

April 23, 2018

Mr. Ron Bales
Manager, Environmental Policy Section
INDOT, Division of Environmental Services
Room N642, IGCN
100 North Senate Avenue
Indianapolis, Indiana 46204

Re: FONSI request packet prepared for SR 37, Hamilton County, Des. No.'s 1600540, 1601831,

1601829, 1601827, 1601830, 1592345, 1592348, 1601826, 1601828, 1592346, 1592347,

1592349, 1602229, 1602231

Dear Mr. Bales,

We would like to request the timely review of the attached information packet necessary for the preparation of the Finding of No Significant Impact (FONSI) regarding the aforementioned project pursuant to 40 CFR, Part 1500.4q and paragraph 5 of the DOT Order 5610.1C implementing the National Environmental Policy Act of 1969. This information packet includes the following documents:

Attachment 1 Environmental Assessment (text only), Additional Information (AI) Document (in its entirety)

Attachment 2 Section 106 Documentation: 800.11(e) Documentation (text only), SHPO

Concurrence Letter, and Public Notice with Proof of Publication

Attachment 3 Section 4(f) De Minimis Documentation

Attachment 4 Public Hearing Materials: Notice of Public Hearing, Publisher's Affidavit, Sign-in

Sheet, PowerPoint Presentation, Information Packet, Public Hearing

Presentation Summary, Public Comment Transcript, Letter and E-mails Received

from Public Hearing, Reponses to Comments, December 11, 2017 Public Information Meeting (PowerPoint Presentation, Minutes, and Sign-in Sheet),

and Property Owner Coordination Memo

Attachment 5 Project Commitments

#### Project Overview:

The project includes roadway and intersection improvements on SR 37 in the Cities of Fishers and Noblesville, Hamilton County. Intersections are at the following roads: 126<sup>th</sup> Street, 131<sup>st</sup> Street, 135<sup>th</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street, and SR 32. The project limits along SR 37 extend from approximately 2,034 feet south of the SR 37/126<sup>th</sup> Street intersection to approximately 1,875 feet north of the SR 37/SR 32 intersection, for a length of approximately six miles. There are two proposed drainage easements included in the project: one is located approximately midway between 126<sup>th</sup> and 131<sup>st</sup> Streets, extending west of SR 37 for a length of approximately 2,645 feet (0.5 mile) to a point east of Lantern Road, and the other is located along 146<sup>th</sup> Street extending west of SR 37 for a length of approximately 4,700 feet (0.9 mile) to a point east of the White River.

The preferred alternative will involve the reconstruction of SR 37 to an expressway with grade-separated, consisting of dual-lane teardrop roundabout interchanges at 126th Street, 131st Street, 141st Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street and SR 38/SR 32. A teardrop

roundabout interchange consists of two closely spaced roundabouts on either side of SR 37, which are tied together through the middle to function as one unit. The 146<sup>th</sup> Street intersection will consist of a grade-separated single point urban interchange (SPUI). Finally, the project will provide right in/right out access at 135th Street. State Road 37 will be depressed at each interchange and reconstructed with two 12-foot travel lanes, 10-foot outside shoulder, and 2.7-foot inside shoulder in each direction. No additional travel lanes will be added to SR 37. A 26.5-foot grass median with a roll curb will be constructed. Intersecting roadways will be constructed with 12-foot travel lanes with a curb. Retaining walls will be constructed along the depressed portions of SR 37 and raised portion of the interchanges in order to reduce right-of-way impacts. Landscaping with short herbaceous vegetation may occur within the center of the roundabout interchanges. The traffic signal at the intersection of SR 32 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project.

In addition, the new grade-separated interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic east and west across SR 37. Lighting will be replaced along SR 37 and additional lighting will be installed at the new interchanges. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town and Country Boulevard, Pleasant Street and SR 32.

The project will include construction of a storm sewer trunk line and inlets to collect storm water in the depressed areas of SR 37. There are two locations where lateral drainage pipe installation is proposed: one drainage easement extends west of SR 37 approximately midway between 126<sup>th</sup> and 131<sup>st</sup> Streets to a point east of Lantern Road, and the other extends west of SR 37 along 146th Street to a point east of the White River. No lift stations will be necessary to pump the water. The drainage will be conveyed west of SR 37 via gravity and outlet to Shoemaker Ditch and the White River. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits. From the beginning of the proposed north trunk line, at SR 37 and 146<sup>th</sup> Street, to roughly Allisonville Road (approximately 3,700 feet) trenchless excavation will be employed as the method for excavation of the future receiving pits and installation of the storm sewer. The remaining extent of the north trunk line (approximately 1,000 ft.) will be completed using an open trench method, which involves an open cut in the ground. A storm sewer system will be installed along the intersecting roads to connect to existing and/or proposed storm sewer systems. In addition, a north field detention basin, approximately 16.2 acres in size, will be constructed along the east side of SR 37, approximately 0.5 mile north of 146<sup>th</sup> Street. This drainage basin seeks to utilize an existing legal drain (McMahon - Overdorff) to direct flow at a decreased velocity into Overdorff Branch and then to the White River upstream of any storm water impact with the project's watershed.

The total estimated amount of right-of-way required for the proposed project (corridor-wide) is 53.52 acres of permanent right-of-way, 3.42 acres of temporary right-of-way, and 2.4 acres of permanent drainage easement. One residential relocation is anticipated. That relocation is in the northeast quadrant of SR 37 and Greenfield Avenue. No business relocations are anticipated; however, a total of 25.95 acres of commercial property will be acquired as permanent right-of-way. Within the section being advanced through final design (the section of SR 37 between 126<sup>th</sup> Street and 146<sup>th</sup> Street) approximately 36 acres of the total 53.52 acres of permanent right-of-way is required, and 1.93 acres of the total 3.42 acres of temporary right-of-way is required.

Environmental Documentation and Public Involvement:

On April 28, 2017 the Environmental Assessment (EA) for this project was released for public involvement by INDOT, and the Federal Highway Administration (FHWA). A public hearing was held on May 16, 2017 as advertised in the Indianapolis Star on May 1, 2017, and May 8, 2017. The public hearing consisted of an open house for one-on-one discussions with attendees and a formal presentation by the project team. The public comment period extended from May 1, 2017 (date of the first advertisement) until May 31, 2017 (the advertised deadline date for comments). Comments were received from two responders via mail and e-mail prior to the hearing, and via two individuals during the public hearing comment session. Questions/comments received prior to the public hearing concerned traffic diversion at Lantern Road, ingress/egress at Shoe Overlook, Shoemaker ditch flooding, loss of commercial property visibility from SR37, loss of convenient access to businesses, inappropriate use of roundabouts at the proposed locations and resulting economic stress to businesses, and negative impacts of additional right-of-way needed from existing parking lots. Questions/comments at the public hearing focused on how the project would handle increased runoff drainage at Shoemaker Ditch and the possibility of noise barriers for the Wellington Northeast neighborhood. Responses to all comments received from the public during the hearing phase are provided in Attachment 4 (Pages 34-35). Certification of Public Involvement was received on July 17, 2017 (Attachment 1 – page 1).

Concurrent with advancement of this FONSI request, an Additional Information (AI) Document was prepared that addressed changes in the proposed design that resulted subsequent to the EA's certification of public involvement on July 17, 2017. These changes are incorporated into the project description discussed in the Project Overview section above, while the updated environmental consequences are provided in the Summary of Environmental Impacts section below. Specifically, the AI addresses the change in interchange type at 146<sup>th</sup> Street from a grade separated multi-lane roundabout to a SPUI, the change from a grade separated dual lane roundabout interchange at 141<sup>st</sup> Street to a single lane roundabout interchange, the addition of a north field detention basin on the east side of SR 37 north of 146<sup>th</sup> Street, the inclusion of drainage pits along 146<sup>th</sup> Street to meet the additional storm water demands of the project, the inclusion of a median crossover approximately 0.4 mile south of 126<sup>th</sup> Street as part of the maintenance of traffic (MOT) plan, and the reduction in acreage of right-of-way/drainage easement required at the Junkersfeld parcel. Resolve

During the development of the AI, an additional public information meeting was held on December 11, 2017 to discuss the changes in design at 141<sup>st</sup> Street, and 146<sup>th</sup> Street, the status of the drainage contracts, maintenance of traffic, and the overall schedule (Attachment 4, Pages 36-47). A total of 37 individuals from the public signed in to the meeting, three additional individuals on the sign-in sheet were associated with Hamilton County, the City of Fishers, and FHWA (Attachment 4, Pages 7-12). The majority of the questions raised by the public were in regards to the phasing of construction and specific design questions regarding lighting and signal timing at the signalized intersections adjacent to SR 37. Answers to the public inquiries were provided at the meeting, and are documented in the minutes included in Attachment 4 (Pages 48-50). In addition, coordination occurred with those property owners affected by the proposed drainage pits along the 146<sup>th</sup> Street drainage trunk line. Documentation of this coordination is included in Attachment 4 (Pages 55-56).

#### Summary of Environmental Impacts:

The following summarizes impacts as detailed in the EA and AI.

A total of 0.77 acre of wetland impacts and 1,692 linear feet of stream impacts are anticipated for the project. Wetland and stream mitigation are required. The City of Fisher's Project Management Consultant, RQAW, is currently in the process of preparing the necessary U.S Army Corps of Engineers

(USACE) Regional General Permit Section 404 and IDEM Section 401 Water Quality Certification permit applications for the project. Additionally, an IDNR Construction in a Floodway Permit is required, for which mitigation is also needed.

The proposed project will result in the conversion of approximately 20.1 acres of prime or unique farmland. However, this project received no further consideration for farmland protection as the total assessed point value on the Natural Resources Conservation Service's (NRCS) Form CPA-106 was determined to be less than 160 points (123 points). Therefore, this site received no further consideration for farmland protection. This project was determined to not have a significant impact to farmland.

The affected use of Section 4(f) resources by the proposed action were addressed as "de minimis" impacts through coordination with the City of Fishers, City of Noblesville and the Hamilton County Highway Department. Hamilton County Bridge No. 151 (eligible for the National Register of Historic Places), Harrison Parkway Elementary School, Harrison Thompson Park and 24 existing or planned trails were identified as Section 4(f) resources. Evaluations of the bridge, school, and park were not required since access and use would not be affected. Of the 24 existing and proposed trails, 11 are under the City of Fishers jurisdiction, 11 are under the City of Noblesville jurisdiction and two are under the Hamilton County Highway Department jurisdiction.

The original coordination concerning impacts and concurrence on the "de minimis" determination was conducted with the City of Fishers (January 18, 2017) and City of Noblesville (January 20, 2017). Both jurisdictional authorities concurred with the "de minimis" findings on January 18 and 20, 2017, respectively. A public notice was published by the *Indianapolis Star* on January 24, 2017 and *The Times* (Noblesville) on January 25, 2017. The notices indicated that the comment period deadline on the "de minimis" finding was February 25, 2017. No comments were received.

It was subsequently determined that two of the trails along 146<sup>th</sup> Street were actually under the jurisdiction of the Hamilton County Highway Department. Due to this realization and changes in project design (i.e., inclusion of a detention basin and elimination of drainage pipes along 141<sup>st</sup> and 146<sup>th</sup> Street) Section 4(f) coordination with the City of Fishers, City of Noblesville, and Hamilton County Highway Department was reinitiated on April 11, 2017. Each of the three jurisdictional agencies concurred with the "de minimis" finding on April 11, 14, and 11, 2017, respectively. A second public notice was published by *The Times* (Noblesville) on March 27, 2017 and the *Indianapolis Star* on March 28, 2017. The notices indicated that the comment period deadline on the "de minimis" finding was April 27, 2017. No comments were received.

No Section 6(f) properties were identified within the project area.

Highway noise barriers were found to be feasible and reasonable based on cost effectiveness at both the Sunlake and Woods of Britton apartment complexes. The public involvement component of the reasonableness requirements at both apartment complexes was addressed by mailing information packets to solicit input from both apartment management and impacted and benefitted tenants concerning their preference to have barrier walls installed or not. The information packet included a cover letter, INDOT Noise Barriers brochure, map showing impacted apartment units for both Sunlake and Woods of Britton apartment complexes, and a questionnaire survey form to be completed and returned to the Project Manager. As it turns out, both apartment complexes are operated by the same entity, Regency Windsor Management. On May 1, 2017, the information packets were mailed out to

management, 36 impacted and/or benefitted tenants at Sunlake, and 11 impacted and/or benefitted tenants at Woods of Britton. From this effort, Regency Windsor Management expressed its desire to have noise barrier walls installed at both apartment complex locations. Tenant response to the initial mailing was minimal with one tenant at Sunlake Apartments in favor of having the barriers and one tenant at Woods of Britton Apartments opposed to barrier installation. Due to the poor response in returned surveys, on June 1, 2017, a second round of information packets, containing the same material as the first round, was sent out to the tenants at both Sunlake and Woods of Britton apartments. In an effort to encourage tenants to participate in this survey, management at both apartment complexes sent e-mails to the tenants of interest (Sunlake - May 19, 2017; and Woods of Britton - June 15, 2017) notifying them of the deadlines to return their completed survey forms. No additional survey forms were received from this effort. For Sunlake Apartments, since management and one tenant expressed a desire for having noise barrier walls installed, this public involvement component of the reasonableness criteria is considered to be met; therefore, a noise barrier wall at this location will continue to be considered and evaluated further during the design phase. For Woods of Britton apartments, despite one negative response for a noise barrier wall from a tenant, management's desire for noise barriers walls at this location satisfies the public involvement component of the reasonableness criteria; therefore, a noise barrier wall at this location will also continue to be considered and evaluated further during the design phase.

#### Conclusion:

No revisions or modifications to the design of this project which would alter the scope or intent of this project or would increase any impacts to either the natural or human environments have been made. All firm commitments made in the Environmental Assessment will be satisfied.

Upon the satisfactory completion of your review of the FONSI request information packet, we would request that you forward the attached information to the FHWA with the request that they prepare the necessary FONSI for this project in order to complete the NEPA process.

Please contact me at (317) 334-6807 or <a href="mailto:ccosta@lochgroup.com">ccosta@lochgroup.com</a> if there are any questions or if additional information is needed.

Sincerely,

Chad E. Costa

Environmental Manager Lochmueller Group, Inc.

Attachments: (5)

- Environmental Assessment (Text Only), Additional Information (AI) Document (in its entirety) Pages 1-632
- 2. Final Section 106 Documentation: SHPO Concurrence Letter, 800.1(e) Documentation (Text Only), and Public Notice with Proof of Publication Pages 1-19
- 3. Section 4(f) De Minimis Documentation Pages 1-14

- 4. Public Hearing Materials: Notice of Public Hearing, Publisher's Affidavit, Sign-in Sheet, PowerPoint Presentation, Information Packet, Public Hearing Presentation Summary, Public Comment Transcript, Letter and E-mails Received from Public Hearing, Reponses to Comments, December 11, 2017 Public Information Meeting (PowerPoint Presentation, , Meeting Minutes, and Sign-in Sheet), and Property Owner Coordination Memo Pages 1-56
- 5. Project Commitments Pages 1-5

cc: Laura Hilden, INDOT Environmental Services
Jennifer Beck, INDOT Greenfield District
Randall Brooks, RQAW
Joe Dabkowski, RQAW
Eric Farny, American Structurepoint, Inc.

# Attachment 1 Environmental Assessment (Text Only) Additional Information Document (In its Entirety)

ounty1	lamilton	Route	SR 37 De	s. No1600540 et al.
CATI	EGORICAL E	XCLUSION / I	A Environmental Document ENVIRONMENTAL PROJECT INFORMATION	ASSESSMENT FORM
Road No	./County:	SR 37 / Hami	ilton County	
Designat	ion Number:		1831, 1601829, 1601827, 16 2346, 1592347, 1592349, 16	01830, 1592345, 1592348, 1601826, 02229, 1602231
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Note: Do no	t approve until after Se	etion 106 public involv	rement and all other environmen	ntal requirements have been satisfied.
INDOT ES/D Reviewer Sign		an Har	unton Date:	4-26-17
Name and Org	ganization of CE/EA Prep	arer. Kia Gillette / Loc	hmueller Group	
his is page 1 o	of 90 Project name		D 37 Imperiorment Bealing	Date: Audi 26 2016
ing is bede it	r sojour name		R 37 Improvement Project	Date: April 26, 2017

Form Version, June 2013 Attachment 2

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County	Hamilton	Route	SR 37	Des. No	1600540 et al.	
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	Opportunity for a Public				X	]
	aring is required for all O, and the ACHP.	historic bridges proce	essed under the Histor	ric Bridges Prog	grammatic Agreem	ent between INDOT,
	at public involvement of ecial purpose meeting				rs and residents	(i.e. notice of entry),
remarks.	Notice of Entry for a home owners and Community Advisor prior to approval o summarized below.	Survey or Investigation business owners, in try Committee (CAC),	cluded several public on letters, a project we adividual meetings we and a Section 106 pui Assessment (EA). To the Letters	bsite and email with home own blic notice. A p	address, public n ners and busines public hearing will	neetings with s owners, a l also be held
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	business owners for meetings provided a The first was held o drainage, schedule,	the first meeting and in update on the proje in June 15, 2016 at a other local roads, rig	r potentially affected I they have been notified as well as an oppo- local business (Pinhea ght-of-way needs, business des, loss of business d	ied via email for ortunity for bus ids) at 9 a.m. Q ilding relocatio	or subsequent med iness owners to a uestions generally ns, MOT during	etings. These sk questions. pertained to construction,

Date:

County	Hamilton	Route	SR 37	Des. No.	1600540 et al.	
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loss, and business access (Appendix G, pages G5 to G9). The second public business owner meeting was on September 21, 2016 at a local business (Ben and Ari's) at 9 a.m. Questions generally pertained to schedule, MOT during construction, right-of-way needs, drainage, other local roads, and project funding (Appendix G, pages G14 to G18).

A third combined public home owner/business owner meeting was held on January 30, 2017 at the Delaware Township Community Building at 6 p.m. (Appendix G, pages G42 to G48). The meeting informed property owners on the current status of the project, included stations with detailed maps for each interchange and the drainage areas were available for the public to review, and addressed questions and comments from the community. Meeting participants could also sign up for individual meetings with project team members at each station. Questions generally pertained to MOT during construction, construction schedule, impacts to local roads, other local road projects, coordination with schools, railroad crossings, access to businesses during construction, drainage, and pedestrian connectivity.

A fourth combined public home owner/business owner meeting was held on April 18, 2017 at the Delaware Township Community Building at 6 p.m. (Appendix G, pages G52 to G57). The meeting informed property owners on the current status of the project and addressed questions and comments from the community. Questions generally pertained to MOT during construction, construction schedule, impacts to local roads, other local road projects, coordination with schools, railroad crossings, and drainage and detention.

#### Individual Homeowner and Business Meetings

Individual home owner and business owner meetings have occurred by request. There have been over 100 unique homeowner contacts and over 200 unique business owner contacts made to date. Contacts include in person meetings as well as phone conversations. Coordination with home owners and business owners will continue into the design and construction phases of the project.

#### **CAC** Meetings

A CAC has been established for the project in order to gather additional feedback and concerns. Invitation letters were mailed out to CAC invitees on July 12, 2016. The CAC invitee list included business leaders, community leaders, emergency response facilities, residential associations, and local education facilities. The first CAC meeting was held on December 14, 2016 at 10:30 a.m. at a local meeting space for entrepreneurs (Launch Fishers). The role of the CAC was discussed and an update on the project was provided. Meeting participants were then provided the opportunity to review Stage 1 design plans. Questions generally pertained to Hamilton Southeastern school bus routes that use 131st Street and 141st Street, MOT during construction, a request for a wide shoulder during construction by emergency services, and large delivery trucks and their use of the roundabout interchanges. Additional comments were provided after the meeting from a local business owner on the CAC. These comments were about deliveries to businesses during construction, specifically regarding weight limits and Department of Transportation (DOT) regulations on alternative routes, and signage (Appendix G, pages G23 to G41).

#### Section 106 Public Notice

To meet the public involvement requirements of Section 106, the Federal Highway Administration's (FHWA's) finding of "No Adverse Effect" was advertised in the *Indianapolis Star* and *The Times* in Noblesville, both widely circulated newspapers throughout the Cities of Fishers and Noblesville and Hamilton County, on December 30, 2016 (Appendix D, pages D101 to D104). The comment period ended on January 29, 2017 and no comments were received.

#### Public Hearing

The proposed project is being processed as an EA. Per the current *Indiana Department of Transportation* (INDOT) Public Involvement Manual 2012, Part 1, Section IV.C.4, a public hearing will be provided to the public. Upon release of the EA for public involvement, a legal advertisement will be placed in local publications notifying the public of the EA's availability for review and comment for a period of 30 days.

This is page 3 of 90	Project name:	SR 37 Improvement Project	Date:	April 26, 2017

County	Hamilton	Rout	e	SR 37	Des. No.	1600540 et a	1.
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This is p	page 4 of 90	Project name: _	SR	37 Improvement Proje	ct	Date:	April 26, 2017

Form Version: June 2013 Attachment 2 Attachment 1

Des. No. 1600540 et. al.

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• 1	31st Street				
• 1	35 <sup>th</sup> Street <sup>2</sup>				
• 1	41st Street				
• 1	46 <sup>th</sup> Street				
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• S	R 32				
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Attachment 1

This is page 5 of 90 Project name:

Indiana Department of Transportation							
County	Hamilton	Route	SR 37	Des. No.	1600540 et al.		
	0 11	er vehicle of over 160	seconds.				
	Year 2036) Levels of						
The Traffi	c Operations Analys	is Report forecasted	that all nine interse	ections will operat	te in unsatisfactory, highly		
congested	conditions in the Y	ear 2036 in the no	build case (where	no improvements	are made to the existing		
	ns). Specifics include		. (	1			

- In the p.m. peak, eight of the nine intersections are forecasted to operate at an overall LOS F. The other intersection (146th Street) is forecasted to operate at an overall LOS E.
- In the a.m. peak, six of the nine intersections are forecasted to operate at an overall LOS E or F. The three exceptions are 135th Street (LOS C), Town and Country Boulevard (LOS C), and Pleasant Street (LOS D).
- In the p.m. peak, all intersections are forecasted to have at least one leg operating at LOS F.
- In the a.m. peak, seven of the nine intersections are forecasted to have at least one leg operating at LOS F. The two exceptions are Town and Country Boulevard and Pleasant Street, which are forecasted to have at least one leg operating at LOS E.
- In the p.m. peak, five of the intersections (126th Street, 131st Street, 141st Street, Greenfield Avenue, and Pleasant Street) are forecasted to have at least one leg with an average delay per vehicle of over 200 seconds.
- Three of the nine intersections (126th Street, Greenfield Avenue, and SR 32) are forecasted to have all legs of the intersection operate at LOS E or F in both the a.m. and p.m. peak periods.

#### **Congestion Analysis Summary**

Under existing conditions (Year 2010) three of the eight<sup>4</sup> intersections operate at substandard LOS in the p.m. peak period. Six of the eight intersections have at least one leg operating at substandard LOS in the p.m. peak period. In the forecast year (2036) eight of the nine intersections are forecasted to operate at LOS F in the p.m. peak period; the ninth intersection is forecasted to operate at LOS E. Most intersections have legs operating at LOS F.

A safety analysis was completed for the eight signalized intersections<sup>5</sup> (126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town and County Boulevard, Pleasant Street and SR 32) identified in the congestion analysis. It was performed using RoadHat, an INDOT tool for analysis of crash hazards (Appendix I, pages I7 to I10). The following points give the key findings in the analysis.

- 954 crashes occurred at these eight intersections over a period of four years (2010 to 2013)
  - This equates to four to five crashes each week during the four year period.
  - The 146th Street intersection is the highest crash location, averaging three to four crashes per month during the four year period.
- All eight intersections have *higher than average* crash rates for comparable intersections.
- Crash rates at all eight intersections are in at least the highest one-third of crash rates for comparable intersections.
- Two of the intersections (126th Street and 146th Street) have crash rates which identifies them as high crash

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<sup>&</sup>lt;sup>4</sup> 135<sup>th</sup> Street was not included in the Year 2010 analysis. <sup>5</sup> 135<sup>th</sup> Street was not included in the safety analysis because there was a change in its condition (non-signalized to signalized) during this timeframe. This is page 6 of 90 Project name: SR 37 Improvement Project Date: April 26, 2017

County							
County	Hamilton		Route	SR 37	Des. No.	1600540 et a	1.
in	tersections usi	ng INDOT's	s procedures.				
	o They ar	re so identifi	ied because the	eir crash rates are in the h	ighest 5% of comp	parable interse	ections.
		6 <sup>th</sup> Street int		ooth crash rates and crash	costs which put it	in the highes	t 1% of
Project Pu	rposes						
on SR 37 t and p.m. p	se of the proje between 126 <sup>th</sup> eak periods at	Street and S each of the	SR 32. This put nine intersect	e existing and forecasted rpose would be achieved ions. It could also be ach OS D is considered accep	by showing an L nieved by showing	OS C or bett g an improve	er in both a.m.
by reducing	g the overall o	ccurrence of	f crashes (as mo	es at the eight identified is easured by crashes/100 n at 126 <sup>th</sup> Street and 146 <sup>th</sup>	nillion vehicle mile	es traveled (V	MT)). It could
PROJECT	Γ DESCRIPT	ION (PREF	ERRED ALT	ERNATIVE):			
County:	Hamilton		Mu	unicipality: Cities of Fis	hers and Noblesville	;	
	roposed Work:			7 and intersections at the fo			
		The projection intersection approximate ap	ct limits along son to approximately six miles.	Greenfield Avenue, Town a SR 37 extend from approx ately 1,875 feet north of There are two proposed tween 126th and 131st Street treet and west of SR 37, for	imately 2,034 feet s the SR 37/SR 32 drainage easement s, west of SR 37 for	ard, Pleasant S south of the Si intersection, s included in a length of app	treet, and SR 32. R 37/126 <sup>th</sup> Street for a length of the project: one proximately 2,667
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Des. No. 1600540 et. al.

		indiana Dep	artment of Tran	isportation	
County	Hamilton	Route	SR 37	Des. No.	1600540 et al.
is located Geologica Township and 25, To	within Delaware and 1 Survey (USGS) Quadi 18 North, Range 5 Eas	Noblesville Townsh rangles; Sections 31 ar st; Sections 18, 19, 30 ge 4 East. Adjacent la	ips; Fishers, McCornd 32, Township 19 I and 31, Township 18 Ind usage is predomir	dsville, Noblesvi North, Range 5 Ea 8 North, Range 5	et. Specifically, the project lle, and Riverwood U.S. ast; Sections 5, 6, 7 and 8, East; and Sections 13, 24 I and industrial with some
There is signalized 146 <sup>th</sup> Streepresent ap	asists of two northbound an inside 4-foot paved intersections within the et, Greenfield Avenue, proaching these intersec- rsections. The existing	I shoulder and approxe e project area. These Town and County Bou ctions. There are no po	ximately 40-foot wid are located at 126 <sup>th</sup> Salevard, Pleasant Stre edestrian or bicycle f	de grass median. Street, 131 <sup>st</sup> Street eet, and SR 32. Ri acilities parallel to	ot outside paved shoulder. There are nine at-grade, 135 <sup>th</sup> Street, 141 <sup>st</sup> Street, ght and left turn lanes are SR 37 or crossing SR 37 with the widest portion at
intersection intersection lane with	on consists of two westb on. 126 <sup>th</sup> Street west of the	ound and two eastbour he SR 37 intersection of and the intersection. T	nd 12-foot wide trave consists of one westb here are existing and	el lanes with turn ound and one east planned trails bo	Street east of the SR 37 lanes at driveways and the bound 12-foot wide travel th north and south of 126 <sup>th</sup> tely 80 to 90 feet wide.
intersection intersection lane with	on consists of one westb on. 131st Street west of the turn lanes at driveways	bound and one eastbour the SR 37 intersection of and the intersection. T	nd 12-foot wide trave consists of one westbe there are existing and	el lane with turn lound and one east planned trails bo	Street east of the SR 37 anes at driveways and the bound 12-foot wide travel th north and south of 131st tely 90 to 125 feet wide.
intersection intersection lane with	n consists of one westb n. 135 <sup>th</sup> Street west of the	bound and one eastbour he SR 37 intersection cays and the intersection	nd 12-foot wide trave consists of one westb	el lane with turn l ound and one east	Street east of the SR 37 anes at driveways and the bound 12-foot wide travel 135 <sup>th</sup> Street varies from
intersection intersection lane with	n consists of one westb n. 141st Street west of the	bound and one eastbour the SR 37 intersection of and the intersection. T	nd 12-foot wide trave consists of one westb there are existing and	el lane with turn lound and one east planned trails so	Street east of the SR 37 anes at driveways and the bound 12-foot wide travel uth of 141st Street near the et wide.
intersection intersection lanes with	on consists of two westb on. 146 <sup>th</sup> Street west of the turn lanes at driveways	ound and two eastbour he SR 37 intersection of and the intersection. T	nd 12-foot wide trave consists of two westb There are existing and	el lanes with turn ound and two east laned trails bo	Street east of the SR 37 lanes at driveways and the bound 12-foot wide travel th north and south of 146 <sup>th</sup> tely 185 to 220 feet wide.
Avenue ea lanes at dr one eastbo are presen	ast of the SR 37 intersective viveways and the intersection 10-foot wide trave	ction consists of one w ction. Greenfield Aver el lane with turn lanes trail south of Greenfie	vestbound and two earnue west of the SR 37 at driveways and the eld Avenue and east	stbound 12-foot vintersection consintersection. No	de intersection. Greenfield wide travel lanes with turn sists of one westbound and shoulders or outside curbs xisting right-of-way along

SR 37 Improvement Project

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Project name:

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Town and Country Boulevard crosses SR 37 at a right angle to form a four-way at-grade intersection. Town and Country Boulevard east of the SR 37 intersection consists of one westbound and two eastbound 12-foot wide travel lanes with turn lanes at a roundabout and the intersection. Town and County Boulevard west of the SR 37 intersection consists of one westbound and two eastbound 12-foot wide travel lane with turn lanes a roundabout and the intersection. Town and Country Boulevard is bordered by curb and gutter on the outside on each side of SR 37. The existing right-of-way along Town and Country Boulevard varies from approximately 70 to 115 feet wide.

Pleasant Street crosses SR 37 at a right angle to form a four-way at-grade intersection. Pleasant Street east of the SR 37 intersection consists of one westbound and one eastbound 12-foot wide travel lane with turn lanes at a roundabout and the intersection. Pleasant Street west of the SR 37 intersection consists of one westbound and one eastbound 12-foot wide travel lane with turn lanes at driveways and the intersection. There are existing trails north and south of Pleasant Street and east of SR 37. The existing right-of-way along Pleasant Street varies from approximately 50 to 100 feet wide.

SR 32 crosses SR 37 at an approximate 20 degree skew to form a four-way at-grade intersection. SR 32 east of the SR 37 intersection consists of two westbound and one eastbound 12-foot wide travel lanes with turn lanes at driveways and the intersection. SR 32 (Conner Street) west of the SR 37 intersection consists of two westbound and two eastbound 12-foot wide travel lanes with turn lanes at driveways and the intersection. The existing right-of-way along SR 32 varies from approximately 70 to 75 feet wide.

#### **Proposed Conditions**

The preferred alternative will involve the reconstruction of SR 37 to an expressway with grade-separated, dual-lane teardrop roundabout interchanges at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street and SR 32. A teardrop roundabout interchange consists of two closely spaced roundabouts on either side of SR 37, which are tied together through the middle to function as one unit. The project will provide right in/right out access at 135<sup>th</sup> Street. SR 37 will be depressed under the roundabout interchanges and reconstructed with two 12-foot travel lanes, 10-foot outside shoulder, and 2.7-foot inside shoulder in each direction. No additional travel lanes will be added to SR 37. A 26.5-foot grass median with a roll curb will be constructed. Intersecting roadways will be constructed with 12-foot travel lanes with a curb. Retaining walls will be constructed along the depressed portions of SR 37 and raised portion of the interchanges in order to reduce right-of-way impacts. Landscaping with short herbaceous vegetation may occur within the center of the roundabout interchanges. The traffic signal at the intersection of SR 32 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project.

The project will include construction of a storm sewer trunk line and inlets to collect water in the depressed areas of SR 37. There are two proposed drainage pipe installation locations included in the project: one drainage easement approximately midway between 126<sup>th</sup> and 131<sup>st</sup> Streets west of SR 37 and one pipe installation within existing and proposed right-of-way along 146<sup>th</sup> Street and west of SR 37. No lift stations will be necessary to pump the water. The drainage will be conveyed via gravity and outlet to Shoemaker Ditch and the White River north of 146<sup>th</sup> Street and west of SR 37. A detention basin may be constructed for the drainage midway between 126<sup>th</sup> and 131<sup>st</sup> Streets prior to the outlet to Shoemaker Ditch. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits. Trenchless excavation and holes excavated for the receiving pits will be used for approximately the eastern 75-80% of the drainage pipe installation. The western 20-25% of the drainage pipe installation will be completed using the open trench method involving an open cut in the ground. A storm sewer system will be installed along the intersecting roads to connect to existing and/or proposed storm sewer systems.

The installation of a drainage pipe along 141<sup>st</sup> Street to outlet to an Unnamed Tributary (UNT) to Weaver Creek was previously included in the project. However, this portion of the project has been eliminated and the pipe will now be installed along 146<sup>th</sup> Street to outlet to the White River.

In addition, the roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic east and west across SR 37. Lighting will be replaced along SR 37 and additional lighting will be installed at the new

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roundabout interchanges. Construction of the interchanges at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street will occur prior to those at Greenfield Avenue, Town and Country Boulevard, Pleasant Street and SR 32.

There are 14 Designation numbers (Des. Nos.) included in the project. Each is discussed below:

Des No.: 1600540 - This Des No. represents the entire SR 37 corridor from approximately I-69 in Fishers to SR 32 in Noblesville.

**Des No.:** 1601831 - This Des No. represents the pipe installation along of 146<sup>th</sup> Street. This drainage pipe installation will be within existing and proposed right-of-way and is not anticipated to require easement acquisition. The drainage pipe will be approximately 66 inches in diameter and outlet to the White River. It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street and outlet to the White River. The pipe would be installed using trenchless excavation from SR 37 to Allisonville Road. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide by 40 feet deep (maximum), will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits. The portion of the drainage pipe installation west of Allisonville Road will be completed using the open trench method involving an open cut in the ground. The majority of the pipe installation will occur within existing City or County right-of-way but some minor right-of-way or easement acquisition may be necessary. This drainage pipe will collect drainage from the depressed portions of SR 37 under 141<sup>st</sup> Street and 146<sup>th</sup> Street.

Des No.: 1601829 - This Des No. represents the drainage easement and pipe installation from SR 37 west to Shoemaker Ditch, just east of Lantern Road. The drainage pipe will be approximately 48 inches in diameter will be installed from SR 37 approximately midway between 126<sup>th</sup> Street and 131<sup>st</sup> Street. The drainage pipe will be installed via trenchless excavation for approximately 2,235 feet. Trenchless excavation involves digging pits at approximately 400 - 900-foot intervals and installing and connecting the sections of pipe via the pits. The pits will be approximately 26 feet deep. The western portion of the pipe installation from the outfall for approximately 432 feet east will be installed via an open cut method. This drainage pipe will collect drainage from the depressed portions of SR 37 under 126<sup>th</sup> Street and 131<sup>st</sup> Street. It may now also include construction of a detention basin prior to out letting to Shoemaker Ditch. Forest preservation and tree plantings may also occur on this parcel to mitigation for floodway habitat loss. An Additional Information document will likely be needed in the future to document the mitigation activities. Detention will follow the INDOT requirements for storm water. Construction of this basin will require acquisition of an entire residential parcel east of Lantern Road, just west of Ramapo Drive (Appendix B, pages B8 and B9). The house on this parcel is currently unoccupied.

Des Nos.: 1592345 & 1601827 - Des No. 1592345 represents the road improvements and roundabout construction at the SR 37/126<sup>th</sup> Street intersection. Des No. 1601827 represents the new bridge that will carry 126<sup>th</sup> Street over SR 37. The reconstruction of SR 37 will begin approximately 2,034 feet south of the SR 37/126<sup>th</sup> Street intersection and extend 3,310 feet northward to approximately 1,276 feet north of the intersection. Along 126<sup>th</sup> Street, the project will extend from Windsor Drive west of SR 37 to approximately 150 feet west of Parkside Drive. SR 37 will be depressed approximately 17-20 feet below 126<sup>th</sup> Street. A grade-separated, dual lane teardrop roundabout interchange will be constructed at 126<sup>th</sup> Street with elevated ramps from SR 37 to 126<sup>th</sup> Street and from 126<sup>th</sup> Street to SR 37. 126<sup>th</sup> Street will be no more than 10 feet above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. An 8-foot pedestrian path will be constructed along both the south and north sides of 126<sup>th</sup> Street at the interchange. The new bridge (Structure No. 037-29-10226) will be a continuous composite prestressed concrete bulbtee beam bridge. It will include two spans that are 55-foot 6-inch long each. Lighting will be included at the roundabout.

**Des Nos.:** 1592346, 1601828, 1602229, & 1602231 - Des No. 1592346 represents the road improvements and roundabout construction at the SR 37/131<sup>st</sup> Street intersection. Des No. 1601828 represents the new bridge that will carry 131<sup>st</sup> Street over SR 37. Des No. 1602229 represents the replacement of the small structure carrying SR 37 over a UNT to Britton Branch (CV 037-029-170.03) south of 131<sup>st</sup> Street. Des No. 1602231 represents the replacement of the small structure carrying SR 37 over Britton Branch (CV 037-029-170.50) north of 131<sup>st</sup> Street. The reconstruction of SR 37 will begin approximately 1,380 feet south of the SR 37/131<sup>st</sup> Street intersection and extend 2,970 feet northward to approximately 1,591 feet north of the intersection. Along 131<sup>st</sup> Street, the project will extend from Britton Park Road

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west of SR 37 to approximately 220 feet west of Parkside Drive. A grade-separated, dual lane teardrop roundabout interchange will be constructed at 131<sup>st</sup> Street with elevated ramps from SR 37 to 131<sup>st</sup> Street and from 131<sup>st</sup> Street to SR 37. 131<sup>st</sup> Street will be raised no more than 10 feet above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. An 8-foot pedestrian path will be constructed along both the south and north sides of 131<sup>st</sup> Street at the interchange. The new bridge (Structure No. 037-29-10224) will be a continuous composite prestressed concrete bulb-tee beam bridge. It will include two spans that are 56-foot long each. Lighting will be included at the roundabout.

The existing 6-foot by 6-foot reinforced box culvert carrying SR 37 over a UNT to Britton Branch (CV 037-029-170.03) is undersized and will be replaced with a 9-foot by 6-foot reinforced concrete box culvert (Des No. 1602229). The structure will be sumped (the bottom of the culvert will be placed below the ground surface) six inches and riprap will be placed upstream and downstream of the structure. The existing 8.5-foot by 8-foot reinforced box culvert carrying SR 37 over Britton Branch (CV 037-029-170.50) is undersized and will be replaced with a 12-foot by 10-foot concrete box culvert (Des No. 1602231). The structure will be sumped one foot and riprap will be placed upstream and downstream of the structure.

**Des No.: 1592347** - Des No. 1592346 represents the road improvements, removal of the traffic signal, and conversion of the SR 37/135<sup>th</sup> Street intersection to a right-in/right-out turning movement. There will no longer be any left turns from SR 37 northbound onto 135<sup>th</sup> Street westbound or left turns from 135<sup>th</sup> Street eastbound to SR 37 northbound. There will also no longer be any left turns from SR 37 southbound onto 135<sup>th</sup> Street eastbound or left turns from 135<sup>th</sup> Street westbound to SR 37 southbound. If a driver headed northbound on SR 37 wishes to go west onto 135<sup>th</sup> Street, they would need to go north to the 141<sup>st</sup> Street roundabout intersection and exit onto SR 37 wishes to go east on 135<sup>th</sup> Street, they would need to go south to the 131<sup>st</sup> Street roundabout intersection and exit onto SR 37 north. They could then turn right to head east onto 135<sup>th</sup> Street.

Des Nos.: 1592348 & 1601830 - Des No. 1592348 represents the road improvements and roundabout construction at the SR 37/141st Street intersection. Des No. 1601830 represents the new bridge that will carry 141st Street over SR 37. The reconstruction of SR 37 will begin approximately 1,450 feet south of the SR 37/141st Street intersection and extend 5,300 feet northward to approximately 1,450 feet north of the intersection. Along 141st Street, the project will extend from approximately 750 west of SR 37 to approximately 560 feet east of SR 37. SR 37 will be depressed approximately 17-20 feet below 141st Street. A grade-separated, dual lane teardrop roundabout interchange will be constructed at 141st Street with elevated ramps from SR 37 to 141st Street and from 141st Street to SR 37. 141st Street will be raised no more than 10 feet above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. An 8-foot pedestrian path will be constructed along both the south and north sides of 141st Street at the interchange. The new bridge (Structure No. 037-29-10227) will be a continuous composite prestressed concrete bulbtee beam bridge. It will include two spans that are 55-foot 6-inch long each. Lighting will be included at the roundabout.

Des Nos.: 1592349 & 1601826 - Des No. 1592349 represents the road improvements and roundabout construction at the SR 37/146<sup>th</sup> Street intersection. Des No. 1601826 represents the new bridge that will carry 146<sup>th</sup> Street over SR 37. The reconstruction of SR 37 will begin approximately 1,250 feet south of the SR 37/146<sup>th</sup> Street intersection and extend 3,400 feet northward to approximately 2,150 feet north of the intersection. Along 146<sup>th</sup> Street, the project will extend from approximately 700 west of SR 37 to approximately 1,000 feet east of SR 37. SR 37 will be depressed approximately 17-20 feet below 146<sup>th</sup> Street. A grade-separated, dual lane teardrop roundabout interchange will be constructed at 146<sup>th</sup> Street with elevated ramps from SR 37 to 146<sup>th</sup> Street and from 146<sup>th</sup> Street to SR 37. 146<sup>th</sup> Street will be raised no more than 10 feet above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. An 8-foot pedestrian path will be constructed along both the south and north sides of 146<sup>th</sup> Street at the interchange. The new bridge (Structure No. 037-29-10225) will be a continuous composite prestressed concrete bulb-tee beam bridge. It will include two spans that are 55-foot 6-inch long each. Lighting will be included at the roundabout.

**Greenfield Avenue** - No specific Des Nos. have been assigned to the SR 37/Greenfield Avenue road improvements, roundabout construction, or new bridge. The reconstruction of SR 37 will begin approximately 1,800 feet south of the SR

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37/Greenfield Avenue intersection and extend 3,900 feet northward to approximately 2,100 feet north of the intersection. There will be a continuous auxiliary lane between the Greenfield Avenue and Town and Country Boulevard in each direction along SR 37. Between these two interchanges, the travel lanes will need to shift inward to transition from an existing open grass median to a proposed enclosed median with a center median barrier prior to the Town and Country Boulevard interchange. Along Greenfield Avenue, the project will extend from approximately 600 west of SR 37 to approximately 600 feet east of SR 37. The current skew of Greenfield Avenue through this interchange will be maintained. SR 37 will be depressed below Greenfield Avenue. The minimum vertical clearance above SR 37 will be 16 feet 6 inches. A grade-separated, dual lane teardrop roundabout interchange will be constructed at Greenfield Avenue with elevated ramps from SR 37 to Greenfield Avenue and from Greenfield Avenue to SR 37. Greenfield Avenue will be raised above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. The new bridge is anticipated to be a two span, 198-foot 6-inch long, prestressed reinforced concrete bulb tee beam structure. A pedestrian path will be constructed along both the south and north sides of Greenfield Avenue at the interchange. Lighting will be included at the roundabout.

Town and Country Boulevard - No specific Des Nos. have been assigned to the SR 37/Town and Country Boulevard road improvements, roundabout construction, or new bridge. There will be a continuous auxiliary lane between the Greenfield Avenue and Town and Country Boulevard in each direction along SR 37. Between these two interchanges, the travel lanes will need to shift inward to transition from an existing open grass median to a proposed enclosed median with a center median barrier prior to the Town and Country Boulevard interchange. Because of the length necessary to develop entrance and exit ramp junctions, and gain vertical separation between SR 37 and Town and Country Boulevard, the existing bridges carrying SR 37 over Stony Creek will be widened by approximately 17 feet as part of the project. The Stony Creek bridges widening will take place within the SR 37 median. There will be a continuous auxiliary lane between the Town and Country Boulevard and Pleasant Street interchanges in the northbound direction. In the southbound direction, a continuous collector-distributor (CD) lane will be used to interconnect the interchanges. Only the southbound exit to Town and Country Boulevard is proposed to exit to the CD. Traffic entering southbound SR 37 from Pleasant Street will travel through the CD and enter south of Town and County Boulevard. The reconstruction of SR 37 will begin approximately 1,400 feet south of the SR 37/Town and Country Boulevard intersection and extend 2,700 feet northward to approximately 1,300 feet north of the intersection. Along Town and Country Boulevard, the project will extend from approximately 300 west of SR 37 to approximately 350 feet east of SR 37. SR 37 will be depressed below Town and Country Boulevard. The minimum vertical clearance above SR 37 will be 16 feet 6 inches. A grade-separated dual lane teardrop roundabout interchange will be constructed at Town and Country Boulevard with elevated ramps from SR 37 to Town and Country Boulevard and from Town and Country Boulevard to SR 37. Town and Country Boulevard will be raised above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. The new bridge is anticipated to be a two span, 118-foot long, prestressed reinforced concrete Ibeam structure. A pedestrian path will be constructed along both the south and north sides of Town and Country Boulevard at the interchange. Lighting will be included at the roundabout.

In addition the small structure south of Town and Country Boulevard and Stony Creek that carries SR 37 over UNT to Stony Creek 1 is anticipated to be replaced.

Pleasant Street - No specific Des Nos. have been assigned to the SR 37/Pleasant Street road improvements, roundabout construction, or new bridge. The reconstruction of SR 37 will begin approximately 1,200 feet south of the SR 37/Pleasant Street intersection and extend 2,700 feet northward to approximately 1,500 feet north of the intersection. There will be a continuous CD lane in each direction between the Pleasant Street and SR 32 interchanges along SR 37. In the northbound direction, only the northbound exit ramp to SR 32 is proposed to exit to the CD. Traffic wishing to enter northbound SR 37 from Pleasant Street will travel through the CD to enter north of SR 32. In the southbound direction, only the southbound entrance from SR 32 is proposed to exit from the CD. Traffic wishing to exit southbound SR 37 to Pleasant Street will exit at SR 32 and travel through the CD to Pleasant Street. Along Pleasant Street, the project will extend from approximately 450 west of SR 37 to approximately 350 feet east of SR 37. Cherry Street will not be a full access interchange; however, it will be connected to the southbound CD between SR 32 and Pleasant Street. SR 37 will be depressed below Pleasant Street. The minimum vertical clearance above SR 37 will be 16 feet 6 inches. A grade-separated, dual lane teardrop roundabout interchange will be constructed at Pleasant Street with elevated ramps from SR 37 to Pleasant Street and from Pleasant Street to SR 37. Pleasant Street will be raised above its existing grade. Retaining

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County	Hamilton	Route	SR 37	Des. No.	1600540 et al.
		_			

walls will be installed along the depressed portion of SR 37 and along the interchange ramps. The new bridge is anticipated to be a two span, 118-foot long, prestressed reinforced concrete I-beam structure. A pedestrian path will be constructed along both the south and north sides of Pleasant Street at the interchange. Lighting will be included at the roundabout.

SR 32 - No specific Des Nos, have been assigned to the SR 37/SR 32 road improvements, roundabout construction, or new bridge. The reconstruction of SR 37 will begin approximately 800 feet south of the SR 37/SR 32 intersection and extend 2,675 feet northward to approximately 1,875 feet north of the intersection. There will be a continuous CD lane in each direction between the Pleasant Street and SR 32 interchanges along SR 37. In the northbound direction, only the northbound exit ramp to SR 32 is proposed to exit to the CD. Traffic wishing to enter northbound SR 37 from Pleasant Street will travel through the CD to enter north of SR 32. In the southbound direction, only the southbound entrance from SR 32 is proposed to exit from the CD. Traffic wishing to exit southbound SR 37 to Pleasant Street will exit at SR 32 and travel through the CD to Pleasant Street. Along SR 32, the project will extend from approximately 500 west of SR 37 to approximately 630 feet east of SR 37. The traffic signal at the intersection of SR 32 and Cumberland Road is also anticipated to be upgraded as part of the project. Cherry Street will not be a full access interchange; however, it will be connected to the southbound CD between SR 32 and Pleasant Street. SR 37 will be depressed below SR 32. The minimum vertical clearance above SR 37 will be 16 feet 6 inches. A grade-separated, dual lane teardrop roundabout interchange will be constructed at SR 32 with elevated ramps from SR 37 to SR 32 and from SR 32 to SR 37. SR 32 will be raised above its existing grade. Retaining walls will be installed along the depressed portion of SR 37 and along the interchange ramps. The new bridge is anticipated to be a two span, 124-foot ten-inch long, prestressed reinforced concrete I-beam structure. A pedestrian path will be constructed along both the south and north sides of SR 32 at the interchange. Lighting will be included at the roundabout.

In addition the small structure south of SR 32 carries SR 37 over UNT to Stony Creek 2 (CV 037-029-174.78) is anticipated to be widened on the west side to accommodate additional pavement.

#### Summary of Costs and Impacts

The preferred alternative addresses the purpose and need by reducing congestion and improving safety at the intersections listed above. It will reduce congestion by improving traffic flow through the intersections. The grade separation will allow SR 37 traffic flow through the interchange without stopping for the intersecting roadway traffic. The grade separation and roundabout will also reduce traffic conflict opportunities, resulting in a safer facility.

The proposed project will require approximately 41.89 acres of permanent right-of-way, 1.11 acre of temporary right-of-way and 2.16 acres of permanent easement (for drainage). Two residential relocations will be required; however, one house is currently unoccupied. The proposed project will result in 0.748 acre of wetland impacts (0.537 acre within proposed right-of-way and 0.211 acre within existing right-of-way), 1,128 linear feet of stream impacts, 1.2 acres of agricultural land impacts, and 6.9 acres of forest impacts. No business relocations are anticipated; however, impacts to 28.6 acres of commercial property are anticipated. One historic property, Hamilton County Bridge No. 151, is present, but the project will have no adverse effect to the resource. Several existing and planned trails are present within the project area; however, the project is not anticipated to have permanent adverse effects to these trails and is anticipated to result in a Section 4(f) *de minimis* finding.

The proposed project will maintain two lanes of traffic in each direction along SR 37 during construction. The MOT will be phased with some detours of the intersecting roads during interchange construction (Appendix B, pages B206 to B215). Please refer to the *Maintenance of Traffic (MOT) During Construction* section of this document for further details on the proposed MOT.

The SR 37 Improvement Project is listed in the Indiana Statewide Transportation Improvement Program (STIP) and the Indianapolis Metropolitan Planning Organization (MPO) Indianapolis Regional Transportation Improvement Program (IRTIP) under the lead Des No. 1600540 as well as the 13 individual Des Nos.: 1592345, 1592348, 1592346, 1592347, 1592349, 1601827, 1601830, 1601826, 1601828, 1602229, 1602231, 1601829, and 1601831 (Appendix H, pages H1 to

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		indiana Dep	artment of Trai	isportation	
County	Hamilton	Route	SR 37	Des. No.	1600540 et al.
Country		reet, and SR 32) are 1	isted in the Indianap		enfield Avenue, Town and Rang Transportation Plan
estimated and Cour interchan construct 126 <sup>th</sup> Str 2019. A c for maps	at \$104,159,650. The entry Boulevard, Pleasan ges is anticipated to be ion of the 131st Street an eet interchange, 135th Sconstruction schedule fo	total cost for the north t Street, and SR 32) it from the fall of 2015 ad 141st Street interchar treet modifications, ar r the northern four intercea (pages B1 to B28)	ern portion of the prosess estimated at \$156,788 through the end of ages is anticipated to an 146th Street intercerchanges has not yet	oject (SR 37 and 23,626. Construct 2020. The drain the fall of the drain the fall of the deep developed.	Greenfield Avenue, Town etion for the southern four nage pipe installation and f 2018. Construction of the ted to begin in the fall of Please refer to Appendix B ages B29 to B84), and the
OTHER	ALTERNATIVES CO	NSIDERED:			
			ing Alternative and an	explanation of wi	hy each discarded alternative
was not se					
SR 37. T section a alternativ	he No Build Alternative bove. If this alternative does not meet the purp we 2 - Preferred Alternative	e does not address the de were selected, cong pose and need of the pr	congestion and safety estion would continu oject and was therefor	concerns discuss e to increase at re dismissed from	the eight intersections. This further consideration.
<u>Alternati</u>	ve) above				
grade-sep However teardrop (identifie However resulted i and D. 7 while the pages 15	parated interchanges at the parated interchanges were roundabout configuration of as Alternative 1 and parated Alternative 3 did not all intersections improve the average overall delays overall delays for intersections.	the locations discussed ould be in a tight diamon. The Traffic Opera 1 2 in the report) will improve the overall I oved to an LOS of B of y for the intersection resection ramps with Altonia	in the <i>Project Descr</i> mond configuration water and the state of the s	ription (Preferred with traffic signal rt determined that he capacity need tion as well as A native 3 resulted to 2 ranged from om 6.1 seconds to	native would construct new (1 Alternative) section above. Its (if warranted) and not a at both Alternatives 2 and 3 s at the study intersections. Alternative 2. Alternative 2 in several with an LOS of C 1.8 seconds to 13.1 seconds, o 39.3 seconds (Appendix I, Italian and Italian an
investiga three-land projected	ted. A two-lane roundale roundabout can handle	bout has a typical daile a maximum of 55,00 This volume, combined	ly service volume may 00 to 60,000. The AA with the cross stree	aximum of 45,00 ADT for SR 37 a tt traffic, would e	nstead of an interchange was 0 vehicles per day, while a lone is 58,237 in 2018, and exceed the capacity of an at-
intersecti alteration complete	ons, additional turn an s. This would require a ly alleviate the congestions and pedestrian move	d thru lanes would n additional right-of-way on through the corrido	eed to be added to r impacts and a large r and does not addres	each intersection or footprint for the s safety concerns	ons on SR 37 and at the a, along with signal timing the intersection. It would not with accidents at signalized was eliminated from further
	·· - •				

SR 37 Improvement Project

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Date:

County _	Hamilton	Route		SR 37	_ Des. No.	1600540 et a	al.	
stages of the local stakeh created visu	e project. Elevati olders (City of I al barriers throug	ated and At-Grade Integrated and At-Grade Integrated Integration of State of Noble (and their communities, and their communities) and their communities are the state of the s	de a visua sville, and and pursue	al barrier between the d Hamilton County e alternatives that w	ne east and wo desired to could promot	vest sides of the	ne corridor. The alternative that	
ditches or s developed c slopes, guar likely result	torm water reter ommercial area. drails and in son in greater right- acts was elimina	oidance Alternative: T ntion/detention basins. Right-of-way impacts ne locations using retain of-way impacts to adjuted from consideration	They a have been ining wall acent com	re located along and minimized through s. Shifting SR 37 to imercial properties.	n existing for hout the project avoid wetla For this reas	our-lane highwater with the unds is not feasion, an alterna	yay in a highly se of steepened sible and would tive that avoids	
installation	along 141st Streed dattempts to mi	Pipe Installation Alonet to a UNT to Weave inimize impacts (in particular)	er Creek v	was investigated as	part of the p	project. Based	on higher cost	
It would not It would not It would not It would not It would resu Other (Desc	The Do Nothing Alternative is not feasible, prudent or practicable because (Mark all that apply):  It would not correct existing capacity deficiencies;  It would not correct existing safety hazards;  It would not correct the existing roadway geometric deficiencies;  It would not correct existing deteriorated conditions and maintenance problems; or  It would result in serious impacts to the motoring public and general welfare of the economy.  Other (Describe)							
ROADWAY	CHARACTER	₹:						
If the	proposed action	n has multiple roadways	s, this sec	tion should be filled	out for each	roadway.		
Current ADT	Classification: -: Volume (DHV):	5,198 Truck 55 Lega	(FY 2018) Percenta al Speed (	mph): 55	OT: 75,60	67 VPD (F	Y 2038)	
		Existing 4 (12' wide)		Proposed 4 (12' wide) plus ~	2 10' wido			
Number of L		,		auxiliary lanes				
Type of Land Pavement W		Paved asphalt travel land	ies	Paved asphalt travel 93.4	ft.			
Shoulder Wi	dth:	10 outside, ft. 4 inside		10 outside, 2.7 ins	ide ft.			
Median Widt Sidewalk Wi		40 ft. 0 ft.		26.5	ft.			
Setting: Topography		Urban X X Level	Suburba Rolling	n Rural Hilly				
This is p	age 15 of 90 P	roject name:	SF	R 37 Improvement Pro	ject	Date:	April 26, 2017	

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County Hamilton	Route		SR 37	Des. No.	1600540 et al.
126 <sup>th</sup> Street Functional Classification: Current ADT: Design Hour Volume (DH') Designed Speed (mph):	V): 2,023 Truck F 35 Legal	Y 2018) Percentaç Speed (r	nph): 35	: <u>27,461</u> 	VPD (FY 2038)
Number of Lanes:  Type of Lanes:  Pavement Width:  Shoulder Width:	West of SR 37 - 1 12' WB 1 12' EB lane, 1 12' EB left tr lane, 1 12' EB right turn lant East of SR 37 - 1 12' EB lant 12' EB left turn lane, 1 12' lane, 1 12' WB left turn lane WB right turn lane Paved asphalt travel lanes West of SR 37 - 48 East of SR 37 - 64 0	urn ne ne, 1 WB	Proposed  4 (12' wide)  Paved asphalt travel la  57.2  2.6 Outside	nnes ft.	
Median Width: Sidewalk Width:	West of SR 37 - N/A East of SR 37 - 4' raised West - 6 - 8	ft.	2.0 Inside N/A 8	ft.	
Setting: Topography:  131st Street		L Suburban Rolling	Rural Hilly		
Functional Classification: Current ADT: Design Hour Volume (DH) Designed Speed (mph):	V): 1,644 Truck F	Y 2018) Percentag Speed (r	· · /	:18,553	VPD (FY 2038)
Number of Lanes:	West of SR 37 - 1 14' W 2 11' EB lanes, 2 12' EB turn lanes, 1 EB 11' right lane East of SR 37 - 2, 14' EB 1 12' WB, 2 12' WB left lanes, 1 12' WB right turn	left turn B lanes, turn	4 (12' wide)		
Type of Lanes:	Paved asphalt travel lanes		Paved asphalt travel la		
Pavement Width:	West of SR 37 - 75' East of SR 37 - 80'	ft.	57.2	ft.	
Shoulder Width:	0	ft.	2.6 Outside 2.0 Inside	ft.	
Median Width:	West of SR 37 - 4' raised East of SR 37 - 4' raised		N/A	ft.	
Sidewalk Width:	West of SR 37 - 6 East of SR 37 - 8	ft.	8	ft.	
Setting: Topography:		Suburban Rolling	Rural Hilly		
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County	Hamilton	Route		SR 37	Des. No.	1600540 et al.
	<b>5<sup>th</sup> Street</b> Classification:	Collector				
Current AD	DT:	Not Available VPD (FY 2	018)	Design Year ADT:	Not Availab	le VPD (FY 2038)
	our Volume (DHV): Speed (mph):	765         Truck Per           30         Legal Sp	centa		Availab	NO VID (11 2036)
		Existing		Proposed		
Number of		West of SR 37 - 1 14' WB la 1 12' EB lane, 2 12' EB left lanes, 1 12' EB right turn lar East of SR 37 - 2 12' EB lan 12' WB lane, 2 12' EB left t lanes	turn ne es, 1	2 12' lanes, 2 12' auxi		
Type of La	nes:	Paved asphalt travel lanes	r.	Paved asphalt travel la		
Pavement	Width:	West of SR 37 - 66 East of SR 37 - 66	ft.	56	ft.	
Shoulder V	Width:	N/A	ft.	2	ft.	
Median Wi	idth:	West of SR 37 - 'raised East of SR 37 - 6' raised	ft.	N/A	ft.	
Sidewalk V	Vidth:	0	ft.	0	ft.	
Setting: Topograph	ny:	Urban X Sub X Level Roll	ourbar ling	Rural Hilly		
Functional Current Al Design Ho	1st Street Classification: DT: pur Volume (DHV): Speed (mph):	Major Collector           13,087         VPD (FY 2           1,802         Truck Per           35         Legal Sp	centa		17,004 	VPD (FY 2038)
Number of	f Lanes:	Existing  West of SR 37 - 1 17' WB la 1 12' EB lane, 1 12' EB left lane, 1 12' EB right turn land East of SR 37 - 1 16' EB lan 12' WB lane, 1 12' EB left t lane, 1 12' EB right turn land	turn e e, 1 urn	Proposed 4 (12' wide)		
Type of La	ines:	Paved asphalt travel lanes		Paved asphalt travel la		
Pavement	Width:	West of SR 37 - 61 East of SR 37 - 65	ft.	57.2	ft.	
Shoulder V	Vidth:	West of SR 37 - 4' south East of SR 37 - 9' south, 4' north	ft.	2.6 Outside 2.0 Inside	ft.	
Median Wi	idth:	West of SR 37 - 4' raised East of SR 37 - N/A	ft.	N/A	ft.	
Sidewalk V	Width:	West - 5 East - 8	ft.	8	ft.	
Setting: Topograph	ny:	Urban X Sub X Level Roll	ourbar ling	Rural Hilly		
Functional Current Al Design Ho	6 <sup>th</sup> Street I Classification: DT: our Volume (DHV): Speed (mph):	Primary Arterial           29,337         VPD (FY 2           3,861         Truck Pere           45         Legal Sp	centa		38,118	VPD (FY 2038)
This is	page 17 of 90 P	roject name:	SR	37 Improvement Project	et	Date: April 26, 2017

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Des. No. 1600540 et. al.

County Hamilton	Route		SR 37	Des. No.	1600540 et al.
	Existing		Proposed		
Number of Lanes:	West of SR 37 - 2 14' EB land 2 13' EB lanes, 2 12' EB left turn lanes, 1 13' EB right turn lane East of SR 37 - 2 12' EB land 12' EB right turn lane, 2 12' lanes, 2 12' WB left turn land 12' WB right turn lane	n es, 1 WB	4 12' through lanes, 4 1 and turn lanes	2' auxiliary	
Type of Lanes:	Paved asphalt travel lanes		Paved asphalt travel lar	nes	
Pavement Width:	West of SR 37 - 93 East of SR 37 - 98	ft.	105.2	ft.	_
Shoulder Width:	West of SR 37 - 0 East of SR 37 - 0	ft.	2.6 Outside 2.0 Inside	ft.	
Median Width:	East of SR 37 - 2' raised	ft.	N/A	ft.	
Sidewalk Width:	West - 8 East - 0	ft.	8	ft.	
Setting: Topography:	Urban X Subr X Level Rolli	urbar ng	Rural Hilly		
Greenfield Avenue Functional Classification: Current ADT: Design Hour Volume (DHV)	Primary Arterial  17,648 VPD (FY 2)  Truck Porce		Design Year ADT:	22,930	VPD (FY 2038)
Designed Speed (mph):	35 Legal Spe		West – 35;		
Bodgnod opoca (mpn).		, DOG	East - 40		
	Existing		Proposed		
Number of Lanes:	West of SR 37 - 1 18' WB la 1 11' EB lane, 1 12' EB left t lane, 1 11' EB right turn lane East of SR 37 - 4 10' EB land 1 12' WB lane, 1 12' WB left turn lane, 1 12' WB right turn lane	es,	4 (12' wide)		
Type of Lanes:	Paved asphalt travel lanes		Paved asphalt travel lar		
Pavement Width:	West of SR 37 - 52 East of SR 37 - 80	ft.	61.2	ft.	_
Shoulder Width:	West of SR 37 - 0 East of SR 37 - 0	ft.	2.6	ft.	
Median Width:	West of SR 37-0 East of SR 37-4' raised	ft.	8	ft.	
Sidewalk Width:	West - 0 East - 8	ft.	Not yet determined	ft.	
Setting: Topography:	Urban X Sub X Level Rolli	urbar ng	Rural Hilly		
This is page 18 of 90	Project name:	SR	37 Improvement Project	t	Date: April 26, 2017

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County Hamilton	Route	SR 37	Des. No.	1600540 et al.
Town and Country				
Functional Classification: Current ADT:	Collector 18,602 VPD (FY 20	Design Year ADT	: 24,170	VPD (FY 2038)
Design Hour Volume (DHV):	Truck Porc	entage (%)		. (
Designed Speed (mph):	1,276	eed (mph): 7 %	_	
Designed Opeca (mpn).		.ca (mpn)	<u>—</u>	
	Existing	Proposed		
	West of SR 37 - 1 14' WB lan			]
	1 17' WB right turn lane, 2 12 EB lanes, 1 16' left turn lane,			
Number of Lanes:	12' right turn lane	1		
	East of SR 37 - 2 12' EB lane			
	12' EB lane, 2 12' EB left tur			
Type of Lanes:	lanes, 1 12' EB right turn land Paved asphalt travel lanes	Paved asphalt travel l	anes	_
		ft. West of SR 37 - 57.		<b>⊥</b>
Pavement Width:	East of SR 37 - 72	East of SR 37 - 66.2		
Shoulder Width:	West of SR 37 - 0 East of SR 37 - 0	ft. 2.6	ft.	
Median Width:	West - 4' raised	ft. West of SR 37 - 4	ft.	
Wodali Widti.	East - 0 West - 6	East of SR 37 - 13		
Sidewalk Width:	East - 0	ft. Not yet determined	ft.	
Setting: Topography:	Urban X Subo X Level Rolli	urban Rural ng Hilly		
Pleasant Street				
Functional Classification: Current ADT:	Minor Arterial 14,512 VPD (FY 20	018) Design Year ADT	18,856	VPD (FY 2038)
Design Hour Volume (DHV):	1,078 Truck Perc	entage (%)		
Designed Speed (mph):		eed (mph): 35	<u> </u>	
	Existing	Proposed		
	West of SR 37 - 1 12' WB lan			7
	1 12' WB right turn lane, 1 12' WB lane, 1 12' WB left turn	2'		
	lane			
Number of Lanes:	East of SR 37 – 1 12' EB land			
	12' EB right turn lane, 1 12'			
	lane, 1 12' WB left turn lane, 12' WB right turn lane	1		
Type of Lanes:	Paved asphalt travel lanes	Paved asphalt travel l	anes	
Pavement Width:		t. 57.2	ft.	_
Shoulder Width:	West of SR 37 - 4' south f	t. 2.6	ft.	
Median Width:		t. 4	ft.	
	East of SR 37 - 4 West of SR 37 - 6	t. Not yet determined	ft.	
Sidewalk Width:	East of SR 37 - 8	i. Inot yet determined	IL.	
Setting:		urban Rural		
Topography:	X Level Rolli	ng Hilly		
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Des. No. 1600540 et. al.

County _	Hamilton	Rou	ite	SR 37	Des. No.	1600540 et	al.
SR 3							
	Classification:	Primary Arte					
Current ADT	Γ:	20,539	VPD (FY 2018)	Design Year ADT	26,686	VPD (F	Y 2038)
Design Hou	r Volume (DHV):	2,107	Truck Percenta	ge (%) Not Available			
Designed Sp	peed (mph):	35	Legal Speed ( –	West _ 35:	<del>-</del> -		
		Existing		Proposed			
Number of L		1 11' WB lane, turn lane, 1 11' lane East of SR 37 – 12' WB lanes, 1 turn lane	WB right turn 1 12' EB lane, 2 12' WB left	5 (12' wide)			
Type of Land	es:	Paved asphalt to		Paved asphalt travel la			
Pavement V	Vidth:	West of SR 3 East of SR 3		69.2	ft.		
Shoulder Wi	idth:	West of SR East of SR 37 - 10' nor	4' south,	2.6	ft.		
Median Wid	th:	West of SR East of SR 37 –		4	ft.		
Sidewalk Wi	idth:	0	ft.	Not yet determined	ft.		
Setting: Topography	:	X Level	X Suburbar Rolling	n Rural Hilly			
DESIGN CR	RITERIA FOR E	RIDGES:					
If the propose	ad action has mu	tinle bridges or	emall structures	this section should be	filled out for	each structu	ure.
ii tile propose	action has mu	uple bridges or .	siriali structures, i	inis section snould be	i iiilea oat ioi	each shuck	7 C.
Structure/NE	BI Number(s):	037-29-1 (126 <sup>th</sup> Street o		Sufficiency Rating:		N/A	
	<del></del>	•	viol sit s / )	Proposed	(Rat	ing, Source of	Information)
		Existing		Proposeu			
Bridge Type	:	N/A		Continuous Com Concrete Bulb-T			
Number of S	Spans:	N/A		2	2510	<u> </u>	
Weight Rest		N/A to	n	N/A ton			
Height Resti		N/A ft.		17 ft.			
Curb to Curb		N/A ft.		28.3 ft.			
	Outside Width:	N/A ft.		73.5 ft.			
Shoulder Wi		N/A ft.		2 ft.			
Length of Cl	hannel Work:			0 ft.			
<i>Descri</i> Remarks:	No current brid roundabout into and from 126 <sup>th</sup> Retaining walls	lge exists at the erchange will be Street to SR 33 s will be installe	intersection of 1: e constructed at 7. 126 <sup>th</sup> Street w d along the depre	n information for small 26 <sup>th</sup> Street and SR 37 126 <sup>th</sup> Street with elevill be raised no more essed portion of SR 3 both the south and no	A grade-se rated ramps to than 10 feet 7 and along to	from SR 37 et above its et the interchan	to 126 <sup>th</sup> Street existing grade.
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County _	Hamilton	Route	SR 37	_ Des. No	1600540 et al.	
		t the interchange. The new stressed concrete bulb-tee be				
Will the struc	cture be rehabilit	tated or replaced as part of t	ne project?	Yes	No	N/A X
Structure/NE	BI Number(s):	CV 037-029-170.03	Sufficiency Rating:		N/A	
				(Ratir	ng, Source of Informati	ion)
		Existing	Proposed			
Bridge Type	:	Corrugated metal pipe/Reinf concrete box culvert	orced Reinforced con	ncrete box culvert	i	
Number of S	Spans:	1	1			
Weight Rest		N/A ton	N/A ton			
Height Rest		N/A ft.	N/A ft.			
Curb to Curb		N/A ft.	N/A ft.			
	Outside Width:	141 ft.	159 ft.			
Shoulder Wi		N/A ft.	N/A ft.			
Length of Ci	nannel Work:		329 ft.			
<i>Descri</i> Remarks:	South of 131st carrying SR 37 a 9-foot by 6-1 will be placed the structure. I expected to o	Structures; provide specific loss street, the existing 6-foot of over a UNT to Britton Brase foot reinforced concrete box below the ground surface) street as a result of replaced on realigning a portion of the	by 6-foot corrugated monch (CV 037-029-170.03 culvert. The structure with six inches and riprap willing plans, approximately ing the existing small	etal pipe/reinfor 3) is undersized will be sumped ( Il be placed upst 329 linear feet ( structure, placi	and will be replaced (the bottom of the cutream and downstream (0.14 acre) of impact	with alvert of ts are
Will the struc	cture be rehabilit	tated or replaced as part of t	ne project?	Yes X	No	N/A
Structure/NE	3I Number(s):	037-29-10224 (131 <sup>st</sup> Street over SR 37)	Sufficiency Rating:		N/A	
		Existing	Proposed	(Ratir	ng, Source of Informati	ion)
Bridge Type	:	N/A	Continuous Co	omposite Prestress	sed	
				-Tee Beam Bridge	e	
Number of S		N/A	2			
Weight Rest		N/A ton	N/A ton			
Height Rest		N/A ft.	16.7 ft. 28.1 ft.			
	Outside Width:	N/A It.	74.3 ft.			
Shoulder Wi		N/A ft.	2 ft.			
	nannel Work:	10.	$\frac{2}{0}$ ft.			

Form Version: June 2013 Attachment 2

SR 37 Improvement Project

Attachment 1

Des. No. 1600540 et. al.

This is page 21 of 90 Project name:

April 26, 2017

Date:

County _	Hamilton	F	Route	SR 37	Des. No.	1600540 et al.	
<i>Descri</i> Remarks:	No current brid roundabout into and from 131st Retaining walls 8-foot pedestria new bridge at	lge exists at the change will Street to SR s will be instant path will be the interchant	the intersection be constructed 37. 131st Stralled along the be constructed a sange. The new	of 131st Street and SR d at 131st Street with det will be raised no n depressed portion of Salong both the south and w bridge (Structure Nam bridge. It will include	R 37. A grade-se elevated ramps in nore than 10 fee R 37 and along and north sides of No. 037-29-102.	from SR 37 to 1 et above its exist the interchange r 131st Street and 24) will be a control of the street and 24)	31st Street sing grade. samps. An across the continuous
Will the stru	cture be rehabilita	ated or replac	ced as part of t	ne project?	Ye	s No	N/A X
Structure/NI	BI Number(s):	CV 037-	029-170.50	Sufficiency Rating:		N/A ing, Source of Info	ormation)
		Existing	3	Proposed			
Bridge Type	<u>'</u>	3-sided conc	rete culvert	Reinforced c	oncrete box culve	rt	
Number of S		1	rete curvert	1	oncrete bon curve	11	
		T NT/A	400				
Weight Rest		N/A	ton	N/A ton			
Height Rest		N/A	ft.	N/A ft.			
Curb to Curl	b Width:	N/A	ft.	N/A ft.			
Outside to C	Outside Width:	186	ft.	205 ft.			
Shoulder W		N/A	ft.	N/A ft.			
		11/21	16.	289 ft.			
Length of C	hannel Work:			289 II.			
Remarks:	North of 131st	Street, the ex	sisting 8.5-foot	cation information for s by 10-foot 3-sided co	ncrete culvert ca		er Britton
	concrete box c ground surface expected to Br	ulvert. The solution one foot an itton Branch itton within	structure will l d riprap will b as a result of the proposed	ted and will be replace be sumped (the botton e placed upstream and replacing the existing right-of-way (including	n of the culvert downstream of structure and pl	will be placed the structure. In acing riprap ups	below the npacts are stream and
	concrete box c ground surface expected to Br downstream. Ir	ulvert. The solution one foot an itton Branch itton within	structure will l d riprap will b as a result of the proposed	be sumped (the botton e placed upstream and replacing the existing	n of the culvert downstream of structure and pl	will be placed the structure. In acing riprap ups	below the npacts are stream and
Will the stru	concrete box c ground surface expected to Br downstream. Ir	ulvert. The s ) one foot an itton Branch npacts withir set (0.08 acre	structure will be driprap will be as a result of a the proposed.	be sumped (the botton e placed upstream and replacing the existing right-of-way (includin	n of the culvert downstream of structure and pl	will be placed the structure. In acing riprap ups the existing structure.	below the npacts are stream and
	concrete box of ground surface expected to Br downstream. In be 289 linear for	ulvert. The s ) one foot an itton Branch npacts withir set (0.08 acre ated or replace	structure will be driprap will be as a result of a the proposed.	be sumped (the botton e placed upstream and replacing the existing right-of-way (includin	n of the culvert downstream of structure and plag the length of	will be placed the structure. In acing riprap ups the existing structure s No	below the mpacts are stream and cture) will
	concrete box of ground surface expected to Br downstream. In the 289 linear for contract the properties of the concrete be rehabilited.	ulvert. The s ) one foot an itton Branch npacts withir set (0.08 acre ated or replace	structure will be designed as a result of the proposed of the	be sumped (the botton e placed upstream and replacing the existing right-of-way (including	n of the culvert downstream of structure and plag the length of	will be placed the structure. In acing riprap ups the existing structure s	below the mpacts are stream and cture) will
	concrete box of ground surface expected to Br downstream. In the 289 linear for contract the properties of the concrete be rehabilited.	ulvert. The s ) one foot an itton Branch npacts withir set (0.08 acre ated or replace	structure will be designed as a result of the proposed of the	be sumped (the botton e placed upstream and replacing the existing right-of-way (including	n of the culvert downstream of structure and plag the length of	will be placed the structure. In acing riprap ups the existing structure s No	below the mpacts are stream and cture) will
	concrete box of ground surface expected to Br downstream. In the 289 linear for the cture be rehabilited.  BI Number(s):	ulvert. The s ) one foot an itton Branch mpacts within eet (0.08 acre  ated or replace  037-2 (141st Stre	structure will be designed as a result of the proposed of the	pe sumped (the bottom e placed upstream and replacing the existing right-of-way (includin  ne project?  Sufficiency Rating:  Proposed  Continuous C	n of the culvert downstream of structure and plag the length of	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Structure/Ni Bridge Type	concrete box of ground surface expected to Br downstream. In the 289 linear for the 289 linear for the surface of the surface	ulvert. The s ) one foot an itton Branch mpacts within set (0.08 acre  ated or replace  141st Stre  Existing	structure will be designed as a result of the proposed of the	pe sumped (the bottom e placed upstream and replacing the existing right-of-way (includin  ne project?  Sufficiency Rating:  Proposed  Continuous C	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Structure/NE  Bridge Type  Number of S	concrete box of ground surface expected to Br downstream. In be 289 linear feature be rehabilited.  BI Number(s):	ulvert. The s ) one foot an itton Branch mpacts within set (0.08 acre ated or replace (141st Stre  Existing	structure will lid riprap will be as a result of a the proposed.).  ced as part of the ending the end of the e	pe sumped (the botton e placed upstream and replacing the existing right-of-way (includin ne project?  Sufficiency Rating:  Proposed  Continuous C Concrete But 2	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Structure/NE  Bridge Type  Number of S  Weight Resi	concrete box of ground surface expected to Br downstream. In be 289 linear feature be rehabilited.  BI Number(s):	ulvert. The s ) one foot an itton Branch mpacts within set (0.08 acre  ated or replace  141st Stre  Existing  N/A  N/A  N/A	structure will lid riprap will be as a result of a the proposed.).  ced as part of the ending the end of the e	pe sumped (the botton e placed upstream and replacing the existing right-of-way (includin ne project?  Sufficiency Rating:  Proposed  Continuous ( Concrete Bul 2  N/A ton	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Structure/NE  Bridge Type  Number of S  Weight Rest  Height Rest	concrete box of ground surface expected to Br downstream. In be 289 linear feature be rehabilited.  BI Number(s):	ulvert. The s ) one foot an itton Branch mpacts within set (0.08 acre  ated or replace  (141st Stre  Existing  N/A  N/A  N/A  N/A	ton ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (includin ne project?  Sufficiency Rating:  Proposed  Continuous C Concrete But 2  N/A 16.8 ft.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Structure/NE  Bridge Type  Number of S  Weight Rest  Height Rest  Curb to Curl	concrete box of ground surface expected to Br downstream. In be 289 linear for the 289 li	ulvert. The s ) one foot an itton Branch mpacts within tet (0.08 acre  ated or replace  037-2 (141st Stre  Existing  N/A  N/A  N/A  N/A  N/A  N/A	ton ft. ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (includin ne project?  Sufficiency Rating:  Proposed  Continuous C Concrete Bu 2  N/A 16.8 16.8 16.8 16.8 16.6 16.8 17.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Structure/NE  Bridge Type  Number of S  Weight Rest  Height Rest  Curb to Curl	concrete box of ground surface expected to Br downstream. In be 289 linear feature be rehabilited.  BI Number(s):	ulvert. The s ) one foot an itton Branch mpacts within set (0.08 acre  ated or replace  (141st Stre  Existing  N/A  N/A  N/A  N/A	ton ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (includin ne project?  Sufficiency Rating:  Proposed  Continuous C Concrete But 2  N/A 16.8 ft.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Bridge Type  Number of S  Weight Rest  Height Rest  Curb to Curl  Outside to C	concrete box of ground surface expected to Br downstream. In be 289 linear for ture be rehabilited.  BI Number(s):  Exercises:  Bigans:  ctrictions:  b Width:  Dutside Width:	ulvert. The s ) one foot an itton Branch mpacts within tet (0.08 acre  ated or replace (141st Street)  Existing N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/A	ton ft. ft. ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (including the project?  Sufficiency Rating:  Proposed  Continuous Concrete But 2  N/A ton 16.8 ft. 36 ft. 70.8 ft. ft.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Bridge Type  Number of S  Weight Rest  Height Rest  Curb to Curl  Outside to C  Shoulder W	concrete box of ground surface expected to Br downstream. In be 289 linear for ture be rehabilited.  BI Number(s):  Exercises Spans: trictions: rictions: b Width: Dutside Width: idth:	ulvert. The s ) one foot an itton Branch mpacts within tet (0.08 acre  ated or replace  037-2 (141st Stre  Existing  N/A  N/A  N/A  N/A  N/A  N/A	ton ft. ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (including the project?  Sufficiency Rating:  Proposed  Continuous Concrete But 2  N/A ton 16.8 ft. 36 ft. 70.8 ft. ft. 2 ft.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Bridge Type  Number of S  Weight Rest  Height Rest  Curb to Curl  Outside to C  Shoulder W	concrete box of ground surface expected to Br downstream. In be 289 linear for ture be rehabilited.  BI Number(s):  Exercises:  Bigans:  ctrictions:  b Width:  Dutside Width:	ulvert. The s ) one foot an itton Branch mpacts within tet (0.08 acre  ated or replace (141st Street)  Existing N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/A	ton ft. ft. ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (including the project?  Sufficiency Rating:  Proposed  Continuous Concrete But 2  N/A ton 16.8 ft. 36 ft. 70.8 ft. ft.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will
Bridge Type  Number of S  Weight Rest  Height Rest  Curb to Curl  Outside to C  Shoulder W	concrete box of ground surface expected to Br downstream. In be 289 linear for ture be rehabilited.  BI Number(s):  Exercises Spans: trictions: rictions: b Width: Dutside Width: idth:	ulvert. The s ) one foot an itton Branch mpacts within tet (0.08 acre  ated or replace (141st Street)  Existing N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/A	ton ft. ft. ft.	pe sumped (the botton e placed upstream and replacing the existing right-of-way (including the project?  Sufficiency Rating:  Proposed  Continuous Concrete But 2  N/A ton 16.8 ft. 36 ft. 70.8 ft. ft. 2 ft.	n of the culvert downstream of structure and plag the length of Ye X	will be placed the structure. In acing riprap ups the existing structure s No N/A	below the mpacts are stream and cture) will

Form Version: June 2013 Attachment 2 Attachment 1

County _	Hamilton	F	Route	SR	37	Des. N	lo. <u>1</u>	600540 et a	1.	
Descri. Remarks:	No current brid roundabout into and from 141st Retaining walls 8-foot pedestria new bridge at composite preseach.	lge exists at erchange wil Street to SR s will be instant an path will be the interch tressed conce	the intersection 1 be constructed 37. 141st Streadled along the coe constructed a ange. The new rete bulb-tee be	of 141st dat 141st dat 141st det will be depressed along both w bridge am bridge	Street and SR Street with e e raised no m portion of SI the south an (Structure N e. It will include	37. A gradelevated ran nore than 10 R 37 and ald d north side No. 037-29-	e-separ nps from ) feet a ong the es of 14 10227)	m SR 37 t bove its endinterchang 1st Street and will be	o 141st existing ge ramp and acr a cont ot 6-inc	Street grade. os. An oss the inuous
Structure/NE	3I Number(s):		29-10225	Suffic	eiency Rating:			N/A		
	_	(146 <sup>th</sup> Stre	et over SR 37)	_		-	(Rating	, Source of	Informa	ntion)
		Existing	g	P	roposed		( 8	,		,
Bridge Type	:	N/A			Continuous C			d		
Number of S	Snane:	N/A			2	.b-1ec Beam	Driuge			
Weight Rest		N/A	ton		N/A ton					
		N/A	ft.		16.1 ft.					
Height Rest										
Curb to Curl		N/A	ft.		36 ft.					
	Outside Width:	N/A	ft.		66.5 ft.					
Shoulder Wi		N/A	ft.		2 ft.					
Length of Cl	nannel Work:				0 ft.					
Remarks:	No current brid roundabout into and from 146 <sup>th</sup> Retaining walls 8-foot pedestria new bridge at composite pres each.	lge exists at erchange wil Street to SF s will be instant an path will be the interch tressed conce	the intersection 1 be constructed 2.37. 146 <sup>th</sup> Stra alled along the be constructed a ange. The neverete bulb-tee be	of 146 <sup>th</sup> d at 146 <sup>th</sup> eet will b depressed along both w bridge am bridge	Street and SR Street with e e raised no m portion of SI the south an (Structure N e. It will incle	37. A gradelevated ran nore than 10 R 37 and alo d north side No. 037-29-	e-separ nps from ) feet a long the es of 14 10225)	m SR 37 t bove its e interchang 6 <sup>th</sup> Street a will be	o 146 <sup>th</sup> xisting ge ramp and acrea conto to 6-inc	Street grade. os. An oss the inuous ch long
Will the strue	cture be rehabilita	ated or repla	ced as part of th	ne project	?					X
Structure/NE	3I Number(s):	CV 037	-029-172.19	Suffic —	iency Rating:		(Rating	N/A , Source of	Informa	ation)
		Existing	g	P	roposed					
Bridge Type		Reinforced	concrete box culv	ert	Reinforced co	oncrete hov o	ulvert			
Number of S		1	concrete box curv	V11	1	OHOLOR OUA C	aiveit			
Weight Rest		N/A	ton		N/A	ton				
						4				
Height Rest		N/A	ft.		N/A	ft.				
Curb to Curl		N/A	ft.		N/A	ft.				
	Outside Width:	150	ft.		150	ft.				
Shoulder W		N/A	ft.		N/A	ft.				
Length of Cl	nannel Work:				0	ft.				
This is p	age 23 of 90 F	Project name:		SR 37 I	mprovement P	roject		_ Date:	April	26, 2017

Form Version: June 2013 Attachment 2 Attachment 1

Des. No. 1600540 et. al.

County _	Hamilton	R	Route S	R 37	_ Des. No.	1600540 et al.	
<i>Descri</i> Remarks:	No work is an	ticipated at th	vide specific location in ne small structure carrefore, impacts are not	rying SR 37 over	r Overdorff Br		
Will the struc	cture be rehabili	ated or replac	ced as part of the proje	ct?	Yes	No X	N/A
Structure/NE	31 Number(s):	CV 037-	.029-172.46 Suf	ficiency Rating:		N/A	
	_	Existing		Proposed	(Rat	ing, Source of Informat	ion)
Bridge Type	:	Reinforced c	concrete box ugated Metal Pipe	Reinforced cor	ncrete box ated Metal Pipe		
Number of S	Snans:	1		1			
Weight Rest		N/A	ton	N/A	ton		
Height Rest		N/A	ft.		ft.		
Curb to Curl		N/A	ft.		ft.		
	Outside Width:	150	ft.		ft.		
Shoulder Wi		N/A	ft.		ft.		
	nannel Work:	IN/A	IL.		ft.		
<i>Descri</i> Remarks:	No work is an	ticipated at th 7-029-172.46)	vide specific location in the small structure carry or; therefore, impacts an	ying SR 37 over	a UNT Overd		
Structure/NE	BI Number(s):			Sufficiency Rating:	(Rat	N/A	ion)
		Existing	]	Proposed			
D :							
Bridge Type	:	N/A			inforced Concre n Bridge	te	
				Prestressed Re Bulb-Tee Bear 2		te	
Number of S	Spans:	N/A	ton	Bulb-Tee Bear 2		te	
Number of S Weight Rest	Spans:	N/A N/A	ton ft.	Bulb-Tee Bear 2 N/A ton		te	
Number of S Weight Rest Height Rest	Spans: rictions: rictions:	N/A N/A N/A		Bulb-Tee Bear 2 N/A ton		te	
Number of S Weight Rest Height Rest Curb to Curl	Spans: rictions: rictions: o Width:	N/A N/A N/A N/A	ft. ft.	Bulb-Tee Bear  2  N/A ton  16.5 ft.  232.7 ft.		te	
Number of S Weight Rest Height Rest Curb to Curl Outside to C	Spans: rictions: rictions: Dividth: Dutside Width:	N/A N/A N/A	ft.	Bulb-Tee Bear 2 N/A ton 16.5 ft. 232.7 ft.		te	
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi	Spans: rictions: rictions: Dividith: Outside Width: dth:	N/A N/A N/A N/A N/A	ft. ft. ft.	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft.		te	
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: o Width: outside Width: dth: nannel Work:	N/A N/A N/A N/A N/A N/A	ft. ft. ft. ft.	Bulb-Tee Bear  2  N/A ton  16.5 ft.  232.7 ft.  236 ft.  2 ft.  0 ft.	n Bridge	te	
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: o Width: outside Width: dth: nannel Work:	N/A N/A N/A N/A N/A N/A N/A N/A N/A	ft. ft. ft. ft. vide specific location in	Bulb-Tee Bear   2   N/A   ton   16.5   ft.   232.7   ft.   236   ft.   0   ft.   ft.   nformation for sm	m Bridge		1 lane
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: o Width: outside Width: dth: nannel Work: be bridges and s	N/A N/A N/A N/A N/A N/A N/A N/A otructures; prodge exists at the structures at the structures.	ft. ft. ft. ft. vide specific location in the intersection of Green	Bulb-Tee Bear   2   N/A   ton   16.5   ft.   232.7   ft.   236   ft.   0   ft.   f	m Bridge  mall structures. and SR 37. A	grade-separated, dua	
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: o Width: outside Width: dth: nannel Work: be bridges and s No current bri teardrop round	N/A N/A N/A N/A N/A N/A N/A N/A N/A atructures; pro dge exists at tabout interchal	ft. ft. ft.  ft.  vide specific location in the intersection of Greange will be constructed.	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. ft. ft. ft. denformation for sm eenfield Avenue ed at Greenfield	n Bridge nall structures. and SR 37. A Avenue with e	grade-separated, dua levated ramps from S	SR 37
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: o Width: Outside Width: dth: nannel Work: be bridges and s No current bri teardrop round to Greenfield	N/A N/A N/A N/A N/A N/A N/A N/A Atructures; prodge exists at about interchalabout interchalabout and f	ft. ft. ft. vide specific location in the intersection of Greange will be construction Greenfield Avenuation.	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 1 ft. 0 ft.  proper field Avenue ed at Greenfield are to SR 37. Gree	nall structures. and SR 37. A Avenue with e	grade-separated, dua levated ramps from S ue will be raised abo	SR 37 ve its
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: hannel Work:  be bridges and so No current briteardrop round to Greenfield existing grade	N/A N/A N/A N/A N/A N/A N/A N/A Atructures; prodge exists at about interchalled about int	ft. ft. ft. ft. vide specific location in the intersection of Greange will be construction Greenfield Avenualls will be installe	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. ft. ft. ft. ft. ft. ft. gray ft.	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion	grade-separated, dua levated ramps from S ue will be raised abo of SR 37 and alon	SR 37 ve its g the
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: De bridges and some to Greenfield existing grade interchange ra	N/A N/A N/A N/A N/A N/A N/A N/A N/A Atructures; produce exists at about interchalabout interchalabout. Avenue and f. Retaining mps. The ne	ft. ft. ft. ft.  vide specific location in the intersection of Greange will be construction Greenfield Avenualls will be installe w bridge is anticipated	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 1 ft. 0 ft.  mformation for sm eenfield Avenue ed at Greenfield are to SR 37. Gr d along the dep ed to be a two	n Bridge  nall structures. and SR 37. A  Avenue with e eenfield Avenuressed portion span, 198-foo	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: Debe bridges and some teardrop round to Greenfield existing grade interchange rareinforced con	N/A	ft. ft. ft. ft. vide specific location in the intersection of Gre ange will be constructe from Greenfield Avenu walls will be installe w bridge is anticipate beam structure. A pec	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: Debe bridges and some teardrop round to Greenfield existing grade interchange rareinforced con	N/A	ft. ft. ft. ft.  vide specific location in the intersection of Greange will be construction Greenfield Avenualls will be installe w bridge is anticipated	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: Debe bridges and some teardrop round to Greenfield existing grade interchange rareinforced con	N/A	ft. ft. ft. ft. vide specific location in the intersection of Gre ange will be constructe from Greenfield Avenu walls will be installe w bridge is anticipate beam structure. A pec	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: Debe bridges and some teardrop round to Greenfield existing grade interchange rareinforced con	N/A	ft. ft. ft. ft. vide specific location in the intersection of Gre ange will be constructe from Greenfield Avenu walls will be installe w bridge is anticipate beam structure. A pec	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: Debe bridges and some teardrop round to Greenfield existing grade interchange rareinforced con	N/A	ft. ft. ft. ft. vide specific location in the intersection of Gre ange will be constructe from Greenfield Avenu walls will be installe w bridge is anticipate beam structure. A pec	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl	Spans: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: Debe bridges and some teardrop round to Greenfield existing grade interchange rareinforced con	N/A	ft. ft. ft. ft. vide specific location in the intersection of Gre ange will be constructe from Greenfield Avenu walls will be installe w bridge is anticipate beam structure. A pec	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed	grade-separated, dua levated ramps from S are will be raised abo of SR 37 and alon t 6-inch long, prestr	SR 37 ve its g the ressed
Number of S Weight Rest Height Rest Curb to Curl Outside to C Shoulder Wi Length of Cl  Descrit Remarks:	Spans: rictions: rictions: rictions: Dutside Width: Dutside Width: Dannel Work: De bridges and selection of the Greenfield existing grade interchange rareinforced connorth sides of the prictions.	N/A	ft. ft. ft.  ft.  vide specific location in the intersection of Greange will be construct from Greenfield Avenu walls will be installe w bridge is anticipate beam structure. A pervenue and across the new transport of the specific production of the specific product	Bulb-Tee Bear  2  N/A ton 16.5 ft. 232.7 ft. 236 ft. 2 ft. ft. 0 ft.  cenfield Avenue ed at Greenfield Avenue ed at Greenfield along the dependent of the bear to be a two destrian path will	nall structures. and SR 37. A Avenue with e eenfield Avenuressed portion span, 198-fool be constructed interchange.	grade-separated, dua levated ramps from S ae will be raised abo of SR 37 and alon t 6-inch long, prestr d along both the sout	SR 37 ve its g the ressed

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Des. No. 1600540 et. al.

Page 24

County _	Hamilton		Route SR	37	Des. No.	160054	40 et al.	
Will the struc	ture be rehabili	tated or repla	ced as part of the projec	t?	Ye	es	No	N/A X
Structure/NB	I Number(s):		t yet determined Country Blvd. over SR 37)	Sufficienc Rating:	<u></u>	N/		
					(Ra	iting, Sou	rce of Informa	ation)
		Existin	g F	Proposed				
Bridge Type:		N/A		Prestressed Beam Brid	Reinforced Concrege	ete I		
Number of S		N/A		2			]	
Weight Restr		N/A	ton	N/A to				
Height Restri		N/A	ft.	16.5 ft.				
Curb to Curb		N/A	ft.	202.8 ft.				
Outside to O		N/A	ft.	206.2 ft.				
Shoulder Wid		N/A	ft.	2 ft.				
Length of Ch	annei vvork:			0 ft.				
Remarks:	No current bridual lane tear elevated ramps 37. Town and along the depretwo span, 118 constructed aloat the intercharture be rehabilit	dge exists at drop rounda s from SR 37 I Country Bo essed portion 8-foot long, ong both the sage.  Not (Pleasar	the intersection of Townshout intersection of Townshout interchange will to Town and Country I ulevard will be raised at of SR 37 and along the prestressed reinforced south and north sides of ced as part of the project tyet determined at Street over SR 37)	n and Countribe construct Boulevard are bove its exis interchange concrete I-b Town and C	ry Boulevard and ted at Town and from Town and sting grade. Retail ramps. The new beam structure. Country Boulevard	d SR 37. d Counti d Counti ining wa bridge is A pedes d and act	ry Boulevar ry Boulevard lls will be in a anticipated strian path v	d with d to SR stalled to be a will be bridge
		Existin	g F	Proposed				
Bridge Type:		N/A		Prestressed Beam Brid	Reinforced Concr	ete I		
Number of S		N/A		2				
Weight Restr		N/A	ton	N/A to				
Height Restri		N/A	ft.	16.5 ft.				
Curb to Curb		N/A	ft.	202.8 ft.				
Outside to O		N/A	ft.	206.2 ft.				
Shoulder Wid		N/A	ft.	2 ft.				
Length of Ch	annei work:		]	0 ft.				

Form Version: June 2013 Attachment 2 Attachment 1

SR 37 Improvement Project

This is page 25 of 90 Project name:

Des. No. 1600540 et. al.

Attachment 1 Page 25

April 26, 2017

Date:

County	Hamilton	F	Route	SR	37	Des. No.	1600540 et	al.	
Descri	ibe bridges and s	tructures: pro	ovide specific loca	ation info	ormation for sma	all structures.			
Remarks:	No current brid interchange wi from Pleasant be installed al- anticipated to l	dge exists at all be constructed to SR ong the deprese a two sparses.	the intersection of cted at Pleasant 37. Pleasant Streesed portion of n, 118-foot long, ong both the south	of Pleas Street veet will SR 37 prestres	ant Street and Street and Street and showed and along the ssed reinforced	SR 37. A dua imps from SR its existing g interchange concrete I-be	R 37 to Pleas grade. Retain ramps. The gram structure	sant Stre ning wa new br e. A ped	eet and lls will idge is estrian
Will the stru	cture be rehabilit	ated or repla	ced as part of the	project	?	Ye	es M	No	N/A X
Structure/N	BI Number(s):		yet determined 32 over SR 37)		Sufficiency Rating:		N/A		
		Existin	g	Pi	roposed	(Ra	ting, Source o	t Intorma	ation)
Bridge Type	9:	N/A			Prestressed Rei Beam Bridge	nforced Concre	ete I		
Number of S	Spans:	N/A			2				
Weight Res		N/A	ton		N/A ton		•		
Height Rest		N/A	ft.		16.5 ft.				
Curb to Cur		N/A	ft.		181.8 ft.				
	Outside Width:	N/A	ft.		185.3 ft.				
Shoulder W		N/A	ft.		2 ft.				
	hannel Work:				0 ft.				
Remarks:	interchange wi 37. SR 32 wi portion of SR 3 ten-inch long,	Il be constru Il be raised a 37 and along prestressed re	at the intersection cted at SR 32 with above its existing the interchange reinforced concretes of SR 32 and a	th eleva g grade. ramps. T e I-bear	ted ramps from Retaining wal The new bridge m structure. A p	SR 37 to SR Ils will be ins is anticipated bedestrian pat	32 and from stalled along to be a two	n SR 32 the dep span, 12	to SR pressed 24-foot
Will the stru	cture be rehabilit	ated or repla	ced as part of the	project	?	Ye	es M	No	N/A X
Structure/N	BI Number(s):	CV 037	-029-174.78	Suffic –	ciency Rating: -	(Ra	N/A ting, Source of	of Informa	ation)
		Existin	g	Pi	roposed				
Bridge Type	7.	Congrete ele	ibtop structure		Concrete slabto	n etructure			
Number of S		1	iotop structure		1	p siructure			
Weight Res		N/A	ton		NI/A 4	ton			
		N/A N/A	ft.			t.			
Height Rest Curb to Cur									
		N/A 220	ft.			ft.			
	Outside Width:	1	ft.			ft.			
Shoulder W		N/A	ft.			ft.			
Length of C	hannel Work:				63 f	ft.			
This is a	page 26 of 90 F	Project name		SD 27 I	mprovement Pro	ient	Date:	A nril	26, 2017
	JACIE ZO OT YU. F	TOIECL DAME:		3K 3 / I	mbrovement Pro	ICCI	Date:	April	40. 4U1/

Form Version: June 2013 Attachment 2 Attachment 1

Des. No. 1600540 et. al.

County _	Hamilton	F	Route	SR 37		Des. No.	160054	0 et al.	
<i>Descri</i> i Remarks:	The small stru anticipated to preliminary de	cture south o be widened o sign plans, ir	f SR 32 that carries S on the west side to accompacts to UNT 2 to St the proposed right-of	R 37 over commodate ony Creek	UNT to additio will res	Stony Creek 2 nal pavement. sult from lengt	Based hening	on a review the small st	of the ructure
Will the struc	cture be rehabilit	ated or repla	ced as part of the proj	ect?		Yes X	<b>5</b>	No	N/A
Structure/NE	BI Number(s):		29-3982 BSBL B over Stony Creek)	Sufficion Rating		(.	August 5	pection Repo 5, 2015) ce of Inform	
		Existin	g	Proposed	i	(Itali	ng, soui	cc or inform	ation)
Bridge Type	:	Continuous Bridge	Composite Steel Beam	Continu Bridge		nposite Steel Be	eam		
Number of S	Spans:	3		3					
Weight Rest		N/A	ton	N/A	ton			1	
Height Resti		N/A	ft.	N/A	ft.				
Curb to Curb		37	ft.	54	ft.				
	outside Width:	40	ft.	57	ft.				
Shoulder Wi		9.8	ft.	9.8	ft.				
	nannel Work:			90	ft.				
Remarks:	between SR 3 carrying south project. The St the design plan Stony Creek to southbound br	7 and Town bound SR 3 tony Creek b ns, impacts to oridges. Applidge widening	ssary to develop entra and Country Bouleva 7 over Stony Creek varidges widening will to Stony Creek will rest coximately 90 feet of ag and riprap placement of both bridges at this	ard, the exwill be wid ake place valt from be impacts a nt. There v	isting colleged by within the ridge within the ridge within the ridge with the ridge with the received by the	ontinuous comy approximate the SR 37 med idening to allo cted to occur 180 feet (0.19	nposite ely 17 d ian. Bas w for la as a re acre) o	steel beam feet as part sed on a re- ane addition sult of the of impact to	bridge of the view of a to the SR 37 Stony
Will the struc	cture be rehabilit	ated or repla	ced as part of the proj	ect?		Yes		No	N/A
Structure/NE	BI Number(s):		29-3982 JANB JB over Stony Creek)	Sufficion Rating	•	(.	August 5	pection Reports, 2015)	
		Existin	g	Proposed	i	(Tun	115, 5041		uciony
Duida - Too		Camtin	Commonite Ct - 1 D	C	C	annanita Grada		1	
Bridge Type		Continuous Bridge	Composite Steel Beam	Bridge	uous Cor	nposite Steel Be	eam		
Number of S	Spans:	3		3					
Weight Rest		N/A	ton	N/A	ton			1	
Height Rest		N/A	ft.	N/A	ft.				
Curb to Curb		39.5	ft.	54	ft.				
	Outside Width:	42.5	ft.	57	ft.				
Shoulder Wi		9.8	ft.	9.8	ft.				
		7.0	it.						
Length of Ch	nannel Work:			90	ft.				
This is p	age 27 of 90 F	Project name:	SR 3	37 Improven	nent Proj	ect	Dat	te: Apri	26, 2017

County	Hamilton	Route	SR 37	Des. No.	1600540 et al.	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Taminon	Noute	Six 37	DG3. NU.	10000 10 01 41.	
<i>Descri</i> Remarks:	Because of the len between SR 37 an carrying northbour project. The Stony of impacts are expe	gth necessary to deve d Town and Country nd SR 37 over Stony Creek bridges wideni ected to occur as a res	Boulevard, the existing Creek will be widen ing will take place with sult of the SR 37 northly	ramp junctions, a ing continuous conted by approximate hin the SR 37 med bound bridge wide	nd gain vertical separa imposite steel beam britely 17 feet as part of ian. Approximately 90 oning and riprap placeming of both bridges at	the feet nent.
Vill the stru	cture be rehabilitated	l or replaced as part o	f the project?	Ye X		N/A
MAINTEN	ANCE OF TRAFFI	C (MOT) DURING (	CONSTRUCTION:			
s a tempora Vill the proj Provision Provision Provision Vill the prop	is will be made for act is will be made for the is will be made to accoosed MOT substanti	d?  f a detour or require a  ccess by local traffic ar  rough-traffic depender  commodate any local all  ally change the enviro		vals. s of the action?	X X X X	X X X X
Remarks:	owner and busines project in order to bluetooth technolo can identify areas construction seque addition of traffic be employed. The necessary. Update provided on the protect of the proposed project of the southern four constructed prior of Pleasant Street, and constructed at the Street and 146th Street and 146t	as meetings about the develop a traffic may be track traffic more with increased traffic more with also be a bout the project poject website: http://www.cet will maintain two interchanges changes to the northern four and SR 32). It is antices ame time starting in reet interchanges will lude five phases for example to the phase for example to th	e project. A traffic mo anagement plan for convements throughout the covements throughout the covements when interwhere improvements striping, changing sign evaluated during corprior to and through tww.fishers.in.us/SR37 lanes of traffic in each s (126th Street, 131st Street, 131st Street, 131st Street, 131st Street anges changes ch	odel has been developmentation. Traffic the project area and resections are close such as road closural timings and transtruction and characteristic of the construction (incomprovements). The direction along Street, 141st Street (Greenfield, Town Street and 141st Street and 141	l as a concern during he eloped specifically for a data was collected used nearby roads. The mode which can help iderates, additional turn lastic calming devices of anges made if determined the mother will be seen and 146th Street) will not and Country Boulev Street interchanges will sare constructed, the 10.  A B, pages B206 to B2 wo lanes of traffic in each can be seen as a constructed of the seen and country Boulev Street interchanges will sare constructed, the 10.  A B, pages B206 to B2	this sing odel attify nes, buld ined I be ion. I be ard, I be 26 <sup>th</sup>

Form Version: June 2013 Attachment 2 Attachment 1

County	Hamilton	Route	SR 37	Des. No.	1600540 et al.	

**Phase 3** – Construct remaining portions of ramps started in Phase 2 and construct the roundabout. Construct the intersecting road east and west of SR 37. The intersecting road is anticipated to be closed for approximately 60 to 90 days during Phase 3. Detours for each interchange will required for this 30-day period. The anticipated detour for 126<sup>th</sup> Street would use Lantern Road, 131<sup>st</sup> Street and Cumberland Road for a length of 3.1 miles. The anticipated detour for 131<sup>st</sup> Street would use Lantern Road, 126<sup>th</sup> Street, and Cumberland Road for a length of 3.1 miles. The anticipated detour for 141<sup>st</sup> Street would use Allisonville Road, 146<sup>th</sup> Street, and Cumberland Road for a length of 3.9 miles. The anticipated detour for 146<sup>th</sup> Street would use Allisonville Road, 141<sup>st</sup> Street, and Cumberland Road for a length of 3.9 miles (Appendix B, pages B212 to B215).

**Phase 4** — Construct intersecting road bridge and SR 37 mainline. Maintain SR 37 northbound and southbound traffic on ramps. Maintain right-in/right-out access of intersecting roads via temporary signals.

**Phase 5** – Remove temporary pavement and construct remaining portion of roundabouts and bridge approach slabs.

Specific details for the MOT for the SR 37 interchanges with Greenfield Avenue, Town and Country Boulevard, Pleasant Street, and SR 32 have not yet been developed. However, they are anticipated to be similar to phased approach described above.

The MOT for the southern drainage pipe (located mid-way between 126<sup>th</sup> Street and 131<sup>st</sup> Street) will be minimal and may consist of some signage in the vicinity of the receiving pits along Ramapo Drive. Access to all properties will be maintained during the drainage pipe installation. The MOT for the drainage pipe along 146<sup>th</sup> Street will require the closure of one lane in some areas for material delivery for the receiving pits. Two lanes of traffic will be maintained in each direction along 146<sup>th</sup> Street; however, left turn restrictions may occur. Access to all properties will be maintained during the drainage pipe installation.

The MOT may pose delays and temporary inconveniences to traveling motorists (including school buses and emergency services); however, all inconveniences will cease upon project completion. The contractor shall coordinate with local schools and emergency services at least two weeks prior to construction so they are aware of the project.

In order to address concerns from business owners regarding potential impacts to businesses along the SR 37 corridor in Fishers during construction, the City of Fishers will hire a marketing and advertising coordinator. The role of the marketing and advertising coordinator will research the needs of the businesses along the SR 37 corridor in Fishers during construction and engage the appropriate sub-contractors to develop and implement the marketing campaign. The objective of the campaign is to promote the various businesses along the SR 37 corridor during construction. This could include the following activities:

- a. An integrated advertising campaign that supports the vision for the future of the SR 37 corridor and promotes businesses during the construction period,
- b. Periodic communications with the business leaders to determine specific needs and opportunity for promotion,
- c. Creative use of digital communications tools to further the advertising message, and
- d. Campaign monitoring and results tracking.

ESTIMATED PROJECT COST AND SCHEDULE:									
Engineering:	\$		50 (2016) – South 08 - North	Right-of-Way:	\$ 7,600,000 (2017) - South 8,727,855 - North	Construction:	\$	86,000,000 (2018) – South 132,848,063 - North	
This is pag	e 2	9 of 90	Project name:		SR 37 Improvement Project		Date	: April 26, 2017	

Form Version: June 2013

County _	Hamilton	Route	SR 37	Des. No.	1600540 et al.
Anticipated	Start Date of Co	nstruction: Fall of 2018			
Date project	incorporated int	o STIP March 1, 2017 (A	Amendment 16-36) (Ap	pendix H, pages H1 to	H8)
Is the project	ct in an MPO Are	Yes No			
If yes,					
Name of N	MPO Indianap	oolis Metropolitan Planning O	rganization		
Location of	f Project in TIP	Available via electronic sear Transportation Improvemen https://mitip.indympo.org/?s =&project_type=&transit_s True) (Appendix H, pages F	t Program (IRTIP: search_str=1600540&L ystem=&ROUTE=&IS	EAD_AGENCY	
Data of inc	ornaration by rat	forance into the STID Ma	rob 1 2017		

#### **RIGHT OF WAY:**

	Amount	(acres)
Land Use Impacts	Permanent	Temporary
Residential	4.2	0
Commercial	28.6	1.1
Agricultural	1.2	0
Forest	6.9	0
Wetlands	0.54	0.01
Other: Open Water	0.05	0
Other: Religious	0.2	0
Other: Library	0.2	0
TOTAL	41.89	1.11

Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition or reacquisition, either known or suspected, and there impacts on the environmental analysis should be discussed.

Remarks:

Within the project area, the existing right-of-way width along SR 37 varies between 175 feet along the majority of the mainline to 460 feet wide at its intersection with SR 32 in Noblesville. The proposed right-of-way along the SR 37 mainline ranges from approximately 190 feet to 280 feet, expanding wider along the intersecting roads at the proposed interchanges.

The proposed project will require a total of approximately 41.89 acres of permanent right-of-way, consisting of 4.2 acres of residential land, 28.6 acres of commercial land, 1.2 acres of agricultural land, 6.9 acres of forest land, 0.54 acre of wetlands, less than 0.05 acre of an open water pond, 0.2 acre of religious property (Legacy Bible Church), and 0.2 acre of property from a library (Hamilton East Public Library). The total right-of-way required for the southern four interchanges (SR 37 and 126th Street, 131st Street, 141st Street, and 146th Street), potential detention basin at Shoemaker Ditch, and drainage pipe along 146th Street to the White River is 26.94 acres. The total right-of-way required for the northern four interchanges (SR 37 and Greenfield Avenue, Town and Country Boulevard, Pleasant Street, and SR 32) is 14.95 acres.

This is page 30 of 90	Project name:	SR 37 Improvement Project	Date:	April 26, 2017
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County	Hamilton	Route	SR 37	Des. No.	1600540 et al.	
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The project will also require approximately 1.11 acres of temporary right-of-way, consisting almost entirely of commercial land, for grading and driveway reconstruction. Approximately 0.01 acre of the temporary right-of-way consists of wetland. All identified temporary right-of-way is for the southern portion of the project. It is anticipated temporary right-of-way will be required in the northern portion of the project for grading and driveway reconstruction and this will be determined in the design phase of that portion of the project.

In addition to the permanent and temporary right-of-way, the proposed project will require a drainage easement for the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37. The drainage will be conveyed west of SR 37 via gravity and outlet to a potential detention basin and Shoemaker Ditch west. The drainage easement for the southern drainage pipe total 2.16 acres. Land use for the drainage easement consists of 0.68 acre of residential land, 1.19 acres of commercial land, and 0.29 acre of forest land. Not all of this land will be permanently disturbed. Trenchless excavation will be used for approximately the eastern 75-80% of the drainage pipe installation with holes excavated for the receiving pits. The western 20-25% of the drainage pipe installation will be completed using an open cut method. The northern drainage pipe installation along 146<sup>th</sup> Street will be within existing and proposed right-of-way and is not anticipated to require easement acquisition.

# <u>Part III – Identification and Evaluation of Impacts of the Proposed</u> Action

Action				

**SECTION A - ECOLOGICAL RESOURCES** 

Streams, Rivers, Watercourses & Jurisdictional Ditches
Federal Wild and Scenic Rivers
State Natural, Scenic or Recreational Rivers
Nationwide Rivers Inventory (NRI) listed
Outstanding Rivers List for Indiana
Navigable Waterways

<u>Presence</u>	<u>Impacts</u>			
	Yes	No		
X	X			
X	X			
X	X			
X	X			

Remarks:

Lochmueller Group conducted a desktop review on December 21, 2016 and March 3, 2017 using publically available Geographic Information System (GIS) (<a href="http://maps.indiana.edu/index.html">http://maps.indiana.edu/index.html</a>) water resource layers and the USGS topographic map of the area in order to identify any waterways located within the immediate vicinity of the project area. These data resources indicate that there are seven blueline streams within the survey area. Britton Branch, an UNT to Britton Branch, White River, Stony Creek, UNT 2 to Stony Creek (also known as Wilson Ditch), Weaver Creek, and Shoemaker Ditch are intermittent and perennial streams within the survey area. Lochmueller Group conducted a field check of the project area in the summer and fall of 2016 and spring of 2017. Please refer to Appendix B for the USGS topographic map of the area (pages B2 to B3) and Appendix E for the RFI and RFI Addendum Water Resources Maps (pages E15 to E17 and E30).

A *Waters of the U.S. Determination Report* dated March 16, 2017 was prepared for the project by Lochmueller Group to detail the water resources observed and potentially impacted within the project area. Based on a field review with the U.S. Army Corps of Engineers (USACE) and the Indiana Department of Environmental Management (IDEM) on October 27, 2016, the streams and waterways reported below are considered jurisdictional Waters of the U.S. These streams showed Ordinary High Water Mark (OHWM) characteristics and hydrologic connection to the White River. The White River is a traditionally navigable water and is located running roughly parallel to the project area. A proposed drainage pipe will outlet to the White River, north of 146<sup>th</sup> Street.

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County named Route SK 37 Des. No. 1600340 et al.	County	/ Hamilton	Route	SR 37	Des. No.	1600540 et al.	
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None of the streams within the project area are listed as a Federal Wild and Scenic River; State Natural, Scenic or Recreational River. The White River is listed on the National Rivers Inventory (NRI) and as an Indiana Outstanding River and Stream.

A re-coordination letter was sent to the National Park Service regarding the proposed drainage pipe outlet to the White River on March 15, 2017. No response was received.

The following streams and waterways are discussed from south to north within the project area.

The UNT to Britton Branch is an ephemeral stream that flows from east to west beneath SR 37. It then parallels SR 37 before turning west and outlets into a detention pond. SR 37 crosses UNT to Britton Branch north of 126<sup>th</sup> Street and south of 131<sup>st</sup> Street (CV 037-029-170.03). UNT to Britton Branch is a tributary of Britton Branch, which flows west and empties into the White River. The OHWM of UNT to Britton Branch is 18 feet wide by 3 feet deep. The Headwater Habitat Evaluation Index (HHEI) score of UNT to Britton Branch is 63, which indicates "excellent" habitat quality potential. Based on review of the design plans, approximately 329 linear feet (0.14 acre) of impacts are expected to occur as a result of replacing the existing small structure, placing riprap upstream and downstream, and realigning a portion of the stream parallel to SR 37.

SR 37 crosses Britton Branch north of 131st Street and south of 135th Street (CV 037-029-170.50). Britton Branch is an intermittent stream with sand and silt substrate and is classified as a legal drain in Hamilton County. Britton Branch is a tributary of the White River and flows to the west. The OHWM of Britton Branch upstream of SR 37 is 13.3 feet wide by 18 inches deep. The OHWM of Britton Branch downstream of SR 37 is 12 feet wide by 21 inches deep. The Qualitative Habitat Evaluation Index (QHEI) score of Britton Branch upstream of SR 37 is 46, which indicates "fair" habitat quality potential. The QHEI score of Britton Branch downstream of SR 37 is 32, which indicates "poor" habitat quality potential. Impacts are expected to Britton Branch as a result of replacing the existing structure and placing riprap upstream and downstream. Impacts within the proposed right-of-way (including the length of the existing structure) will be 289 linear feet (0.08 acre).

UNT to Shoemaker Ditch is located west of SR 37 and flows into Shoemaker Ditch, south of 131st Street. UNT to Shoemaker Ditch is an ephemeral stream with gravel and silt substrate. UNT to Shoemaker Ditch is a tributary of Shoemaker Ditch, which flows west under Lantern Road and empties into the White River. The OHWM of UNT to Shoemaker Ditch upstream is 3.1 feet wide by 5 inches deep. The OHWM of UNT to Shoemaker Ditch downstream is 5.7 feet wide by 10 inches deep. The HHEI score of UNT to Shoemaker Ditch is 21, which indicates "poor" habitat quality potential. The UNT to Shoemaker Ditch is outside of the project construction limits and will not be impacted by the drainage pipe installation or potential detention basin construction.

Shoemaker Ditch is located west of SR 37, south of 131st Street, and adjacent to Lantern Road. Shoemaker Ditch is a perennial stream with gravel and silt substrate and is classified as a legal drain in Hamilton County. Shoemaker Ditch is a tributary of the White River and flows to the west. The OHWM of Shoemaker Ditch is 16.3 feet wide by 21 inches deep. The QHEI score of Shoemaker Ditch is 37, which indicates "poor" habitat quality potential. Impacts are expected to Shoemaker Ditch as a result of installation of a drainage pipe and outlet within a proposed drainage easement. There will be no new structure crossing UNT to Shoemaker Ditch. Impacts within the construction limits of this new drainage easement will be approximately 150 linear feet (0.06 acre).

Weaver Creek is located west of SR 37 and north of 141<sup>st</sup> Street within a residential area. Weaver Creek is an intermittent stream with cobble and gravel substrate. Weaver Creek is a tributary of the White River and flows to the west. The OHWM of Weaver Creek is 4.7 feet wide by 0.4 inches deep. The HHEI score of Weaver Creek is 44, which indicates "average" habitat quality potential. Based on the review of the design plans, Weaver Creek is outside of the project construction limits and there are no anticipated impacts to

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Weaver Creek.

UNT to Weaver Creek is located west of SR 37 and north of 141<sup>st</sup> Street within a residential area. UNT to Weaver Creek is an ephemeral stream with hardpan and sand substrate. UNT to Weaver Creek is a tributary of Weaver Creek, which flows west and empties into the White River. The OHWM of UNT to Weaver Creek is 6.1 feet wide by 15 inches deep. The HHEI score of UNT to Weaver Creek is 36, which indicates "poor" habitat quality potential. The UNT to Weaver Creek is outside of the project construction limits and there are no anticipated impacts to the UNT to Weaver Creek.

The White River is a traditionally navigable water and is located running roughly parallel to the project area. A proposed drainage pipe will outlet to the White River, north of 146<sup>th</sup> Street. The White River is a perennial stream with sand and silt substrate. Within the SR 37 Improvement Project survey area, all streams eventually drain into the White River. Impacts to the White River will result from the installation of a drainage pipe that will outlet to the White River. The pipe will drain storm water from SR 37. There are approximately 60 linear feet (0.01 acre) of impact that may occur from the drainage pipe outlet along the left (east) bank of the White River.

The UNT to White River is south of 146<sup>th</sup> Street and east of the White River. Waters for the UNT to White River originate upslope of the White River floodplain parallel to 146<sup>th</sup> Street. Currently, drainage is held in a retention pond on the west side of a senior retirement community at the southwest corner of 146<sup>th</sup> Street and Allisonville Road. A steep, excavated channel directs this storm water into the White River floodplain, creating the UNT. The OHWM of UNT to White River is 3.2 feet wide by 0.9 feet deep. The HHEI score of UNT to White River upstream of SR 37 is 16, which indicates "very poor" habitat quality potential. The UNT to White River is outside of the project construction limits and there are no anticipated impacts to this stream.

UNT 2 to White River is south of 146<sup>th</sup> Street and east of the White River. Waters for UNT 2 to White River originate as 146<sup>th</sup> Street storm water. This conveyance originates in the White River floodplain via a small storm water outflow and travels for approximately 55 feet before converging with the UNT to White River. The OHWM of UNT 2 to White River is 2.2 feet wide by 2 inches deep. The HHEI score of UNT 2 to White River upstream of SR 37 is 16, which indicates "very poor" habitat quality potential. UNT 2 to White River is outside of the project construction limits and there are no anticipated impacts to this stream.

SR 37 crosses Overdorff Branch north of 146<sup>th</sup> Street. Overdorff Branch is an intermittent stream with gravel and silt substrate. Overdorff Branch is a tributary of the White River and flows to the west. The OHWM of Overdorff Branch upstream of SR 37 is 12.8 feet wide by 13 inches deep. The OHWM of Overdorff Branch downstream of SR 37 is 9 feet wide by 16 inches deep. The HHEI score of Overdorff Branch upstream of SR 37 is 49, which indicates "average" habitat quality potential. The HHEI score of Overdorff Branch downstream of SR 37 is 69, which indicates "excellent" habitat quality. Based on a review of the preliminary design plans, impacts are not expected to occur to Overdorff Branch as a result of this project. No work is anticipated at the small structure carrying SR 37 over Overdorff Branch (CV 037-029-172.19).

UNT to Overdorff Branch is located along the east side of SR 37 and crosses SR 37 north of 146<sup>th</sup> Street. UNT to Overdorff Branch is an intermittent stream with gravel and silt substrate and is classified as a legal drain in Hamilton County. UNT to Overdorff Branch is a tributary of Overdorff Branch, which flows west and empties into to the White River. The OHWM of UNT to Overdorff Branch is 6.3 feet wide by 14 inches deep. The HHEI score of UNT to Overdorff Branch upstream of SR 37 is 36, which indicates "poor" habitat quality potential. The HHEI score of UNT to Overdorff Branch downstream of SR 37 is 48, which indicates "average" habitat quality potential. Based on a review of the preliminary design plans, impacts are not expected to occur to UNT to Overdorff Branch as a result of this project. No work is anticipated at the small structure carrying SR 37 over UNT to Overdorff Branch (CV 037-029-172.46).

UNT to Stony Creek 1 is located along the west side of SR 37, north of Greenfield Avenue and south of

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Town and Country Boulevard. UNT to Stony Creek 1 is an ephemeral stream with sand and silt substrate. UNT to Stony Creek 1 is a tributary of Stony Creek, which flows west and empties into the White River. The OHWM of UNT to Stony Creek 1 is 6.8 feet wide by 5 inches deep. The HHEI score of UNT to Stony Creek 1 is 33, which indicates "poor" habitat quality potential. Approximately 57 linear feet (0.01 acre) of this stream occurs within the proposed permanent right-of-way for this project. There was no structure apparent during the field review or within INDOT's culvert database. Impacts will result from widening the roadway in this area.

SR 37 crosses Stony Creek north of Greenfield Avenue and south of Town and Country Boulevard (Structures: 37-29-3982 JANB and 37-29-3982 BSBL). Stony Creek is a perennial stream with sand and silt substrate and is classified as a legal drain in Hamilton County. Stony Creek is a tributary of the White River and flows to the west. The OHWM of Stony Creek upstream of SR 37 is 48.5 feet wide by 13 inches deep. The OHWM of Stony Creek downstream of SR 37 is 44.6 feet wide by 27 inches deep. The QHEI score of Stony Creek is 49, which indicates "poor" habitat quality potential. Based on a review of the design plans, impacts to Stony Creek will result from bridge widening to allow for lane addition to the Stony Creek bridges. Approximately 180 feet (0.19 acre) of impacts are expected to occur as a result of bridge widening and riprap placement.

UNT to Stony Creek 4 is located along the east side of SR 37, just south of Stony Creek. UNT to Stony Creek 4 is an ephemeral stream with sand and silt substrate. UNT to Stony Creek 4 is a tributary of Stony Creek, which flows west and empties into the White River. The OHWM of UNT to Stony Creek 4 is 2.8 feet wide by 2.5 inches deep. The HHEI score of UNT to Stony Creek 4 is 28, which indicates "poor" habitat quality potential. Based on a review of the preliminary design plans for this project, no impacts are expected to occur to this stream.

SR 37 crosses UNT to Stony Creek 2 (also known as Wilson Ditch) north of Pleasant Street (CV 037-029-174.78). UNT to Stony Creek 2 is an ephemeral stream with silt substrate. UNT to Stony Creek 2 is a tributary of Stony Creek, which flows west and empties into the White River. The OHWM of UNT to Stony Creek 2 upstream of SR 37 is 6.5 feet wide by 15 inches deep. The OHWM of UNT to Stony Creek 2 downstream of SR 37 is 11 feet wide by 23 inches deep. The QHEI score of UNT to Stony Creek 2 upstream of SR 37 is 27, which indicates "poor" habitat quality potential. The QHEI score of UNT to Stony Creek 2 downstream of SR 37 is 28, which indicates "poor" habitat quality potential. Based on a review of the preliminary design plans, impacts to UNT 2 to Stony Creek will result from lengthening the small structure to the west. Impacts within the proposed right-of-way west of SR 37 are approximately 63 linear feet (0.02 acre).

The proposed project will result in 1,128 linear feet (0.51 acre) of impacts to the seven streams observed within the project area. Stream mitigation is required when new impacts meet or exceed 300 linear feet and/or 0.1 acre below the OHWM. Because the project will result in over 300 linear feet and 0.1 acre of stream impacts, stream mitigation is anticipated. Please see the *Permits* section at the end of this document for a discussion of the required permits for the project.

Early coordination letters were sent electronically to the U.S. Fish and Wildlife Service (USFWS), Indiana Department of Natural Resources (IDNR), Division of Fish and Wildlife, and USACE on September 13, 2016 (Appendix C, pages C1 to C7). USACE and USFWS did not respond to the early coordination letter.

The IDNR Division of Fish and Wildlife responded on October 13, 2016 with recommendations to avoid and minimize impacts to fish, wildlife and botanical resources to the greatest extent possible, and to compensate for impacts (Appendix C, pages C25 to C28). Applicable recommendations provided by the IDNR Division of Fish and Wildlife can be found in the *Environmental Commitments* section at the end of this document. Please note that the recommendations provided by the IDNR Division of Fish and Wildlife may become requirements of any permit issued. If IDNR does not have permitting authority, then all recommendations are voluntary. The need for an IDNR Construction in a Floodway Permit is anticipated for the project.

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The September 13, 2016 early coordination letter also invited recipients to a resource agency meeting on October 4, 2016 at Launch Fishers. Representatives from the City of Fishers, FHWA, USACE, IDEM, IDNR attended the meeting. The purpose of the meeting was to introduce the resource agencies to the SR 37 Improvement Project and identify any concerns they may have moving forward. A Google Earth tour of the project corridor was also completed. Potential impacts to streams were discussed at the meeting (Appendix C, pages C74 to C87).

In addition to early coordination and the resource agency meeting, a water resources field review was conducted with representatives from USACE and IDEM on October 27, 2016. The purpose of the meeting was to review water resources in the field with USACE and IDEM in order to determine their jurisdictional status (Appendix F, pages F46 to F52). Additional coordination with USACE since the field review indicates the jurisdictional status of some wetlands may change from what is represented in the field review minutes. Coordination with USACE and IDEM will continue during the permitting process.

Re-coordination letters were sent to the resource agencies on March 15, 2017 (and again to USFWS on April 14, 2017) in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141<sup>st</sup> Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146<sup>th</sup> Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C41). The IDNR Division of Fish and Wildlife responded on April 13, 2017 indicating all of the recommendations in their previous letter dated October 13, 2016 still apply (Appendix C, page C57). USFWS responded in an email dated April 17, 2017 with recommendations to minimize impacts to fish and wildlife resources (Appendix C, pages C70 to C73). Applicable recommendations provided by the IDNR Division of Fish and Wildlife and USFWS can be found in the *Environmental Commitments* section at the end of this document.

	<u>Presence</u>		<u>Impacts</u>		
Other Surface Waters		Yes	No		
Reservoirs					
Lakes					
Farm Ponds					
Detention Basins	X	X			
Storm Water Management Facilities					
Other: Former golf course pond	X		X		

Remarks:

Lochmueller Group conducted a desktop review on December 21, 2016 and March 3, 2017 using publically available GIS (<a href="http://maps.indiana.edu/index.html">http://maps.indiana.edu/index.html</a>) water resource layers and the USGS topographic map of the area in order to identify any water resources located within the immediate vicinity of the project area. Numerous residential and commercial storm water detention ponds are mapped in the vicinity of the project area. One former golf course pond (Pond 6) was also identified. The golf course is no longer present in the area. Upon completion of the field investigations, 16 ponds were identified within or immediately adjacent to the project area. Please refer to Appendix B for maps depicting the project area (pages B1 through B24), site photographs of the project area (pages B25 through B84) and Appendix E for the RFI and RFI Addendum Water Resources Map (pages E15 to E17 and E30).

Lochmueller Group conducted a waters investigation of the project area in the summer and fall of 2016 and spring 2017. A *Waters of the U.S. Determination Report* dated March 16, 2017 was prepared for the project by Lochmueller Group to detail the water resources observed and potentially impacted within the project area. (Appendix F, pages F23 to F45).

Pond 1 is located west of SR 37, approximately 0.24 mile south of the intersection of SR 37 and 126<sup>th</sup> Street. Pond 1 is an excavated retention pond of 2.96 acres. Pond 1 contributes flow to Shoemaker Ditch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

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Pond 2 is located east of SR 37, approximately 0.29 mile south of the intersection of SR 37 and 126<sup>th</sup> Street. Pond 2 is an excavated retention pond of 0.20 acre. Pond 2 contributes flow to Shoemaker Ditch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 3 is located east of SR 37, approximately 0.19 mile north of the intersection of SR 37 and 126<sup>th</sup> Street. Pond 3 is an excavated retention pond of 1.37 acres. Pond 3 contributes flow to the UNT to Britton Branch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 4 is located east of SR 37, approximately 0.11 mile north of the intersection of SR 37 and 131<sup>st</sup> Street. Pond 4 is an excavated retention pond of 0.35 acre. Pond 4 contributes flow to Britton Branch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 5 is located just west of SR 37, approximately 0.3 mile north of the intersection of SR 37 and 131<sup>st</sup> Street. Pond 5 is an excavated retention pond of 0.51 acre. Pond 5 contributes flow to Britton Branch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 6 is east of SR 37 and north of 135<sup>th</sup> Street. Pond 6 is an excavated pond of 0.35 acre. Historic aerial photos were reviewed and Pond 6 appears to have been excavated as a water feature on the now defunct Britton Golf Course which opened in 1986. Additional review of the historical aerial images indicate that Britton Golf Course was demolished in the summer of 2006. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Ponds 7, 8, and 9 are located east of SR 37 to the north and south of 141st Street; these features are connected via small structure conveyances. Pond 7 is an excavated retention pond of 1.39 acres. Pond 8 is an excavated retention pond of 2.94 acres. Pond 9 is an excavated retention pond of 1.19 acres. These three ponds are connected, and flow is conveyed between them via pipes and detention ponds to Shoemaker Ditch. Based on a review of the design plans, these ponds are not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 10 is located just south of 146<sup>th</sup> Street, approximately 0.21 mile west of the intersection of SR 37 and 146<sup>th</sup> Street. Pond 10 is an excavated retention pond of 0.18 acre. Pond 10 contributes flow the White River. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 11 is located just east of SR 37, approximately 0.5 mile north of the intersection of SR 37 and 146<sup>th</sup> Street. Pond 11 is an excavated retention pond of 2.63 acres. Currently, Pond 11 contributes flow to Overdorff Branch via the recently excavated UNT to Overdorff Branch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 12 is located just west of SR 37, approximately 0.11 mile south of the intersection of SR 37 and Town and Country Boulevard. Pond 12 is an excavated retention pond of 1.04 acres. Pond 12 contributes flow to Stony Creek. Approximately 0.05 acre of Pond 12 occurs within the proposed permanent right-of-way. Therefore, impacts to Pond 12 are anticipated.

Pond 13 is located east of SR 37, approximately 0.14 mile north of the intersection of SR 37 and Town and Country Boulevard. Pond 13 is an excavated retention pond of 0.89 acre. Pond 13 contributes flow to Stony Creek. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

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Pond 14 is located west of SR 37, approximately 0.12 mile south of the intersection of SR 37 and 146<sup>th</sup> Street. Pond 14 is an excavated retention pond of 0.08 acre. Pond 14 contributes flow to the White River. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 15 is located east of SR 37, approximately 0.33 mile north of the intersection of SR 37 and 131<sup>st</sup> Street. Pond 15 is an excavated retention pond of 1.35 acres. Pond 15 contributes flow to Britton Branch. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

Pond 16 is located just west of SR 37, approximately 0.62 mile south of the intersection of SR 37 and Greenfield Avenue. Pond 16 is an excavated retention pond of 0.06 acre. Based on a review of the design plans, this pond is not located within the proposed right-of-way for the project; therefore, no impacts are anticipated.

The proposed project will result in approximately 0.05 acre of impact to Pond 12. Impacts will be limited to the portion of the pond within the construction limits of the project. Please see the *Permits* section at the end of this document for a discussion of the required permits for the project.

Early coordination letters were sent electronically to USFWS, IDNR, Division of Fish and Wildlife, and the USACE on September 13, 2016 (Appendix C, pages C1 to C7). The USACE and USFWS did not respond to the early coordination letter.

The IDNR, Division of Fish and Wildlife responded to the initial early coordination letter on October 13, 2016 with several recommendations to avoid, minimize, or compensate for impacts to fish, wildlife and botanical resources (Appendix C, pages C25 to C28). Applicable measures provided by IDNR, Division of Fish and Wildlife are listed in the *Environmental Commitments* section at the end of this document. Please note that the recommendations provided by the IDNR, Division of Fish and Wildlife may become requirements of any permit issued. The need for an IDNR Construction in a Floodway Permit is anticipated for the project.

The September 13, 2016 early coordination letter also invited recipients to a resource agency meeting on October 4, 2016 at Launch Fishers. Representatives from the City of Fishers, FHWA, USACE, IDEM, IDNR attended the meeting. The purpose of the meeting was to introduce the resource agencies to the SR 37 Improvement Project and identify any concerns they may have moving forward. A Google Earth tour of the project corridor was also completed. No concerns were raised by resource agencies regarding impacts to ponds at the meeting (Appendix C, pages C74 to C87).

In addition to early coordination and the resource agency meeting, a water resources field review was conducted with representatives from USACE and IDEM on October 27, 2016. The purpose of the meeting was to review water resources in the field with USACE and IDEM in order to determine their jurisdictional status (Appendix F, pages F46 to C52). Additional coordination with USACE since the field review indicates the jurisdictional status of some wetlands may change from what is represented in the field review minutes. Coordination with USACE and IDEM will continue during the permitting process.

Re-coordination letters were sent to the resource agencies on March 15, 2017 (and again to USFWS on April 14, 2017) in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141<sup>st</sup> Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146<sup>th</sup> Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C41). The IDNR Division of Fish and Wildlife responded on April 13, 2017 indicating all of the recommendations in their previous letter dated October 13, 2016 still apply (Appendix C, page C57). USFWS responded in an email dated April 17, 2017 with recommendations to minimize impacts to fish and wildlife resources (Appendix C, pages C70 to

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			provided by the IDNR Division of the section at the end of this do		Wildlife and USFWS can be
Wetlands			<u>Presence</u>		Impacts es No X
Total wetland ar	ea: 3.385	acre(s)	Total wetland area impacted:	0.748	acre(s)
46			(		

(If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments
A	PEM1A	0.090	0	Delineated wetland located within a roadside ditch northeast of the SR 37 and I-69 interchange. Wetland impacts are not expected to result from this project.
В	PEM1A	0.004	0.004	Delineated wetland located within a roadside ditch northeast of the SR 37 and I-69 interchange. Approximately 0.004 acre of the wetland is within the existing right-of-way and construction limits of the project.
С	PEM1A	0.034	0.011	Delineated wetland located within a parking lot detention structure southeast of the intersection of SR 37 and 126 <sup>th</sup> Street. Approximately 0.011 acre of the wetland is within the proposed right-of-way of the project.
D	PEM1A	0.034	0	Delineated wetland located within a roadside ditch southeast of the intersection of 126 <sup>th</sup> Street and Reynolds Drive. Wetland impacts are not expected to result from this project.
F	PEM1A	0.159	0	Delineated wetland located in old field southeast of the intersection of SR 37 and 135 <sup>th</sup> Street. Wetland impacts are not expected to result from this project.
G	PEM1A	0.008	0.008	Delineated wetland located within a roadside ditch east of SR 37, south of 135 <sup>th</sup> Street and north of Britton Branch.  Approximately 0.008 acre of the wetland is within the existing right-of-way and construction limits of the project.
Н	PEM1A	0.116	0	Delineated wetland located in old field northeast of the intersection of SR 37 and 135 <sup>th</sup> Street. Wetland impacts are not expected to result from this project.

<sup>6</sup> Includes 0.537 acre	in the proposed righ	nt-of-way and 0.211 acre in the existing right-of-way			
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I	PEM1A	0.030	0.030	Delineated wetland located in a roadside ditch east of SR 37, extending south from the intersection of SR 37 and 141st Street.  Approximately 0.030 acre of the wetland is within the construction limits of the project.
J	PEM/SS1A	0.256	0.168	Delineated wetland located in roadside ditch/ retention basin structures southwest of SR 37 and 146 <sup>th</sup> Street. Approximately 0.168 acre of the wetland is within the proposed right-of-way of the project.
K	PEM1A	0.003	0	Delineated wetland located within railroad ditch east of railroad and south of 146 <sup>th</sup> Street. Wetland impacts are not expected to result from this project.
L	PEM1A	0.091	0.091	Delineated wetland located in a roadside ditch west of SR 37 and north of 135 <sup>th</sup> Street. Approximately 0.091 acre of the wetland is within the existing right-of-way and construction limits of the project.
М	PEM1A	0.038	0.038	Delineated wetland located in roadside ditch southwest of the intersection of SR 37 and 135 <sup>th</sup> Street. Approximately 0.038 acre of the wetland is within the existing right-of-way and construction limits of the project.
N	PEM1A	0.158	0.020	Delineated wetland located within a parking lot detention structure northwest of the intersection of SR 37 and 131st Street.  Approximately 0.020 acre of the wetland is within the proposed right-of-way of the project.
О	PEM1C	0.093	0.093	Delineated wetland located as a backwater wetland/roadside ditch south of UNT to Britton Branch. Approximately 0.093 acre of the wetland is within the proposed right-of-way of the project.
P	PSS1A	0.179	0	Delineated wetland located within detention pond feature northwest of the intersection of 146 <sup>th</sup> Street and SR 37. Wetland impacts are not expected to result from this project.
R	PEM1A	0.009	0.009	Delineated wetland located within roadside ditch southeast of SR 37 and SR 32/Connor Street. Approximately 0.009 acre of the wetland is within the proposed right-of-way of the project.
S	PEM1A	0.101	0.101	Delineated wetland located within roadside ditch northwest of SR 37 and Town and Country Boulevard. Approximately 0.101 acre of the wetland is within the existing and proposed right-of-way of the project.

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County	Hamilton	Route	SR 37	Des. No. 1600540 et al.
T	PEM1A	0.031	0.031	Delineated wetland located within roadside ditch southwest of SR 37 and Town and Country Boulevard. Approximately 0.031 acre of the wetland is within the proposed
W	PFO1A	>0.040	0	right-of-way of the project.  Delineated wetland located within floodplain of the White River, south of 146th Street and east of the river. Wetland W was not delineated in its entirety, as it extends south within the floodplain. No impacts to Wetland W are anticipated.
X	PFO1A	>0.10	0.014	Delineated wetland located within floodplain of the White River, north of 146th Street and east of the river. Wetland X was not delineated in its entirety, as it extends north within the floodplain.  Approximately 0.014 acre of the wetland is within the proposed right-of-way of the project.
Y	PFO1A	0.050	0.023	Delineated wetland located within floodplain of the White River, north of 146 <sup>th</sup> Street and east of the river.  Approximately 0.023 acre of the wetland is within the proposed right-of-way of the project.
U/ Stony Creek Floodplain Wetland	PFO1A	>0.375	0.101	Delineated wetland located within floodplain of Stony Creek, west of the SR 37 bridge over Stony Creek. Wetland was not delineated in its entirety, as it extends west within the floodplain. Approximately 0.101 acre of the wetland is within the existing and proposed right-of-way of the project.
UNT to Overdorff Branch Fringe	PEM1A	0.195	0	Delineated wetland located within fringe of UNT to Overdorff Branch. UNT is an excavated channel and at the time of delineation wetland was limited to the spoil pile on either side of the channel. Wetland impacts are not expected to result from this project.
Pond 6 Fringe	PEM1A	0.048	0.002	Delineated wetland located as an emergent fringe to Pond 6. Approximately 0.002 acre of the wetland is within the proposed right-of-way of the project.
Britton Branch Fringe	PEM1C	>1.143	0.004	Southern/left bank of Britton Branch as well as cattail fringe along north bank of Britton Branch was delineated as a wetland. Approximately 0.004 acre of the wetland is within the proposed right-ofway of the project.

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Wetlands (Mark all that apply)  Wetland Determination  Wetland Delineation  Wetland Delineation  Witigation Plan  Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):  Substantial adverse so incl. economic, or environmental impacts, or The project on the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Measures to avoid, minimize, and mitigate wetland impacts are are plasterine, unconsolidated bottom, excavated (PUBGx) wetlands that have been excavated as stormwater retention/detention structures.  Additional NVI wetlands are mapped within the project area are plusterine, unconsolidated bottom, excavated least of the White River, both north and south of 146th Street, and west of the SR 37 bridge over Stony Creek.  According to the Soil Survey Geographic Database (SSURGO) for Hamilton County, two hydric soils and seeven soils known for hydric inclusions are mapped within the project area. These hydric soils are Brookston silty (aly loam (BP) and Patton silty (aly loam (BP)). Soils known for hydric inclusions are Crosby silt loam (St) (Appendix F, pages F15 to F22).  Lochmaeller Group conducted a Waters of the United States determination during the summer and fall of 2016 and spring 2017. Field investigation of the project area identified 25 wetlands? 19 of these 25 wetland (EPG) wetland, Plast palustrine, because of the US. Determination Amount (Midwest Regional	County	Hamilton	Route	SR 37	Des. No. 1600540 et al.
Wetland Delineation  USACE Isolated Waters Determination  Mitigation Plan  Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):  Substantial adverse impacts to adjacent homes, business or other improved properties; Substantially increased project costs; Unique engineering, traffic, maintenance, or safety problems; Substantial adverse social, economic, or environmental impacts, or The project not meeting the identified needs.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Remarks:  According to the National Wetlands Inventory (NWI) which was reviewed on December 21, 2016 and March 3, 2017, numerous wetlands are mapped within the vicinity of the project (Appendix F, pages F13 to F14).  The majority of the wetlands mapped within the project area are palustrine, curoosolidated bottom, excavated (PUBGs) wetlands that have been excavated as stormwater retention/detention structures.  Additional NWI wetlands are mapped in the White River and Stony Creek floodplains. These wetlands are mapped as a palustrine, forested, broad-leaf deciduous, and temporarily flooded (PFO1A) wetlands. They are located east of the White River, both north and south of 146th Street, and west of the SR 37 bridge over Stony Creek.  According to the Soil Survey Geographic Database (SSURGO) for Hamilton County, two hydric soils and seven soils known for hydric inclusions are mapped within the project area. These hydric soils are Brookston sitty clay loam (Bh) and Patton sitty day loam (Pn). Soils known for hydric inclusions are mapped within the project treat.  According to the Soil Survey Geographic Database (SSURGO) for Hamilton County, two hydric soils and seven soils known for hydric inclusions are mapped within the project area. These hydric soils are Brookston sitty clay loam (Bh) and Patton sitty day loam (Bh) and Patton sitty day loam (Bh) and Patton sitty day loam (Bh) and Patton sitty d	Wetlands	(Mark all that an	alv)	<u>Documentation</u>	ES Approval Dates
Westand Delineation  USACE Isolated Waters Determination  Witigation Plan  Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain): Substantial adverse impacts to adjacent homes, business or other improved properties; Substantial adverse project costs: Unique engineering, tarfici, maintenance, or safely problems; Substantial adverse social, economic, or environmental impacts, or The project not meeting the identified needs.  Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.  Remarks:  According to the National Wetlands Inventory (NWI) which was reviewed on December 21, 2016 and March 3, 2017, numerous wetlands are mapped within the vicinity of the project (Appendix F, pages F13 to F14).  The majority of the wetlands mapped within the project area are palustrine, unconsolidated bottom, excavated (PUBGx) wetlands that have been excavated as stormwater retention/detention structures.  Additional NWI wetlands are mapped in the White River and Stony Creek Boodplains. These wetlands are mapped as a palustrine, forested, broad-leaf deciduous, and temporarily flooded (PFOIA) wetlands. They are located east of the White River, both north and south of 146th Street, and west of the SR 37 bridge over Stony Creek.  According to the Soil Survey Geographic Database (SSURGO) for Hamilton County, two hydric soils and seven soils known for hydric inclusions are mapped within the project area. These hydric soils are Brookshord sity clay loam (Br) and Patton sity clay loam (Pn.) Soils known for hydric inclusions are mapped within the project area. These hydric soils are Brookshord sity clay loam (Br) and Patton sity clay loam (MmB2 and MmC2), Shoals silt loam (Sh), and Sleeth loam (St) (Appendix F, pages F15 to F22).  Lochmueller Group conducted a Waters of the United States determination during the summer and fall of 2016 and spring 2017. Field investigation of the project area identified			<i>"y</i> )	X	
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Form Version: June 2013
Attachment 2

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Wetland B is a 0.004-acre feature with emergent wetland vegetation in the roadside ditch east of SR 37 and north of the I-69 interchange. This is a PEM1A wetland. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland B is not located in a mapped hydric soil and is limited to the roadside ditch. Wetland B occurs entirely within the existing right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.004 acre of impact to this wetland.

Wetland C is a 0.034-acre feature with emergent wetland vegetation within a storm water detention basin. It is located east of SR 37 and south of 126<sup>th</sup> Street. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, 0.011 acre of Wetland C is within the proposed right-of-way and will be impacted by the project.

Wetland D is a 0.034-acre feature with emergent vegetation immediately east of Reynolds Drive and south of 126<sup>th</sup> Street. This feature is located in a roadside ditch and is hydrologically connected to Britton Branch via non-jurisdictional storm water connections. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, no impacts are expected to this wetland because it is outside of the proposed right-of-way.

Wetland F is a 0.159-acre feature with emergent wetland vegetation east of SR 37 and south of 135<sup>th</sup> Street. This wetland occurs within a very shallow topographic depression that appears to have been formed shortly after the construction of the business access drive to the east; a strip of gravel substrate was observed within the wetland. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, no impacts are expected to this wetland because it is outside of the proposed right-of-way.

Wetland G is a 0.008-acre feature with emergent vegetation in a roadside ditch east of SR 37 and north of Britton Branch. This PEM1A wetland was observed at the outlet of a 12-inch diameter stormwater pipe where wetland hydrophytes had dominated a small depression within the roadside ditch. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland G does not extend outside of the ditch and it is not located within any mapped hydric soils. Wetland G occurs entirely within the existing right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.008 acre of impact to this wetland.

Wetland H is a 0.116-acre feature with emergent wetland vegetation east of SR 37 and north of 135<sup>th</sup> Street. Similar to Wetland F, this feature appears to have resulted from the construction of an access drive. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, no impacts are expected to this wetland because it is outside of the proposed right-of-way.

Wetland I is a 0.030-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and south of 141st Street. This PEM1A wetland appears to convey stormwater to a 16-inch diameter stormwater pipe. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland I does not extend outside of the ditch and is not located in mapped hydric soils. Wetland I occurs entirely within the existing right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.030 acre of impact to this wetland.

Wetland J is a 0.256-acre feature with emergent and scrub/shrub wetland vegetation within series of storm water retention basins, connected via culverts. It is located west of SR 37 and south of 146<sup>th</sup> Street. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, 0.168 acre of Wetland J occurs within the existing and proposed right-of-way along SR 37 and will be impacted by the project.

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Wetland K is a 0.003-acre feature with emergent wetland vegetation within a railroad ditch. It is located west of SR 37 and south of 146<sup>th</sup> Street, and is immediately east of the railroad. This PEM1A wetland was observed at the outlet of a 12-inch diameter stormwater pipe. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland K does not extend outside of the railroad ditch. Based on a review of the design plans, no impacts are expected to this wetland because it is outside of the proposed right-of-way.

Wetland L is a 0.091-acre feature with emergent wetland vegetation in a roadside ditch west of SR 37 and north of 135<sup>th</sup> Street. This PEM1A wetland was observed at the outlet of a 16-inch diameter stormwater pipe. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland L is located within hydric soil Brookston silty clay loam (Br) and the wetland vegetation is limited to the roadside ditch. Wetland L occurs entirely within the existing right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.091 acre of impact to this wetland.

Wetland M is a 0.038-acre feature with emergent wetland vegetation in a roadside ditch west of SR 37 and south of 135<sup>th</sup> Street. This PEM1A wetland was observed within the roadside ditch that conveys drainage from west of SR 37 beneath Britton Park Road. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland M does not extend outside of the ditch and is not located within a mapped hydric soils. Wetland M occurs entirely within the existing right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.038 acre of impact to this wetland.

Wetland N is a 0.158-acre feature with emergent wetland vegetation within a storm water retention basin. It is located west of SR 37 and north of 131st Street. This PEM1A wetland was observed within a stormwater retention feature. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, 0.020 acre of Wetland N occurs within the proposed right-of-way and will be impacted by the project.

Wetland O is a 0.093-acre linear feature with emergent wetland vegetation located west of SR 37 and north of 126th Street. Wetland O likely functions both as stormwater conveyance from adjacent commercial parking lots and as a backwater area to the UNT to Britton Branch; Wetland O flows directly into a UNT to Britton Branch. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland O is almost entirely within the proposed right-of-way is expected to be entirely impacted as a result of this project. Therefore there will be 0.093 acre of impact to this wetland.

Wetland P is a 0.179-acre feature with shrub-scrub wetland vegetation within a storm water retention basin. It is located west of SR 37 and north of 146<sup>th</sup> Street. Two determination data points were taken and were positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, no impacts are expected to this wetland because it is outside of the proposed right of way.

Wetland R is a 0.009-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and south of SR 32/Conner Street. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland R does not extend outside of the ditch and is not located within a mapped hydric soil. Wetland R occurs entirely within the proposed right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.009 acre of impact to this wetland.

Wetland S is a 0.101-acre feature with emergent vegetation in a roadside ditch west of SR 37 and north of Town and Country Boulevard. This PEM1A wetland is a long, linear feature within the roadside ditch. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Wetland S occurs entirely within the existing and proposed right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.101 acre of impact to this wetland.

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Wetland T is a 0.031-acre feature that at the time of survey (July 2016) contained emergent wetland vegetation. Wetland T was mapped in a roadside ditch west of SR 37 and south of Town and Country Boulevard. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. During the agency field visit, this feature did not contain wetland vegetation. Wetland T does not extend outside of the ditch and is not located within a mapped hydric soil. Wetland T occurs entirely within the proposed right-of-way and is expected to be entirely impacted as a result of this project. Therefore there will be 0.031 acre of impact to this wetland.

Wetland U/ Stony Creek Floodplain wetland is a mapped NWI wetland located in the floodplain of Stony Creek west of SR 37. This palustrine, emergent, persistent, temporarily flooded (PFO1A) wetland is mapped as an 18.11 acre wetland extending from SR 37 to the west. The eastern boundary of the wetland was delineated in the field. Based on the field delineation, this wetland is in excess of 0.375 acre and extends further to the west outside of the survey boundary. Wetland hydrophytes were observed within the floodplain on both the left and right banks. The floodplain was bound on the north by levee walls and on the south by the toe of a hillslope. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, 0.101 acre of Wetland U/ Stony Creek Floodplain are within the existing and proposed right-of-way and will be impacted by the project.

Wetland W is within a mapped NWI wetland located in the floodplain of the White River, south of 146<sup>th</sup> Street. This PFO1A wetland is in excess of 0.040 acre. The wetland was not delineated in its entirety and extends south within the floodplain. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Very sparse wetland vegetation was observed within ponded area, at the outlet of a storm water culvert that conveys drainage from 146<sup>th</sup> Street. Wetland W is outside of the construction limits and will not be impacted by the project.

Wetland X is within a mapped NWI wetland located in the floodplain of the White River, north of 146<sup>th</sup> Street. This PFO1A wetland is in excess of 0.010 acre. The wetland was not delineated in its entirety and extends north within the floodplain. Wetland X formed within a topographic depression at the base of a steeply sloped hill. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Approximately 0.014 acre of Wetland X is within the proposed right-of-way for the drainage pipe installation along 146<sup>th</sup> Street and will be impacted by the project.

Wetland Y is within a mapped NWI wetland located in the floodplain of the White River, north of 146<sup>th</sup> Street. This PFO1A wetland is 0.050 acre in size. Wetland Y formed as a result of storm water ponding at the base of the 146<sup>th</sup> Street roadside grade; storm water is conveyed to Wetland Y via a small culvert. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Approximately 0.023 acre of Wetland Y is within the proposed right-of-way for the drainage pipe installation along 146<sup>th</sup> Street and will be impacted by the project.

UNT to Overdorff Branch Fringe wetland was delineated as a fringe of the UNT to Overdorff Branch. This tributary is located east of SR 37 approximately 0.5 mile north of the intersection of SR 37 and 146<sup>th</sup> Street. This palustrine, emergent, persistent, seasonally flooded (PEM1C) wetland is 0.195 acre and an approximately 6-foot fringe to the recently excavated channel. As this channel was excavated in hydric soils and soils known for hydric inclusions, wetland hydrophytes were observed growing from the spoil pile (resulting from recent excavation of the UNT). A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. Based on a review of the design plans, no impacts are expected to this wetland because it is outside of the proposed right-of-way.

Pond 6 Fringe wetland is a 0.048-acre wetland located as an emergent fringe to an excavated pond northeast of the intersection of SR 37 and 135<sup>th</sup> Street. Pond 6 Fringe wetland is mapped within hydric soil Brookston silty clay loam (Br) and Crosby silt loam (CrA) (which is known for hydric inclusions). Wetland hydrophytes

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were observed within depressional fringe features at the northwest, northeast, and southeast edges of Pond 6, which is mapped as a PUBGx NWI wetland. The soils exhibited hydric soil indicators and primary indicators of wetland hydrology were observed. Though this feature is mapped as an excavated pond (according to NWI data), this feature was not present in the 1978 soil survey map and appears to have been excavated more than 5 years ago as part of a golf course. The golf course is no longer present. Based on a review of the design plans, approximately 0.002 acre of the Pond 6 Fringe is within the proposed right-of-way and will be impacted by the project.

Britton Branch Fringe wetland is in excess of 1.143 acres and is located south of the Britton Branch stream channel, east of SR 37. It also includes a small fringe north of Britton Branch. The shelves on either side of Britton Branch appear to have been excavated for flood attenuation, but this was done with shallow slopes in hydric soil unit Brookston silty clay loam. A determination data point was taken and was positive for wetland hydrophytes, hydric soil indicators and wetland hydrology. The wetland was delineated within the survey boundary, but likely continues east on the shelf of Britton Branch. Based on a review of the design plans, approximately 0.004 acre of the Britton Branch Fringe wetland is within the proposed right-of-way and will be impacted by the project.

Wetland impacts<sup>8</sup> will be limited to the existing and proposed right-of-way limits of the project. Impacted wetlands are generally of poor quality with limited species diversity. Approximately 0.748 acre of wetland may be impacted in order to complete the improvements to SR 37. Impacts to Wetlands B, C, G, I, J, L, M, N, O, R, S, T, X, Y, U/Stony Creek Floodplain, Pond 6 Fringe, and Britton Branch Fringe are anticipated. The project is in compliance with the most current version of the wetland finding portion of the Categorical Exclusion Programmatic Agreement between FHWA and INDOT.

The wetlands to be impacted by the project are largely within roadside ditches or storm water retention/detention basins. They are located along an existing four-lane highway in a highly developed commercial area. Right-of-way impacts have been minimized throughout the project with the use of steepened slopes, guardrails and in some locations using retaining walls. Shifting SR 37 to avoid wetlands is not feasible and would likely result in greater right-of-way impacts to adjacent commercial properties. For this reason, an alternative that avoids wetland impacts was eliminated from consideration. Avoidance of impacts to wetlands were not practicable because such avoidance would result in no improvements to SR 37, and thus would prevent the project from meeting the purpose and need of the project. Efforts to minimize wetland impacts will continue in the design phase of the project.

Impacts to Wetlands A, D, F, H, K, P, W and the UNT to Overdorff Branch Fringe are not anticipated because they are all located outside of the proposed right-of-way limits of the project. However, due to their proximity to the project, do not disturb signs will be posted and proper erosion control measures will be implemented to prevent indirect impacts to these wetlands. This is a firm commitment and is included in the *Environmental Commitments* section below in this document.

Wetland mitigation is required when wetland impacts meet or exceed 0.1 acre. Because wetland impacts will be greater than 0.1 acre, wetland mitigation is anticipated if these wetlands are determined to be jurisdictional by USACE and IDEM.

During the early coordination phase of the project, the USFWS, USACE, and the IDNR, Division of Fish and Wildlife were consulted. Early coordination with the regulatory agencies was completed on September 13, 2016 (Appendix C, pages C1 to C7). The USFWS and USACE did not provide a response to the early coordination letter. Therefore, it is assumed that these agencies have no objections to the project as currently proposed.

r icase note that the	cic aic no wellands i	2 of & within the analysis			
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8 Places note that there are no wotlands E or O within the analysis

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The IDNR, Division of Fish and Wildlife responded to the initial early coordination letter on October 13, 2016 with several recommendations to avoid, minimize, or compensate for impacts to fish wildlife and botanical resources (Appendix C, pages C25 to C28). Applicable measures provided by IDNR, Division of Fish and Wildlife are listed in the *Environmental Commitments* section at the end of this document. Please note that the recommendations provided by the IDNR, Division of Fish and Wildlife may become requirements of any permit issued. The need for an IDNR Construction in a Floodway Permit is anticipated for the project.

The September 13, 2016 early coordination letter also invited recipients to a resource agency meeting on October 4, 2016 at Launch Fishers. Representatives from the City of Fishers, FHWA, USACE, IDEM, IDNR attended the meeting. The purpose of the meeting was to introduce the resource agencies to the SR 37 Improvement Project and identify any concerns they may have moving forward. A Google Earth tour of the project corridor was also completed. Potential impacts to wetlands were discussed at the meeting (Appendix C, pages C74 to C87).

In addition to early coordination and the resource agency meeting, a water resources field review was conducted with representatives from USACE and IDEM on October 27, 2016. The purpose of the meeting was to review water resources in the field with USACE and IDEM in order to determine their jurisdictional status (Appendix F, pages F46 to C52). Additional coordination with USACE since the field review indicates the jurisdictional status of some wetlands may change from what is represented in the field review minutes. Coordination with USACE and IDEM will continue during the permitting process.

Re-coordination letters were sent to the resource agencies on March 15, 2017 (and again to USFWS on April 14, 2017) in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141<sup>st</sup> Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146<sup>th</sup> Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C41). The IDNR Division of Fish and Wildlife responded on April 13, 2017 indicating all of the recommendations in their previous letter dated October 13, 2016 still apply (Appendix C, page C57). USFWS responded in an email dated April 17, 2017 with recommendations to minimize impacts to fish and wildlife resources (Appendix C, pages C70 to C73). Applicable recommendations provided by the IDNR Division of Fish and Wildlife and USFWS can be found in the *Environmental Commitments* section at the end of this document.

Terrestrial Habitat	X
Unique or High Quality Habitat	

Yes No
X
X
X

Use the remarks box to identify each type of habitat and the acres impacted (i.e. forested, grassland, farmland, lawn, etc).

Remarks: A review of the USGS topographic map, aerial photograph, and site visits conducted by Lochmueller Grounds.

A review of the USGS topographic map, aerial photograph, and site visits conducted by Lochmueller Group during the summer and fall of 2016 and spring of 2017 revealed that land use within the project area consists primarily of paved asphalt roadway and commercial land use. Limited amounts of agricultural land, forested land, and residential land are also present.

Vegetation within the project area was consistent with urban/suburban land use. The project area is dominated by manicured lawn and immature planted trees. Within forested areas, the overstory vegetation observed during the site visits consisted of primarily silver maple (*Acer saccharinum*), American sycamore (*Platanus occidentalis*), green ash (*Fraxinus pennsylvanica*), and black walnut (*Juglans nigra*). When present, the scrub/shrub/saplings vegetation consisted of sandbar willow (*Salix interior*) and multiflora rose (*Rosa multiflora*). Herbaceous vegetation along the project route was dominated by lawn grasses including tall fescue (*Schedonorous arundinacea*), hairy crabgrass (*Digitaria sanguinalis*), and Kentucky bluegrass (*Poa pratensis*). Within old fields, tall goldenrod (*Solidago altissima*) was common. Within wet areas, sedges

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		Indiana Dep	partment of Tra	nsportation		
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	(Carex spp.), spike	rushes (Eleocharis spp	o.) and cattails ( <i>Typha</i>	a spp.) were prevale	ent.	
	acres of agricultur existing pavement facilities. Please s site photographs of observed during th presence of beave crayfish was also 2017 field check.	way impacts for the teral land, and 4.2 acres or maintained grasses ee Appendix B for the of the project area (pare field checks. No core of were observed during observed along a road No other signs of will animals such as squirr	of residential land. associated with con 2016 aerial photograges B25 through B3 forest will be impact the field check in way in an apartment ddlife were observed.	The remainder of immercial properties aphs of the project 34). No unique or ited by the project of the spring 2017 complex east of SI during the field of	the project area is and existing transpo area (pages B4 to B2 high quality habitat Chewed trees indicat along Shoemaker D choemaker Ditch dur checks; however, it	largely ortation 24) and ts were ting the itch. A ring the
	consulted. Early co	coordination phase of ordination with the reg . The USFWS did not p	gulatory agencies wa	s completed on Sep	tember 13, 2016 (Ap	
	2016 with several botanical resources Fish and Wildlife note that the rec	on of Fish and Wildliff recommendations to a (Appendix C, pages of the listed in the <i>Enviro</i> commendations provided by permit issued. The next of the commendations of the comme	avoid, minimize, or C25 to C28). Applic onmental Commitmental by the IDNR, I	compensate for in able measures prove ats section at the endivision of Fish a	npacts to fish, wildly ided by IDNR, Divind of this document.	ife and ision of Please become
The September 13, 2016 early coordination letter also invited recipients to a resource as October 4, 2016 at Launch Fishers. Representatives from the City of Fishers, FHWA, IDNR attended the meeting. The purpose of the meeting was to introduce the resource ages Improvement Project and identify any concerns they may have moving forward. A Google project corridor was also completed. No concerns were raised by resource agencies reg terrestrial habitat at the meeting (Appendix C, pages C74 to C87).					s, FHWA, USACE, ource agencies to the A Google Earth tour	IDEM, e SR 37 r of the
Re-coordination letters were sent to the resource agencies on March 15, 2017 (and again to USFWS of 14, 2017) in order to document and solicit comment on two changes to the project: 1) the drainage installation along 141st Street to a UNT to Weaver Creek will be removed and a drainage pipe instal will be added along 146th Street to outlet to the White River, and 2) a detention basin may be consumprior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C41). The IDNR Divition Fish and Wildlife responded on April 13, 2017 indicating all of the recommendations in their previous dated October 13, 2016 still apply (Appendix C, page C57). USFWS responded in an email dated Appendix C, pages C73). Applicable recommendations to minimize impacts to fish and wildlife resources (Appendix C, pages C73). Applicable recommendations provided by the IDNR Division of Fish and Wildlife and USFWS found in the <i>Environmental Commitments</i> section at the end of this document.  If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole coranimal movement, consideration of utilizing wildlife crossings should be taken.						ge pipe allation structed ision of as letter pril 17, C70 to
		ed within or adjacent to thin or adjacent to the f				lo X X
	If yes, will the proje	ect impact any of these	karst features?			
	arks box to identify ar October 13, 1993)	ny karst features within	the project area. (Ka	rst investigation mu	st comply with the K	arst

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Date:

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Remarks:	Memorandum of U	Understanding (MOU)	between INDOT, IDNF	R, IDEM and US	ed in the October 13, 1993 SFWS. No karst features are Impacts to karst features are
Within th Any critic Federal		ny federal species		Y X X	Impacts Yes No X X X X
Is Section	on 7 formal consultati	on required for this action	Yes on?	No X	
Remarks:		n long-eared bat (Myor			(Myotis sodalis), federally gered rusty patched bumble
		Early coordination with			vision of Fish and Wildlife ed on September 13, 2016
	October 13, 2016, species listed as shalf mile radius clubshell mussel (mussel (Obovaria mussel (Villosa li species above as a	the Natural Heritage tate or federally threate of the project. These Pleuroblema clava), rale subrotunda), kidneys fenosa). According to the result of the project (ise bluet (insect) because	Program's data have bened, endangered, or ran species include: turque bitsfoot mussel ( <i>Quadr</i> hell mussel ( <i>Ptychobra</i> their response, IDNR d'Appendix C, pages C2	een checked. The have been reproved the have been reproved to the have been reproved to the have been reproved to the have been checked. The have been reproved to the have been r	ation response letter, dated the IDNR reports six animal ported to occur within a one callagma divagans) (insect), ylindrica), round hickorynut (is), and little spectaclecase and impacts to the mussel project is not anticipated to a, seepages and bogs) is not
	long-eared bat root bark, or with crace C28). This is indocument. IDNR fish, wildlife, and Applicable measu Commitments sect	osting (greater than 3 in ks, crevices, or cavities cluded as a commitme provided additional recommendation botanical resources to the provided by IDNF tion at the end of this	nches diameter at breas s) from April 1 through ent in the <i>Environment</i> commendation provided the greatest extent possil R, Division of Fish and	t height, living of September 30 al Commitments in order to avoid ble, and to mitig d Wildlife are that the recommitments in that the recommitments in the second s	e for Indiana bat or northern or dead, with loose hanging (Appendix C, pages C25 to a section at the end of this id and minimize impacts to ate for unavoidable impacts. Listed in the <i>Environmental</i> mendations provided by the ued.
	response to the ea	arly coordination letter;		that the meeting	e USFWS did not provide a g minutes from the resource ctober 21, 1016.
	in order to docum along 141st Street along 146th Street	nent and solicit comme to a UNT to Weaver C to outlet to the White	nt on two changes to t reek will be removed a	he project: 1) the nd a drainage pition basin may	Wildlife on March 15, 2017 are drainage pipe installation pe installation will be added be constructed prior to the

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IDNR, Division of Fish and Wildlife responded in a letter dated April 13, 2017 indicating the Natural Heritage Program's data have been checked. The IDNR reports the same six animal species listed above as state or federally threatened, endangered, or rare have been reported to occur within a one half mile radius of the project. The letter indicated all of the recommendations in their previous letter dated October 13, 2016 still apply (Appendix C, page C57).

USFWS responded in an email dated March 15, 2017 requesting information on how many trees would be removed 146<sup>th</sup> Street, if tree removal would stay within 100-300 feet of the roadway, and if tree removal would be required for the proposed detention pond near Shoemaker Ditch. A response was provided on March 17, 2017 via email by Lochmueller Group indicating approximately 0.85 acre of forest is within the proposed right-of-way near 146<sup>th</sup> Street and the White River and the distance of possible tree clearing was 120 feet from the road. The response also indicated some tree clearing for the Shoemaker Ditch detention pond would be required. Through further coordination with INDOT ES and USFWS it was determined that independent Section 7 consultation was recommended (Appendix C, pages C63 to C66).

As part of the independent Section 7 consultation, a re-coordination letter was sent to USFWS on April 14, 2017 (Appendix C, pages C67 to C69) requesting comments on a May Affect – Not Likely to Adversely Affect determination for the Indiana bat, northern long-eared bat, and rusty patched bumble bee. It also requested comments on a No Affect determination for the federally endangered clubshell mussel and federally threatened rabbitsfoot mussel.

USFWS responded in an email dated April 17, 2017 (Appendix C, pages C70 to C73). They indicated they do not have any extant records for the rabbitsfoot mussel or the clubshell mussel in Hamilton County. USFWS indicated there is suitable summer habitat for the Indiana bat and northern long-eared bat present throughout the area surrounding the project site. If tree clearing will be avoided during the period from April 1 – September 30, they concur that the proposed project is not likely to adversely affect the Indiana bat or northern long-eared bat. This is included as a commitment in the *Environmental Commitments* section at the end of this document.

USFWS also indicated they have developed "high potential" zones around each recent (2001-2016) rusty patched bumble bee record and have concluded the bee is likely to be present within these areas. The letter further states, the project location is not in a high priority area for the rusty patched bumble bee; therefore, consultation under 7(a)(2) is not required.

This precludes the need for further consultation on this project under Section 7 of the Endangered Species Act of 1973, as amended. 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. The proposed project is not expected to impact any federally or state endangered, threatened, or rare species.

#### SECTION B - OTHER RESOURCES

#### **Drinking Water Resources**

Wellhead Protection Area Public Water System(s) Residential Well(s) Source Water Protection Area(s) Sole Source Aquifer (SSA)

<u>Presenc</u>	e

X X X

#### <u>Impacts</u> Yes No

X

X

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If a SSA	A is present, answer th	ne following:				
				Yes	No	
ls t	the Project in the St. J	oseph Aquifer System?				
ls t	the FHWA/EPA SSA I	MOU Applicable?				
Init	tial Groundwater Asse	ssment Required?				
De	tailed Groundwater A	seesement Peguired?				1

Remarks:

The proposed project is located in Hamilton County; therefore, the project is not located within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/EPA Sole Source Aquifer Memorandum of Agreement (MOA) is not applicable to this project, and a detailed groundwater assessment is not required.

According to the IDEM Ground Water Section early coordination response letter, dated September 20, 2016, portions of the project are located within a Wellhead Protection Area (WHPA) and within a Source Water Assessment Area which would relate to a public water surface water intake (Appendix C, pages C19 to C20). An early coordination letter was sent to the Water Division of Citizen's Energy Group on October 7, 2016. In a response email, dated October 11, 2016, Citizen's Energy Group indicates the project construction area does not overlap any of Citizens Water's wellhead protection areas. They also indicated Citizen's Water has surface water intakes on the White River, one just north of 116<sup>th</sup> Street in Carmel and one further south in Marion County. According to Citizen's Energy Group, it is important to protect this drinking water source by preventing contamination from reaching the White River and any of its tributaries. Strict compliance with existing regulations should accomplish this protection. These regulations include programs such as Spill Prevention Control and Countermeasures (Oil Spill Prevention), Storm Water Pollution Prevention equipment/control equipment, training/drills for the workforce and frequent inspections are needed in order to ensure protection of the waterways.

Citizen's Energy Group further states that in the event contamination from construction activities reaches the White River that could adversely affect the drinking water resource, the responsible party should immediately contact the Citizens Water Central Control System at (317) 941-7124. However, in the event that contact is not made at this number, please call the Citizens Energy Group Environmental Hotline at (317) 402-8636. The caller should be prepared to describe the nature of the contamination (quantity and type of material), location and time of release (Appendix C, pages C31 to C32).

Re-coordination letters were sent to the IDEM Ground Water Section and Citizen's Energy Group on March 15, 2017 in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141<sup>st</sup> Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146<sup>th</sup> Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C41). The IDEM Ground Water Section responded in a letter dated March 22, 2017, reiterating that the project area is located within a WHPA and within a Source Water Assessment Area which would relate to a public water surface water intake (Appendix C, pages C51 to C52). No response was received from Citizen's Energy.

The IDNR Enhanced Water Well Web Viewer website (<a href="http://www.in.gov/dnr/water/6604.htm">http://www.in.gov/dnr/water/6604.htm</a>) was consulted on January 20, 2017 and March 16, 2017. Two unconsolidated wells are mapped in the vicinity of the southern drainage easement, west of SR 37 north of 126th Street and south of 131st Street. One unconsolidated water well is mapped at the northwest quadrant of the SR 37 and 131st Street intersection. One unconsolidated water well is mapped at the northwest quadrant of the SR 37 and 141st Street intersection. Four boreholes drilled to bedrock are mapped both north and south of 146th Street west of SR 37 and east of Allisonville Road near the proposed drainage pipe location. One unspecific well type well is mapped west of SR 37 near Overdorff Branch. One borehole drilled to bedrock is mapped west of SR 37 and south of Greenfield Avenue, just west of Prosperity Drive. Two boreholes drilled to bedrock are mapped south of Stony Creek and east of SR 37.

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		Indiana De <sub>l</sub>	partment of Tra	nsportation	
County _	Hamilton	Route	SR 37	Des. No.	1600540 et al.
	Princeton Lakes A coordination resp approximately 0.3 Coordination with	apartments. This well wonse email (Appendix mile northeast of the i	vas also identified by C., page C24). T ntersection; therefore Apartments via tel	IDNR, Division of the Princeton Lake, the water well mephone on Januar	SR 32, identified as for the of Oil and Gas in their early es Apartments are located ay not be mapped correctly. Ty 24, 2017 indicates their
	Impacts to water was part of the right	wells are possible. If an of-way agreement with according to 312 IAC	y residential or publi h the property owner	c wells are encoun If any identified w	ntified on the design plans. tered, they will be re-drilled yell needs to be backfilled, it ntal Commitments section at
		are present throughout n has been initiated for		relocation of the w	vater utility lines may occur.
Flood Plain	_		<u>P</u>	resence	Impacts
Longitudi Transver Project lo	nal Encroachment se Encroachment cated within a regul	ated floodplain within 1000' up/downstr	eam from project	X X X	Yes         No           X         X           X         X           X         X
Discuss impa Remarks:	According to the (FIRM) of the are	available Federal Eme a, the SR 37 Improvem	ergency Management ent Project area is ma	Agency (FEMA) apped within five 1	Flood Insurance Rate Maps 00-year floodplains including Creek (Appendix F, page F1
	potential detention Ditch just east of encroachment to t basin. The propose established by IN proposed easement	h basin location is with Lantern Road (west the floodplain to install sed project qualifies as DOT for impacts to f	in the 100-year flood of SR 37). At this I the drainage pipe via a Category 5 project loodplains. The instantant	Iplains of Shoemal ocation, the project open cut and poten ect according to the illation of a new of Irainage outlet will	athern drainage easement and ker Ditch/UNT to Shoemaker ct will result in a transverse ntially construct the detention are five categories of projects drainage structure within the ll not result in a substantial
	change in flood ri emergency service not substantial. A during the prelimi	sks; and there will be re or emergency evaluati hydraulic design stud inary design phase. A s sign study has been add	no substantial increa. ion routes; therefore y that addresses var summary of this stud	se in potential for i it has been determi ious structure size v will be included	s; there will be no substantial interruption or termination of med that this encroachment is alternates will be completed with the Field Check Plans." immental Commitments section
	floodplain of Britt the west side of location, the prop- and therefore, qua	on Branch at SR 37, no SR 37. The project wo osed project will replace	orth of 131st Street. T ill result in a longit the the existing small roject according to the	he floodplain exter udinal encroachme structure to accom e five categories for	project crosses the 100-year and into the project area along ent to the floodplain. At this modate the new road surface or projects laid out by INDOT

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"Zero homes are located within the base floodplain within 1,000 feet upstream and zero homes are located within the base floodplain downstream. The proposed structure will have an effective capacity such that backwater surface elevations are not expected to substantially increase. As a result, there will be no substantial adverse impacts on natural and beneficial floodplain values; there will be substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not substantial. A hydraulic design study that addresses various structure size alternates will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans." This hydraulic design study has been added as a firm commitment in the Environmental Commitments section below in this document.

According to FIRM Panel 18057C0144G (effective November 19, 2014), the northern drainage pipe will cross a portion of the 100-year floodplain of the White River, west of Allisonville Road. At this location, the project will result in a transverse encroachment to the floodplain to install the drainage pipe via open cut. The proposed project qualifies as a Category 5 project according to the five categories of projects established by INDOT for impacts to floodplains. The installation of a new drainage structure will outlet to the White River. This drainage outlet will not result in a substantial encroachment to the floodplain. Therefore, the following statement applies:

"There will be no substantial impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evaluation routes; therefore it has been determined that this encroachment is not substantial. A hydraulic design study that addresses various structure size alternates will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans." This hydraulic design study has been added as a firm commitment in the Environmental Commitments section below in this document.

According to FIRM panel 18057C0163G (effective November 19, 2014), the project crosses the 100-year floodplain of Stony Creek at SR 37. The project will result in a transverse encroachment to the floodplain. At this location, the proposed project will widen the existing bridge structures to accommodate the new road surface and therefore, qualifies as a Category 3 project according to the five categories for projects laid out by INDOT for impacts to floodplains. Therefore, the following statement applies:

"The modifications to drainage structures included in this project will result in an insubstantial change in their capacity to carry flood water. This change could cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any substantial adverse impacts on the natural and beneficial floodplain values; they will not result in substantial change in flood risks or damage; and they do not have substantial potential for interruption or termination of emergency service or emergency routes; therefore, it has been determined that this encroachment is not substantial."

According to FIRM panel 18057C0161G (effective November 19, 2014), the project crosses the 100-year floodplain of UNT 2 to Stony Creek (also known as Wilson Ditch) at SR 37. The project will result in a transverse encroachment to the floodplain. At this location, the proposed project will widen the existing structure to accommodate the new road surface and therefore, qualifies as a Category 3 project according to the five categories for projects laid out by INDOT for impacts to floodplains. Therefore, the following statement applies:

"The modifications to drainage structures included in this project will result in an insubstantial change in their capacity to carry flood water. This change could cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any substantial adverse impacts on the natural and beneficial floodplain values; they will not result in substantial change in flood risks or damage; and they do not have substantial potential for interruption or termination of emergency service or emergency routes; therefore, it has been determined that this encroachment is not substantial."

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According to the IDNR Division of Fish and Wildlife early coordination response letter dated Octo 2016, the project will require the formal approval for construction in a floodway under the Flood Cont (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other is waterbody which has a drainage area greater than one square mile (Appendix C, pages C25 to C28). The for an IDNR Construction in a Floodway Permit is anticipated for the project.  Re-coordination letters were sent to the resource agencies on March 15, 2017 in order to document and comment on two changes to the project: 1) the drainage pipe installation along 141st Street to a Uweaver Creek will be removed and a drainage pipe installation will be added along 146st Street to out White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemake (Appendix C, pages C38 to C41). The IDNR Division of Fish and Wildlife responded on April 15 stating the proposal may require the formal approval for construction in a floodway under the Flood Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream of flowing waterbody which has a drainage area greater than one square mile (Appendix C, page C57).  Farmland Agricultural Lands Prime Farmland (per NRCs)  Total Points (from Section VII of CPA-106/AD-1006* 100 110 110 110 110 110 110 110 110 11	
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	Creek River, ording
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County Hamilton	Route	SR 37	Des. No 1600540 et al.	
SECTION C - CULTURAL RESOUR	CES			
Minor Projects PA Clearance	ategory Ty	or Listed	val Dates	N/A X
Results of Research	Resource F	<u>Present</u>		
Archaeology NRHP Buildings/Site(s) NRHP District(s) NRHP Bridge(s)	X			
Project Effect				
No Historic Properties Affected	No Adverse	Effect X Adver	rse Effect	
<u> </u>	Oocumentation Prepared			
<b>Documentation</b> (mark all that apply)		ES/FHWA Approval Date(s)	SHPO Approval Date(s)	
Historic Properties Short Report				
Historic Property Report Archaeological Records Check/ Review	X	July 15, 2016 August 8, 2016,	August 19, 2016 September 9, 2016,	
· ·		November 28, 2016	<b>December 16, 2016</b>	
Archaeological Phase la Survey Report	X	August 8, 2016, November 28, 2016	September 9, 2016, December 16, 2016	
		March 14, 2017	April 24, 2017	
Archaeological Phase Ic Survey Report Archaeological Phase II Investigation Repo	ort -			
Archaeological Phase III Data Recovery				
APE, Eligibility and Effect Determination	X	December 27, 2016 March 20, 2017	January 20, 2017 April 24, 2017	
800.11 Documentation	X	December 27, 2016	January 20, 2017	
		March 20, 2017	April 24, 2017	
		MOA Signature Dates (	List all signatories)	
Memorandum of Agreement (MOA)			,	
Describe all efforts to document cultural categories outlined in the remarks box. T in local newspapers. Please indicate the include any further Section 106 work which	he completion of publication dat	of the Section 106 process te, name of paper(s) and	s requires that a Legal Notice to the comment period deadling	be published e. Likewise
Preservation Act of 1966 a Section 106 and 36 CFR 8	s amended (Se 00 outline a pr	ction 106), and its impler ocess that requires FHW.	n Section 106 of the Nation menting federal regulation, 36 A and INDOT to evaluate the a the National Register of Hist	CFR 800.
			ed work and the density of de erally includes all properties	
This is page 54 of 90 Project name	:	SR 37 Improvement Proje	ect Date: Ap	oril 26, 2017

Form Version: June 2013 Attachment 2 Attachment 1

County	Hamilton	Route	SR 37	Des. No.	1600540 et al.	
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viewshed of the proposed project as well as all areas where ground disturbance may occur or where auditory or visual impacts might be expected. The APE expands widest where proposed elevated intersections will allow a broader viewshed, and is narrowest where structural development, landforms or vegetation masks or limits the viewshed. In areas where elevated interchanges are planned, the APE extends outward from the existing intersection 0.25 mile in in either direction along the intersecting road. In areas where the viewshed is most restricted, the APE extends outward from the centerline of SR 37 or intersecting roadways approximately 300 feet (Appendix D, pages D42 to D46).

On March 6, 2017, the APE was expanded to include a potential detention pond near Shoemaker Ditch, approximately mid-way between 126<sup>th</sup> Street and 131<sup>st</sup> Street, and a drainage pipe installation along 146<sup>th</sup> Street west to the White River. The expanded APE includes all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended additions to the APE for this project are defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin (Appendix D, pages D21 to D25).

Coordination with Consulting Parties: Early coordination was initiated with potential consulting parties on June 6, 2016, with a letter introducing the project and inviting organizations and individuals to be consulting parties (Appendix D, pages D52 to D55). The following is a list of organizations and individuals the letters were sent to and the date of their response (if received). Those organizations that wished to be a consulting party are shown in bold below. [Note: INDOT, FHWA, and the State Historic Preservation Officer (SHPO) are automatically considered consulting parties].

Section 106 Invited Consulting Parties	Date of Response(s)
Indiana Landmarks, Central Regional Office	June 17, 2016
Hamilton County Historian	No Response
Hamilton County Historical Society/Museum	No Response
Fishers Historical Preservation Committee	No Response
Noblesville Preservation Alliance	No Response
Hamilton County Genealogical Society	No Response
Indianapolis MPO	No Response
City of Fishers	June 13, 2016
City of Noblesville	No Response
Hamilton County Board of Commissioners	No Response
Hamilton County Highway Department	June 20, 2016

Due to changes in the project and the resulting expansion of the APE, coordination was reinitiated with all consulting parties on March 22, 2017 (Appendix D, pages D5 to D8).

Archaeology: A Phase 1a Archaeological Reconnaissance Survey was conducted for the proposed undertaking, which included an archaeological records check, and a report on this investigation was completed by qualified professionals at Cultural Resource Analysts, Inc. on July 25, 2016 (Miller & Harth, August 11, 2016). The Phase 1a report stated only one of eight previously recorded archaeological sites in the survey area were relocated, and that 16 previously unrecorded archaeological sites were documented during the archaeological reconnaissance. The report concluded that the previously recorded sites that were not relocated most likely were destroyed by modern construction or had been mapped incorrectly, and that the portions of the previously recorded site and newly recorded archaeological sites in the project area demonstrated poor integrity. No further archaeological investigations were recommended (Appendix D, pages D81 to D82). The report of these findings was received by the INDOT Cultural Resources Office on July 27, 2016 and was approved by INDOT on August 8, 2016 pending revisions (Appendix D, page D97). The revised report was sent to the SHPO, and the SHPO concurred with the findings of the report on September 9, 2016 (Appendix D, pages D67 to D68).

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Due to revision of the SR 37 Improvement Project footprint involving a drainage easement along 141st Street, an Indiana Archaeological Short Report was completed by qualified professionals at Cultural Resource Analysts, Inc. on November 16, 2016 (Miller & DeBoer, November 16, 2016). The work detailed in this Addendum Report to the initial Phase 1a Archaeological Reconnaissance Survey included an archaeological records check and Phase 1a field investigations. The Addendum Report concluded no archaeological resources were present in the project area addition and recommended the project be allowed to proceed as planned (Appendix D, pages D83 to D84). The Addendum Report was received by the INDOT Cultural Resources Office on November 23, 2016 and was approved by INDOT on November 28, 2016 (Appendix D, page D99). The Addendum Report was sent to SHPO, and the SHPO concurred with the findings of the report on December 16, 2016 (Appendix D, pages D74 to D75).

If construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined (outside of the survey area), additional archaeological assessment may be required.

Due to revision of the SR 37 Improvement Project footprint involving potential detention basin near Shoemaker Ditch, approximately mid-way between 126<sup>th</sup> Street and 131<sup>st</sup> Street and a drainage pipe installation along 146<sup>th</sup> Street west to the White River, a Phase Ia Archaeological Reconnaissance Survey Addendum #2 Interim Report was completed by qualified professionals at Cultural Resource Analysts, Inc. on March 14, 2017 (Miller & Martin, March 14, 2017). The work detailed in this Addendum #2 Interim Report included an archaeological records check and Phase 1a field investigations. The Addendum #2 Interim Report identified four previously unrecorded archaeological sites. Three of the sites were recommended as not eligible for inclusion in the National Register. The fourth site, Site 12H1811, was recommended for avoidance or further work in the form of a Phase II National Register evaluation (Appendix D, pages D28 to D29). Site 12H1811 will be avoided by all project construction activities. A 100-foot buffer of the site will be clearly marked on the design plans as an environmentally sensitive area and maintained during the design and construction of the project. The Addendum Report was received by the INDOT Cultural Resources Office on March 13, 2017 and was approved by INDOT on March 14, 2017 (Appendix D, page D100). The Addendum Report was sent to SHPO, and the SHPO concurred with the findings of the report on April 24, 2017 (Appendix D, pages D1 to D2).

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27- and 29) requires that the discovery must be reported to the Department of Natural Resources within two business days. This is also listed in the Environmental Commitments section at the end of this document.

**Historic Properties:** On February 1, 2016, the National Register and the *Indiana Register of Historic Sites* and *Structures* (State Register) were checked by Lochmueller Group's Qualified Professional who satisfies the *Secretary of the Interior's Professional Qualification Standards* using the *State Historic Architectural* and *Archaeological Research Database* (SHAARD) and SHAARD GIS. No above-ground resources on either list were found to be near the project area.

On June 6, 2016, Lochmueller Group's Qualified Professionals who satisfy the *Secretary of the Interior's Professional Qualification Standards* conducted a field review of the project area. One individual resource, Historic Bridge No. 2136, Hamilton County Bridge No. 151, National Bridge Inventory (NBI) No. 2900138 was found to be extant and within the APE. According to the *Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges* (February 2009) by Mead and Hunt, Hamilton County Bridge No. 151 is "previously listed in or determined eligible for listing in the National Register..." This bridge has not been listed in the National Register, but remains eligible for listing per field investigation. No additional resources were recommended eligible for the National Register within the APE.

The HPR describing these findings was sent to the INDOT Cultural Resources Office on July 1, 2016 and was approved by INDOT on July 15, 2016 (Appendix D, page D96). The HPR was sent to the SHPO, and the

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SHPO concurred with the findings of the report on August 19, 2016 (Appendix D, pages D60 to D61).

On November 28, 2016 Lochmueller Group sent a letter to SHPO and consulting parties detailing changes in the SR 37 Improvement Project resulting in the expansion of the APE west along 141<sup>st</sup> Street due to a revision in a proposed drainage easement. A qualified professional historian from Lochmueller Group reviewed the expanded APE in the field on November 10, 2016. No above-ground resources listed on or eligible for the National Register were identified within the expanded APE. A letter with these findings was sent to INDOT for review on November 21, 2016 and approved by INDOT on November 23, 2016. The SHPO concurred with the findings in this letter on December 16, 2016 (Appendix D, pages D63 to D64).

On March 6, 2017, the APE was expanded to include a potential detention basin near Shoemaker Ditch, approximately mid-way between 126<sup>th</sup> Street and 131<sup>st</sup> Street and a drainage pipe installation along 146<sup>th</sup> Street west to the White River. Qualified professional historians from Lochmueller Group reviewed the expanded APE in the field on March 7, 2017. No above-ground resources listed on or eligible for the National Register were identified within the expanded APE. An Addendum to the 800.11(e) documentation with these findings was sent to INDOT for review on March 13, 2017 and approved by INDOT on March 20, 2017 (Appendix D, pages D9 to D29). The SHPO concurred with the findings in a letter dated April 24, 2017 (Appendix D, pages D1 to D2).

In a letter dated April 20, 2017, Indiana Landmarks indicated they concurred with the boundaries of the redefined APE, concurred that the additional contributing properties within the expanded boundaries were not eligible, and did not object to the "No Adverse Effect" finding for those properties. They also indicated the Nickel Plate Railroad is included within the APE and could be affected by the installation of new drainage infrastructure along 146th Street. They asked if the railroad is NRHP-eligible, they would like to know whether the proposed trenchless excavation will be executed in such a manner as to avoid any adverse effect on the existing railroad (Appendix D, page D4). Lochmueller Group responded to Indiana Landmarks in an email dated April 21, 2017, indicating there will be two drainage pipes installed under the Nickle Plate Railroad. The southern-most will be approximately half way between 126th Street and 131st Street and the northern-most will be along 146th Street. The drainage pipes will be installed under the railroad using trenchless excavation. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 -900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits. Because the pipes will be installed under the ground, using the trenchless technology, Lochmueller Group does not believe there will be any adverse impacts to the railroad even if it was eligible for the National Register. In an email dated April 21, 2017, Indiana Landmarks indicated they were pleased to hear that there will be no damage to the rails (Appendix D, page D3).

**Documentation, Findings:** The project will have No Adverse Effect on Hamilton County Bridge No. 151.

The Section 106 "No Adverse Effect" finding was signed by INDOT for FHWA, on December 27, 2016 (Appendix D, page D34). The 800.11(e) document and finding were sent to consulting parties, including SHPO, on December 27, 2016. The SHPO concurred with the "No Adverse Effect" Section 106 effect finding on January 20, 2017 (Appendix D, pages D31 to D32).

On March 6, 2017, the APE was expanded to include a potential detention basin near Shoemaker Ditch, approximately mid-way between 126<sup>th</sup> Street and 131<sup>st</sup> Street and a drainage pipe installation along 146<sup>th</sup> Street west to the White River. An Addendum to the 800.11(e) documentation with the results of the additional historic and archaeological property surveys and signed "No Adverse Effect" finding was submitted to INDOT for review on March 13, 2017. The Section 106 "No Adverse Effect" finding was signed by INDOT for FHWA, on March 20, 2017 (Appendix D, page D11). The Addendum to the 800.11(e) documentation and finding were sent to consulting parties, including SHPO, on March 22, 2017. The SHPO concurred with the updated "No Adverse Effect" Section 106 effect finding in a letter dated April 24, 2017 (Appendix D, pages D1 to D2).

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Indiana Department of Transportation							
County _	Hamilton	Route	SR 37	Des. No.	1600540 et al.		
	Adverse Effect" wa newspapers through (Appendix D, pages received.  On March 6, 2017 approximately mid- Street west to the V	as advertised in the <i>Indian</i> nout the Cities of Fisher is D101 to D104). The configuration, the APE was expandently between 126 <sup>th</sup> Street	mapolis Star and s and Noblesville s and Noblesville s mment period en d to include a poet and 131st Stree 106 finding ren	The Times in Noblesse and Hamilton Cour ded on January 29, 2 potential detention batet, and a drainage phained "No Adverse"	26, FHWA's finding of "No ville, both widely circulated aty, on December 30, 2016 017 and no comments were sin near Shoemaker Ditch, ipe installation along 146 <sup>th</sup> Effect." Because the effect		
	The Section 106 pr been fulfilled.	ocess has been complete	ed and the respon	sibilities of the FHV	VA under Section 106 have		
SECTION I	D - SECTION 4(f)	RESOURCES/ SECTION	ON 6(f) RESOU	RCES			
Parks & Oth Publicly Publicly	Involvement (mark ner Recreational Lar owned park owned recreation are school, state/national	nd	Presence  X X	Yes X	No X		
"De	grammatic Section 4( minimis" Impact* vidual Section 4(f)	(f)*	Prepared  X	FHW/ Approval			
Nationa Nationa State W	Vaterfowl Refuges I Wildlife Refuge I Natural Landmark ildlife Area ature Preserve		Presence	Yes	No		
"De	grammatic Section 4( minimis" Impact* vidual Section 4(f)	f)*	Presence	FHWA Approval			
Historic Pro Sites eli	operties gible and/or listed on	the NRHP	Presence X	Yes	No X		

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			Evaluations Prepared			
Pr	ogrammatic Section 4(f)*		Trepared	<u>FHV</u> Approva		
	e minimis" Impact* dividual Section 4(f)					

\*FHWA approval of the environmental document also serves as approval of any Section 4f Programmatic and/or De minimis evaluation(s) discussed below.

Discuss Programmatic Section 4(f) and "de minimis" Section 4(f) impacts in the remarks box below. Individual Section 4(f) documentation must be separate Draft and Final documents. For further discussions on Programmatic, "de minimis" and Individual Section 4(f) evaluations please refer to the "Procedural Manual for the Preparation of Environmental Studies". Discuss proposed alternatives that satisfy the requirements of Section 4(f).

Remarks:

Section 4(f) of the Department of Transportation (DOT) Act of 1966, 49 USC 303(c) was established to protect publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites against transportation conversions. There are 27 Section 4(f) resources within the project area, 24 are existing and planned recreational trails or trail segments managed by the Cities of Fishers and Noblesville and Hamilton County, one is a historic bridge eligible for the National Register (Hamilton County Bridge No. 151), one is a park (Harrison Thompson Park), and one is a public school (Harrison Parkway Elementary School). A discussion of the impacts to these resources is below.

#### Hamilton County Bridge No. 151

As part of the Section 106 consultation process, Hamilton County Bridge No. 151 was identified as eligible for listing in the National Register (Appendix D, page D80). The project will not directly impact this bridge and it was determined through consultation with the SHPO that the project will have No Adverse Effect to this resource. The SHPO concurred with this determination in a letter dated January 20, 2017 (Appendix D, pages D1 to D2). Therefore, no Section 4(f) evaluation is required for Hamilton County Bridge No. 151.

#### Harrison Parkway Elementary School

Harrison Parkway Elementary School is located west of SR 37 and north of 141st Street. This school is part of the Hamilton Southeastern School District. There is a recreational trail north of 141st Street and a baseball diamond north of the trail. This property is a Section 4(f) resource if open to the public and serves either organized or substantial walk-on recreational purposes. The school property will not be directly impacted by construction of the project. A drainage easement was previously included in the project approximately 30 feet south of the school property, south of 141st Street. This easement has been removed from the project. No right-of-way or easement will be acquired from the school; therefore, there will be no direct use of the property. Access will be maintained to the school at all times. Therefore, no Section 4(f) evaluation is required for Harrison Parkway Elementary School.

#### Harrison Thompson Park

According to the INDR, Division of Fish and Wildlife re-coordination response letter dated April 13, 2017, the Fishers Parks & Recreation's Harrison Thompson Park is within 0.5 mile of the project area (Appendix C, page C57). This park is owned and managed by the City of Fishers. It is located approximately 0.5 mile west of SR 37, north of 131st Street and south of 141st Street. No right-of-way or easement will be acquired from this park; therefore, there will be no direct use of the property. Access will be maintained to the park at all times. Therefore, no Section 4(f) evaluation is required for Harrison Thompson Park.

#### Cities of Fishers & Noblesville Recreational Trails - Section 4(f) de minimis Determination

In 2008, Congress issued amendments of Section 4(f) in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6009 of the regulations permitted the FHWA to determine that a direct use of a Section 4(f) resource which, after taking into account any measures to minimize harm, does not adversely affect the features, attributes and activities of the resource

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constitutes a *de minimis* impact. *De minimis* impacts are considered minimal impacts. In general, these impacts will not result in an adverse effect to the activities, features or attributes that qualify a resource (e.g. park) for protection under Section 4(f).

According to the IDNR Trails Inventory GIS layer (2013), review of master plans, and coordination with the Cities of Fishers and Noblesville, there are 12 existing recreational trails owned and managed by the Cities of Fishers and Noblesville within or near the project area. There are an additional 12 recreational trails planned by the Cities of Fishers and Noblesville within or near the project area. It was determined later in the coordination process that two of these trails (along 146th Street) are under the jurisdiction of Hamilton County. Some of the planned trails are continuation of already existing trails. Impacts to these existing and planned recreational trails are listed below and discussed in Appendix I, pages I11 to I135.

#### **City of Fishers Existing and Planned Trails**

- 126<sup>th</sup> Street Trail (Existing) (Appendix I, page I19) Based on proposed and existing right-of-way limits, up to approximately 1,010 feet of reconstruction of trail north of 126<sup>th</sup> Street and 610 feet south of 126<sup>th</sup> Street may be necessary; no permanent adverse impacts will occur.
- 126<sup>th</sup> Street Trail (Planned) (Appendix I, page I19) There will be no impact to the planned trail; pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange.
- Lantern Road Trail & Connectors/Harrison Parkway (Location 1) (Existing) (Appendix I, page I19)
   No impact is anticipated from the drainage easement which will be east of Lantern Road.
- 131st Street Trail (Existing) (Appendix I, page I19) Based on proposed and existing right-of-way limits, up to approximately 495 feet of reconstruction of trail north of 131st Street and 410 feet south of 131st Street may be necessary. No permanent adverse impacts will occur.
- 131st Street Trail (Planned) (Appendix I, page I19) No impact to planned trail; pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange.
- 141st Street Trail (Existing) (Appendix I, pages I19 to I20) Based on proposed and existing right-of-way limits, up to approximately 315 feet south of 141st Street may be necessary; no permanent adverse impacts will occur. There may be minor temporary impacts from drainage pipe trenchless pits.
- 141st Street Trail (Planned) (Appendix I, pages I19 to I20) No impact to planned trail; pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange.
- Lantern Road Trail & Connectors/Harrison Parkway (Location 2) (Existing) (Appendix I, pages I19

   I20) No impact anticipated from drainage easement which will be along 141st Street.
- Allisonville Road Trail (Existing) (Appendix I, pages I19 to I20) No impact, the trail is outside of the proposed drainage easement.
- Allisonville Road Trail (Planned) (Appendix I, pages I19 to I20) No impact, the proposed trail is outside of the proposed drainage easement.
- 146<sup>th</sup> Street/Greenfield Avenue Corridor (Existing) (Appendix I, page I20) Based on proposed and existing right-of-way limits, up to approximately 525 feet south of 146<sup>th</sup> Street may be necessary; no permanent adverse impacts will occur. Pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange. It was determined later in the coordination process that this trail is under jurisdiction of Hamilton County. Coordination efforts with Hamilton County are discussed below.
- Proposed Trail Next to Railroad (Planned) (In Master Plan Only) (Appendix I, page I22) Proposed drainage easements between 126<sup>th</sup> Street and 131<sup>st</sup> Street and along 141<sup>st</sup> Street would cross proposed trail location; no impacts anticipated.

#### City of Noblesville Existing and Planned Trails

• 146<sup>th</sup> Street Trail (Planned) (Appendix I, page I31) - No impact to planned trail; pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange. It was determined

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later in the coordination process that this trail is under jurisdiction of Hamilton County. Coordination efforts with Hamilton County are discussed below.

- 146<sup>th</sup> Street Trail (Existing) (Appendix I, page I31) Based on proposed and existing right-of-way limits, up to approximately 290 feet of reconstruction of trail north of 146<sup>th</sup> Street may be necessary; no permanent adverse impacts will occur. It was determined later in the coordination process that this trail is under jurisdiction of Hamilton County. Coordination efforts with Hamilton County are discussed below.
- East of Village Center Trails (Location 1) (Planned) (Appendix I, pages I31 to I32) No impact because outside of the proposed project limits.
- East of Village Center Trails (Existing) (Appendix I, page I32) Based on proposed and existing right-of-way limits, up to approximately 435 feet of reconstruction of the trail south of Greenfield Avenue may be necessary; no permanent adverse impacts will occur.
- Cumberland Road Trail (Location 1) (Existing) (Appendix I, page I32) No impact because the trail is outside of proposed project limits. The interchange will provide connectivity across SR 37 at Greenfield Avenue.
- Cumberland Road Trail (Planned) (Appendix I, page I32) The majority of the planned trail is within the proposed right-of-way; pedestrian and bicycle connectivity will not be restricted by the project across Town and Country Boulevard as part of the interchange.
- East of Village Center Trails (Location 2) (Planned) (Appendix I, page I32) Small portions of the planned trail are within the proposed right-of-way. This is not anticipated to affect the use of the trail west of SR 37.
- Schools Trail (Planned) (Appendix I, pages I32 to I33) A small portion of the trail, approximately 120 feet south of Pleasant Street and 65 feet north of Cherry Street, is within the proposed right-of-way. Impacts are not anticipated to prohibit use of the remainder of the trail to the south. Pedestrian and bicycle connectivity will not be restricted by the project across Town and Country Boulevard, Pleasant Street, or Cherry Street as part of the project.
- East of Village Center Trails (Location 3) (Planned) (Appendix I, page I33) No impact anticipated because the proposed trail is outside of the project limits.
- Midland Trace Trail (Existing, but not shown in GIS layer) (Appendix I, page I33) Based on proposed and existing ROW limits, up to approximately 235 feet of reconstruction of trail north of Pleasant Street and 270 feet of trail south of Pleasant Street may be necessary; no permanent adverse impacts will occur.
- Midland Trace Trail (Planned, but not shown in GIS layer) (Appendix I, page I33) Small portions of the planned trail are within the proposed right-of-way, but this is not anticipated to affect use of the trail once constructed. The interchange at Pleasant Street will provide east-west connectivity across SR 37.
- Cumberland Road Trail (Location 2) (Existing) (Appendix I, page I33) Minor reconstruction of the trail may be necessary within existing Cherry Street and SR 32/Conner Street right-of-way. No permanent adverse impacts are anticipated.

In order for the FHWA to make a *de minimis* finding, written concurrence that the proposed impacts will not affect the resource's features, attributes, and activities is required from the party that has ownership or control of the resource (official with jurisdiction). Therefore, a letter was sent to the City of Fishers (the official with jurisdiction) on January 18, 2017, requesting concurrence that the project will not adversely affect the activities, features, and attributes that qualify their recreational trails for protection under Section 4(f). The City of Fishers agreed with this determination in its letter, dated January 19, 2017 (Appendix I, page I11). A letter was sent to the City of Noblesville (the official with jurisdiction) on January 20, 2017, requesting concurrence that the project will not adversely affect the activities, features, and attributes that qualify their recreational trails for protection under Section 4(f). The City of Noblesville agreed with this determination in its letter, dated January 20, 2017 (Appendix I, page I23).

Due to changes in the project area including a potential detention basin near Shoemaker Ditch, approximately

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mid-way between 126th Street and 131st Street, the elimination of a drainage pipe installation along 141st Street, and a drainage pipe installation along 146th Street west to the White River, coordination regarding trails was reinitiated with the Cities of Fishers and Noblesville. Only those trails potentially impacted by the project changes, or potentially no longer impacted, are discussed in this re-coordination letter. A letter was sent to the City of Fishers (the official with jurisdiction) on April 11, 2017, requesting concurrence that the project changes will not adversely affect the activities, features, and attributes that qualify their recreational trails for protection under Section 4(f) (Appendix I, pages I37 to I45). The City of Fishers agreed with this determination in its letter, dated April 11, 2017 (Appendix I, page I36). A letter was sent to the Hamilton County Highway Department (the official with jurisdiction) on April 11, 2017, requesting concurrence that the project will not adversely affect the activities, features, and attributes that qualify their recreational trails for protection under Section 4(f) (Appendix I, pages I47 to I53). The Hamilton County Highway Department agreed with this determination in its letter, dated April 11, 2017 (Appendix I, page I46). A letter was sent to the City of Noblesville (the official with jurisdiction) on April 11, 2017, requesting concurrence that the project will not adversely affect the activities, features, and attributes that qualify their recreational trails for protection under Section 4(f) (Appendix I, pages I55 to I61). The City of Noblesville agreed with this determination in its letter, dated April 14, 2017 (Appendix I, page I54).

Updates to potential impacts to these trails were identified in the April 11, 2017 letters to the Cities of Fishers and Noblesville and Hamilton County (Appendix I, pages I36 to I62) and are listed below.

#### City of Fishers Existing and Planned Trails

- Lantern Road Trail & Connectors/Harrison Parkway (Location 1) (Existing) (Appendix I, page I44) No impact is anticipated. A drainage easement and potential detention basin will be constructed east of Lantern Road, which is across the road from the trail.
- 141st Street Trail (Existing) (Appendix I, page I45) Based on proposed and existing right-of-way limits, up to approximately 315 feet south of 141st Street may be necessary; no permanent adverse impacts will occur. There will be no impacts from drainage easement trenchless pits will occur because pipe installation has been moved to along 146th Street.
- Lantern Road Trail & Connectors/Harrison Parkway (Location 2) (Existing) (Appendix I, page I45)
   No impact anticipated. A drainage pipe will be installed using trenchless excavation along the north side 146<sup>th</sup> Street, across the street from the trail.
- Allisonville Road Trail (Planned) (Appendix I, page I45) No impact, the proposed trail is outside of the proposed drainage pipe installation area which is anticipated north of 146<sup>th</sup> Street, which is across the street from the trail.
- Proposed Trail Next to Railroad (Planned) (In Master Plan Only) (Appendix I, page I45) Proposed drainage easements between 126<sup>th</sup> Street and 131<sup>st</sup> Street and along 146<sup>th</sup> Street would cross proposed trail location; no impacts anticipated.

#### **Hamilton County Existing and Proposed Trails**

- 146<sup>th</sup> Street/Greenfield Avenue Corridor (Existing South of 146<sup>th</sup> Street) (Appendix I, page I53) Based on proposed and existing right-of-way limits, up to approximately 525 feet south of 146<sup>th</sup> Street may be necessary; no permanent adverse impacts will occur. Pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange. Minor impacts from drainage pipe trenchless pits west of SR 37 may occur and temporary trail user detours may be needed during construction. Disturbed portions of the trail will be replaced and a manhole lid within the path pavement may be required in the vicinity of the drainage pipe. No permanent impacts to the trail are anticipated.
- 146<sup>th</sup> Street Trail (Under Construction North of 146<sup>th</sup> Street and west of SR 37) (Appendix I, page I53) Pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange. As discussed in a meeting on March 31, 2017 with project designers, the trail will need to avoid one groundwater monitoring well to allow for future access. Minor impacts from drainage pipe

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trenchless pits west of SR 37 may occur and temporary trail user detours may be needed during construction. Disturbed portions of the trail will be replaced and a manhole lid within the path pavement may be required in the vicinity of the drainage pipe. No permanent impacts to the trail are anticipated.

• 146<sup>th</sup> Street Trail (Existing – North of 146<sup>th</sup> Street and east of SR 37) (Appendix I, page I53) - Based on proposed and existing right-of-way limits, up to approximately 290 feet of reconstruction of trail north of 146<sup>th</sup> Street may be necessary. No permanent adverse impacts will occur. Pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchange.

#### **City of Noblesville Planned Trails**

- East of Village Center Trails (Location 1) (Planned) (Appendix I, pages I61) No impact because outside of the proposed project limits. Drainage pipe installation is anticipated to occur south of 146<sup>th</sup> Street in the vicinity of this planned trail.
- White River Trail (Planned) (Appendix I, page I61) An open trench may be used to install the pipe west of Allisonville in the location of this planned trail. Minor amounts of right-of-way or easement may be required for the drainage pipe installation in this area. No permanent impacts to the planned trail location are anticipated and the drainage pipe should not prevent future construction of the trail.

Coordination will continue with the Cities of Fishers and Noblesville and Hamilton County regarding existing and planned recreational trails throughout the design phase of the project.

Impacts to the recreational trails described above, are anticipated to qualify for use of the *de minimis* provisions due to the following: 1) The transportation use of the Section 4(f) resource does not adversely affect the activities, features, and attributes that qualify the proposed park for protection under Section 4(f). 2) The Cities of Fishers and Noblesville, and Hamilton County, who have jurisdiction over the recreational trails have been informed about the intent to have the FHWA make a *de minimis* finding and have provided written concurrence with this finding. 3) The public was afforded an opportunity to review and comment on the effects of the proposed project regarding impacts to the recreational trails via a public notice that was published in the *Indianapolis Star* and *The Times* in Noblesville, on January 24 and 25, 2017, respectively (Appendix I, page I35). The comment period ended on February 25, 2017 and no comments were received. A second public notice for the project changes and trail impact update was published in *The Times* in Noblesville and the *Indianapolis Star*, on March 27 and 28, 2017, respectively (Appendix I, page I62). The comment period ended on April 27, 2017 and no comments were received.

The transportation use of these Section 4(f) resources does not adversely affect the activities, features, and attributes that qualify the trails for protection under Section 4(f). As such, it is anticipated that the FHWA will issue a *de minimis* finding for the project. FHWA's issuance of the FONSI will constitute issuance of the *de minimis* finding.

#### Other Potential Section 4(f) Resources

Per review of infrastructure shapefiles from IndianaMap, USGS topographic map, and site visits conducted by Lochmueller Group in the summer and fall of 2016 and spring of 2017, five potential Section 4(f)-applicable resources were identified within or near the project limits. They were a playground west of SR 37 (Appendix B, page B19), the Community Montessori School, the Primrose School of Noblesville (Appendix I, page I122), Britton Golf Course (Appendix E, pages E3 and E12), and the Hamilton County 4H Fairgrounds (Appendix B, page B22). The playground is located west of SR 37 and south of Greenfield Avenue. The playground was determined to be privately owned by a residential subdivision. Because it is not publicly owned, it is not subject to Section 4(f). The Community Montessori School is located south of 141st Street. The school is privately owned and not subject to Section 4(f). The Primrose School of Noblesville is a private pre-school and day care and is not subject to Section 4(f). The Britton Golf Course was identified in the Red Flag Investigation; however, it is no longer present within the project area.

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	the FHWA Section fairgrounds that for contacted via telept County 4H Fairgrounds. The fairgrounds of the fairgrounds of that are educational and there are appropriately week of July Although there is a	on 4(f) Policy Paper (Junction primarily for cohone and email on Februarist representative ind They also indicated the is mostly scheduled dual and training related. A paximately 1,000 – 2,000 and is open to the pub	July 20, 2012), Section ommercial purposes. ruary 15, 2017. In an licated there is a walking fairgrounds is used fring the week. They a Almost every weekend 0 people at the fairgroulic with about 10,000 roperty, it appears the	7 and south of Pleasant on 4(f) is not applicable. The Hamilton County a email dated February 10 and path but no other record the Purdue Extensionals on have many rental extensionals booked for mostly trounds each weekend. The in attendance (Appendigating fairgrounds are primariles)	te to publicly owned the Fairgrounds were 5, 2017, the Hamilton creational facilities on a Service educational vents during the week ade show type events the 4H fair is held the x I, page I63 to I64).
Section 6(f	) Involvement		Presence	<u>Use</u>	
Section 6(f	) Property			Yes No	]
Discuss prop	oosed alternatives tha	t satisfy the requiremen	ts of Section 6(f). Disc	cuss any Section 6(f) inv	olvement.
Remarks:	Water Conserved.  (https://www.nps.g. LWCF sites were infrastructure shap Group in the sum within the project addition, the IDNF dated September (Appendix C, page)  Re-coordination we to document and so Street to a UNT to Street to outlet to	ation Fund (LWG tov/subjects/lwcf/lwcf-i identified within 0.5 efiles from IndianaMap mer and fall of 2016, limits (Appendix B, pa R Division of Outdoor 1 27, 2016 and indicated 27, 2016 and indicated 27 (29).  as reinitiated with the lolicit comment on two Weaver Creek will be the White River, and 2 er Ditch. No response	CF). The Nation n-your-neighborhood. mile of the project as to USGS topographic non readily apparent Stages B2 to B84; and Recreation responded I there is no impact (IDNR Division of Outchanges to the project removed and a drainal 2) a detention basin m	or improved using fundal Park Service htm/) was consulted on area (Appendix I, page nap, and site visits conduction 6(f)-applicable Appendix E, pages E12 to the early coordination on any LWCF encumbered on the drainage pipe in ge pipe installation will hay be constructed prior oject will not involve an	LWCF website January 19, 2016. No 165). Per review of acted by Lochmueller resources are located to E14 and E29). In n request in an email bered park properties  rch 15, 2017 in order estallation along 141st be added along 146th to the drainage pipe
SECTION	E – Air Quality				
Air C Co Is t If Y	Quality  Informity Status of the project in an air quites, then:  Is the project in the relation in the project exemporate in the project is NOT as the project in the proj	most current MPO TIP? It from conformity? exempt from conformity the Transportation Plan elysis required (CO/PM)	y, then: (TP)?	Yes No X	
This is p	page 64 of 90 Proje	ect name:	SR 37 Improvement	Project D	ate: April 26, 2017

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County _	Hamilton	Route	SR 37	Des. No.	1600540 et a	ıl.		
Remarks:	Hamilton Co	ounty is currently in attain	ment for all criteria polluta	ants.				
	The propose 2. The SR 3' lead Des No 1592349, 16 pages H1 to Greenfield A	ed project is not considere 7 Improvement Project is 1 o. 1600540 as well as th 501827, 1601830, 1601826 o H22). In addition, the	d exempt from conformity listed in the Indiana STIP at the 13 individual Des Nos 5, 1601828, 1602229, 1602 northern four interchange by Boulevard, Pleasant Stre	7 in accordance and the Indiana a.: 1592345, 15 2231, 1601829, es and SR 37	polis MPO II 592348, 1592 and 160183 reconstruction	RTIP under the 2346, 1592347, 1 (Appendix H, on (SR 37 and		
	Hot Spot An Because the required.		for CO and PM <sub>2.5</sub> , a hor	t spot analysis	for these po	ollutants is not		
	The purpose roundabout in This project pollutants are changes in the	Mobile Source Air Toxics (MSATs)  The purpose of this project is to reduce congestion along SR 37 by constructing grade-separated roundabout interchanges at eight signalized intersections. No additional travel lanes will be added to SR 37. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.						
Moreover, U.S. Environmental Protection Agency (USEPA) regulations for vehicle engines and furcause overall MSAT emissions to decline significantly over the next several decades. Based on regunow in effect, an analysis of national trends with USEPA's MOVES2014 model forecasts a correduction of over 90 percent in the total annual emission rate for the priority MSAT from 2010 twhile vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guida Mobile Source Air Toxic Analysis in NEPA Documents, FHWA, October 12, 2016 <sup>9</sup> ). This will both the background level of MSAT as well as the possibility of even minor MSAT emissions from this p								
SECTION	F - NOISE							
<b>Noise</b> Is a noise ar	nalysis required		regulations and INDOT's t	raffic noise poli	Yes	No		
ES Review	of Noise Analy		nary 26, 2017					
Remarks:	Because this project involves notable changes to the vertical alignment of SR 37, construction of multiple teardrop roundabouts and associated ramps, it is considered a Type 1 project. Therefore, in accordance with 23 CFR 772 and the INDOT Traffic Noise Policy (FHWA concurrence on July 13, 2011), this action does require a formal noise analysis.  A noise analysis was completed by the Lochmueller Group on January 17, 2017 (Appendix I, pages I67 to I128). Ambient highway traffic noise measurements were taken at 13 locations and utilized to validate the Traffic Noise Model (TNM) 2.5 layout for the existing condition SR 37 and intersecting roadways.							
			Ill but one of the 13 location					
<sup>9</sup> Ava 2017		w.fhwa.dot.gov/environment/	/air_quality/air_toxics/policy_	and_guidance/n	nsat/ (Accessed	l January 17,		
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Woods of Britton apartments could not be validated for either of the two monitoring periods conducted. This inability for TNM 2.5 to predict the hourly equivalent  $L_{eq}(h)$  within  $\pm 3$  dBA (A-weighted decibels) of the field measurement was attributed to the greater distance between SR 37 and the monitoring point and the increased non-traffic ambient sound levels experienced during monitoring as a result of moderate winds and rustling leaves from nearby trees. Despite the lack of model validation at this location, the TNM 2.5 model set-up in the vicinity of  $135^{th}$  Street was considered to be reliable for predicting  $L_{eq}(h)$  levels for receptors more proximal to the roadway.

For the baseline existing condition L<sub>eq</sub>(h) sound levels were calculated for 403 potential noise sensitive receptors within the study area. These included 263 Category B residential dwellings, seven Category C facilities and 133 Category E and F businesses. The residential receptors included 41 single-family dwelling units: 28 homes in the Wellington Parkway/Glasgow Lane neighborhood, three homes along Greenfield Avenue and 10 homes along Cumberland Road. Additionally, multi-family dwelling units included 82 receptors at the Sunlake apartment complex south of 126th Street, 52 receptors at the Woods of Britton apartment complex between 135th Street and 141st Street, and 88 receptors at the Millstone apartment complex north of 146th Street. Category C receptors included Pinheads Bowling (includes outdoor volleyball recreation use), Ben & Ari's Miniature Golf Course, the Wellington Parkway playground, Legacy Bible Church, Hamilton East Public Library, Kid's World Private Preschool, and Primrose School of Noblesville. The Category E receptors are represented by a variety of restaurants, offices, banks, veterinarian clinic, dance studios, and hotels; while the Category F receptors included automobile dealerships, gas stations, retailers, warehouses, car washes, and automotive service centers, etc. Using 2010 AM peak hour traffic data available from the individual intersection 2011 Mobility Studies, TNM 2.5 predicted the base year L<sub>ea</sub>(h) levels to range from 46.0 dBA to 70.7 dBA. This analysis concluded that 14 Category B residential properties and one Category C property currently approach or exceed the 67 dBA noise abatement criteria (NAC) established for these land use types. The Category B residential properties included a home on Greenfield Avenue, two homes on Cumberland Road, three units at Sunlake apartments, one unit at Woods of Britton apartments and seven units at Millstone apartments. The Category C property was Ben & Ari's Miniature Golf Course on the west side of SR 37 between 135th and 141st Street.

A build alternative model including SR 37, intersection roadways, teardrop roundabouts, associated ramps, and proposed collector/distributor roadways along SR 37 was constructed using TNM 2.5 and AM peak hour traffic data from the Mobility Studies to predict  $L_{eq}(h)$  sound levels for the 2036 design year. The 2036 design year TNM 2.5 analysis predicted that 54 receptors would experience  $L_{eq}(h)$  levels that approach or exceed the appropriate NAC as a result of the increased traffic, anticipated increased speeds resulting from elimination of the traffic signals, and roadway alignment modification. The 43 Category B residences where the 67 dBA NAC would be approached or exceeded included four residences along Cumberland Road, ten units at Sunlake apartments, six units at Woods of Britton apartments, and 23 units at Millstone apartments. The four Category C locations where impacts were predicted based on the 67 dBA NAC included Kid's World Private Preschool, Primrose School of Noblesville, Legacy Bible Church and Ben & Ari's Miniature Golf Course. The seven Category E and F receptors where impacts are anticipated based on the 72 dBA NAC included Fishers Self Storage, Andy Mohr Mitsubishi, Indiana Elite Cheer and Tumbling, Dog Dayz kennel, a multi-business strip, ZR Tactical Solutions and JDS International. Table 1 summarizes the anticipated impacts.

Mitigation abatement measures were given consideration at the Category B and C locations. Horizontal and vertical alignment changes of SR 37 and/or intersecting roads were not considered feasible given the extent of development within the landscape of the project area. Additionally, acquisition of buffer space along SR 37 and insulation of public use or non-profit institutional structures was not considered feasible as interior noise impacts were not identified for any such facilities within the project area. As such, the potential use of sound barriers was investigated to determine whether such abatement measures would be feasible and reasonable. Although potentially effective in noise abatement, the use of earthen berms as an abatement measure along SR 37 at these Category B and C locations was discounted because such

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features have a larger footprint than barrier walls and sufficient space for inclusion of earthen berms is lacking along SR 37 between the highway and the locations where NAC impacts have been identified.

Table 1. TNM 2.5	Predicted Leq(h) Levels for Category B	B, C, E and F for 2036 Design Y	Year Impacted Receptors		
NAC Category	Location	2010 Base Year Leq(h)	2036 Design Year		
			L <sub>eq</sub> (h)		
Category B	16455 Cumberland Road	65.3 dBA	67.8 dBA		
	16477 Cumberland Road	65.0 dBA	67.5 dBA		
	16487 Cumberland Road	68.4 dBA	71.1 dBA		
	16497 Cumberland Road	67.4 dBA	70.0 dBA		
	Sunlake Apartments (10 units)	63.2 to 67.2 dBA	66.2 to 70.2 dBA		
	Woods of Britton Apartments (6	64.8 to 68.8 dBA	66.5 to 71.5 dBA		
	units)				
	y B		66.2 to 70.5 dBA		
Category C	Kid's World Private Preschool	65.3 dBA	67.5 dBA		
	Primrose School of Noblesville	65.7 dBA	68.3 dBA		
	Legacy Bible Church	63.0 dBA	66.2 dBA		
	Ben & Ari's Miniature Golf	66.9 dBA	68.8 dBA		
	Course				
Category E	Indiana Elite Cheer and Tumbling	67.8 dBA	71.0 dBA		
	JDS International	68.9 dBA	71.7 dBA		
Category F	Fisher's Self Storage	70.4 dBA	72.9 dBA		
	Andy Mohr Mitsubishi	70.7 dBA	72.2 dBA		
	Dog Dayz	70.1 dBA	73.0 dBA		
	Multi-business strip	68.6 dBA	71.5 dBA		
	ZR Tactical Solutions	69.1 dBA	71.6 dBA		

Table 2. TNM 2	.5 Bar	rier Analy	sis Summ	ary Includi	ng Feasit	ole and Reasonablen	ess Assessmen	t		
Receptor Address	Impacted receptors	2036 L <sub>eath</sub> , without barrier (dBA)	2036 L <sub>equi)</sub> with barrier (dBA)	Barrier length & Height	Insertion Loss (dBA)	Benefited receptors (5 dBA insertion loss)	Total Estimated Cost/ Cost per Benefited Receptor	Impacted Receptors with 7 dBA Insertion Loss	Feasible	Reasonable
Cumberland Road residences	4	67.6 to 70.8	60.0 to 64.9	600 ft 6 to 19 ft	5.0 to 10.8	impacted =4	\$218,925 \$54,731	4 of 4	Yes	No
Sunlake Apartments	10	66.2 to 70.2	58.5 to 63.2	1,194 ft 8 to 17 ft	5.0 to 8.8	impacted = 10 non-impacted = 26	\$492,015 \$13,667	6 of 10	Yes	Yes
Woods of Britton Apartments	6	66.5 to 71.5	61.5 to 65.5	700 ft 5 to 16 ft	5.1 to 10.6	impacted = 5 non-impacted = 6	\$269,926 \$24,538	4 of 6	Yes	Yes
Millstone Apartments	23	66.2 to 70.5	58.0 to 69.2	850 ft 8 to 19 ft	0.2 to 9.5	impacted = 14 non-impacted = 28	\$400,507 \$9,353	6 of 23	Yes	No
Legacy Bible Church	1	66.0	61.0	300 ft 8 to 10 ft	5.0	impacted = 1	\$82,487 \$82,487	0 of 1	Yes	No
Kid's World Private Preschool	1	67.8	62.8	400 ft 9 to 10 ft	5.0	impacted = 1	\$113,955 \$113,955	0 of 1	Yes	No
Primrose School of Noblesville	1	68.9	63.9	400 ft 7 to 10 ft	5.0	impacted = 1	\$109,479 \$109,479	0 of 1	Yes	No

In accordance with INDOT Traffic Noise Analysis Procedure, structural barrier walls were modeled and analyzed in TNM 2.5 at the Cumberland Road residences, three apartment complexes, Kid's World Private Preschool, Primrose School of Noblesville, and Legacy Bible Church. Optimized barriers at each location were evaluated in terms of their feasibility and reasonableness based on INDOT criteria. Table 2 summarizes the results of the barrier analysis.

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For the four Cumberland Road residences, a barrier capable of providing a 5 dBA reduction at the majority of the residences was considered to be feasible in terms of acoustic performance and engineering considerations, but did not meet the cost-effective reasonableness criteria of \$30,000 per benefited receptor. At Legacy Bible Church, Kid's World Private School and Primrose School of Noblesville, the principal exterior land use was the small playgrounds adjacent to the buildings where children play. For each of these locations, a short barrier up to 10 feet in height was shown to be acoustically feasible (5 dBA reduction), but had estimated costs of \$82,487 to \$113,955 and were therefore not considered to be reasonable in terms of cost-effectiveness.

Each of the three apartment complexes where design year noise impacts were predicted to occur consist of two and three story buildings, and each apartment unit has either a patio or a balcony as an exterior use space. At Sunlake apartments, a barrier 1,194 feet in length was shown to provide a 5 dBA reduction at all ten of the impacted apartment receptors, as well as 26 additional non-impacted apartment units. At a height of up to 17 feet, such a barrier was also predicted to provide a 7 dBA noise reduction at the majority of the first row impacted receptors (six out of 10), and therefore meets the INDOT substantial reduction design goal criteria. With a total estimated cost of \$492,015 and a cost per benefited receptor of \$13,667, this barrier meets the INDOT cost-effective reasonableness criteria. At Woods of Britton apartments, a barrier 700 feet in length was shown to provide a 5 dBA reduction at five of the six impacted receptors, as well as six additional non-impacted apartment units. At a height of up to 16 feet, such a barrier was also predicted to provide a 7 dBA noise reduction at the majority of the first row impacted receptors (four out of six), and therefore meets the INDOT substantial reduction design goal criteria. With a total estimated cost of \$269,926 and a cost per benefited receptor of \$24,538, this barrier meets the INDOT cost-effective reasonableness criteria. At Millstone apartments, a barrier 850 feet in length was shown to provide a 5dBA reduction at 14 of the 23 impacted receptors, as well as 28 additional non-impacted apartment units. With a total estimated cost of \$400,507 and a cost per benefited receptor of \$9,353, this barrier meets the INDOT cost-effective reasonableness criteria. However, at a height of up to 19 feet, this barrier is predicted to only provide a 7 dBA reduction at only six of the 23 impacted receptors (26 percent), and therefore doesn't meet INDOTs reasonableness design goal criteria of 7 dBA.

Based on this preliminary abatement analysis, barrier walls at the Sunlake and Woods of Britton apartment complexes warrant further consideration. As of March 16, 2017, public involvement (i.e., public hearing or mailer postcards) to survey the viewpoints of the impacted residents and property management at these two apartment complexes had not yet been conducted for the project. The will and desires of the public are an important factor in dealing with the overall problems of highway traffic noise and are a key component in determining whether a barrier is reasonable at a specific location. In the event that residents and management at one or both of these apartment complexes are in favor of having a noise abatement barrier, the inclusion of such a feature(s) will continue to be given consideration. A final determination on noise abatement for the project would be made during the design phase. At such time, if design elements have changed that warrant a re-evaluation of the predicted noise levels, additional noise analysis would be performed to determine if impacts are anticipated, and if so, noise abatement measures would be evaluated.

INDOT ES reviewed the noise study and found it to be technically sufficient and has been completed in accordance with federal guidelines and state policy in an email dated January 26, 2017 (Appendix I, page 66). Because this project is sponsored by a Local Public Agency (LPA), INDOT ES is not required to review/approve the noise analysis study.

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		Indiana De <sub>l</sub>	partment of Tr	ransportation
County	Hamilton	Route	SR 37	Des. No1600540 et al.
SECTION	G - COMMUNITY	IMPACTS		
Will the pro Will the pro Will the pro Will constru Does the co If No, a	posed action result in posed action result in action activities impac ommunity have an ap re steps being made	with the local/regional of a substantial impacts to a substantial impacts to a substantial impacts to at community events (ferproved transition plan? to advance the community explains	community cohesion local tax base or prostivals, fairs, etc.)?	operty values?  X X X X ?
Remarks:	lane road. The pro- eight subject inter- intersecting roads a sight impacts and substantial negativ The congestion rel The Hamilton Cou No direct impacts interchange will be	ject will not add travel resections and strip right at the interchanges to a provide visual continue impacts the surroundief provided by the provinty 4H Fairgrounds are will occur to the fairge an inconvenience, det	lanes to SR 37 and ht-of-way along SR void significant elevuity across SR 37. ling community or cject is anticipated to e located west of SR grounds. The closur tours will be clearly	to community cohesion. SR 37 is an existing 4-right-of-way acquisition will generally be at the R 37. SR 37 will also be depressed under the vation of those roads. This will minimize line-of-The proposed project is not expected to have cause economic impacts to the surrounding area. To be a benefit to the community.  R 37 and south of Pleasant Street in Noblesville. The of Pleasant Street during construction of the marked and this should not substantially impair in the Hamilton County 4H Fairgrounds during

According to the Fairs and Festivals website (<a href="www.fairsandfestivals.net">www.fairsandfestivals.net</a>), accessed on January 19, 2016 by Lochmueller Group, there are 13 fairs and festivals scheduled within 10 miles of the project. These are largely located within Indianapolis, Carmel, Westfield, and Noblesville. The proposed project will maintain four lanes of traffic on SR 37 during construction (Appendix B, pages B206 to B211). Although intersecting roads may be closed for a short period (approximately 60 to 90 days) to construct the roundabouts, detours will be clearly marked and this should not substantially impair travel routes to these fairs or festivals. Please refer to the Maintenance of Traffic (MOT) During Construction section of this document for further details on the proposed MOT.

the planning stages of the project and at least two weeks prior to construction.

The MOT may pose delays and temporary inconveniences to traveling motorists (including school buses and emergency services); however, all inconveniences will cease upon project completion. In order to address concerns from business owners regarding potential impacts to businesses along the SR 37 corridor in Fishers during construction, the City of Fishers will hire a marketing and advertising coordinator. The role of the marketing and advertising coordinator will research the needs of the businesses along the SR 37 corridor in Fishers during construction and engage the appropriate sub-contractors to develop and implement the marketing campaign. The objective of the campaign is to promote the various businesses along the SR 37 corridor during construction. This could include the following activities:

- a. An integrated advertising campaign that supports the vision for the future of the SR 37 corridor and promotes businesses during the construction period,
- b. Periodic communications with the business leaders to determine specific needs and opportunity for promotion,
- c. Creative use of digital communications tools to further the advertising message, and
- d. Campaign monitoring and results tracking.

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County _	Hamilton	Route	SR 37	Des. No16	00540 et al.	
	Americans with I implemented on Fo Transition Plan for	Disabilities Act (ADA ebruary 17, 2015. Coc	rebsite ( <a href="http://www.fished">http://www.fished</a> A) Transition Plan for ordination with the City of e was approved on July ansition Plans.	the City of Fish of Noblesville Engi	ers was approineer indicates	oved and the ADA
	d Cumulative Impactorsed action result in	ets a substantial indirect or	cumulative impacts?		Yes I	No X
Remarks:	distance, but are s result from the in foreseeable future other actions. Development is on with or without the provide additional	still reasonably foresee incremental impact of actions regardless of agoing in the project are e proposed project. The access to any currer	by an action (project) are able. Cumulative impact the action when added what agency (Federal of the action of the action when added the along SR 37. Develope project will not add can also the action of the actio	ts are impacts on to d to other past, p r non-Federal) or pment is anticipated spacity to the existing Therefore, the pro-	the environment present, and resperson undertand to continue in ging roadway not ject is not exp	nt, which easonably ikes such in the area etwork or
Will the prop private utiliti	es, emergency servi	ces, religious institution	health and educational fa s, airports, public transpo traffic will affect public fac	ortation or pedestria	n	No X
Remarks:			substantial impacts on he gious institutions, airpor			
	located east of SR area. No right-of-times; therefore, in north of Greenfiel property bordering be impacted. The religious institution through portions of However, the drain	37 and north of Green-way will be acquired mpacts to it are not and Id Avenue. Strip right SR 37. This portion of Prairie View Christian will not be impacted of the eastern and norther	ar the project area. The field Avenue. It is apprefrom this religious institutionated. The Legacy Brof-way will be required the property is wooded a Church is located west the project construction. For property boundary was along 141st Street has been church property.	oximately 300 feet aution and access we will be church is located along the eastern and old field, no state of SR 37 and nor A drainage easement as previously include.	southeast of the vill be maintain atted west of S in edge of the tructures or part of 141st Stront along 141st S ided in the projection.	ne project ned at all R 37 and church's king will eet. This Street and ect scope.
	School is located v School District. The easement was prev	west of SR 37 and nor ne school property will riously included in the s easement has been	tivate school near the protect of 141st Street. This so not be directly impacted project approximately 30 removed from the project	chool is part of the by construction of feet south of the s	Hamilton Sou the project. A chool property	drainage , south of
	meeting held on indicated their sch regarding school b	December 14, 2016, nool bus routes use 13 us routes during constr	cludes schools both east the representative from 1 <sup>st</sup> Street and 141 <sup>st</sup> Street fuction of these two inter a meeting with Hamilton	n Hamilton South et. The representate changes (Appendix	eastern School tive expressed x G, pages G38	District concerns to G41).

Form Version: June 2013 Attachment 2 Attachment 1

SR 37 Improvement Project

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Date:

Oddity Hammon Hodge Stray	County	, Hamilton	Route	SR 37	Des. No.	1600540 et al.	
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issuance of the FONSI to discuss their concerns with the project.

The Community Montessori School is private and is located south of 141st Street, across from Harrison Parkway Elementary School. The school property will not be directly impacted by construction of the project. A drainage easement was previously included in the project along the northern boundary of the school property, south of 141st Street. This easement has been removed from the project. No right-of-way or easement will be acquired from the school.

Hamilton East Public Library is located west of SR 37 and north of SR 32 in Noblesville. Strip right-of-way will be required along the eastern edge of the library property bordering SR 37. This area consists of maintained lawn and no buildings or parking will be impacted.

No emergency service buildings will be impacted by the project. The City of Noblesville Fire Station 3 is located approximate 0.3 mile northwest of SR 37 and north of Greenfield Avenue. The fire station is outside of the project area and no impacts are anticipated.

In addition, representatives from the City of Fishers Police and Fire Departments attending the CAC meeting on December 14, 2016. The Police Department representative requested that a wide shoulder be incorporated into the MOT design to allow officers to make safe traffic stops and access accidents. He also indicated that the fire and rescue personnel will need a full lane width to accommodate any assistance needed for accidents to avoid backing up or shutting down traffic. They indicated they would review the proposed design plans and their emergency routes and provide comments to the design team.

There are existing and planned trails near SR 37 at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street, SR 32. There is no existing trail connectivity across SR 37 throughout the project area. Some portions of existing trail may require reconstruction during the interchange construction; however, no permanent impacts are anticipated. The project will provide east-west pedestrian and bicycle connectivity at the proposed interchanges allowing for safe crossing at these locations (Appendix I, pages I11 to I62).

There are no airports within the project area. According to the INDOT Department of Aviation early coordination response email dated September 23, 2016, the Indianapolis Metropolitan Airport is located 16,000 feet southwest of the project. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the airport, Federal Aviation Administration (FAA) Form 7460 (Notice of Proposed construction or alteration) must be filed (Appendix C, page C22).

Re-coordination was initiated with the INDOT Department of Aviation on March 15, 2017 in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141<sup>st</sup> Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146<sup>th</sup> Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch. The INDOT Department of Aviation responded in a letter dated March 28, 2017. They indicate the Noblesville Airport is located approximately 1.5 nautical miles east of the approximate midpoint (146<sup>th</sup> Street) of the project site, and the Indianapolis Metropolitan Airport is located approximately 2.6 nautical miles southwest of the southernmost point of the project site. Based upon the provided information, an Indiana Tall Structure permit would not be required unless the project involves the construction of a temporary (i.e., crane) or permanent structure that penetrates a 100:1 slope from the nearest point of the Noblesville Airport runway and/or the nearest point of the Indianapolis Metropolitan Airport runway (Appendix C, page C53).

The proposed project will maintain four lanes of traffic on SR 37 during construction (Appendix B, pages B206 to B211). Although intersecting roads may be closed for a short period (approximately 60 to 90 days) to construct the roundabouts, detours will be clearly marked and this should not substantially impair. Please refer to the *Maintenance of Traffic (MOT) During Construction* section of this document for further details

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		Indiana Dep	partment of Tr	ansportation	
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	(including school completion. School construction. The centers, recreation construction. The also be evaluated prior to and this	buses and emergency ool districts and emerge e project sponsor will a nal facilities, and any MOT is not expected to during construction and	services); however gency services multiples is services multiples; services multiples; local special event of substantially imparts of the services is services; however the services in the ser	r, all inconvenience ust be notified at for contacting religions or festivals at act public facilities letermined necessar	ences to traveling motorists ces will cease upon project least two weeks prior to ious institutions, community least seven days prior to or services. The MOT will y. Updates about the project d on the project website:
During the or Does the proof of YES, there are Are are	development of the project require an EJ and EJ and EJ and EJ populations lo	Presidential EO 12898) project were EJ issues id analysis? cated within the project adversely high or disproper	area?	EJ populations?	Yes         No           X
Remarks:	than 0.5 acre of no	ew permanent right-of-wight-of-way (approxima	yay. Because the pro	eject is expected to	or more relocations or more require more than 0.5 acre of a (one vacant house), an EJ
	the project area, of fact, populations impacts to them. comparison (COC Noblesville (COC For this project tf 1108.07; Block Gof Census Tract 1 Block Group 1 (A	alculating their percenta of EJ concern do exist. The reference population C). For this project them 2). The community that here are 12 ACs. The roup 1 (AC 2), Block G 108.09; and Block Group 2	age in the area relate, and determining on may be a county are are two COCs, to overlaps the project ACs within COC froup 2 (AC 3), Bloom 1 (AC 6) of Cen (AC 8) of Census	ive to a reference p whether there will r, city, or town and the City of Fisher et limits is called th 1 are Block Group ck Group 3 (AC 4) sus Tract 1108.12. Fract 1105.06; Bloc	ome populations in and near population to determine if, in be disproportionate adverse is called the community of s (COC 1) and the City of the affected community (AC). 2 (AC 1) of Census Tract and Block Group 4 (AC 5). The ACs within COC 2 are k Group 2 (AC 9) and Block Group 2 (AC 12) of Census
		ulation of concern for E opulation or minority po			ow-income or minority or if pulation in the COC.
	2017. The data		the U.S. Censu	s Bureau's Ame	was completed on March 10, rican FactFinder webpage
	income or minori AC 3 (5.34%), ar data for low-incon (20.61%) in Nobl of EJ concern are 2 (30.19%) in Fis	ty population. However, and AC 4 (6.03%) in Fish me populations determine esville were also greater present within the projection was greater than 1.	the data for low-in thers were greater that AC 9 (25.04%). Than 125% of CO exet area. Also, the days of COC 1 (22	ncome populations nan 125% of COC AC 10 (14.28%), AC 2 (8.59%). Therefata for the minority .47%) and AC 11 (	determined AC 1 (10.31%), 1 (3.95%). Additionally, the AC 11 (20.81%), and AC 12 fore low-income populations of populations determined AC (16.82%) in Noblesville was boncern are present within the

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COC 1: City of Fishers	Low-Income	Minority
COC %	3.16%	17.98%
125% of COC	3.95%	22.47%
AC 1: Census Tract 1108.07, Block Group 2	10.31%	13.87%
Population of EJ Concern	Yes	No
AC 2: Census Tract 1108.09, Block Group 1	2.09%	30.19%
Population of EJ Concern	No	Yes
AC 3: Census Tract 1108.09, Block Group 2	5.34%	9.26%
Population of EJ Concern	Yes	No
AC 4: Census Tract 1108.09, Block Group 3	6.03%	14.86%
Population of EJ Concern	Yes	No
AC 5: Census Tract 1108.09, Block Group 4	0.80%	13.57%
Population of EJ Concern	No	No
AC 6: Census Tract 1108.12, Block Group 1	0.40%	2.11%
Population of EJ Concern	No	No
COC 2: City of Noblesville		
	Low-Income	Minority
COC%	6.87%	13.27%
125% of COC	8.59%	16.59%
AC 7: Census Tract 1105.06, Block Group 1	3.51%	6.69%
Population of EJ Concern	No	No
AC 8: Census Tract 1105.06, Block Group 2	7.99%	13.25%
Population of EJ Concern	No	No
AC 9: Census Tract 1106, Block Group 2	25.04%	0.16%
Population of EJ Concern	Yes	No
AC 10: Census Tract 1106, Block Group 3	14.28%	9.42%
Population of EJ Concern	Yes	No
AC 11: Census Tract 1107, Block Group 1	20.81%	16.82%
Population of EJ Concern	Yes	Yes
AC 12: Census Tract 1107, Block Group 2	20.61%	8.63%
Population of EJ Concern	Yes	No

The proposed project is expected to require the acquisition of approximately 41.89 acres of permanent ROW (strip ROW and corner cuts along SR 37 and intersecting roads at the proposed interchanges), 1.11 acres of temporary ROW (for drive reconstruction and grading), and 2.16 acres of drainage easements. Some of the drainage easement areas overlap existing and proposed ROW. Land use within the proposed permanent ROW consists of commercial/light industrial, residential, with some agricultural land. The ROW requirements for the project will be refined as the project design progresses. The proposed project will require two residential relocations; however, one house, located in the possible detention basin area near Shoemaker Ditch, is currently vacant. The second house is located in the northeast quadrant of SR 37 and Greenfield Avenue. No business relocations are anticipated at this time.

Overall, the negative impacts to property owners within the project area will be minimal and consist primarily of short-term construction impacts and the loss of strip ROW. There will only be one residential relocation and the acquisition of one vacant house. The ROW to be acquired will not substantially diminish the existing use of the affected property owners. SR 37 will remain open to through traffic during construction and will not require closure. The proposed MOT will utilize phased construction. Two lanes of traffic will be maintained in each direction along SR 37 during each phase of construction, with the use of temporary pavement markings, warning lights, construction barrels, and signs directing traffic. Access to all

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		Indiana De <sub>l</sub>	partment of Tra	ansportation		
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	cross streets enter different outlet p cross streets durin local traffic need	ring SR 37 may be close oints to leave their neigng construction, they wing to access and cross S	ed for a short duration ghborhoods and/or but the identified during SR 37. Public involves	on, as such resident businesses. If detoung the detailed desi ement will continue	ring construction. However, s may be required to utilize r routes are needed for the gn phase in order to handle throughout the duration of community cohesion are	
Impacts from the project to any EJ community in this area will be beneficial due to the reduced tracongestion and enhanced pedestrian access resulting from the project. It is expected the project will not he a disproportionately high and adverse environmental or health impact to low-income or minority populat of EJ concern when compared to non EJ populations.						
	information along information providisproportionately to non EJ popul 6640.23a. No furt INDOT ES shoul (Appendix I, pag Shoemaker Ditch pipe installation a coordination rega 2017, INDOT ES	g with the Environmenta ided, INDOT ES would y high and adverse effect ations in accordance we ther EJ analysis is required to be contacted immediated in the contacted immediated ge I130). Due to change, approximately mid-way along 141st Street, and a contacted in the contacted	al Justice (EJ) Analy not consider the im t on minority and/or ith the provisions of ed. Should the scope ately to determine if es in the project are between 126th Street drainage pipe installa with INDOT ES on ES has no comments	rsis for the above repacts associated we low income popular of Executive Order of work change or the EJ Analysis were a including a potent and 131st Street, that the street of the transport of	referenced project. With the ith this project as causing a attions of EJ concern relative 12898 and FHWA Order the amount of right-of-way, ould need to be reinitiated rential detention basin near the elimination of a drainage reet west to the White River, in an email dated March 15, the updated analysis and no page I129).	
Will the pro Is a Busine Is a Concep	ss Information Surventual Stage Relocati	in the relocation of peopl	ed?	ns?	Yes No	
Number of	relocations: R	esidences: 2 B	usinesses:0	Farms:0	Other: 0	
	If a BIS or CSRS i	s required, discuss the re	esults in the remarks	box.		

Form Version: June 2013 Attachment 2 Attachment 1

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Remarks:  The project is anticipated to relocate two residences. One of these houses potential detention basin near Shoemaker Ditch (Appendix B, page B9). The s northeast quadrant of SR 37 and Greenfield Avenue (Appendix B, page B9). The sacquisition of right-of-way will be required from commercial properties. affect business parking lots or remove or relocate access drives. However, all access to a transportation facility. Potential business relocations were reenvironmental professionals from the project team to determine where impaspaces, could impact the ability to continue business operations. Based on completion of the draft EA, it was determined the right-of-way impacts voperations, and no businesses were identified as potential relocations. The Citicand Hamilton County will continue to investigate opportunities to reduce rigwith business owners during the right-of-way acquisition process.  The acquisition and relocation program will be conducted in accordance with Relocation Assistance and Real Property Acquisition Policies Act of 1970 as are available to all residential and business relocates without discrimination project will be required to move from a displaced dwelling unless comparavailable to that person.  Water, sanitary sewer, gas, electric, cable, and telephone utility lines are presen Utility coordination has been initiated for the project and several utilities attenmenting on January 11, 2017.  SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES  Hazardous Materials & Regulated Substances (Mark all that apply)  Red Flag Investigation  Phase I Environmental Site Assessment (Phase I ESA)  Phase I Environmental Site Assessment: January 18, 2017	In some instances this may businesses will be provided riewed by engineering and ets, such as loss of parking information available during ill not substantially impacts of Fishers and Noblesville, at-of-way impacts and work 49 CFR 24 and the Uniform tended. Relocation resources No person displaced by this able replacement housing is a throughout the project area.
potential detention basin near Shoemaker Ditch (Appendix B, page B9). The s northeast quadrant of SR 37 and Greenfield Avenue (Appendix B, page B19).  The acquisition of right-of-way will be required from commercial properties. affect business parking lots or remove or relocate access drives. However, all access to a transportation facility. Potential business relocations were re environmental professionals from the project team to determine where impa spaces, could impact the ability to continue business operations. Based on completion of the draft EA, it was determined the right-of-way impacts v operations, and no businesses were identified as potential relocations. The Citic and Hamilton County will continue to investigate opportunities to reduce rig with business owners during the right-of-way acquisition process.  The acquisition and relocation program will be conducted in accordance with Relocation Assistance and Real Property Acquisition Policies Act of 1970 as ar are available to all residential and business relocatees without discrimination. project will be required to move from a displaced dwelling unless compar available to that person.  Water, sanitary sewer, gas, electric, cable, and telephone utility lines are presen Utility coordination has been initiated for the project and several utilities attendmenting on January 11, 2017.  SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES  Hazardous Materials & Regulated Substances (Mark all that apply) Red Flag Investigation Phase I Environmental Site Assessment (Phase I ESA) Phase I Environmental Site Assessment (Phase I ESA) Design/Specifications for Remediation required?  No Yes/ Date  ES Review of Investigations  Phase I Environmental Site Assessment: January Phase I Envi	In some instances this may businesses will be provided riewed by engineering and ets, such as loss of parking information available during ill not substantially impacts of Fishers and Noblesville, at-of-way impacts and work 49 CFR 24 and the Uniform tended. Relocation resources No person displaced by this able replacement housing is a throughout the project area.
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Relocation Assistance and Real Property Acquisition Policies Act of 1970 as ar are available to all residential and business relocatees without discrimination. project will be required to move from a displaced dwelling unless compar available to that person.  Water, sanitary sewer, gas, electric, cable, and telephone utility lines are present Utility coordination has been initiated for the project and several utilities attended to meeting on January 11, 2017.  SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES  Phazardous Materials & Regulated Substances (Mark all that apply)  Red Flag Investigation  Phase I Environmental Site Assessment (Phase I ESA)  Phase II Environmental Site Assessment (Phase II ESA)  Design/Specifications for Remediation required?  No Yes/ Date  ES Review of Investigations  Phase I Environmental Site Assessment: January 1902  Phase I Environmental Site Assessment: January 1903  Phase I Environmental Site Assessment: January 1903  Phase I Environmental Site Assessment: January 1904  Phase I Environmental Site Assessment: January 1904  Phase I Environmental Site Assessment: January 1905  Phase I Environmental Site Assessment 1905  Phase I	nended. Relocation resources No person displaced by this able replacement housing is throughout the project area.
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ES Review of Investigations Phase I Environmental Site Assessment: January	<u>on</u>
	ry 17, 2017
clude a summary of findings for each investigation.	
A Red Flag Investigation (RFI) was completed for the project area by Lochmu 2016 in order to identify potential hazardous material concerns that could p (Appendix E, pages E1 to E25). The RFI was reviewed and approved with January 18, 2017.	otentially impact the project
Due to changes in the project area including a potential detention basin near Shomid-way between 126 <sup>th</sup> Street and 131 <sup>st</sup> Street, the elimination of a drainage Street, and a drainage pipe installation along 146 <sup>th</sup> Street west to the White R completed for the project area by Lochmueller Group on March 15, 2017 in hazardous material concerns that could potentially impact the project (Appendix RFI was reviewed and approved with revisions by INDOT ES on March hazardous material sites were identified within 0.5-mile of the new project areas	pipe installation along 141 <sup>st</sup> ver, an RFI Addendum was n order to identify potential
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Form Version: June 2013 Attachment 2

Attachment 1

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The RFI identified five IDEM 303d listed impaired streams, 11 petroleum wells, one petroleum field, 11 industrial waste sites (Resource Conservation and Recovery Act (RCRA) Generators), 16 leaking underground storage tanks (LUSTs), 21 underground storage tanks (USTs), one IDEM State Cleanup Program site, three National Pollutant Discharge Elimination System (NPDES) facilities, and five NPDES pipes within 0.5 mile of the project. Please refer to the RFI for further details on these hazardous material concerns.

One impaired stream, Stony Creek, is located within the project area and is listed as impaired for *Escherichia coli (E. coli)*, impaired biotic communities (IBC), and polychlorinated biphenyls (PCBs) in fish tissue. Workers who are working in or near water with *E. coli* will take care to wear adequate personal protective equipment (PPE), observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. If there will be sediment and/or soils disturbed by construction, additional investigation may be necessary and coordination with INDOT ES will occur.

The project area is mapped within the Trenton Oil Field. Additionally, one petroleum well is mapped within the southern portion of the project area (Appendix E, pages E18 to E20). Early coordination letters were sent to the IGS and IDNR, Division of Oil and Gas on September 13, 2016. IGS responded on September 22, 2016, stating that there are no unusual geological, geographical, or geophysical features within the project area. IGS confirmed that the project area is mapped within the Trenton Oil Field, but is no longer producing on any scale that is profitable. In their response letter, the IGS also indicated that there some abandoned petroleum wells from the late 1800s within a half mile of the SR 37 roadway which are presumed to be plugged. The IGS stated that these abandoned petroleum wells should not have any effect on the project (Appendix C, page C24).

The IDNR, Division of Oil and Gas responded on September 22, 2016, stating that oil and gas issues may not exist; however, there are historic wells (petroleum) that were drilled at the turn of the 1900s. The IDNR, Division of Oil and Gas indicated that they have very few records on the actual locations of these historic petroleum wells or how the wells were constructed from that era. They also stated that the Trenton Oil Field is now a dried up production field with only pockets of minerals remaining. However, the IDNR Division of Oil and Gas cautions that it is still possible to hit an open hole/well or old metal casing of an abandoned gas well. They further state that it does not appear that any of the known wells are in the areas where the roads have been previously paved. Otherwise, more than likely, the wells would have been hit when SR 37 was first constructed, as well as the side streets involved with this project. If any heavy cast iron metal pipes or wells are discovered during construction, the IDNR, Division of Oil and Gas will be notified immediately and construction in the area will cease until the IDNR has the opportunity to inspect the well and oversee plugging of wells if necessary (Appendix C, page C24). This is included as a firm commitment in the *Environmental Commitments* section below in this document.

Re-coordination was initiated with the IDNR Division of Oil and Gas on March 15, 2017 in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141st Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146th Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch. The IDNR Division of Oil and Gas responded in an email dated March 21, 2017 with a list of presumed plugged crude oil and natural gas wells within 0.5 mile of the SR 37 project (Appendix C, pages C54 to C56). They reiterated that existing wells may not be mapped and are difficult to find and cautioned the project team regarding holes in the ground. If any heavy cast iron metal pipes or wells are discovered during construction, the IDNR, Division of Oil and Gas will be notified immediately and construction in the area will cease until the IDNR has the opportunity to inspect the well and oversee plugging of wells if necessary.

Multiple gas stations (filling stations) were identified within the immediate vicinity of the project area during the initial field check conducted by Lochmueller Group on June 23, 2016 (Appendix E, page E31).

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The project scope of work will include grading, vegetation clearing, and excavation activities throughout the limits of the project. In general, excavation at a depth of approximately 20 feet below ground surface (bgs) will be required for the grade-separated interchanges at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street and SR 32. Trenchless excavation (directional boring) and open cut methods will be utilized to install the new storm sewer drain lines that will outlet to Shoemaker Ditch and a UNT Weaver Creek west of SR 37. Excavation at a maximum depth of approximately 40 feet below ground surface (bgs) will be required for the receiving pits needed for the directional boring process.

Based on the scope of work, as well as the hazardous material concerns identified during the field checks and RFI, further investigation into potential hazardous material concerns was warranted.

A Phase I Environmental Site Assessment (ESA) was completed for the project area on January 17, 2017 by Metric Environmental, LLC (Metric) due to the presence of several hazardous material sites in and near the vicinity of the project area (Appendix E, pages E33 to E74). The Phase I ESA consisted of a site reconnaissance, completed on June 29, 2016; a review of historical and governmental records, such as a review of the publically available files within IDEM's Virtual File Cabinet (VFC); and interviews with current owners and/or occupants, historical owners and/or occupants, neighboring property owners and/or occupants, and local government officials. The results of the Phase I ESA revealed 21 recognized environmental conditions (RECs) near the project area and are summarized below. Please see Appendix E for maps depicting the locations of the RECs (pages E75 to E78).

- 1. A Speedway branded filling station (Speedway #3304) (FID #22634) has adjoined the project area along the north side of the SR 32/Conner Street (east of SR 37) at 3150 Conner Street since circa 2004. According to the files in IDEM VFC, a Phase II Subsurface Investigation was conducted at the site in December 2007. Contaminants of concern (COCs) were not present in soil and groundwater samples collected at concentrations exceeding respective IDEM Remediation Closure Guide (RCG) Migration to Groundwater (MTG)/Tap Screening Levels. A No Further Action was issued for the site's LUST case (LUST #200712503) by IDEM on January 16, 2008. Based on the filling station's close proximity to the project area, any potential releases or spills since 2007 could have adversely affected the project area; therefore, the Speedway #3304 facility represents an REC to the project area (REC 1). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.
- 2. A former Nally's Dry Cleaning facility adjoined the project area to the west at 2640 Conner Street (strip mall) from circa 2004 to circa 2008. No dry cleaning facility currently occupies the shopping center. It is unknown whether the site was a pickup/drop off facility or if dry-cleaning activities were conducted onsite. Based on the dry cleaning facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Nally's Dry Cleaning facility represents an REC to the project area (REC 2). Phase II sampling activities are warranted to determine if contaminants are present since excavation will be required and permanent strip right-of-way will be acquired from this location and because it is unknown if the site was a pickup/drop off location or if dry cleaning activities were conducted on site. There are no records or contacts available for the site and no way to determine if dry cleaning activities were conducted on site.
- 3. A filling station (formerly Home Run Mart/AMOCO Oil Co) (FID #1091) has adjoined the project area on the southwest quadrant of the SR 37 and SR 32/Conner Street intersection at 2995 Conner Street since the early 1970s. The site is currently occupied by Valero filling station (FID 1091). According to the files in IDEM VFC, a suspect LUST was reported in 1989 as a result of a failed tank tightness test of a 6,000-gallon gasoline UST (LUST #198911073). Five USTs (one 8,000-gallon and three 6,000-gallon gasoline USTs and one 550 gallon used oil UST) and associated equipment were removed from western portion of the site in October 1991. The current UST area

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(comprised of one 12,000-gallon and one 10,000-gallon gasoline UST and one 8,000-gallon diesel UST) was installed in 1992 on the northeast portion of the site located approximately 20 feet from the project area. IDEM assigned Incident #200407509 to the site following the detection of dissolved COCs above applicable IDEM action levels in groundwater samples collected from the OW-4R and OW-5R sampling locations. Based on a subsurface investigation conducted in 2004, trace petroleum COCs are present immediately south of the current UST system at concentrations below applicable IDEM RCG MTG screening levels (SLs). COCs were not present in soil samples collected immediately north and east of the current UST system along the areas of the project area. In 2006, no COCs were present in groundwater samples collected from well MW-1 located east of the UST area. However, benzene was present in groundwater collected from a well located north of the UST area along Conner Street at a concentration of 9.4µg/L (AEC, 2008b). A No Further Action Determination Approval Pursuant to the IDEM RCG was issued in March 2016 for the site by IDEM with unconditional closure (IDEM, 2016). The site was also listed on the standard environmental databases as a former small quantity generator in 1991 (RCRA ID #IND984892737). However, based on the close proximity of the UST area to the project area, any potential releases that could have occurred since 2006 may have adversely affected the project area; therefore, the Home Run Mart/AMOCO Oil Co facility represents an REC to the project area (REC 3). This site is at the same intersection as REC 2. Per IDEM VFC files, groundwater flow has been mapped as radial at this site and it does not appear as though any samples from the northeastern ROW have been evaluated. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.

- 4. A former Doskocil Specialty Brand Co. facility (FID #4321) was situated west adjacent to the project area at 2395 E. Conner Street since circa 1985. According to the files in the IDEM VFC, the site used to operate one 20,000-gallon diesel UST, which was removed in approximately 1991 (IDEM, 1991). Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the former Doskocil Specialty Brand Co. facility represents an REC to the project area (REC 4). Excavation will be required (up to 20 feet bgs) for the construction of the interchange. Because this site is in close proximity to the graded interchange Phase II sampling activities are warranted.
- 5. A Meijer branded filling station (Meijer Gas Station #230) (FID #24769) is situated east and adjacent to the project area at 16905 Mercantile Boulevard. According to the files in the IDEM VFC, the site has been used as a filling station since at least 2004. The site is currently improved with one 3,000-gallon E-85 (ethanol fuel) UST, one 8,000-gallon gasoline UST, one 20,000-gallon gasoline UST, and one 8,000-gallon diesel UST. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Meijer Gas Station #230 facility represents an REC to the project area (REC 5). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 6. A Rickers/BP branded filling station (Rickers #77) (FID #24490) adjoins the project area on the northwest quadrant of the Town and County Boulevard and SR 37 intersection at 16788 Clover Road. According to the files in the IDEM VFC, the site has been used as a filling station since 2001. The site currently operates two 15,000-gallon gasoline USTs and one 8,000-gallon diesel UST. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Rickers #77 facility represents an REC to the project area (REC 6). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.
- 7. An auto wrecking facility has been situated west and adjacent to the project area at 2180 Greenfield Avenue since at least 1976. The site is currently occupied by Boggs Wrecker Service. The facility appears to have been storing vehicles in a lot immediately adjacent to SR 37. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Boggs Wrecker Service facility represents an REC to the project area

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(REC 7). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur

- 8. A Speedway branded filling station (Speedway #8071) (FID #18087) has adjoined the project area in the northeast quadrant of the Greenfield Avenue and SR 37 Intersection at 2290 Greenfield Avenue. According to the files in the IDEM VFC, the site has been used as a filling station since at least 1994. The site currently operates one 12,000-gallon gasoline UST, one 8,000-gallon gasoline UST, one 6,000-gallon diesel UST, and one 4,000-gallon kerosene UST that were installed in 1992. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Speedway #8071 facility represents an REC to the project area (REC 8). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.
- 9. A Marsh Village Pantry/Marathon branded filling station (FID #18330) has been situated west and adjacent to the project area at 2299 Greenfield Avenue. According to the files in the IDEM VFC, the site has been used as a filling station since at least 1994. The site currently operates one 12,000-gallon gasoline UST, one 10,000-gallon gasoline UST, and one 2,000-gallon diesel UST. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Marsh Village Pantry/Marathon branded filling station facility represents an REC to the project area (REC 9). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.
- 10. An auto repair facility has adjoined the project area to the west at 14700 Herriman Boulevard since circa 1994. The site is currently occupied by Truck Service Inc. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Truck Service Inc. facility represents an REC to the project area (REC 10). However, there are no records in the IDEM VFC that would suggest USTs are currently present or were historically used at this site. Additionally, there is no evidence indicating that a spill or release ever occurred at this site; therefore, Phase II sampling is not warranted at this site. This facility is not expected to impact the project.
- 11. A Circle K branded filling station (Circle K #2364) (FID #25088) has adjoined the project area in the southwest quadrant of the 146<sup>th</sup> Street and SR 37 intersection at 14554 Herriman Boulevard since circa 2008. According to the files in the IDEM VFC, the site currently operates one 20,000-gallon gasoline USTs, one 8,000-gallon gasoline UST, and two 10,000-gallon diesel USTs. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore, the Circle K #2364 facility represents an REC to the project area (REC 11). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.
- 12. A Speedway branded filling station (Speedway #3352) (FID #24807) has been situated west adjacent to the project area at 14091 Trade Center Drive since at least 2005. According to the files in the IDEM VFC, the site is currently operates one 20,000-gallon gasoline UST, one 10,000-gallon gasoline UST, one 4,000-Gallon diesel UST, and one 4,000-gallon kerosene UST that were installed in 2004. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore, the Speedway #3352 facility represents an REC to the project area (REC 12). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.

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- 13. An Andy Mohr Mitsubishi branded car dealership/ repair center has adjoined the project area to the west at 13927 Trade Center Drive since at least 2005. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Andy Mohr Mitsubishi facility represents an REC to the project area (REC 13). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 14. A Honda of Fishers branded car dealership/ repair center has adjoined the project area to the west at 13661 Britton Park Road since at least 2015. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Honda of Fishers facility represents an REC to the project area (REC 14). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 15. An Ed Martin Nissan of Fishers branded car dealership/ repair center has adjoined the project area to the west at 13397 Britton Park Road since at least 2010. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Ed Martin of Fishers facility represents an REC to the project area (REC 15). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 16. A BP branded filling station (BP #70361) (FID #22553) adjoins the project area in the northwest quadrant of the 131st Street and SR 37 intersection at 9290 E. 131st Street. The site has been occupied by a filling station since circa 1997. According to the files in the IDEM VFC, the site currently operates three 10,000-gallon gasoline USTs. Based on the filling station's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore, the BP branded filling station facility represents an REC to the project area (REC 16). Permanent strip right-of-way will be acquired from this location and excavation will be required (up to 20 feet bgs) for the construction of the interchange. Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.
- 17. An Andy Mohr Buick Pontiac GMC branded car dealership/ repair center has been situated west adjacent to the project area at 9295 E. 131st Street since circa 2004. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Andy Mohr Buick Pontiac GMC facility represents an REC to the project area (REC 17). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 18. A former Saturn of Fishers branded car dealership/ repair center was located west adjacent to the project area at 12875 Ford Drive between circa 2000 and circa 2008. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Saturn of Fishers facility represents an REC to the project area (REC 18). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 19. A Fishers Collision Repair branded repair center has been situated west adjacent to the project area at 12685 Ford Drive since circa 1995. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Fishers Collision Repair facility represents an REC to the project area (REC 19). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 20. A Don Hinds Ford Inc. branded car dealership/ repair center has been situated west adjacent to the project area at 12610 Ford Drive since circa 1990. Based on the facility's close proximity to the project area, any potential releases or spills could have adversely affected the project area; therefore the Don Hinds Ford Inc. facility represents an REC to the project area (REC 20). However, based on the lack of evidence indicating that a spill or release ever occurred at this site, Phase II sampling is not warranted. This facility is not expected to impact the project.
- 21. Circle K (Shell) filling station #2276 (FID #19585) has adjoined the project area on the northeast

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quadrant of the 126th Street and SR 37 intersection at 9510 E. 126th Street since circa 1995. According to the files in the IDEM VFC, the IDEM assigned Incident No. 200508508 in August 2005 following the results of a Phase II identified elevated COCs in soil and groundwater samples. A second incident (Incident #201305507) was issued following a reported spill; however, the incident has since been deactivated (AECOM, 2015). Copies of the Initial Site Characterization Report and subsequent Further Site Investigation Reports were not found in the IDEM VFC while researching this facility. Groundwater sampling conducted by Groundwater & Environmental Services, Inc. (GES) on September 29, 2016 revealed levels of benzene in MW-12S (29.8 µg/L) that exceeds RCG Residential Vapor Exposure SLs and MW-5 (1,240 µg/L) and MW-13R (126 µg/L) that exceed RCG Commercial/Industrial Vapor Exposure SLs along the eastern border of the site (GES, 2016). Additionally, recent groundwater sampling data (QMR dated October 28, 2016 and historical analytical data) suggests elevated COCs in groundwater along the southern property extent, adjacent to the right-of-way. There is a shallow depth to water present as well (i.e. two to six feet. bgs). Based on the results of recent sampling at the site and distance from the project area, any potential releases that could have occurred at the site could have adversely affected the project area; therefore, the Circle K (Shell) filling station represents an REC to the project area (REC 21). Therefore, Phase II sampling activities are warranted to determine if contaminants are present in the areas where excavation will occur.

Based on the results of the Phase I ESA, review of the publically available files in the IDEM VFC, and the project scope of work, the need for Phase II sampling activities are warranted for 12 of the 21 RECs, as identified above, prior to construction. Phase II sampling activities will include soil borings in the areas where excavation will occur, a short report of the findings, and the analytical results of the sampling activities. IDEM will be coordinated with prior to the Phase II soil sampling activities. INDOT ES will review the limited Phase II soil sampling work plan and the results of the limited Phase II sampling activities prior to the project letting. If contaminated soils or water are encountered during construction, appropriate PPE shall be utilized. Any contamination encountered during excavation activities will need to be properly handled and disposed in accordance with current regulations. IDEM will be notified through the spill line at (888) 233-7745 within 24 hours of discovery of contamination.

The following firm commitments regarding potential hazardous material contamination will be added to the INDOT Commitment Database and are also listed in the *Environmental Commitments* section at the end of this document.

- 1. If dewatering is necessary during construction activities in the project area, then analytical testing will be performed before discharging the water to determine if contaminants of concern are present.
- 2. Phase II sampling activities will be completed at the following 12 locations prior to letting of the project for construction: Speedway filling station located at 3150 Conner Street (REC 1); the former Nally's Dry Cleaning located at 2640 Conner Street (strip mall) (REC 2); Valero filling station located at 2995 Conner Street (REC 3); the former Doskocil Specialty Brand Co. facility located at 2395 Conner Street (REC 4); Rickers/BP filling station located at 16788 Clover Road (REC 6); Boggs Wrecker Service located at 2180 Greenfield Avenue (REC 7); Speedway filling station located at 2290 Greenfield Avenue (REC 8); Marsh Village Pantry/Marathon filling station located at 2299 Greenfield Avenue (REC 9); Circle K filling station located at 14554 Herriman Boulevard (REC 11); Speedway filling station located at 14091 Trade Center Drive (REC 12); BP filling station located at 9290 East 131st Street (REC 16); and the Circle K (Shell) filling station located at 9510 East 126th Street (REC 21).
- 3. Phase II sampling activities will include soil borings in the areas where excavation will occur, a short report of the findings, and the analytical results of the sampling activities. IDEM will be coordinated with prior to the limited Phase II soil sampling activities. INDOT ES will review the Phase II soil sampling work plan and the results of the limited Phase II sampling activities.
- 4. If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) will be used. Contaminated materials will need to be properly

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·	notified th	by trained personnel and an arough the spill line at the and within 2 (two) l	t (888) 233-7745 with	nin 24 hours of di		
SECTIO	N I – PERMITS CHE	CKLIST				
Permits (	mark all that apply)		Likely Required			
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N C M US Coast	onstruction in a Floodw avigable Waterway Pe ake Preservation Perm other litigation Required t Guard Section 9 Brid Please discuss in the	rmit it Ige Permit	X			
Remarks:	A USACE Section 1,128 linear feet ( required when importing tion is required location of mitigat regarding jurisdiction be needed to doc Categorical Exclustion and the Important to	404 Permit and IDEM 0.51 acre) of stream pacts exceed 300 feet ired when impacts exion sites has not yet be donal status and mitigatument the mitigation ion (CE) will be needed DNR Division of Fish will require the formal and proposal to construct has a drainage area intigation may be required.	I Section 401 Water Q impacts and 0.748 at or 0.1 acre; therefore en determined. Coord tion requirements in the if it will occur on the interest of it will occur on the interest of its will be interest.	cre of wetland im re, stream mitigate fore, wetland mit lination will conting the permitting phase or adjacent to the l not occur adjacent oordination responsion in a floodway are mile (Appending	apacts. Stream ion is anticipation is anticipation is an anue with USA see of the project are project are not to the project and to the project as letter date under the Floor of a stream or lix C, pages	a mitigation is ated. Wetland ticipated. The CE and IDEM et. An AI will a. A separate et.  d October 13, od Control Act other flowing C25 to C28).
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Britton Branch, Shoemaker Ditch, UNT to Overdorff Branch, and Stony Creek are regulated legal drains in Hamilton County. The Hamilton County Surveyor's office requires a permit for crossing, outletting or working within the easement of a regulated drain. Coordination with the Hamilton County Surveyor's Office has been initiated and will continue in the permitting phase of the project.

According to the Marion County Storm Water Management District early coordination response letter dated September 20, 2016, there are no Marion County Storm Water Management District assets within the project limits and the Marion County Storm Water Management District receives no immediate discharges from the project area (Appendix C, page C23).

This project lies within the Cities of Fishers and Noblesville Urban Area Boundaries (UABs). Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. A coordination letter was sent to the City of Fishers MS4 Coordinator, City of Noblesville MS4 Program Manager, and Hamilton County MS4 Representative on February 14, 2017 (Appendix C, pages C35 to C37). In an email dated March 10, 2017, the Hamilton County Surveyor's Office responded that it appears the project falls within the corporate boundaries of the City of Fishers and City of Noblesville. Hamilton County will defer all comments regarding storm water quality to those municipalities. As the design progresses, it is recommended that the storm water quality (SWQ) system conform to the appropriate ordinances and standards of the City of Fishers, the City of Noblesville and Hamilton County. The standards are very similar (Appendix C, page C62). No other responses were received.

Re-coordination letters were sent to the Cities of Fishers and Noblesville and Hamilton County on March 15, 2017 in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141st Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146th Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C41). In an email dated March 24, 2017, the Hamilton County Surveyor's Office asked about the INDOT detention requirements referenced in the re-coordination letter. Project designers called the Hamilton County Surveyor's Office to let them know the storm water control measures INDOT recommended. In an email dated March 27, the City of Fishers MS4 Coordinator asked for an exhibit showing the plans for water quality in each district. In an email dated March 28, 2017, the City of Noblesville MS4 Program Manager requested an exhibit showing the water quality and storm systems for the portion of the project including 141st Street north. In an email dated April 17, 2017, Lochmueller Group responded to all three parties indicating that the plans for the water quality and storm systems for the SR 37 were still under development and a commitment will be added to this EA indicating these plans will be provided when available (Appendix C, pages C60 to C62). This is listed as a Firm commitment in the *Environmental Commitments* section below.

It is the responsibility of the Cities of Fishers and Noblesville to apply for any permits required, including those listed above and any that are required by the local authorities.

#### **SECTION J- ENVIRONMENTAL COMMITMENTS**

The following information should be provided below: List all commitments, name of agency/organization requesting the commitment(s), and indicating which are firm and which are for further consideration. The commitments should be numbered.

#### Remarks:

## Firm (Required):

- 1. If permanent or temporary right-of-way amounts change, the INDOT Environmental Services will be contacted immediately. (INDOT ES)
- 2. School districts and emergency services must be notified at least two weeks prior to construction. The project sponsor will also be responsible for contacting religious institutions, community centers, recreational facilities, and any local special events or festivals at least seven days prior to construction. (INDOT ES)

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- 3. If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al.) and State Law (IC 14-21-1) require that work must stop immediately within 100 feet of the discovery and that the discovery must be reported to the Division of Historic Preservation and Archaeology in the Department of Natural Resources within two (2) business days. INDOT's Cultural Resources Office shall also be notified. (IDNR DHPA & INDOT ES)
- 4. If construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined (outside of the survey area), additional archaeological assessment may be required. These sites will be marked on the final plans and labeled environmentally sensitive areas. (IDNR DHPA & INDOT ES)
- 5. Archaeological Site 12H1811 will be avoided by all project construction activities. A 100-foot buffer of the site will be clearly marked on the design plans as an environmentally sensitive area and maintained during the design and construction of the project. (INDOT ES)
- 6. If dewatering is necessary during construction activities in the project area, then analytical testing will be performed before discharging the water to determine if contaminants of concern are present. (INDOT ES)
- 7. Phase II sampling activities will be completed at the following 12 locations prior to letting of the project for construction: Speedway filling station located at 3150 Conner Street (REC 1); the former Nally's Dry Cleaning located at 2640 Conner Street (strip mall) (REC 2); Valero filling station located at 2995 Conner Street (REC 3); the former Doskocil Specialty Brand Co. facility located at 2395 Conner Street (REC 4); Rickers/BP filling station located at 16788 Clover Road (REC 6); Boggs Wrecker Service located at 2180 Greenfield Avenue (REC 7); Speedway filling station located at 2290 Greenfield Avenue (REC 8); Marsh Village Pantry/Marathon filling station located at 2299 Greenfield Avenue (REC 9); Circle K filling station located at 14554 Herriman Boulevard (REC 11); Speedway filling station located at 14091 Trade Center Drive (REC 12); BP filling station located at 9290 East 131st Street (REC 16); and the Circle K (Shell) filling station located at 9510 East 126th Street (REC 21). (INDOT ES)
- 8. Phase II sampling activities will include soil borings in the areas where excavation will occur, a short report of the findings, and the analytical results of the sampling activities. IDEM will be coordinated with prior to the limited Phase II soil sampling activities. INDOT ES will review the Phase II soil sampling work plan and the results of the limited Phase II sampling activities. (INDOT ES)
- 9. If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) will be used. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM will be notified through the spill line at (888) 233-7745 within 24 hours of discovery of a release from a UST system and within 2 (two) hours of discovery of a spill. (INDOT ES)
- 10. Workers who are working in or near water with *E. coli* (Stony Creek) will take care to wear adequate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. (INDOT ES)
- 11. If there will be sediment and/or soils disturbed by construction in or near Stony Creek, additional investigation may be necessary and coordination with INDOT ES will occur. (INDOT ES)
- 12. An IDEM Rule 5 Notice of Intent is required for the project. The project site owner shall post a permit notice near the main entrance of the project site. (IDEM)
- 13. Citizen's Energy Group has indicated that Citizen's Water has surface water intakes on the White River in Hamilton County and Marion County. Citizen's Energy Group emphasizes protection of this drinking water source by preventing contamination from reaching the White River and any of its tributaries by strictly complying with existing regulations. Regulations include programs such as Spill Prevention Control and Countermeasures (Oil Spill Prevention), Storm Water Pollution Prevention and Emergency Response Planning. Planning, documenting plans, procuring and deploying spill prevention equipment/control equipment, training/drills for the workforce and frequent inspections are needed in order to ensure protection of the waterways. (Citizen's Energy

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Group)

- 14. Citizen's Energy Group states that in the event contamination from construction activities reaches the White River that could adversely affect the drinking water resource, the responsible party should immediately contact the Citizens Water Central Control System at (317) 941-7124. However, in the event that contact is not made at this number, please call the Citizens Energy Group Environmental Hotline at (317) 402-8636. The caller should be prepared to describe the nature of the contamination (quantity and type of material), location and time of release. (Citizen's Energy Group)
- 15. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. (IDEM)
- 16. If any heavy cast iron metal pipes or wells are discovered during construction, the IDNR, Division of Oil and Gas will be notified immediately and construction in the area will cease until the IDNR has the opportunity to inspect the well and oversee plugging of wells if necessary. If a well is hit contact: Assistant Director of IDNR, Division of Oil and Gas at 317-233-0933 (office) or 317-450-6611 (cell); Field Specialist at 317-417-6556; and Northern Area Inspector at 765-618-0766. (IDNR, Division of Oil and Gas)
- 17. The Noblesville Airport runway is located 1.5 nautical miles east of the project. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the nearest point of the Noblesville Airport runway, FAA Form 7460 (Notice of Proposed construction or alteration) must be filed. For assistance contact Adam French, INDOT Office of Aviation, 317-232-1477. (INDOT Office of Aviation)
- 18. The Indianapolis Metropolitan Airport is located 16,000 feet (three miles) southwest of the project. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the airport FAA Form 7460 (Notice of Proposed construction or alteration) must be filed. For assistance contact Adam French, INDOT Office of Aviation, 317-232-1477. (INDOT Office of Aviation)
- 19. Based on the preliminary noise abatement analysis, barrier walls at the Sunlake and Woods of Britton apartment complexes warrant further consideration. Public involvement (i.e., public hearing or mailer postcards) will be completed to survey the viewpoints of the impacted residents and property management at these two apartment complexes. A final determination on noise abatement for the project would be made during the design phase. At such time, if design elements have changed that warrant a re-evaluation of the predicted noise levels, additional noise analysis would be performed to determine if impacts are anticipated, and if so, noise abatement measures would be evaluated. (INDOT ES)
- 20. Coordination will continue with the Cities of Fishers and Noblesville and Hamilton County regarding existing and planned recreational trails throughout the design phase of the project. (INDOT ES)
- 21. If any residential or public wells are encountered, they will be re-drilled as part of the right-of-way agreement with the property owner. If any identified well needs to be backfilled, it will be performed according to 312 IAC 13-10. (INDOT ES)
- 22. Trees greater than 3 inches diameter at breast height will not be removed from April 1 through September 30 to avoid impacts to potentially roosting bats. (USFWS)
- 23. 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 should be operated below the OHWM during this time unless the machinery is within the caissons or on the cofferdams. (USFWS)
- 24. Restrict below low-water work to placement of piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)
- 25. Restrict channel work and vegetation clearing to the minimum necessary. (USFWS)
- 26. Construct new structures with a widened span and benches on one or both sides to provide for wildlife crossing, if practical. The crossing should be above normal high water, relatively flat and with natural substrate suitable for use by a wide variety of wildlife. (USFWS)
- 27. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)

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- 28. Implement temporary erosion and siltation control devices such as placement of riprap check dams in drainage ways and ditches, installation of silt fences, covering exposed areas with erosion control materials, and grading slopes to retain runoff in basins. (USFWS)
- 29. Re-vegetate all disturbed soil areas immediately upon project completion, using native trees and shrubs in the riparian zone wherever feasible. (USFWS)
- 30. Post DO NOT DISTURB signs at the construction zone boundaries and do not clear trees or understory vegetation outside the boundaries. (USFWS)
- 31. Impacts to Wetlands A, D, F, H, K, P, W, and the UNT to Overdorff Branch Fringe are not anticipated because they are all located outside of the proposed right-of-way limits of the project. However, due to their proximity to the project, do not disturb signs will be posted and proper erosion control measures will be implemented to prevent indirect impacts to these wetlands. (INDOT ES)
- 32. Coordination with INDOT Utilities and Railroads will occur during the planning stages of the project. (INDOT ES)
- 33. Coordination with Hamilton Southeastern Schools will occur during the planning stages of the project and at least two weeks prior to construction. (INDOT ES)
- 34. Coordination with Emmanuel United Methodist Church, Legacy Bible Church, and Prairie View Christian Church will occur during the planning stages of the project and at least two weeks prior to construction. (INDOT ES)
- 35. Coordination with the Hamilton County 4H Fairgrounds will occur during the planning stages of the project and at least two weeks prior to construction. (INDOT ES)
- 36. In order to address concerns from business owners regarding potential impacts to businesses along the SR 37 corridor in Fishers during construction, the City of Fishers will hire a marketing and advertising coordinator. The role of the marketing and advertising coordinator will research the needs of the businesses along the SR 37 corridor in Fishers during construction and engage the appropriate sub-contractors to develop and implement the marketing campaign. The objective of the campaign is to promote the various businesses along the SR 37 corridor during construction. (City of Fishers)
- 37. Updates about the project prior to and through construction (including the MOT) will be provided on the project website: <a href="http://www.fishers.in.us/SR37Improvements">http://www.fishers.in.us/SR37Improvements</a>. (City of Fishers)
- 38. A hydraulic design study that addresses various structure size alternates for the drainage outlet within the Shoemaker Ditch/UNT to Shoemaker Ditch floodplain will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans. (INDOT ES)
- 39. A hydraulic design study that addresses various structure size alternates for the drainage outlet within the White River floodplain will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans. (INDOT ES)
- 40. A hydraulic design study that addresses various structure size alternates for the Britton Branch small structure replacement will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans. (INDOT ES)
- 41. The storm water quality (SWQ) system will conform to the appropriate ordinances and standards of the City of Fishers, the City of Noblesville and Hamilton County. (Hamilton County)
- 42. Exhibits showing the plans for water quality and storm systems for the SR 37 project will be provided to the City of Fishers MS4 Coordinator, City of Noblesville MS4 Program Manager, and Hamilton County Surveyor's Office once they become available. (City of Fishers)
- 43. An Additional Information document will be needed to document if wetland, stream or habitat mitigation will occur on or adjacent to the project area. A separate Categorical Exclusion will be needed if the mitigation will not occur adjacent to the project. (INDOT ES)

#### For Further Consideration:

1. To maintain fish passage, IDNR recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with

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shorter through lengths are better than culverts with longer through lengths. (IDNR)

- 2. If box or pipe culverts are used, the bottom should be buried a minimum of 6 inches (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2 feet) below the stream bed elevation. (IDNR)
- 3. Crossings should span the entire channel width (a minimum of 1.2 times the bankful width); maintain the natural stream substrate within the structure; have a minimum openness ration (height x width/length) of 0.25; and have stream depth and water velocities during low-flow conditions that are approximate to those in the natural stream channel. (IDNR)
- 4. For new, replacement, or rehabbed structures, and any bank stabilization under the structure(s), must not create conditions that are less favorable for wildlife passage when compared to current conditions. (IDNR)
- 5. For streambank stabilization, regrading to a stable slope (2:1 or shallower) and establishing native vegetation along the banks are the most effective techniques for stabilization and erosion control. A variety of methods to accomplish this include: planting plugs, whips, container stock, seeding, and live stakes. In addition to vegetation establishment, some additional level of bioengineered bank stabilization may be needed. Combining vegetation with any of the following bank stabilization methods can provide additional bank protection while not compromising benefits to fish, wildlife, and botanical resources: geotextiles (heavy-duty net-free biodegradable erosion control blankets and/or turf reinforcement maps), vegetated geogrids or soil lifts, fiber rolls, glacial stone, or riprap. (IDNR)
- 6. Riprap or other hard bank stabilization materials should be used only at the toe of the sideslopes up the OHWM with the exception of areas directly under bridges. The banks about the OHWM should be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR)
- 7. Riprap, or other stabilization materials should not be placed in the active stream channel above the existing streambed elevation. (IDNR)
- 8. IDNR Division of Fish and Wildlife recommends a mitigation plan be developed (and submitted with the permit application, if required) if habitat impacts will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <a href="http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf">http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf</a>. (IDNR)
- 9. Impacts to non-wetland forest of one acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR)
- 10. For impacts to trees and wooded habitat outside of the riparian areas along the proposed project corridor, consider using native trees and shrubs for any proposed on-site revegetation and landscaping. (IDNR)
- 11. IDNR recommends considering a more sustainable approach to stormwater management in general. The traditional model of stormwater management aims to drain urban 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 flood problems from one section of the basin to another section. A more sustainable approach aims to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, underground storage systems, etc.), recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.), and reusing runoff for irrigation elsewhere in the basin. (IDNR)
- 12. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. IDNR encourages visiting the International Dark-Sky Association's website to learn more about the potential negative impacts of improperly selected LED lighting systems. (IDNR)
- 13. Changes in zoning and direct access to major roadways as well as transportation alternative should be considered for future development along major transportation corridors (IDNR)

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- 14. Revegetate all bare and disturbed areas using a mixture of grasses, sedges, wildflowers, shrubs and trees native to Central Indiana as soon as possible upon completion. (IDNR)
- 15. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush. (IDNR)
- 16. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife. (IDNR)
- 17. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR)
- 18. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR)
- 19. Operate equipment used to replace/rehabilitate/modify stream crossings from the existing roadway whenever possible. (IDNR)
- 20. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR)
- 21. Do not use broken concrete as riprap. (IDNR)
- 22. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap. (IDNR)
- 23. The sideslopes for the outlet section must be 2:1 or flatter. (IDNR)
- 24. Minimize the movement of resuspended bottom sediment from the immediate project area. (IDNR)
- 25. Do not deposit or allow demolition/construction materials or debris to fall or otherwise enter the waterway. (IDNR)
- 26. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized. (IDNR)
- 27. Seed and protect all disturbed streambanks that are 3:1 or steeper with heavy-duty net-free biodegradable erosion control blankets to minimize the entrapment and snaring of small wildlife such as snakes and turtles (follow manufacturer's recommendations for installation); seed and apply mulch on all other disturbed areas. (IDNR)
- 28. Seed and protect areas where runoff is conveyed through a channel/swale with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas. (IDNR)
- 29. Protect the area around and below any concentrated discharge points, down to the waterway's normal flow level, with an appropriate structural armament such as riprap. (IDNR)
- 30. IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM. (IDEM)
- 31. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule: (<a href="http://www.ai.org/legislative/iac/T03260/A00080.PDF">http://www.ai.org/legislative/iac/T03260/A00080.PDF</a>). (IDEM)
- 32. Appropriate structures and techniques should be utilized both during the construction phase, and after completion of the project, to minimize impacts associated with storm runoff. (IDEM)
- 33. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized. (IDEM)
- 34. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies will be limited to only that which is necessary to complete the project. (IDEM)

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#### **SECTION K-EARLY COORDINATION**

Please list the date coordination was sent and all agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received. INDOT and FHWA are automatically considered early coordination participants and should only be listed if a response is received.

Remarks:

Early coordination with the regulatory agencies was completed on September 13, 2016. If no response was received, it was assumed the agency did not feel the project will result in substantial impacts. Early coordination letters were also sent to the City of Fishers and City of Noblesville MS4 Coordinators on February 14, 2017, and the Hamilton County MS4 Coordinator on February 16, 2017 (Appendix C, pages C1 to C37).

Re-coordination letters were sent to the resource agencies on March 15, 2017 in order to document and solicit comment on two changes to the project: 1) the drainage pipe installation along 141st Street to a UNT to Weaver Creek will be removed and a drainage pipe installation will be added along 146th Street to outlet to the White River, and 2) a detention basin may be constructed prior to the drainage pipe outlet to Shoemaker Ditch (Appendix C, pages C38 to C62).

The following agencies/individuals were contacted during the coordination and re-coordination processes:

	Agency	Date of Response(s)
1.	USACE, Louisville District	No Response Received
2.	IDNR, Division of Fish and Wildlife	October 13, 2016 & April 13, 2017
3.	USFWS, Bloomington Field Office	April 17, 2017
4.	NRCS	January 17, 2017 & March 23, 2017
5.	INDOT, Office of Public Involvement	September 19, 2016
6.	National Park Service, Midwest Regional Office	No Response Received
7.	U.S. Department of Housing and Urban Development	No Response Received
8.	Indiana Geological Survey (IGS)	September 22, 2016 & March 31, 2017
9.	INDOT, Office of Aviation	September 23, 2016 & March 28, 2017
10.	IDEM (electronic submission)	September 13, 2016 & March 15, 2017
11.	IDEM, Ground Water Section	September 20, 2016 & March 22, 2017
12.	IDNR, Division of Outdoor Recreation	September 27, 2016
13.	IDNR, Division of Oil and Gas	September 22, 2016 & March 21, 2017
14.	City of Fishers, Mayor's Office	No Response Received
15.	City of Fishers, City Council	No Response Received
16.	City of Fishers, Department of Parks and Recreation	No Response Received
17.	City of Fishers, Engineering Department	No Response Received
18.	City of Noblesville, Mayor's Office	No Response Received
19.	City of Noblesville, Engineering Department	No Response Received
20.	City of Noblesville, Parks and Recreation	No Response Received
21.	City of Noblesville, Common Council	No Response Received
22.	Hamilton County Highway Department	No Response Received
23.	Hamilton County Commissioners	No Response Received
24.	Hamilton County Parks and Recreation	No Response Received
25.	Indianapolis Department of Public Works, Stormwater Program	September 20, 2016
26.	Indianapolis Metropolitan Planning Organization	No Response Received
27.	City of Fishers MS4 Coordinator	March 27, 2017
28.	City of Noblesville MS4 Coordinator	March 28, 2017
29.	Hamilton County Surveyor's Office	March 10, 2017 & March 24, 2017
30.	Citizen's Energy Group	October 11, 2016

The September 13, 2016 early coordination letter also invited recipients to a resource agency meeting on October 4, 2016 at Launch Fishers. Representatives from the City of Fishers, FHWA, USACE, IDEM, IDNR attended the meeting. The purpose of the meeting was to introduce the resource agencies to the SR

This is page 89 of 90	Project name:	SR 37 Improvement Project	Date:	April 26, 2017

_	Hamilton	Route	SR 37	Des. No.	1600540 et al.
	the project corrid scope, pedestrian	or was also complete	ed. Resource agency need, drainage easem	comments genera	rard. A Google Earth tour or illy pertained to the projec detention, stream crossings
	representatives from water resources in (Appendix F, page jurisdictional state)	om USACE and IDEN n the field with USA es F46 to F52). Additi	M on October 27, 20 ACE and IDEM in ional coordination wi may change from wh	16. The purpose of order to determine the USACE since that is represented in	view was conducted with f the meeting was to review e their jurisdictional status he field review indicates the in the field review minutes.

This is page 90 of 90 Project name: SR 37 Improvement Project Date: April 26, 2017



## MEMORANDUM

**DATE:** April 17, 2018

**TO:** Ron Bales, INDOT Environmental Policy Manager

FROM: Chad E. Costa, Lochmueller Group, Inc.

**RE:** Additional Information Documentation – Des. Nos. 1600540, 1601831, 1601829, 1601827,

1601830, 1592345, 1592348, 1601826, 1601828, 1592346, 1592347, 1592349, 1602229,

1602231; SR 37 Improvement Project between I-69 and State Road (SR) 32 in the Cities of Fishers

and Noblesville, Hamilton County, Indiana

**CC:** Laura Hilden, INDOT; Jennifer Beck, INDOT; Randall Brooks, RQAW; Joe Dabkowski, RQAW; Eric

Farny, American Structurepoint

## 1.0 PROJECT OVERVIEW AND HISTORY

This memorandum provides Additional Information (AI) regarding the referenced project that proposes to upgrade SR 37 to a limited access facility between I-69 and SR 32 in the cities of Fishers and Noblesville Hamilton County, Indiana (Des. No. 1600540, et. al.). This memorandum contains a history of the environmental documentation, a revised project description, and revised discussions of impacts to wetlands, waterways, prime farmland, floodplains, and cultural resources. This AI supplements the Environmental Assessment (EA) document that was submitted to INDOT and approved July 17, 2017, This EA was not submitted to the Federal Highway Administration (FHWA) for a "Finding of No Significant Impact (FONSI)" due to changes in the project design that arose after the EA was submitted to INDOT. These changes are described throughout this AI document. Unless specifically discussed, the impacts as identified in the July 2017 Environmental Assessment (EA) remain the same.

The project originally proposed to reconstruct SR 37 to an expressway, with grade-separated, dual-lane teardrop roundabout interchanges at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town and County Boulevard, Pleasant Street, and SR 32. These roundabout interchanges included sidewalks and crosswalks. Existing lighting fixtures are to be replaced along SR 37 with new lighting installed at the proposed roundabout interchanges. The intersection at 135th Street would have right in-out access. SR 37 will be depressed under the roundabout interchanges and reconstructed to a typical section consisting of two 12- foot travel lanes, a 10-foot outside shoulder, and a 2.7-foot inside shoulder in each direction. A 26.5-foot grass median with a roll curb will be constructed that separates the northbound and southbound lanes. Retaining walls will be constructed along the depressed portions of SR 37 and raised portions of the interchanges to reduce right-of-way impacts within the corridor. A storm sewer trunk line and inlets will be constructed along the depressed area of SR 37 also. Drainage trunk lines will be installed approximately midway between 126th and 131st Streets west of SR 37, and within the right-of-way along 146th Street west of SR 37. A detention basin will be constructed for the drainage midway between 126th and 131st Streets. Receiving pits will be excavated at 400 to 900-foot intervals and sections of pipe will be put into place underground via the pits. A storm sewer system will be installed along the intersecting roads to connect to existing and/or proposed storm sewer systems.

A drainage pipe will be installed along 146th Street to outlet to the White River. The total project length is approximately 6 miles.

There are 14 Des. Nos. included in the project; 1600540, 1601831, 1601829, 1592345, 1601827, 1592346, 1601828, 1602229, 1602231, 1592347, 1592348, 1601830, 1592349, and 1601826. The EA describing the environmental impacts was reviewed and released for public involvement by the Indiana Department of Transportation (INDOT) Environmental Services (ES) and Federal Highway Administration (FHWA) on April 28, 2017.

The Legal Notice of Public Hearing was published in the May 1 and May 8, 2017 editions of the *Indianapolis Star*. The notice advertised the public hearing to be held on May 16, 2017 at Fishers High School, Fishers, Indiana, the availability of the EA and preliminary design plans for public review, and requested public comments regarding the project. Comments were accepted for a period of 30-days beginning May 1, 2017 and continuing through May 31, 2017. Responses to comments were posted on the project's website and will be included in the documentation requesting a Finding of No Significant Impact (FONSI) from the FHWA. The EA was certified by INDOT, office of Public Involvement on July 17, 2017. Due to changes in the project design, a FONSI request was not submitted to FHWA. This request will not be submitted to FHWA until the Additional Information (AI) document and associated public meeting (December 11, 2017) were complete.

# 2.0 MODIFIED DESIGN PLANS (2018)

Since the July 2017 EA was released for public involvement, the project has been modified such that further documentation in six areas is necessary (Appendix B, page 1). These six areas include the following locations.

- Additional Area #1: Single Point Urban Interchange (SPUI) at 146<sup>th</sup> Street (Des Nos 1592349 & 1601826)
- Additional Area #2: North Field Detention Basin between SR 37 and the north terminus of North Pointe Blvd (Des No. 1601826).
- Additional Area #3: Drainage Pits along 146<sup>th</sup> Street (Des No. 1601831)
- Additional Area #4: Single lane roundabout at 141st Street (Des No. 1601830)
- Additional Area #5: Extension of Maintenance of Traffic (MOT) Operations on SR 37 south of 126<sup>th</sup> Street (Des No. 1592345)
- Additional Area #6: Junkersfeld Parcel (Des Nos. 1592346 & 1601829)

## Additional Area #1:

Additional Area #1 is associated with the proposed interchange at the existing at-grade intersection of 146<sup>th</sup> Street and SR 37. It is generally described as extending from a point approximately 0.5 mile north to a point approximately 0.25 mile south of the SR 37 and 146<sup>th</sup> Street intersection, and roughly 0.25 mile west to a point approximately 0.25 mile east of the same intersection (Appendix B, pages B1, B2, and B8).

The original interchange design within Additional Area #1, proposed a multi-lane roundabout interchange with ramps extending between a depressed grade of SR 37 to a new 146<sup>th</sup> Street overpass. Construction was also to include retaining walls along the depressed portion of 146<sup>th</sup> Street and pedestrian facilities along the north and south sides of 146<sup>th</sup> Street at the interchange. Traffic forecasts for 146<sup>th</sup> Street for design year 2041 indicated such an interchange would not adequately service future traffic volumes and would result in undesirable backups in the traffic queue. Therefore, a SPUI has been proposed as an alternative interchange type at this location. The proposed change to the interchange type does not reflect a large variation in the environmental footprint at that intersection. As discussed in Section 4.0 of this AI, additional right-of-way will be required at the interchange approaches to accommodate the wider pavement width needed for the auxiliary turn lanes. This proposed change will also allow for left turns at Herriman Drive, whereas the previous interchange option restricted Herriman Drive to a right in/right out intersection.

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#### Additional Area #2:

Additional Area #2 is located on the east side of SR 37 approximately 0.5 mile north of the SR 37 and 146<sup>th</sup> Street intersection, and includes an area of agricultural land, residential area, and an existing stormwater management facility (Appendix B, pages B1 and B3).

It has been determined that additional water storage facilities are required for the project. A basin area was chosen northeast of the intersection of SR 37 and 146<sup>th</sup> Street. This added element includes the construction of a storm water detention basin within an approximate 16.2 acre area, currently used primarily for agricultural purposes. This drainage basin seeks to utilize an existing legal drain (McMahon – Overdorff) to direct flow at a decreased velocity into Overdorff Branch and then to the White River, upstream of any storm water impact with the project's watershed. The exact layout of this detention facility has yet to be determined, and will likely be less than the 16.2-acre footprint. However, for the purpose of this Al document, the research area assumes a depressed basin over the entire 16.2 acres with a 6-foot embankment around the basin.

#### Additional Area #3:

Additional Area #3 is associated with the north drainage trunk line along 146<sup>th</sup> Street and is generally described as including the area between the White River and a point approximately 0.25 mile east of the Allisonville Road and 146<sup>th</sup> Street intersection (Appendix B, pages B1, B4, and B40).

As previously scoped, the drainage easement along 146<sup>th</sup> Street will carry additional stormwater from the project area along SR 37 to the White River. Trenchless excavation along the north side of 146<sup>th</sup> Street will be utilized, however, further hydraulic analysis revealed that to adequately regulate the stormwater demands of the project, additional drainage pits are needed for on-site storage of water. These pits will be excavated to a depth of 40 feet and will be 35 feet wide by 15 feet long (north-south). These pits are not anticipated to be daylighted. The changes to the plans at this location will result in a reduction in the amount of permanent and temporary right-of-way required by approximately 0.33 acre.

#### Additional Area #4:

Additional Area #4 is associated with the proposed interchange at the existing at-grade intersection of 141<sup>st</sup> Street and SR 37. It is generally described as extending from a point approximately 0.25 mile north to a point approximately 0.25 mile south of the SR 37 and 141<sup>st</sup> Street intersection, and roughly 0.25 mile west to a point approximately 0.25 mile east of the same intersection (Appendix B, pages B1, B5 and B64).

The previous scope of work at 141<sup>st</sup> Street included a grade-separated, dual-lane teardrop roundabout interchange at 141<sup>st</sup> Street with ramps extending between a depressed grade of SR 37 to a new 141<sup>st</sup> Street overpass. Construction was to include retaining walls along the depressed portion of 146<sup>th</sup> Street and pedestrian facilities along the north and south sides of 141<sup>st</sup> Street at the interchange. However, traffic forecasts for 141<sup>st</sup> Street, for the design year 2041, do not necessitate a dual-lane roundabout at this interchange, so the scope of work was decreased to a grade-separated, single-lane teardrop roundabout interchange. The decreased scope of work also reflects a decreased footprint at this intersection.

#### Additional Area #5:

Additional Area #5 is associated with an area of extended maintenance of traffic (MOT) operations (Appendix B, pages B1, B6, and B85). In order to adequately manage traffic while the proposed 126<sup>th</sup> Street interchange is constructed, a median crossover is required along SR 37 near I-69. This crossover will temporarily shift the two northbound SR 37 lanes to an area immediately adjacent to the two southbound SR 37 lanes. The location of this temporary crossover is approximately 0.4 mile south of 126<sup>th</sup> Street, with the temporary pavement leading to the crossover point extending an additional 350 feet to the south.

#### Additional Area #6:

Additional Area #6 is associated with modifications made to the Junkersfeld parcel, which is located on Lantern Road approximately 0.3 mile north of 126<sup>th</sup> Street (Appendix B, pages B1, B7 and B88).

As discussed in the July 2017 EA, the entire 6.6-acre Junkersfeld parcel, which included a vacant residence, was to be acquired for the construction of a storm water outfall area, detention basin, and an area of re-vegetation for floodway mitigation. However, advancement of the design and further hydraulic analysis determined acquisition of the entire parcel was unnecessary. It was estimated that approximately 3.8 acres of the Junkersfeld parcel would be required for storm water detention. Floodway mitigation is no longer planned for this parcel. However, the construction of a temporary bridge is now proposed approximately 13 feet north (upstream) of the existing Junkersfeld driveway crossing at Shoemaker Ditch to provide a structure suitable of handling construction equipment. The proposed temporary bridge will have a 20-foot span, and an anticipated width of 11 feet. An aggregate drive leading from the existing driveway to the temporary structure is also proposed. The temporary structure will be removed upon completion of construction.

The aforementioned description of activities are the only modifications to the preferred alternative addressed in this AI Document.

## 3.0 ESTIMATED PROJECT COST AND SCHEDULE

## Prior Documentation (See July 2017 EA text page 29):

As documented in the July 2017 EA, the total estimated cost of the project, which included preliminary engineering, right-of-way, and construction costs, was \$104,159,650 for the southern section (SR 37 from 126<sup>th</sup> Street to 146<sup>th</sup> Street), and \$156,723,626 for the northern section (SR from 146<sup>th</sup> to SR 32). A breakdown of total cost for the south section by project phase is \$10,559,650 (2016) for Preliminary Engineering (PE), \$7,600,000 (2017) for Right-of-Way (RW), and \$86,000,000 (2018) for Construction (CN). The total cost for the north section by phase was stated as \$15,147,708 for the PE phase, \$8,727,855 for the RW phase, and \$132,848,063 for the CN phase. All costs for the north section are illustrative only.

## **Current Programming:**

Review of the State Transportation Improvement Program (STIP) for FY 2018 – 2021 showed revisions to the funding for the construction of the southern section (SR 37 from 126th Street to 146th Street) (Appendix H, pages H1-H8). Local funds for the CN phase have been removed for all locations with the exception of the intersection improvements at 126<sup>th</sup> Street. The total project cost for the southern section is now \$103,654,650 with \$3,654,650 being from local funding sources. The remaining \$100,000.00 is sourced from state funding. All remaining project costs are for the construction phase of the project.

## 4.0 RIGHT-OF-WAY

## Prior Documentation (See July 2017 EA text page 30-31):

Within the project area, the existing right-of-way width along SR 37 varies from 175 to 460 feet. The originally proposed right-of-way included 41.89 acres of permanent right-of-way, 1.11 acres of temporary right-of-way, and 2.16 acres of drainage easement.

## New Conditions (Resulting from Design Modifications):

#### Additional Area #1:

Initially, approximately 5.94 acres of permanent right-of-way was required for interchange improvements at 146<sup>th</sup> Street and SR 37. With the new design of the SPUI interchange at this location, approximately 6.86 acres of permanent right-of-way is now required from commercial land uses (Appendix B, page B2).

#### Additional Area #2

Acquisition of 16.2 acres of land as permanent right-of-way will be required for the construction of the detention basin north of 146<sup>th</sup> Street along the east side of SR 37 from agricultural lands (Appendix B, page B3).

#### Additional Area #3

Originally, the construction of the drainage line along the north side of 146th Street would require 1.27 acres of permanent right-of-way. With the design changes, approximately 0.33 acre of temporary right-of-way and 0.55 acre of permanent right-of-way will be required from lands currently zoned as residential as well as those within the floodplain of the White River (Appendix B, page B4).

#### Additional Area #4

Initially, approximately 5.32 acres of permanent right-of-way and 0.14 acre of temporary right-of-way was required for the intersection improvements at this location. The decreased scope of work also reflects a decreased footprint at this intersection. Approximately 3.85 acres of permanent right-of-way and 0.17 acre of temporary right-of-way will be required for the construction of the single-lane roundabout at this location from agricultural, residential, and commercial lands (Appendix B, page B5).

#### Additional Area #5

The changes in Additional Area #5 does not affect right-of-way quantities. This change to the approved EA is an adjustment to the MOT plan and is confined to the median of SR 37.

#### Additional Area #6

Initially, the entire 6.6 acres of the Junkersfeld Parcel was to be required for the construction of the detention at this location. With the current design changes, the construction of the detention basin at this location will require the acquisition of approximately 2.32 acres of permanent and 1.43 acres of temporary right-of-way from residential lands (Appendix B, page B7).

The following table provides a detailed breakdown of the revised anticipated right-of-way impacts compared to the amounts approved in the July 2017 EA.

Right-of-Way Impacts by Land Use Type

	Acreage of New Right-of-Way				Difference	
Land Use Type	Original Design		Modified Design (2018)		Dillelelice	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
Residential	4.20	0.00	8.17	0.35	3.97	0.35
Commercial	28.60	1.10	25.95	1.49	-2.65	0.39
Agricultural	1.20	0.00	10.15	0.00	8.95	0.00
Forest	6.90	0.00	5.88	1.57	-1.02	1.57
Wetlands	0.54	0.01	0.45	0.01	-0.09	0.00
Other: Open Water	0.05	0.00	2.52	0.00	2.47	0.00
Other: Religious	0.20	0.00	0.20	0.00	0.00	0.00
Other: Library	0.20	0.00	0.20	0.00	0.00	0.00
Total	41.89	1.11	53.52	3.42		

The project originally proposed to acquire two residences; one vacant residence is located within the proposed detention basin near Shoemaker Ditch (currently referred to as the Junkersfeld parcel) and the other residence is located in the northeast quadrant of SR 37 and Greenfield Avenue. Due to the changes in Additional Area #6, the vacant residence on the Junkersfeld parcel is no longer required. As a result, the total number of residential acquisitions required is reduced to one. There has been, and continues to be, acquisition of right-of-way from commercial properties which might affect business parking lots and/or remove or relocate access drives.

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However, all business will continue to be provided access to a transportation facility and design work continues to reduce the overall amount of right-of-way needed.

Advance acquisition of right-of-way within the south section of the project corridor, 146<sup>th</sup> Street to 126<sup>th</sup> Street, has been initiated. All right-of-way, permanent and temporary, currently going through the acquisition process is being purchased in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* (Public Law 91-646), as amended and the regulation titled *Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs* (49 CFR Part 24), and the Indiana Code Title 8 Article 23.

#### 5.0 ECOLOGICAL RESOURCES

# 5.1 Streams, Rivers, Watercourses, and Jurisdictional Ditches

## Prior Documentation (See July 2017 EA text page 31-38):

A Waters of the U.S. Determination Report was prepared by Lochmueller Group dated March 16, 2017 and updated Novernber 29, 2017. Based on a field review with the U.S. Army Corps of Engineers (USACE) and the Indiana Department of Environmental Management (IDEM) on October 27, 2016, twelve jurisdictional streams flow within the project area.; Unnamed Tributary (UNT) to Britton Branch, Britton Branch, UNT to Shoemaker Ditch, Weaver Creek, UNT to Weaver Creek, Overdorff Branch, UNT to Overdorff Branch, UNT to Stony Creek 1, Stony Creek, UNT to Stony Creek 4, and UNT to Stony Creek 2. In the approved EA, approved on July 17, 2017 April 2017, it was determined that UNT to Britton Branch, Britton Branch, Shoemaker Ditch, White River, UNT to Stony Creek 1, Stony Creek, and UNT to Stony Creek 2 would be impacted as a part of the SR 37 Improvement Project. Impacts to these jurisdictional streams were documented to be approximately 1,128 linear feet (0.51 acre).

Within the coordination field review with USACE and IDEM on October 27, 2016, it was determined that some ditches would also be jurisdictional. The combined total impacts to streams and jurisdictional ditches resulting from the proposed project, as originally scoped, will be approximately 2,518 feet and cover an area of approximately 0.81 acre below the OHWM.

## New Conditions (Resulting from Design Modifications):

A description of the impact changes to the identified streams, watercourses, and jurisdictional ditches resulting from the design modifications follows.

Additional Area #1: There are no streams, rivers, watercourses, jurisdictional ditches identified within Additional Area #1 where the SPUI will be constructed at 146<sup>th</sup> Street and SR 37. This determination was made by a Lochmueller Group professional biologist during the October 27, 2017 field investigation; no wetland conditions or streams with OHWM characteristics were observed within the additional area. This additional area will not result in a change in impacts to any streams, rivers, watercourses, or jurisdictional ditches (Appendix F, page F52-55)

Additional Area #2: For the construction of the detention basin within the 16.2 acres of right-of-way to be acquired along the east side of SR 37 north of 146<sup>th</sup> Street, two UNTs to Overdorff Branch will be impacted. The first is an open ditch along the east side of SR 37. Approximately 747 linear feet of this Water of the U.S. will be impacted through likely grading activities to construct the detention basin. In addition, approximately 973 linear feet of an encapsulated ditch, identified as McMahon-Overdorff Branch Regulated Drain, extending from the northwest corner of the 16.2-acre parcel to the southeast corner will likely be impacted through inline detention, or the need to re-route the tile around the detention basin. Although the exact layout of the detention basin has yet to be determined, the assumption is that the entirety of both UNTs to Overdorff Branch will be impacted. The July 2017 EA did not identify any impacts to either drainage feature (Appendix F, page F56).

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Additional Area #3: The construction of additional drainage pits and the drainage outfall along the north side of 146th Street will result in a reduction in impacts to the White River. The current plan for the drainage pipe outlet is to be constructed to drain into the floodplain of the White River approximately 260 feet east of the left bank of the White River. The July 2017 EA documented 60 linear feet of potential impact to the White River. However, the current design of the north trunk line eliminate these impacts to the White River due to the new discharge point (Appendix F, page F52-55).

Additional Area #4: There are no streams, rivers, watercourses, or jurisdictional ditches identified within Additional Area #4 where the grade-separated, single-lane teardrop roundabout interchange will be constructed at the intersection of 141<sup>st</sup> Street and SR 37. This additional area will not result in a change in impacts to any streams, rivers, watercourses, or jurisdictional ditches (Appendix F, page F49)

Additional Area #5: There are no streams, rivers, watercourses, or jurisdictional ditches identified within Additional Area #5 where the temporary median crossover will be constructed at the southern terminus of the project at the interchange of I-69 and SR 37. This additional area will not result in a change in impacts to any streams, rivers, watercourses, or jurisdictional ditches (Appendix F, page F42)

Additional Area #6: The construction of a detention basin and temporary bridge within the Junkersfeld parcel will result in a reduction of impacts to Shoemaker Ditch and UNT to Shoemaker Ditch. No specific plans were available (at the time the EA was being developed) for this location, therefore; impacts to the waterways were assumed in the July 2017 EA. The current design plans for the construction of the detention basin includes construction of a temporary 11 foot wide bridge with an approximately 20 foot span over Shoemaker Ditch for construction access as well as the detention basin facilities in the southern are of the Junkersfeld parcel. Construction of the detention basin and temporary bridge over Shoemaker Ditch is assumed to impact approximately 11 linear feet (0.004 acre) of Shoemaker Ditch and approximately 16 linear feet (0.002 acre) of UNT to Shoemaker ditch (Appendix F, page F45-46).

The following table provides a detailed breakdown of the revised anticipated impacts (within Additional Areas 1-6) to water resources compared to the amounts approved in the July 2017 EA.

Additional Areas	Streams Impacted	Original Design  Linear Feet of Impacts	Modified Design (2018) Linear Feet of Impacts	Changes from EA
1	n/a	n/a	n/a	n/a
2	UNT to Overdorff Branch	0	747 LF	+747 LF
3	White River	60 LF	0 LF	-60 LF
4	n/a	n/a	n/a	n/a
5	n/a	n/a	n/a	n/a
6	Shoemaker Ditch, UNT to Shoemaker Ditch	150 LF, 0 LF	11 LF, 16 LF	-139 LF, +16 LF
	·		Total	+564 LF

Due to the changes in the design of the project, re-coordination was sent to the USACE, USFWS, and Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife on February 21, 2018 (Appendix C, pages C1 to C6).

The USACE did not reply to the re-coordination letter within the 30-day comment period.

The USFWS replied on February 22, 2018 and stated that comments from their correspondence dated April 17, 2017 still applies to the project (Appendix C, pages C10 to C11). No additional recommendations were given pertaining directly to streams, rivers, watercourses, or jurisdictional ditches. The USFWS general recommendations had already been included in the commitments of the project as part of the July 2017 EA.

The IDNR DFW replied to the re-coordination on March 26, 2018 and stated that all recommendations from their letter dated October 13, 2016 still apply to the project (Appendix C, page C14). No additional recommendations were given.

#### 5.2 Wetlands

## Prior Documentation (See July 2017 EA text page 38-46):

A Waters of the U.S. Determination Report was prepared by Lochmueller Group on March 16, 2017. The investigation identified 25 wetlands within the project area. The majority of the wetlands identified were palustrine, emergent (PEM) or palustrine, forested (PFO) persistent wetlands. Of those 25 wetlands, it was determined that 17 of the identified wetlands would be impacted by the proposed project based on the design plans included in the July 2017 EA. Wetlands B, C, G, I, J, L, M, N, O, R, S, T, X, Y, wetland U/Stony Creek Floodplain, Pond 6 wetland fringe, and Britton Branch fringe were identified to be impacted as a result of the proposed project. The project plans included in the July 2017 EA identified 0.748 acre of impacted wetlands.

## New Conditions (Resulting from Design Modifications):

Due to the changes in the project design, and additional waters investigation was undertaken on October 27, 2017. No additional water resources were identified during this investigation (see Appendix F for Waters Report). A description of the impact changes to the identified wetlands resulting from the design modifications follows.

Additional Area #1: The construction of the SPUI at the intersection of 146th Street and SR 37 had resulted in impacts to Wetland J only, but the planned modifications will also result in impacts to Wetland P. Additional impacts to Wetland J will be 0.016 acre and new impacts to Wetland P will be approximately 0.002 acre.

Additional Area #2: For the construction of the detention basin within the 16.2 acres of ROW to be acquired along the east side of SR 37 north of 146<sup>th</sup> Street, the UNT to Overdorff Branch fringe wetland will be impacted. The entire 0.093 acre wetland will be impacted by the construction of the detention basin. According to the original design plans, this wetland was not impacted.

Additional Area #3: There are no wetlands identified within the Additional Area #3 where the changes in drainage along the north side of 146<sup>th</sup> Street will take place. This additional area will not result in a change in impacts to any wetlands.

Additional Area #4: The construction of the grade separated, single-lane teardrop roundabout interchange at the intersection of 141st Street and SR 37 will result in impacts to Wetland I. The changes in the design plans in Additional Area #4 will not change the impacts to the wetlands at this location.

Additional Area #5: There are no wetlands identified within the additional area #5 where the temporary median crossover will be constructed at the southern terminus of the project at the interchange of I-69 and SR 37. This additional area will not result in a change in impacts to any wetlands.

Additional Area #6: There are no wetlands identified within the additional area #6 where the detention basin and temporary bridge structure over Shoemaker Ditch will be constructed. This additional area will not result in a change in impacts to any wetlands.

Due to the changes in the design of the project, re-coordination was sent to the USACE, USFWS, and IDNR Division of Fish and Wildlife on February 21, 2018 (Appendix C, pages C1 to C6).

The USACE did not reply to the re-coordination letter within the 30-day comment period.

The USFWS replied on February 22, 2018 and stated that comments from their correspondence dated April 17, 2017 still applies to the project (Appendix C, pages C10 to C11). No additional recommendations were given pertaining directly to wetlands. The USFWS general recommendations had already been included in the commitments of the project as part of the July 2017 EA.

The IDNR DFW replied to the re-coordination on March 26, 2018 and stated that all recommendations from their letter dated October 13, 2016 still apply to the project (Appendix C, page C14). No additional recommendations were given.

#### 5.3 Terrestrial Habitat

## Prior Documentation (See July 2017 EA text page 46-47):

The approved July 2017 EA had indicated land use impacted by the preferred alternative primarily consisted of paved asphalt roadway and commercial properties, the area also included residential properties, agricultural fields, and forest.

For the purposes of this AI document, impacts to terrestrial habitat will be the same as the Right-of-Way Impacts by Land Use Type in Section 4.0 of this document. Please reference this section to view the land uses of the right-of-way, the currently proposed changes, and the resulting uses of the right-of-way.

Due to the changes in the design of the project as outlined in the approved July 17, 2017 EA document, recoordination was sent to the USFWS and IDNR Division of Fish and Wildlife on March 15, 2017 to outline the changes to the project.

USFWS replied on April 17, 2017 with general recommendations to minimize adverse impacts to fish and wildlife resources; however no recommendations pertain directly to terrestrial habitats. The USFWS general recommendations had already been included in the commitments of the project.

The IDNR DFW replied to the re-coordination on April 13, 2017 and stated that all recommendations from the previous letter still apply to the project. No additional recommendations were given.

## New Conditions (Resulting from Design Modifications):

Due to the changes in the design of the project, re-coordination was undertaken on February 21, 2018 to outline the project changes (Appendix C, pages C1 to C6).

USFWS replied February 22, 2018 stating that the previous coordination and comments provided would be valid for the project, despite the changes in design. No additional comments were made regarding impacts to terrestrial habitats (Appendix C, page C10).

The IDNR DFW replied to the re-coordination on March 26, 2018 and stated that all recommendations from the previous letter still apply to the project. No additional recommendations were given.

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## 5.4 Threatened or Endangered Species

## Prior Documentation (See July 2017 EA text page 48-49):

Hamilton County is within the range of the federally endangered Indiana bat (*Myotis sodalis*), the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*), and the federally endangered rusty patched bumble bee (*Bombus affinis*). According to the July 2017 EA, the USFWS and IDNR recommended tree clearing should occur outside of the active bat roosting season (April 1 to September 30); and therefore, the project is not likely to adversely affect the listed bat species. In addition to the species listed above, the IDNR stated that according to the Natural Heritage Program database, the turquoise bluet (*Enallagma divagans*), clubshell mussel (*Pluerobema clava*), rabbitsfoot mussel (*Quadrula cylindrical*), kidneyshell mussel (*Ptychobranchus fasciolaris*), little spectaclecase mussel (*Villosa lienosa*), and the round hickorynut mussel (*Obovaria subrotunda*) all had been reported to occur within a one mile radius of the project area. IDNR did not expect impacts to these species.

Due to the changes in the design of the project outlined in the July 2017 EA, re-coordination was sent to the USFWS and IDNR Division of Fish and Wildlife on March 15, 2017 to outline the changes to the project.

USFWS replied on April 17, 2017 and re-stated that the project is within the range of the federally endangered Indiana bat and rusty patched bumble bee and the federally threatened NLEB. They report no extant records for the rabbitsfoot mussel (*Quadrula cylindrical*) or the clubshell mussel (*Pluerobema clava*) in Hamilton County. They also note that suitable habitat for both bat species is present throughout the area of the project and recommends tree-clearing be avoided from April 1 through September 30. As long as this recommendation is implemented, they concur that the proposed project, along with the outlined changes, is not likely to adversely affect the Indiana bat or the NLEB. Finally, the USFWS states that the project location is not a high priority area for the rusty patched bumble bee; therefore, consultation under Section 7(a)(2) is not required. This precluded the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended.

The IDNR DFW replied to the re-coordination on April 13, 2017 and stated that all recommendations from the previous letter still apply to the project and that the Natural Heritage Center database was reviewed and no new species were found in the new project areas. USFWS responded with questions regarding the tree removal to be done to construct the detention basin and the new drainage pipe. Their questions were addressed and USFWS concurred with the previous determination that as long as clearing of suitable bat habitat occurred outside of the active season (April 1 to September 30), there would be no adverse effect on the listed species.

## New Conditions (Resulting from Design Modifications):

Due to the changes in the design of the project, re-coordination was sent to the USACE, USFWS, and IDNR Division of Fish and Wildlife on February 21, 2018 (Appendix C, pages C1 to C6).

The USACE did not reply to the re-coordination letter within the 30-day comment period.

The USFWS replied on February 22, 2018 and stated that comments from their correspondence dated April 17, 2017 still applies to the project (Appendix C, pages C10 to C11). No additional recommendations were given pertaining directly to threatened and endangered species. The USFWS general recommendations had already been included in the commitments of the project as part of the July 2017 EA.

The IDNR DFW replied to the re-coordination on March 26, 2018 and stated that all recommendations from their letter dated October 13, 2016 still apply to the project (Appendix C, page C14). No additional recommendations were given.

#### **6.0 OTHER RESOURCES**

## 6.1 Floodplains

#### Prior Documentation (See July 2017 EA text page 51-53):

As documented in the July 2017 EA, the proposed project crosses five 100-year floodplains including Britton Branch, Shoemaker Ditch, White River, Stony Creek and UNT 2 to Stony Creek. The EA documented transverse encroachments to the 100-year floodplains of Shoemaker Ditch, White River, Stony Creek, and UNT 2 to Stony Creek. In addition, the project resulted in longitudinal encroachments to the 100-year floodplain of Britton Branch. The transverse encroachment to the Shoemaker Ditch 100-year floodplain would occur due to installation of a drainage pipe, detention basin, and an area for revegetation for floodway mitigation at the Junkersfeld Parcel. The longitudinal encroachment to the 100-year floodplain of Britton Branch would occur due to the replacement of the small structure at this location north of 131st Street west of SR 37. The transverse encroachment to the 100-year floodplain of the White River would occur due to the installation the new drainage pipe along the north side of 146<sup>th</sup> Street west of Allisonville Road. The transverse encroachment to the 100-year floodplain of Stony Creek would occur due to widening the existing bridge structures over Stony Creek to accommodate the new roadway. The transverse encroachment to the 100-year floodplain of UNT 2 to Stony Creek would occur due to widening the existing structure of SR 37 to accommodate the new roadway.

## New Conditions (Resulting from Design Modification)

Refinement of the ROW requirements in three additional areas warranted re-coordination. These three areas are Additional Area #1 (146<sup>th</sup> Street SPUI), Additional Area #6 (Junkersfeld parcel) and the western side of the 131<sup>st</sup> Street single lane roundabout. Refinement of the ROW resulted in reduction in ROW requirements and therefore; a reduction in floodplain encroachment at these locations.

Additional Area #1: In the July 2017 EA, encroachment was described at this location as a transverse encroachment resulting from the installation of the northern drainage pipe via open cut excavation. At present, permanent ROW will not encroach on the floodplain of the White River, therefore; no impacts to this floodplain are expected.

Additional Area #6: Because acquisition of the entire Junkersfeld parcel - for construction of a retention basin and mitigation area – is no longer required for this project, the resultant encroachment on the floodplain of Shoemaker Ditch is reduced. In the July 2017 EA, the encroachment was described as a transverse encroachment. The current design alternative will still result in a transverse encroachment.

131<sup>St</sup> Street: In the vicinity of 131<sup>st</sup> Street, the impacts to the floodplain were described in the July 2017 EA as a longitudinal encroachment. ROW refinement at this location has reduced the longitudinal encroachment on the floodplain of Shoemaker Ditch.

## 6.2 Farmland

## Prior Documentation (See July 2017 EA text page 53):

According to the July 2017 EA, the proposed SR 37 Improvement Project would have resulted in the conversion of approximately 2.7 acres of prime or unique farmland. Since this project received a total point value of less than 160 points (100 points), this site received no further consideration for farmland protection. No other alternatives other than those already discussed in the July 2017 EA will be considered without a re-evaluation of the project's potential impacts upon farmland. This project was determined to not have a significant impact to farmland.

# New Conditions (Resulting from Design Modifications):

The additional acquisition of 8.95 acres of agricultural land in Additional Area #6 for the construction of the north detention basin warranted re-coordination. Re-coordination with the NRCS occurred on February 21, 2018. The NRCS responded on March 15, 2018 (Appendix C, pages C15 to C16) and indicated the project will result in the conversion of approximately 20.1 acres of prime or unique farmland. However, since this project received a total point value of less than 160 points (123 points), this site will receive no further consideration for farmland protection. Please note this acreage is higher than the 10.15 acres of agricultural land to be acquired for right-of-way (refer to the Right-of-Way Impacts by Land Use Type table in Section 4.0) because prime and unique farmland can also include other non-developed land uses such as forest. No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland. This project was determined to not have a significant impact to farmland.

# 7.0 CULTURAL RESOURCES

# Prior Documentation (See July 2017 EA text page 54-58)

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The Section 106 process for this undertaking resulted in the issuance of a finding of "No Adverse Effect" on December 27, 2016 by the INDOT, Cultural Resources Office (INDOT-CRO), on behalf of the FHWA. Following the expansion of the project to include several drainage improvements along cross streets, a new "No Adverse Effect" finding was issued by INDOT-CRO, on behalf of FHWA, on March 20, 2017.

# *New Conditions (Resulting from Design Modifications):*

As a result of the proposed changes to the design of the project, the Area of Potential Effects (APE) was expanded to account for the additional detention basin along the east side of SR 37 north of 146th Street. Additional historic and archaeological surveys were completed using this APE on October 27, 2017 and November 27-29, 2017, respectively. The additional historic survey yielded no additional resources. In addition, a Phase 1A archaeological reconnaissance and associated interim report were completed by CRA for the expanded footprint (Michael J. Curran, December 14, 2017). No archaeological sites were located within the expanded footprint survey area. One previously recorded archaeological site (12H736) had been recorded adjacent to the survey area. However, Site 12H736 was determined not eligible for the NRHP and no evidence of the site was found in the survey area. In addition, re-coordination with the consulting parties was also undertaken on March 22, 2017. Correspondence received subsequent to this re-coordination was from Indiana Landmarks. This group noted that the Nickel Plate trail could be affected by the installation of the drainage infrastructure along 146th street. Upon further coordination and the explanation of the trenchless excavation technique to be utilized in the area, no further comment was noted from this consulting party.

A second addendum to the 800.11(e) documentation with the results of the additional historic and archaeological property surveys and signed "No Adverse Effect" finding was submitted to INDOT-CRO for review on February 12, 2018. The Section 106 finding of "No Adverse Effect" was signed by INDOT-CRO for FHWA on February 16, 2018. The Addendum to the 800.11(e) documentation and finding were sent to consulting parties, including SHPO, on February 19, 2018. The SHPO concurred with the updated "No Adverse Effect" Section 106 effect finding in a letter dated March 9, 2018. (Appendix D, pages D44-45)

#### 8.0 NOISE

# Prior Documentation (See July 2017 EA text page 65-68):

Because this project involves notable changes to the vertical alignment of SR 37, construction of multiple teardrop roundabouts and associated ramps, it is considered a Type 1 project. Therefore, in accordance with 23

CFR 772 and the INDOT Traffic Noise Policy (FHWA concurrence on July 13, 2017), this action required a formal noise analysis. A formal noise analysis was completed by the Lochmueller Group on January 19, 2017.

A total of 403 noise sensitive receptors within the study area were evaluated as part of the analysis. This analysis concluded that under existing conditions (baseline) 14 Category B residential properties and one Category C property currently approach or exceed the 67 decibels (dBA) noise abatement criteria (NAC) established for these land use types. The Category B residential properties included a home on Greenfield Avenue, two homes on Cumberland Road, three units at Sunlake apartments, one unit at Woods of Britton apartments and seven units at Millstone apartments. The Category C property was Ben & Ari's Miniature Golf Course on the west side of SR 37 between 135<sup>th</sup> and 141<sup>st</sup> Street.

With the proposed improvements to SR 37 in the design year (2036), Traffic Noise Model, Version 2.5 (TNM 2.5) predicted that 54 receptors would experience Equivalent Sound Level (Leq(h)) levels that approach or exceed the appropriate Noise Abatement Criteria (NAC) as a result of the increased traffic, anticipated increased speeds resulting from elimination of the traffic signals, and roadway alignment modification. The 43 Category B residences where the 67 dBA NAC would be approached or exceeded included four residences along Cumberland Road, ten units at Sunlake apartments, six units at Woods of Britton apartments, and 23 units at Millstone apartments. The four Category C locations where impacts were predicted based on the 67 dBA NAC included Kid's World Private Preschool, Primrose School of Noblesville, Legacy Bible Church and Ben & Ari's Miniature Golf Course. The seven Category E and F receptors where impacts are anticipated based on the 72 dBA NAC included Fishers Self Storage, Andy Mohr Mitsubishi, Indiana Elite Cheer and Tumbling, Dog Dayz kennel, a multi-business strip, ZR Tactical Solutions and JDS International.

Mitigation abatement measures were given consideration at the Category B and C location. In accordance with INDOT Traffic Noise Analysis Procedure, structural barrier walls were modeled and analyzed in TNM 2.5 at the Cumberland Road residences, three apartment complexes, Kid's World Private Preschool, Primrose School of Noblesville, and Legacy Bible Church. Optimized barriers at each location were evaluated in terms of their feasibility and reasonableness based on INDOT criteria. As a result of the barrier analysis, two locations for a barrier were determined to meet INDOTs feasibleness and reasonableness criteria. Those locations were adjacent to Sunlake Apartments and Woods of Britton Apartments.

At Sunlake Apartments, a barrier 1,194 feet in length was shown to provide a 5 dBA reduction at all ten of the impacted apartment receptors, as well as 26 additional non-impacted apartment units. At a height of up to 17 feet, such a barrier was also predicted to provide a 7 dBA noise reduction at the majority of the first row impacted receptors (six out of 10), and therefore met the INDOT substantial reduction design goal criteria. With a total estimated cost of \$492,015 and a cost per benefited receptor of \$13,667, this barrier also met the INDOT cost-effective reasonableness criteria. At the Woods of Britton Apartments, a barrier 700 feet in length was shown to provide a 5 dBA reduction at five of the six impacted receptors, as well as six additional non-impacted apartment units. At a height of up to 16 feet, such a barrier was also predicted to provide a 7 dBA noise reduction at the majority of the first row impacted receptors (four out of six), and therefore met the INDOT substantial reduction design goal criteria. With a total estimated cost of \$269,926 and a cost per benefited receptor of \$24,538, this barrier was determined to meet the INDOT cost-effective reasonableness criteria.

On January 26, 2017, INDOT ES concurred the noise analysis study was technically sufficient and was completed in accordance with FHWA and INDOT guidelines.

# New Conditions (Resulting from Design Modifications):

Subsequent to INDOT concurrence of the January 19, 2017 SR 37 highway noise analysis, there were land use changes within the study area in proximity to SR 37, re-evaluation of design year traffic patterns, design change considerations at 141st Street and 146th Street, and a request to re-evaluate the location of the originally proposed

Woods of Britton noise barrier. As a result, a noise addendum was completed on March 26, 2018 (Appendix I, pages I1 to I85).

The original study abatement barrier at the Woods of Britton apartment location was 700 feet in length with an estimated cost of \$269,926. It was assessed to provide a 5 dBA reduction for 11 impacted and non-impacted residences for a cost per benefited value of \$24,538 per receptor. However, this barrier extended approximately 100 feet south of the shared property line between Woods of Britton and the currently undeveloped Block A-1 of the Fishers Marketplace development. Because this extension was perceived to possibly limit visual exposure of this property for any future commercial development, a new barrier that did not extend south of the property boundary was evaluated. The barrier length to the north was also confined to the property boundary between Woods of Britton and Tire Barn. As before, the proposed barrier was placed at the edge of the proposed permanent right-of-way. The TNM 2.5 analysis showed that a new shorter (530 feet) and taller (up to 17 feet in height) barrier could provide a 7 dBA reduction in design year Leq(h) at greater than 50 percent of the impacted receptors, and with a cost per benefited receptor (5 dBA reduction) value between \$15,359 and \$18,651 the new barrier is considered to be cost-effective (Appendix I, page I24). The management of Woods of Britton apartments was previously favorable to having such a barrier and the tenants did not voice any overwhelming opposition. As such, the recommendation to install an abatement barrier at this location remains unchanged. In addition, no changes have been made to the Sunlake Apartments abatement barrier.

New 2041 design year traffic data for the 141<sup>st</sup> Street and 146<sup>th</sup> Street interchanges was incorporated with the original 2036 design year traffic data for the remainder of the study area as input into the TNM 2.5 hybrid 2036/2041 design year model run. In most instances, the new total and/or truck traffic volumes were lesser than those used in the original 2036 design year study.

Six new commercial businesses (Harley Davidson, Belle Tire, Verizon, Ed Martin Toyota dealership, O'Reilly Auto Parts, and GetGo Café and Market) along both sides of SR 37 were added to the analysis for a total of 409 receptors. Additionally, the former Ben & Ari's Miniature Golf Course (NAC Category C) has been repurposed into the Category F Alderman Luxury Imports dealership. From the 2036/2041 design year analysis, none of these new receptor sites had predicted  $L_{eq}(h)$  levels that approached or exceeded their respective NAC criteria of 72 dBA.

The revised 146<sup>th</sup> Street interchange was modeled as a single point interchange using the new 2041 traffic data. Although this interchange is generally centered at the same location as the originally proposed teardrop roundabout, the exit and entrance ramp geometry for the single point interchange resulted in a wider footprint with lanes slightly closer to proximal receptors. All of the receptors in the immediate vicinity of this interchange are Category E and F commercial businesses. The change to the single point interchange with the new 2041 traffic data did not result in any new predicted NAC impacts near the 146<sup>th</sup> Street intersection. The proposed interchange configurations for the remaining seven intersection locations within the study area remained unchanged from the original study.

On March 26, 2018, INDOT ES concurred the noise analysis addendum was technically sufficient and was completed in accordance with FHWA and INDOT guidelines (Appendix I, page I86)

# 9.0 HAZARDOUS MATERIALS

# Prior Documentation (See July 2017 EA text page 75-82):

As part of the project activities for the initial SR 37 Improvement Project Area, Lochmueller Group completed a Red Flag Investigation (RFI) in January 2017 and completed an addendum (March 2017) to the original RFI based on changes in the project design plans. The original RFI identified numerous sites with hazardous material concerns and recommended a Phase I Environmental Site Assessment (ESA) be performed within the survey area of the SR 37. The RFI addendum completed in March 2017 identified no new hazardous material concerns

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within 0.5 mile of the project area. The Phase I ESA was performed by Metric Environmental in January 2017 and identified 21 recognized environmental conditions. The majority of these conditions recognized were filling stations with a former dry cleaning service, auto wrecking facility, two auto repair facilities, and six auto dealerships identified as well. It was recommended that a limited subsurface investigation in areas of concern where excavation was anticipated. A Phase II Hazardous Material Investigation is planned and will be completed prior to project letting.

# New Conditions (Resulting from Design Modifications):

A second RFI Addendum approved by INDOT ES on January 12, 2018 identified one additional site of hazardous material concern approximately 0.2 mile southwest of the southern terminus (Appendix E, page E1-6). This site was identified as an "Other" Waste – Electronic Waste site. It was determined that no impact is expected as a result of the proposed project modifications. Therefore, no further investigations are warranted.

#### 10.0 PERMITS

The following permits were identified in the 2017 EA as being needed for the project:

- Individual Section 401 Water Quality Certification (WQC)
- Section 404 Regional General Permit (RGP)
- Construction in a Floodway Permit
- Rule 5
- Hamilton County Drainage Permit

Applications for Section 401 WQC from IDEM and Section 404 RGPs from the USACE remain in progress. However, the Construction in a Floodway Permits for the outfall structures within the regulated floodways of Shoemaker Ditch and the White River were issued by the IDNR on March 15, 2018. The conditions of these permits have already been incorporated as firm project commitments.

# 11.0 AGENCY RE-COORDINATION

As part of the development of the environmental study provided in the original EA document, an early coordination packet was prepared and disseminated to local, state and federal agencies on September 13, 2016. This effort was intended to provide appropriate planning, institutional and regulatory agencies an initial opportunity to provide feedback regarding any issue areas that may be affected by the project. Re-coordination with agencies occurred on March 15, 2017 after several drainage improvements along cross streets were added to the project. The current modifications to the design, prompted the need to re-coordinate again with agencies. On February 21, 2018, re-coordination was initiated with those agencies listed in the below table.

Agency	Date Contacted	Date of Response	Appendix C Location
INDOT, Environmental Services (ES)	2/21/2018	No Response	N/A
INDOT, Greenfield District	2/21/2018	No Response	N/A
INDOT, Office of Public Involvement	2/21/2018	No Response	N/A
INDOT, Office of Aviation	2/21/2018	2/28/2018	C12
FHWA	2/21/2018	No Response	N/A
USFWS	2/21/2018	2/22/2018	C10
USACE, Louisville District	2/21/2018	No Response	N/A
NRCS	2/21/2018	3/15/2018	C15-C16
IDEM	2/21/2018	No Response	N/A
IDEM, Groundwater Section	2/21/2018	No Response	N/A
IDNR, Division of Water	2/21/2018	No Response	N/A
IDNR, Division of Fish and Wildlife	2/21/2018	3/26/2018	C14

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2/21/2018	2/27/2018	C13
2/21/2018	2/22/2018	C7-C9
2/21/2018	No Response	N/A
	2/21/2018 2/21/2018	2/21/2018         2/22/2018           2/21/2018         No Response           2/21/2018         No Response

# 12.0 PUBLIC INVOLVEMENT

# Prior Documentation (See July 2017 EA text page 2-4):

On May 16, 2017, a public hearing was held. The meeting provided the public an opportunity to learn more about the project and to provide the cities and county with comments or concerns for consideration. The public hearing offered the public the opportunity to provide oral comments in a formal setting, as well as submit written comments within 15 days following the public hearing. All comments were responded to and submitted into the public record for the project. Responses to public comments will be provided as an attachment to the FONSI request.

# New Conditions (Resulting from Design Modifications):

On December 11, 2017, the City of Fishers, and its consultants RQAW and American Structurepoint, held a public information meeting regarding the SR 37 Improvement Project. The meeting was held at the Delaware Township Community Building located at 9094 East 131<sup>st</sup> Street in Fishers. A total of 37 individuals from the public signed in to the meeting, three additional individuals on the sign-in sheet were associated with Hamilton County, the City of Fishers, and FHWA (Appendix G, Pages G16 to G19). The meeting informed individuals interested in the SR 37 corridor on the current status of the project, overview of the proposed drainage changes, and addressed questions/comments from the community. The majority of the questions raised by the public were in regards to the phasing of construction and specific design questions regarding lighting and signal timing at the signalized intersections adjacent to SR 37.

In March 2018, additional coordination occurred with property owners adjacent to the northern and southern drainage trunk lines associated with the SR 37 Road Improvement Project (Appendix G, Pages 20-21). No adjacent property owners responded with any concerns regarding the construction of the drainage trunk lines, but many property owners asked questions regarded timing of drainage trunk line construction. Drainage line

construction is scheduled to begin August 2018 and finish in early 2019 prior to any major construction begins along SR 37.

# 13.0 ENVIRONMENTAL COMMITMENTS

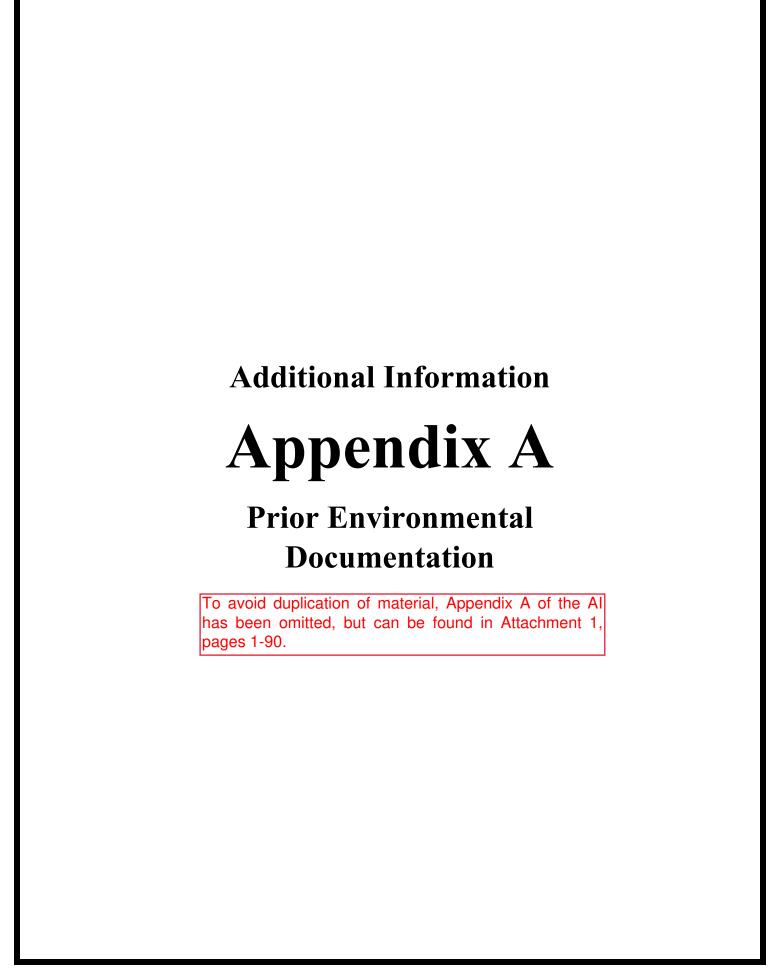
All commitments made in the 2017 EA remain valid. As a result of the modifications discussed in this AI, no additional "firm" or "for consideration" commitments are required to be added to this document.

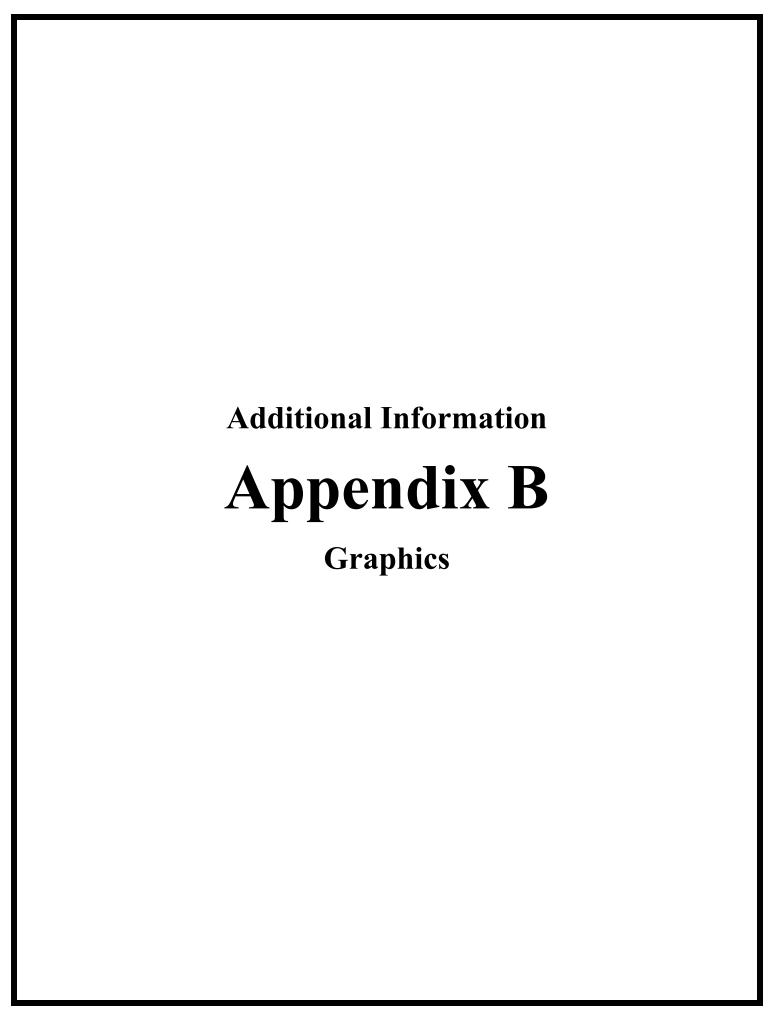
# 14.0 CONCLUSIONS

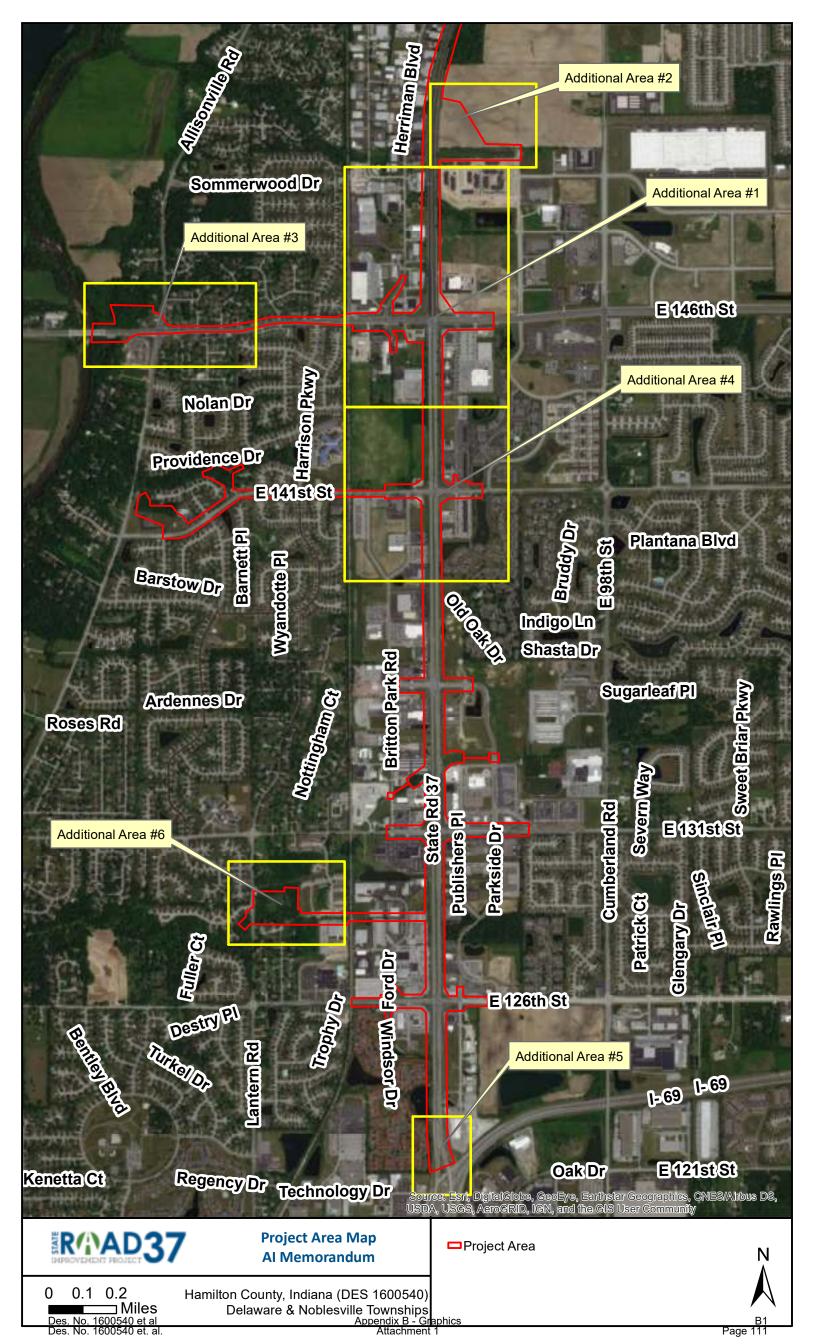
The revised project still meets the original purpose and need specified in the July 2017 EA. The changes to the scope of the project are not anticipated to result in significant changes to the impacts on the environment outside of those previously documented in the July 2017 EA. Unless specifically discussed in this document, the discussions and analysis of the environmental impacts in the July 2017 EA remain valid.

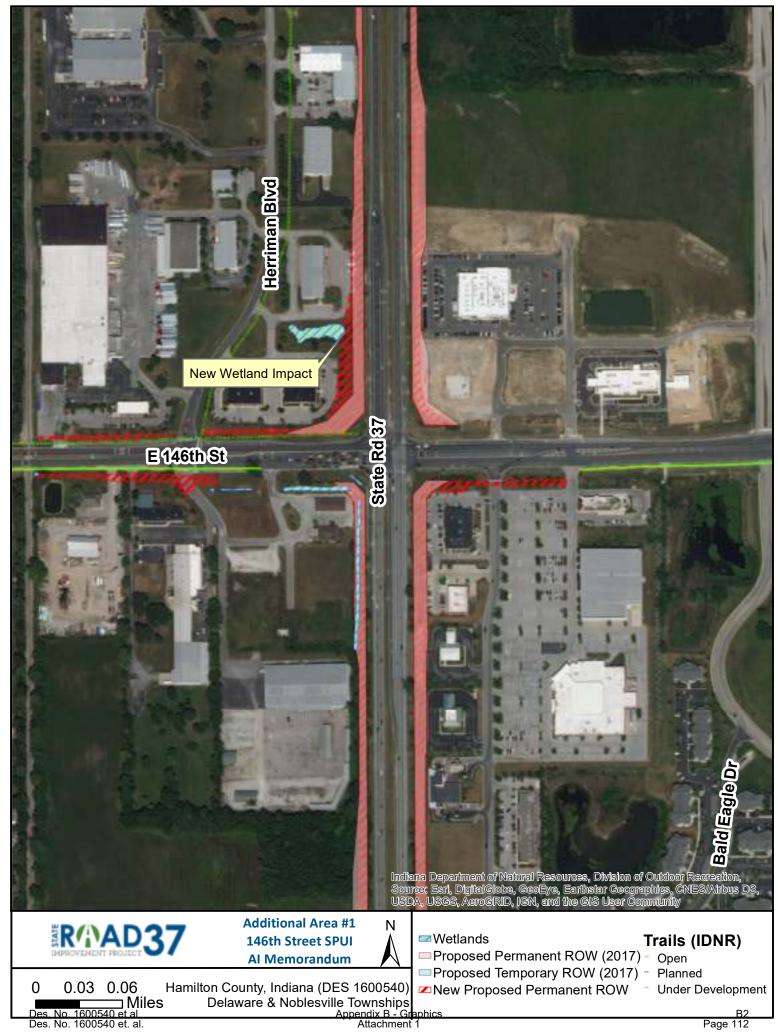


Appendix A: Prior Environmental Documentation INDOT Approved Environmental Assessment – text only (July 14, 2017)	A1-A90
Appendix B: Graphics	
Additional Area Maps	B1-B7
Preliminary Plan Sheets – 146 <sup>th</sup> Street SPUI	
Preliminary Plan Sheets – North Drainage Line (146 <sup>th</sup> Street)	
Preliminary Plan Sheets – 141st Street Single-lane Roundabout	
Maintenance of Traffic – I-69/SR 37 Interchange Median Crossover Plans	
Preliminary Plan Sheets – South Drainage Line (Junkersfeld Parcel)	
Appendix C: Agency Re-Coordination	
Sample Re-Coordination Letter (sent to resource agencies)	C1-C6
Indiana Geological Survey (IGS)	
Environmental Assessment Report (February 22, 2018)	
USFWS	
Response Email (February 22, 2018)	C10-C11
Indiana Department of Transportation (INDOT)	
Department of Aviation Response Letter (February 28, 2018)	C12
IDNR	
Division of Outdoor Recreation Email (March 2, 2018)	C13
Division of Fish and Wildlife Response Letter (March 26, 2018)	C14
Natural Resources Conservation Service (NRCS)	
Response Letter (March 15, 2018)	C15
Appendix D: Section 106 of the National Historic Preservation Act (NHPA)	
Section 106 800.11(e) Addendum #2	
SHPO Concurrence of Section 106 Finding (March 9, 2018)	D66-D67
Appendix E: Red Flag Investigation & Hazardous Materials	
Red Flag Investigation Addendum #2	E1-E6
Appendix F: Water Resources	
Waters of the U.S. Determination Report (November 29, 2017)	F1-F235
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Appendix G: Public Involvement	
Public Information Meeting Slides (December 11, 2017)	G1-G12
Public Information Meeting Minutes (December 11, 2017)	
Public Information Meeting Sign-in Sheet (December 11, 2017)	G16-G21
Appendix H: Air Quality	
Relevant pages from the INDOT Statewide Transportation Improvement Progra	m (STIP)H1-H8
Appendix I: Noise Analysis	
Noise Analysis Addendum Report Text, Tables, and Figures	
Noise Analysis INDOT Technical Sufficiency Email	I86
Appendix J: Permits	
IDNR Construction in a Floodway Permit (Shoemaker Ditch)	
IDNR Construction in a Floodway Permit (West Fork White River)	J7-J12



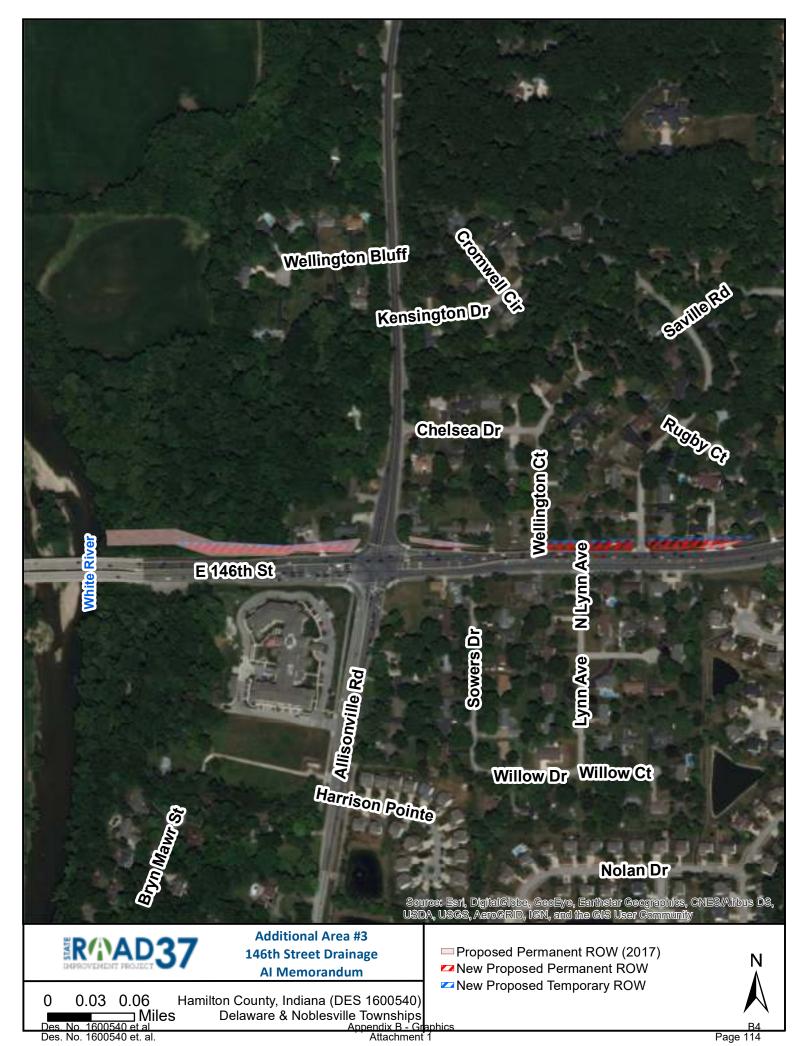






B2 Page 112





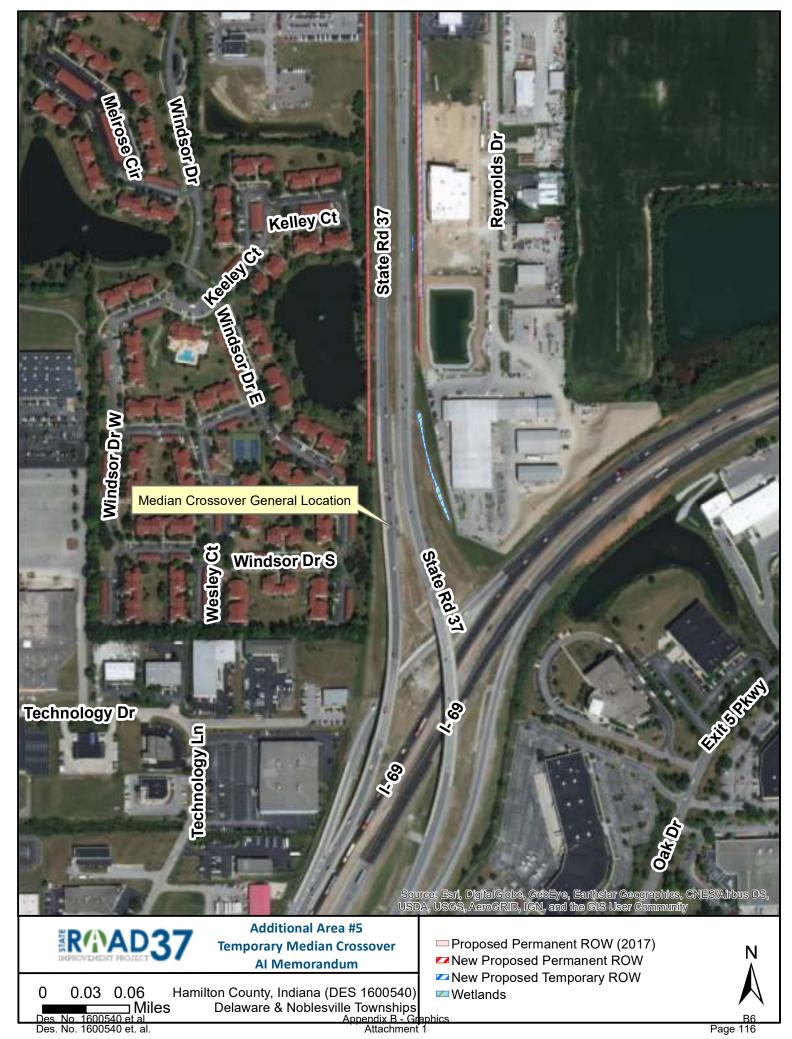


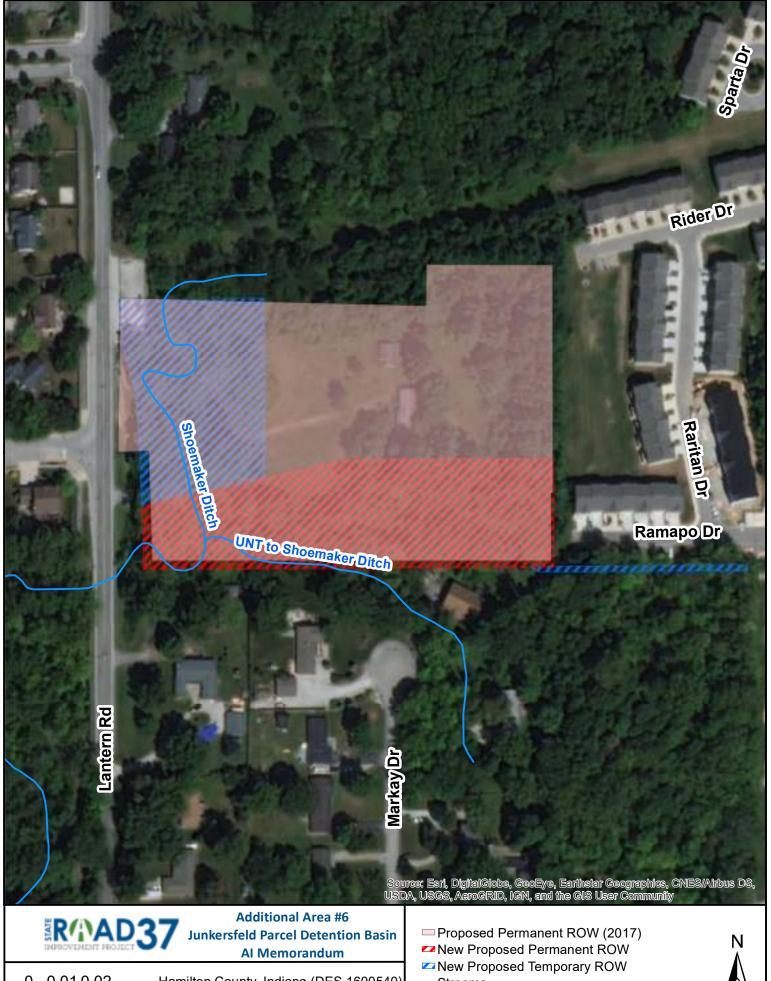
Des. No. 1600540 et al.
Des. No. 1600540 et. al.

Hamilton County, Indiana (DES 1600540) Delaware & Noblesville Townships Appendix B - Gran Attachment 1

New Proposed Temporary ROW

Wetlands





0 0.01 0.02 Miles Des No 1600540 et al Des. No. 1600540 et. al.

Hamilton County, Indiana (DES 1600540) Delaware & Noblesville Townships Appendix B - Graphic Attachment 1

Streams

PROJECT	DESIGNATION
1991340	1092349
CONTRACT	DEED GE FELE
B-39584	

	KIN DEELGAKEION WONDERS
	BRIDGE
1601876	New Bridge; SABRESI, Over SR 37

# INDIANA DEPARTMENT **OF TRANSPORTATION**



# **ROAD PLANS**

S.R. 37 AND 146th STREET RECONSTRUCTION

PROJECT NO.

1592349 P.E. 1592349 R/W 1592349 CONST.

Roadway Reconstruction along S.R 37 Beginning Approx. 1,225 Feel South of the Intersection of S.R 37 & 146th St. to Approx. 2,260 Feet North of the Intersection of S.R 37 & 146th St. In Section 18, Township 18 North, Range 5 East in Noblesville Township and Section 19, Township 18 North, Range 5 East in Delaware Township in Hamilton County, Indiana.



NOTE: SEE NEXT SHEET FOR TRAFFIC DATA/DESIGN DATA TABLES



LATITUDE: 40° 00' 03° N LONGITUDE: 86° 00' 15" W

Gross Length:

Net Length: 0.66 MI.

0.66 MI.

Maximum Grade:

4.40 %

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2018 TO BE USED WITH THESE PLANS



CITY OF FISHERS

Scott Fadness, Mayor

Jeff Hill, Director of Engineering

ERMAD37

**FISHERS** 

1625 N. Post Road Indianapolis, IN 46219 Phone 317-895-2585 Fax 317-895-2596 www.ucindy.com

Stage 1 Plans

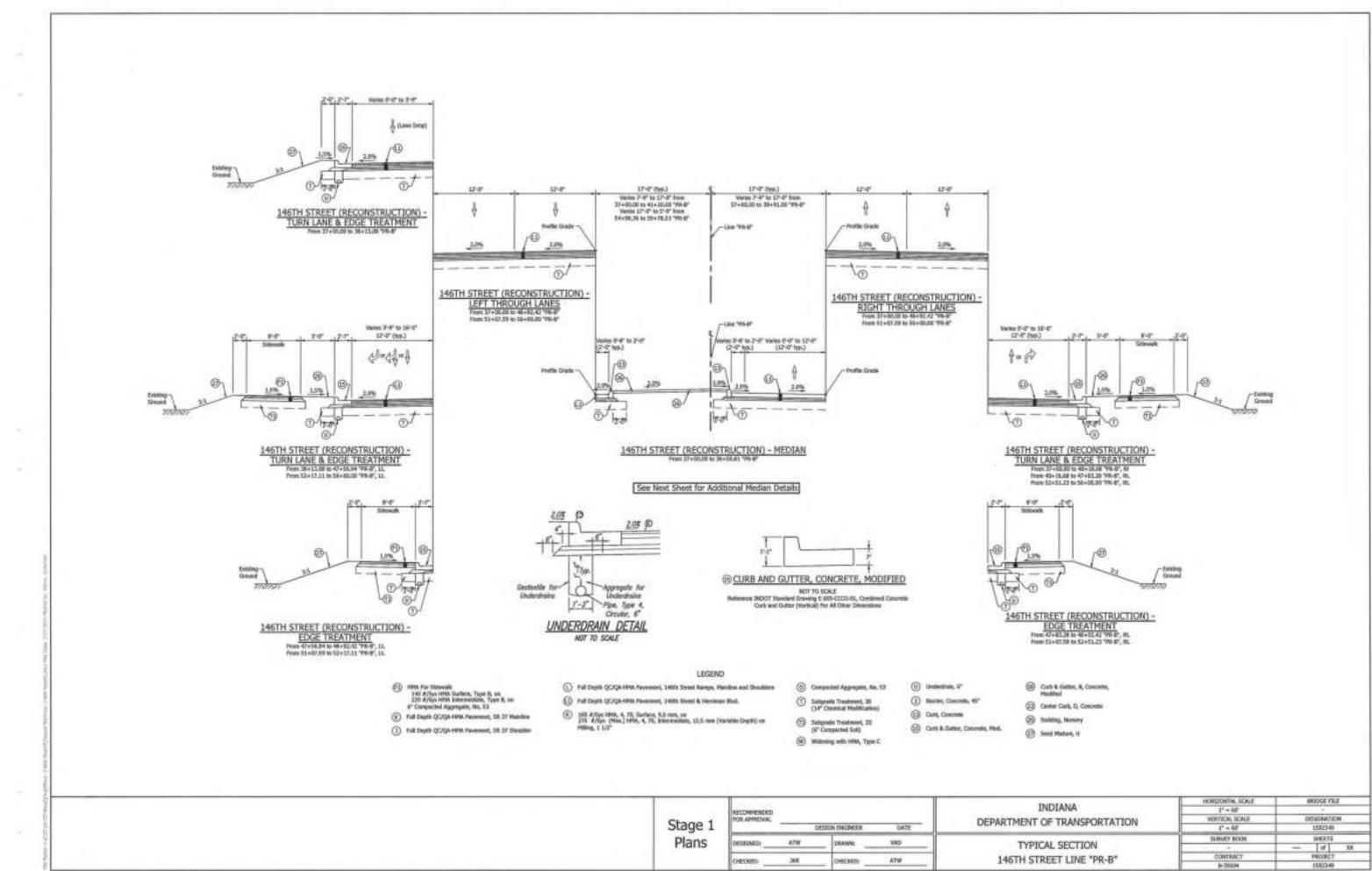
NG FRAND EN	UNITED CONSULTING	317-895-2585 PHICER RUPERS
SCHOOL 601		DATE
R LETTING:	MOTION CHARGE OF TAMES OF TAMES	DATE

1592349 SHETS

Des. No. 1600540 et al

Des. No. 1600540

Appendix B - Graphics Attachment 1

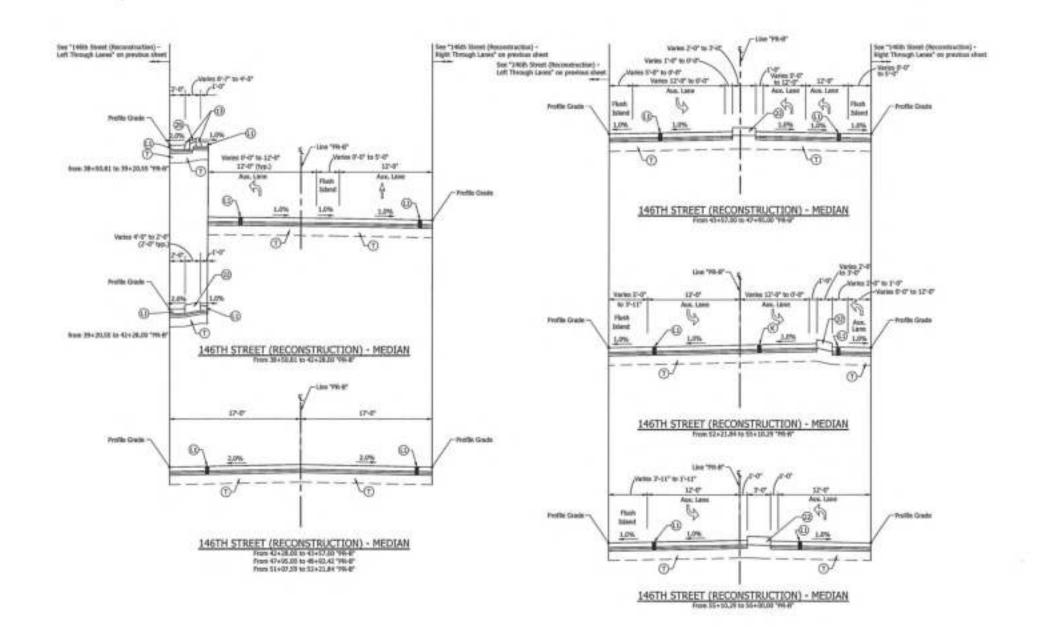


Des. No. 1600540 et al Des. No. 1600540

Appendix B - Graphics

Page 119 Attachment 1

B9



LEGEND.

(%) WHA For Sidewolk

240 A Flor SMA Surface, Type II, an

250 A Flor SMA Siderendoloit, Type III, or

6" Compacted Aggregate, No. 63

- (c) Full Displit QC/QA-HMA Pavement, SR-37 Maletins
- (1) Full Depth QC/QA-HHA Pavernest, SR 37 Shoulder
- (L) Full Disjoin QC/QA-HMA Flavoreure, 1985s Street Ramps, Habilities and Shouthers
- (i) Full Depth QCQA-MRA Fovernow, 1-66th Street & Hercinan Blvd.
- (E) 365 #/Syc 1994, 4, 70, Surface, 9,5 mm, po. 275 #/Syc (Max.) 1994, 4, 70, Immunostate, 12.5 mm (Vanishte Depht) on
- (ii) Compacted Aggregate, No. 53

- (9° Comparted Soil)
- Withdraw with HMA, Type ⊆
- (ii) Underdrain, 6"
- (2) Barrer, Concrete, 46°
- (1) Curb, Committee
- (S) Carls & Gutter, Concrete, Hotel
- (2) Conter Carb, D, Concreto

(B) Curb & Gutter, B, Concrete, Houldfind

- (B) Totaling, Namery
- (i) Seed Places, II

Stage 1 Plans

DATE

INDIANA DEPARTMENT OF TRANSPORTATION TYPICAL SECTION 146TH STREET LINE "PR-8"

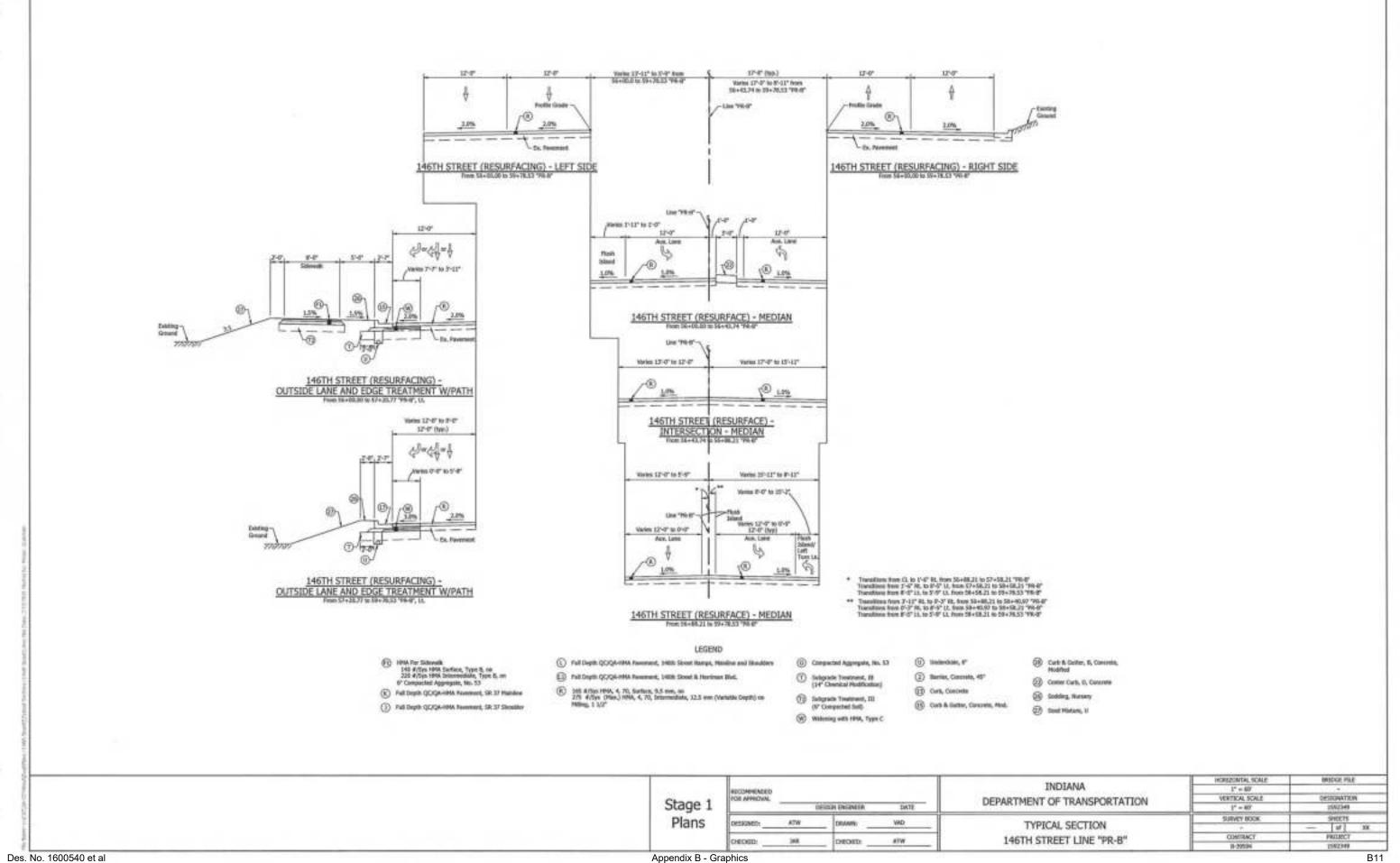
HORDONTAL SCALE BREDGE PAZ  $T' \neq bT$ VERTICAL SOLE 1592349 SHEETS NX SURVEY BOOK CONTRACT 8-38504

Des. No. 1600540 et al

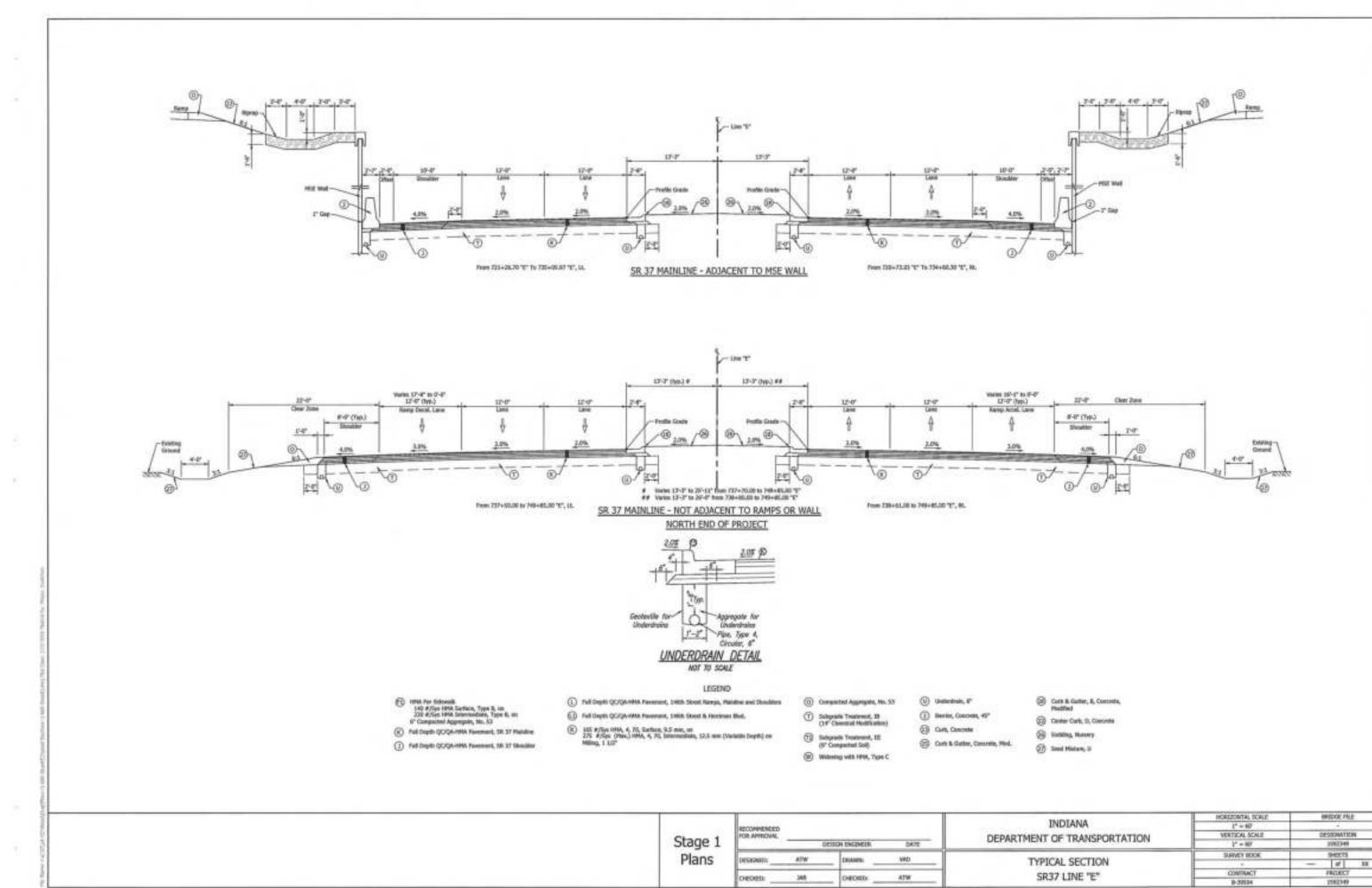
Appendix B - Graphics Attachment 1

Des. No. 1600540

B10



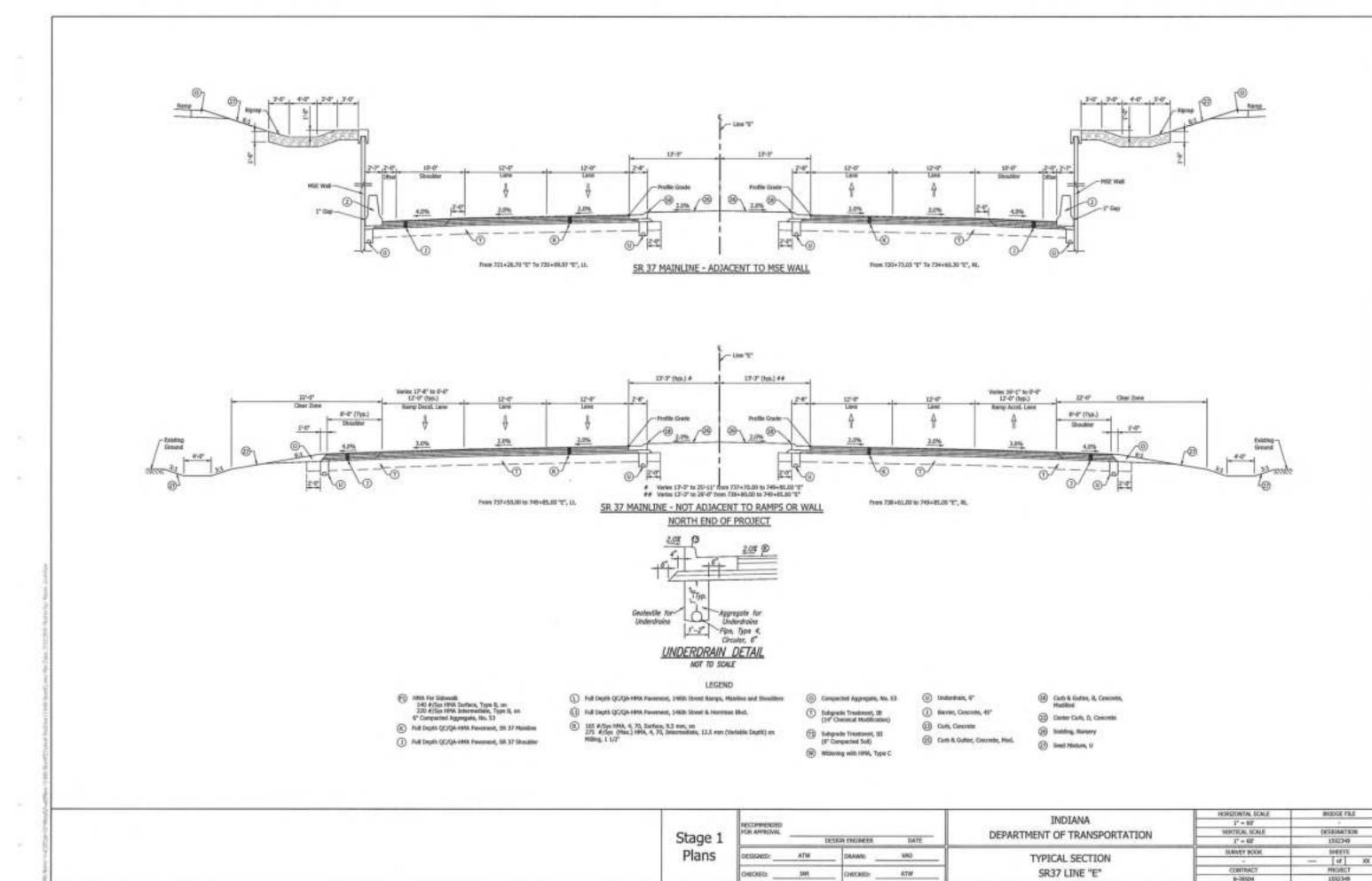
Des. No. 1600540



Appendix B - Graphics

Attachment 1

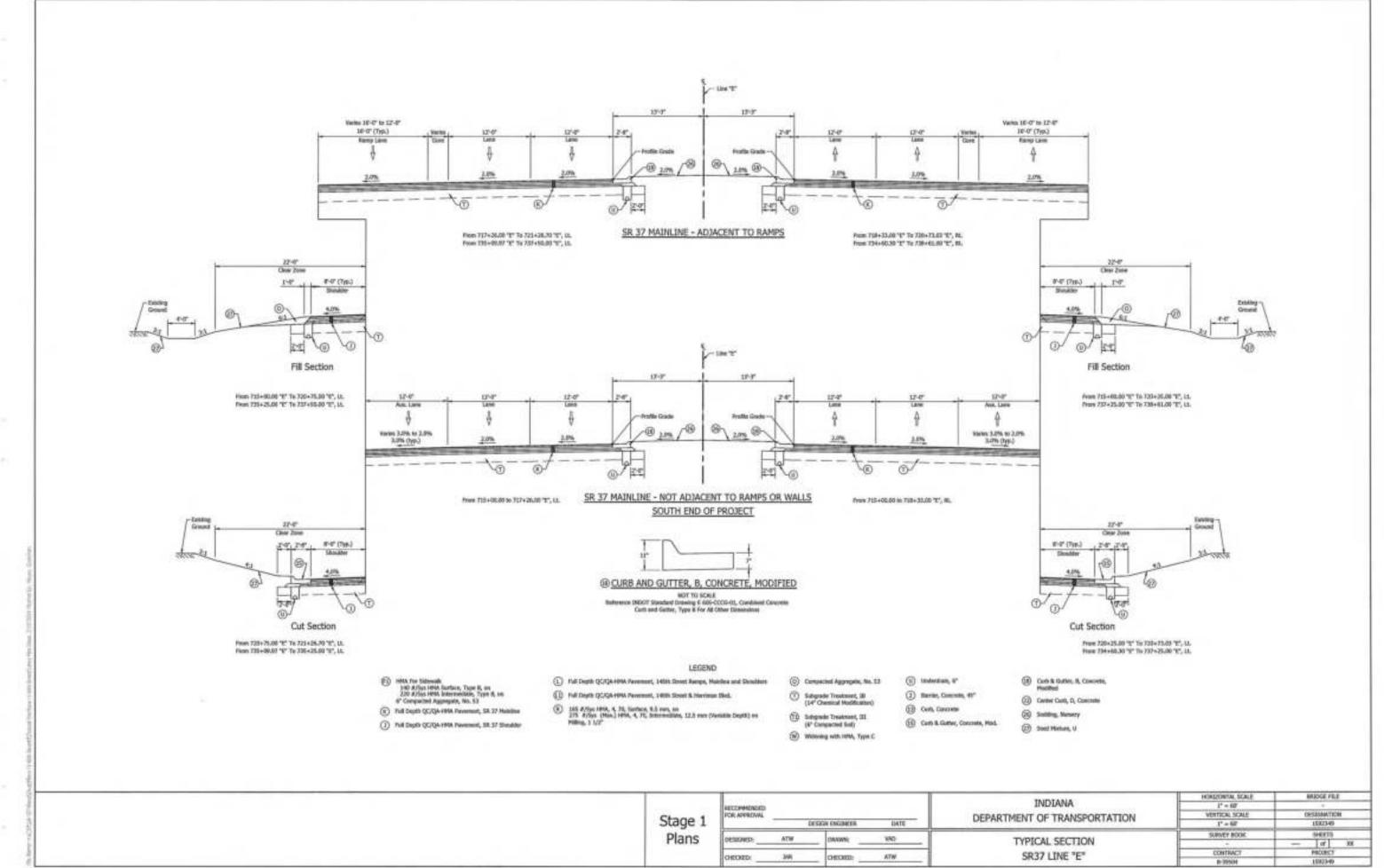
Des. No. 1600540



Des. No. 1600540 et al Des. No. 1600540

Appendix B - Graphics

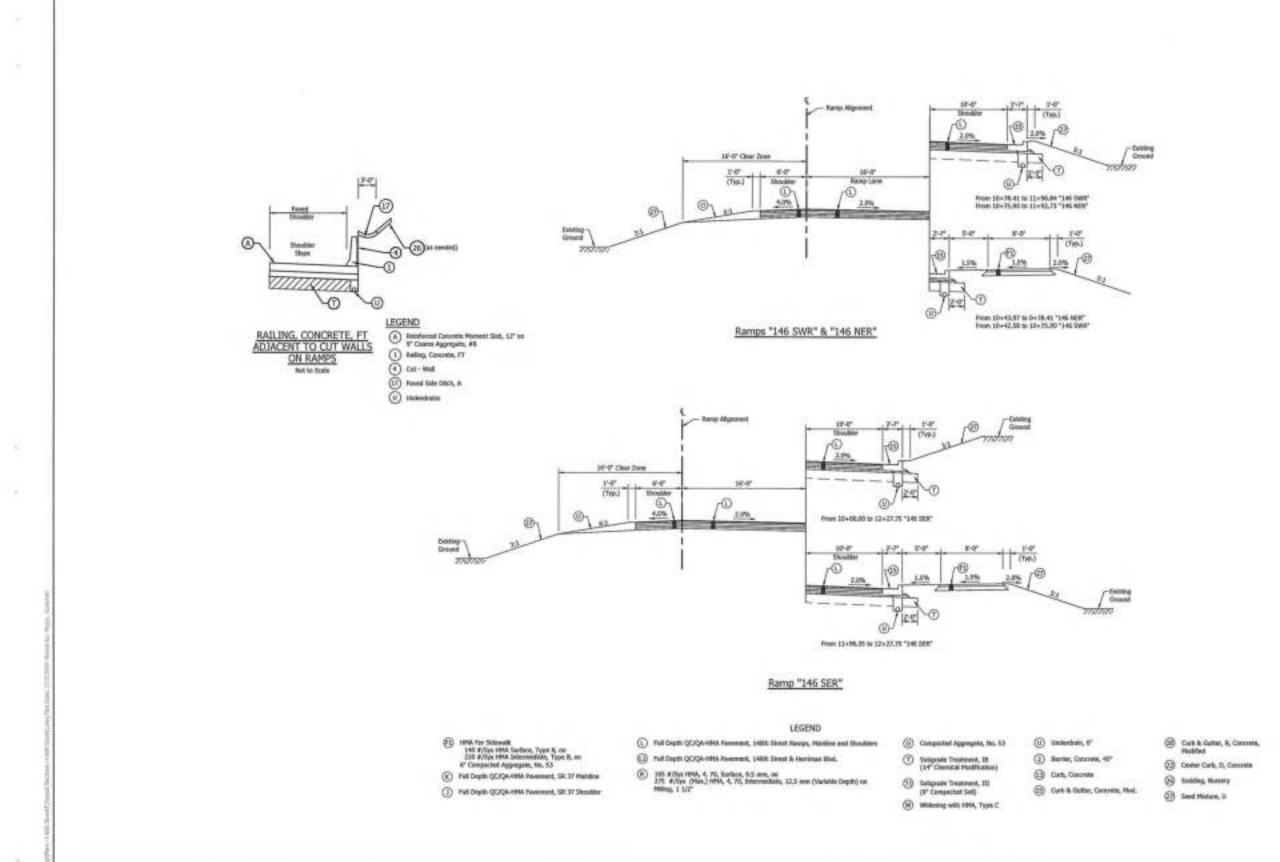
B13 Page 123



Des. No. 1600540 et al Des. No. 1600540 Appendix B - Graphics

D. ... 404

B14



Plans

POR APPROVAL DESIGN ENGINEER DATE
DESIGNED: ATW DRAWN: WAD
DRECKED: JAH GRECKED: ATW

INDIANA 10 HORROWIN, SCALE
1° = 60°
DEPARTMENT OF TRANSPORTATION 10 HORROWING MANUE
1° = 60°
TYPICAL SECTION RAMP
LINE "146 NER" AND LINE "146 SER"
GENTIALCT

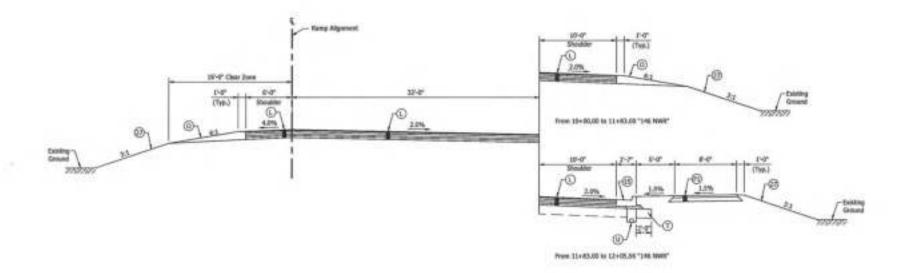
Appendix B - Graphics
Attachment 1

Stage 1

Des. No. 1600540

Des. No. 1600540 et al

BRIDGE FILE



Ramp \*146 NWR\*

LEGEND

- ### OMA For Editorials

  340 8/Sys. 1994. Surface, Type & on

  320 8/Sys. 1994. Setermediate, Type & or
  6" Competited Aggregate, No. \$3
- (E) 158 Depth QC/QA-1993 Ference4, SR-S7 Relative
- (1) Full Depth QC/QA+RMA Favorievit, SR 37 Structure
- (i) Tull Depth QC/QA-1998 Pavernoni, 1950s Street Ramps, Matribe and Shoulders
- (1) Full Depth QC/Qn+89A Feversonic, 146th Strong & Horrison Blod.
- (R) 183 4/Sys 1994, 4, 70, Surface, 9,5 mm, on 273 4/Sys (Plan.) 1996, 4, 75, Sebermultain, (2,5 mm (Variable Depth) on Milling, 1 1/2"
- © Comparted Aggregate, No. 53
- © Subgrade Treatment, IB (14" Chemical Modification
- Subgrade Treatment, III (IF Compacted Soll)
- (W) Millering with 1994, Type C
- (i) Underdrain, 5"
- (2) Barrier, Coscosin, 45°
- (3) Carb, Concrete.
- (E) Cord-B Guller, Concrete, Mod.
- (a) Solding, Norwey
  - (2) Seed Micture, U

(II) Curb & Gatter, B, Coscnets, Harbitral

(S) Center Curb, D, Concrete

INDIANA DEPARTMENT OF TRANSPORTATION DATE DESKIN ENGINEER. WD TYPICAL SECTION RAMP

Stage 1 Plans

ATW OHECKO: OWDOOD

VENTICAL SCALE  $1^{+} - 00^{\circ}$ SURVEY BOOK CONTRACT LINE "146 NWR" 9-29504

HORIZONTAL SCALE

 $1^{\circ} \approx 60^{\circ}$ 

INDICATE PROPERTY.

1012340

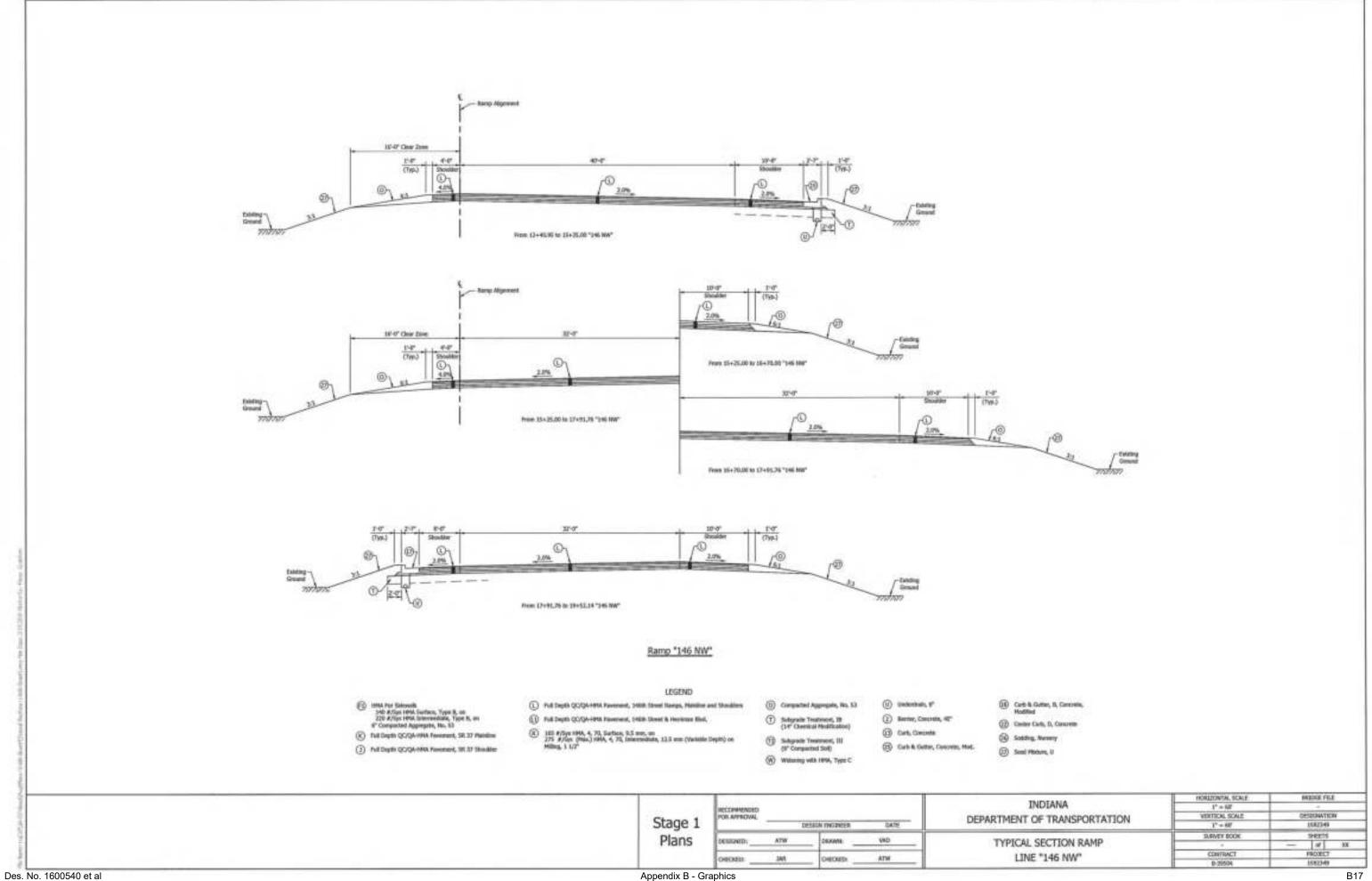
NEEDS XX

B16

Des. No. 1600540 et al

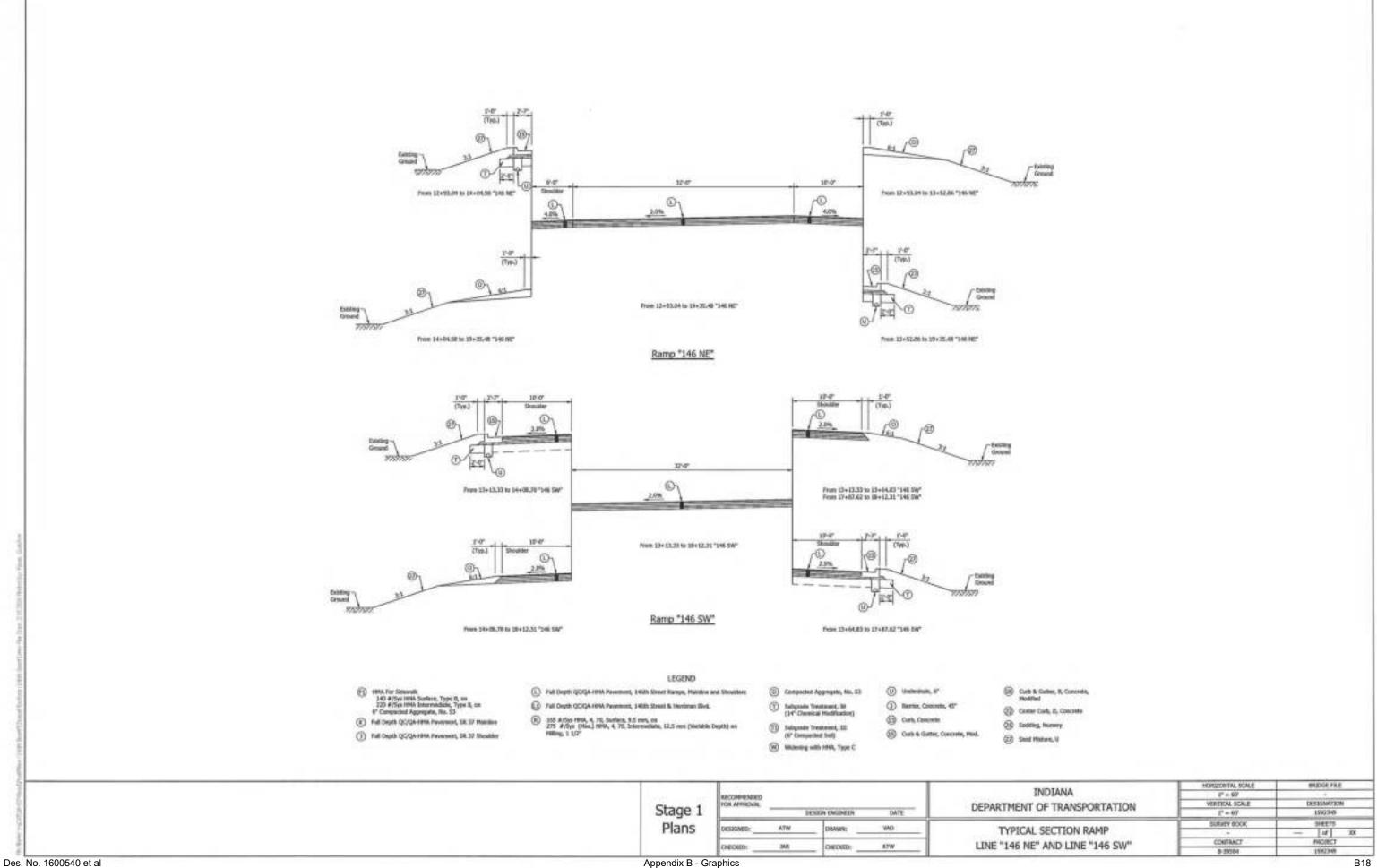
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Appendix B - Graphics Attachment 1



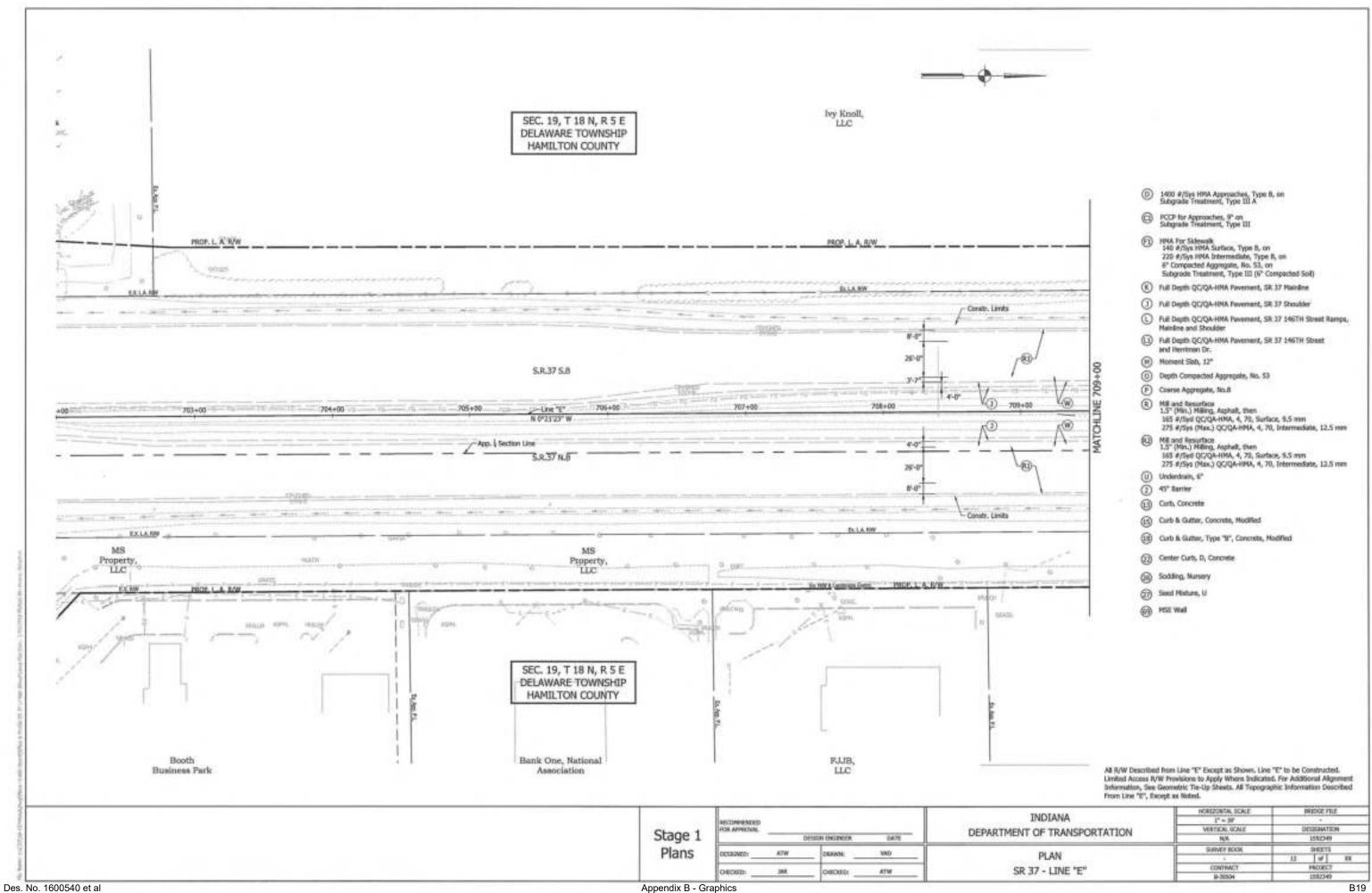
Des. No. 1600540

Appendix B - Graphics



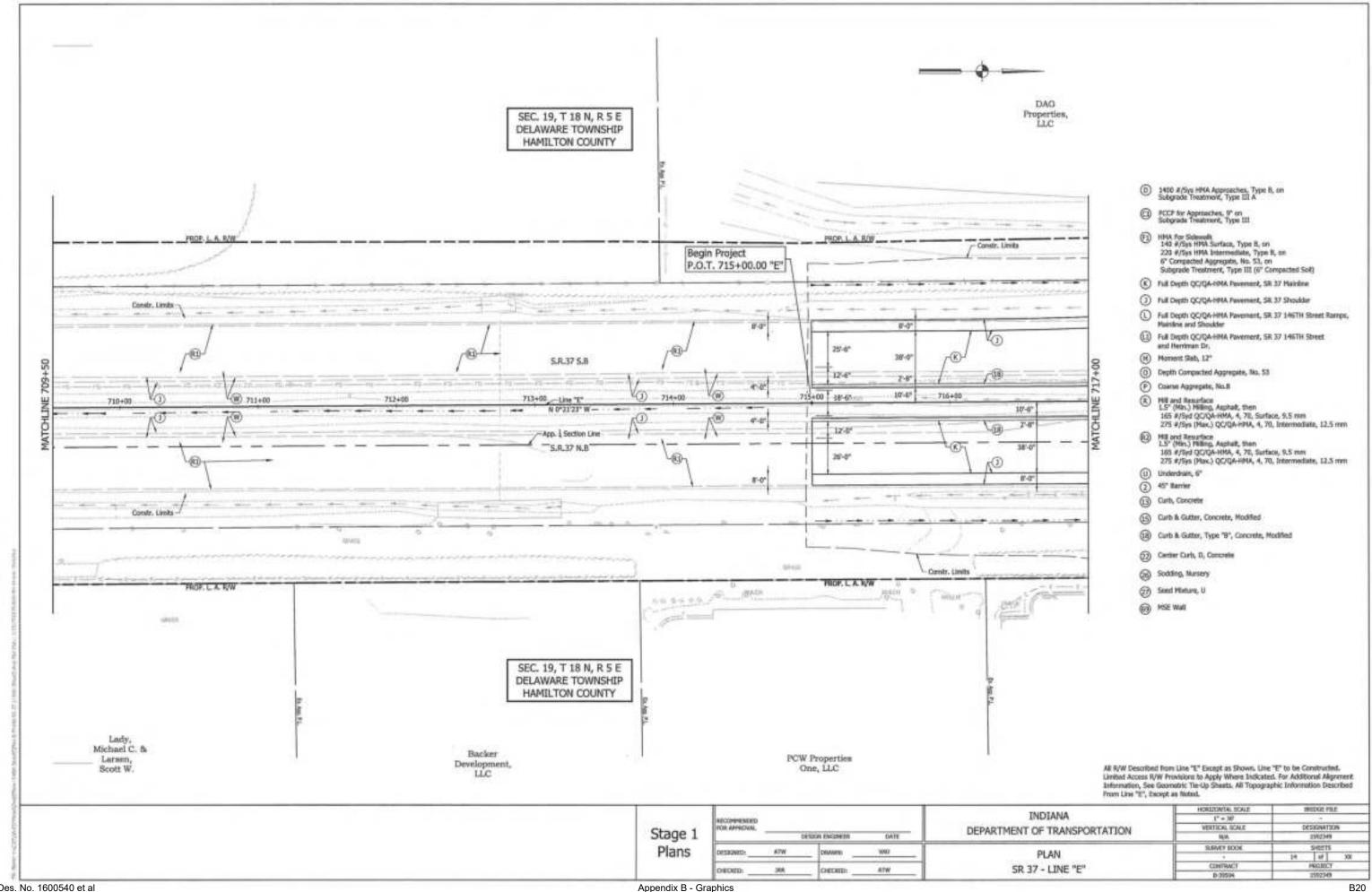
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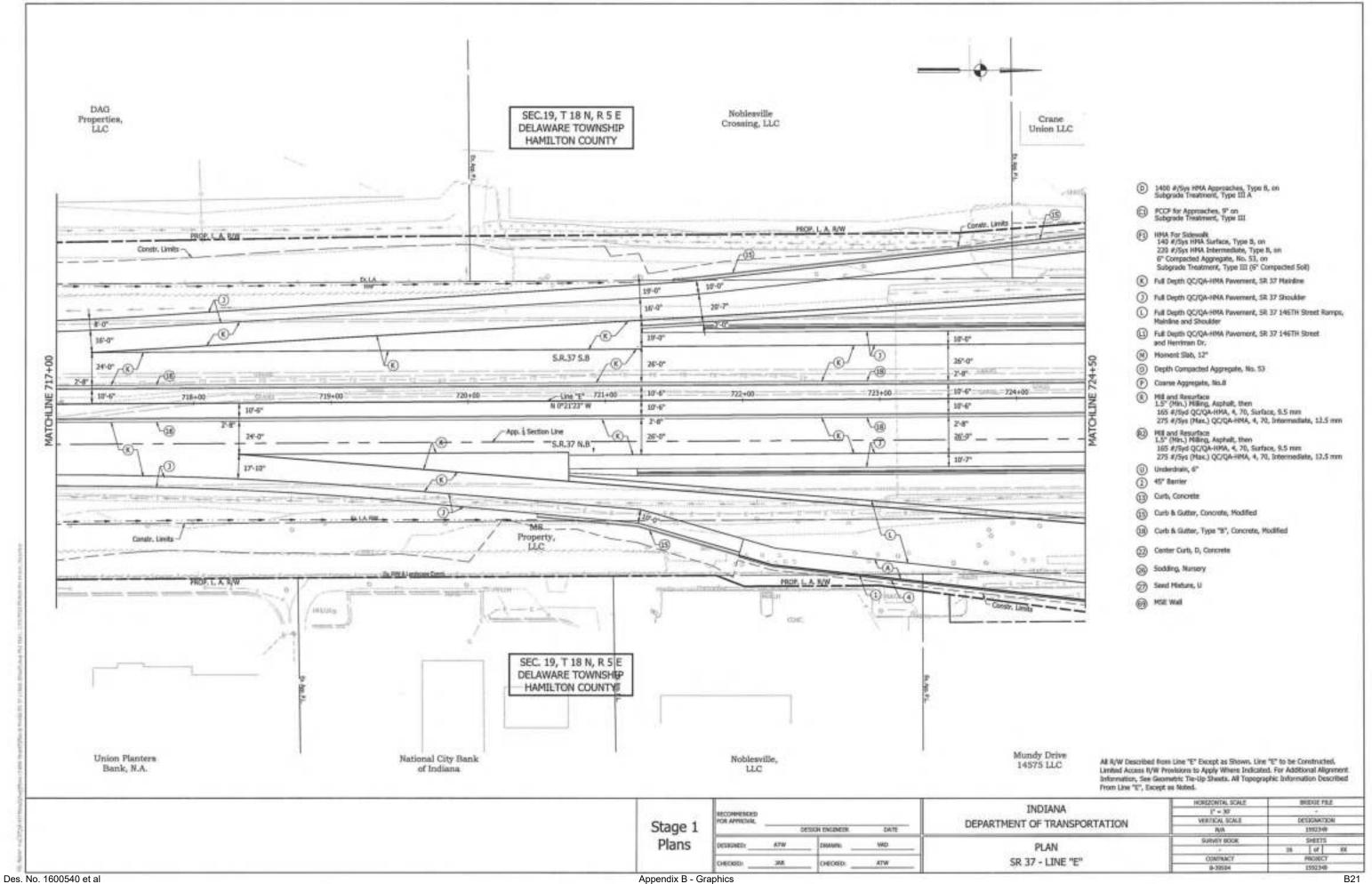
Appendix B - Graphics

Des. No. 1600540

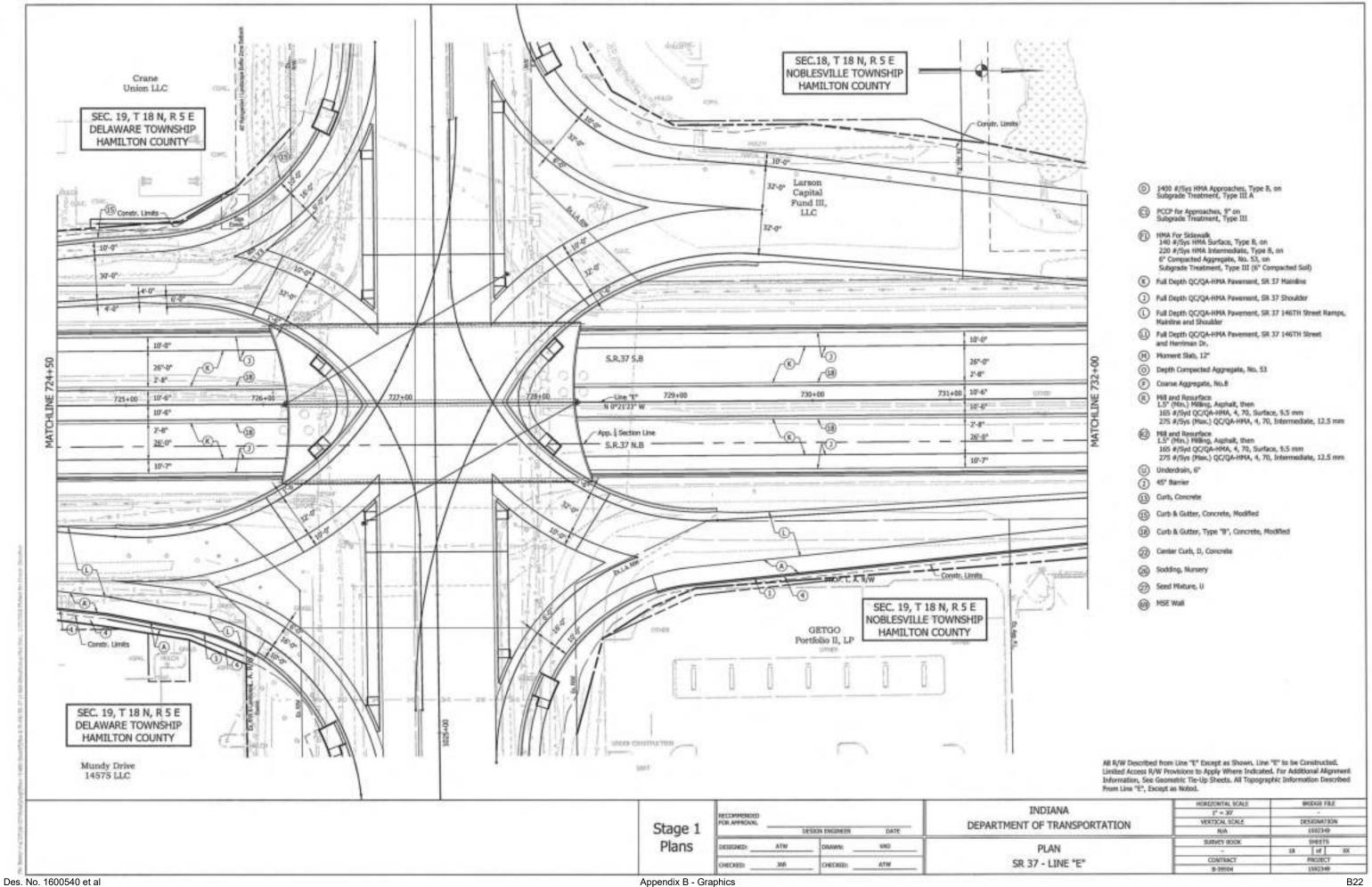


Des. No. 1600540 et al Des. No. 1600540

Appendix B - Graphics



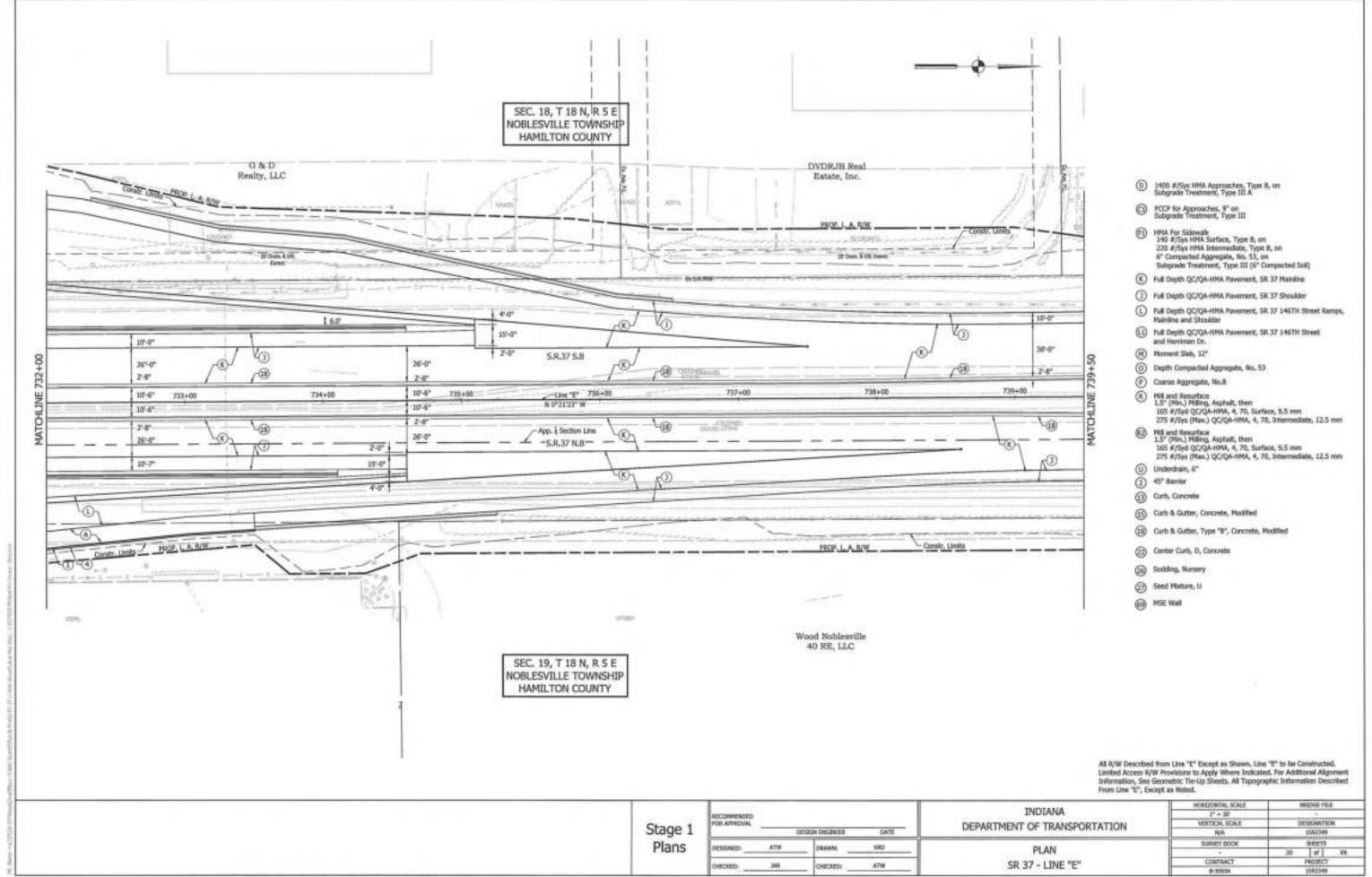
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Des. No. 1600540

Appendix B - Graphics Attachment 1

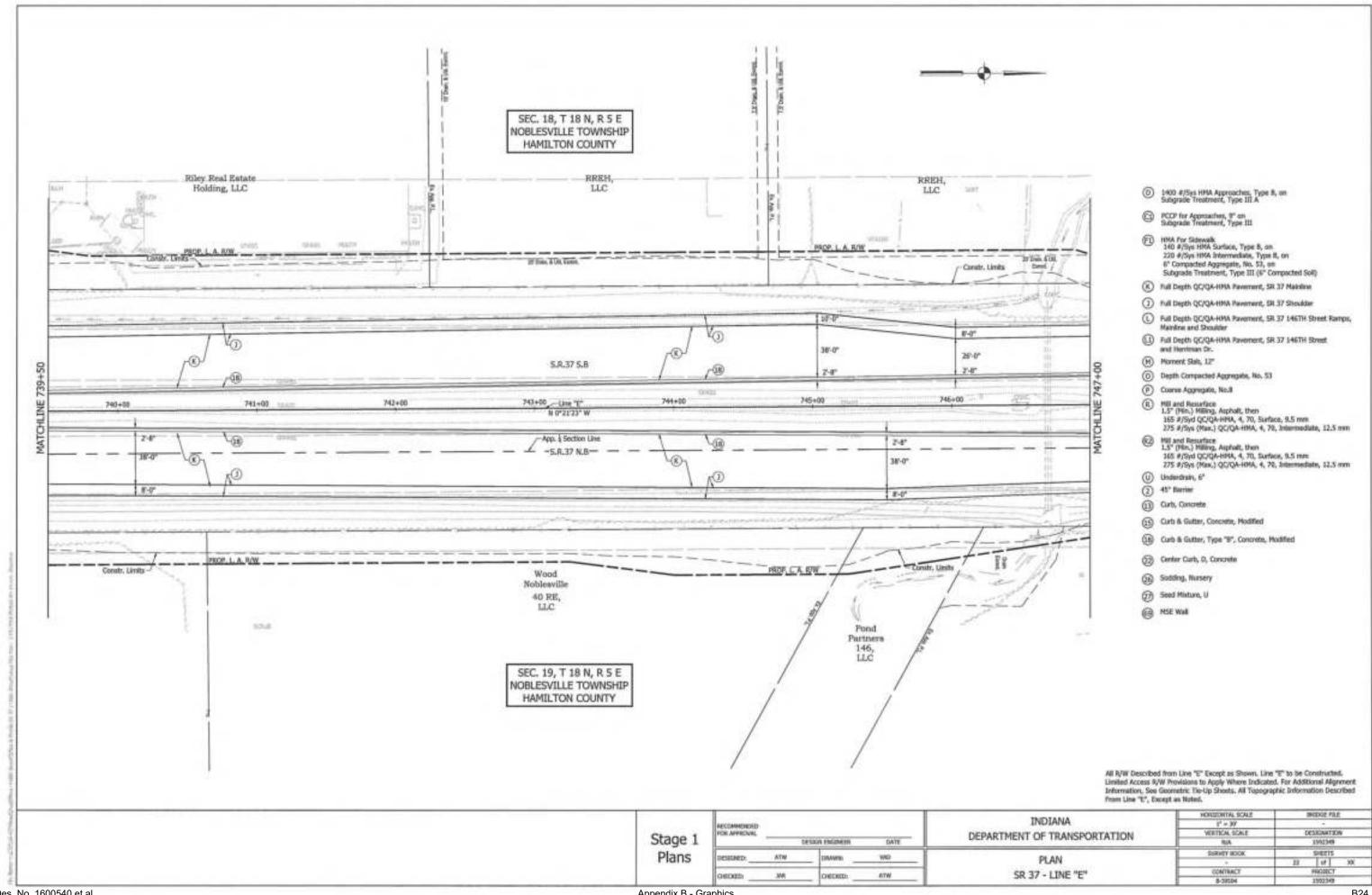
B22



Des. No. 1600540

Appendix B - Graphics

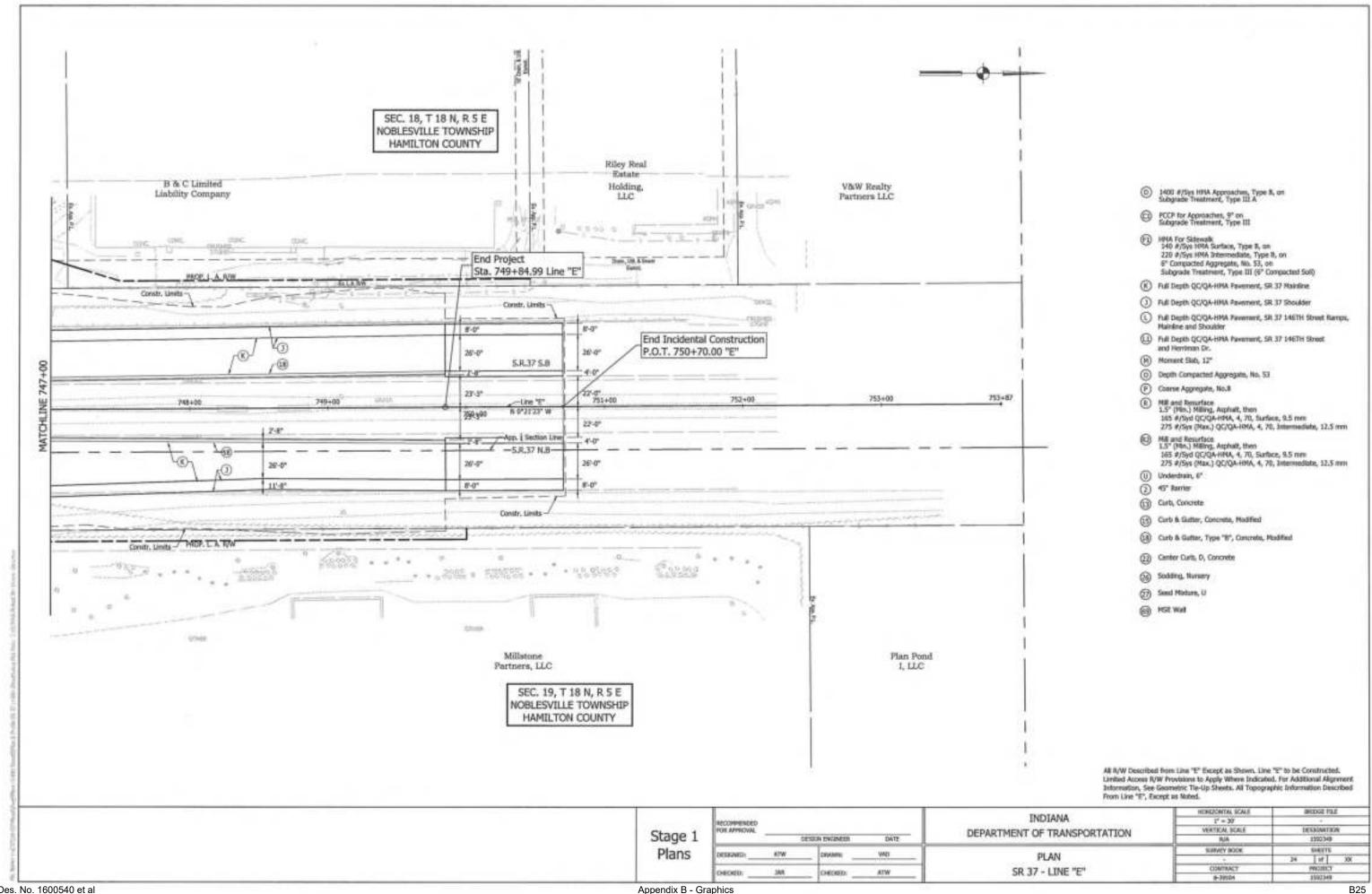
B23



Des. No. 1600540

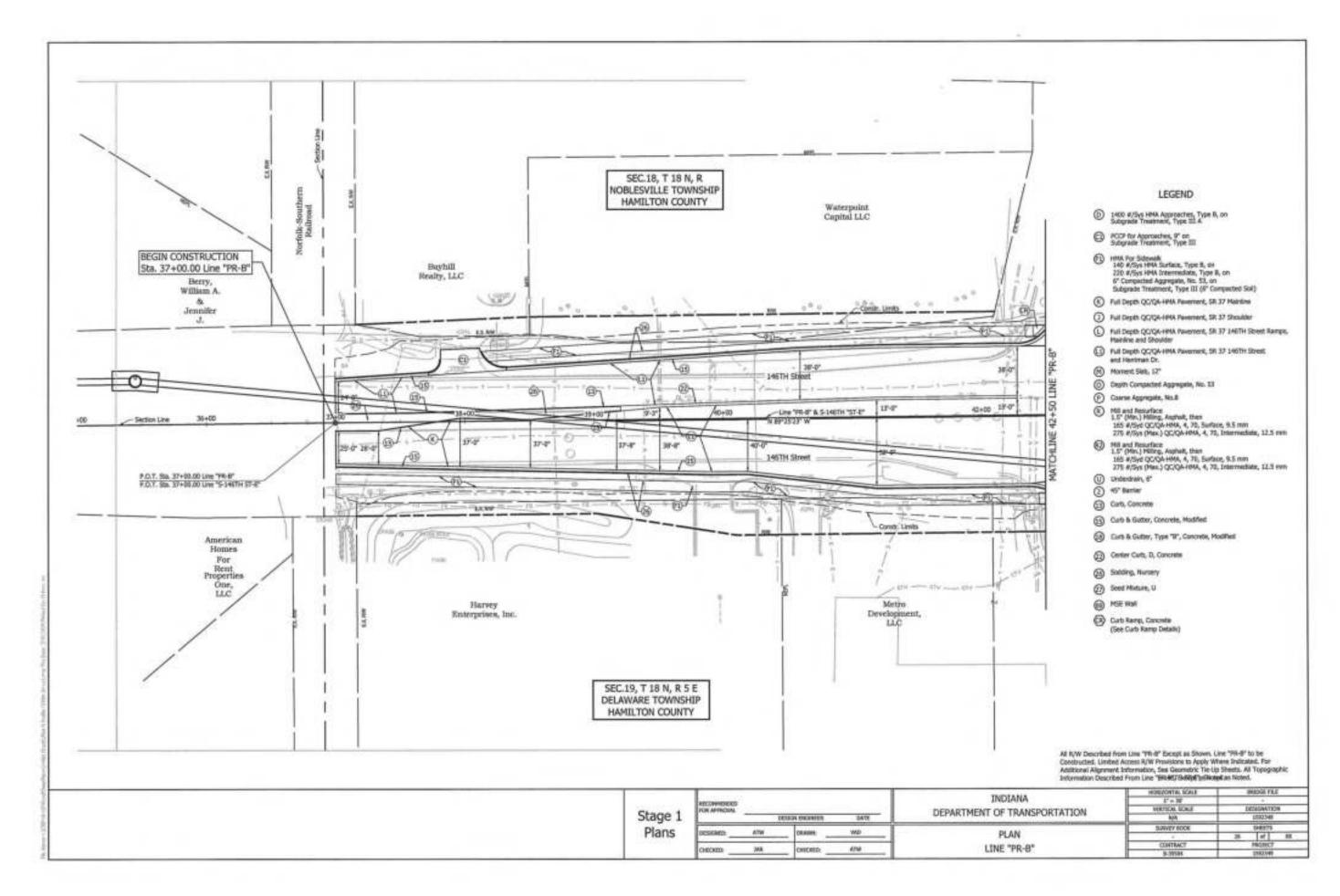
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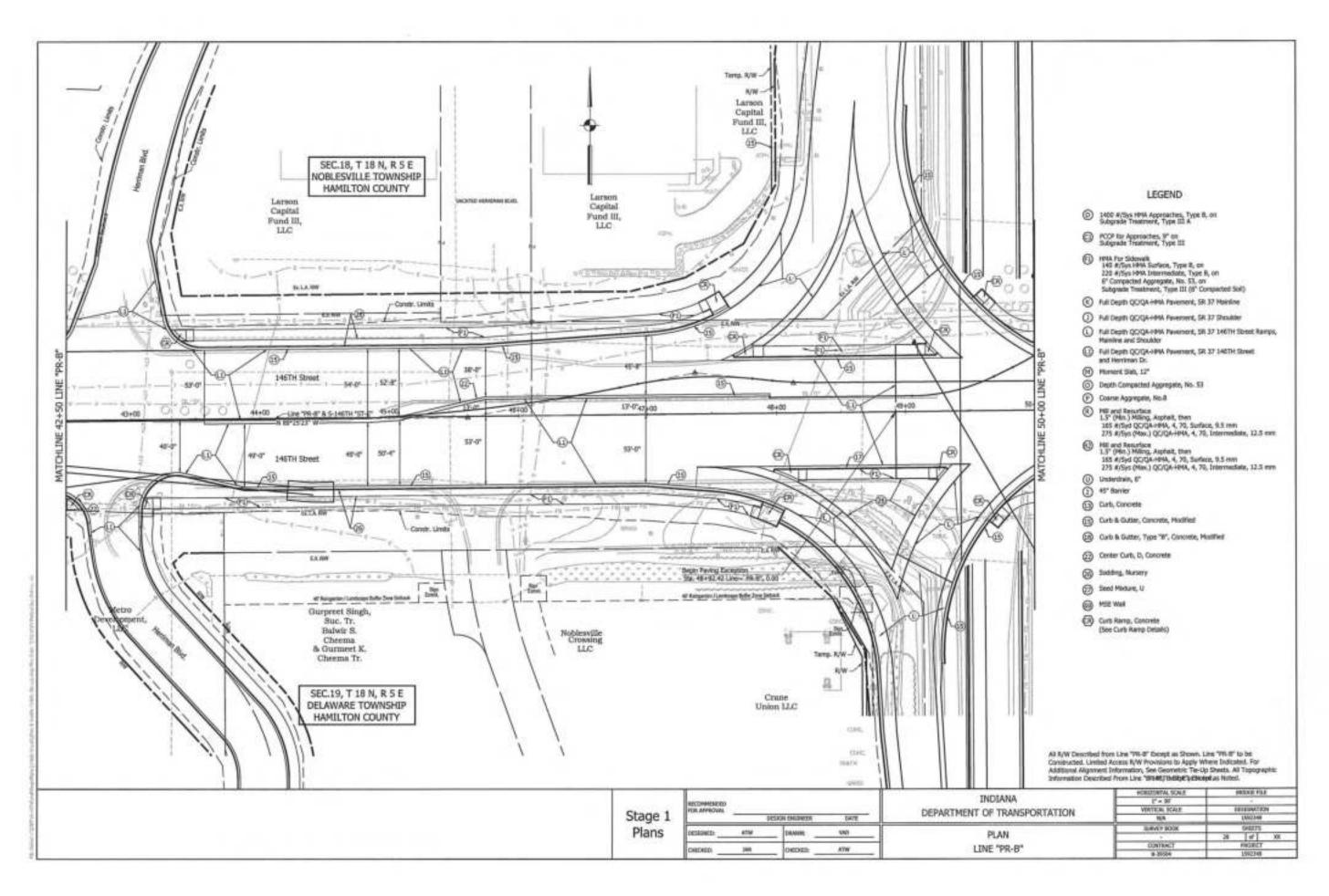
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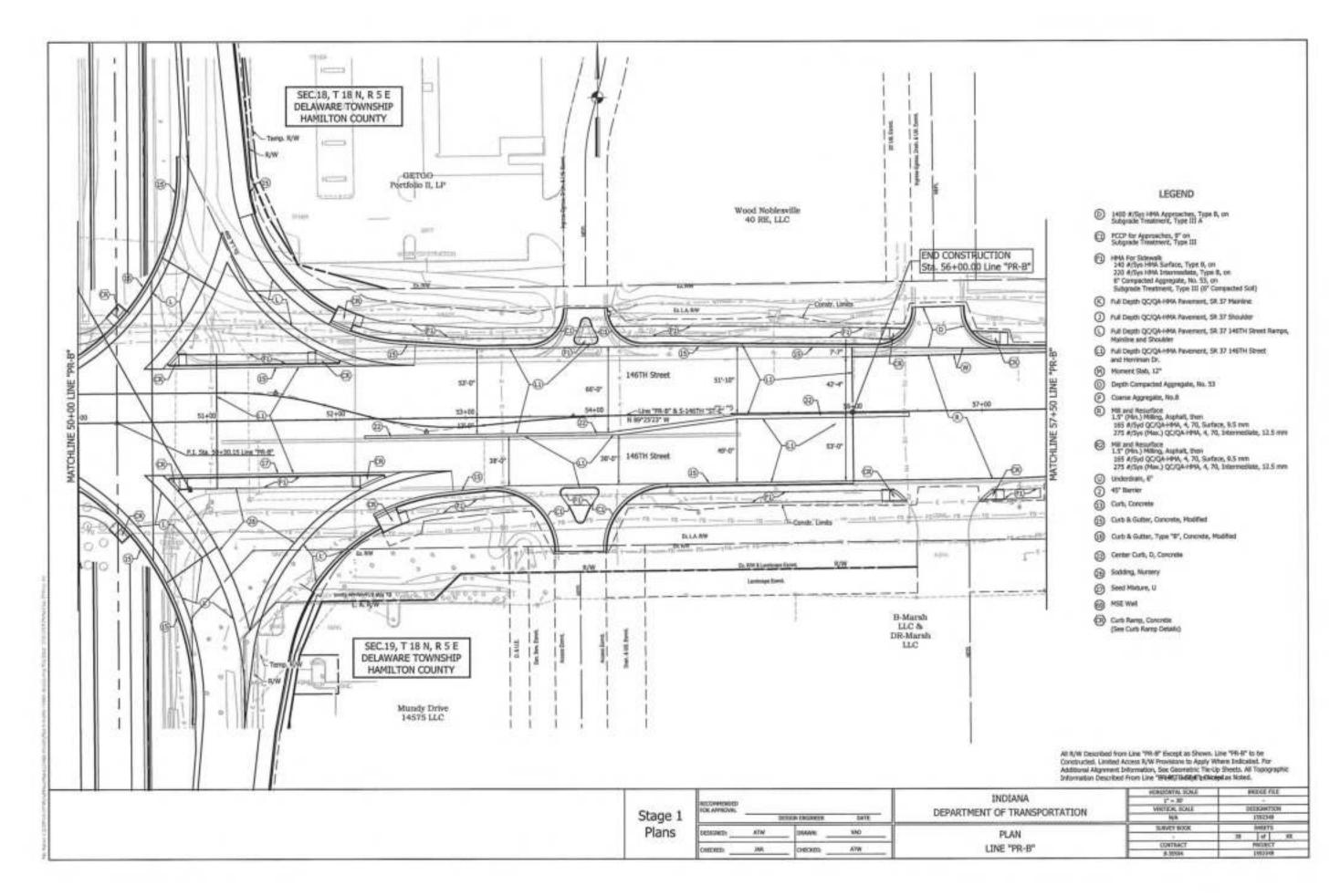


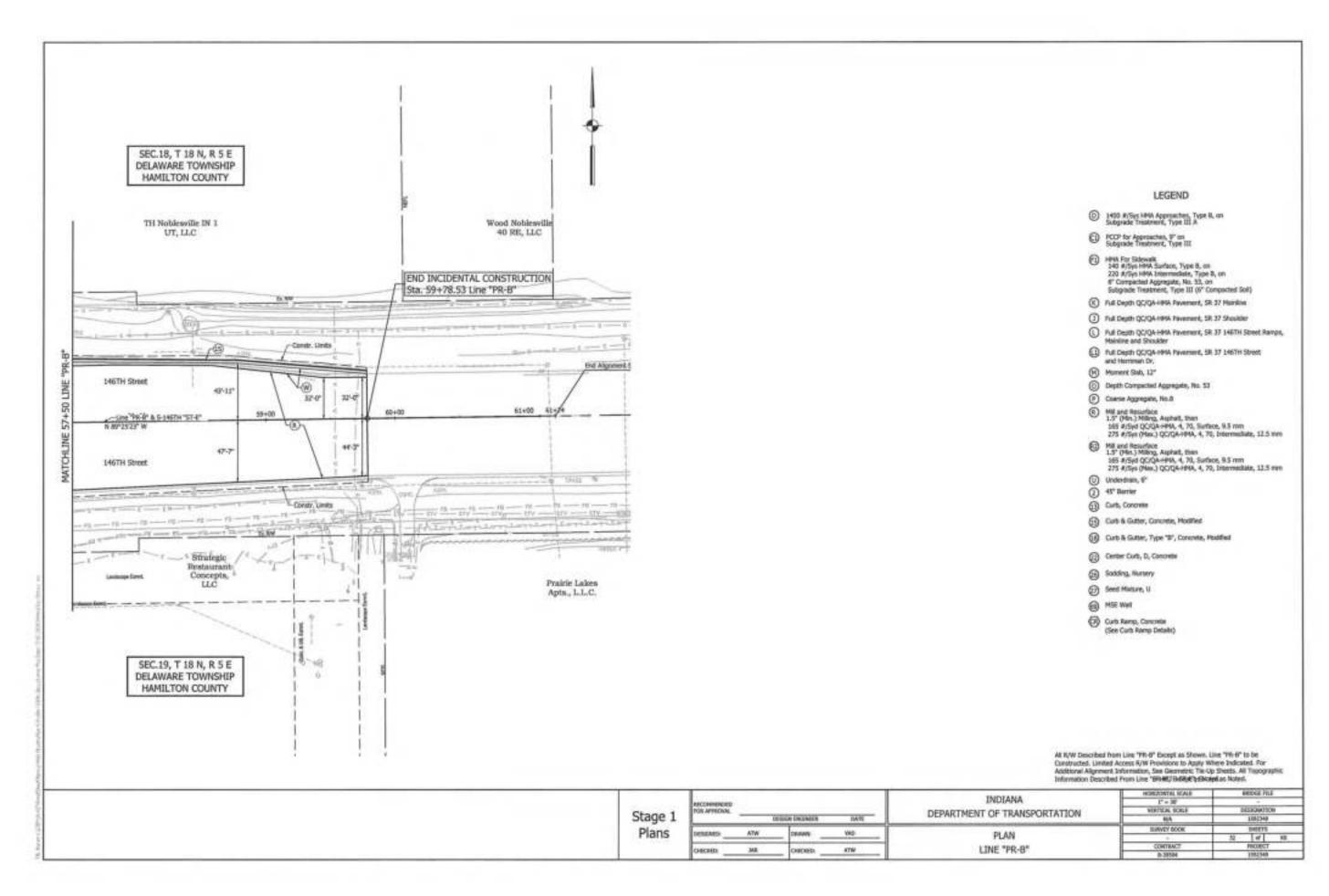
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Appendix B - Graphics



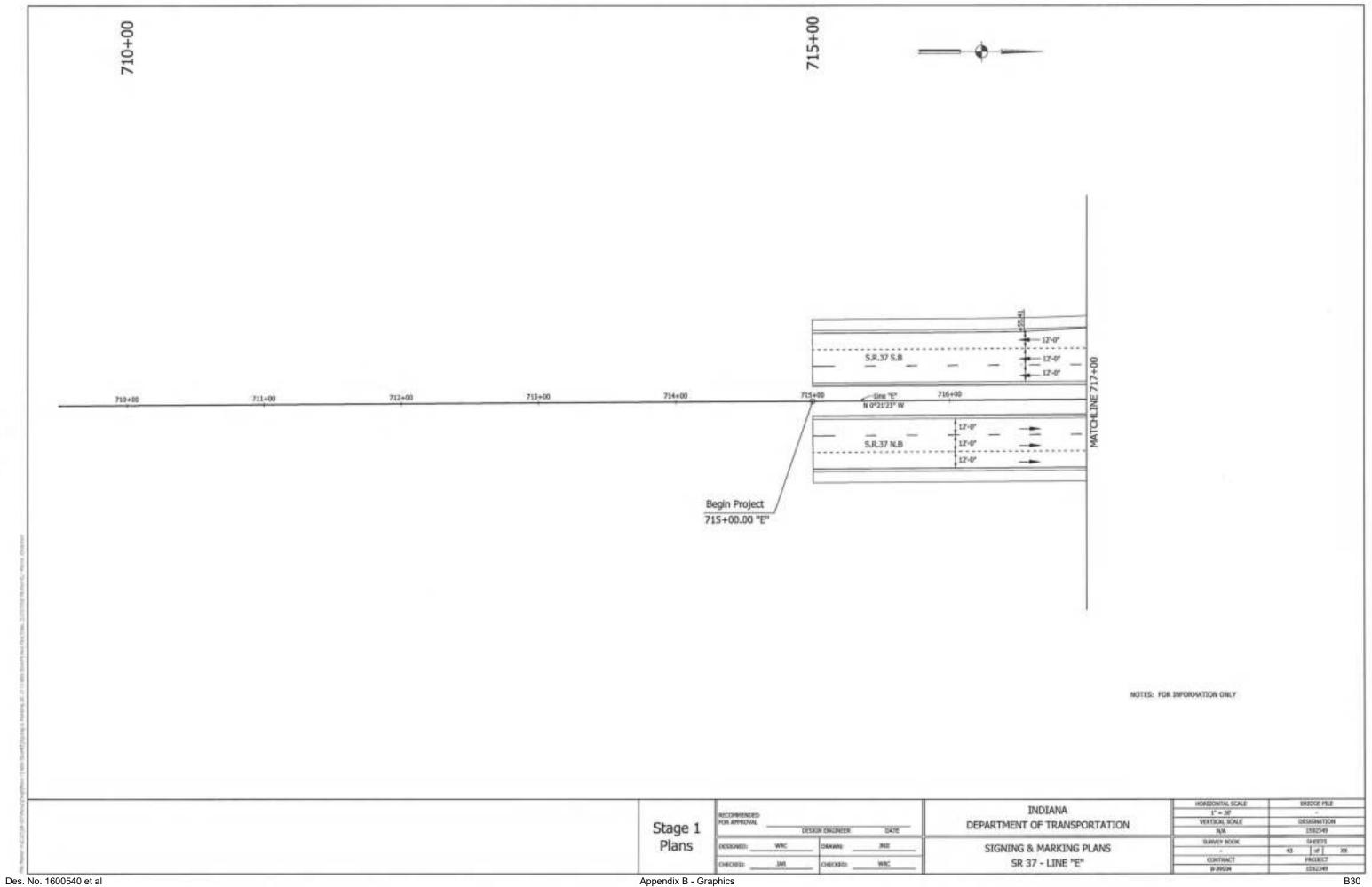






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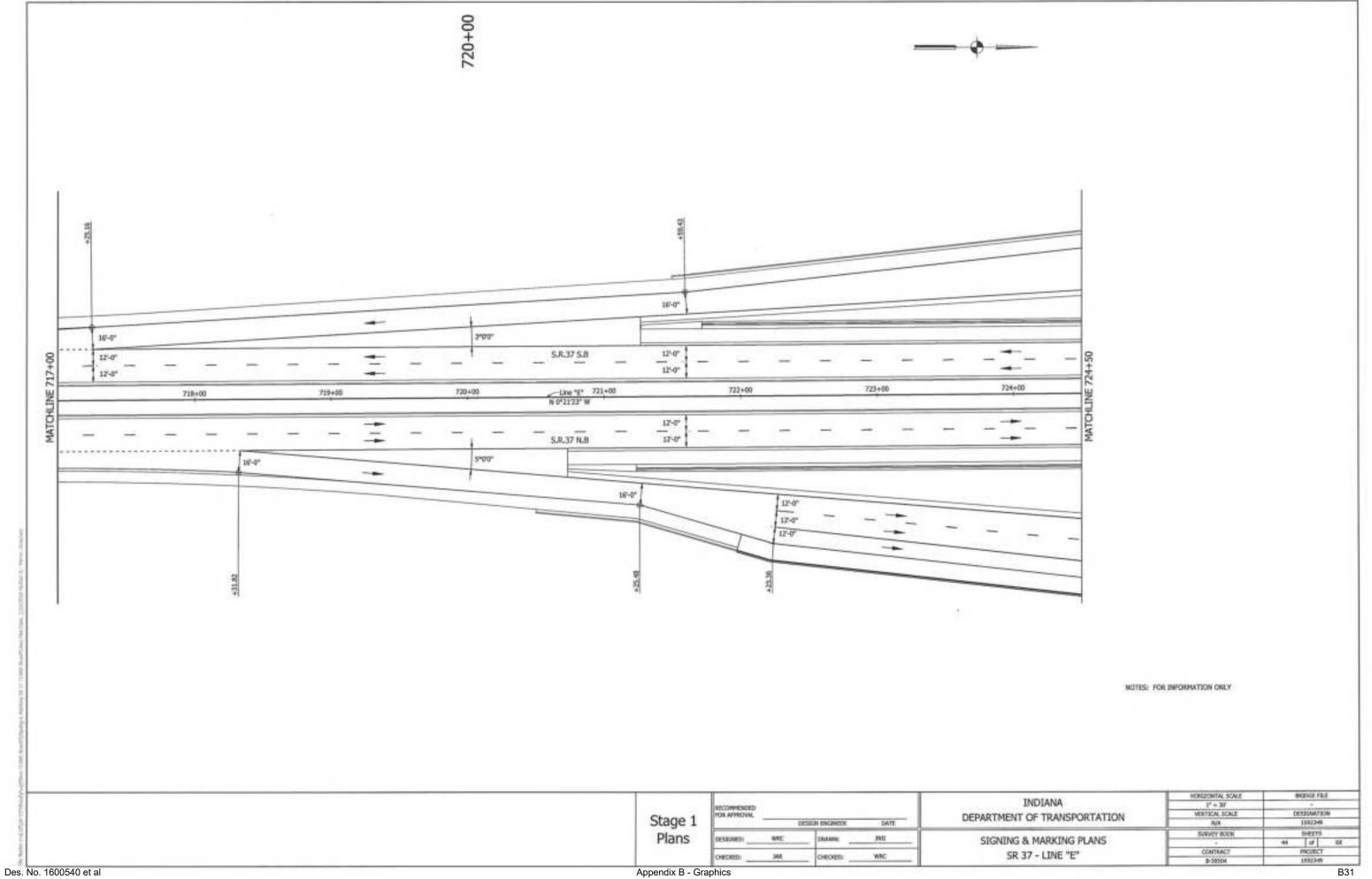
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Attachment 1



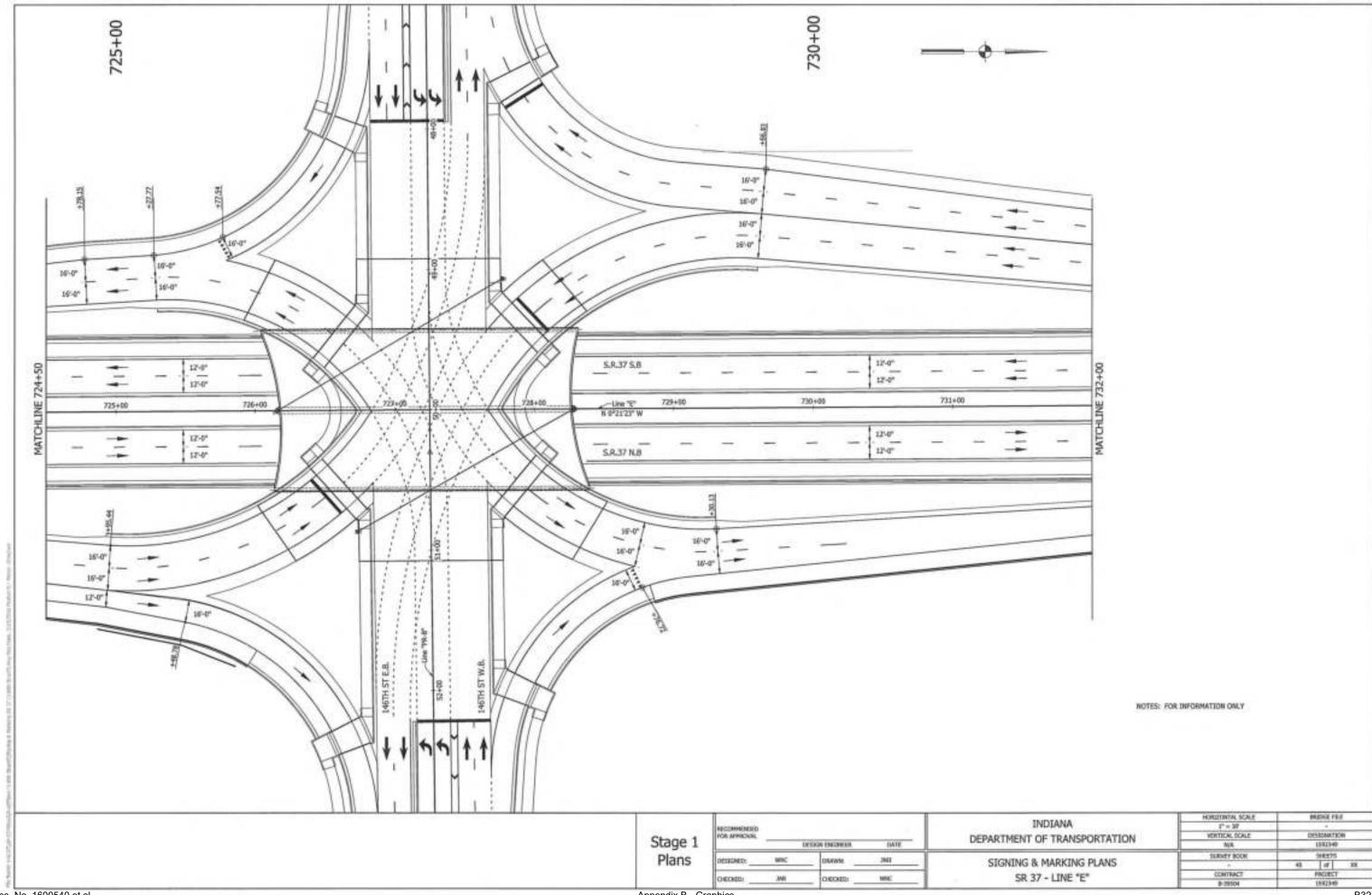
Appendix B - Graphics

Des. No. 1600540

Page 140



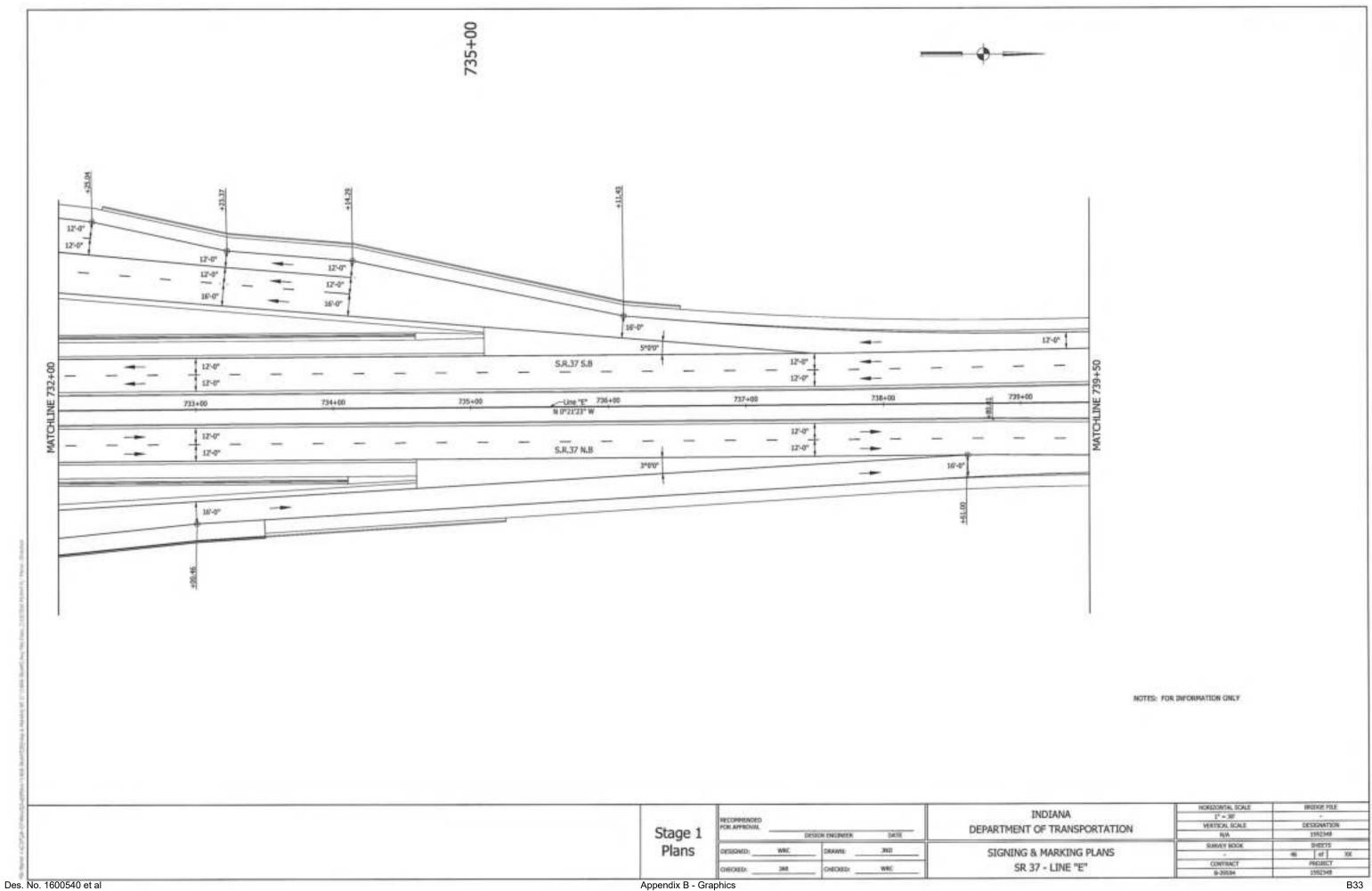
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Des. No. 1600540

Appendix B - Graphics

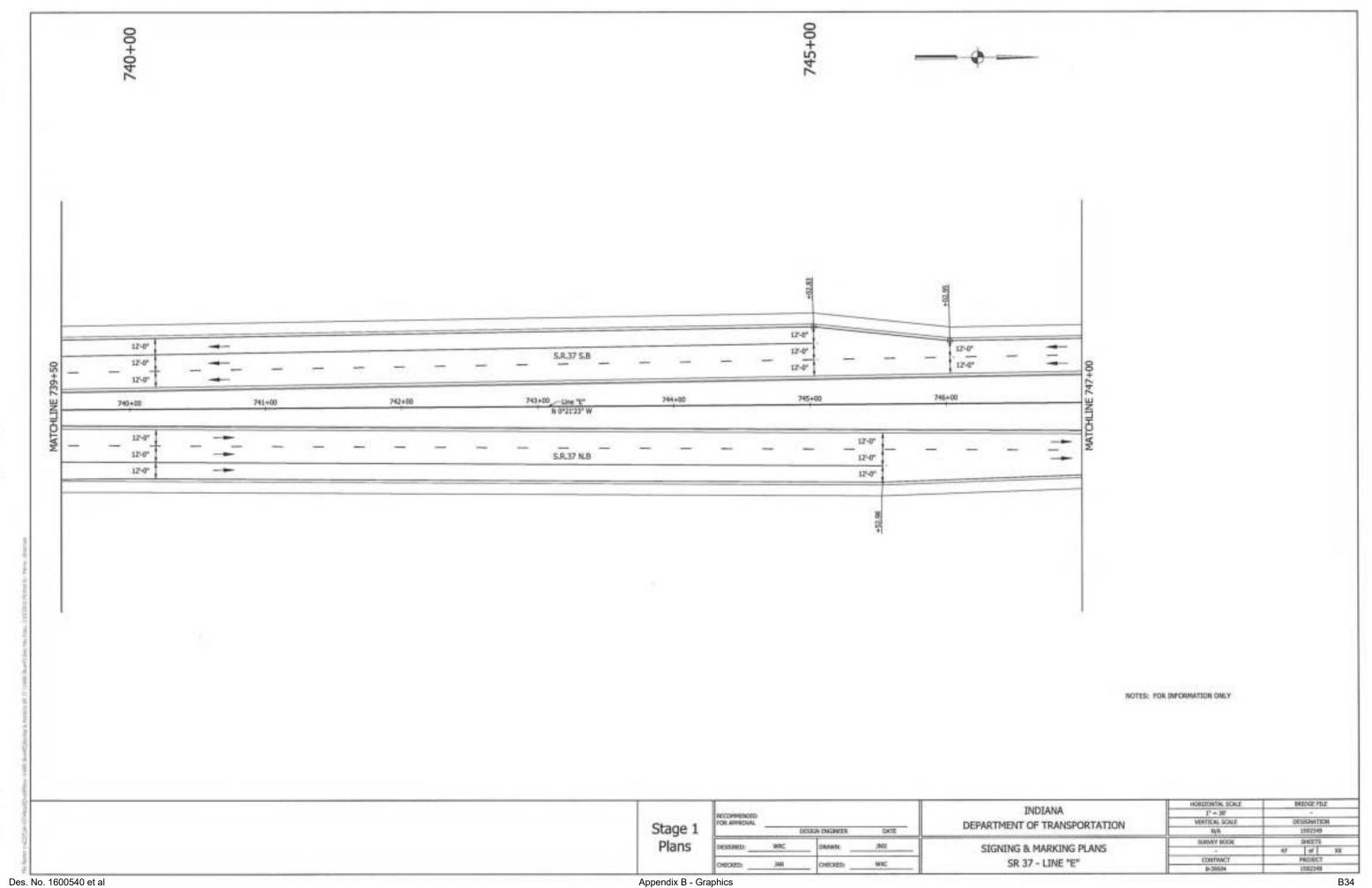
B32



Appendix B - Graphics

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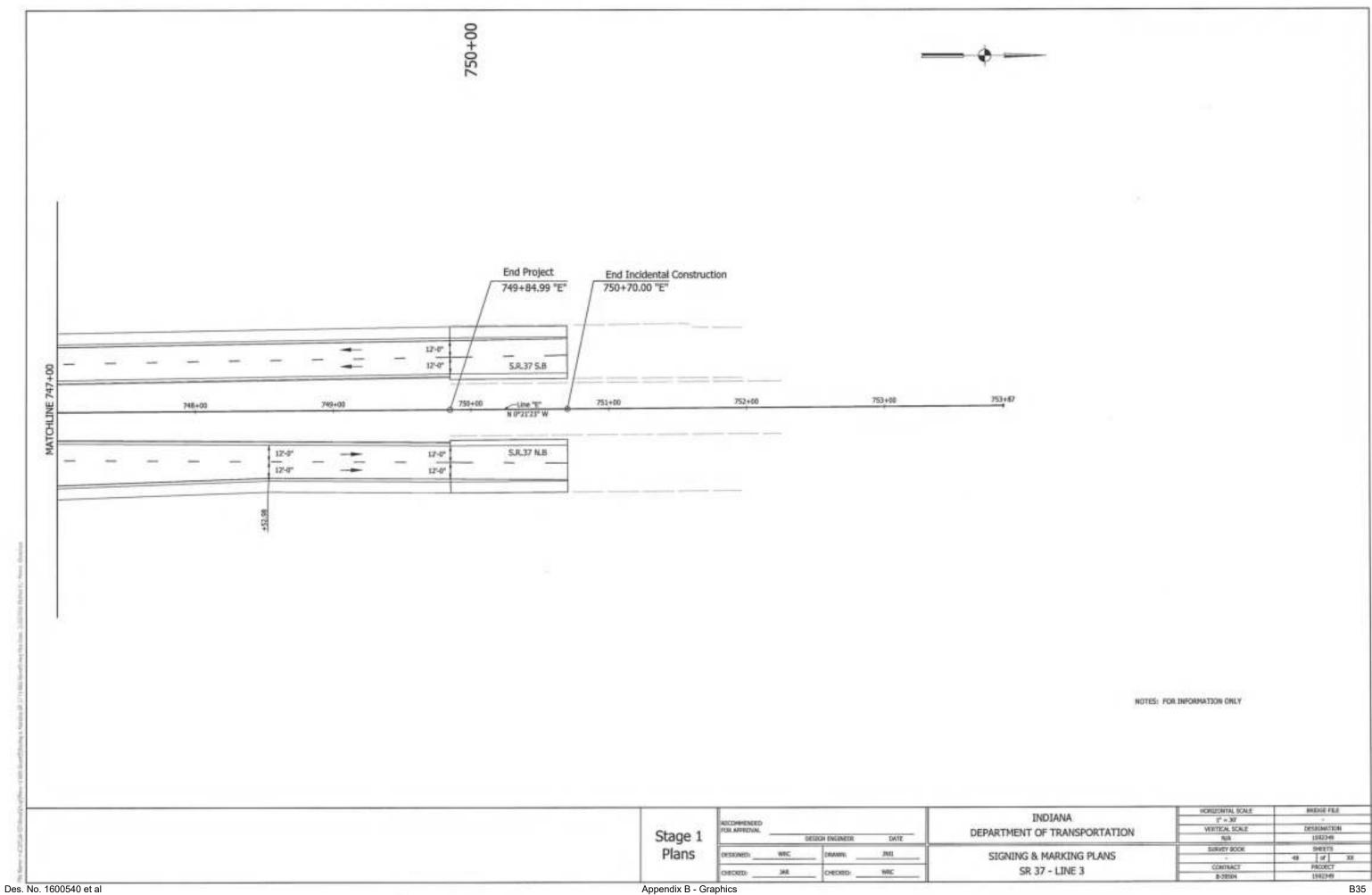
Page 143



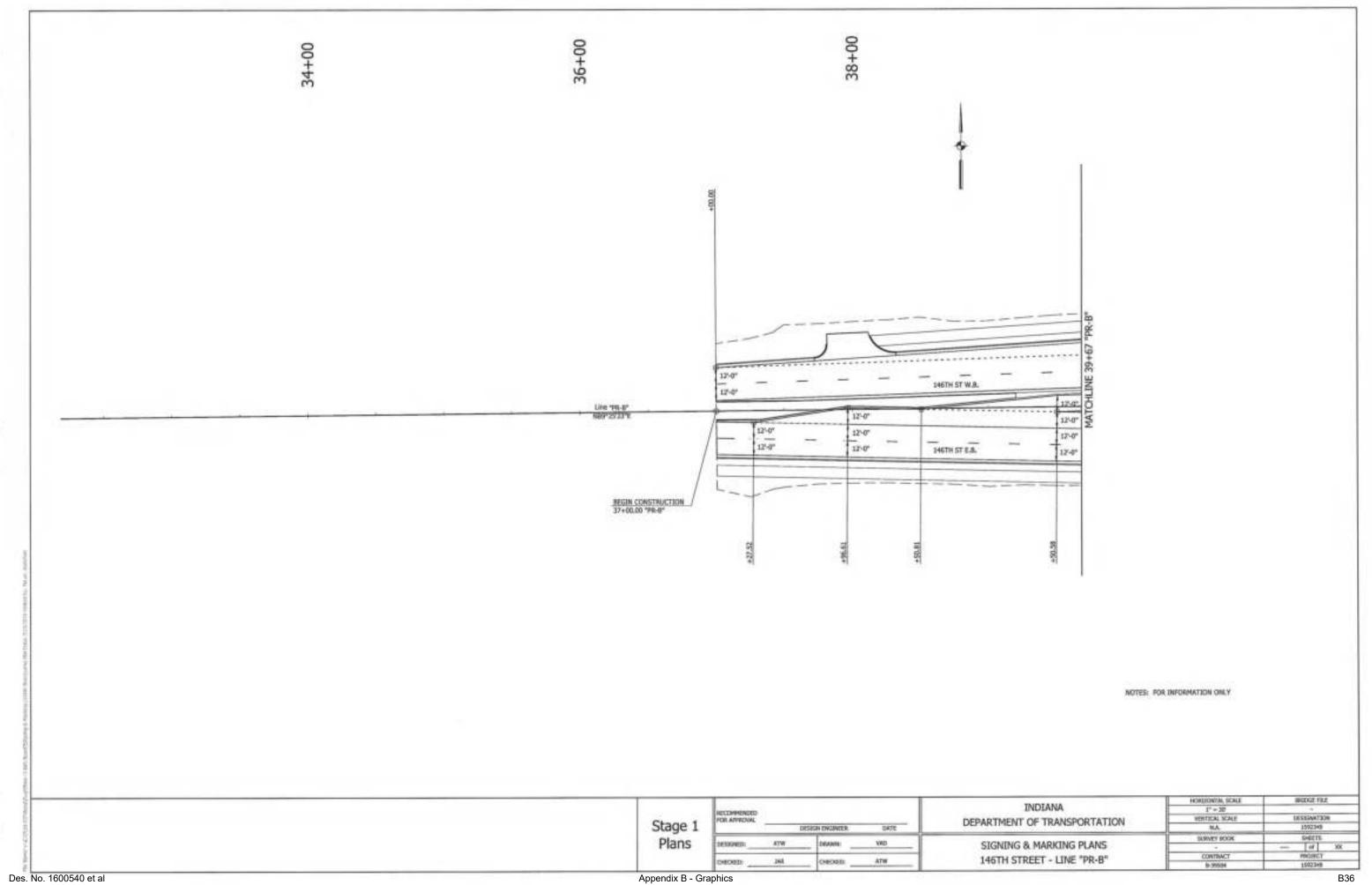
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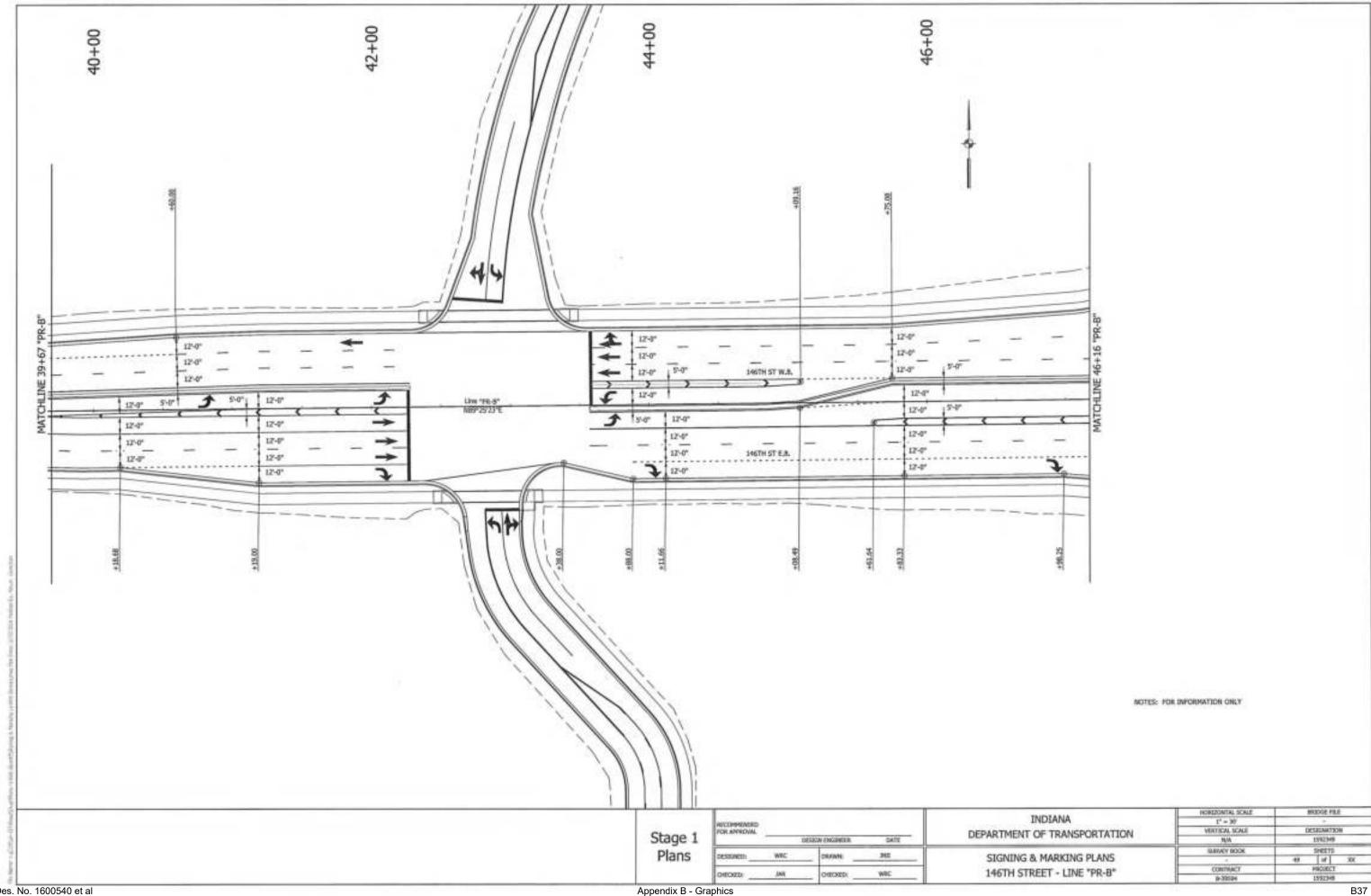
Page 144



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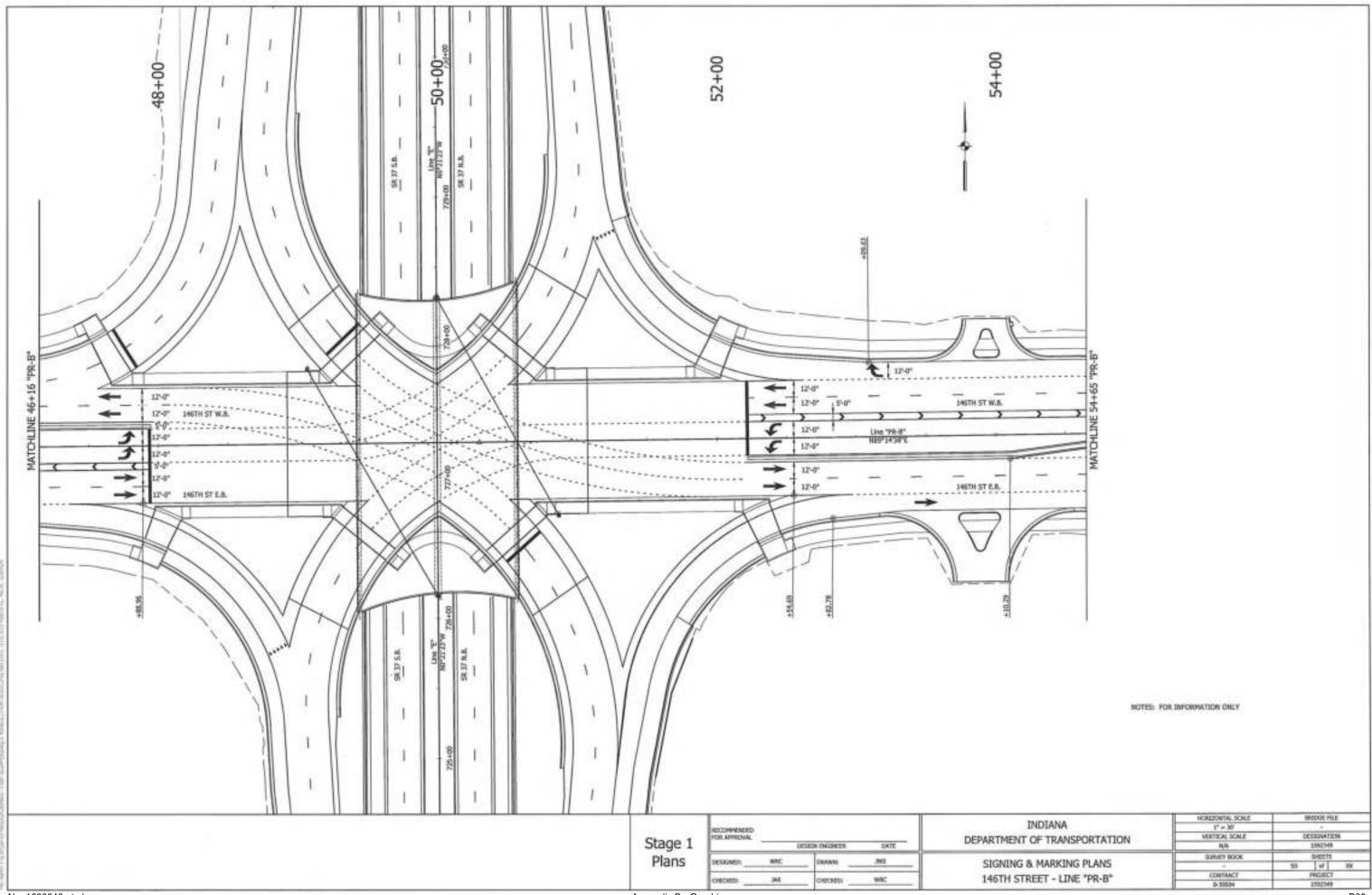


Des. No. 1600540



Des. No. 1600540

Appendix B - Graphics

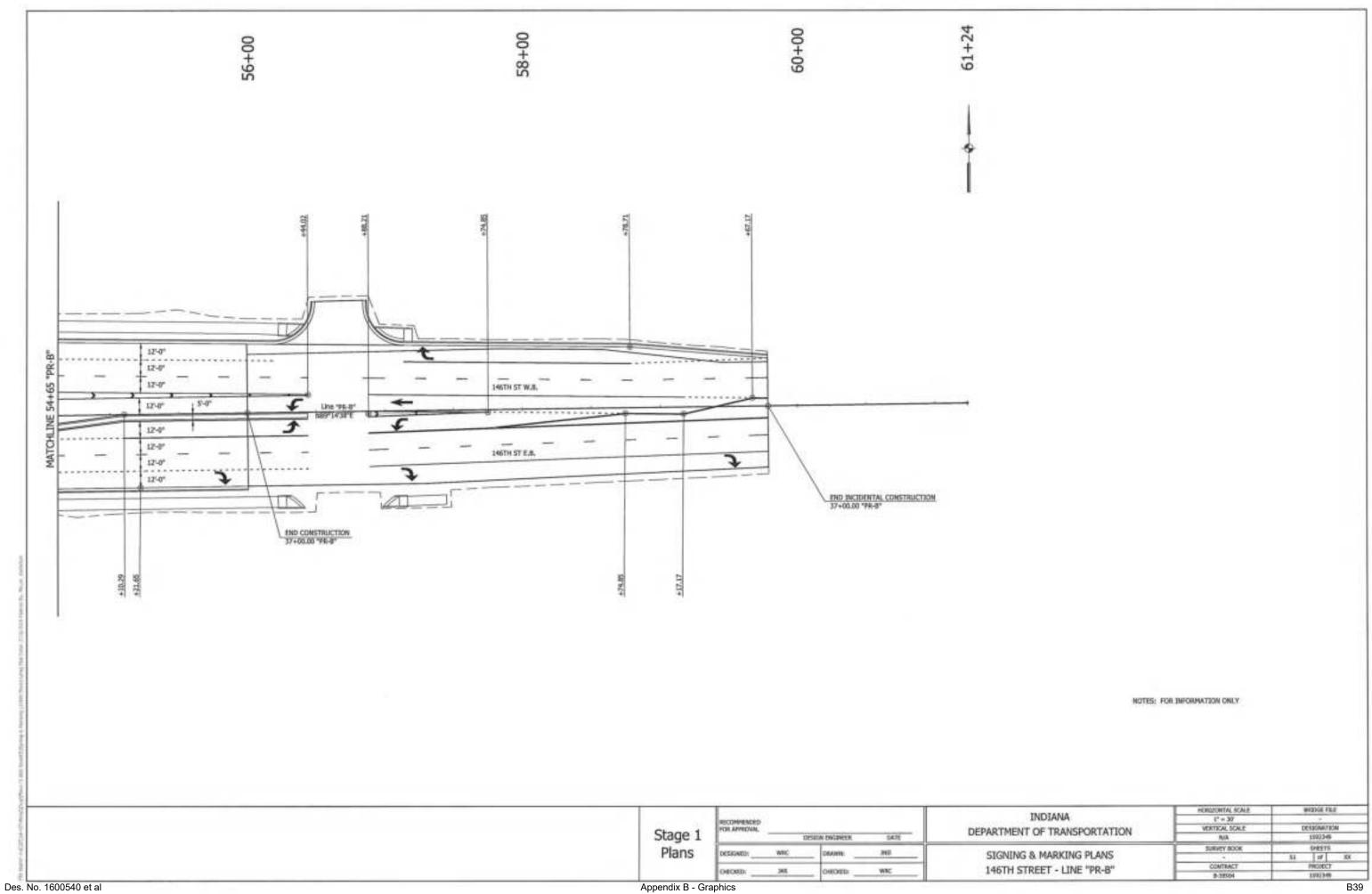


Des. No. 1600540

Attachment 1

Appendix B - Graphics

B38



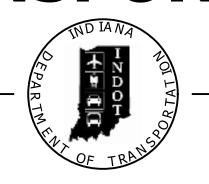
Appoilaix B Orap

Des. No. 1600540

Page 149

PROJECT	DESIGNATION	
1592345	1601831	
CONTRACT	BRIDGE FILE	
D 20072	NI/A	

## INDIANA DEPARTMENT OF TRANSPORTATION



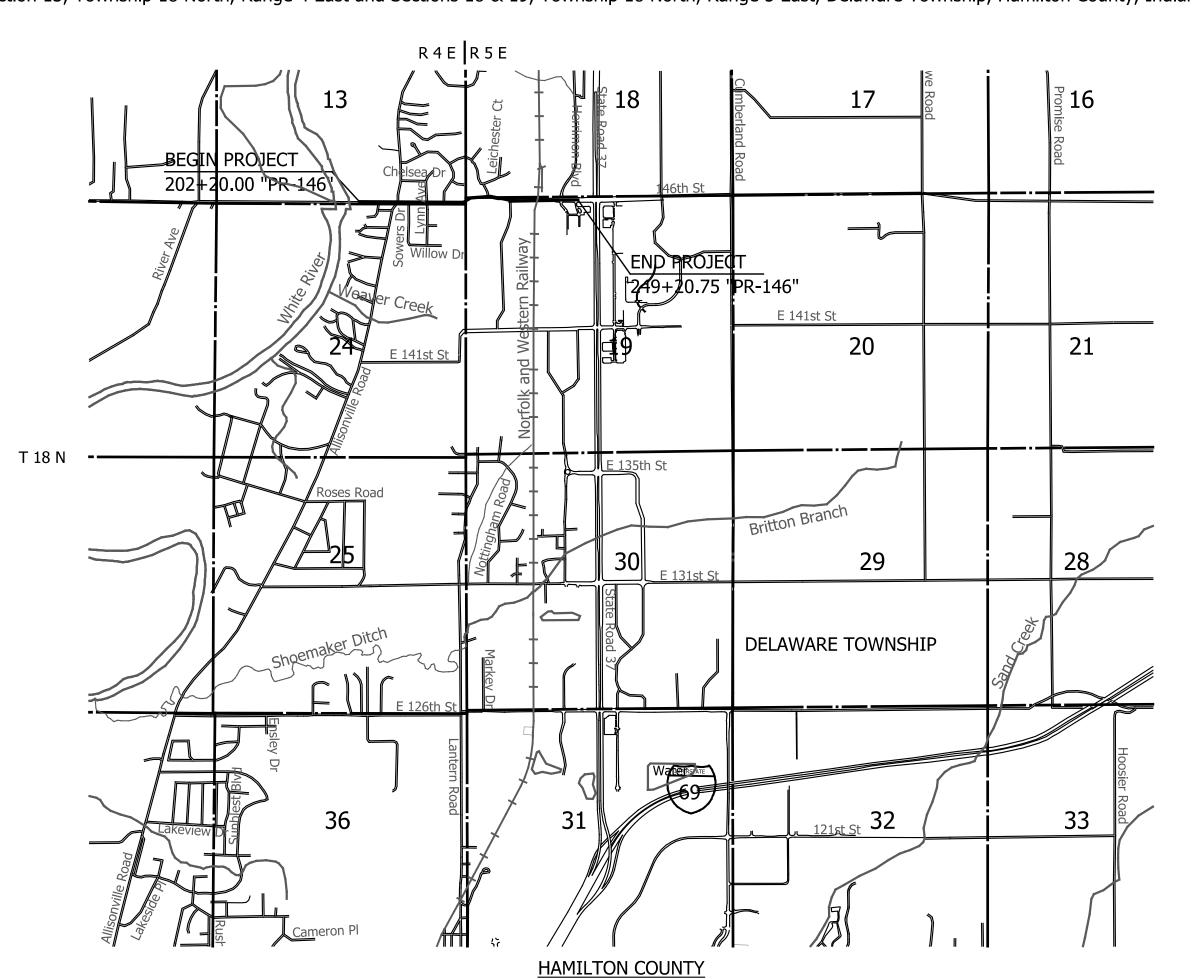
## ROAD PLANS

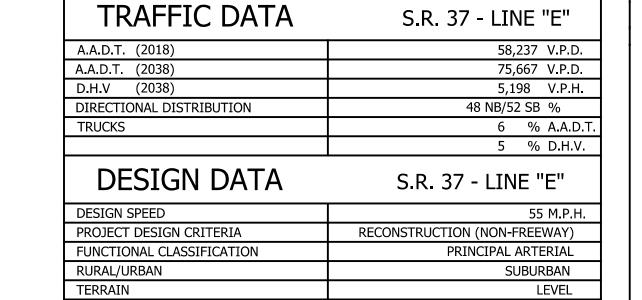
S.R. 37 NORTH DRAINAGE LINE RECONSTRUCTION

PROJECT NO.

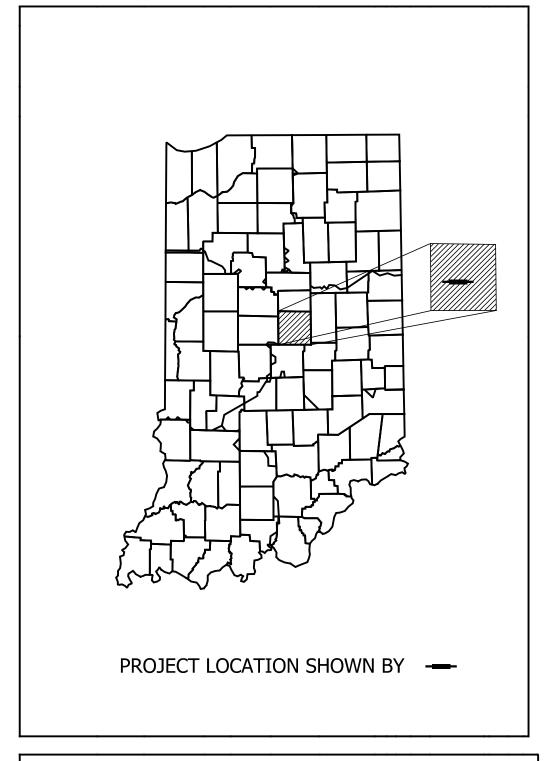
1601831 P.E. 1601831 R/W 1601831 CONST.

Advanced storm sewer construction for S.R. 37 beginning approx. 5,264 feet West of the Intersection of S.R. 37 and 146th Street,
Thence Easterly Approx. 4,700 feet long Line "PR-146" to approx. 564 feet West of the Intersection of S.R. 37 and 146th Street,
All in Section 13, Township 18 North, Range 4 East and Sections 18 & 19, Township 18 North, Range 5 East, Delaware Township, Hamilton County, Indiana





ACCESS CONTROL



LATITUDE: 40°00'03" N LONGITUDE: 86°00'32" W

Gross Length: 0.89 MI.

Net Length: 0.89 MI.

Maximum Grade: 6.25 %

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2018 TO BE USED WITH THESE PLANS.

	BRIDGE FILE N/A	
	DESIGNATION	
	1601831	
SURVEY BOOK	SHEETS	
N/A	1 of 31	
CONTRACT	PROJECT	
B-39873	1601831	
	D 10	

## ERAD37 IMPROVEMENT PROJECT



CITY OF FISHERS	
Scott Fadness, Mayor	Date
Jeff Hill, Director of Engineering	Date

AMERICAN STRUCTUREPOINT INC.

Des. No. 1600540 et al 3/16/2018

Des. No. 1600540 et. al.

7260 SHADELAND STATION INDIANAPOLIS, IN 46256-3957 FEL 317.547.5580 FAX 317.543.0270 www.structurepoint.com PLANS
PREPARED BY:

American Structurepoint, Inc.

CERTIFIED BY:

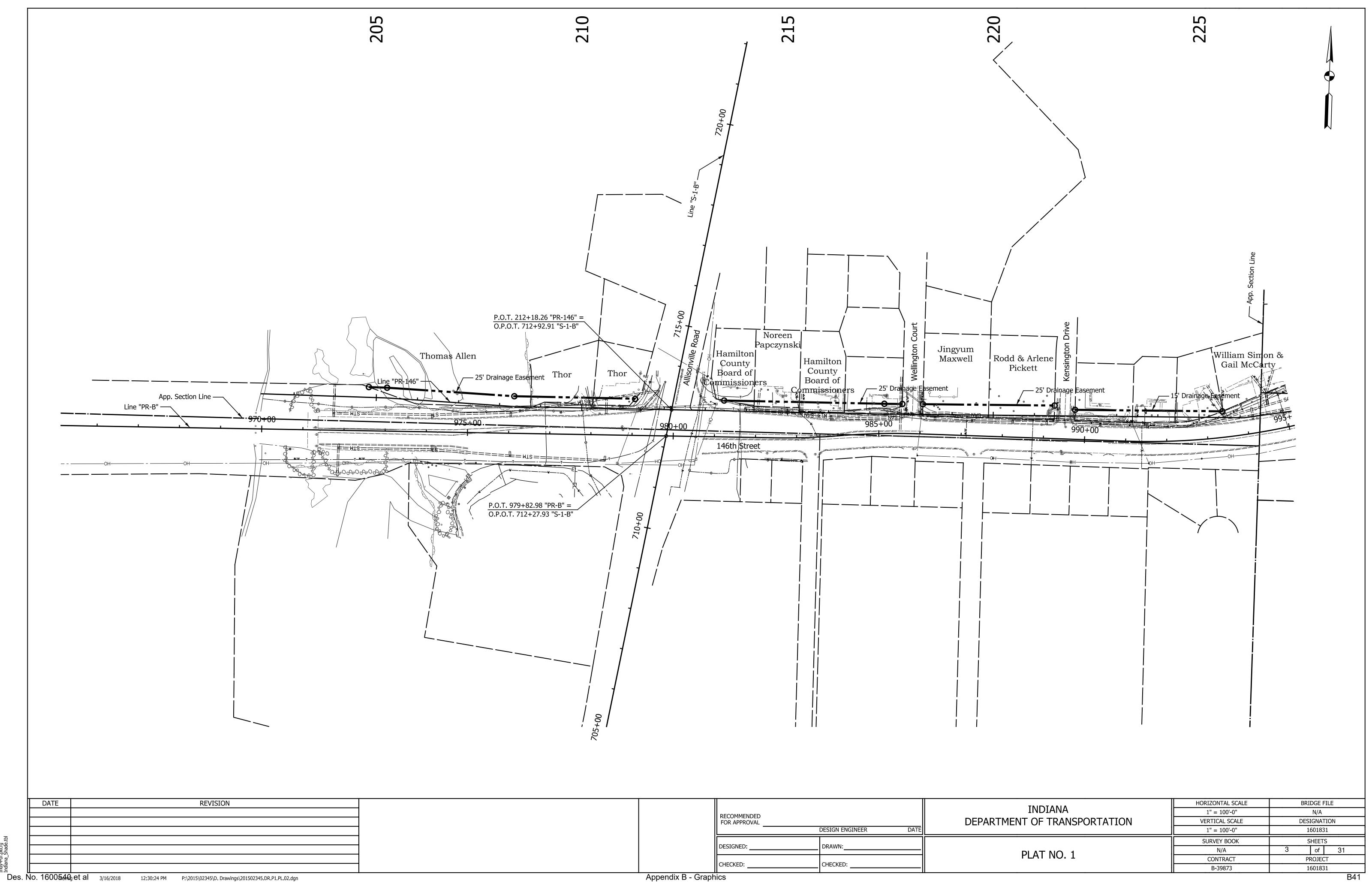
APPROVED
FOR LETTING:

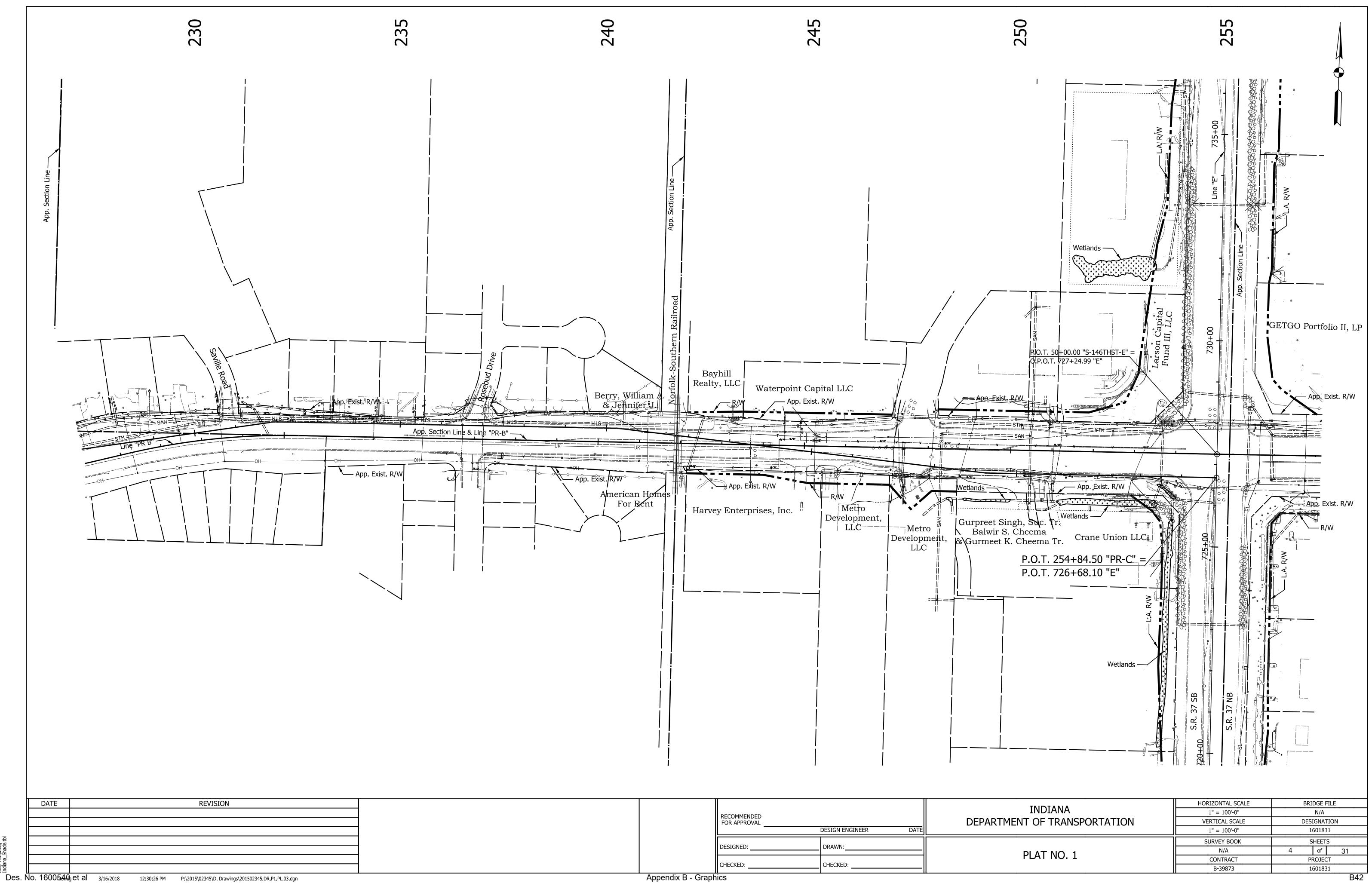
INDIANA DEPARTMENT OF TRANSPORTATION

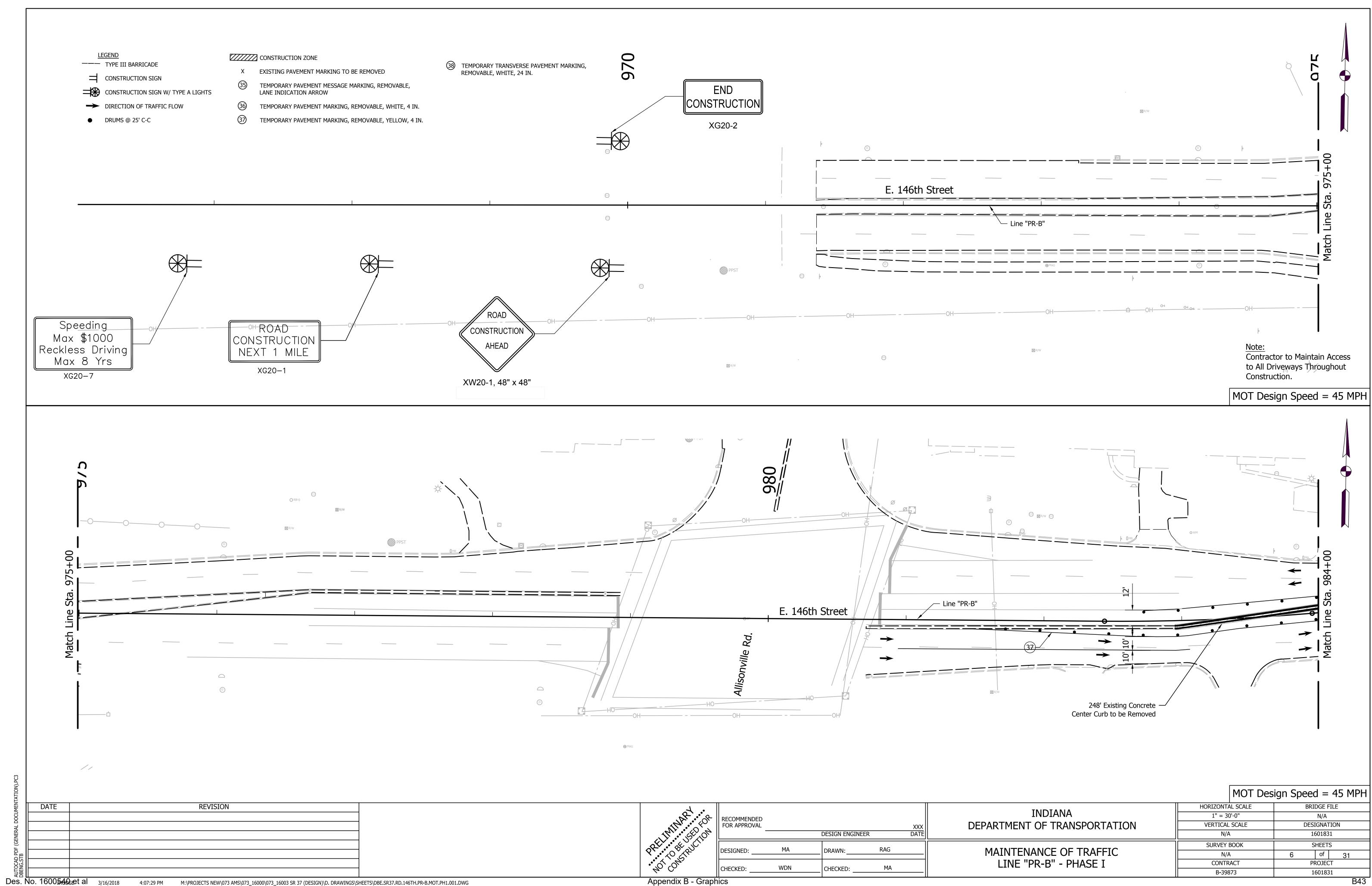
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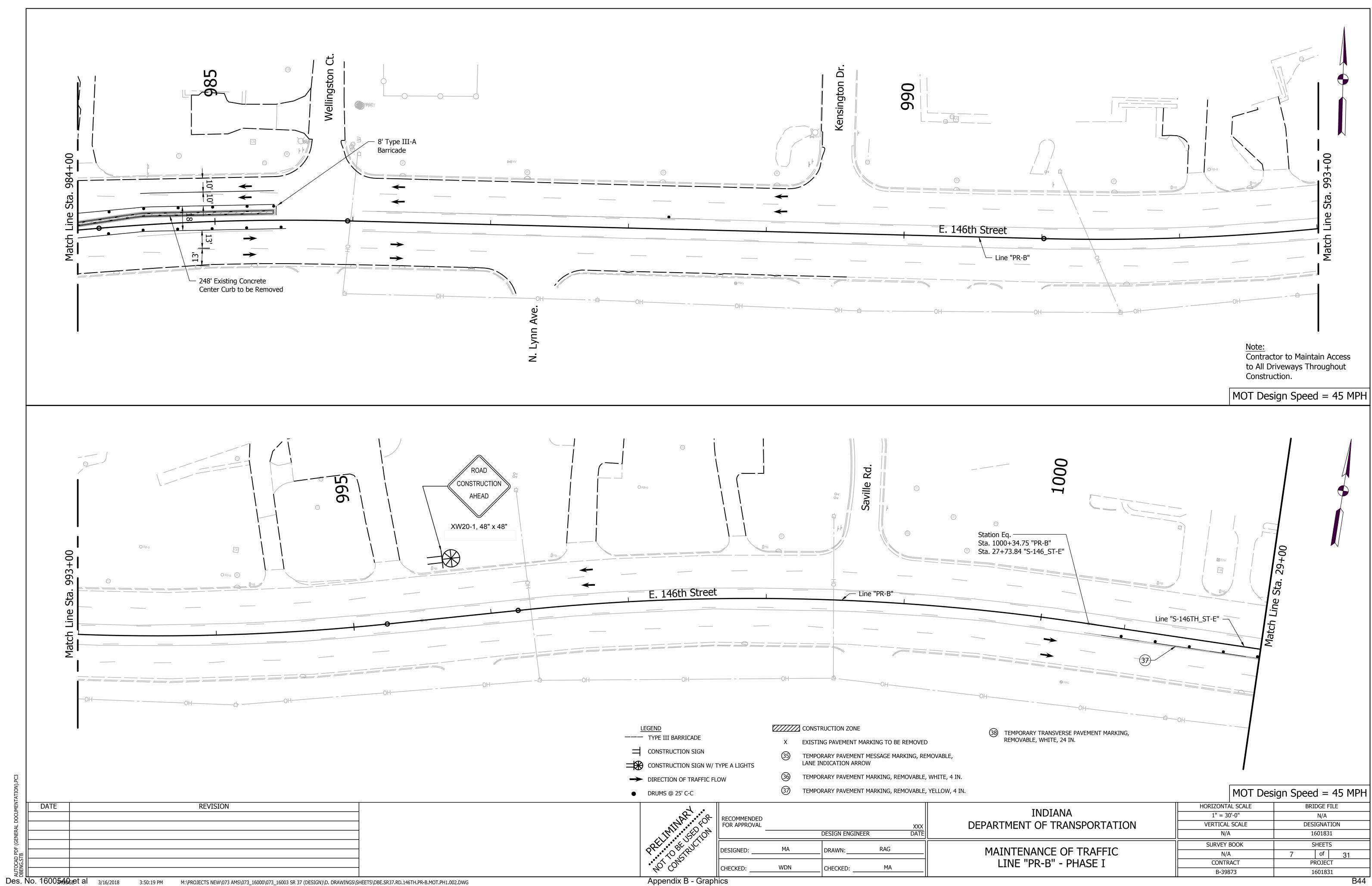
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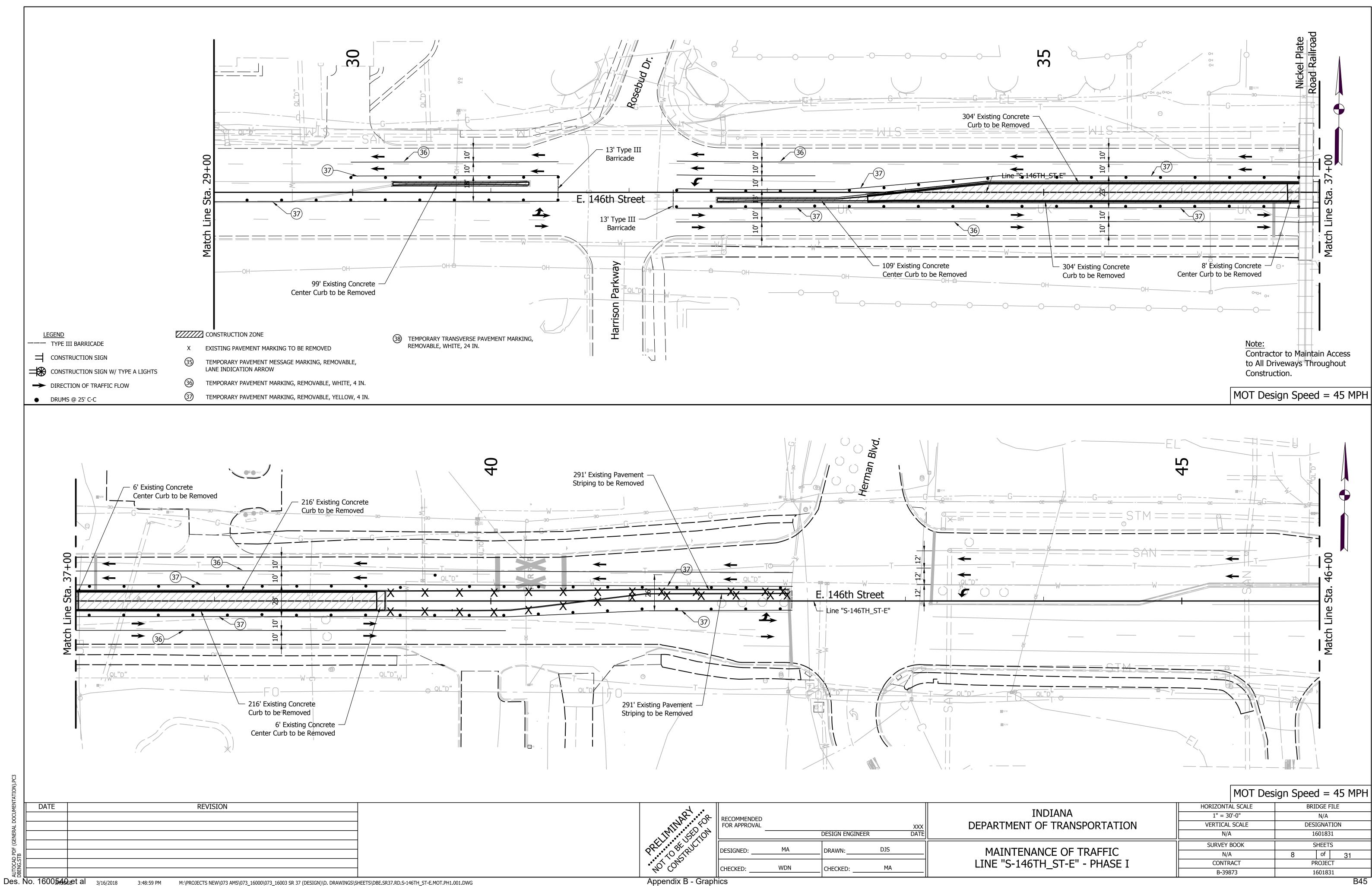
Appendix B - Graphics





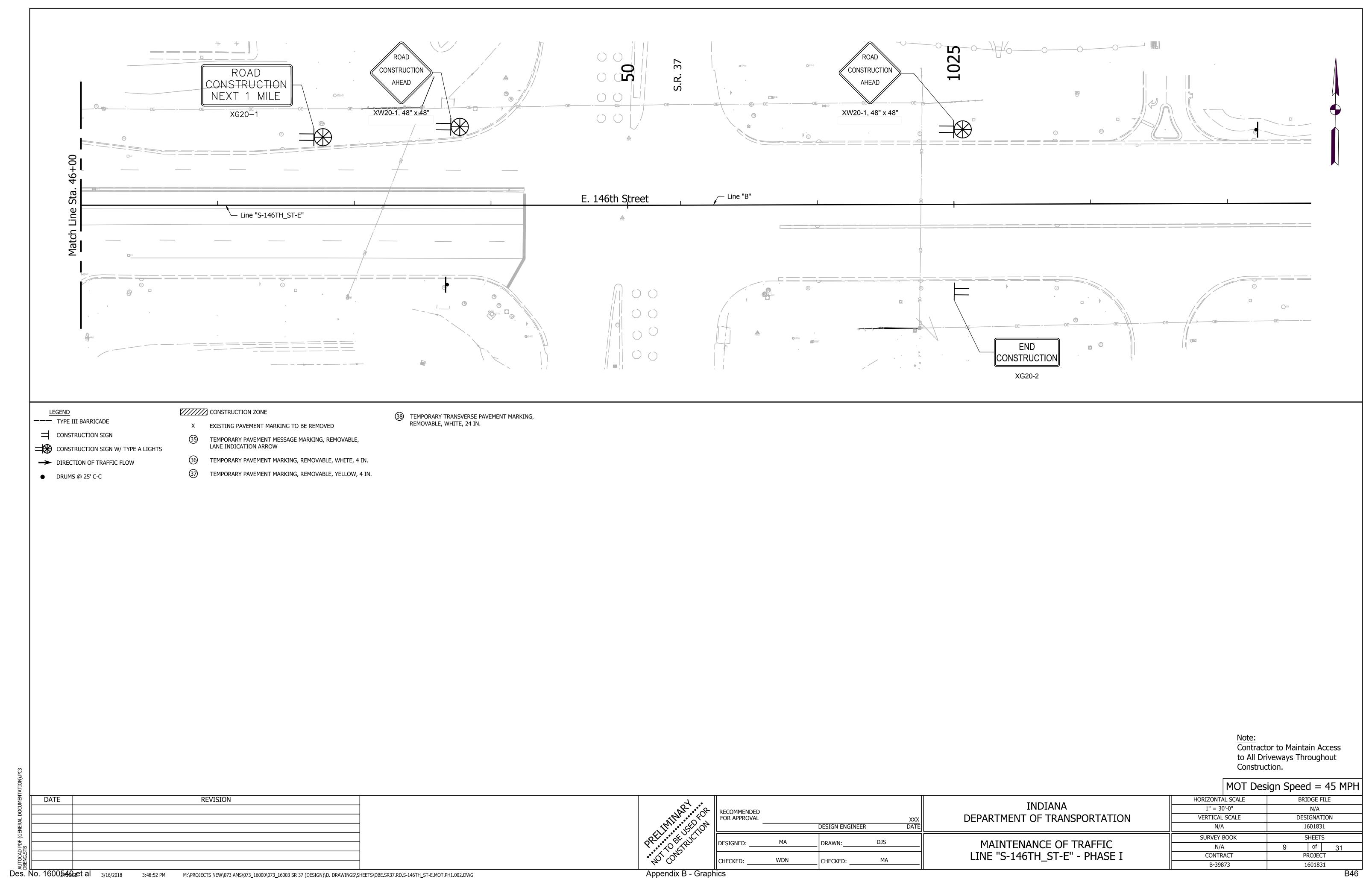




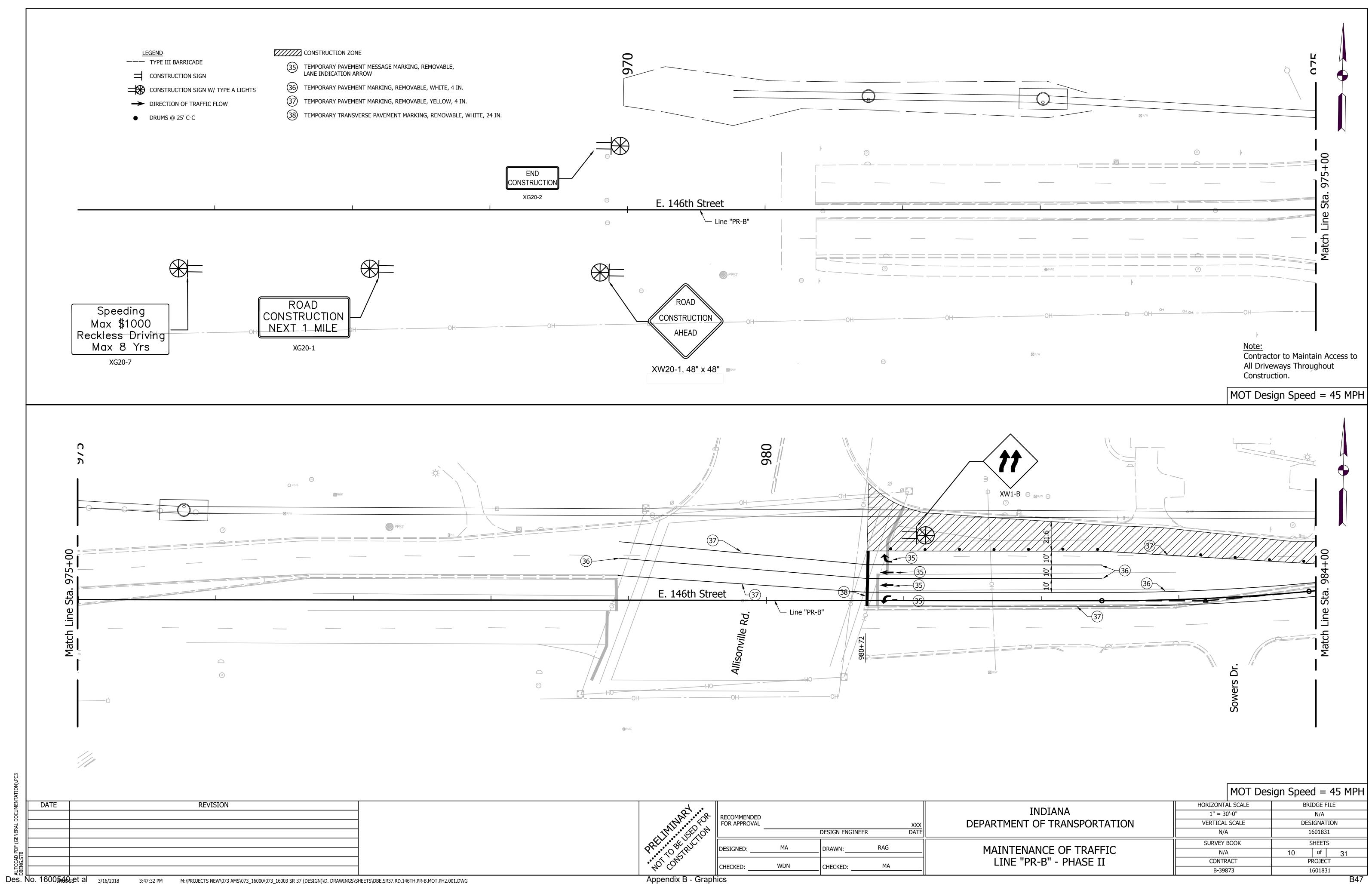


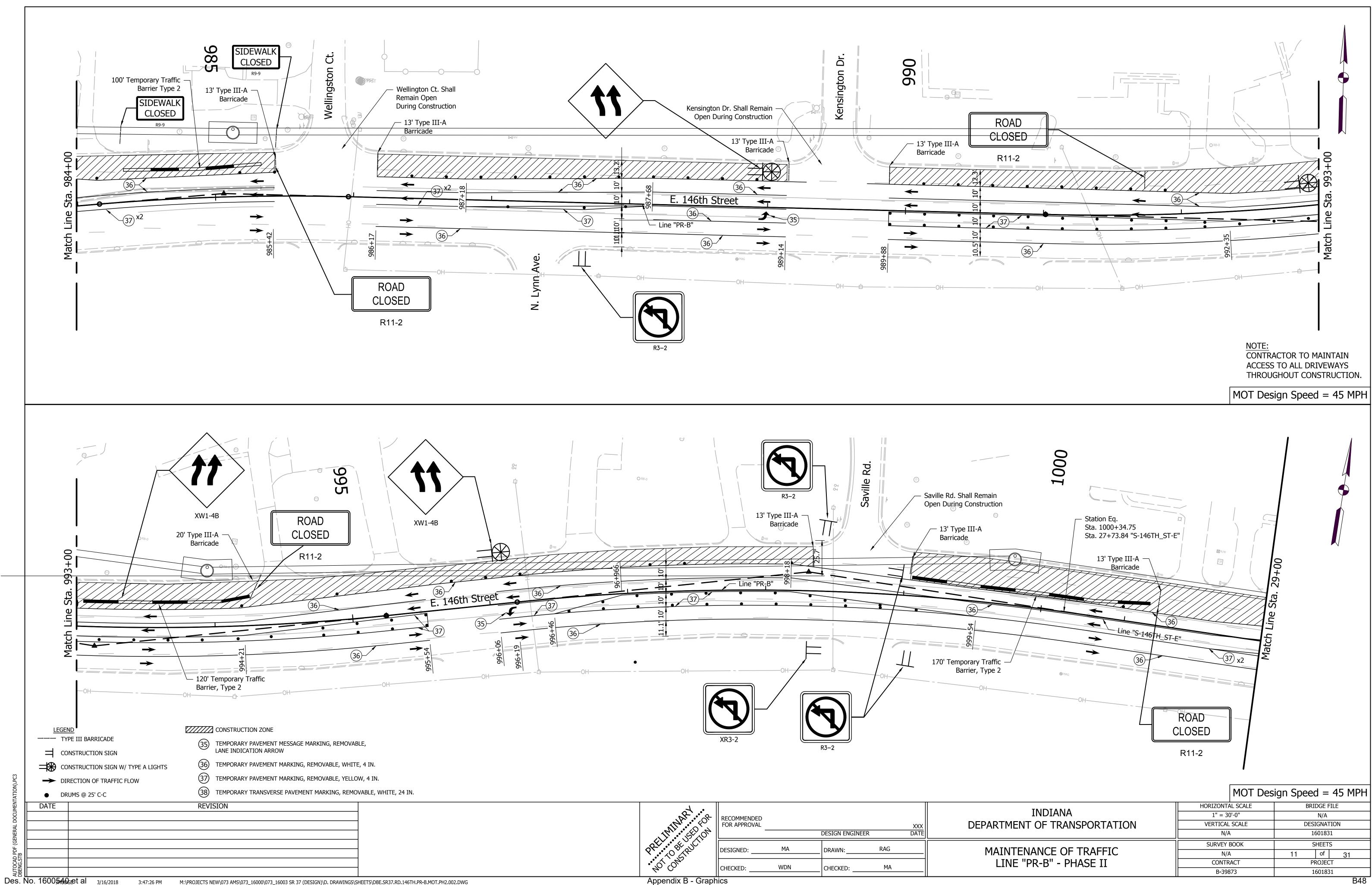
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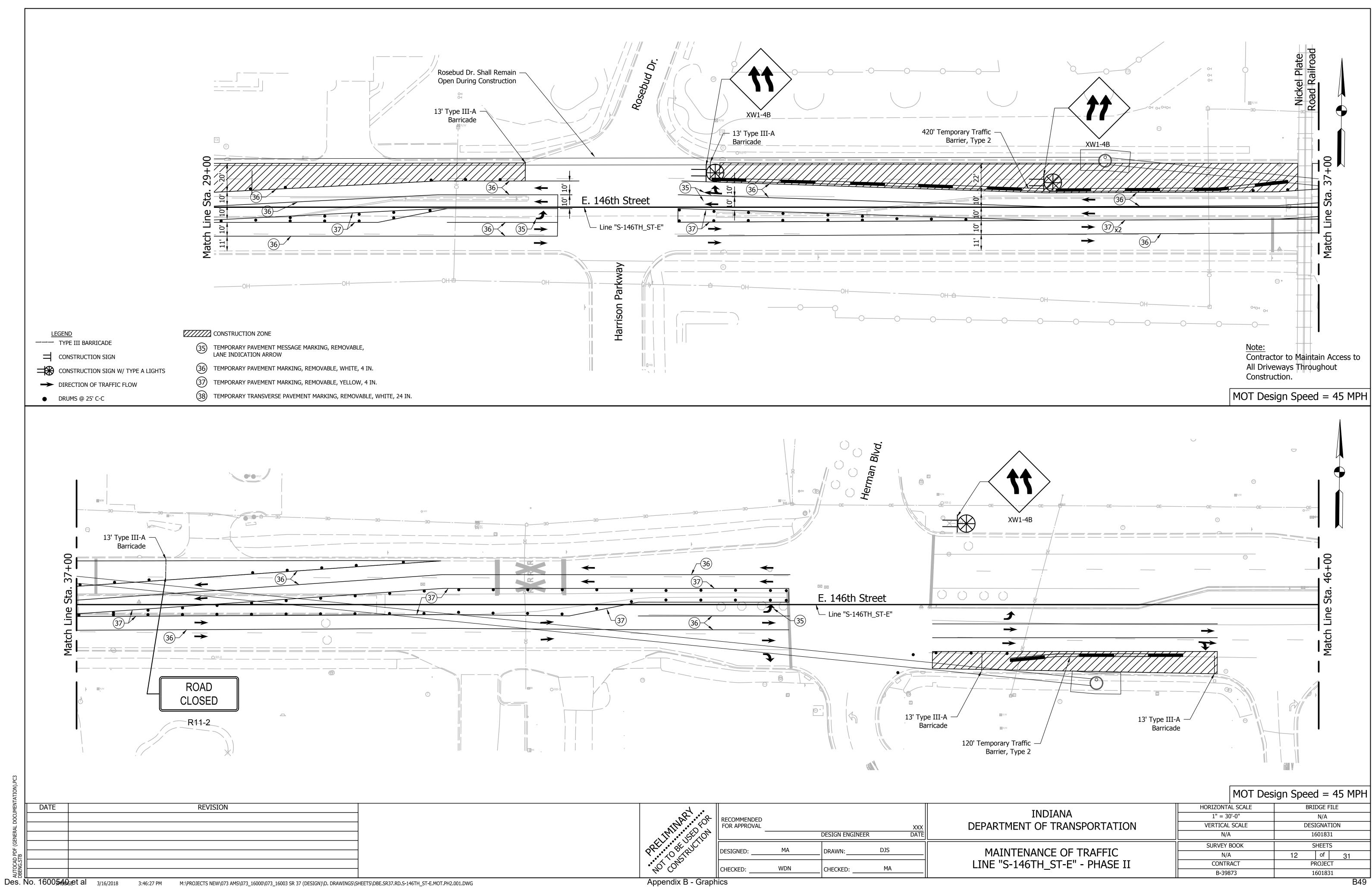
Des. No. 1600540 et. al.



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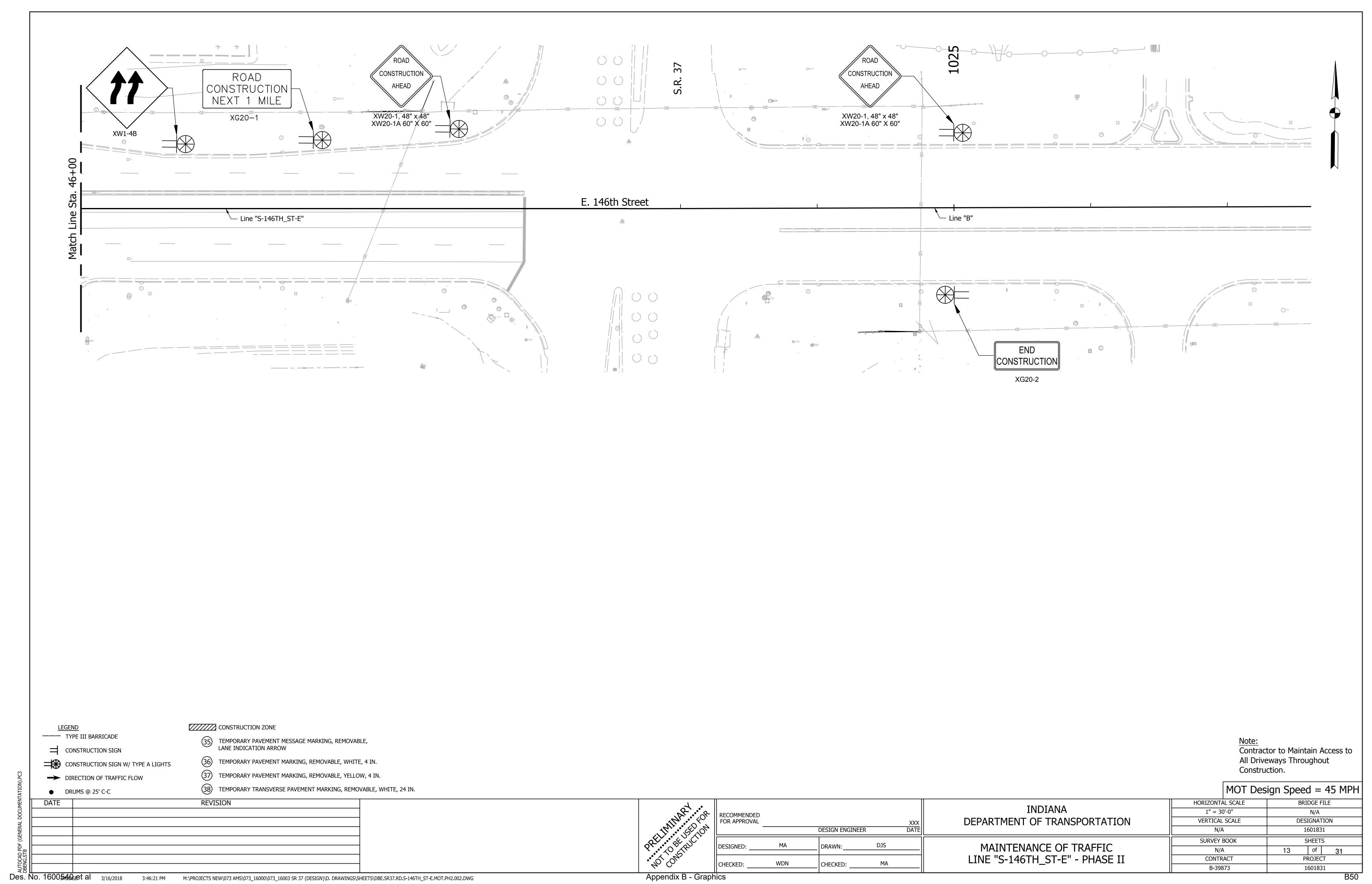




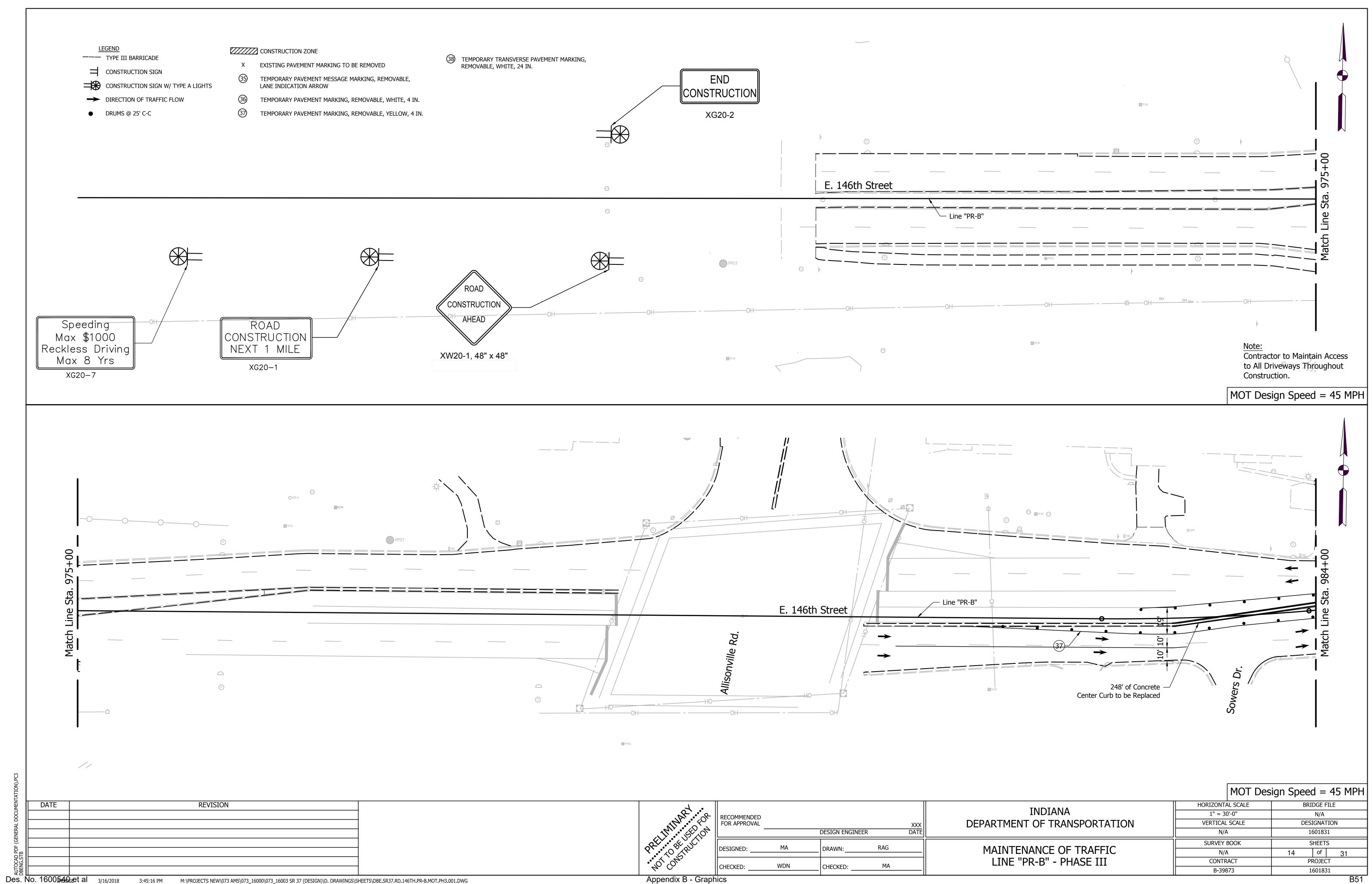


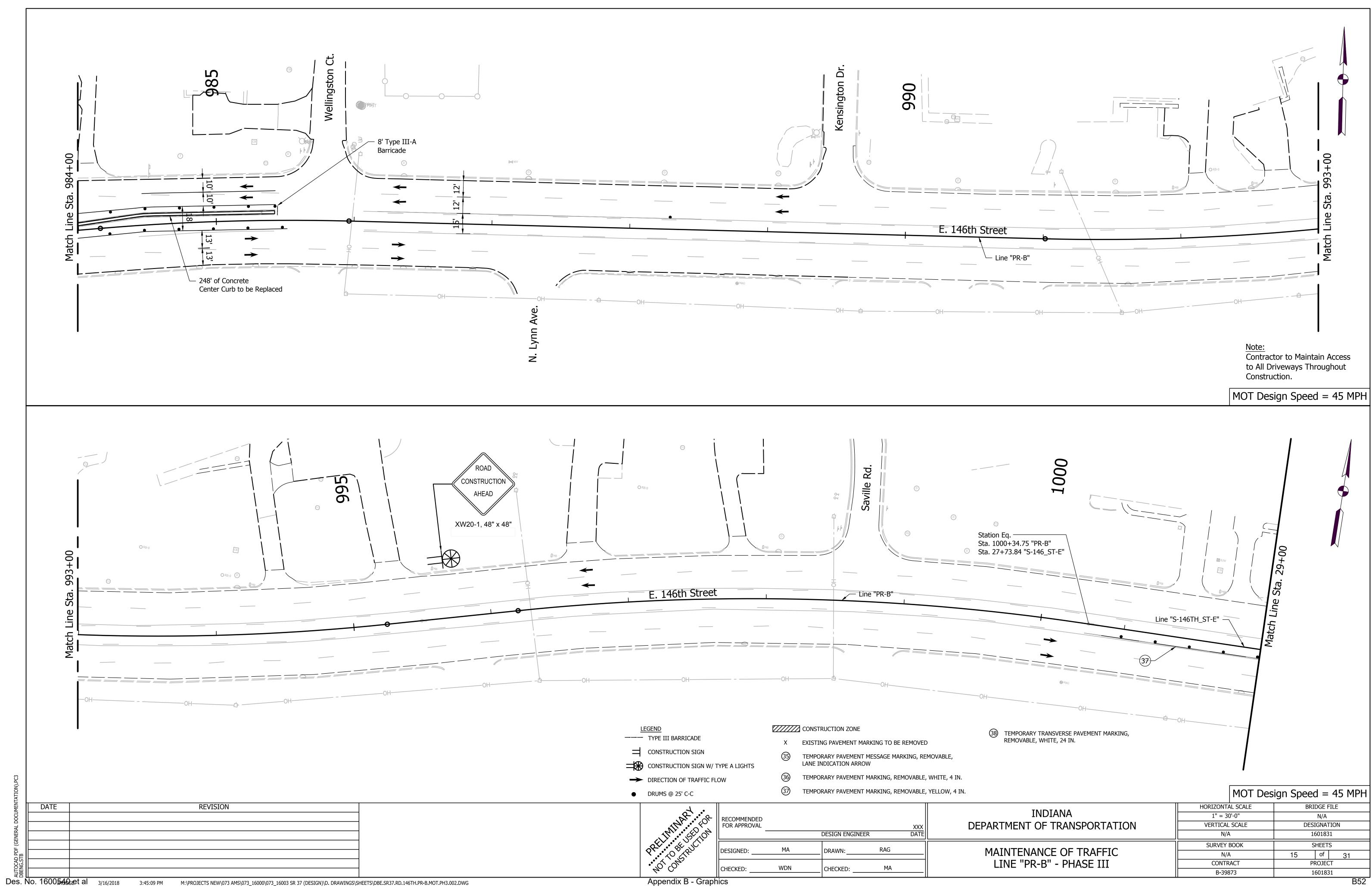
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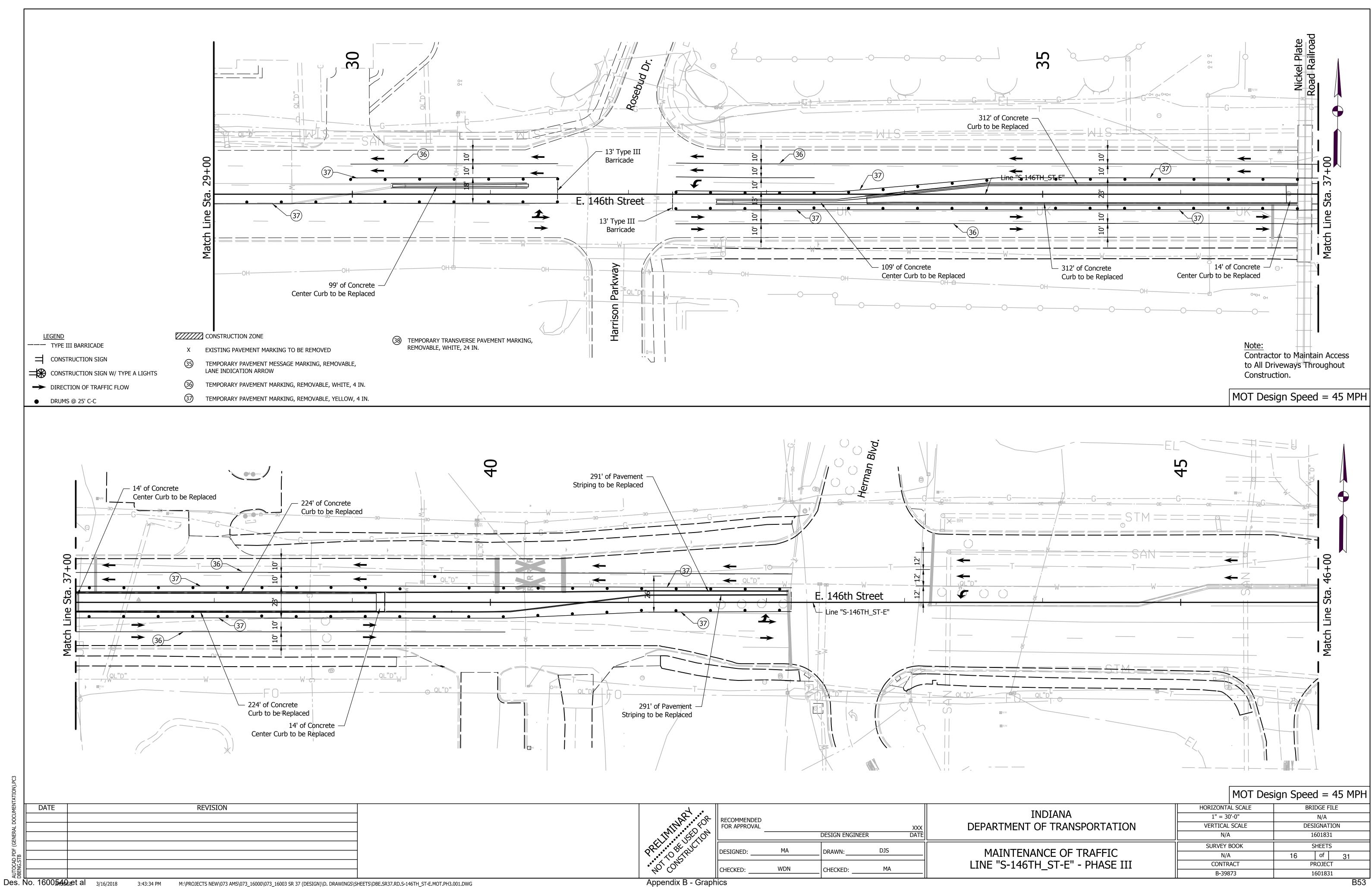
Des. No. 1600540 et. al.

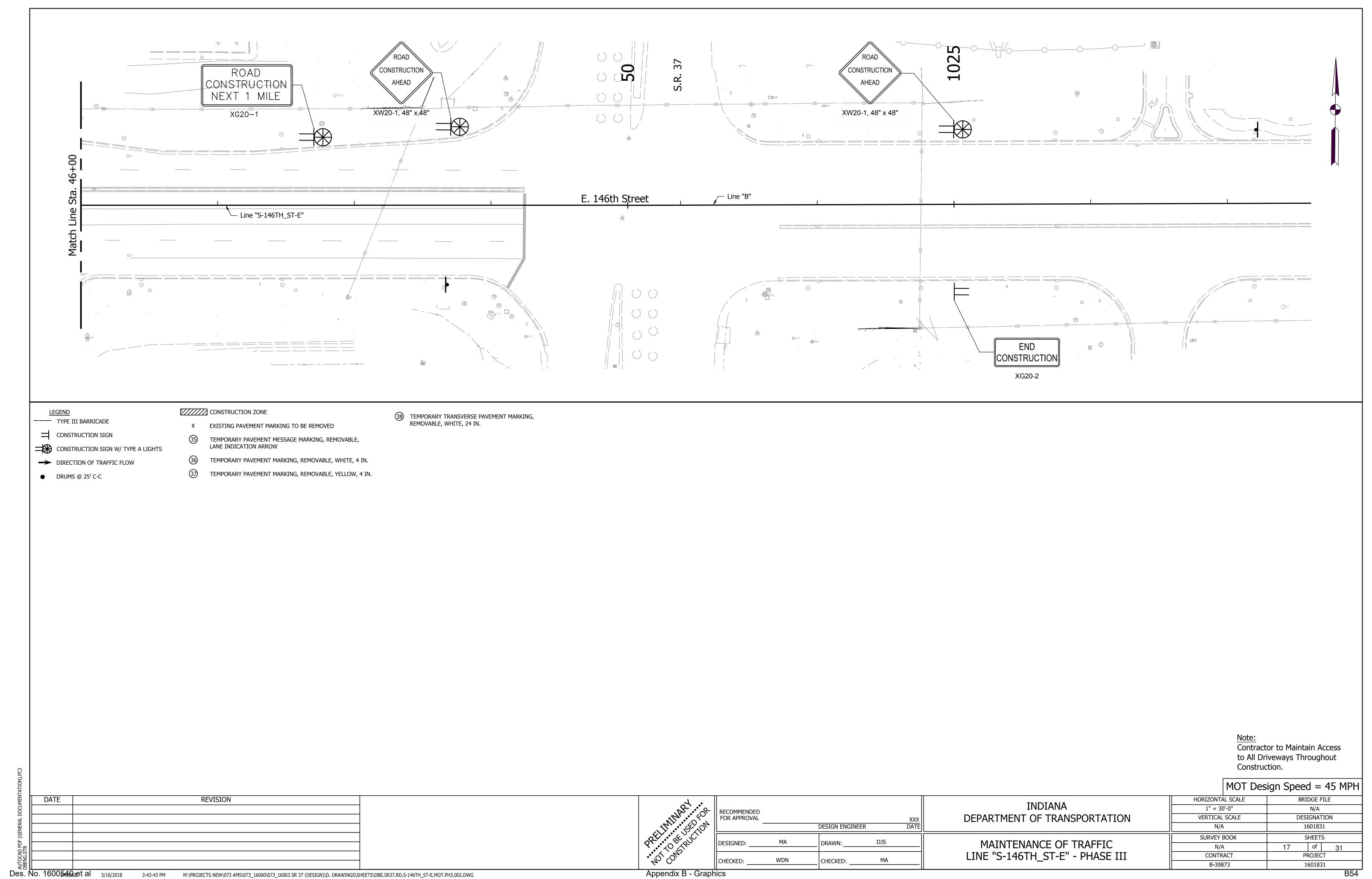


Appendix B - Grapi
Attachment 1

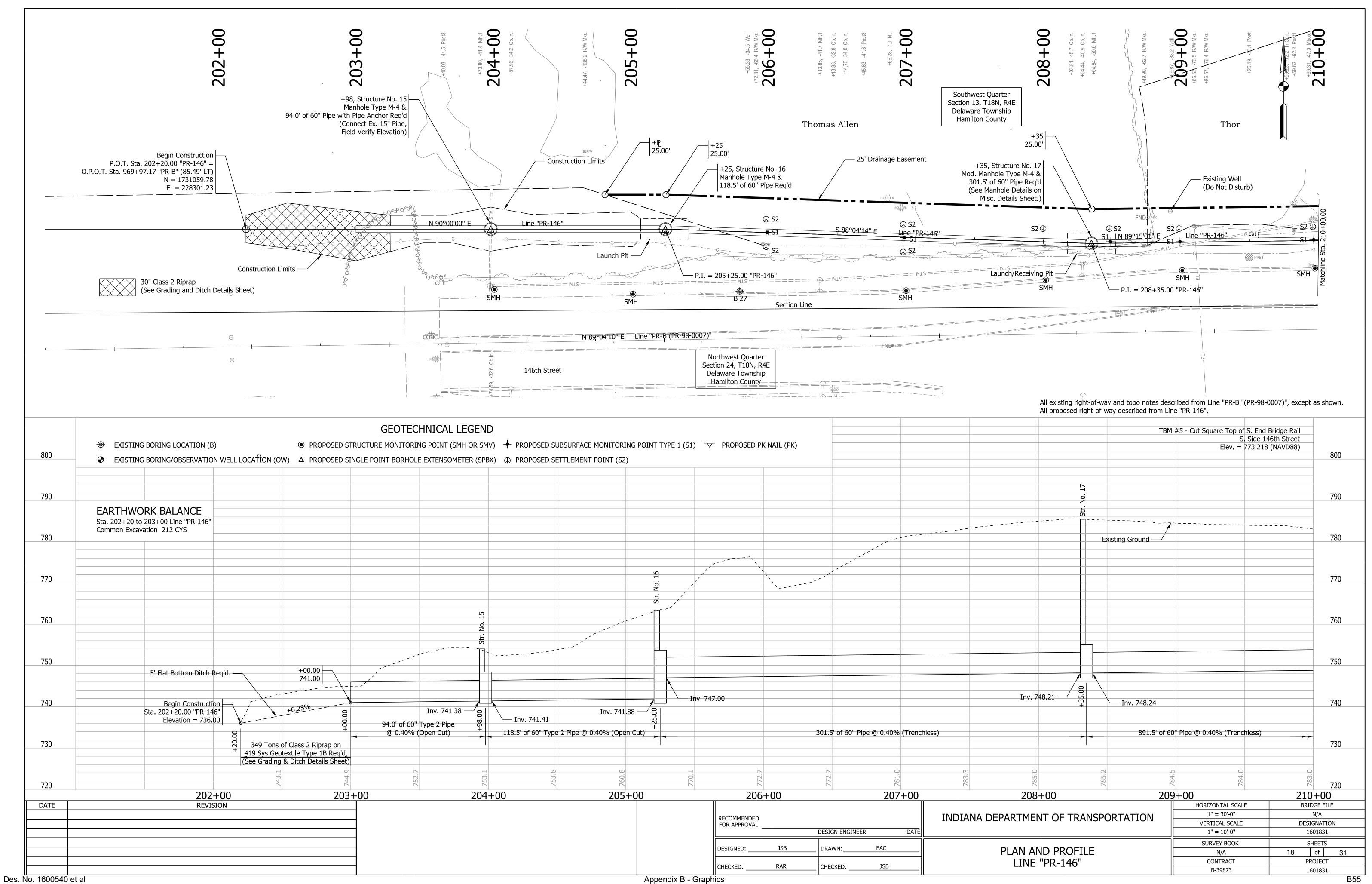


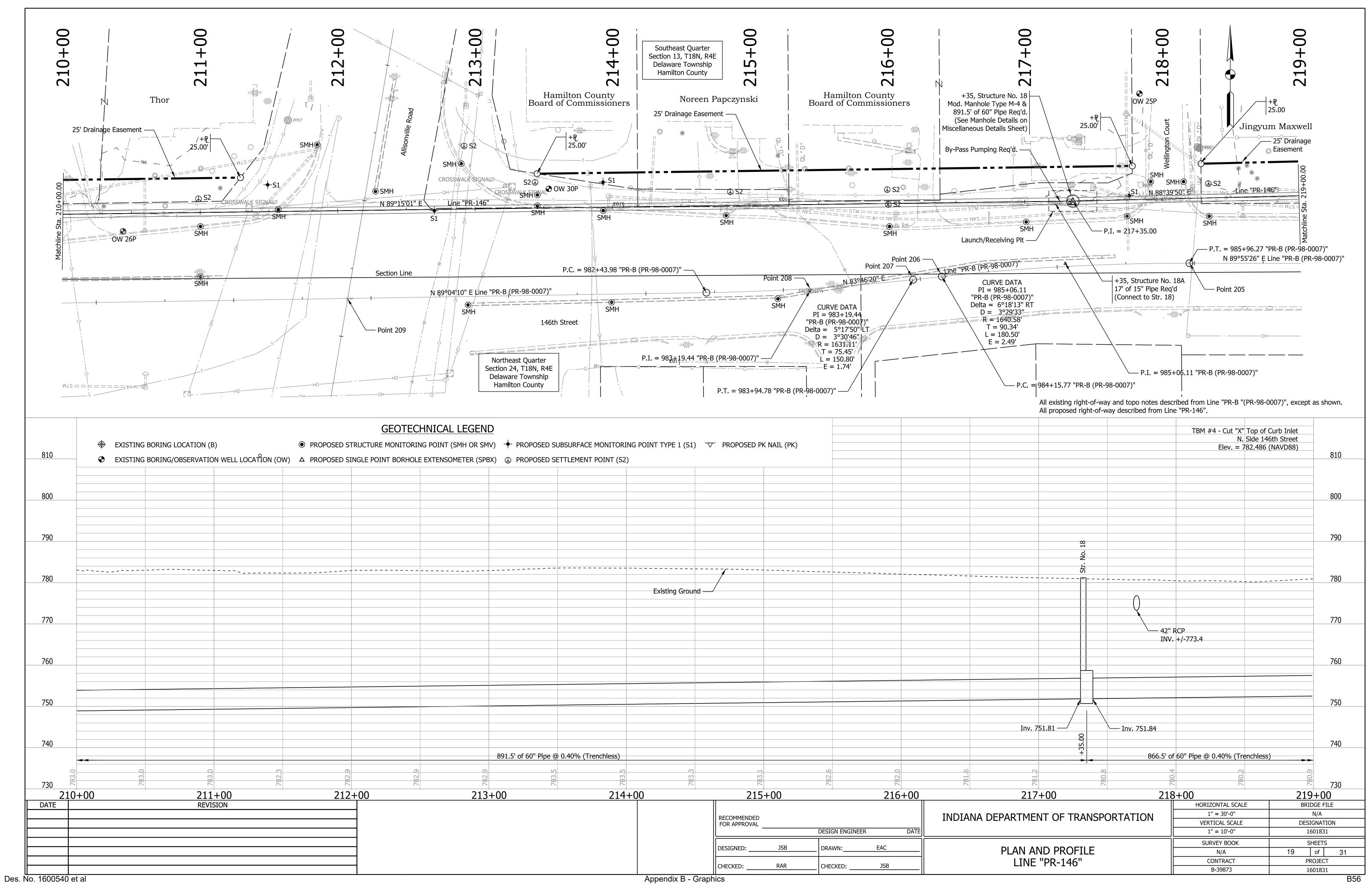


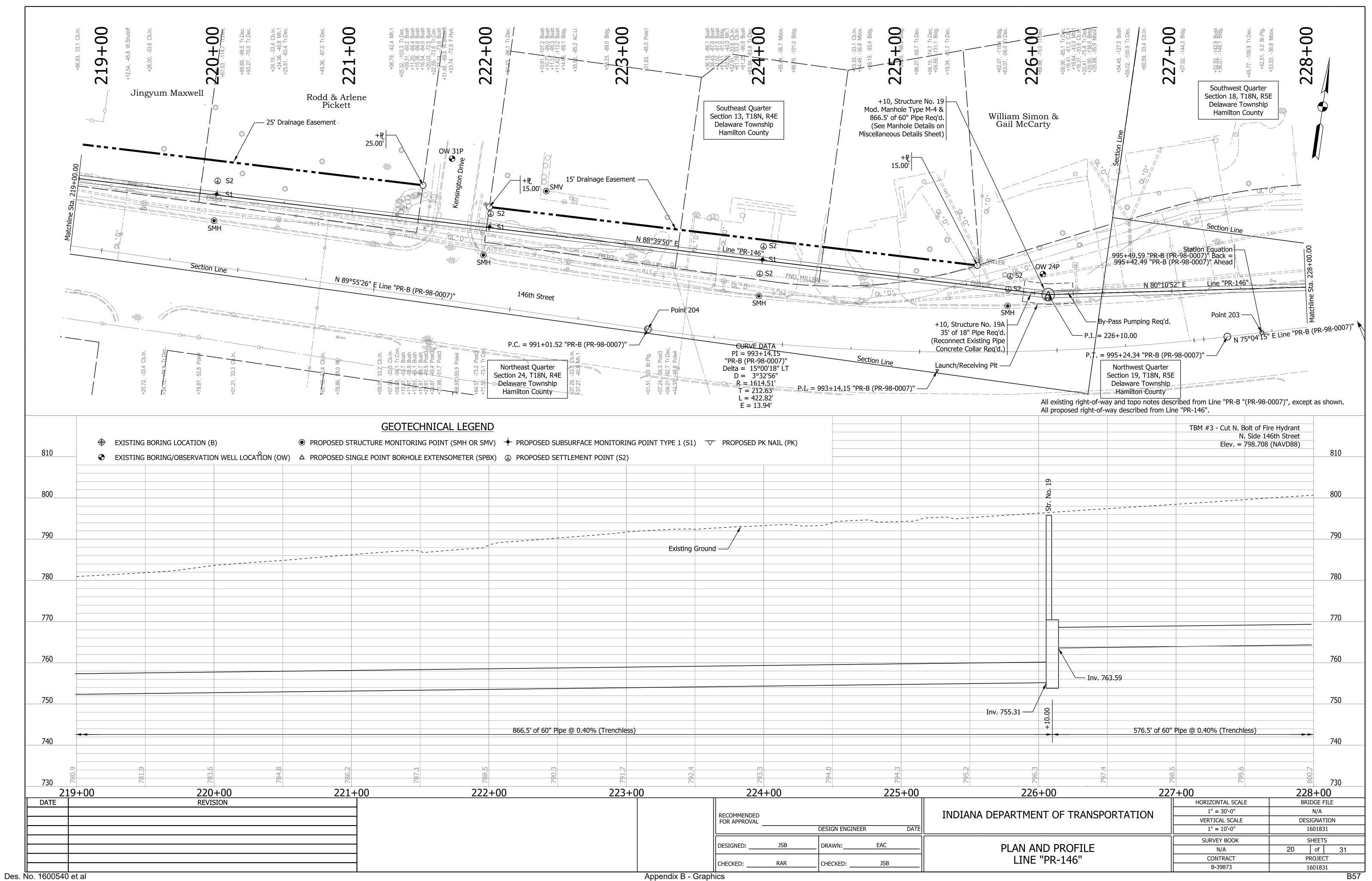


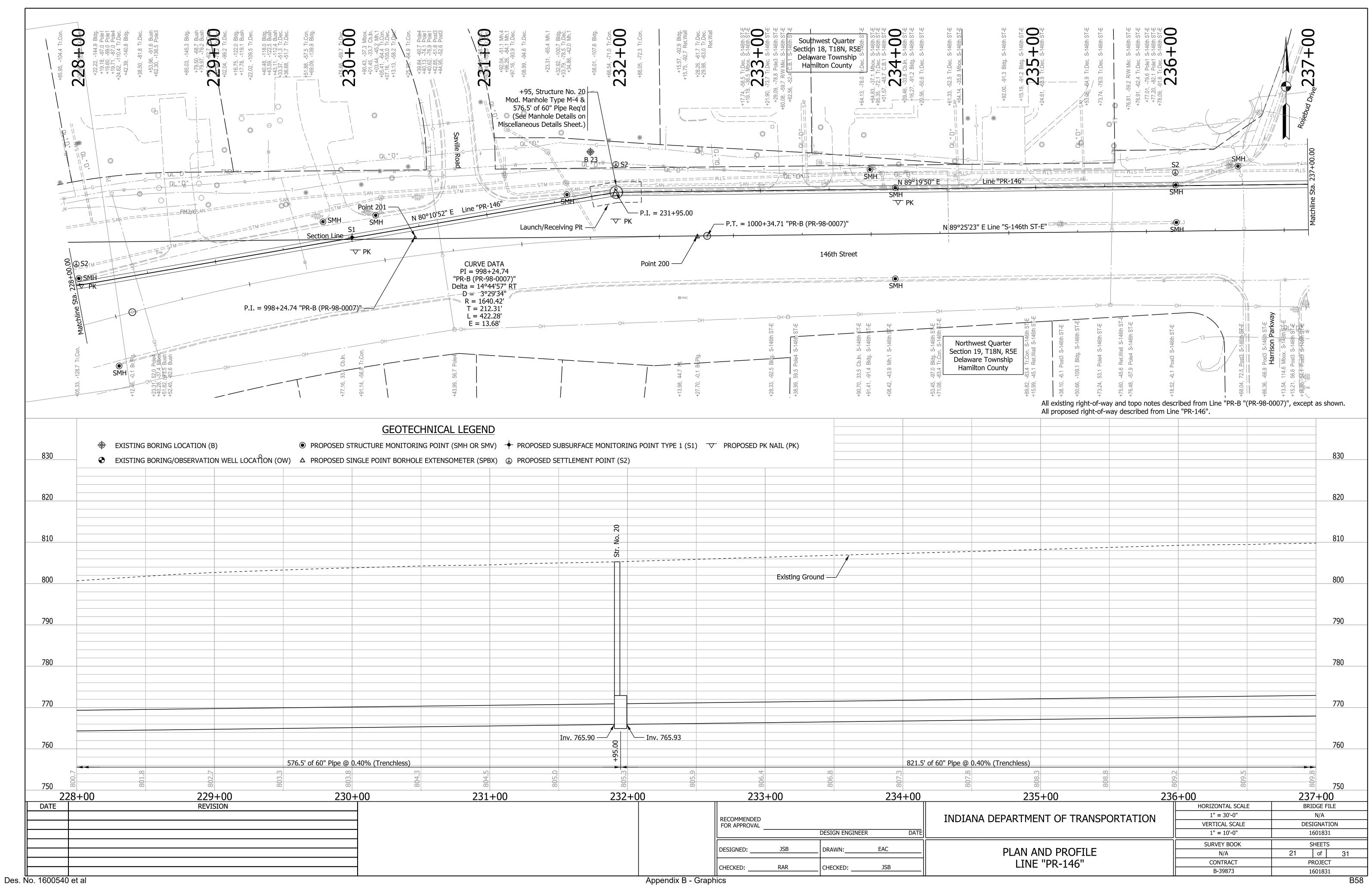


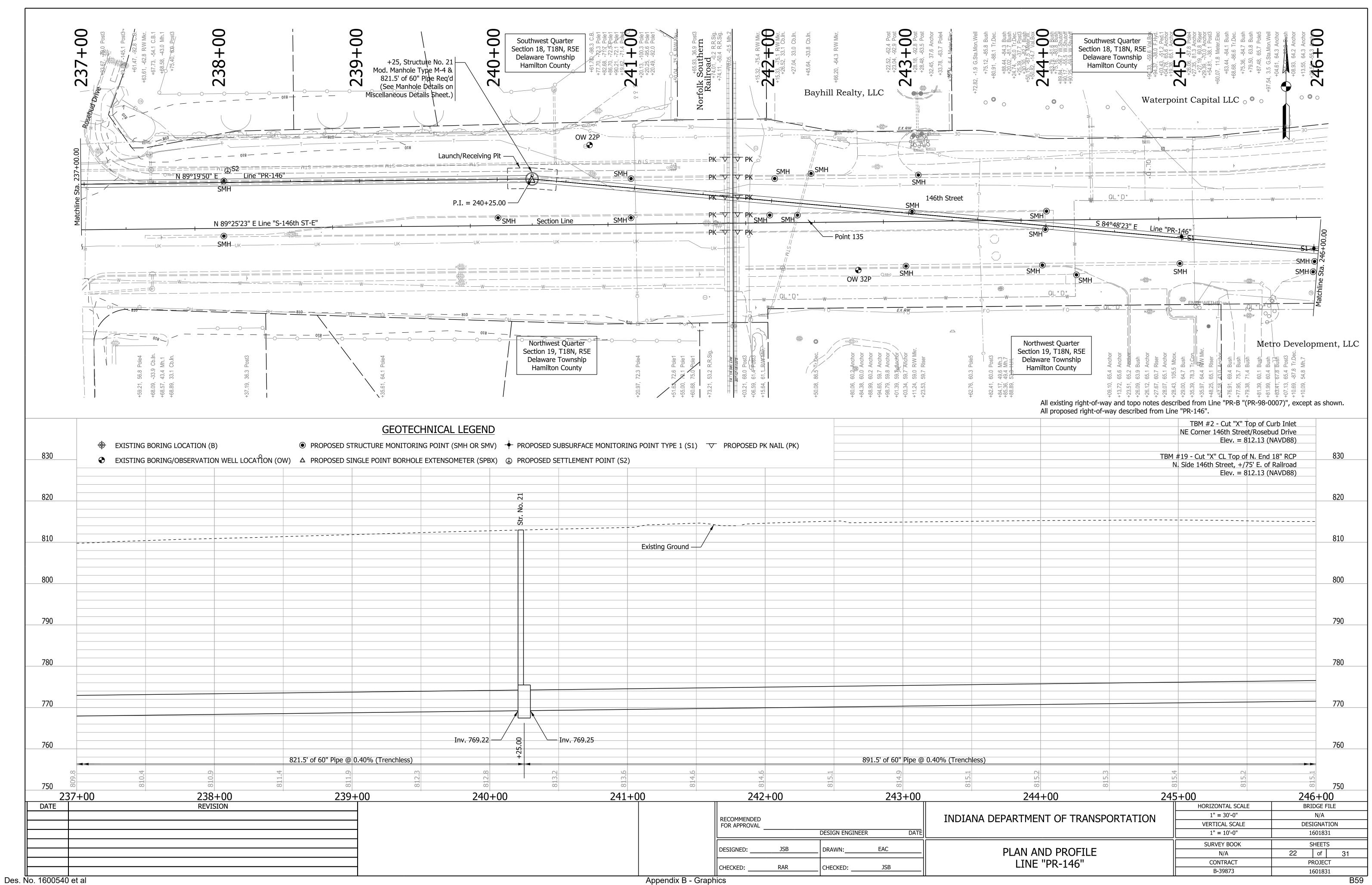
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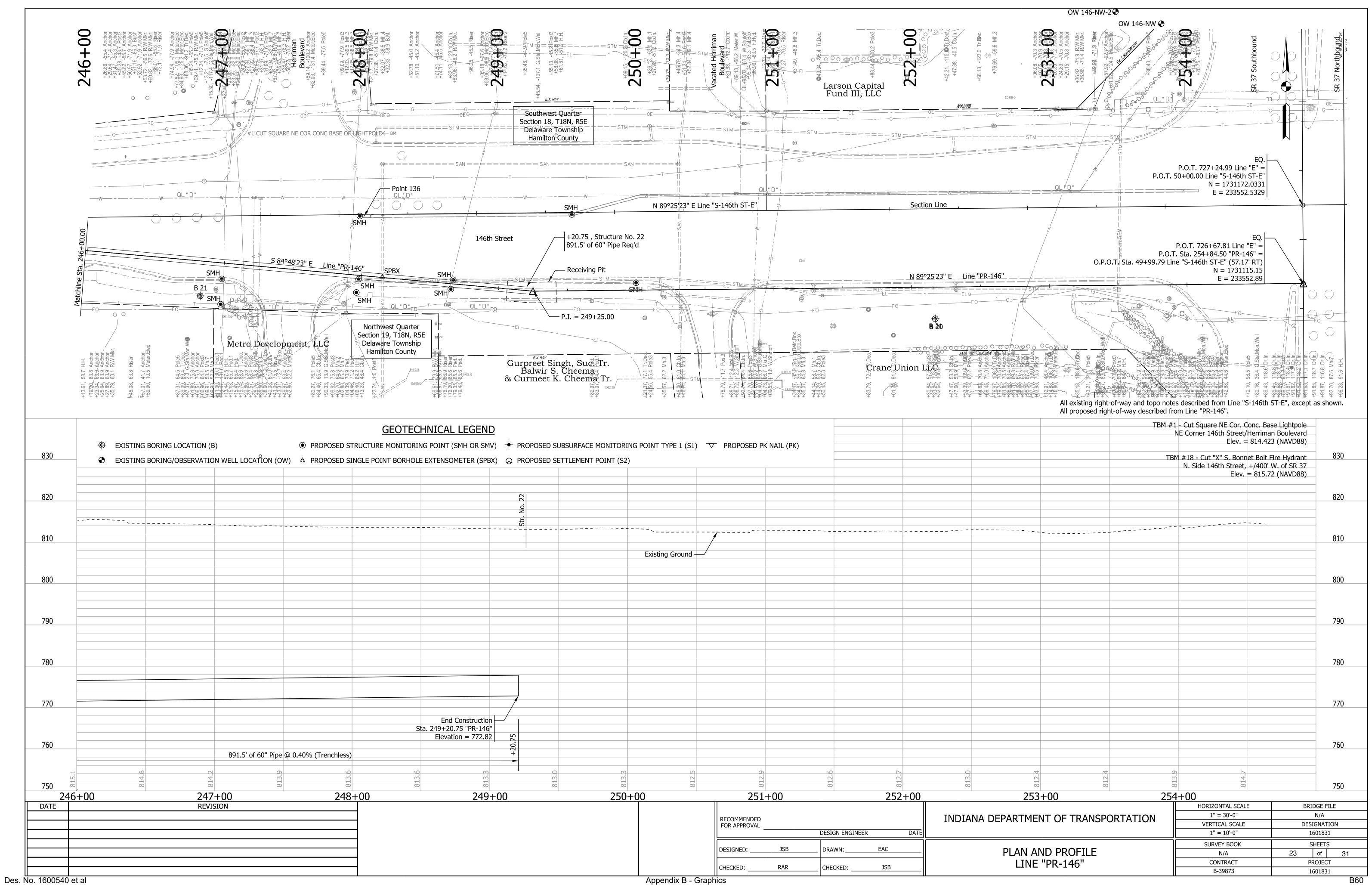


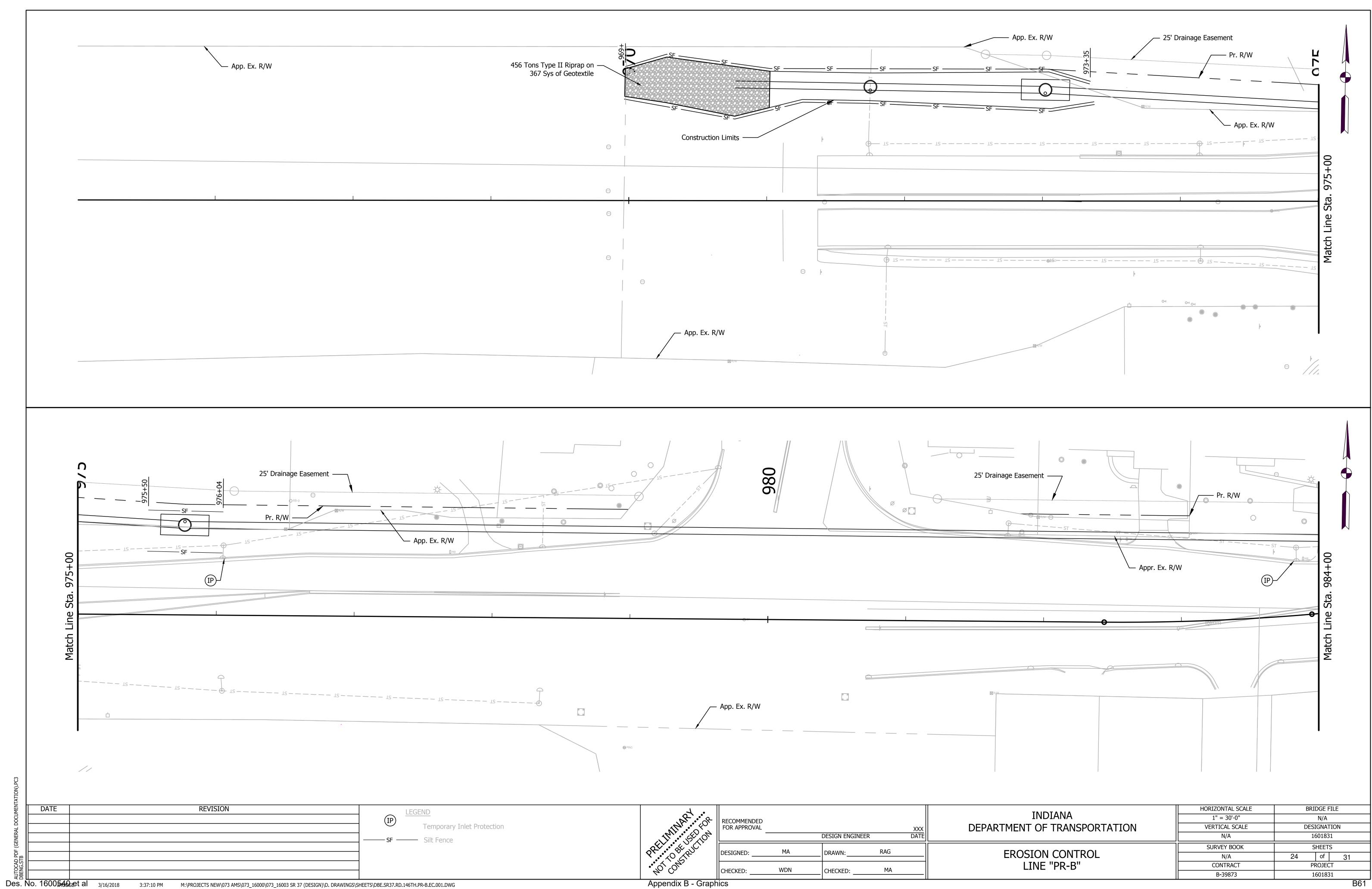


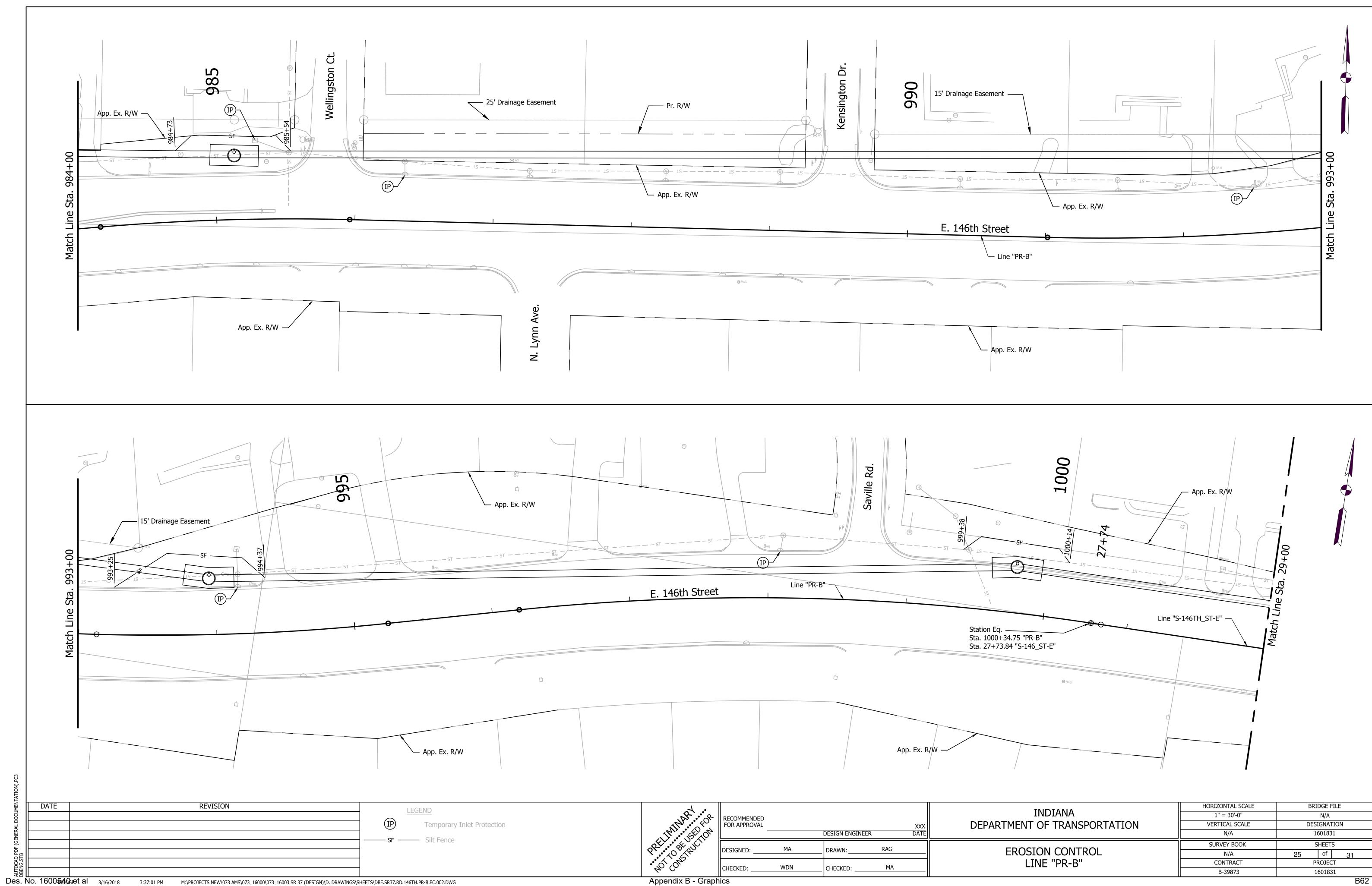






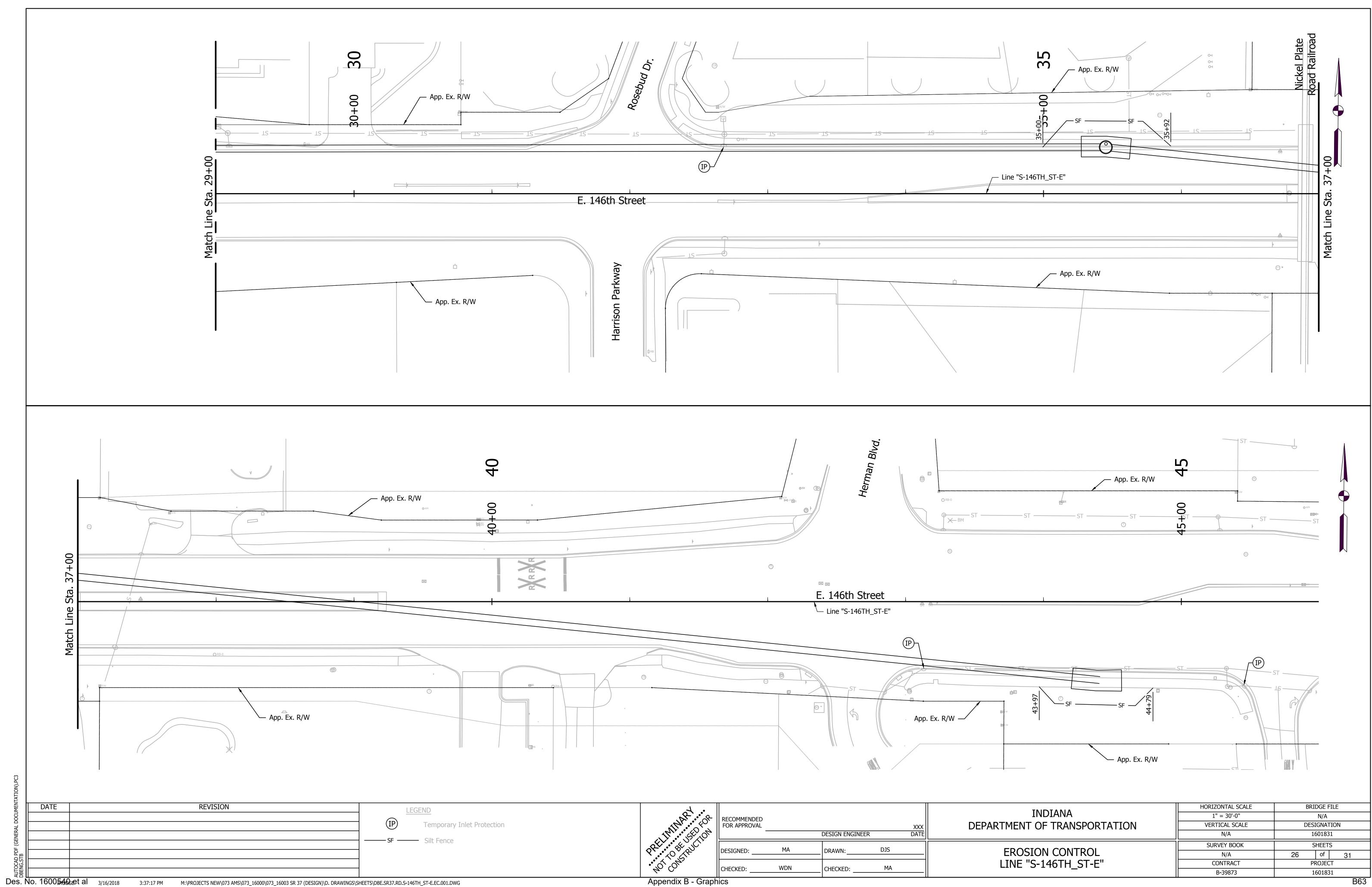






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Des. No. 1600540 et. al.



Des. No. 1600540 et. al.

PRODECT	DESIGNATION
5 - + 5 / La	1590348
CONTRACT	BROOGE FILE
R 39504	W

	KIN DESIGNATION HUMBERS
	MONDHAY
	A TOTAL OF STREET
- Cartanian - Cart	BADGE
1803836	New Bridge; 140st St. Over M.ST

## ERAD37



CITY OF FISHERS	
Scott Fadness, Mayor	
Jeff Hill, Director of Engineering	

## INDIANA DEPARTMENT OF TRANSPORTATION



## **ROAD PLANS**

S.R. 37 AND 141st STREET RECONSTRUCTION

PROJECT NO. 1592348 P.E. 1592348 R/W 1592348 CONST.

Roadway Reconstruction along S.R. 37 Beginning Approx. 1,555 Feet South of the Intersection of S.R. 37 & 141st St., Thence Northerly Approx. 3,000 Feet Along Line "E" to Approx. 1,445 Feet North of the Intersection of S.R. 37 & 141st St., New Roundabout Interchange at the Intersection of S.R. 37 & 141st St., Along with Reconstruction along 141st St., Beginning Approx. 650 Feet West of the Intersection of S.R. 37 & 141st St., Thence Easterly Approx. 1,300 Feet Along Line "S-141st ST-E" to Approx. 650 Feet East of the Intersection of S.R. 37 & 141st St., All in Section 19, Township 18, North Range 5 East, Delaware Township, Hamilton County, Indiana.



NOTE: SEE NEXT SHEET FOR TRAFFIC DATA/DESIGN DATA TABLES



LATITUDE: 39" 59' 37" N LONGITUDE: 86" 00' 14" W

Gross Length:

0.81 MI.

0.79 MI.

Net Length:

Maximum Grade: 4.50 %

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2018 TO BE USED WITH THESE PLANS

UNITED

1625 N. Post Road Indianapolis, IN 46219 Phone 317-895-2585 Fax 317-895-2596 reww.ucindy.com

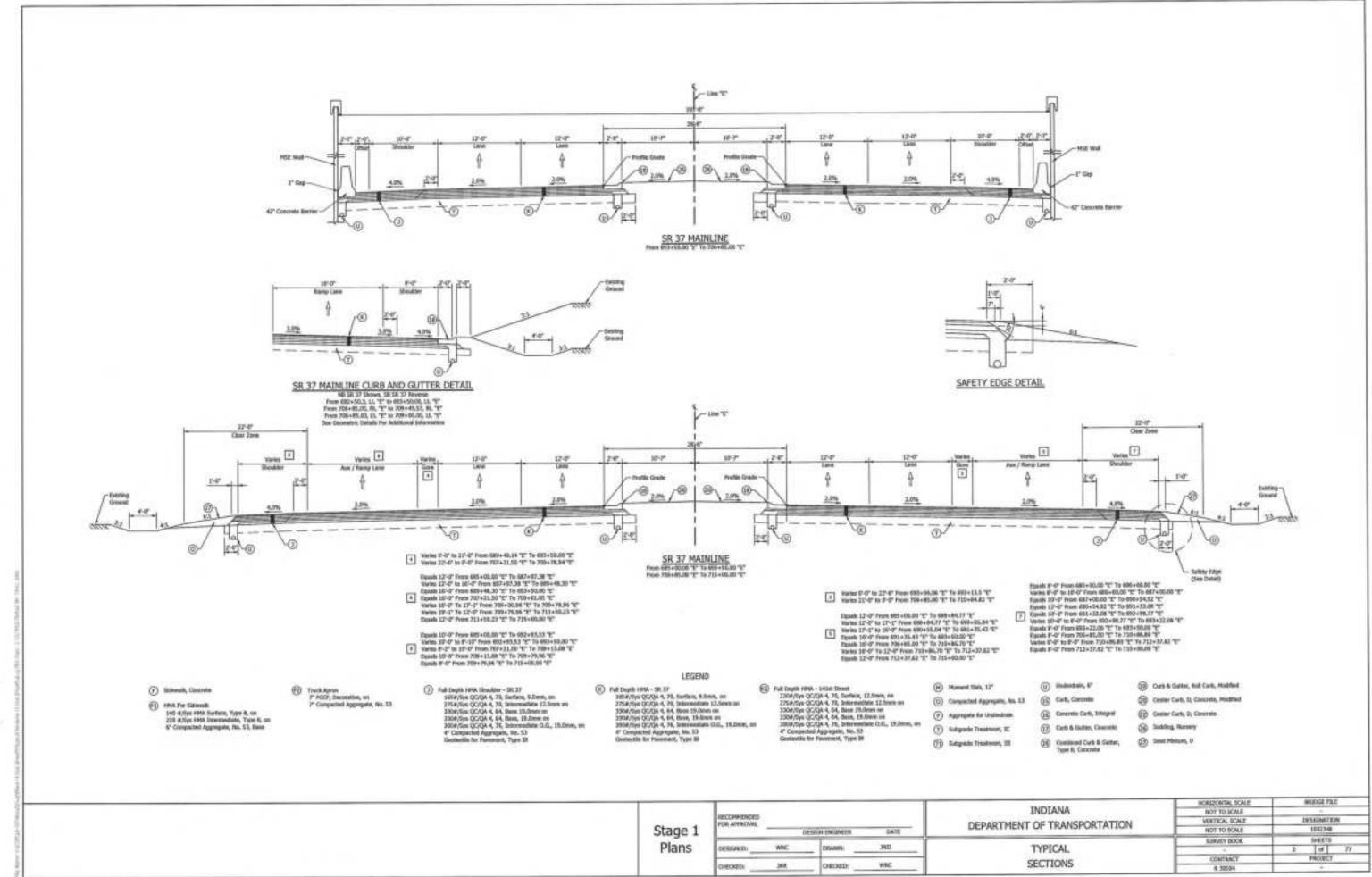
Stage 1 Plans PLANTS STATE CONSULTING 317-895-7585 PHENN NAMES OF TRANSPORTATION 5475

DESCRIPTION OF TRANSPORTATION 5475

	-			
	DESIGNATION 1992348		ON	
SURVEY BOOK		318275		
+	1.	of [	. 37	
CONTRACT	PRODUCT			

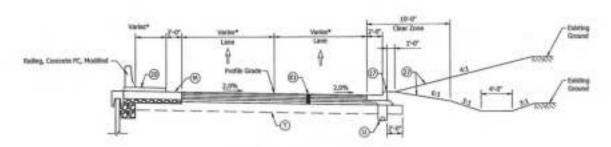
Appendix B - Graphics
Attachment 1

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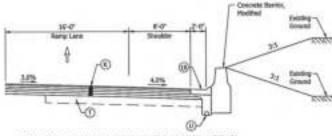


Des. No. 1600540 et al Des. No. 1600540 et. al.

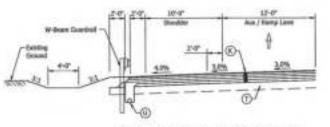
Appendix B - Graphics



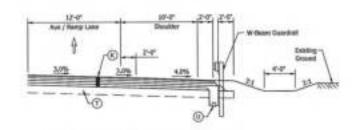
SR 37 ENTRANCE / EXIT RAMP from 202+11,77 "341 Sette 1o 206+10,74 "341 Selfe from 557+61,00 "141 Selfe To 158+24,05 "341 SElf" from 602+11,19 "341 RRE" To 406+81,40 "341 REE" from 502+96,00 "141 RRE" To 406+81,40 "341 RWE" \*See Geometric Details For Additional Information



CURB AND GUTTER CONCRETE BARRIER DETAIL
From 552+57:90 "141 SER" to 557+62.00 "141 SER"



CURB AND GUTTER GUARDRAIL DETAIL.



CURB AND GUTTER GUARDRAIL DETAIL

(F) Sidewalk, Concrete

(T) niths for Salessille 140 4/5ys 1914 Sartisce, Type II, on 220 4/5ys 1914 Salestondiate, Type II, on Il" Comporatol Appropria, No. S.S. Basis

Truck Aprel
7" PCCP, Decorative, en
7" Competited Apprepain, No. 53

(3) Full Depth 1988 Shoulder - 38:30
105 6 (Nys. QCCQ) 4, 70, Surface, 4. Smart, on
275 6 (Nys. QCCQ) 4, 70, Surface, 4. Smart, on
285 6 (Nys. QCCQ) 4, 4, 70, Surface, 4. Smart, on
285 6 (Nys. QCCQ) 4, 4, 4, Smart, 30, Organ on
285 6 (Nys. QCCQ) 4, 4, 4, Smart, 30, Organ
285 6 (Nys. QCCQ) 4, 4, 4, Smart, 30, Organ
285 6 (Nys. QCCQ) 4, 50, Smoothnoodial O.S., 13, Smart, on
4° Compared Application, 50, 27
Glootscale for Pavement, Type 38

LEGEND (K) Full Dayon 1994 - SR 57 Full Dugith 1954 - St. 27

1054/Sys QC/QA 4, 70, Surface, 3.5mio, oir
2754/Sys QC/QA 4, 70, Surface, 3.5mio, oir
2754/Sys QC/QA 4, 70, Surface, 3.5mio 3.3mio 3.3mi

(E) Full Depth HMA - 141st Stout 201st New QCGs 4, 70, Surface, E1.Seren, or 215s New QCGs 4, 70, Surface, E1.Seren on 216s New QCGs 4, 70, Sustantial Storen on 216s New QCGs 4, 64, Storen Storen on 305s New QCGs 4, 76, Storen Storen on 4 Compared Agraptists, No. 23 Geototette for Payenteen, Type 28

(A) Monoset State, 12"

(ii) Compacted Aggregate, No. 53 Aggregate for Disdocrasis

(T) Salapsole Trealment, E;

(T) Subgrade Treatment, III

(i) Underdeb, 6"

(B) Curb & Gutter, Fluid Corb, Mindfeld (E) Curb, Conorde (3) Ceres Curb, D, Concrete, Modified

(2) Career Curts, D., Concrete: (ii) Concrete Corts, Innegral

(S) Solding, Money (Control & Gutter, Concrete

(2) Sood Mattern, V © Continue Carb & Gutter, Type B, Conceile

Stage 1 Plans

FOR APPROVAL DATE 240 OECOED: GEORIE WIC

INDIANA DEPARTMENT OF TRANSPORTATION TYPICAL,

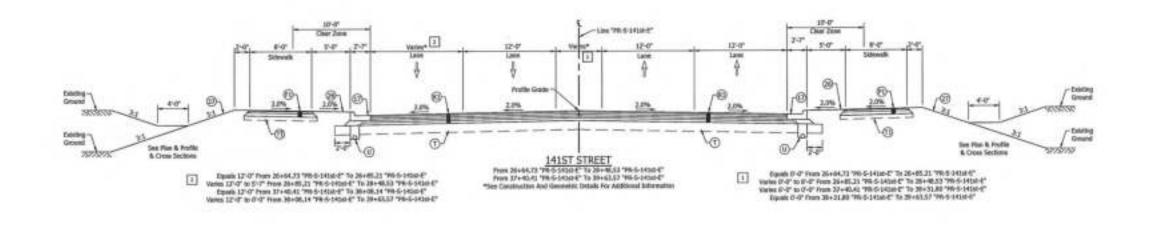
SECTIONS

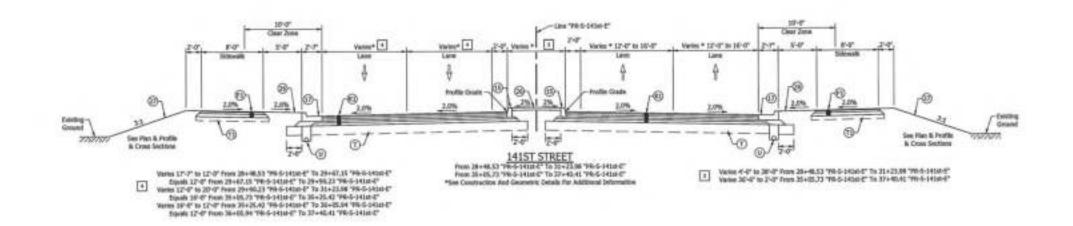
BADGE FEE **MOT TO SCALE** DESIGNATION VERTICAL SCALE 1550348 MOT TO SCALE SURVEY BOOK l at CONTRACT R 39504

Des. No. 1600540 et al

Des. No. 1600540 et. al.

Appendix B - Graphics





(F) Stanuals, Concrete

(i) 1849. For Sideralli. Self-drillips 1849. Surface, Type R, on 200 drillips 1849. Interconducto, Type II, on 6" Compacted Aggregate, No. 53, these

Truck Aprels
P PCCP, Decositive, on IP Compacted Appregate, No. 53 (3) Full Depth 199A. Shouldber - SH 337 166-6/Syn QCOQA 4, 70, Surface, 9. Seem, ser 275-9/Syn QCOQA 4, 70, Stemmediate 12, James on 3304/Syn QCOQA 4, 64, Dates (3) Depth ser 3304/Syn QCOQA 4, 64, Dates, 13, Smith en 3006/Sys QC/QA 4, 76, Internetiwin G.G., 15.0mm, on 4" Compacted Appropris, No. 53. Geolootilis for Parament, Type St.

LEGEND (K) Full Dupth 1994 - 59.37
263 4/3p QCQA 4, 76, Surface, 5.5mm, so:
275 4/3p QCQA 4, 76, Surface, 5.5mm, so:
250 4/3p QCQA 4, 76, Subsemblass 25,5mm on:
250 4/3p QCQA 4, 64, Suse; 15,5mm on:
250 4/3p QCQA 4, 64, Suse; 15,5mm on:
250 4/3p QCQA 4, 64, Suse; 15,5mm on:
250 4/3p QCQA 4, 56, Subsemblass QLQ, 18,5mm, oc. 4" Compacted Aggregate, No. 13 Geotrottle for Poncerent, Type 38

© Full Dayab 1964 - 14 tot Steet
2014/0ys QCQA 4, NJ, Barticos, 52.5 evm, etc
2744/0ys QCQA 4, NJ, Barticos, 52.5 evm, etc
2744/0ys QCQA 4, NJ, Barticos, 52.5 evm ex
2014/0ys QCAA 4, NA, Barra, 28.5 evm ex
2014/0ys QCAA 4, NJ, Barrandaline D.G., 19.5 eve, ex4° Compacted Aggregate, No. 13
Geotacide for Revenuest, Type 29

(R) Monwell Ship, SJ\* (ii) Compacted Appropriate, No. 53

(P) Appropriate for Understrain (T) Integrate Treatment, IC

(S) Subgrade Treatment, III

(S) Carb, Concrete

Concrete Carb, Salespail (ii) Out & Gutter, Doccorde

Continued Curb & Suffer, Type B, Concrete

(S) Curt & Gutter, Red Curts, Rhebbed

(a) Center Carts, II, Concepts, Healthed

(2) Center Carb, 5, Constitu

(ii) Solding Businey

Sent Haton, U

Stage 1 Plans

FOR APPROVAL SHIE DESCRIPTION

INDIANA DEPARTMENT OF TRANSPORTATION TYPICAL

HERBIE FILE HORIZOWIAL SCALE **HOT TO SCALE** DESOCRATION NOT TO SCALE 1552348 SURVEY BOOK

Appendix B - Graphics

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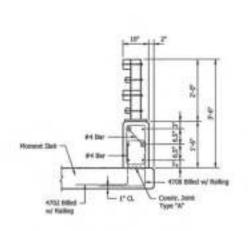
SECTIONS

at 1

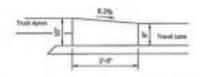
Des. No. 1600540 et al Des. No. 1600540 et. al.

Attachment 1

Page 67 Page 177



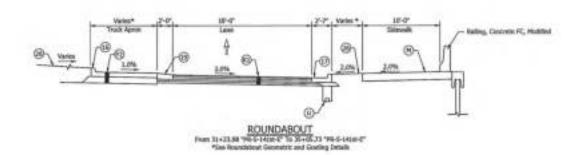
- 5702 Billed w/



PS-2 RAILING ON MOMENT SLAB

FC RAILING ON CENTER CURB ON MOMENT SLAB

CURB & GUTTER, ROLL CURB, MODIFIED
 MOTTO SCALE



(F) Silterally, Concrete

(F) HMA For Sidmunds. 240 A/Son HMA Sorface, Type 6, on 230 A/Son HMA Intermediate, Type 6, on 6" Composted Appropries, No. 53, there

Truck Agron
P PCSP, Deserables, on
P Compacted Aggregate, No. 13

Trill Depth 195A Standard - SX 37

1854/Dis QCQA 4, 76, Surface, 9,5min, no
2754/Dis QCQA 4, 76, Surface, 9,5min, no
2754/Dis QCQA 4, 76, See 18,5min on
2754/Dis QCQA 4, 64, See 18,5min on
2754/Dis QCQA 4, 76, Salaryambaro 0,6, 19,0mm, on
2754/Dis QCQA 4, 76, Salaryambaro 0,6, 19,0mm, on
A' Compacted Agongate, No. 53

Geolostife for Neventors, Type 18

LEGEND Pull Degith HMA - SR 37 1654/Spc QCQR 4, 7G, Sorbora, 9,Desin, on 2764/Spc QCQR 4, 7G, Sorbora, 9,Desin, on 3304/Spc QCQR 4, 64, 8th State (3504) 3304/Spc QCQR 4, 64, 8th State (3504) 3004/Spc QCQR 4, 76, Informatical OLG., 19,Owel 6\* Compacted Aggregate, No. 53 Lieutoscille for Plavement, Type IB

C Full Depth HMA - Intlat threat
2204/554 QCQA 4, 76, Serface, 12.5mm, an
2704/564 QCQA 4, 76, Serface, 12.5mm, an
2704/565 QCQA 4, 64, See IS Shown on
1204/565 QCQA 4, 64, See IS Shown on
1204/565 QCQA 4, 64, See IS Shown on
1204/565 QCQA 4, 16, See IS See IS Shown on
1204/565 QCQA 4, 16, See IS Shown on
1204/565 QCQA 5, See IS Shown on
120

(B) Hormost State, LL\* © Compacted Appropriate, No. 13 (F) Aggregate for Understate

(1) Subgrade Treatment, III.

(E) Curto & Guetter, Concrete (f) Subgrade Treatment, III (a) Continued Carlo & Guiter, Type B, Concrete

(i) United tals, 5" (3) Carlo & Gulton, Roll Corb., ModRed

(E) Corts, Descripto (S) Center Curs, II, Concrete, Modified Concrete Carty, Arlespall

(2) Deview Curls, D., Conscrete:

(S) Solding, Mersery

(ii) Seed Michael, U

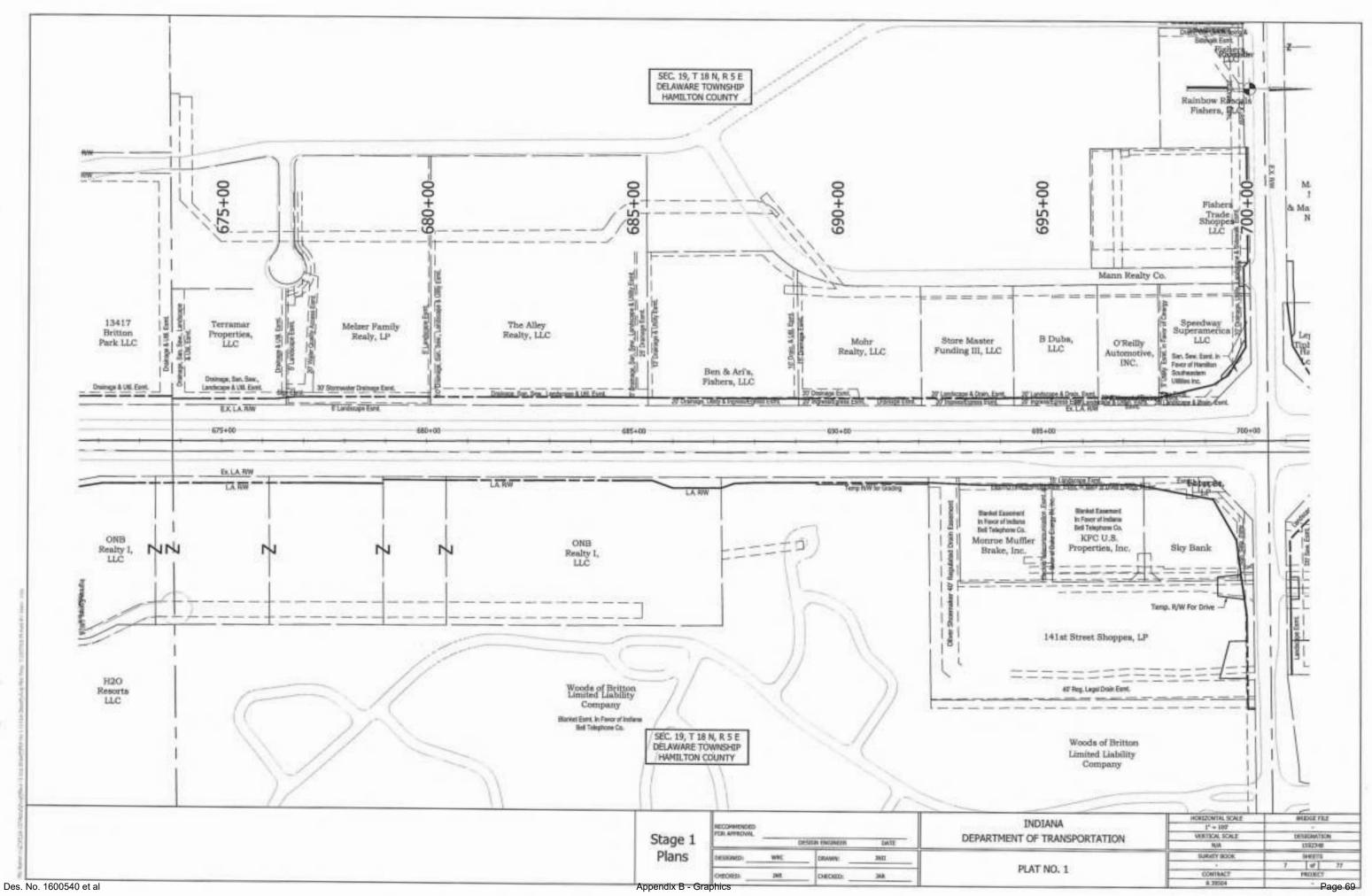
Stage 1 Plans

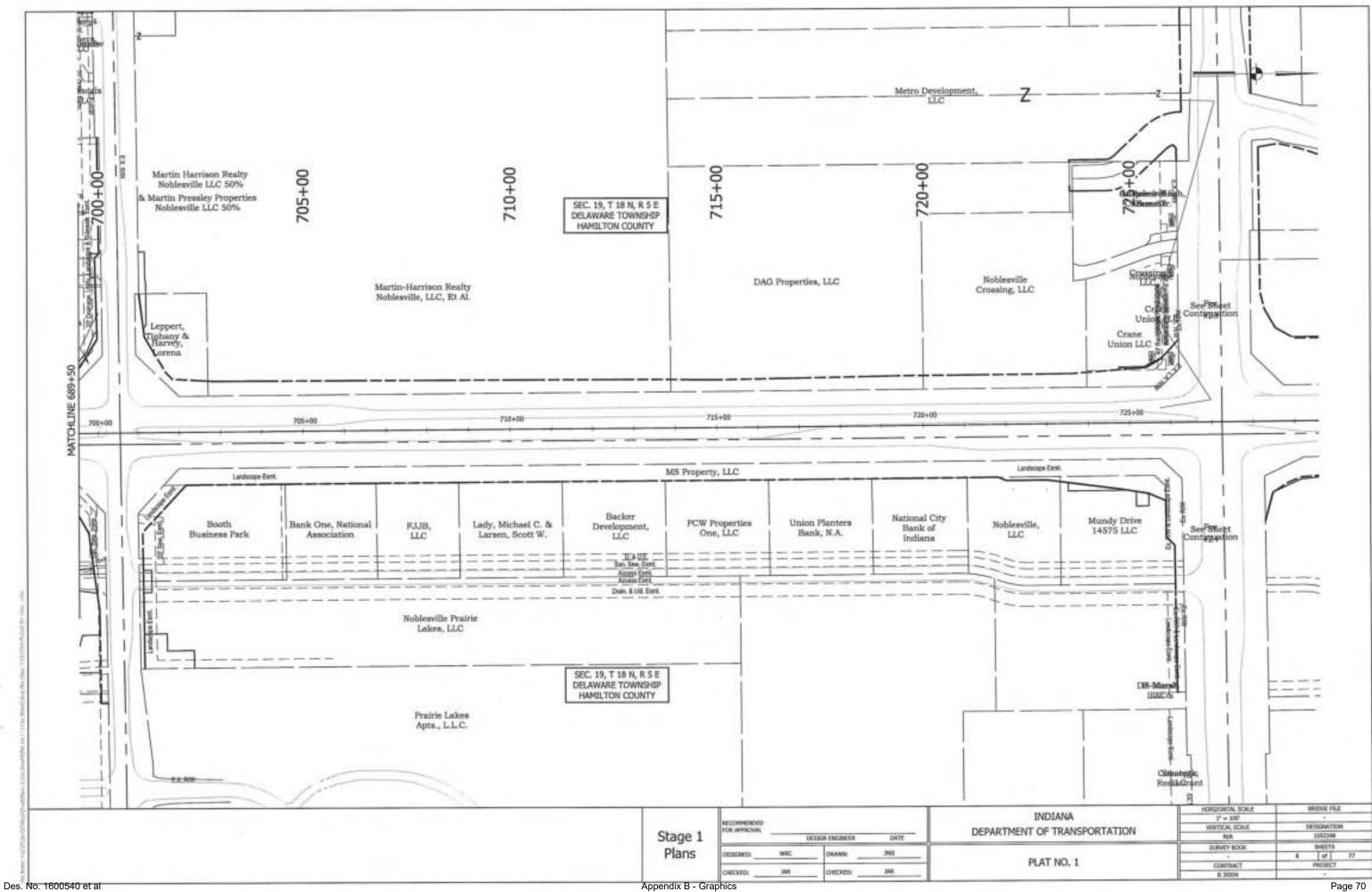
accurement)				DESCRIPTION .	HORSZONTAL SCALE	800006 751.6
				INDIANA	NOT TO SCALE	
FOR APPROVAL				DEPARTMENT OF TRANSPORTATION	VERTECAL SCALE	DICEMBERSHI
	DESIGN OVGENERS DATE	DEPARTMENT OF TRANSPORTATION	NOT YO SCALE	1597348		
and the last terms and	100	and described to	SURVEY SCCK	SHEETS		
DESIGNED:	WIC	Toomer -	JNII	TYPICAL	1.00 (A) (C)	6 of 37
	Tank .		wic SECTIONS	CONTRACT	PRODECT	
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Appendix B - Graphics

Des. No. 1600540 et al Des. No. 1600540 et. al.

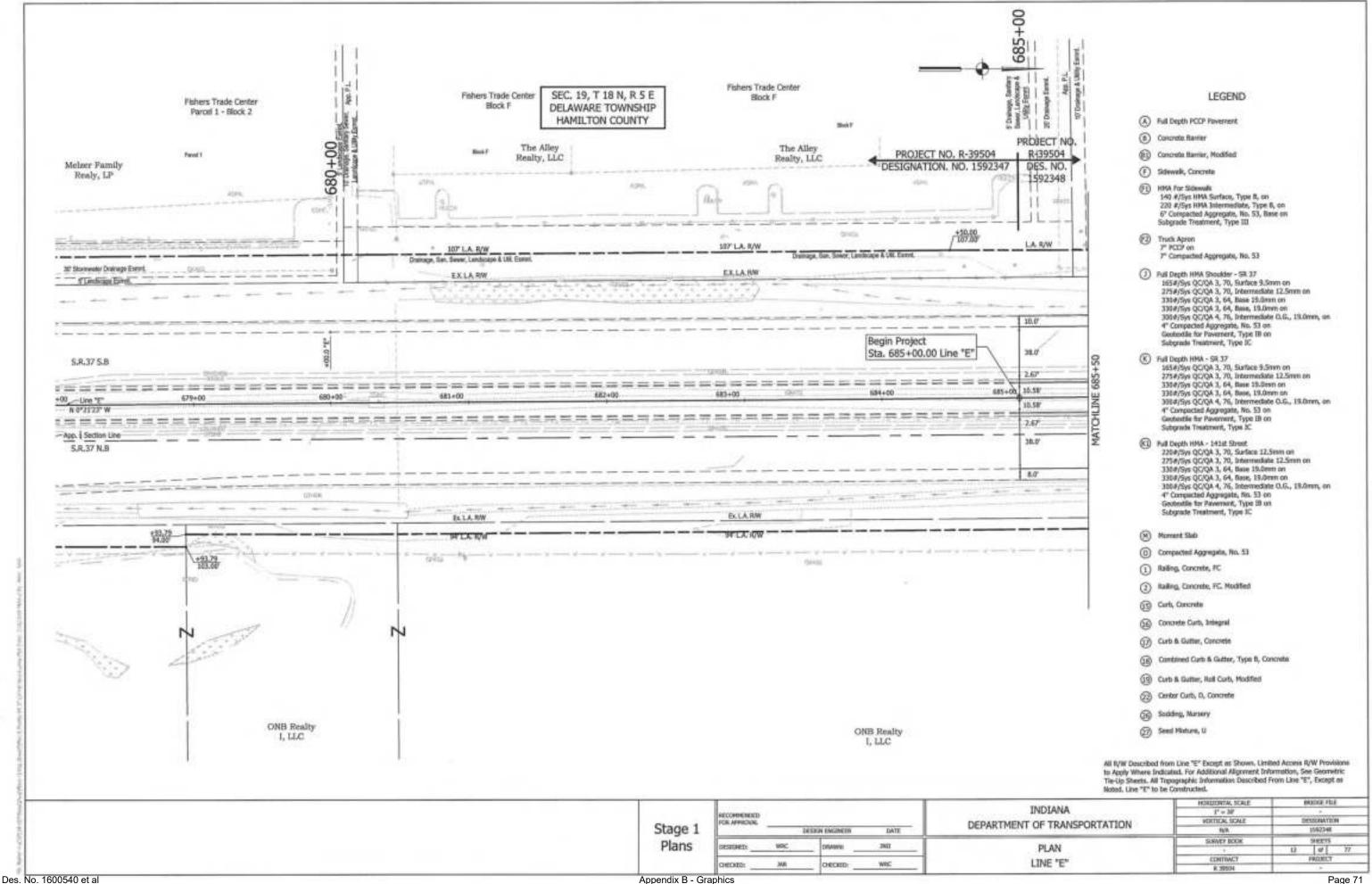
Page 68



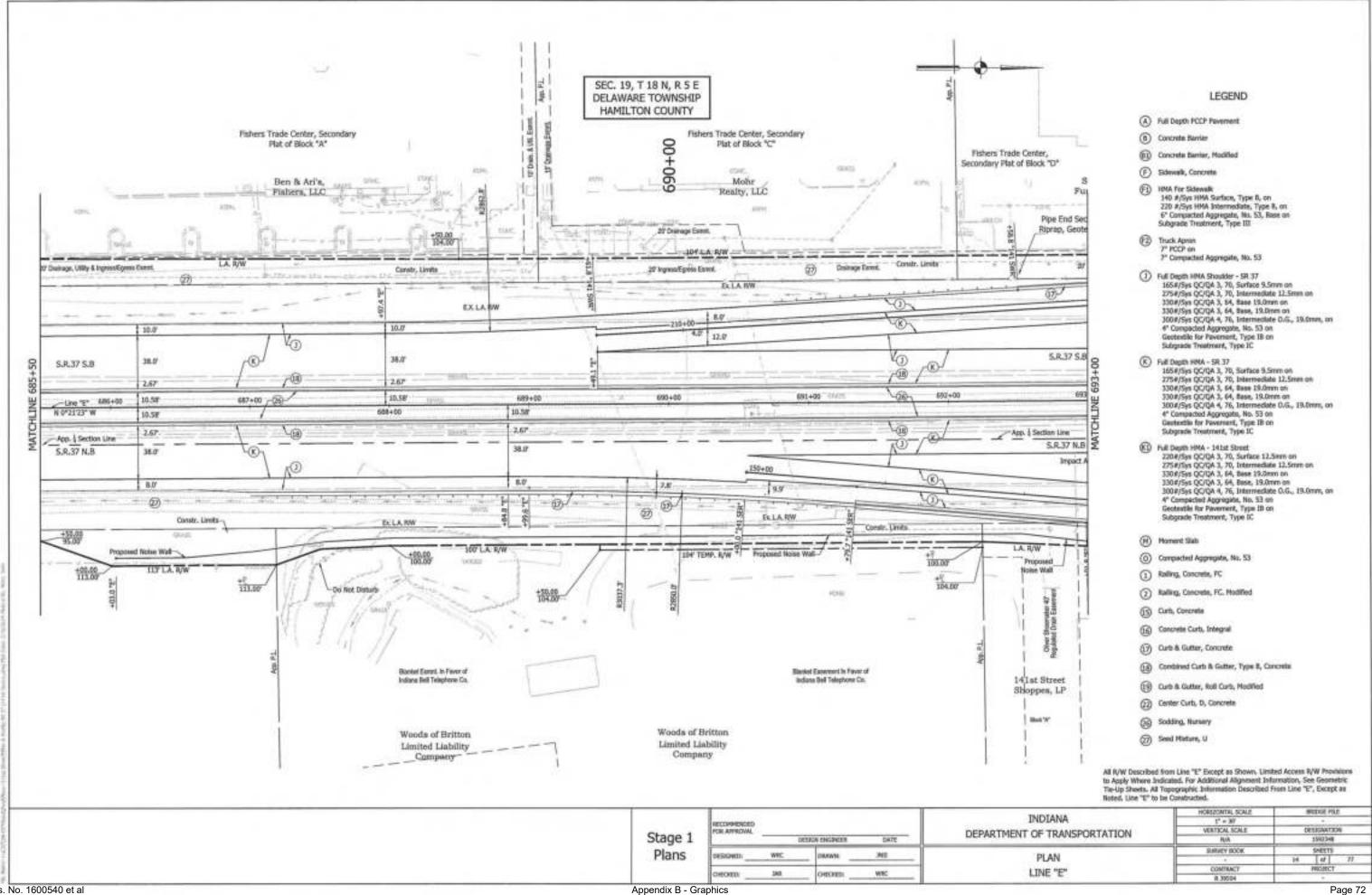


Attachment 1

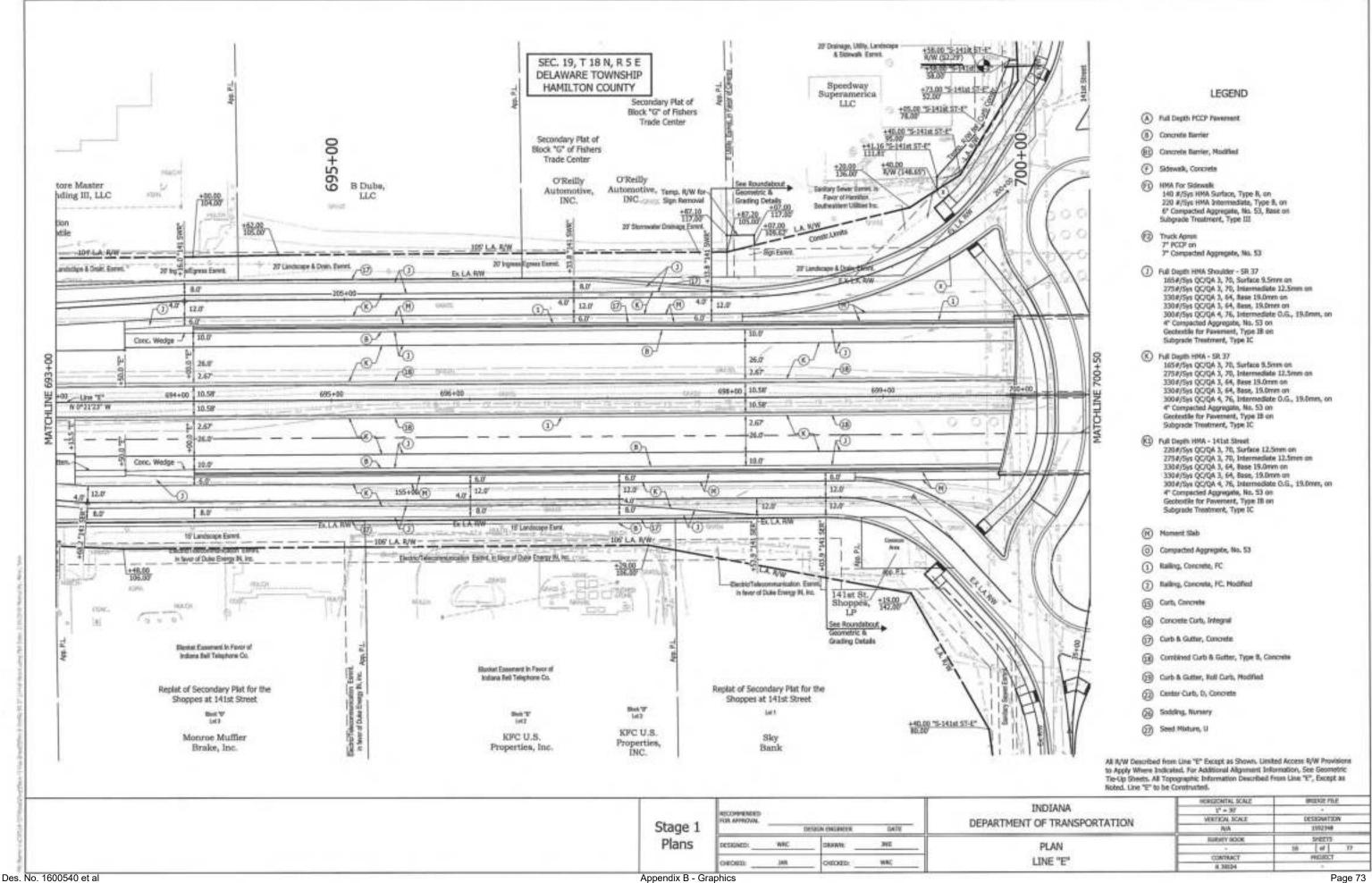
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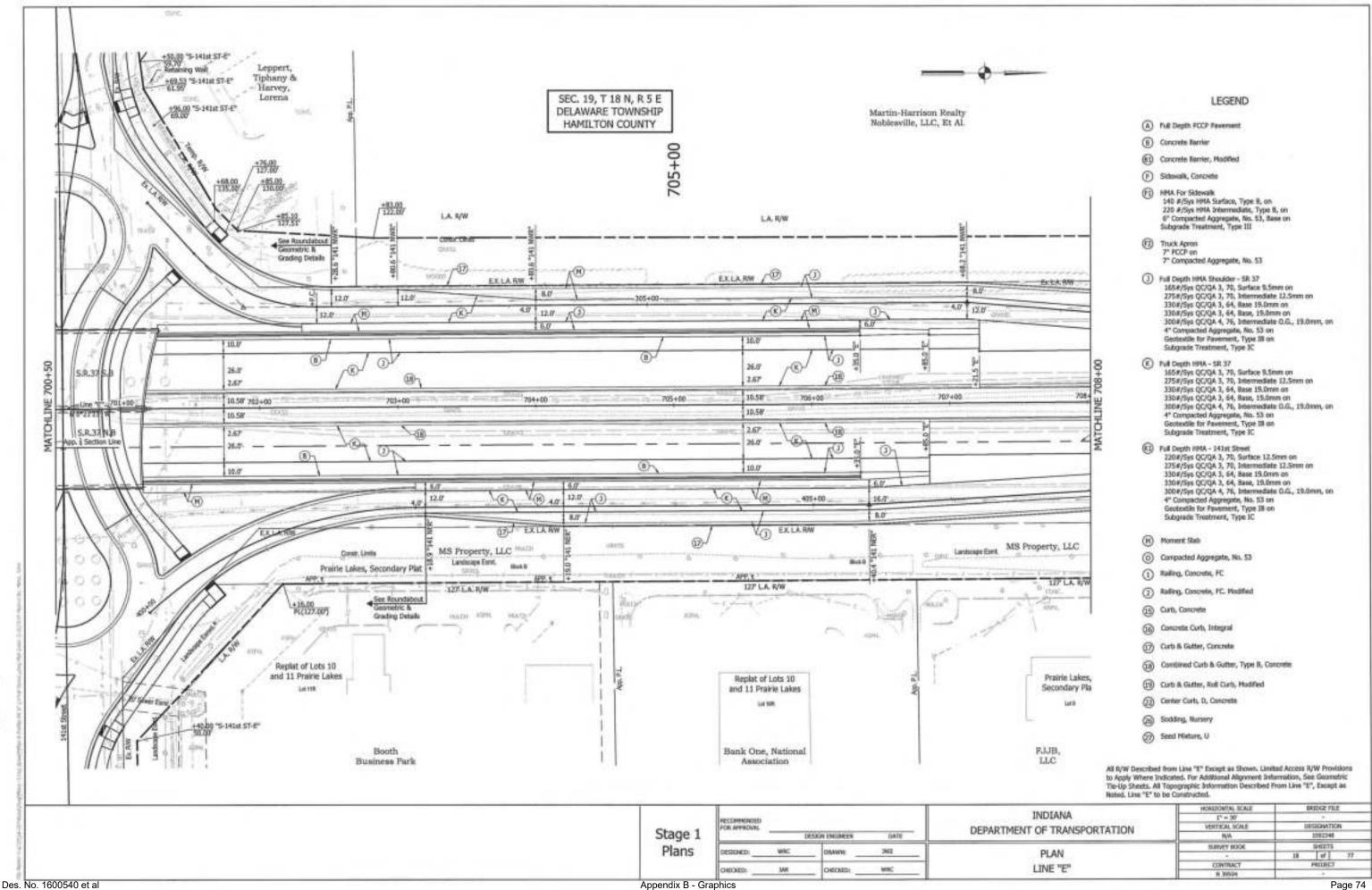
Appendix B - Graphics Attachment 1



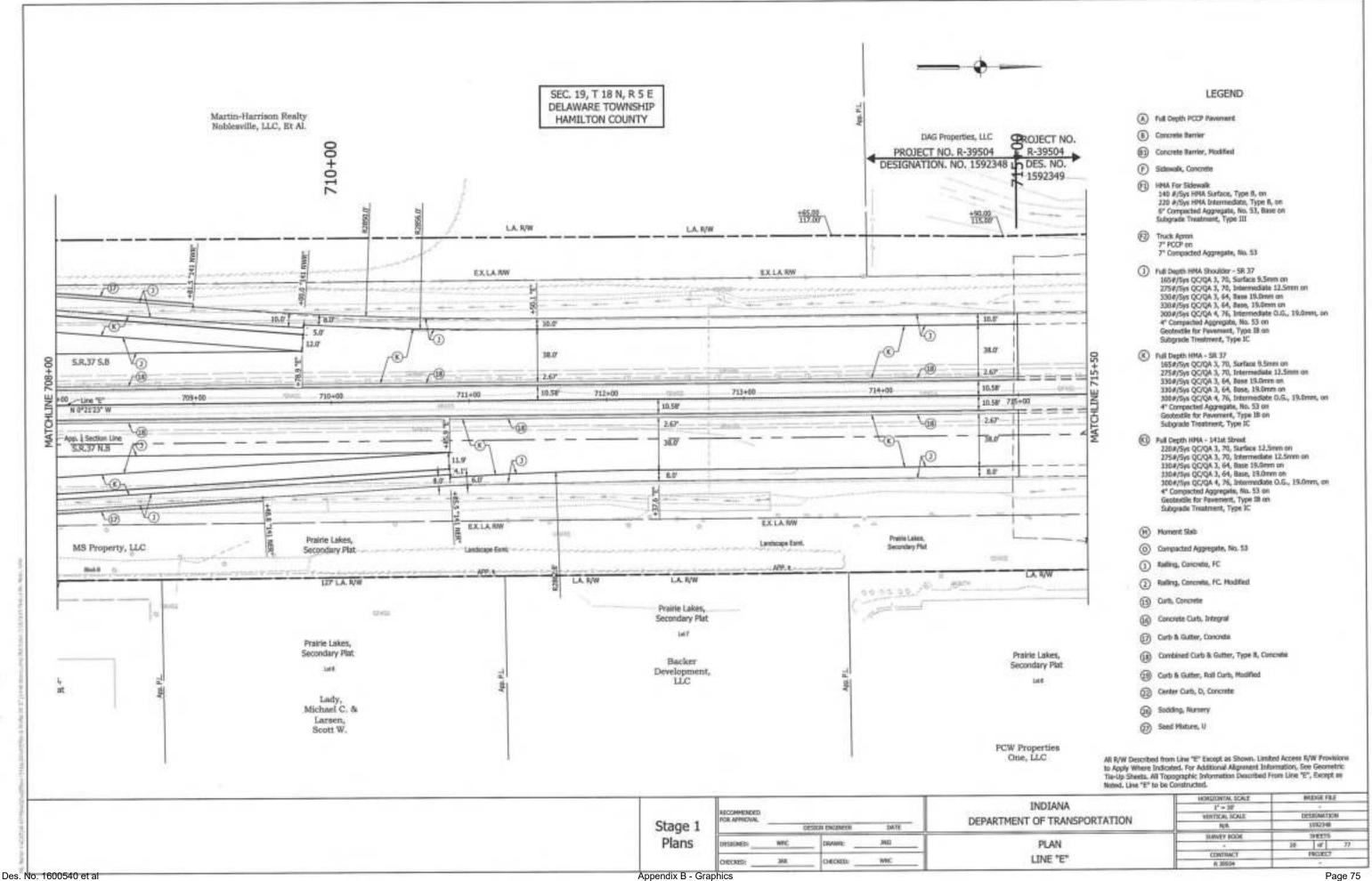
Des. No. 1600540 et al Des. No. 1600540 et. al. Appendix B - Graphics

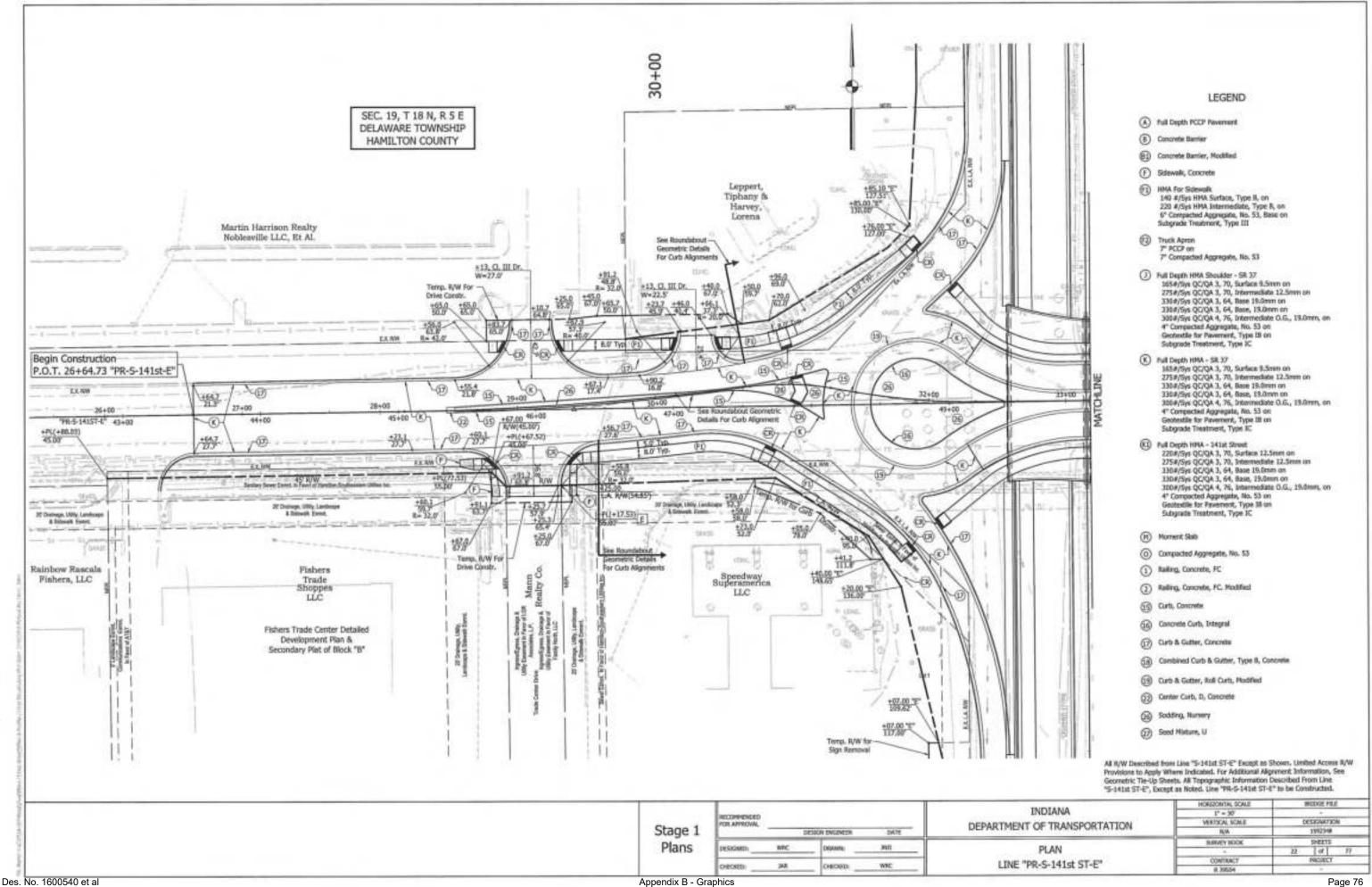


Appendix B - Graphics

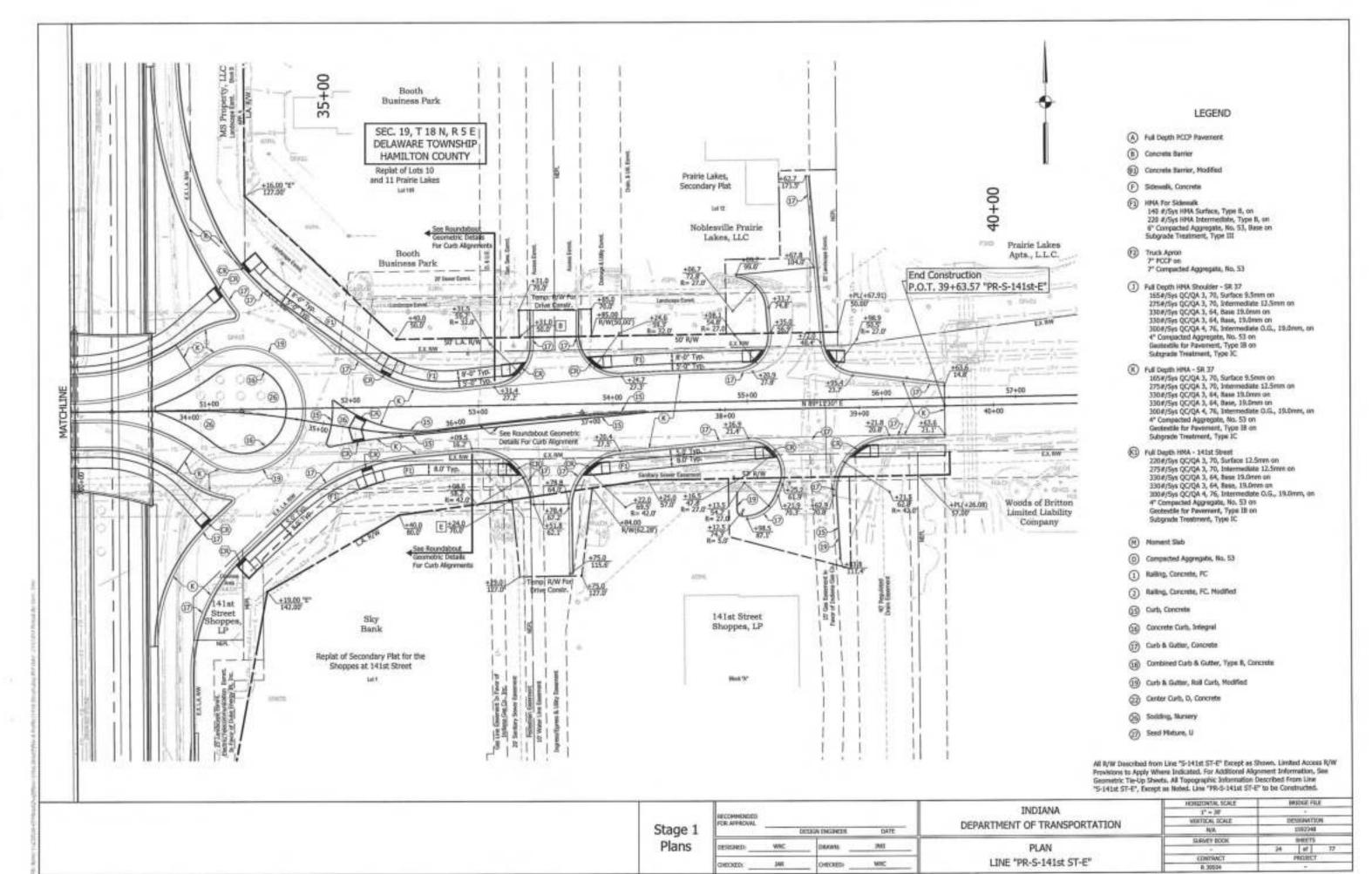


Appendix B - Graphics





Appendix B - Graphics



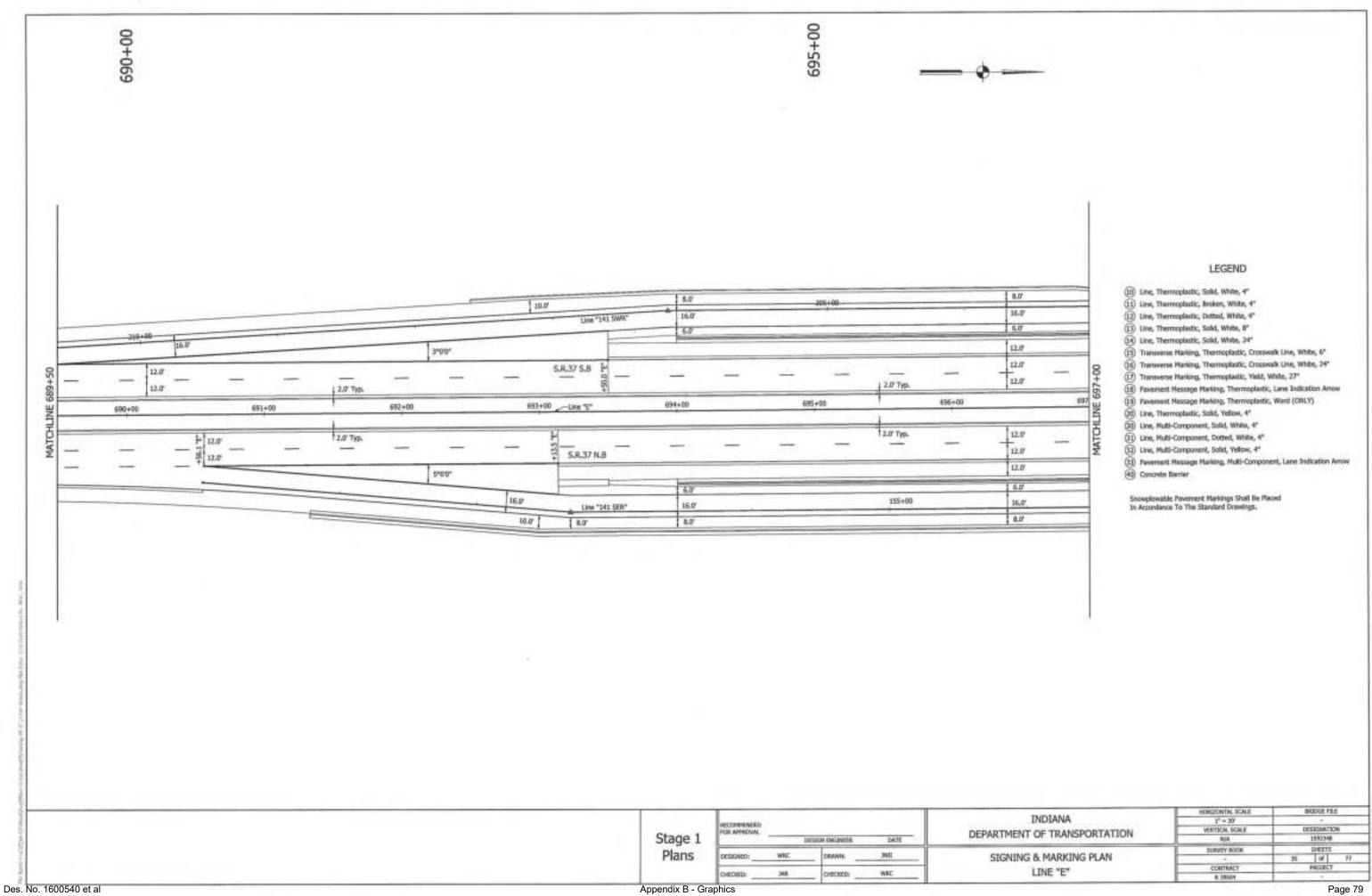
Des. No. 1600540 et al Des. No. 1600540 et. al. Appendix B - Graphics

PROJECT NO. R-39504 PROJECT NO. R-39504 DESIGNATION, NO. 1592347 DESIGNATION, NO. 1592348 LEGEND (III) Line, Thermoplastic, Solid, White, 4" Begin Project P.O.T. 685+00.00 "E" (1) Line, Thermoptestic, Broken, White, 4" (12) Line, Thermoplastic, Dotted, White, 4° (13) Line, Thermoplastic, Solid, White, 8" (14) Line, Thermoplastic, Solid, White, 24" 12.0 Transverse Marking, Thermoplastic, Crosswalk Line, White, 61 12.0 17.0 (b) Transverse Marking, Thermoplastic, Crosswalk Line, White, 24\* S.R.37 S.B 12.0 (17) Transverse Harking, Thermoplastic, Yield, White, 27\* 12.0 12.0 1.2.0' Typ. (B) Pavement Message Marking, Thermoplestic, Lane Indication Arrow 689+00 (19) Pavement Message Morking, Therreoplastic, Word (ONLY) 688+03 Line E 686+00 687+00 694+05 682+00 683+00 (20) Line, Thermoplastic, Solid, Yellow, 4" 685+00 (30) Line, Multi-Component, Solid, White, 4" 2.0" Typ. 12.0 (31) Line, Multi-Component, Dotted, White, 4" 12.0 (2) Line, Multi-Component, Solid, Yellow, 4" 12.0 S.R.37 N.B Revenent Message Marking, Multi-Component, Lane Indication Arrow 12.0 12,0 (40) Concrete Barrier 12.0 Snowplowable Pavement Markings Shall be Placed In Accordance To The Standard Drawings. HORIZONTAL SCALE MODGE FILE INDIANA VERTICAL SCALE DEPARTMENT OF TRANSPORTATION Stage 1 DATE 2592346 SHEETS TO PROJECT SURVEY BOOK Plans MEE SIGNING & MARKING PLAN CONTRACT LINE "E" NRC снеоева CHECKER Des. No. 1600540 et al Appendix B - Graphics Page 78

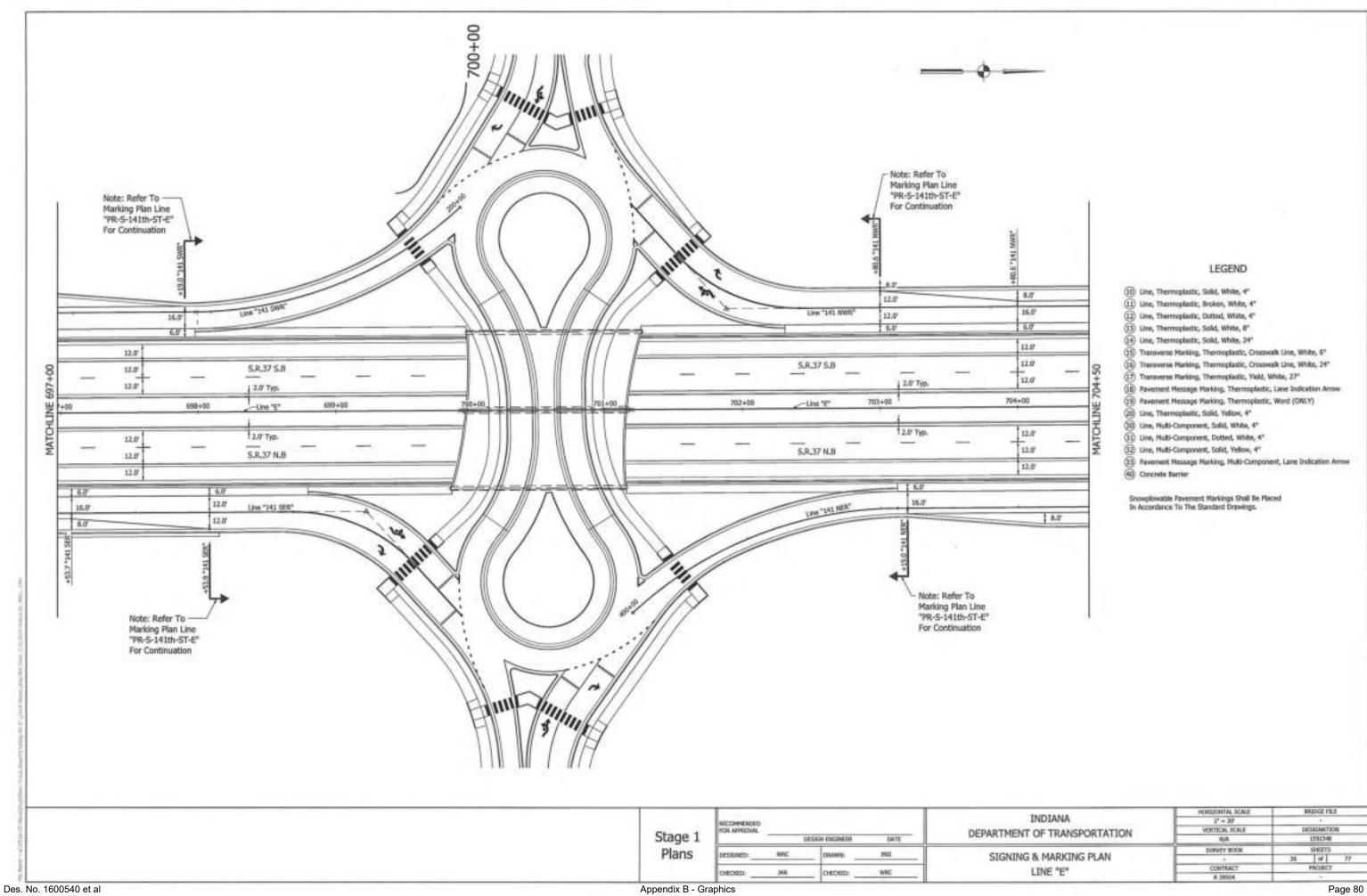
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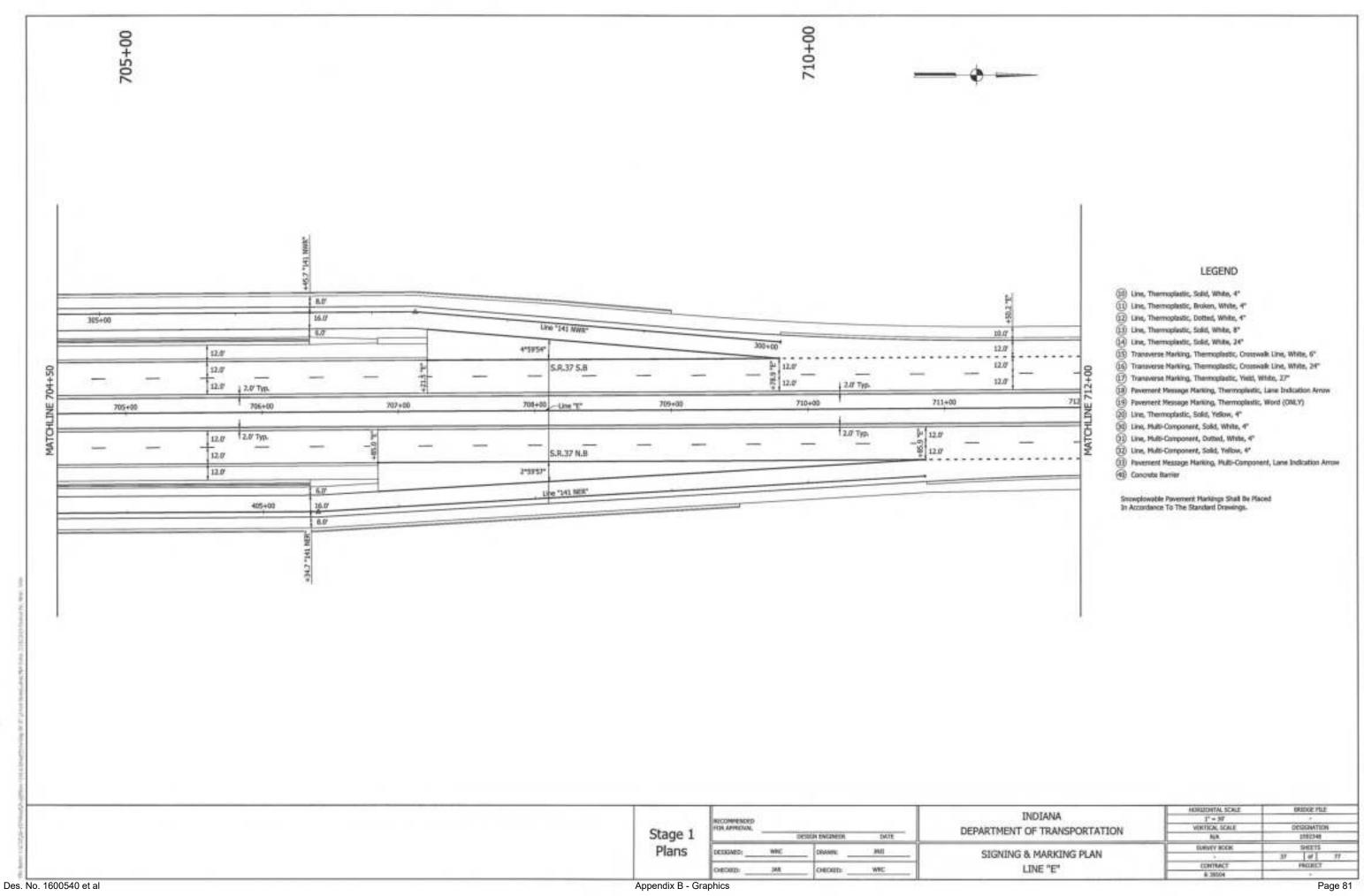


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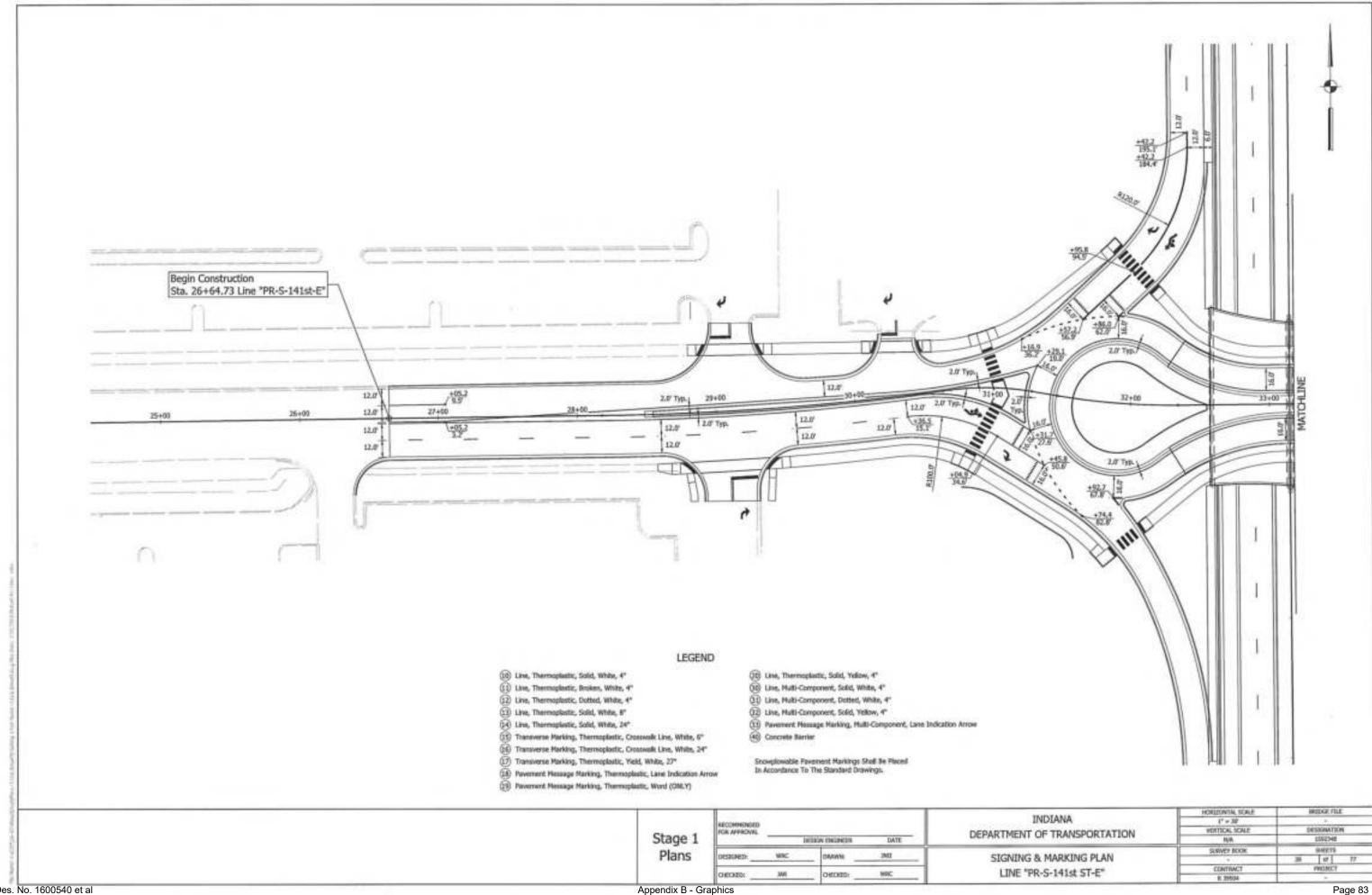


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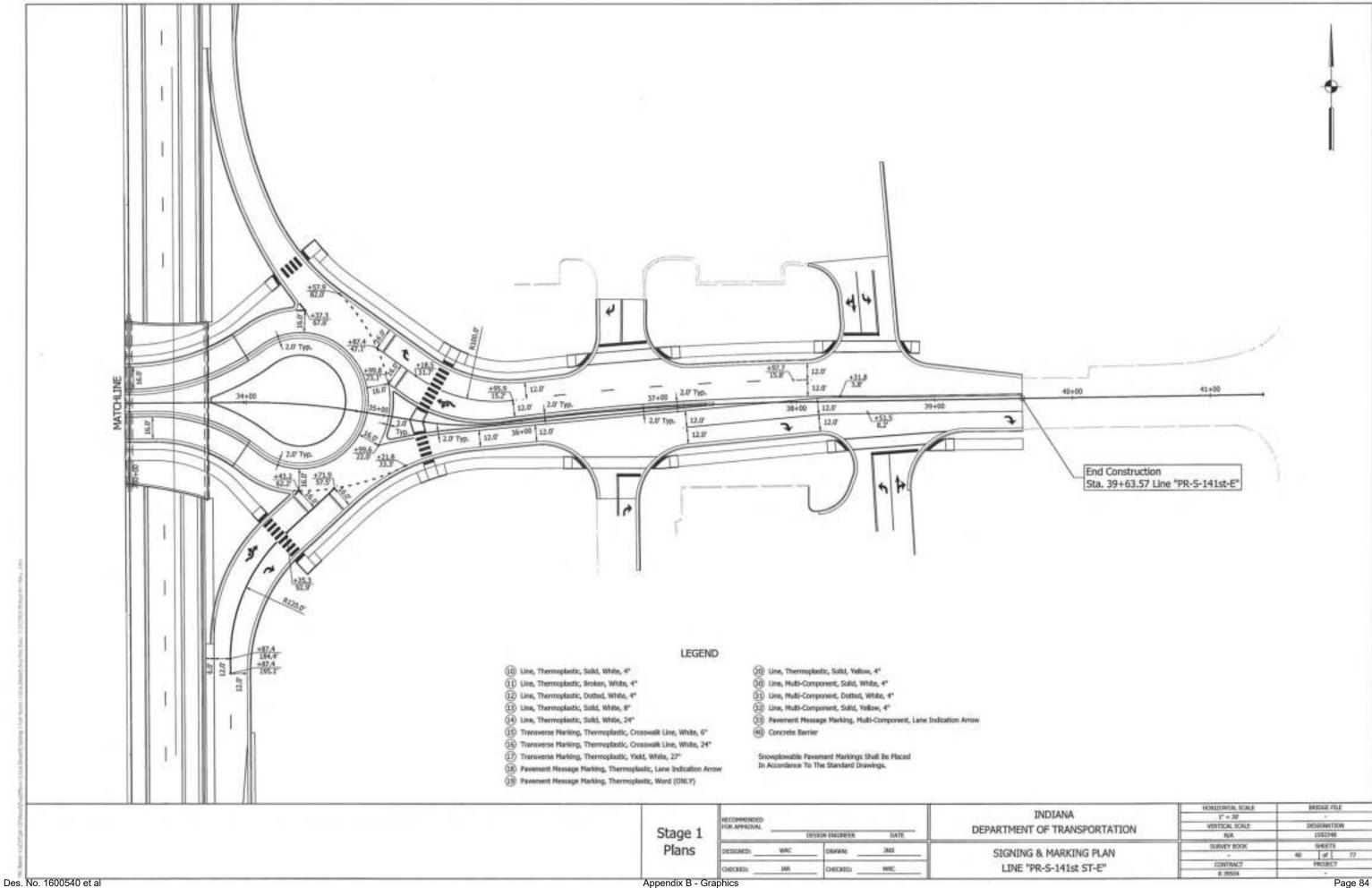
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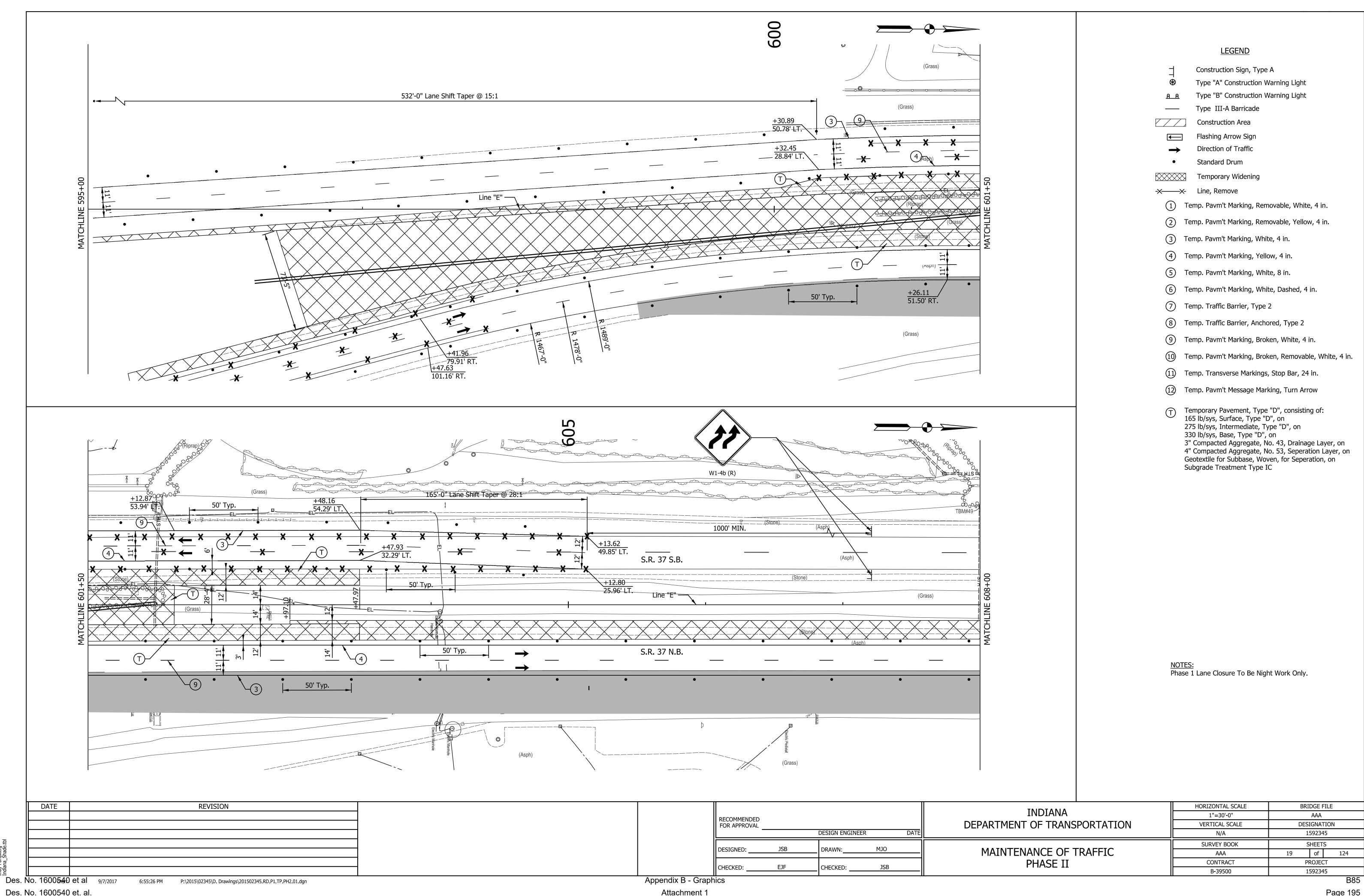


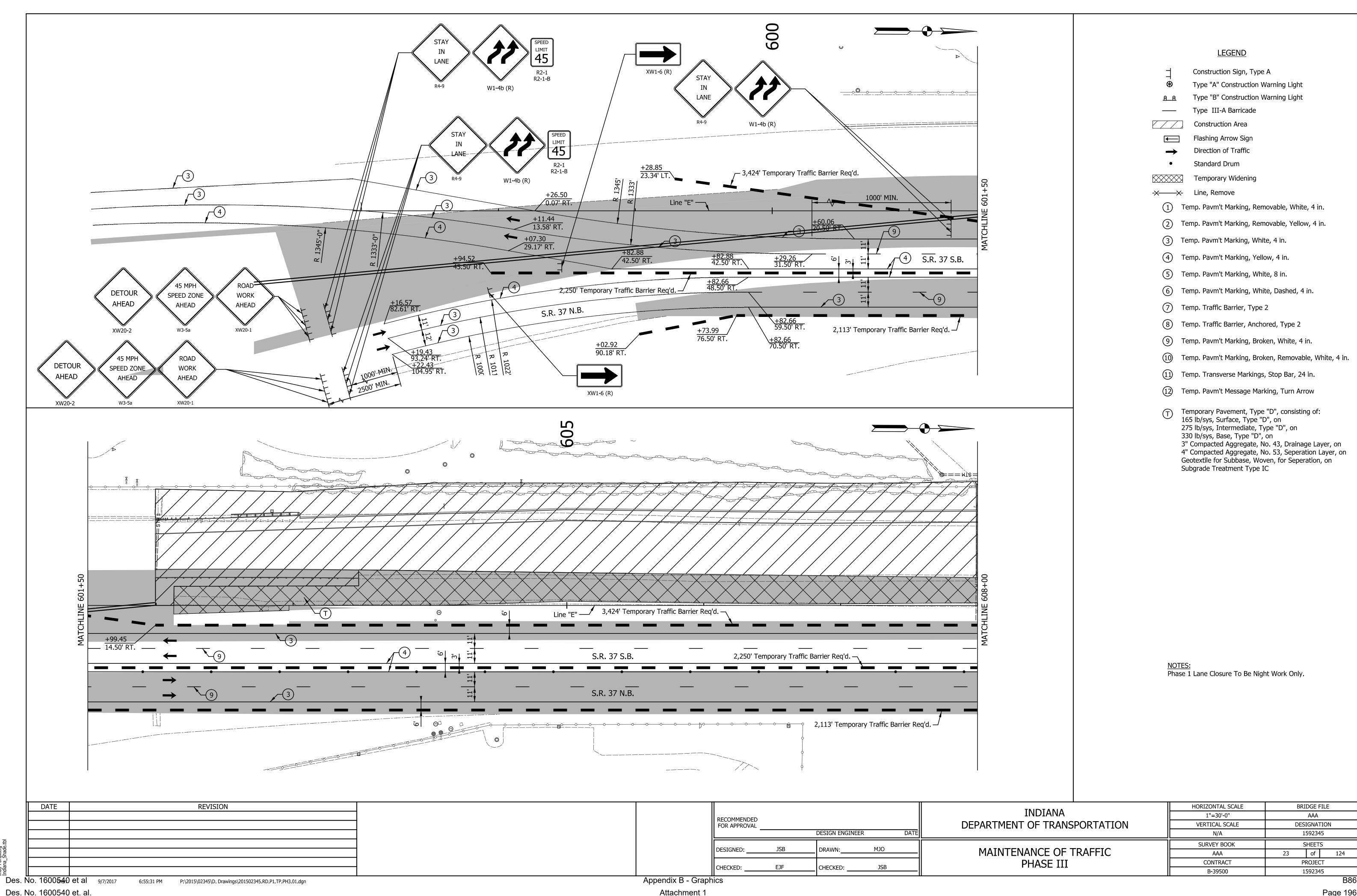
715+00 PROJECT NO. R-39504 PROJECT NO. R-39504 DESIGNATION, NO. 1592348 DESIGNATION, NO. 1592349 LEGEND (iii) Line, Thermoplestic, Solid, White, 4" End Project P.O.T. 715+00.00 "E" (1) Line, Thermopisetic, Broton, White, 4" (32) Line, Thermoplastic, Dotted, White, 4" (1) Line, Thermoplestic, Solid, White, #" (34) Line, Thermoplestic, Solid, White, 24" 10.0 12.0 (E) Transverse Mirking, Thermoplistic, Crosswalk Line, White, 6" 12.0 (16) Transverse Marking, Thermoplastic, Crosswall: Line, White, 24" S.R.37 S.B 12.0 12.77 (27) Transverse Marking, Thermoplastic, Yield, White, 27\* 12.0 12.0" 2.0' Typ. (16) Pavement Message Marking, Thermoplestic, Lane Indication Arrow 3,13+00 (39) Pavement Message Marking, Thermoplastic, Word (ONLY) 718+00 -Line\*2\* 716+00 717+00 715+00 713+00 714+00 (20) Line, Thermoplostic, Solid, Yellow, 4" (30) Line, Multi-Component, Solid, White, 4" (31) Line, Hulti-Component, Dotted, White, 4" 2.0 Typ. 12.0 12.0 (E) Line, Hulti-Component, Solid, Yellow, 4" 12.0 12.0 Revernent Message Marking, Hulti-Component, Lane Indication Arrow @ Concrete Serrier 12.0 12.0 10.0 Snowplowshite Pavement Markings Shall Be Placed In Accordance To The Standard Drawings. SHIEDGE FILE INDIANA  $1^{\circ} = 30^{\circ}$ DESIGNATION VEHTSCAL SCALE DEPARTMENT OF TRANSPORTATION Stage 1 DATE 1592348 DESIGN ENGINEER. sweers of SURVEY BOOK Plans JAIL SIGNING & MARKING PLAN CONTRACT LINE "E" WIC снесиот OHOUGH H.39904 Des. No. 1600540 et al Appendix B - Graphics Page 82 Attachment 1

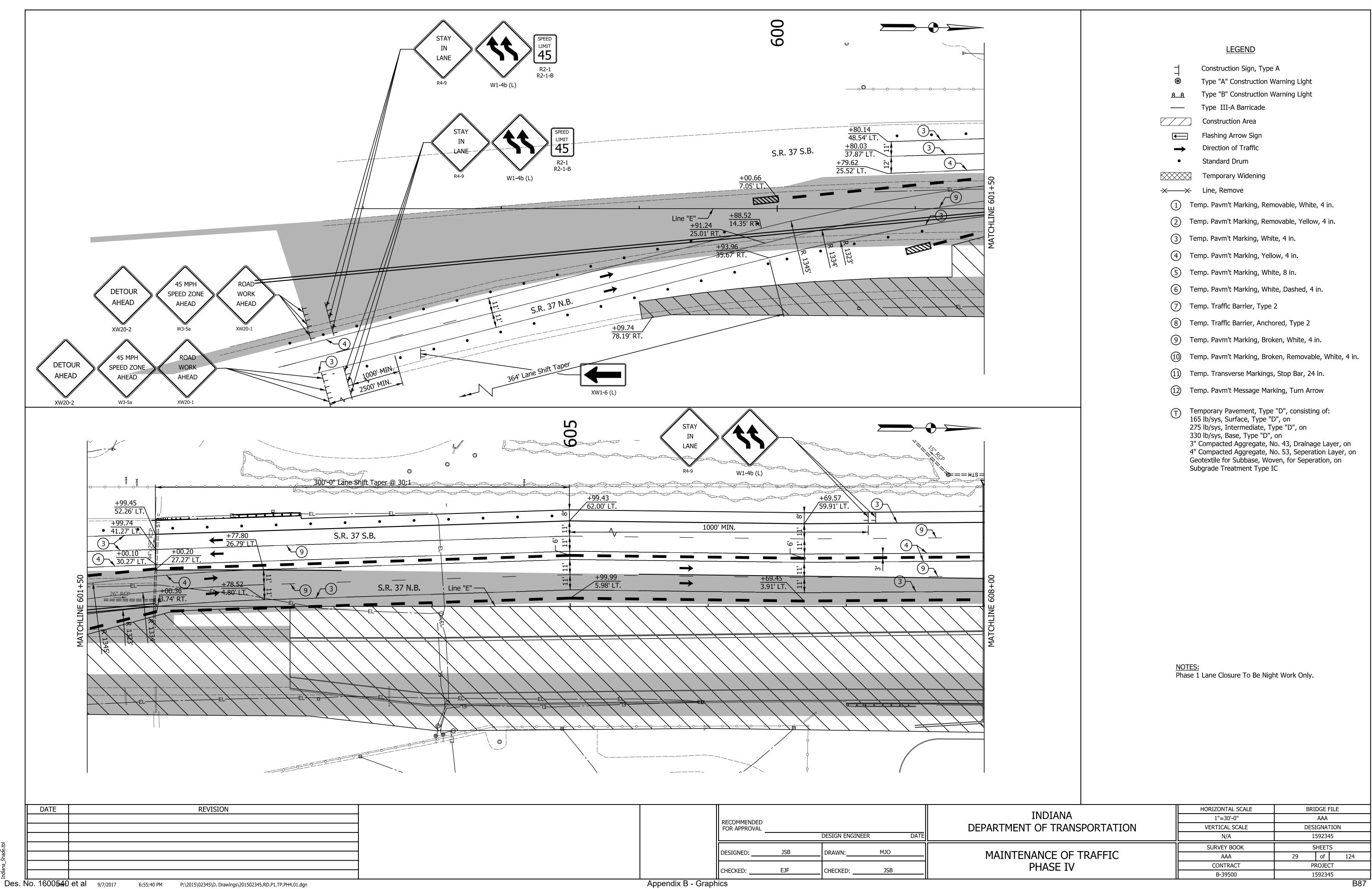


Des. No. 1600540 et al Des. No. 1600540 et. al. Appendix B - Graphics



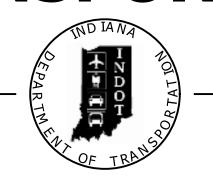






PROJECT	DESIGNATION
1592345	1601829
CONTRACT	BRIDGE FILE
D 20072	NI/A

# INDIANA DEPARTMENT OF TRANSPORTATION



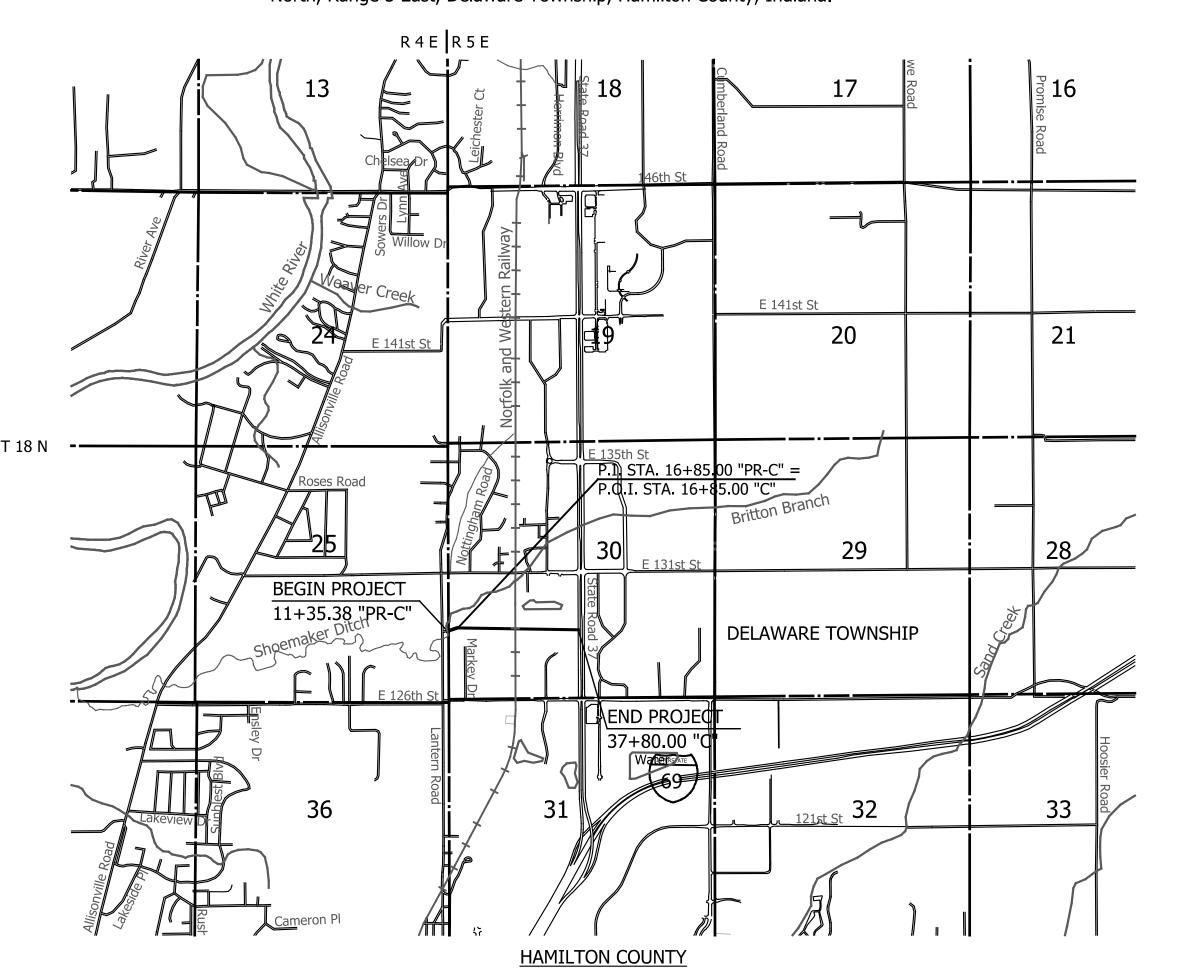
# ROAD PLANS

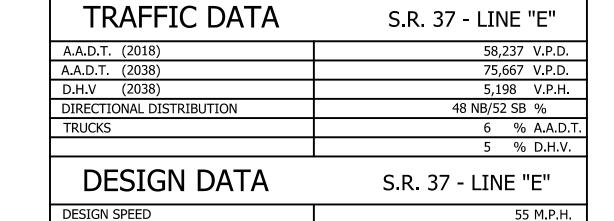
S.R. 37 SOUTH DRAINAGE LINE RECONSTRUCTION

PROJECT NO.

1601829 P.E. 1601829 R/W 1601829 CONST.

Advanced storm sewer construction for S.R. 37 beginning approx. 1,315 feet North and 2,644 feet West of the Intersection of S.R. 37 and 126th Street, thence Easterly approx. 549 feet along Line "PR-C", thence Easterly approx. 2,095 along Line "C", to approx. 1,315 feet North of the Intersection of S.R. 37 and 126th Street, all in Section 30, Township 18 North, Range 5 East, Delaware Township, Hamilton County, Indiana.





RECONSTRUCTION (NON-FREEWAY)

PRINCIPAL ARTERIAL

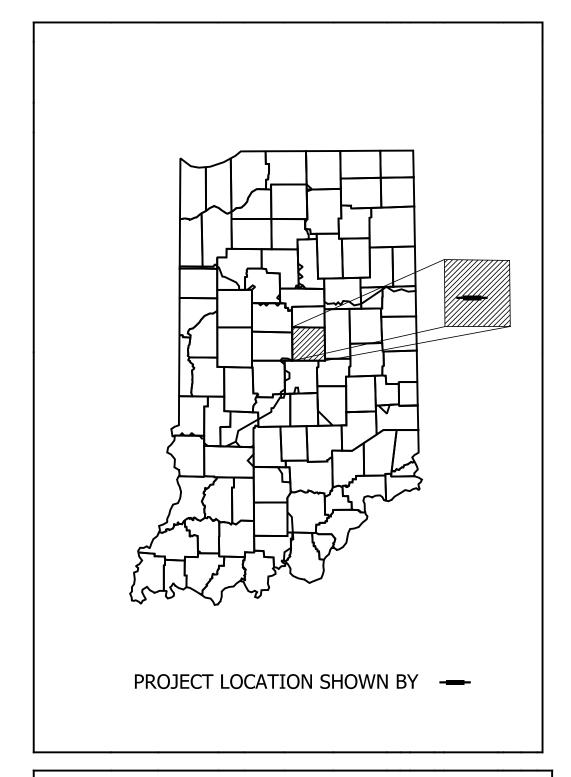
SUBURBAN LEVEL

PROJECT DESIGN CRITERIA

RURAL/URBAN

ACCESS CONTROL

FUNCTIONAL CLASSIFICATION



LATITUDE: 39°58'31" N LONGITUDE: 86°00'14" W

Gross Length: 0.50 MI.

Net Length: 0.50 MI.

Maximum Grade: 0.60 %

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2018 TO BE USED WITH THESE PLANS.

BRI	BRIDGE FILE		
N/A			
DESIGNATION			
1601829			
S	SHEETS		
1	of	18	
PROJECT		T .	
1601829			
	DES. 1 S 1	N/A  DESIGNAT  160182  SHEETS  1 of  PROJECT	





CITY OF FISHERS	
Scott Fadness, Mayor	Date
Jeff Hill, Director of Engineering	Date



Des. No. 1600540 et al 3/16/2018

Des. No. 1600540 et. al.

7260 SHADELAND STATION INDIANAPOLIS, IN 46256-3957 EL 317.547.5580 FAX 317.543.0270 www.structurepoint.com PLANS
PREPARED BY:

CERTIFIED BY:

American Structurepoint, Inc.

CERTIFIED BY:

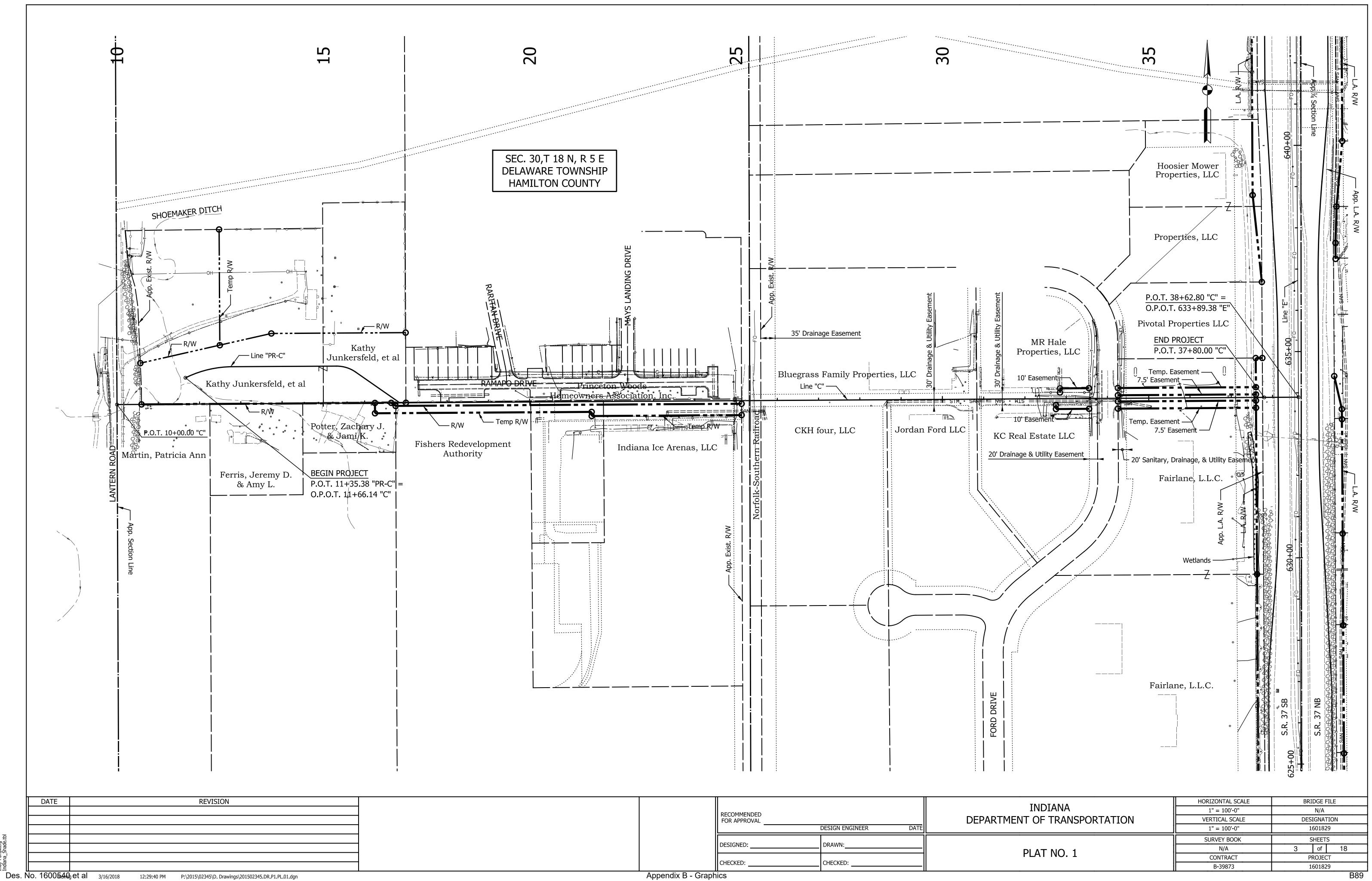
APPROVED
FOR LETTING:

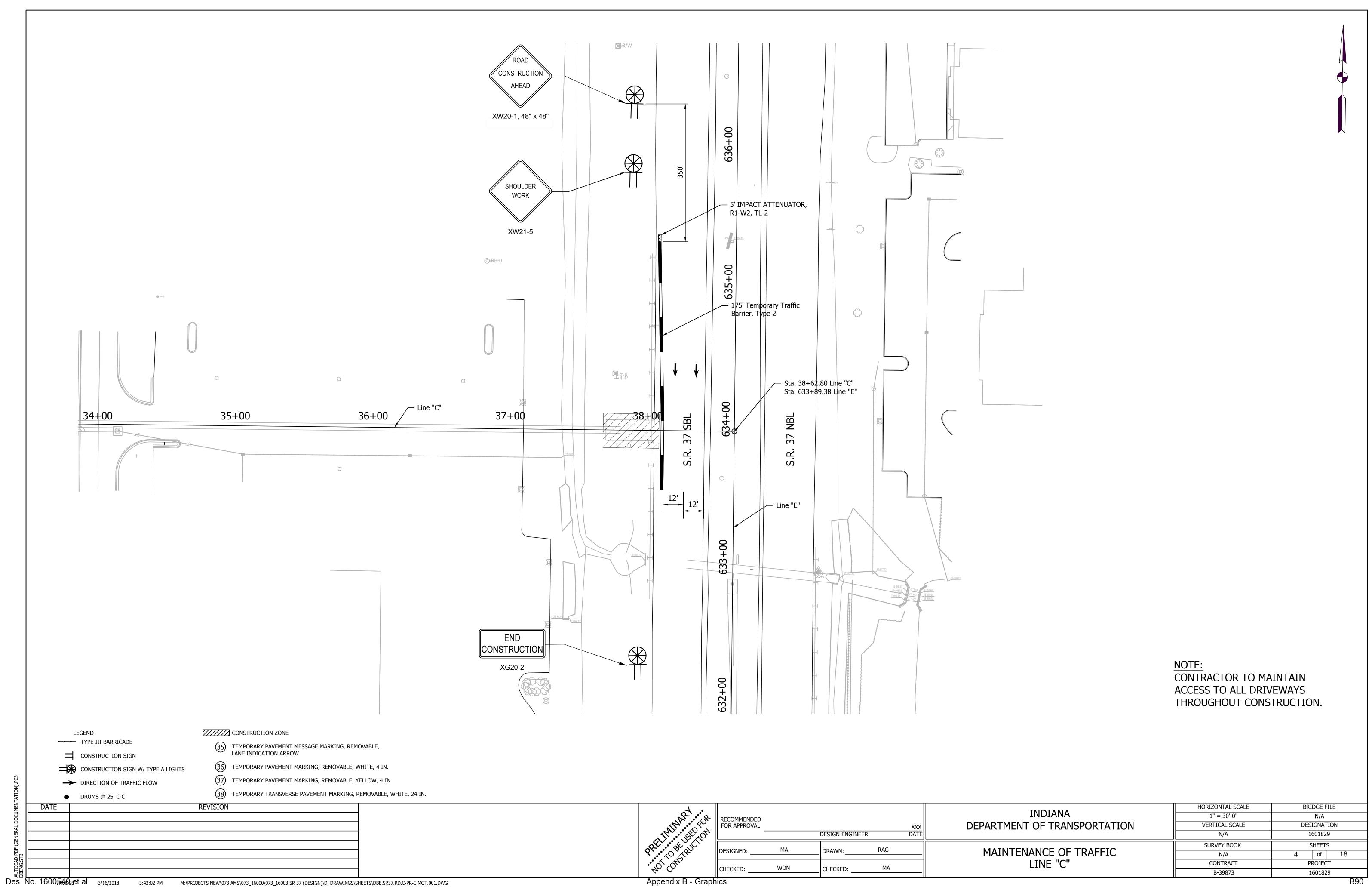
INDIANA DEPARTMENT OF TRANSPORTATION

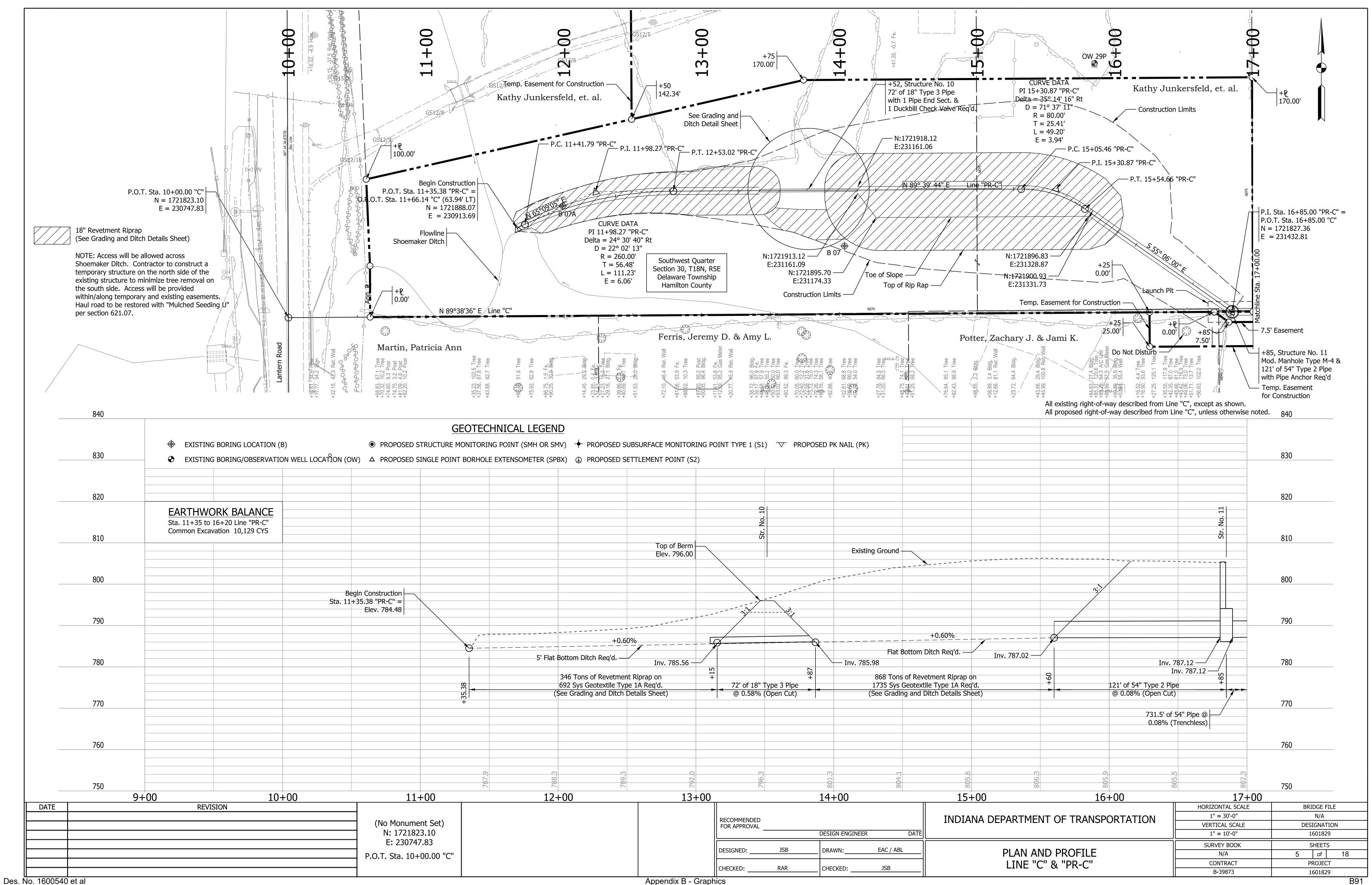
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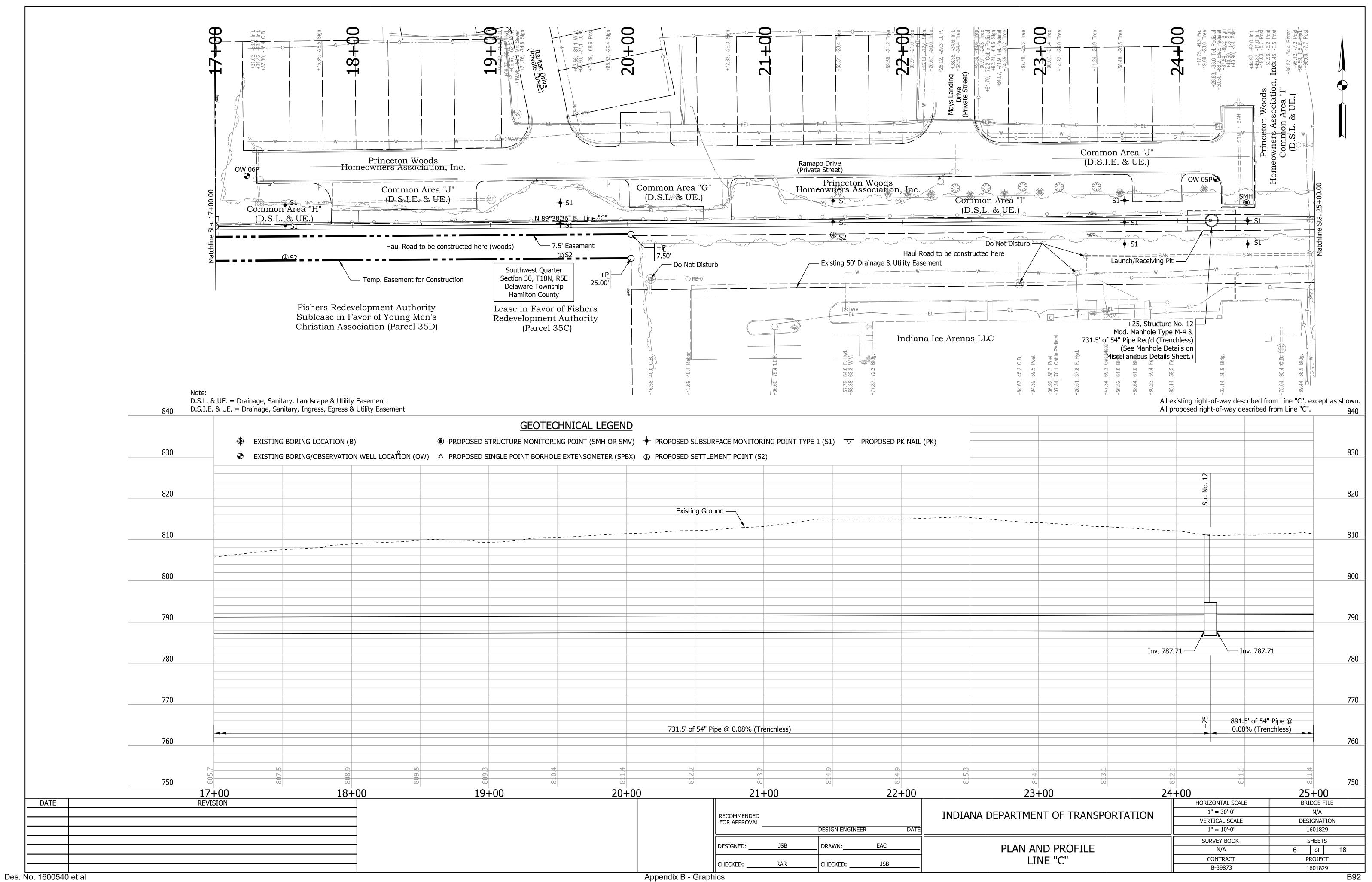
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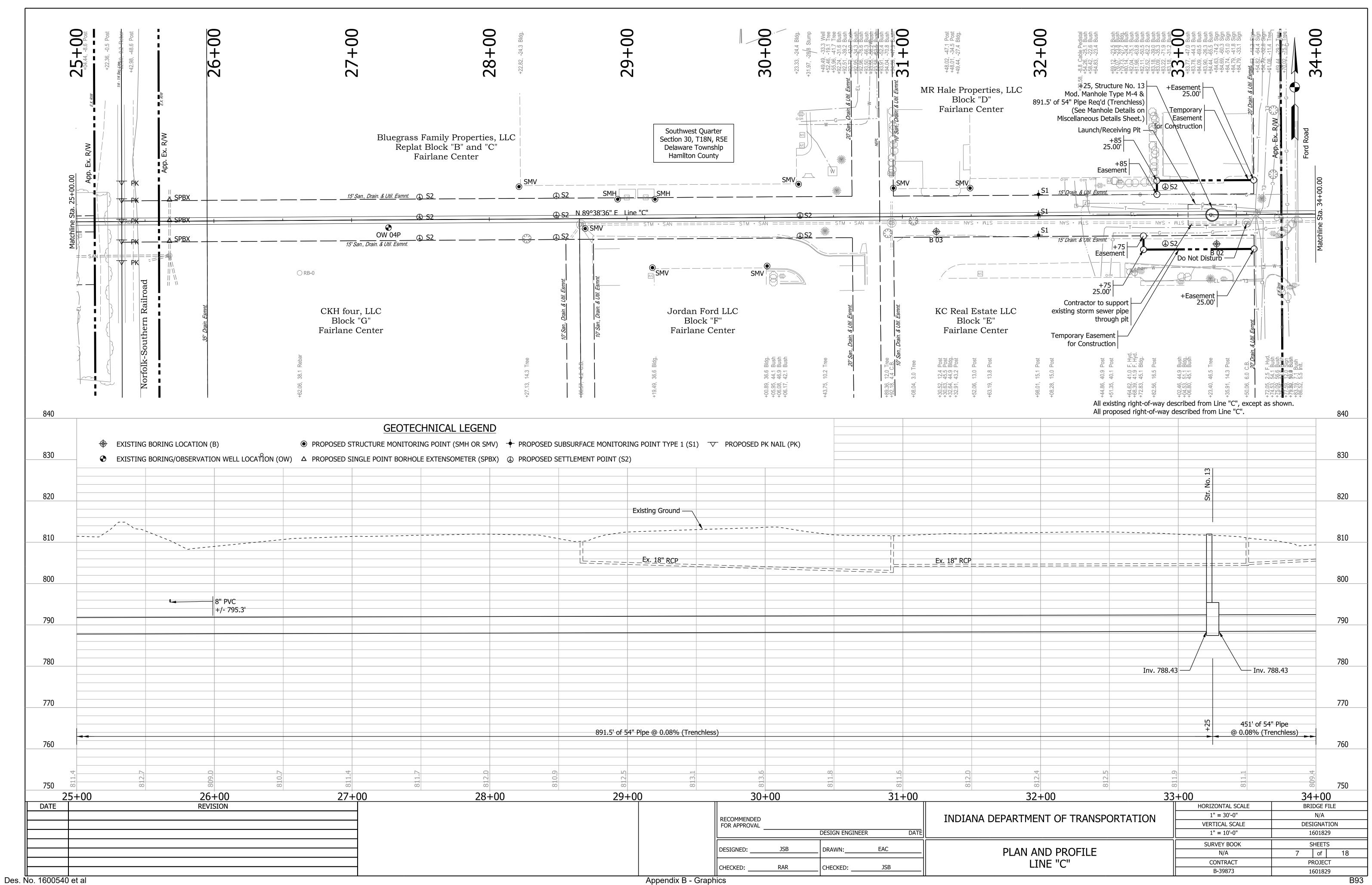
Appendix B - Graphics

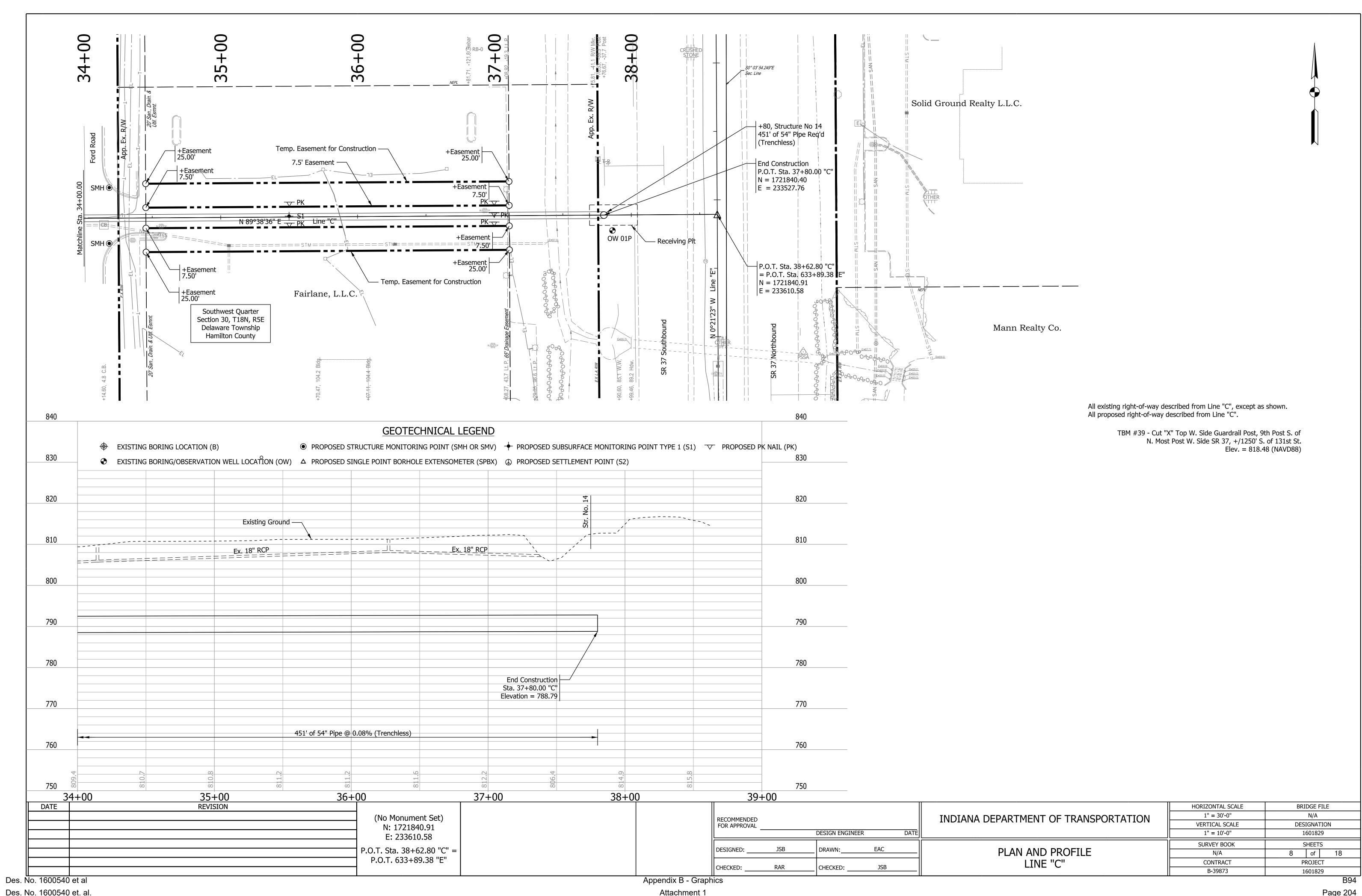


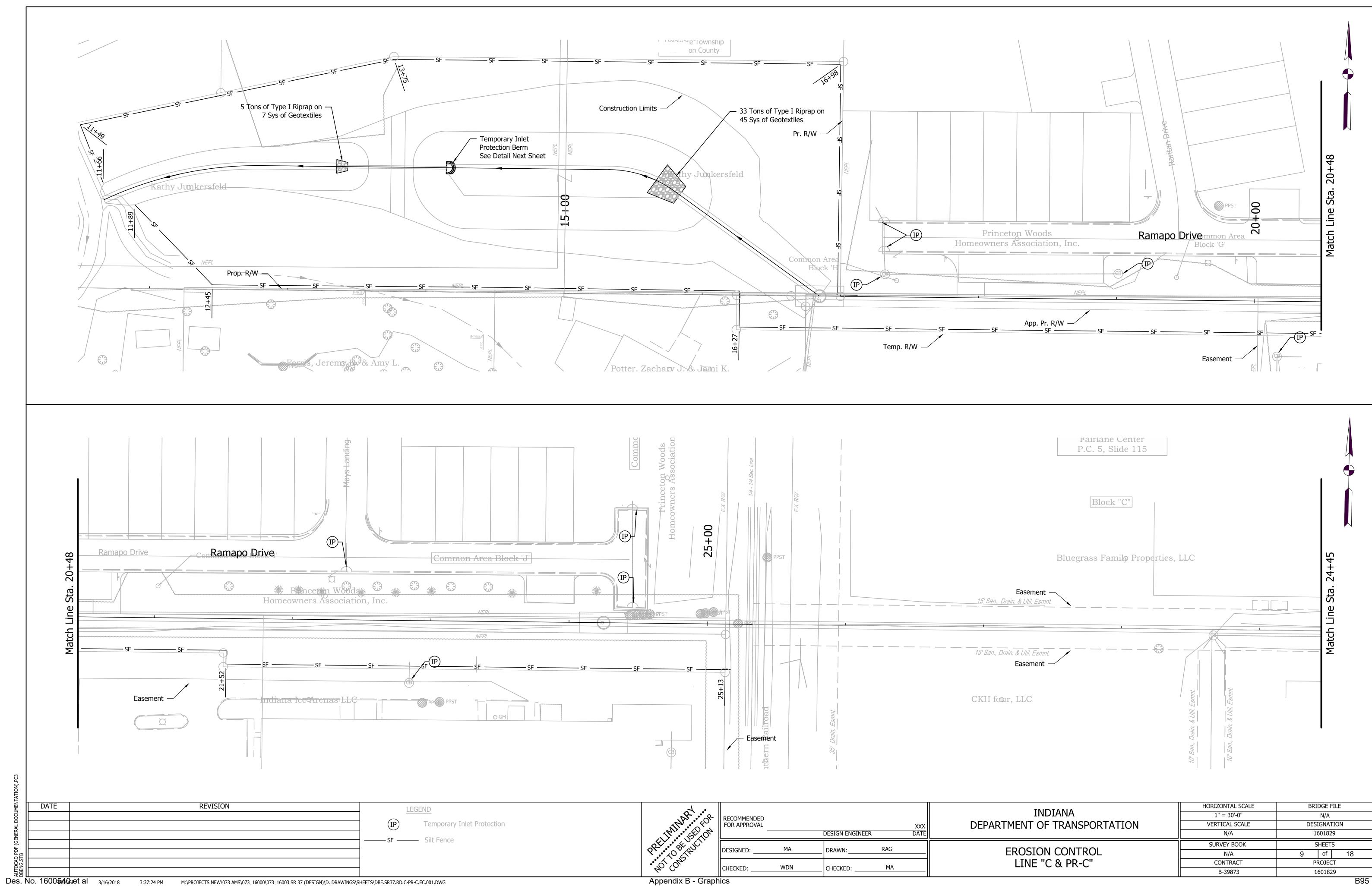


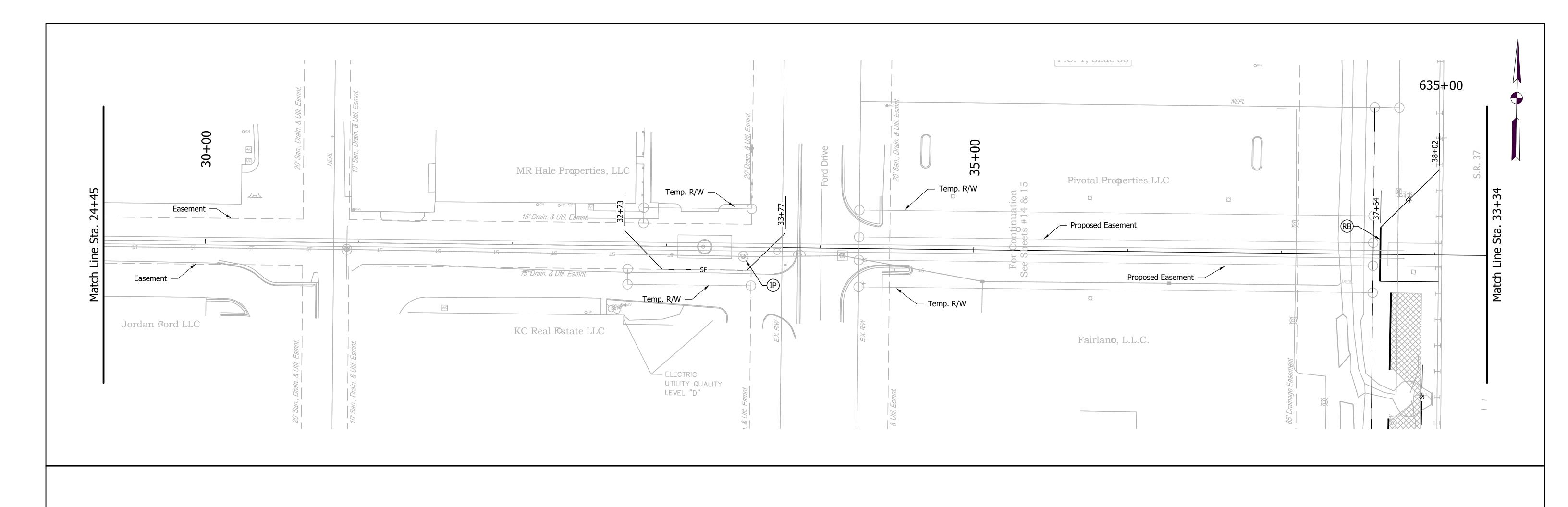


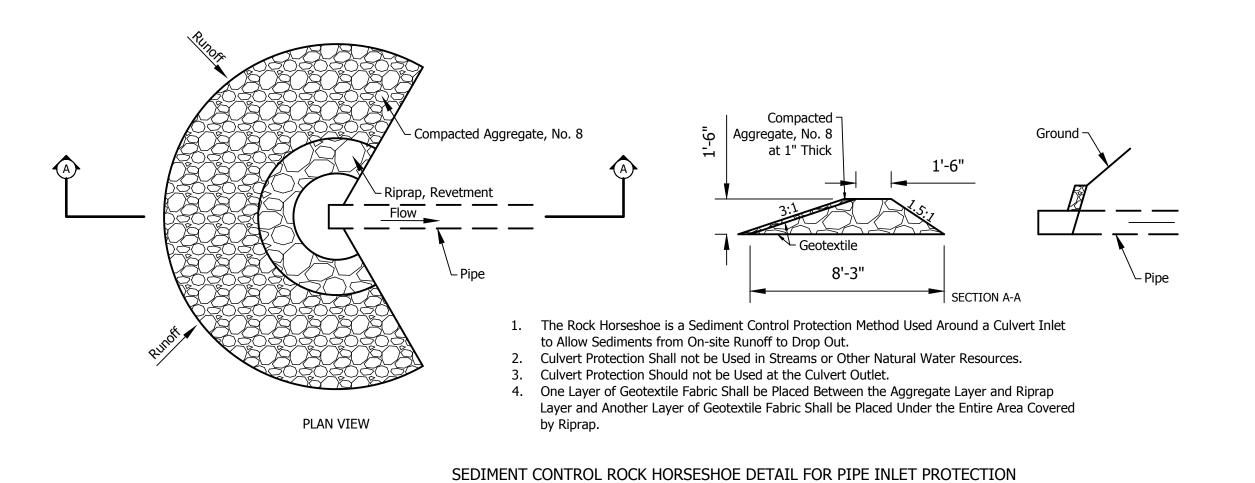


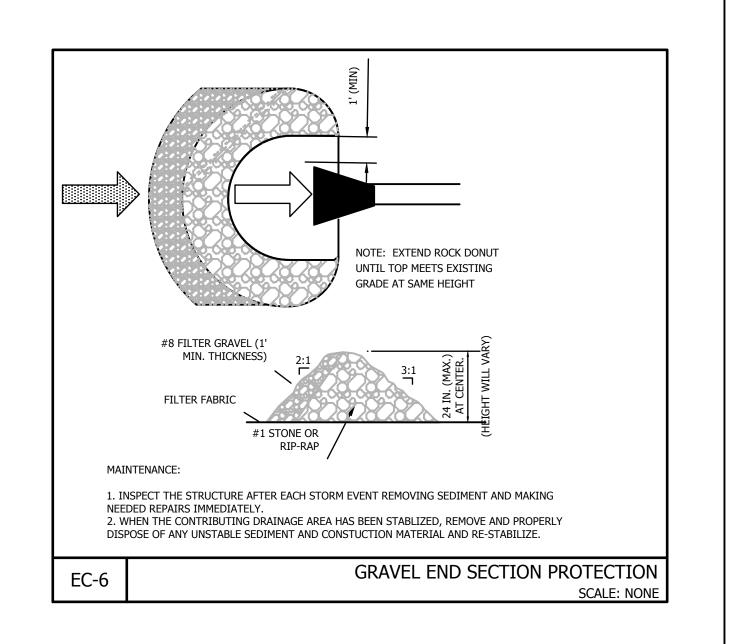










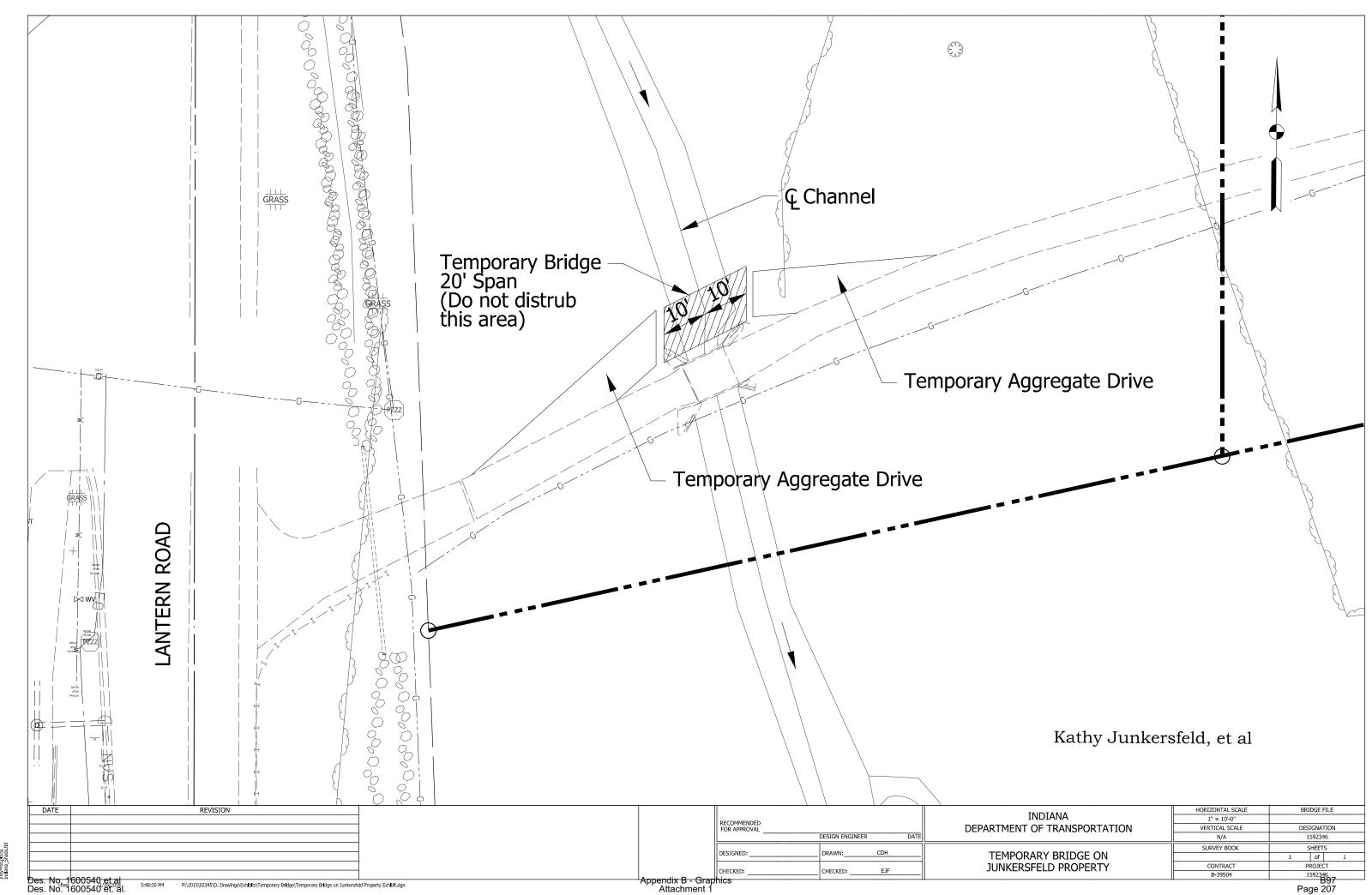


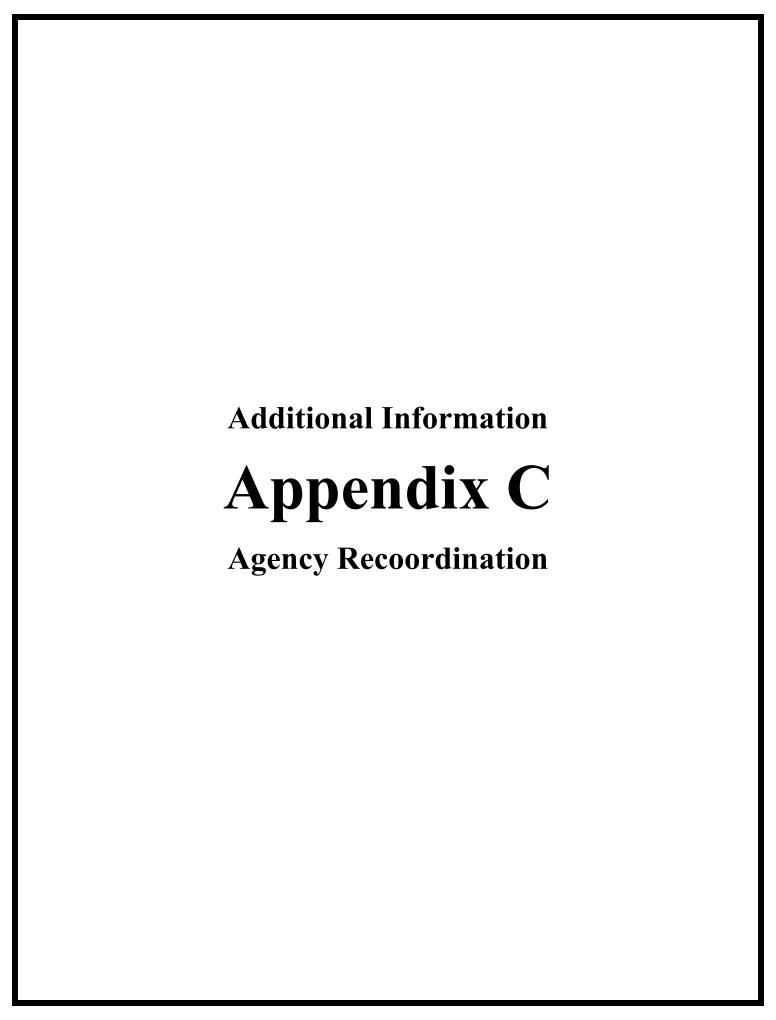
	DATE	REVISION	<u>LE</u>	<u>GEND</u>		
			(IP)	Temporary Inlet Protection		
			SF	— Silt Fence		⋌
IG.STB			RB	Rock Filter Berm		٠ •
DBEN			1			

MR. OR
PRELIMINARY. FOR PRELIM
PRY TO BE FULL
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S TON	RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		XXX DATE	
	DESIGNED:	MA	DRAWN:	RAG		
	CHECKED:	WDN	CHECKED:	MA		

TRUDTANIA	HORIZONTAL SCALE	BRIDGE FILE
INDIANA	1" = 30'-0"	N/A
DEPARTMENT OF TRANSPORTATION	VERTICAL SCALE	DESIGNATION
	N/A	1601829
EDOCTONI CONITDOI	SURVEY BOOK	SHEETS
EROSION CONTROL	N/A	10 of 18
LINE "C"	CONTRACT	PROJECT
	B-39873	1601829







February 21, 2018

Sample Re-Coordination Letter Sent to Resource Agencies

Re: Des. No.: 1600540

SR 37 Improvement Project, from I-69 to SR 32 Fishers and Noblesville, Hamilton County, Indiana

Dear Sir or Madam,

The Federal Highway Administration (FHWA), in conjunction with the Indiana Department of Transportation (INDOT), and the City of Fishers propose to proceed with the SR 37 Corridor Project, from Interstate 69 (I-69) to State Road 32 (SR 32) in Noblesville and Delaware Townships, Hamilton County, Indiana (Des. No. 1600540). FHWA is providing funding and is the lead federal agency for this project. This letter is part of the continuing coordination phase of the environmental review process requesting comments associated with this project. Previous coordination has taken place on September 13, 2016, and March 15, 2017. This letter seeks to provide additional updates that to the project scope of work that have occurred since the previous two coordination letters were sent. Please reference the above Des. No. and project description in your reply and your comments will be incorporated into the formal environmental study.

### **Project Location**

The proposed project is located in the Riverwood United States Geological Survey (USGS) Topographic Quadrangle, Sections 31 and 32, Township 19 North, Range 5 East, and Sections 5, 6, 7 and 8, Township 18 North, Range 5 East; Noblesville Quadrangle, Section 18, Township 18 North, Range 5 East; and Fishers Quadrangle, Sections 18, 19, 30 and 31, Township 18 North, Range 5 East and Sections 13, 24 and 25, Township 18 North, Range 4 East. Adjacent land usage is predominantly commercial and industrial with some agricultural and residential.

### Previous Project Description (as described in the original early coordination letter dated September 13, 2016, and re-coordination letter dated March 15, 2017)

The proposed project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. In addition, the interchanges would include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the project is anticipated to occur in at least two phases. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. However, the environmental document will be completed for the entire SR 37 Corridor from I-69 to SR 32.

To address the known drainage needs associated with the first phase of the project, two proposed drainage easements were proposed. The first is approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. As indicated in our re-coordination correspondence dated March 15, 2017, this drainage easement would also include the construction of an approximate 1 acre detention basin prior to discharging to Shoemaker Ditch. The property on which this detention basin is to be built is referred to as "Junkersfeld." It was further noted in this correspondence that the entire Junkersfeld parcel would need to be acquired for construction of the detention basin. While this on-site detention is still required, further



analysis and modifications to the design has resulted in changes at this property (see description of "Area 6" under Currently Proposed Project Changes section of this letter).

The second drainage easement area included the addition of a new drainage system along 146<sup>th</sup> Street. As communicated in the March 15, 2017 re-coordination letter, the 146<sup>th</sup> Street drainage line compensated for the removal of the 141<sup>st</sup> Street drainage line to Weaver Creek from the scope of the project. The proposed drainage line along 146<sup>th</sup> Street is located along its south side between SR 37 and the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed along the north side of 146<sup>th</sup> Street. A pipe, or open ditch, would then discharge from Allisonville Road into the White River. The pipe would be installed using trenchless excavation from SR 37 to Allisonville Road. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits would be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits. The portion of the drainage pipe installation west of Allisonville Road would be completed using the open trench method involving an open cut in the ground. Detention within the pipe would be considered to meet INDOT detention requirements. While the 146<sup>th</sup> Street drainage system is still a component of the proposed project, further analysis and modifications to the design and locations of the drainage pits warrants re-coordination (see description of "Area 3" under Currently Proposed Project Changes section of this letter).

The maintenance of traffic (MOT) will likely include lane restrictions and periodic lane closures; however, SR 37 will not be closed for any significant length of time during construction. If detour routes are needed for the cross streets during construction, they will be identified during the detailed design phase in order to handle local traffic needing to access and cross SR 37. The City of Fishers will diligently communicate with the public, businesses and news media to help disseminate updates throughout the duration of the project to reduce impact as much as possible.

# Currently Proposed Project Changes (2018)

The proposed project includes changes in design at five (5) areas since the last re-coordination letter dated March 15, 2017. The proposed changes are discussed in detail below, and the associated additional areas are identified on the attached mapping.

1. <u>Area 1:</u> Single Point Urban Interchange (SPUI) at 146<sup>th</sup> Street – Originally, the project proposed a multi-lane roundabout interchange with ramps extending between a depressed grade of SR 37 to a new 146<sup>th</sup> Street overpass. Construction was also to include retaining walls along the depressed portion of 146<sup>th</sup> Street and pedestrian facilities along the north and south sides of 146<sup>th</sup> Street at the interchange. Traffic forecasts for 146<sup>th</sup> Street for design year 2041 indicated such an interchange would not adequately service future traffic volumes, and result in undesirable backups in the traffic queue. Therefore, a SPUI has been proposed as an alternative interchange type at this location. The proposed change to the interchange type does not reflect a large variation in the environmental footprint at that intersection. Additional right of way would be required at the interchange approaches to accommodate the wider pavement width needed for the auxiliary turn lanes. This proposed change will also allow for left turns at Herriman Drive, whereas the previous interchange option restricted Herriman Drive to a right in/right out intersection. An additional 1.08 acres of permanent right-of-way (ROW) is required for the construction of the SPUI.



- 2. <u>Area 2:</u> North Field Detention Basin between SR 37 and the north terminus of North Pointe Boulevard Additional water storage facilities are required for the project. A potential basin area was chosen northeast of the intersection of SR 37 and 146<sup>th</sup> Street. This added element includes the construction of storm water detention basin within an approximate 16.2 acre area, currently used primarily for agricultural purposes. This drainage basin seeks to utilize an existing legal drain (McMahon Overdorff) to direct flow at a decreased velocity into Overdorff Branch, to the White River upstream of any storm water impact with the project's watershed. The exact layout of this detention facility has yet to be determined, and will likely be less than the 16.2 acre footprint. However, the modified APE in this location of the project assumes a depressed basin over the entire 16.2 acres with a likely 6 foot embankment around the basin.
- 3. <u>Area 3:</u> Drainage Pits along 146<sup>th</sup> Street as previously scoped, the drainage easement along 146<sup>th</sup> Street will carry additional stormwater from the project area along SR 37 to the White River. Trenchless excavation along the north side of 146<sup>th</sup> Street will still be utilized, however, further hydraulic analysis revealed that in order to adequately regulate the additional stormwater demands of the project, drainage pits are needed for additional on-site storage of waters. These pits will be excavated to a depth of 40 feet deep and have dimensions of 35 feet wide by 15 feet long (north-south). These pits are not anticipated to be daylighted. An additional 0.47 acre of perpetual drainage easements is required for these drainage structures. This acreage is composed of both temporary and permanent ROW.
- 4. <u>Area 4:</u> Single Lane Roundabout at 141<sup>st</sup> Street the previous scope of work at 141<sup>st</sup> Street included a grade-separated, dual lane teardrop roundabout interchange will be constructed at 141<sup>st</sup> Street with ramps extending between a depressed grade of SR 37 to a new 141<sup>st</sup> Street overpass. Construction was also to include retaining walls along the depressed portion of 146 street and pedestrian facilities along the North and South sides of 141 street at the interchange. Traffic forecasts for 141 street for the design year 2041 do not necessitate a dual lane roundabout at this interchange, so the scope of work was decreased to a grade-separated, single lane teardrop roundabout interchange. The decreased scope of work also reflects a decreased footprint at this intersection. An additional 0.16 acre of permanent ROW is needed to construct the single lane roundabout for improvements to access/turn lanes.
- 5. <u>Area 5:</u> Extension of Maintenance of Traffic Operations on SR 37 south of 126<sup>th</sup> Street In order to adequately manage traffic while the proposed 126<sup>th</sup> Street interchange is constructed, a median crossover is required along SR 37 near I-69. This crossover will temporarily shift the two northbound SR 37 lanes to an area immediately adjacent to the two southbound SR 37 lanes. The location of this temporary crossover is approximately 0.4 mile south of 126<sup>th</sup> Street, with the temporary pavement leading to the crossover point extending an additional 350 feet to the south. An additional 0.2 mile of SR 37 was surveyed toward I-69; this area does not represent any additional ROW requirements.
- 6. <u>Area 6:</u> Junkersfeld Parcel Originally, it was proposed to acquire the entire 6.6 acres that comprises the Junkersfeld parcel, which included a vacant residence, for the construction of a



storm water outfall area, detention basin and an area of re-vegetation for floodway mitigation. However, advancement of the design and further hydraulic analysis determined acquisition of the entire parcel was unnecessary. Currently, it is estimated that approximately 3.8 acres of the Junkerfeld parcel is required for storm water detention. Floodway mitigation is no longer planned for this parcel. However, the construction of a temporary bridge is now proposed approximately 13 feet north (upstream) of the existing Junkersfeld driveway crossing at Shoemaker Ditch to provide a structure suitable of handling construction equipment. The proposed temporary bridge will have a 20-foot span, and an anticipated width of 11 feet. An aggregate drive leading from the existing driveway to the temporary structure is also proposed. The temporary structure will be removed upon completion of construction.

# Right-of-way (as described in the original coordination letter dated September 13, 2016)

The majority of the project will take place within the existing SR 37 ROW. Prior correspondence indicated approximately 34 acres of ROW would be required for the project. Current estimates for the proposed project indicate approximately 35.9 acres of permanent ROW (including 0.47 acre of perpetual easements) and 1.93 acres of temporary ROW is now required.

# Environmental Resources (for new project areas)

A Red Flag Investigation (RFI) Addendum was completed for a 0.5-mile radius of the new project area. The RFI Addendum was signed on January 12, 2018. Few additional "Red Flags" were identified within the amended 0.5-mile radius; however, no impacts are expected to these additional resources. The following resources were identified within and adjacent to the expanded 0.5 mile buffer:

- Weaver Cemetery (CR-29-70) located approximately 0.05 mile northwest of the project area at Allisonville Road and 141 street. Due to proximity Due to the proximity of this cemetery to the project, coordination with INDOT Cultural Resources Office (CRO) will occur to determine if a cemetery development plan is required based on the current scope of the project.
- 2. Five (5) additional schools are now mapped within the 0.5 mile radius of the project area. The closest school, Harrison Parkway Elementary school (0.06 mile north of 146<sup>th</sup> Street), was addressed in the original RFI but was not a mapped resource at the time. No changes in impacts to schools are expected, and additional coordination with Hamilton Southeastern Schools Corporation will occur through the re-coordination process.
- 3. "Other" Waste Electronic Waste: One (1) feature identified as End of Life Electronics (EOLE) is located 0.2 mile southwest of the southern terminus of the project area. According to a review of correspondence within the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC), this facility is not subject to any permitted regulations and is an electronic storage and recycling facility. No impact is expected.

In addition, survey areas that elicited the need for the red flag addendum also resulted in an addendum to the Section 106 finding for this project. Coordination with INDOT Cultural Resources Office (CRO) will occur.

Due to changes in the project scope, an additional field visit was undertaken on October 27, 2017. No additional resources were identified during this field investigation.

Des. No. 1600540 et. al.

www.fishers.in.us/sr37

Attachment 1



# Range-wide Programmatic Informal Consultation

The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and federally threatened northern long-eared bat (*Myotis septentrionalis*). It is anticipated that this project will still qualify for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat* (NLEB), dated December 2016, between FHWA, Federal Railroad Administration, Federal Transit Administration and U.S. Fish and Wildlife Service (USFWS).

### **Coordination**

As part of this re-coordination effort, you are requested to review this information and provide any comments you may have relative to anticipated impacts of the project modifications on resources for which you have jurisdiction or special expertise. To facilitate the development of this project, you are asked to reply within 30 days of receipt of this letter. If we do not receive your response within 30 calendar days from the date of this letter, it will be assumed your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, if you feel an extension to the response time is necessary, a reasonable amount may be granted upon request. If a questionnaire follows this letter, please complete.

If you have any questions regarding this matter, please feel free to contact Kate Lucier at Lochmueller Group, at 317.334.6827 or at <a href="mailto:klucier@lochgroup.com">klucier@lochgroup.com</a>. Thank you in advance for your input.

Sincerely,

Kate Lucier, PWS Environmental Biologist

Lochmueller Group, Inc.

# Attachments:

Attachment A: Red Flag Investigation Addendum Maps (dated 1-12-18)
 Updated Aerial Map pages depicting ROW updates (Areas 1-5)

• Attachment B: Photographs of North Field Detention Basin (Area 2)

Attachment C: Preliminary Layout Sheets

Removed to avoid duplication; See Appendix E for RFI maps and Appendix B for aerials, and design plans

# Agency Distribution:

- Indiana Department of Natural Resources (IDNR), Division of Fish and Wildlife (electronic submission)
- U.S. Fish and Wildlife Service (USFWS) (electronic submission)
- U.S. Army Corps of Engineers (USACE), Louisville District
- Federal Highway Administration (FHWA) (electronic submission)

**a** (317)595-3737

SR37@fishers.in.us

www.fishers.in.us/sr37

@DriveFishers

One Municipal Drive

Fishers, Indiana 46038



- Indiana Department of Transportation (INDOT), Greenfield District (electronic submission)
- INDOT, Office of Public Involvement (electronic submission)
- INDOT, Office of Aviation (electronic submission)
- Natural Resources Conservation Service (NRCS)
- Indiana Geological Survey (IGS) (electronic submission)
- Indiana Department of Environmental Management (IDEM) (electronic submission)
- IDEM, Ground Water Section
- IDNR, Division of Oil and Gas
- IDNR, Division of Outdoor Recreation
- National Park Service
- US Department of Housing and Urban Development (electronic submission)
- Indianapolis Metropolitan Planning Organization
- City of Fishers, Mayor's Office
- City of Fishers, City Council
- City of Fishers, Department of Parks and Recreation
- City of Fishers, Engineering Department
- City of Noblesville, Mayor's Office
- City of Noblesville, Engineering Department
- City of Noblesville, Parks and Recreation
- City of Noblesville, Common Council
- Hamilton County Highway Department
- Hamilton County Commissioners
- Hamilton County Parks and Recreation
- Indianapolis Department of Public Works, Stormwater Program
- City of Fishers MS4 Coordinator
- City of Noblesville MS4 Program Manager
- Hamilton County MS4 Representative
- Hamilton Southeastern School District (electronic submission)
- Citizens Energy Group (electronic submission)

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# **Organization and Project Information**

**Project ID:** 

**Des. ID:** 1600540

**Project Title:** SR 37 Improvement Project **Name of Organization:** Lochmueller Group, Inc.

Requested by: Kate Lucier

# **Environmental Assessment Report**

# 1. Geological Hazards:

- High liquefaction potential
- Floodway

# 2. Mineral Resources:

- Bedrock Resource: High Potential
- Sand and Gravel Resource: High Potential

# 3. Active or abandoned mineral resources extraction sites:

- Petroleum Exploration Wells
- Abandoned Industrial Minerals Sand Gravel Pits

# **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: 611 N. Walnut Grove Avenue, Bloomington, IN 47405-2208

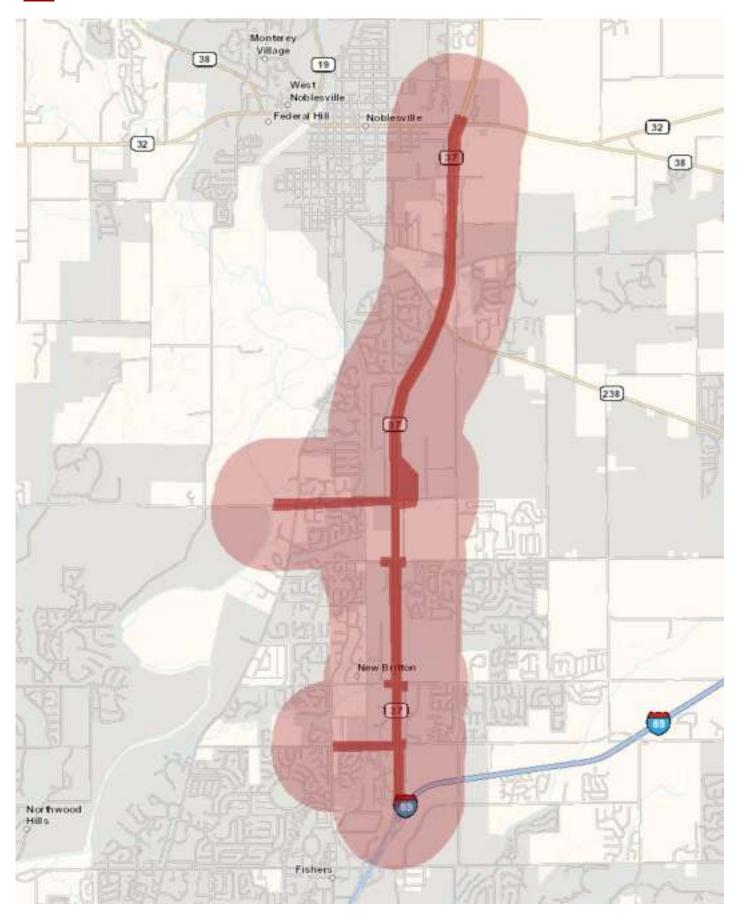
Email: IGSEnvir@indiana.edu

Phone: 812 855-7428 Date: February 22, 2018

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<sup>\*</sup>All map layers from Indiana Map (maps.indiana.edu)







# Metadata:

- https://maps.indiana.edu/metadata/Geology/Petroleum Wells.html
- https://maps.indiana.edu/metadata/Geology/Industrial Minerals Sand Gravel Pits Abandoned.html
- https://maps.indiana.edu/metadata/Geology/Seismic\_Earthquake\_Liquefaction\_Potential.html
- https://maps.indiana.edu/metadata/Geology/Industrial Minerals Sand Gravel Resources.html
- https://maps.indiana.edu/metadata/Hydrology/Floodplains FIRM.html
- https://maps.indiana.edu/metadata/Geology/Bedrock Geology.html

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# Lucier, Kate

**From:** McWilliams, Robin <robin\_mcwilliams@fws.gov>

Sent: Thursday, February 22, 2018 10:14 AM

**To:** Lucier, Kate

**Subject:** Re: SR 37 Improvement Project (Des. 1600540) Re-coordination Letter

Dear Kate,

I have looked over the proposed changes to the SR 37 upgrade project. We ended up doing a more traditional informal consultation on this because at the time, it appeared that parts of the project would possibly extend greater than 300 feet from the edge of the pavement and not fit within the rangewide programmatic consultation. We sent comments on April 17, 2017 to Kia Gilliette and I believe those comments will still be valid after reading through the proposed changes.

I do not see any reason to use the rangewide programmatic at this point (since we have already consulted and the changes should not affect that consultation), unless INDOT would like you to re-evaluate the project under the programmatic.

If you have any questions or do decide to use the IPAC online determination key, I will review that determination once I receive it via IPAC.

Sincerely, Robin

Robin McWilliams Munson

U.S. Fish and Wildlife Service 620 South Walker Street Bloomington, Indiana 46403 812-334-4261 x. 207 Fax: 812-334-4273

Monday, Tuesday - 7:30a-3:00p Wednesday, Thursday - telework 8:30a-3:00p

On Wed, Feb 21, 2018 at 4:14 PM, Pruitt, Scott < scott pruitt@fws.gov > wrote:

----- Forwarded message -----

From: Lucier, Kate < KLucier@lochgroup.com>

Date: Wed, Feb 21, 2018 at 4:06 PM

Subject: SR 37 Improvement Project (Des. 1600540) Re-coordination Letter

To: "scott\_pruitt@fws.gov" <scott\_pruitt@fws.gov>

Cc: "Costa, Chad" < CCosta@lochgroup.com>

Hi Mr. Pruitt,

1

Please see attached re-coordination letter for the above mentioned project. Please don't hesitate to contact me with any questions or comments regarding this project.

Cheers,

# **Kate Lucier, PWS**

# **Environmental Biologist**

# **Lochmueller Group**

3502 Woodview Trace

Suite 150, Indianapolis, IN 46268

Direct 317-334-6827

Mobile 317-464-9523

KLucier@lochgroup.com

http://lochgroup.com

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Scott Pruitt
Field Supervisor
U.S. Fish & Wildlife Service
Indiana Field Office
620 South Walker
Bloomington, IN 47403
(812) 334-4261 ext. 214
(812) 334-4273 FAX
Scott Pruitt@fws.gov





100 North Senate Avenue Room N955 Indianapolis, Indiana 46204 PHONE: (317) 232-1477 FAX: (317) 232-1499

**Eric Holcomb, Governor** Joe McGuinness, Commissioner

February 28, 2018

Ms. Kate Lucier, Environmental Biologist Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268

Subject: Early Coordination Review (Des. No. 1600540)

Dear Ms. Lucier,

In response to your request on February 21, 2018 for early coordination review of an improvement project along SR 37 from Interstate 69 to State Road 32 in Noblesville and Delaware Townships, Hamilton County, Indiana; the Indiana Department of Transportation, Office of Aviation has reviewed the information and provides the following:

# Are there any existing or proposed public-use airports within 5 nautical miles of the project limits (IC 8-21-10-6)?

The Noblesville Airport is located approximately 1.6 nautical miles east of the of the northern portion of the proposed project site, and the Indianapolis Metropolitan Airport is located approximately 2.5 nautical miles southwest of the southernmost point of the proposed project site.

# Will an Indiana Tall Structure permit (IC 8-21-10-3-a) and/or Noise Sensitive (IC 8-21-10-3-b) permit be required?

Based upon the provided information, an Indiana Tall Structure permit would not be required unless the project involves the construction of a temporary (e.g., crane) or permanent structure that penetrates a 100:1 slope from the nearest points of the Noblesville Airport and/or the Indianapolis Metropolitan Airport runways.

For any questions related to Indiana Tall Structure and/or Noise Sensitive permitting, please contact James Kinder at (317) 232-1485 or jkinder2@indot.in.gov.

Sincerely,

Des. No. 1600540 et al

Des. No. 1600540 et. al.

Adam French, MPA

Chief Airport Inspector, Office of Aviation

Indiana Department of Transportation

Idam Fred

www.in.gov/dot/ An Equal Opportunity Employer From: <u>Lucier, Kate</u>
To: <u>Kunkel, Chris</u>

Subject: FW: 1600540 SR 37 Improvements Hamilton County, IN

**Date:** Tuesday, March 27, 2018 10:40:20 AM

Attachments: Indiana as of 12-31-17.xlsx

Please save this to the project folder

# **Kate Lucier, PWS**

**Environmental Biologist** 

# **Lochmueller Group**

KLucier@lochgroup.com

Direct 317-334-6827 Mobile 317-464-9523

-

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**From:** Herber, Lisa <LHerber1@dnr.IN.gov>

Sent: Friday, March 2, 2018 3:18 PM

**To:** Lucier, Kate < KLucier@lochgroup.com> **Cc:** Bronson, Bob < bbronson@dnr.IN.gov>

Subject: 1600540 SR 37 Improvements Hamilton County, IN

Ms. Lucier, this project will not impact a Land and Water Conservation Fund site or Natural, Scenic, and Recreational River System.

Please see attached LWCF project list from NPS since their website is down. I have shared this with Lochmueller Group recently. Please ensure others are using this to check for project impacts to LWCF sites before requesting review. All State properties impacts should have a review request as several of the grants in the list are for multiple State properties but do not list the specific sites.

# Sincerely,

# Lisa Herber

Grants Coordinator Indiana Department of Natural Resources Division of Outdoor Recreation 402 W. Washington Street, W271 Indianapolis, Indiana 46204

Phone: 317-232-4074

Email: <u>LHerber1@dnr.IN.gov</u>

# State of Indiana DEPARTMENT OF NATURAL RESOURCES Division of Fish and Wildlife

Early Coordination/Environmental Assessment

DNR #:

ER-49296-2

Request Received: February 21, 2018

Requestor:

Lachmueller Greubline

Kate Luder

3502 Woodview Trace, Suite 150

Indianapolis, IN 46266.

Project:

SR 37 Corridor Project from :-30 to SR 32 in Fishers and Neolasvillo: Des #1806540;

aeers ê ni asgaado ngasb

County/Site info:

Hamston

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 jurisolization over the project, the recommendations contained in this letter may become requirements at any permit issued. If we do not

have permitting authority, all recommendations are volentary.

Regulatory Assessment:

This proposal may regulie the formal approval of our agency pursuant to the Floor Genirol Act (IC 14-28-1) for any proposal to construct, excavato, or fill in or on the floodway of a stream or other flowing waterbook, which has a drainage area greater than one square mile. Please submit a copy of this letter with any permit application (s).

Natural Heritage Dalabase:

The National Berthage Program's data have been checked.

Fishers Parks & Recreation's Harrison Thumpson Park and the species below have

been documented within 1/2 mile of the project area.

A) INSECT. Turquoise filue! (Enallagma divagans); state rare Wehin project area in

Sections 7 & 8).

B) MUSSELS (in WE White River):

Clubshell (Fleuroberna clave), foderally & state endangered.

Rabbitafoot (Quadrula sylindrica sylindrical); fact threatened & state endangered.

Bound Hickorymut (Obevaria submitunda): state encangered.

4. Kidneyshell (Ptychobranchus fasciolaris); state special concern

5. Little Speciaclecase (Villose Lenosa); state special concern.

Fish & Wildlife Comments: All of the recommendations in our gravious letter dated October 13, 2016, still apply.

Contact Staff:

Christie II. Stantier, Environ, Coordinator, Fish & Wildfile.

Our agency appreciates this opportunity to polof sorvice. Please contact the above

Date: March 26, 2018

staff meinber at (217) 232-4080 if we can be of further sesistance.

Emmon. Coordinater

Division of Fish and Wildlife



March 15, 2018

Kate Lucier Environmental Biologist Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268

Dear Ms. Lucier:

The proposed project to improve State Road 37 in the Town of Fishers and Noblesville, Hamilton County, Indiana (Des No. 1600540), as referred to in your letter received February 23, 2018, will cause a conversion of prime farmland.

The attached packet of information is for your use completing Parts VI and VII of the AD-1006.

After Completion, the federal funding agency needs to forward one copy to NRCS for our records.

If you need additional information, please contact Rick Neilson at 317-295-5875.

Sincerely,

JILL M. REINHART

Acting State Conservationist

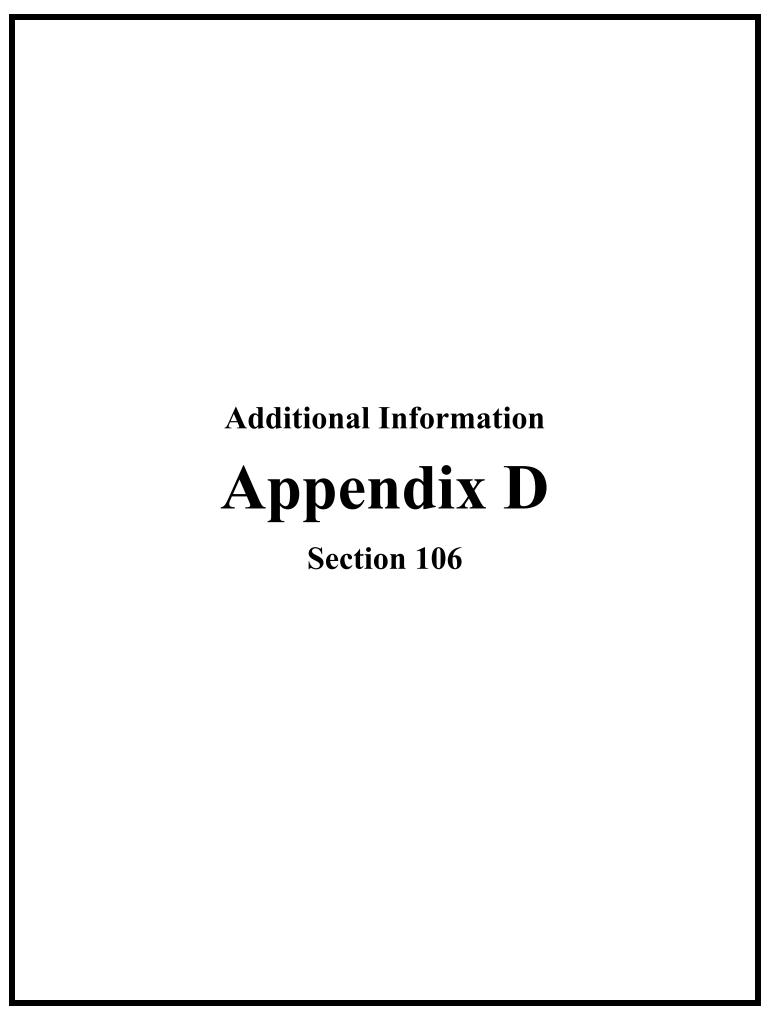
Helping People Help the Land.

# **FARMLAND CONVERSION IMPACT RATING** FOR CORRIDOR TYPE PROJECTS

N	R	c	s.	C	P	A-	10	16
		4	Re	w.	1-6	rin		

PART I (To be completed by Federal Agency)				3. Date of Land Evaluation Request 4. Sheet t of 1							
1. Name of Project Des.1600540 I-69 to SR 32				5. Federal Agency Involved							
2. Type of Project Improvement Project				6. County and State Hamilton County, Indiana							
PART II (To be completed by		Date Request Received by NRCS     2/23/1%			2. Person Completing Form DP						
Does the corridor contain prime, unique statewide or local important farmilar     (If no, the FPPA does not apply - Do not complete additional parts of this for				TEIL IFT NO I T			Acres Irrigated Average Farm Size     128 AC				
5. Major Crop(s) Corn	and in Government Jurisdiction 99,635 % 86			7. Amount of Farmland As Defined in FPPA Acres: 165,598 % 55							
				al Site Assessment System			10. Date Land Evaluation Returned by NRCS				
PART III (To be completed by Federal Agency)				Alternative C			rridor For Segment :				
The second of the second			Corridor 1 Cor		idor 2	Corridor 3	Corridor 4				
A. Total Acres To Be Converted											
B. Total Acres To Be Converted	Indirectly, Or To Receive S	iervices									
C. Total Agres In Corridor		CONTRACTOR IN TO SEC	100	0.0	0.0	_	0.0	0.0			
PART IV (To be completed b	by NRCS) Land Evaluation	on Informatio	on .				5				
A. Total Acres Prime And Uniqu	ue Farmland			20.1				THE PLAN			
B. Total Acres Statewide And L	SCHOOL SC			1.0							
C. Percentage Of Farmland in	The second secon			0.0120				1000			
D. Percentage Of Farmland in G				9.0							
PART V (To be completed by N value of Farmland to Be Servin				63				122.0			
PART VI (To be completed by	Federal Agency) Corrido	·	Maximum								
Assessment Criteria (These c	riteria are explained in 7 (	CFR 658.5(c))	Points								
Area in Nonurban Use	196		15	1							
Perimeter in Nonurban U			10	0							
Percent Of Corridor Being Farmed				0	_						
Protection Provided By State And Local Government				0							
5. Size of Present Farm Unit Compared To Average				10	_						
6, Creation Of Nonfarmable	E-MANUFACTURE -		25	25 2	_						
7. Availability Of Farm Supp	port Services		20	10	_	_		_			
8. On-Farm Investments	Com Connet Candras		25	10	_	_					
Blects Of Conversion On Farm Support Services     Compatibility With Existing Agricultural Use				4	_			_			
TOTAL CORRIDOR ASSES	100	60	-	_		_					
PART VII (To be completed by Federal Agency)				00	0	-	0	0			
Relative Value Of Farmland (			100	744	_	-	-				
		-8-	100	63	_						
Total Corridor Assessment (Fr assessment)	rom Part vi above or a local	500	160	60	0		0	0			
TOTAL POINTS (Total of above 2 lines)			260	123	0		0	0			
1. Corridor Selected:	2. Total Acres of Farm	Andrew Management	3. Date Of S	selection:	4. Was	A Local Si	a Assessment Use	17			
Corridor 1	Converted by Proje 10.15	ct:	3/28/	3/28/2018			YES NO				
5. Reason For Selection: Mee	ets the purpose and n	eed and has	s the least	impact on pri	me farr	mland.	3/28/18				
NOTE: Complete a form for	or each segment with n	nore than on	e Alternat	e Corridor							

Des. No. 1600540 et al Des. No. 1600540 et. al.



# SR 37 Improvement Project: I-69 to SR 32

Fishers and Noblesville, Hamilton County, Indiana Des. No. 1600540; DHPA No. 19374

# Section 106 ADDENDUM #2 to 800.11(e) Documentation

**February 16, 2018** 



Prepared for the City of Fishers and the Federal Highway Administration (FHWA)



**Gary Francis Quigg** 

# 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 SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540/DHPA No. 19374

# AREA OF POTENTIAL EFFECTS (APE)

The APE for this project generally encompasses the properties that have a proximate viewshed of the undertaking. This project involves construction to improve an existing roadway. The APE expands widest where potentially elevated interchanges allow a wider viewshed and is narrowest where development or tree cover limits or masks the viewshed. In areas where interchanges are planned the APE generally expands outward from the existing intersection for 0.25 mile in either direction along the intersecting road. The APE includes all areas where ground disturbance may occur or where auditory or visual impacts may be expected.

The APE was expanded west of the original APE to include an area along 141<sup>st</sup> Street between SR 37 and Allisonville Road to allow for a drainage easement when the original 800.11(e) documentation (December 22, 2016) was completed. However, this easement was removed from the proposed project prior to the submittal of the March 13, 2017 Addendum to the original 800.11(e) documentation. Please note the maps referencing the APE in Appendix A refer to the area where the 141<sup>st</sup> Easement was to occur as APE Extension #1.

The APE was expanded to the west of the original APE in an Addendum to the original 800.11(e) documentation dated March 13, 2017, and included all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended March 13, 2017, expansion of the APE for this project was defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin. This first Addendum to the original 800.11(e) documentation was approved by the Indiana Department of Transportation's (INDOT) Cultural Resource Office (CRO) on March 20, 2017 and by the State Historic Preservation Office (SHPO) on April 24, 2017. Please note the maps referencing the APE in Appendix A refer to the area along 146<sup>th</sup> Street and the parcel on Lantern Road as APE Extension #2.

The APE has again expanded, this time to the east and south of the original APE, as described in this second Addendum to the original 800.11(e) documentation (dated February, 2018) to include all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended February, 2018, expansion of the APE for this project is defined as two areas: 1) an area extending east from the present APE along SR 37 approximately 700 feet north, east, and south centered upon the north terminus of North Pointe Boulevard; and 2) an area extending approximately 400 to 700 feet northeast, southeast and southwest from the present APE along SR 37 ending at I-69. Please note the maps referencing the APE in Appendix A refer to the two areas where the APE has been expanded for a third time as APE Extension #3.

# **ELIGIBILITY DETERMINATIONS**

There are no properties currently listed on the National Register of Historic Places (NRHP) within the APE.

# Properties Eligible for Listing on the NRHP

**Hamilton County Bridge No. 151** – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

No properties within the expanded/revised APE are listed in or recommended eligible for listing in the NRHP.

### EFFECT FINDING

# Hamilton County Bridge No. 151 – "No Adverse Effect"

INDOT, acting on the Federal Highway Administration's (FHWA's) behalf, has determined a "No Adverse Effect" finding is appropriate for this undertaking. No new historic properties were identified as a result of the APE expansion. Therefore, the finding remains "No Adverse Effect."

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect for Hamilton County Bridge No. 151 and the project's overall finding.

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

This undertaking will not convert property from Hamilton County Bridge No. 151, a Section 4(f) historic property, to a transportation use beyond its existing role. INDOT determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for Hamilton County Bridge No. 151.

Comments will be accepted for thirty (30) days upon receipt of the findings.

# Mary E. Kennedy for

Anuradha V. Kumar

Manager, Cultural Resources Office, Environmental Services (for Federal Highway Administration)

February 16, 2018

Approval Date

# FEDERAL HIGHWAY ADMINISTRATION DOCUMENTATION OF SECTION 106 FINDING OF "NO ADVERSE EFFECT" SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR 800.5 (c)

SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540 DHPA No. 19374

### 1. DESCRIPTION OF THE UNDERTAKING AND MODIFICATIONS

The City of Fishers, with funding from the Federal Highway Administration and administrative oversight from the Indiana Department of Transportation, proposes to proceed with the SR 37 Improvement Project from I-69 to SR 32. The project is in Fishers and Noblesville, Delaware and Noblesville townships, Hamilton County, Indiana (DES 1600540).

The SR 37 Improvement Project is located from I-69 in the City of Fishers (Delaware Township) to SR 32 in the City of Noblesville (Noblesville Township) in Hamilton County. Specifically, the proposed project is located in the Riverwood United States Geological Survey (USGS) Topographic Quadrangle, Sections 31 and 32, Township 19 North, Range 5 East, and Sections 5, 6, 7 and 8, Township 18 North, Range 5 East; Noblesville Quadrangle, Section 18, Township 18 North, Range 5 East; and Fishers Quadrangle, Sections 18, 19, 30 and 31, Township 18 North, Range 5 East and Sections 13, 24 and 25, Township 18 North, Range 4 East. Adjacent land usage is predominantly commercial and industrial with some agricultural and residential. Please see Appendices A, B, and E for maps and photographs of the project area.

This second 800.11(e) Addendum has been prepared due to expansions of the project area.

# Original Project Description (as described in the original 800.11(e) Documentation dated December 22, 2016)

The proposed project would involve the reconstruction of SR 37 to an expressway with grade-separated interchanges at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 Corridor from I-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st west of SR 37 and one along 141st Street and west of SR 37. The drainage would be conveyed via gravity and outlet to Shoemaker Ditch and Weaver Creek west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. In addition, the roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges is anticipated to occur in at least two phases. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. The majority of the project will take place within the existing SR 37 right-of-way (ROW). The proposed project may require approximately 34 acres of ROW. ROW requirements are currently being refined.

The maintenance of traffic (MOT) will likely include lane restrictions and periodic lane closures; however, SR 37 will not be closed for any significant length of time during construction. If detour routes are needed

for the cross streets during construction, they will be identified during the detailed design phase in order to handle local traffic needing to access and cross SR 37.

# Proposed Project Changes (as described in the first Addendum to the original 800.11(e) Documentation dated March 13, 2017)

The proposed project includes two changes since the original 800.11(e) documentation dated December 22, 2016. These changes are listed below:

- 1. Proposed Drainage Pipe Installation Along 146th Street Originally the project proposed the installation of a drainage pipe along 141st Street, from SR 37 west to outlet at Weaver Creek. Based on cost estimates and attempts to minimize impacts (in part to a church property and residences), this pipe is now proposed to be installed along 146th Street rather than 141st Street. The pipe installation along 141st Street to Weaver Creek is no longer included in the project. It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street. A pipe, or open ditch, would then outlet from Allisonville Road into the White River. The pipe would be installed using trenchless excavation from SR 37 to Allisonville Road. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below-ground via the pits. The portion of the drainage pipe installation west of Allisonville Road will be completed using the open trench method involving an open cut in the ground. The majority of the pipe installation will occur within existing City or County right-of-way but some minor right-of-way or easement acquisition may be necessary. Detention within the pipe will be considered to meet Indiana Department of Transportation (INDOT) detention requirements.
- 2. Detention Basin at Shoemaker Ditch As included in the previous Section 106 consultation, the project includes the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. It may now also include construction of a detention basin, approximately 1 acre in size, prior to out-letting to Shoemaker Ditch. Detention will follow the INDOT requirements for storm water. Construction of this basin will require acquisition of the entire residential parcel at 12825 Lantern Road. The house on this parcel, a ca.-1955 ranch, is currently unoccupied. It received a "Non-contributing" rating during the March 2017 fieldwork.

This first Addendum documentation provided additional information regarding the effects of the revised project scope. The expanded APE in the first Addendum documentation was located west of the previous APE, and included all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended additions to the APE for this project in the first Addendum were defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin.

# Proposed Project Changes for this second Addendum to the original 800.11e Documentation

The proposed project includes two additional changes outside the APE since the first Addendum to the 800.11(e) documentation dated March 13, 2017. These changes are listed below:

1) <u>Inclusion of a North Field Detention Basin between SR 37 and the north terminus of North Pointe Boulevard</u> – This added element includes the construction of storm water detention basin within an approximate 16.2 acre area, currently used primarily for agricultural purposes. This drainage basin

seeks to utilize an existing legal drain (McMahon – Overdorff) to direct flow at a decreased velocity into Overdorff Branch, to the White River upstream of any storm water impact with the project's watershed. The exact layout of this detention facility has yet to be determined, and will likely be less than the 16.2 acre footprint. However, the modified APE in this location of the project assumes a depressed basin over the entire 16.2 acres with a likely 6 foot embankment around the basin. Structures adjacent to the south side of the proposed detention basin are part of a "Noncontributing" modern apartment building complex.

2) Extension of Maintenance of Traffic Operations on SR 37 south of 126<sup>th</sup> Street – In order to adequately manage traffic while the proposed 126<sup>th</sup> Street interchange is constructed, a median crossover is required along SR 37 near I-69. This crossover will temporarily shift the two northbound SR 37 lanes to an area immediately adjacent to the two southbound SR 37 lanes. The location of this temporary crossover is approximately 0.4 mile south of 126<sup>th</sup> Street, with the temporary pavement leading to the crossover point extending an additional 350 feet to the south. The preliminary plans for this added median crossover are included in Appendix A. This extension is included within the modified APE.

Please see Appendix A and B for maps and photographs of the two APE expansion areas recommended in this second Addendum to the 800.11(e).

In addition to the two project elements discussed above, design plans for the 141st Street interchange and the 146th Street interchange have been modified since the last update to the 800.11(e) documentation on March 13, 2017. At the time of the previous update, the 141st Street interchange was proposed to be a dual lane roundabout configuration with the grade of SR 37 depressed beneath that of 141st Street. Advancement of the design of this interchange has determined that the roundabout only needs to be a single lane. This change did not substantially affect the right-of-way requirements, as the City still plans to acquire the same amount of land as with the previous design. The interchange at 146th Street was originally proposed to be a multi-lane roundabout with the grade of SR 37 depressed beneath the cross street. Continued evaluation of the projected traffic operations with the proposed roundabout, warranted a revision in interchange type. The 146th Street interchange is now proposed to be a single point urban interchange (SPUI). Neither the change in interchange type at 146th Street nor the reduced lane configuration of the 141st roundabout interchange affected the APE as last delineated in the March 13, 2017 800.11(e) documentation. Conceptual layouts of both interchanges are included in Appendix A of this document.

## 2. PREVIOUS EFFORTS TO IDENTIFY HISTORIC PROPERTIES

The National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures (State Register), the State Historic Architectural and Archaeological Research Database (SHAARD), and the SHAARD Geographic Information Systems (GIS) were consulted. No resources within the APE were identified as being listed on the NRHP or State Register.

On June 7, 2016 Lochmueller Group historians, Connie J. Ziegler and Gary Francis Quigg, both Qualified Professionals for history and architectural history, conducted a site visit of the APE and documented resources at least 50 years of age, and those that will be 50 years of age at the time of the project letting (i.e., constructed before 1967), within the APE.

The APE was investigated for the existence of any historical properties, structures, objects or districts listed in or eligible for listing in the NRHP. The historians walked and drove the SR 37 corridor within the APE, taking photographs of all resources meriting a Contributing or higher rating. Non-contributing resources or those that did not meet the age requirements were noted but not documented other than in general view photographs. As a result of this field survey and associated documentary research the historians

recommended one property as eligible for listing in the NRHP: Hamilton County Bridge No. 151 (HB-2136/NBI-2900138).

A Historic Property Report (HPR) was completed (Ziegler, July 19, 2016). The summary of the HPR is found in Appendix D. The State Historic Preservation Officer (SHPO) staff responded to the HPR on August 19, 2016 and concurred with the recommendations therein.

An archaeological records review, Phase 1A archaeological reconnaissance, and associated report were completed by Cultural Resources Analysts, Inc. (CRA). The Phase 1A archaeological report (Miller/Harth, August 11, 2016) was transmitted to the SHPO on August 22, 2016. The report concluded that 16 previously unrecorded archaeological sites were located within the project area, but due to low density of cultural material and poor integrity of these sites no further archaeological work was recommended (see the report summary in Appendix D). The SHPO staff concurred with the recommendations of the archaeological report in a letter dated September 9, 2016 and added that if construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined, additional assessment may be required. Copies of all letters referenced can be found in Appendix E.

Early coordination was initiated on June 6, 2016. Below is a list of the organizations invited to participate as consulting parties. The organizations identified in bold print are participating consulting parties.

State Historic Preservation Officer (automatic consulting party)
INDOT Cultural Resources Office (automatic consulting party)
Indiana Landmarks, Central Regional Office
Hamilton County Historical Society/Museum
Fishers Historic Preservation Committee
Noblesville Preservation Alliance
Hamilton County Historian
Hamilton County Genealogical Society
Indianapolis Metropolitan Planning Organization
City of Fishers
City of Noblesville
Hamilton County Board of Commissioners
Hamilton County Highway Department

Subsequent to the submittal of the HPR and Phase 1A archaeological reconnaissance report in 2016, the project footprint changed slightly. The proposed drainage easement along 141<sup>st</sup> Street to the west was extended further towards the west along 141<sup>st</sup> Street towards Allisonville Road. The proposed drainage pipe would outlet further to the west to a wooded ravine east of Allisonville Road, and eventually drain to Weaver Creek.

The APE for aboveground resources was expanded to account for this change. A qualified professional historian from Lochmueller Group reviewed the expanded APE in the field on November 10, 2016. No resources listed on or eligible for the NRHP were identified within the expanded APE. Two Contributing properties were identified with the expanded APE: Lochmueller #4 a c.1940 house and Indiana Historic Sites and Structures Inventory (IHSSI) #057-206-5004, the Spannuth/Weaver Cemetery (CR-29-70) (mapped in SHAARD as east of Allisonville Road). Both properties are located west of Allisonville Road and will not be affected by the drainage easement.

In addition, a Phase 1A archaeological reconnaissance and associated addendum report were completed by CRA for the expanded footprint (Miller/DeBoer, November 16, 2016). No archaeological sites were identified and it was recommended the project be allowed to proceed as planned.

A letter was sent to the SHPO on November 28, 2016 and email notification was provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts. The SHPO staff responded to the letter on December 16, 2016 and agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report. See Appendix E for Previous Signed Finding and 800.11(e) document.

This proposed drainage easement along 141<sup>st</sup> Street has now been removed from the proposed project and replaced with the APE extension along 146<sup>th</sup> Street discussed below.

# **2017**

Following INDOT's December 27, 2016 signed finding of "No Adverse Effect" for the above project and SHPO's January 20, 2017 (DHPA #19374) concurrence with that finding, the project footprint changed to include the following:

- 1) Drainage Pipe Installation along 146<sup>th</sup> Street--It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street and outlet into the White River; and
- 2) Detention Basin at Shoemaker Ditch--As mentioned in the project's original early coordination letter (June 6, 2016), the project includes the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. It may now also include construction of a detention basin prior to out-letting to Shoemaker Ditch. Construction of this basin will require acquisition of the entire residential parcel at 12825 Lantern Road. The house on this parcel, a ca.-1955 ranch, is currently unoccupied. It received a "Non-contributing" rating during the March 2017 fieldwork.

The APE for aboveground resources was expanded to account for the above-described project changes (see Appendices A and B). Qualified professional historians from Lochmueller Group walked/photographed the expanded APE in the field on March 7, 2017. No aboveground resources listed in or eligible for the NRHP were identified within the expanded APE. The following eight properties meriting a Contributing rating were identified with the expanded APE: Lochmueller #1 (8716 146th Street; ca.-1960 ranch); Lochmueller #2 (8725 146th Street; ca.-1965 ranch); Lochmueller #3 (8715 146th Street; ca.-1965 ranch); Lochmueller #4 (14612 Wellington Court; ca.-1960 ranch); Lochmueller #5 (8650 146th Street); Lochmueller #6 (8575 146th Street; ca.-1955 mini ranch); Lochmueller #7 (14541 Allisonville Road (ca.-1950 ranch), and Indiana Historic Sites and Structures Inventory (IHSSI) #057-464-50002 (Farm; 8845 146th St.; ca.-1880 Italianate; included English barn; silo; corncrib; shed; privy). During the March 7, 2017 fieldwork, it was noted that the ca.-1880 Italianate farmhouse and English barn have been extensively altered. Both the farmhouse and barn have been covered in synthetic exterior siding material. A modern wraparound porch has been added to the farmhouse's north, east, and west elevations; in addition, doors and windows on the house appear to be modern replacements. The farmhouse and barn have been physically connected, with the barn's upper floors appearing to have been adapted for residential use with the lower floor altered as garage space. The other structures noted in the IHSSI as part of #50002 have been demolished.

In addition, a Phase 1A archaeological reconnaissance and associated interim report were completed by CRA for the expanded footprint (Joseph Miller, March 10, 2017). Four previously unrecorded archaeological sites (12H1808-12H1811) were recorded. Sites 12H1808 and 12H1810 were isolated prehistoric finds of unknown cultural affiliation. Sites 12H1808-12H1810 are recommended as not eligible

for inclusion in the NRHP. Site 12H1811 is a prehistoric lithic scatter recovered from the A horizon, as well as feature, contexts. No temporally diagnostic artifacts were recovered during the current survey of this site. However, shovel testing indicated that some portions of the site have high potential for intact subsurface archaeological deposits that could produce significant information pertaining to the prehistory of the region. Therefore the NRHP status of the site could not be assessed during the current survey, and it is recommended that this site be avoided or subjected to further work in the form of a Phase II NRHP evaluation. Also, bucket augering on the narrow White River floodplain indicated that there is low potential for deeply buried archaeological deposits within the survey area, and no deep testing is recommended for the project. Site 12H1811will be clearly marked on the design plans and avoided by all project activities. See Appendix C for the archaeological interim report summary.

Following INDOT's March 20, 2017 signed finding of "No Adverse Effect" for the Addendum to the original 800.11(e) documentation for the above project changes and SHPO's April 24, 2017 (DHPA #19374) concurrence with that finding, the project footprint changed again to include the following:

- 1) Inclusion of a North Field Detention Basin between SR 37 and the north terminus of North Pointe Boulevard This added element includes the construction of storm water detention basin within an approximate 16.2 acre area, currently used primarily for agricultural purposes. This drainage basin seeks to utilize an existing legal drain (McMahon Overdorff) to direct flow at a decreased velocity into Overdorff Branch, to the White River upstream of any storm water impact with the project's watershed. The exact layout of this detention facility has yet to be determined, and will likely be less than the 16.2 acre footprint. However, the modified APE in this location of the project assumes a depressed basin over the entire 16.2 acres with a likely 6 foot embankment around the basin. Structures adjacent to the south side of the proposed detention basin are part of a "Noncontributing" modern apartment building complex.
- 2) Extension of Maintenance of Traffic Operations on SR 37 south of 126<sup>th</sup> Street In order to adequately manage traffic while the proposed 126<sup>th</sup> Street interchange is constructed, a median crossover is required along SR 37 near I-69. This crossover will temporarily shift the two northbound SR 37 lanes over along the two southbound SR 37 lanes. The location of this temporary crossover is approximately 0.4 mile south of 126<sup>th</sup> Street, with the temporary pavement leading to the crossover point extending an additional 350 feet to the south. The preliminary plans for this added median crossover are included in Appendix A.

The APE for aboveground resources was expanded again to account for the above-described project changes (see maps in Appendix A). A qualified professional historian from Lochmueller Group walked/photographed the expanded APE in the field on October 26, 2017. No aboveground resources listed in or eligible for the NRHP were identified within the expanded APE. No previously inventoried or newly-identified properties meriting a rating of Contributing or higher were recorded within the expanded APE (See photos in Appendix B).

In addition, a Phase 1A archaeological reconnaissance and associated interim report were completed by CRA for the expanded footprint (Michael J. Curran, December 14, 2017). No archaeological sites were located within the expanded footprint survey area. One previously recorded archaeological site (12H736) had been recorded adjacent to the survey area. However, Site 12H736 was determined not eligible for the NRHP and no evidence of the site was found in the survey area. Please note that this most recent archaeological reconnaissance included a number of additional areas beyond the North Pointe Boulevard and SR-37/I-69 APE expansions that were previously surveyed for aboveground resources within the original APE. See Appendix C for the archaeological interim report summary.

## 3. DESCRIBE AFFECTED HISTORIC PROPERTIES

**2016: Hamilton County Bridge No. 151** – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

**2017:** No new historic properties were recorded in the revised/expanded APE areas. Archaeological Site 12H1811 was recommended for further investigation; however, this site will be clearly marked on design plans and avoided by all project activities. Archaeological Site 12H736 is adjacent to the expanded survey area, but does no evidence of this site was found in the survey area and it is not eligible for the NRHP. Neither 12H1811 nor 12H736 will be within the archaeological APE for the project.

## 4. DESCRIBE THE UNDERTAKING'S EFFECT ON HISTORIC PROPERTIES

**2016**: **Hamilton County Bridge No. 151**; **No Adverse Effect**— The proposed undertaking will not encroach upon the bridge. Although the project is within close proximity to Hamilton County Bridge No. 151 (approximately 85 feet to existing SR 37), it is anticipated that there will be no adverse effect on the bridge. The project takes place on a busy, multi-lane highway, and while the SR 37 bridge, which is near the historic bridge, may be widened, if that occurs it will be expanded into the median not toward Bridge No. 151. It is possible that the SR 37 bridge will be replaced, but, if so, a new bridge will remain at or near the existing elevation. Vegetation clearing may be necessary for approximately 10 - 20 feet east of the SR 37 bridge. There will be no direct impact on Bridge No. 151 and the setting of the historic bridge is already altered with the busy, multi-lane modern highway near it. In addition, no official detour would be signed to include the Bridge No. 151 due to its narrow width. In essence, the project creates no greater effect on Hamilton County Bridge No. 151. Please see Appendix E for a conceptual plan sheet of this area.

The project will have no direct impact on the historic bridge other than a viewshed change due to the proposed new construction. The viewshed change will have no impact on any of the characteristics that qualify the bridge for the NRHP and will have No Adverse Effect on Hamilton County Bridge No. 151.

**2017**: No new historic properties were identified in the revised/expanded APE areas.

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

According to 36 CFR 800.5(a)(1) "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."

**Hamilton County Bridge No. 151** -- According to 36 CFR 800.5(a)(1) the criteria of adverse effect do not apply.

Per 800.5(a)(2)(i): "Physical destruction of or damage to all or part of the property" will not occur. The project will not directly affect the bridge. No right-of-way will be required from the bridge. No portion of the bridge or abutments will be directly impacted.

Per 36 CFR 800.5(a)2(ii): the "Alteration of a property, including 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 and/or other applicable guidelines" will not occur. The project will have no direct impact on the bridge.

Per 36 CFR 800.5(a)2(iii): the "Removal of the property from its historic location" will not occur. The project will not remove the bridge from its historic location.

Per 36 CFR 800.5(a)2(iv): a "Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance" will not occur. The project will not cause a change of character to any of the bridge's features. The existing multi-lane SR 37 is already within close proximity to the bridge with minimal secondary tree growth to provide a visual buffer. Although some tree clearing may be necessary, the project will have little permanent impact on the physical features of the bridge's setting.

Per 36 CFR 800.5(a)2(v): the "Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features" will not occur. The project will be visible from the bridge. However, the setting will not be highly altered. Some tree clearing may occur between the two bridges, but much of SR 37 is already visible to Bridge No. 151 when the trees are not leafed out and the SR 37 bridge is visible at all times. Some loss of secondary tree growth will not affect the audible, atmospheric or visual elements of the property setting in the winter months and will likely result in only a slight change when the trees are in leaf.

Per 36 CFR 800.5(a)2(vi): "Neglect of a property which causes its deterioration..." will not occur as a result of the project. The undertaking will not cause the deterioration of any aspect of the property.

Per 36 CFR 800.5(a)2(vii): the "Transfer, lease, or sale of property out of Federal ownership or control..." will not occur. Ownership of the property will not change as a result of this project.

## 6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

An early coordination letter was mailed to consulting parties on June 6, 2016. The HPR (Ziegler, July 19, 2016) was uploaded to IN SCOPE, the Indiana Department of Transportation's website for publicly accessible documents, for review by consulting parties on July 20, 2016. The summary of the HPR is found in Appendix E.

The SHPO staff responded to the HPR in a letter dated August 19, 2016. The letter stated "Based on the information included in the historic property report ("HPR"), we agree that Hamilton County Bridge No. 151 (National Bridge Inventory No. 2900138) is eligible for inclusion in the National Register of Historic Places under criteria A and C and that this bridge is the only above-ground property identified within the area of potential effects that would be eligible for the National Register. Bridge No. 151 also was rated Select in INDOT's Indiana Historic Bridge Inventory. Based on your description of the project and on photographs included in the HPR, it does not appear that the SR 37 Corridor Project would adversely affect Bridge No. 151."

A letter was sent to the SHPO on November 28, 2016 and email notification provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts.

Indiana Landmarks responded to this letter in an email dated December 5, 2016. They requested clarification regarding the expanded footprint and questioned whether the SR 37 drainage easement expansion would have an effect on the possible future expansion of Allisonville Road. Specifically they asked, "If the drainage pipe from SR 37 will now outlet into a wooded ravine on the east side of Allisonville Road at 141st Street, will future expansions of Allisonville Road require water from that thoroughfare to drain to the west instead, in order to avoid overwhelming the ravine to the east? If so, could there be adverse effects on either of the two properties in question?"

Lochmueller Group responded to Indiana Landmarks in an email dated December 19, 2016. Project designers reviewed the area near Allisonville Road and 141st Street and it is not anticipated that the outlet water from SR 37 will impact drainage on future Allisonville Road projects. Allisonville Road currently uses roadside ditches for the surface water, which are independent from the wooded ravine. Any future expansion would involve either relocating these roadside ditches or the introduction of a storm sewer system. SR 37 will also utilize detention to reduce impacts to the ravine and Weaver Creek. Indiana Landmarks responded in an email dated December 19, 2016 indicating they do not object to a finding of "No Adverse Effect."

The SHPO staff responded to the letter describing the project footprint changes on December 16, 2016 and agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report.

A finding of "No Adverse Effect" was signed by INDOT, on behalf of FHWA, on December 27, 2016 and transmitted to consulting parties. A Public Notice of the FHWA finding of "No Adverse Effect" was published in the *Indianapolis Star* and *The Times* in Noblesville on December 30, 2016. A 30-day comment period was given, and no comments were received.

All of the correspondence detailed above may be found in Appendix E.

# **2017**

On January 20, 2017, the SHPO staff sent a letter stating, in part, "We concur with INDOT's December 27, 2016, Section 106 finding, on behalf of FHWA, of "No Adverse Effect" for this federal undertaking as a whole. We also concur that the only historic property identified within this project's area of potential effects – the 1916, three-span, reinforced concrete Hamilton County Bridge No. 151 – will not be adversely affected by this project."

Due to changes in the project scope and location since the original Section 106 finding of "No Adverse Effect" was signed on December 27, 2016, an Addendum to the Section 106 800.11(e) documentation was prepared reaffirming the original finding of "No Adverse Effect." This second finding (dated March 13, 2017) was signed by INDOT, on behalf of FHWA, on March 20, 2017, and transmitted to consulting parties on March 22, 2017.

On April 20, 2017, Indiana Landmarks sent an email with an attached letter in response to the (first) Addendum to the 800.11e (March 13, 2017). The email requested information on how the changes in the project scope, specifically the placement of underground drainage pipes in two areas west of SR 37

(between 126<sup>th</sup> and 131<sup>st</sup> streets and along 146<sup>th</sup> Street), would affect the Nickel Plate Railroad should the railroad be determined potentially eligible for the National Register.

On April 21, 2017, Lochmueller Group responded to Indiana Landmarks stating, in part, "The drainage pipes will be installed under the railroad using trenchless excavation. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400-900 feet intervals and sections of pipe will be pushed/pulled into place below ground via the pits. Because the pipes will be installed under the ground, using trenchless technology, we don't believe there will be any adverse impacts to the railroad even if it was eligible for the National Register."

Indiana Landmarks responded in an email dated April 21, 2017, stating, in part, "We expected that the Nickel Plate Railroad would probably be left undisturbed through the trenchless excavation process, but just wanted to make sure it did not coincide with the location of any receiving pits. We are pleased to hear that there will be no damage to the rails."

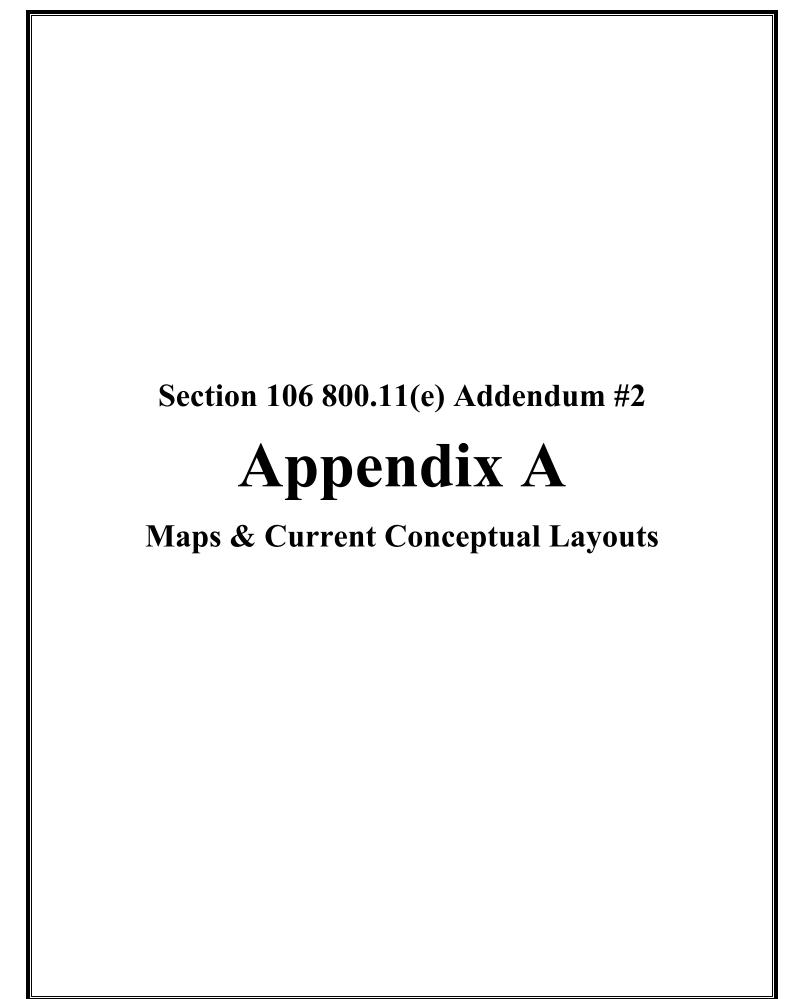
On April 24, 2017, the SHPO staff sent a letter in response to the (first) Addendum to the 800.11(e) (March 13, 2017). The letter agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP, and concurred with the conclusions and recommendations in the second Phase 1A archaeological reconnaissance addendum report. The letter further stated, "Therefore, we concur with INDOT's March 20, 2017 finding on behalf of the Federal Highway Administration of "No Adverse Effect."

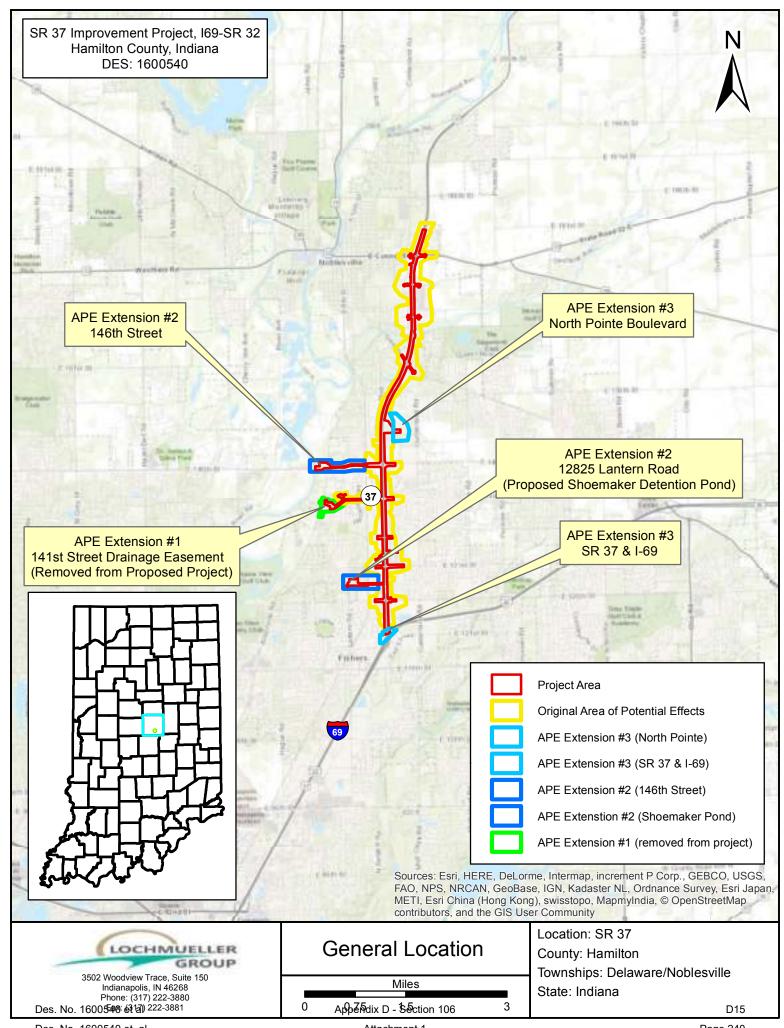
All of the 2017 correspondence detailed above may be found in Appendix D. No other consulting party comments were received.

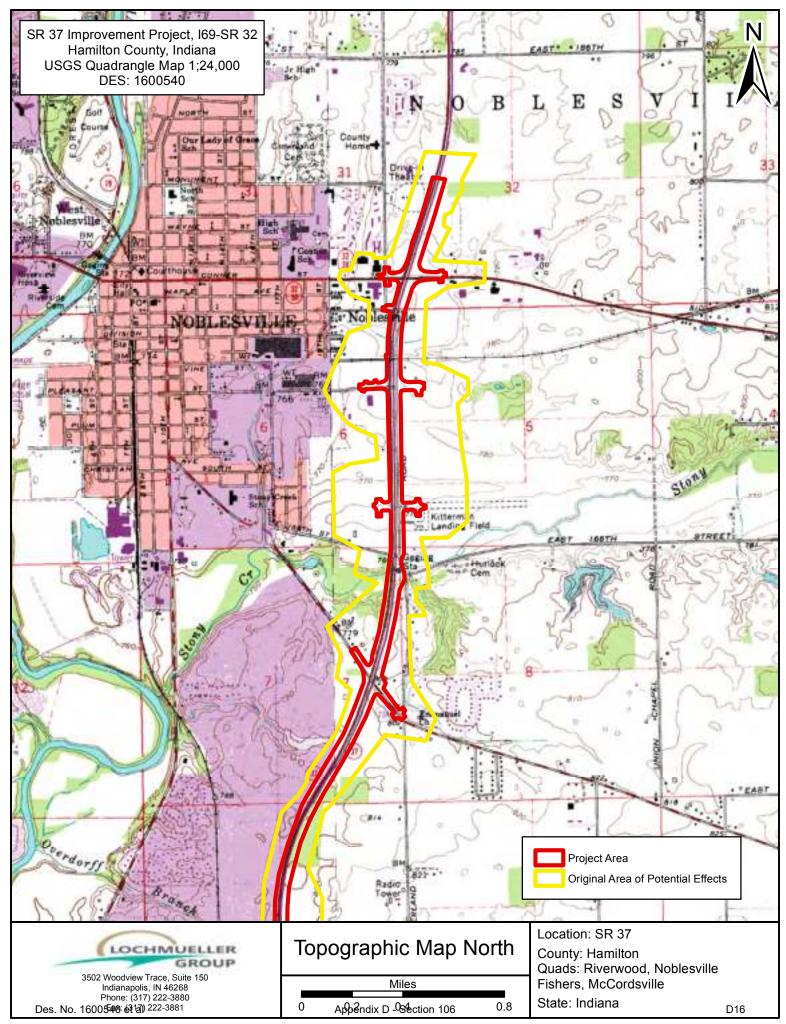
Because no new resources in the APE expansion areas are recommended NRHP-eligible—and Archaeological Sites 12H1811 and 12H736 will be avoided by all project activities—the previous findings for the project of "No Adverse Effect" remain valid. A 30-day comment period will be given to all consulting parties. This document will be revised, if necessary, after the comment period to reflect any comments received. Because the effect finding for the project did not change, no new public notice is required.

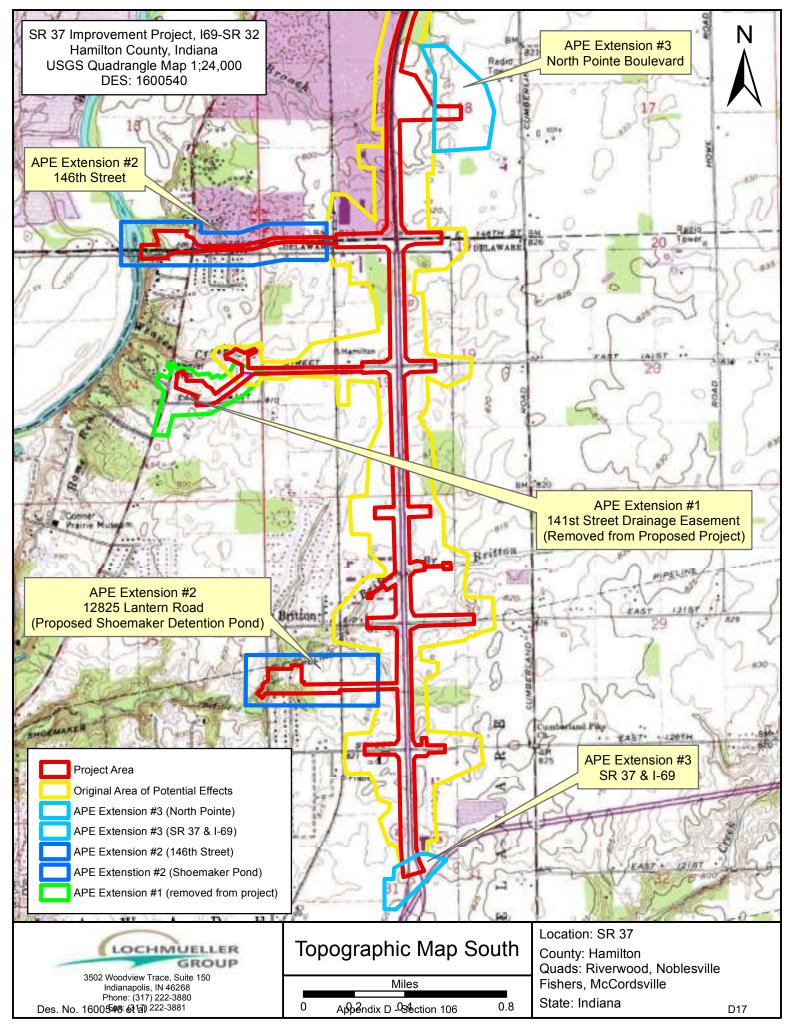
# **APPENDICES**

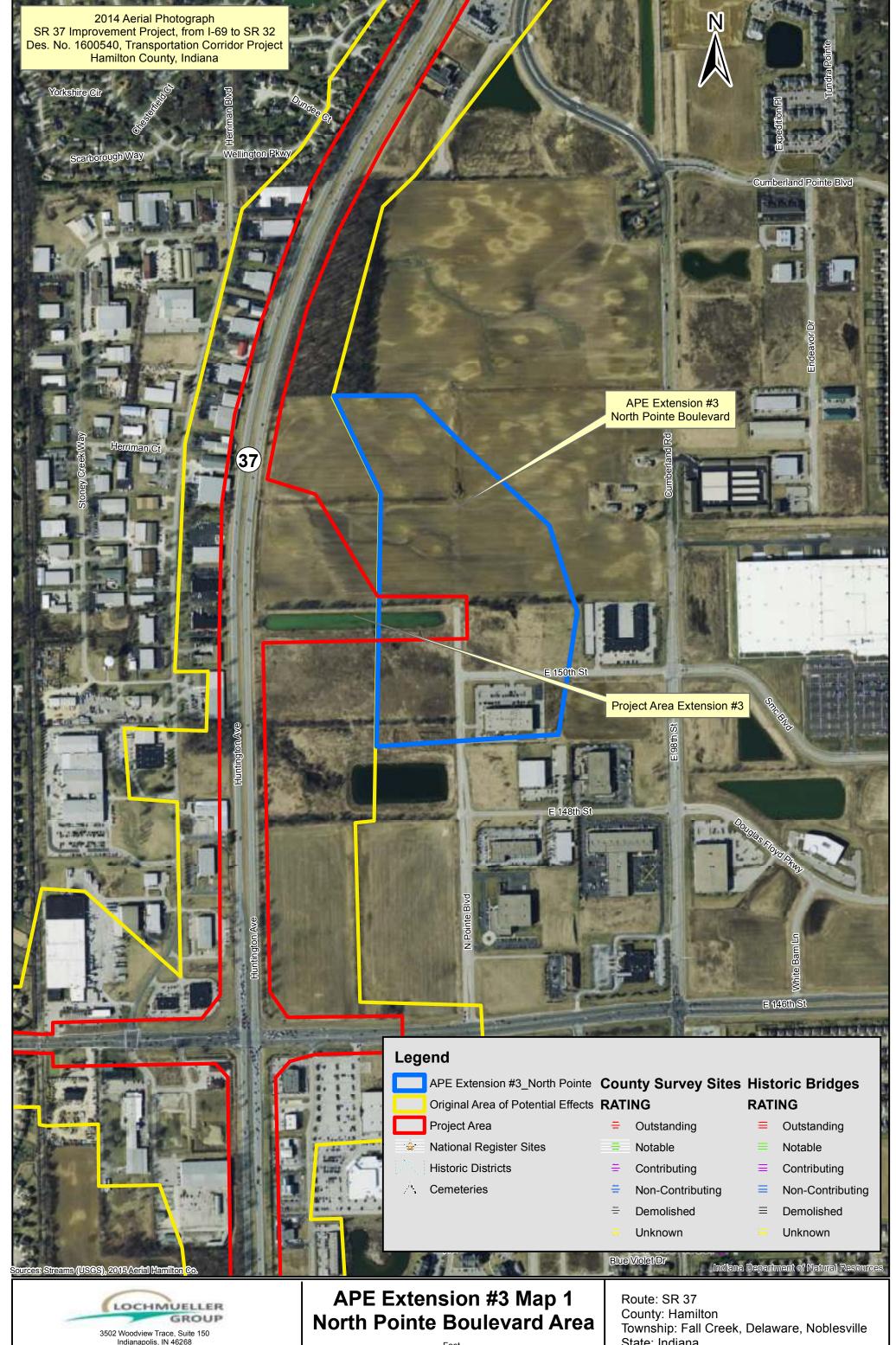
- A Maps & Current Conceptual Layouts
- B Photographs of Additional Area of Potential Effects (APE #3) for second Addendum to the 800.11(e)
- C Phase 1a Archaeological Survey Interim Report Summary (Addendum #3)
- D Consulting Parties Correspondence Following the first Addendum to the 800.11(e)
- E Previous Section 106 Findings/800.11e Documentation (Original and first Addendum to the 800.11(e))











3502 Woodview Trace, Suite 150 Indianapolis, IN 46268 Phone: (317) 222-3880 Fax: (317) 222-3881

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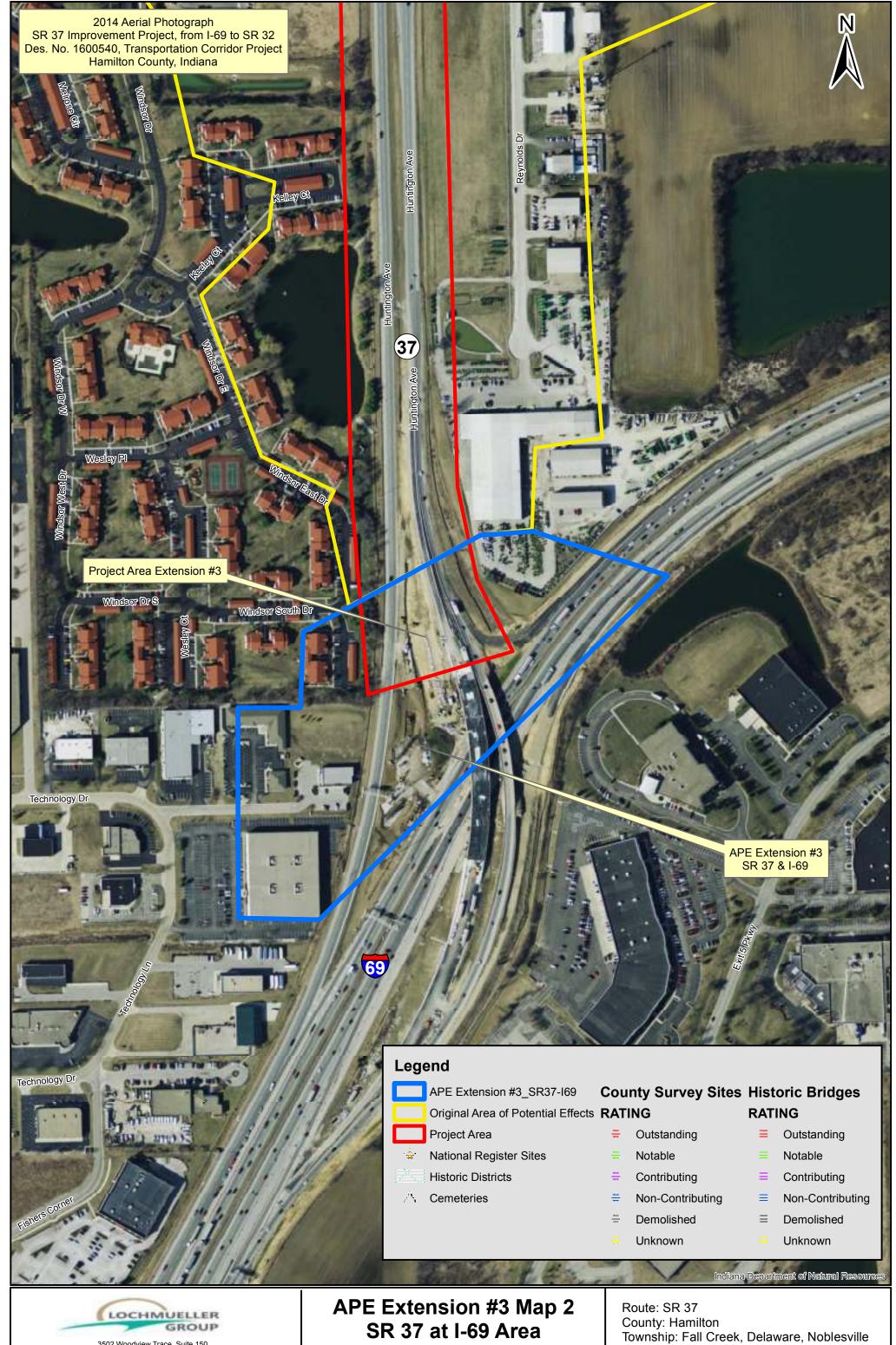
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Attachment 1

State: Indiana

01/04/18

Page 243



180 360 Appendix D - Section 106

Attachment 1

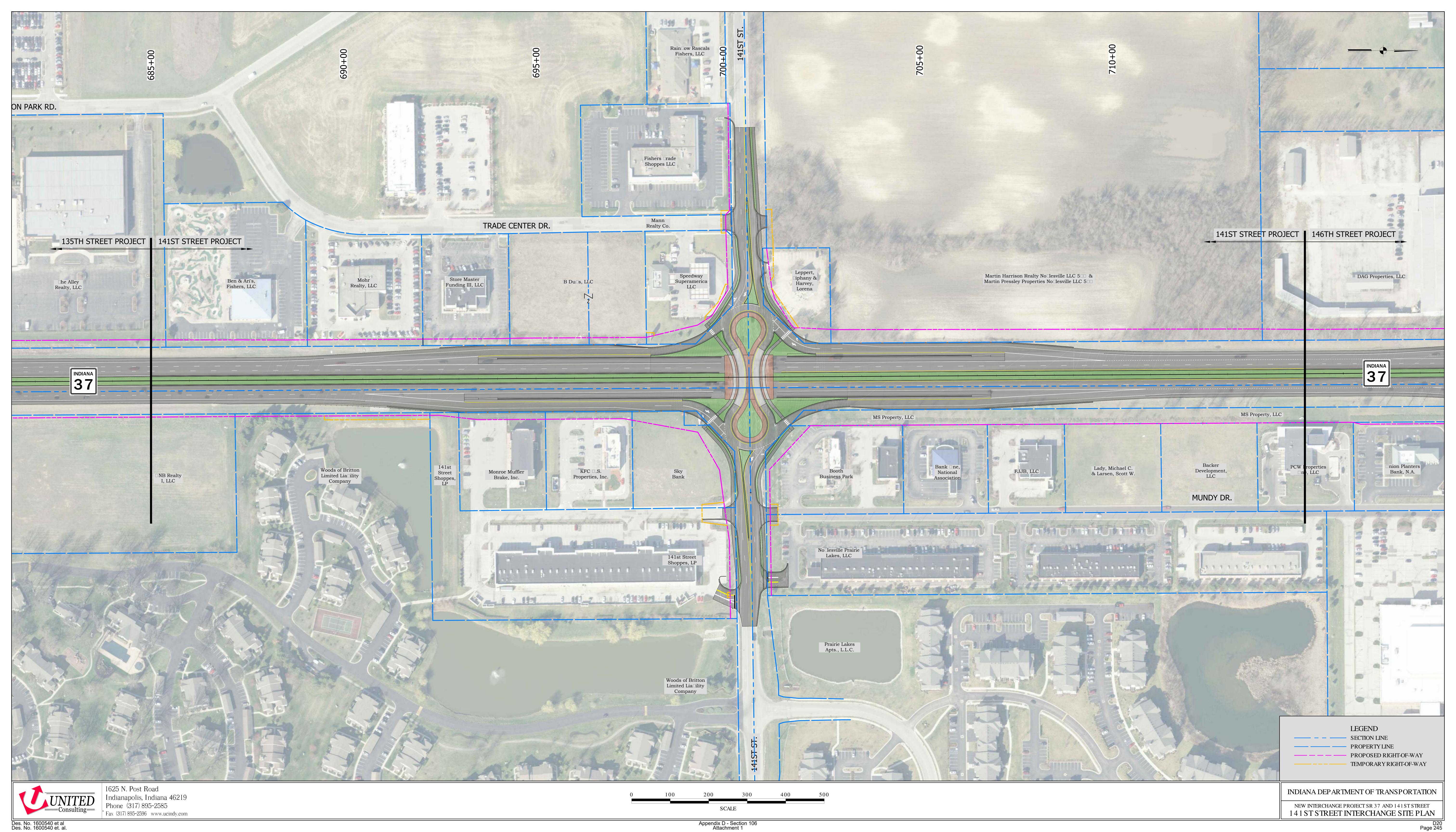
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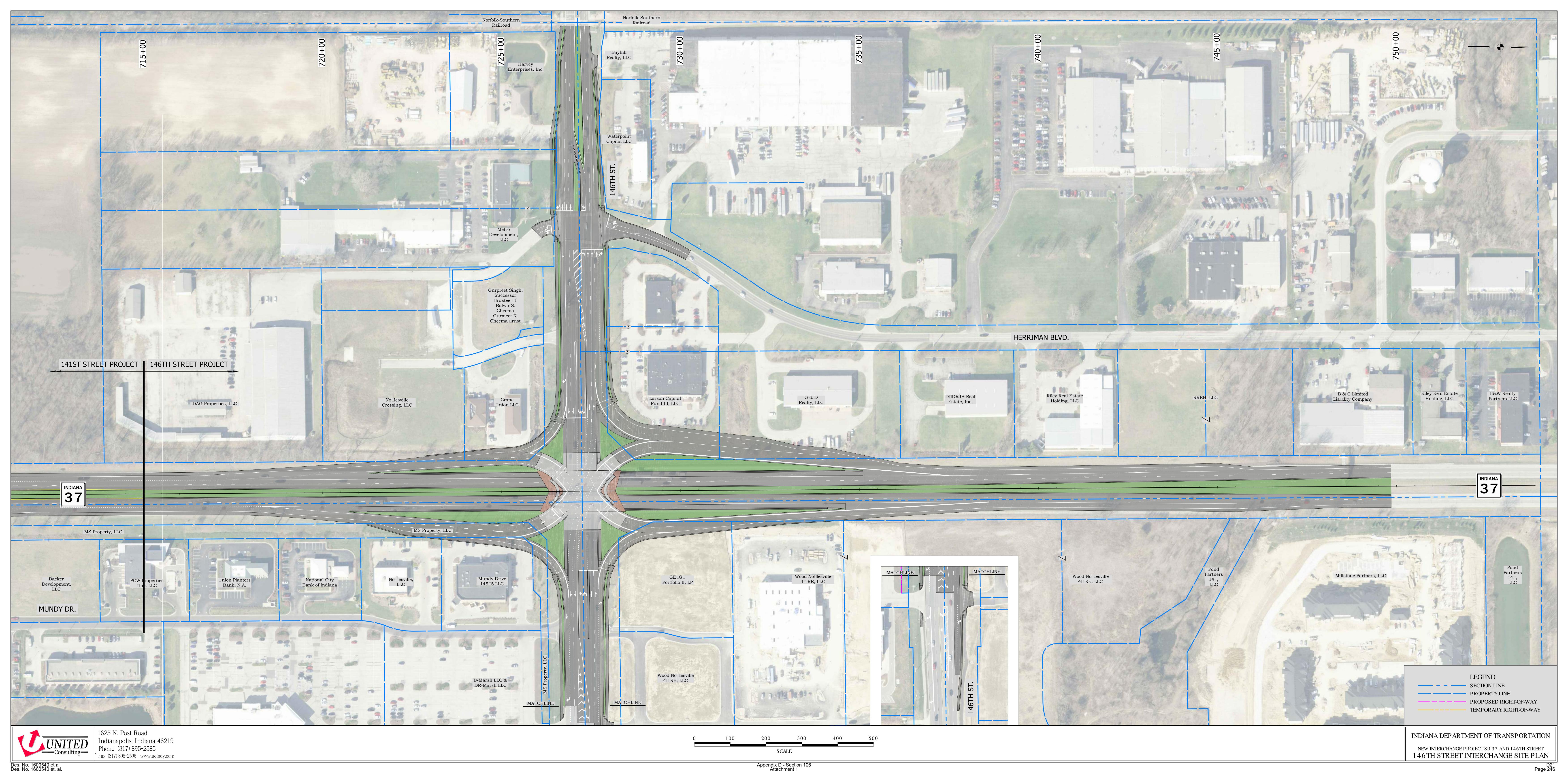
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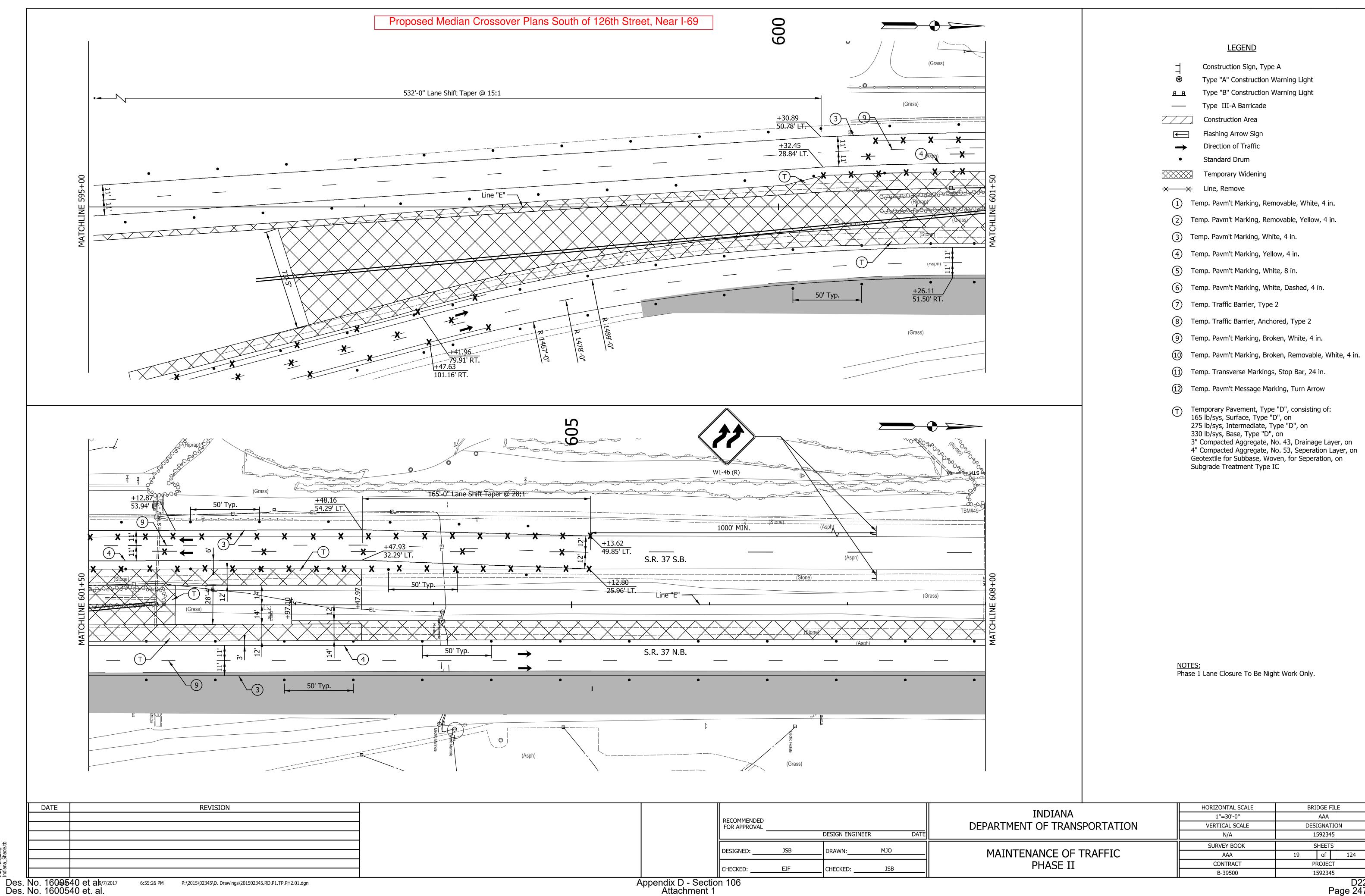
State: Indiana

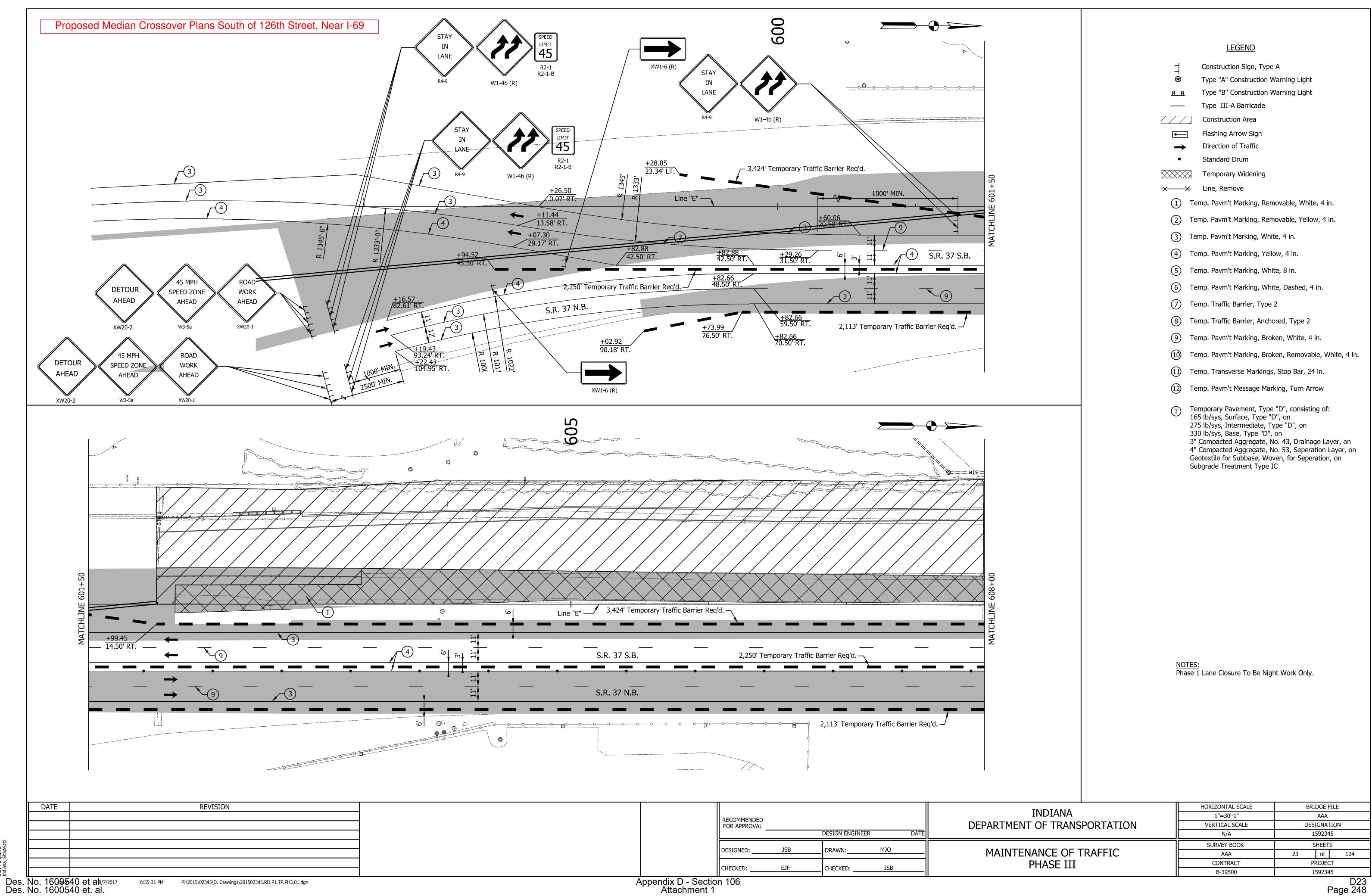
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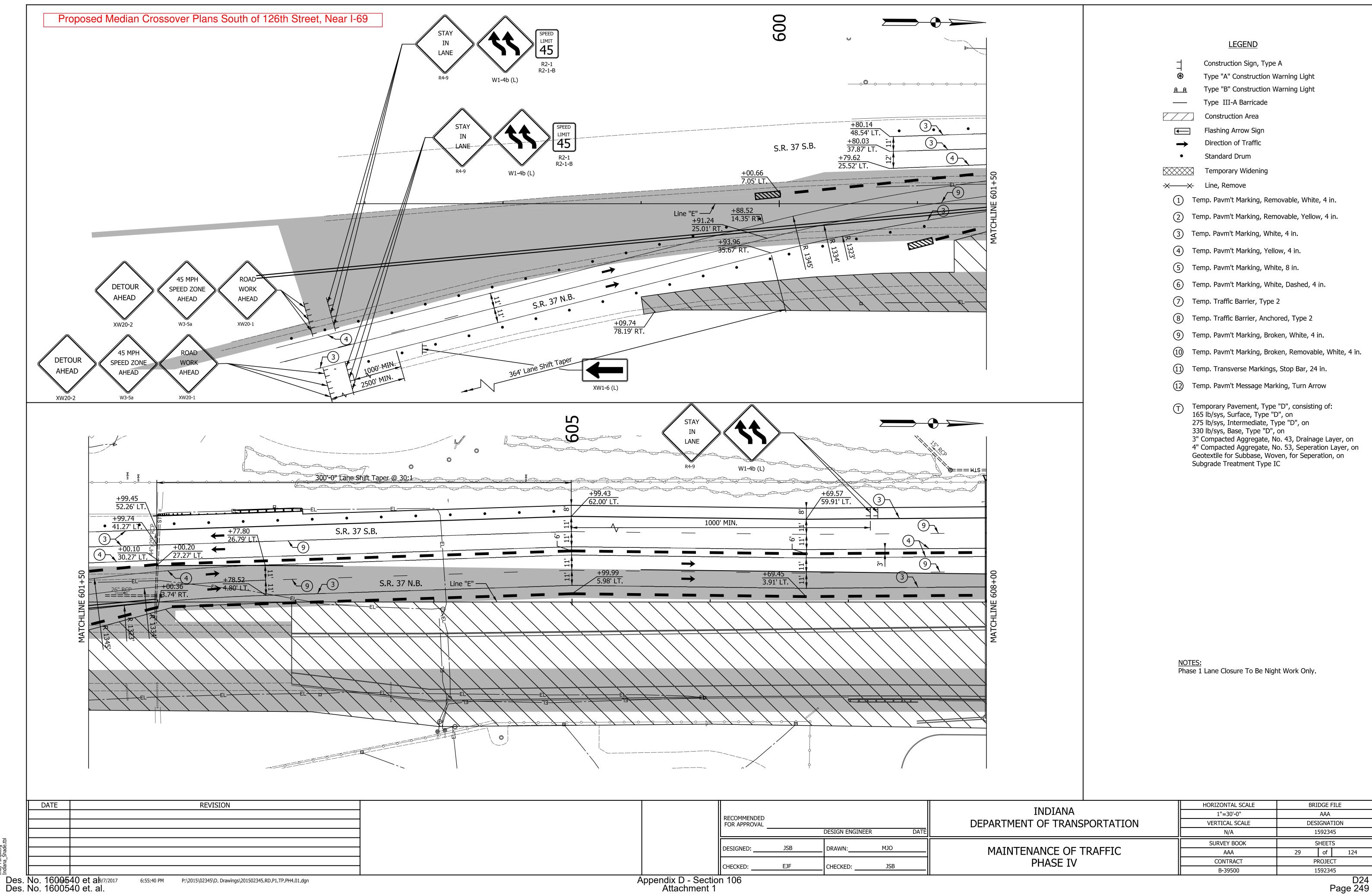
Page 244

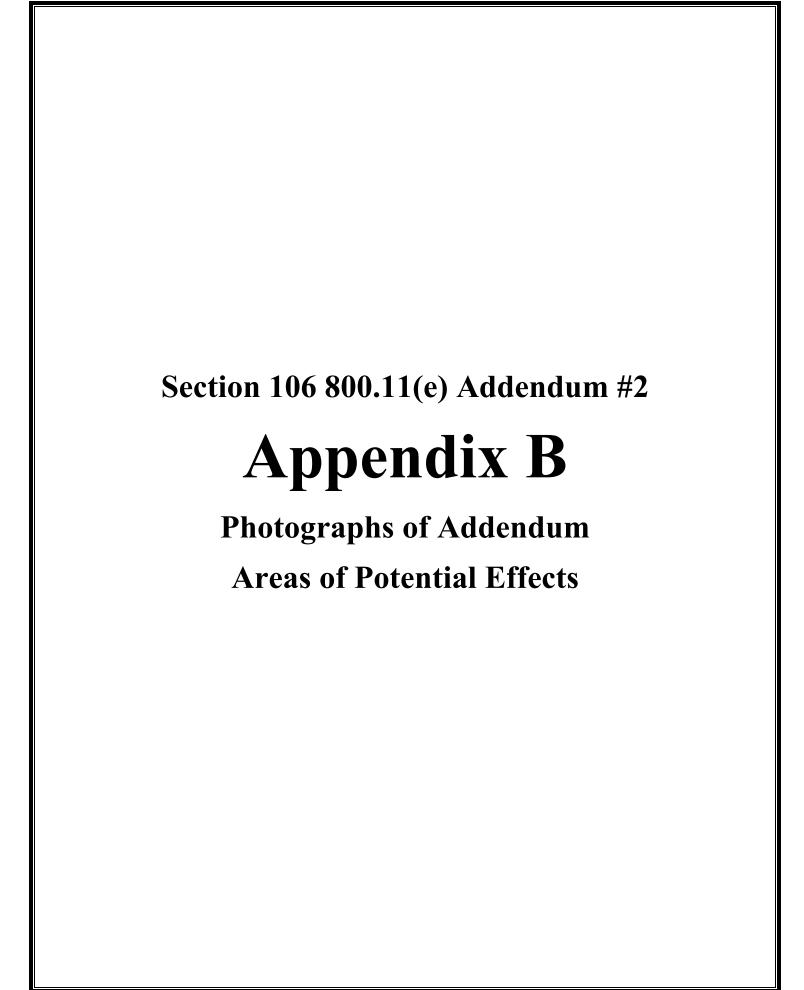


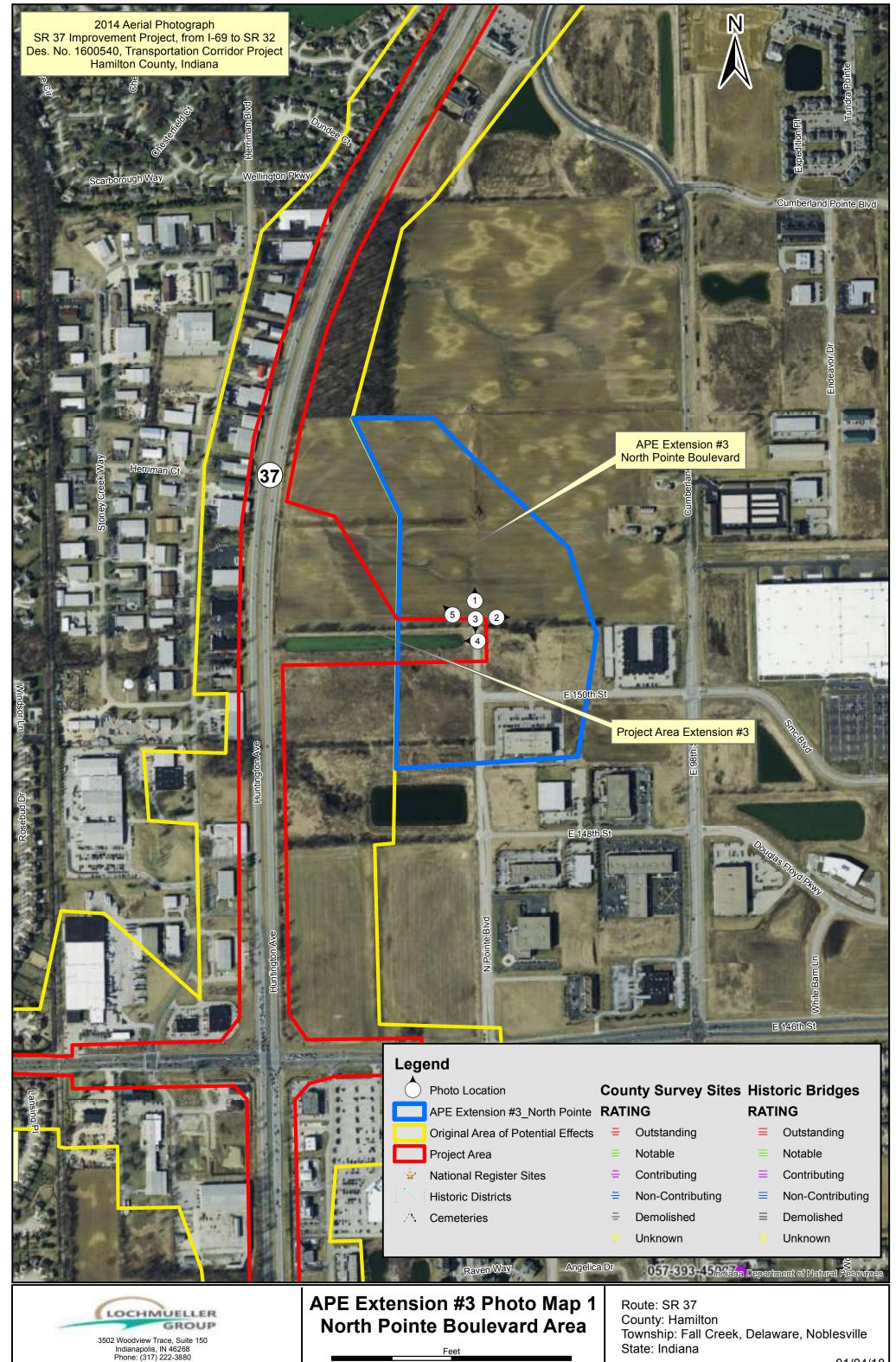












Indianapolis, IN 46268 Phone: (317) 222-3880 Fax: (317) 222-3881

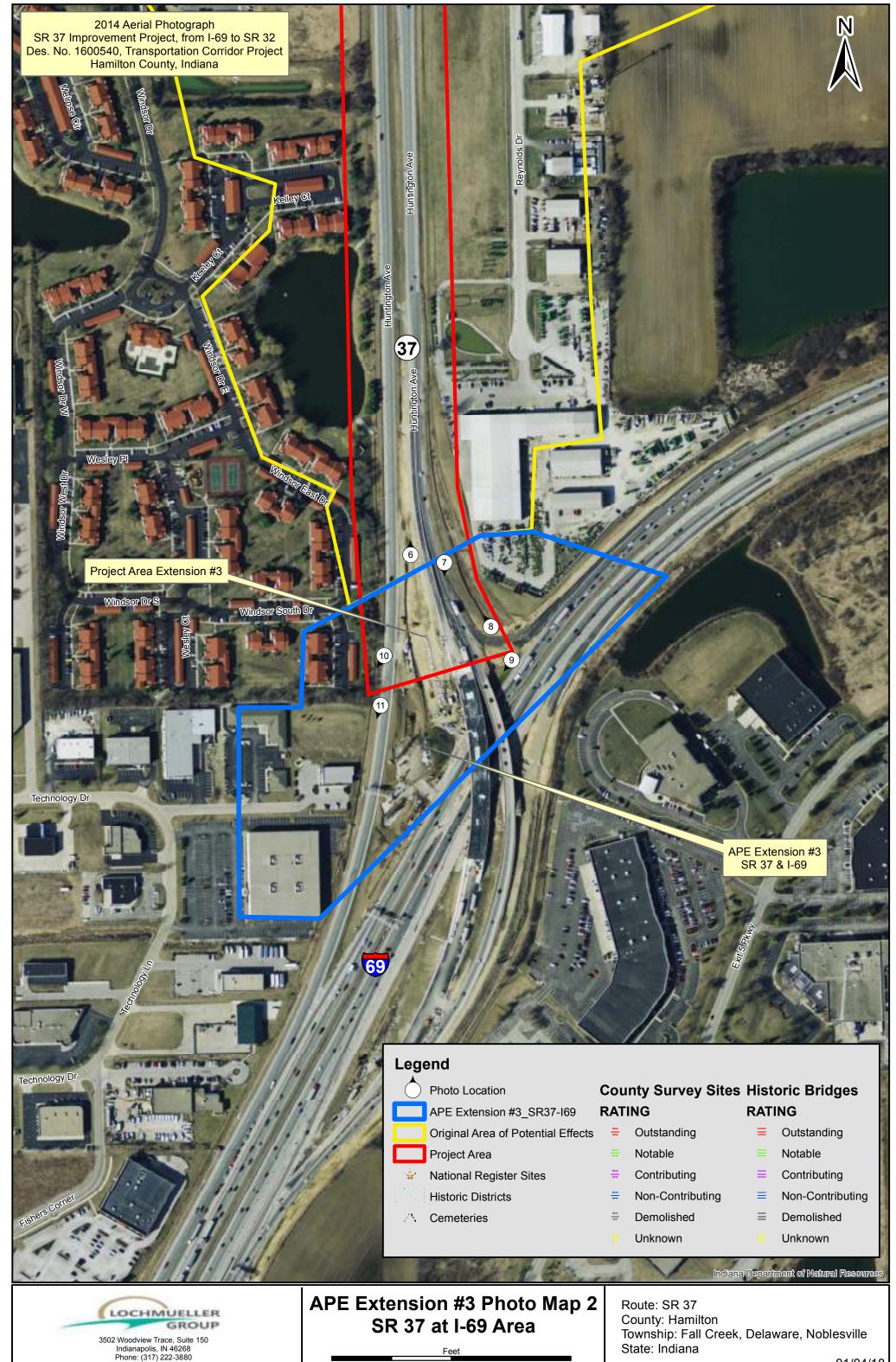
Des. No. 1600540 et al Des. No. 1600540 et. al.

375 750 Appendix D - Section 106

Attachment 1

01/04/18

Page 251



3502 Woodview Trace, Suite 150 Indianapolis, IN 46268 Phone: (317) 222-3880 Fax: (317) 222-3881 Des. No. 1600540 et al Des. No. 1600540 et. al.

) 360 Appendix D - Section 106 180

Attachment 1

01/04/18

Page 252



1. Looking N in APE Extension #3 from N terminus of N. Pointe Boulevard



2. Looking E in APE Extension #3 from N terminus of N. Pointe Boulevard
Appendix D - Section 106

Des. No. 1600540 et al Des. No. 1500540 et. al.



3. Looking S in APE Extension #3 from N terminus of N. Pointe Boulevard



4. Looking W in APE Extension #3 from N terminus of N. Pointe Boulevard

Des. No. 1600540 et al Appendix D - Section 106

Des. No. 1500540 et al.



5. Looking NW in APE Extension #3 at N terminus of N. Pointe Boulevard



6. Looking N at N end of APE Extension #3 at SR 37 & I-69  $_{\rm Appendix\ D}$  - Section 106

Des. No. 1600540 et al Des. No. 1500540 et. al.



7. Looking S into APE Extension #3 at SR 37 & I-69, E side of SR 37 ROW



8. Looking NW in APE Extension #3 at SR 37 & I-69, E side of SR 37 ROW Appendix D - Section 106

Des. No. 1600540 et al Des. No. 1500540 et. al.



9. Looking SW in APE Extension #3 at SR 37 & I-69, E side of SR 37 ROW

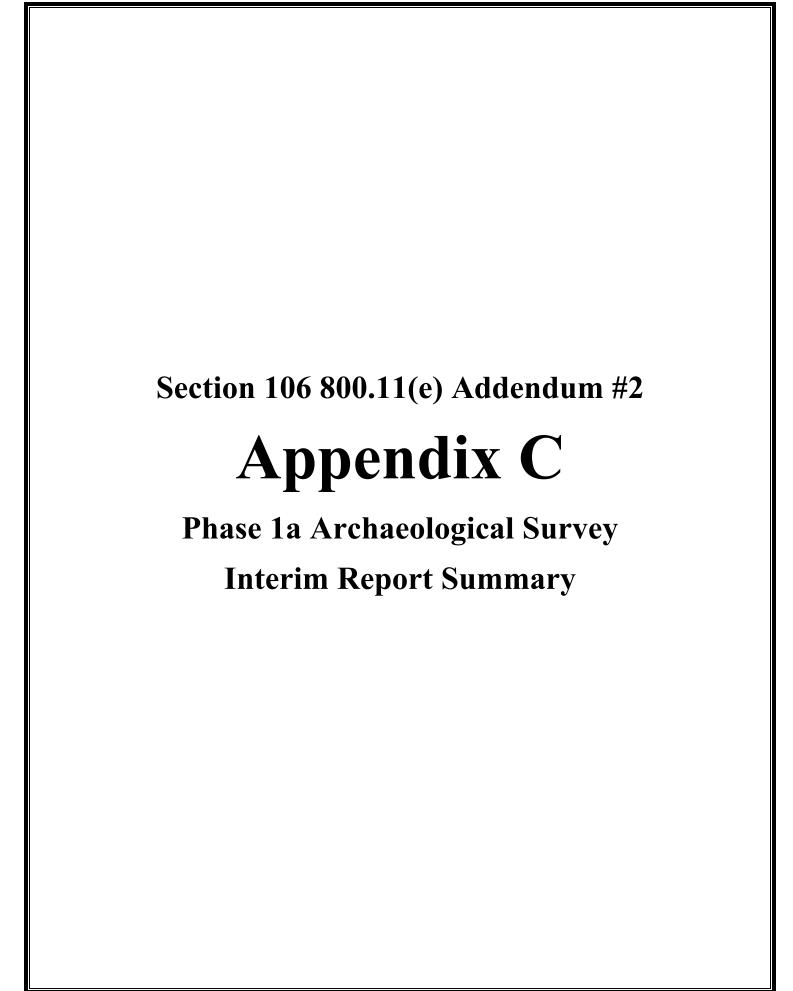


10. Looking SW in APE Extension #3 at SR 37 & I-69, W side of SR 37 ROW Appendix D - Section 106

Des. No. 1600540 et al Des. No. 1500540 et. al.



11. Looking SSW in APE Extension #3 at SR 37 & I-69, W side of SR 37 ROW



### PHASE IA ARCHAEOLOGICAL RECONNAISSANCE SURVEY FOR THE PROPOSED STATE ROUTE 37 IMPROVEMENT PROJECT, HAMILTON COUNTY, INDIANA, ADDENDUM NO. 3 (INDOT DES NO. 1600540)

by Michael J. Curran

### Prepared for

Gary Quigg Lochmueller Group, Inc. 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268 Phone: (317) 334-6807 Email: gquigg@lochgroup.com

### Prepared by

Cultural Resource Analysts, Inc. 201 NW 4th Street, Suite 204 Evansville, Indiana Phone: (812) 253-3009 Fax: (812) 253-3010 Email: amartin@crai-ky.com CRA Project No.: I17L024

> Andrew V. Martin, RPA Principal Investigator

December 14, 2017

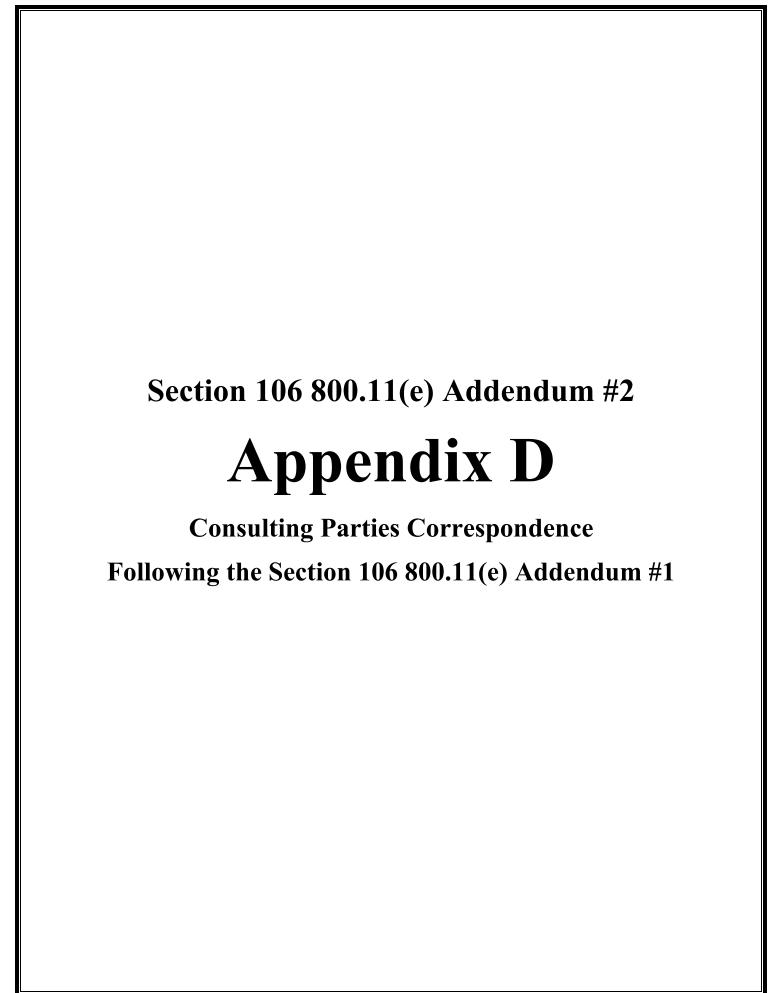
Lead Agency: Federal Highway Administration INDOT DES No.: 1600540

### **ABSTRACT**

Between November 27 and 29, 2017, Cultural Resource Analysts, Inc., personnel conducted a phase Ia archaeological reconnaissance survey for additional areas of the proposed State Route 37 improvement project in Hamilton County, Indiana (Indiana Department of Transportation Designation Number 1600540). The survey was conducted at the request of Lochmueller Group, Inc. Prior to conducting this survey, an archaeological records review was completed utilizing data from the Indiana Division of Historic Preservation and Archaeology's State Historic Architectural and Archaeological Research Database. The records review revealed that a small portion of the survey area had been previously surveyed. Due to the small size of the previously surveyed area, and the duration of time since an earlier investigation, these landforms were re-investigated. One previously recorded archaeological site (12H736) had been recorded adjacent to the survey area. However, Site 12H736 was determined not eligible for the National Register of Historic Places and no evidence of the site was found within the survey area.

The land that will be impacted by the additions to the SR 37 corridor improvement project is located in 10 discontinuous areas that encompass approximately 14.0 ha (34.6 acres). Field methods consisted of screened shovel testing, pedestrian survey, and visual inspection. No archaeological sites were located in the survey area. Therefore, no archaeological sites eligible for, or listed on, the National Register of Historic Places will be affected by this project and archaeological clearance is recommended for the proposed project.

Appendix D - Section 106



Erk Helceryh, Gwyeroon Carperon F. Clark, Director

Division of Historic Streamstice & Archaeology • 402 W. Wishington Shore, W174 • Indicreptio, PA 46704-2719 Physic S17,330-1646 • Fee 317-2324046 • depoigennt stages www.th.gov/enrurésenic



January 20, 2017.

Annasilia V. Kontar

Martagen Cultural Resources Office.

Epyinomental Services

Indiana Department of Transportation 100 North Senate Avenue, Room NG12

Indianapolia, Indiana, 46204.

Federal Agency: Indiana Department of Transportation ("IMEXIT").

en behalt at Fodoral Highway Administration (FFIPWA")

Re: INIXIT's finding of 'No Adverse Effect,' with supporting documentation, for the SR 37 Improvement Project 1.69 to SR 32, Warri too County, Indiana (Dos. No. 1690240; DHFA No. 19374)

Dear Ma. Kuman.

Pursuant to Section 196 of the National Historic Preservation Act (54 U.S.C. § 306108), 36 U.F.R. Purt 800, and the "Programmatic Agreement (9A) among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Theoric Preservation Officer regarding the implementation of the Pederal Aid Highway Program on the State of Indianal the staff of the Indiana State Historic Preservation Officer has reviewed the Ending upon documentation flot were enclosed with Lachmaneller Group's letter dated December 27, 2016, which we recovered on December 18, for the above indicated project in the order of Fishers and Noblesville, and in Delaware and Noblesville townships, in Hamilton County, Indiana.

We concur with INDOT's December 27, 2016, Section 105 finding, on public of FHWA, of "No Adverse Effect" for this federal undertaking as a whole.

We also concur that the only historic property identified within this project's arcs, of potential offices—the 1916, three-spen, coinforced concrete Hamilton County Bridge No. 151—will not be adversely affected by this project.

Abbrught we have complice with your request that we concur with your "No Adverse Effect" finding specifically for Bridge No. 151, we are misule only it is necessary to request such concurrence where, as bere, the everall finding for the undertaking is "No Adverse Effect" (which necessarily means that no nisteric property within the area of potential effects will be accorded affectedly, and, as the finding states, the fundantaking will not convert property from Hamilton County tailage No. 151, a Section 4(f) historic property, to a transportation use beyond its existing role" and "no Section 4(f) evaluation is required for Hamilton County Bridge No. 151." Please sec 23 C.P.R. 56 774,3 and 774.5(b)(1).

Hany prohistoric or historic architectogical artifacts of human remains are impowered carring construction, denotition, or earthmoving methylics, state lips (Indiana Cone 14, 21-1, 27 and -79) requires that the discovery to reported to the Department of Natural Resources within two (2) humans days. In that event, please call (3.17) 232-1616. Be advised that adherence to Indiana Code (4-21-1-27 and -19 nees not coviate the need to adhere to applicable indeed statutes and regulations, including but not limited to 36 C.F.B. 800.

Higes, have questions about archaeological issues, pleaso contact Mitchell Zoll at (317) 232-3493 or mzol @ductNigov. Higeu bave questions about buildings or structures, please compet John Cert or (\$47) 253-1949 or june 55 http://www.

The DNR interior Protects enhance, preserve and wirely use natural, suitoral and receiptional recounters for the Benefit of Indiana's Objects. Humay's training benefit of Indiana.

www.DNR.IN.gov An Ecoal Opport hisy Employer If there is any feare correspondence regarding the SR 27 Improvement Ptajen; I 69 to SR 32 in Hamilton County (Des. No. 1500540), please continue to refer to DHPA No. 19374.

Very finity yours,

Mitche Hk. Zolle

Deputy State Historie Preservatico Officer

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eg: Kiz Galetto, Lockmodloz Goop

eme: Ruben Dirke, PD, Roberd JTigh way Administration. Indiana 12 vision. Annually Komen. Indiana Repartment of transportation. Mary Kermedy, Indiana Repartment of transportation. Show Miller indiana Repartment of transportation. Jettery Lascott. Ediana Department of Transportation. Jettery Lascott. Ediana Department of Transportation. Sharley Clara. Ediana Toportation of Transportation. Sharley Clara. Ediana Toportation of Transportation. Star Gibert, 1994 multiple Clara. Sharley Martin, Lutheral Eduarda: Analysis, Inc. Toportation, Cultural Eduarda: Analysis, Inc. Milled Com., Indiana Department of National Resources. Judg. Com., Indiana Department of National Resources.

### Gillette, Kia

From: Gillette, Kia

Sent: Wednesday, March 22, 2017 1:51 PM

**To:** 'Alison Krupski'; 'Bradley Davis'; 'Dr. James Cooper'; 'Mark Dollase'; 'Michelle Allen

(Michelle.allen@dot.gov)'; 'MKENNEDY@indot.IN.gov'; 'Paul Brandenburg'; 'SR 37

Corridor Design'; 'Sam Burgess'; 'hamiltoncomuseum@att.net';

'mike.quinn@cliftoncpa.com'; 'heighwayd@earthlink.net'; 'kathyvena@att.net';

'anna.gremling@indy.gov'; 'mayorfadness@fishers.in.us';

'mglodowski@noblesville.in.us'; 'dan.stevens@hamiltoncounty.in.gov'

Cc: 'Farny, Eric'; 'Troy Woodruff (twoodruff@rqaw.com)'; 'Joseph Dabkowski'; 'Quigg, Gary'

Subject: Section 106 800.11(e) Addendum Documentation and "No Adverse Effect" Finding

Uploaded to IN SCOPE for SR 37 Corridor Project (DES No. 1600540)

Attachments: SR 37 Improvement Project\_8011.e Addendum\_DES1600450\_AI\_SHPOTransmittal\_

2017-03-22.pdf

Dear Invited Consulting Party/Agency Representative,

Due to changes in the project scope and location since the original Section 106 "No Adverse Effect" finding was signed on December 27, 2016, an Addendum to the Section 106 800.11(e) Documentation was prepared for the SR 37 Corridor Project (DES No. 1600540) in Fishers and Noblesville, Hamilton County, Indiana. The "No Adverse Effect" finding for the project remains the same but has been reaffirmed as part of this documentation. This documentation and the transmittal letter describing the project changes have been uploaded to the Indiana Department of Transportation's website. The transmittal letter is attached for your convenience. The document names are:

SR 37 Improvement Project I-69 to SR 32 800.11e Addendum SR 37 Improvement Project I-69 to SR 32 800.11e Addendum SHPO Transmittal

Please note that a hard copy of these materials are being submitted to the Indiana SHPO. In an effort to conserve resources, this documentation may be viewed electronically by other consulting parties by accessing INDOT's Section 106 document posting website IN SCOPE at:

erms.indot.in.gov/Section106Documents/

Please use the project identification details provided in the subject heading to search for the documents. The DES Number (1600540) is probably the best way to search. A hard copy of the materials will be provided to any invited consulting party who makes such a request within seven (7) days of receipt of this notification.

Please feel free to contact me if you questions about this posting.

Thanks, Kia

Kia Gillette

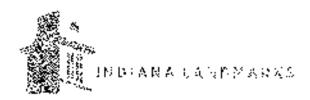
**Environmental Manager - Senior Associate** 

Lochmueller Group

317.334.6807 (direct) | 317.695.0825 (mobile)

KGillette@lochgroup.com

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April 20, 2017

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Page 266

Kia Gillette Environmental Manager, Lochmüeller Group

3502 Woodview Trace, Suite 150 Indianapolis, IN 46268

Re:

SR 37 improvement Project I-69 to SR 32. Fishers and Noblesville, Pamilton County INDOT. Designation (DFS) Number 1600450; OHPA Number 19374

Ms. Gillette:

Thank you for the continued opportunity to comment on the above project.

Indiana Landmarks concurs with the boundaries of the redefined APE. We also concur with the finding that the eight additional contributing properties identified within the expanded boundaries are not NREP-eligible. Accordingly, we do not object to the finding of "No Adverse Effect" for these properties.

At the same time, we have noted that the historic Nickel Plate Railroad is included within the APE and will presumably be affected by the installation of new drainage infrastructure along 146th Street. The railroad seems to have been classified neither as an aboveground resource nor as an archaeological resource within the Historic Structures Report, but we believe that the feature should be studied further to determine whether it should be treated as an NRHP-aligible cultural resource under the Section 106. process. If the failtoad is NRHP-eligible, Indiana Landmarks would like to know whether the proposed trenchless excavation will be executed in such a manner as to avoid any adverse effect on the existing railroad.

We appreciate your consideration and look forward to remaining involved in this project.

Sincerely,

Sam Burgess

Community Preservation Specialist

Des. No. 1600540 et al т. - стр. ст. тв. п. тр. п.н. т.к. 1-55 - 35-1 Сестт иго-веря пери асст. Арреndix D - Section 106 Des. No. 1500540 et. al.

### Gillette, Kia

From: Gillette, Kia

**Sent:** Friday, April 21, 2017 7:06 AM

To: 'Sam Burgess'

**Subject:** RE: Section 106 800.11(e) Addendum Documentation and "No Adverse Effect" Finding

Uploaded to IN SCOPE for SR 37 Corridor Project (DES No. 1600540)

Mr. Burgess,

Thank you for your comments regarding the SR 37 Improvement Project. There will be 2 drainage pipes installed under the Nickle Plate Railroad. The southern-most will be approximately half way between 126<sup>th</sup> Street and 131<sup>st</sup> Street and the northern-most will be along 146<sup>th</sup> Street. The drainage pipes will be installed under the railroad using trenchless excavation. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits.

Because the pipes will be installed under the ground, using the trenchless technology, we don't believe there will be any adverse impacts to the railroad even if it was eligible for the National Register.

Please let me know if you have any further questions.

Thanks, Kia

### Kia Gillette

**Environmental Manager - Senior Associate** 

### Lochmueller Group

317.334.6807 (direct) | 317.695.0825 (mobile)

KGillette@lochgroup.com

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From: Sam Burgess [mailto:sburgess@indianalandmarks.org]

**Sent:** Thursday, April 20, 2017 9:00 AM **To:** Gillette, Kia <KGillette@lochgroup.com>

Subject: RE: Section 106 800.11(e) Addendum Documentation and "No Adverse Effect" Finding Uploaded to IN SCOPE

for SR 37 Corridor Project (DES No. 1600540)

Ms. Gillette:

Attached is Indiana Landmarks' response to the latest correspondence regarding Des. No. 1600540.

Thanks,

Sam Burgess

### Gillette, Kia

**From:** Sam Burgess <sburgess@indianalandmarks.org>

**Sent:** Friday, April 21, 2017 8:36 AM

**To:** Gillette, Kia

**Subject:** RE: Section 106 800.11(e) Addendum Documentation and "No Adverse Effect" Finding

Uploaded to IN SCOPE for SR 37 Corridor Project (DES No. 1600540)

Ms. Gillette,

Thank you very much for your feedback. We expected that the Nickel Plate Railroad would probably be left undisturbed through the trenchless excavation process, but just wanted to make sure it did not coincide with the location of any receiving pits. We are pleased to hear that there will be no damage to the rails.

Best,

Sam

**From:** Gillette, Kia [mailto:KGillette@lochgroup.com]

Sent: Friday, April 21, 2017 7:06 AM

To: Sam Burgess <sburgess@indianalandmarks.org>

Subject: RE: Section 106 800.11(e) Addendum Documentation and "No Adverse Effect" Finding Uploaded to IN SCOPE

for SR 37 Corridor Project (DES No. 1600540)

Mr. Burgess,

Thank you for your comments regarding the SR 37 Improvement Project. There will be 2 drainage pipes installed under the Nickle Plate Railroad. The southern-most will be approximately half way between 126<sup>th</sup> Street and 131<sup>st</sup> Street and the northern-most will be along 146<sup>th</sup> Street. The drainage pipes will be installed under the railroad using trenchless excavation. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below ground via the pits.

Because the pipes will be installed under the ground, using the trenchless technology, we don't believe there will be any adverse impacts to the railroad even if it was eligible for the National Register.

Please let me know if you have any further questions.

Thanks, Kia

Kia Gillette

**Environmental Manager - Senior Associate** 

Lochmueller Group

317.334.6807 (direct) | 317.695.0825 (mobile)

KGillette@lochgroup.com

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Eric Halcamb, Savernad Cameren F. Clada Dinneren

Division of Historic Preservation & Archeology - 102 VV, VV artington Street, WE/H - Inclangible, IN 146204-12739 Prone 317 202-1646 | Lax 317 202-0695 - thips@thi.l.Ngov - www.lNgov/do/historic

FRONT LABORATION AND THE PROPERTY AND TH

April 34, 2017

Kia Gillette Isosomantal Marager Loclandeller Group 3507 Woodview Types, Scite 150 Indianaporis, Indiana, 46268

Festeral Agency: Indiana Department of Transportation ("INDUIT").

on behalf of Federal Highway Administration ("FFIWA").

Re: Indiant Department of Transportation's finding of "No Adverse Diffect" on held I of the Federal Highway Administration for addendum project rationnation and phase to archaeological recombisance arrivey report O. Miller, 9/90/2017) for SR 57 Improvement Project; I-69 to SR 33, in Humilton Courty, Indiana (Des. No. 1606/40, Addendum # 21 (DHPA No. 19174)

Dear Ms. Gillette:

Pursuant to Section 106 of the National Historic Preservation Act (\$1 k. S.C. § 306108), 36 C.F.R. Port 800, and the "Pregrammatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council or Historic Preservation and the Indiana State Historic Preservation of the Federal Aid Highway Program in the State of Indiana." the staff of the Indiana State Historic Preservation Officer, has reviewed I ochoweller Group's letter, with finding and supporting 800.1" documentation enclosed and the addendum archaeological report, for the above referenced project, dated March 22, 2017 and deceived on March 27, 2017.

From your cover letter, it is our understanding that the principal changes to the project state the initial finding of "No Adverse Effect" was made on December 27, 2016 are that the drainage pipe that was preposed to be installed along 141° Street will now be installed along 146° Street and that a drainage pipe that is proposed to be installed unidway between 176° Street may now be accompanied by the construction of a rose-accordatention has in he force the outlet to Sheomaker Direkt

This archaeology report addresses additional areas examined after the initial trading of "No Adverse Effect" was made, and we understand it to be the first report. We concur with the conclusions and recommendations contained in the addendum archaeological report (J. Miller, 3/95/3017). Archaeological view 10, 11 1808 through 1810 are not elegible for normalism to the National or State Registers of Historic Places. Additionally, archaeological site 12-14-1811 is potentially eligible for nomination to the National and State Registers of Historic Places and should be avoided by all construction at inities or subjected to archaeological respectators.

Therefore, we concur with INDOT's March 20, 2017 finding so hehalf of the Federal Nighway Administration of "No Adverse Pillest."

If any prehistoric or historic mechaeological antifacts or lauton remains are incovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14.21 1.27 and 129) requires that the discovery he control to the Department of Natural Resources within two (2) husiness days. In that event, please call (3.17) 332-

The DNB mission: Perform enhance presents and wisely use natural cultural and recreational resources for the benefit of hadional advances for the benefit of hadionals discensionage partnership at the density, at expension and other date.

www.DNR.IN.gov Ae Equal Opportunity Employer Gillette April 24, 2017 Page 3

1646. Be advised that adherence to Indiana Code 14-21-1-27 and -29 does not obvious the need to adhere to applicable federal surfaces and regulations, including but not limited to 36 C F.R. 800.

If you have questions about nichecological issues please contact Mikh Zoll at (117) 232-349° or rizologidat N,gm. Questions about buildings or structures should be directed to from Carriat (517) 235-1949 or pear § glact N,gm.

5t of functe correspondence regarding this project (Dec. No. 1600540), please continue to refer to DHPA No. 19074.

Very in ly yours,

M. labell K. J

Deputy Some Historic Preservation Officer

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Des. No. 1600540 et al Des. No. 1500540 et. al. **Section 106 800.11(e) Addendum #2 Appendix E Previous Section 106 Findings** and 800.11(e) documentation (Original and Addendum #1)

### SR 37 Improvement Project: I-69 to SR 32

Fishers and Noblesville, Hamilton County, Indiana Des. No. 1600540

### Section 106 800.11(e) Documentation

**December 22, 2016** 



Prepared for the City of Fishers and the Federal Highway Administration (FHWA)



**Gary Francis Quigg** 

# 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 SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540/DHPA No. 19374

### AREA OF POTENTIAL EFFECTS (APE)

The APE for this project generally encompasses the properties that have a proximate viewshed of the undertaking. This project involves construction to improve an existing roadway. The APE expands widest where potentially elevated interchanges allow a wider viewshed and is narrowest where development or tree cover limits or masks the viewshed. In areas where interchanges are planned the APE expands outward from the existing intersection for 0.25 mile in either direction along the intersecting road. The APE includes all areas where ground disturbance may occur or where auditory or visual impacts may be expected. Maps of the APE can be found in Appendix A.

### **ELIGIBILITY DETERMINATIONS**

There are no properties currently listed on the National Register of Historic Places (NRHP) within the APE.

### Properties Eligible for Listing on the NRHP

Hamilton County Bridge No. 151 – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

### **EFFECT FINDING**

Hamilton County Bridge No. 151 - "No Adverse Effect"

INDOT, acting on FHWA's behalf, has determined a "No Adverse Effect" finding is appropriate for this undertaking. INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect for Hamilton County Bridge No. 151 and the project's overall finding.

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

This undertaking will not convert property from Hamilton County Bridge No. 151, a Section 4(f) historic property, to a transportation use beyond its existing role. INDOT has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for Hamilton County Bridge No. 151.

Comments will be accepted for thirty (30) days upon receipt of the finding	ngs.
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Anuradha V. Kumar Digitally signed by Anuradha V. Kumar Date: 2016.12.27 12:13:58 -05'00'

Anuradha V. Kumar

Manager, Cultural Resources Office, Environmental Services (for Federal Highway Administration)

12/27/2016 Approval Date

## FEDERAL HIGHWAY ADMINISTRATION DOCUMENTATION OF SECTION 106 FINDING OF "NO ADVERSE EFFECT" SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR 800.5 (c)

SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540 DHPA No. 19374

### 1. DESCRIPTION OF THE UNDERTAKING

The Federal Highway Administration (FHWA) and City of Fishers propose to proceed with the SR 37 Improvement Project from I-69 to SR 32. The project is in Fishers and Noblesville, Delaware and Noblesville Townships, Hamilton County, Indiana (DES 1600540).

The proposed project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 corridor from I-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st west of SR 37 and one along 141st Street and west of SR 37. The drainage would be conveyed via gravity and outlet to streams west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. The roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. Please see Appendix F for conceptual plans.

The maintenance of traffic (MOT) will likely include lane restrictions and periodic lane closures; however, SR 37 will not be closed for any significant length of time during construction. If detour routes are needed for the cross streets during construction, they will be identified during the detailed design phase in order to handle local traffic needing to access and cross SR 37.

The SR 37 Improvement Project is located from I-69 in the City of Fishers (Delaware Township) to SR 32 in the City of Noblesville (Noblesville Township) in Hamilton County. Specifically, the proposed project is located in the Riverwood United States Geological Survey (USGS) Topographic Quadrangle, Sections 31 and 32, Township 19 North, Range 5 East, and Sections 5, 6, 7 and 8, Township 18 North, Range 5 East; Noblesville Quadrangle, Section 18, Township 18 North, Range 5 East; and Fishers Quadrangle, Sections 19, 30 and 31, Township 18 North, Range 5 East and Sections 24 and 25, Township 18 North, Range 4 East. Adjacent land usage is predominantly commercial and industrial with some agricultural and residential properties. Please see Appendices A and B for maps and photographs of the project area.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. The APE includes all locations where the project may result in disturbance of the ground; all locations from which the project may be visible or audible; and all locations where the ground-disturbing activity may result in changes to traffic patterns, land use, or public access. This project involves construction to improve an existing roadway. The APE expands to include all

properties that have a viewshed of the project. It expands widest where elevated intersections allow a wider viewshed and is narrowest where development or tree cover limits or masks the viewshed. In areas where interchanges are planned the APE expands outward from the existing intersection for 0.25 mile in either direction along the intersecting road. Please see Appendix A for maps of the APE.

### 2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

The National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures (State Register), the State Historic Architectural and Archaeological Research Database (SHAARD), and the SHAARD Geographic Information Systems (GIS) were consulted. No resources within the APE were identified as being listed on the NRHP or State Register.

On June 7, 2016 Lochmueller Group historians, Connie J. Ziegler and Gary Francis Quigg, both Qualified Professionals for history and architectural history, conducted a site visit of the APE and documented resources at least 50 years of age, and those that will be 50 years of age at the time of the project letting (i.e., constructed before 1967), within the APE.

The APE was investigated for the existence of any historical properties, structures, objects or districts listed in or eligible for listing in the NRHP. The historians walked and drove the SR 37 corridor within the APE, taking photographs of all resources meriting a Contributing or higher rating. Non-contributing resources or those that did not meet the age requirements were noted but not documented other than in general view photographs. As a result of this field survey and associated documentary research the historians recommended one property as eligible for listing in the NRHP: Hamilton County Bridge No. 151 (HB-2136/NBI-2900138)

A Historic Property Report (HPR) was completed (Ziegler, July 19, 2016). The summary of the HPR is found in Appendix E. The State Historic Preservation Officer (SHPO) staff responded to the HPR on August 19, 2016 and concurred with the recommendations therein.

An archaeological records review, Phase 1A archaeological reconnaissance, and associated report were completed by Cultural Resources Analysts, Inc. (CRA). The Phase 1A archaeological report (Miller/Harth, August 11, 2016) was transmitted to the SHPO on August 22, 2016. The report concluded that 16 previously unrecorded archaeological sites were located within the project area, but due to low density of cultural material and poor integrity of these sites no further archaeological work was recommended (see the report summary in Appendix E). The SHPO staff concurred with the recommendations of the archaeological report in a letter dated September 9, 2016 and added that if construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined, additional assessment may be required. Copies of all letters referenced can be found in Appendix D.

Early coordination was initiated on June 6, 2016. Below is a list of the organizations invited to participate as consulting parties. The organizations identified in bold print are participating consulting parties.

State Historic Preservation Officer (automatic consulting party)
INDOT Cultural Resources Office (automatic consulting party)
Indiana Landmarks, Central Regional Office
Hamilton County Historical Society/Museum
Fishers Historic Preservation Committee
Noblesville Preservation Alliance
Hamilton County Historian

Hamilton County Genealogical Society
Indianapolis Metropolitan Planning Organization
City of Fishers
City of Noblesville
Hamilton County Board of Commissioners
Hamilton County Highway Department

Subsequent to the submittal of the HPR and Phase IA archaeological reconnaissance report, the project footprint has changed slightly. The proposed drainage easement along 141st Street to the west has been extended further towards the west along 141st Street towards Allisonville Road. The proposed drainage pipe will now outlet further to the west to a wooded ravine east of Allisonville Road, which will eventually drain to Weaver Creek.

The APE for aboveground resources was expanded to account for this change (see Appendices A and B). A qualified professional historian from Lochmueller Group reviewed the expanded APE in the field on November 10, 2016. No resources listed on or eligible for the NRHP were identified within the expanded APE. Two Contributing properties were identified with the expanded APE: Lochmueller #4 a c. 1940 house and Indiana Historic Sites and Structures Inventory (IHSSI) #057-206-5004, the Spannuth/Weaver Cemetery (CR-29-70) (mapped in SHAARD as east of Allisonville Road). Both properties are located west of Allisonville Road and will not be adversely affected by the drainage easement.

In addition, a Phase 1A archaeological reconnaissance and associated addendum report were completed by CRA for the expanded footprint (Miller/DeBoer, November 16, 2016). No archaeological sites were identified and it was recommended the project be allowed to proceed as planned.

A letter was sent to the SHPO on November 28, 2016 and email notification provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts. The SHPO staff responded to the letter on December 16, 2016 and agreed that there are no above-ground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report.

### 3. DESCRIBE AFFECTED HISTORIC PROPERTIES

**Hamilton County Bridge No. 151** – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

### 4. DESCRIBE THE UNDERTAKING'S EFFECT ON HISTORIC PROPERTIES

Hamilton County Bridge No. 151; No Adverse Effect--- The proposed undertaking will not encroach upon the bridge. Although the project is within close proximity to Hamilton County Bridge No. 151 (approximately 85 feet to existing SR 37), it is anticipated that there will be no adverse effect on the bridge. The project takes place on a busy, multi-lane highway, and while the SR 37 bridge, which is near the historic bridge, may be widened, if that occurs it will be expanded into the median not toward Bridge

No. 151. It is possible that the SR 37 bridge will be replaced, but, if so, a new bridge will remain at or near the existing elevation. Vegetation clearing may be necessary for approximately 10 - 20 feet east of the SR 37 bridge. There will be no direct impact on Bridge No. 151 and the setting of the historic bridge is already altered with the busy, multi-lane modern highway near it. In addition, no official detour would be signed to include the Bridge No. 151 due to its narrow width. In essence, the project creates no greater effect on Hamilton County Bridge No. 151. Please see Appendix F for a conceptual plan sheet of this area.

The project will have no direct impact on the historic bridge other than a viewshed change due to the proposed new construction. The viewshed change will have no impact on any of the characteristics that qualify the bridge for the NRHP and will have No Adverse Effect on Hamilton County Bridge No. 151.

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

According to 36 CFR 800.5(a)(1) "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."

**Hamilton County Bridge No. 151** -- According to 36 CFR 800.5(a)(1) the criteria of adverse effect do not apply.

Per 800.5(a)(2)(i): "Physical destruction of or damage to all or part of the property" will not occur. The project will not directly affect the bridge. No right-of-way will be required from the bridge. No portion of the bridge or abutments will be directly impacted.

Per 36 CFR 800.5(a)2(ii): the "Alteration of a property, including 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 and/or other applicable guidelines" will not occur. The project will have no direct impact on the bridge.

Per 36 CFR 800.5(a)2(iii): the "Removal of the property from its historic location" will not occur. The project will not remove the bridge from its historic location.

Per 36 CFR 800.5(a)2(iv): a "Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance" will not occur. The project will not cause a change of character to any of the bridge's features. The existing multi-lane SR 37 is already within close proximity to the bridge with minimal secondary tree growth to provide a visual buffer. Although some tree clearing may be necessary, the project will have little permanent impact on the physical features of the bridge's setting.

Per 36 CFR 800.5(a)2(v): the "Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features" will not occur. The project will be visible from the bridge. However, the setting will not be highly altered. Some tree clearing may occur between the two bridges, but much of SR 37 is already visible to Bridge No. 151 when the trees are not leafed out and the SR 37 bridge is visible at all times. Some loss of secondary tree growth will not affect the audible, atmospheric or visual elements of the property setting in the winter months and will likely result in only a slight change when the trees are in leaf.

Per 36 CFR 800.5(a)2(vi): "Neglect of a property which causes its deterioration..." will not occur as a result of the project. The undertaking will not cause the deterioration of any aspect of the property.

Per 36 CFR 800.5(a)2(vii): the "Transfer, lease, or sale of property out of Federal ownership or control..." will not occur. Ownership of the property will not change as a result of this project.

### 6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

An early coordination letter was mailed to consulting parties on June 6, 2016. The HPR (Ziegler, July 19, 2016) was uploaded to IN SCOPE, the Indiana Department of Transportation's website for publicly accessible documents, for review by consulting parties on July 20, 2016. The summary of the HPR is found in Appendix E.

The SHPO staff responded to the HPR in a letter dated August 19, 2016. The letter stated "Based on the information included in the historic property report ("HPR"), we agree that Hamilton County Bridge No. 151 (National Bridge Inventory No. 2900138) is eligible for inclusion in the National Register of Historic Places under criteria A and C and that this bridge is the only above-ground property identified within the area of potential effects that would be eligible for the National Register. Bridge No. 151 also was rated Select in INDOT's Indiana Historic Bridge Inventory. Based on your description of the project and on photographs included in the HPR, it does not appear that the SR 37 Corridor Project would adversely affect Bridge No. 151."

A letter was sent to the SHPO on November 28, 2016 and email notification provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts.

Indiana Landmarks responded to this letter in an email dated December 5, 2016. They requested clarification regarding the expanded footprint and questioned whether the SR 37 drainage easement expansion would have an effect on the possible future expansion of Allisonville Road. Specifically they asked, "If the drainage pipe from SR 37 will now outlet into a wooded ravine on the east side of Allisonville Road at 141st Street, will future expansions of Allisonville Road require water from that thoroughfare to drain to the west instead, in order to avoid overwhelming the ravine to the east? If so, could there be adverse effects on either of the two properties in question?"

Lochmueller Group responded to Indiana Landmarks in an email dated December 19, 2016. Project designers reviewed the area near Allisonville Road and 141st Street and it is not anticipated that the outlet water from SR 37 will impact drainage on future Allisonville Road projects. Allisonville Road currently uses roadside ditches for the surface water, which are independent from the wooded ravine. Any future expansion would involve either relocating these roadside ditches or the introduction of a storm sewer system. SR 37 will also utilize detention to reduce impacts to the ravine and Weaver Creek. Indiana Landmarks responded indicating they do no object to a finding of No Adverse Effect.

The SHPO staff responded to the letter describing the project footprint changes on December 16, 2016 and agreed that there are no above-ground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report.

No other consulting party comments were received.

A Public Notice of the FHWA finding of "No Adverse Effect" will be published in the *Indianapolis Star* and *The Times* in Noblesville in January of 2017. A 30-day comment period will be given. This document will be revised, if necessary, after the public notice to reflect any comments received.

### **APPENDICES**

- A Maps
- B General Photographs
- C List of Consulting Parties
- D Consulting Parties Correspondence
- E Historic Property Report and Archaeological Report Summaries
- F Conceptual Plans

Appendices have been removed to reduce file size, but may be accessed via IN SCOPE

### SR 37 Improvement Project: I-69 to SR 32

Fishers and Noblesville, Hamilton County, Indiana Des. No. 1600540; DHPA No. 19374

## Section 106 ADDENDUM to 800.11(e) Documentation

March 13, 2017



Prepared for the City of Fishers and the Federal Highway Administration (FHWA)



**Gary Francis Quigg** 

# 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 SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540/DHPA No. 19374

### AREA OF POTENTIAL EFFECTS (APE)

The APE for this project generally encompasses the properties that have a proximate viewshed of the undertaking. This project involves construction to improve an existing roadway. The APE expands widest where potentially elevated interchanges allow a wider viewshed and is narrowest where development or tree cover limits or masks the viewshed. In areas where interchanges are planned the APE generally expands outward from the existing intersection for 0.25 mile in either direction along the intersecting road. The APE includes all areas where ground disturbance may occur or where auditory or visual impacts may be expected.

The expanded APE is located west of the previous APE, and includes all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended additions to the APE for this project are defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin. Maps of the expanded/revised APE can be found in Appendix A.

### **ELIGIBILITY DETERMINATIONS**

There are no properties currently listed on the National Register of Historic Places (NRHP) within the APE.

### Properties Eligible for Listing on the NRHP

**Hamilton County Bridge No. 151** – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

No properties within the expanded/revised APE are listed in or recommended eligible for listing in the NRHP.

#### EFFECT FINDING

Hamilton County Bridge No. 151 – "No Adverse Effect"

INDOT, acting on FHWA's behalf, has determined a "No Adverse Effect" finding was appropriate for this undertaking. No new historic properties were identified as a result of the APE expansion. Therefore, the finding remains "No Adverse Effect."

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect for Hamilton County Bridge No. 151 and the project's overall finding.

# 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 SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540/DHPA No. 19374

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

This undertaking will not convert property from Hamilton County Bridge No. 151, a Section 4(f) historic property, to a transportation use beyond its existing role. INDOT determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for Hamilton County Bridge No. 151.

Comments will be accepted for thirty (30) days upon receipt of the findings.

Anuradha V. Kumar	
Anuradha V. Kumar	
•	Environmental Services (for Federal Highway Administration)
03/20/2017	
Approval Date	

## FEDERAL HIGHWAY ADMINISTRATION DOCUMENTATION OF SECTION 106 FINDING OF "NO ADVERSE EFFECT" SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR 800.5 (c)

SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540 DHPA No. 19374

#### 1. DESCRIPTION OF THE UNDERTAKING AND MODIFICATIONS

The Federal Highway Administration (FHWA) and City of Fishers propose to proceed with the SR 37 Improvement Project from I-69 to SR 32. The project is in Fishers and Noblesville, Delaware and Noblesville townships, Hamilton County, Indiana (DES 1600540).

The SR 37 Improvement Project is located from I-69 in the City of Fishers (Delaware Township) to SR 32 in the City of Noblesville (Noblesville Township) in Hamilton County. Specifically, the proposed project is located in the Riverwood United States Geological Survey (USGS) Topographic Quadrangle, Sections 31 and 32, Township 19 North, Range 5 East, and Sections 5, 6, 7 and 8, Township 18 North, Range 5 East; Noblesville Quadrangle, Section 18, Township 18 North, Range 5 East; and Fishers Quadrangle, Sections 18, 19, 30 and 31, Township 18 North, Range 5 East and Sections 13, 24 and 25, Township 18 North, Range 4 East. Adjacent land usage is predominantly commercial and industrial with some agricultural and residential. Please see Appendices A, B, and D for maps and photographs of the project area.

This 800.11(e) Addendum has been prepared due to expansions of the project area.

## Original Project Description (as described in the original 800.11(e) Documentation dated December 22, 2016)

The proposed project would involve the reconstruction of SR 37 to an expressway with grade-separated interchanges at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 Corridor from I-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st west of SR 37 and one along 141st Street and west of SR 37. The drainage would be conveyed via gravity and outlet to Shoemaker Ditch and Weaver Creek west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. In addition, the roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges is anticipated to occur in at least two phases. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. The majority of the project will take place within the existing SR 37 right-of-way (ROW). The proposed project may require approximately 34 acres of ROW. ROW requirements are currently being refined.

The maintenance of traffic (MOT) will likely include lane restrictions and periodic lane closures; however, SR 37 will not be closed for any significant length of time during construction. If detour routes are needed

for the cross streets during construction, they will be identified during the detailed design phase in order to handle local traffic needing to access and cross SR 37.

#### **Proposed Project Changes**

The proposed project includes two changes since the original 800.11(e) documentation dated December 22, 2016. These changes are listed below:

- 1. Proposed Drainage Pipe Installation Along 146<sup>th</sup> Street Originally the project proposed the installation of a drainage pipe along 141st Street, from SR 37 west to outlet at Weaver Creek. Based on cost estimates and attempts to minimize impacts (in part to a church property and residences), this pipe is now proposed to be installed along 146<sup>th</sup> Street rather than 141<sup>st</sup> Street. The pipe installation along 141st Street to Weaver Creek is no longer included in the project. It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street. A pipe, or open ditch, would then outlet from Allisonville Road into the White River. The pipe would be installed using trenchless excavation from SR 37 to Allisonville Road. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below-ground via the pits. The portion of the drainage pipe installation west of Allisonville Road will be completed using the open trench method involving an open cut in the ground. The majority of the pipe installation will occur within existing City or County right-of-way but some minor right-of-way or easement acquisition may be necessary. Detention within the pipe will be considered to meet Indiana Department of Transportation (INDOT) detention requirements.
- 2. Detention Basin at Shoemaker Ditch As included in the previous Section 106 consultation, the project includes the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. It may now also include construction of a detention basin, approximately 1 acre in size, prior to out-letting to Shoemaker Ditch. Detention will follow the INDOT requirements for storm water. Construction of this basin will require acquisition of the entire residential parcel at 12825 Lantern Road. The house on this parcel, a ca.-1955 ranch, is currently unoccupied. It received a "Non-contributing" rating during the March 2017 fieldwork.

This Addendum documentation seeks to provide additional information regarding the effects of the revised project scope. The expanded APE is located west of the previous APE, and includes all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended additions to the APE for this project are defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin. Please see Appendix A for maps of the addendum APE sections and Appendix B for photos of the two Addendum APE expansion areas.

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

The National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures (State Register), the State Historic Architectural and Archaeological Research Database (SHAARD), and the SHAARD Geographic Information Systems (GIS) were consulted. No resources within the APE were identified as being listed on the NRHP or State Register.

On June 7, 2016 Lochmueller Group historians, Connie J. Ziegler and Gary Francis Quigg, both Qualified Professionals for history and architectural history, conducted a site visit of the APE and documented resources at least 50 years of age, and those that will be 50 years of age at the time of the project letting (i.e., constructed before 1967), within the APE.

The APE was investigated for the existence of any historical properties, structures, objects or districts listed in or eligible for listing in the NRHP. The historians walked and drove the SR 37 corridor within the APE, taking photographs of all resources meriting a Contributing or higher rating. Non-contributing resources or those that did not meet the age requirements were noted but not documented other than in general view photographs. As a result of this field survey and associated documentary research the historians recommended one property as eligible for listing in the NRHP: Hamilton County Bridge No. 151 (HB-2136/NBI-2900138).

A Historic Property Report (HPR) was completed (Ziegler, July 19, 2016). The summary of the HPR is found in Appendix D. The State Historic Preservation Officer (SHPO) staff responded to the HPR on August 19, 2016 and concurred with the recommendations therein.

An archaeological records review, Phase 1A archaeological reconnaissance, and associated report were completed by Cultural Resources Analysts, Inc. (CRA). The Phase 1A archaeological report (Miller/Harth, August 11, 2016) was transmitted to the SHPO on August 22, 2016. The report concluded that 16 previously unrecorded archaeological sites were located within the project area, but due to low density of cultural material and poor integrity of these sites no further archaeological work was recommended (see the report summary in Appendix D). The SHPO staff concurred with the recommendations of the archaeological report in a letter dated September 9, 2016 and added that if construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined, additional assessment may be required. Copies of all letters referenced can be found in Appendix D.

Early coordination was initiated on June 6, 2016. Below is a list of the organizations invited to participate as consulting parties. The organizations identified in bold print are participating consulting parties.

State Historic Preservation Officer (automatic consulting party) INDOT Cultural Resources Office (automatic consulting party) Indiana Landmarks, Central Regional Office

Hamilton County Historical Society/Museum
Fishers Historic Preservation Committee
Noblesville Preservation Alliance
Hamilton County Historian
Hamilton County Genealogical Society
Indianapolis Metropolitan Planning Organization
City of Fishers
City of Noblesville
Hamilton County Board of Commissioners
Hamilton County Highway Department

Subsequent to the submittal of the HPR and Phase IA archaeological reconnaissance report in 2016, the project footprint changed slightly. The proposed drainage easement along 141<sup>st</sup> Street to the west was extended further towards the west along 141<sup>st</sup> Street towards Allisonville Road. The proposed drainage pipe would outlet further to the west to a wooded ravine east of Allisonville Road, and eventually drain to Weaver Creek.

The APE for aboveground resources was expanded to account for this change. A qualified professional historian from Lochmueller Group reviewed the expanded APE in the field on November 10, 2016. No resources listed on or eligible for the NRHP were identified within the expanded APE. Two Contributing properties were identified with the expanded APE: Lochmueller #4 a c.1940 house and Indiana Historic Sites and Structures Inventory (IHSSI) #057-206-5004, the Spannuth/Weaver Cemetery (CR-29-70) (mapped in SHAARD as east of Allisonville Road). Both properties are located west of Allisonville Road and will not be affected by the drainage easement.

In addition, a Phase 1A archaeological reconnaissance and associated addendum report were completed by CRA for the expanded footprint (Miller/DeBoer, November 16, 2016). No archaeological sites were identified and it was recommended the project be allowed to proceed as planned.

A letter was sent to the SHPO on November 28, 2016 and email notification was provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts. The SHPO staff responded to the letter on December 16, 2016 and agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report. See Appendix D for Previous Signed Finding and 800.11(e) document.

This proposed drainage easement along 141<sup>st</sup> Street has now been removed from the proposed project and replaced with the APE extension along 146<sup>th</sup> Street discussed below.

#### **2017**

Following INDOT's December 27, 2016 signed finding of "No Adverse Effect" for the above project and SHPO's January 20, 2017 (DHPA #19374) concurrence with that finding, the project footprint changed to include the following:

- 1) Drainage Pipe Installation along 146<sup>th</sup> Street--It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street and outlet into the White River; and
- 2) Detention Basin at Shoemaker Ditch--As mentioned in the project's original early coordination letter (June 6, 2016), the project includes the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. It may now also include construction of a detention basin prior to out-letting to Shoemaker Ditch. Construction of this basin will require acquisition of the entire residential parcel at 12825 Lantern Road. The house on this parcel, a ca.-1955 ranch, is currently unoccupied. It received a "Non-contributing" rating during the March 2017 fieldwork.

The APE for aboveground resources was expanded to account for the above-described project changes (see Appendices A and B). Qualified professional historians from Lochmueller Group walked/photographed the expanded APE in the field on March 7, 2017. No aboveground resources listed in or eligible for the NRHP were identified within the expanded APE. The following eight properties meriting a Contributing rating were identified with the expanded APE: Lochmueller #1 (8716 146<sup>th</sup> Street; ca.-1960 ranch); Lochmueller #2 (8725 146<sup>th</sup> Street; ca.-1965 ranch); Lochmueller #3 (8715 146<sup>th</sup> Street; ca.-1965 ranch); Lochmueller #4 (14612 Wellington Court; ca.-1960 ranch); Lochmueller #5 (8650 146<sup>th</sup> Street); Lochmueller #6 (8575 146<sup>th</sup> Street; ca.-1955 mini ranch); Lochmueller #7 (14541 Allisonville Road (ca.-1950 ranch), and Indiana Historic Sites and Structures Inventory (IHSSI) #057-464-50002 (Farm; 8845 146<sup>th</sup> St.; ca.-1880 Italianate; included English barn; silo; corncrib; shed; privy). During the March 7, 2017 fieldwork, it was noted that

Appendix D - Section 106

the ca.-1880 Italianate farmhouse and English barn have been extensively altered. Both the farmhouse and barn have been covered in synthetic exterior siding material. A modern wraparound porch has been added to the farmhouse's north, east, and west elevations; in addition, doors and windows on the house appear to be modern replacements. The farmhouse and barn have been physically connected, with the barn's upper floors appearing to have been adapted for residential use with the lower floor altered as garage space. The other structures noted in the IHSSI as part of #50002 have been demolished.

In addition, a Phase 1A archaeological reconnaissance and associated interim report were completed by CRA for the expanded footprint (Joseph Miller, March 10, 2017). Four previously unrecorded archaeological sites (12H1808-12H1811) were recorded. Sites 12H1808 and 12H1810 were isolated prehistoric finds of unknown cultural affiliation. Sites 12H1808-12H1810 are recommended as not eligible for inclusion in the NRHP. Site 12H1811 is a prehistoric lithic scatter recovered from the A horizon, as well as feature, contexts. No temporally diagnostic artifacts were recovered during the current survey of this site. However, shovel testing indicated that some portions of the site have high potential for intact subsurface archaeological deposits that could produce significant information pertaining to the prehistory of the region. Therefore the NRHP status of the site could not be assessed during the current survey, and it is recommended that this site be avoided or subjected to further work in the form of a Phase II NRHP evaluation. Also, bucket augering on the narrow White River floodplain indicated that there is low potential for deeply buried archaeological deposits within the survey area, and no deep testing is recommended for the project. Site 12H1811will be clearly marked on the design plans and avoided by all project activities. See Appendix C for the archaeological interim report summary.

#### 3. DESCRIBE AFFECTED HISTORIC PROPERTIES

**2016:** Hamilton County Bridge No. 151 – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

**2017:** No new historic properties were recorded in the revised/expanded APE areas. Archaeological Site 12H1811 was recommended for further investigation; however, this site will be clearly marked on design plans and avoided by all project activities. It will not be within the archaeological APE for the project.

#### 4. DESCRIBE THE UNDERTAKING'S EFFECT ON HISTORIC PROPERTIES

**2016:** Hamilton County Bridge No. 151; No Adverse Effect— The proposed undertaking will not encroach upon the bridge. Although the project is within close proximity to Hamilton County Bridge No. 151 (approximately 85 feet to existing SR 37), it is anticipated that there will be no adverse effect on the bridge. The project takes place on a busy, multi-lane highway, and while the SR 37 bridge, which is near the historic bridge, may be widened, if that occurs it will be expanded into the median not toward Bridge No. 151. It is possible that the SR 37 bridge will be replaced, but, if so, a new bridge will remain at or near the existing elevation. Vegetation clearing may be necessary for approximately 10 – 20 feet east of the SR 37 bridge. There will be no direct impact on Bridge No. 151 and the setting of the historic bridge is already altered with the busy, multi-lane modern highway near it. In addition, no official detour would be signed to include the Bridge No. 151 due to its narrow width. In essence, the project creates no greater effect on Hamilton County Bridge No. 151. Please see Appendix D for a conceptual plan sheet of this area.

The project will have no direct impact on the historic bridge other than a viewshed change due to the proposed new construction. The viewshed change will have no impact on any of the characteristics that qualify the bridge for the NRHP and will have No Adverse Effect on Hamilton County Bridge No. 151.

**2017**: No new historic properties were identified in the revised/expanded APE areas.

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

According to 36 CFR 800.5(a)(1) "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."

**Hamilton County Bridge No. 151** -- According to 36 CFR 800.5(a)(1) the criteria of adverse effect do not apply.

Per 800.5(a)(2)(i): "Physical destruction of or damage to all or part of the property" will not occur. The project will not directly affect the bridge. No right-of-way will be required from the bridge. No portion of the bridge or abutments will be directly impacted.

Per 36 CFR 800.5(a)2(ii): the "Alteration of a property, including 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 and/or other applicable guidelines" will not occur. The project will have no direct impact on the bridge.

Per 36 CFR 800.5(a)2(iii): the "Removal of the property from its historic location" will not occur. The project will not remove the bridge from its historic location.

Per 36 CFR 800.5(a)2(iv): a "Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance" will not occur. The project will not cause a change of character to any of the bridge's features. The existing multi-lane SR 37 is already within close proximity to the bridge with minimal secondary tree growth to provide a visual buffer. Although some tree clearing may be necessary, the project will have little permanent impact on the physical features of the bridge's setting.

Per 36 CFR 800.5(a)2(v): the "Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features" will not occur. The project will be visible from the bridge. However, the setting will not be highly altered. Some tree clearing may occur between the two bridges, but much of SR 37 is already visible to Bridge No. 151 when the trees are not leafed out and the SR 37 bridge is visible at all times. Some loss of secondary tree growth will not affect the audible, atmospheric or visual elements of the property setting in the winter months and will likely result in only a slight change when the trees are in leaf.

Per 36 CFR 800.5(a)2(vi): "Neglect of a property which causes its deterioration..." will not occur as a result of the project. The undertaking will not cause the deterioration of any aspect of the property.

Per 36 CFR 800.5(a)2(vii): the "Transfer, lease, or sale of property out of Federal ownership or control..." will not occur. Ownership of the property will not change as a result of this project.

#### 6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

An early coordination letter was mailed to consulting parties on June 6, 2016. The HPR (Ziegler, July 19, 2016) was uploaded to IN SCOPE, the Indiana Department of Transportation's website for publicly accessible documents, for review by consulting parties on July 20, 2016. The summary of the HPR is found in Appendix D.

The SHPO staff responded to the HPR in a letter dated August 19, 2016. The letter stated "Based on the information included in the historic property report ("HPR"), we agree that Hamilton County Bridge No. 151 (National Bridge Inventory No. 2900138) is eligible for inclusion in the National Register of Historic Places under criteria A and C and that this bridge is the only above-ground property identified within the area of potential effects that would be eligible for the National Register. Bridge No. 151 also was rated Select in INDOT's Indiana Historic Bridge Inventory. Based on your description of the project and on photographs included in the HPR, it does not appear that the SR 37 Corridor Project would adversely affect Bridge No. 151."

A letter was sent to the SHPO on November 28, 2016 and email notification provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts.

Indiana Landmarks responded to this letter in an email dated December 5, 2016. They requested clarification regarding the expanded footprint and questioned whether the SR 37 drainage easement expansion would have an effect on the possible future expansion of Allisonville Road. Specifically they asked, "If the drainage pipe from SR 37 will now outlet into a wooded ravine on the east side of Allisonville Road at 141st Street, will future expansions of Allisonville Road require water from that thoroughfare to drain to the west instead, in order to avoid overwhelming the ravine to the east? If so, could there be adverse effects on either of the two properties in question?"

Lochmueller Group responded to Indiana Landmarks in an email dated December 19, 2016. Project designers reviewed the area near Allisonville Road and 141st Street and it is not anticipated that the outlet water from SR 37 will impact drainage on future Allisonville Road projects. Allisonville Road currently uses roadside ditches for the surface water, which are independent from the wooded ravine. Any future expansion would involve either relocating these roadside ditches or the introduction of a storm sewer system. SR 37 will also utilize detention to reduce impacts to the ravine and Weaver Creek. Indiana Landmarks responded indicating they do no object to a finding of "No Adverse Effect."

The SHPO staff responded to the letter describing the project footprint changes on December 16, 2016 and agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report.

No other consulting party comments were received.

A Public Notice of the FHWA finding of "No Adverse Effect" was published in the *Indianapolis Star* and *The Times* in Noblesville on December 30, 2016. A 30-day comment period was given, and no comments were received.

#### <u>2017</u>

Because no new resources in the APE expansion areas are recommended NRHP-eligible—and Archaeological Site 12H1811 will be avoided by all project activities—the previous finding for the project of "No Adverse Effect" remains valid. A 30-day comment period will be given to all consulting parties. This document will be revised, if necessary, after the comment period to reflect any comments received. Because the effect finding for the project did not change, no new public notice is required.

#### **APPENDICES**

- A Maps
- B Photographs of Addendum Areas of Potential Effects
- C Phase 1a Archaeological Survey Interim Report Summary
- D Previous Section 106 Finding and 800.11(e) Documentation

Appendices have been removed to reduce file size, but may be accessed via IN SCOPE

Bright leleemis, Governon Cameron F. Carlo Director

DM2ch of Historic Preservation & Audinomy 9: 402 W. Washington Sulect W0274 - 6 diamounts. IN: 46204-2739. Phone 317-732-1649. Tax 317-232-0656 - chips@cm.tN.gov rower IN gov/rin/bistoric



March 9, 2018

Gary Quigg Fochmoeller Georp 3502 Woodwiew Trace, Suite 150 Indiananolis, Indiana, 46268

Federal Agency: Indiana Department of Transportation (\*INDOIT),

en behalf of Federal Highway Administration, Indiana Division (\*FIT9/AT).

Re: Addendum No. 5 phase is archaeological recommissance report (Curran, 1/15/2018), Tehmory 16, 2018. Section 106 Ending of "No Adverse Effect." addendum No Rito fact 800.01(c) Documents con, for the SR 37 Improvement Project: 1-69 to SR in the office of Fishers and Noblesville. Hamilton County, fedical (Des. No. 1600-10; 1942). No. 1937/1

Dear Mr. Quiga:

Persuant to Section IS6 of the National Historic Preservation Act (\$4.10.8.0. § 15618.8), 36 C.F.R. Part \$00, and the inflogrammatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation (Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana," the state of the Indiana State Historic Preservation, Officer, has reviewed Lachtonicler Group's Janet, with Indiana and supporting 800.11 documentation enclosed and the addendum archaeological report, for the above referenced project, dated February 19, 2018 and received on February 26, 2018.

This archaeology report addresses additional areas examined after the initial finding of "No Adverse Effect" was made, and we understand it to be the final report. We construint this conclusions and recommendations operated in the addendum archaeological equal (M. Curran, 1/15/2015) Archaeological after 12-11-736 is not eligible for nomination to the National or State Registers of Historic Planes.

Therefore, we concur with INDO's's February 16, 2018 fitsling on behalf of the Federal Highway Amministration of "No Adverse Ulfen."

If any prchistoric or historic archaeological artifacts or horom remnins are uncovered cating construction, consolition, or earthmoving activities, state low Contians Code 14 21 1.07 and 429) remains that the discovery or reported to the Department of Natural Resources, Division of Historic Presorvation, and Archaeology (FINTINR-DEPAP) within two (2) business days. In this event, piease call (217) 253-1646. Be advised that atherence to Indiana Code 14 21 1.37 and 436 dres not obvise the head to applicable federal statutes and regulations, including but not breated to 36 C.F.R. Part 880.

If you have questions about archicological issues please contact Minh ZoF at (317) 232-3492 or sizelifydicallogor. Questions about buildings or structures should be directed to John Carr at (317) 232-1949 or journ@dmr.N.gov.

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www.DNR.IN.gov An Equal Opportunity Engages in there would need to be any ferther correspondence following INDO I's third "No Adverse Pffect" lineing for this project (Das. No. 1906540), planet continue to refer to DRPA No. 19574.

Very buly yours.

الذكر Mitchell K.

Deputy Stine Historic Preservation Officer

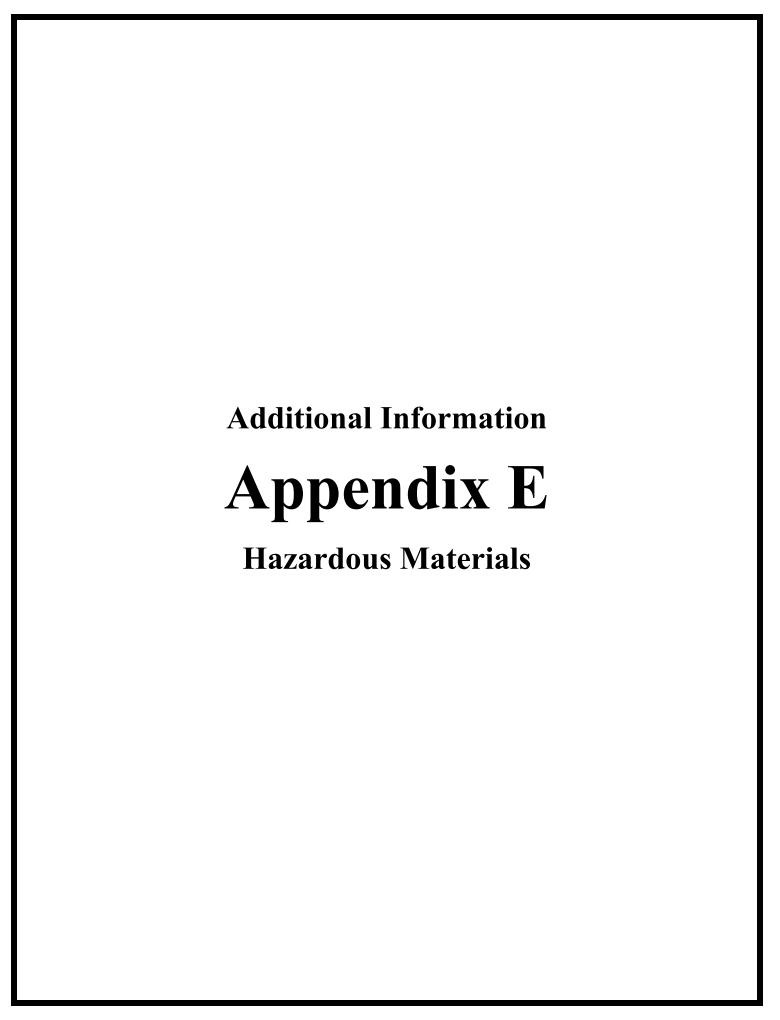
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#### January 11, 2018

To: Hazardous Materials Unit

**Environmental Services** 

Indiana Department of Transportation 100 N Senate Avenue, Room N642

Indianapolis, IN 46204

From: Kate Lucier, PWS

3502 Woodview Trace, Suite 150 Indianapolis, Indiana, 46234 klucier@lochgroup.com

Re: RED FLAG INVESTIGATION ADDENDUM #2

Des. No.: 1600540 (LPA Project)

SR 37 Improvement Project – 126<sup>th</sup> Street to State Road (SR) 32

Fishers and Noblesville, Hamilton County, Indiana

A review of the original Red Flag Investigation (RFI) signed on January 18, 2017 and the first RFI addendum signed on March 15, 2017, for the above referenced project identified new resources on the Infrastructure and Hazardous Materials layers within a 0.5 mile radius of the project limits that has the potential to substantively impact to the project.

Changes to the project description from the above mentioned RFI reports result from the inclusion of additional survey areas for proposed drainage infrastructure north of 146<sup>th</sup> Street, including a drainage pipe, pits, and detention pond; a change in proposed interchange configuration at SR 37 and 146<sup>th</sup> Street (from a roundabout to a single point urban interchange); a change in proposed interchange configuration at SR 37 and 141<sup>st</sup> Street (from a dual lane roundabout to a single lane roundabout); the addition of an access drive from 141<sup>st</sup> Street to the business park in the northeast quadrant of the proposed interchange; and the addition of median crossovers as part of the maintenance of traffic plan along SR 37 south of 126<sup>th</sup> Street approaching Interstate 69 (I-69). In addition, potential upgrades to ancillary roads may occur at Windsor Drive / Ford Drive at 126<sup>th</sup> Street, and Herriman Boulevard at 146<sup>th</sup> Street. These additional survey areas total approximately 30.5 acres. Additional right-of-way requirements for the above improvements is not anticipated to exceed this acreage.

The following items should be considered an addendum to the previously approved RFI prepared for the project.

 Urbanized Area Boundary (UAB): This boundary was previously identified in the original red flag investigation (RFI) (dated 1/17/2017). The project lies within the Indianapolis UAB (Hamilton County being an Incorporated Area within the Indianapolis UAB). A project update letter describing relevant project changes will be sent to the MS4 Coordinators for the City of Fishers (1 Municipal Drive, Fishers, IN, 46038) and City of Noblesville (Engineering Department 16S 10<sup>th</sup> Street, Noblesville Indiana, 46060).



#### 2. Infrastructure:

- a. Cemeteries: Weaver Cemetery (also identified as CR-29-70) is mapped within the 0.5 mile radius of the project area and was identified in the original RFI (dated 1/17/2017). Given the scope of work changes that have occurred, this cemetery is now located approximately 0.05 mile northwest of the project area at 141<sup>st</sup> Street and Allisonville Road. Due to the proximity of this cemetery to the project, coordination with INDOT Cultural Resources Office (CRO) will occur to determine if a cemetery development plan is required based on
- b. the current scope of the project.
  Schools: Five (5) additional schools are now mapped within the 0.5 mile radius of the project area. The closest school, Harrison Parkway Elementary school (0.06 mile north of 146<sup>th</sup> Street), was addressed in the original RFI but was not a mapped resource at the time. No changes in impacts to schools are expected, and additional coordination with Hamilton Southeastern Schools Corporation will occur through the re-coordination process.

#### 3. Hazardous Materials:

- a. "Other" Waste Electronic Waste: One (1) feature identified as End of Life Electronics (EOLE) is located 0.2 mile southwest of the southern terminus of the project area. According to a review of correspondence within the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC), this facility is not subject to any permitted regulations and is an electronic storage and recycling facility. No impact is expected.
- 4. Cultural Resources: The additional survey areas that have elicited this RFI addendum will also result in an addendum to the Section 106 finding for this project. Coordination with INDOT Cultural Resources Office (CRO) will occur.
- 5. Ecological Information: A review of the U.S. Fish and Wildlife Service (USFWS) database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in an urbanized area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects" dated October 25, 2017. Re-coordination with the Indiana Department of Natural Resources and the USFWS will occur.

An inquiry using the USFWS Information for Planning and Consultation (IPaC) website did not indicate the presence of the federally endangered species, the Rusty Patched Bumble bee, in or within 0.5 mile of the project area. No impact is expected.

Nicole Fohey - Digitally signed by Nicole Fohey Steting Dix cn-Nicole Fohey Steting Dix cn-Nicole Fohey Steting on-Nicol7, out-Environmental Services, tableau, enabling enabling on Steting enabling on Steting enabling of Steting enabling on Steting enabling enablin

INDOT Environmental Services concurrence:

Prepared by:

Kate Lucier, PWS Environmental Biologist

Lochmueller Group, Inc.

**GRAPHICS:** 

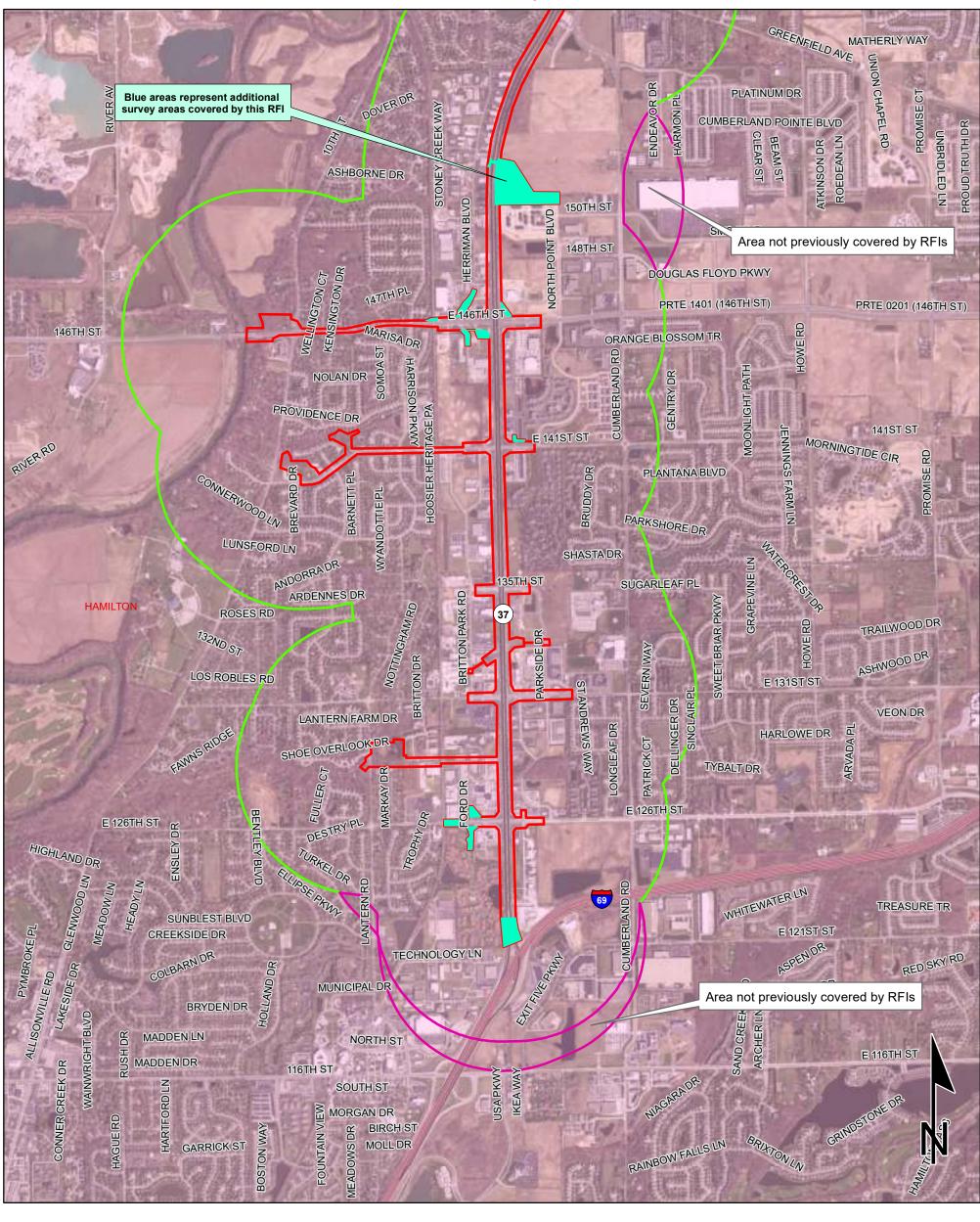
Infrastructure: Yes Water Resources: No

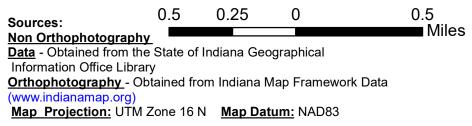
Mining/Mineral Exploration: No

Hazmat Concerns: Yes

UAB: Yes

## Addendum Red Flag Investigation - Urbanized Area Boundary Map State Road 37 Improvement Project, SR 37 from I-69 to SR 32 Des. No. 1600540, Transportation Corridor Project Hamilton County, Indiana



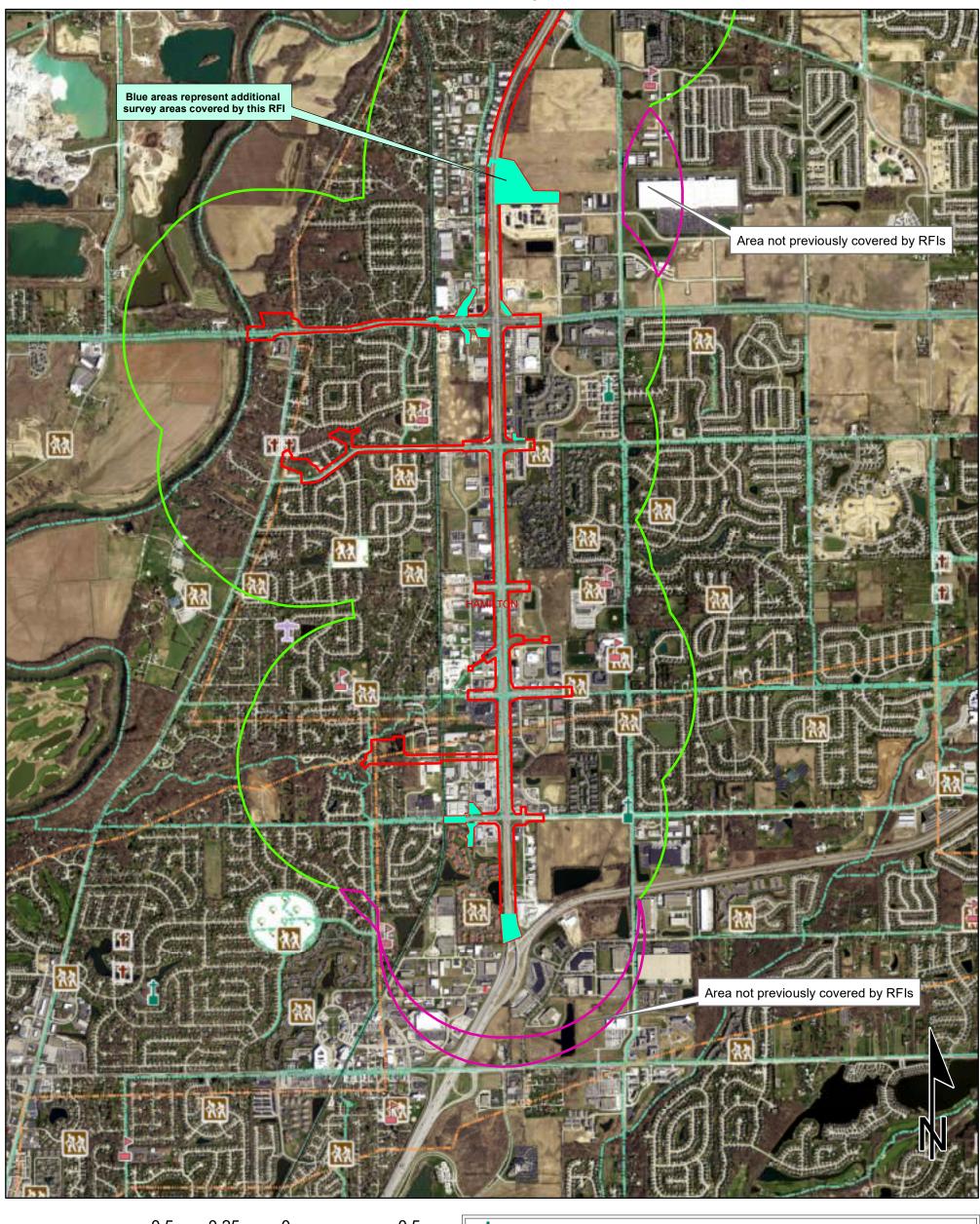


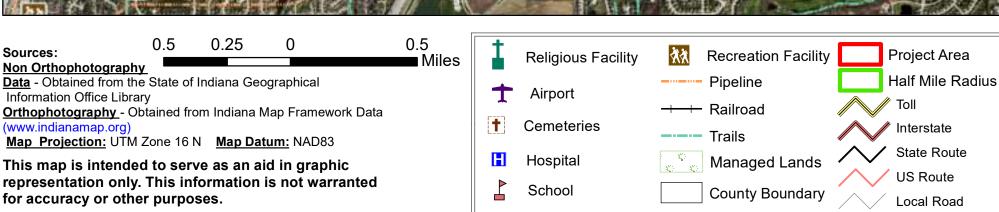
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



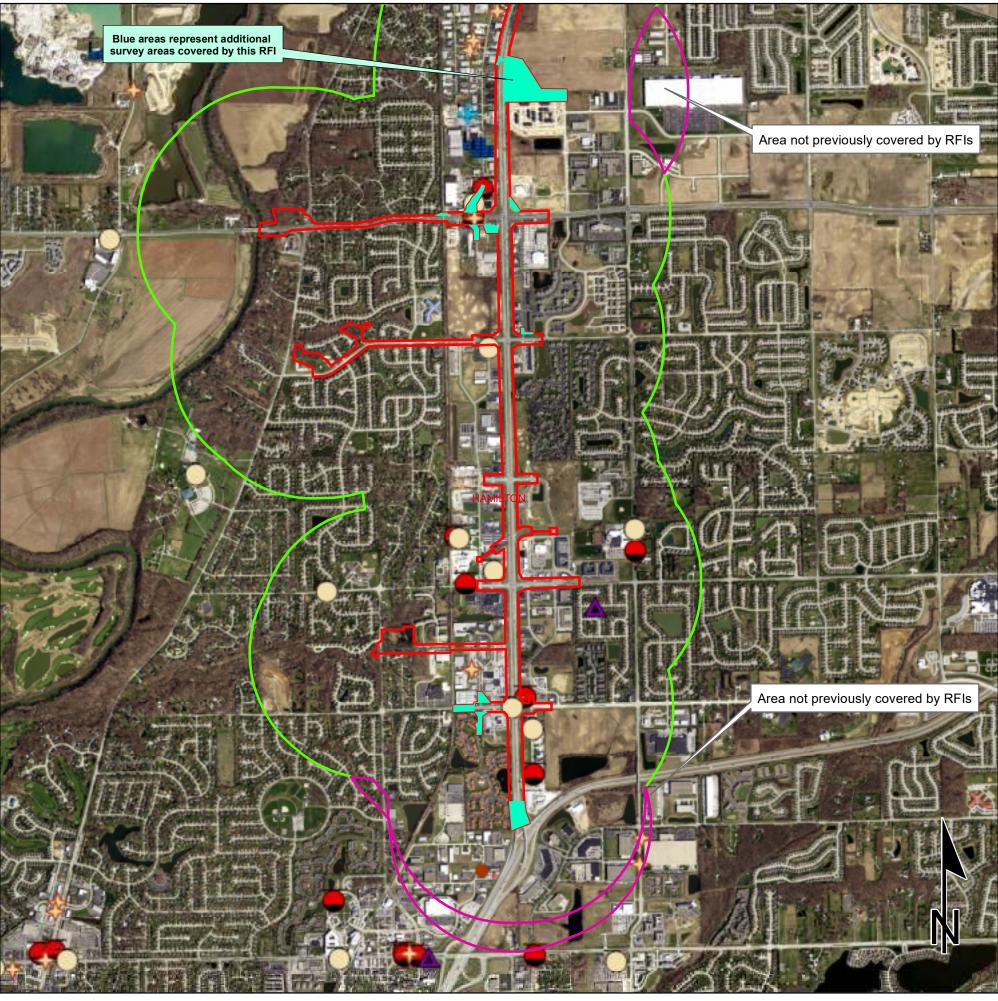
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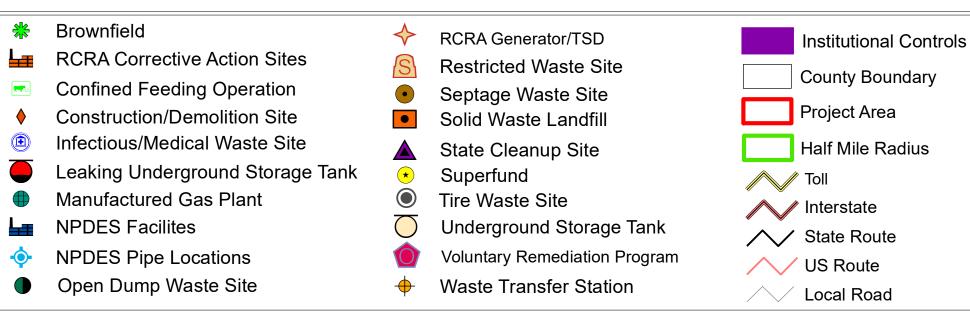
## Addendum Red Flag Investigation - Infrastructure Map State Road 37 Improvement Project, SR 37 from I-69 to SR 32 Des. No. 1600540, Transportation Corridor Project Hamilton County, Indiana





## Addendum Red Flag Investigation - Hazardous Materials Map State Road 37 Improvement Project, SR 37 from I-69 to SR 32 Des. No. 1600540, Transportation Corridor Project Hamilton County, Indiana





0 0.5 0.5 0.25 ■ Miles

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

Des. No. 1600540 et al

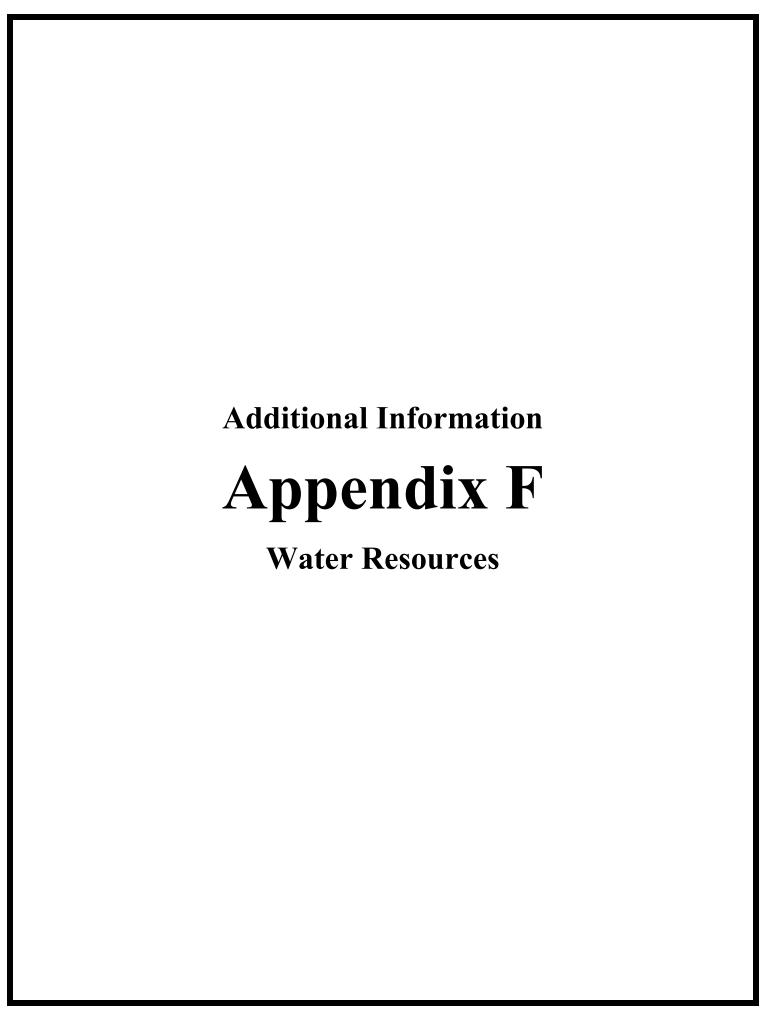
Des. No. 1600540

**Data** - Obtained from the State of Indiana Geographical Information Office Library Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83

Sources:

Non Orthophotography



### Waters of the U.S. Determination Report

## SR 37 Improvement Project

HAMILTON COUNTY, INDIANA DES 1600540



March 23, 2017 Updated November 29, 2017

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#### Waters of the U.S. Determination Report SR 37 Improvement Project DES No. 1600540 Hamilton County, Indiana

#### **Date of Waters Investigations**

June 23-24; July 1, 12, 13, 17, 19; October 10; November 2, 2016; March 7 & 14, 2017; and October 27, 2017

#### Location

The SR 37 Improvement Project is located along SR 37 from I-69 to approximately 2,000 feet north of SR 32 in Hamilton County, Indiana (Appendix A, page A1).

- Hamilton County; Noblesville and Delaware Townships, Indiana
- Township 18 North, Range 4 East, Sections 13, 24 & 25
- Township 18 North, Range 5 East, Section 5-8, 18-19, 30-31
- Township 19 North, Range 5 East, Section 19, 31-32
- Riverwood, McCordsville, Noblesville, & Fishers United States Geological Survey (USGS) 1:24,000
   Quadrangles (Appendix A, pages A2-A3)

#### Landscape Setting

The SR 37 Improvement Project is located in a primarily urban footprint, in the cities of Fishers and Noblesville, Indiana. Prior to the conversion of the SR 37 project area to a populated municipal area, the footprint of the SR 37 was primarily low-relief rural/agricultural area; urban development continues within the SR 37 Improvement Project area.

The lowest elevation within Hamilton County occurs at the White River, approximately 0.5-1.5 miles west of the SR 37 Improvement Project, depending on the position along the right-of-way. The SR 37 Improvement project is located entirely within the Central Till Plains physiographic region, which is characterized by mainly flat plain dissected, by many stream channels and drainageways. In Hamilton County, these dissecting channels drain toward the West Fork of the White River. The project area is completely within the drainage basin of the West Fork of the White River.

#### Soils

Soils within the SR 37 Improvement Project survey boundary include the following (Appendix A, pages A4-A12):

**Brookston silty clay loam (Br):** Brookston series consists of very deep, poorly drained soils formed in as much as 51 cm (20 inches) of silty material and the underlying loamy till in depressions on till plains and

moraines. Slope ranges from 0 to 3%. Brookston silty clay loams are hydric soils. Hydric rating for this soil is 95%

Crosby silt loam (CrA): very deep, somewhat poorly drained soils that are moderately deep to dense till. Crosby soils formed in as much as 56 cm (22 inches) of loess or other silty material and in the underlying loamy till. They are on till plains. Slope ranges from 0 to 6%. Crosby silt loam is not a hydric soil, however, minor inclusions of Treaty-drained can occur within topographic depressions. Hydric rating for this soil is 2%

**Fox loam (FnA, FnB2):** very deep, well drained soils which are moderately deep to stratified calcareous sandy outwash. These soils formed in thin loess and in loamy alluvium or just in loamy alluvium overlying stratified calcareous sandy outwash on outwash plains, stream terraces, valley trains, kames, and glacial moraines. Slopes range from 0 to 35%. Fox loam is not a hydric soil, however, minor inclusions of Westland-drained can occur within topographic depressions. Hydric rating for FnA is 4% and 6% for FnB2.

**Fox clay loam (FxC3):** moderately deep, well-drained soils that are moderately sloped and found on side slopes adjacent to drainageways on terraces and on domelike areas on uplands. The underlying material is calcareous sand and gravelly sand. Fox clay loam is not a hydric soil. Hydric soil rating for this soil is 0%.

**Genesee (Gessie) silt loam (Ge):** very deep, well drained soils that formed in loamy alluvium on flood plains. Slope ranges from 0 to 2 percent. Genesee silt loam is not a hydric soil. Hydric soil rating for this soil is 0%.

**Hennepin loam (HeF):** very deep, well drained soils formed in calcareous glacial till. These soils are on upland side slopes that border stream valleys and on moraines. Permeability is moderate or moderately slow. Slopes range from 10 to 70%. Hennepin loam is not considered a hydric soil. Hydric soil rating for this soil is 0%.

Miami silt loam, 0-2% (MmA): deep, well-drained, nearly level soils that occur on slight rises on uplands. Relief is nearly level. Miami soils formed in loess or silty material and in the underlying loamy till. Slopes range from 0-2%. Miami silt loam is not a hydric soil, however, minor inclusions of Treaty can occur within topographic depressions. Hydric soil rating for this soil is 0%.

Miami silt loam, 2-6% slopes (MmB2): deep, well-drained on rises on till plains and along drainageways and streams. Miami soils formed in loess or silty material and in the underlying loamy till. Slopes range from 2-6%. Miami silt loam is not a hydric soil, however, minor inclusions of Treaty can occur within topographic depressions. Hydric soil rating for this soil is 5%.

Miami silt loam, 6-12% slopes (MmC2): deep, well-drained, and moderately sloping soils are found on knobs and breaks along streams and drainageways on uplands. Miami soils formed in loess or silty material and in the underlying loamy till. Slopes are 6-12%. Miami silt loam is not a hydric soil, however, minor inclusions of Treaty can occur within topographic depressions. Hydric soil rating for this soil is 3%.

Miami silt loam, 12-18% slopes (MmD2): deep, well-drained, strongly sloping soils found on breaks along streams and drainageways. Miami soils formed in loess or silty material and in the underlying loamy till.

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Slopes are 12-18%. Miami silt loam is not a hydric soil, however, minor inclusions of Treaty can occur within topographic depressions. Hydric soil rating for this soil is 0%.

**Miami clay loam, 6-12% slopes (MoC3):** deep, well-drained, moderately sloping on knobs and breaks along streams and drainageways along uplands. Miami clay loam is not a hydric soil. Hydric soil rating for this soil is 0%.

Miami clay loam, 12-18% slopes (MoD3): deep, well-drained, strongly sloping soils is found on breaks along streams and drainageways. Miami clay loams are in calcareous tills on gravelly loam or clay loam. Slopes are 12-18%. Miami clay loam is not a hydric soil. Hydric soil rating for this soil is 0%.

Ockley silt loam (OcA): very deep, well drained soils that are deep or very deep to calcareous, stratified sandy and gravelly outwash. Ockley soils formed in as much as 51 cm (20 inches) of loess or silty material and in the underlying loamy outwash. They are commonly on stream terraces and outwash plains, and less commonly on kame moraines and eskers. Slope ranges from 0 to 30%. Ockley silt loam is not hydric soil. Hydric soil rating for this soil is 0%.

**Orthents (Or):** deep, well-drained soils are nearly level to steep and are found on uplands and terraces which have been altered by man. This map unit is generally found near highways, interchanges, shopping centers, gravel pits, and in landfills. Orthents is not a hydric soil unit. Hydric soil rating for this soil is 0%.

**Patton silt loam (Pn):** very deep, poorly drained and very poorly drained soils formed in glaciolacustrine deposits on stream terraces and glacial lake plains. Slope ranges from 0 to 2%. Patton silt loam is considered a hydric soil. Hydric soil rating for this soil is 90%.

**Shoals silt loam (Sh):** very deep, somewhat poorly drained soils that formed in alluvium on flood plains. Slope ranges from 0 to 2%. Shoals silt loam is not a hydric soil, however, minor inclusions of Sloan can occur within backswamps, floodplains, and meander scars. Hydric soil rating for this soil is 4%.

**Sleeth loam (St):** very deep, somewhat poorly drained soils that are deep to calcareous, stratified gravelly and sandy outwash. Sleeth soils formed in loamy outwash. A mantle of loess or other silty material is as much as 51 cm (20 inches) thick in some areas. They are on outwash terraces, stream terraces, and outwash plains. Slope ranges from 0 to 2%. Sleeth loam is not a hydric soil, however, minor inclusions of poorly-drained aqualfs and Westland occur within topographic depressions. Hydric soil rating for this soil is 10%.

#### Hydrology

The dissected drainage channels that cross the SR 37 Improvement Project area drain the relatively low relief typical of Hamilton County. Hydrology of the region generally directs water to these drainage channels and eventually west toward the West Fork of the White River.

The USGS 1:24,000 scale topographic map indicates that there are seven blueline streams within the identified survey area. Britton Branch, an Unnamed Tributary (UNT) to Britton Branch, Stony Creek, UNT

2 to Stony Creek (sometimes called Wilson Ditch), Weaver Creek, Shoemaker Ditch and the White River are intermittent and perennial streams within the survey area (Appendix A, pages A2-A3).

According to the Indiana StreamStats version 4.0 (<a href="http://water.usgs.gov/osw/streamstats/indiana.html">http://water.usgs.gov/osw/streamstats/indiana.html</a>), the field identified streams within the SR 37 Improvement project area have a total drainage area of approximately 59.33 square miles (Appendix A, pages A13-A14).

The SR 37 Improvement Project area is mapped within six 100-year floodplains (Appendix B, pages B2-B24). According to Flood Insurance Rate Map (FIRM) Panel 18057C0232G (effective November 19, 2014), the survey boundary crosses the floodways of Shoemaker Ditch/UNT to Shoemaker Ditch just east of Lantern Road (west of SR 37); the floodway of Britton Branch at SR 37, north of 131st Street; and the 100-year floodplain of Weaver Creek, just north of E. 141st Street. According to FIRM panel 18057C0144G (effective November 19, 2014), the survey boundary encroaches on the 100-year floodplain of the White River just west of Allisonville Road at 146 Street. According to FIRM panel 18057C0163G (effective November 19, 2014), the survey boundary crosses the floodway of Stony Creek at SR 37. According to FIRM panel 18057C0161G (effective November 19, 2014), the survey boundary crosses the floodway of UNT 2 to Stony Creek at SR 37.

Base floodplain elevations were determined for these floodplains using the Indiana floodplain information portal (INFIP) (<a href="http://dnrmaps.dnr.in.gov/appsphp/fdms/">http://dnrmaps.dnr.in.gov/appsphp/fdms/</a>). Base floodplain elevation at Shoemaker Ditch is approximately 792.1 feet (NADV 88). Base floodplain elevation at Britton Branch, approximately 0.2 river miles downstream of SR 37 is 804.2 feet (NADV 88). Base floodplain elevation at the White River at 146 Street is 754.6 feet (NADV 88). Base floodplain elevation at Stony Creek at SR 37 is 758 feet (NADV 88). Base floodplain elevation at UNT 2 to Stony Creek (also called Wilson Ditch on INFIP web tool) at SR 37 is 765.2 feet (NADV 88).

#### Field Reconnaissance

Lochmueller Group, Inc. conducted field reviews of the SR 37 Improvement Project survey boundary during the summer and fall of 2016. Due to a changes in the project design, two field inspections were undertaken on March 7<sup>th</sup> and 14<sup>th</sup>, 2017 to investigate additional survey areas at the 146 Street Drainage area and at the potential Shoemaker Ditch detention area (at Shoemaker Ditch, east of Lantern Road). In fall of 2017, additional survey was needed to investigate eight additional areas due to changes in the project design. This additional survey was undertaken October 27, 2017.

Fourteen stream features exhibiting ordinary high water mark (OHWM) characteristics were observed within the survey boundary (Table 2 - Stream Summary).

Wetland determinations were conducted in accordance with the Corps of Engineers Wetland Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest 2.0 (2008) via numerous data points within the identified survey boundary. Twenty-five wetlands were observed within the identified survey boundary (Table 1 - Wetland Summary). Wetland boundaries and location of wetland determination plots were geo-located using a global positioning

system (GPS) device, a Trimble Geo7x. Determinations that were made within NWI polygons were refined using this GPS device and acreages reported are from field delineations.

Sixteen open water ponds were observed within the survey boundary (Table 3 - Pond Summary). Most ponds were created for stormwater detention/retention.

#### Wetland Determination

Wetland determination data sheets for the wetlands discussed below are in Appendix D, pages D1-D111.

#### 1. Britton Branch Wetland Fringe

Data points BRW1, BRW2, BRD1

This wetland feature is >1.143 acres and is located south of the Britton Branch stream channel, east of SR 37. The shelves on either side of Britton Branch appear to have been excavated for flood attenuation, but this was done with shallow slopes in hydric soil unit Brookston silty clay loam. Wetland hydrophytes were observed as a 6-foot fringe to the channel of Britton Branch (within the bankfull width) and up the left (south) bank shelf. The right (north) bank of Britton Branch was observed with slightly higher elevation, and wetland hydrophytes were not observed. Soils taken within plot BRW1 were representative of hydric soil indicators loamy gleyed matrix (F2), depleted below dark surface (A11), and redox dark surface (F6). The primary hydrology indicator observed was that of oxidized rhizospheres on living roots (C3). The wetland was delineated within the survey boundary, but likely continues east on the shelf of Britton Branch.

## **2. Pond 6 Wetland Fringe** (No longer present as of October 27, 2017 field investigation) *Data points 6W1, 6D1*

This wetland is a 0.048-acre wetland located as an emergent fringe to an excavated pond near northeast of the intersection of SR 37 and 135<sup>th</sup> Street. Pond 6 wetland fringe is mapped within hydric soil Brookston silty clay loam and Crosby silt loam (which is known for hydric inclusions). Wetland hydrophytes were observed within depressional fringe features at the northwest, northeast, and southeast edges of Pond 6, which is mapped as a palustrine, unconsolidated bottom, semi permanently exposed, excavated (PUBGx) NWI wetland. The soils exhibited hydric soil indicator depleted matrix (F3), and oxidized rhizospheres on living roots were observed as the primary indicator of wetland hydrology. These wetland fringe features were fully delineated, but are not fully within the project survey boundary. Though this feature is mapped as an excavated pond (according to NWI data), this feature was not present in the 1978 soil survey map and appears to have been excavated more than 5 years ago as part of a golf course. The golf course is no longer present.

#### 3. Stony Creek Floodplain Wetland (Wetland U)

Data points SCW1, SCD1

This wetland is a mapped NWI wetland located in the floodplain of Stony Creek at SR 37. This palustrine, emergent, persistent, temporarily flooded (PFO1A) wetland is mapped as an 18.11 acre wetland extending from SR 37 to west, adjacent to Stony Creek. The eastern boundaries, within the identified survey boundary, of this wetland feature were refined using on the ground global positioning system (GPS) delineation. This wetland feature is in excess of >0.375 acres and extends further to the west outside of the survey boundary. Wetland hydrophytes were observed within the floodplain on both the left and right banks. The floodplain was bound on the north by levee walls and on the south by the toe of a hillslope. Soils exhibited hydric soil indicator loamy gleyed matrix (F2). Drift deposits were observed as a primary indicator of hydrology.

#### 4. UNT to Overdorff Branch Wetland Fringe

Data Points OV1, OV2

This wetland is mapped as a fringe of the UNT to Overdorff Branch. This tributary is located east of SR 37 approximately 0.5 mile north of the intersection of SR 37 and 146<sup>th</sup> Street. This palustrine, emergent, persistent, seasonally flooded (PEM1C) wetland is 0.195 acre and an approximately 6-foot fringe to the recently excavated channel. Field observations indicate the wetland fringe was a consistent distance from the UNT, therefore a 6-foot buffer of the stream was used to delineate the wetland. As this channel was excavated in hydric soils and soils known for hydric inclusions, wetland hydrophytes were observed growing from the spoil pile (resulting from recent excavation of the UNT). The soil profile observed within the spoil pile was consistent with hydric soil indicator redox dark surface (F6). The primary hydrology indicator within the determination plot was oxidized rhizospheres on living roots (C3).

#### 5. Wetland A

Data Points AW1, AD1

Wetland A is a 0.09-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37. This palustrine, emergent, persistent, temporarily flooded (PEM1A) wetland passed the rapid test for wetland vegetation as hydrophytes were observed within a linear depression northeast of the I-69/SR 37 interchange. Soils excavated within Wetland A met the criteria for hydric soil indicators loamy gleyed matrix (F2), and depleted matrix (F3). Surface water and soil saturation were observed as primary hydrology indicators.

#### 6. Wetland B

Data points BW1, BD1

Wetland B is a 0.004-acre feature with emergent wetland vegetation in the roadside ditch east of SR 37 and north of the I-69 interchange. This PEM1A wetland was observed at the outlet of a 12-inch diameter stormwater pipe where wetland hydrophytes had dominated a small depression. Soils excavated within Wetland B met the criteria for hydric soil indicator depleted matrix (F3). Primary indicators of hydrology observed were surface water and saturation.

#### 7. Wetland C

Data points CW1, CD1

Wetland C is a 0.034-acre feature with emergent wetland vegetation within a storm water detention basin. It is located east of SR 37 and south of 126<sup>th</sup> Street. Vegetation passed the rapid test for hydrophytic vegetation as they dominated the detention feature. Soils excavated within this feature met the criteria for hydric soil indicator depleted matrix (F3). Primary indicators of hydrology observed were surface water and saturation.

#### 8. Wetland D

Data Points DW1, DD1

Wetland D is a 0.034-acre feature with emergent vegetation immediately east of a business access drive and south of 126<sup>th</sup> Street. This feature is located in a roadside ditch and is hydrologically connected to Britton Branch via non-jurisdictional storm water connections. Hydrophytes were observed in a small depression resulting from stormwater pooling and conveyance to a nearby rip rap lined ditch. A depleted matrix (F3) was observed when a soil pit was excavated within the roadside ditch. Primary indicators of hydrology were surface water and saturation.

#### 9. Wetland F

Data points FW1, FD1

Wetland F is a 0.159 acre feature with emergent wetland vegetation east of SR 37 and south of 135<sup>th</sup> Street. This wetland feature occurs within a very shallow topographic depression that appears to have been formed shortly after the construction of the business access drive to the east of this feature; a strip of gravel substrate was observed within the wetland. Wetland hydrophytes were observed within the depressional feature, though plants appear to be frequently mowed and stunted plants were observed. Soils excavated within this feature met the criteria for hydric soil indicator depleted matrix (F3). Primary indicators of hydrology observed were surface water and saturation.

#### 10. Wetland G

Data Points GW1, GD1

Wetland G is a 0.008-acre feature with emergent vegetation in a roadside ditch east of SR 37 and north of Britton Branch. This PEM1A wetland was observed at the outlet of a 12-inch diameter stormwater pipe where wetland hydrophytes had dominated a small depression within the roadside ditch. Soils excavated within Wetland G met the criteria for hydric soil indicator depleted matrix (F3). A primary indicator of hydrology was surface water.

#### 11. Wetland H

Data Points HW1, HD1

Wetland H is a 0.116-acre feature with emergent wetland vegetation east of SR 37 and north of 135<sup>th</sup> Street. Similar to Wetland F, this feature appears to have resulted from the construction of an access drive. Gravel was observed within and adjacent to the wetland feature, and shovel refusal was encountered as a result of construction (fill) materials within the substrate. Wetland hydrophytes were

observed within the depressional feature, though plants appear to be frequently mowed and stunted plants were observed. Soils excavated within this feature met the criteria for hydric soil indicator depleted matrix (F3). Primary indicators of hydrology observed were surface water and saturation.

#### 12. Wetland I

Data Points IW1, ID1

Wetland I is a 0.03-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and south of 146<sup>th</sup> Street. This PEM1A wetland appears to convey stormwater to a 16-inch diameter stormwater pipe. Soils excavated within Wetland I met the criteria for hydric soil indicator F3. Primary indicators of hydrology observed were surface water and saturation.

#### 13. Wetland J

Data Points JW1, JD1

Wetland J is a 0.256-acre feature with emergent and scrub/shrub wetland vegetation within series of storm water retention basins, connected via culverts. It is located west of SR 37 and south of 146<sup>th</sup> Street. Wetland hydrophytes were observed within all of the retention features, a data point was taken in the north eastern-most feature and emergent vegetation was observed. The additional retention features were dominated by emergent vegetation, with some willow shrubs; this wetland is considered a palustrine, emergent, persistent/shrub-scrub, broad leaf deciduous, temporarily flooded (PEM/SS1A) wetland. Soils excavated within this feature met the criteria for hydric soil indicator depleted matrix (F3). Primary indicators of hydrology observed were surface water, saturation, and sediment deposits.

#### 14. Wetland K

Data Points KW1, KD1

Wetland K is a 0.003-acre feature with emergent wetland vegetation within a railroad ditch. It is located west of SR 37 and south of 146<sup>th</sup> Street, and is immediately east of the railroad. This PEM1A wetland was observed at the outlet of a 12-inch diameter stormwater pipe where wetland hydrophytes had dominated a small depression. Soils excavated within Wetland K met the criteria for hydric soil indicator depleted matrix (F3). Primary indicators of hydrology observed were surface water and saturation.

#### 15. Wetland L

Data Points LW1, LD1

Wetland L is a 0.091-acre feature with emergent wetland vegetation in a roadside ditch west of SR 37 and north of 135<sup>th</sup> Street. This PEM1A wetland was observed at the outlet of a 16-inch diameter stormwater pipe where wetland hydrophytes have dominated the roadside ditch. Soils excavated within Wetland L met the criteria for hydric soil indicator redox dark surface (F6). Primary indicators of hydrology observed were surface water and saturation.

#### 16. Wetland M

Data Points MW1, MD1

Wetland M is a 0.038-acre feature with emergent wetland vegetation in a roadside ditch west of SR 37 and south of 135<sup>th</sup> Street. This PEM1A wetland was observed within the roadside ditch that conveys

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drainage from west of SR 37 beneath Britton Park Road. Soils excavated within Wetland M met the criteria for hydric soil indicators depleted matrix (F3) and redox dark surface (F6). Primary indicators of hydrology observed were surface water and saturation.

#### 17. Wetland N

Data Points NW1, ND1

Wetland N is a 0.158-acre feature with emergent wetland vegetation within a storm water retention basin. It is located west of SR 37 and north of 131<sup>st</sup> Street. This PEM1A wetland was observed within a stormwater retention feature where wetland hydrophytes have dominated concave relief. Soils excavated within Wetland N met the criteria for hydric soil indicators Depleted Matrix (F3); organic matter was observed in the upper 3 inches of the soil profile, it was characterized as hemic to sapric plant material (muck). Primary indicators of hydrology observed were water stained leaves and a thin muck surface.

#### 18. Wetland O

Data Points OW1, OD1

Wetland O is a 0.093-acre linear feature with emergent wetland vegetation located west of SR 37 and north of 126<sup>th</sup> Street. Wetland O likely functions both as stormwater conveyance from adjacent commercial parking lots and as a backwater area to the UNT to Britton Branch; Wetland O flows directly into a UNT to Britton Branch. Emergent wetland hydrophytes were observed within the depression; this wetland would be classified as a PEM1A. Soils excavated within Wetland O met the criteria for hydric soil indicator loamy mucky mineral (F1); organic matter was observed throughout the soil profile, it was characterized as hemic to sapric plant material (muck) within a mineral matrix. Primary indicators of hydrology observed were surface water, saturation, and a hydrogen sulfide odor.

#### 19. Wetland P

Data Points PW1, PW2, PD1

Wetland P is a 0.179-acre feature with shrub-scrub wetland vegetation within a storm water retention basin. It is located west of SR 37 and north of 146<sup>th</sup> Street. This stormwater retention feature was dominated by shrub vegetation within the canopy and emergent vegetation throughout. Two wetland data points were taken due to the change in dominant vegetation within the retention feature. Soils and hydrology indicators remained consistent within the feature; Soils excavated within Wetland P met the criteria for hydric soil indicator depleted matrix (F3), primary indicators of hydrology observed were water stained leaves and aquatic fauna.

#### 20. Wetland R

Data Points RW1, RD1

Wetland R is a 0.009-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and south of SR 32. Wetland hydrophytes are periodically mowed resulting in vegetation being significantly disturbed at the time of survey. Soils excavated within Wetland R met the criteria for hydric soil indicator F6. A primary indicators of hydrology observed was water stained leaves.

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#### 21. Wetland S

Data Points SW1, SD1

Wetland S is a 0.101-acre feature with emergent vegetation in a roadside ditch west of SR 37 and north of Town & Country Boulevard. This PEM1A wetland is a long, linear feature within the roadside ditch. Wetland hydrophytes were observed. Soils excavated within Wetland S met the criteria for hydric soil indicator redox dark surface (F6). The primary indicator of hydrology observed was saturation.

#### 22. Wetland T

Data Points TW1, TD1

Wetland T is a 0.031-acre feature that at the time of survey (July 2016) contained emergent wetland vegetation. Wetland T was mapped in a roadside ditch west of SR 37 and south of Town & Country Boulevard. Very sparse wetland vegetation was observed within the roadside ditch, at the outlet of a stormwater culvert that conveys drainage beneath Town & Country Boulevard. Soils excavated within Wetland T met the criteria for hydric soil indicator 2 cm muck (A10); sapric/ hemic plant material overlaid the mineral matrix. The primary indicators of hydrology observed were surface water, algal crust, sparsely vegetated roadside ditch, and water stained leaves. During the agency field visit, this feature did not contain wetland vegetation.

#### 23. Wetland W

Data Points WW1, WD1

Wetland W is a floodplain wetland in excess of 0.04-acre. Wetland W was mapped within the White River floodplain, south of 146<sup>th</sup> Street. Very sparse wetland vegetation was observed within ponding area, at the outlet of a stormwater culvert that conveys drainage from 146 Street. Soils excavated within Wetland W met the criteria for hydric soil indicator redox dark surface (F6). The primary indicators of hydrology observed were saturation and water-stained leaves.

#### 24. Wetland X

Data points XW1, XD1

Wetland X is a floodplain wetland in excess of 0.1-acre. Wetland X was mapped within the White River floodplain, north of 146<sup>th</sup> Street at the base of a steep bluff. Wetland X formed within a topographic depression at the base of the steep bluff. Soils excavated within Wetland X met the criteria for hydric soil indicator depleted matrix (F3) and Depleted below dark surface (A11). The primary indicators of hydrology observed were saturation and surface water to a depth of 2 inches.

#### 25. Wetland Y

Data Points YW1, YD1

Wetland Y is a floodplain wetland of 0.05-acre. Wetland Y was mapped within the White River floodplain, north of 146<sup>th</sup> Street. Wetland Y formed as a result of stormwater ponding at the base of the 146<sup>th</sup> Street roadside grade; stormwater is conveyed to Wetland Y via a small culvert. Soils excavated within Wetland Y met the criteria for hydric soil indicator redox dark surface (F6) and redox depression (F8). The primary indicators of hydrology observed were saturation, surface water to a depth of 1 inch, sparsely vegetated concave surface, and water stained leaves.

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#### Non-Wetland Data Points

#### 1. Data Point QD1

Data point QD1 is located at within a forested area, east of SR 37 and approximately 0.5 miles south of Greenfield Avenue. Staining is visible on aerial photography leading into a small ponding area within the forested parcel. This parcel was sparsely vegetated, with only 62% cover observed in all three strata. This data point featured silver maple (*Acer saccharinum*) canopy trees, green ash (*Fraxinus pennsylvanica*) understory saplings and very sparse cover of white grass (*Leersia virginica*) as the only dominant species within the herbaceous stratum. Primary indicators of hydrology show that periodic inundation and drainage occur within this topographic depression; water marks on trees and drift deposits were observed within the sparsely vegetated concave surface. Soils excavated from a 20-inch deep pit indicate that drainage via paired culvert to the west are adequate enough to prevent ponding. Soils did not meet criteria for low chroma soils, as redox concentrations were only observed below 12 inches. Due to the lack of hydric soil indicators, it was determined that data point QD1 was not within a wetland.

#### 2. Right Bank of Britton Branch

Data point BRD2 is located on the right (north) bank of Britton Branch, east of SR 37. The shelves on either side of Britton Branch appear to have been excavated for flood attenuation, but this was done with shallow slopes in hydric soil unit Brookston silty clay loam. The right bank shelf, however appears to have been excavated slightly higher than the left. Wetland hydrophytes were not observed up the right bank of Britton Branch. The fringe wetland, detailed above, however does appear as a 6-foot fringe to the channel of Britton Branch (within the bankfull width) on both sides of Britton Branch. Vegetation was limited to the herbaceous stratum and dominant species were aslike clover (*Trifolium hybridum*), white clover (*Trifolium repens*), and tall goldenrod (*Solidago altissima*). Soils taken within plot BRD2 were representative of hydric soil indicators loamy gleyed matrix (F2) and depleted matrix (F3). Due to the lack of wetland hydrophytes or primary indicators of hydrology at the time of survey, it was determined that the right bank shelf of Britton Branch is not a wetland.

#### 3. Data Point VD1

Data point VD1 is located at within the forested floodplain of Shoemaker Ditch, east of Lantern Road. This data point featured Eastern cottonwood (*Populus deltoides*) and hackberry (*Celtis occidentalis*) canopy trees, hackberry and grey dogwood (*Cornus racemosa*) understory saplings and a sparse covering of understory herbaceous vegetation in the early spring season. The only dominant species within the herbaceous stratum was wild garlic (*Allium canadense*). No primary indicators of hydrology were observed within the floodplain. Soils excavated from a 20-inch deep pit indicate that drainage via paired culvert to the west are adequate enough to prevent ponding. Soils did not meet criteria for low chroma soils, as redox concentrations were not observed. Due to the lack of hydric soil and hydrology indicators, it was determined that data point VD1 was not within a wetland.

Table 1: Wetland Summary

		Idi	ole 1: Wetlan	a Summary	'		
Name	Lat	Long	Cowardin Class	Quality	Soil Unit	Total Acres	Acres within Survey Boundary
Britton Branch Fringe	39.981944	-86.003127	PEM1C	Poor	Br	>1.143	0.663
Pond 6 Fringe	39.987175	<del>-86.003462</del>	PEM1A	Average	Br/CrA	0.048	0.023
Stony Creek Floodplain (Wetland U)	40.028851	-85.995944	PFO1A	Average	Sh	>0.375	0.144
UNT to Overdorff Branch Fringe	40.008274	-86.003833	PEM1A	Poor	CrA/Br	0.195	0.195
Wetland A	39.966336	-86.003300	PEM1A	Poor	CrA/Br	0.090	0.035
Wetland B	39.968181	-86.003419	PEM1A	Poor	CrA	0.004	0.004
Wetland C	39.971375	-86.002662	PEM1A	Poor	Br	0.034	0.034
Wetland D	39.970996	-86.002266	PEM1A	Poor	Br	0.034	0.008
Wetland F	39.984478	-86.002535	PEM1A	Poor	Br	0.159	0
Wetland G	39.982905	-86.003531	PEM1A	Poor	CrA/MmB2	0.008	0.008
Wetland H	39.985523	-86.002919	PEM1A	Poor	CrA	0.116	0.009
Wetland I	39.992438	-86.003715	PEM1A	Poor	CrA	0.030	0.030
Wetland J	40.000586	-86.004572	PEM/SS1A	Poor	CrA/Br	0.256	0.256
Wetland K	40.000598	-86.008685	PEM1A	Poor	CrA	0.003	0
Wetland L	39.988151	-86.004218	PEM1A	Poor	Br	0.091	0.091
Wetland M	39.984926	-86.004380	PEM1A	Poor	CrA	0.038	0.038
Wetland N	39.979381	-86.004303	PEM1A	Poor	CrA	0.158	0.101
Wetland O	39.974698	-86.004130	PEM1C	Poor	Br	0.093	0.093
Wetland P	40.002049	-86.005163	PSS1A	Poor	CrA/Br	0.179	0
Wetland R	40.045068	-85.994037	PEM1A	Poor	MoC3	0.009	0.009
Wetland S	40.032939	-85.995555	PEM1A	Poor	St	0.101	0.101
Wetland T	40.032278	-85.995578	PEM1A	Poor	OcA	0.031	0.016

Name	Lat	Long	Cowardin Class	Quality	Soil Unit	Total Acres	Acres within Survey Boundary
Wetland W	39.999852	-86.022362	PFO1A	Poor	Ge	>0.04	0.03
Wetland X	40.000648	-86.021975	PFO1A	Poor	Ge	>0.1	0.003
Wetland Y	40.000662	-86.021975	PFO1A	Poor	Ge	0.05	0.02
					Total	>3.337	1.888

#### **Streams Analysis**

Qualitative Habitat Evaluation Index (QHEI) and Headwater Habitat Evaluation Index (HHEI) data sheets for the streams discussed below are in Appendix D, pages D111-131.

#### 1. UNT to Britton Branch

SR 37 crosses UNT to Britton Branch north of 126<sup>th</sup> Street and south of 131<sup>st</sup> Street. UNT to Britton Branch is an ephemeral stream feature with cobble and gravel substrate. UNT to Britton Branch is a tributary of Britton Branch, which flows west and empties into the White River. There is approximately 987 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Britton Branch is 18 feet wide by 3 feet deep. The Headwater Habitat Evaluation Index (HHEI) score of UNT to Britton Branch is 63, which indicates "excellent" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

Wetland vegetation was observed growing along the eastern bank of edges of the UNT to Britton Branch. Both USACE and IDEM requested data points at this location to determine if there may be a wetlands along the stream. Upon subsequent inspection, the bank of the UNT is armored with rap and cattails (Typha sp.) were observed growing between the stones. Additional species observed within the rip rap included crown vetch (Securigera varia).

#### 2. Britton Branch

SR 37 crosses Britton Branch north of 131st Street and south of 135th Street. Britton Branch is an intermittent stream feature with sand and silt substrate and is classified as a legal drain in Hamilton County. Britton Branch is a tributary of the White River and flows to the west. There is approximately 1,200 linear feet of this stream feature within the survey boundary. The OHWM of Britton Branch upstream of SR 37 is 13.3 feet wide by 18 inches deep. The OHWM of Britton Branch downstream of SR 37 is 12 feet wide by 21 inches deep. The Qualitative Habitat Evaluation Index (QHEI) score of Britton Branch upstream of SR 37 is 46, which indicates "poor" habitat quality potential. The QHEI score of Britton Branch downstream of SR 37 is 32, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 3. UNT to Shoemaker Ditch

UNT to Shoemaker Ditch is located west of SR 37 and flows beneath Lantern Road, south of 131st Street. UNT to Shoemaker Ditch is an ephemeral stream feature with gravel and silt substrate. UNT to Shoemaker

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Ditch is a tributary of Shoemaker Ditch, which flows west and empties into the White River. There is approximately 416 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Shoemaker Ditch upstream of Lantern Road is 3.1 feet wide by 5 inches deep. The OHWM of UNT to Shoemaker Ditch downstream of Lantern Road is 5.7 feet wide by 10 inches deep. The HHEI score of UNT to Shoemaker Ditch is 21, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 4. Shoemaker Ditch

Shoemaker Ditch is located west of SR 37, south of 131<sup>st</sup> Street, and adjacent to Lantern Road. Shoemaker Ditch is a perennial stream feature with gravel and silt substrate and is classified as a legal drain in Hamilton County. Shoemaker Ditch is a tributary of the White River and flows to the west. There is approximately 634 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of Shoemaker Ditch is 16.3 feet wide by 21 inches deep. The QHEI score of Shoemaker Ditch is 37, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 5. Weaver Creek

Weaver Creek is located west of SR 37 and north of 141st Street within a residential area. Weaver Creek is an intermittent stream feature with cobble and gravel substrate. Weaver Creek is a tributary of the White River and flows to the west. There is approximately 487 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of Weaver Creek is 4.7 feet wide by 0.4 inches deep. The HHEI score of Weaver Creek is 44, which indicates "average" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 6. UNT to Weaver Creek

UNT to Weaver Creek is located west of SR 37 and north of 141st Street within a residential area. UNT to Weaver Creek is an ephemeral stream feature with hardpan and sand substrate. UNT to Weaver Creek is a tributary of Weaver Creek, which flows west and empties into the White River. There is approximately 295 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Weaver Creek is 6.1 feet wide by 15 inches deep. The HHEI score of UNT to Weaver Creek is 36, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 7. Overdorff Branch

SR 37 crosses Overdorff Branch north of 146<sup>th</sup> Street. Overdorff Branch is an intermittent stream feature with gravel and silt substrate. Overdorff Branch is a tributary of the White River and flows to the west. There is approximately 418 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of Overdorff Branch upstream of SR 37 is 12.8 feet wide by 13 inches deep. The OHWM of Overdorff Branch downstream of SR 37 is 9 feet wide by 16 inches deep. The HHEI score of Overdorff Branch upstream of SR 37 is 49, which indicates "average" habitat quality potential. The HHEI score of Overdorff Branch downstream of SR 37 is 69, which indicates "excellent" habitat quality. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 8. UNT to Overdorff Branch

UNT to Overdorff Branch is located along the east side of SR 37 and crosses SR 37 north of 146th Street. UNT to Overdorff Branch is an intermittent stream feature with gravel and silt substrate and is classified

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as a legal drain in Hamilton County. UNT to Overdorff Branch is a tributary of Overdorff Branch, which flows west and empties into to the White River. There is approximately 1,029 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Overdorff Branch is 6.3 feet wide by 14 inches deep. The HHEI score of UNT to Overdorff Branch upstream of SR 37 is 36, which indicates "poor" habitat quality potential. The HHEI score of UNT to Overdorff Branch downstream of SR 37 is 48, which indicates "average" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 9. UNT to Stony Creek 1

UNT to Stony Creek 1 is located along the west side of SR 37, north of Greenfield Avenue and south of Town and Country Boulevard. UNT to Stony Creek 1 is an ephemeral stream feature with sand and silt substrate. UNT to Stony Creek 1 is a tributary of Stony Creek, which flows west and empties into the White River. There is approximately 84 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Stony Creek 1 is 6.8 feet wide by 5 inches deep. The HHEI score of UNT to Stony Creek 1 is 33, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 10. Stony Creek

SR 37 crosses Stony Creek north of Greenfield Avenue and south of Town and Country Boulevard. Stony Creek is a perennial stream feature with sand and silt substrate and is classified as a legal drain in Hamilton County. Stony Creek is a tributary of the White River and flows to the west. There is approximately 312 linear feet of this stream feature within the SR 37 ESB. The OHWM of Stony Creek upstream of SR 37 is 48.5 feet wide by 13 inches deep. The OHWM of Stony Creek downstream of SR 37 is 44.6 feet wide by 27 inches deep. The QHEI score of Stony Creek is 49, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 11. UNT to Stony Creek 4

UNT to Stony Creek 4 is located along the east side of SR 37, north of 166th Street and south of Mercantile Boulevard. UNT to Stony Creek 4 is an ephemeral stream feature with sand and silt substrate. UNT to Stony Creek 4 is a tributary of Stony Creek, which flows west and empties into the White River. There is approximately 77 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Stony Creek 4 is 2.8 feet wide by 2.5 inches deep. The HHEI score of UNT to Stony Creek 4 is 28, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 12. UNT to Stony Creek 2

SR 37 crosses UNT to Stony Creek 2 north of Pleasant Street. UNT to Stony Creek 2 is an ephemeral stream feature with silt substrate. UNT to Stony Creek 2 is a tributary of Stony Creek, which flows west and empties into the White River. There is approximately 283 linear feet of this stream feature within the SR 37 survey boundary. The OHWM of UNT to Stony Creek 2 upstream of SR 37 is 6.5 feet wide by 15 inches deep. The OHWM of UNT to Stony Creek 2 downstream of SR 37 is 11 feet wide by 23 inches deep. The QHEI score of UNT to Stony Creek 2 upstream of SR 37 is 27, which indicates "poor" habitat quality potential. The QHEI score of UNT to Stony Creek 2 downstream of SR 37 is 28, which indicates "poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 13. UNT to White River

Waters for UNT to White River originate upslope of the White River floodplain parallel to 146<sup>th</sup> Street. Currently, drainage is held in a retention pond on the west side of a senior retirement community at the southwest corner of 146 Street and Allisonville Road. A steep, excavated channel directs this stormwater into the White River floodplain, creating the UNT. There are approximately 156 feet of this feature within the SR 37 survey boundary. The OHWM of UNT to White River is 3.2 feet wide by 0.9 feet deep. The HHEI score of UNT to White River upstream of SR 37 is 16, which indicates "very poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 14. UNT to White River 2

Waters for UNT to White River originate as 146<sup>th</sup> Street stormwater. This conveyance originates in the White River floodplain via a small stormwater outflow and travels for approximately 55 feet before converging with the UNT to White River. There are approximately 32 feet of this feature within the SR 37 survey boundary. The OHWM of UNT to White River is 2.2 feet wide by 2 inches deep. The HHEI score of UNT to White River upstream of SR 37 is 16, which indicates "very poor" habitat quality potential. This stream feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.

#### 15. White River

The 146<sup>th</sup> Street drainage pipe construction limits encroach on the river within the White River floodplain, north of 146<sup>th</sup> Street. The White River is a perennial stream feature with sand and silt substrate. Within the SR 37 Improvement project survey area, all stream features eventually drain into the White River, a traditionally navigable water within Hamilton County. Impacts to the White River will result from the addition of a drainage easement, draining stormwater from the SR 37 project area. There are approximately 60 linear feet of proposed right-of-way along the left (east) bank of the White River. This stream feature is a jurisdictional water and will be regulated by the USACE and IDEM.



Table 2: Stream Summary

	Table 2: Stream Summary								
Name	Latitude	Longitude	Substrate	Regime	OHWM width	OHWM depth	Drainage Area (sq mi)	LF within Survey Boundary	Quality Score
UNT to Britton Branch	39.974920	-86.003785	Cobble/ Gravel	Ephemeral	18'	3'	0.17	987	63
Britton Branch	39.981898	-86.003230	Sand/Silt	Intermittent	Up:13.3' Dn:12'	Up: 18" Dn:21"	1.67	1200	Up: 46 Dn: 32
UNT to Shoemaker Ditch	39.975067	-86.012423	Gravel/Silt	Ephemeral	Up:3.1' Dn:5.7'	Up:5" Dn:10"	0.11	416	21
Shoemaker Ditch	39.97508	-86.013952	Gravel/Silt	Perennial	16.3'	21"	4.00	634	37
Weaver Creek	39.994361	-86.016132	Cobble/ Gravel	Intermittent	4.7'	0.4'	0.15	487	44
UNT to Weaver Creek	39.992969	-86.019631	Hardpan/ Sand	Ephemeral	6.1'	15"	0.08	295	36
Overdorff Branch	40.006127	-86.004355	Gravel/Silt	Intermittent	Up:12.8' Dn:9'	Up: 13" Dn:16"	0.22	418	Up: 49 Dn: 69
UNT to Overdorff Branch	40.009844	-86.00373	Gravel/Silt	Intermittent	6.3'	14"	0.28	1029	Up: 36 Dn: 48
UNT to Stony Creek 1	40.026245	-85.996304	Sand/silt	Ephemeral	6.8′	5"	>0.10	84	33
Stony Creek	40.029006	-85.995399	Sand/silt	Perennial	Up:48.5' Dn: 44.6'	Up:13" Dn:27"	51.04	312	49
UNT to Stony Creek 4	40.028960	-85.994959	Sand/Silt	Ephemeral	2.8′	2.5"	>0.1	77	28
UNT to Stony Creek 2	40.042199	-85.995219	Silt	Ephemeral	Up: 6.5' Dn:11'	Up: 15" Dn:23"	1.59	283	Up: 27 Dn: 28
UNT to White River	39.999470	-86.022310	Sand/silt	Ephemeral	3.2′	0.9'	0.01	156	16
UNT to White River 2	39.999840	-86.022140	Sand/silt	Ephemeral	2.2'	2"	0.01	32	16
White River	40.000159	-86.023193	Sand/silt	Perennial	n/a	n/a	n/a	60	n/a
							Total	6470	

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#### **Retention Ponds**

#### 1. Pond 1

Pond 1 is located west of SR 37, approximately 0.24 mile south of the intersection of SR 37 and 126<sup>th</sup> Street. Pond 1 is an excavated retention pond of 2.96 acres. Pond 1 contributes flow to Shoemaker Ditch. Pond 1 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### 2. Pond 2

Pond 2 is located east of SR 37, approximately 0.29 mile south of the intersection of SR 37 and 126<sup>th</sup> Street. Pond 2 is an excavated retention pond of 0.20 acre. Pond 2 contributes flow to Shoemaker Ditch. Pond 2 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### 3. Pond 3

Pond 3 is located east of SR 37, approximately 0.19 mile north of the intersection of SR 37 and 126<sup>th</sup> Street. Pond 3 is an excavated retention pond of 1.37 acres. Pond 3 contributes flow to the UNT to Britton Branch. This feature represents in-line retention from the Hamilton County Soil Survey (1978) and could therefore be jurisdictional under USACE (Appendix B, page B25). This feature is included on the pre-JD form.

#### 4. Pond 4

Pond 4 is located east of SR 37, approximately 0.11 mile north of the intersection of SR 37 and 131<sup>st</sup> Street. Pond 4 is an excavated retention pond of 0.35 acre. Pond 4 contributes flow to Britton Branch. Pond 4 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### 5. Pond 5

Pond 5 is located just west of SR 37, approximately 0.3 mile north of the intersection of SR 37 and 131<sup>st</sup> Street. Pond 5 is an excavated retention pond of 0.51 acre. Pond 5 contributes flow to Britton Branch. Pond 5 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### **6. Pond 6** (No longer present as of October 27, 2017 field investigation)

Pond 6 is east of SR 37 and north of 135<sup>th</sup> Street. Pond 6 is an excavated pond of 0.35 acre. Historic aerial photos were reviewed, and Pond 6 appears to have been excavated as a water feature on the now defunct Britton Golf Course which opened in 1986. Additional review of the historical aerial images indicate that Britton Golf Course was demolished in the summer of 2006. This feature may be jurisdictional under USACE as there is a surface water connection to Britton Branch via roadside stormwater conveyance. It is included on the pre-JD form. Wetland fringe is present adjacent to Pond 6. Though this water resource was not present during the October 2017 field investigation, the construction and fill activities that removed it from consideration from this version of this waters submittal were not a result of this proposed project.

#### 7. Ponds 7, 8, & 9

Ponds 7, 8, and 9 are located east of SR 37 to the north and south of 141<sup>st</sup> Street. Pond 7 is an excavated retention pond of 1.39 acres. Pond 8 is an excavated retention pond of 2.94 acres. Pond 9 is an excavated

retention pond of 1.19 acres. These three ponds are connected, and flow likely continues via pipes and detention ponds to Shoemaker Ditch. These features represent in-line retention from the Hamilton County Soil Survey (1978) and could therefore be jurisdictional under the USACE (Appendix B, page B26). These features are included on the pre-JD form.

#### 8. Pond 10

Pond 10 is located just south of 146<sup>th</sup> Street, approximately 0.21 mile west of the intersection of SR 37 and 146<sup>th</sup> Street. Pond 10 is an excavated retention pond of 0.18 acre. Pond 10 contributes flow the White River. Pond 10 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### 9. Pond 11

Pond 11 is located just east of SR 37, approximately 0.5 mile north of the intersection of SR 37 and 146<sup>th</sup> Street. Pond 11 is an excavated retention pond of 2.63 acres. Currently, Pond 11 contributes flow to Overdorff Branch via the recently excavated UNT to Overdorff Branch. This feature may represent in-line retention from the Hamilton County soil Survey (1978) and therefore could be jurisdictional under the USACE (Appendix B, page B27). This feature is included on the pre-JD form.

#### 10. Pond 12

Pond 12 is located just west of SR 37, approximately 0.11 mile south of the intersection of SR 37 and Town & Country Boulevard. Pond 12 is an excavated retention pond of 1.04 acres. Pond 12 contributes flow to Stony Creek. This feature represents in-line retention from the Hamilton County Soil Survey (1978) and could therefore be jurisdictional under the USACE (Appendix B, page B28). This feature is included on the pre-JD form.

#### 11. Pond 13

Pond 13 is located east of SR 37, approximately 0.14 mile north of the intersection of SR 37 and Town and Country Boulevard. Pond 13 is an excavated retention pond of 0.89 acre. Pond 13 contributes flow to Stony Creek. Pond 13 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### 12. Pond 14

Pond 14 is located west of SR 37, approximately 0.12 mile south of the intersection of SR 37 and 146<sup>th</sup> Street. Pond 14 is an excavated retention pond of 0.08 acre. Pond 14 contributes flow to the White River. Pond 14 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.

#### 13. Pond 15

Pond 15 is located east of SR 37, approximately 0.33 mile north of the intersection of SR 37 and 131<sup>st</sup> Street. Pond 15 is an excavated retention pond of 1.35 acres. Pond 15 contributes flow to Britton Branch. This feature represents in-line retention from the Hamilton County Soil Survey (1978) and could therefore be jurisdictional under the USACE (Appendix B, page B29). This feature is included on the pre-JD form.

#### 14. Pond 16

Pond 16 is located just west of SR 37, approximately 0.62 mile south of the intersection of SR 37 and Greenfield Avenue. Pond 16 is an excavated retention pond of 0.06 acre. Pond 16 meets the USACE and IDEM exemptions for retention/detention facilities constructed for storm water retention.



Table 3: Pond Summary

Name	Latitude	Longitude	Cowardin Class	Size (acres)	Flows to
1	39.967264	-86.004563	PUBGx	2.958	Shoemaker Ditch
2	39.967214	-86.002925	PUBGx	0.197	Shoemaker Ditch
3	39.974901	-86.002565	PUBGx	1.368	UNT to Britton Branch
4	39.980753	-86.00302	PUBGx	0.349	Britton Branch
5	39.983374	-86.004734	PUBGx	0.505	Britton Branch
<del>6*</del>	<del>39.987535</del>	<del>-86.003408</del>	PUBGx	<del>0.352</del>	Britton Branch
7	39.991031	-86.003018	PUBGx	1.387	Shoemaker Ditch
8	39.992064	-86.001291	PUBGx	2.935	Shoemaker Ditch
9	39.994193	-86.001527	PUBGx	1.194	Shoemaker Ditch
10	40.000353	-86.008445	PUBGx	0.179	White River
11	40.007954	-86.001635	PUBGx	2.631	UNT to Overdorff Branch
12	40.030435	-85.995961	PUBGx	1.039	Stony Creek
13	40.034953	-85.994355	PUBGx	0.893	Stony Creek
14	39.99888	-86.005172	PUBGx	0.077	White River
15	39.984222	-86.001651	PUBGx	1.346	Britton Branch
16	40.014761	-86.002808	PUBGx	0.06	White River

<sup>\*</sup>Pond 6 no longer present as of October 2017 field investigation. Construction and fill activities were not a result of this project.

#### Conclusion

The field investigation for the SR 37 Improvement Project survey area yielded 25 wetlands, 14 streams, and 16 retention ponds (NWI mapped PUBGx wetlands). These features may fall under the jurisdiction of the USACE or the IDEM, however a formal jurisdictional determination will be requested during the next phase of the project.

Every effort should be taken to avoid and minimize the impacts to the water resources listed above. Disturbance of a wetland or stream could result in a mitigation requirement to secure the required permits for the SR 37 Improvement Project. If construction exceeds the limits of the survey review area illustrated in this documentation, further field investigation will be needed. This report is this preparer's best judgment of water resources that are likely to be under federal jurisdiction, based on the guidelines set forth by USACE. The final determination of jurisdictional waters is ultimately the responsibility of the USACE.

#### **Preparers**

Lochmueller Group Inc. Staff	Position	Contributing Effort
Kathryn Lucier, PWS	Environmental Biologist	Field Data Collection Delineation Report Preparation





### Waters of the U.S. Determination Report

# **Appendix A**

**Environmental Setting Maps** 



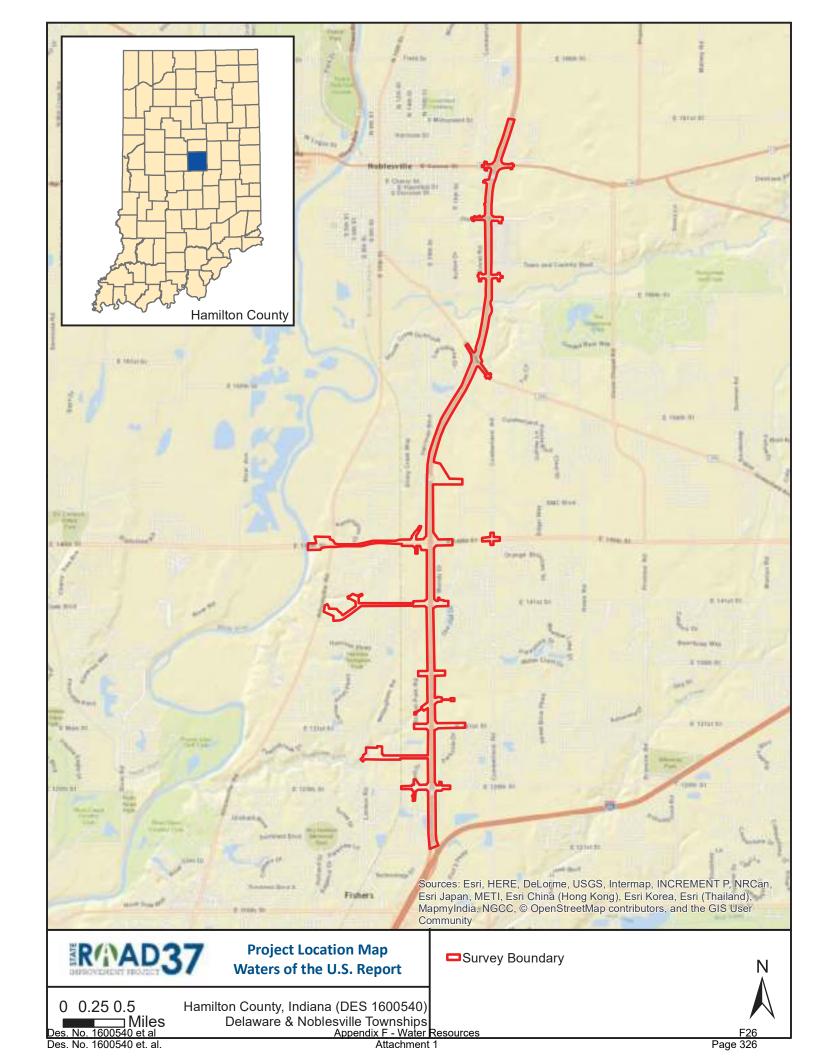
(317)595-3737

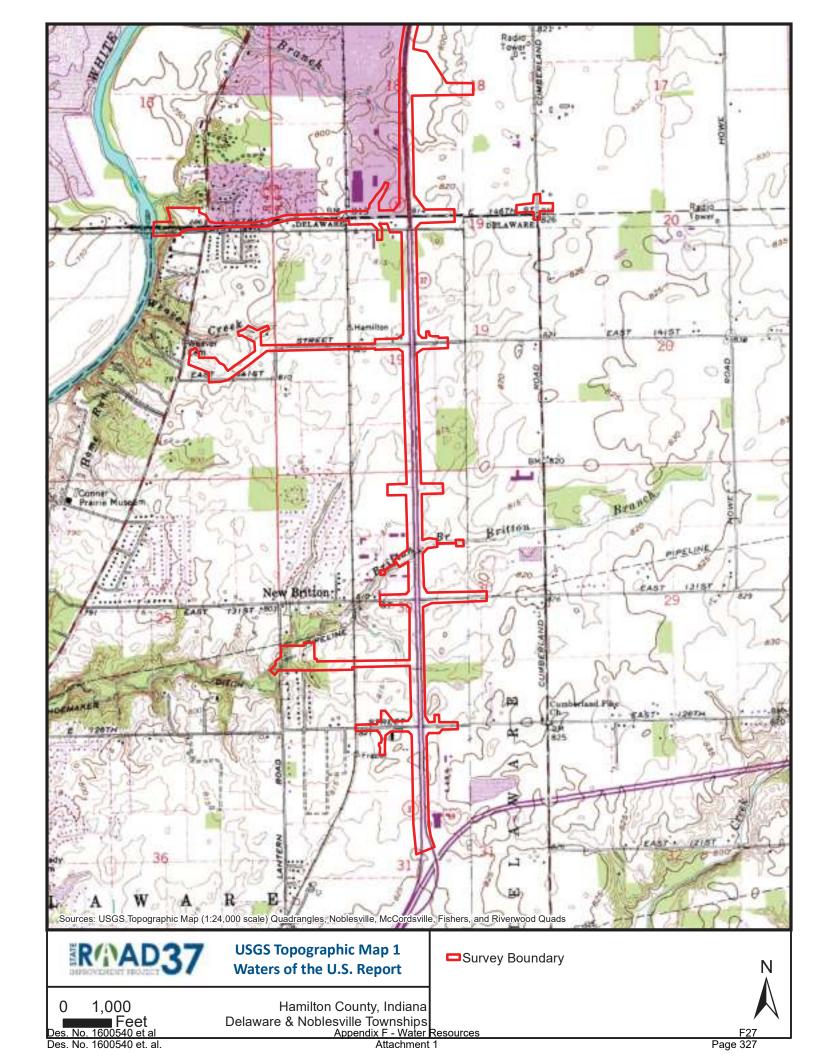
SR37@fishers.in.us

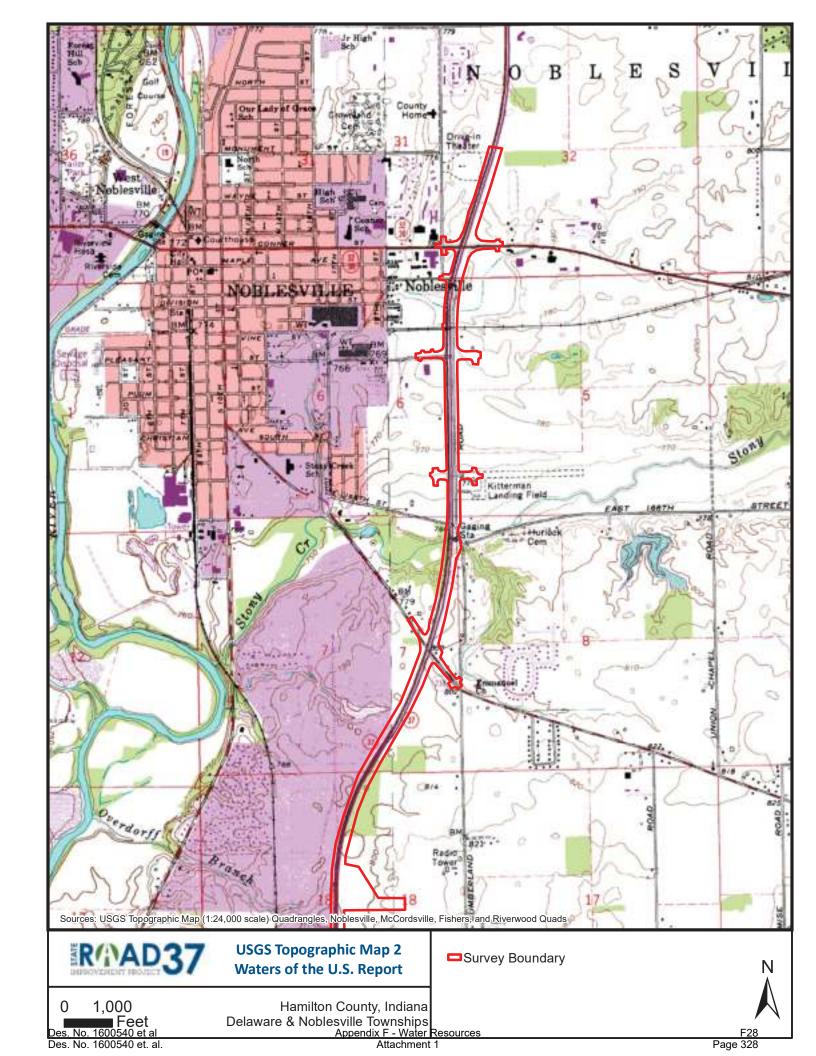
www.fishers.in.us/sr37. @ OriveFishers

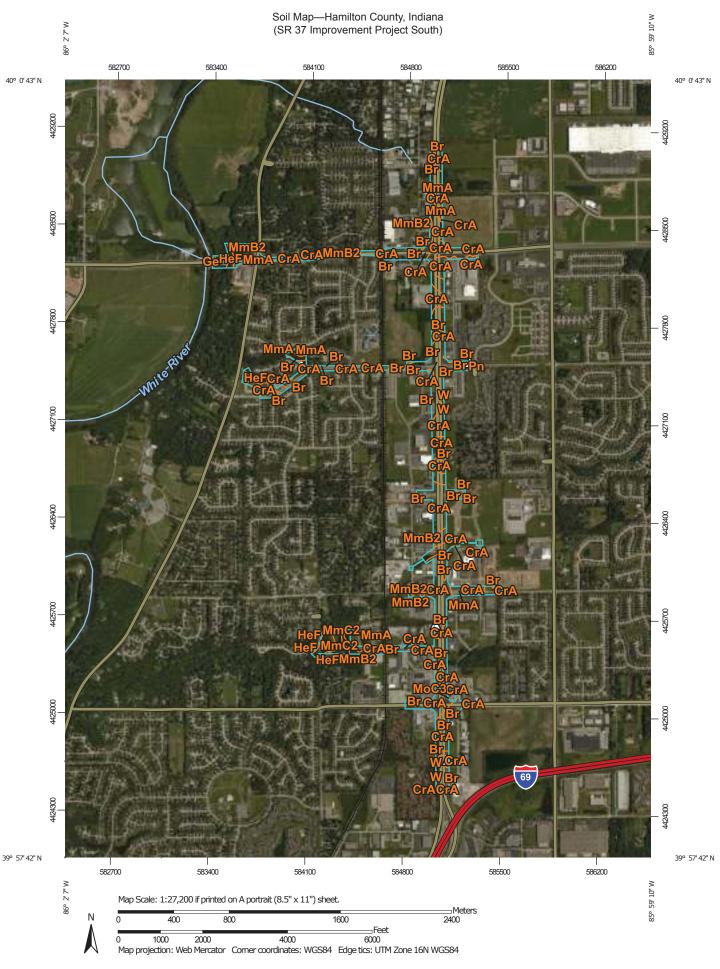
One Municipal Drive Fishers, Indiana 46038

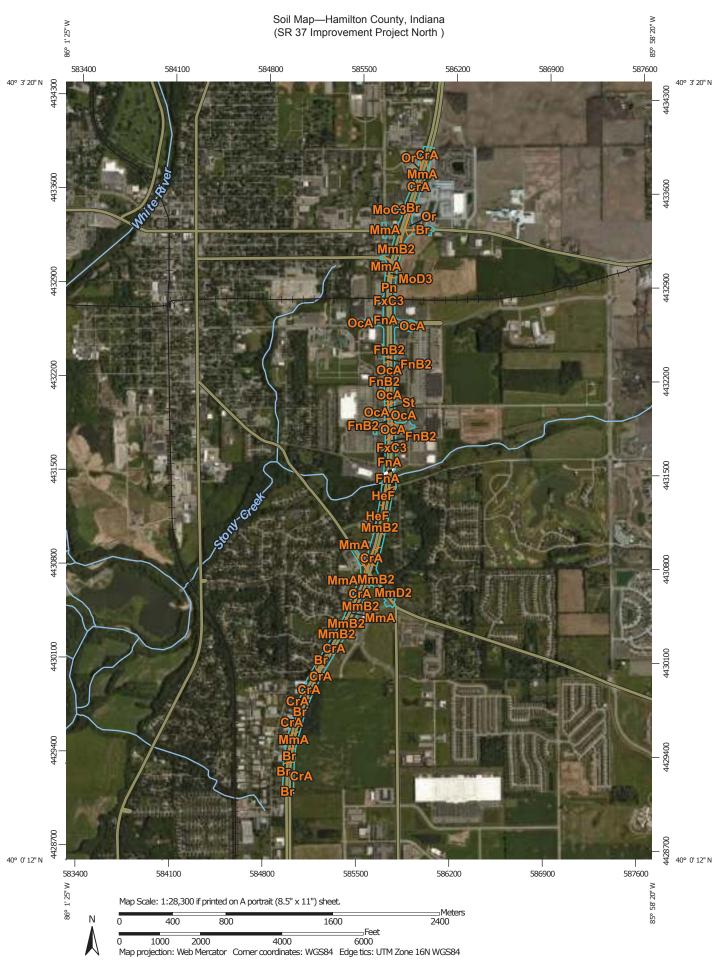
Des. No. 1600540 et al Des. No. 1600540 et. al. Attachment 1

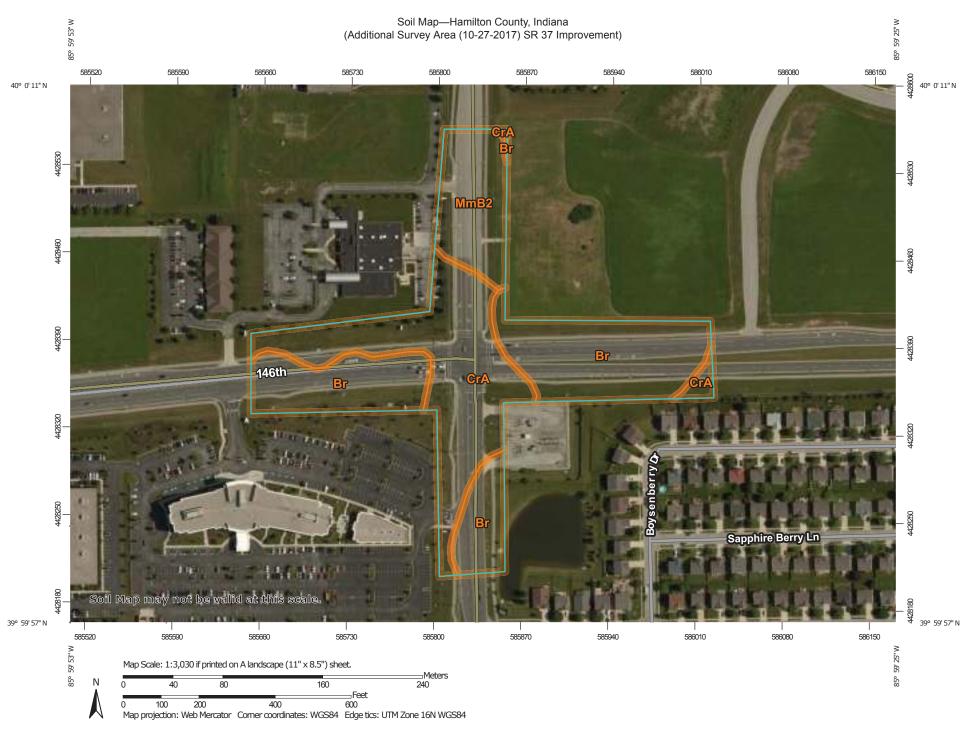












#### MAP LEGEND

Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Δ

Water Features

Transportation

+++

-

Background

Very Stony Spot

Special Line Features

Streams and Canals

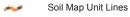
Interstate Highways

Aerial Photography

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Area of Interest (AOI)

Soil Map Unit Points

#### **Special Point Features**

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hamilton County, Indiana Survey Area Data: Version 17, Sep 14, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 27, 2014—Aug 28, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

### **Map Unit Legend**

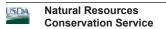
Hamilton County, Indiana (IN057)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Br	Brookston silty clay loam, 0 to 2 percent slopes	75.0	23.1%		
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	120.5	37.1%		
FnA	Fox loam, 0 to 2 percent slopes	15.5	4.8%		
FnB2	Fox loam, 2 to 6 percent slopes, eroded	5.4	1.7%		
FxC3	Fox clay loam, 8 to 18 percent slopes, severely eroded	2.4	0.7%		
Ge	Gessie silt loam, 0 to 2 percent slopes, frequently flooded	2.0	0.6%		
HeF	Hennepin loam, 18 to 50 percent slopes	4.7	1.4%		
MmA	Miami silt loam, 0 to 2 percent slopes	20.2	6.2%		
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	43.9	13.5%		
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	2.8	0.9%		
MmD2	Miami silt loam, 12 to 18 percent slopes, eroded	0.2	0.1%		
MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	6.4	2.0%		
MoD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	1.0	0.3%		
OcA	Ockley silt loam, 0 to 2 percent slopes	11.5	3.5%		
Or	Orthents	2.0	0.6%		
Pn	Patton silty clay loam, 0 to 2 percent slopes	4.1	1.3%		
Sh	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	5.4	1.7%		
St	Sleeth loam	1.1	0.3%		
W	Water	0.5	0.2%		
Totals for Area of Interest		324.8	100.0%		

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### Report—Hydric Soil List - All Components

Hydric Soil List - All Components–IN057-Hamilton County, Indiana						
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)	
Br: Brookston silty clay loam, 0 to 2 percent slopes	Brookston	90-100	Depressions,till plains	Yes	2,3	
	Crosby	0-10	Till plains	No	_	
CrA: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	Crosby	80-100	Recessionial moraines,ground moraines,water-lain moraines	No	_	
	Williamstown-Eroded	0-10	Recessionial moraines,ground moraines,water-lain moraines	No	_	
	Treaty-Drained	0-5	Depressions,swales,w ater-lain moraines	Yes	2	
FnA: Fox loam, 0 to 2 percent slopes	Fox	60-100	Stream terraces	No	_	
	Ockley	0-25	Stream terraces	No	_	
	Westland-Drained	0-5	Depressions on stream terraces,swales on stream terraces	Yes	2,3	
	Whitaker	0-3	Stream terraces	No	_	
FnB2: Fox loam, 2 to 6 percent slopes, eroded	Fox-Eroded	70-100	Till plains,stream terraces	No	_	
	Ockley	0-10	Stream terraces	No	_	
	Fox-Till substratum	0-10	Stream terraces on till plains	No	_	
	Westland-Drained	0-10	Depressions on stream terraces,swales on stream terraces	Yes	2	
FxC3: Fox clay loam, 8 to 18 percent slopes, severely eroded	Fox-Severely eroded	100	Terraces	No	_	
Ge: Gessie silt loam, 0 to 2 percent slopes, frequently flooded	Gessie-Frequent, brief	85-95	Flood-plain steps,flood plains,natural levees	No	_	
	Shoals-Frequent, brief	0-5	Flood plains	No	_	
	Eel-Occasional, brief	0-4	Flood-plain steps	No	_	
	Fox	0-3	Stream terraces	No	_	
	Stonelick-Frequent, brief	0-3	Flood plains	No	_	
HeF: Hennepin loam, 18 to 50 percent slopes	Hennepin	100	Till plains	No	_	

Hydric Soil List - All Components–IN057-Hamilton County, Indiana						
Map symbol and map unit name	Component/Local Phase	Comp.	Landform	Hydric status	Hydric criteria met (code)	
MmA: Miami silt loam, 0 to 2 percent slopes	Miami	100	Till plains	No	_	
MmB2: Miami silt loam, 2 to 6 percent slopes, eroded	Miami-Eroded	50-100	Till plains	No	_	
	Crosby	2-15	Till plains	No	_	
	Treaty	2-15	Till plains	Yes	2,3	
	Williamstown	2-15	Till plains	No	_	
MmC2: Miami silt loam, 6 to 12 percent slopes, eroded	Miami-Eroded	80-98	Till plains	No	_	
	Rainsville-Eroded	2-15	Till plains	No	_	
	Treaty	2-15	Till plains	Yes	2,3	
	Crosby	0-5	Till plains	No	_	
MmD2: Miami silt loam, 12 to 18 percent slopes, eroded	Miami-Eroded	80-100	Till plains	No	_	
	Rainsville-Eroded	2-15	Till plains	No	_	
	Crosby	0-10	Till plains	No	_	
MoC3: Miami clay loam, 6 to 12 percent slopes, severely eroded	Miami-Severely eroded	90-100	Till plains	No	_	
	Crosby	0-5	Till plains	No	_	
MoD3: Miami clay loam, 12 to 18 percent slopes, severely eroded	Miami-Severely eroded	100	Till plains	No	_	
OcA: Ockley silt loam, 0 to 2 percent slopes	Ockley	70-90	Stream terraces	No	_	
	Wawaka	0-10	Till plains on outwash plains	No	_	
	Fox	0-10	Outwash terraces	No	_	
	Digby	0-5	Outwash plains,glacial drainage channels	No	_	
	Haney	0-5	Outwash plains,glacial drainage channels	No	_	
Or: Orthents	Orthents	98	Till plains,terraces	Unranked	_	
	Water	2	_	No	_	
Pn: Patton silty clay loam, 0 to 2 percent slopes	Patton-Drained, loamy substratum	80-100	Depressions on lake plains	Yes	2,3	
	Crosby	0-10	Recessionial moraines,ground moraines,water-lain moraines	No	_	
	Treaty-Drained	0-10	Depressions,swales,w ater-lain moraines	Yes	2	
	Starks	0-5	Till plains	No	_	



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Hydric Soil List - All Components–IN057-Hamilton County, Indiana							
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)		
	Westland-Drained	0-5	Depressions on stream terraces,swales on stream terraces	Yes	2,3		
	Palms-Drained	0-3	Depressions on moraines	Yes	1,3		
Sh: Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Shoals	75-95	Flood plains	No	_		
	Eel	3-5	Flood plains	No	_		
	Sloan	0-15	Meander scars,backswamps, flood plains	Yes	2		
	Genesee	0-5	Flood-plain steps,flood plains,natural levees	No	_		
St: Sleeth loam	Sleeth	90	Terraces	No	_		
	poorly drained aqualfs	1-10	Depressions	Yes	2		
	Westland	3	Depressions	Yes	2,3		
W: Water	Water	100-100	_	No	_		

### **Data Source Information**

Soil Survey Area: Hamilton County, Indiana Survey Area Data: Version 17, Sep 14, 2016

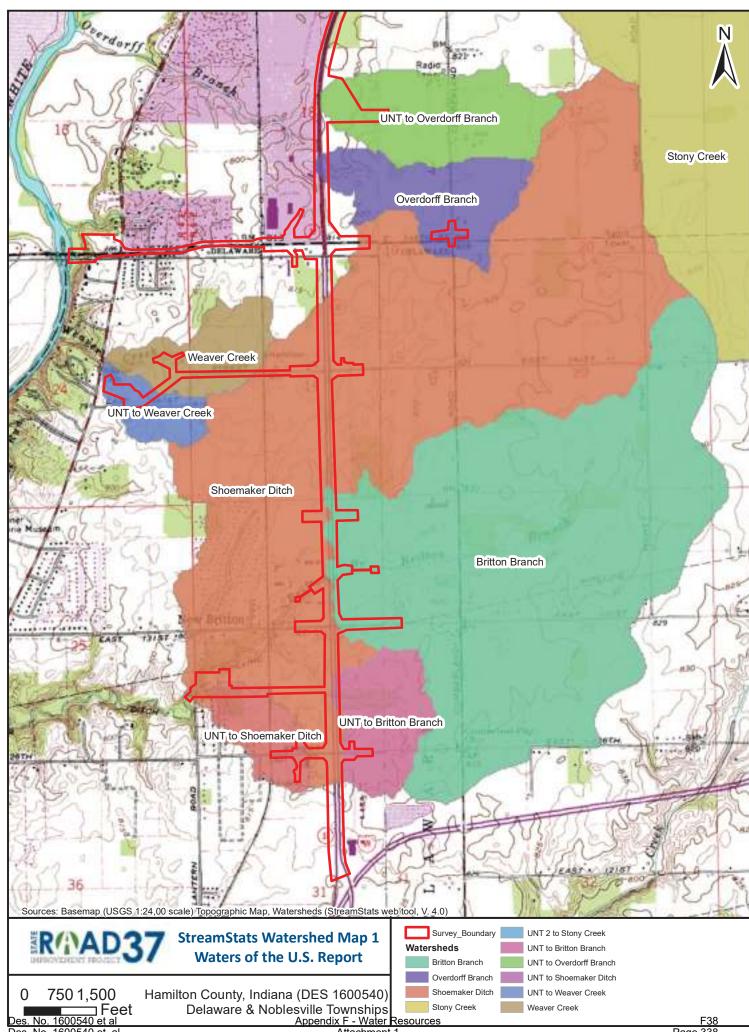
Des. No. 1600540 et al Des. No. 1600540 et. al.

## **Hydric Rating by Map Unit**

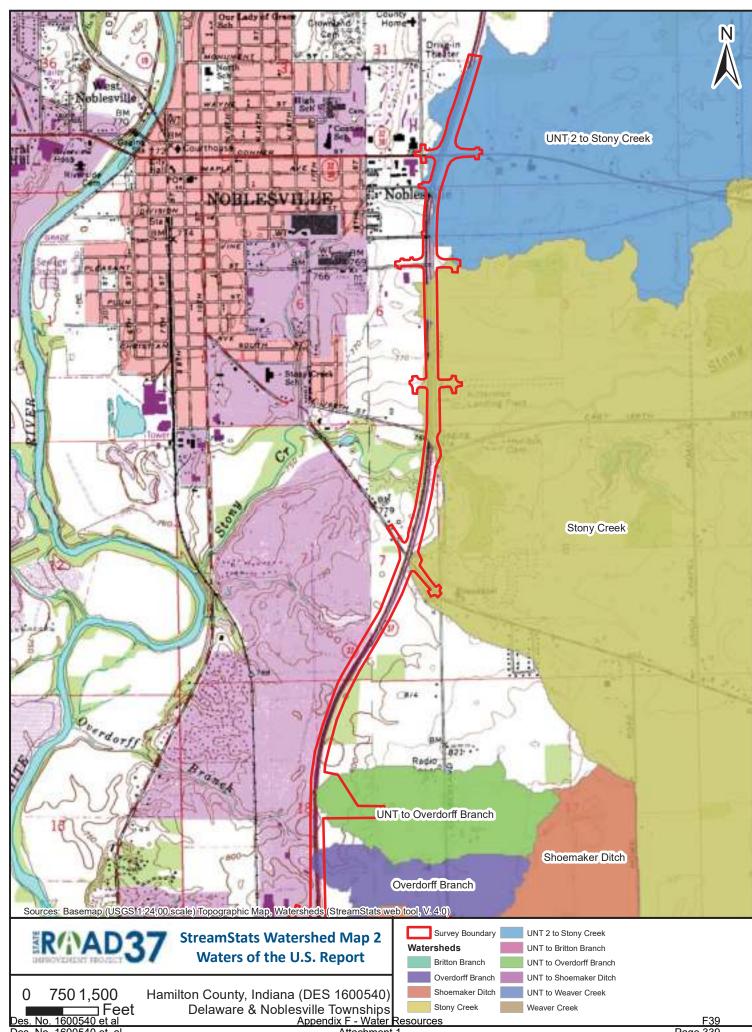
Hydric Rating by Map Unit— Summary by Map Unit — Hamilton County, Indiana (IN057)							
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI			
Br	Brookston silty clay loam, 0 to 2 percent slopes	95	75.0	23.1%			
CrA	Crosby silt loam, fine- loamy subsoil, 0 to 2 percent slopes	2	120.5	37.1%			
FnA	Fox loam, 0 to 2 percent slopes	4	15.5	4.8%			
FnB2	Fox loam, 2 to 6 percent slopes, eroded	6	5.4	1.7%			
FxC3	Fox clay loam, 8 to 18 percent slopes, severely eroded	0	2.4	0.7%			
Ge	Gessie silt loam, 0 to 2 percent slopes, frequently flooded	0	2.0	0.6%			
HeF	Hennepin loam, 18 to 50 percent slopes	0	4.7	1.4%			
MmA	Miami silt loam, 0 to 2 percent slopes	0	20.2	6.2%			
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	5	43.9	13.5%			
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	3	2.8	0.9%			
MmD2	Miami silt loam, 12 to 18 percent slopes, eroded	0	0.2	0.1%			
MoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	0	6.4	2.0%			
MoD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	0	1.0	0.3%			
OcA	Ockley silt loam, 0 to 2 percent slopes	0	11.5	3.5%			
Or	Orthents	0	2.0	0.6%			
Pn	Patton silty clay loam, 0 to 2 percent slopes	90	4.1	1.3%			
Sh	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	4	5.4	1.7%			
St	Sleeth loam	10	1.1	0.3%			



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### Waters of the U.S. Determination Report

# **Appendix B**

**Water Resource Maps** 



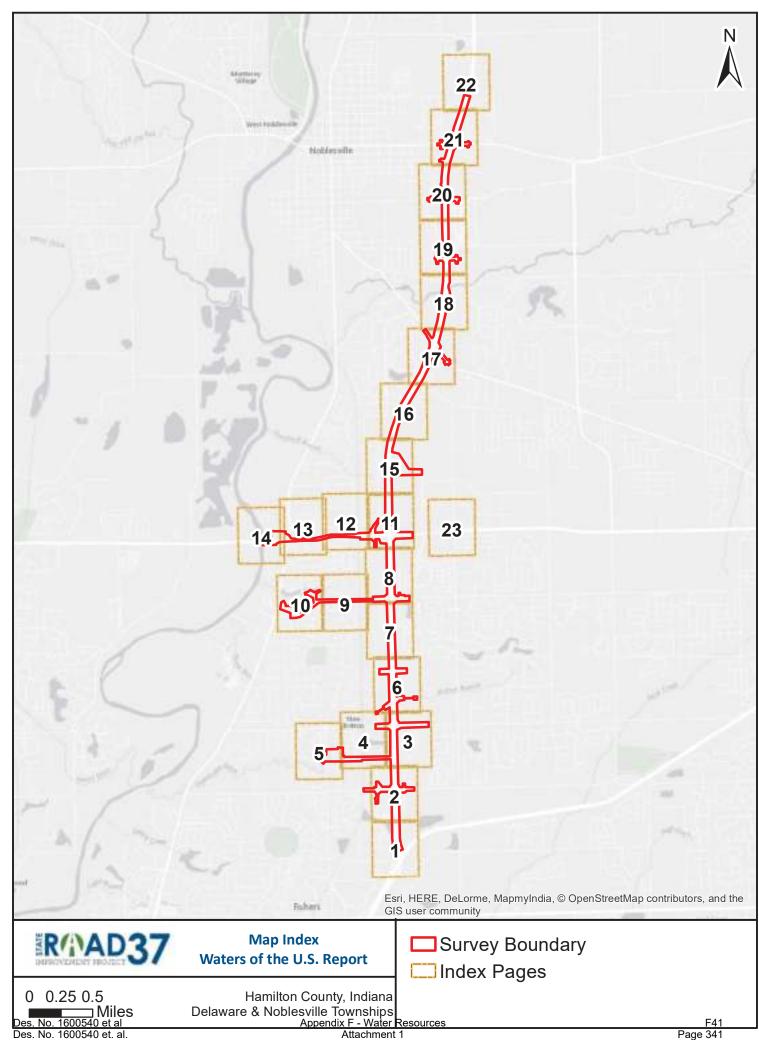
(317)595-3737

SR37@fishers.in.us

www.fishers.in.us/sr37

@ OriveFishers

One Municipal Drive
 Fishers, Indiana 46038

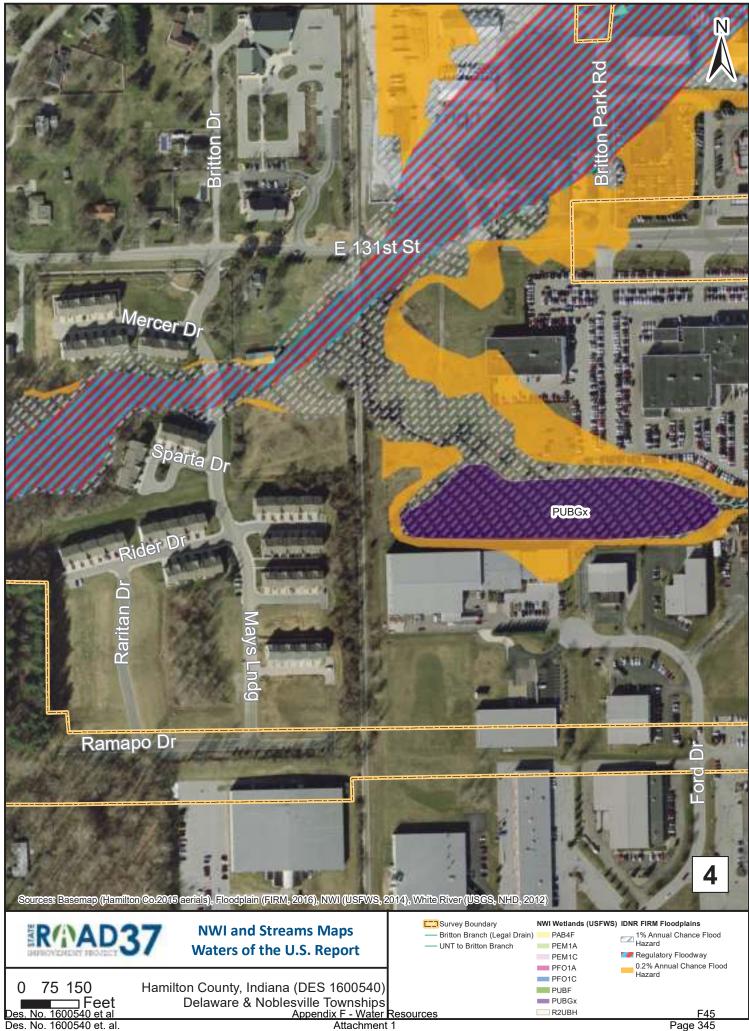


Page 341 Attachment 1

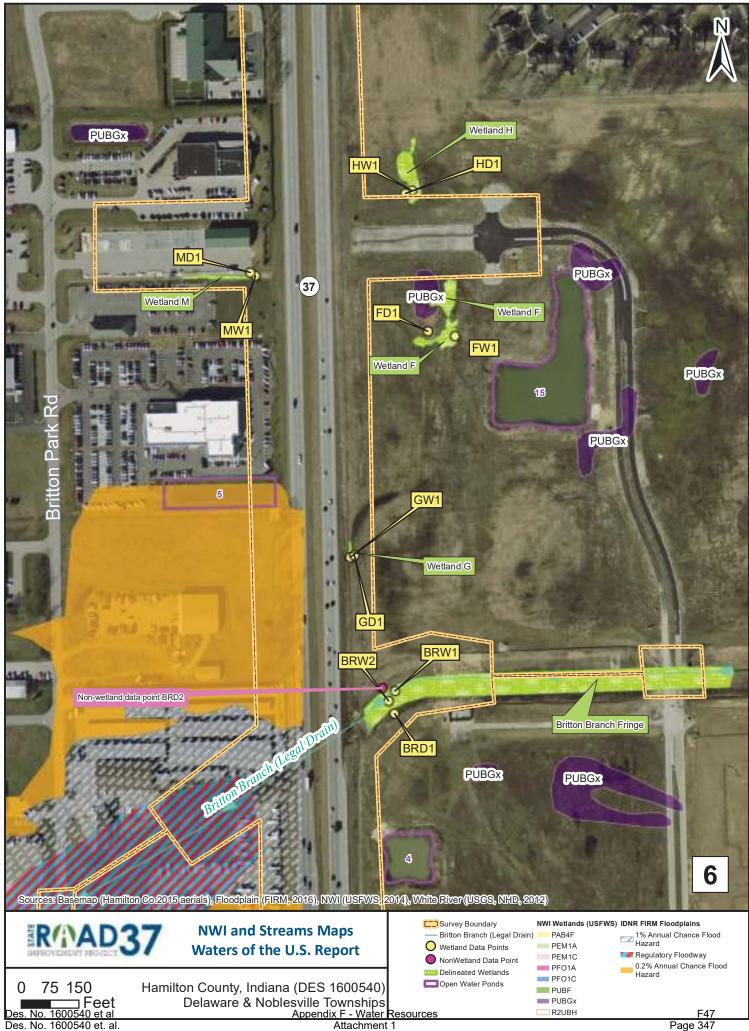




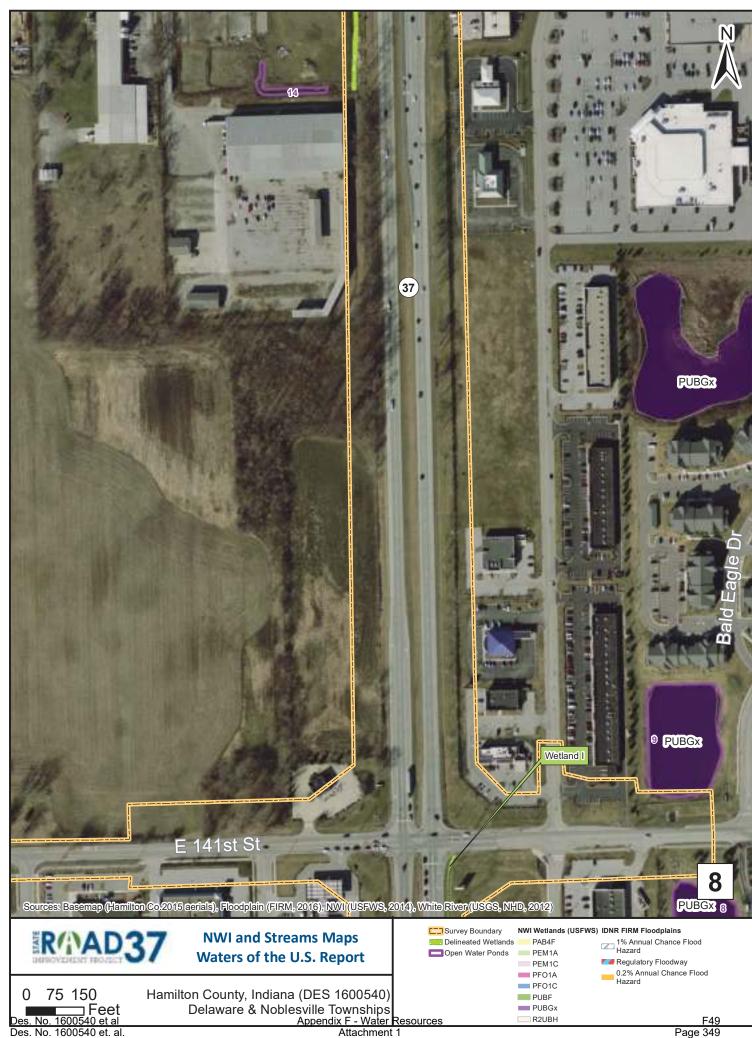


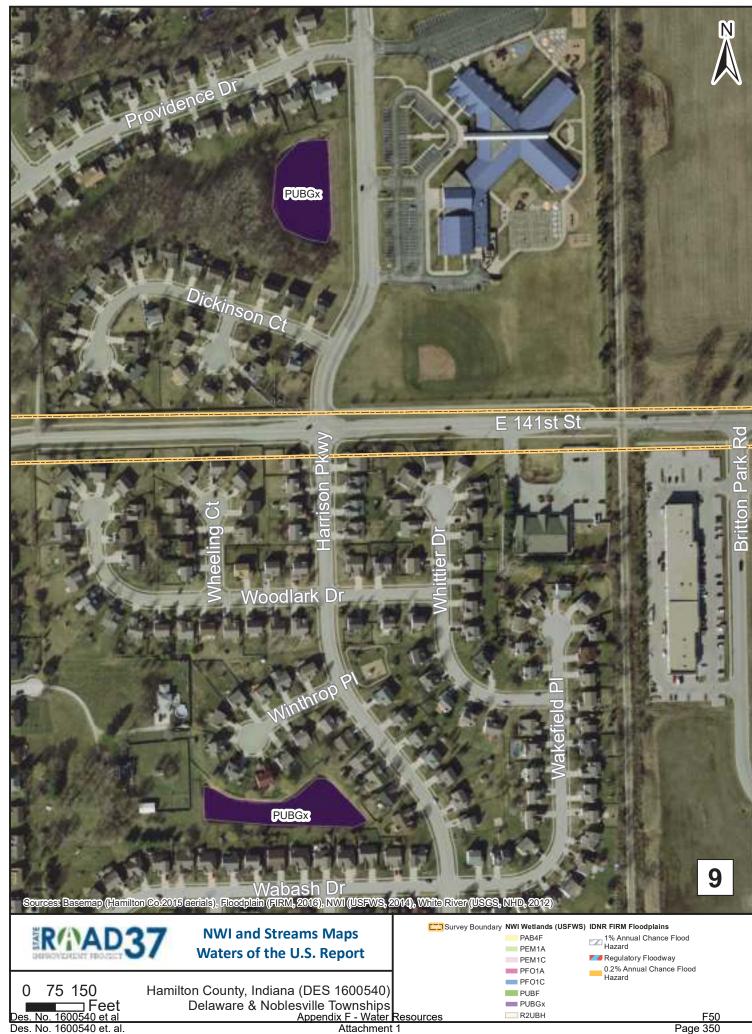


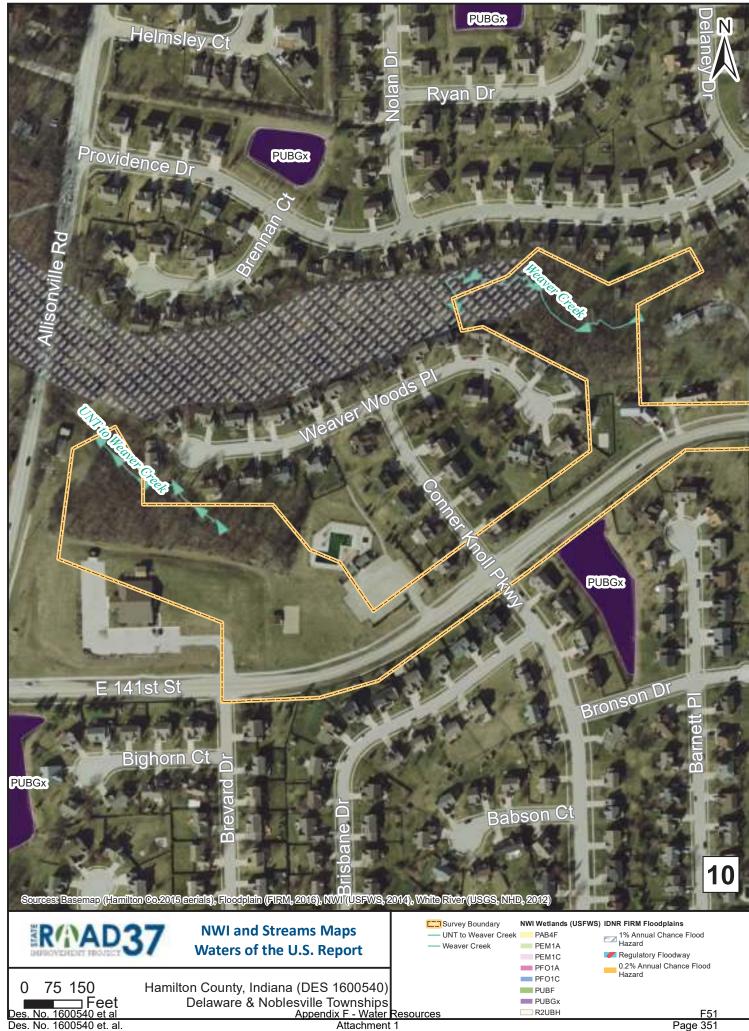




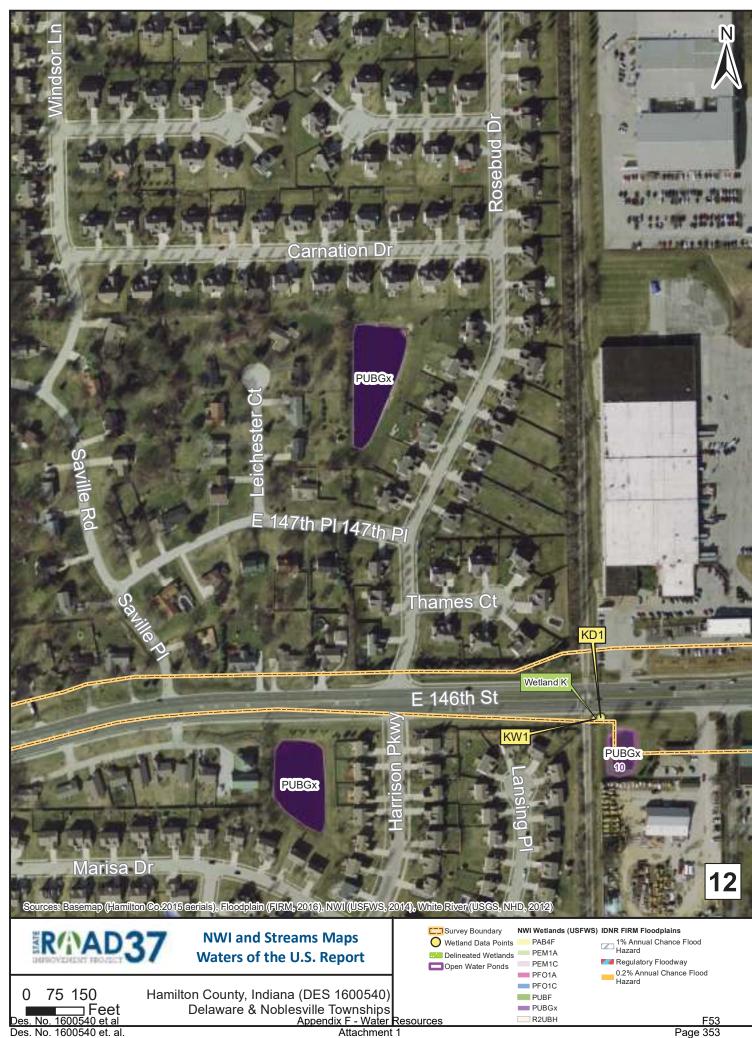


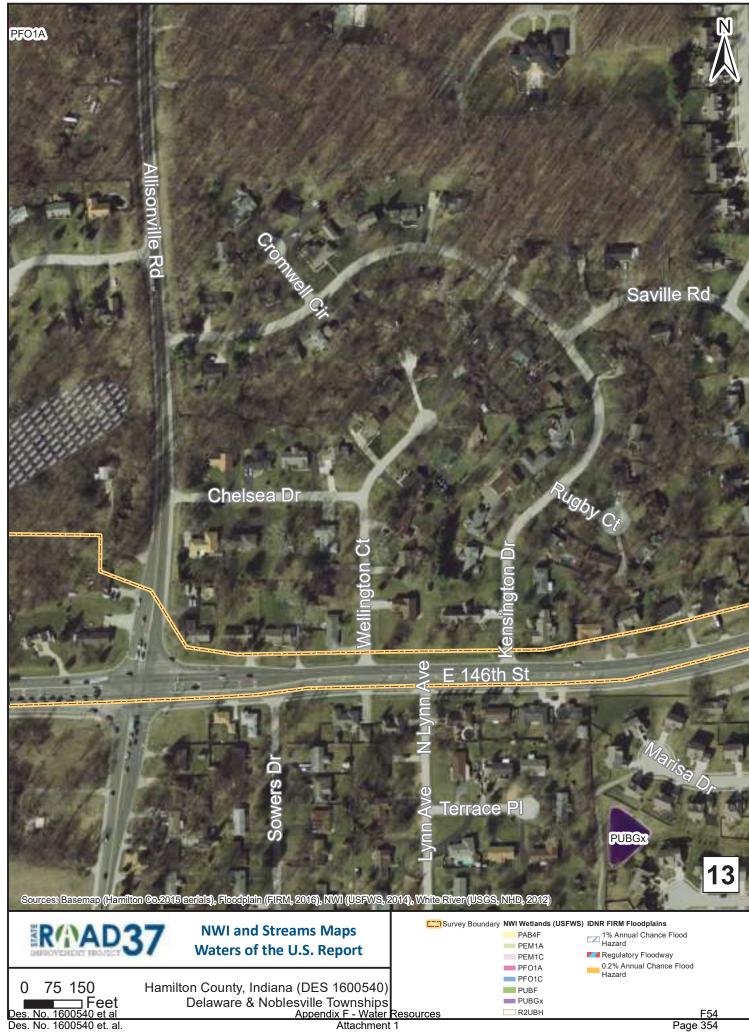


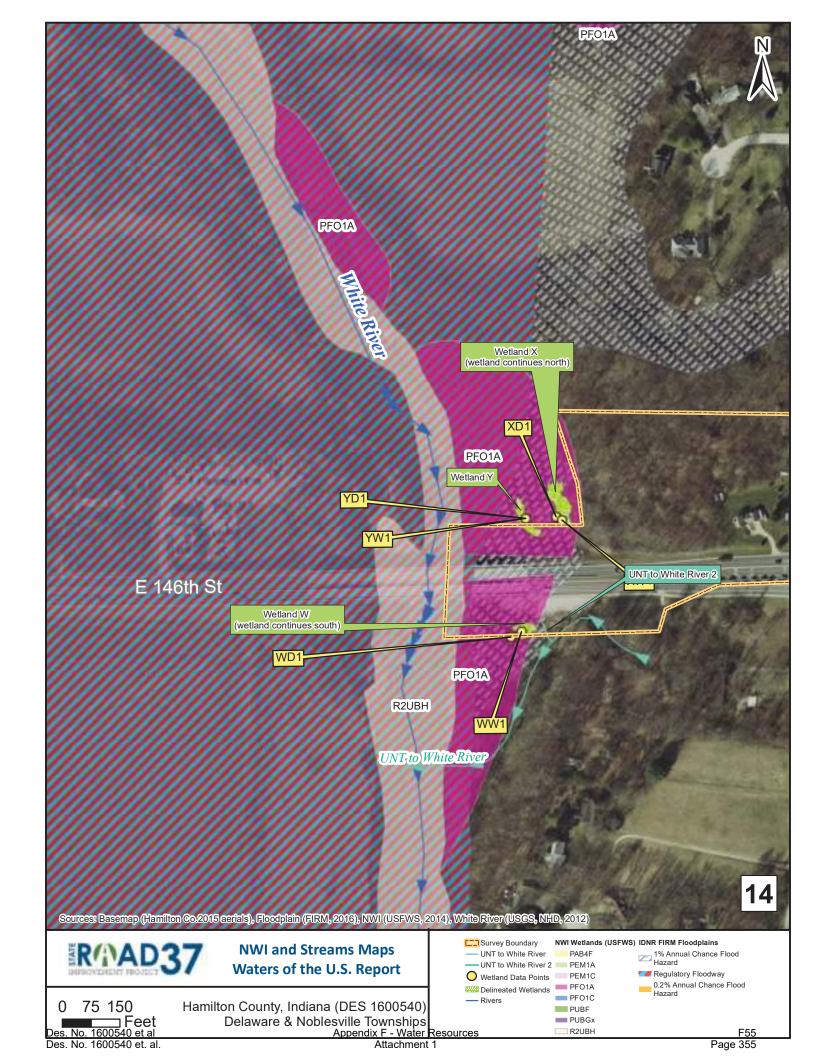








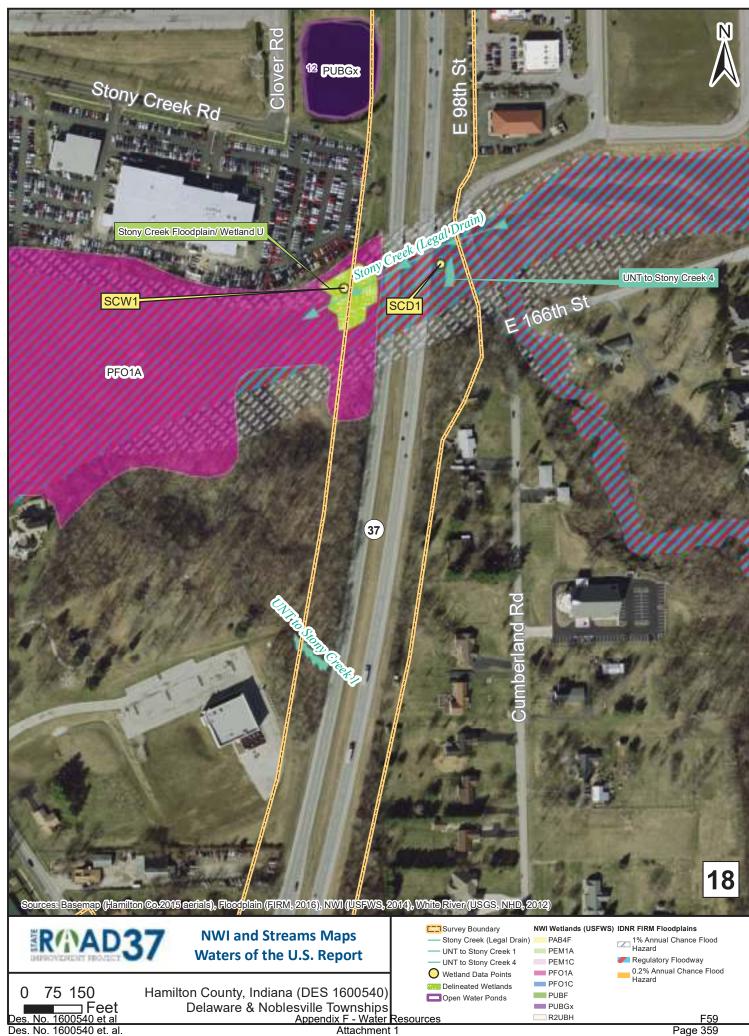




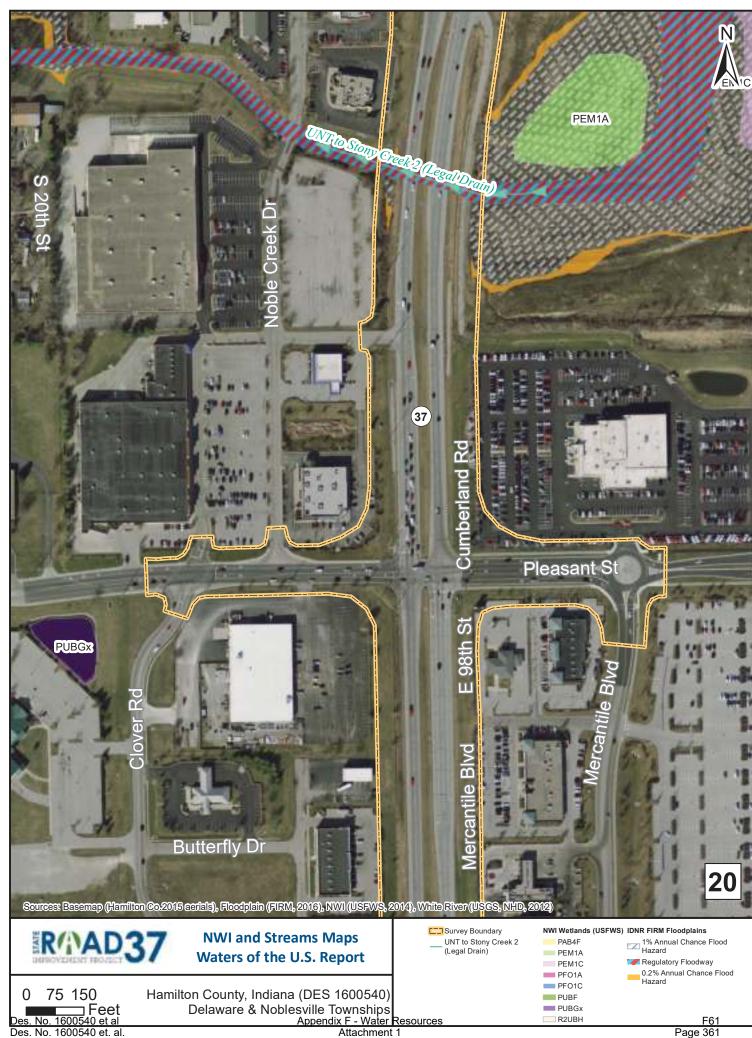


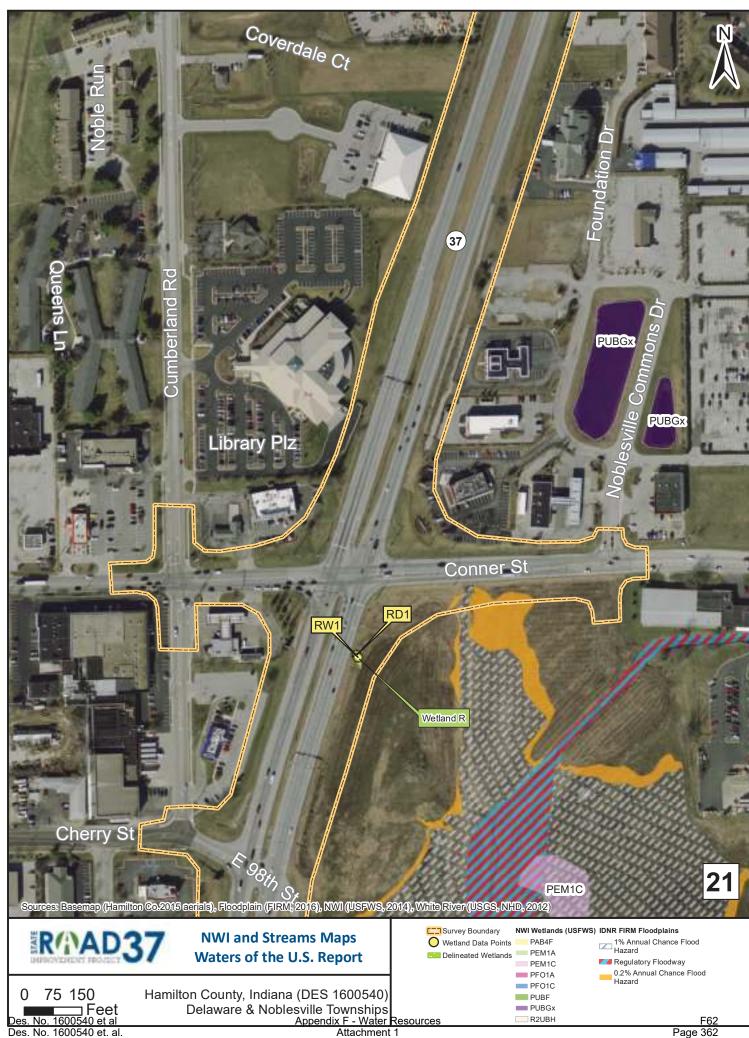




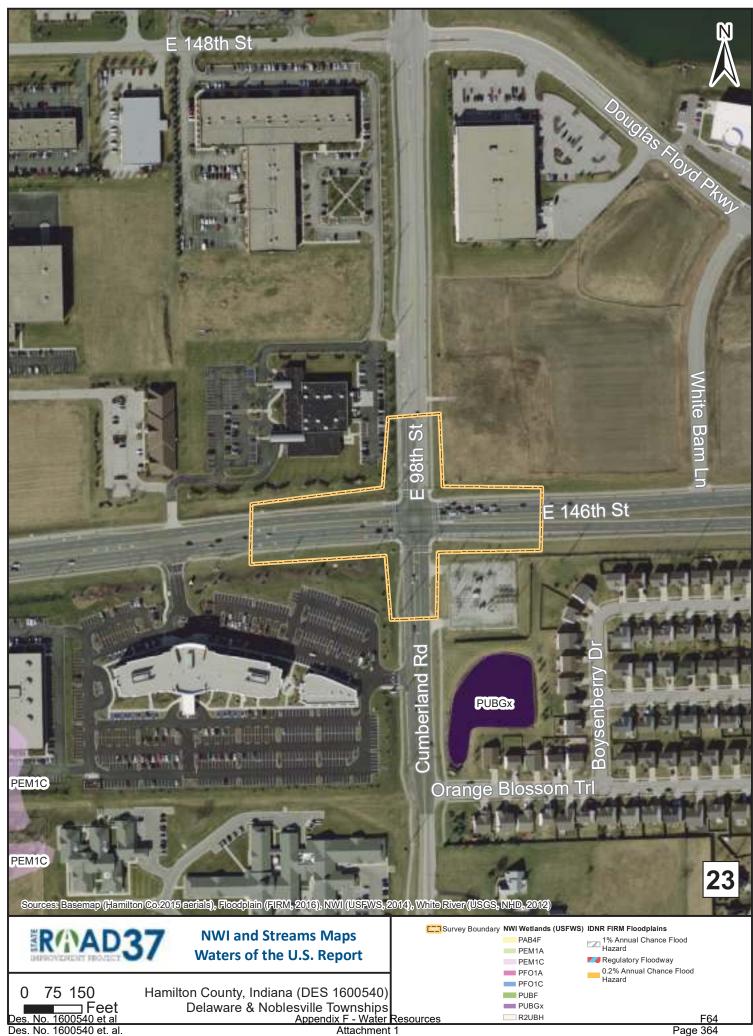


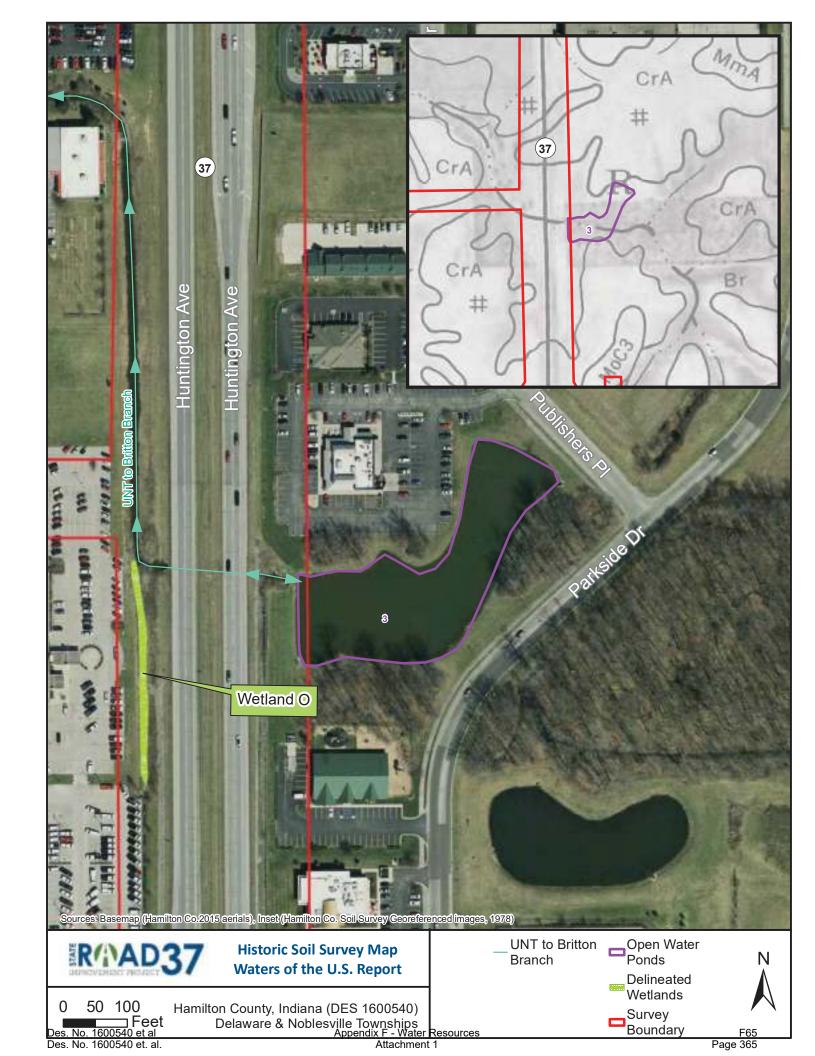


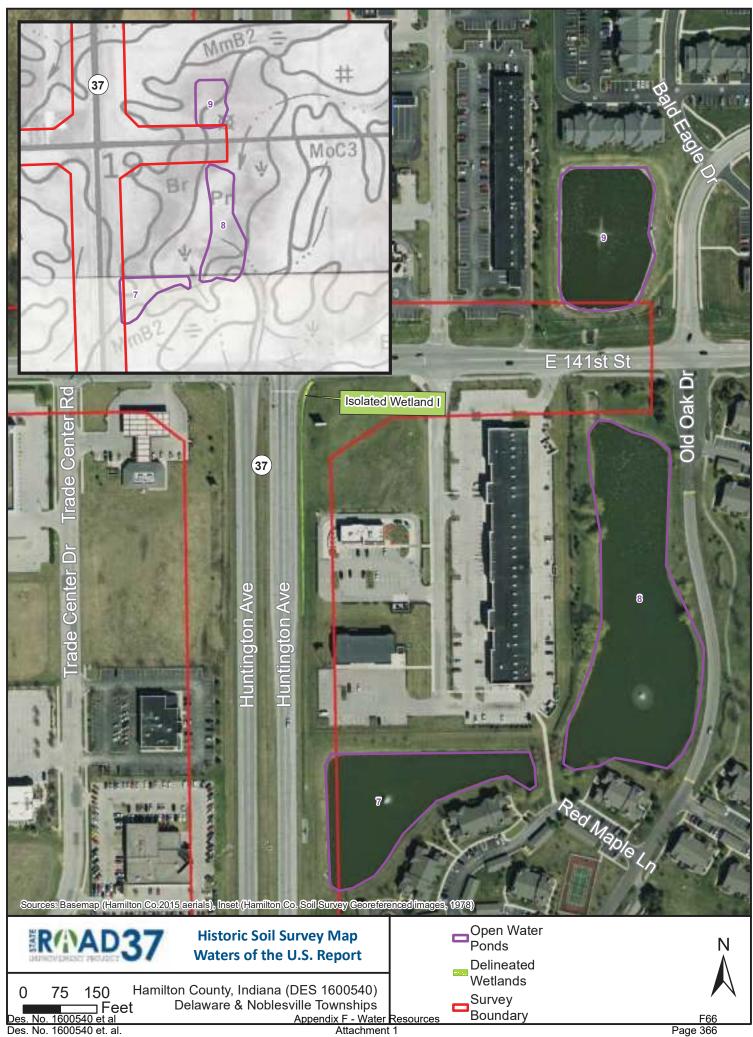




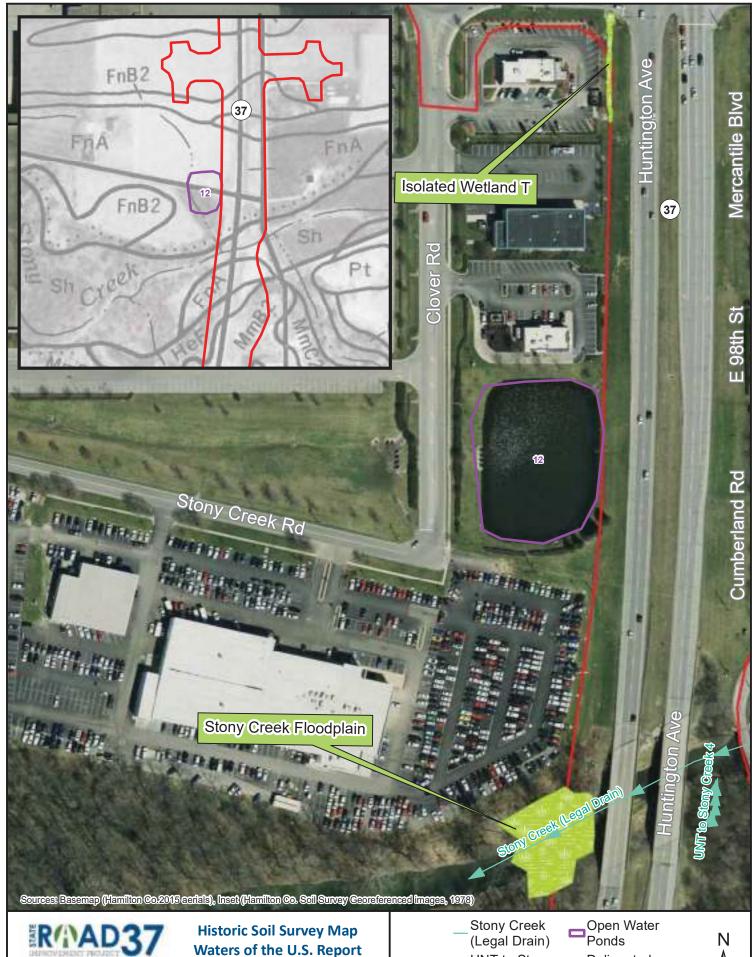












50 100 Feet Des. No. 1600540 et al Des. No. 1600540 et. al.

Hamilton County, Indiana (DES 1600540)

Delaware & Noblesville Townships

Appendix F - Water Resources

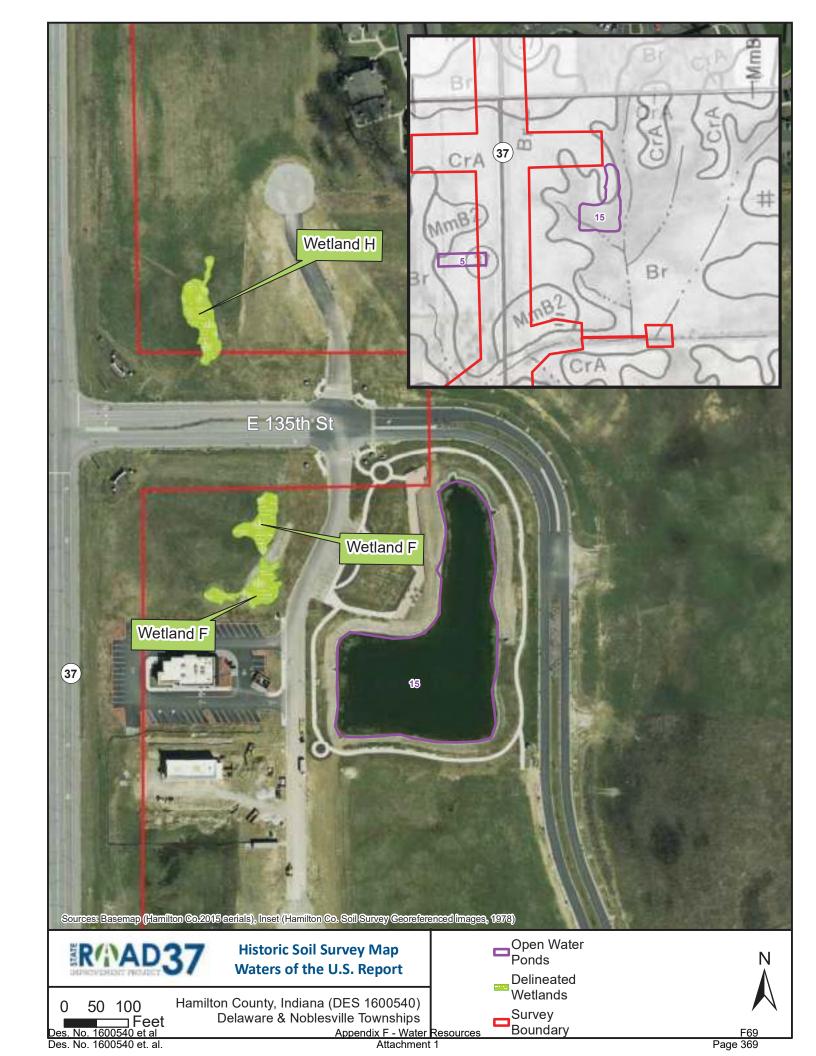
Attachment 1

UNT to Stony Creek 4

Delineated Wetlands

Survey Boundary







## Waters of the U.S. Determination Report

## **Appendix C**

**Photographs** 



(317)595-3737

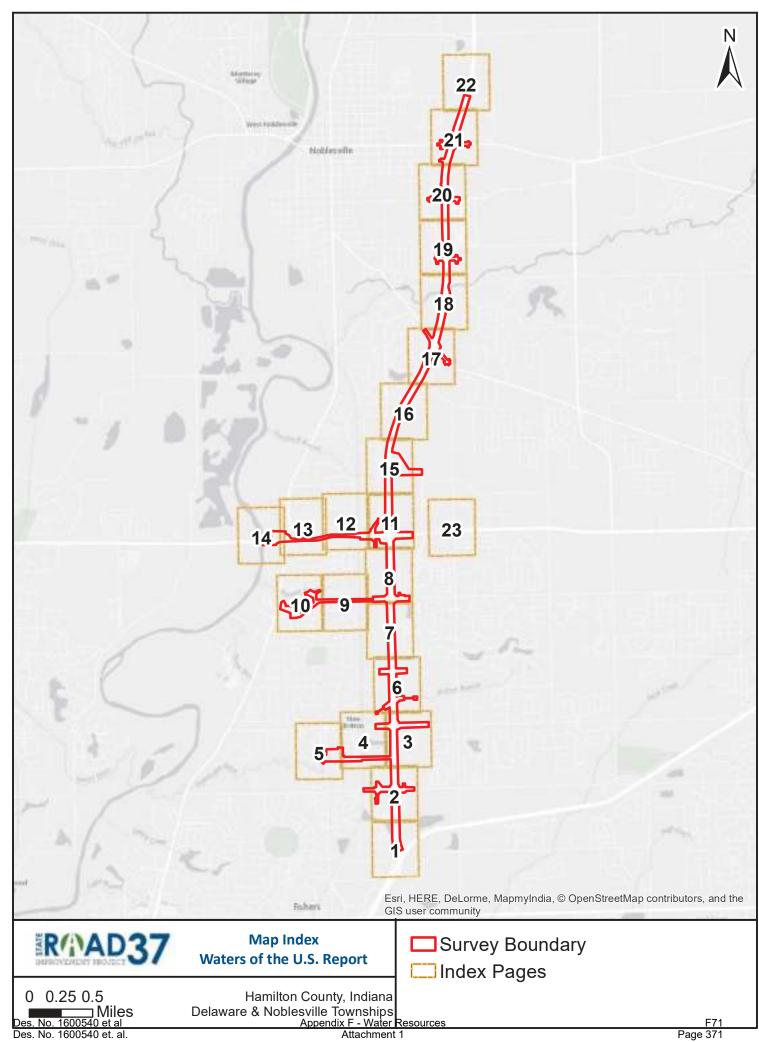
SR37@fishers.in.us

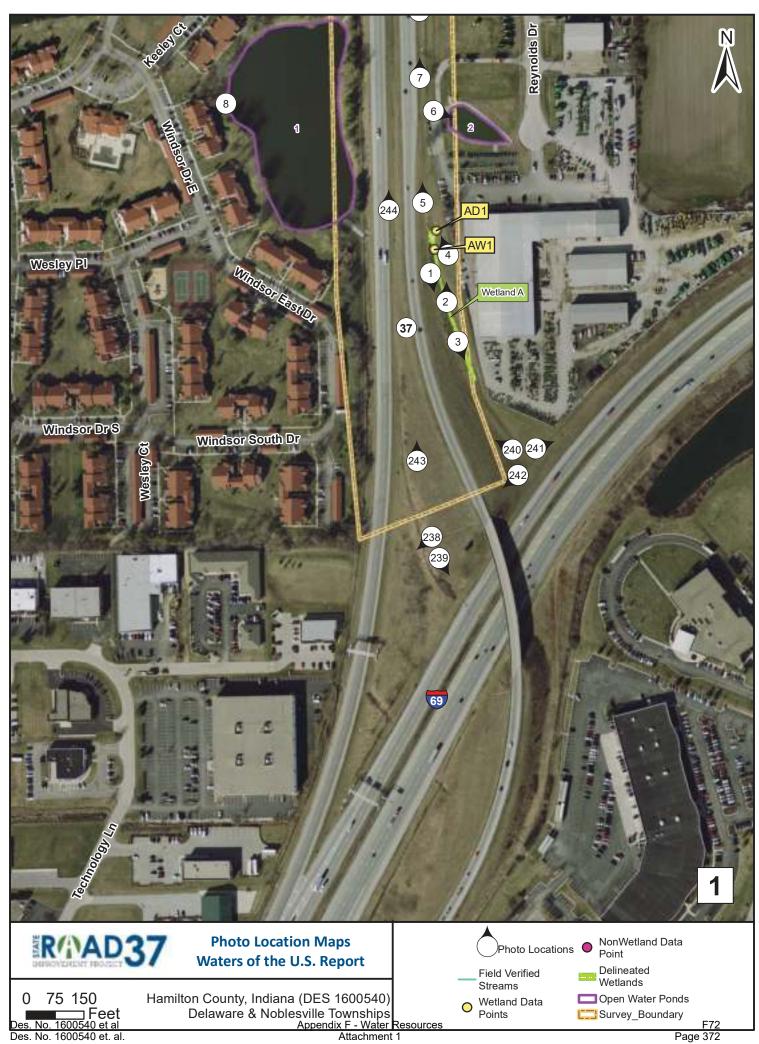
www.fishers.in.us/sr37.

@ OriveFishers

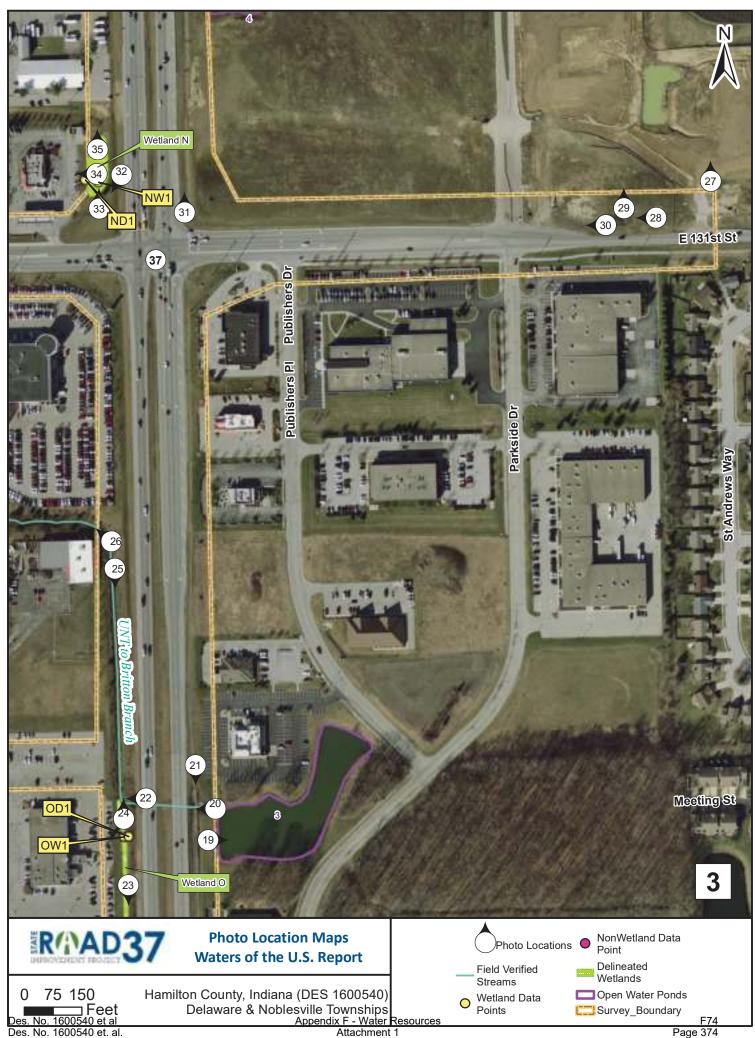
One Municipal Drive
 Fishers, Indiana 46038

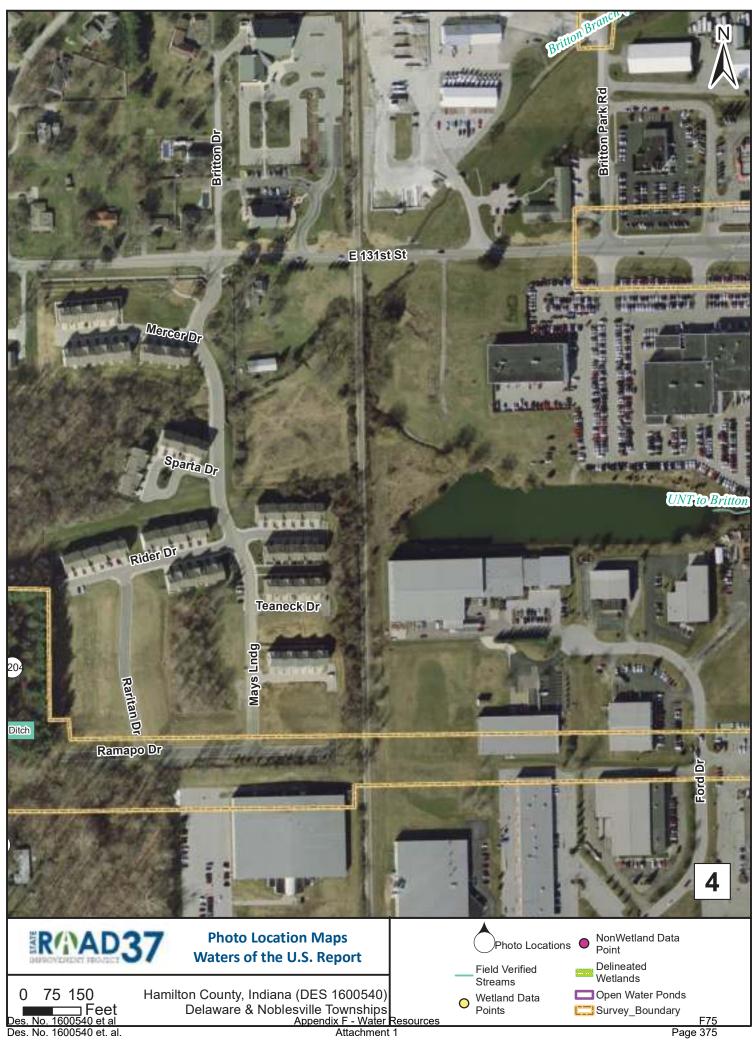
Des. No. 1600540 et al Des. No. 1600540 et. al.



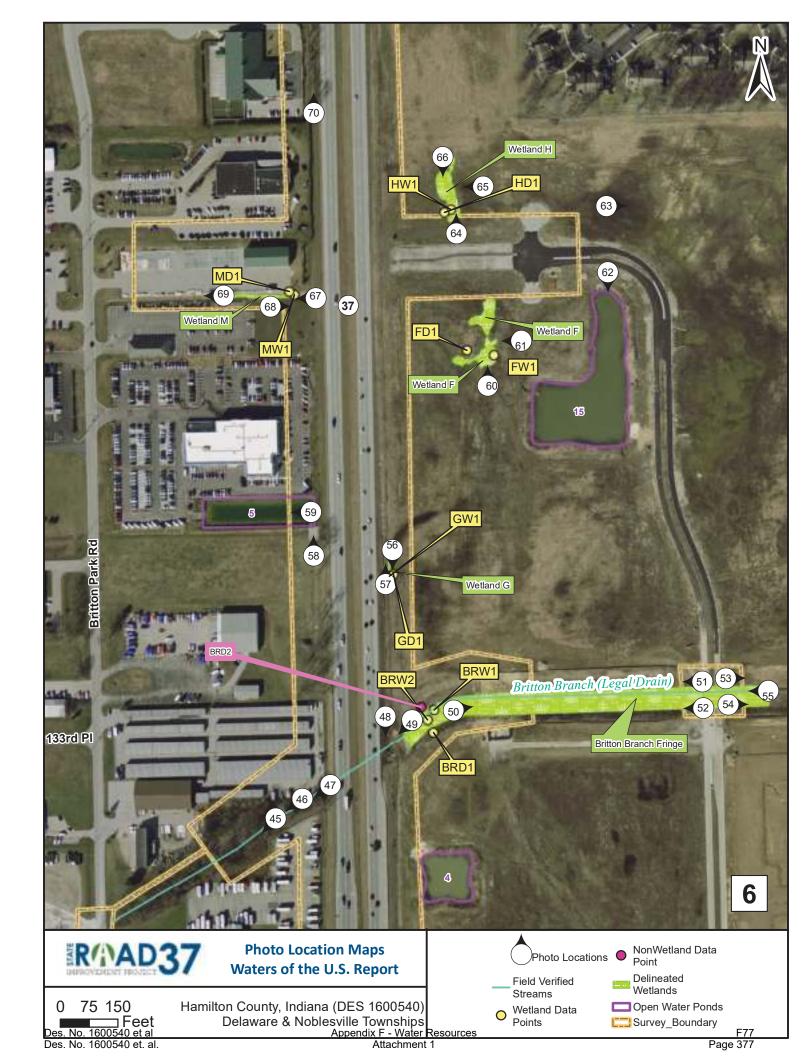






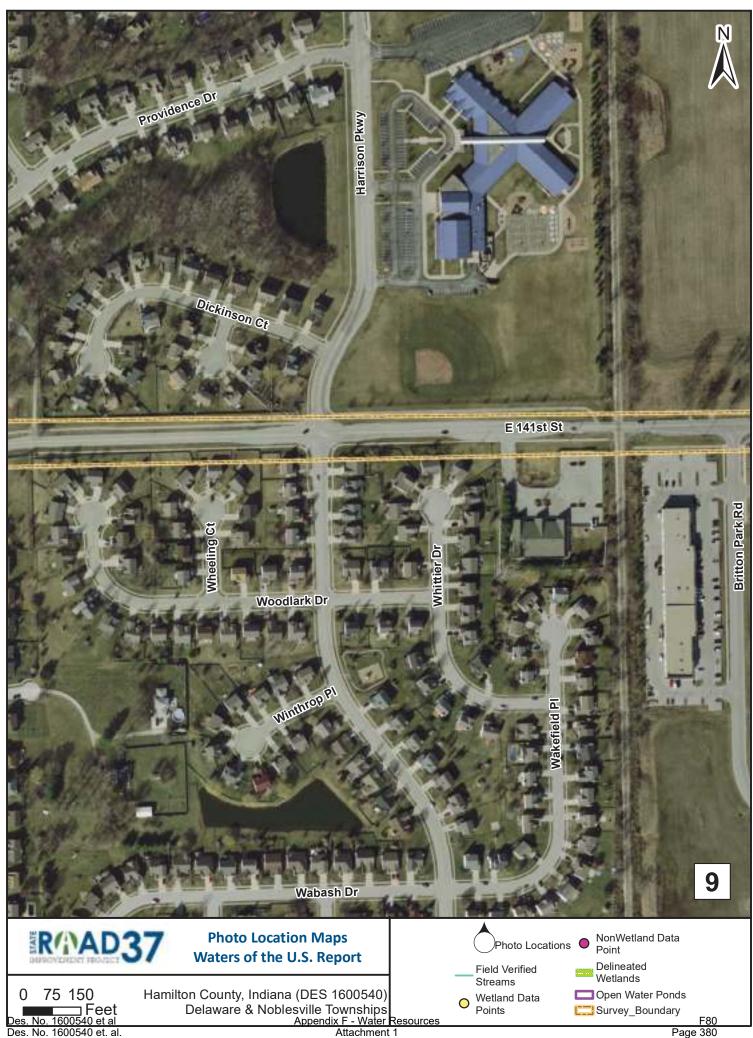
































Attachment 1

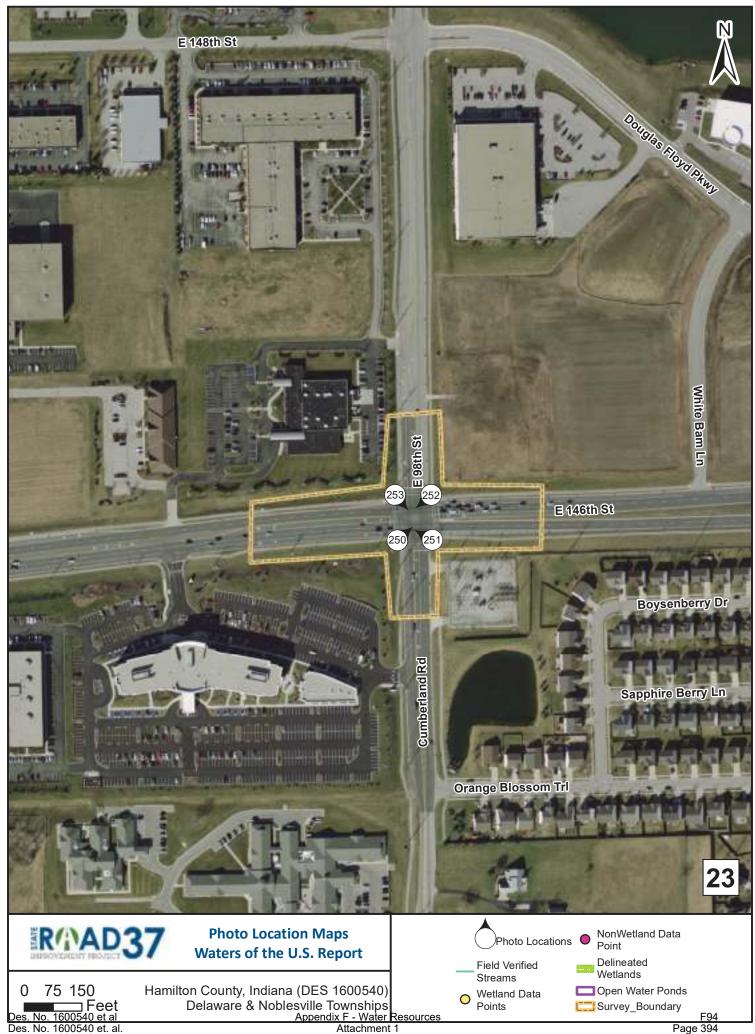




Page 392 Attachment 1



Page 393





1. Looking south on the east side of SR 37 towards Wetland A.



2. Looking north within Wetland A.



3. Looking southeast within Wetland A.



4. Looking north on the east side of SR 37 towards Wetland A.



5. Looking north up SR 37 ROW.



6. Looking east at storm water pond 2 adjacent to Reynolds Farm Equipment.



7. Looking north on SR 37 ROW. Inundation in the ditches due to storm water.



8. Looking southeast at retention pond 1.



9. Looking south on the east side of SR 37 at plot Bw1.



10. Looking north from culvert on the east side of SR 37 at plot Bw1.



11. Looking northeast at water ponding within ditch at intersection of SR 37 and 126th St.



12. Looking east at Wetland C.



13. Looking south at Wetland C.



14. Looking west at Wetland C.



15. Looking south at Wetland D.



16. Looking north at Wetland D.



17. Looking south on SR 37 ROW. Water in the ditch is due to storm water, and no OHWM was observed; channel is completely riprap.



18. Looking north on SR 37 ROW. Flowing water resulting from storm water event.



19. Looking east at retention pond 3.



20. Looking west at storm water outflow from retention pond through 8-foot diameter culvert under SR 37.



21. Looking south down SR 37 ROW towards culvert.



22. Looking west at culvert outlet to UNT to Britton Branch.



23. Looking south towards Wetland O.



24. Looking north towards Wetland O and UNT to Britton Branch.



25. Looking south upstream UNT to Britton Branch.



26. Looking northwest downstream UNT to Britton Branch.



27. Looking north at retention pond.



28. Looking west at former wetland (now sidewalk).



29 (a). Looking north at wetland vegetation (now sidewalk).



29 (b). Looking north at wetland vegetation (now sidewalk).



30. Looking west down 131st St at construction of sidewalk.



31. Looking north up SR 37 ROW.



32. Looking southwest towards Wetland N.



33. Looking north towards Wetland N.



34. Looking west within Wetland N.



35. Looking north within Wetland N.



36. Looking south at UNT to Shoemaker Ditch flowing through small culvert.



37. Looking northwest at UNT to Shoemaker Ditch.



38. Looking northwest downstream UNT to Shoemaker Ditch.



39. Looking northwest downstream UNT to Shoemaker Ditch.



40. Looking east at convergence of Shoemaker Ditch and UNT to Shoemaker Ditch.



41. Looking north upstream Shoemaker Ditch.



42. Looking southwest downstream Shoemaker Ditch.



43. Looking west at riparian area.



44. Looking east at riparian area.



45. Looking southwest downstream Britton Branch.



46. Looking southwest downstream Britton Branch.



47. Looking southwest from culvert at Britton Branch.



48. Looking south at culvert that carries SR 37 over Britton Branch.



49. Looking southwest downstream Britton Branch towards SR 37 culvert.



50 (a). Looking east upstream Britton Branch fringe.



50 (b). Looking east upstream Britton Branch fringe.



51. Looking west downstream Britton Branch from under bridge.



52. Looking west downstream Britton Branch from bridge deck.



53. Looking east upstream Britton Branch under bridge.



54. Looking east upstream Britton Branch from bridge deck.



55. Looking west downstream Britton Branch.



56. Looking south on the east side of SR 37 within Wetland G.



57. Looking north on the east side of SR 37 within Wetland  ${\sf G}.$ 



58. Looking north at culvert outflow from retention pond 5.



59. Looking west at retention pond 5 adjacent to Ed Martin Nissan.



60. Looking north at Wetland F.



61. Looking west at Wetland F.



62. Looking south at retention pond 15.



63. Looking east at fallow field.



64. Looking north at Wetland H.



65. Looking west at Wetland H.



66. Looking south at Wetland H.



67. Looking west at Wetland M.



68. Looking east from Wetland M.



69. Looking west at culvert leading into Wetland M.



70. Looking north up SR 37 ROW.



71. Looking north at open water pond 6 and fringe wetland.



72. Looking south down SR 37 ROW from Wetland L.



73. Looking east at roadside slope from Wetland L.



74. Looking northwest at Wetland L from roadside.



75. Looking north within Wetland L.



76. Looking east at retention pond 7.



77. Looking south on the west side of SR 37 ROW.



78. Looking north on the west side SR 37 ROW.



79. Looking northeast at Wetland I from SR 37.



80. Looking south at retention pond 8.



81. Looking north at retention pond 9.



82. Looking north within fallow field.



83. Looking north at roadside ditch riprap channel on the east side of SR 37.



84. Looking south down drainage pattern south of Wetland J.



85. Looking north up drainage pattern to Wetland J.



86. Looking north at Wetland J from storm water outlet.



87. Looking west at storm water outlet.



88. Looking west towards pond 14 from Wetland J.



89. Looking east towards Wetland J from pond 14.



90. Looking south at pond 14.



91. Looking northwest downstream UNT to Weaver Creek.



92. Looking southeast upstream UNT to Weaver Creek.



93. Looking northwest downstream UNT to Weaver Creek.



94. Looking east down drainage swale.



95. Looking west down drainage swale.



96. Looking south up drainage swale.



97. Looking north at culvert inlet.



98. Looking west within Weaver Creek floodplain.



99. Looking north within Weaver Creek floodplain.



100. Looking east within Weaver Creek floodplain.



101. Looking south within Weaver Creek floodplain.



102. Looking west downstream Weaver Creek.



103. Looking east upstream Weaver Creek.



104. Looking northeast at southern lobe of Wetland J.



105. Looking south at Wetland J within Circle K parking lot.



106. Looking northwest within Wetland J.



107. Looking east at Wetland J.



108. Looking west at extension of Wetland J west of Noblesville Crossing business district entrance.



109. Looking east at western extent of Wetland J.



110. Looking northeast at storm water ponding.



111. Looking north at riprap ditch.



112. Looking south at storm water ponding in riprap ditch.



113. Looking south at riprap ditch at confluence of 3 culverts. Hydrophytes mowed recently. Only 2 inches of mucky sediment.



114. Looking north up SR 37 ROW within riprap ditch.



115. Looking southwest at Wetland P.



116. Looking southeast at Wetland P.



117. Looking south at Wetland P shrub scrub component.



118. Looking south at culvert under SR 37.



119. Looking west at 16-inch diameter culvert under SR 37 that likely drains into Wetland P.



120. Looking south at retention pond 10.



121. Looking north at Wetland K.



122. Looking north towards small storm water ponding area. No soil indicators exist as cattails are growing directly out of riprap.



123. Looking west downstream Overdorff Branch.



124. Looking east upstream Overdorff Branch towards SR 37 culvert.



125. Looking south at Overdorff Branch.



126. Looking west downstream Overdorff Branch towards SR 37.



127. Looking south upstream Overdorff Branch east of SR 37.



128. Looking east at retention pond 11.



129. Looking east at concrete culvert draining retention pond 11.



130. Looking south upstream UNT to Overdorff Branch fringe.



131. Looking north downstream UNT to Overdorff Branch fringe.



132. Looking south downstream UNT to Overdorff Branch.



133. Looking east upstream UNT to Overdorff Branch.



134. Looking northwest at culvert carrying SR 37 over UNT to Overdorff Branch.



135. Looking east at upstream UNT to Overdorff Branch.



136. Looking north at retention pond 16.



137. Looking west towards culverts under SR 37.



138. Looking north at culvert flow path to ponding area.



139. Looking west at ephemeral ponding area within forested area.



140. Looking east at vernal ponding area within forested area.



141. Looking south at SR 37 ROW from Greenfield Ave intersection.



142. Looking north up SR 37 ROW from Greenfield Ave intersection.



143. Looking northwest downstream UNT to Stony Creek 1.



144. Looking southeast upstream UNT to Stony Creek 1.



145. Looking south on the east side of SR 37 ROW.



146. Looking north on the east side of SR 37 ROW. Hydrophytes are growing from 1.5 to 2 inches of muck within concrete ditch.



147. Looking southwest downstream Stony Creek.



148. Looking southwest downstream Stony Creek.



149. Looking east upstream Stony Creek under SR 37.



150. Looking west within mapped NWI wetland.



151. Looking east within mapped NWI wetland.



152. Looking west downstream Stony Creek under SR 37.



153. Looking east upstream Stony Creek.



154. Looking north downstream UNT to Stony Creek 4.



155. Looking south upstream UNT to Stony Creek 4.



156. Looking south towards Stony Creek from bridge.



157. Looking north on SR 37 ROW from bridge.



158. Looking north at retention pond 12.



159. Looking north at culvert that outlets to Wetland T.



160. Looking south down SR 37 ROW at Wetland T.



161. Looking west down Town & Country Blvd.



162. Looking north on SR 37 ROW at Wetland S.



163. Looking northwest at Wetland S.



164 (a). Looking east at retention pond 13.



164 (b). Looking east at retention pond 13.



165. Looking south down west side of SR 37 ROW from Pleasant St intersection.



166. Looking south down east side of SR 37 ROW from Pleasant St intersection.



167. Looking north at UNT to Stony Creek 2 floodplain.



168. Looking southeast at UNT to Stony Creek 2 flowline direction.



169. Looking northeast at UNT to Stony Creek 2 floodplain.



170. Looking west downstream UNT to Stoney Creek 2.



171. Looking east upstream UNT to Stony Creek 2 towards bridge over SR 37.



172. Looking east at SR 37 bridge over UNT to Stony Creek 2.



173. Looking east at UNT to Stony Creek 2.



174. Looking west towards structure carrying SR 37 over UNT to Stony Creek 2.



175. Looking south at bank of UNT to Stony Creek 2.



176. Looking northeast at floodplain of UNT to Stony Creek 2.



177. Looking north at excavated extension of UNT to Stoney Creek 2



178. Looking south at storm water culvert outlet into ditch.



179. Looking west at storm water culvert outlet from under SR 37 into roadside ditch.



180. Looking north down flowline channel roadside ditch east of SR 37.



181. Looking south down roadside drainage ditch.



182. Looking north up roadside drainage ditch.



183. Looking north at Wetland R.



184. Looking north at Wetland R.



185. Looking west at Wetland R.



186. Looking south down west side of SR 37 ROW.



187. Looking south at detention pond south of SR 32.



188. Looking north on SR 37 ROW.



189. Looking west at tributary outlet and inlet east of library.



190. Looking south down riprap ditch.



191. Looking south at hydric vegetation within riprap channel. Storm water fed via culvert drainage from parking lot.



192. Looking west at detention pond.



193. Looking north at wet drainage pattern within detention pond.



194. Looking south at wet drainage pattern within detention pond.



195. Looking north from north end of project on west side of SR 37.



196. Looking south from north end of project on west side of SR 37.



197. Looking north from north end of project on SR 37 median.



198. Looking south from north end of project on SR 37 median.



199. Looking north from north end of project on east side of SR 37.



200. Looking south from north end of project on east side of SR 37.



201. Looking east at open field (Map page 5)



202. Facing north west at Shoemaker ditch (Map page 5)



203. Facing west at Shoemaker ditch bank (Map Page 5)



204. Facing north at wooded area (Map page 5)



205. Facing west from Kensington Drive down 146 Street (Map Page 13)



206. Facing east down 146 street (Map page 13)



207. Facing northeast within wooded area north of 146 street (Map page 14)



208. Facing south within wooded area toward 146 street (Map page 14)



209. Facing west toward White River (Map page 14)



210. Facing north at White River (Map page 14)



211. Facing west on trail (Map page 14)



212. Facing southwest to floodplain to UNT to White River, UNT 2 to White River, and Wetland W



213. Facing west down 146 Street (Map Page 12)



214. Facing east toward railway (Map Page 12)



215. Facing west down 146 street (Map Page 12)



216. Facing east down 146 Street (Map Page 14)



217. Facing west within wooded area (Map Page 14)



218. Facing west toward White River bridge (Map Page 14)



219. Facing south at White River (Map page 14)



220. Facing east down 146 Street (Map page 13)



221. Facing west down 146 street (Map Page 13)



222. Facing east down 146 street (Map Page 12)



223. Facing north west at apartment complex detention pond (Map page 14)



224. Looking south upstream UNT to White River (Map page 14)



225. Looking north downstream UNT to White River (Map page 14)



226. Looking south within floodplain ponding area (Map page 14)



227. Looking west within floodplain, Wetland W in background (Map page 14)



228. Looking north upstream UNT to White River, UNT 2 to White River (Map page 14)



229. Looking east at levee wall in floodplain (Map page 14)



230. Looking east at 146 Bridge structures over White River (Map page 14)



231. Looking north at culvert draining to Wetland Y (Map page 14)



232. Looking southeast at Wetland Y from YW1 (Map page 14)



233. Looking north from YD1 (Map page 14)



234. Looking north at Data point WD1 (Map page 14)



235. Looking north upstream White River south of the bridge (Map page 14)



236. White River south of Bridge looking south



237. Looking east at Wetland X (Map page 14)



238. Looking south west to rip rap drainage feature



239. Looking south east to drainage feature
Appendix F - Water Resources
Attachment 1



240. Looking northwest, east of State Road 37 intersection with interstate 69



241. Looking north east south of I 69

Appendix F - Water Resources

Attachment 1



242. Looking south west to interchange



243. Looking north within State Road 37 median



244. Looking north within median



245. Looking North up Windsor Drive Appendix F - Water Resources Attachment 1



246. Looking south toward Sunlake Apartments from 126th Street



247. Looking west down 126th Street
Appendix F - Water Resources
Attachment 1



248. Looking east up 126th Street



249. Looking north up Ford Drive from 126th Street

Appendix F - Water Resources

Attachment 1

250. Looking northeast from intersection of Cumberland Road and 146 street



251. Looking north west from intersection of 146 Street and Cumberland Road Des. No. 1600540 et al Des. No. 1600540 et. al.

Appendix F - Water Resources Attachment 1



252. Looking Southwest from intersection of 146 and Cumberland Road



253. Looking south east from intersection of 146 and Cumberland Road
tal Appendix F - Water Resources
t. al. Attachment 1



254. Looking north within agricultural field



255. Looking Northwest with an agricultural field towards State Road 37

Appendix F - Water Resources
Attachment 1



256. Looking east within agricultural field



257. Looking west to retention basin Appendix F - Water Resources Attachment 1



258. Looking south down Road



259. Looking north to agricultural field

Appendix F - Water Resources

Attachment 1



## Waters of the U.S. Determination Report

# **Appendix D**

**Data Sheets** 

Removed to minimize file size



(317)595-3737

SR37@fishers.in.us

www.fishers.in.us/sr37

② @ DriveFishers

One Municipal Drive Fishers, Indiana 46038



## Waters of the U.S. Determination Report

# **Appendix E**

Agency Meeting Minutes (October 27, 2016)



(317)595-3737

SR37@fishers.in.us

Des. No. 1600540 et al Des. No. 1600540 et. al. www.fishers.in.us/sr37.

② @ DriveFishers

One Municipal Drive
 Fishers, Indiana 46038



## **MEETING MINUTES**

## SR 37 Improvement Project Resource Agency Meeting

Launch Fishers October 27, 2016 at 8:30 a.m. EDT

Attendee	Organization
Deb Snyder	U.S. Army Corps of Engineers (USACE)
Sara Mundy	USACE
J. Turner	Indiana Department of Environmental Management (IDEM)
Janelle Kozelichki	IDEM
Joe Dabkowski	RQAW
Jeremy Kieffner	Lochmueller Group
Kia Gillette	Lochmueller Group
Kate Lucier	Lochmueller Group

#### Introductions/Purpose of the Meeting I.

- Lochmueller Group opened the meeting and thanked meeting participants for attending. The purpose of the meeting was to review water resources in the field with USACE and IDEM in order to determine their jurisdictional status.
- Meeting participants introduced themselves.
- Water resource features are discussed below in the order they were reviewed in the field.

#### II. **Wetland C**

- Wetland C is a 0.034-acre feature with emergent wetland vegetation within a storm water retention basin. It is located east of SR 37 and south of 126<sup>th</sup> Street.
- This feature falls under the exemption for storm water and is not considered jurisdictional by USACE. It is considered an isolated wetland by IDEM; however, it is considered exempt due to being a manmade drainage control structure.
- Feature will be called "Isolated Wetland C" in the Waters of the US Determination Report and will not be included on the pre-Jurisdictional Determination (JD) form.

#### III. Wetland D

- Wetland D is a 0.039-acre feature with emergent vegetation immediately east of a business access drive and south of 126th Street.
- Wetland D eventually connects to Britton Branch via non-jurisdictional storm water connections. Wetland D is considered jurisdictional by both USACE and IDEM because the non-jurisdictional storm water connections provide a significant nexus to this emergent wetland.

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Wetland D will continue to be referred to as "Wetland D" in the Waters of the US Determination Report and will be included on the pre-JD form.

#### IV. Wetland A

- Wetland A is a 0.09-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and north of the I-69 interchange.
- Wetland A is located within soils with hydric inclusions and the wetland vegetation is limited to the roadside ditch. USACE considers this a ditch and will not take jurisdiction over this feature.
- IDEM will take jurisdiction over this feature because it is located within a mapped soil with hydric inclusions. It may be considered exempt under the state isolated wetlands law based on classification and size.
- Wetland A will now be referred to as "Isolated Wetland A" and will not be included on the pre-JD form.

#### ٧. **Wetland B**

- Wetland B is a 0.004-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and north of the I-69 interchange.
- Wetland B is not located in a mapped hydric soil and is limited to the roadside ditch. It is considered an incidental feature within a ditch and will not be considered jurisdictional by USACE. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.
- Wetland B will now be referred to as "Isolated Wetland B" and will not be included on the pre-JD form.

## Rip Rap Lined Roadside Ditch on East Side of SR 37 from 126th Street to a UNT to Britton VI.

- This riprap lined roadside ditch runs along the east side of SR 37 from 126<sup>th</sup> Street north to an UNT to Britton Branch. It was not determined to be a historic captured stream channel and is not located within any hydric soils.
- The rip rap lined roadside ditch receives flow mainly from storm water.
- The rip rap lined roadside ditch along the east side of SR 37 is considered a roadside ditch and not a captured channel. USACE and IDEM will not take jurisdiction over this feature. It will not be included on the Waters of the US Determination Report mapping or on the pre-JD form.

#### VII. **UNT to Britton Branch/Pond 3**

- Pond 3 is a retention pond that contributes flow to an UNT to Britton Branch that flows beneath SR 37 from east to west via a corrugated metal pipe (CMP).
- Historical aerial photos and the Hamilton County Soils Survey (1978) indicate that Pond 3 captures drainage and would be considered "in-line detention"
- UNT to Britton Branch is a stream feature that flows from Pond 3 under SR 37 to the west. This UNT also contributes flow to Britton Branch which in turn flows to the White River, a traditionally navigable water (TNW).

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USACE and IDEM will take jurisdiction over this feature. It will be included on the Waters of the US Determination Report mapping or on the pre-JD form and these features will be referred to as "UNT to Britton Branch" and "Pond 3".

#### Wetland E VIII.

- Wetland E was a 0.047-acre feature in a roadside ditch north of 131st Street. Wetland E was an incidental feature in the located within an excavated area for sidewalk construction. It has since been completely filled in by a recent sidewalk/bike trail project and is no longer considered a wetland.
- Wetland E will be removed from the Waters of the US Determination Report maps and will not be included on the pre-JD form.

#### IX. Wetland G

- Wetland G is a 0.008-acre feature with emergent vegetation in a roadside ditch east of SR 37 and north of Britton Branch.
- Wetland G does not extend outside of the ditch and it is not located within any mapped hydric soils. USACE considers this area as a ditch and the wetland vegetation is a result of an incidental feature on the landscape and will not be taking jurisdiction over this ditch. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.
- Wetland G will now be referred to as "Isolated Wetland G" and will not be included on the pre-JD form.

#### X. **Britton Branch**

- SR 37 crosses Britton Branch north of 131st Street and south of 135th Street. Britton Branch is classified as a legal drain in Hamilton County.
- Cattails are growing along both sides of Britton Branch as a vegetated fringe above the ordinary high water mark (OHWM), within the bankfull width. USACE and IDEM requested additional wetland sample plots on both sides of the OHWM limits of the creek to determine whether these cattails indicate wetland conditions are present.
- Data points were also requested on the left bank shelf of Britton Branch to document if wetland conditions are present on that side of the stream.
- Results of the added data points and wetland fringe will be added to the Waters of the US Determination Report and the pre-JD form.

#### XI. Wetland F

- Wetland F is a 0.159 acre feature with emergent wetland vegetation east of SR 37 and south of 135th Street.
- USACE jurisdiction will be assumed and Wetland F will be included on the pre-JD form.

#### XII. Wetland H

- Wetland H is a 0.116 acre feature with emergent wetland vegetation east of SR 37 and north of 135<sup>th</sup> Street.
- USACE jurisdiction will be assumed and Wetland H will be included on the pre-JD form.

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### XIII. Pond 6

- Pond 6 is east of SR 37 and north of 135<sup>th</sup> Street.
- It appears to be a farm pond and USACE would not take jurisdiction over a farm pond. If available, historic aerial photos should be reviewed to determine if the pond was associated with a farm.
- Emergent wetland vegetation is growing in the pond and in some areas as a fringe above the bank. Both USACE and IDEM requested that wetland data points be taken in these areas and wetlands along the fringe added if they meet the wetland criteria.
- If determined to be a farm pond and there are not wetlands on the fringe of the pond, USACE will not take jurisdiction; however, IDEM may take Pond 6 as an isolated wetland feature.

## XIV. Ponds 7, 8 & 9

- Ponds 7, 8 & 9 are east of SR 37 and on both the south and north sides of 141st Street.
- These 3 ponds are connected and flow likely continues via pipes and detention ponds to Shoemaker Ditch.
- USACE and IDEM recommended a review of historic soil survey maps to determine if
  these ponds were in-stream detention or if they were constructed solely for detention.
  If the ponds convey historic channels, the USACE will take jurisdiction and these ponds
  will be included on the pre-JD form.

## XV. Wetland I

- Wetland I is a 0.03-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and south of 146<sup>th</sup> Street.
- Wetland I does not extend outside of the ditch and is not located in a mapped hydric soils. USACE considers this area as a ditch and the wetland vegetation is a result of an incidental feature on the landscape and will not be taking jurisdiction over this ditch. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.
- Wetland I will now be referred to as "Isolated Wetland I" and will not be included on the pre-JD form.

## XVI. UNT to Overdorff Branch

- UNT to Overdorff Branch is located east of SR 37 and north of 146<sup>th</sup> Street.
- The UNT appears to have been recently channelized and there is emergent wetland vegetation growing on the stream banks.
- USACE and IDEM requested that a data point be taken along the vegetated fringe to see if wetland conditions are present.
- If this area meets the wetland criteria, it is assumed that both the USACE and IDEM will
  take jurisdiction of this wetland and it will be included in the Waters of the US
  Determination Report and on the pre-JD form.
- West of SR 37, the UNT to Overdorff Branch is primarily a natural channel. This feature is assumed to be jurisdictional and will be regulated by the USACE and IDEM.



### XVII. Wetland R

- Wetland R is a 0.009-acre feature with emergent wetland vegetation in a roadside ditch east of SR 37 and south of SR 32.
- Wetland R does not extend outside of the ditch and is not located within a mapped hydric soil. USACE considers this area as a ditch and the wetland vegetation is a result of an incidental feature on the landscape and will not be taking jurisdiction over this ditch. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.
- Wetland R will now be referred to as "Isolated Wetland R" and will not be included on the pre-JD form.

## XVIII. UNT to Stony Creek 3

- The UNT to Stony Creek 3 is a roadside ditch that runs along the east side of SR 37 from approximately SR 32 south to a UNT of Stony Creek.
- UNT to Stony Creek 3 is not likely a relocated tributary and receives flow largely from storm water runoff.
- Both USACE and IDEM consider the UNT to Stony Creek 3 as a roadside ditch and not a
  captured channel. USACE and IDEM will not take jurisdiction over this feature. This
  feature will not be included on the Waters of the US Determination Report mapping or
  on the pre-JD form.

## XIX. Wetland S

- Wetland S is a 0.102-acre feature with emergent vegetation in a roadside ditch west of SR 37 and north of Town & Country Boulevard.
- Wetland S does not extend outside of the ditch and is not located within a mapped hydric soil. USACE considers this area as a ditch and the wetland vegetation is a result of an incidental feature on the landscape and will not be taking jurisdiction over this ditch. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.
- Wetland S will now be referred to as "Isolated Wetland S" and will not be included on the pre-JD form.

## XX. Wetland T

- Wetland T is a 0.031-acre feature that at the time of survey (July 2016) contained emergent wetland vegetation. During this field visit, this feature did not contain wetland vegetation. Wetland T was mapped in a roadside ditch west of SR 37 and south of Town & Country Boulevard.
- Wetland T does not extend outside of the ditch and is not located within a mapped hydric soil. USACE considers this area as a ditch and the wetland vegetation is a result of an incidental feature on the landscape and will not be taking jurisdiction over this ditch. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.

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Wetland T will now be referred to as "Isolated Wetland T" and will not be included on the pre-JD form.

#### XXI. Wetland U

- Wetland U is a >0.375-acre feature with woody and emergent wetland vegetation in the Stony Creek floodplain west of SR 37 and north of Stony Creek.
- Wetland U is adjacent to Stony Creek. It will be considered jurisdictional by USACE and included on the pre-JD form.

#### XXII. Wetland P

- Wetland P is a 0.18-acre feature with emergent wetland vegetation within a storm water retention basin. It is located west of SR 37 and north of 146<sup>th</sup> Street.
- This feature falls under the exemption for storm water and is not considered jurisdictional by USACE. It is considered an isolated wetland by IDEM; however, it is considered exempt due to being a manmade drainage control structure.
- Feature will be called "Isolated Wetland P" in the Waters of the US Determination Report and will not be included on the pre-JD form.

#### XXIII. Wetland J/ Pond 14

- Wetland J is a 0.256-acre feature with emergent and scrub/shrub wetland vegetation within a storm water retention basin. It is located west of SR 37 and south of 146th Street.
- This feature falls under the exemption for storm water and is not considered jurisdictional by USACE. It is considered an isolated wetland by IDEM; however, it is considered exempt due to being a manmade drainage control structure.
- Pond 14 is located at the southern boundary of Wetland J and receives flow from Wetland J via culvert conveyance from east to west.
- This feature falls under the exemption for storm water and is not considered jurisdictional by either agency. Feature will be called "Isolated Wetland J" in the Waters of the US Determination Report and will not be included on the pre-JD form.

#### XXIV. Wetland K

- Wetland K is a 0.003-acre feature with emergent wetland vegetation within a railroad ditch. It is located west of SR 37 and south of 146th Street, and is immediately east of the railroad.
- Wetland K was not reviewed in the field and is just outside of the survey area. It does not extend outside of the railroad ditch. USACE is anticipated to consider this a ditch based on other similar areas reviewed previously and will not take jurisdiction over this feature. It would likely be considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a railroad ditch.
- Feature will be called "Isolated Wetland K" in the Waters of the US Determination Report and will not be included on the pre-JD form.

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#### XXV. Wetland L

- Wetland L is a 0.091-acre feature with emergent wetland vegetation in a roadside ditch west of SR 37 and north of 135<sup>th</sup> Street.
- Wetland L is located within soils with hydric inclusions and the wetland vegetation is limited to the roadside ditch. USACE considers this a ditch and will not take jurisdiction over this feature.
- IDEM will take jurisdiction over this feature because it is located within a mapped soil with hydric inclusions. It may be considered exempt under the state isolated wetlands law based on classification and size.
- Wetland L will now be referred to as "Isolated Wetland L" and will not be included on the pre-JD form.

#### XXVI. Wetland M

- Wetland M is a 0.038-acre feature with emergent wetland vegetation in a roadside ditch west of SR 37 and south of 135<sup>th</sup> Street.
- Wetland M does not extend outside of the ditch and is not located within a mapped hydric soils. USACE considers this area as a ditch and the wetland vegetation is a result of an incidental feature on the landscape and will not be taking jurisdiction over this ditch. It is considered an isolated wetland by IDEM; however, it is likely exempt due to being an incidental feature within a roadside ditch.
- Wetland M will now be referred to as "Isolated Wetland M" and will not be included on the pre-JD form.

#### XXVII. Wetland N

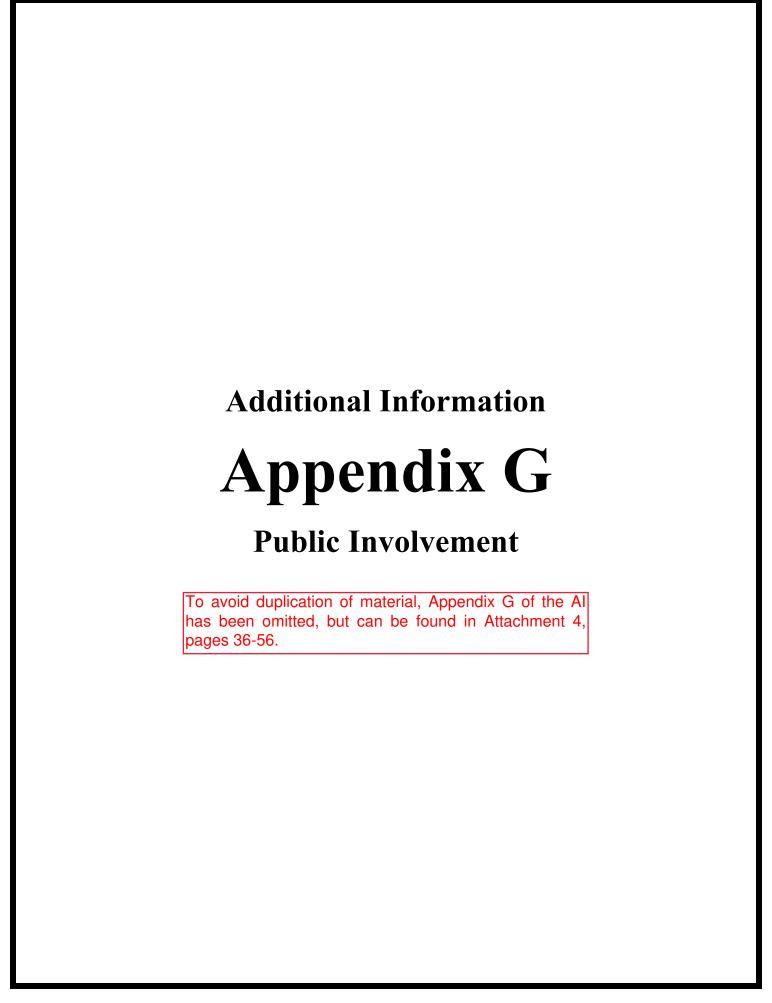
- Wetland N is a 0.158-acre feature with emergent wetland vegetation within a storm water retention basin. It is located west of SR 37 and north of 131st Street.
- This feature falls under the exemption for storm water and is not considered jurisdictional by USACE. It is considered an isolated wetland by IDEM; however, it is considered exempt due to being a manmade drainage control structure.
- Feature will be called "Isolated Wetland N" in the Waters of the US Determination Report and will not be included on the pre-JD form.

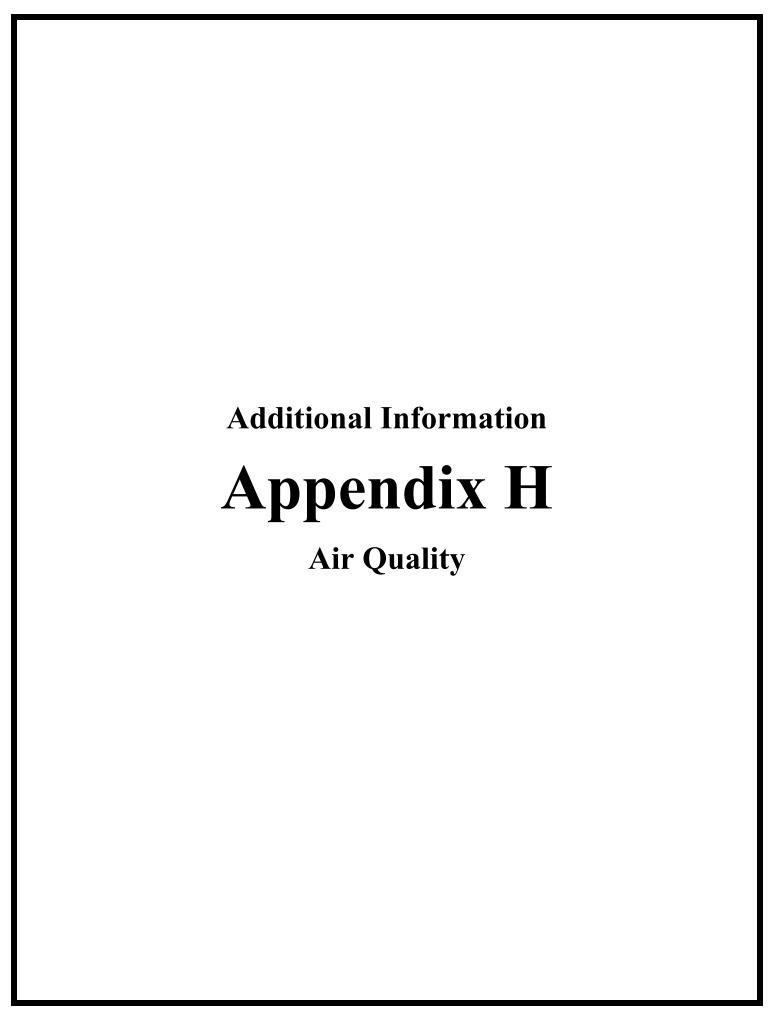
#### XXVIII. Wetland O/UNT to Britton Branch

- Wetland O is a 0.093-acre linear feature with emergent wetland vegetation located west of SR 37 and north of 126<sup>th</sup> Street.
- Wetland O flows directly into a UNT to Britton Branch.
- Wetland O is considered jurisdictional by USACE and will be included on the pre-JD form.
- Wetland vegetation is growing along the edges of the UNT to Britton Branch. Both USACE and IDEM requested data points at this location to determine if there may be a wetlands along the banks of the stream.
- If wetland fringes are determined along the stream channel, the areas will be included in the Waters of the US Determination Report and added to the pre-JD form.

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State Preservation and Local Initiated Projects FY 2018 - 2021

	tion and Loc	cal Initiat		cts FY 2018 - 2021													
PONSOR	CONTR ACT#/	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
	LEAD DES								Complete Project*								
	39233 / 1600896	A 10	SR 32	Small Structure Replacement	1.113 mi E of US 31	Greenfield		0 NHPP	\$200,000.00	Bridge Consulting	PE	\$80,000.00	\$20,000.00	\$100,000.00			
		Comments	I : Indianapo	lis Metropolitan Planning	Organization, Indianapolis Regional	Transportation Council	Policy Com		 umber 17-IMPO-012,	approved 25 Octobe	er 2017.						
	39233 / 1601967	A 10	SR 37	Small Structure Pipe Lining	2.922 miles N of I-69	Greenfield		0 NHS	\$15,000.00	Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000
				<u> </u>						Bridge Consulting	PE	\$4,000.00	(\$1,000.00)	\$5,000.00			
	((	Comments	: IMPO, Inc	dianapolis Regional Trans	portation Council Policy Committee,	Resolution Number 17-	IMPO-012,	approved 25 October	r 2017								
	39233 / 1601968		SR 37	Small Structure Pipe Lining	3.568 miles N of I-69	Greenfield		0 NHPP		Bridge Consulting	PE	\$3,200.00	(\$800.00)	\$4,000.00			
		<u> </u>		1						Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000
	(	Comments	: IMPO. Inc	dianapolis Regional Trans	portation Council Policy Committee,	Resolution Number 17-	IMPO-012.	approved 25 Octobe	r 2017								
	39237 / 1593110	Init.	1 465	Bridge Painting	EB over US 31	Greenfield		0 NHPP		Bridge Construction	CN	\$130,452.30	\$14,494.70		\$144,947.00		
	39237 / 1593111	Init.	I 465	Bridge Painting	WB over US 31	Greenfield		0 NHPP		Bridge Construction	CN	\$130,452.30	\$14,494.70		\$144,947.00		
	39288 / 1592544	A 06	SR 38	HMA Overlay Minor Structural	From 2.45 mi. W of SR 47 (Boone/Hamilton County Line) to SR 47	Greenfield	2.42	7 STP	\$120,000.00	Road Consulting	PE	\$96,000.00	\$24,000.00	\$120,000.00			
	(	Comments	: No MPO,	New 2022 project	in en n					<u> </u>	1					<u> </u>	
	39288 / 1601982	A 02	SR 47	Road Reconstruction (3R/4R Standards)	from the Boone/Hamilton Co Line to SR 38	Greenfield	1.62	2 STP	\$500,000.00	Road ROW	RW	\$80,000.00	\$20,000.00				\$100,000
		<u> </u>	<u> </u>	1	<u> </u>					Road Consulting	PE	\$320,000.00	\$80,000.00	\$400,000.00			
		Comments	: No MPO,	New 2022 project													
	39500 / 1592345	M 06	SR 37	New Interchange Construction	Intersection Improvement at 126th Street and SR 37	Greenfield		0 Multiple	\$15,484,500.00	Statewide Construction	(CN)	\$0.00	\$0.00		\$10,295,350.00	(\$10,295,350.0 0)	
		<u>. I</u>	l	<u> </u>			<u> </u>			100% Local Funds	CN	\$0.00	\$0.00		\$3,654,650.00	(\$3,654,650.00)	
										Statewide Consulting	(CN)	\$0.00	(\$0.00)		\$1,534,500.00	(\$1,534,500.00)	
		Comments		R Q1, 2018 ADMINISTRA	ATIVE 18-04.1 - Moved funds from F	Y 20 to FY 19. Year of	f <mark>unding</mark>										
	(r	upon local preference project dev	and														
	<u>r</u>	process process process		Now Interchange	Intersection Improvement at	Greenfield	1 1	0 STP		100%   000	(CN)	\$0.00	\$1,111,300.00			04 444 000 00	
	39500 / 1592346	l mite	31(37	New Interchange Construction	Intersection Improvement at 131st Street and SR 37	Orecinicia .				100% Local Funds		φυ.υυ	Ψ1,111,300.00			\$1,111,300.00	

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\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not

fiscally constrained and is for information purposes. No. 1600540 et al.

Appendix H - Air Quality

Attachment 1

OR	CONTR	STIP	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL	Estimated	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	20
		NAME	KOUIL	WORKTIFE	LOCATION	DISTRICT	WILLES	CATEGORY	Cost left to	FROGRAM	FIIASE	PEDERAL	WATCH	2018	2019	2020	20
	LEAD	IVAIIL						JOAN LOOK!	Complete								
	DES								Project*								
	39500 /	Init.	SR 37	New Interchange	Intersection Improvement at	Greenfield	(	0 STP		Statewide	CN	\$1,666,500.00	\$0.00			\$1,666,500.00	
	1592346			Construction	131st Street and SR 37					Consulting							
										Statewide	CN	\$14,378,700.00	\$0.00			\$14,378,700.00	
										Construction						ψ1 <del>4</del> ,576,766.00	
	39500 /	M 02		New Interchange	Intersection Improvement at	Greenfield	(	0 Multiple	\$14,208,000.0	Statewide Statewide	CN	-\$1,578,700.00	\$0.00	(	(\$1,578,700.00)		
	1592346			Construction	131st Street and SR 37					Construction							
										1000/ 1 1	CN	00.00	-\$1,111,300.00		(2.1.1.1.2.2.2.2.)		
										100% Local Funds	CN	<del>\$0.00</del>	-\$1,111,300.00		(\$1,111,300.00)		
										T unus							
										Statewide	CN	-\$258,500.00	\$0.00		(\$258,500.00)		
										Statewide Consulting							
	C	omments:	QUARTE	R Q3, 2017 ADMINISTRA	ATIVE 18-01.1 - revised funds. Redu	ced state funds and re	moved local	funds.									
	39500 /	Init.	SR 37	New Interchange	Intersection Improvement at	Greenfield	(	0 STP		100% Local	CN	\$0.00	\$714,500.00			\$714,500.00	
	1592348			Construction	141st Street and SR 37					Funds							
											- CAL	200.075.500.00	40.00				
										Statewide Construction	CN	\$20,375,500.00	\$0.00			\$20,375,500.00	
										Construction							
										Statewide	CN	\$2,282,500.00	\$0.00			\$2,282,500.00	
										Consulting						Ψ2,202,000.00	
		M 02	SR 37	New Interchange	Intersection Improvement at	Greenfield	(	0 Multiple	\$21,201,000.0		CN	\$0.00	-\$714,500.00		(\$714,500.00)		
	1592348			Construction	141st Street and SR 37					<mark>Funds</mark>							
										Statewide Statewide	CN	-\$1,275,500.00	\$0.00		(04.075.500.00)		
										Construction		Ψ1,270,000.00	Ψ0.00	'	(\$1,275,500.00)		
										Statewide Consulting	CN	-\$181,500.00	\$0.00		(\$181,500.00)		
										Consulting							
										Consulting							
	C	omments:	QUARTE	R Q3, 2017 ADMINISTR	ATIVE 18-01.1 - revised funds. Redu	ced state funds and rei	moved local	funds.									
	39500 /	omments:		New Bridge, Concrete	New Bridge; 126th Street over	uced state funds and rer	moved local	funds.  Multiple	\$3,274,500.0	O Statewide	CN	(\$0.00	\$0.00		\$2,950,000.00	(\$2,950,000.00)	
					_		moved local		\$3,274,500.0		(CN)	\$0.00	(\$0.00 <u>)</u>		\$2,950,000.00	(\$2,950,000.00)	
	39500 /			New Bridge, Concrete	New Bridge; 126th Street over		moved local		\$3,274,500.0	O Statewide Construction					· · ·		
	39500 /			New Bridge, Concrete	New Bridge; 126th Street over		moved local		\$3,274,500.0	O Statewide Construction Statewide	CN CN	\$0.00 \$0.00	\$0.00 \$0.00		\$2,950,000.00	(\$2,950,000.00)	
	39500 /			New Bridge, Concrete	New Bridge; 126th Street over		moved local		\$3,274,500.0	O Statewide Construction					· · ·		
	39500 / 1601827	M 06	SR 37	New Bridge, Concrete Construction	New Bridge; 126th Street over	Greenfield		0 <mark>Multiple</mark>		O Statewide Construction Statewide					· · ·		
	39500 / 1601827	M 06	SR 37 QUARTER	New Bridge, Concrete Construction	New Bridge; 126th Street over SR 37	Greenfield		0 <mark>Multiple</mark>		O Statewide Construction Statewide					· · ·		
	39500 / 1601827	opmments:	SR 37 QUARTEFelopment	New Bridge, Concrete Construction	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from F	Greenfield  Y 20 to FY 19; modified		Multiple  n local preference and		O Statewide Construction  Statewide Consulting		\$0.00	(\$0.00)		· · ·		
	39500 / 1601827 CC pr pr	M 06	SR 37 QUARTEFelopment	New Bridge, Concrete Construction  R Q1, 2018 ADMINISTR	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from FV  New Bridge; 131st Street over	Greenfield		0 <mark>Multiple</mark>		O Statewide Construction  Statewide Consulting					· · ·		
	39500 / 1601827	opmments:	SR 37 QUARTEFelopment	New Bridge, Concrete Construction	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from F	Greenfield  Y 20 to FY 19; modified		Multiple  n local preference and		O Statewide Construction  Statewide Consulting	CN)	\$0.00	(\$0.00)		· · ·	(\$324,500.00)	
	39500 / 1601827 CC pr pr	opmments:	SR 37 QUARTEFelopment	New Bridge, Concrete Construction  R Q1, 2018 ADMINISTR	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from FV  New Bridge; 131st Street over	Greenfield  Y 20 to FY 19; modified		Multiple  n local preference and		O Statewide Construction Statewide Consulting  100% Local Funds	CN	\$0.00 \$0.00	(\$0.00) (\$59,300.00)		· · ·	(\$324,500.00) \$59,300.00	
	39500 / 1601827 CC pr pr	opmments:	SR 37 QUARTEFelopment	New Bridge, Concrete Construction  R Q1, 2018 ADMINISTR	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from FV  New Bridge; 131st Street over	Greenfield  Y 20 to FY 19; modified		Multiple  n local preference and		Statewide Construction  Statewide Consulting  100% Local Funds  Statewide	CN)	\$0.00	(\$0.00)		· · ·	(\$324,500.00)	
	39500 / 1601827 CC pr pr	opmments:	SR 37 QUARTEFelopment	New Bridge, Concrete Construction  R Q1, 2018 ADMINISTR	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from FV  New Bridge; 131st Street over	Greenfield  Y 20 to FY 19; modified		Multiple  n local preference and		O Statewide Construction Statewide Consulting  100% Local Funds	CN	\$0.00 \$0.00	(\$0.00) (\$59,300.00)		· · ·	(\$324,500.00) \$59,300.00	
	39500 / 1601827 CC pr pr	opmments:	SR 37 QUARTEFelopment	New Bridge, Concrete Construction  R Q1, 2018 ADMINISTR	New Bridge; 126th Street over SR 37  ATIVE 18-04.1 - moved funds from FV  New Bridge; 131st Street over	Greenfield  Y 20 to FY 19; modified		Multiple  n local preference and		Statewide Construction  Statewide Consulting  100% Local Funds  Statewide	CN	\$0.00 \$0.00	(\$0.00) (\$59,300.00)		· · ·	(\$324,500.00) \$59,300.00	

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\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not

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ate Preservation and	d Loca	al Initiat	ed Proje	cts FY 2018 - 2021													
PONSOR CO AC LE	ONTR	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT		FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018 2	019	2020	2021
3950		M 02	SR 37	New Bridge, Concrete Construction	New Bridge; 131st Street over SR 37	Greenfield)	C	Multiple Multiple	\$3,330,000.00	Statewide Consulting	(CN)	( <del>-</del> \$16,500.00)	\$0.00	(\$	<mark>(6,500.00)</mark>		
			l		l		<u> </u>			Statewide Construction	(CN)	-\$90,700.00	\$0.00	(\$	9 <mark>0,700.00)</mark>		
										100% Local Funds	(CN)	\$0.00	-\$59,300.00	(\$	59,300.00)		
	Co	mments	: QUARTEI	R Q3, 2017 ADMINISTRA	TIVE 18-01.1 - Revised state funds a	and removed local fund	ls.				•			<u> </u>		L	
				New Bridge, Concrete Construction	New Bridge; 141st Street over SR 37	Greenfield		STP)		Statewide Consulting	(CN)	\$401,500.00	\$0.00	\$4	01,500.00		
				1	1					Statewide Construction	(CN)	\$3,479,700.00	\$0.00	\$3, <sub>4</sub>	<mark>79,700.00</mark>		
										100% Local Funds	(CN)	(\$0.00 <sub>)</sub>	\$170,300.00	<b>\$</b>	70,300.00		
( <mark>3950</mark>	1830	M 02	(SR 37)	New Bridge, Concrete Construction	New Bridge; 141st Street over SR 37	<mark>Greenfield</mark>	C	Multiple Multiple	\$3,607,500.00	O Statewide Consulting	(CN)	-\$44,000.00	\$0.00	(\$	14,000.00)		
					1					100% Local Funds	(CN)	\$0.00	-\$170,300.00	(\$1	<mark>70,300.00)</mark>		
										Statewide Construction	(CN)	-\$229,700.00	\$0.00	(\$2	29,700.00)		
	Co	mments:	: QUARTEI	R Q3, 2017 ADMINISTRA	TIVE 18-01.1 - Revised state funds a	and removed local fund	ls.										
				Small Structure Maint and Repair	Extension of small structure just S of 131st St under SR 37	Greenfield		) <mark>STP</mark>		Statewide Consulting	(CN)	\$37,400.00	\$0.00			\$37,400.00	
			<u> </u>		1					Statewide Construction	(CN)	\$304,520.00	\$0.00			\$304,520.00	
										100% Local Funds	CN	(\$0.00 <u>)</u>	(\$35,480.00)			\$35,480.00	
3950 1602		M 02	SR 37	Small Structure Maint and Repair	Extension of small structure just S of 131st St under SR 37	Greenfield	(0	STP	\$349,650.00	Statewide Construction	(CN)	\$10,480.00	\$0.00	(	<mark>10,480.00</mark>		
			l	I	I	<u> </u>				Statewide Consulting	(CN)	-\$2,750.00	\$0.00	(	5 <mark>2,750.00)</mark>		
										100% Local Funds	(CN)	(\$0.00)	-\$35,480.00	(\$	35,480.00)		
	Co	mmente	OUARTE	R O3 2017 ADMINISTRA	TIVE 18-01.1 - revised funds. Revise	ed state funds and rem	oved local fu	ınds							ļ		
3950 1602	00 /	Init.	SR 37	Small Structure Maint and Repair	Extension of small structure just N of 131st St under SR 37	Greenfield		) STP		Statewide Construction	CN	\$306,518.00	\$0.00			\$306,518.00	
			<u> </u>	<u> </u>	<u> </u>					100% Local Funds	(CN)	(\$0.00 <sub>)</sub>	(\$36,050.00)			\$36,050.00	

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Appendix H - Air Quality

Des. No. 1600540 et. al. Attachment 1

ate Preservation and Local Initiated	l Projects FY 2018 - 2021
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State Preserva	tion and Loc	al Initiat	ed Proje	cts FY 2018 - 2021													
SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
	39500 / 1602231	Init.	SR 37	Small Structure Maint and Repair	Extension of small structure just N of 131st St under SR 37	Greenfield)	(	0 STP		Statewide Consulting	CN	\$37,682.00	\$0.00			\$37,682.00	
	39500 / 1602231	M 02	SR 37	Small Structure Maint and Repair	Extension of small structure just N of 131st St under SR 37	Greenfield	(	0 STP	\$352,500.0	0 100% Local Funds	CN	\$0.00	-\$36,050.00		(\$36,050.00)		
		<u> </u>	<u> </u>		l		<u> </u>			Statewide Consulting	CN	( <mark>-\$2,750.00</mark> )	\$0.00		(\$2,750.00)		
										Statewide Construction	CN	\$11,050.00	\$0.00		\$11,050.00		
	C	omments	: QUARTE	R Q3, 2017 ADMINISTRA	TIVE 18-01.1 - Revised state funds	and removed local funds	8.			•	•					•	
	39504 / 1592345	Init.	SR 37	New Interchange Construction	Intersection Improvement at 126th Street and SR 37	Greenfield	(	0 STP		100% Local Funds	CN	\$0.00	\$216,800.00			\$216,800.00	
		<u> </u>				_ <b>L</b>	ı			Statewide Consulting	CN	\$1,584,000.00	\$0.00			\$1,584,000.00	
										Statewide Construction	CN	\$14,283,200.00	\$0.00			\$14,283,200.00	
	39504 / 1592345	M 02	SR 37	New Interchange Construction	Intersection Improvement at 126th Street and SR 37	Greenfield	(	0 <mark>Multiple</mark>	\$15,484,500.0	O Statewide Construction	CN	-\$3,987,850.00	\$0.00			(\$3,987,850.00)	
				•	•	•	ı			Statewide Consulting	CN	-\$49,500.00	\$0.00			(\$49,500.00)	
										100% Local Funds	CN	\$0.00	\$3,437,850.00			\$3,437,850.00	
	C	omments	: QUARTE	R Q3, 2017 ADMINISTRA	TIVE 18-01.1 - revised funds in FY2	0. Reduced CN/CE state	e funds an	d increased local fund	ds		<u> </u>				<u>!</u>	ļ	
	39504 / 1592346	M 06	SR 37	New Interchange Construction	Intersection Improvement at 131st Street and SR 37	Greenfield)	(	0 <mark>Multiple</mark>	\$14,208,000.0	O Statewide Construction	CN	\$1,578,700.00	\$0.00			\$1,578,700.00	
		<u> </u>		l		_ <b>L</b>	1	<u> </u>		Statewide Consulting	CN	\$258,500.00	\$0.00			\$258,500.00	
	C	comments	: QUARTE	R Q1, 2018 ADMINISTRA	TIVE 18-04.1 - increased funds in F	Y 20; modified based up	on local pr	eference and				<u> </u>			1		
	p		elopment														
	39504 / 1592347	_	SR 37	New Interchange Construction	Intersection Improvement at 135th Street and SR 37	Greenfield	(	0 STP		100% Local Funds	CN	\$0.00	\$110,020.00			\$110,020.00	
			<u> </u>	1	1	1		l	l	Statewide Consulting	CN	\$236,500.00	\$0.00			\$236,500.00	
										Statewide Construction	CN	\$2,064,980.00	\$0.00			\$2,064,980.00	
	39504 / 1592347	M 02	SR 37	New Interchange Construction	Intersection Improvement at 135th Street and SR 37	Greenfield		0 <mark>Multiple</mark>	\$2,109,000.0	O Statewide Construction	CN	<mark>-\$164,980.00</mark>	\$0.00			(\$164,980.00)	

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Des. No. 1600540 et. al.

Appendix H - Air Quality H4

NSOR	CONTR	STIP	ROUTE	ects FY 2018 - 2021	LOCATION	DISTRICT	MILES	FEDERAL	Estimated	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
JOK	ACT#/	NAME	KOOIL	WORKTHE	EGGATION	DISTRICT	INILLO	CATEGORY	Cost left to	TROOKAM	ITTIAGE	TEDERAL	MATON	2018	2019	2020	2021
	LEAD				A				Complete								
	DES								Project*								
	39504 /	M 02	SR 37	New Interchange	Intersection Improvement at	Greenfield		0 Multiple	\$2,109,000.0	0 100% Local	CN	\$0.00	-\$110,020.00			(\$110,020.00)	
	1592347			Construction	135th Street and SR 37					Funds							
										Statewide	(CN)	-\$27,500.00	\$0.00			(\$27,500.00)	
										Consulting						(42.,500.00)	
		Name	OLIABEE	TO CO. COAZ ADMINISTRA	ATIVE 40 04 4 marked for the Day	and state for decording		I S de								1	
					ATIVE 18-01.1 - revised funds. Red			0 Multiple	\$21,201,000.0	0 0 0 0 0 0 0 0 0	CN	-\$1,275,500.00	\$0.00			1 (2)	
	39504 / 1592348	I IVI OO	3137	New Interchange Construction	Intersection Improvement at 141st Street and SR 37	Greenfield	'	O Manapie	φ21,201,000.0	Construction	CIV	-φ1,273,300.00	φυ.υυ			(\$1,275,500.00)	
										Statewide	(CN)	<del>-\$181,500.00</del>	<mark>\$0.00</mark>			(\$181,500.00)	
										Consulting							
										100% Local	CN	\$0.00	-\$714,500.00			(\$714,500.00)	
										Funds							
	C	Comments	QUARTE	R Q1, 2018 ADMINISTRA	ATIVE 18-04.1 - decreased funds in	FY 20; modified based	upon local p	oreference and			<u> </u>				1	· · · · · · · · · · · · · · · · · · ·	
		roject dev															
	39504 /	rocess pro		New Interchange	Intersection Improvement at	Greenfield	1.56	ST STP		100% Local	CN	\$0.00	\$1,449,300.00			\$1,449,300.00	
	1592349			Construction	146th Street and SR 37					Funds						ψ1,443,000.00	
										Otalescida	CNI	\$1,996,500.00	\$0.00				
										Statewide Consulting	CIV	\$1,990,500.00	<del>\$0.00</del>			\$1,996,500.00	
										Statewide Construction	(CN)	\$16,800,700.00	<mark>\$0.00</mark>			\$16,800,700.00	
										Construction							
	39504 /	M 02	SR 37	New Interchange	Intersection Improvement at	Greenfield	1.56	Multiple	\$17,538,000.0		CN	-\$1,000,700.00	\$0.00			(\$1,000,700.00)	
	1592349			Construction	146th Street and SR 37					Construction							
		<u> </u>	l							Statewide Statewide	CN	-\$258,500.00	\$0.00			(\$258,500.00)	
										Statewide Consulting							
										100% Local	CN	\$0.00	-\$1,449,300.00			(\$1,449,300.00)	
										Funds		•	( • ., ,			(\$1,443,500.00)	
	1/2																
					ATIVE 18-01.1 - revised funds. Red				1		T (211)						
	39504 / 1601826	Init.	SR 37	New Bridge, Concrete Construction	New Bridge; 146th St over SR	Greenfield	1.56	STP)		100% Local Funds	(CN)	\$0.00 <sub>0</sub>	\$81,500.00			\$81,500.00	
	1001020									, and							
										Statewide	CN	\$357,500.00	<mark>\$0.00</mark>			\$357,500.00	
										Consulting							
										Statewide	CN	\$3,168,500.00	\$0.00			\$3,168,500.00	
										Statewide Construction	(CN)	\$3,168,500.00	\$0.00			\$3,168,500.00	
	39504 /	M 02	SR 37	New Bridge. Concrete	New Bridge; 146th St over SR	Greenfield)	( <mark>1.56</mark>	67 Multiple	\$3,330,000.0	Construction	(CN)	\$3,168,500.00 -\$27,500.00	\$0.00				
	(39504 /) (1601826)	M 02	SR 37	New Bridge, Concrete Construction	New Bridge; 146th St over SR 37	Greenfield	1.56	67 <mark>Multiple</mark>	\$3,330,000.0	Construction						\$3,168,500.00 (\$27,500.00)	
		M 02	SR 37		New Bridge; 146th St over SR 37	Greenfield	(1.56	37 <mark>Multiple</mark>	\$3,330,000.0	Construction  Statewide							

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Des. No. 1600540 et. al.

Indiana Department of Transportation (INDOT) State Preservation and Local Initiated Projects FY 2018 - 2021 MILES FEDERAL SPONSOR ROUTE WORK TYPE LOCATION DISTRICT PROGRAM CONTR STIP Estimated PHASE **FEDERAL** MATCH 2018 2019 2020 2021 ACT#/ NAME CATEGORY Cost left to LEAD Complete DES Project\* New Bridge, Concrete New Bridge; 146th St over SR \$3,330,000.00 Statewide (\$168,500.00 1601826 onstruction Construction omments: QUARTER Q3, 2017 ADMINISTRATIVE 18-01.1 - Revised state funds and removed local funds. 39504 / lew Bridge, Concrete New Bridge; 126th Street over \$3,012,900.00 tatewide 1601827 onstruction \$335,500.0 onsulting \$37,100.00 \$37,100.0 100% Local unds New Bridge; 126th Street over -\$11,000 39504 / ew Bridge, Concrete Statewide (\$11,000.00 1601827 Consulting onstruction (\$62,900.00 Statewide Construction <del>-\$37,100.0</del> 00% Local (\$37,100.00 unds omments: QUARTER Q3, 2017 ADMINISTRATIVE 18-01.1 - revised funds. Reduced state funds and removed local funds. 39504 / lew Bridge, Concrete New Bridge; 131st Street over Statewide (\$90,700.00 1601828 onstruction SR 37 Construction <del>-\$59,300.0</del> 00% Local (\$59,300.00 unds (\$16,500.00 Statewide onsulting omments: QUARTER Q1, 2018 ADMINISTRATIVE 18-04.1 -reduce funds in FY 20; modified based upon local preference and roject development

rocess progress.

M 06 New Bridge; 141st Street over Greenfield | \$3,607,500.00 Statewide 39504 / New Bridge, Concrete (\$3,250,000.0 \$3,250,000.0 1601830 construction SR 37 Construction (\$357,500.0 \$357,500.00 Statewide Consulting

Comments: QUARTER Q1, 2018 ADMINISTRATIVE 18-04.1 - move funds from FY 19 to FY 20; modified based upon local preference and project development

	process	orogress.	)											
39504 /	M 06	SR 37	Small Structure Maint	Extension of small structure	Greenfield	0 Multiple	\$352,500.00	100% Local	CN	\$0.00	-\$36,050.00		(\$36,050.00)	
160223			and Repair	just N of 131st St under SR 37				Funds						
								Statewide	CN	<mark>-\$2,750.00</mark>	\$0.00		(\$2,750.00)	
								Consulting						
								Statewide	CN	\$11,050.00	\$0.00		\$11,050.00	
								Construction						

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\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not

fiscally constrained and is for information purposes. Des. No. 1600540 et al.

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State Preservation and Local Initiated Projects FY 2018 - 2021

ONSOR	CONTR	STIP	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL	Estimated	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
	ACT#/ LEAD DES	NAME						CATEGORY	Cost left to Complete Project*								
	39681 / 1600819	M 02	MS 1	Bike/Pedestrian Facilities	Midland Trace Trail, Hazel Dell Rd to Willowview Rd	Greenfield	(	TA	\$1,350,000.00	100% Local Funds	CN	\$0.00	-\$158,947.00	(\$158,947.00)			
										Indianapolis MPO	CN	-\$206,841.00	\$0.00	(\$206,841.00)			
	b e tı	eased on u estimate ar ransfer fun	pdated nd nding	R Q3, 2017 ADMINISTRA	TIVE 18-01.1 - Reduced funding						•	,			1	,	
	39682 / 1600682	rom CN to		Curve Correction	Strawtown Ave from 1,100' W of Prairie Baptist to 400' E of Prairie Baptist	Greenfield	(	STP		100% Local Funds	CN	\$0.00	\$56,350.00			\$56,350.00	
		<u> </u>	l		п тапе Бария					Indianapolis MPO	CN	\$507,150.00	\$0.00			\$507,150.00	
										100% Local Funds	RW	\$0.00	\$35,000.00	\$35,000.00			
	39726 / 1600597	Init.	IR 1084	New Road Construction	276th St 6 miles west of Gwinn Rd to 281st @Gwinn Rd & along 281st over to Sr19	Greenfield	(	STP		Economic Development - Construction	CN	\$4,000,000.00	\$0.00		\$4,000,000.00		
										100% Local Funds	RW	\$0.00	\$660,000.00	\$660,000.00			
										100% Local Funds	CN	\$0.00	\$1,010,000.00		\$1,010,000.00		
	39738 / 1600650	Init.	IR 1086	New Road Construction	0.13 miles E of US-31 & 0.5 miles S of 146th St over Cool Creek	Greenfield	(	STP		Indianapolis MPO	CN	\$2,160,000.00	\$0.00				\$2,160,000
							•			100% Local Funds	CN	\$0.00	\$540,000.00				\$540,000.
										100% Local Funds	RW	\$0.00	\$1,538,000.00	\$1,538,000.00			
	39738 / 1601249	Init.	ST 1093	New Bridge, Other	New Bridge CN over Cool Cr connecting new Lowe's Way Rd ext. to Rangeline Rd.	Greenfield	(	STP		Indianapolis MPO	CN	\$2,430,000.00	\$0.00				\$2,430,000
		1		•		1		1	<u> </u>	100% Local Funds	CN	\$0.00	\$607,500.00				\$607,500.
	39871 / 1601832			Traffic Signal Visibility Improvements	at 6 Intersections between Spring Mill Road and Moontown/Gray Road	Greenfield		NHPP		Safety Construction	CN	\$166,963.20	\$41,740.80		\$208,704.00		
	39871 / 1601832	M 02	SR 32	Traffic Signal Visibility Improvements	At 6 Intersections between Spring Mill Road and Moontown/Gray Road	Greenfield	.001	Safety	\$208,704.00	Safety Construction	CN	\$0.00	\$0.00		\$0.00		
	C	Comments	: Updating	Federal % to 100% - Safe		<u> </u>				•		<u> </u>		•	•	•	
	39873 / 1601829	(Init.)	SR 37	Small Structure - New	Drainage pipe installation along 131st near SR 37	Greenfield	3.415	S <mark>ISTP</mark> )		Statewide Construction	(CN)	\$3,812,000.00	<mark>(\$0.00</mark> )		\$3,812,000.00		

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\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not

fiscally constrained and is for information purposes. No. 1600540 et al.

Des. No. 1600540 et. al.

Appendix H - Air Quality

Attachment 1

NSOR	CONTR	STIP	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL	Estimated	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
	ACT#/ LEAD DES	NAME						CATEGORY	Cost left to Complete Project*								
	39873 /	Init.	SR 37	Small Structure - New	Drainage pipe installation along	Greenfield	3.415	STP	110,000	100% Local	CN	\$0.00	\$213,000.00		\$213,000.00		
	1601829				131st near SR 37					Funds					φ210,000.00		
		•					•			Statewide Consulting	CN	\$440,000.00	\$0.00		\$440,000.00		
	39873 / 1601829	M 02	SR 37	Small Structure - New	Drainage pipe installation along 131st near SR 37	Greenfield	3.415	Multiple)	\$6,105,000.0	0 100% Local Funds	(CN)	\$0.00	-\$213,000.00		(\$213,000.00)		
										Statewide Consulting	CN	\$165,000.00	\$0.00		\$165,000.00		
										Statewide Construction	CN	\$1,688,000.00	\$0.00		\$1,688,000.00		
	15																
	39873 /			Small Structure - New	ATIVE 18-01.1 - Revised state funds  drainage pipe installation along	Greenfield		STP)	1	Ctotowide	CN	\$550,000.00	\$0.00	<b>#</b> 550,000,00		<u> </u>	
	1601831	in int.	SIX 37	omaii ou ucture - New	141st near SR 37	Greenileiu	0.410	JOIF		Statewide Consulting	CIV	<del>\$330,000.00</del>	φυ.υυ	\$550,000.00			
										Statewide Construction	CN	\$4,650,000.00	\$0.00	\$4,650,000.00			
										100% Local Funds	(CN)	\$0.00	\$400,000.00	\$400,000.00			
	39873 / 1601831	M 06	SR 37	Small Structure - New	Drainage pipe installation along 146th near SR 37	Greenfield	3.415	5 Multiple)	\$12,765,000.0	0 Statewide Construction	CN	\$6,850,000.00	\$0.00	(\$4,650,000.00)	(\$11,500,000.00)		
										100% Local	CN	\$0.00	-\$400,000.00	(\$400,000.00)			
										Funds				,			
										Statewide Consulting	(CN)	\$715,000.00	\$0.00	(\$550,000.00)	\$1,265,000.00		
	p	Comments project dev	elopment	R Q1, 2018 ADMINISTR	ATIVE 18-04.1 - increased funds and	moved from FY 18 to F	Y 19; modifi	ied based upon local	preference and		<u> </u>	l					
	39945 /	A 04	SR 37	Traffic Signals  Modernization	At Greenfield Avenue (Old SR 238)	Greenfield	C	) <mark>STP</mark> )	\$240,812.0	O District Other Construction	(CN)	\$240,812.00	\$0.00	\$240,812.00			
	1601871										1						
		Comments	: New Proje	ct, 18-00 2018-2021 IRT	TIP)												
			: New Proje		2.250 N Marion/Hamilton	Greenfield		NHPP	\$481,105.0	O Bridge Construction	CN	\$432,994.50	\$48,110.50			\$481,105.00	
	40013 / 1602208	A 08	1 69	ct, 18-00 2018-2021 IRT	2.250 N Marion/Hamilton	Greenfield	C	) NHPP	\$481,105.0		CN	\$432,994.50	\$48,110.50			\$481,105.00	
	40013 / 1602208	A 08	1 69 : 18-00 201	ct, 18-00 2018-2021 IRT Small Structure Replacement 8-2021 IRTIP, approved Intersection Improvement,	2.250 N Marion/Hamilton  7/3/2017  Intersection Improvement roundabout at Southeastern	Greenfield		) NHPP			CN	\$432,994.50 \$0.00	\$48,110.50 \$565,313.00			\$481,105.00	\$565,313.00
	40013 / 1602208	A 08	1 69 : 18-00 201	ct, 18-00 2018-2021 IRT Small Structure Replacement 8-2021 IRTIP, approved Intersection	2.250 N Marion/Hamilton 7/3/2017 Intersection Improvement					Construction  0 100% Local						\$481,105.00	\$565,313.00 \$2,261,250.00

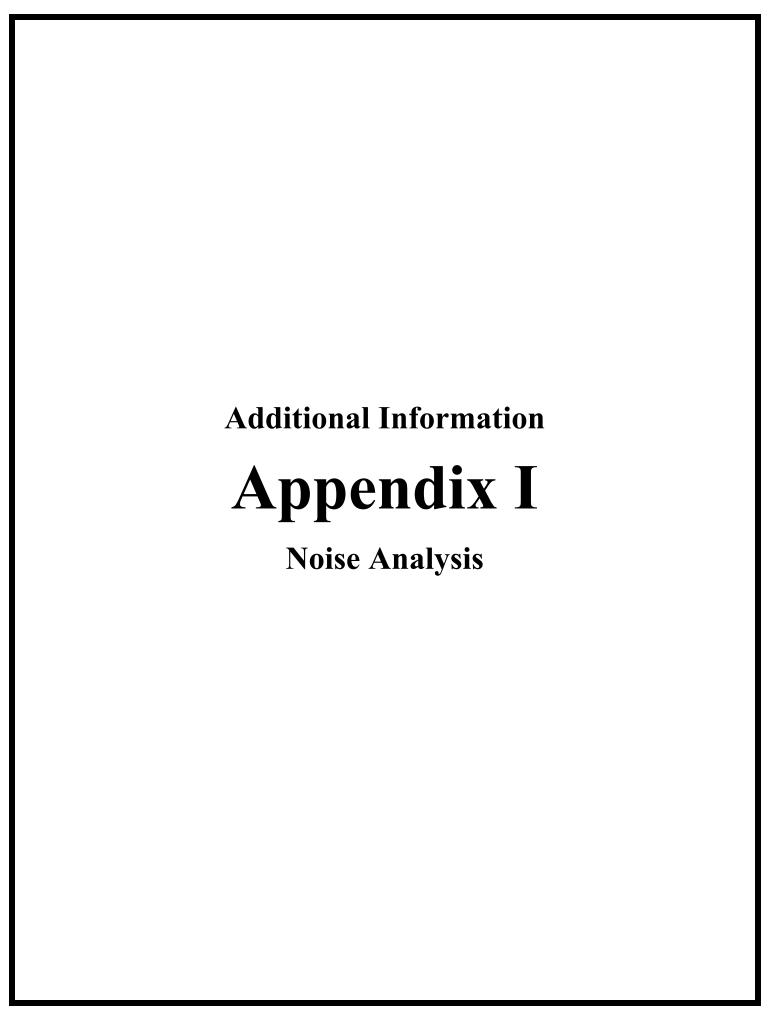
Attachment 1

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\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not

fiscally constrained and is for information purposes. Des. No. 1600540 et al

Appendix H - Air Quality



# Addendum SR 37 Improvement Project I-69 to SR 32 Fishers and Noblesville, Hamilton County, Indiana

**Highway Noise Analysis** 

**DES No. 1600540** 

## **Prepared for:**

City of Fishers One Municipal Drive Fishers, Indiana 46038

## Prepared by:

Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268

March 26, 2018

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Figure 1 SR37  $L_{eq}(h)$  Comparison for All Receptors Between the Original 2036 Traffic Data and the Hybrid 2036/2041 Traffic Data at 141<sup>st</sup> Street and 146<sup>th</sup> Street

## **Appendices**

Appendix A	SR 37 Design Year 2036/2041 Traffic Data for TNM 2.5
Appendix B	146 <sup>th</sup> Street Teardrop Roundabout and Single Point Interchange Comparison
Appendix C	Woods of Britton Apartment Barrier Map
Appendix D	Maps of Design Year 2036/2041 TNM 2.5 Results
Appendix E	TNM 2.5 2010 Existing Condition, 2036 Design Year and 2036/2041Design Year L <sub>eq</sub> (h)
	Level Results for SR 37
Appendix F	TNM 2.5 2010 Base Condition Sound Level Results
Appendix G	TNM 2.5 2036 Design Year Sound Level Results
Appendix H	TNM 2.5 2036/2041 Design Year Sound Level Results
Appendix I	TNM 2.5 2036/2041 Barrier Assessment Results – Woods of Britton Apartments

#### 1. 2016-2017 Noise Analysis Summary

The SR 37 improvement project highway noise analysis from I-69 to SR 32 through Fishers and Noblesville in Hamilton County, Indiana was conducted in 2016. The final report dated January 19, 2017 received Indiana Department of Transportation (INDOT) technical sufficiency approval on January 26, 2017.

The original analysis was based on design plans for double roundabout interchanges at the 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, and 146<sup>th</sup> Street intersections prepared by American Structurepoint and United Consulting as provided to Lochmueller Group by RQAW. The analysis for the northern portion of the project was based on conceptual plans in the respective Mobility Studies (American Structurepoint 2011a, 2011b, 2011c, 2011d) for double roundabout interchanges at Greenfield Avenue, Town and Country, Pleasant Street, and SR 32/38. The original analysis utilized 2036 peak hour traffic data prepared by American Structurepoint as input for the TNM 2.5 model (American Structurepoint 2011e). Design year L<sub>eq</sub>(h) predicted levels were calculated for 403 receptors including 263 Category B residential sites, 7 Category C locations, 61 Category E businesses, and 72 Category F facilities. Receptors included all entities in place at the time the study was conducted in the fall of 2016 and any facilities not yet construction, but permitted, that were identified through coordination with the Fishers Plan Commission and Noblesville Plan Commission.

The original analysis identified a total of 43 Category B residential properties where 67 dBA NAC impacts were anticipated for the design year. Of these, 39 were apartment complex units from Sunlake Apartments (n=10), Woods of Britton Apartments (n=6), and Millstone Apartments (n=23). Additionally, there were four Category C receptors (Kid's World Private Preschool, Primrose School of Noblesville, Legacy Bible, and Ben & Ari's Miniature Golf Course) where 67 dBA NAC impacts were anticipated and seven Category E/F receptors (Fishers Self Storage, Andy Mohr Mitsubishi, Indiana Elite Cheer and Tumbling, Dog Dayz kennel, multi-business strip, Tactical Solutions and JDS International) where 72 dBA NAC impacts were anticipated.

Barrier wall mitigation was investigated at Sunlake Apartments, Woods of Britton Apartments, and Millstone Apartments to determine if such a measure would be feasible and reasonable to reduce design year  $L_{\rm eq}(h)$  levels in accordance with INDOT *Traffic Noise Analysis Procedure* guidelines (INDOT 2011). The analysis concluded that noise barrier mitigation was feasible and met the INDOT cost-effective reasonableness criteria at Sunlake and Woods of Britton Apartments, but not at the Millstone Apartments location. Public involvement with the management and affected tenants at the Sunlake and Woods of Britton apartment complexes was conducted in May and June 2017 via questionnaire surveys and the May 16, 2017 public hearing. This coordination effort concluded that management for both Sunlake and Woods of Britton was in favor of having the proposed barrier wall included in the design of the SR 37 project, and that there was no notable opposition to such a mitigation measure by the affected tenants. Based on this feedback, it was recommended that barriers at both locations continue to receive consideration and further evaluation during the final design phase of the project.

#### 2. Project Area Changes and Design Changes Since Approval of the January 19, 2017 Report

Subsequent to approval of the January 19, 2017 SR 37 highway noise analysis, there have been land use changes within the study area in proximity to SR 37, re-evaluation of design year traffic patterns, design change considerations at 141<sup>st</sup> Street and 146<sup>th</sup> Street, and a request to re-evaluate the location of the originally proposed Woods of Britton noise barrier.

#### a. Additional Receptors and Changes in NAC Categorization

In 2017, construction on six new businesses was completed or initiated. Harley Davidson is a Category F receptor located between I-69 and 126<sup>th</sup> Street and east of SR 37 at Reynolds Industrial Park off of Reynolds Drive. Belle Tire is a Category F receptor located between 131<sup>st</sup> Street and

135<sup>th</sup> Street on the west side of SR 37 off of Britton Park Road and south of Ed Martin Nissan. Verizon Wireless is a Category E receptor located north of 135<sup>th</sup> Street and east of SR 37 on Outlot 3B of the Fishers Marketplace development off of Bent Grass Lane. Ed Martin Toyota auto dealership is a Category F receptor north of 141<sup>st</sup> Street and west of SR 37. O'Reilly Auto Parts is a Category F receptor located south of 141<sup>st</sup> Street and the Speedway Gas Station to the west of SR 37 off of Trade Center Drive. GetGo Café and Market is a Category F receptor north of 146<sup>th</sup> Street and west of SR 37. Receptor data points were incorporated into the TNM 2.5 models for all base year and design year runs conducted as part of this re-analysis. Additionally, the Ben and Ari's Miniature Golf Course located south of 141<sup>st</sup> Street and west of SR 37 off of Trade Center Drive closed business and the property is being repurposed as Alderman Luxury Imports. This receptor was reclassified as a Category F site in all re-analysis runs.

#### b. Design Year Traffic Volume Changes

In 2017, American Structurepoint revisited the design year predicted traffic patterns for the 141<sup>st</sup> Street and 146<sup>th</sup> Street intersections. From this effort, new 2041 design year traffic data was generated for both locations. The new AM peak hour turning movement traffic data has been updated in Appendix A (blue shaded records). In some instances, individual turning movement total volumes and truck component volumes were greater than those used in the original 2036 design year analysis; however, in some cases the volumes were reduced.

### c. 141<sup>st</sup> Street and 146<sup>th</sup> Street Design Changes

In consideration of the new 2041 traffic turning movement data, the designs of the 141<sup>st</sup> Street and 146<sup>th</sup> Street teardrop roundabout interchange configurations were revisited. The original design for the 141<sup>st</sup> Street intersection was for a two lane teardrop roundabout. However, there was question as to if a two lane teardrop roundabout was warranted. After taking the 2041 traffic turning movement data into consideration, it was concluded that a single lane design would yield the level of service desired. The original design for the 146<sup>th</sup> Street interchange was a two lane teardrop roundabout (Appendix B). This was subsequently changed in 2017 to a single point interchange configuration (Appendix B) because of traffic congestion that could not be satisfied by the roundabout design.

#### d. Woods of Britton Apartment Noise Barrier Wall Reassessment

In the original January 19, 2017 approved highway noise analysis study, a noise abatement barrier wall was recommended for apartment tenants proximal to SR 37 south of the detention basin lake. The recommended barrier was 700 feet in length along the proposed right-of-way with an estimated cost of \$270,000 and an estimated cost per benefitted receptor cost of \$24,538. However, this abatement barrier design extended approximately 100 feet south of the property boundary line between Woods of Britton apartments and the Fishers Marketplace development parcels which are anticipated for future development (Appendix C). Although there is currently no structures or plans to construct on the northernmost parcel of Fishers Marketplace, there is concern that the 100 foot extension of the currently proposed Woods of Britton barrier wall along this undeveloped parcel could partially impair visibility of the property from SR 37 in the future. Therefore, the design team identified the need to reassess this barrier and confine the northern and southern limits of the proposed barrier to the proposed right-of-way boundary along the Woods of Britton property.

Based on the changes noted above subsequent to completion of the original 2017 highway noise analysis, it was decided through consultation with INDOT Environmental Services that a highway noise re-analysis was warranted for SR 37. This re-analysis was conducted in accordance with the INDOT *Traffic Noise Analysis Procedure* (INDOT 2011) and the Federal Highway Administration's (FHWA) *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (FHWA 1997). The 2011 *INDOT Traffic Noise Analysis Procedure* represents the current FHWA approved policy at

the time the investigation was initiated in 2016. These procedures are revisited/revised every five years by INDOT.

#### 3. Revised Noise Sensitive Areas

In 23 CFR 772 (as amended) FHWA established seven Activity Categories to define Noise Abatement Criteria (NAC) for conducting highway noise analyses. The following represents the changes in noise sensitive area classifications from the original January 19, 2017 report.

The number of Category B residential single and multi-family units for the study area is 263 and remains unchanged from the original analysis. The number of Category C properties was reduced by one to a total of six properties with the reclassification of the Ben & Ari's Miniature Golf Course which has been repurposed into the Category F Alderman Luxury Imports dealership. The number of Category E properties increase by one to seven properties with the addition of the Verizon store on a previous undeveloped parcel. Lastly, the number of Category F properties increased by six with the addition of Harley Davidson, Belle Tire, Ed Martin Toyota dealership, O'Reilly Auto Parts, and GetGo Café and Market, as well as the repurposing of the Alderman Luxury Imports dealership.

Appendix D provides the updated land use by Activity Category along SR 37 within the study area.

#### 4. Ambient Noise Measurements

In 2016, ambient noise measurements were obtained at thirteen locations along SR 37 from I-69 to SR 32/38 in an effort to determine  $L_{eq}(h)$  levels at representative sites for the purposes of verifying the TNM 2.5 model constructed for the analysis performed accurately when compared to field measurements. The changes addressed in this addendum as described in Section 2 of this document did not warrant obtaining additional ambient noise measurements for this re-analysis because the design geometry for the proposed project remains the same as it was in the original 2016 analysis, with the exception of the change from a teardrop roundabout interchange to a single point interchange at  $146^{th}$  Street. Since the new interchange configuration was in the same location as the original teardrop roundabout, the 2016 ambient measurement at Creed Medical (Site 7) in the northwest quadrant of the intersection was considered to still be sufficient in representing this area.

#### 5. TNM 2.5 2010 Base Condition Set-Up Changes

Except for the addition of the six new receptors (Harley Davidson, Belle Tire, Ed Martin Toyota dealership, Verizon, O'Reilly Auto Parts, and GetGo Café and Market) and the reclassification of the former Ben & Ari's Golf Course from Category C to the new Alderman Luxury Imports as a Category F, no addition changes were warranted to the roadways, receptors, building barriers, terrain lines, ground zones or tree zones for the rerun of the 2010 base condition TNM 2.5 model development.

#### 6. TNM 2.5 2010 Base Condition Results

The 2010 base condition  $L_{eq}(h)$  highway noise levels for the 263 modeled residential receptors along SR 37 from south of 126<sup>th</sup> Street to north of SR 32/38 remained unchanged since no Category B residences were added or removed from the study area as part of this re-analysis. As such, there are still 14 Category B residential dwelling units that have predicted  $L_{eq}(h)$  levels that approach or exceed the 67 dBA NAC.

In the original analysis the Category C Ben & Ari's Miniature Golf Course receptor ( $L_{eq}(h) = 66.9 \text{ dBA}$ ) was identified as a site where the  $L_{eq}(h)$  level approached or exceeded the 67 dBA NAC for this classification. However, since this property has been reclassified as a Category F property, the base condition  $L_{eq}(h)$  does not exceed the appropriate 72 dBA NAC.

For the six new construction Category E and F receptors (Harley Davidson, Belle Tire, Verizon, Ed Martin Toyota, O'Reilly Auto Parts, and GetGo Café and Market) the 2010 base condition  $L_{eq}(h)$ 

levels ranged from 61.6 dBA to 66.8 dBA, and therefore do not approach or exceed the applicable NAC of 72 dBA.

Appendix E includes the 2010 base year  $L_{eq}(h)$  levels for each of the 409 receptors included in the reanalysis. TNM 2.5 output of the 2010 base year model run is included in Appendix F.

#### 7. TNM 2.5 2036/2041 Design Year Model Changes

Changes to the 2036/2041 TNM 2.5 model construction were limited to the following three changes. First, the 2041 traffic volumes for the 141<sup>st</sup> Street and 146<sup>th</sup> Street interchanges were incorporated into the model. As a result, traffic data used in the new model was a hybrid of 2036 traffic data of the interchanges south of 141<sup>st</sup> Street and north of 146<sup>th</sup> Street and 2041 for the 141<sup>st</sup> Street and 146<sup>th</sup> Street interchanges. The AM peak hour traffic data used as input into the 2036/2041 design year model is provided in Appendix A. Second, the six new Category E and F businesses (Harley Davidson, Belle Tire, Verizon, Ed Martin Toyota, O'Reilly Auto Parts, and GetGo Café and Market) receptors and the reclassification of the Ben & Ari's Miniature Golf Course (Category C) to Alderman Luxury Imports (Category E) were included. Lastly, the 146<sup>th</sup> Street interchange was reconstructed from the teardrop roundabout interchange in the original study into a single point interchange. The geometry of the 126<sup>th</sup> Street, 131<sup>st</sup> Street, 135<sup>th</sup> Street, 141<sup>st</sup> Street, Greenfield Avenue, Town and Country Avenue, Pleasant Avenue, and SR 32/38 intersection from the original 2036 design year analysis remain unchanged.

#### 8. TNM 2.5 2036/2041 Design Year Results and Identification of Predicted Impacted Receptors

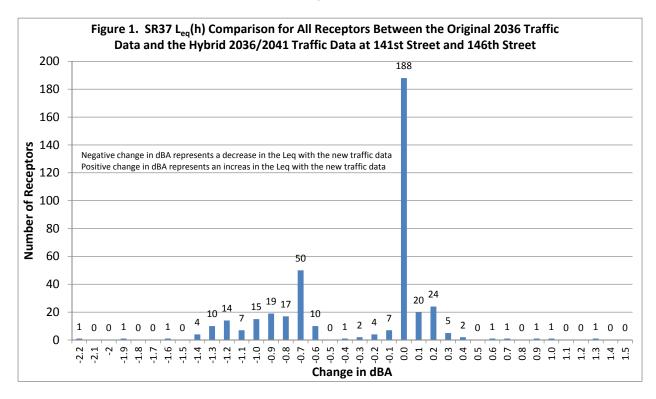
The variance in predicted individual  $L_{eq}(h)$  level between the original 2036 design year run and the reanalysis 2036/2041 design year run is solely a function of the traffic data used for the 141<sup>st</sup> Street and 146<sup>th</sup> Street interchanges and the minor change in interchange geometry at 146<sup>th</sup> Street. Appendix E includes the predicted  $L_{eq}(h)$  for the original 2036 design year run and the 2036/2041 design year run for the 408 receptors. One residential receptor is a relocation and was removed from the design year runs.  $L_{eq}(h)$  values highlighted in red in Appendix E identify receptors where the respective NAC criteria is approached or exceeded. 2036  $L_{eq}(h)$  predicted levels in the original study range from 48.4 dBA at a partially shielded apartment unit at Sunlake to 73.0 dBA at the Dog Dayz kennel. 2036/2041  $L_{eq}(h)$  predicted levels in the re-analysis range from 48.4 dBA at a partially shielded apartment unit at Sunlake to 72.9 dBA at the Fishers Storage facility. TNM 2.5 output of the 2036 design year model run are included in Appendix G. TNM 2.5 output of the 2036/2041 design year model run are included in Appendix D includes a series of maps that identify 2036/2041 design year impacts throughout the study area.

For the 2036/2041 design year re-analysis there was a total of 39 Category B residential receptors with  $L_{\rm eq}(h)$  levels that approach or exceed the 67 NAC threshold, four fewer than the original study. All four of these residential receptors were at Millstone apartments where the 66 dBA threshold was narrowly exceeded in the 2036 design year and slight reductions in the predicted  $L_{\rm eq}(h)$  resulting from decreased traffic volumes in the input for the 2036/2041 design year run was enough to result in a  $L_{\rm eq}(h)$  below the threshold. From the re-analysis the 2036/2041 design year impacts include four single-family dwellings east of SR 37 along Cumberland Road just south of Stoney Creek, ten dwelling units at the Sunlake apartment complex, six dwelling units at the Woods of Britton apartment complex, and 19 dwelling units at the Millstone apartment complex.

For the 2036/2041 design year re-analysis there was a total of three Category C receptors with predicted  $L_{\rm eq}(h)$  levels that approach or exceed the 67 NAC threshold (Legacy Bible Church, Kid's World Private Preschool and Education, and Primrose School of Noblesville). This is one fewer than the original 2036 design year study and is attributed to the reclassification of the former Ben & Ari's Miniature Golf Course property from Category C to Category F since the property has now been repurposed as Alderman Luxury Imports.

For the 2036/2041 design year re-analysis there were no Category E receptors with predicted  $L_{eq}(h)$  levels that approach or exceed the 72 NAC threshold and only three Category F receptors where NAC impacts are anticipated (Fishers Self Storage, Andy Mohr Mitsubishi, Dog Dayz kennel). With the revised traffic data the following Category F receptors would no longer be considered impacted due to reductions in the design year  $L_{eq}(h)$ : Indiana Elite Cheer and Tumbling, a multi-business strip, ZR Tactical Solutions, and JDS International.

Figure 1 provides a comparative analysis of the increase and decrease in  $L_{eq}(h)$  between the 2036 design year traffic data with the teardrop roundabout at  $146^{th}$  Street and the hybrid 2036/2041 design year traffic data with the single point interchange at  $146^{th}$  Street. The majority of the receptors (n=188) experienced no change since they were either south of north of the  $141^{st}$  Street and  $146^{th}$  Street areas. Most of the receptors that experienced a minor 0.1 to 0.2 dBA increase were at the Woods of Britton apartments south of  $141^{st}$  Street. The majority of the receptors where a 0.7 to 0.9 dBA decrease occurred were within the Millstone apartments north of  $141^{st}$  Street.



#### 9. 2036/2041 Design Year Noise Abatement Evaluation

In the original study, noise abatement barrier walls were evaluated for feasibility and reasonableness in accordance with the INDOT criteria at seven locations: Cumberland Road residences, Sunlake Apartments, Millstone Apartments, Woods of Britton Apartments, Legacy Bible Church, Kid's World Private Preschool, and Primrose School of Noblesville. The Cumberland Road residences, Legacy Bible Church, and Primrose School of Noblesville are located in the northern half of the project area which is not currently in the design phase. As such the traffic data and conceptual designs used in the original study have not changed, so the predicted L<sub>eq</sub>(h) levels, impacts identified and barrier analysis results presented in the original study remain valid. Likewise, the design and traffic volumes used for the 2036/2041 design year re-analysis in the vicinity of the Sunlake Apartments and the Kid's World Private Preschool are the same as that used in the TNM 2.5 for the original 2036 design year analysis; therefore, the results of these barrier evaluations remain unchanged. Although the 2036/2041 design year traffic volumes used in the TNM 2.5 north of 146<sup>th</sup> Street changed from the original study, the design of the mainline northbound and southbound lanes are in the same general horizontal and vertical geometry as in the original study. The test barrier from the original study was

found to be cost-effective, but could not be designed to provide the required 7 dBA noise reduction to greater than 50 percent for the 23 impacted receptors. Despite the fact that there are four less impacted receptors anticipated at the Millstone Apartments based on the revised 2036/2041 design year traffic volumes, revisiting the barrier evaluation at this location is not considered warranted since it would still not be practical to obtain a 7 dBA noise reduction at 50 percent of the 19 impacted receptors.

In the original 2036 design year analysis, a noise abatement barrier was found to be both feasible and reasonable at the Woods of Britton Apartment complex. The barrier was 700 feet in length and ranged from 5 to 16 feet in height with an estimated cost of \$269,929 based on the INDOT cost rate of \$30 per square foot. Each of the apartment buildings are two stories tall and have eight apartment units (two 1<sup>st</sup> story and two 2<sup>nd</sup> story units on each side of the building), each with either a ground story patio or balcony. The six impacted receivers identified in the 2036 design year study were from the two buildings closest to SR 37. These included one 1st story unit and three 2nd story units in the building closest to SR 37, and two 2<sup>nd</sup> story units in the building immediately adjacent to the detention pond. From the original 2036 design year study, the 700 foot long barrier along the proposed right-ofway limits would provide a 7 dBA reduction at four of the six first row impacted receptors, thus satisfying the INDOT noise abatement feasible design goal of having a 7 dBA reduction for the majority (greater than 50%) of the impacted first row receptors. Furthermore, a 5 dBA reduction in sound levels was predicted at five of the six 1st and 2nd story impacted receptors and at an additional six 1st and 2nd story non-impacted receptors. The resulting Leq(h) levels for the impacted receptors would range from 56.8 to 61.9 dBA and the cost per benefited receptor would be approximately \$24,538 per receptor (\$269,929 / 11 benefited receptors). Therefore, the cost-effective reasonableness criteria of ≤ \$25,000 per benefited receptor barrier was achieved. Appendix C shows the impacted receptors, benefited receptors and the 2036 design year barrier.

Although the 700-foot long barrier along the right-of-way was found to be feasible and reasonable, there was concern that this barrier extended 100 feet south of the property line between Woods of Britton Apartments and Block A-1 (undeveloped parcel) of the Fishers Marketplace development, and that this could obstruct visibility of any future commercial business on this property. To address this concern, a follow-up barrier analysis was conducted which limited the north and south extents of the barrier to the Woods of Britton property boundary along the SR 37 right-of-way. From this effort, an alternative taller barrier 530 feet long ranging from 15 to 17 feet in height along the proposed rightof-way was developed. Appendix I includes the TNM 2.5 generated barrier schematic, Lea(h) sound level results, and the barrier description. This barrier provided a 7 dBA reduction in the Len(h) at four of the six impacted receptors (7.0 to 9.0 dBA insertion loss), thus meeting the INDOT design goal. The TNM 2.5 results predicted that five of the six impacted receptors would experience a reduction of 5 dBA or greater and that an additional 12 non-impacted receptors would also experience a reduction of 5 dBA or greater. At an estimated cost of \$261,118, the cost per benefited receptor is estimated at \$15,360 per receptor (\$261,118 / 17 benefited receptors). Appendix C shows the impacted receptors, benefited receptors, and the 2036/2041 design year barrier.

This TNM 2.5 analysis indicates that benefited receptors would occur at four different buildings (Building A through D on Appendix C). Benefited receptors included four at Building A (two 1<sup>st</sup> floor and two 2<sup>nd</sup> floor), six at Building B (three 1<sup>st</sup> floor and three 2<sup>nd</sup> floor), four at Building C (two 1<sup>st</sup> floor and two 2<sup>nd</sup> floor), and three at Building D (one 1<sup>st</sup> floor and two 2<sup>nd</sup> floor). Although the TNM 2.5 analysis for this barrier configuration predicts insertion losses of 5.8 to 7.5 dBA for the three benefited receptors at Building D, this is considered to be higher than expected for receptors that are greater than 350 feet from SR 37. However, even if these three receptors were discounted as benefited receptors, the cost per benefited receptor for the remaining 14 units would be \$18,651 and would still be within the INDOT cost-effective reasonableness criteria of \$25,000 per benefited receptor. Table 1 details the predicted  $L_{eq}(h)$ , insertion loss, and solution barrier characteristics for the Woods of Britton Apartments.

Table 1. Summary of Woods of Britton Apartments Test Barrier Feasible and Reasonableness Cost Effectiveness

Receptor Address	LIICOLIVCIICOS								
Apartment 26 2 <sup>nd</sup> story 55.8 49.7 6.1 Apartment 27 1 <sup>st</sup> story 54.2 48.5 5.7 Apartment 28 2 <sup>nd</sup> story 57.3 49.9 7.4 Apartment 29 1 <sup>st</sup> story 58.0 50.5 7.5 Apartment 30 2 <sup>nd</sup> story 60.9 52.1 8.8 Apartment 31 1 <sup>st</sup> story 59.5 53.5 6.0 Apartment 32 2 <sup>nd</sup> story 62.6 56.0 6.6 Apartment 38 2 <sup>nd</sup> story 62.6 56.0 6.6 Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5 Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0 Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8 Apartment 42 2 <sup>nd</sup> story 64.3 57.3 7.0 Apartment 43 1 <sup>st</sup> story 64.3 57.3 7.0 Apartment 44 2 <sup>nd</sup> story 64.5 57.5 7.0 Apartment 45 1 <sup>st</sup> story 64.1 58.2 5.9  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Receptor Address	2041 L <sub>eq(h)</sub> without barrier	2041 L <sub>eq(h)</sub> with barrier	Loss	length	height range	Estimated cost	Feasible	Reasonable
Apartment 27 1st story 54.2 48.5 5.7  Apartment 28 2nd story 57.3 49.9 7.4  Apartment 29 1st story 58.0 50.5 7.5  Apartment 30 2nd story 60.9 52.1 8.8  Apartment 31 1st story 59.5 53.5 6.0  Apartment 32 2nd story 62.6 56.0 6.6  Apartment 38 2nd story 67.5 60.0 7.5  Apartment 40 2nd story 71.6 64.6 7.0  Apartment 41 1st story 67.8 58.8 9.0  Apartment 42 2nd story 61.0 54.4 6.6  Apartment 43 1st story 64.3 57.3 7.0  Apartment 44 2nd story 64.5 57.5 7.0  Apartment 45 1st story 64.1 58.2 5.9  Apartment 47 1st story 64.1 58.2 5.9		nts							
Apartment 28 2 <sup>nd</sup> story 57.3 49.9 7.4  Apartment 29 1 <sup>st</sup> story 58.0 50.5 7.5  Apartment 30 2 <sup>nd</sup> story 60.9 52.1 8.8  Apartment 31 1 <sup>st</sup> story 59.5 53.5 6.0  Apartment 32 2 <sup>nd</sup> story 62.6 56.0 6.6  Apartment 38 2 <sup>nd</sup> story 68.5 65.1 3.4  Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5  Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0  Apartment 41 1 <sup>st</sup> story 67.8 58.8 9.0  Apartment 42 2 <sup>nd</sup> story 64.3 57.3 7.0  Apartment 44 2 <sup>nd</sup> story 64.5 57.5 7.0  Apartment 45 1 <sup>st</sup> story 64.1 58.2 5.9  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9		55.8	49.7	6.1					
Apartment 29 1 <sup>st</sup> story 58.0 50.5 7.5  Apartment 30 2 <sup>nd</sup> story 60.9 52.1 8.8  Apartment 31 1 <sup>st</sup> story 59.5 53.5 6.0  Apartment 32 2 <sup>nd</sup> story 62.6 56.0 6.6  Apartment 38 2 <sup>nd</sup> story 68.5 65.1 3.4  Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5  Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0  Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8  Apartment 42 2 <sup>nd</sup> story 64.3 57.3 7.0  Apartment 44 2 <sup>nd</sup> story 64.5 57.5 7.0  Apartment 45 1 <sup>st</sup> story 64.1 58.2 5.9  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9		54.2	48.5	5.7					
Apartment 29 1 <sup>st</sup> story 58.0 50.5 7.5 Apartment 30 2 <sup>nd</sup> story 60.9 52.1 8.8 Apartment 31 1 <sup>st</sup> story 59.5 53.5 6.0 Apartment 32 2 <sup>nd</sup> story 62.6 56.0 6.6 Apartment 38 2 <sup>nd</sup> story 68.5 65.1 3.4 Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5 Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0 Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8 Apartment 42 2 <sup>nd</sup> story 67.8 58.8 9.0 Apartment 43 1 <sup>st</sup> story 64.3 57.3 7.0 Apartment 44 2 <sup>nd</sup> story 64.5 57.5 7.0 Apartment 45 1 <sup>st</sup> story 64.1 58.2 5.9  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Apartment 28 2 <sup>nd</sup> story	57.3	49.9	7.4			Analysis 1:		
Apartment 30 2" story 60.9 52.1 8.8  Apartment 31 1st story 59.5 53.5 6.0  Apartment 32 2" story 62.6 56.0 6.6  Apartment 38 2" story 62.6 56.0 6.6  Apartment 39 1st story 68.5 65.1 3.4  Apartment 40 2" story 67.5 60.0 7.5  Apartment 41 1st story 64.4 55.6 8.8  Apartment 42 2" story 67.8 58.8 9.0  Apartment 43 1st story 64.3 57.3 7.0  Apartment 44 2" story 64.3 57.3 7.0  Apartment 45 1st story 64.5 57.5 7.0  Apartment 46 2" story 67.1 60.1 7.0  Apartment 47 1st story 64.1 58.2 5.9	Apartment 29 1st story	58.0	50.5	7.5				V	
Apartment 32 2 <sup>nd</sup> story 62.6 56.0 6.6 Apartment 38 2 <sup>nd</sup> story 68.5 65.1 3.4 Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5 Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0 Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8 Apartment 42 2 <sup>nd</sup> story 67.8 58.8 9.0 Apartment 43 1 <sup>st</sup> story 64.3 57.3 7.0 Apartment 44 2 <sup>nd</sup> story 64.5 57.5 7.0 Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0 Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0 Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Apartment 30 2 <sup>nd</sup> story	60.9	52.1	8.8			Benefited = 17	Y	es
Apartment 38 2 <sup>nd</sup> story 68.5 65.1 3.4  Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5  Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0  Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8  Apartment 42 2 <sup>nd</sup> story 67.8 58.8 9.0  Apartment 43 1 <sup>st</sup> story 64.3 57.3 7.0  Apartment 44 2 <sup>nd</sup> story 64.5 57.5 7.0  Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0  Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Apartment 31 1 <sup>st</sup> story	59.5	53.5	6.0					
Apartment 39 1 <sup>st</sup> story 67.5 60.0 7.5  Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0  Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8  Apartment 42 2 <sup>nd</sup> story 67.8 58.8 9.0  Apartment 43 1 <sup>st</sup> story 61.0 54.4 6.6  Apartment 44 2 <sup>nd</sup> story 64.3 57.3 7.0  Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0  Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Apartment 32 2 <sup>nd</sup> story	62.6	56.0	6.6			Per benefited cost = \$15,359		
Apartment 40 2 <sup>nd</sup> story 71.6 64.6 7.0  Apartment 41 1 <sup>st</sup> story 64.4 55.6 8.8  Apartment 42 2 <sup>nd</sup> story 67.8 58.8 9.0  Apartment 43 1 <sup>st</sup> story 61.0 54.4 6.6  Apartment 44 2 <sup>nd</sup> story 64.3 57.3 7.0  Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0  Apartment 46 2 <sup>nd</sup> story 64.1 58.2 5.9	Apartment 38 2 <sup>nd</sup> story	68.5	65.1	3.4					
Apartment 40 2" story 71.6 64.6 7.0  Apartment 41 1st story 64.4 55.6 8.8  Apartment 42 2nd story 67.8 58.8 9.0  Apartment 43 1st story 61.0 54.4 6.6  Apartment 44 2nd story 64.3 57.3 7.0  Apartment 45 1st story 64.5 57.5 7.0  Apartment 46 2nd story 67.1 60.1 7.0  Apartment 47 1st story 64.1 58.2 5.9	Apartment 39 1st story	67.5	60.0	7.5	520	15 to 17			
Apartment 42 2 <sup>nd</sup> story 67.8 58.8 9.0  Apartment 43 1 <sup>st</sup> story 61.0 54.4 6.6  Apartment 44 2 <sup>nd</sup> story 64.3 57.3 7.0  Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0  Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Apartment 40 2 <sup>nd</sup> story	71.6	64.6	7.0	550	15 10 17			
Apartment 43 1 <sup>st</sup> story 61.0 54.4 6.6  Apartment 44 2 <sup>nd</sup> story 64.3 57.3 7.0  Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0  Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9		64.4	55.6	8.8					
Apartment 43 1 <sup>st</sup> story       61.0       54.4       6.6         Apartment 44 2 <sup>nd</sup> story       64.3       57.3       7.0         Apartment 45 1 <sup>st</sup> story       64.5       57.5       7.0         Apartment 46 2 <sup>nd</sup> story       67.1       60.1       7.0         Apartment 47 1 <sup>st</sup> story       64.1       58.2       5.9             Exclude Units 26 through 28       Yes         Benefited = 14       Yes         Barrier cost = \$261,118       Per benefited cost = \$18,651	Apartment 42 2 <sup>nd</sup> story	67.8	58.8	9.0			Analysis 2:		
Apartment 45 1 <sup>st</sup> story 64.5 57.5 7.0  Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9  Barrier cost = \$261,118  Per benefited cost = \$18,651		61.0	54.4	6.6					
Apartment 46 2 <sup>nd</sup> story 67.1 60.1 7.0  Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9	Apartment 44 2 <sup>nd</sup> story	64.3	57.3	7.0				Ye	es
Apartment 47 1 <sup>st</sup> story 64.1 58.2 5.9		64.5	57.5	7.0					
		67.1	60.1	7.0			Per benefited cost = \$18,651		
Apartment 48 2 <sup>nd</sup> story 66.6 60.5 6.1		64.1	58.2	5.9					
	Apartment 48 2 <sup>nd</sup> story	66.6	60.5	6.1					

Blue = 4 impacted receptors for which ≥7.0 dBA was achieved

Green = 6 additional non-impacted receptors for which ≥7.0 dBA was achieved

Yellow = 7 impacted and non-impacted receptors for which ≥5.0 dBA was achieved

#### 10. Noise Compatible Future Development

As part of the 2036 design year study, an effort was made to estimate the 66 dBA zone at Category G undeveloped properties along the SR 37 corridor to assist City of Fishers, City of Noblesville and Hamiltor County planners in understanding where 66 dBA impacts can be expected to occur at these currently undeveloped properties. The 66 dBA zone identifies an area within which  $L_{\rm eq}(h)$  levels are expected to be at 66 dBA or higher. This effort was repeated for the re-analysis based on the updated NAC classifications of parcels along SR 37 through the use of receptor data points oriented in rows perpendicular to the SR 37 roadway at 10-foot intervals. These receptor rows were placed at one or more representative locations within each undeveloped lot or parcel along SR 37. The resulting TNM 2.5 data was reviewed to determine the distance from the roadway at which the design year  $L_{\rm eq}(h)$  is anticipated to equal or be greater than 66 dBA based on 2036/2041 traffic volumes. From this data an approximate 66 dBA contour line was generated and depicted on the maps in Appendix D.

#### 11. Summary

The original highway noise analysis for the proposed SR 37 improvements from I-69 to SR 32 was completed in January 2017 and received INDOT technical sufficiency approval on January 26, 2017. Subsequent changes in design year traffic data predictions, a change in the 146<sup>th</sup> Street interchange from a teardrop roundabout to a single point interchange, the addition of a few new commercial receptors in the study area, and change in the desired goals for the Woods of Britton Apartments abatement barrier, warranted a re-analysis of the previously approved highway noise assessment.

New 2041 design year traffic data for the 141<sup>st</sup> Street and 146<sup>th</sup> Street interchanges was incorporated with the original 2036 design year traffic data for the remainder of the study area as input into the TNM 2.5 hybrid 2036/2041 design year model run. In most instances, the new total and/or truck traffic volumes were lesser than those used in the original 2036 design year study.

Six new commercial businesses (Harley Davidson, Belle Tire, Verizon, Ed Martin Toyota dealership, O'Reilly Auto Parts, and GetGo Café and Market) along both sides of SR 37 were added to the analysis for a total of 409 receptors. Additionally, the former Ben & Ari's Miniature Golf Course (NAC Category C) has been repurposed into the Category F Alderman Luxury Imports dealership. From the 2036/2041 design year analysis, none of these new receptor sites had predicted  $L_{\rm eq}(h)$  levels that approached or exceeded their respective NAC criteria of 72 dBA.

The revised 146<sup>th</sup> Street interchange was modeled as a single point interchange using the new 2041 traffic data. Although this interchange is generally centered at the same location as the originally proposed teardrop roundabout, the exit and entrance ramp geometry for the single point interchange resulted in a wider footprint with lanes slightly closer to proximal receptors. All of the receptors in the immediate vicinity of this interchange are Category E and F commercial businesses. The change to the single point interchange with the new 2041 traffic data did not result in any new predicted NAC impacts near the 146<sup>th</sup> Street intersection. The proposed interchange configurations for the remaining seven intersection locations within the study area remained unchanged from the original study.

From the re-analysis using the 146<sup>th</sup> Street single point interchange and the 2036/2041 design year hybrid traffic data, there were four fewer residential impacts (all at Millstone Apartments) and five fewer Category E and F commercial impacts compared to the original study based on the teardrop interchange at 146<sup>th</sup> Street and the 2036 traffic data. The number of predicted apartment unit impacts at Sunlake (n=10) and at Woods of Britton (n=6) remained unchanged. Total residential impacts for the project were reduced to 39. Category C impacts are still anticipated at Kid's World Private Preschool, Primrose School of Noblesville, and Legacy Bible Church. Category E/F impacts (approach or greater than the 72 dBA NAC threshold) are now anticipated at just three business establishments.

The original study abatement barrier at the Woods of Britton apartment location was 700 feet in length with an estimated cost of \$269,926. It was assessed to provide a 5 dBA reduction for 11 impacted and non-impacted residences for a cost per benefited value of \$24,538 per receptor. However, this barrier extended approximately 100 feet south of the shared property line between Woods of Britton and the currently undeveloped Block A-1 of the Fishers Marketplace development. Because this extension was perceived to possibly limit visual exposure of this property for any future commercial development, a new barrier that did not extend south of the property boundary was evaluated. The barrier length to the north was also confined to the property boundary between Woods of Britton and Tire Barn. As before, the proposed barrier was placed at the edge of the proposed permanent right-of-way. The TNM 2.5 analysis showed that a new shorter (530 feet) and taller (up to 17 feet in height) barrier could provide 7 dBA reduction in design year Leg(h) at greater than 50 percent of the impacted receptors, and with a cost per benefited receptor (5 dBA reduction) value between \$15,359 and \$18,651 the new barrier is considered to be cost-effective. management of Woods of Britton apartments was previously favorable to having such a barrier and the tenants did not voice any overwhelming opposition. As such, the recommendation to install an abatement barrier at this location remains unchanged.

A final determination on noise abatement for the SR 37 Improvement Project will be made during the final design phase. At such time, if design elements have changed that warrant a re-evaluation of the predicted noise levels, additional noise analysis will be performed to determine if impacts are anticipated, and if so, noise abatement measures will be further evaluated.

#### 12. References

American Structurepoint. 2011a. SR 37 Mobility Study, SR 37 and Greenfield Avenue, Hamilton County, Indiana.

American Structurepoint. 2011b. SR 37 Mobility Study, SR 37 and Town and Country Boulevard, Hamilton County, Indiana.

American Structurepoint. 2011c. SR 37 Mobility Study, SR 37 and Pleasant Street, Hamilton County, Indiana.

American Structurepoint. 2011d. SR 37 Mobility Study, SR 37 and SR 32/38, Hamilton County, Indiana.

American Structurepoint. 2011e. SR 37 Mobility Study, Traffic Operation Analysis for SR 37 from 126<sup>th</sup> Street to SR 32, Hamilton County, Indiana.

FHWA. 1997. Procedures for Abatement of Highway Traffic Noise and Construction Noise, 23 CFR Part 772, August 11, 1997.

INDOT. 2011. Indiana Department of Transportation Traffic Noise Analysis Procedure, 2011

#### 13. Investigators

Lochmueller Group, Inc. Staff	Position	Contributing Effort
Rusty Yeager	Environmental Biologist IV	TNM 2.5 Modeling
		Addendum Preparation
		GIS Mapping

# **Appendix A**

SR 37 Design Year 2036/2041 Traffic Data for TNM 2.5

Roadway Section	Lane Direction and	Hou	Hourly Traffic Volumes		
	Inclusive Movements	Cars	Medium T	Heavy T	Speed (mph)
SR37	northbound	1785	64	32	60
south of 126 <sup>th</sup> Street	southbound	2704	23	11	60
South of 126 Street	SR 37 northbound	1477	57	29	60
	SR 37 southbound	2064	20	10	60
	eastbound west of SR 37	550	9	4	35
	eastbound east of SR 37	673	13	6	35
	westbound east of SR 37	1213	13	7	35
	westbound west of SR 37	897	16	8	35
126 <sup>th</sup> Street	southeast ramp	308	7	3	45
	southwest ramp	640	3	1	45
	northeast ramp	328	5	3	45
	northwest ramp	467	8	4	45
	roundabout north	1202	13	7	30
	roundabout south	682	11	6	30
SR37	northbound	1792	64	33	60
126 <sup>th</sup> to 131 <sup>st</sup> Street	southbound	2531	28	14	60
120 to 101 offeet	SR 37 northbound	1569	56	28	60
	SR 37 southbound	2045	64	32	60
	eastbound west of SR 37	338	25	12	35
	eastbound east of SR 37	583	30	16	35
	westbound east of SR 37	899	13	7	35
	westbound west of SR 37	734	17	10	35
131 <sup>st</sup> Street	southeast ramp	223	8	5	45
	southwest ramp	424	5	3	45
	northeast ramp	132	2	0	45
	northwest ramp	413	8	5	45
	roundabout north	882	15	9	30
	roundabout north	475	26	13	30
SR37	northbound	1701	58	28	60
131 <sup>st</sup> to 135 <sup>th</sup> Street	southbound	2458	72	37	60
131 to 133 Girect	eastbound west of SR 37	120	0	0	30
	eastbound east of SR 37	120	0	0	30
135 <sup>th</sup> Street	westbound east of SR 37	240	0	0	30
	westbound west of SR 37	240	0	0	30
SR37	northbound	1638	77	40	60
135 <sup>th</sup> to 141 <sup>st</sup> Street	southbound	2295	40	21	60
TOO TO 141 Officer	SR 37 northbound	1422	71	36	60
	SR 37 southbound	1728	34	17	60
	eastbound west of SR 37	403	10	5	35
	eastbound east of SR 37	391	7	4	35
	westbound east of SR 37	1023	6	3	35
	westbound west of SR 37	806	14	7	35
141 <sup>st</sup> Street	southeast ramp	246	6	4	45
	southwest ramp	566	6	4	45
	northeast ramp	236	3	1	45
	northwest ramp	327	8	4	45
	roundabout north	979	9	5	30
	roundabout north	337	7	3	30
SR37	northbound	1658	74	37	60
141 <sup>st</sup> to 146 <sup>th</sup> Street	southbound	2056	42	21	60
111 10 140 011001	SR 37 northbound	859	11	6	60
	SR 37 southbound	1124	9	5	60
	eastbound west of SR 37	1280	35	17	35
146 <sup>th</sup> Street	eastbound east of SR 37	927	47	22	35
	westbound east of SR 37	1569	17	9	35
	westbound west of SR 37	2426	23	12	35
	southeast ramp	757	17	8	45
	southwest ramp	662	8	4	45
	northeast ramp	327	3	2	45 45
		736	12	6	
	northwest ramp				45
	roundabout north	2059	22	11	30
0007	roundabout south	987	38	18	30
SR37	northbound	1186	14	8	60
146 <sup>th</sup> to Greenfield Street	southbound	1960	21	11	60

SR 37 northbound	Roadway Section	Lane Direction and Inclusive Movements	Hou	Hourly Traffic Volumes		
SR 37 southbound		SR 37 northbound	Cars	Medium T	Heavy T	(mph) 60
eastbound west of SR 37   616   6   3   35						60
eastbound east of SR 37   540   15   7   35		eastbound west of SR 37	616			35
Season						
Westbound west of SR 37   689   5   2   35			1097	18	8	
Southeast ramp	0		689			
Southwest ramp	Greenfield Street					
On the est ramp			527	3	1	
Northwest ramp					8	
Toundabout north						
Figure   Foundabout south   684   16   8   30					2	
Northbound   1457   51   25   60		roundabout south		16	8	30
Sear	SR 37		1457		25	
SR 37 northbound						
SR 37 southbound   1993   56   28   60						
Eastbound west of SR 37						
Beatbound east of SR 37   359   4   2   30						
Town and Country Boulevard   Westbound east of SR 37						
Town and Country Boulevard						
Southeast ramp						
Southwest ramp   287   8   3   45     northeast ramp   338   5   2   45     Toundabout north   258   4   1   30     Toundabout south   210   0   0   30     SR 37     Town & Country Blvd. to Pleasant St.	Town and Country Boulevard					
Northeast ramp   33						
Northwest ramp   398   5   2   45     Toundabout north   258   4   1   30     Toundabout south   210   0   0   0   30     SR 37   Northbound   1184   47   24   60     Southbound   2286   59   29   60     Southbound   105   2   1   45     SR 37 northbound   1040   43   22   60     SR 37 southbound   2305   46   23   60     eastbound east of SR 37   206   11   6   35     eastbound east of SR 37   171   5   3   35     westbound east of SR 37   291   7   4   35     southbound south   258   29   30     SR 37 southbound   2305   46   23   60     eastbound west of SR 37   206   11   6   35     eastbound east of SR 37   171   5   3   35     westbound east of SR 37   291   7   4   35     southeast ramp   144   4   2   45     roundabout north   153   2   1   30     roundabout south   203   12   7   30     northbound   1103   25   13   60     SR 37   Northbound   2305   46   23   60     southbound   2305   24   23   27     southbound   2305   27   27   27     southbound   2305   27   27   27     southwes						
Provide the control of the control						
Proundabout south   210   0   0   30				_		
Northbound						
SR 37   Town & Country Blvd. to Pleasant St.   Southbound collector/distributor   105   2   1   45						
Southbound collector/distributor   105   2   1   45						
SR 37 northbound   1040   43   22   60	Town & Country Blvd. to Pleasant St.					
SR 37 southbound   2305					22	
Pleasant Street    eastbound west of SR 37   206   11   6   35     eastbound east of SR 37   171   5   3   35     westbound east of SR 37   192   5   2   35     westbound west of SR 37   192   5   2   35     westbound west of SR 37   291   7   4   35     southeast ramp   144   4   2   45     roundabout north   153   2   1   30     roundabout south   203   12   7   30     northbound   2305   46   23   60     Pleasant Street to SR 32/38   northbound   2305   46   23   60     SR 37 northbound   2305   46   23   60     northbound collector/distributor   215   14   7   45     southbound collector/distributor   240   8   5   45     SR 37 northbound   456   13   7   60     SR 37 southbound   456   13   7   60     SR 37 southwest of SR 37   715   30   15   35     eastbound west of SR 37   1110   21   11   35     westbound west of SR 37   1110   21   11   35     southeast ramp   647/862   12/26   6/13   45     southwest ramp   1200/960   42/34   22/17   45     northwest ramp   564   19   11   45     roundabout north   1528   35   17   30     roundabout south   497   21   10   30     SR 37   Northbound   796   32   16   60						
Pleasant Street   eastbound east of SR 37   171   5   3   35						
Pleasant Street   Westbound east of SR 37   192   5   2   35   Westbound west of SR 37   291   7   4   35   5   5   5   5   5   5   5   5						35
Westbound west of SR 37   291   7   4   35	Pleasant Street		192	5	2	
Southeast ramp						
Toundabout north   153   2   1   30						
Toundabout south   203   12   7   30				2		
Northbound   1103   25   13   60					7	
SR37   Southbound   Southbound   SR 32/38   SR 37   Southbound   SR 37	SR37 Pleasant Street to SR 32/38	northbound			13	
Pleasant Street to SR 32/38   northbound collector/distributor   215   14   7   45						
Southbound collector/distributor   240   8   5   45						
SR 37 northbound       456       13       7       60         SR 37 southbound       1313       34       16       60         eastbound west of SR 37       715       30       15       35         eastbound east of SR 37       604       22       11       35         westbound east of SR 37       1113       29       14       35         westbound west of SR 37       1110       21       11       35         southeast ramp       647/862¹       12/26¹       6/13¹       45         southwest ramp       1200/960²       42/34²       22/17²       45         northeast ramp       340       19       9       45         northwest ramp       564       19       11       45         roundabout north       1528       35       17       30         roundabout south       497       21       10       30         SR37       northbound       796       32       16       60					5	
SR 37 southbound 1313 34 16 60 eastbound west of SR 37 715 30 15 35 eastbound east of SR 37 604 22 11 35 westbound east of SR 37 1113 29 14 35 westbound west of SR 37 1110 21 11 35 southeast ramp 647/862¹ 12/26¹ 6/13¹ 45 southwest ramp 1200/960² 42/34² 22/17² 45 northeast ramp 340 19 9 45 northwest ramp 564 19 11 45 roundabout north 1528 35 17 30 roundabout south 497 21 10 30 SR37	SR 32/38	SR 37 northbound				
eastbound west of SR 37       715       30       15       35         eastbound east of SR 37       604       22       11       35         westbound east of SR 37       1113       29       14       35         westbound west of SR 37       1110       21       11       35         southeast ramp       647/862¹       12/26¹       6/13¹       45         southwest ramp       1200/960²       42/34²       22/17²       45         northeast ramp       340       19       9       45         northwest ramp       564       19       11       45         roundabout north       1528       35       17       30         roundabout south       497       21       10       30         SR37       northbound       796       32       16       60						
SR 32/38    eastbound east of SR 37   604   22   11   35     westbound east of SR 37   1113   29   14   35     westbound west of SR 37   1110   21   11   35     southeast ramp   647/862¹   12/26¹   6/13¹   45     southwest ramp   1200/960²   42/34²   22/17²   45     northeast ramp   340   19   9   45     northwest ramp   564   19   11   45     roundabout north   1528   35   17   30     roundabout south   497   21   10   30     SR37   northbound   796   32   16   60						
SR 32/38						
SR 32/38       westbound west of SR 37       1110       21       11       35         southeast ramp       647/862¹       12/26¹       6/13¹       45         southwest ramp       1200/960²       42/34²       22/17²       45         northeast ramp       340       19       9       45         northwest ramp       564       19       11       45         roundabout north       1528       35       17       30         roundabout south       497       21       10       30         SR37       northbound       796       32       16       60						
SR 32/38         southeast ramp         647/862¹         12/26¹         6/13¹         45           southwest ramp         1200/960²         42/34²         22/17²         45           northeast ramp         340         19         9         45           northwest ramp         564         19         11         45           roundabout north         1528         35         17         30           roundabout south         497         21         10         30           SR37         northbound         796         32         16         60						
southwest ramp         1200/960²         42/34²         22/17²         45           northeast ramp         340         19         9         45           northwest ramp         564         19         11         45           roundabout north         1528         35         17         30           roundabout south         497         21         10         30           SR37         northbound         796         32         16         60						
northeast ramp   340   19   9   45     northwest ramp   564   19   11   45     roundabout north   1528   35   17   30     roundabout south   497   21   10   30     SR37   northbound   796   32   16   60						
northwest ramp         564         19         11         45           roundabout north         1528         35         17         30           roundabout south         497         21         10         30           SR37         northbound         796         32         16         60		· ·				
roundabout north 1528 35 17 30 roundabout south 497 21 10 30 SR37 northbound 796 32 16 60						
roundabout south         497         21         10         30           SR37         northbound         796         32         16         60						
SR37 northbound 796 32 16 60						
	SR37					
	north of SR 32/38	southbound	1877	53	27	60

Traffic Source (unshaded): 2036 design year traffic data for TNM 2.5 was derived from the 2011 Mobility Study turning movement data (American Structurepoint 2011a). Relative percent truck was determined form 2013 and 2016 turning movement truck percentage data obtained from A & F Engineering.

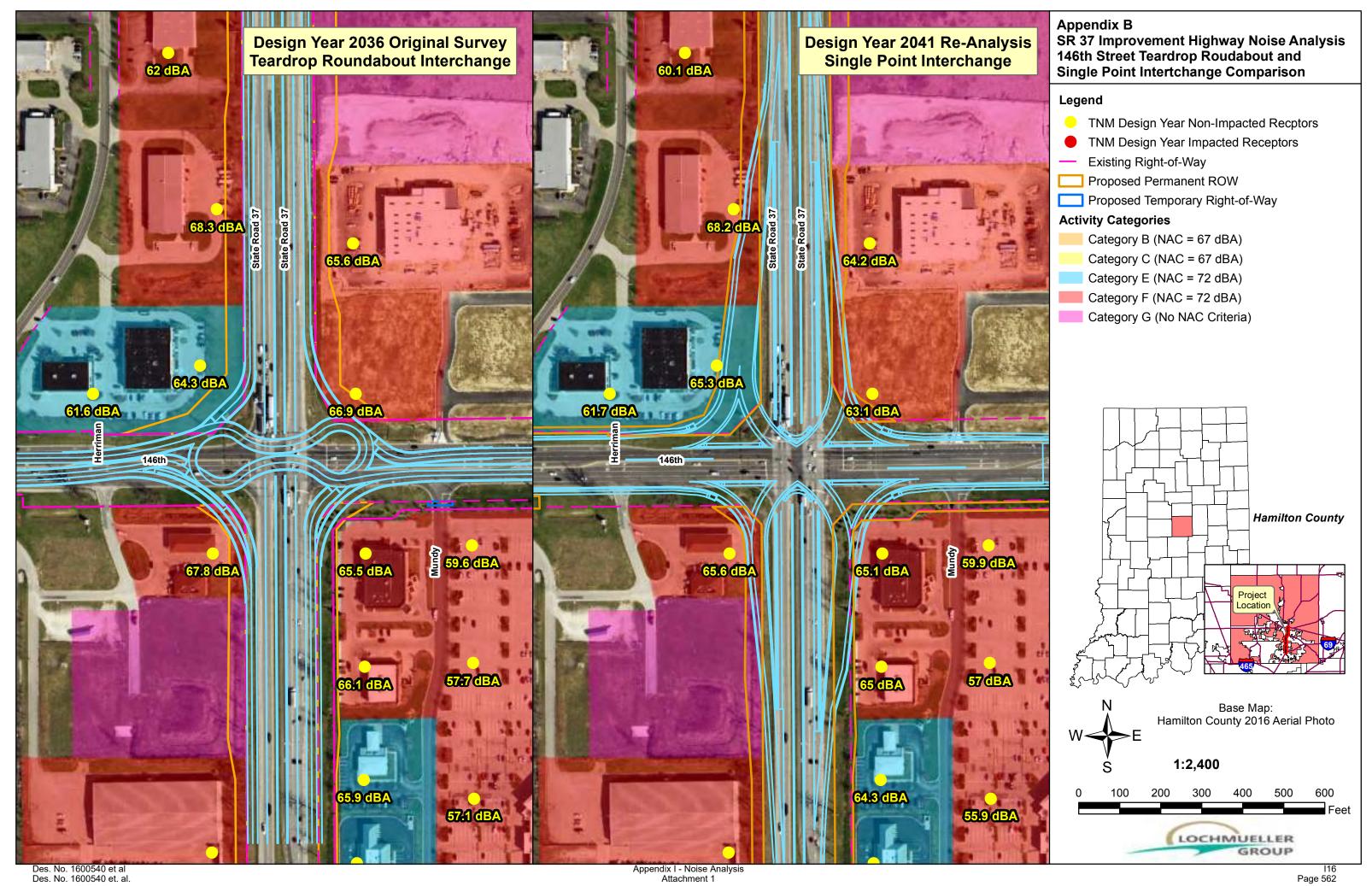
Traffic Source (blue shaded): 2041 design year traffic data for TNM 2.5 was derived from AM peak hour turning movements and AM peak hour truck percentages provided by American Structurepoint from the traffic re-analysis for 141<sup>st</sup> Street and 146<sup>th</sup> Street.

First number represents southeast ramp traffic from SR 37. Second number represents exit ramp traffic combined with collector/distributor traffic from Pleasant Street heading toward SR 32/38.

First number represents southwest ramp traffic to SR 37 combined with southbound collector/distributor traffic to Pleasant Street. Second number represents southwest ramp traffic to SR 37.

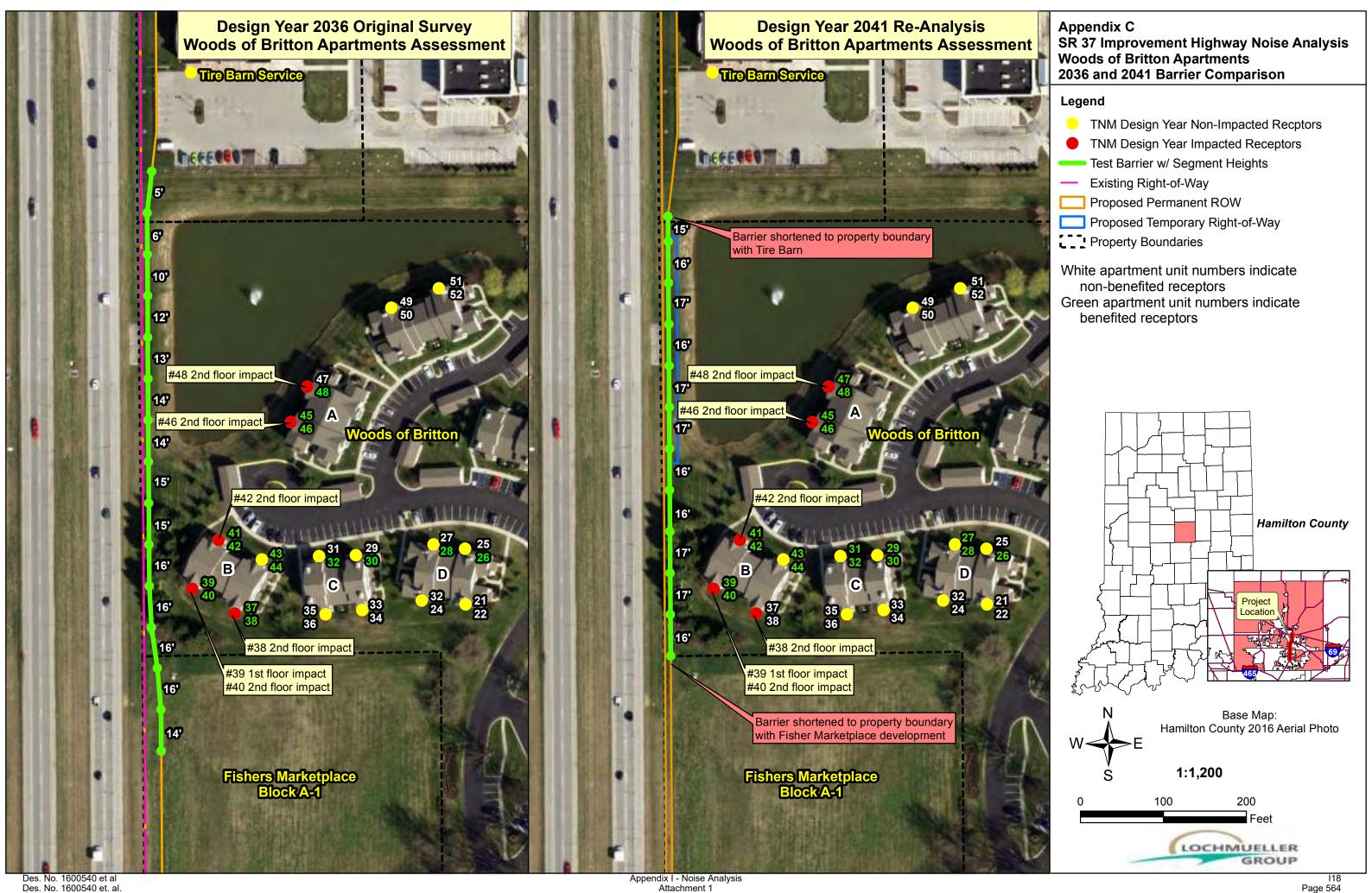
# **Appendix B**

146th Street Teardrop Roundabout and Single Point Interchange Comparison



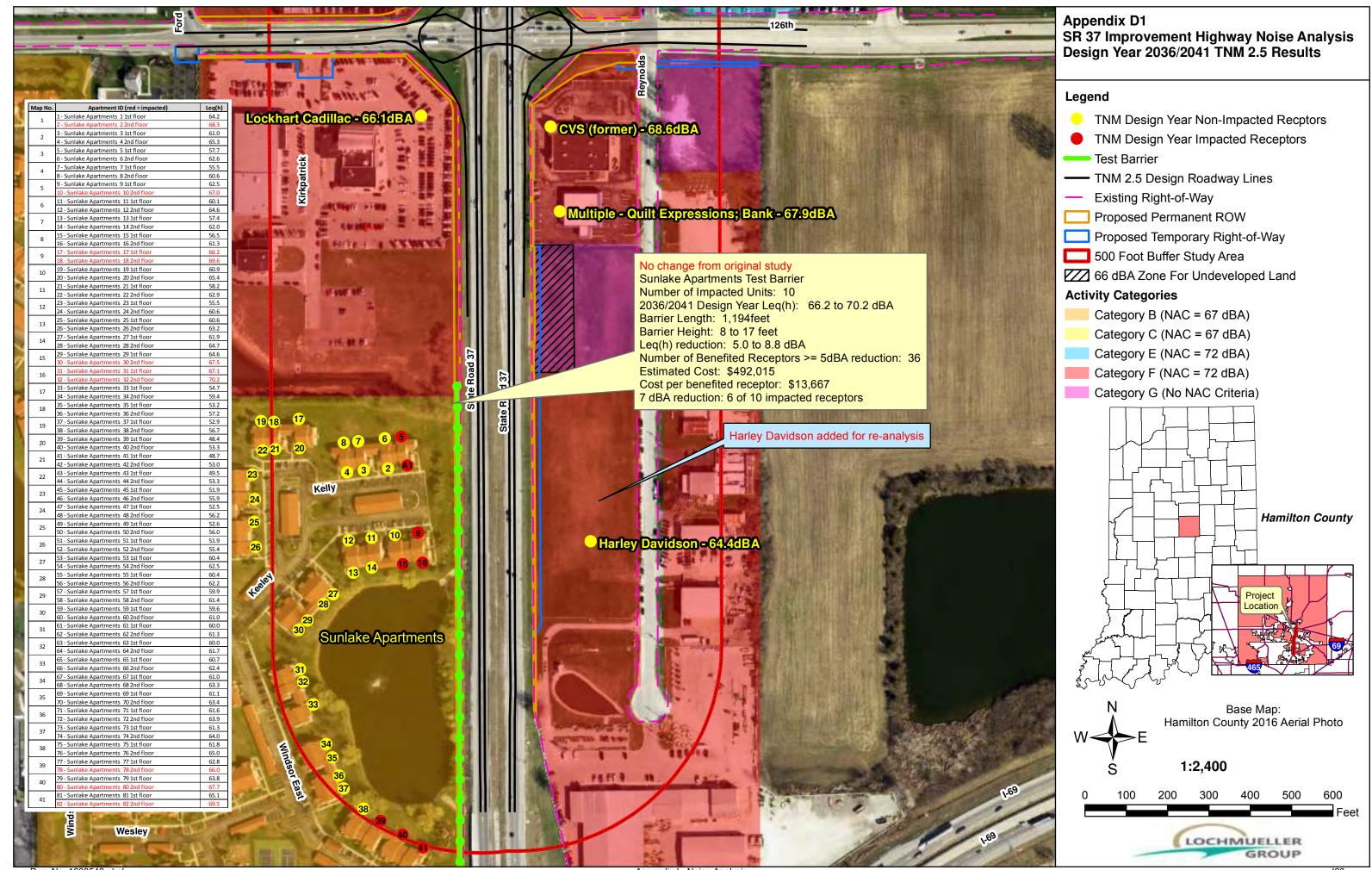
# **Appendix C**

**Woods of Britton Apartment Barrier Map** 

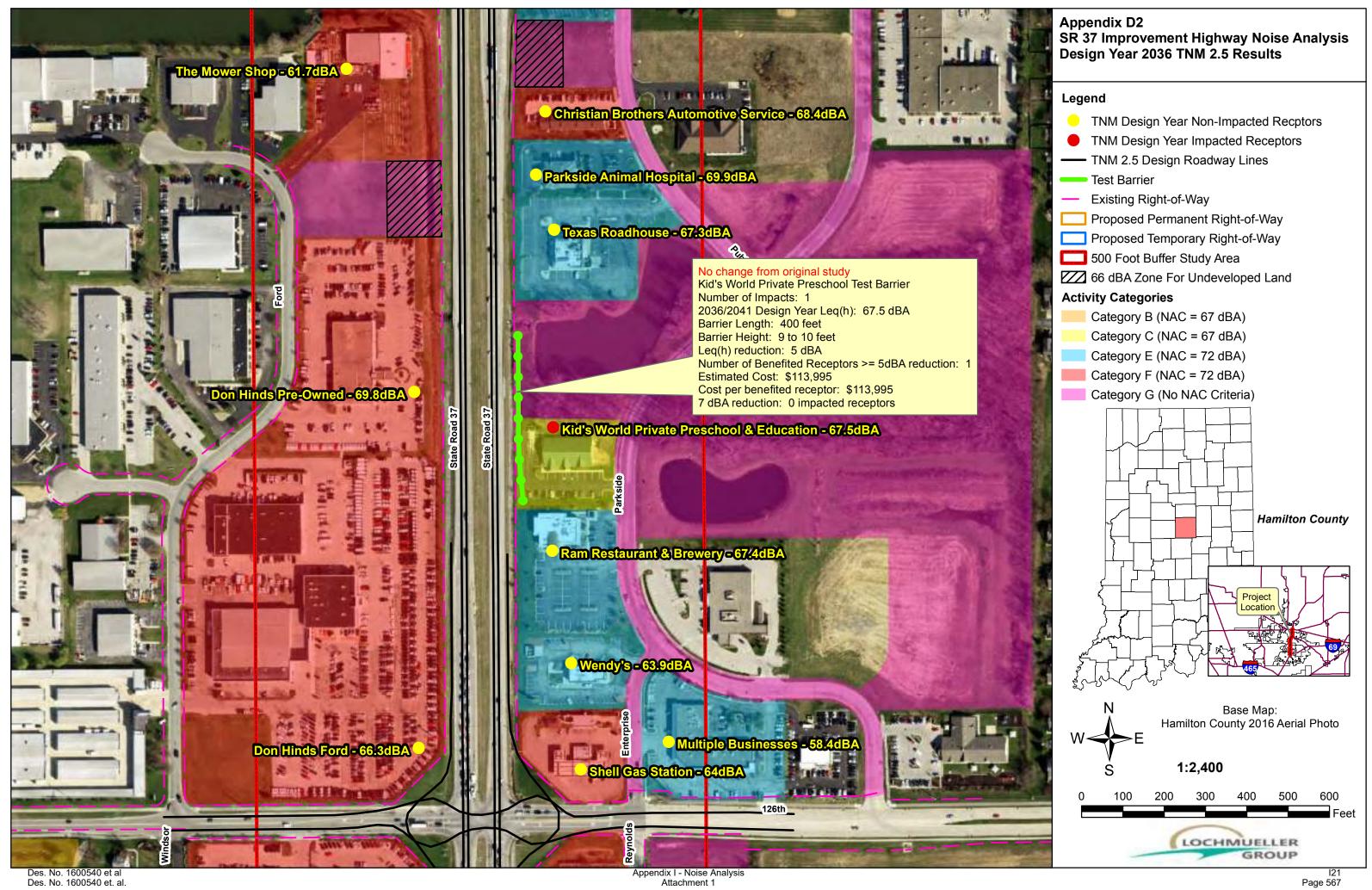


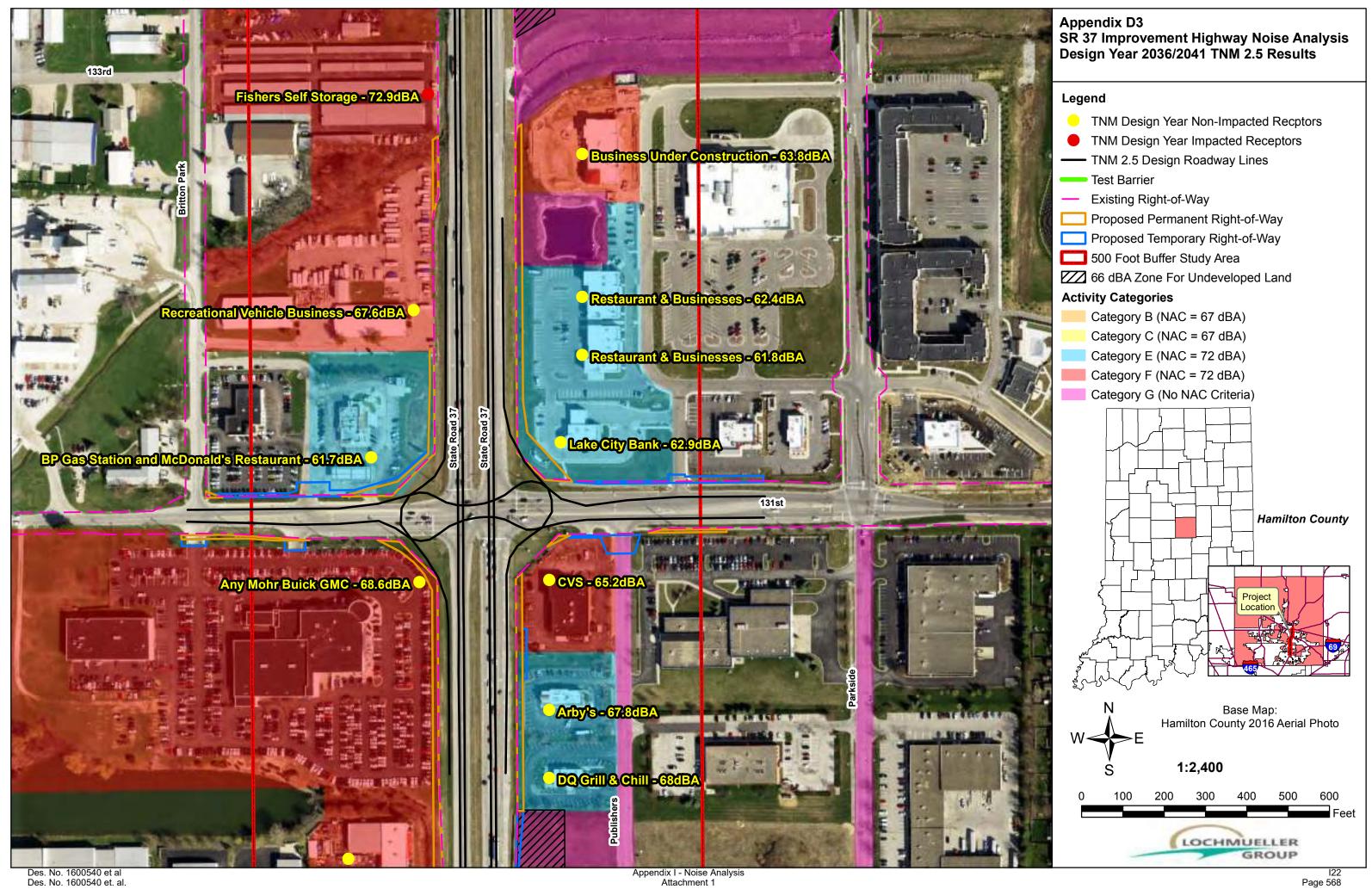
# **Appendix D**

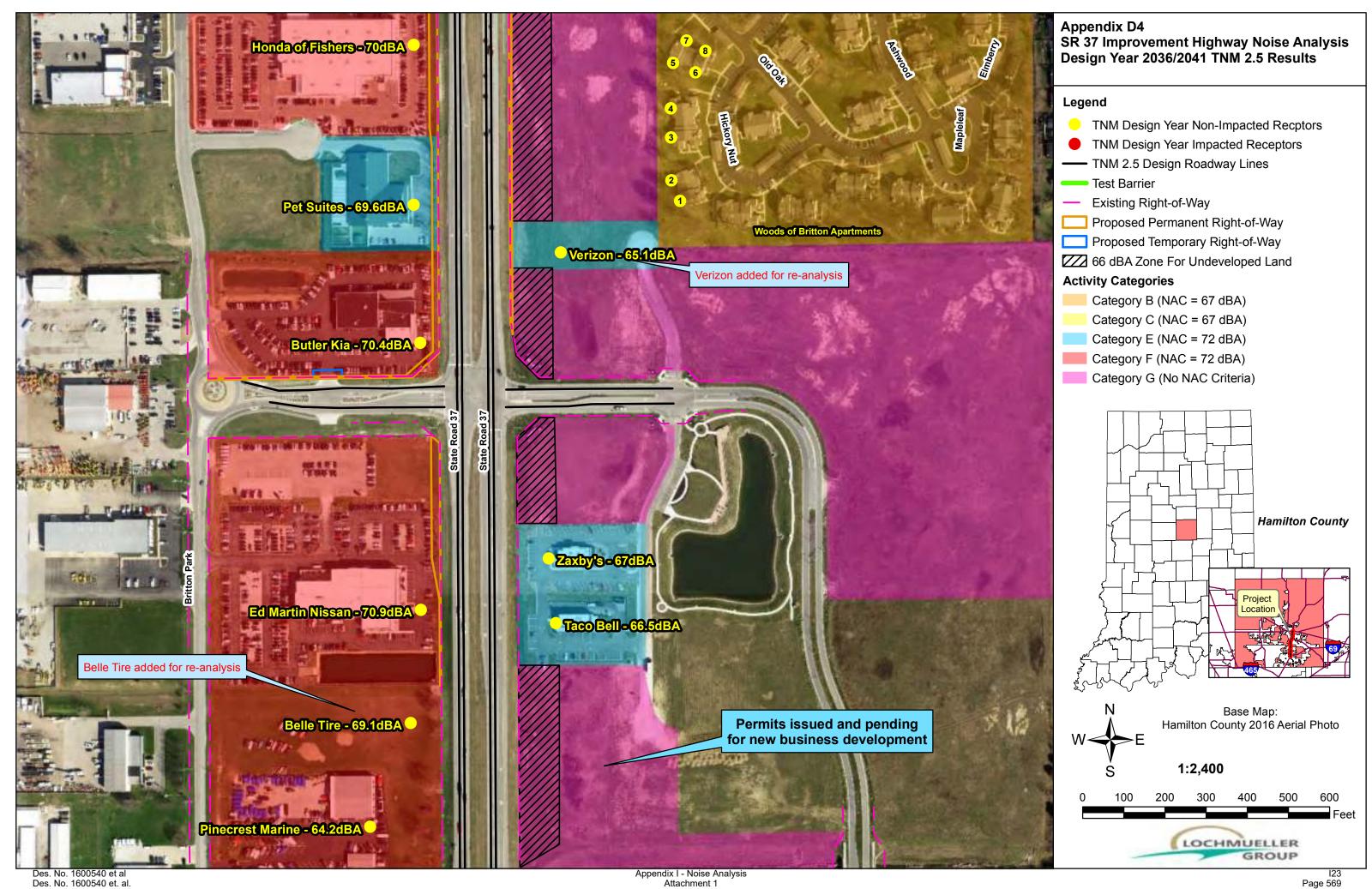
Maps of Design Year 2036/2041 TNM 2.5 Impacts

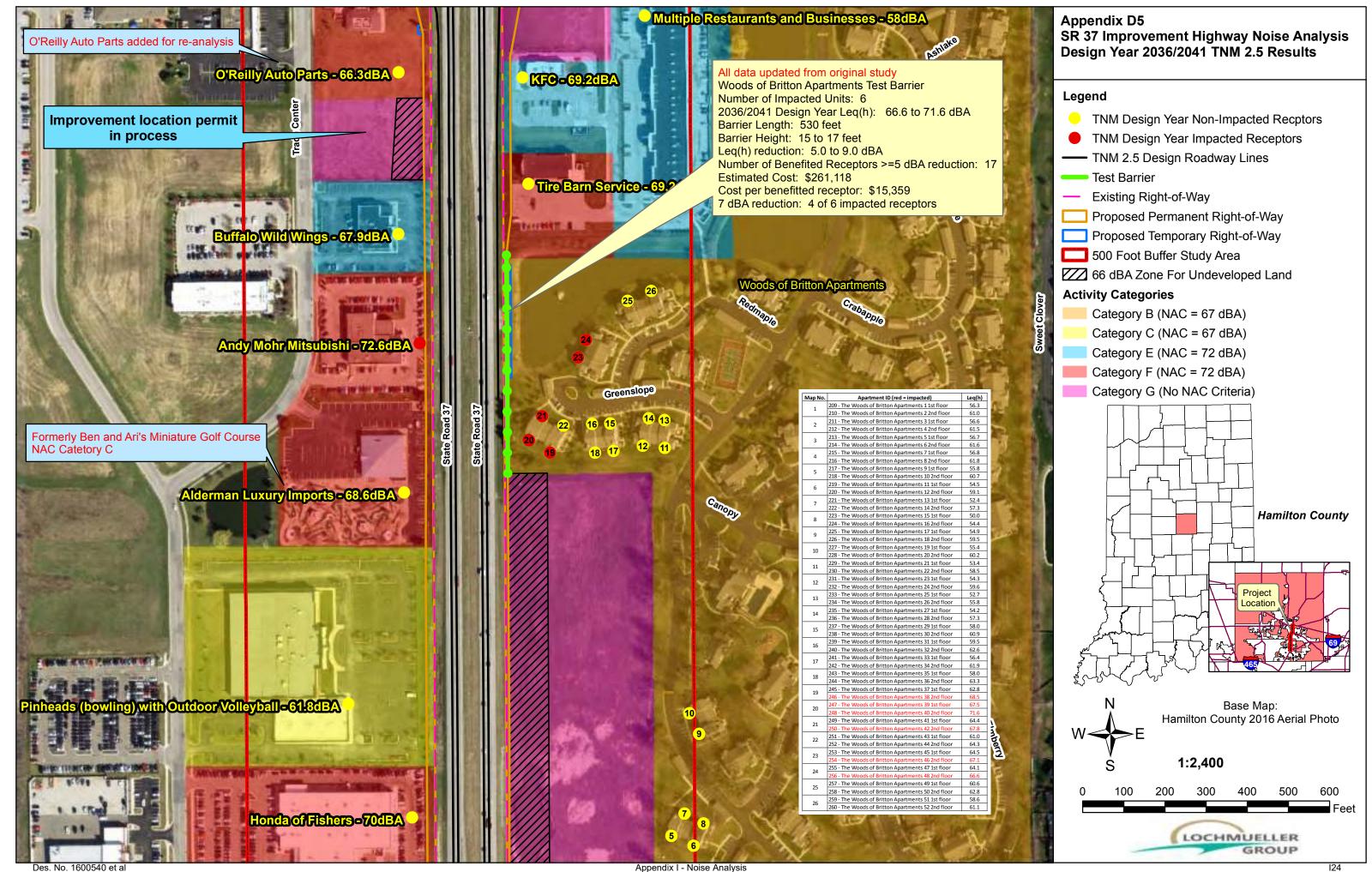


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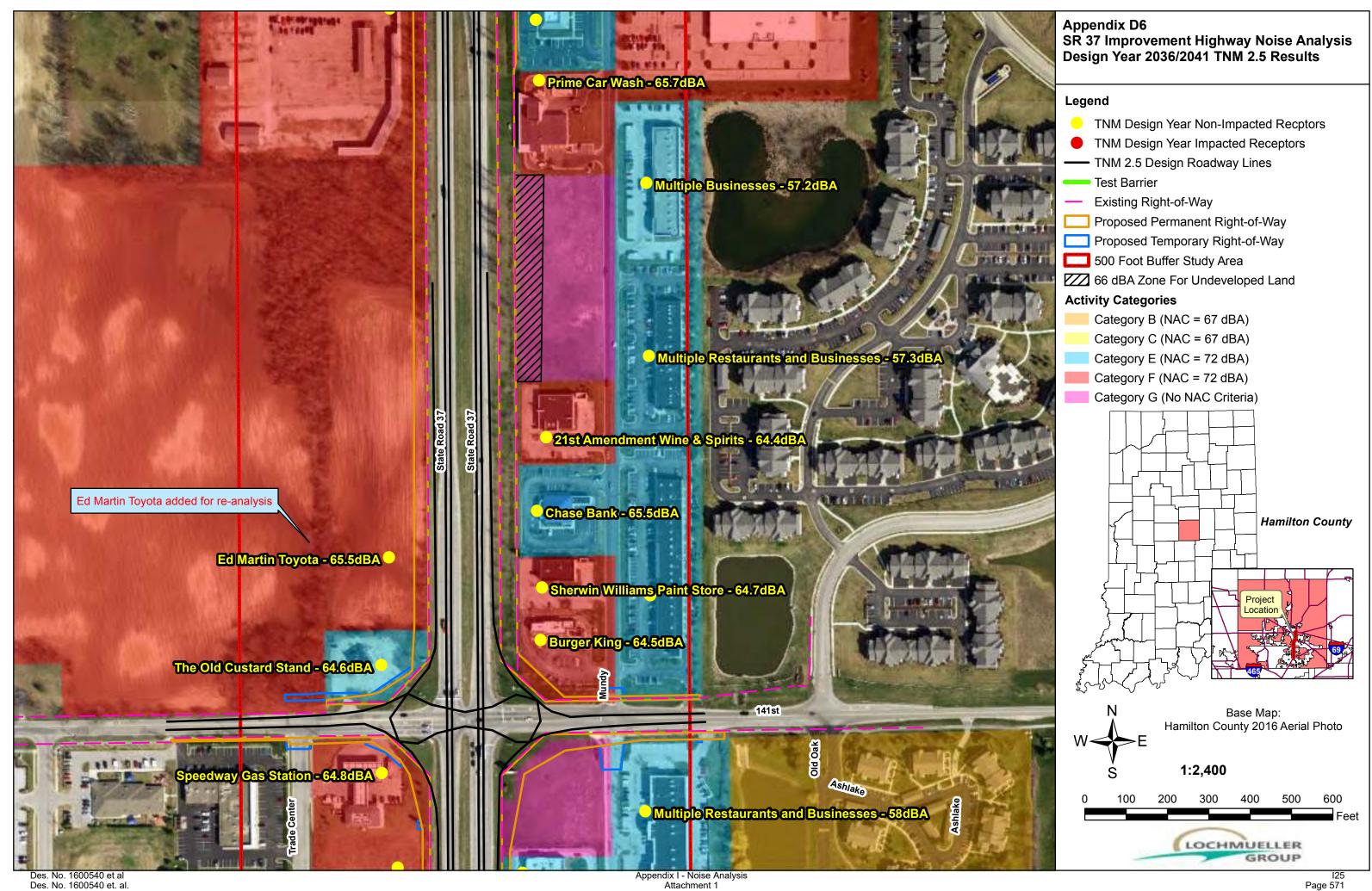




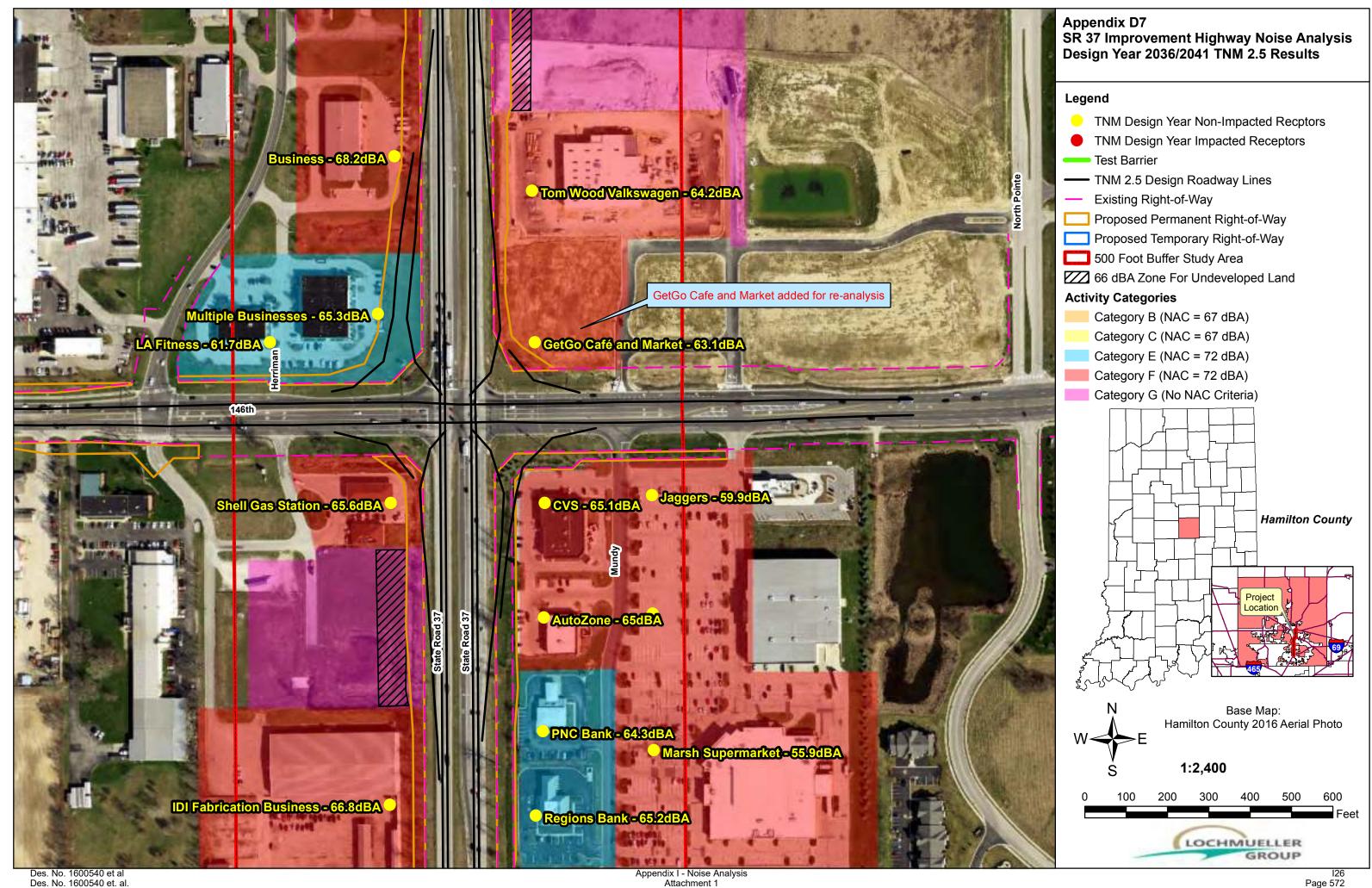


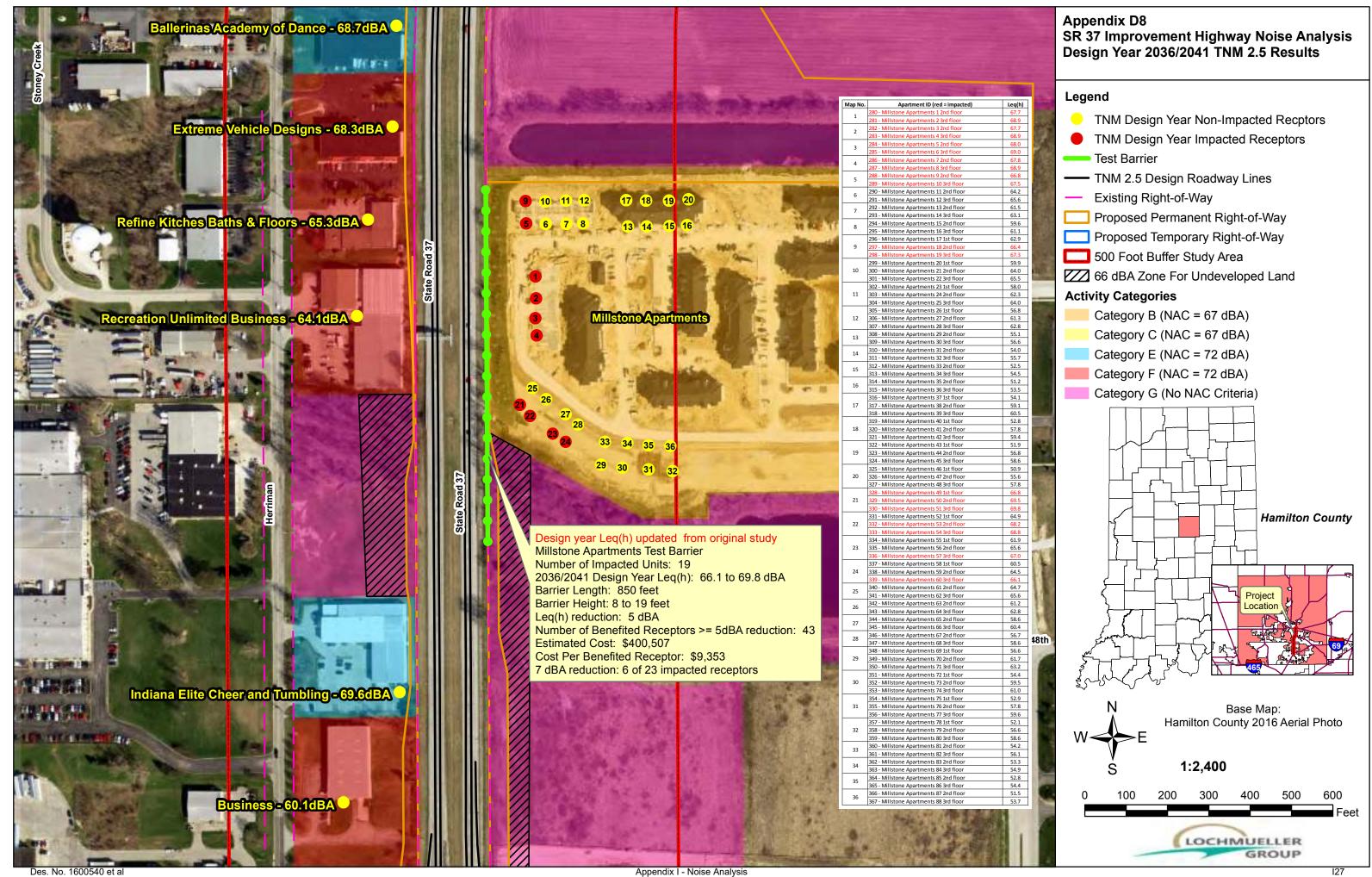


Des. No. 1600540 et. al.

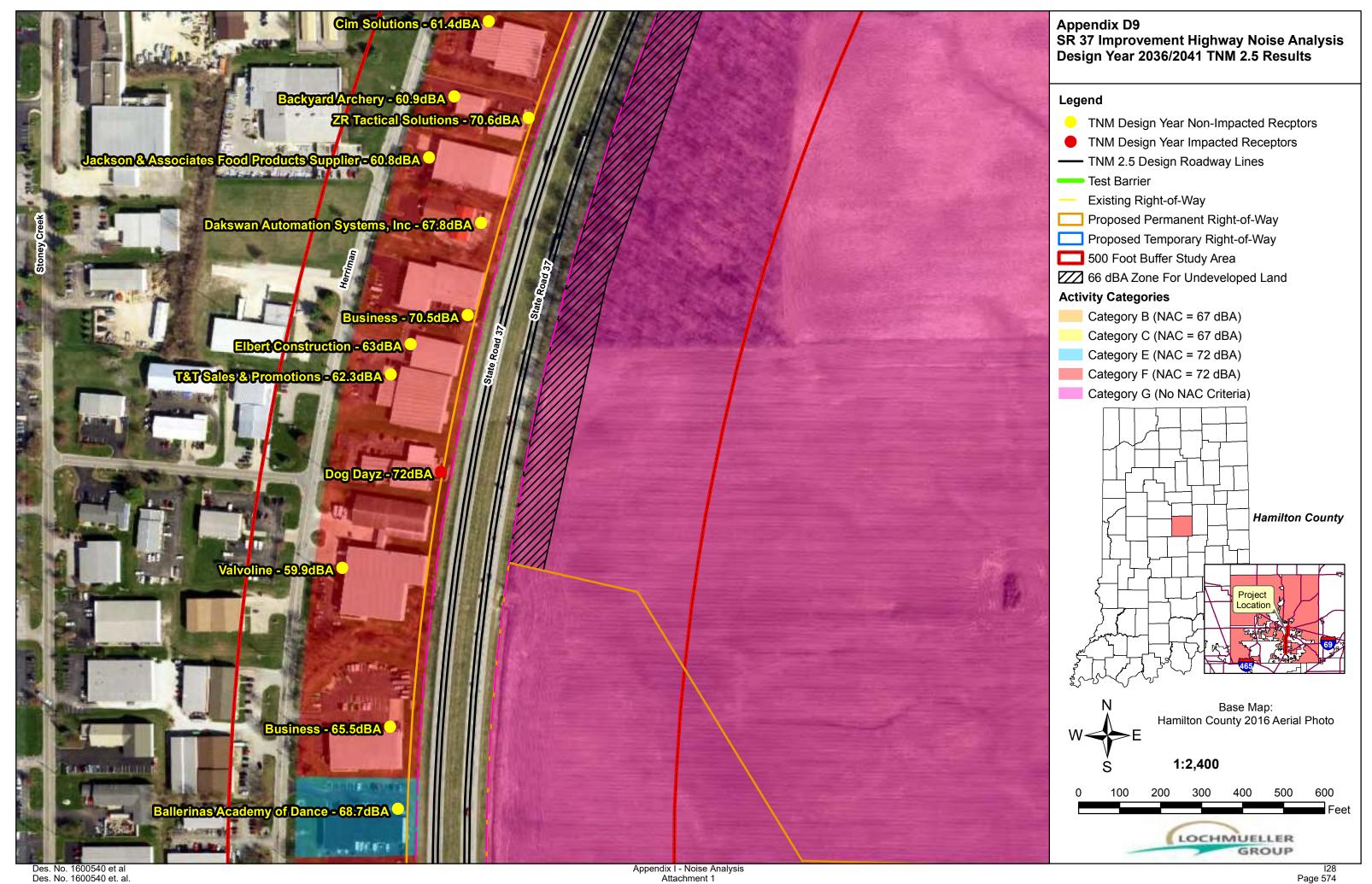


Attachment 1

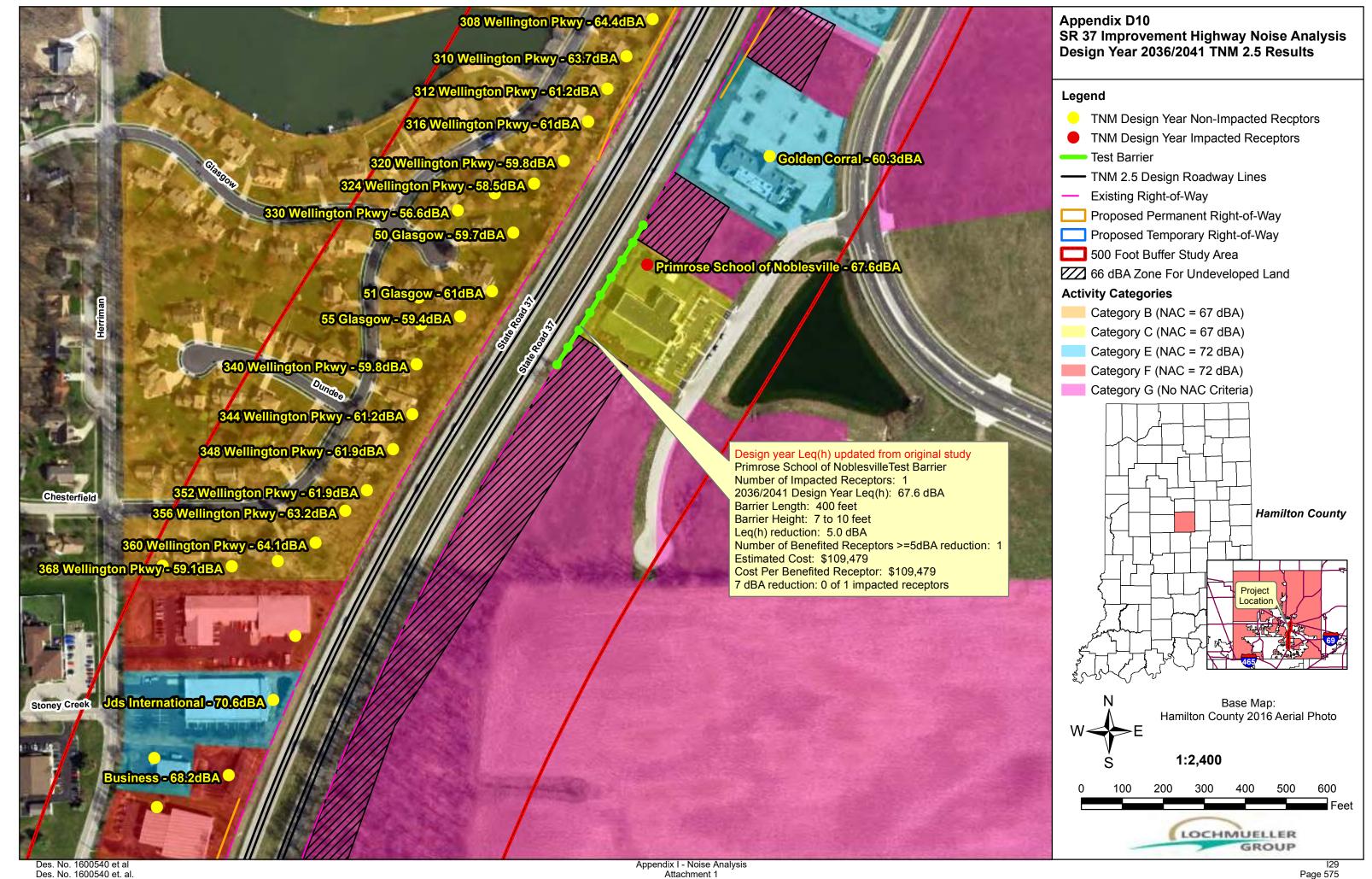


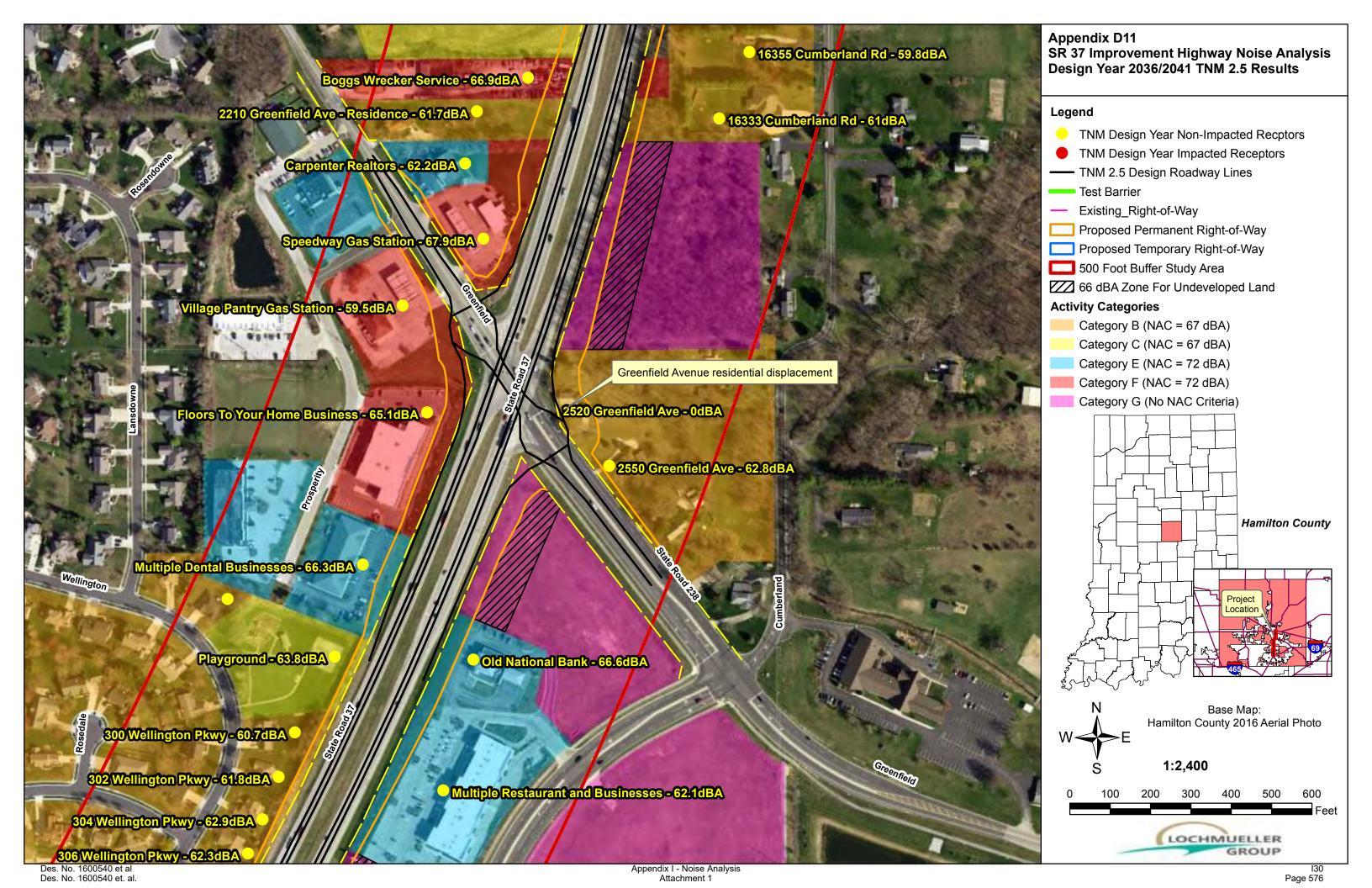


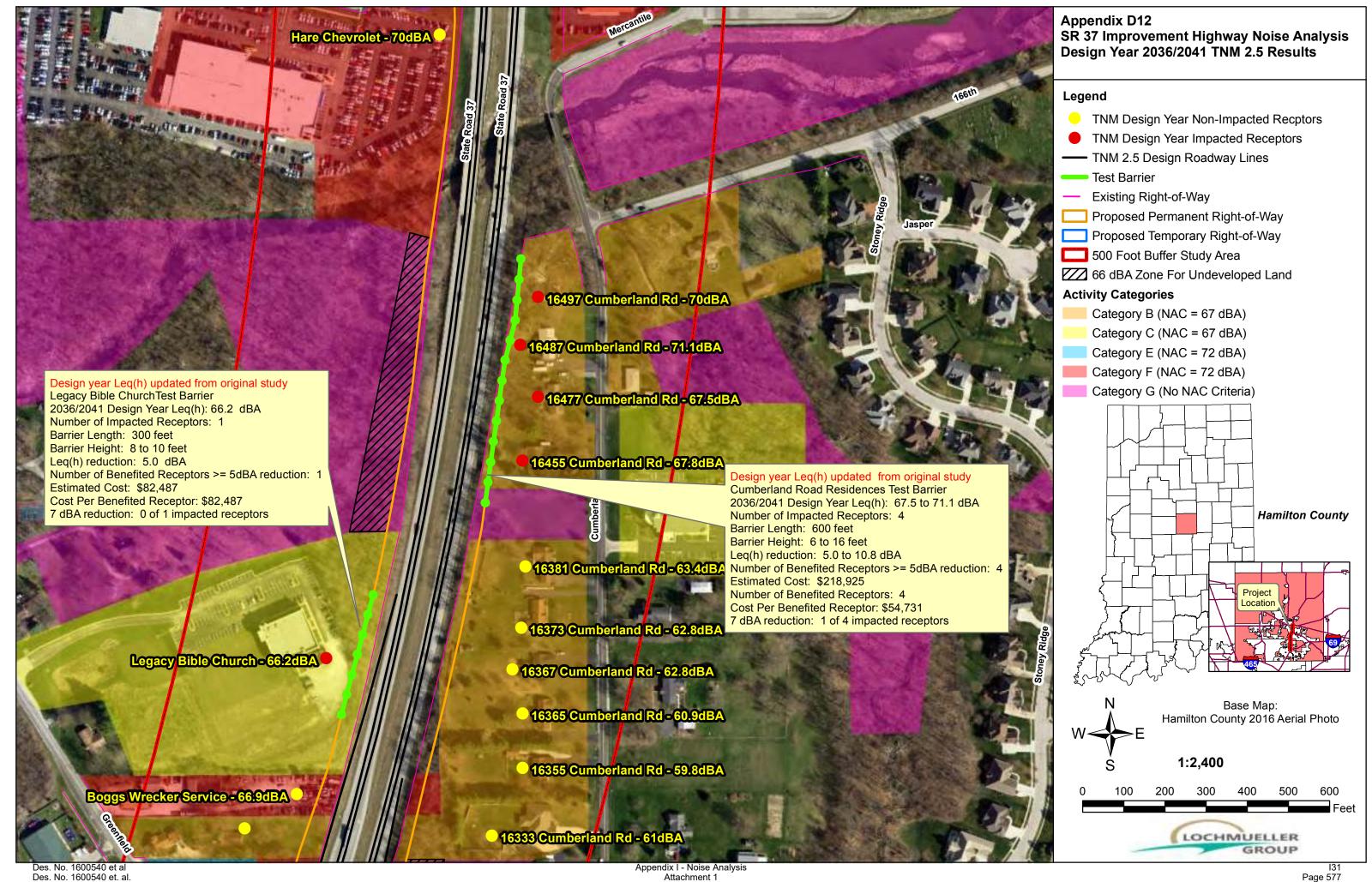
Des. No. 1600540 et. al.

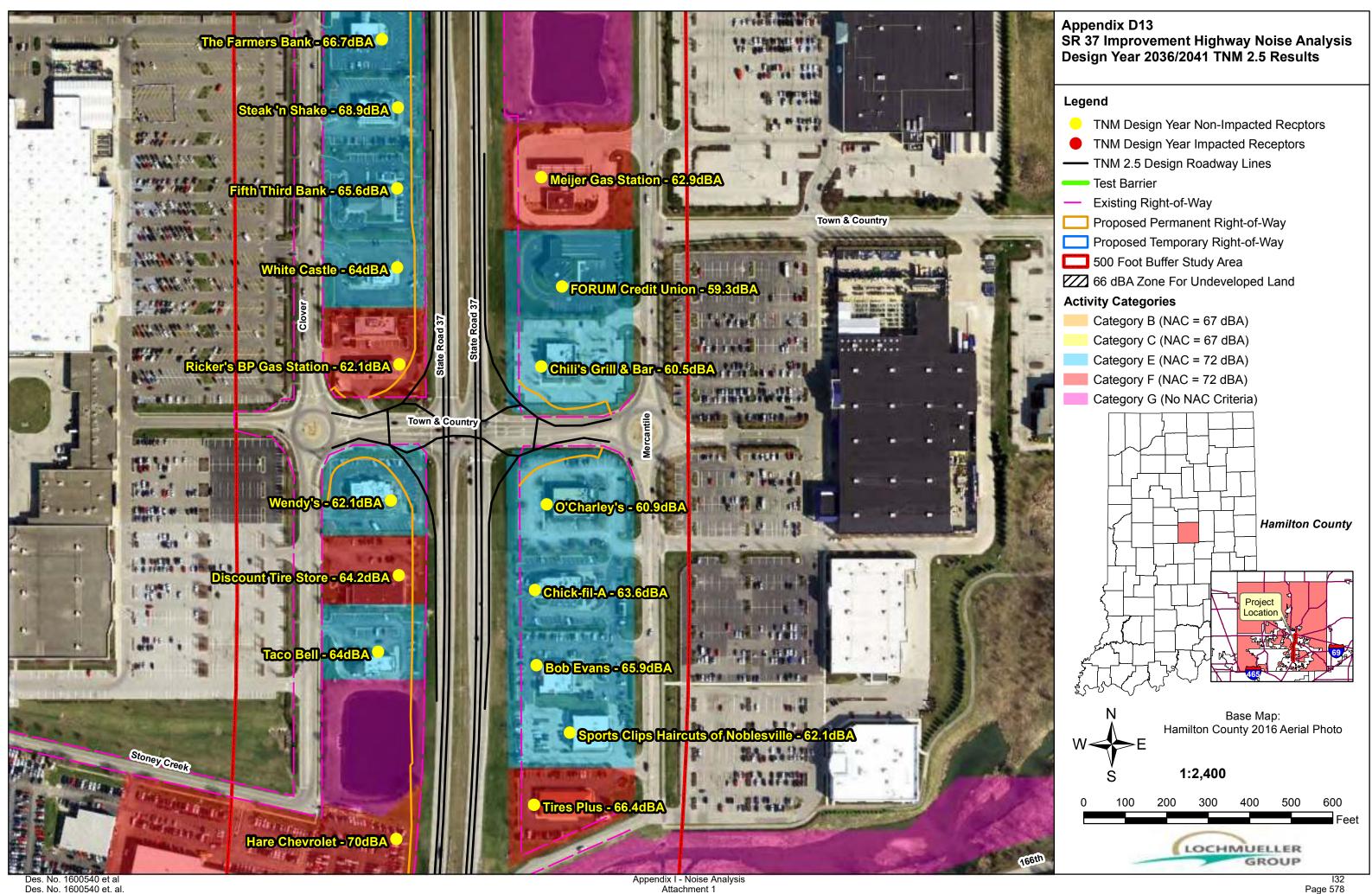


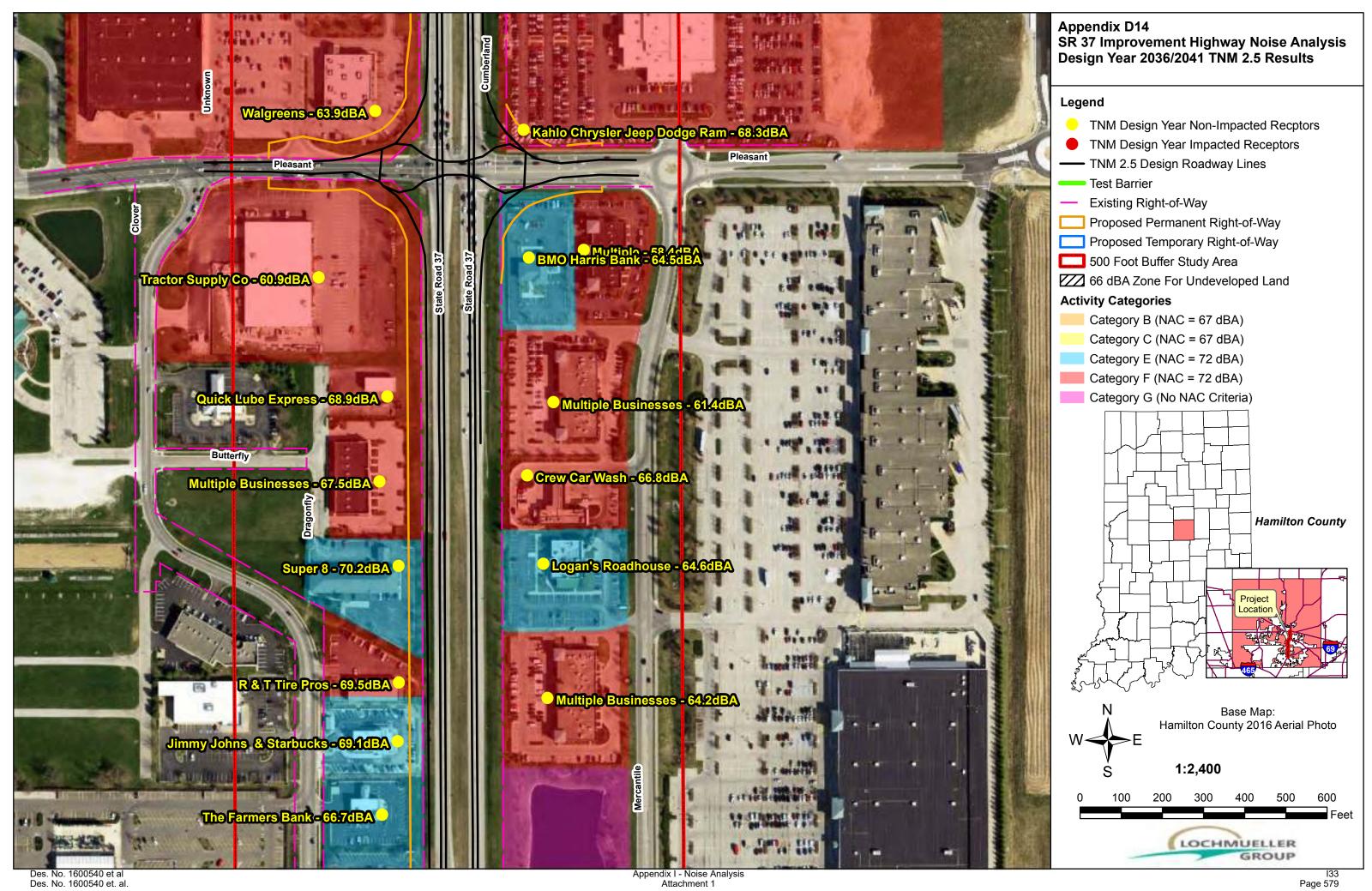
Appendix I - Noise Analysis Attachment 1

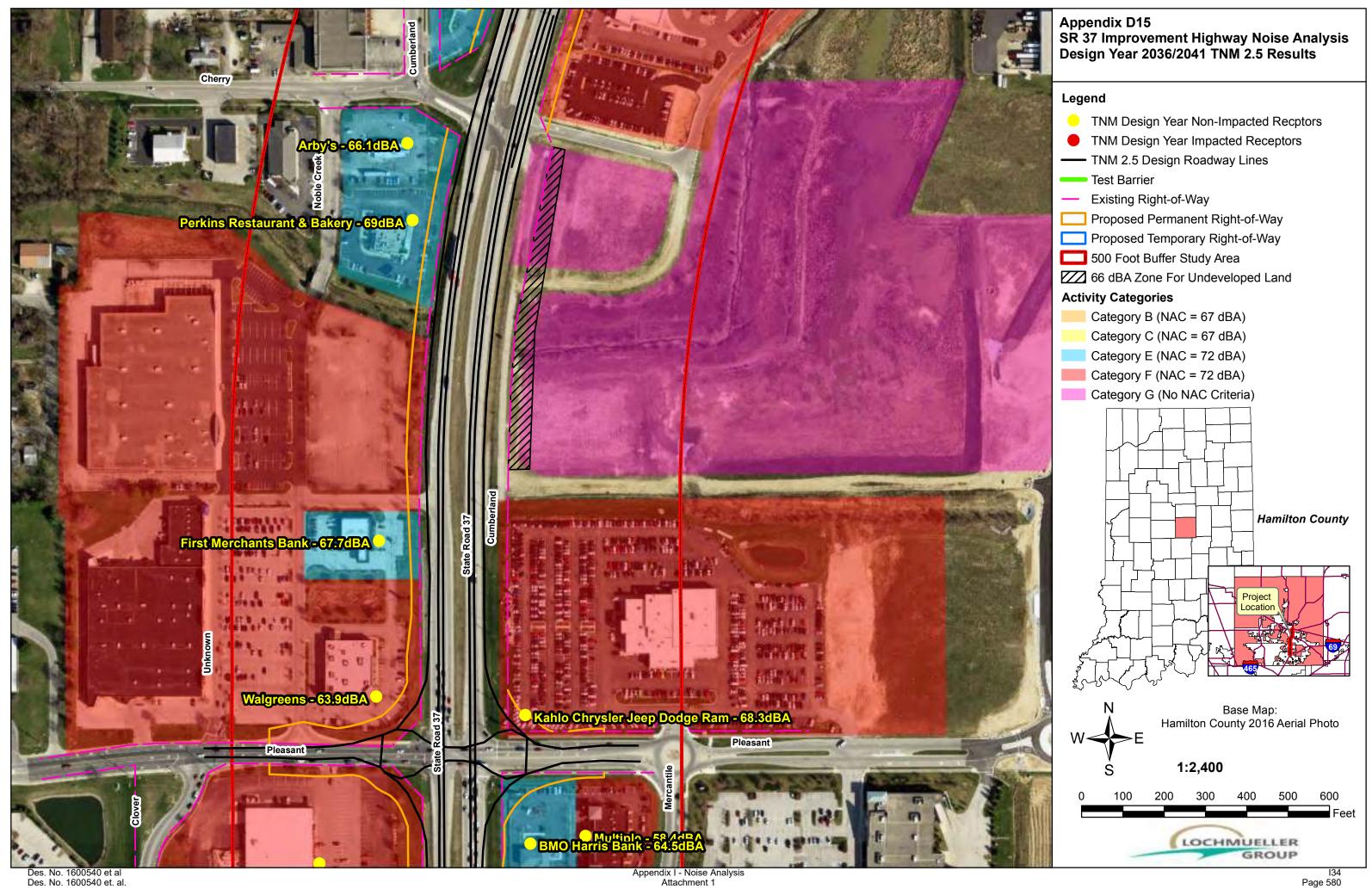


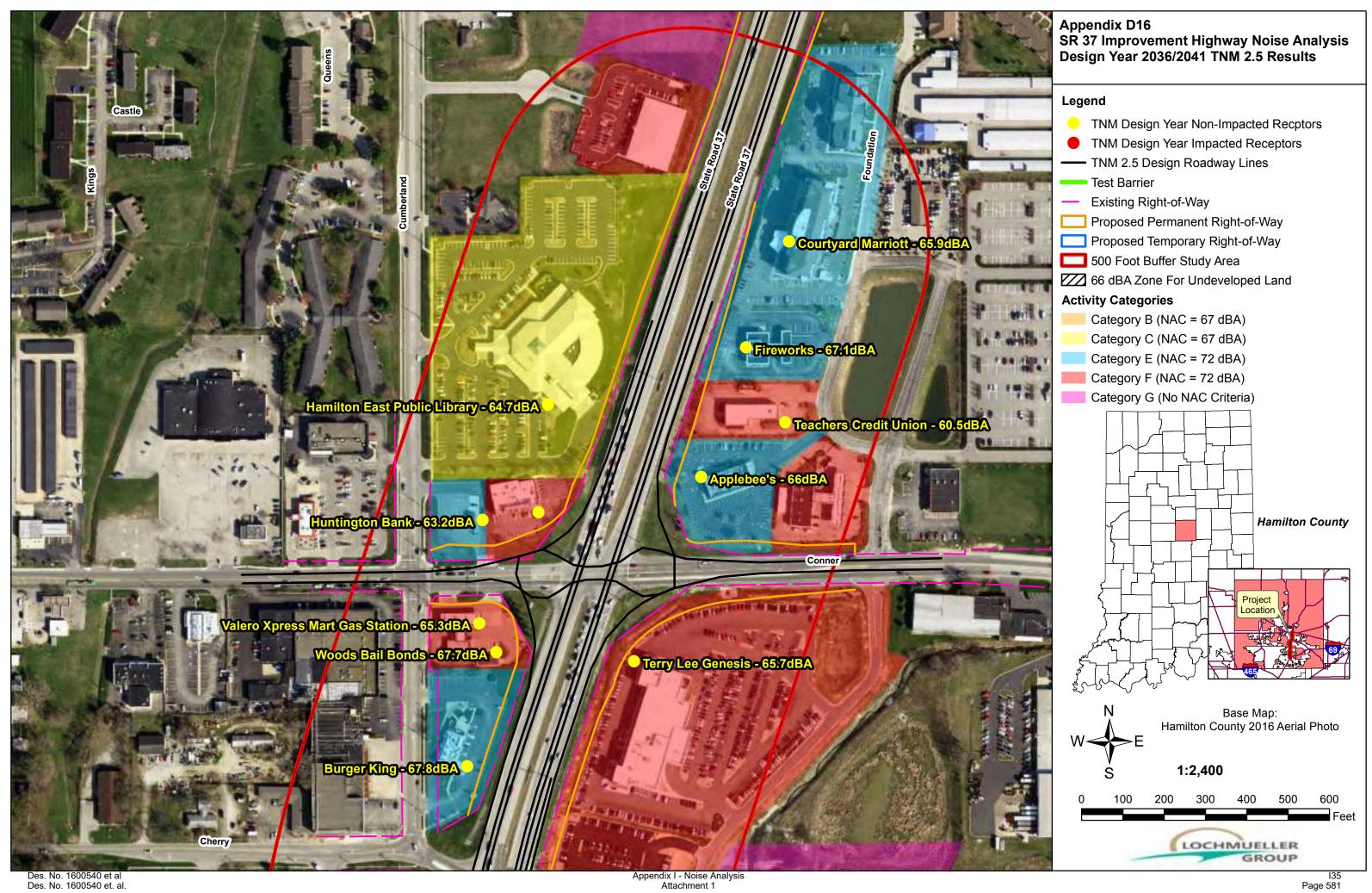












Appendix I - Noise Analysis Attachment 1

## Appendix E

TNM 2.5 2010 Existing Condition, 2036 Design Year and 2036/2041Design Year  $L_{\rm eq}(h)$  Level Results for SR 37

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Leg(h) Level Results for SR37 - 126th Street to SR32/38

Appendix E. TNM 2.5 2010 Existing Condition,	2036 Design Ye	ar, and 2036/2	041 Hybr	id Design \	ear L <sub>eq</sub> (h) Lev	el Results for S	R37 - 126th Stree	et to SR32/38					
Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
1 - Sunlake Apartments 1 1st floor	233409.7	1719489.2	822.2	1	B / 67	61.7	64.2	2.5	No	64.2	2.5	No	0.0
2 - Sunlake Apartments 2 2nd floor	233409.7	1719489.2	822.2	1	B / 67	65.6	68.3	2.7	Yes	68.3	2.7	Yes	0.0
3 - Sunlake Apartments 3 1st floor	233363.5	1719482.0	821.9	1	B / 67	57.9	61.0	3.1	No	61.0	3.1	No	0.0
4 - Sunlake Apartments 4 2nd floor	233363.5	1719482.0	821.9	1	B / 67	62.3	65.3	3.0	No	65.3	3.0	No	0.0
5 - Sunlake Apartments 5 1st floor	233304.9	1719478.1	822.0	1	B / 67	54.8	57.7	2.9	No	57.7	2.9	No	0.0
6 - Sunlake Apartments 6 2nd floor	233304.9	1719478.1	822.0	1	B / 67	59.3	62.6	3.3	No	62.6	3.3	No	0.0
7 - Sunlake Apartments 7 1st floor	233263.9	1719472.2	821.9	1	B / 67	53.8	55.5	1.7	No	55.5	1.7	No	0.0
8 - Sunlake Apartments 8 2nd floor	233263.9	1719472.2	821.9	1	B / 67	58.3	60.6	2.3	No	60.6	2.3	No	0.0
9 - Sunlake Apartments 9 1st floor	233395.2	1719558.4	822.1	1	B / 67	60.1	62.5	2.4	No	62.5	2.4	No	0.0
10 - Sunlake Apartments 10 2nd floor	233395.2	1719558.4	822.1	1	B / 67	64.6	67.0	2.4	Yes	67.0	2.4	Yes	0.0
11 - Sunlake Apartments 11 1st floor	233355.5	1719554.5	822.2	1	B / 67	57.6	60.1	2.5	No	60.1	2.5	No	0.0
12 - Sunlake Apartments 12 2nd floor	233355.5	1719554.5	822.2	1	B / 67	62.3	64.6	2.3	No	64.6	2.3	No	0.0
13 - Sunlake Apartments 13 1st floor	233291.0	1719547.3	822.1	1	B / 67	54.9	57.4	2.5	No	57.4	2.5	No	0.0
14 - Sunlake Apartments 14 2nd floor	233291.0	1719547.3	822.1	1	B / 67	60.0	62.0	2.0	No	62.0	2.0	No	0.0
15 - Sunlake Apartments 15 1st floor	233255.9	1719544.7	822.1	1	B / 67	54.1	56.5	2.4	No	56.5	2.4	No	0.0
16 - Sunlake Apartments 16 2nd floor	233255.9	1719544.7	822.1	1	B / 67	59.4	61.3	1.9	No	61.3	1.9	No	0.0
17 - Sunlake Apartments 17 1st floor	233436.1	1719325.7	821.6	1	B / 67	63.2	66.2	3.0	Yes	66.2	3.0	Yes	0.0
18 - Sunlake Apartments 18 2nd floor	233436.1	1719325.7	821.6	1	B / 67	67.0	69.6	2.6	Yes	69.6	2.6	Yes	0.0
19 - Sunlake Apartments 19 1st floor	233380.1	1719321.1	822.0	1	B / 67	58.7	60.9	2.2	No	60.9	2.2	No	0.0
20 - Sunlake Apartments 20 2nd floor	233380.1	1719321.1	822.0	1	B / 67	63.0	65.4	2.4	No	65.4	2.4	No	0.0
21 - Sunlake Apartments 21 1st floor	233323.4	1719314.0	821.7	1	B / 67	55.6	58.2	2.6	No	58.2	2.6	No	0.0
22 - Sunlake Apartments 22 2nd floor	233323.4	1719314.0	821.7	1	B / 67	60.2	62.9	2.7	No	62.9	2.7	No	0.0
23 - Sunlake Apartments 22 2nd noor	233268.1	1719307.4	821.8	1	B / 67	53.3	55.5	2.2	No	55.5	2.2	No	0.0
24 - Sunlake Apartments 24 2nd floor	233268.1	1719307.4	821.8	1	B / 67	58.0	60.6	2.6	No	60.6	2.6	No	0.0
25 - Sunlake Apartments 25 1st floor	233279.2	1719229.6	821.3	1	B / 67	58.5	60.6	2.1	No	60.6	2.1	No	0.0
26 - Sunlake Apartments 26 2nd floor	233279.2	1719229.6	821.3	1	B / 67	60.5	63.2	2.7	No	63.2	2.7	No	0.0
27 - Sunlake Apartments 27 1st floor	233273.2	1719241.9	821.7		B / 67	59.4	61.9			61.9			
				1	B / 67			2.5	No	64.7	2.5	No	0.0
28 - Sunlake Apartments 28 2nd floor	233324.1 233399.6	1719241.9 1719250.4	821.7 821.9	1	B / 67	61.8 62.0	64.7 64.6	2.9	No	64.6	2.9	No	0.0
29 - Sunlake Apartments 29 1st floor		1719250.4		1	B / 67	64.6			No		2.6	No	0.0
30 - Sunlake Apartments 30 2nd floor	233399.6		821.9 821.7	1		64.5	67.5	2.9	Yes	67.5 67.1	2.9	Yes	0.0
31 - Sunlake Apartments 31 1st floor	233446.5 233446.5	1719253.7 1719253.7	821.7	1	B / 67 B / 67	67.2	67.1 70.2	2.6	Yes	70.2	2.6	Yes	0.0
32 - Sunlake Apartments 32 2nd floor				1	· ·			3.0	Yes		3.0	Yes	0.0
33 - Sunlake Apartments 33 1st floor	233147.5	1719601.5	822.3	1	B / 67	52.4	54.7	2.3	No	54.7	2.3	No	0.0
34 - Sunlake Apartments 34 2nd floor	233147.5	1719601.5	822.3	1	B / 67	57.4	59.4	2.0	No	59.4	2.0	No	0.0
35 - Sunlake Apartments 35 1st floor	233087.6	1719594.4	822.3	1	B / 67	51.1	53.2	2.1	No	53.2	2.1	No	0.0
36 - Sunlake Apartments 36 2nd floor	233087.6	1719594.4	822.3	1	B / 67	55.5	57.2	1.7	No	57.2	1.7	No	0.0
37 - Sunlake Apartments 37 1st floor	233056.4	1719595.7	822.0	1	B / 67	50.8	52.9	2.1	No	52.9	2.1	No	0.0
38 - Sunlake Apartments 38 2nd floor	233056.4	1719595.7	822.0	1	B / 67	54.9	56.7	1.8	No	56.7	1.8	No	0.0
39 - Sunlake Apartments 39 1st floor	233149.6	1719530.6	822.5	1	B / 67	46.0	48.4	2.4	No	48.4	2.4	No	0.0
40 - Sunlake Apartments 40 2nd floor	233149.6	1719530.6	822.5	1	B / 67	50.5	53.3	2.8	No	53.3	2.8	No	0.0
41 - Sunlake Apartments 41 1st floor	233090.4	1719528.7	822.3	1	B / 67	47.0	48.7	1.7	No	48.7	1.7	No	0.0
42 - Sunlake Apartments 42 2nd floor	233090.4	1719528.7	822.3	1	B / 67	50.7	53.0	2.3	No	53.0	2.3	No	0.0
43 - Sunlake Apartments 43 1st floor	233059.8	1719525.4	822.3	1	B / 67	47.3	49.5	2.2	No	49.5	2.2	No	0.0
44 - Sunlake Apartments 44 2nd floor	233059.8	1719525.4	822.3	1	B / 67	50.9	53.3	2.4	No	53.3	2.4	No	0.0
45 - Sunlake Apartments 45 1st floor	233035.6	1719466.8	821.6	1	B / 67	49.4	51.9	2.5	No	51.9	2.5	No	0.0
46 - Sunlake Apartments 46 2nd floor	233035.6	1719466.8	821.6	1	B / 67	53.0	55.9	2.9	No	55.9	2.9	No	0.0
47 - Sunlake Apartments 47 1st floor	233041.5	1719406.9	821.6	1	B / 67	50.1	52.5	2.4	No	52.5	2.4	No	0.0
48 - Sunlake Apartments 48 2nd floor	233041.5	1719406.9	821.6	1	B / 67	53.7	56.2	2.5	No	56.2	2.5	No	0.0
49 - Sunlake Apartments 49 1st floor	233040.2	1719352.2	821.5	1	B / 67	50.2	52.6	2.4	No	52.6	2.4	No	0.0
50 - Sunlake Apartments 50 2nd floor	233040.2	1719352.2	821.5	1	B / 67	53.4	56.0	2.6	No	56.0	2.6	No	0.0
51 - Sunlake Apartments 51 1st floor	233043.4	1719291.7	821.6	1	B / 67	50.0	51.9	1.9	No	51.9	1.9	No	0.0
52 - Sunlake Apartments 52 2nd floor	233043.4	1719291.7	821.6	1	B / 67	53.1	55.4	2.3	No	55.4	2.3	No	0.0
53 - Sunlake Apartments 53 1st floor	233230.9	1719178.1	820.4	1	B / 67	58.0	60.4	2.4	No	60.4	2.4	No	0.0
54 - Sunlake Apartments 54 2nd floor	233230.9	1719178.1	820.4	1	B / 67	59.8	62.5	2.7	No	62.5	2.7	No	0.0
55 - Sunlake Apartments 55 1st floor	233207.5	1719154.0	820.8	1	B / 67	57.8	60.4	2.6	No	60.4	2.6	No	0.0
56 - Sunlake Apartments 56 2nd floor	233207.5	1719154.0	820.8	1	B / 67	59.3	62.2	2.9	No	62.2	2.9	No	0.0

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Leg(h) Level Results for SR37 - 126th Street to SR32/38

Appendix E. TNM 2.5 2010 Existing Condition,	2036 Design Ye	ar, and 2036/2	2041 Hybr	id Design \	ear L <sub>eq</sub> (h) Lev	el Results for S	R37 - 126th Stree	et to SR32/38					
Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
57 - Sunlake Apartments 57 1st floor	233168.4	1719113.7	820.7	1	B / 67	57.4	59.9	2.5	No	59.9	2.5	No	0.0
58 - Sunlake Apartments 58 2nd floor	233168.4	1719113.7	820.7	1	B / 67	58.8	61.4	2.6	No	61.4	2.6	No	0.0
59 - Sunlake Apartments 59 1st floor	233147.6	1719090.9	820.6	1	B / 67	57.1	59.6	2.5	No	59.6	2.5	No	0.0
60 - Sunlake Apartments 60 2nd floor	233147.6	1719090.9	820.6	1	B / 67	58.4	61.0	2.6	No	61.0	2.6	No	0.0
61 - Sunlake Apartments 61 1st floor	233150.3	1718995.9	820.6	1	B / 67	57.5	60.0	2.5	No	60.0	2.5	No	0.0
62 - Sunlake Apartments 62 2nd floor	233150.3	1718995.9	820.6	1	B / 67	58.7	61.3	2.6	No	61.3	2.6	No	0.0
63 - Sunlake Apartments 63 1st floor	233158.1	1718966.0	821.0	1	B / 67	57.6	60.0	2.4	No	60.0	2.4	No	0.0
64 - Sunlake Apartments 64 2nd floor	233158.1	1718966.0	821.0	1	B / 67	59.1	61.7	2.6	No	61.7	2.6	No	0.0
65 - Sunlake Apartments 65 1st floor	233182.9	1718910.6	820.9	1	B / 67	58.1	60.7	2.6	No	60.7	2.6	No	0.0
66 - Sunlake Apartments 66 2nd floor	233182.9	1718910.6	820.9	1	B / 67	59.5	62.4	2.9	No	62.4	2.9	No	0.0
67 - Sunlake Apartments 67 1st floor	233213.7	1718815.0	821.7	1	B / 67	58.5	61.0	2.5	No	61.0	2.5	No	0.0
68 - Sunlake Apartments 68 2nd floor	233213.7	1718815.0	821.7	1	B / 67	60.3	63.3	3.0	No	63.3	3.0	No	0.0
69 - Sunlake Apartments 69 1st floor	233228.7	1718782.4	821.9	1	B / 67	58.8	61.1	2.3	No	61.1	2.3	No	0.0
70 - Sunlake Apartments 70 2nd floor	233228.7	1718782.4	821.9	1	B / 67	60.7	63.4	2.7	No	63.4	2.7	No	0.0
71 - Sunlake Apartments 71 1st floor	233244.9	1718739.4	821.6	1	B / 67	58.8	61.6	2.8	No	61.6	2.8	No	0.0
72 - Sunlake Apartments 72 2nd floor	233244.9	1718739.4	821.6	1	B / 67	60.9	63.9	3.0	No	63.9	3.0	No	0.0
73 - Sunlake Apartments 73 1st floor	233256.0	1718707.5	822.0	1	B / 67	58.8	61.3	2.5	No	61.3	2.5	No	0.0
74 - Sunlake Apartments 74 2nd floor	233256.0	1718707.5	822.0	1	B / 67	61.1	64.0	2.9	No	64.0	2.9	No	0.0
75 - Sunlake Apartments 75 1st floor	233303.7	1718658.3	821.5	1	B / 67	59.5	61.8	2.3	No	61.8	2.3	No	0.0
76 - Sunlake Apartments 76 2nd floor	233303.7	1718658.3	821.5	1	B / 67	62.1	65.0	2.9	No	65.0	2.9	No	0.0
77 - Sunlake Apartments 77 1st floor	233345.4	1718629.7	821.5	1	B / 67	60.2	62.8	2.6	No	62.8	2.6	No	0.0
78 - Sunlake Apartments 78 2nd floor	233345.4	1718629.7	821.5	1	B / 67	63.2	66.0	2.8	Yes	66.0	2.8	Yes	0.0
79 - Sunlake Apartments 79 1st floor	233398.7	1718595.8	821.4	1	B / 67	60.8	63.8	3.0	No	63.8	3.0	No	0.0
80 - Sunlake Apartments 80 2nd floor	233398.7	1718595.8	821.4	1	B / 67	64.9	67.7	2.8	Yes	67.7	2.8	Yes	0.0
81 - Sunlake Apartments 81 1st floor	233448.2	1718564.6	821.6	1	B / 67	61.9	65.1	3.2	No	65.1	3.2	No	0.0
82 - Sunlake Apartments 82 2nd floor	233448.2	1718564.6	821.6	1	B / 67	66.8	69.5	2.7	Yes	69.5	2.7	Yes	0.0
83 - Auto Dealership - Lockhart Cadillac	233443.3	1720334.6	824.7	1	F / 72	66.4	66.1	-0.3	No	66.1	-0.3	No	0.0
84 - Auto Dealership - Don Hinds Ford	233467.0	1720702.0	819.7	1	F / 72	68.4	66.3	-2.1	No	66.3	-2.1	No	0.0
85 - Auto Dealership - Don Hinds Pre-Owned	233456.6	1721563.8	812.9	1	F / 72	67.3	69.8	2.5	No	69.8	2.5	No	0.0
86 - The Mower Shop	233292.8	1722345.3	814.9	1	F / 72	59.6	61.7	2.1	No	61.7	2.1	No	0.0
87 - Auto Dealership - Any Mohr Buick GMC	233464.7	1723015.5	813.0	1	F / 72	69.0	68.6	-0.4	No	68.6	-0.4	No	0.0
88 - BP Gas Station and McDonald's Restaurant	233348.3	1723317.6	809.8	1	E / 72	62.9	61.7	-1.2	No	61.7	-1.2	No	0.0
89 - Recreational Vehicle Business	233450.8	1723673.5	806.9	1	F / 72	67.9	67.6	-0.3	No	67.6	-0.3	No	0.0
90 - Fishers Self Storage	233485.5	1724196.0	806.2	1	F / 72	70.4	72.9	2.5	Yes	72.9	2.5	Yes	0.0
91 - Pinecrest Marine	233332.7	1724432.1	808.1	1	F / 72	62.0	64.2	2.2	No	64.2	2.2	No	0.0
92 - Auto Dealership - Ed Martin Nissan	233456.0	1724959.9	810.4	1	F / 72	68.0	70.9	2.9	No	70.9	2.9	No	0.0
93 - Auto Dealership - Butler Kia	233454.2	1725609.2	814.6	1	F / 72	68.8	70.7	1.9	No	70.4	1.6	No	-0.3
94 - Pet Suites	233438.6	1725944.3	814.0	1	E / 72	67.0	69.8	2.8	No	69.6	2.6	No	-0.2
95 - Auto Dealership - Honda of Fishers	233438.6	1726333.2	811.5	1	F / 72	67.5	70.3	2.8	No	70.0	2.5	No	-0.3
96 - Pinheads (bowling) with Outdoor Volleyball	233284.1	1726609.2	809.8	1	C / 67	60.1	61.9	1.8	No	61.8	1.7	No	-0.1
97 - Ben & Ari's Miniature Golf Course	233419.5	1727123.1	811.6	1	C / 67	66.9	68.8	1.9	Yes		2.7	.,,	J.1
97 - Alderman Luxury Imports	233419.5	1727123.1	811.6	1	F / 72	66.9	23.0	1.7		68.6	1.7	No	-0.2
98 - Auto Dealership - Andy Mohr Mitsubishi	233457.7	1727486.0	811.5	1	F / 72	70.7	72.2	1.5	Yes	72.6	1.9	Yes	0.4
99 - Buffalo Wild Wings Restaurant	233405.6	1727751.6	812.9	1	E / 72	66.6	67.7	1.1	No	67.9	1.3	No	0.2
100 - Speedway Gas Station	233367.4	1728373.1	815.0	1	F / 72	65.3	63.5	-1.8	No	64.8	-0.5	No	1.3
101 - The Old Custard Stand Restaurant	233365.7	1728635.3	818.1	1	E / 72	64.8	63.7	-1.1	No	64.6	-0.2	No	0.9
102 - IDI Fabrication Business	233386.6	1730224.0	815.0	1	F / 72	65.3	67.4	2.1	No	66.8	1.5	No	-0.6
103 - Shell Gas Station	233388.5	1730953.5	814.3	1	F / 72	66.5	67.8	1.3	No	65.6	-0.9	No	-2.2
104 - LA Fitness	233096.3	1731343.1	812.6	1	E / 72	61.4	61.6	0.2	No	61.7	0.3	No	0.1
105 - Multiple Businesses	233358.0	1731411.8	811.5	1	E / 72	65.4	64.3	-1.1	No	65.3	-0.1	No	1.0
106 - Business	233398.1	1731791.9	809.4	1	F / 72	66.9	68.3	1.4	No	68.2	1.3	No	-0.1
107 - Business	233279.7	1731731.3	808.5	1	F / 72	59.6	62.0	2.4	No	60.1	0.5	No	-1.9
108 - Indiana Elite Cheer and Tumbling	233415.3	1732473.8	807.5	1	E / 72	67.8	71.0	3.2	Yes	69.6	1.8	No	-1.4
109 - Recreation Unlimited Business	233312.1	1733350.2	797.5	1	F / 72	61.7	65.1	3.4	No	64.1	2.4	No	-1.4
110 - Refine Kitches Baths & Floors	233338.9	1733583.2	798.0	1	E / 72	62.9	66.4	3.5	No	65.3	2.4	No	-1.0
111 - Extreme Vehicle Designs	233398.1	1733808.5	795.8	1	F / 72	66.6	69.4	2.8	No	68.3	1.7	No	-1.1
TIT LAGETTE VEHICLE DESIGNS	233370.1	1733000.3	133.0	1	1 / / 2	00.0	03.4	4.0	INU	00.5	1./	INU	-1.1

Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
112 - Ballerinas Academy of Dance	233407.6	1734053.0	795.1	1	E / 72	66.9	69.8	2.9	No	68.7	1.8	No	-1.1
113 - Business	233388.5	1734253.5	792.4	1	F / 72	64.0	66.7	2.7	No	65.5	1.5	No	-1.2
114 - Valvoline	233272.0	1734641.2	794.3	1	F / 72	58.4	60.9	2.5	No	59.9	1.5	No	-1.0
115 - Dog Dayz	233512.7	1734876.1	797.6	1	F / 72	70.1	73.0	2.9	Yes	72.0	1.9	Yes	-1.0
116 - T&T Sales & Promotions	233390.4	1735112.9	795.1	1	F / 72	61.0	63.2	2.2	No	62.3	1.3	No	-0.9
117 - Elbert Construction	233438.2	1735187.3	796.8	1	F / 72	61.7	64.0	2.3	No	63.0	1.3	No	-1.0
118 - Multi-Business	233577.6	1735258.0	797.7	1	F / 72	68.6	71.5	2.9	Yes	70.5	1.9	No	-1.0
119 - Dakswan Automation Systems, Inc	233610.1	1735483.4	797.0	1	F / 72	65.8	68.8	3.0	No	67.8	2.0	No	-1.0
120 - Jackson & Associates Food Products Supplier	233484.0	1735641.9	795.1	1	F / 72	59.1	61.5	2.4	No	60.8	1.7	No	-0.7
121 - ZR Tactical Solutions	233726.5	1735739.3	794.8	1	F / 72	69.1	71.6	2.5	Yes	70.6	1.5	No	-1.0
122 - Backyard Archery	233545.1	1735790.8	794.5	1	F / 72	59.4	61.8	2.4		60.9			-0.9
·					•				No		1.5	No	
123 - Cim Solutions	233629.2	1735974.2	795.7	1	F / 72	59.8	62.3	2.5	No	61.4	1.6	No	-0.9
124 - Business	233804.8	1736052.5	795.7	1	F / 72	66.6	69.2	2.6	No	68.2	1.6	No	-1.0
125 - Children's Bureau Inc	233623.4	1736094.5	795.5	1	E / 72	58.2	60.5	2.3	No	59.6	1.4	No	-0.9
126 - Jds International	233913.7	1736235.8	796.5	1	E / 72	68.9	71.7	2.8	Yes	70.6	1.7	No	-1.1
127 - Summers Plumbing Heating & Cooling	233967.2	1736392.4	796.0	1	F / 72	67.9	70.7	2.8	No	69.7	1.8	No	-1.0
128 - 372 Wellington Pkwy - Residence	233728.6	1736554.4	792.8	1	B / 67	55.7	57.9	2.2	No	56.9	1.2	No	-1.0
129 - 368 Wellington Pkwy - Residence	233812.0	1736561.3	793.8	1	B / 67	57.7	60.1	2.4	No	59.1	1.4	No	-1.0
130 - 376 Wellington Pkwy - Residence	233643.6	1736563.0	791.5	1	B / 67	53.9	56.0	2.1	No	55.0	1.1	No	-1.0
131 - 364 Wellington Pkwy - Residence	233924.8	1736575.2	794.1	1	B / 67	60.9	63.5	2.6	No	62.5	1.6	No	-1.0
132 - 360 Wellington Pkwy - Residence	234016.8	1736618.6	791.1	1	B / 67	62.5	65.1	2.6	No	64.1	1.6	No	-1.0
133 - 356 Wellington Pkwy - Residence	234089.7	1736696.7	791.5	1	B / 67	61.7	64.4	2.7	No	63.2	1.5	No	-1.2
134 - 352 Wellington Pkwy - Residence	234141.8	1736747.1	791.5	1	B / 67	60.6	63.2	2.6	No	61.9	1.3	No	-1.3
135 - 348 Wellington Pkwy - Residence	234206.1	1736847.8	792.2	1	B / 67	60.6	63.2	2.6	No	61.9	1.3	No	-1.3
136 - 344 Wellington Pkwy - Residence	234252.9	1736932.8	792.4	1	B / 67	59.9	62.5	2.6	No	61.2	1.3	No	-1.3
137 - 340 Wellington Pkwy - Residence	234263.3	1737054.4	793.5	1	B / 67	58.5	61.0	2.5	No	59.8	1.3	No	-1.2
138 - 336 Wellington Pkwy - Residence	234273.8	1737151.6	795.5	1	B / 67	57.7	60.3	2.6	No	59.1	1.4	No	-1.2
139 - 55 Glasgow Lane - Residence	234369.2	1737170.7	794.2	1	B / 67	58.3	60.8	2.5	No	59.4	1.1	No	-1.4
140 - 332 Wellington Pkwy - Residence	234268.6	1737170.7	793.5	1	B / 67	55.8	58.3	2.5	No	57.1	1.3	No	-1.4
141 - 51 Glasgow Lane - Residence	234447.4	1737217.3	795.6		B / 67	59.9	62.3			61.0			
-				1				2.4	No		1.1	No	-1.3
142 - 50 Glasgow Lane - Residence	234499.5	1737375.5	796.6	1	B / 67	58.3	60.9	2.6	No	59.7	1.4	No	-1.2
143 - 330 Wellington Pkwy - Residence	234364.0	1737429.4	796.7	1	B / 67	55.3	57.8	2.5	No	56.6	1.3	No	-1.2
144 - 328 Wellington Pkwy - Residence	234454.3	1737471.0	795.5	1	B / 67	55.8	58.4	2.6	No	57.2	1.4	No	-1.2
145 - 324 Wellington Pkwy - Residence	234549.8	1737495.3	795.4	1	B / 67	57.1	59.8	2.7	No	58.5	1.4	No	-1.3
146 - 320 Wellington Pkwy - Residence	234622.7	1737550.9	795.5	1	B / 67	58.2	61.1	2.9	No	59.8	1.6	No	-1.3
147 - 316 Wellington Pkwy - Residence	234681.7	1737646.4	796.3	1	B / 67	59.6	62.3	2.7	No	61.0	1.4	No	-1.3
148 - 312 Wellington Pkwy - Residence	234728.6	1737726.2	795.4	1	B / 67	59.8	62.4	2.6	No	61.2	1.4	No	-1.2
149 - 310 Wellington Pkwy - Residence	234775.5	1737806.1	795.8	1	B / 67	61.9	64.8	2.9	No	63.7	1.8	No	-1.1
150 - 308 Wellington Pkwy - Residence	234839.7	1737896.4	795.9	1	B / 67	62.8	65.5	2.7	No	64.4	1.6	No	-1.1
151 - 306 Wellington Pkwy - Residence	234879.7	1737950.2	795.4	1	B / 67	61.2	63.6	2.4	No	62.3	1.1	No	-1.3
152 - 304 Wellington Pkwy - Residence	234916.1	1738035.3	796.9	1	B / 67	61.8	64.1	2.3	No	62.9	1.1	No	-1.2
153 - 302 Wellington Pkwy - Residence	234956.1	1738139.4	797.0	1	B / 67	60.7	63.0	2.3	No	61.8	1.1	No	-1.2
154 - 300 Wellington Pkwy - Residence	234996.0	1738250.5	795.9	1	B / 67	59.6	61.9	2.3	No	60.7	1.1	No	-1.2
155 - Playground Park - Wellington NE Neighborhood	235094.9	1738438.0	798.0	1	C / 67	62.5	64.6	2.1	No	63.8	1.3	No	-0.8
156 - 274 Wellington Pkwy - Residence	234829.3	1738580.4	795.9	1	B / 67	53.4	55.5	2.1	No	54.9	1.5	No	-0.6
157 - Multiple Dental Businesses	235164.4	1738665.5	795.9	1	E / 72	63.8	66.4	2.6	No	66.3	2.5	No	-0.1
158 - Floors To Your Home Business	235324.1	1739043.9	797.8	1	F / 72	65.1	65.1	0.0	No	65.1	0.0	No	0.0
159 - Village Pantry Gas Station	235263.3	1739307.8	797.7	1	F / 72	60.3	59.5	-0.8	No	59.5	-0.8	No	0.0
160 - Speedway Gas Station	235463.0	1739472.8	798.8	1	F / 72	66.0	67.9	1.9	No	67.9	1.9	No	0.0
161 - Carpenter Realtors	235417.9	1739472.8	798.0		F / 72	60.1	62.2			62.2			
·				1				2.1	No		2.1	No	0.0
162 - 2210 Greenfield Ave - Residence	235447.4	1739788.7	792.6	1	B / 67	57.9	61.7	3.8	No	61.7	3.8	No	0.0
163 - Boggs Wrecker Service	235574.1	1739872.1	797.4	1	F / 72	61.9	66.9	5.0	No	66.9	5.0	No	0.0
164 - Legacy Bible Church	235645.3	1740201.9	792.8	1	C / 67	63.0	66.2	3.2	Yes	66.2	3.2	Yes	0.0
165 - Auto Dealership - Hare Chevrolet	235921.4	1741718.2	763.8	1	F / 72	67.0	70.0	3.0	No	70.0	3.0	No	0.0
166 - Taco Bell Restaurant	235877.5	1742168.9	766.2	1	E / 72	64.2	64.0	-0.2	No	64.0	-0.2	No	0.0
167 - Discount Tire Store	235927.1	1742354.2	768.4	1	F / 72	67.0	64.2	-2.8	No	64.2	-2.8	No	0.0

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Leg(h) Level Results for SR37 - 126th Street to SR32/38

Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	R37 - 126th Stree 2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
168 - Wendy's Restaurant	235908.1	1742533.7	768.1	1	E / 72	66.0	62.1	-3.9	No	62.1	-3.9	No	0.0
169 - Ricker's BP Gas Station	235929.1	1742862.2	767.8	1	F / 72	66.8	62.1	-4.7	No	62.1	-4.7	No	0.0
170 - White Castle Restaurant	235923.3	1743095.2	769.5	1	E / 72	66.5	64.0	-2.5	No	64.0	-2.5	No	0.0
171 - Fifth Third Bank	235923.3	1743286.1	770.0	1	E / 72	66.1	65.6	-0.5	No	65.6	-0.5	No	0.0
172 - Steak 'n Shake Restaurant	235925.2	1743480.9	771.6	1	E / 72	66.2	68.9	2.7	No	68.9	2.7	No	0.0
173 - The Farmers Bank	235887.0	1743645.2	771.1	1	E / 72	64.1	66.7	2.6	No	66.7	2.6	No	0.0
174 - Jimmy Johns Restaurant & Starbucks	235925.3	1743823.7	770.0	1	E / 72	66.6	69.1	2.5	No	69.1	2.5	No	0.0
175 - R & T Tire Pros	235928.1	1743965.9	772.1	1	F / 72	67.0	69.5	2.5	No	69.5	2.5	No	0.0
176 - Super 8 Hotel	235927.2	1744248.7	777.6	1	E / 72	67.5	70.2	2.7	No	70.2	2.7	No	0.0
177 - Multiple Businesses	235881.4	1744454.9	778.0	1	F / 72	64.7	67.5	2.8	No	67.5	2.8	No	0.0
178 - Quick Lube Express	235900.1	1744661.2	780.1	1	F / 72	66.1	68.9	2.8	No	68.9	2.8	No	0.0
179 - Tractor Supply Co Business	235733.5	1744950.7	780.4	1	F / 72	58.7	60.9	2.2	No	60.9	2.2	No	0.0
180 - Walgreens	235871.0	1745354.9	775.6	1	F / 72	64.8	63.9	-0.9	No	63.9	-0.9	No	0.0
181 - First Merchants Bank	235877.2	1745732.0	776.0	1	E / 72	65.7	67.7	2.0	No	67.7	2.0	No	0.0
182 - Perkins Restaurant & Bakery	235958.5	1746507.0	774.8	1	E / 72	66.5	69.0	2.5	No	69.0	2.5	No	0.0
183 - Arby's Restaurant	235946.0	1746694.5	776.6	1	E / 72	63.8	66.1	2.3	No	66.1	2.3	No	0.0
184 - Burger King Restaurant	236096.0	1747032.0	779.3	1	E / 72	67.0	67.8	0.8	No	67.8	0.8	No	0.0
185 - Woods Bail Bonds	236166.8	1747307.0	780.9	1	F / 72	65.8	67.7	1.9	No	67.7	1.9	No	0.0
186 - Valero Xpress Mart Gas Station	236125.1	1747377.8	780.8	1	F / 72	63.7	65.3	1.6	No	65.3	1.6	No	0.0
187 - Huntington Bank	236133.5	1747627.8	780.6	1	E / 72	61.5	63.2	1.7	No	63.2	1.7	No	0.0
188 - Multiple Businesses	236268.9	1747646.6	782.0	1	F / 72	65.9	66.7	0.8	No	66.7	0.8	No	0.0
189 - Hamilton East Public Library	236291.8	1747907.0	784.3	1	C / 67	62.4	64.7	2.3	No	64.7	2.3	No	0.0
190 - Multiple - Quilt Expressions; Bank	233778.5	1720103.9	823.7	1	F / 72	66.3	67.9	1.6	No	67.9	1.6	No	0.0
191 - CVS (former)	233756.7	1720308.5	824.0	1	F / 72	68.1	68.6	0.5	No	68.6	0.5	No	0.0
192 - Shell Gas Station	233860.1	1720650.3	820.7	1	F / 72	63.7	64.0	0.3	No	64.0	0.3	No	0.0
193 - Multiple Businesses	234072.4	1720030.3	819.8	1	E / 72	57.6	58.5	0.9	No	58.4	0.8	No	-0.1
194 - Wendy's Restaurant	233836.8	1720907.7	820.8	1	E / 72	63.5	63.9	0.4	No	63.9	0.4	No	0.0
195 - Ram Restaurant & Brewery	233790.5	1721178.7	818.7	1	E / 72	65.5	67.4	1.9	No	67.4	1.9		0.0
196 - Kid's World Private Preschool & Education	233792.8	1721178.7	814.9	1	C / 67	65.3	67.5	2.2	Yes	67.5	2.2	No Yes	0.0
197 - Texas Roadhouse Restaurant	233795.0	1721956.0	817.8		E / 72	65.5	67.3			67.3			
	233751.1	1722090.1	817.8	1	E / 72	67.9	69.9	1.8 2.0	No	69.9	1.8 2.0	No	0.0
198 - Parkside Animal Hospital				1					No			No	0.0
199 - Christian Brothers Automotive Service	233773.7 233778.9	1722242.9 1722541.5	818.8 819.0	1	F / 72 E / 72	66.6 66.1	68.4 68.0	1.8	No	68.4 68.0	1.8	No	0.0
200 - DQ Grill & Chill Restaurant	233778.9	1722706.4		1		66.3	67.8	1.9	No	67.8	1.9	No	0.0
201 - Arby's Restaurant			818.5	1	E / 72			1.5	No		1.5	No	0.0
202 - CVS	233778.9	1723020.7	815.9	1	F / 72	66.5	65.2	-1.3	No	65.2	-1.3	No	0.0
203 - Lake City Bank	233806.7	1723354.0	810.9	1	E / 72	64.2	62.9	-1.3	No	62.9	-1.3	No	0.0
204 - Restaurant & Businesses	233858.8	1723565.8	810.6	1	E / 72	61.8	61.8	0.0	No	61.8	0.0	No	0.0
205 - Restaurant & Businesses	233858.8	1723706.4	809.6	1	E / 72	62.3	62.4	0.1	No	62.4	0.1	No	0.0
206 - Business Under Construction	233858.8	1724051.9	810.4	1	F / 72	62.2	63.8	1.6	No	63.8	1.6	No	0.0
207 - Taco Bell Restaurant	233784.1	1724926.9	810.5	1	E / 72	63.9	66.5	2.6	No	66.5	2.6	No	0.0
208 - Zaxby's Restaurant	233766.7	1725084.9	810.9	1	E / 72	64.6	67.0	2.4	No	67.0	2.4	No	0.0
209 - The Woods of Britton Apartments 1 1st floor	234085.5	1725953.9	815.5	1	B / 67	54.3	56.1	1.8	No	56.3	2.0	No	0.2
210 - The Woods of Britton Apartments 2 2nd floor	234085.5	1725953.9	815.5	1	B / 67	58.8	61.0	2.2	No	61.0	2.2	No	0.0
211 - The Woods of Britton Apartments 3 1st floor	234064.6	1726003.7	814.9	1	B / 67	54.6	56.5	1.9	No	56.6	2.0	No	0.1
212 - The Woods of Britton Apartments 4 2nd floor	234064.6	1726003.7	814.9	1	B / 67	59.1	61.5	2.4	No	61.5	2.4	No	0.0
213 - The Woods of Britton Apartments 5 1st floor	234063.6	1726107.8	817.1	1	B / 67	54.6	56.6	2.0	No	56.7	2.1	No	0.1
214 - The Woods of Britton Apartments 6 2nd floor	234063.6	1726107.8	817.1	1	B / 67	59.1	61.6	2.5	No	61.6	2.5	No	0.0
215 - The Woods of Britton Apartments 7 1st floor	234062.9	1726178.1	817.5	1	B / 67	54.7	56.7	2.0	No	56.8	2.1	No	0.1
216 - The Woods of Britton Apartments 8 2nd floor	234062.9	1726178.1	817.5	1	B / 67	59.2	61.8	2.6	No	61.8	2.6	No	0.0
217 - The Woods of Britton Apartments 9 1st floor	234068.8	1726288.8	816.5	1	B / 67	53.5	55.7	2.2	No	55.8	2.3	No	0.1
218 - The Woods of Britton Apartments 10 2nd floor	234068.8	1726288.8	816.5	1	B / 67	57.9	60.7	2.8	No	60.7	2.8	No	0.0
219 - The Woods of Britton Apartments 11 1st floor	234123.1	1726265.6	816.8	1	B / 67	52.1	54.3	2.2	No	54.5	2.4	No	0.2
220 - The Woods of Britton Apartments 12 2nd floor	234123.1	1726265.6	816.8	1	B / 67	56.3	59.1	2.8	No	59.1	2.8	No	0.0
221 - The Woods of Britton Apartments 13 1st floor	234101.2	1726343.4	816.5	1	B / 67	50.5	52.3	1.8	No	52.4	1.9	No	0.1
222 - The Woods of Britton Apartments 14 2nd floor	234101.2	1726343.4	816.5	1	B / 67	55.1	57.3	2.2	No	57.3	2.2	No	0.0
223 - The Woods of Britton Apartments 15 1st floor	234146.8	1726318.6	816.7	1	B / 67	48.0	49.8	1.8	No	50.0	2.0	No	0.2

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Leq(h) Level Results for SR37 - 126th Street to SR32/38

Appendix E. TNM 2.5 2010 Existing Condition,	2036 Design Ye	ar, and 2036/2	041 Hybr	id Design \	ear L <sub>eq</sub> (h) Lev	vel Results for S	R37 - 126th Stree	et to SR32/38	•				
Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
224 - The Woods of Britton Apartments 16 2nd floor	234146.8	1726318.6	816.7	1	B / 67	52.4	54.4	2.0	No	54.4	2.0	No	0.0
225 - The Woods of Britton Apartments 17 1st floor	234136.4	1726537.4	815.7	1	B / 67	52.8	54.8	2.0	No	54.9	2.1	No	0.1
226 - The Woods of Britton Apartments 18 2nd floor	234136.4	1726537.4	815.7	1	B / 67	57.3	59.5	2.2	No	59.5	2.2	No	0.0
227 - The Woods of Britton Apartments 19 1st floor	234112.9	1726586.9	815.6	1	B / 67	53.3	55.3	2.0	No	55.4	2.1	No	0.1
228 - The Woods of Britton Apartments 20 2nd floor	234112.9	1726586.9	815.6	1	B / 67	57.8	60.2	2.4	No	60.2	2.4	No	0.0
229 - The Woods of Britton Apartments 21 1st floor	234052.8	1727231.4	817.1	1	B / 67	51.4	53.2	1.8	No	53.4	2.0	No	0.2
230 - The Woods of Britton Apartments 22 2nd floor	234052.8	1727231.4	817.1	1	B / 67	56.5	58.5	2.0	No	58.5	2.0	No	0.0
231 - The Woods of Britton Apartments 23 1st floor	233999.6	1727236.6	816.8	1	B / 67	52.4	54.1	1.7	No	54.3	1.9	No	0.2
232 - The Woods of Britton Apartments 24 2nd floor	233999.6	1727236.6	816.8	1	B / 67	57.5	59.6	2.1	No	59.6	2.1	No	0.0
233 - The Woods of Britton Apartments 25 1st floor	234052.1	1727299.0	816.9	1	B / 67	51.5	52.4	0.9	No	52.7	1.2	No	0.3
234 - The Woods of Britton Apartments 26 2nd floor	234052.1	1727299.0	816.9	1	B / 67	54.6	55.7	1.1	No	55.8	1.2	No	0.1
235 - The Woods of Britton Apartments 27 1st floor	234014.0	1727304.3	817.1	1	B / 67	53.1	54.0	0.9	No	54.2	1.1	No	0.2
236 - The Woods of Britton Apartments 28 2nd floor	234014.0	1727304.3	817.1	1	B / 67	56.1	57.1	1.0	No	57.3	1.2	No	0.2
237 - The Woods of Britton Apartments 29 1st floor	233920.2	1727291.3	815.4	1	B / 67	56.4	57.8	1.4	No	58.0	1.6	No	0.2
238 - The Woods of Britton Apartments 30 2nd floor	233920.2	1727291.3	815.4	1	B / 67	59.0	60.7	1.7	No	60.9	1.9	No	0.2
239 - The Woods of Britton Apartments 31 1st floor	233875.9	1727290.0	815.7	1	B / 67	58.4	59.2	0.8	No	59.5	1.1	No	0.3
240 - The Woods of Britton Apartments 32 2nd floor	233875.9	1727290.0	815.7	1	B / 67	61.0	62.4	1.4	No	62.6	1.6	No	0.2
241 - The Woods of Britton Apartments 33 1st floor	233928.0	1727224.9	815.8	1	B / 67	54.4	56.3	1.9	No	56.4	2.0	No	0.1
242 - The Woods of Britton Apartments 34 2nd floor	233928.0	1727224.9	815.8	1	B / 67	59.4	61.9	2.5	No	61.9	2.5	No	0.0
243 - The Woods of Britton Apartments 35 1st floor	233883.8	1727219.7	815.6	1	B / 67	56.0	57.9	1.9	No	58.0	2.0	No	0.1
244 - The Woods of Britton Apartments 36 2nd floor	233883.8	1727219.7	815.6	1	B / 67	60.9	63.3	2.4	No	63.3	2.4	No	0.0
245 - The Woods of Britton Apartments 37 1st floor	233774.4	1727221.0	814.0	1	B / 67	60.8	62.7	1.9	No	62.8	2.0	No	0.1
246 - The Woods of Britton Apartments 38 2nd floor	233774.4	1727221.0	814.0	1	B / 67	65.8	68.5	2.7	Yes	68.5	2.7	Yes	0.0
247 - The Woods of Britton Apartments 39 1st floor	233722.9	1727250.3	814.0	1	B / 67	65.4	67.4	2.0	Yes	67.5	2.1	Yes	0.1
248 - The Woods of Britton Apartments 40 2nd floor	233722.9	1727250.3	814.0	1	B / 67	68.8	71.5	2.7	Yes	71.6	2.8	Yes	0.1
249 - The Woods of Britton Apartments 41 1st floor	233754.9	1727309.5	814.4	1	B / 67	62.6	64.2	1.6	No	64.4	1.8	No	0.2
250 - The Woods of Britton Apartments 42 2nd floor	233754.9	1727309.5	814.4	1	B / 67	65.3	67.6	2.3	Yes	67.8	2.5	Yes	0.2
251 - The Woods of Britton Apartments 43 1st floor	233806.9	1727286.1	814.3	1	B / 67	59.6	60.8	1.2	No	61.0	1.4	No	0.2
252 - The Woods of Britton Apartments 44 2nd floor	233806.9	1727286.1	814.3	1	B / 67	62.4	64.1	1.7	No	64.3	1.9	No	0.2
253 - The Woods of Britton Apartments 45 1st floor	233842.1	1727451.4	813.9	1	B / 67	63.1	64.4	1.3	No	64.5	1.4	No	0.1
254 - The Woods of Britton Apartments 46 2nd floor	233842.1	1727451.4	813.9	1	B / 67	65.1	67.0	1.9	Yes	67.1	2.0	Yes	0.1
255 - The Woods of Britton Apartments 47 1st floor	233861.6	1727494.4	813.4	1	B / 67	62.8	63.9	1.1	No	64.1	1.3	No	0.2
256 - The Woods of Britton Apartments 48 2nd floor	233861.6	1727494.4	813.4	1	B / 67	64.8	66.5	1.7	Yes	66.6	1.8	Yes	0.1
257 - The Woods of Britton Apartments 49 1st floor	233963.2	1727589.5	813.6	1	B / 67	59.8	60.4	0.6	No	60.6	0.8	No	0.2
258 - The Woods of Britton Apartments 50 2nd floor	233963.2	1727589.5	813.6	1	B / 67	61.6	62.6	1.0	No	62.8	1.2	No	0.2
259 - The Woods of Britton Apartments 51 1st floor	234020.5	1727612.9	813.6	1	B / 67	57.5	58.4	0.9	No	58.6	1.1	No	0.2
260 - The Woods of Britton Apartments 52 2nd floor	234020.5	1727612.9	813.6	1	B / 67	60.2	61.0	0.8	No	61.1	0.9	No	0.1
261 - Tire Barn Service	233721.6	1727873.1	812.0	1	F / 72	67.2	69.0	1.8	No	69.2	2.0	No	0.2
262 - KFC Restaurant	233707.7	1728131.8	812.8	1	E / 72	67.9	69.0	1.1	No	69.2	1.3	No	0.2
263 - Multiple Restaurants and Businesses	234004.6	1728281.1	811.3	1	E / 72	57.7	57.4	-0.3	No	58.0	0.3	No	0.6
264 - Burger King Restaurant	233751.1	1728696.0	814.3	1	E / 72	65.0	64.2	-0.8	No	64.5	-0.5	No	0.3
265 - Multiple Restaurants and Businesses	234016.7	1728803.7	813.0	1	E / 72	56.5	56.4	-0.1	No	56.8	0.3	No	0.4
266 - Sherwin Williams Paint Store	233754.6	1728822.8	814.8	1	F / 72	64.8	64.6	-0.1	No	64.7	-0.1	No	0.1
267 - Chase Bank	233742.4	1729008.5	815.5	1	E / 72	64.8	65.4	0.6	No	65.5	0.7	No	0.1
268 - 21st Amendment Wine & Spirits	233765.0	1729185.6	816.1	1	F / 72	63.6	64.2	0.6	No	64.4	0.8	No	0.2
269 - Multiple Restaurants and Businesses	234013.3	1729383.5	815.7	1	E / 72	55.3	57.1	1.8	No	57.3	2.0	No	0.2
270 - Multiple Residuants and Businesses	234013.3	1729801.9	817.8	1	E / 72	55.1	57.3	2.2	No	57.2	2.1	No	-0.1
271 - Prime Car Wash	233747.6	1730050.2	817.7	1	F / 72	64.1	65.9	1.8	No	65.7	1.6	No	-0.1
272 - Regions Bank	233739.9	1730030.2	818.3	1	E / 72	64.9	66.6	1.7	No	65.2	0.3	No	-1.4
273 - Marsh Supermarket	234025.4	1730355.8	817.1	1	F / 72	54.9	57.1	2.2	No	55.9	1.0	No	-1.2
274 - PNC Bank	233757.1	1730333.8	819.0	1	E / 72	63.9	65.9	2.2	No	64.3	0.4	No	-1.2
275 - AutoZone Business	233759.0	1730676.6	818.9	1	F / 72	63.9	66.1	2.2	No	65.0	1.1	No	-1.0
276 - Godby Home Furnishings	234022.8	1730686.1	817.1	1	F / 72	55.6	57.7	2.1	No	57.0	1.4	No	-0.7
277 - CVS	233760.9	1730953.5	819.5	1	F / 72	64.3	65.5	1.2	No	65.1	0.8	No	-0.7
277 - CV3 278 - Jaggers Restaurant	234020.4	1730972.6	816.8	1	E / 72	58.6	59.6	1.0	No	59.9	1.3	No	0.3
279 - Auto Dealership - Tom Wood Valkswagen	233730.4	1731709.7	810.8	1	F / 72	63.3	65.6	2.3	No	64.2	0.9		-1.4
273 - Auto Dediership - Torri Wood Valkswagen	233/30.4	1/31/09./	010.9	1	Γ//2	03.3	03.0	2.3	NO	04.2	0.9	No	-1.4

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Lea(h) Level Results for SR37 - 126th Street to SR32/38

Appendix E. TNM 2.5 2010 Existing Condition,	Eddo Besign Te	ur, una 2000/2	lo-i i iyon						2025	2036/2041 Design	2036/2041 Design	2025/2044	2025 ( (/))
Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	Year Modeled Leq(h)	Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
280 - Milestone Apartments 1 2nd floor	233744.6	1733446.0	807.1	1	B / 67	65.4	68.4	3.0	Yes	67.7	2.3	Yes	-0.7
281 - Milestone Apartments 2 3rd floor	233744.6	1733446.0	807.1	1	B / 67	66.8	69.6	2.8	Yes	68.9	2.1	Yes	-0.7
282 - Milestone Apartments 3 2nd floor	233745.9	1733392.9	807.2	1	B / 67	65.4	68.4	3.0	Yes	67.7	2.3	Yes	-0.7
283 - Milestone Apartments 4 3rd floor	233745.9	1733392.9	807.2	1	B / 67	66.8	69.6	2.8	Yes	68.9	2.1	Yes	-0.7
284 - Milestone Apartments 5 2nd floor	233743.3	1733345.5	807.0	1	B / 67	65.6	68.7	3.1	Yes	68.0	2.4	Yes	-0.7
285 - Milestone Apartments 6 3rd floor	233743.3	1733345.5	807.0	1	B / 67	66.9	69.7	2.8	Yes	69.0	2.1	Yes	-0.7
286 - Milestone Apartments 7 2nd floor	233747.1	1733303.9	807.2	1	B / 67	65.4	68.5	3.1	Yes	67.8	2.4	Yes	-0.7
287 - Milestone Apartments 8 3rd floor	233747.1	1733303.9	807.2	1	B / 67	66.7	69.6	2.9	Yes	68.9	2.2	Yes	-0.7
288 - Milestone Apartments 9 2nd floor	233721.9	1733573.8	806.8	1	B / 67	64.5	67.5	3.0	Yes	66.8	2.3	Yes	-0.7
289 - Milestone Apartments 10 3rd floor	233721.9	1733573.8	806.8	1	B / 67	65.5	68.2	2.7	Yes	67.5	2.0	Yes	-0.7
290 - Milestone Apartments 11 2nd floor	233769.2	1733573.1	806.9	1	B / 67	61.9	64.9	3.0	No	64.2	2.3	No	-0.7
291 - Milestone Apartments 12 3rd floor	233769.2	1733573.1	806.9	1	B / 67	63.5	66.3	2.8	Yes	65.6	2.1	No	-0.7
292 - Milestone Apartments 13 2nd floor	233819.1	1733573.1	807.3	1	B / 67	59.0	62.2	3.2	No	61.5	2.5	No	-0.7
293 - Milestone Apartments 14 3rd floor	233819.1	1733573.1	807.3	1	B / 67	60.8	63.8	3.0	No	63.1	2.3	No	-0.7
294 - Milestone Apartments 15 2nd floor	233858.7	1733573.8	808.0	1	B / 67	57.1	60.4	3.3	No	59.6	2.5	No	-0.8
295 - Milestone Apartments 16 3rd floor	233858.7	1733573.8	808.0	1	B / 67	58.8	61.8	3.0	No	61.1	2.3	No	-0.7
296 - Milestone Apartments 17 1st floor	233720.6	1733628.9	806.9	1	B / 67	60.6	63.5	2.9	No	62.9	2.3	No	-0.6
297 - Milestone Apartments 18 2nd floor	233720.6	1733628.9	806.9	1	B / 67	64.2	67.0	2.8	Yes	66.4	2.2	Yes	-0.6
298 - Milestone Apartments 19 3rd floor	233720.6	1733628.9	806.9	1	B / 67	65.2	68.0	2.8	Yes	67.3	2.1	Yes	-0.7
299 - Milestone Apartments 20 1st floor	233767.3	1733627.6	807.1	1	B / 67	57.8	60.7	2.9	No	59.9	2.1	No	-0.8
300 - Milestone Apartments 21 2nd floor	233767.3	1733627.6	807.1	1	B / 67	61.8	64.7	2.9	No	64.0	2.2	No	-0.7
301 - Milestone Apartments 22 3rd floor	233767.3	1733627.6	807.1	1	B / 67	63.4	66.2	2.8	Yes	65.5	2.1	No	-0.7
302 - Milestone Apartments 23 1st floor	233817.8	1733629.5	807.5	1	B / 67	55.9	58.8	2.9	No	58.0	2.1	No	-0.8
303 - Milestone Apartments 24 2nd floor	233817.8	1733629.5	807.5	1	B / 67	60.1	63.0	2.9	No	62.3	2.2	No	-0.7
304 - Milestone Apartments 25 3rd floor	233817.8	1733629.5	807.5	1	B / 67	61.9	64.7	2.8	No	64.0	2.1	No	-0.7
305 - Milestone Apartments 26 1st floor	233862.6	1733630.8	808.0	1	B / 67	54.7	57.7	3.0	No	56.8	2.1	No	-0.9
306 - Milestone Apartments 27 2nd floor	233862.6	1733630.8	808.0	1	B / 67	58.9	62.0	3.1	No	61.3	2.4	No	-0.7
307 - Milestone Apartments 28 3rd floor	233862.6	1733630.8	808.0	1	B / 67	60.6	63.5	2.9	No	62.8	2.2	No	-0.7
308 - Milestone Apartments 29 2nd floor	233967.7	1733566.8	809.5	1	B / 67	53.5	55.8	2.3	No	55.1	1.6	No	-0.7
309 - Milestone Apartments 30 3rd floor	233967.7	1733566.8	809.5	1	B / 67	54.9	57.3	2.4	No	56.6	1.7	No	-0.7
310 - Milestone Apartments 31 2nd floor	234012.7	1733566.8	809.3	1	B / 67	51.4	54.9	3.5	No	54.0	2.6	No	-0.9
311 - Milestone Apartments 32 3rd floor	234012.7	1733566.8	809.3	1	B / 67	53.2	56.4	3.2	No	55.7	2.5	No	-0.7
312 - Milestone Apartments 33 2nd floor	234068.1	1733568.2	809.6	1	B / 67	50.2	53.3	3.1	No	52.5	2.3	No	-0.8
313 - Milestone Apartments 34 3rd floor	234068.1	1733568.2	809.6	1	B / 67	52.1	55.2	3.1	No	54.5	2.4	No	-0.7
314 - Milestone Apartments 35 2nd floor	234110.8	1733570.1	809.8	1	B / 67	49.0	52.1	3.1	No	51.2	2.2	No	-0.9
315 - Milestone Apartments 36 3rd floor	234110.8	1733570.1	809.8	1	B / 67	51.1	54.3	3.2	No	53.5	2.4	No	-0.8
316 - Milestone Apartments 37 1st floor	233963.5	1733630.6	808.6	1	B / 67	52.3	55.0	2.7	No	54.1	1.8	No	-0.9
317 - Milestone Apartments 38 2nd floor	233963.5	1733630.6	808.6	1	B / 67	56.8	59.8	3.0	No	59.1	2.3	No	-0.7
318 - Milestone Apartments 39 3rd floor	233963.5	1733630.6	808.6	1	B / 67	58.3	61.2	2.9	No	60.5	2.2	No	-0.7
319 - Milestone Apartments 40 1st floor	234011.8	1733629.7	808.7	1	B / 67	51.2	53.7	2.5	No	52.8	1.6	No	-0.9
320 - Milestone Apartments 41 2nd floor	234011.8	1733629.7	808.7	1	B / 67	55.7	58.5	2.8	No	57.8	2.1	No	-0.7
321 - Milestone Apartments 42 3rd floor	234011.8	1733629.7	808.7	1	B / 67	57.4	60.1	2.7	No	59.4	2.0	No	-0.7
322 - Milestone Apartments 43 1st floor	234067.2	1733629.2	809.0	1	B / 67	50.1	52.8	2.7	No	51.9	1.8	No	-0.9
323 - Milestone Apartments 44 2nd floor	234067.2	1733629.2	809.0	1	B / 67	54.3	57.5	3.2	No	56.8	2.5	No	-0.7
324 - Milestone Apartments 45 3rd floor	234067.2	1733629.2	809.0	1	B / 67	56.2	59.4	3.2	No	58.6	2.4	No	-0.8
325 - Milestone Apartments 46 1st floor	234114.1	1733632.5	808.7	1	B / 67	49.4	51.9	2.5	No	50.9	1.5	No	-1.0
326 - Milestone Apartments 47 2nd floor	234114.1	1733632.5	808.7	1	B / 67	53.6	56.4	2.8	No	55.6	2.0	No	-0.8
327 - Milestone Apartments 48 3rd floor	234114.1	1733632.5	808.7	1	B / 67	55.6	58.5	2.9	No	57.8	2.2	No	-0.7
328 - Milestone Apartments 49 1st floor	233706.5	1733135.5	805.8	1	B / 67	64.4	67.5	3.1	Yes	66.8	2.4	Yes	-0.7
329 - Milestone Apartments 50 2nd floor	233706.5	1733135.5	805.8	1	B / 67	67.2	70.1	2.9	Yes	69.5	2.3	Yes	-0.6
330 - Milestone Apartments 51 3rd floor	233706.5	1733135.5	805.8	1	B / 67	67.8	70.5	2.7	Yes	69.8	2.0	Yes	-0.7
331 - Milestone Apartments 52 1st floor	233730.7	1733108.9	804.9	1	B / 67	62.7	65.6	2.9	No	64.9	2.2	No	-0.7
332 - Milestone Apartments 53 2nd floor	233730.7	1733108.9	804.9	1	B / 67	65.9	68.8	2.9	Yes	68.2	2.3	Yes	-0.6
333 - Milestone Apartments 54 3rd floor	233730.7	1733108.9	804.9	1	B / 67	66.8	69.5	2.7	Yes	68.8	2.0	Yes	-0.7
334 - Milestone Apartments 55 1st floor	233785.5	1733066.1	806.7	1	B / 67	59.8	62.8	3.0	No	61.9	2.1	No	-0.9
335 - Milestone Apartments 56 2nd floor	233785.5	1733066.1	806.7	1	B / 67	63.4	66.3	2.9	Yes	65.6	2.2	No	-0.7

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Lea(h) Level Results for SR37 - 126th Street to SR32/38

Appendix E. TNM 2.5 2010 Existing Condition,	2036 Design Ye	ar, and 2036/2	041 Hybr	id Design \	ear L <sub>eq</sub> (h) Lev	vel Results for S	R37 - 126th Stree	et to SR32/38	1	1		,	
Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)	2036 Impacts?	2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041 Impacts?	2036 Leq(h) - 2036/2041 Leq(h)
336 - Milestone Apartments 57 3rd floor	233785.5	1733066.1	806.7	1	B / 67	65.0	67.7	2.7	Yes	67.0	2.0	Yes	-0.7
337 - Milestone Apartments 58 1st floor	233816.6	1733046.5	806.5	1	B / 67	58.4	61.4	3.0	No	60.5	2.1	No	-0.9
338 - Milestone Apartments 59 2nd floor	233816.6	1733046.5	806.5	1	B / 67	62.3	65.3	3.0	No	64.5	2.2	No	-0.8
339 - Milestone Apartments 60 3rd floor	233816.6	1733046.5	806.5	1	B / 67	64.0	66.8	2.8	Yes	66.1	2.1	Yes	-0.7
340 - Milestone Apartments 61 2nd floor	233737.2	1733175.8	807.3	1	B / 67	62.3	65.3	3.0	No	64.7	2.4	No	-0.6
341 - Milestone Apartments 62 3rd floor	233737.2	1733175.8	807.3	1	B / 67	63.5	66.3	2.8	Yes	65.6	2.1	No	-0.7
342 - Milestone Apartments 63 2nd floor	233769.9	1733149.1	807.9	1	B / 67	59.1	61.9	2.8	No	61.2	2.1	No	-0.7
343 - Milestone Apartments 64 3rd floor	233769.9	1733149.1	807.9	1	B / 67	60.7	63.5	2.8	No	62.8	2.1	No	-0.7
344 - Milestone Apartments 65 2nd floor	233816.6	1733113.4	808.0	1	B / 67	56.3	59.3	3.0	No	58.6	2.3	No	-0.7
345 - Milestone Apartments 66 3rd floor	233816.6	1733113.4	808.0	1	B / 67	58.2	61.0	2.8	No	60.4	2.2	No	-0.6
346 - Milestone Apartments 67 2nd floor	233846.8	1733088.3	807.0	1	B / 67	54.2	57.4	3.2	No	56.7	2.5	No	-0.7
347 - Milestone Apartments 68 3rd floor	233846.8	1733088.3	807.0	1	B / 67	56.3	59.2	2.9	No	58.6	2.3	No	-0.6
348 - Milestone Apartments 69 1st floor	233902.6	1732990.7	804.5	1	B / 67	54.7	57.8	3.1	No	56.6	1.9	No	-1.2
349 - Milestone Apartments 70 2nd floor	233902.6	1732990.7	804.5	1	B / 67	59.4	62.5	3.1	No	61.7	2.3	No	-0.8
350 - Milestone Apartments 71 3rd floor	233902.6	1732990.7	804.5	1	B / 67	61.1	64.0	2.9	No	63.2	2.1	No	-0.8
351 - Milestone Apartments 72 1st floor	233954.4	1732984.2	806.4	1	B / 67	52.5	55.7	3.2	No	54.4	1.9	No	-1.3
352 - Milestone Apartments 73 2nd floor	233954.4	1732984.2	806.4	1	B / 67	57.2	60.4	3.2	No	59.5	2.3	No	-0.9
353 - Milestone Apartments 74 3rd floor	233954.4	1732984.2	806.4	1	B / 67	59.0	61.9	2.9	No	61.0	2.0	No	-0.9
354 - Milestone Apartments 75 1st floor	234017.3	1732979.7	808.9	1	B / 67	51.1	54.2	3.1	No	52.9	1.8	No	-1.3
355 - Milestone Apartments 76 2nd floor	234017.3	1732979.7	808.9	1	B / 67	55.6	58.7	3.1	No	57.8	2.2	No	-0.9
356 - Milestone Apartments 77 3rd floor	234017.3	1732979.7	808.9	1	B / 67	57.5	60.4	2.9	No	59.6	2.1	No	-0.8
357 - Milestone Apartments 78 1st floor	234075.6	1732975.6	811.4	1	B / 67	50.1	53.0	2.9	No	52.1	2.0	No	-0.9
358 - Milestone Apartments 79 2nd floor	234075.6	1732975.6	811.4	1	B / 67	54.4	57.5	3.1	No	56.6	2.2	No	-0.9
359 - Milestone Apartments 80 3rd floor	234075.6	1732975.6	811.4	1	B / 67	56.4	59.5	3.1	No	58.6	2.2	No	-0.9
360 - Milestone Apartments 81 2nd floor	233912.2	1733047.0	806.6	1	B / 67	51.9	55.0	3.1	No	54.2	2.3	No	-0.8
361 - Milestone Apartments 82 3rd floor	233912.2	1733047.0	806.6	1	B / 67	53.9	56.8	2.9	No	56.1	2.2	No	-0.7
362 - Milestone Apartments 83 2nd floor	233966.5	1733042.5	808.3	1	B / 67	50.9	54.1	3.2	No	53.3	2.4	No	-0.8
363 - Milestone Apartments 84 3rd floor	233966.5	1733042.5	808.3	1	B / 67	52.7	55.7	3.0	No	54.9	2.2	No	-0.8
364 - Milestone Apartments 85 2nd floor	234017.8	1733038.0	814.3	1	B / 67	49.8	53.6	3.8	No	52.8	3.0	No	-0.8
365 - Milestone Apartments 86 3rd floor	234017.8	1733038.0	814.3	1	B / 67	51.7	55.1	3.4	No	54.4	2.7	No	-0.7
366 - Milestone Apartments 87 2nd floor	234070.6	1733035.5	821.7	1	B / 67	49.0	52.4	3.4	No	51.5	2.5	No	-0.9
367 - Milestone Apartments 88 3rd floor	234070.6	1733035.5	821.7	1	B / 67	51.2	54.5	3.3	No	53.7	2.5	No	-0.8
368 - Primrose School of Noblesville	234825.8	1737297.4	800.0	1	C / 67	65.7	68.3	2.6	Yes	67.6	1.9	Yes	-0.7
369 - Golden Corral Restaurant	235124.5	1737561.3	799.8	1	E / 72	59.6	61.0	1.4	No	60.3	0.7	No	-0.7
370 - Multiple Restaurant and Businesses	235364.0	1738106.4	798.9	1	E / 72	61.0	62.7	1.7	No	62.1	1.1	No	-0.6
371 - Old National Bank	235438.7	1738431.1	799.9	1	E / 72	64.2	66.8	2.6	No	66.6	2.4	No	-0.2
372 - 2550 Greenfield Ave - Residence	235775.5	1738910.3	796.7	1	B / 67	63.7	62.8	-0.9	No	62.8	-0.9	No	0.0
373 - 2520 Greenfield Ave - Residence	235654.0	1739052.6	803.7	1	B / 67	68.4	64.4	2.0		Relocation	2 =		6:
374 - 16333 Cumberland Rd - Residence	236048.1	1739771.4	800.8	1	B / 67	58.3	61.1	2.8	No	61.0	2.7	No	-0.1
375 - 16355 Cumberland Rd - Residence	236122.7	1739936.3	799.8	1	B / 67	57.4	59.8	2.4	No	59.8	2.4	No	0.0
376 - 16365 Cumberland Rd - Residence	236122.7	1740068.2	799.0	1	B / 67	58.7	60.9	2.2	No	60.9	2.2	No	0.0
377 - 16367 Cumberland Rd - Residence	236098.4	1740175.9	797.3	1	B / 67	60.6	62.9	2.3	No	62.8	2.2	No	-0.1
378 - 16373 Cumberland Rd - Residence	236119.2	1740276.6	794.5	1	B / 67	60.6	62.8	2.2	No	62.8	2.2	No	0.0
379 - 16381 Cumberland Rd - Residence	236129.7	1740425.9	787.9	1	B / 67	61.5	63.4	1.9	No	63.4	1.9	No	0.0
380 - 16455 Cumberland Rd - Residence	236121.9	1740682.8	789.9	1	B / 67	65.3	67.8	2.5	Yes		2.5	Yes	0.0
381 - 16477 Cumberland Rd - Residence	236160.0	1740837.3	788.2	1	B / 67	65.0	67.5	2.5	Yes	67.5	2.5	Yes	0.0
382 - 16487 Cumberland Rd - Residence	236116.6	1740964.1	782.2	1	B / 67	68.4	71.1	2.7	Yes	71.1	2.7	Yes	0.0
383 - 16497 Cumberland Rd - Residence	236160.0	1741080.4	783.7	1	B / 67	67.4	70.0 66.4	2.6	Yes	70.0	2.6	Yes	0.0
384 - Tires Plus	236253.7	1741800.4	766.6	1	F / 72	63.7		2.7	No	66.4	2.7	No	0.0
385 - Sports Clips Haircuts of Noblesville	236339.6	1741974.1	768.1	1	E / 72	60.3	62.1	1.8	No	62.1	1.8	No	0.0
386 - Bob Evans Restaurant	236259.4	1742136.5	769.4	1	E / 72	64.7	65.9	1.2	No	65.9	1.2	No	0.0
387 - Chick-fil-A Restaurant	236255.6	1742317.9	769.3	1	E / 72	65.2	63.6 60.9	-1.6	No	63.6 60.9	-1.6	No	0.0
388 - O'Charley's Restaurant & Bar	236284.3	1742524.1	769.7	1	E / 72	63.7		-2.8	No		-2.8	No	0.0
389 - Chill's Grill & Bar Restaurant	236270.9	1742856.4	770.4	1	E / 72	64.1	60.5 59.3	-3.6	No	60.5 59.3	-3.6	No	0.0
390 - FORUM Credit Union	236320.6	1743049.3	770.3	1	E / 72	61.2	62.9	-1.9	No	62.9	-1.9	No	0.0
391 - Meijer Gas Station	236270.9	1743312.9	771.3	1	F / 72	63.3	02.9	-0.4	No	02.9	-0.4	No	0.0

Appendix E. TNM 2.5 2010 Existing Condition, 2036 Design Year, and 2036/2041 Hybrid Design Year Leq(h) Level Results for SR37 - 126th Street to SR32/38

Receptor	X coordinate	Y coordinate	Elevation	Dwelling Units	Activity Category/NAC	2010 Existing Modeled Leq (h)	2036 Design Year Modeled Leq(h)	2036 Design Year Increase Leq (h)		2036/2041 Design Year Modeled Leq(h)	2036/2041 Design Year Increase Leq (h)	2036/2041	2036 Leq(h) - 2036/2041 Leq(h)
392 - Multiple Businesses	236289.2	1743928.9	776.9	1	F / 72	62.2	64.2	2.0	No	64.2	2.0	No	0.0
393 - Logan's Roadhouse Restaurant	236279.3	1744254.9	778.1	1	E / 72	62.7	64.6	1.9	No	64.6	1.9	No	0.0
394 - Crew Car Wash	236239.7	1744469.5	778.9	1	F / 72	64.6	66.8	2.2	No	66.8	2.2	No	0.0
395 - Multiple Businesses	236304.3	1744646.6	778.9	1	F / 72	60.6	61.4	0.8	No	61.4	0.8	No	0.0
396 - BMO Harris Bank	236243.9	1744998.7	781.8	1	E / 72	64.1	64.5	0.4	No	64.5	0.4	No	0.0
397 - Multiple Businesses	236377.2	1745017.4	780.7	1	F / 72	58.4	58.4	0.0	No	58.4	0.0	No	0.0
398 - Auto Dealership - Kahlo Chrysler Jeep Dodge Ram	236231.4	1745309.1	778.5	1	F / 72	65.4	68.3	2.9	No	68.3	2.9	No	0.0
399 - Auto Dealership - Terry Lee Genesis	236500.1	1747286.2	771.2	1	F / 72	64.9	65.7	0.8	No	65.7	0.8	No	0.0
400 - Applebee's Restaurant	236662.6	1747732.0	774.9	1	E / 72	63.7	66.0	2.3	No	66.0	2.3	No	0.0
401 - Fireworks	236771.5	1748045.1	777.9	1	F / 72	63.5	67.1	3.6	No	67.1	3.6	No	0.0
402 - Teachers Credit Union	236866.3	1747863.5	774.8	1	E / 72	57.6	60.5	2.9	No	60.5	2.9	No	0.0
403 - Courtyard Marriott	236875.3	1748301.7	778.3	1	E / 72	61.5	65.9	4.4	No	65.9	4.4	No	0.0
404 - Belle Tire	233431.3	1724684.8	808.5	1	F / 72	66.8	69.1	2.3	No	69.1	2.3	No	0.0
405 - Verizon	233795.6	1725828.3	811.9	1	E / 72	62.2	64.9	2.7	No	65.1	2.9	No	0.2
406 - Harley Davidson	233853.2	1719306.0	825.4	1	F / 72	61.6	64.4	2.8	No	64.4	2.8	No	0.0
407 - O'Reilly Auto Parts	233406.0	1728144.6	813.4	1	F / 72	66.5	65.6	-0.9	No	66.3	-0.2	No	0.7
408 - Auto Dealership - Ed Martin Toyota	233384.8	1728895.9	814.5	1	F / 72	64.9	65.2	0.3	No	65.5	0.6	No	0.3
409 - GetGo Café and Market	233384.8	1728895.9	811.5	1	F / 72	64.0	66.9	2.9	No	63.1	-0.9	No	-3.8

Red shading indicates locations where the appropriate NAC level is approached or exceeded in the 2036 design year.

No shading indicates locations where the appropriate NAC level is not approached or exceeded in the 2036 design year.

Blue shading indicates locations where the increase in the Leq(h) from the 2036 design year data and the 2036/2041 design year data was >= 0.2 dBA.

## **Appendix F**

TNM 2.5 2010 Base Condition Sound Level Results

RESULTS: SOUND LEVELS SR37 126th to SR32

RESULTS: SOUND LEVELS						S	R37 126th	to SR32				
Lochmueller Group							16 March	2018				
Rusty Yeager, Daniel Townsend							TNM 2.5	2010				
reasty reager, barner rownsena							Calculated	with TNN	125			
RESULTS: SOUND LEVELS							Galculatot	4 WILL 1141	n 2.0			
PROJECT/CONTRACT:		SR37 1	26th to SR3	12								
RUN:			ase conditio									
BARRIER DESIGN:			HEIGHTS	211				Average	pavement type	e shall he use	d unless	
DARWER DEGION.			TILIOTTIO						ighway agenc			
ATMOSPHERICS:		68 dea	F, 50% RH						rent type with			
		oo aog	70 70 1411						Tone type with		111174.	
Receiver	No	#DUs	Eviating	No Barrier					With Barrier			
Name	No.	#008		LAeq1h		Increase over	oviotina	Туре	Calculated	Noise Reduc	tion	
			LACTII	Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
				Calculated	Critii	Calculated	Sub'l Inc	ппрасс	LAeqIII	Calculated	Goai	minus
							SubTille					Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
	4											
1 - Sunlake Apartments 1 1st floor	1			61.7					61.7			
2 - Sunlake Apartments 2 2nd floor	2		0.0	65.6					65.6			
3 - Sunlake Apartments 3 1st floor	3		0.0	57.9					57.9			
4 - Sunlake Apartments 4 2nd floor	4		0.0	62.3					62.3			
5 - Sunlake Apartments 5 1st floor	5		0.0	54.8					54.8			-
6 - Sunlake Apartments 6 2nd floor	6		0.0	59.3					59.3			
7 - Sunlake Apartments 7 1st floor	7		0.0	53.8					53.8			
8 - Sunlake Apartments 8 2nd floor	8		0.0	58.3					58.3			
9 - Sunlake Apartments 9 1st floor	9		0.0	60.1	66				60.1			
10 - Sunlake Apartments 10 2nd floor	10 11		0.0	64.6					64.6			
11 - Sunlake Apartments 11 1st floor	12		0.0	57.6 62.3					57.6 62.3			
12 - Sunlake Apartments 12 2nd floor 13 - Sunlake Apartments 13 1st floor	13			54.9					54.9			
14 - Sunlake Apartments 14 2nd floor	14		-	60.0			-		60.0			
15 - Sunlake Apartments 15 1st floor	15			54.1	66				54.1			
16 - Sunlake Apartments 16 2nd floor	16		0.0	59.4					59.4			
17 - Sunlake Apartments 17 1st floor	17		0.0	63.2			+		63.2			
18 - Sunlake Apartments 18 2nd floor	18		-						67.0			
19 - Sunlake Apartments 19 1st floor	19		0.0				_		58.7		-	
20 - Sunlake Apartments 20 2nd floor	20		0.0						63.0			
21 - Sunlake Apartments 21 1st floor	21		0.0						55.6			
22 - Sunlake Apartments 22 2nd floor	22		0.0	60.2			-		60.2			
23 - Sunlake Apartments 23 1st floor	23		-	53.3					53.3			
24 - Sunlake Apartments 24 2nd floor	24								58.0			

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RESULTS: SOUND LEVELS						SR	37 126th to	SR32				
25 - Sunlake Apartments 25 1st floor	25	1	0.0	58.5	66	58.5	15		58.5	0.0	7	-7.0
26 - Sunlake Apartments 26 2nd floor	26	1	0.0	60.5	66	60.5	15		60.5	0.0	7	-7.0
27 - Sunlake Apartments 27 1st floor	27	1	0.0	59.4	66	59.4	15		59.4	0.0	7	-7.0
28 - Sunlake Apartments 28 2nd floor	28	1	0.0	61.8	66	61.8	15		61.8	0.0	7	-7.0
29 - Sunlake Apartments 29 1st floor	29	1	0.0	62.0	66	62.0	15		62.0	0.0	7	-7.0
30 - Sunlake Apartments 30 2nd floor	30	1	0.0	64.6	66	64.6	15		64.6	0.0	7	-7.0
31 - Sunlake Apartments 31 1st floor	31	1	0.0	64.5	66	64.5	15		64.5	0.0	7	-7.0
32 - Sunlake Apartments 32 2nd floor	32	1	0.0	67.2	66	67.2	15	Snd Lvl	67.2	0.0	7	-7.0
33 - Sunlake Apartments 33 1st floor	33	1	0.0	52.4	66	52.4	15		52.4	0.0	7	-7.0
34 - Sunlake Apartments 34 2nd floor	34	1	0.0	57.4	66	57.4	15		57.4	0.0	7	-7.0
35 - Sunlake Apartments 35 1st floor	35	1	0.0	51.1	66	51.1	15		51.1	0.0	7	-7.0
36 - Sunlake Apartments 36 2nd floor	36	1	0.0	55.5	66	55.5	15		55.5	0.0	7	-7.0
37 - Sunlake Apartments 37 1st floor	37	1	0.0	50.8	66	50.8	15		50.8	0.0	7	-7.0
38 - Sunlake Apartments 38 2nd floor	38	1	0.0	54.9	66	54.9	15		54.9	0.0	7	-7.0
39 - Sunlake Apartments 39 1st floor	39	1	0.0	46.0	66	46.0	15		46.0	0.0	7	-7.0
40 - Sunlake Apartments 40 2nd floor	40	1	0.0	50.5	66	50.5	15		50.5	0.0	7	-7.0
41 - Sunlake Apartments 41 1st floor	41	1	0.0	47.0	66	47.0	15		47.0	0.0	7	-7.0
42 - Sunlake Apartments 42 2nd floor	42	1	0.0	50.7	66	50.7	15		50.7	0.0	7	-7.0
43 - Sunlake Apartments 43 1st floor	43	1	0.0	47.3	66	47.3	15		47.3	0.0	7	-7.0
44 - Sunlake Apartments 44 2nd floor	44	1	0.0	50.9	66	50.9	15		50.9	0.0	7	-7.0
45 - Sunlake Apartments 45 1st floor	45	1	0.0	49.4	66	49.4	15		49.4	0.0	7	-7.0
46 - Sunlake Apartments 46 2nd floor	46	1	0.0	53.0	66	53.0	15		53.0	0.0	7	-7.0
47 - Sunlake Apartments 47 1st floor	47	1	0.0	50.1	66	50.1	15		50.1	0.0	7	-7.0
48 - Sunlake Apartments 48 2nd floor	48	1	0.0	53.7	66	53.7	15		53.7	0.0	7	-7.0
49 - Sunlake Apartments 49 1st floor	49	1	0.0	50.2	66	50.2	15		50.2	0.0	7	-7.0
50 - Sunlake Apartments 50 2nd floor	50	1	0.0	53.4	66	53.4	15		53.4	0.0	7	-7.0
51 - Sunlake Apartments 51 1st floor	51	1	0.0	50.0	66	50.0	15		50.0	0.0	7	-7.0
52 - Sunlake Apartments 52 2nd floor	52	1	0.0	53.1	66	53.1	15		53.1	0.0	7	-7.0
53 - Sunlake Apartments 53 1st floor	53	1	0.0	58.0	66	58.0	15		58.0	0.0	7	-7.0
54 - Sunlake Apartments 54 2nd floor	54	1	0.0	59.8	66	59.8	15		59.8	0.0	7	-7.0
55 - Sunlake Apartments 55 1st floor	55	1	0.0	57.8	66	57.8	15		57.8	0.0	7	-7.0
56 - Sunlake Apartments 56 2nd floor	56	1	0.0	59.3	66	59.3	15		59.3	0.0	7	-7.0
57 - Sunlake Apartments 57 1st floor	57	1	0.0	57.4	66	57.4	15		57.4	0.0	7	-7.0
58 - Sunlake Apartments 58 2nd floor	58	1	0.0	58.8	66	58.8	15		58.8	0.0	7	-7.0
59 - Sunlake Apartments 59 1st floor	59	1	0.0	57.1	66	57.1	15		57.1	0.0	7	-7.0
60 - Sunlake Apartments 60 2nd floor	60	1	0.0	58.4	66	58.4	15		58.4	0.0	7	-7.0
61 - Sunlake Apartments 61 1st floor	61	1	0.0	57.5	66	57.5	15		57.5	0.0	7	-7.0
62 - Sunlake Apartments 62 2nd floor	62	1	0.0	58.7	66	58.7	15		58.7	0.0	7	-7.0
63 - Sunlake Apartments 63 1st floor	63	1	0.0	57.6	66	57.6	15		57.6	0.0	7	-7.0
64 - Sunlake Apartments 64 2nd floor	64	1	0.0	59.1	66	59.1	15		59.1	0.0	7	-7.0
65 - Sunlake Apartments 65 1st floor	65	1	0.0	58.1	66	58.1	15		58.1	0.0	7	-7.0

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RESULTS: SOUND LEVELS						SF	R37 126th 1	to SR32				
66 - Sunlake Apartments 66 2nd floor	66	1	0.0	59.5	66	59.5	15		59.5	0.0	7	-7.0
67 - Sunlake Apartments 67 1st floor	67	1	0.0	58.5	66	58.5	15		58.5	0.0	7	-7.0
68 - Sunlake Apartments 68 2nd floor	68	1	0.0	60.3	66	60.3	15		60.3	0.0	7	-7.0
69 - Sunlake Apartments 69 1st floor	69	1	0.0	58.8	66	58.8	15		58.8	0.0	7	-7.0
70 - Sunlake Apartments 70 2nd floor	70	1	0.0	60.7	66	60.7	15		60.7	0.0	7	-7.0
71 - Sunlake Apartments 71 1st floor	71	1	0.0	58.8	66	58.8	15		58.8	0.0	7	-7.0
72 - Sunlake Apartments 72 2nd floor	72	1	0.0	60.9	66	60.9	15		60.9	0.0	7	-7.0
73 - Sunlake Apartments 73 1st floor	73	1	0.0	58.8	66	58.8	15		58.8	0.0	7	-7.0
74 - Sunlake Apartments 74 2nd floor	74	1	0.0	61.1	66	61.1	15		61.1	0.0	7	-7.0
75 - Sunlake Apartments 75 1st floor	75	1	0.0	59.5	66	59.5	15		59.5	0.0	7	-7.0
76 - Sunlake Apartments 76 2nd floor	76	1	0.0	62.1	66	62.1	15		62.1	0.0	7	-7.0
77 - Sunlake Apartments 77 1st floor	77	1	0.0	60.2	66	60.2	15		60.2	0.0	7	-7.0
78 - Sunlake Apartments 78 2nd floor	78	1	0.0	63.2	66	63.2	15		63.2	0.0	7	-7.0
79 - Sunlake Apartments 79 1st floor	79	1	0.0	60.8	66	60.8	15		60.8	0.0	7	-7.0
80 - Sunlake Apartments 80 2nd floor	80	1	0.0	64.9	66	64.9	15		64.9	0.0	7	-7.0
81 - Sunlake Apartments 81 1st floor	81	1	0.0	61.9	66	61.9	15		61.9	0.0	7	-7.0
82 - Sunlake Apartments 82 2nd floor	82	1	0.0	66.8	66	66.8	15	Snd Lvl	66.8	0.0	7	-7.0
83 - Auto Dealership - Lockhart Cadillac	83	1	0.0	66.4	71	66.4	15		66.4	0.0	7	-7.0
84 - Auto Dealership - Don Hinds Ford	84	1	0.0	68.4	71	68.4	15		68.4	0.0	7	-7.0
85 - Auto Dealership - Don Hinds Pre-Own	85	1	0.0	67.3	71	67.3	15		67.3	0.0	7	-7.0
86 - The Mower Shop	86	1	0.0	59.6	71	59.6	15		59.6	0.0	7	-7.0
87 - Auto Dealership - Any Mohr Buick GM	87	1	0.0	69.0	71	69.0	15		69.0	0.0	7	-7.0
88 - BP Gas Station and McDonald's Resta	88	1	0.0	62.9	71	62.9	15		62.9	0.0	7	-7.0
89 - Recreational Vehicle Business	89	1	0.0	67.9	71	67.9	15		67.9	0.0	7	-7.0
90 - Fishers Self Storage	90	1	0.0	70.4	71	70.4	15		70.4	0.0	7	-7.0
91 - Pinecrest Marine	91	1	0.0	62.0	71	62.0	15		62.0	0.0	7	-7.0
92 - Auto Dealership - Ed Martin Nissan	92	1	0.0	68.0	71	68.0	15		68.0	0.0	7	-7.0
93 - Auto Dealership - Butler Kia	93	1	0.0	68.8	71	68.8	15		68.8	0.0	7	-7.0
94 - Pet Suites	94	1	0.0	67.0	71	67.0	15		67.0	0.0	7	-7.0
95 - Auto Dealership - Honda of Fishers	95	1	0.0	67.5	71	67.5	15		67.5	0.0	7	-7.0
96 - Pinheads (bowling) with Outdoor Volle	96	1	0.0	60.1	66	60.1	15		60.1	0.0	7	-7.0
97 - Alderman Luxury Imports	97	1	0.0	66.9	66	66.9	15	Snd Lvl	66.9	0.0	7	-7.0
98 - Auto Dealership - Andy Mohr Mitsubis	98	1	0.0	70.7	71	70.7	15		70.7	0.0	7	-7.0
99 - Buffalo Wild Wings Restaurant	99	1	0.0	66.6	71	66.6	15		66.6	0.0	7	-7.0
100 - Speedway Gas Station	100	1	0.0	65.3	71	65.3	15		65.3	0.0	7	-7.0
101 - The Old Custard Stand Restaurant	101	1	0.0	64.8	71	64.8	15		64.8	0.0	7	-7.0
102 - IDI Fabrication Business	102	1	0.0	65.3	71	65.3	15		65.3	0.0	7	-7.0
103 - Shell Gas Station	103	1	0.0	66.5	71	66.5	15		66.5	0.0	7	-7.0
104 - LA Fitness	104	1	0.0	61.4	71	61.4	15		61.4	0.0	7	-7.0
105 - Multiple Businesses	105	1	0.0	65.4	71	65.4	15		65.4	0.0	7	-7.0
106 - Business	106	1	0.0	66.9	71	66.9	15		66.9	0.0	7	-7.0

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RESULTS: SOUND LEVELS						s	R37 126th	to SR32				
107 - Business	107	1	0.0	59.6	71	59.6	15		59.6	0.0	7	-7.0
108 - Indiana Elite Cheer and Tumbling	108	1	0.0	67.8	71	67.8	15		67.8	0.0	7	-7.0
109 - Recreation Unlimited Business	109	1	0.0	61.7	71	61.7	15		61.7	0.0	7	-7.0
110 - Refine Kitches Baths & Floors	110	1	0.0	62.9	71	62.9	15		62.9	0.0	7	-7.0
111 - Extreme Vehicle Designs	111	1	0.0	66.6	71	66.6	15		66.6	0.0	7	-7.0
112 - Ballerinas Academy of Dance	112	1	0.0	66.9	71	66.9	15		66.9	0.0	7	-7.0
113 - Business	113	1	0.0	64.0	71	64.0	15		64.0	0.0	7	-7.0
114 - Valvoline	114	1	0.0	58.4	71	58.4	15		58.4	0.0	7	-7.0
115 - Dog Dayz	115	1	0.0	70.1	71	70.1	15		70.1	0.0	7	-7.0
116 - T&T Sales & Promotions	116	1	0.0	61.0	71	61.0	15		61.0	0.0	7	-7.0
117 - Elbert Construction	117	1	0.0	61.7	71	61.7	15		61.7	0.0	7	-7.0
118 - Multi-Business	118	1	0.0	68.6	71	68.6	15		68.6	0.0	7	-7.0
119 - Dakswan Automation Systems Inc	119	1	0.0	65.8	71	65.8	15		65.8	0.0	7	-7.0
120 - Jackson & Associates Food Products	120	1	0.0	59.1	71	59.1	15		59.1	0.0	7	-7.0
121 - ZR Tactical Solutions	121	1	0.0	69.1	71	69.1	15		69.1	0.0	7	-7.0
122 - Backyard Archery	122	1	0.0	59.4	71	59.4	15		59.4	0.0	7	-7.0
123 - Cim Solutions	123	1	0.0	59.8	71	59.8	15		59.8	0.0	7	-7.0
124 - Business	124	1	0.0	66.6	71	66.6	15		66.6	0.0	7	-7.0
125 - Children's Bureau Inc	125	1	0.0	58.2	71	58.2	15		58.2	0.0	7	-7.0
126 - Jds International	126	1	0.0	68.9	71	68.9	15		68.9	0.0	7	-7.0
127 - Summers Plumbing Heating & Coolir	127	1	0.0	67.9	71	67.9	15		67.9	0.0	7	-7.0
128 - 372 Wellington Pkwy - Residence	128	1	0.0	55.7	66	55.7	15		55.7	0.0	7	-7.0
129 - 368 Wellington Pkwy - Residence	129	1	0.0	57.7	66	57.7	15		57.7	0.0	7	-7.0
130 - 376 Wellington Pkwy - Residence	130	1	0.0	53.9	66	53.9	15		53.9	0.0	7	-7.0
131 - 364 Wellington Pkwy - Residence	131	1	0.0	60.9	66	60.9	15		60.9	0.0	7	-7.0
132 - 360 Wellington Pkwy - Residence	132	1	0.0	62.5	66	62.5	15		62.5	0.0	7	-7.0
133 - 356 Wellington Pkwy - Residence	133	1	0.0	61.7	66	61.7	15		61.7	0.0	7	-7.0
134 - 352 Wellington Pkwy - Residence	134	1	0.0	60.6	66	60.6	15		60.6	0.0	7	-7.0
135 - 348 Wellington Pkwy - Residence	135	1	0.0	60.6	66	60.6	15		60.6	0.0	7	-7.0
136 - 344 Wellington Pkwy - Residence	136	1	0.0	59.9	66	59.9	15		59.9	0.0	7	-7.0
137 - 340 Wellington Pkwy - Residence	137	1	0.0	58.5	66	58.5	15		58.5	0.0	7	-7.0
138 - 336 Wellington Pkwy - Residence	138	1	0.0	57.7	66	57.7	15		57.7	0.0	7	-7.0
139 - 55 Glasgow Lane - Residence	139	1	0.0	58.3	66	58.3	15		58.3	0.0	7	-7.0
140 - 332 Wellington Pkwy - Residence	140	1	0.0	55.8	66	55.8	15		55.8	0.0	7	-7.0
141 - 51 Glasgow Lane - Residence	141	1	0.0	59.9	66	59.9	15		59.9	0.0	7	-7.0
142 - 50 Glasgow Lane - Residence	142	1	0.0	58.3	66	58.3	15		58.3	0.0	7	-7.0
143 - 330 Wellington Pkwy - Residence	143	1	0.0	55.3	66	55.3	15		55.3	0.0	7	-7.0
144 - 328 Wellington Pkwy - Residence	144	1	0.0	55.8	66	55.8	15		55.8	0.0	7	-7.0
145 - 324 Wellington Pkwy - Residence	145	1	0.0	57.1	66	57.1	15		57.1	0.0	7	-7.0
146 - 320 Wellington Pkwy - Residence	146	1	0.0	58.2	66	58.2	15		58.2	0.0	7	-7.0
147 - 316 Wellington Pkwy - Residence	147	1	0.0	59.6	66	59.6	15		59.6	0.0	7	-7.0

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Des. No. 1600540 et. al. Attachment 1

RESULTS: SOUND LEVELS		SR37 126th to SR32										
148 - 312 Wellington Pkwy - Residence	148	1	0.0	59.8	66	59.8	15		59.8	0.0	7	-7.0
149 - 310 Wellington Pkwy - Residence	149	1	0.0	61.9	66	61.9	15		61.9	0.0	7	-7.0
150 - 308 Wellington Pkwy - Residence	150	1	0.0	62.8	66	62.8	15		62.8	0.0	7	-7.0
151 - 306 Wellington Pkwy - Residence	151	1	0.0	61.2	66	61.2	15		61.2	0.0	7	-7.0
152 - 304 Wellington Pkwy - Residence	152	1	0.0	61.8	66	61.8	15		61.8	0.0	7	-7.0
153 - 302 Wellington Pkwy - Residence	153	1	0.0	60.7	66	60.7	15		60.7	0.0	7	-7.0
154 - 300 Wellington Pkwy - Residence	154	1	0.0	59.6	66	59.6	15		59.6	0.0	7	-7.0
155 - Playground Park - Wellington NE Ne	155	1	0.0	62.5	66	62.5	15		62.5	0.0	7	-7.0
156 - 274 Wellington Pkwy - Residence	156	1	0.0	53.4	66	53.4	15		53.4	0.0	7	-7.0
157 - Multiple Dental Businesses	157	1	0.0	63.8	71	63.8	15		63.8	0.0	7	-7.0
158 - Floors To Your Home Business	158	1	0.0	65.1	71	65.1	15		65.1	0.0	7	-7.0
159 - Village Pantry Gas Station	159	1	0.0	60.3	71	60.3	15		60.3	0.0	7	-7.0
160 - Speedway Gas Station	160	1	0.0	66.0	71	66.0	15		66.0	0.0	7	-7.0
161 - Carpenter Realtors	161	1	0.0	60.1	71	60.1	15		60.1	0.0	7	-7.0
162 - 2210 Greenfield Ave - Residence	162	1	0.0	57.9	66	57.9	15		57.9	0.0	7	-7.0
163 - Boggs Wrecker Service	163	1	0.0	61.9	71	61.9	15		61.9	0.0	7	-7.0
164 - Legacy Bible Church	164	1	0.0	63.0	66	63.0	15		63.0	0.0	7	-7.0
165 - Auto Dealership - Hare Chevrolet	165	1	0.0	67.0	71	67.0	15		67.0	0.0	7	-7.0
166 - Taco Bell Restaurant	166	1	0.0	64.2	71	64.2	15		64.2	0.0	7	-7.0
167 - Discount Tire Store	167	1	0.0	67.0	71	67.0	15		67.0	0.0	7	-7.0
168 - Wendy's Restaurant	168	1	0.0	66.0	71	66.0	15		66.0	0.0	7	-7.0
169 - Ricker's BP Gas Station	169	1	0.0	66.8	71	66.8	15		66.8	0.0	7	-7.0
170 - White Castle Restaurant	170	1	0.0	66.5	71	66.5	15		66.5	0.0	7	-7.0
171 - Fifth Third Bank	171	1	0.0	66.1	71	66.1	15		66.1	0.0	7	-7.0
172 - Steak 'n Shake Restaurant	172	1	0.0	66.2	71	66.2	15		66.2	0.0	7	-7.0
173 - The Farmers Bank	173	1	0.0	64.1	71	64.1	15		64.1	0.0	7	-7.0
174 - Jimmy Johns Restaurant & Starbuck	174	1	0.0	66.6	71	66.6	15		66.6	0.0	7	-7.0
175 - R & T Tire Pros	175	1	0.0	67.0	71	67.0	15		67.0	0.0	7	-7.0
176 - Super 8 Hotel	176	1	0.0	67.5	71	67.5	15		67.5	0.0	7	-7.0
177 - Multiple Businesses	177	1	0.0	64.7	71	64.7	15		64.7	0.0	7	-7.0
178 - Quick Lube Express	178	1	0.0	66.1	71	66.1	15		66.1	0.0	7	-7.0
179 - Tractor Supply Co Business	179	1	0.0	58.7	71	58.7	15		58.7	0.0	7	-7.0
180 - Walgreens	180	1	0.0	64.8	71	64.8	15		64.8	0.0	7	-7.0
181 - First Merchants Bank	181	1	0.0	65.7	71	65.7	15		65.7	0.0	7	-7.0
182 - Perkins Restaurant & Bakery	182	1	0.0	66.5	71	66.5	15		66.5	0.0	7	-7.0
183 - Arby's Restaurant	183	1	0.0	63.8	71	63.8	15		63.8	0.0	7	-7.0
184 - Burger King Restaurant	184	1	0.0	67.0	71	67.0	15		67.0	0.0	7	-7.0
185 - Woods Bail Bonds	185	1	0.0	65.8	71	65.8	15		65.8	0.0	7	-7.0
186 - Valero Xpress Mart Gas Station	186	1	0.0	63.7	71	63.7	15		63.7	0.0	7	-7.0
187 - Huntington Bank	187	1	0.0	61.5	71	61.5			61.5	0.0		-7.0
188 - Multiple Businesses	188	1	0.0	65.9	71	65.9	15		65.9	0.0	7	-7.0

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RESULTS: SOUND LEVELS						SR	37 126th t	7 126th to SR32							
189 - Hamilton East Public Library	189	1	0.0	62.4	66	62.4	15		62.4	0.0	7	-7.0			
190 - Multiple - Quilt Expressions; Bank	190	1	0.0	66.3	71	66.3	15		66.3	0.0	7	-7.0			
191 - CVS (former)	191	1	0.0	68.1	71	68.1	15		68.1	0.0	7	-7.0			
192 - Shell Gas Station	192	1	0.0	63.7	71	63.7	15		63.7	0.0	7	-7.0			
193 - Multiple Businesses	193	1	0.0	57.6	71	57.6	15		57.6	0.0	7	-7.0			
194 - Wendy's Restaurant	194	1	0.0	63.5	71	63.5	15		63.5	0.0	7	-7.0			
195 - Ram Restaurant & Brewery	195	1	0.0	65.5	71	65.5	15		65.5	0.0	7	-7.0			
196 - Kid's World Private Preschool & Edu	196	1	0.0	65.3	66	65.3	15		65.3	0.0	7	-7.0			
197 - Texas Roadhouse Restaurant	197	1	0.0	65.5	71	65.5	15		65.5	0.0	7	-7.0			
198 - Parkside Animal Hospital	198	1	0.0	67.9	71	67.9	15		67.9	0.0	7	-7.0			
199 - Christian Brothers Automotive Servic	199	1	0.0	66.6	71	66.6	15		66.6	0.0	7	-7.0			
200 - DQ Grill & Chill Restaurant	200	1	0.0	66.1	71	66.1	15		66.1	0.0	7	-7.0			
201 - Arby's Restaurant	201	1	0.0	66.3	71	66.3	15		66.3	0.0	7	-7.0			
202 - CVS	202	1	0.0	66.5	71	66.5	15		66.5	0.0	7	-7.0			
203 - Lake City Bank	203	1	0.0	64.2	71	64.2	15		64.2	0.0	7	-7.0			
204 - Restaurant & Businesses	204	1	0.0	61.8	71	61.8	15		61.8	0.0	7	-7.0			
205 - Restaurant & Businesses	205	1	0.0	62.3	71	62.3	15		62.3	0.0	7	-7.0			
206 - Business Under Construction	206	1	0.0	62.2	71	62.2	15		62.2	0.0	7	-7.0			
207 - Taco Bell Restaurant	207	1	0.0	63.9	71	63.9	15		63.9	0.0	7	-7.0			
208 - Zaxby's Restaurant	208	1	0.0	64.6	71	64.6	15		64.6	0.0	7	-7.0			
209 - The Woods of Britton Apartments 1	209	1	0.0	54.3	66	54.3	15		54.3	0.0	7	-7.0			
210 - The Woods of Britton Apartments 22	210	1	0.0	58.8	66	58.8	15		58.8	0.0	7	-7.0			
211 - The Woods of Britton Apartments 3	211	1	0.0	54.6	66	54.6	15		54.6	0.0	7	-7.0			
212 - The Woods of Britton Apartments 4 2	212	1	0.0	59.1	66	59.1	15		59.1	0.0	7	-7.0			
213 - The Woods of Britton Apartments 5	213	1	0.0	54.6	66	54.6	15		54.6	0.0	7	-7.0			
214 - The Woods of Britton Apartments 6 2	214	1	0.0	59.1	66	59.1	15		59.1	0.0	7	-7.0			
215 - The Woods of Britton Apartments 7	215	1	0.0	54.7	66	54.7	15		54.7	0.0	7	-7.0			
216 - The Woods of Britton Apartments 8 2	216	1	0.0	59.2	66	59.2	15		59.2	0.0	7	-7.0			
217 - The Woods of Britton Apartments 9	217	1	0.0	53.5	66	53.5	15		53.5	0.0	7	-7.0			
218 - The Woods of Britton Apartments 10	218	1	0.0	57.9	66	57.9	15		57.9	0.0	7	-7.0			
219 - The Woods of Britton Apartments 11	219	1	0.0	52.1	66	52.1	15		52.1	0.0	7	-7.0			
220 - The Woods of Britton Apartments 12	220	1	0.0	56.3	66	56.3	15		56.3	0.0	7	-7.0			
221 - The Woods of Britton Apartments 13	221	1	0.0	50.5	66	50.5	15		50.5	0.0	7	-7.0			
222 - The Woods of Britton Apartments 14	222	1	0.0	55.1	66	55.1	15		55.1	0.0	7	-7.0			
223 - The Woods of Britton Apartments 15	223	1	0.0	48.0	66	48.0	15		48.0	0.0	7	-7.0			
224 - The Woods of Britton Apartments 16	224	1	0.0	52.4	66	52.4	15		52.4	0.0	7	-7.0			
225 - The Woods of Britton Apartments 17	225	1	0.0	52.8	66	52.8	15		52.8	0.0	7	-7.0			
226 - The Woods of Britton Apartments 18	226	1	0.0	57.3	66	57.3	15		57.3	0.0	7				
227 - The Woods of Britton Apartments 19	227	1	0.0	53.3	66	53.3	15		53.3	0.0	7	-7.0			
228 - The Woods of Britton Apartments 20	228	1	0.0	57.8	66	57.8	15		57.8	0.0	7	-7.0			
229 - The Woods of Britton Apartments 21	229	1	0.0	51.4	66	51.4	15		51.4	0.0	7	-7.0			

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RESULTS: SOUND LEVELS	SR37 126th to SR32											
230 - The Woods of Britton Apartments 22	230	1	0.0	56.5	66	56.5	15		56.5	0.0	7	-7.0
231 - The Woods of Britton Apartments 23	231	1	0.0	52.4	66	52.4	15		52.4	0.0	7	-7.0
232 - The Woods of Britton Apartments 24	232	1	0.0	57.5	66	57.5	15		57.5	0.0	7	-7.0
233 - The Woods of Britton Apartments 25	233	1	0.0	51.5	66	51.5	15		51.5	0.0	7	-7.0
234 - The Woods of Britton Apartments 26	234	1	0.0	54.6	66	54.6	15		54.6	0.0	7	-7.0
235 - The Woods of Britton Apartments 27	235	1	0.0	53.1	66	53.1	15		53.1	0.0	7	-7.0
236 - The Woods of Britton Apartments 28	236	1	0.0	56.1	66	56.1	15		56.1	0.0	7	-7.0
237 - The Woods of Britton Apartments 29	237	1	0.0	56.4	66	56.4	15		56.4	0.0	7	-7.0
238 - The Woods of Britton Apartments 30	238	1	0.0	59.0	66	59.0	15		59.0	0.0	7	-7.0
239 - The Woods of Britton Apartments 31	239	1	0.0	58.4	66	58.4	15		58.4	0.0	7	-7.0
240 - The Woods of Britton Apartments 32	240	1	0.0	61.0	66	61.0	15		61.0	0.0	7	-7.0
241 - The Woods of Britton Apartments 33	241	1	0.0	54.4	66	54.4	15		54.4	0.0	7	-7.0
242 - The Woods of Britton Apartments 34	242	1	0.0	59.4	66	59.4	15		59.4	0.0	7	-7.0
243 - The Woods of Britton Apartments 35	243	1	0.0	56.0	66	56.0	15		56.0	0.0	7	-7.0
244 - The Woods of Britton Apartments 36	244	1	0.0	60.9	66	60.9	15		60.9	0.0	7	-7.0
245 - The Woods of Britton Apartments 37	245	1	0.0	60.8	66	60.8	15		60.8	0.0	7	-7.0
246 - The Woods of Britton Apartments 38	246	1	0.0	65.8	66	65.8	15		65.8	0.0	7	-7.0
247 - The Woods of Britton Apartments 39	247	1	0.0	65.4	66	65.4	15		65.4	0.0	7	-7.0
248 - The Woods of Britton Apartments 40	248	1	0.0	68.8	66	68.8	15	Snd Lvl	68.8	0.0	7	-7.0
249 - The Woods of Britton Apartments 41	249	1	0.0	62.6	66	62.6	15		62.6	0.0	7	-7.0
250 - The Woods of Britton Apartments 42	250	1	0.0	65.3	66	65.3	15		65.3	0.0	7	-7.0
251 - The Woods of Britton Apartments 43	251	1	0.0	59.6	66	59.6	15		59.6	0.0	7	-7.0
252 - The Woods of Britton Apartments 44	252	1	0.0	62.4	66	62.4	15		62.4	0.0	7	-7.0
253 - The Woods of Britton Apartments 45	253	1	0.0	63.1	66	63.1	15		63.1	0.0	7	-7.0
254 - The Woods of Britton Apartments 46	254	1	0.0	65.1	66	65.1	15		65.1	0.0	7	-7.0
255 - The Woods of Britton Apartments 47	255	1	0.0	62.8	66	62.8	15		62.8	0.0	7	-7.0
256 - The Woods of Britton Apartments 48	256	1	0.0	64.8	66	64.8	15		64.8	0.0	7	-7.0
257 - The Woods of Britton Apartments 49	257	1	0.0	59.8	66	59.8	15		59.8	0.0	7	-7.0
258 - The Woods of Britton Apartments 50	258	1	0.0	61.6	66	61.6	15		61.6	0.0	7	-7.0
259 - The Woods of Britton Apartments 51	259	1	0.0	57.5	66	57.5	15		57.5	0.0	7	-7.0
260 - The Woods of Britton Apartments 52	260	1	0.0	60.2	66	60.2	15		60.2	0.0	7	-7.0
261 - Tire Barn Service	261	1	0.0	67.2	71	67.2	15		67.2	0.0	7	-7.0
262 - KFC Restaurant	262	1	0.0	67.9	71	67.9	15		67.9	0.0	7	-7.0
263 - Multiple Restaurants and Businesses	263	1	0.0	57.7	71	57.7	15		57.7	0.0	7	-7.0
264 - Burger King Restaurant	264	1	0.0	65.0	71	65.0	15		65.0	0.0	7	-7.0
265 - Multiple Restaurants and Businesses	265	1	0.0	56.5	71	56.5	15		56.5	0.0	7	-7.0
266 - Sherwin Williams Paint Store	266	1	0.0	64.8	71	64.8	15		64.8	0.0	7	-7.0
267 - Chase Bank	267	1	0.0	64.8	71	64.8	15		64.8	0.0	7	-7.0
268 - 21st Amendment Wine & Spirits	268	1	0.0	63.6	71	63.6	15		63.6	0.0	7	-7.0
269 - Multiple Restaurants and Businesses		1	0.0	55.3	71	55.3	15		55.3	0.0	7	-7.0
270 - Multiple Businesses	270	1	0.0	55.1	71	55.1	15		55.1	0.0	7	-7.0

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RESULTS: SOUND LEVELS		SR37 126th to SR32										
271 - Prime Car Wash	271	1	0.0	64.1	71	64.1	15		64.1	0.0	7	-7.0
272 - Regions Bank	272	1	0.0	64.9	71	64.9	15		64.9	0.0	7	-7.0
273 - Marsh Supermarket	273	1	0.0	54.9	71	54.9	15		54.9	0.0	7	-7.0
274 - PNC Bank	274	1	0.0	63.9	71	63.9	15		63.9	0.0	7	-7.0
275 - AutoZone Business	275	1	0.0	63.9	71	63.9	15		63.9	0.0	7	-7.0
276 - Godby Home Furnishings	276	1	0.0	55.6	71	55.6	15		55.6	0.0	7	-7.0
277 - CVS	277	1	0.0	64.3	71	64.3	15		64.3	0.0	7	-7.0
278 - Jaggers Restaurant	278	1	0.0	58.6	71	58.6	15		58.6	0.0	7	-7.0
279 - Auto Dealership - Tom Wood Valksw	283	1	0.0	63.3	71	63.3	15		63.3	0.0	7	-7.0
280 - Milestone Apartments 1 2nd floor	284	1	0.0	65.4	66	65.4	15		65.4	0.0	7	-7.0
281 - Milestone Apartments 2 3rd floor	285	1	0.0	66.8	66	66.8	15	Snd Lvl	66.8	0.0	7	-7.0
282 - Milestone Apartments 3 2nd floor	287	1	0.0	65.4	66	65.4	15		65.4	0.0	7	-7.0
283 - Milestone Apartments 4 3rd floor	288	1	0.0	66.8	66	66.8	15	Snd Lvl	66.8	0.0	7	-7.0
284 - Milestone Apartments 5 2nd floor	289	1	0.0	65.6	66	65.6	15		65.6	0.0	7	-7.0
285 - Milestone Apartments 6 3rd floor	290	1	0.0	66.9	66	66.9	15	Snd Lvl	66.9	0.0	7	-7.0
286 - Milestone Apartments 7 2nd floor	291	1	0.0	65.4	66	65.4	15		65.4	0.0	7	-7.0
287 - Milestone Apartments 8 3rd floor	292	1	0.0	66.7	66	66.7	15	Snd Lvl	66.7	0.0	7	-7.0
288 - Milestone Apartments 9 2nd floor	293	1	0.0	64.5	66	64.5	15		64.5	0.0	7	-7.0
289 - Milestone Apartments 10 3rd floor	294	1	0.0	65.5	66	65.5	15		65.5	0.0	7	-7.0
290 - Milestone Apartments 11 2nd floor	295	1	0.0	61.9	66	61.9	15		61.9	0.0	7	-7.0
291 - Milestone Apartments 12 3rd floor	296	1	0.0	63.5	66	63.5	15		63.5	0.0	7	-7.0
292 - Milestone Apartments 13 2nd floor	297	1	0.0	59.0	66	59.0	15		59.0	0.0	7	-7.0
293 - Milestone Apartments 14 3rd floor	298	1	0.0	60.8	66	60.8	15		60.8	0.0	7	-7.0
294 - Milestone Apartments 15 2nd floor	299	1	0.0	57.1	66	57.1	15		57.1	0.0	7	-7.0
295 - Milestone Apartments 16 3rd floor	300	1	0.0	58.8	66	58.8	15		58.8	0.0	7	-7.0
296 - Milestone Apartments 17 1st floor	301	1	0.0	60.6	66	60.6	15		60.6	0.0	7	-7.0
297 - Milestone Apartments 18 2nd floor	302	1	0.0	64.2	66	64.2	15		64.2	0.0	7	-7.0
298 - Milestone Apartments 19 3rd floor	303	1	0.0	65.2	66	65.2	15		65.2	0.0	7	-7.0
299 - Milestone Apartments 20 1st floor	304	1	0.0	57.8	66	57.8	15		57.8	0.0	7	-7.0
300 - Milestone Apartments 21 2nd floor	305	1	0.0	61.8	66	61.8	15		61.8	0.0	7	-7.0
301 - Milestone Apartments 22 3rd floor	306	1	0.0	63.4	66	63.4	15		63.4	0.0	7	-7.0
302 - Milestone Apartments 23 1st floor	307	1	0.0	55.9	66	55.9	15		55.9	0.0	7	-7.0
303 - Milestone Apartments 24 2nd floor	308	1	0.0	60.1	66	60.1	15		60.1	0.0	7	-7.0
304 - Milestone Apartments 25 3rd floor	309	1	0.0	61.9	66	61.9	15		61.9	0.0	7	-7.0
305 - Milestone Apartments 26 1st floor	309	1	0.0	54.7	66	54.7	15		54.7	0.0	7	-7.0
306 - Milestone Apartments 27 2nd floor	310	1	0.0	58.9	66	58.9	15		58.9	0.0	7	-7.0
307 - Milestone Apartments 28 3rd floor	311	1	0.0	60.6	66	60.6	15		60.6	0.0	7	-7.0
308 - Milestone Apartments 29 2nd floor	312	1	0.0	53.5	66	53.5	15		53.5	0.0	7	-7.0
309 - Milestone Apartments 30 3rd floor	313	1	0.0	54.9	66	54.9	15		54.9	0.0	7	-7.0
310 - Milestone Apartments 31 2nd floor	314	1	0.0	51.4	66	51.4	15		51.4	0.0	7	-7.0
311 - Milestone Apartments 32 3rd floor	315	1	0.0	53.2	66	53.2	15		53.2	0.0	7	-7.0

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RESULTS: SOUND LEVELS		SR37 126th to SR32										
312 - Milestone Apartments 33 2nd floor	316	1	0.0	50.2	66	50.2	15		50.2	0.0	7	-7.0
313 - Milestone Apartments 34 3rd floor	317	1	0.0	52.1	66	52.1	15		52.1	0.0	7	-7.0
314 - Milestone Apartments 35 2nd floor	318	1	0.0	49.0	66	49.0	15		49.0	0.0	7	-7.0
315 - Milestone Apartments 36 3rd floor	319	1	0.0	51.1	66	51.1	15		51.1	0.0	7	-7.0
316 - Milestone Apartments 37 1st floor	320	1	0.0	52.3	66	52.3	15		52.3	0.0	7	-7.0
317 - Milestone Apartments 38 2nd floor	321	1	0.0	56.8	66	56.8	15		56.8	0.0	7	-7.0
318 - Milestone Apartments 39 3rd floor	322	1	0.0	58.3	66	58.3	15		58.3	0.0	7	-7.0
319 - Milestone Apartments 40 1st floor	323	1	0.0	51.2	66	51.2	15		51.2	0.0	7	-7.0
320 - Milestone Apartments 41 2nd floor	324	1	0.0	55.7	66	55.7	15		55.7	0.0	7	-7.0
321 - Milestone Apartments 42 3rd floor	325	1	0.0	57.4	66	57.4	15		57.4	0.0	7	-7.0
322 - Milestone Apartments 43 1st floor	326	1	0.0	50.1	66	50.1	15		50.1	0.0	7	-7.0
323 - Milestone Apartments 44 2nd floor	327	1	0.0	54.3	66	54.3	15		54.3	0.0	7	-7.0
324 - Milestone Apartments 45 3rd floor	328	1	0.0	56.2	66	56.2	15		56.2	0.0	7	-7.0
325 - Milestone Apartments 46 1st floor	329	1	0.0	49.4	66	49.4	15		49.4	0.0	7	-7.0
326 - Milestone Apartments 47 2nd floor	330	1	0.0	53.6	66	53.6	15		53.6	0.0	7	-7.0
327 - Milestone Apartments 48 3rd floor	331	1	0.0	55.6	66	55.6	15		55.6	0.0	7	-7.0
328 - Milestone Apartments 49 1st floor	285	1	0.0	64.4	66	64.4	15		64.4	0.0	7	-7.0
329 - Milestone Apartments 50 2nd floor	332	1	0.0	67.2	66	67.2	15	Snd Lvl	67.2	0.0	7	-7.0
330 - Milestone Apartments 51 3rd floor	333	1	0.0	67.8	66	67.8	15	Snd Lvl	67.8	0.0	7	-7.0
331 - Milestone Apartments 52 1st floor	334	1	0.0	62.7	66	62.7	15		62.7	0.0	7	-7.0
332 - Milestone Apartments 53 2nd floor	335	1	0.0	65.9	66	65.9	15		65.9	0.0	7	-7.0
333 - Milestone Apartments 54 3rd floor	336	1	0.0	66.8	66	66.8	15	Snd Lvl	66.8	0.0	7	-7.0
334 - Milestone Apartments 55 1st floor	337	1	0.0	59.8	66	59.8	15		59.8	0.0	7	-7.0
335 - Milestone Apartments 56 2nd floor	338	1	0.0	63.4	66	63.4	15		63.4	0.0	7	-7.0
336 - Milestone Apartments 57 3rd floor	339	1	0.0	65.0	66	65.0	15		65.0	0.0	7	-7.0
337 - Milestone Apartments 58 1st floor	340	1	0.0	58.4	66	58.4	15		58.4	0.0	7	-7.0
338 - Milestone Apartments 59 2nd floor	341	1	0.0	62.3	66	62.3	15		62.3	0.0	7	-7.0
339 - Milestone Apartments 60 3rd floor	342	1	0.0	64.0	66	64.0	15		64.0	0.0	7	-7.0
340 - Milestone Apartments 61 2nd floor	343	1	0.0	62.3	66	62.3	15		62.3	0.0	7	-7.0
341 - Milestone Apartments 62 3rd floor	344	1	0.0	63.5	66	63.5	15		63.5	0.0	7	-7.0
342 - Milestone Apartments 63 2nd floor	345	1	0.0	59.1	66	59.1	15		59.1	0.0	7	-7.0
343 - Milestone Apartments 64 3rd floor	346	1	0.0	60.7	66	60.7	15		60.7	0.0	7	-7.0
344 - Milestone Apartments 65 2nd floor	347	1	0.0	56.3	66	56.3	15		56.3	0.0	7	-7.0
345 - Milestone Apartments 66 3rd floor	348	1	0.0	58.2	66	58.2	15		58.2	0.0	7	-7.0
346 - Milestone Apartments 67 2nd floor	349	1	0.0	54.2	66	54.2	15		54.2	0.0	7	-7.0
347 - Milestone Apartments 68 3rd floor	350	1	0.0	56.3	66	56.3	15		56.3	0.0	7	-7.0
348 - Milestone Apartments 69 1st floor	351	1	0.0	54.7	66	54.7	15		54.7	0.0	7	-7.0
349 - Milestone Apartments 70 2nd floor	352	1	0.0	59.4	66	59.4	15		59.4	0.0	7	-7.0
350 - Milestone Apartments 71 3rd floor	353	1	0.0	61.1	66	61.1	15		61.1	0.0	7	-7.0
351 - Milestone Apartments 72 1st floor	354	1	0.0	52.5	66	52.5	15		52.5	0.0	7	-7.0
352 - Milestone Apartments 73 2nd floor	355	1	0.0	57.2	66	57.2	15		57.2	0.0	7	-7.0

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RESULTS: SOUND LEVELS	SR37 126th to SR32											
353 - Milestone Apartments 74 3rd floor	356	1	0.0	59.0	66	59.0	15		59.0	0.0	7	-7.0
354 - Milestone Apartments 75 1st floor	357	1	0.0	51.1	66	51.1	15		51.1	0.0	7	-7.0
355 - Milestone Apartments 76 2nd floor	358	1	0.0	55.6	66	55.6	15		55.6	0.0	7	-7.0
356 - Milestone Apartments 77 3rd floor	359	1	0.0	57.5	66	57.5	15		57.5	0.0	7	-7.0
357 - Milestone Apartments 78 1st floor	360	1	0.0	50.1	66	50.1	15		50.1	0.0	7	-7.0
358 - Milestone Apartments 79 2nd floor	361	1	0.0	54.4	66	54.4	15		54.4	0.0	7	-7.0
359 - Milestone Apartments 80 3rd floor	362	1	0.0	56.4	66	56.4	15		56.4	0.0	7	-7.0
360 - Milestone Apartments 81 2nd floor	363	1	0.0	51.9	66	51.9	15		51.9	0.0	7	-7.0
361 - Milestone Apartments 82 3rd floor	364	1	0.0	53.9	66	53.9	15		53.9	0.0	7	-7.0
362 - Milestone Apartments 83 2nd floor	365	1	0.0	50.9	66	50.9	15		50.9	0.0	7	-7.0
363 - Milestone Apartments 84 3rd floor	366	1	0.0	52.7	66	52.7	15		52.7	0.0	7	-7.0
364 - Milestone Apartments 85 2nd floor	373	1	0.0	49.8	66	49.8	15		49.8	0.0	7	-7.0
365 - Milestone Apartments 86 3rd floor	374	1	0.0	51.7	66	51.7	15		51.7	0.0	7	-7.0
366 - Milestone Apartments 87 2nd floor	375	1	0.0	49.0	66	49.0	15		49.0	0.0	7	-7.0
367 - Milestone Apartments 88 3rd floor	376	1	0.0	51.2	66	51.2	15		51.2	0.0	7	-7.0
368 - Primrose School of Noblesville	377	1	0.0	65.7	66	65.7	15		65.7	0.0	7	-7.0
369 - Golden Corral Restaurant	378	1	0.0	59.6	71	59.6	15		59.6	0.0	7	-7.0
370 - Multiple Restaurant and Businesses	379	1	0.0	61.0	71	61.0	15		61.0	0.0	7	-7.0
371 - Old National Bank	380	1	0.0	64.2	71	64.2	15		64.2	0.0	7	-7.0
372 - 2550 Greenfield Ave - Residence	381	1	0.0	63.7	66	63.7	15		63.7	0.0	7	-7.0
373 - 2520 Greenfield Ave - Residence	382	1	0.0	68.4	66	68.4	15	Snd Lvl	68.4	0.0	7	-7.0
374 - 16333 Cumberland Rd - Residence	383	1	0.0	58.3	66	58.3	15		58.3	0.0	7	-7.0
375 - 16355 Cumberland Rd - Residence	384	1	0.0	57.4	66	57.4	15		57.4	0.0	7	-7.0
376 - 16365 Cumberland Rd - Residence	385	1	0.0	58.7	66	58.7	15		58.7	0.0	7	-7.0
377 - 16367 Cumberland Rd - Residence	386	1	0.0	60.6	66	60.6	15		60.6	0.0	7	-7.0
378 - 16373 Cumberland Rd - Residence	387	1	0.0	60.6	66	60.6	15		60.6	0.0	7	-7.0
379 - 16381 Cumberland Rd - Residence	388	1	0.0	61.5	66	61.5	15		61.5	0.0	7	-7.0
380 - 16455 Cumberland Rd - Residence	389	1	0.0	65.3	66	65.3	15		65.3	0.0	7	-7.0
381 - 16477 Cumberland Rd - Residence	390	1	0.0	65.0	66	65.0	15		65.0	0.0	7	-7.0
382 - 16487 Cumberland Rd - Residence	391	1	0.0	68.4	66	68.4	15	Snd Lvl	68.4	0.0	7	-7.0
383 - 16497 Cumberland Rd - Residence	392	1	0.0	67.4	66	67.4	15	Snd Lvl	67.4	0.0	7	-7.0
384 - Tires Plus	393	1	0.0	63.7	71	63.7	15		63.7	0.0	7	-7.0
385 - Sports Clips Haircuts of Noblesville	394	1	0.0	60.3	71	60.3	15		60.3	0.0	7	-7.0
386 - Bob Evans Restaurant	395	1	0.0	64.7	71	64.7	15		64.7	0.0	7	-7.0
387 - Chick-fil-A Restaurant	396	1	0.0	65.2	71	65.2	15		65.2	0.0	7	-7.0
388 - O'Charley's Restaurant & Bar	397	1	0.0	63.7	71	63.7	15		63.7	0.0	7	-7.0
389 - Chili's Grill & Bar Restaurant	398	1	0.0	64.1	71	64.1	15		64.1	0.0	7	-7.0
390 - FORUM Credit Union	399	1	0.0	61.2	71	61.2	15		61.2	0.0	7	-7.0
391 - Meijer Gas Station	399	1	0.0	63.3	71	63.3	15		63.3	0.0	7	-7.0
392 - Multiple Businesses	400	1	0.0	62.2	71	62.2	15		62.2	0.0	7	-7.0
393 - Logan's Roadhouse Restaurant	401	1	0.0	62.7	71	62.7	15		62.7	0.0	7	-7.0

16 M

10

RESULTS: SOUND LEVELS							s	R37 126th t	o SR32				
394 - Crew Car Wash	402	1	0.0	64	.6	71	64.6	15		64.6	0.0	7	-7.0
395 - Multiple Businesses	403	1	0.0	60	0.6	71	60.6	15		60.6	0.0	7	-7.0
396 - BMO Harris Bank	404	1	0.0	64	.1	71	64.1	15		64.1	0.0	7	-7.0
397 - Multiple Businesses	405	1	0.0	58	3.4	71	58.4	15		58.4	0.0	7	-7.0
398 - Auto Dealership - Kahlo Chrysler Jee	406	1	0.0	65	5.4	71	65.4	15		65.4	0.0	7	-7.0
399 - Auto Dealership - Terry Lee Genesis	407	1	0.0	64	.9	71	64.9	15		64.9	0.0	7	-7.0
400 - Applebee's Restaurant	408	1	0.0	63	3.7	71	63.7	15		63.7	0.0	7	-7.0
401 - Fireworks	409	1	0.0	63	5.5	71	63.5	15		63.5	0.0	7	-7.0
402 - Teachers Credit Union	410	1	0.0	57	'.6	71	57.6	15		57.6	0.0	7	-7.0
403 - Courtyard Marriott	411	1	0.0	61	.5	71	61.5	15		61.5	0.0	7	-7.0
404 - Belle Tire	367	1	0.0	66	6.8	71	66.8	15		66.8	0.0	7	-7.0
405 - Verizon	479	1	0.0	62	2.2	71	62.2	15		62.2	0.0	7	-7.0
406 - Harley Davidson	480	1	0.0	61	.6	71	61.6	15		61.6	0.0	7	-7.0
407 - O'Reilly Auto Parts	481	1	0.0	66	5.5	71	66.5	15		66.5	0.0	7	-7.0
408 - Auto Dealership	483	1	0.0	64	.9	71	64.9	15		64.9	0.0	7	-7.0
409 - GetGo Café and Market	484	1	0.0	64	.0	71	64.0	15		64.0	0.0	7	-7.0
Dwelling Units		# DUs	Noise Re	duction									
			Min	Avg	Max								
			dB	dB	dB								
All Selected		409	0.0	C	0.0	0.0							
All Impacted		15	0.0	C	0.0	0.0							

0.0

0

0.0

0.0

16 M

11

All that meet NR Goal

## **Appendix G**

TNM 2.5 2036 Design Year Sound Level Results

**RESULTS: SOUND LEVELS** SR37 - 126th to SR32

Lochmueller Group  R. Yeager, D. Townsend  TNM 2.5  Calculated with TNM 2.5  RESULTS: SOUND LEVELS  PROJECT/CONTRACT:  SR37 - 126th to SR32  RUN:  BARRIER DESIGN:  INPUT HEIGHTS  Average pavement type shall be used unless the supplier of		
R. Yeager, D. Townsend  Calculated with TNM 2.5  RESULTS: SOUND LEVELS PROJECT/CONTRACT: SR37 - 126th to SR32  RUN: BARRIER DESIGN: INPUT HEIGHTS  TNM 2.5  Calculated with TNM 2.5  Average pavement type shall be used unl		
RESULTS: SOUND LEVELS PROJECT/CONTRACT: SR37 - 126th to SR32 RUN: BARRIER DESIGN: Calculated with TNM 2.5  Calculated with TNM 2.5  Average pavement type shall be used unless that the second of the		
RESULTS: SOUND LEVELS PROJECT/CONTRACT: SR37 - 126th to SR32 RUN: 2036 design year Alternative BARRIER DESIGN: INPUT HEIGHTS Average pavement type shall be used unl		
PROJECT/CONTRACT: SR37 - 126th to SR32  RUN: 2036 design year Alternative  BARRIER DESIGN: INPUT HEIGHTS Average pavement type shall be used unl		
RUN: 2036 design year Alternative BARRIER DESIGN: INPUT HEIGHTS Average pavement type shall be used unl		
BARRIER DESIGN: INPUT HEIGHTS Average pavement type shall be used unl		
	ess	
a State highway agency substantiates the		
ATMOSPHERICS: 68 deg F, 50% RH of a different type with approval of FHWA		
Receiver		
Name No. #DUs Existing No Barrier With Barrier		
LAeq1h LAeq1h Increase over existing Type Calculated Noise Reduction		-
Calculated Crit'n Calculated Crit'n Impact LAeq1h Calculated Goa		Calculated
Sub'l Inc		minus
		Goal
dBA dBA dBA dB dBA dB dBA		dB
1 - Sunlake Apartments 1 1st floor 1 1 61.7 64.2 66 2.5 15 64.2 0.0	7	-7.0
2 - Sunlake Apartments 2 2nd floor 2 1 65.6 68.3 66 2.7 15 Snd Lvl 68.3 0.0	7	-7.0
3 - Sunlake Apartments 3 1st floor 3 1 57.9 61.0 66 3.1 15 61.0 0.0	7	-7.0
4 - Sunlake Apartments 4 2nd floor 4 1 62.3 65.3 66 3.0 15 65.3 0.0	7	-7.0
5 - Sunlake Apartments 5 1st floor 5 1 54.8 57.7 66 2.9 15 57.7 0.0	7	-7.0
6 - Sunlake Apartments 6 2nd floor 6 1 59.3 62.6 66 3.3 15 62.6 0.0	7	-7.0
7 - Sunlake Apartments 7 1st floor 7 1 53.8 55.5 66 1.7 15 55.5 0.0	7	-7.0
8 - Sunlake Apartments 8 2nd floor 8 1 58.3 60.6 66 2.3 15 60.6 0.0	7	-7.0
9 - Sunlake Apartments 9 1st floor 9 1 60.1 62.5 66 2.4 15 62.5 0.0	7	-7.0
10 - Sunlake Apartments 10 2nd floor 10 1 64.6 67.0 66 2.4 15 Snd Lvl 67.0 0.0	7	-7.0
11 - Sunlake Apartments         11 1st floor         11         1         57.6         60.1         66         2.5         15          60.1         0.0	7	-7.0
12 - Sunlake Apartments     12 2nd floor     12     1     62.3     64.6     66     2.3     15      64.6     0.0	7	-7.0
13 - Sunlake Apartments     13 1st floor     13 1 54.9     57.4     66     2.5     15     57.4     0.0	7	-7.0
14 - Sunlake Apartments     14 2nd floor     14     1     60.0     62.0     66     2.0     15      62.0     0.0	7	-7.0
15 - Sunlake Apartments     15 1st floor     15 1 54.1     56.5     66 2.4     15     56.5     0.0	7	-7.0
16 - Sunlake Apartments     16 2nd floor     16     1     59.4     61.3     66     1.9     15      61.3     0.0	7	-7.0
17 - Sunlake Apartments     17 1 1 63.2     66.2     66     3.0     15 Snd Lvl     66.2     0.0	7	
18 - Sunlake Apartments         18 2nd floor         18         1         67.0         69.6         66         2.6         15         Snd Lvl         69.6         0.0	7	_
19 - Sunlake Apartments         19 1st floor         19 1 58.7         60.9         66         2.2         15         60.9         0.0	7	
20 - Sunlake Apartments     20 2nd floor     20     1     63.0     65.4     66     2.4     15      65.4     0.0	7	
21 - Sunlake Apartments     21 1st floor     21     1     55.6     58.2     66     2.6     15      58.2     0.0	7	
22 - Sunlake Apartments     22 2nd floor     22     1     60.2     62.9     66     2.7     15      62.9     0.0	7	
23 - Sunlake Apartments     23 1st floor     23     1     53.3     55.5     66     2.2     15      55.5     0.0	7	
24 - Sunlake Apartments     24 2nd floor     24     1     58.0     60.6     66     2.6     15      60.6     0.0	7	-7.0
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RESULTS: SOUND LEVELS						SR3	7 - 126th	to SR32				
25 - Sunlake Apartments 25 1st floor	25	1	58.5	60.6	66	2.1	15		60.6	0.0	7	-7.0
26 - Sunlake Apartments 26 2nd floor	26	1	60.5	63.2	66	2.7	15		63.2	0.0	7	-7.0
27 - Sunlake Apartments 27 1st floor	27	1	59.4	61.9	66	2.5	15		61.9	0.0	7	-7.0
28 - Sunlake Apartments 28 2nd floor	28	1	61.8	64.7	66	2.9	15		64.7	0.0	7	-7.0
29 - Sunlake Apartments 29 1st floor	29	1	62.0	64.6	66	2.6	15		64.6	0.0	7	-7.0
30 - Sunlake Apartments 30 2nd floor	30	1	64.6	67.5	66	2.9	15	Snd Lvl	67.5	0.0	7	-7.0
31 - Sunlake Apartments 31 1st floor	31	1	64.5	67.1	66	2.6	15	Snd Lvl	67.1	0.0	7	-7.0
32 - Sunlake Apartments 32 2nd floor	32	1	67.2	70.2	66	3.0	15	Snd Lvl	70.2	0.0	7	-7.0
33 - Sunlake Apartments 33 1st floor	33	1	52.4	54.7	66	2.3	15		54.7	0.0	7	-7.0
34 - Sunlake Apartments 34 2nd floor	34	1	57.4	59.4	66	2.0	15		59.4	0.0	7	-7.0
35 - Sunlake Apartments 35 1st floor	35	1	51.1	53.2	66	2.1	15		53.2	0.0	7	-7.0
36 - Sunlake Apartments 36 2nd floor	36	1	55.5	57.2	66	1.7	15		57.2	0.0	7	-7.0
37 - Sunlake Apartments 37 1st floor	37	1	50.8	52.9	66	2.1	15		52.9	0.0	7	-7.0
38 - Sunlake Apartments 38 2nd floor	38	1	54.9	56.7	66	1.8	15		56.7	0.0	7	-7.0
39 - Sunlake Apartments 39 1st floor	39	1	46.0	48.4	66	2.4	15		48.4	0.0	7	-7.0
40 - Sunlake Apartments 40 2nd floor	40	1	50.5	53.3	66	2.8	15		53.3	0.0	7	-7.0
41 - Sunlake Apartments 41 1st floor	41	1	47.0	48.7	66	1.7	15		48.7	0.0	7	-7.0
42 - Sunlake Apartments 42 2nd floor	42	1	50.7	53.0	66	2.3	15		53.0	0.0	7	-7.0
43 - Sunlake Apartments 43 1st floor	43	1	47.3	49.5	66	2.2	15		49.5	0.0	7	-7.0
44 - Sunlake Apartments 44 2nd floor	44	1	50.9	53.3	66	2.4	15		53.3	0.0	7	-7.0
45 - Sunlake Apartments 45 1st floor	45	1	49.4	51.9	66	2.5	15		51.9	0.0	7	-7.0
46 - Sunlake Apartments 46 2nd floor	46	1	53.0	55.9	66	2.9	15		55.9	0.0	7	-7.0
47 - Sunlake Apartments 47 1st floor	47	1	50.1	52.5	66	2.4	15		52.5	0.0	7	-7.0
48 - Sunlake Apartments 48 2nd floor	48	1	53.7	56.2	66	2.5	15		56.2	0.0	7	-7.0
49 - Sunlake Apartments 49 1st floor	49	1	50.2	52.6	66	2.4	15		52.6	0.0	7	-7.0
50 - Sunlake Apartments 50 2nd floor	50	1	53.4	56.0	66	2.6	15		56.0	0.0	7	-7.0
51 - Sunlake Apartments 51 1st floor	51	1	50.0	51.9	66	1.9	15		51.9	0.0	7	-7.0
52 - Sunlake Apartments 52 2nd floor	52	1	53.1	55.4	66	2.3	15		55.4	0.0	7	-7.0
53 - Sunlake Apartments 53 1st floor	53	1	58.0	60.4	66	2.4	15		60.4	0.0	7	-7.0
54 - Sunlake Apartments 54 2nd floor	54	1	59.8	62.5	66	2.7	15		62.5	0.0	7	-7.0
55 - Sunlake Apartments 55 1st floor	55	1	57.8	60.4	66	2.6	15		60.4	0.0	7	-7.0
56 - Sunlake Apartments 56 2nd floor	56	1	59.3	62.2	66	2.9	15		62.2	0.0	7	-7.0
57 - Sunlake Apartments 57 1st floor	57	1	57.4	59.9	66	2.5	15		59.9	0.0	7	-7.0
58 - Sunlake Apartments 58 2nd floor	58	1	58.8	61.4	66	2.6	15		61.4	0.0	7	-7.0
59 - Sunlake Apartments 59 1st floor	59	1	57.1	59.6	66	2.5	15		59.6	0.0	7	-7.0
60 - Sunlake Apartments 60 2nd floor	60	1	58.4	61.0	66	2.6	15		61.0	0.0	7	-7.0
61 - Sunlake Apartments 61 1st floor	61	1	57.5	60.0	66	2.5	15		60.0	0.0	7	-7.0
62 - Sunlake Apartments 62 2nd floor	62	1	58.7	61.3	66	2.6	15		61.3	0.0	7	-7.0
63 - Sunlake Apartments 63 1st floor	63	1	57.6	60.0	66	2.4	15		60.0	0.0	7	-7.0
64 - Sunlake Apartments 64 2nd floor	64	1	59.1	61.7	66	2.6	15		61.7	0.0	7	-7.0
65 - Sunlake Apartments 65 1st floor	65	1	58.1	60.7	66	2.6	15		60.7	0.0	7	-7.0

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RESULTS: SOUND LEVELS						SF	R37 - 126th	to SR32				
66 - Sunlake Apartments 66 2nd floor	66	1	59.5	62.4	66	2.9	15		62.4	0.0	7	-7.0
67 - Sunlake Apartments 67 1st floor	67	1	58.5	61.0	66	2.5	15		61.0	0.0	7	-7.0
68 - Sunlake Apartments 68 2nd floor	68	1	60.3	63.3	66	3.0	15		63.3	0.0	7	-7.0
69 - Sunlake Apartments 69 1st floor	69	1	58.8	61.1	66	2.3	15		61.1	0.0	7	-7.0
70 - Sunlake Apartments 70 2nd floor	70	1	60.7	63.4	66	2.7	15		63.4	0.0	7	-7.0
71 - Sunlake Apartments 71 1st floor	71	1	58.8	61.6	66	2.8	15		61.6	0.0	7	-7.0
72 - Sunlake Apartments 72 2nd floor	72	1	60.9	63.9	66	3.0	15		63.9	0.0	7	-7.0
73 - Sunlake Apartments 73 1st floor	73	1	58.8	61.3	66	2.5	15		61.3	0.0	7	-7.0
74 - Sunlake Apartments 74 2nd floor	74	1	61.1	64.0	66	2.9	15		64.0	0.0	7	-7.0
75 - Sunlake Apartments 75 1st floor	75	1	59.5	61.8	66	2.3	15		61.8	0.0	7	-7.0
76 - Sunlake Apartments 76 2nd floor	76	1	62.1	65.0	66	2.9	15		65.0	0.0	7	-7.0
77 - Sunlake Apartments 77 1st floor	77	1	60.2	62.8	66	2.6	15		62.8	0.0	7	-7.0
78 - Sunlake Apartments 78 2nd floor	78	1	63.2	66.0	66	2.8	15	Snd Lvl	66.0	0.0	7	-7.0
79 - Sunlake Apartments 79 1st floor	79	1	60.8	63.8	66	3.0	15		63.8	0.0	7	-7.0
80 - Sunlake Apartments 80 2nd floor	80	1	64.9	67.7	66	2.8	15	Snd Lvl	67.7	0.0	7	-7.0
81 - Sunlake Apartments 81 1st floor	81	1	61.9	65.1	66	3.2	15		65.1	0.0	7	-7.0
82 - Sunlake Apartments 82 2nd floor	82	1	66.8	69.5	66	2.7	15	Snd Lvl	69.5	0.0	7	-7.0
83 - Auto Dealership - Lockhart Cadillac	83	1	66.4	66.1	71	-0.3	15		66.1	0.0	7	-7.0
84 - Auto Dealership - Don Hinds Ford	84	1	68.4	66.3	71	-2.1	15		66.3	0.0	7	-7.0
85 - Auto Dealership - Don Hinds Pre-Owr	85	1	67.3	69.8	71	2.5	15		69.8	0.0	7	-7.0
86 - The Mower Shop	86	1	59.6	61.7	71	2.1	15		61.7	0.0	7	-7.0
87 - Auto Dealership - Any Mohr Buick GM	87	1	69.0	68.6	71	-0.4	15		68.6	0.0	7	-7.0
88 - BP Gas Station and McDonald's Resta	88	1	62.9	61.7	71	-1.2	15		61.7	0.0	7	-7.0
89 - Recreational Vehicle Business	89	1	67.9	67.6	71	-0.3	15		67.6	0.0	7	-7.0
90 - Fishers Self Storage	90	1	70.4	72.9	71	2.5	15	Snd Lvl	72.9	0.0	7	-7.0
91 - Pinecrest Marine	91	1	62.0	64.2	71	2.2	15		64.2	0.0	7	-7.0
92 - Auto Dealership - Ed Martin Nissan	92	1	68.0	70.9	71	2.9	15		70.9	0.0	7	-7.0
93 - Auto Dealership - Butler Kia	93	1	68.8	70.7	71	1.9	15		70.7	0.0	7	-7.0
94 - Pet Suites	94	1	67.0	69.8	71	2.8	15		69.8	0.0	7	-7.0
95 - Auto Dealership - Honda of Fishers	95	1	67.5	70.3	71	2.8	15		70.3	0.0	7	-7.0
96 - Pinheads (bowling) with Outdoor Volle	96	1	60.1	61.9	66	1.8	15		61.9	0.0	7	-7.0
97 - Ben & Ari's Miniature Golf Course	97	1	66.9	68.8	66	1.9	15	Snd Lvl	68.8	0.0	7	-7.0
98 - Auto Dealership - Andy Mohr Mitsubis	98	1	70.7	72.2	71	1.5	15	Snd Lvl	72.2	0.0	7	-7.0
99 - Buffalo Wild Wings Restaurant	99	1	66.6	67.7	71	1.1	15		67.7	0.0	7	-7.0
100 - Speedway Gas Station	100	1	65.3	63.5	71	-1.8	15		63.5	0.0	7	-7.0
101 - The Old Custard Stand Restaurant	101	1	64.8	63.7	71	-1.1	15		63.7	0.0	7	
102 - IDI Fabrication Business	102	1	65.3	67.4	71	2.1	15		67.4	0.0	7	-7.0
103 - Shell Gas Station	103	1	66.5	67.8	71	1.3	15		67.8	0.0	7	-7.0
104 - LA Fitness	104	1	61.4	61.6	71	0.2	15		61.6	0.0	7	-7.0
105 - Multiple Businesses	105	1	65.4	64.3	71	-1.1	15		64.3	0.0	7	-7.0
106 - Business	106	1	66.9	68.3	71	1.4	15		68.3	0.0	7	-7.0

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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32 107 107 - Business 59.6 62.0 71 2.4 15 62.0 0.0 -7.0 71 71.0 -7.0 108 - Indiana Elite Cheer and Tumbling 108 67.8 71.0 3.2 Snd Lvl 0.0 15 109 109 - Recreation Unlimited Business 61.7 65.1 71 3.4 15 ----65.1 0.0 7 -7.0 110 - Refine Kitches Baths & Floors 62.9 71 3.5 0.0 -7.0 110 66.4 15 66.4 ----111 - Extreme Vehicle Designs 111 1 66.6 69.4 71 2.8 15 69.4 0.0 -7.0 ----112 - Ballerinas Academy of Dance 112 1 66.9 69.8 71 2.9 15 69.8 0.0 7 -7.0 ----113 1 64.0 71 2.7 0.0 7 -7.0 113 - Business 66.7 15 ----66.7 114 - Valvoline 114 1 58.4 71 2.5 60.9 0.0 7 -7.0 60.9 15 115 70.1 73.0 71 2.9 Snd Lvl 73.0 0.0 7 -7.0 115 - Dog Dayz 15 116 - T&T Sales & Promotions 116 61.0 63.2 71 2.2 15 63.2 0.0 7 -7.0 117 - Elbert Construction 117 61.7 64.0 71 2.3 15 64.0 0.0 7 -7.0 71 2.9 0.0 7 -7.0 118 - Multi-Business 118 68.6 71.5 15 Snd LvI 71.5 119 - Dakswan Automation Systems Inc 119 65.8 68.8 71 3.0 15 68.8 0.0 -7.0 120 - Jackson & Associates Food Products 120 59.1 71 2.4 15 0.0 -7.0 61.5 61.5 7 ----121 - ZR Tactical Solutions 121 69.1 71.6 71 2.5 15 Snd Lvl 71.6 0.0 -7.0 122 - Backyard Archery 122 59.4 61.8 71 2.4 61.8 0.0 7 -7.0 15 ----123 71 2.5 62.3 0.0 -7.0 123 - Cim Solutions 59.8 62.3 15 ----124 - Business 126 69.2 71 2.6 69.2 -7.0 66.6 15 ----0.0 125 - Children's Bureau Inc 127 58.2 60.5 71 2.3 15 60.5 0.0 -7.0 128 68.9 71.7 71 2.8 71.7 -7.0 126 - Jds International 15 Snd Lvl 0.0 7 -7.0 127 - Summers Plumbing Heating & Coolir 129 67.9 70.7 71 2.8 15 70.7 0.0 128 - 372 Wellington Pkwy - Residence 130 55.7 57.9 66 2.2 15 57.9 0.0 -7.0 ----129 - 368 Wellington Pkwy - Residence 131 1 66 2.4 7 -7.0 57.7 60.1 15 60.1 0.0 ----130 - 376 Wellington Pkwy - Residence 132 2.1 1 53.9 56.0 66 15 ----56.0 0.0 7 -7.0 131 - 364 Wellington Pkwy - Residence 133 1 60.9 63.5 66 2.6 15 63.5 0.0 7 -7.0 ----132 - 360 Wellington Pkwy - Residence 134 1 62.5 65.1 66 2.6 15 65.1 0.0 7 -7.0 ----133 - 356 Wellington Pkwy - Residence 135 61.7 64.4 66 2.7 15 64.4 0.0 7 -7.0 ----134 - 352 Wellington Pkwy - Residence 136 60.6 63.2 66 2.6 15 63.2 0.0 7 -7.0 135 - 348 Wellington Pkwy - Residence 137 66 2.6 15 0.0 -7.0 60.6 63.2 63.2 136 - 344 Wellington Pkwy - Residence 138 59.9 66 2.6 15 62.5 0.0 7 -7.0 62.5 137 - 340 Wellington Pkwy - Residence 139 58.5 61.0 66 2.5 15 61.0 0.0 7 -7.0 ----66 2.6 -7.0 138 - 336 Wellington Pkwy - Residence 140 57.7 60.3 15 60.3 0.0 7 ----139 - 55 Glasgow Lane - Residence 141 66 2.5 0.0 7 -7.0 58.3 60.8 15 60.8 ----66 140 - 332 Wellington Pkwy - Residence 142 55.8 58.3 2.5 15 ----58.3 0.0 -7.0 141 - 51 Glasgow Lane - Residence 143 59.9 66 2.4 0.0 7 -7.0 62.3 15 62.3 ----142 - 50 Glasgow Lane - Residence 144 58.3 60.9 66 2.6 15 60.9 0.0 -7.0 ----143 - 330 Wellington Pkwy - Residence 145 55.3 57.8 66 2.5 15 57.8 0.0 -7.0 66 2.6 -7.0 144 - 328 Wellington Pkwy - Residence 146 55.8 58.4 15 58.4 0.0 ----145 - 324 Wellington Pkwy - Residence 147 -7.0 57.1 59.8 66 2.7 15 0.0 ----59.8 66 7 -7.0 146 - 320 Wellington Pkwy - Residence 148 1 58.2 61.1 2.9 15 ----61.1 0.0 147 - 316 Wellington Pkwy - Residence 149 59.6 62.3 66 2.7 15 62.3 0.0 -7.0 ----

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 Appendix I - Noise Analysis
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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32 148 - 312 Wellington Pkwy - Residence 150 59.8 62.4 66 2.6 15 62.4 0.0 -7.0 151 66 -7.0 149 - 310 Wellington Pkwy - Residence 61.9 64.8 2.9 15 64.8 0.0 ----152 150 - 308 Wellington Pkwy - Residence 62.8 65.5 66 2.7 15 ----65.5 0.0 7 -7.0 151 - 306 Wellington Pkwy - Residence 153 66 2.4 0.0 -7.0 61.2 63.6 15 63.6 ----152 - 304 Wellington Pkwy - Residence 154 61.8 64.1 66 2.3 15 64.1 0.0 -7.0 ----153 - 302 Wellington Pkwy - Residence 155 1 60.7 63.0 66 2.3 15 63.0 0.0 7 -7.0 ----154 - 300 Wellington Pkwy - Residence 156 1 66 2.3 61.9 0.0 7 -7.0 59.6 61.9 15 ----155 - Playground Park - Wellington NE Ne 157 62.5 66 2.1 0.0 7 -7.0 64.6 15 64.6 ----156 - 274 Wellington Pkwy - Residence 158 53.4 55.5 66 2.1 15 55.5 0.0 7 -7.0 ----157 - Multiple Dental Businesses 159 63.8 66.4 71 2.6 15 66.4 0.0 7 -7.0 158 - Floors To Your Home Business 160 65.1 65.1 71 0.0 15 65.1 0.0 7 -7.0 ----161 71 0.0 7 -7.0 159 - Village Pantry Gas Station 60.3 59.5 -0.8 15 ----59.5 160 - Speedway Gas Station 162 66.0 67.9 71 1.9 15 67.9 0.0 -7.0 ----161 - Carpenter Realtors 163 71 2.1 62.2 0.0 -7.0 60.1 62.2 15 7 ----162 - 2210 Greenfield Ave - Residence 164 57.9 61.7 66 3.8 15 61.7 0.0 -7.0 ----163 - Boggs Wrecker Service 165 61.9 66.9 71 5.0 15 66.9 0.0 7 -7.0 ----164 - Legacy Bible Church 3.2 66.2 0.0 -7.0 166 63.0 66.2 66 15 Snd Lvl 165 - Auto Dealership - Hare Chevrolet 167 70.0 71 3.0 -7.0 67.0 15 ----70.0 0.0 166 - Taco Bell Restaurant 168 64.2 64.0 71 -0.2 15 64.0 0.0 -7.0 167 - Discount Tire Store 169 67.0 64.2 71 -2.8 64.2 0.0 -7.0 15 ----7 -7.0 168 - Wendy's Restaurant 170 66.0 62.1 71 -3.9 15 62.1 0.0 ----169 - Ricker's BP Gas Station 171 66.8 62.1 71 -4.7 15 62.1 0.0 7 -7.0 ----170 - White Castle Restaurant 7 -7.0 172 66.5 64.0 71 -2.515 64.0 0.0 ----171 - Fifth Third Bank 173 71 1 66.1 65.6 -0.5 15 ----65.6 0.0 7 -7.0 172 - Steak 'n Shake Restaurant 174 1 66.2 68.9 71 2.7 15 68.9 0.0 7 -7.0 ----173 - The Farmers Bank 175 1 64.1 66.7 71 2.6 15 66.7 0.0 7 -7.0 ----174 - Jimmy Johns Restaurant & Starbuck 176 66.6 69.1 71 2.5 15 69.1 0.0 7 -7.0 ----175 - R & T Tire Pros 177 67.0 69.5 71 2.5 15 69.5 0.0 7 -7.0 178 71 2.7 0.0 -7.0 176 - Super 8 Hotel 67.5 70.2 15 70.2 179 64.7 71 2.8 15 67.5 0.0 7 -7.0 177 - Multiple Businesses 67.5 178 - Quick Lube Express 180 66.1 68.9 71 2.8 15 68.9 0.0 7 -7.0 ----181 71 2.2 -7.0 179 - Tractor Supply Co Business 58.7 60.9 15 60.9 0.0 7 ----182 71 -0.9 0.0 7 -7.0 180 - Walgreens 64.8 63.9 15 63.9 ----183 181 - First Merchants Bank 65.7 67.7 71 2.0 15 ----67.7 0.0 -7.0 182 - Perkins Restaurant & Bakery 184 71 2.5 0.0 7 -7.0 66.5 69.0 15 69.0 ----183 - Arby's Restaurant 185 63.8 66.1 71 2.3 15 66.1 0.0 -7.0 ----184 - Burger King Restaurant 186 67.0 67.8 71 8.0 15 67.8 0.0 -7.0 ----187 71 1.9 -7.0 185 - Woods Bail Bonds 65.8 67.7 15 67.7 0.0 ----188 71 -7.0 186 - Valero Xpress Mart Gas Station 63.7 65.3 1.6 15 65.3 0.0 ----71 1.7 7 -7.0 187 - Huntington Bank 189 1 61.5 63.2 15 ----63.2 0.0 188 - Multiple Businesses 190 65.9 66.7 71 8.0 15 66.7 0.0 -7.0 ----

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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32 189 - Hamilton East Public Library 191 62.4 64.7 66 2.3 64.7 0.0 -7.0 15 192 71 -7.0 190 - Multiple - Quilt Expressions; Bank 66.3 67.9 1.6 15 67.9 0.0 ----191 - CVS (former) 193 68.1 68.6 71 0.5 15 ----68.6 0.0 7 -7.0 192 - Shell Gas Station 194 71 0.3 0.0 -7.0 63.7 64.0 15 64.0 ----193 - Multiple Businesses 195 57.6 58.5 71 0.9 15 58.5 0.0 -7.0 ----194 - Wendy's Restaurant 196 1 63.5 63.9 71 0.4 15 63.9 0.0 7 -7.0 ----195 - Ram Restaurant & Brewery 197 71 1.9 0.0 -7.0 1 65.5 67.4 15 ----67.4 196 - Kid's World Private Preschool & Edu 198 65.3 66 2.2 Snd Lvl 0.0 7 -7.0 67.5 15 67.5 197 - Texas Roadhouse Restaurant 199 65.5 67.3 71 1.8 15 67.3 0.0 -7.0 ----198 - Parkside Animal Hospital 200 67.9 69.9 71 2.0 15 69.9 0.0 7 -7.0 199 - Christian Brothers Automotive Service 201 66.6 68.4 71 1.8 15 68.4 0.0 -7.0 ----71 1.9 0.0 7 -7.0 200 - DQ Grill & Chill Restaurant 202 66.1 68.0 15 ----68.0 203 66.3 67.8 71 1.5 15 0.0 -7.0 201 - Arby's Restaurant ----67.8 202 - CVS 204 71 -1.3 0.0 -7.0 66.5 65.2 15 65.2 7 ----203 - Lake City Bank 205 64.2 62.9 71 -1.3 15 62.9 0.0 -7.0 ----204 - Restaurant & Businesses 206 61.8 61.8 71 0.0 61.8 0.0 7 -7.0 15 ----207 71 0.1 0.0 -7.0 205 - Restaurant & Businesses 62.3 62.4 15 62.4 ----206 - Business Under Construction 208 62.2 71 -7.0 63.8 1.6 15 ----63.8 0.0 207 - Taco Bell Restaurant 209 63.9 66.5 71 2.6 15 66.5 0.0 -7.0 208 - Zaxby's Restaurant 210 71 2.4 -7.0 64.6 67.0 15 67.0 0.0 -----7.0 209 - The Woods of Britton Apartments 1 211 54.3 56.1 66 1.8 15 56.1 0.0 ----210 - The Woods of Britton Apartments 2 2 212 58.8 61.0 66 2.2 15 61.0 0.0 -7.0 ----66 1.9 7 -7.0 211 - The Woods of Britton Apartments 3 213 54.6 56.5 15 56.5 0.0 ----2.4 212 - The Woods of Britton Apartments 4 2 214 1 59.1 61.5 66 15 ----61.5 0.0 7 -7.0 213 - The Woods of Britton Apartments 5 215 1 54.6 56.6 66 2.0 15 56.6 0.0 7 -7.0 ----214 - The Woods of Britton Apartments 6 1 216 59.1 61.6 66 2.5 15 61.6 0.0 -7.0 ----215 - The Woods of Britton Apartments 7 217 54.7 56.7 66 2.0 15 56.7 0.0 7 -7.0 ----216 - The Woods of Britton Apartments 8 2 218 59.2 61.8 66 2.6 15 61.8 0.0 7 -7.0 219 66 2.2 0.0 -7.0 217 - The Woods of Britton Apartments 9 53.5 55.7 15 55.7 220 57.9 66 2.8 15 0.0 7 -7.0 218 - The Woods of Britton Apartments 10 60.7 60.7 219 - The Woods of Britton Apartments 11 222 52.1 54.3 66 2.2 15 54.3 0.0 7 -7.0 ----2.8 -7.0 220 - The Woods of Britton Apartments 12 223 56.3 59.1 66 15 59.1 0.0 7 ----224 66 1.8 0.0 7 -7.0 221 - The Woods of Britton Apartments 13 50.5 52.3 15 52.3 ----66 2.2 222 - The Woods of Britton Apartments 14 225 55.1 57.3 15 \_\_\_\_ 57.3 0.0 -7.0 66 0.0 -7.0 223 - The Woods of Britton Apartments 15 226 48.0 49.8 1.8 15 49.8 ----227 52.4 54.4 66 2.0 15 54.4 0.0 -7.0 224 - The Woods of Britton Apartments 16 ----225 - The Woods of Britton Apartments 17 228 52.8 54.8 66 2.0 15 54.8 0.0 -7.0 ----229 66 2.2 -7.0 226 - The Woods of Britton Apartments 18 57.3 59.5 15 59.5 0.0 -----7.0 230 53.3 55.3 66 2.0 15 0.0 227 - The Woods of Britton Apartments 19 ----55.3 66 2.4 7 -7.0 228 - The Woods of Britton Apartments 20 231 57.8 60.2 15 ----60.2 0.0 232 51.4 53.2 66 1.8 15 53.2 0.0 -7.0 229 - The Woods of Britton Apartments 21 ----

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RESULTS: SOUND LEVELS						SI	R37 - 126th	to SR32				
230 - The Woods of Britton Apartments 22	233	1	56.5	58.5	66	2.0	15		58.5	0.0	7	-7.0
231 - The Woods of Britton Apartments 23	234	1	52.4	54.1	66	1.7	15		54.1	0.0	7	-7.0
232 - The Woods of Britton Apartments 24	235	1	57.5	59.6	66	2.1	15		59.6	0.0	7	-7.0
233 - The Woods of Britton Apartments 25	236	1	51.5	52.4	66	0.9	15		52.4	0.0	7	-7.0
234 - The Woods of Britton Apartments 26	237	1	54.6	55.7	66	1.1	15		55.7	0.0	7	-7.0
235 - The Woods of Britton Apartments 27	238	1	53.1	54.0	66	0.9	15		54.0	0.0	7	-7.0
236 - The Woods of Britton Apartments 28	239	1	56.1	57.1	66	1.0	15		57.1	0.0	7	-7.0
237 - The Woods of Britton Apartments 29	240	1	56.4	57.8	66	1.4	15		57.8	0.0	7	-7.0
238 - The Woods of Britton Apartments 30	241	1	59.0	60.7	66	1.7	15		60.7	0.0	7	-7.0
239 - The Woods of Britton Apartments 31	242	1	58.4	59.2	66	0.8	15		59.2	0.0	7	-7.0
240 - The Woods of Britton Apartments 32	243	1	61.0	62.4	66	1.4	15		62.4	0.0	7	-7.0
241 - The Woods of Britton Apartments 33	244	1	54.4	56.3	66	1.9	15		56.3	0.0	7	-7.0
242 - The Woods of Britton Apartments 34	245	1	59.4	61.9	66	2.5	15		61.9	0.0	7	-7.0
243 - The Woods of Britton Apartments 35	246	1	56.0	57.9	66	1.9	15		57.9	0.0	7	-7.0
244 - The Woods of Britton Apartments 36	247	1	60.9	63.3	66	2.4	15		63.3	0.0	7	-7.0
245 - The Woods of Britton Apartments 37	248	1	60.8	62.7	66	1.9	15		62.7	0.0	7	-7.0
246 - The Woods of Britton Apartments 38	249	1	65.8	68.5	66	2.7	15	Snd Lvl	68.5	0.0	7	-7.0
247 - The Woods of Britton Apartments 39	250	1	65.4	67.4	66	2.0	15	Snd Lvl	67.4	0.0	7	-7.0
248 - The Woods of Britton Apartments 40	251	1	68.8	71.5	66	2.7	15	Snd Lvl	71.5	0.0	7	-7.0
249 - The Woods of Britton Apartments 41	252	1	62.6	64.2	66	1.6	15		64.2	0.0	7	-7.0
250 - The Woods of Britton Apartments 42	253	1	65.3	67.6	66	2.3	15	Snd Lvl	67.6	0.0	7	-7.0
251 - The Woods of Britton Apartments 43	255	1	59.6	60.8	66	1.2	15		60.8	0.0	7	-7.0
252 - The Woods of Britton Apartments 44	256	1	62.4	64.1	66	1.7	15		64.1	0.0	7	-7.0
253 - The Woods of Britton Apartments 45	257	1	63.1	64.4	66	1.3	15		64.4	0.0	7	-7.0
254 - The Woods of Britton Apartments 46	258	1	65.1	67.0	66	1.9	15	Snd Lvl	67.0	0.0	7	-7.0
255 - The Woods of Britton Apartments 47	259	1	62.8	63.9	66	1.1	15		63.9	0.0	7	-7.0
256 - The Woods of Britton Apartments 48	260	1	64.8	66.5	66	1.7	15	Snd Lvl	66.5	0.0	7	-7.0
257 - The Woods of Britton Apartments 49	261	1	59.8	60.4	66	0.6	15		60.4	0.0	7	-7.0
258 - The Woods of Britton Apartments 50	262	1	61.6	62.6	66	1.0	15		62.6	0.0	7	-7.0
259 - The Woods of Britton Apartments 51	263	1	57.5	58.4	66	0.9	15		58.4	0.0	7	-7.0
260 - The Woods of Britton Apartments 52	264	1	60.2	61.0	66	8.0	15		61.0	0.0	7	-7.0
261 - Tire Barn Service	265	1	67.2	69.0	71	1.8	15		69.0	0.0	7	-7.0
262 - KFC Restaurant	266	1	67.9	69.0	71	1.1	15		69.0	0.0	7	-7.0
263 - Multiple Restaurants and Businesses	267	1	57.7	57.4	71	-0.3	15		57.4	0.0	7	-7.0
264 - Burger King Restaurant	268	1	65.0	64.2	71	-0.8	15		64.2	0.0	7	-7.0
265 - Multiple Restaurants and Businesses	269	1	56.5	56.4	71	-0.1	15		56.4	0.0	7	-7.0
266 - Sherwin Williams Paint Store	270	1	64.8	64.6	71	-0.2	15		64.6	0.0	7	-7.0
267 - Chase Bank	271	1	64.8	65.4	71	0.6	15		65.4	0.0	7	-7.0
268 - 21st Amendment Wine & Spirits	272	1	63.6	64.2	71	0.6	15		64.2	0.0	7	-7.0
269 - Multiple Restaurants and Businesses	273	1	55.3	57.1	71	1.8	15		57.1	0.0	7	-7.0
270 - Multiple Businesses	274	1	55.1	57.3	71	2.2	15		57.3	0.0	7	-7.0

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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32 275 271 - Prime Car Wash 64.1 65.9 1.8 65.9 0.0 -7.0 15 276 71 -7.0 64.9 66.6 1.7 66.6 0.0 272 - Regions Bank 15 ----273 - Marsh Supermarket 277 54.9 57.1 71 2.2 15 ----57.1 0.0 7 -7.0 274 - PNC Bank 278 71 2.0 0.0 -7.0 63.9 65.9 15 65.9 ----275 - AutoZone Business 301 63.9 66.1 71 2.2 15 66.1 0.0 -7.0 ----276 - Godby Home Furnishings 302 1 55.6 57.7 71 2.1 15 57.7 0.0 7 -7.0 ----277 - CVS 303 64.3 71 1.2 0.0 7 -7.0 1 65.5 15 65.5 ----278 - Jaggers Restaurant 304 1 58.6 71 1.0 0.0 7 -7.0 59.6 15 59.6 ----279 - Auto Dealership - Tom Wood Valksw 305 63.3 71 2.3 15 0.0 7 -7.0 65.6 ----65.6 280 - Milestone Apartments 1 2nd floor 306 65.4 68.4 66 3.0 15 Snd Lvl 68.4 0.0 7 -7.0 281 - Milestone Apartments 2 3rd floor 309 66.8 69.6 66 2.8 15 Snd Lvl 69.6 0.0 7 -7.0 66 3.0 0.0 7 -7.0 282 - Milestone Apartments 3 2nd floor 310 65.4 68.4 15 Snd Lvl 68.4 283 - Milestone Apartments 4 3rd floor 311 66.8 69.6 66 2.8 15 Snd Lvl 69.6 0.0 -7.0 312 66 3.1 15 Snd Lvl 0.0 -7.0 284 - Milestone Apartments 5 2nd floor 65.6 68.7 68.7 7 285 - Milestone Apartments 6 3rd floor 313 66.9 69.7 66 2.8 15 Snd Lvl 69.7 0.0 -7.0 286 - Milestone Apartments 7 2nd floor 314 65.4 68.5 66 3.1 15 Snd Lvl 68.5 0.0 7 -7.0 66 2.9 Snd Lvl -7.0 287 - Milestone Apartments 8 3rd floor 315 66.7 69.6 15 69.6 0.0 316 66 -7.0 288 - Milestone Apartments 9 2nd floor 64.5 67.5 3.0 15 Snd Lvl 67.5 0.0 289 - Milestone Apartments 10 3rd floor 317 65.5 68.2 66 2.7 15 Snd Lvl 68.2 0.0 -7.0 318 64.9 66 3.0 15 64.9 -7.0 290 - Milestone Apartments 11 2nd floor 61.9 0.0 -7.0 291 - Milestone Apartments 12 3rd floor 319 63.5 66.3 66 2.8 15 Snd Lvl 66.3 0.0 7 292 - Milestone Apartments 13 2nd floor 320 59.0 62.2 66 3.2 15 ----62.2 0.0 -7.0 321 66 3.0 7 -7.0 293 - Milestone Apartments 14 3rd floor 60.8 63.8 15 63.8 0.0 ----322 3.3 294 - Milestone Apartments 15 2nd floor 1 57.1 60.4 66 15 ----60.4 0.0 7 -7.0 295 - Milestone Apartments 16 3rd floor 323 1 58.8 61.8 66 3.0 15 61.8 0.0 7 -7.0 ----296 - Milestone Apartments 17 1st floor 324 60.6 63.5 66 2.9 15 63.5 0.0 7 -7.0 ----297 - Milestone Apartments 18 2nd floor 325 64.2 67.0 66 2.8 15 Snd Lvl 67.0 0.0 7 -7.0 298 - Milestone Apartments 19 3rd floor 326 65.2 68.0 66 2.8 15 Snd Lvl 68.0 0.0 7 -7.0 299 - Milestone Apartments 20 1st floor 327 66 2.9 15 0.0 7 -7.0 57.8 60.7 60.7 328 64.7 66 2.9 15 64.7 0.0 7 -7.0 300 - Milestone Apartments 21 2nd floor 61.8 301 - Milestone Apartments 22 3rd floor 329 63.4 66.2 66 2.8 15 Snd Lvl 66.2 0.0 7 -7.0 330 2.9 -7.0 302 - Milestone Apartments 23 1st floor 55.9 58.8 66 15 58.8 0.0 7 ----331 66 2.9 0.0 7 -7.0 303 - Milestone Apartments 24 2nd floor 60.1 63.0 15 63.0 ----332 304 - Milestone Apartments 25 3rd floor 61.9 64.7 66 2.8 15 ----64.7 0.0 -7.0 333 66 3.0 0.0 7 -7.0 305 - Milestone Apartments 26 1st floor 54.7 57.7 15 57.7 ----334 58.9 62.0 66 3.1 15 62.0 0.0 -7.0 306 - Milestone Apartments 27 2nd floor ----307 - Milestone Apartments 28 3rd floor 335 60.6 63.5 66 2.9 15 63.5 0.0 -7.0 ----66 2.3 -7.0 308 - Milestone Apartments 29 2nd floor 336 53.5 55.8 15 55.8 0.0 ----337 -7.0 309 - Milestone Apartments 30 3rd floor 54.9 66 2.4 15 57.3 0.0 57.3 ----7 -7.0 310 - Milestone Apartments 31 2nd floor 338 51.4 54.9 66 3.5 15 ----54.9 0.0 339 53.2 56.4 66 3.2 15 56.4 0.0 -7.0 311 - Milestone Apartments 32 3rd floor ----

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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32 312 - Milestone Apartments 33 2nd floor 340 50.2 53.3 66 3.1 53.3 0.0 -7.0 15 66 55.2 -7.0 341 52.1 55.2 3.1 15 0.0 313 - Milestone Apartments 34 3rd floor ----314 - Milestone Apartments 35 2nd floor 342 49.0 52.1 66 3.1 15 ----52.1 0.0 7 -7.0 343 66 3.2 0.0 -7.0 315 - Milestone Apartments 36 3rd floor 51.1 54.3 15 54.3 ----316 - Milestone Apartments 37 1st floor 344 52.3 55.0 66 2.7 15 55.0 0.0 -7.0 ----317 - Milestone Apartments 38 2nd floor 345 1 56.8 59.8 66 3.0 15 59.8 0.0 7 -7.0 ----346 1 66 2.9 61.2 0.0 7 -7.0 318 - Milestone Apartments 39 3rd floor 58.3 61.2 15 ----347 51.2 66 2.5 0.0 7 -7.0 319 - Milestone Apartments 40 1st floor 53.7 15 53.7 ----348 55.7 66 2.8 15 0.0 7 -7.0 320 - Milestone Apartments 41 2nd floor 58.5 ----58.5 321 - Milestone Apartments 42 3rd floor 349 57.4 60.1 66 2.7 15 60.1 0.0 7 -7.0 322 - Milestone Apartments 43 1st floor 350 50.1 52.8 66 2.7 15 52.8 0.0 7 -7.0 ----351 3.2 0.0 7 -7.0 323 - Milestone Apartments 44 2nd floor 54.3 57.5 66 15 ----57.5 352 56.2 59.4 66 3.2 15 59.4 0.0 -7.0 324 - Milestone Apartments 45 3rd floor ----353 49.4 66 2.5 0.0 -7.0 325 - Milestone Apartments 46 1st floor 51.9 15 51.9 7 ----326 - Milestone Apartments 47 2nd floor 354 53.6 56.4 66 2.8 15 56.4 0.0 7 -7.0 ----327 - Milestone Apartments 48 3rd floor 355 55.6 58.5 66 2.9 15 ----58.5 0.0 7 -7.0 356 66 3.1 -7.0 328 - Milestone Apartments 49 1st floor 64.4 67.5 15 Snd Lvl 67.5 0.0 306 66 2.9 -7.0 329 - Milestone Apartments 50 2nd floor 67.2 70.1 15 Snd Lvl 70.1 0.0 357 67.8 70.5 66 2.7 15 Snd Lvl 70.5 0.0 -7.0 330 - Milestone Apartments 51 3rd floor 358 62.7 65.6 66 2.9 15 -7.0 331 - Milestone Apartments 52 1st floor 65.6 0.0 7 -7.0 332 - Milestone Apartments 53 2nd floor 359 65.9 68.8 66 2.9 15 Snd Lvl 68.8 0.0 333 - Milestone Apartments 54 3rd floor 360 66.8 69.5 66 2.7 15 Snd Lvl 69.5 0.0 -7.0 361 66 7 -7.0 334 - Milestone Apartments 55 1st floor 59.8 62.8 3.0 15 ----62.8 0.0 362 2.9 Snd Lvl 335 - Milestone Apartments 56 2nd floor 1 63.4 66.3 66 15 66.3 0.0 7 -7.0 336 - Milestone Apartments 57 3rd floor 363 1 65.0 67.7 66 2.7 15 Snd Lvl 67.7 0.0 7 -7.0 337 - Milestone Apartments 58 1st floor 364 58.4 61.4 66 3.0 15 ----61.4 0.0 7 -7.0 338 - Milestone Apartments 59 2nd floor 365 62.3 65.3 66 3.0 15 65.3 0.0 7 -7.0 ----339 - Milestone Apartments 60 3rd floor 366 64.0 66.8 66 2.8 15 Snd Lvl 66.8 0.0 7 -7.0 367 66 15 0.0 7 -7.0 340 - Milestone Apartments 61 2nd floor 62.3 65.3 3.0 65.3 368 66 2.8 15 66.3 0.0 7 -7.0 341 - Milestone Apartments 62 3rd floor 63.5 66.3 Snd Lvl 342 - Milestone Apartments 63 2nd floor 369 59.1 61.9 66 2.8 15 61.9 0.0 7 -7.0 370 2.8 15 -7.0 343 - Milestone Apartments 64 3rd floor 60.7 63.5 66 63.5 0.0 7 ----371 66 3.0 0.0 7 -7.0 344 - Milestone Apartments 65 2nd floor 56.3 59.3 15 59.3 -----7.0 345 - Milestone Apartments 66 3rd floor 372 58.2 61.0 66 2.8 15 ----61.0 0.0 7 373 66 3.2 7 -7.0 346 - Milestone Apartments 67 2nd floor 54.2 57.4 15 57.4 0.0 ----374 56.3 59.2 66 2.9 15 59.2 0.0 -7.0 347 - Milestone Apartments 68 3rd floor ----375 348 - Milestone Apartments 69 1st floor 54.7 57.8 66 3.1 15 57.8 0.0 -7.0 ----66 3.1 -7.0 349 - Milestone Apartments 70 2nd floor 376 59.4 62.5 15 62.5 0.0 ----377 -7.0 66 2.9 15 64.0 0.0 350 - Milestone Apartments 71 3rd floor 61.1 64.0 ----351 - Milestone Apartments 72 1st floor 3.2 7 -7.0 378 52.5 55.7 66 15 ----55.7 0.0 379 57.2 66 3.2 15 60.4 0.0 -7.0 352 - Milestone Apartments 73 2nd floor 60.4 ----

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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32 353 - Milestone Apartments 74 3rd floor 380 59.0 61.9 66 2.9 15 61.9 0.0 -7.0 66 54.2 -7.0 381 51.1 54.2 3.1 15 0.0 354 - Milestone Apartments 75 1st floor ----355 - Milestone Apartments 76 2nd floor 382 55.6 58.7 66 3.1 15 ----58.7 0.0 7 -7.0 383 57.5 66 2.9 0.0 -7.0 356 - Milestone Apartments 77 3rd floor 60.4 15 60.4 ----357 - Milestone Apartments 78 1st floor 384 50.1 53.0 66 2.9 15 53.0 0.0 -7.0 ----358 - Milestone Apartments 79 2nd floor 385 1 54.4 57.5 66 3.1 15 57.5 0.0 7 -7.0 ----386 1 66 3.1 0.0 7 -7.0 359 - Milestone Apartments 80 3rd floor 56.4 59.5 15 59.5 ----360 - Milestone Apartments 81 2nd floor 387 66 3.1 0.0 7 -7.0 51.9 55.0 15 55.0 ----361 - Milestone Apartments 82 3rd floor 388 53.9 66 2.9 15 0.0 7 -7.0 56.8 ----56.8 362 - Milestone Apartments 83 2nd floor 389 50.9 54.1 66 3.2 15 54.1 0.0 7 -7.0 363 - Milestone Apartments 84 3rd floor 405 52.7 55.7 66 3.0 15 55.7 0.0 7 -7.0 ----3.8 0.0 7 -7.0 364 - Milestone Apartments 85 2nd floor 406 49.8 53.6 66 15 ----53.6 365 - Milestone Apartments 86 3rd floor 407 55.1 66 3.4 15 55.1 0.0 -7.0 51.7 ----408 66 3.4 0.0 -7.0 366 - Milestone Apartments 87 2nd floor 49.0 52.4 15 52.4 7 ----367 - Milestone Apartments 88 3rd floor 409 51.2 54.5 66 3.3 15 54.5 0.0 -7.0 ----368 - Primrose School of Noblesville 410 65.7 68.3 66 2.6 Snd Lvl 68.3 0.0 7 -7.0 15 411 71 1.4 -7.0 369 - Golden Corral Restaurant 59.6 61.0 15 ----61.0 0.0 412 71 1.7 -7.0 370 - Multiple Restaurant and Businesses 61.0 62.7 15 ----62.7 0.0 371 - Old National Bank 413 64.2 66.8 71 2.6 15 66.8 0.0 -7.0 414 63.7 62.8 66 -0.9 62.8 -7.0 372 - 2550 Greenfield Ave - Residence 15 0.0 -----7.0 374 - 16333 Cumberland Rd - Residence 416 58.3 61.1 66 2.8 15 61.1 0.0 ----375 - 16355 Cumberland Rd - Residence 417 57.4 59.8 66 2.4 15 59.8 0.0 -7.0 ----66 2.2 7 -7.0 376 - 16365 Cumberland Rd - Residence 418 58.7 60.9 15 60.9 0.0 ----62.9 2.3 377 - 16367 Cumberland Rd - Residence 419 1 60.6 66 15 ----62.9 0.0 7 -7.0 378 - 16373 Cumberland Rd - Residence 420 1 60.6 62.8 66 2.2 15 62.8 0.0 7 -7.0 ----379 - 16381 Cumberland Rd - Residence 421 61.5 63.4 66 1.9 15 63.4 0.0 7 -7.0 ----380 - 16455 Cumberland Rd - Residence 422 65.3 67.8 66 2.5 15 Snd Lvl 67.8 0.0 7 -7.0 381 - 16477 Cumberland Rd - Residence 423 65.0 67.5 66 2.5 15 Snd Lvl 67.5 0.0 7 -7.0 424 71.1 66 2.7 Snd Lvl 71.1 0.0 -7.0 382 - 16487 Cumberland Rd - Residence 68.4 15 425 67.4 66 2.6 Snd Lvl 0.0 7 -7.0 383 - 16497 Cumberland Rd - Residence 70.0 15 70.0 384 - Tires Plus 426 63.7 66.4 71 2.7 15 66.4 0.0 7 -7.0 -7.0 385 - Sports Clips Haircuts of Noblesville 427 60.3 62.1 71 1.8 15 62.1 0.0 7 ----386 - Bob Evans Restaurant 428 71 1.2 0.0 7 -7.0 64.7 65.9 15 65.9 ----429 387 - Chick-fil-A Restaurant 65.2 63.6 71 -1.6 15 ----63.6 0.0 -7.0 430 71 -2.8 0.0 7 -7.0 388 - O'Charley's Restaurant & Bar 63.7 60.9 15 60.9 ----389 - Chili's Grill & Bar Restaurant 431 64.1 60.5 71 -3.6 15 60.5 0.0 -7.0 ----390 - FORUM Credit Union 432 61.2 59.3 71 -1.9 15 59.3 0.0 -7.0 ----71 -7.0 391 - Meijer Gas Station 433 63.3 62.9 -0.4 15 62.9 0.0 ----434 71 -7.0 62.2 64.2 2.0 15 64.2 0.0 392 - Multiple Businesses ----71 7 -7.0 393 - Logan's Roadhouse Restaurant 435 1 62.7 64.6 1.9 15 ----64.6 0.0 436 64.6 71 2.2 15 66.8 0.0 -7.0 394 - Crew Car Wash 66.8 ----

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RESULTS: SOUND LEVELS						S	R37 - 126th	to SR32				
395 - Multiple Businesses	437	1	60.	61.4	. 71	0.8	15		61.4	0.0	7	-7.0
396 - BMO Harris Bank	438	1	64.	1 64.5	71	0.4	15		64.5	0.0	7	-7.0
397 - Multiple Businesses	439	1	58.4	4 58.4	. 71	0.0	15		58.4	0.0	7	-7.0
398 - Auto Dealership - Kahlo Chrysler Jee	440	1	65.4	4 68.3	71	2.9	15		68.3	0.0	7	-7.0
399 - Auto Dealership - Terry Lee Genesis	441	1	64.9	9 65.7	71	0.8	15		65.7	0.0	7	-7.0
400 - Applebee's Restaurant	442	1	63.	7 66.0	71	2.3	15		66.0	0.0	7	-7.0
401 - Fireworks	443	1	63.	5 67.1	71	3.6	15		67.1	0.0	7	-7.0
402 - Teachers Credit Union	389	1	57.	6 60.5	71	2.9	15		60.5	0.0	7	-7.0
403 - Courtyard Marriott	444	1	61.	5 65.9	71	4.4	15		65.9	0.0	7	-7.0
404 - Belle Tire	450	1	66.8	8 69.1	71	2.3	15		69.1	0.0	7	-7.0
405 - Verizon	451	1	62.	2 64.9	71	2.7	15		64.9	0.0	7	-7.0
406 - Harley Davidson	452	1	61.0	6 64.4	. 71	2.8	15		64.4	0.0	7	-7.0
407 - O'Reilly Auto Parts	453	1	66.	5 65.6	71	-0.9	15		65.6	0.0	7	-7.0
408 - Auto Dealership	454	1	64.9	9 65.2	. 71	0.3	15		65.2	0.0	7	-7.0
409 - GetGo Café and Market	455	1	64.	0 66.9	71	2.9	15		66.9	0.0	7	-7.0
Dwelling Units		# DUs	Noise Re	eduction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		408	0.0	0.0	0.0							
All Impacted		54	0.0	0.0	0.0							

0.0

0.0

0.0

All that meet NR Goal

Des. No. 1600540 et al Appendix I - Noise Analysis
Des. No. 1600540 et. al. Attachment 1

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#### **Appendix H**

## TNM 2.5 2036/2041 Design Year Sound Level Results

Des. No. 1600540 et al Des. No. 1600540 et. al. RESULTS: SOUND LEVELS SR37 - 126th to SR32

RESULTS: SOUND LEVELS						,	SR37 - 126	tn to SR32				
							44.5					
Lochmueller Group							14 March	2018				
R. Yeager, D. Townsend							TNM 2.5					
DESCRIPTION OF THE PARTY OF THE							Calculated	d with TNN	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			126th to SF		_							
RUN:			_	year Alternat	ive			_				
BARRIER DESIGN:		INPUT	HEIGHTS							shall be used		
										y substantiate		
ATMOSPHERICS:		68 deg	F, 50% RH	ļ	_	4		of a differ	ent type with	approval of Fl	HWA.	
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Type	Calculated	Noise Reduct	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
1 - Sunlake Apartments 1 1st floor	1	1	61.7	64.2	66	2.5	15		64.2	0.0	7	-7.0
2 - Sunlake Apartments 2 2nd floor	2	1	65.6	68.3	66	2.7	15	Snd Lvl	68.3	0.0	7	-7.0
3 - Sunlake Apartments 3 1st floor	3	1	57.9	61.0	66	3.1	15		61.0	0.0	7	-7.0
4 - Sunlake Apartments 4 2nd floor	4	1	62.3	65.3	66	3.0	15		65.3	0.0	7	-7.0
5 - Sunlake Apartments 5 1st floor	5	1	54.8	57.7	66	2.9	15		57.7	0.0	7	-7.0
6 - Sunlake Apartments 6 2nd floor	6	1	59.3	62.6	66	3.3	15		62.6	0.0	7	-7.0
7 - Sunlake Apartments 7 1st floor	7	1	53.8	55.5	66	1.7	15		55.5	0.0	7	-7.0
8 - Sunlake Apartments 8 2nd floor	8	1	58.3	60.6	66	2.3	15		60.6	0.0	7	-7.0
9 - Sunlake Apartments 9 1st floor	9	1	60.1	62.5	66	2.4	15		62.5	0.0	7	-7.0
10 - Sunlake Apartments 10 2nd floor	10	1	64.6	67.0	66	2.4	15	Snd Lvl	67.0	0.0	7	-7.0
11 - Sunlake Apartments 11 1st floor	11	1	57.6	60.1	66	2.5	15		60.1	0.0	7	-7.0
12 - Sunlake Apartments 12 2nd floor	12	1	62.3	64.6	66	2.3	15		64.6	0.0	7	-7.0
13 - Sunlake Apartments 13 1st floor	13	1	54.9	57.4	66	2.5	15		57.4	0.0	7	-7.0
14 - Sunlake Apartments 14 2nd floor	14	1	60.0	62.0	66	2.0	15		62.0	0.0	7	-7.0
15 - Sunlake Apartments 15 1st floor	15	1	54.1	56.5	66	2.4	15		56.5	0.0	7	-7.0
16 - Sunlake Apartments 16 2nd floor	16	1	59.4	61.3	66	1.9	15		61.3	0.0	7	-7.0
17 - Sunlake Apartments 17 1st floor	17	1	63.2	66.2	66	3.0	15	Snd Lvl	66.2	0.0	7	-7.0
18 - Sunlake Apartments 18 2nd floor	18		00						69.6		7	-7.0
19 - Sunlake Apartments 19 1st floor	19								60.9		7	
20 - Sunlake Apartments 20 2nd floor	20		63.0						65.4		7	
21 - Sunlake Apartments 21 1st floor	21		55.6						58.2		7	
22 - Sunlake Apartments 22 2nd floor	22		60.2						62.9		7	
23 - Sunlake Apartments 23 1st floor	23								55.5		7	
24 - Sunlake Apartments 24 2nd floor	24	1	58.0	60.6	66	2.6	15		60.6	0.0	7	-7.0

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RESULTS: SOUND LEVELS						;	SR37 - 1261	th to SR32				
25 - Sunlake Apartments 25 1st floor	25	1	58.5	60.6	66	2.1	15		60.6	0.0	7	-7.0
26 - Sunlake Apartments 26 2nd floor	26	1	60.5	63.2	66	2.7	15		63.2	0.0	7	-7.0
27 - Sunlake Apartments 27 1st floor	27	1	59.4	61.9	66	2.5	15		61.9	0.0	7	-7.0
28 - Sunlake Apartments 28 2nd floor	28	1	61.8	64.7	66	2.9	15		64.7	0.0	7	-7.0
29 - Sunlake Apartments 29 1st floor	29	1	62.0	64.6	66	2.6	15		64.6	0.0	7	-7.0
30 - Sunlake Apartments 30 2nd floor	30	1	64.6	67.5	66	2.9	15	Snd Lvl	67.5	0.0	7	-7.0
31 - Sunlake Apartments 31 1st floor	31	1	64.5	67.1	66	2.6	15	Snd Lvl	67.1	0.0	7	-7.0
32 - Sunlake Apartments 32 2nd floor	32	1	67.2	70.2	66	3.0	15	Snd Lvl	70.2	0.0	7	-7.0
33 - Sunlake Apartments 33 1st floor	33	1	52.4	54.7	66	2.3	15		54.7	0.0	7	-7.0
34 - Sunlake Apartments 34 2nd floor	34	1	57.4	59.4	66	2.0	15		59.4	0.0	7	-7.0
35 - Sunlake Apartments 35 1st floor	35	1	51.1	53.2	66	2.1	15		53.2	0.0	7	-7.0
36 - Sunlake Apartments 36 2nd floor	36	1	55.5	57.2	66	1.7	15		57.2	0.0	7	-7.0
37 - Sunlake Apartments 37 1st floor	37	1	50.8	52.9	66	2.1	15		52.9	0.0	7	-7.0
38 - Sunlake Apartments 38 2nd floor	38	1	54.9	56.7	66	1.8	15		56.7	0.0	7	-7.0
39 - Sunlake Apartments 39 1st floor	39	1	46.0	48.4	66	2.4	15		48.4	0.0	7	-7.0
40 - Sunlake Apartments 40 2nd floor	40	1	50.5	53.3	66	2.8	15		53.3	0.0	7	-7.0
41 - Sunlake Apartments 41 1st floor	41	1	47.0	48.7	66	1.7	15		48.7	0.0	7	-7.0
42 - Sunlake Apartments 42 2nd floor	42	1	50.7	53.0	66	2.3	15		53.0	0.0	7	-7.0
43 - Sunlake Apartments 43 1st floor	43	1	47.3	49.5	66	2.2	15		49.5	0.0	7	-7.0
44 - Sunlake Apartments 44 2nd floor	44	1	50.9	53.3	66	2.4	15		53.3	0.0	7	-7.0
45 - Sunlake Apartments 45 1st floor	45	1	49.4	51.9	66	2.5	15		51.9	0.0	7	-7.0
46 - Sunlake Apartments 46 2nd floor	46	1	53.0	55.9	66	2.9	15		55.9	0.0	7	-7.0
47 - Sunlake Apartments 47 1st floor	47	1	50.1	52.5	66	2.4	15		52.5	0.0	7	-7.0
48 - Sunlake Apartments 48 2nd floor	48	1	53.7	56.2	66	2.5	15		56.2	0.0	7	-7.0
49 - Sunlake Apartments 49 1st floor	49	1	50.2	52.6	66	2.4	15		52.6	0.0	7	-7.0
50 - Sunlake Apartments 50 2nd floor	50	1	53.4	56.0	66	2.6	15		56.0	0.0	7	-7.0
51 - Sunlake Apartments 51 1st floor	51	1	50.0	51.9	66	1.9	15		51.9	0.0	7	-7.0
52 - Sunlake Apartments 52 2nd floor	52	1	53.1	55.4	66	2.3	15		55.4	0.0	7	-7.0
53 - Sunlake Apartments 53 1st floor	53	1	58.0	60.4	66	2.4	15		60.4	0.0	7	-7.0
54 - Sunlake Apartments 54 2nd floor	54	1	59.8	62.5	66	2.7	15		62.5	0.0	7	-7.0
55 - Sunlake Apartments 55 1st floor	55	1	57.8	60.4	66	2.6	15		60.4	0.0	7	-7.0
56 - Sunlake Apartments 56 2nd floor	56	1	59.3	62.2	66	2.9	15		62.2	0.0	7	-7.0
57 - Sunlake Apartments 57 1st floor	57	1	57.4	59.9	66	2.5	15		59.9	0.0	7	-7.0
58 - Sunlake Apartments 58 2nd floor	58	1	58.8	61.4	66	2.6	15		61.4	0.0	7	-7.0
59 - Sunlake Apartments 59 1st floor	59	1	57.1	59.6	66	2.5	15		59.6	0.0	7	-7.0
60 - Sunlake Apartments 60 2nd floor	60	1	58.4	61.0	66	2.6	15		61.0	0.0	7	-7.0
61 - Sunlake Apartments 61 1st floor	61	1	57.5	60.0	66	2.5	15		60.0	0.0	7	-7.0
62 - Sunlake Apartments 62 2nd floor	62	1	58.7	61.3	66	2.6	15		61.3	0.0	7	-7.0
63 - Sunlake Apartments 63 1st floor	63	1	57.6	60.0	66	2.4	15		60.0	0.0	7	-7.0
64 - Sunlake Apartments 64 2nd floor	64	1	59.1	61.7	66	2.6			61.7	0.0	7	-7.0
65 - Sunlake Apartments 65 1st floor	65	1	58.1	60.7	66	2.6	15		60.7	0.0	7	-7.0

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Appendix I - Noise Analysis

Attachment 1

RESULTS: SOUND LEVELS							SR37 - 126	th to SR32				
66 - Sunlake Apartments 66 2nd floor	66	1	59.5	62.4	66	2.9	15		62.4	0.0	7	-7.0
67 - Sunlake Apartments 67 1st floor	67	1	58.5	61.0	66	2.5	15		61.0	0.0	7	-7.0
68 - Sunlake Apartments 68 2nd floor	68	1	60.3	63.3	66	3.0	15		63.3	0.0	7	-7.0
69 - Sunlake Apartments 69 1st floor	69	1	58.8	61.1	66	2.3	15		61.1	0.0	7	-7.0
70 - Sunlake Apartments 70 2nd floor	70	1	60.7	63.4	66	2.7	15		63.4	0.0	7	-7.0
71 - Sunlake Apartments 71 1st floor	71	1	58.8	61.6	66	2.8	15		61.6	0.0	7	-7.0
72 - Sunlake Apartments 72 2nd floor	72	1	60.9	63.9	66	3.0	15		63.9	0.0	7	-7.0
73 - Sunlake Apartments 73 1st floor	73	1	58.8	61.3	66	2.5	15		61.3	0.0	7	-7.0
74 - Sunlake Apartments 74 2nd floor	74	1	61.1	64.0	66	2.9	15		64.0	0.0	7	-7.0
75 - Sunlake Apartments 75 1st floor	75	1	59.5	61.8	66	2.3	15		61.8	0.0	7	-7.0
76 - Sunlake Apartments 76 2nd floor	76	1	62.1	65.0	66	2.9	15		65.0	0.0	7	-7.0
77 - Sunlake Apartments 77 1st floor	77	1	60.2	62.8	66	2.6	15		62.8	0.0	7	-7.0
78 - Sunlake Apartments 78 2nd floor	78	1	63.2	66.0	66	2.8	15	Snd Lvl	66.0	0.0	7	-7.0
79 - Sunlake Apartments 79 1st floor	79	1	60.8	63.8	66	3.0	15		63.8	0.0	7	-7.0
80 - Sunlake Apartments 80 2nd floor	80	1	64.9	67.7	66	2.8	15	Snd Lvl	67.7	0.0	7	-7.0
81 - Sunlake Apartments 81 1st floor	81	1	61.9	65.1	66	3.2	15		65.1	0.0	7	-7.0
82 - Sunlake Apartments 82 2nd floor	82	1	66.8	69.5	66	2.7	15	Snd Lvl	69.5	0.0	7	-7.0
83 - Auto Dealership - Lockhart Cadillac	83	1	66.4	66.1	71	-0.3	15		66.1	0.0	7	-7.0
84 - Auto Dealership - Don Hinds Ford	84	1	68.4	66.3	71	-2.1	15		66.3	0.0	7	-7.0
85 - Auto Dealership - Don Hinds Pre-Owr	85	1	67.3	69.8	71	2.5	15		69.8	0.0	7	-7.0
86 - The Mower Shop	86	1	59.6	61.7	71	2.1	15		61.7	0.0	7	-7.0
87 - Auto Dealership - Any Mohr Buick GM	87	1	69.0	68.6	71	-0.4	15		68.6	0.0	7	-7.0
88 - BP Gas Station and McDonald's Resta	88	1	62.9	61.7	71	-1.2			61.7	0.0	7	-7.0
89 - Recreational Vehicle Business	89	1	67.9	67.6	71	-0.3	15		67.6	0.0	7	-7.0
90 - Fishers Self Storage	90	1	70.4	72.9	71	2.5	15	Snd Lvl	72.9	0.0	7	-7.0
91 - Pinecrest Marine	91	1	62.0	64.2	71	2.2	15		64.2	0.0	7	-7.0
92 - Auto Dealership - Ed Martin Nissan	92	1	68.0	70.9	71	2.9	15		70.9	0.0	7	-7.0
93 - Auto Dealership - Butler Kia	93	1	68.8	70.4	71	1.6	15		70.4	0.0	7	-7.0
94 - Pet Suites	94	1	67.0	69.6	71	2.6	15		69.6	0.0	7	-7.0
95 - Auto Dealership - Honda of Fishers	95	1	67.5	70.0	71	2.5	15		70.0	0.0	7	-7.0
96 - Pinheads (bowling) with Outdoor Volle	96	1	60.1	61.8	66	1.7	15		61.8	0.0	7	-7.0
97 - Alderman Luxury Imports	97	1	66.9	68.6	66	1.7	15		68.6	0.0	7	-7.0
98 - Auto Dealership - Andy Mohr Mitsubis	98	1	70.7	72.6	71	1.9	15	Snd Lvl	72.6	0.0	7	-7.0
99 - Buffalo Wild Wings Restaurant	99	1	66.6	67.9	71	1.3	15		67.9	0.0	7	-7.0
100 - Speedway Gas Station	100	1	65.3	64.8	71	-0.5	15		64.8	0.0	7	-7.0
101 - The Old Custard Stand Restaurant	101	1	64.8	64.6	71	-0.2	15		64.6	0.0	7	-7.0
102 - IDI Fabrication Business	102	1	65.3	66.8	71	1.5	15		66.8	0.0	7	-7.0
103 - Shell Gas Station	103	1	66.5	65.6	71	-0.9			65.6	0.0	7	-7.0
104 - LA Fitness	104	1	61.4	61.7	71	0.3			61.7	0.0	7	-7.0
105 - Multiple Businesses	105	1	65.4	65.3	71	-0.1			65.3	0.0	7	-7.0
106 - Business	106	1	66.9	68.2	71	1.3	15		68.2	0.0	7	-7.0

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RESULTS: SOUND LEVELS						•	SR37 - 1261	th to SR32				
107 - Business	107	1	59.6	60.1	71	0.5	15		60.1	0.0	7	-7.0
108 - Indiana Elite Cheer and Tumbling	108	1	67.8	69.6	71	1.8	15		69.6	0.0	7	-7.0
109 - Recreation Unlimited Business	109	1	61.7	64.1	71	2.4	15		64.1	0.0	7	-7.0
110 - Refine Kitches Baths & Floors	110	1	62.9	65.3	71	2.4	15		65.3	0.0	7	-7.0
111 - Extreme Vehicle Designs	111	1	66.6	68.3	71	1.7	15		68.3	0.0	7	-7.0
112 - Ballerinas Academy of Dance	112	1	66.9	68.7	71	1.8	15		68.7	0.0	7	-7.0
113 - Business	113	1	64.0	65.5	71	1.5	15		65.5	0.0	7	-7.0
114 - Valvoline	114	1	58.4	59.9	71	1.5	15		59.9	0.0	7	-7.0
115 - Dog Dayz	115	1	70.1	72.0	71	1.9	15	Snd Lvl	72.0	0.0	7	-7.0
116 - T&T Sales & Promotions	116	1	61.0	62.3	71	1.3	15		62.3	0.0	7	-7.0
117 - Elbert Construction	117	1	61.7	63.0	71	1.3	15		63.0	0.0	7	-7.0
118 - Multi-Business	118	1	68.6	70.5	71	1.9	15		70.5	0.0	7	-7.0
119 - Dakswan Automation Systems Inc	119	1	65.8	67.8	71	2.0	15		67.8	0.0	7	-7.0
120 - Jackson & Associates Food Products	120	1	59.1	60.8	71	1.7	15		60.8	0.0	7	-7.0
121 - ZR Tactical Solutions	121	1	69.1	70.6	71	1.5	15		70.6	0.0	7	-7.0
122 - Backyard Archery	122	1	59.4	60.9	71	1.5	15		60.9	0.0	7	-7.0
123 - Cim Solutions	123	1	59.8	61.4	71	1.6	15		61.4	0.0	7	-7.0
124 - Business	126	1	66.6	68.2	71	1.6	15		68.2	0.0	7	-7.0
125 - Children's Bureau Inc	127	1	58.2	59.6	71	1.4	15		59.6	0.0	7	-7.0
126 - Jds International	128	1	68.9	70.6	71	1.7	15		70.6	0.0	7	-7.0
127 - Summers Plumbing Heating & Coolir	129	1	67.9	69.7	71	1.8	15		69.7	0.0	7	-7.0
128 - 372 Wellington Pkwy - Residence	130	1	55.7	56.9	66	1.2	15		56.9	0.0	7	-7.0
129 - 368 Wellington Pkwy - Residence	131	1	57.7	59.1	66	1.4	15		59.1	0.0	7	-7.0
130 - 376 Wellington Pkwy - Residence	132	1	53.9	55.0	66	1.1	15		55.0	0.0	7	-7.0
131 - 364 Wellington Pkwy - Residence	133	1	60.9	62.5	66	1.6	15		62.5	0.0	7	-7.0
132 - 360 Wellington Pkwy - Residence	134	1	62.5	64.1	66	1.6	15		64.1	0.0	7	-7.0
133 - 356 Wellington Pkwy - Residence	135	1	61.7	63.2	66	1.5	15		63.2	0.0	7	-7.0
134 - 352 Wellington Pkwy - Residence	136	1	60.6	61.9	66	1.3	15		61.9	0.0	7	-7.0
135 - 348 Wellington Pkwy - Residence	137	1	60.6	61.9	66	1.3	15		61.9	0.0	7	-7.0
136 - 344 Wellington Pkwy - Residence	138	1	59.9	61.2	66	1.3	15		61.2	0.0	7	-7.0
137 - 340 Wellington Pkwy - Residence	139	1	58.5	59.8	66	1.3	15		59.8	0.0	7	-7.0
138 - 336 Wellington Pkwy - Residence	140	1	57.7	59.1	66	1.4	15		59.1	0.0	7	-7.0
139 - 55 Glasgow Lane - Residence	141	1	58.3	59.4	66	1.1	15		59.4	0.0	7	-7.0
140 - 332 Wellington Pkwy - Residence	142	1	55.8	57.1	66	1.3	15		57.1	0.0	7	-7.0
141 - 51 Glasgow Lane - Residence	143	1	59.9	61.0	66	1.1	15		61.0	0.0	7	-7.0
142 - 50 Glasgow Lane - Residence	144	1	58.3	59.7	66	1.4	15		59.7	0.0	7	-7.0
143 - 330 Wellington Pkwy - Residence	145	1	55.3	56.6	66	1.3	15		56.6	0.0	7	-7.0
144 - 328 Wellington Pkwy - Residence	146	1	55.8	57.2	66	1.4	15		57.2	0.0	7	-7.0
145 - 324 Wellington Pkwy - Residence	147	1	57.1	58.5	66	1.4	15		58.5	0.0	7	-7.0
146 - 320 Wellington Pkwy - Residence	148	1	58.2	59.8	66	1.6			59.8	0.0	7	-7.0
147 - 316 Wellington Pkwy - Residence	149	1	59.6	61.0	66	1.4	15		61.0	0.0	7	-7.0

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RESULTS: SOUND LEVELS						:	SR37 - 126	th to SR32				
148 - 312 Wellington Pkwy - Residence	150	1	59.8	61.2	66	1.4	15		61.2	0.0	7	-7.0
149 - 310 Wellington Pkwy - Residence	151	1	61.9	63.7	66	1.8	15		63.7	0.0	7	-7.0
150 - 308 Wellington Pkwy - Residence	152	1	62.8	64.4	66	1.6	15		64.4	0.0	7	-7.0
151 - 306 Wellington Pkwy - Residence	153	1	61.2	62.3	66	1.1	15		62.3	0.0	7	-7.0
152 - 304 Wellington Pkwy - Residence	154	1	61.8	62.9	66	1.1	15		62.9	0.0	7	-7.0
153 - 302 Wellington Pkwy - Residence	155	1	60.7	61.8	66	1.1	15		61.8	0.0	7	-7.0
154 - 300 Wellington Pkwy - Residence	156	1	59.6	60.7	66	1.1	15		60.7	0.0	7	-7.0
155 - Playground Park - Wellington NE Ne	157	1	62.5	63.8	66	1.3	15		63.8	0.0	7	-7.0
156 - 274 Wellington Pkwy - Residence	158	1	53.4	54.9	66	1.5	15		54.9	0.0	7	-7.0
157 - Multiple Dental Businesses	159	1	63.8	66.3	71	2.5	15		66.3	0.0	7	-7.0
158 - Floors To Your Home Business	160	1	65.1	65.1	71	0.0	15		65.1	0.0	7	-7.0
159 - Village Pantry Gas Station	161	1	60.3	59.5	71	-0.8	15		59.5	0.0	7	-7.0
160 - Speedway Gas Station	162	1	66.0	67.9	71	1.9	15		67.9	0.0	7	-7.0
161 - Carpenter Realtors	163	1	60.1	62.2	71	2.1	15		62.2	0.0	7	-7.0
162 - 2210 Greenfield Ave - Residence	164	1	57.9	61.7	66	3.8	15		61.7	0.0	7	-7.0
163 - Boggs Wrecker Service	165	1	61.9	66.9	71	5.0	15		66.9	0.0	7	-7.0
164 - Legacy Bible Church	166	1	63.0	66.2	66	3.2	15	Snd Lvl	66.2	0.0	7	-7.0
165 - Auto Dealership - Hare Chevrolet	167	1	67.0	70.0	71	3.0	15		70.0	0.0	7	-7.0
166 - Taco Bell Restaurant	168	1	64.2	64.0	71	-0.2	15		64.0	0.0	7	-7.0
167 - Discount Tire Store	169	1	67.0	64.2	71	-2.8	15		64.2	0.0	7	-7.0
168 - Wendy's Restaurant	170	1	66.0	62.1	71	-3.9	15		62.1	0.0	7	-7.0
169 - Ricker's BP Gas Station	171	1	66.8	62.1	71	-4.7	15		62.1	0.0	7	-7.0
170 - White Castle Restaurant	172	1	66.5	64.0	71	-2.5	15		64.0	0.0	7	-7.0
171 - Fifth Third Bank	173	1	66.1	65.6	71	-0.5	15		65.6	0.0	7	-7.0
172 - Steak 'n Shake Restaurant	174	1	66.2	68.9	71	2.7	15		68.9	0.0	7	-7.0
173 - The Farmers Bank	175	1	64.1	66.7	71	2.6	15		66.7	0.0	7	-7.0
174 - Jimmy Johns Restaurant & Starbuck	176	7	66.6	69.1	71	2.5	15		69.1	0.0	7	-7.0
175 - R & T Tire Pros	177	1	67.0	69.5	71	2.5	15		69.5	0.0	7	-7.0
176 - Super 8 Hotel	178	1	67.5	70.2	71	2.7	15		70.2	0.0	7	-7.0
177 - Multiple Businesses	179	1	64.7	67.5	71	2.8	15		67.5	0.0	7	-7.0
178 - Quick Lube Express	180	1	66.1	68.9	71	2.8	15		68.9	0.0	7	-7.0
179 - Tractor Supply Co Business	181	1	58.7	60.9	71	2.2	15		60.9	0.0	7	-7.0
180 - Walgreens	182	1	64.8	63.9	71	-0.9	15		63.9	0.0	7	-7.0
181 - First Merchants Bank	183	1	65.7	67.7	71	2.0	15		67.7	0.0	7	-7.0
182 - Perkins Restaurant & Bakery	184	1	66.5	69.0	71	2.5	15		69.0	0.0	7	-7.0
183 - Arby's Restaurant	185	1	63.8	66.1	71	2.3	15		66.1	0.0	7	-7.0
184 - Burger King Restaurant	186	1	67.0	67.8	71	0.8	15		67.8	0.0	7	-7.0
185 - Woods Bail Bonds	187	1	65.8	67.7	71	1.9	15		67.7	0.0	7	-7.0
186 - Valero Xpress Mart Gas Station	188	1	63.7	65.3	71	1.6	15		65.3	0.0	7	-7.0
187 - Huntington Bank	189	1	61.5	63.2	71	1.7	15		63.2	0.0	7	-7.0
188 - Multiple Businesses	190	1	65.9	66.7	71	0.8	15		66.7	0.0	7	-7.0

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RESULTS: SOUND LEVELS						,	SR37 - 126	th to SR32				
189 - Hamilton East Public Library	191	1	62.4	64.7	66	2.3	15		64.7	0.0	7	-7.0
190 - Multiple - Quilt Expressions; Bank	192	1	66.3	67.9	71	1.6	15		67.9	0.0	7	-7.0
191 - CVS (former)	193	1	68.1	68.6	71	0.5	15		68.6	0.0	7	-7.0
192 - Shell Gas Station	194	1	63.7	64.0	71	0.3	15		64.0	0.0	7	-7.0
193 - Multiple Businesses	195	1	57.6	58.4	71	0.8	15		58.4	0.0	7	-7.0
194 - Wendy's Restaurant	196	1	63.5	63.9	71	0.4	15		63.9	0.0	7	-7.0
195 - Ram Restaurant & Brewery	197	1	65.5	67.4	71	1.9	15		67.4	0.0	7	-7.0
196 - Kid's World Private Preschool & Edu	198	1	65.3	67.5	66	2.2	15	Snd Lvl	67.5	0.0	7	-7.0
197 - Texas Roadhouse Restaurant	199	1	65.5	67.3	71	1.8	15		67.3	0.0	7	-7.0
198 - Parkside Animal Hospital	200	1	67.9	69.9	71	2.0	15		69.9	0.0	7	-7.0
199 - Christian Brothers Automotive Service	201	1	66.6	68.4	71	1.8	15		68.4	0.0	7	-7.0
200 - DQ Grill & Chill Restaurant	202	1	66.1	68.0	71	1.9	15		68.0	0.0	7	-7.0
201 - Arby's Restaurant	203	1	66.3	67.8	71	1.5	15		67.8	0.0	7	-7.0
202 - CVS	204	1	66.5	65.2	71	-1.3	15		65.2	0.0	7	-7.0
203 - Lake City Bank	205	1	64.2	62.9	71	-1.3	15		62.9	0.0	7	-7.0
204 - Restaurant & Businesses	206	1	61.8	61.8	71	0.0	15		61.8	0.0	7	-7.0
205 - Restaurant & Businesses	207	1	62.3	62.4	71	0.1	15		62.4	0.0	7	-7.0
206 - Business Under Construction	208	1	62.2	63.8	71	1.6	15		63.8	0.0	7	-7.0
207 - Taco Bell Restaurant	209	1	63.9	66.5	71	2.6	15		66.5	0.0	7	-7.0
208 - Zaxby's Restaurant	210	1	64.6	67.0	71	2.4	15		67.0	0.0	7	-7.0
209 - The Woods of Britton Apartments 1 1	211	1	54.3	56.3	66	2.0	15		56.3	0.0	7	-7.0
210 - The Woods of Britton Apartments 2 2	212	1	58.8	61.0	66	2.2	15		61.0	0.0	7	-7.0
211 - The Woods of Britton Apartments 3 1	213	1	54.6	56.6	66	2.0	15		56.6	0.0	7	-7.0
212 - The Woods of Britton Apartments 4 2	214	1	59.1	61.5	66	2.4	15		61.5	0.0	7	-7.0
213 - The Woods of Britton Apartments 5 1	215	1	54.6	56.7	66	2.1	15		56.7	0.0	7	-7.0
214 - The Woods of Britton Apartments 6 2	216	1	59.1	61.6	66	2.5	15		61.6	0.0	7	-7.0
215 - The Woods of Britton Apartments 7	217	1	54.7	56.8	66	2.1	15		56.8	0.0	7	-7.0
216 - The Woods of Britton Apartments 8 2	218	1	59.2	61.8	66	2.6	15		61.8	0.0	7	-7.0
217 - The Woods of Britton Apartments 9 1	219	1	53.5	55.8	66	2.3	15		55.8	0.0	7	-7.0
218 - The Woods of Britton Apartments 10	220	1	57.9	60.7	66	2.8	15		60.7	0.0	7	-7.0
219 - The Woods of Britton Apartments 11	222	1	52.1	54.5	66	2.4	15		54.5	0.0	7	-7.0
220 - The Woods of Britton Apartments 12	223	1	56.3	59.1	66	2.8	15		59.1	0.0	7	-7.0
221 - The Woods of Britton Apartments 13	224	1	50.5	52.4	66	1.9	15		52.4	0.0	7	-7.0
222 - The Woods of Britton Apartments 14	225	1	55.1	57.3	66	2.2	15		57.3	0.0	7	-7.0
223 - The Woods of Britton Apartments 15	226	1	48.0	50.0	66	2.0	15		50.0	0.0	7	-7.0
224 - The Woods of Britton Apartments 16	227	1	52.4	54.4	66	2.0	15		54.4	0.0	7	-7.0
225 - The Woods of Britton Apartments 17	228	1	52.8	54.9	66	2.1	15		54.9	0.0	7	-7.0
226 - The Woods of Britton Apartments 18	229	1	57.3	59.5	66	2.2	15		59.5	0.0	7	-7.0
227 - The Woods of Britton Apartments 19	230	1	53.3	55.4	66	2.1	15		55.4	0.0	7	-7.0
228 - The Woods of Britton Apartments 20	231	1	57.8	60.2	66	2.4	15		60.2	0.0	7	-7.0
229 - The Woods of Britton Apartments 21	232	1	51.4	53.4	66	2.0	15		53.4	0.0	7	-7.0

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RESULTS: SOUND LEVELS						:	SR37 - 1261	th to SR32				
230 - The Woods of Britton Apartments 22	233	1	56.5	58.5	66	2.0	15		58.5	0.0	7	-7.0
231 - The Woods of Britton Apartments 23	234	1	52.4	54.3	66	1.9	15		54.3	0.0	7	-7.0
232 - The Woods of Britton Apartments 24	235	1	57.5	59.6	66	2.1	15		59.6	0.0	7	-7.0
233 - The Woods of Britton Apartments 25	236	1	51.5	52.7	66	1.2	15		52.7	0.0	7	-7.0
234 - The Woods of Britton Apartments 26	237	1	54.6	55.8	66	1.2	15		55.8	0.0	7	-7.0
235 - The Woods of Britton Apartments 27	238	1	53.1	54.2	66	1.1	15		54.2	0.0	7	-7.0
236 - The Woods of Britton Apartments 28	239	1	56.1	57.3	66	1.2	15		57.3	0.0	7	-7.0
237 - The Woods of Britton Apartments 29	240	1	56.4	58.0	66	1.6	15		58.0	0.0	7	-7.0
238 - The Woods of Britton Apartments 30	241	1	59.0	60.9	66	1.9	15		60.9	0.0	7	-7.0
239 - The Woods of Britton Apartments 31	242	1	58.4	59.5	66	1.1	15		59.5	0.0	7	-7.0
240 - The Woods of Britton Apartments 32	243	1	61.0	62.6	66	1.6	15		62.6	0.0	7	-7.0
241 - The Woods of Britton Apartments 33	244	1	54.4	56.4	66	2.0	15		56.4	0.0	7	-7.0
242 - The Woods of Britton Apartments 34	245	1	59.4	61.9	66	2.5	15		61.9	0.0	7	-7.0
243 - The Woods of Britton Apartments 35	246	1	56.0	58.0	66	2.0	15		58.0	0.0	7	-7.0
244 - The Woods of Britton Apartments 36	247	1	60.9	63.3	66	2.4	15		63.3	0.0	7	-7.0
245 - The Woods of Britton Apartments 37	248	1	60.8	62.8	66	2.0	15		62.8	0.0	7	-7.0
246 - The Woods of Britton Apartments 38	249	1	65.8	68.5	66	2.7	15	Snd Lvl	68.5	0.0	7	-7.0
247 - The Woods of Britton Apartments 39	250	1	65.4	67.5	66	2.1	15	Snd Lvl	67.5	0.0	7	-7.0
248 - The Woods of Britton Apartments 40	251	1	68.8	71.6	66	2.8	15	Snd Lvl	71.6	0.0	7	-7.0
249 - The Woods of Britton Apartments 41	252	1	62.6	64.4	66	1.8	15		64.4	0.0	7	-7.0
250 - The Woods of Britton Apartments 42	253	1	65.3	67.8	66	2.5	15	Snd Lvl	67.8	0.0	7	-7.0
251 - The Woods of Britton Apartments 43	255	1	59.6	61.0	66	1.4	15		61.0	0.0	7	-7.0
252 - The Woods of Britton Apartments 44	256	1	62.4	64.3	66	1.9	15		64.3	0.0	7	-7.0
253 - The Woods of Britton Apartments 45	257	1	63.1	64.5	66	1.4	15		64.5	0.0	7	-7.0
254 - The Woods of Britton Apartments 46	258	1	65.1	67.1	66	2.0	15	Snd Lvl	67.1	0.0	7	-7.0
255 - The Woods of Britton Apartments 47	259	1	62.8	64.1	66	1.3	15		64.1	0.0	7	-7.0
256 - The Woods of Britton Apartments 48	260	1	64.8	66.6	66	1.8	15	Snd Lvl	66.6	0.0	7	-7.0
257 - The Woods of Britton Apartments 49	261	1	59.8	60.6	66	0.8	15		60.6	0.0	7	-7.0
258 - The Woods of Britton Apartments 50	262	1	61.6	62.8	66	1.2	15		62.8	0.0	7	-7.0
259 - The Woods of Britton Apartments 51	263	1	57.5	58.6	66	1.1	15		58.6	0.0	7	-7.0
260 - The Woods of Britton Apartments 52	264	1	60.2	61.1	66	0.9	15		61.1	0.0	7	-7.0
261 - Tire Barn Service	265	1	67.2	69.2	71	2.0	15		69.2	0.0	7	-7.0
262 - KFC Restaurant	266	1	67.9	69.2	71	1.3	15		69.2	0.0	7	-7.0
263 - Multiple Restaurants and Businesses	267	1	57.7	58.0	71	0.3	15		58.0	0.0	7	-7.0
264 - Burger King Restaurant	268	1	65.0	64.5	71	-0.5			64.5	0.0	7	-7.0
265 - Multiple Restaurants and Businesses	269	1	56.5	56.8	71	0.3			56.8	0.0	7	-7.0
266 - Sherwin Williams Paint Store	270	1	64.8	64.7	71	-0.1	15		64.7	0.0	7	-7.0
267 - Chase Bank	271	1	64.8	65.5	71	0.7			65.5	0.0	7	-7.0
268 - 21st Amendment Wine & Spirits	272	1	63.6	64.4	71	0.8	15		64.4	0.0	7	-7.0
269 - Multiple Restaurants and Businesses		1	55.3	57.3	71	2.0			57.3	0.0	7	-7.0
270 - Multiple Businesses	274	1	55.1	57.2	71	2.1	15		57.2	0.0	7	-7.0

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Appendix I - Noise Analysis

Attachment 1

RESULTS: SOUND LEVELS						:	SR37 - 1261	th to SR32				
271 - Prime Car Wash	275	1	64.1	65.7	71	1.6	15		65.7	0.0	7	-7.0
272 - Regions Bank	276	1	64.9	65.2	71	0.3	15		65.2	0.0	7	-7.0
273 - Marsh Supermarket	277	1	54.9	55.9	71	1.0	15		55.9	0.0	7	-7.0
274 - PNC Bank	278	1	63.9	64.3	71	0.4	15		64.3	0.0	7	-7.0
275 - AutoZone Business	301	1	63.9	65.0	71	1.1	15		65.0	0.0	7	-7.0
276 - Godby Home Furnishings	302	1	55.6	57.0	71	1.4	15		57.0	0.0	7	-7.0
277 - CVS	303	1	64.3	65.1	71	0.8	15		65.1	0.0	7	-7.0
278 - Jaggers Restaurant	304	1	58.6	59.9	71	1.3	15		59.9	0.0	7	-7.0
279 - Auto Dealership - Tom Wood Valksw	305	1	63.3	64.2	71	0.9	15		64.2	0.0	7	-7.0
280 - Milestone Apartments 1 2nd floor	306	1	65.4	67.7	66	2.3	15	Snd Lvl	67.7	0.0	7	-7.0
281 - Milestone Apartments 2 3rd floor	309	1	66.8	68.9	66	2.1	15	Snd Lvl	68.9	0.0	7	-7.0
282 - Milestone Apartments 3 2nd floor	310	1	65.4	67.7	66	2.3	15	Snd Lvl	67.7	0.0	7	-7.0
283 - Milestone Apartments 4 3rd floor	311	1	66.8	68.9	66	2.1	15	Snd Lvl	68.9	0.0	7	-7.0
284 - Milestone Apartments 5 2nd floor	312	1	65.6	68.0	66	2.4	15	Snd Lvl	68.0	0.0	7	-7.0
285 - Milestone Apartments 6 3rd floor	313	1	66.9	69.0	66	2.1	15	Snd Lvl	69.0	0.0	7	-7.0
286 - Milestone Apartments 7 2nd floor	314	1	65.4	67.8	66	2.4	15	Snd Lvl	67.8	0.0	7	-7.0
287 - Milestone Apartments 8 3rd floor	315	1	66.7	68.9	66	2.2	15	Snd Lvl	68.9	0.0	7	-7.0
288 - Milestone Apartments 9 2nd floor	316	1	64.5	66.8	66	2.3	15	Snd Lvl	66.8	0.0	7	-7.0
289 - Milestone Apartments 10 3rd floor	317	1	65.5	67.5	66	2.0	15	Snd Lvl	67.5	0.0	7	-7.0
290 - Milestone Apartments 11 2nd floor	318	1	61.9	64.2	66	2.3	15		64.2	0.0	7	-7.0
291 - Milestone Apartments 12 3rd floor	319	1	63.5	65.6	66	2.1	15		65.6	0.0	7	-7.0
292 - Milestone Apartments 13 2nd floor	320	1	59.0	61.5	66	2.5	15		61.5	0.0	7	-7.0
293 - Milestone Apartments 14 3rd floor	321	1	60.8	63.1	66	2.3	15		63.1	0.0	7	-7.0
294 - Milestone Apartments 15 2nd floor	322	1	57.1	59.6	66	2.5	15		59.6	0.0	7	-7.0
295 - Milestone Apartments 16 3rd floor	323	1	58.8	61.1	66	2.3	15		61.1	0.0	7	-7.0
296 - Milestone Apartments 17 1st floor	324	1	60.6	62.9	66	2.3	15		62.9	0.0	7	-7.0
297 - Milestone Apartments 18 2nd floor	325	1	64.2	66.4	66	2.2	15	Snd Lvl	66.4	0.0	7	-7.0
298 - Milestone Apartments 19 3rd floor	326	1	65.2	67.3	66	2.1	15	Snd Lvl	67.3	0.0	7	-7.0
299 - Milestone Apartments 20 1st floor	327	1	57.8	59.9	66	2.1	15		59.9	0.0	7	-7.0
300 - Milestone Apartments 21 2nd floor	328	1	61.8	64.0	66	2.2	15		64.0	0.0	7	-7.0
301 - Milestone Apartments 22 3rd floor	329	1	63.4	65.5	66	2.1	15		65.5	0.0	7	-7.0
302 - Milestone Apartments 23 1st floor	330	1	55.9	58.0	66	2.1	15		58.0	0.0	7	-7.0
303 - Milestone Apartments 24 2nd floor	331	1	60.1	62.3	66	2.2	15		62.3	0.0	7	-7.0
304 - Milestone Apartments 25 3rd floor	7	1	61.9	64.0	66	2.1	15		64.0	0.0	7	-7.0
305 - Milestone Apartments 26 1st floor	333	1	54.7	56.8	66	2.1	15		56.8	0.0	7	-7.0
306 - Milestone Apartments 27 2nd floor	334	1	58.9	61.3	66	2.4	15		61.3	0.0	7	-7.0
307 - Milestone Apartments 28 3rd floor	335	1	60.6	62.8	66	2.2	15		62.8	0.0	7	-7.0
308 - Milestone Apartments 29 2nd floor	336	1	53.5	55.1	66	1.6	15		55.1	0.0	7	-7.0
309 - Milestone Apartments 30 3rd floor	337	1	54.9	56.6	66	1.7	15		56.6	0.0	7	-7.0
310 - Milestone Apartments 31 2nd floor	338	1	51.4	54.0	66	2.6	15		54.0	0.0	7	-7.0
311 - Milestone Apartments 32 3rd floor	339	1	53.2	55.7	66	2.5	15		55.7	0.0	7	-7.0

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Appendix I - Noise Analysis

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RESULTS: SOUND LEVELS						:	SR37 - 126	th to SR32				
312 - Milestone Apartments 33 2nd floor	340	1	50.2	52.5	66	2.3	15		52.5	0.0	7	-7.0
313 - Milestone Apartments 34 3rd floor	341	1	52.1	54.5	66	2.4	15		54.5	0.0	7	-7.0
314 - Milestone Apartments 35 2nd floor	342	1	49.0	51.2	66	2.2	15		51.2	0.0	7	-7.0
315 - Milestone Apartments 36 3rd floor	343	1	51.1	53.5	66	2.4	15		53.5	0.0	7	-7.0
316 - Milestone Apartments 37 1st floor	344	1	52.3	54.1	66	1.8	15		54.1	0.0	7	-7.0
317 - Milestone Apartments 38 2nd floor	345	1	56.8	59.1	66	2.3	15		59.1	0.0	7	-7.0
318 - Milestone Apartments 39 3rd floor	346	1	58.3	60.5	66	2.2	15		60.5	0.0	7	-7.0
319 - Milestone Apartments 40 1st floor	347	1	51.2	52.8	66	1.6	15		52.8	0.0	7	-7.0
320 - Milestone Apartments 41 2nd floor	348	1	55.7	57.8	66	2.1	15		57.8	0.0	7	-7.0
321 - Milestone Apartments 42 3rd floor	349	1	57.4	59.4	66	2.0	15		59.4	0.0	7	-7.0
322 - Milestone Apartments 43 1st floor	350	1	50.1	51.9	66	1.8	15		51.9	0.0	7	-7.0
323 - Milestone Apartments 44 2nd floor	351	1	54.3	56.8	66	2.5	15		56.8	0.0	7	-7.0
324 - Milestone Apartments 45 3rd floor	352	1	56.2	58.6	66	2.4	15		58.6	0.0	7	-7.0
325 - Milestone Apartments 46 1st floor	353	1	49.4	50.9	66	1.5	15		50.9	0.0	7	-7.0
326 - Milestone Apartments 47 2nd floor	354	1	53.6	55.6	66	2.0	15		55.6	0.0	7	-7.0
327 - Milestone Apartments 48 3rd floor	355	1	55.6	57.8	66	2.2	15		57.8	0.0	7	-7.0
328 - Milestone Apartments 49 1st floor	356	1	64.4	66.8	66	2.4	15	Snd Lvl	66.8	0.0	7	-7.0
329 - Milestone Apartments 50 2nd floor	306	1	67.2	69.5	66	2.3	15	Snd Lvl	69.5	0.0	7	-7.0
330 - Milestone Apartments 51 3rd floor	357	1	67.8	69.8	66	2.0	15	Snd Lvl	69.8	0.0	7	-7.0
331 - Milestone Apartments 52 1st floor	358	1	62.7	64.9	66	2.2	15		64.9	0.0	7	-7.0
332 - Milestone Apartments 53 2nd floor	359	1	65.9	68.2	66	2.3	15	Snd Lvl	68.2	0.0	7	-7.0
333 - Milestone Apartments 54 3rd floor	360	1	66.8	68.8	66	2.0	15	Snd Lvl	68.8	0.0	7	-7.0
334 - Milestone Apartments 55 1st floor	361	1	59.8	61.9	66	2.1	15		61.9	0.0	7	-7.0
335 - Milestone Apartments 56 2nd floor	362	1	63.4	65.6	66	2.2	15		65.6	0.0	7	-7.0
336 - Milestone Apartments 57 3rd floor	363	1	65.0	67.0	66	2.0	15	Snd Lvl	67.0	0.0	7	-7.0
337 - Milestone Apartments 58 1st floor	364	1	58.4	60.5	66	2.1	15		60.5	0.0	7	-7.0
338 - Milestone Apartments 59 2nd floor	365	1	62.3	64.5	66	2.2	15		64.5	0.0	7	-7.0
339 - Milestone Apartments 60 3rd floor	366	1	64.0	66.1	66	2.1	15	Snd Lvl	66.1	0.0	7	-7.0
340 - Milestone Apartments 61 2nd floor	367	1	62.3	64.7	66	2.4	15		64.7	0.0	7	-7.0
341 - Milestone Apartments 62 3rd floor	368	1	63.5	65.6	66	2.1	15		65.6	0.0	7	-7.0
342 - Milestone Apartments 63 2nd floor	369	1	59.1	61.2	66	2.1	15		61.2	0.0	7	-7.0
343 - Milestone Apartments 64 3rd floor	369	1	59.1	62.8	66	3.7	15		62.8	0.0	7	-7.0
344 - Milestone Apartments 65 2nd floor	370	1	60.7	58.6	66	-2.1	15		58.6	0.0	7	-7.0
345 - Milestone Apartments 66 3rd floor	371	1	56.3	60.4	66	4.1	15		60.4	0.0	7	-7.0
346 - Milestone Apartments 67 2nd floor	372	1	58.2	56.7	66	-1.5	15		56.7	0.0	7	-7.0
347 - Milestone Apartments 68 3rd floor	373	1	54.2	58.6	66	4.4	15		58.6	0.0	7	-7.0
348 - Milestone Apartments 69 1st floor	374	1	56.3	56.6	66	0.3	15		56.6	0.0	7	-7.0
349 - Milestone Apartments 70 2nd floor	375	1	54.7	61.7	66	7.0	15		61.7	0.0	7	-7.0
350 - Milestone Apartments 71 3rd floor	376	1	59.4	63.2	66	3.8	15		63.2	0.0	7	-7.0
351 - Milestone Apartments 72 1st floor	377	1	61.1	54.4	66	-6.7	15		54.4	0.0	7	-7.0
352 - Milestone Apartments 73 2nd floor	378	1	52.5	59.5	66	7.0	15		59.5	0.0	7	-7.0

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RESULTS: SOUND LEVELS	SR37 - 126th to SR32											
353 - Milestone Apartments 74 3rd floor	379	1	57.2	61.0	66	3.8	15		61.0	0.0	7	-7.0
354 - Milestone Apartments 75 1st floor	380	1	59.0	52.9	66	-6.1	15		52.9	0.0	7	-7.0
355 - Milestone Apartments 76 2nd floor	381	1	51.1	57.8	66	6.7	15		57.8	0.0	7	-7.0
356 - Milestone Apartments 77 3rd floor	382	1	55.6	59.6	66	4.0	15		59.6	0.0	7	-7.0
357 - Milestone Apartments 78 1st floor	383	1	57.5	52.1	66	-5.4	15		52.1	0.0	7	-7.0
358 - Milestone Apartments 79 2nd floor	384	1	50.1	56.6	66	6.5	15		56.6	0.0	7	-7.0
359 - Milestone Apartments 80 3rd floor	385	1	54.4	58.6	66	4.2	15		58.6	0.0	7	-7.0
360 - Milestone Apartments 81 2nd floor	386	1	56.4	54.2	66	-2.2	15		54.2	0.0	7	-7.0
361 - Milestone Apartments 82 3rd floor	387	1	51.9	56.1	66	4.2	15		56.1	0.0	7	-7.0
362 - Milestone Apartments 83 2nd floor	388	1	53.9	53.3	66	-0.6	15		53.3	0.0	7	-7.0
363 - Milestone Apartments 84 3rd floor	389	1	50.9	54.9	66	4.0	15		54.9	0.0	7	-7.0
364 - Milestone Apartments 85 2nd floor	405	1	52.7	52.8	66	0.1	15		52.8	0.0	7	-7.0
365 - Milestone Apartments 86 3rd floor	406	1	49.8	54.4	66	4.6	15		54.4	0.0	7	-7.0
366 - Milestone Apartments 87 2nd floor	407	1	51.7	51.5	66	-0.2	15		51.5	0.0	7	-7.0
367 - Milestone Apartments 88 3rd floor	408	1	49.0	53.7	66	4.7	15		53.7	0.0	7	-7.0
368 - Primrose School of Noblesville	409	1	51.2	67.6	66	16.4	15	Both	67.6	0.0	7	-7.0
369 - Golden Corral Restaurant	410	1	65.7	60.3	66	-5.4	15		60.3	0.0	7	-7.0
370 - Multiple Restaurant and Businesses	411	1	59.6	62.1	71	2.5	15		62.1	0.0	7	-7.0
371 - Old National Bank	412	1	61.0	66.6	71	5.6	15		66.6	0.0	7	-7.0
372 - 2550 Greenfield Ave - Residence	413	1	64.2	62.8	71	-1.4	15		62.8	0.0	7	-7.0
374 - 16333 Cumberland Rd - Residence	414	1	63.7	61.0	66	-2.7	15		61.0	0.0	7	-7.0
375 - 16355 Cumberland Rd - Residence	416	1	58.3	59.8	66	1.5	15		59.8	0.0	7	-7.0
376 - 16365 Cumberland Rd - Residence	417	1	57.4	60.9	66	3.5	15		60.9	0.0	7	-7.0
377 - 16367 Cumberland Rd - Residence	418	1	58.7	62.8	66	4.1	15		62.8	0.0	7	-7.0
378 - 16373 Cumberland Rd - Residence	419	1	60.6	62.8	66	2.2	15		62.8	0.0	7	-7.0
379 - 16381 Cumberland Rd - Residence	420	1	60.6	63.4	66	2.8	15		63.4	0.0	7	-7.0
380 - 16455 Cumberland Rd - Residence	421	1	61.5	67.8	66	6.3	15	Snd Lvl	67.8	0.0	7	-7.0
381 - 16477 Cumberland Rd - Residence	422	1	65.3	67.5	66	2.2	15	Snd Lvl	67.5	0.0	7	-7.0
382 - 16487 Cumberland Rd - Residence	423	1	65.0	71.1	66	6.1	15	Snd Lvl	71.1	0.0	7	-7.0
383 - 16497 Cumberland Rd - Residence	424	1	68.4	70.0	66	1.6	15	Snd Lvl	70.0	0.0	7	-7.0
384 - Tires Plus	425	1	67.4	66.4	66	-1.0	15	Snd Lvl	66.4	0.0	7	-7.0
385 - Sports Clips Haircuts of Noblesville	426	1	63.7	62.1	71	-1.6	15		62.1	0.0	7	-7.0
386 - Bob Evans Restaurant	427	1	60.3	65.9	71	5.6	15		65.9	0.0	7	-7.0
387 - Chick-fil-A Restaurant	428	1	64.7	63.6	71	-1.1	15		63.6	0.0	7	-7.0
388 - O'Charley's Restaurant & Bar	429	1	65.2	60.9	71	-4.3	15		60.9	0.0	7	-7.0
389 - Chili's Grill & Bar Restaurant	430	1	63.7	60.5	71	-3.2	15		60.5	0.0	7	-7.0
390 - FORUM Credit Union	431	1	64.1	59.3	71	-4.8	15		59.3	0.0	7	-7.0
391 - Meijer Gas Station	432	1	61.2	62.9	71	1.7	15		62.9	0.0	7	-7.0
392 - Multiple Businesses	433	1	63.3	64.2	71	0.9	15		64.2	0.0	7	-7.0
393 - Logan's Roadhouse Restaurant	434	1	62.2	64.6	71	2.4	15		64.6	0.0	7	-7.0
394 - Crew Car Wash	435	1	62.7	66.8	71	4.1	15		66.8	0.0	7	-7.0

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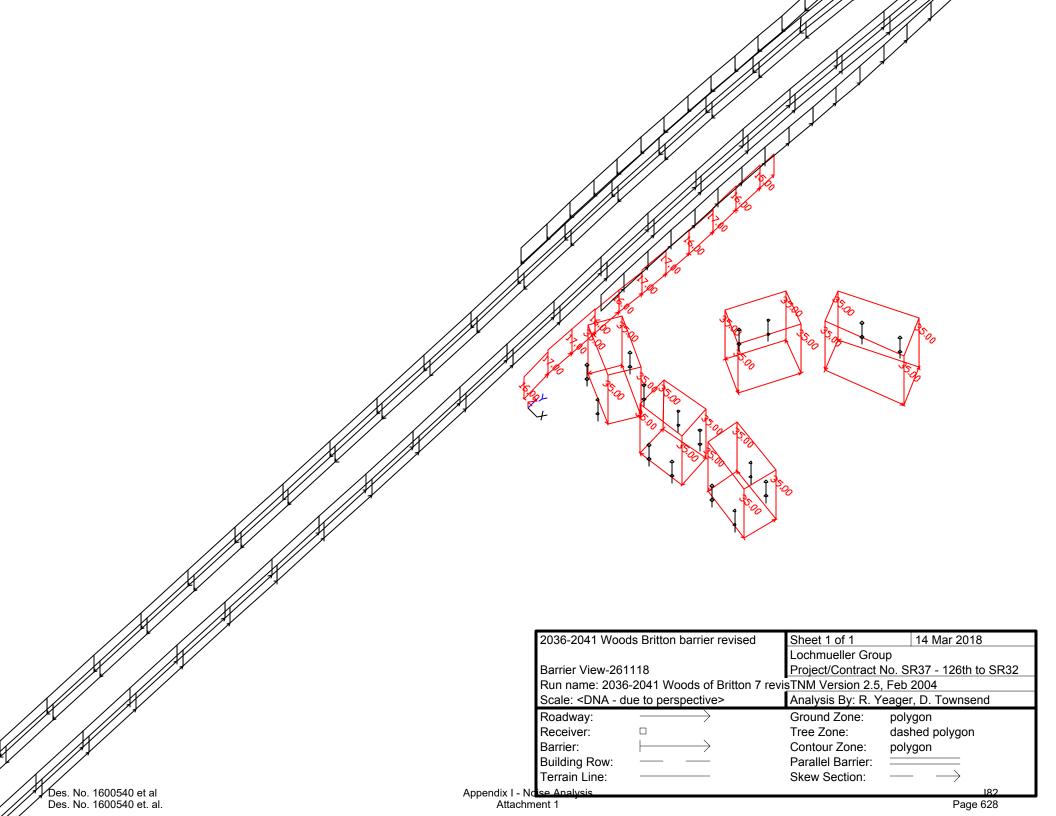
RESULTS: SOUND LEVELS						:	SR37 - 1261	th to SR32	2			
395 - Multiple Businesses	436	1	64.6	61.	4 71	-3.2	15		61.4	0.0	7	-7.0
396 - BMO Harris Bank	437	1	60.6	64.	5 71	3.9	15		64.5	0.0	7	-7.0
397 - Multiple Businesses	438	1	64.1	58.	4 71	-5.7	15		58.4	0.0	7	-7.0
398 - Auto Dealership - Kahlo Chrysler Jee	439	1	58.4	68.	3 71	9.9	15		68.3	0.0	7	-7.0
399 - Auto Dealership - Terry Lee Genesis	440	1	65.4	65.	7 71	0.3	15		65.7	0.0	7	-7.0
400 - Applebee's Restaurant	441	1	64.9	66.	0 71	1.1	15		66.0	0.0	7	-7.0
401 - Fireworks	442	1	63.7	67.	1 71	3.4	15		67.1	0.0	7	-7.0
402 - Teachers Credit Union	443	1	63.5	60.	5 71	-3.0	15		60.5	0.0	7	-7.0
403 - Courtyard Marriott	389	1	57.6	65.	9 71	8.3	15		65.9	0.0	7	-7.0
404 - Belle Tire	444	1	61.5	69.	1 71	7.6	15		69.1	0.0	7	-7.0
405 - Verizon	450	1	66.8	65.	1 71	-1.7	15		65.1	0.0	7	-7.0
406 - Harley Davidson	451	1	62.2	64.	4 71	2.2	15		64.4	0.0	7	-7.0
407 - O'Reilly Auto Parts	452	1	61.6	66.	3 71	4.7	15		66.3	0.0	7	-7.0
408 - Auto Dealership	454	1	64.9	65.	5 71	0.6	15		65.5	0.0	7	-7.0
409 - GetGo Café and Market	455	1	64.0	63.	1 71	-0.9	15		63.1	0.0	7	-7.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected	<u> </u>	408	0.0	0.	0.0							
All Impacted		47	0.0	0.	0.0	)						
All that meet NR Goal		0	0.0	0.	0.0							

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#### **Appendix I**

**TNM 2.5 2036/2041 Barrier Assessment Results – Woods of Britton Apartments** 

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**RESULTS: SOUND LEVELS** SR37 - 126th to SR32

RESULTS: SOUND LEVELS						S	R37 - 126t	n to SR32				
Lochmueller Group							16 March	2018				
R. Yeager, D. Townsend							TNM 2.5	2010				
rougo, pr rouniconu								d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		SR37 -	126th to SF	232								
RUN:				Britton barrie	er revised							
BARRIER DESIGN:		261118						Average r	avement type	e shall be use	l d unless	
<u> </u>										y substantiate		
ATMOSPHERICS:		68 dea	F, 50% RH							approval of F		
Receiver		oo acg	7 , 00 /0 1411						typo wan			
Name	No.	#DUs	Existing	No Barrier					With Barrier			
Name	NO.	#005	LAeq1h	LAeq1h		Increase over	ovicting	Typo	Calculated	Noise Reduc	tion	
			LACTII	-	Crit'n	Calculated	Crit'n	Type Impact	LAeq1h	Calculated	Goal	Calculated
				Calculated	CHUII	Calculated		ппрасс	LAeqIII	Calculated	Guai	1
							Sub'l Inc					minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
147 - The Woods of Britton Apartments 21				53.2					53.0			
148 - The Woods of Britton Apartments 22									58.0			
149 - The Woods of Britton Apartments 23				54.1					53.9			
150 - The Woods of Britton Apartments 24									58.9			
151 - The Woods of Britton Apartments 25			01.0						47.8			
152 - The Woods of Britton Apartments 26			00						49.7			
153 - The Woods of Britton Apartments 27				54.3					48.5			
154 - The Woods of Britton Apartments 28			00.1	57.4					49.9			
155 - The Woods of Britton Apartments 29				58.0					50.5			
156 - The Woods of Britton Apartments 30			00.0			_			52.1			
157 - The Woods of Britton Apartments 31				59.6					53.5		7	-
158 - The Woods of Britton Apartments 32			00						56.0			_
159 - The Woods of Britton Apartments 33				56.4					55.9			
160 - The Woods of Britton Apartments 34				61.9					61.0			
161 - The Woods of Britton Apartments 35			00.0						57.4			
162 - The Woods of Britton Apartments 36			00.0						62.2			
163 - The Woods of Britton Apartments 37			00.0						60.0			
164 - The Woods of Britton Apartments 38									65.1			
165 - The Woods of Britton Apartments 39			65.4						60.0			
166 - The Woods of Britton Apartments 40			68.8						64.6			
167 - The Woods of Britton Apartments 41			62.6						55.6			
168 - The Woods of Britton Apartments 42									58.8			
169 - The Woods of Britton Apartments 43			00.0						54.4			
170 - The Woods of Britton Apartments 44	172	2  1	62.4	64.3	66	1.9	15		57.3	7.0	7	0.0

C:\Users\Rusty\Desktop\2036-2041 Woods of Britton 7 revised ROW

Des. No. 1600540 et al Des. No. 1600540 et. al.

16 M 1

RESULTS: SOUND LEVELS						S	R37 - 126th	to SR32				
171 - The Woods of Britton Apartments 45	173	1	63.	1 64.	5 66	1.4	15		57.5	7.0	7	0.0
172 - The Woods of Britton Apartments 46	174	1	65.	1 67.	1 66	2.0	15	Snd Lvl	60.1	7.0	7	0.0
173 - The Woods of Britton Apartments 47	175	1	62.8	64.2	2 66	1.4	15		58.2	6.0	7	-1.0
174 - The Woods of Britton Apartments 48	176	1	64.8	66.	7 66	1.9	15	Snd Lvl	60.5	6.2	7	-0.8
175 - The Woods of Britton Apartments 49	177	1	59.8	60.	5 66	0.7	15		57.3	3.2	7	-3.8
176 - The Woods of Britton Apartments 50	178	1	61.6	62.	7 66	1.1	15		59.5	3.2	7	-3.8
177 - The Woods of Britton Apartments 51	179	1	57.5	5 58.0	66	1.1	15		56.1	2.5	7	-4.5
178 - The Woods of Britton Apartments 52	180	1	60.2	2 61.	1 66	0.9	15		58.5	2.6	7	-4.4
Dwelling Units		# DUs	Noise Re	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		32	0.2	2 4.0	9.0	)						
All Impacted		6	3.4	4 6.7	9.0	)						
All that meet NR Goal		10	7.0	7.8	9.0	)						

RESULTS: BARRIER DESCRIPTIONS	SR37 - 126th to SR32
NEOGETO. DANNIEN DEGONII TIONO	01\37 - 120th to 01\32

RESOLIS. BARRIER DESCRIPTIONS						1200	11 10 01102	•		
Lochmueller Group				16 March	2018					
R. Yeager, D. Townsend				TNM 2.5						
RESULTS: BARRIER DESCRIPTIONS										
PROJECT/CONTRACT:	SR37	- 126th to S	SR32							
RUN:	sed									
BARRIER DESIGN:	26111	8								
Barriers										
Name	Type Heights al		long Barrier		Length	If Wall	If Berm		Cost	
		Min	Avg	Max		Area	Volume	Тор	Run:Rise	
								Width		
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$
Barrier12	W	15.00	16.4	1 17.00	530	8704				26111
Woods of Britton 5	W	35.00	35.0	0 35.00	303	10591				
Woods of Britton 4	W	35.00	35.0	0 35.00	273	9543				
Woods of Britton 3	W	35.00	35.0	0 35.00	279	9772				
Woods of Britton 2	W	35.00	35.0	0 35.00	318	11142				
Woods of Britton 1	W	35.00	35.0	0 35.00	382	13362				
									Total Cost:	26111

From: Costa, Chad

To: Kunkel, Chris

Subject: FW: SR 37 Improvement Project I-69 to SR 32 (Fishers and Noblesville), Hamilton Co, Indiana (DES 1600540):

Highway noise analysis re-evaluation

**Date:** Monday, March 26, 2018 2:27:23 PM

Attachments: image002.png

image003.png image004.png image005.png

#### Chad Costa

#### **Environmental Manager**

#### **Lochmueller Group**

317.334.6807 (direct)

CCosta@lochgroup.com

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From: Miller, Brandon < BraMiller1@indot.IN.gov>

**Sent:** Monday, March 26, 2018 1:54 PM

To: Yeager, Rusty <RYeager@lochgroup.com>

**Cc:** Costa, Chad <CCosta@lochgroup.com>; DuPont, Jason <JDuPont@lochgroup.com>; Bales,

Ronald <rbales@indot.IN.gov>; Beck, Jennifer <JBeck@indot.IN.gov>

**Subject:** SR 37 Improvement Project I-69 to SR 32 (Fishers and Noblesville), Hamilton Co, Indiana (DES 1600540): Highway noise analysis re-evaluation

INDOT Environmental Services Division (ES) has reviewed the noise study for the above-referenced project and found it to be technically sufficient. As you are aware, INDOT no longer comments on recommendations provided in noise studies for local agency projects. However, it is our assessment that the study has been completed in accordance with federal guidelines and state policy.

#### **Brandon Miller**

Major Projects/LPA Review Liaison INDOT Environmental Services

100 N. Senate Ave., Rm. 642 Indianapolis, IN 46204 **Office:** (317) 234-5108

Email: bramiller1@indot.in.gov



# Attachment 2 Section 106 Documentation: 800.1(e) Documentation (Text Only), SHPO Concurrence Letter, and Public Notice with Proof of Publication

Eric Holcomb, Governor Cameron F. Clark, Director

Division of Historic Preservation & Archaeology · 402 W. Washington Street, W274 · Indianapolis, IN 46204-2739 Phone 3 | 7-232-| 646 · Fax 317-232-0693 · dhpa@dnr.IN.gov · www.IN.gov/dnr/historic



March 9, 2018

Gary Quigg Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268

Federal Agency: Indiana Department of Transportation ("INDOT"),

on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Addendum No. 3 phase Ia archaeological reconnaissance report (Curran, 1/15/2018), February 16, 2018, Section 106 finding of "No Adverse Effect," addendum No. 2 to the 800.11(e) Documentation, for the SR 37 Improvement Project: I-69 to SR in the cities of Fishers and Noblesville, Hamilton County, Indiana (Des. No. 1600540; DHPA No. 19374)

Dear Mr. Quigg:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer, has reviewed Lochmueller Group's letter, with finding and supporting 800.11 documentation enclosed and the addendum archaeological report, for the above referenced project, dated February 19, 2018 and received on February 26, 2018.

This archaeology report addresses additional areas examined after the initial finding of "No Adverse Effect" was made, and we understand it to be the final report. We concur with the conclusions and recommendations contained in the addendum archaeological report (M. Curran, 1/15/2018) Archaeological site 12-H-736 is not eligible for nomination to the National or State Registers of Historic Places.

Therefore, we concur with INDOT's February 16, 2018 finding on behalf of the Federal Highway Administration of "No Adverse Effect."

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and -29) requires that the discovery be reported to the Department of Natural Resources, Division of Historic Preservation and Archaeology ("INDNR-DHPA") within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and -29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. Part 800.

If you have questions about archaeological issues please contact Mitch Zoll at (317) 232-3492 or mzoll@dnr.IN.gov. Questions about buildings or structures should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

The DNR mission: Protect, enhance, preserve and wisely use natural, cultural and recreational resources for the benefit of Indiana's citizens through professional leadership, management and education.

www.DNR.IN.gov An Equal Opportunity Employer Quigg March 9, 2018 Page 2

In there would need to be any further correspondence following INDOT's third "No Adverse Effect" finding for this project (Des. No. 1600540), please continue to refer to DHPA No. 19374.

Very truly yours,

Mitchell K. Zoll

Deputy State Historic Preservation Officer

MKZ:JLC:jlc

emc: Robert Dirks, PE, FHWA

Anuradha Kumar, INDOT Shaun Miller, INDOT Mary Kennedy, INDOT Susan Branigin, INDOT Jeffrey Laswell, INDOT

Patrick Carpenter, INDOT Shirley Clark, INDOT

Gary Quigg, Lochmueller Group

Andrew Martin, RPA, Cultural Resources Analysts, Inc.

Mitchell Zoll, INDNR-DHPA John Carr, INDNR-DHPA

#### SR 37 Improvement Project: I-69 to SR 32

Fishers and Noblesville, Hamilton County, Indiana Des. No. 1600540; DHPA No. 19374

## Section 106 ADDENDUM #2 to 800.11(e) Documentation

**February 16, 2018** 



Prepared for the City of Fishers and the Federal Highway Administration (FHWA)



**Gary Francis Quigg** 

# 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 SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540/DHPA No. 19374

#### AREA OF POTENTIAL EFFECTS (APE)

The APE for this project generally encompasses the properties that have a proximate viewshed of the undertaking. This project involves construction to improve an existing roadway. The APE expands widest where potentially elevated interchanges allow a wider viewshed and is narrowest where development or tree cover limits or masks the viewshed. In areas where interchanges are planned the APE generally expands outward from the existing intersection for 0.25 mile in either direction along the intersecting road. The APE includes all areas where ground disturbance may occur or where auditory or visual impacts may be expected.

The APE was expanded west of the original APE to include an area along 141<sup>st</sup> Street between SR 37 and Allisonville Road to allow for a drainage easement when the original 800.11(e) documentation (December 22, 2016) was completed. However, this easement was removed from the proposed project prior to the submittal of the March 13, 2017 Addendum to the original 800.11(e) documentation. Please note the maps referencing the APE in Appendix A refer to the area where the 141<sup>st</sup> Easement was to occur as APE Extension #1.

The APE was expanded to the west of the original APE in an Addendum to the original 800.11(e) documentation dated March 13, 2017, and included all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended March 13, 2017, expansion of the APE for this project was defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin. This first Addendum to the original 800.11(e) documentation was approved by the Indiana Department of Transportation's (INDOT) Cultural Resource Office (CRO) on March 20, 2017 and by the State Historic Preservation Office (SHPO) on April 24, 2017. Please note the maps referencing the APE in Appendix A refer to the area along 146<sup>th</sup> Street and the parcel on Lantern Road as APE Extension #2.

The APE has again expanded, this time to the east and south of the original APE, as described in this second Addendum to the original 800.11(e) documentation (dated February, 2018) to include all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended February, 2018, expansion of the APE for this project is defined as two areas: 1) an area extending east from the present APE along SR 37 approximately 700 feet north, east, and south centered upon the north terminus of North Pointe Boulevard; and 2) an area extending approximately 400 to 700 feet northeast, southeast and southwest from the present APE along SR 37 ending at I-69. Please note the maps referencing the APE in Appendix A refer to the two areas where the APE has been expanded for a third time as APE Extension #3.

#### **ELIGIBILITY DETERMINATIONS**

There are no properties currently listed on the National Register of Historic Places (NRHP) within the APE.

#### Properties Eligible for Listing on the NRHP

**Hamilton County Bridge No. 151** – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

No properties within the expanded/revised APE are listed in or recommended eligible for listing in the NRHP.

#### EFFECT FINDING

#### Hamilton County Bridge No. 151 – "No Adverse Effect"

INDOT, acting on the Federal Highway Administration's (FHWA's) behalf, has determined a "No Adverse Effect" finding is appropriate for this undertaking. No new historic properties were identified as a result of the APE expansion. Therefore, the finding remains "No Adverse Effect."

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect for Hamilton County Bridge No. 151 and the project's overall finding.

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

This undertaking will not convert property from Hamilton County Bridge No. 151, a Section 4(f) historic property, to a transportation use beyond its existing role. INDOT determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for Hamilton County Bridge No. 151.

Comments will be accepted for thirty (30) days upon receipt of the findings.

#### Mary E. Kennedy for

Anuradha V. Kumar

Manager, Cultural Resources Office, Environmental Services (for Federal Highway Administration)

February 16, 2018

Approval Date

# FEDERAL HIGHWAY ADMINISTRATION DOCUMENTATION OF SECTION 106 FINDING OF "NO ADVERSE EFFECT" SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER PURSUANT TO 36 CFR 800.5 (c)

SR 37 IMPROVEMENT PROJECT: I-69 TO SR 32 DES. No. 1600540 DHPA No. 19374

#### 1. DESCRIPTION OF THE UNDERTAKING AND MODIFICATIONS

The City of Fishers, with funding from the Federal Highway Administration and administrative oversight from the Indiana Department of Transportation, proposes to proceed with the SR 37 Improvement Project from I-69 to SR 32. The project is in Fishers and Noblesville, Delaware and Noblesville townships, Hamilton County, Indiana (DES 1600540).

The SR 37 Improvement Project is located from I-69 in the City of Fishers (Delaware Township) to SR 32 in the City of Noblesville (Noblesville Township) in Hamilton County. Specifically, the proposed project is located in the Riverwood United States Geological Survey (USGS) Topographic Quadrangle, Sections 31 and 32, Township 19 North, Range 5 East, and Sections 5, 6, 7 and 8, Township 18 North, Range 5 East; Noblesville Quadrangle, Section 18, Township 18 North, Range 5 East; and Fishers Quadrangle, Sections 18, 19, 30 and 31, Township 18 North, Range 5 East and Sections 13, 24 and 25, Township 18 North, Range 4 East. Adjacent land usage is predominantly commercial and industrial with some agricultural and residential. Please see Appendices A, B, and E for maps and photographs of the project area.

This second 800.11(e) Addendum has been prepared due to expansions of the project area.

#### Original Project Description (as described in the original 800.11(e) Documentation dated December 22, 2016)

The proposed project would involve the reconstruction of SR 37 to an expressway with grade-separated interchanges at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 Corridor from I-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st west of SR 37 and one along 141st Street and west of SR 37. The drainage would be conveyed via gravity and outlet to Shoemaker Ditch and Weaver Creek west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. In addition, the roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges is anticipated to occur in at least two phases. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. The majority of the project will take place within the existing SR 37 right-of-way (ROW). The proposed project may require approximately 34 acres of ROW. ROW requirements are currently being refined.

The maintenance of traffic (MOT) will likely include lane restrictions and periodic lane closures; however, SR 37 will not be closed for any significant length of time during construction. If detour routes are needed

for the cross streets during construction, they will be identified during the detailed design phase in order to handle local traffic needing to access and cross SR 37.

#### Proposed Project Changes (as described in the first Addendum to the original 800.11(e) Documentation dated March 13, 2017)

The proposed project includes two changes since the original 800.11(e) documentation dated December 22, 2016. These changes are listed below:

- 1. Proposed Drainage Pipe Installation Along 146th Street Originally the project proposed the installation of a drainage pipe along 141st Street, from SR 37 west to outlet at Weaver Creek. Based on cost estimates and attempts to minimize impacts (in part to a church property and residences), this pipe is now proposed to be installed along 146th Street rather than 141st Street. The pipe installation along 141st Street to Weaver Creek is no longer included in the project. It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street. A pipe, or open ditch, would then outlet from Allisonville Road into the White River. The pipe would be installed using trenchless excavation from SR 37 to Allisonville Road. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400 - 900-foot intervals and sections of pipe will be pushed/pulled into place below-ground via the pits. The portion of the drainage pipe installation west of Allisonville Road will be completed using the open trench method involving an open cut in the ground. The majority of the pipe installation will occur within existing City or County right-of-way but some minor right-of-way or easement acquisition may be necessary. Detention within the pipe will be considered to meet Indiana Department of Transportation (INDOT) detention requirements.
- 2. Detention Basin at Shoemaker Ditch As included in the previous Section 106 consultation, the project includes the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. It may now also include construction of a detention basin, approximately 1 acre in size, prior to out-letting to Shoemaker Ditch. Detention will follow the INDOT requirements for storm water. Construction of this basin will require acquisition of the entire residential parcel at 12825 Lantern Road. The house on this parcel, a ca.-1955 ranch, is currently unoccupied. It received a "Non-contributing" rating during the March 2017 fieldwork.

This first Addendum documentation provided additional information regarding the effects of the revised project scope. The expanded APE in the first Addendum documentation was located west of the previous APE, and included all additional areas where ground disturbance will occur and all areas that have a proximate view of the project. The recommended additions to the APE for this project in the first Addendum were defined as an area extending approximately 0.75 mile west on 146<sup>th</sup> Street from the north-south railroad tracks to the 146<sup>th</sup> bridge over White River, and the parcel at 12825 Lantern Road for possible construction of a detention basin.

#### Proposed Project Changes for this second Addendum to the original 800.11e Documentation

The proposed project includes two additional changes outside the APE since the first Addendum to the 800.11(e) documentation dated March 13, 2017. These changes are listed below:

1) <u>Inclusion of a North Field Detention Basin between SR 37 and the north terminus of North Pointe Boulevard</u> – This added element includes the construction of storm water detention basin within an approximate 16.2 acre area, currently used primarily for agricultural purposes. This drainage basin

seeks to utilize an existing legal drain (McMahon – Overdorff) to direct flow at a decreased velocity into Overdorff Branch, to the White River upstream of any storm water impact with the project's watershed. The exact layout of this detention facility has yet to be determined, and will likely be less than the 16.2 acre footprint. However, the modified APE in this location of the project assumes a depressed basin over the entire 16.2 acres with a likely 6 foot embankment around the basin. Structures adjacent to the south side of the proposed detention basin are part of a "Noncontributing" modern apartment building complex.

2) Extension of Maintenance of Traffic Operations on SR 37 south of 126<sup>th</sup> Street – In order to adequately manage traffic while the proposed 126<sup>th</sup> Street interchange is constructed, a median crossover is required along SR 37 near I-69. This crossover will temporarily shift the two northbound SR 37 lanes to an area immediately adjacent to the two southbound SR 37 lanes. The location of this temporary crossover is approximately 0.4 mile south of 126<sup>th</sup> Street, with the temporary pavement leading to the crossover point extending an additional 350 feet to the south. The preliminary plans for this added median crossover are included in Appendix A. This extension is included within the modified APE.

Please see Appendix A and B for maps and photographs of the two APE expansion areas recommended in this second Addendum to the 800.11(e).

In addition to the two project elements discussed above, design plans for the 141st Street interchange and the 146th Street interchange have been modified since the last update to the 800.11(e) documentation on March 13, 2017. At the time of the previous update, the 141st Street interchange was proposed to be a dual lane roundabout configuration with the grade of SR 37 depressed beneath that of 141st Street. Advancement of the design of this interchange has determined that the roundabout only needs to be a single lane. This change did not substantially affect the right-of-way requirements, as the City still plans to acquire the same amount of land as with the previous design. The interchange at 146th Street was originally proposed to be a multi-lane roundabout with the grade of SR 37 depressed beneath the cross street. Continued evaluation of the projected traffic operations with the proposed roundabout, warranted a revision in interchange type. The 146th Street interchange is now proposed to be a single point urban interchange (SPUI). Neither the change in interchange type at 146th Street nor the reduced lane configuration of the 141st roundabout interchange affected the APE as last delineated in the March 13, 2017 800.11(e) documentation. Conceptual layouts of both interchanges are included in Appendix A of this document.

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

The National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures (State Register), the State Historic Architectural and Archaeological Research Database (SHAARD), and the SHAARD Geographic Information Systems (GIS) were consulted. No resources within the APE were identified as being listed on the NRHP or State Register.

On June 7, 2016 Lochmueller Group historians, Connie J. Ziegler and Gary Francis Quigg, both Qualified Professionals for history and architectural history, conducted a site visit of the APE and documented resources at least 50 years of age, and those that will be 50 years of age at the time of the project letting (i.e., constructed before 1967), within the APE.

The APE was investigated for the existence of any historical properties, structures, objects or districts listed in or eligible for listing in the NRHP. The historians walked and drove the SR 37 corridor within the APE, taking photographs of all resources meriting a Contributing or higher rating. Non-contributing resources or those that did not meet the age requirements were noted but not documented other than in general view photographs. As a result of this field survey and associated documentary research the historians

recommended one property as eligible for listing in the NRHP: Hamilton County Bridge No. 151 (HB-2136/NBI-2900138).

A Historic Property Report (HPR) was completed (Ziegler, July 19, 2016). The summary of the HPR is found in Appendix D. The State Historic Preservation Officer (SHPO) staff responded to the HPR on August 19, 2016 and concurred with the recommendations therein.

An archaeological records review, Phase 1A archaeological reconnaissance, and associated report were completed by Cultural Resources Analysts, Inc. (CRA). The Phase 1A archaeological report (Miller/Harth, August 11, 2016) was transmitted to the SHPO on August 22, 2016. The report concluded that 16 previously unrecorded archaeological sites were located within the project area, but due to low density of cultural material and poor integrity of these sites no further archaeological work was recommended (see the report summary in Appendix D). The SHPO staff concurred with the recommendations of the archaeological report in a letter dated September 9, 2016 and added that if construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined, additional assessment may be required. Copies of all letters referenced can be found in Appendix E.

Early coordination was initiated on June 6, 2016. Below is a list of the organizations invited to participate as consulting parties. The organizations identified in bold print are participating consulting parties.

State Historic Preservation Officer (automatic consulting party)
INDOT Cultural Resources Office (automatic consulting party)
Indiana Landmarks, Central Regional Office
Hamilton County Historical Society/Museum
Fishers Historic Preservation Committee
Noblesville Preservation Alliance
Hamilton County Historian
Hamilton County Genealogical Society
Indianapolis Metropolitan Planning Organization
City of Fishers
City of Noblesville
Hamilton County Board of Commissioners
Hamilton County Highway Department

Subsequent to the submittal of the HPR and Phase 1A archaeological reconnaissance report in 2016, the project footprint changed slightly. The proposed drainage easement along 141<sup>st</sup> Street to the west was extended further towards the west along 141<sup>st</sup> Street towards Allisonville Road. The proposed drainage pipe would outlet further to the west to a wooded ravine east of Allisonville Road, and eventually drain to Weaver Creek.

The APE for aboveground resources was expanded to account for this change. A qualified professional historian from Lochmueller Group reviewed the expanded APE in the field on November 10, 2016. No resources listed on or eligible for the NRHP were identified within the expanded APE. Two Contributing properties were identified with the expanded APE: Lochmueller #4 a c.1940 house and Indiana Historic Sites and Structures Inventory (IHSSI) #057-206-5004, the Spannuth/Weaver Cemetery (CR-29-70) (mapped in SHAARD as east of Allisonville Road). Both properties are located west of Allisonville Road and will not be affected by the drainage easement.

In addition, a Phase 1A archaeological reconnaissance and associated addendum report were completed by CRA for the expanded footprint (Miller/DeBoer, November 16, 2016). No archaeological sites were identified and it was recommended the project be allowed to proceed as planned.

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A letter was sent to the SHPO on November 28, 2016 and email notification was provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts. The SHPO staff responded to the letter on December 16, 2016 and agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report. See Appendix E for Previous Signed Finding and 800.11(e) document.

This proposed drainage easement along 141<sup>st</sup> Street has now been removed from the proposed project and replaced with the APE extension along 146<sup>th</sup> Street discussed below.

### **2017**

Following INDOT's December 27, 2016 signed finding of "No Adverse Effect" for the above project and SHPO's January 20, 2017 (DHPA #19374) concurrence with that finding, the project footprint changed to include the following:

- 1) Drainage Pipe Installation along 146<sup>th</sup> Street--It is anticipated the pipe would be installed south of 146<sup>th</sup> Street from SR 37 to the north/south railroad track. From the railroad track to Allisonville Road, the pipe would be installed on the north side of 146<sup>th</sup> Street and outlet into the White River; and
- 2) Detention Basin at Shoemaker Ditch--As mentioned in the project's original early coordination letter (June 6, 2016), the project includes the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. It may now also include construction of a detention basin prior to out-letting to Shoemaker Ditch. Construction of this basin will require acquisition of the entire residential parcel at 12825 Lantern Road. The house on this parcel, a ca.-1955 ranch, is currently unoccupied. It received a "Non-contributing" rating during the March 2017 fieldwork.

The APE for aboveground resources was expanded to account for the above-described project changes (see Appendices A and B). Qualified professional historians from Lochmueller Group walked/photographed the expanded APE in the field on March 7, 2017. No aboveground resources listed in or eligible for the NRHP were identified within the expanded APE. The following eight properties meriting a Contributing rating were identified with the expanded APE: Lochmueller #1 (8716 146th Street; ca.-1960 ranch); Lochmueller #2 (8725 146th Street; ca.-1965 ranch); Lochmueller #3 (8715 146th Street; ca.-1965 ranch); Lochmueller #4 (14612 Wellington Court; ca.-1960 ranch); Lochmueller #5 (8650 146th Street); Lochmueller #6 (8575 146th Street; ca.-1955 mini ranch); Lochmueller #7 (14541 Allisonville Road (ca.-1950 ranch), and Indiana Historic Sites and Structures Inventory (IHSSI) #057-464-50002 (Farm; 8845 146th St.; ca.-1880 Italianate; included English barn; silo; corncrib; shed; privy). During the March 7, 2017 fieldwork, it was noted that the ca.-1880 Italianate farmhouse and English barn have been extensively altered. Both the farmhouse and barn have been covered in synthetic exterior siding material. A modern wraparound porch has been added to the farmhouse's north, east, and west elevations; in addition, doors and windows on the house appear to be modern replacements. The farmhouse and barn have been physically connected, with the barn's upper floors appearing to have been adapted for residential use with the lower floor altered as garage space. The other structures noted in the IHSSI as part of #50002 have been demolished.

In addition, a Phase 1A archaeological reconnaissance and associated interim report were completed by CRA for the expanded footprint (Joseph Miller, March 10, 2017). Four previously unrecorded archaeological sites (12H1808-12H1811) were recorded. Sites 12H1808 and 12H1810 were isolated prehistoric finds of unknown cultural affiliation. Sites 12H1808-12H1810 are recommended as not eligible

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for inclusion in the NRHP. Site 12H1811 is a prehistoric lithic scatter recovered from the A horizon, as well as feature, contexts. No temporally diagnostic artifacts were recovered during the current survey of this site. However, shovel testing indicated that some portions of the site have high potential for intact subsurface archaeological deposits that could produce significant information pertaining to the prehistory of the region. Therefore the NRHP status of the site could not be assessed during the current survey, and it is recommended that this site be avoided or subjected to further work in the form of a Phase II NRHP evaluation. Also, bucket augering on the narrow White River floodplain indicated that there is low potential for deeply buried archaeological deposits within the survey area, and no deep testing is recommended for the project. Site 12H1811will be clearly marked on the design plans and avoided by all project activities. See Appendix C for the archaeological interim report summary.

Following INDOT's March 20, 2017 signed finding of "No Adverse Effect" for the Addendum to the original 800.11(e) documentation for the above project changes and SHPO's April 24, 2017 (DHPA #19374) concurrence with that finding, the project footprint changed again to include the following:

- 1) Inclusion of a North Field Detention Basin between SR 37 and the north terminus of North Pointe Boulevard This added element includes the construction of storm water detention basin within an approximate 16.2 acre area, currently used primarily for agricultural purposes. This drainage basin seeks to utilize an existing legal drain (McMahon Overdorff) to direct flow at a decreased velocity into Overdorff Branch, to the White River upstream of any storm water impact with the project's watershed. The exact layout of this detention facility has yet to be determined, and will likely be less than the 16.2 acre footprint. However, the modified APE in this location of the project assumes a depressed basin over the entire 16.2 acres with a likely 6 foot embankment around the basin. Structures adjacent to the south side of the proposed detention basin are part of a "Noncontributing" modern apartment building complex.
- 2) Extension of Maintenance of Traffic Operations on SR 37 south of 126<sup>th</sup> Street In order to adequately manage traffic while the proposed 126<sup>th</sup> Street interchange is constructed, a median crossover is required along SR 37 near I-69. This crossover will temporarily shift the two northbound SR 37 lanes over along the two southbound SR 37 lanes. The location of this temporary crossover is approximately 0.4 mile south of 126<sup>th</sup> Street, with the temporary pavement leading to the crossover point extending an additional 350 feet to the south. The preliminary plans for this added median crossover are included in Appendix A.

The APE for aboveground resources was expanded again to account for the above-described project changes (see maps in Appendix A). A qualified professional historian from Lochmueller Group walked/photographed the expanded APE in the field on October 26, 2017. No aboveground resources listed in or eligible for the NRHP were identified within the expanded APE. No previously inventoried or newly-identified properties meriting a rating of Contributing or higher were recorded within the expanded APE (See photos in Appendix B).

In addition, a Phase 1A archaeological reconnaissance and associated interim report were completed by CRA for the expanded footprint (Michael J. Curran, December 14, 2017). No archaeological sites were located within the expanded footprint survey area. One previously recorded archaeological site (12H736) had been recorded adjacent to the survey area. However, Site 12H736 was determined not eligible for the NRHP and no evidence of the site was found in the survey area. Please note that this most recent archaeological reconnaissance included a number of additional areas beyond the North Pointe Boulevard and SR-37/I-69 APE expansions that were previously surveyed for aboveground resources within the original APE. See Appendix C for the archaeological interim report summary.

### 3. DESCRIBE AFFECTED HISTORIC PROPERTIES

**2016: Hamilton County Bridge No. 151** – This bridge (HB-2136/NBI #2900138) was constructed in 1916 to carry Cumberland Road over Stony Creek. A three-span, reinforced concrete structure, the bridge rests on cut stone abutments repurposed from an earlier bridge and features piers, cutwaters, and deck stringers made of concrete molded to resemble stone. It was determined previously to be eligible for listing on the NRHP under Criterion C for engineering, according to the Mead and Hunt *Indiana Historic Bridge Inventory*. The bridge is also eligible for the NRHP under Criterion A for its association with a transportation route of historic significance.

**2017:** No new historic properties were recorded in the revised/expanded APE areas. Archaeological Site 12H1811 was recommended for further investigation; however, this site will be clearly marked on design plans and avoided by all project activities. Archaeological Site 12H736 is adjacent to the expanded survey area, but does no evidence of this site was found in the survey area and it is not eligible for the NRHP. Neither 12H1811 nor 12H736 will be within the archaeological APE for the project.

### 4. DESCRIBE THE UNDERTAKING'S EFFECT ON HISTORIC PROPERTIES

**2016**: **Hamilton County Bridge No. 151**; **No Adverse Effect**— The proposed undertaking will not encroach upon the bridge. Although the project is within close proximity to Hamilton County Bridge No. 151 (approximately 85 feet to existing SR 37), it is anticipated that there will be no adverse effect on the bridge. The project takes place on a busy, multi-lane highway, and while the SR 37 bridge, which is near the historic bridge, may be widened, if that occurs it will be expanded into the median not toward Bridge No. 151. It is possible that the SR 37 bridge will be replaced, but, if so, a new bridge will remain at or near the existing elevation. Vegetation clearing may be necessary for approximately 10 - 20 feet east of the SR 37 bridge. There will be no direct impact on Bridge No. 151 and the setting of the historic bridge is already altered with the busy, multi-lane modern highway near it. In addition, no official detour would be signed to include the Bridge No. 151 due to its narrow width. In essence, the project creates no greater effect on Hamilton County Bridge No. 151. Please see Appendix E for a conceptual plan sheet of this area.

The project will have no direct impact on the historic bridge other than a viewshed change due to the proposed new construction. The viewshed change will have no impact on any of the characteristics that qualify the bridge for the NRHP and will have No Adverse Effect on Hamilton County Bridge No. 151.

**2017**: No new historic properties were identified in the revised/expanded APE areas.

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

According to 36 CFR 800.5(a)(1) "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."

**Hamilton County Bridge No. 151** -- According to 36 CFR 800.5(a)(1) the criteria of adverse effect do not apply.

Per 800.5(a)(2)(i): "Physical destruction of or damage to all or part of the property" will not occur. The project will not directly affect the bridge. No right-of-way will be required from the bridge. No portion of the bridge or abutments will be directly impacted.

Per 36 CFR 800.5(a)2(ii): the "Alteration of a property, including 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 and/or other applicable guidelines" will not occur. The project will have no direct impact on the bridge.

Per 36 CFR 800.5(a)2(iii): the "Removal of the property from its historic location" will not occur. The project will not remove the bridge from its historic location.

Per 36 CFR 800.5(a)2(iv): a "Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance" will not occur. The project will not cause a change of character to any of the bridge's features. The existing multi-lane SR 37 is already within close proximity to the bridge with minimal secondary tree growth to provide a visual buffer. Although some tree clearing may be necessary, the project will have little permanent impact on the physical features of the bridge's setting.

Per 36 CFR 800.5(a)2(v): the "Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features" will not occur. The project will be visible from the bridge. However, the setting will not be highly altered. Some tree clearing may occur between the two bridges, but much of SR 37 is already visible to Bridge No. 151 when the trees are not leafed out and the SR 37 bridge is visible at all times. Some loss of secondary tree growth will not affect the audible, atmospheric or visual elements of the property setting in the winter months and will likely result in only a slight change when the trees are in leaf.

Per 36 CFR 800.5(a)2(vi): "Neglect of a property which causes its deterioration..." will not occur as a result of the project. The undertaking will not cause the deterioration of any aspect of the property.

Per 36 CFR 800.5(a)2(vii): the "Transfer, lease, or sale of property out of Federal ownership or control..." will not occur. Ownership of the property will not change as a result of this project.

### 6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

An early coordination letter was mailed to consulting parties on June 6, 2016. The HPR (Ziegler, July 19, 2016) was uploaded to IN SCOPE, the Indiana Department of Transportation's website for publicly accessible documents, for review by consulting parties on July 20, 2016. The summary of the HPR is found in Appendix E.

The SHPO staff responded to the HPR in a letter dated August 19, 2016. The letter stated "Based on the information included in the historic property report ("HPR"), we agree that Hamilton County Bridge No. 151 (National Bridge Inventory No. 2900138) is eligible for inclusion in the National Register of Historic Places under criteria A and C and that this bridge is the only above-ground property identified within the area of potential effects that would be eligible for the National Register. Bridge No. 151 also was rated Select in INDOT's Indiana Historic Bridge Inventory. Based on your description of the project and on photographs included in the HPR, it does not appear that the SR 37 Corridor Project would adversely affect Bridge No. 151."

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A letter was sent to the SHPO on November 28, 2016 and email notification provided to consulting parties on November 30, 2016 describing the changes in the project footprint and additional investigation efforts.

Indiana Landmarks responded to this letter in an email dated December 5, 2016. They requested clarification regarding the expanded footprint and questioned whether the SR 37 drainage easement expansion would have an effect on the possible future expansion of Allisonville Road. Specifically they asked, "If the drainage pipe from SR 37 will now outlet into a wooded ravine on the east side of Allisonville Road at 141st Street, will future expansions of Allisonville Road require water from that thoroughfare to drain to the west instead, in order to avoid overwhelming the ravine to the east? If so, could there be adverse effects on either of the two properties in question?"

Lochmueller Group responded to Indiana Landmarks in an email dated December 19, 2016. Project designers reviewed the area near Allisonville Road and 141st Street and it is not anticipated that the outlet water from SR 37 will impact drainage on future Allisonville Road projects. Allisonville Road currently uses roadside ditches for the surface water, which are independent from the wooded ravine. Any future expansion would involve either relocating these roadside ditches or the introduction of a storm sewer system. SR 37 will also utilize detention to reduce impacts to the ravine and Weaver Creek. Indiana Landmarks responded in an email dated December 19, 2016 indicating they do not object to a finding of "No Adverse Effect."

The SHPO staff responded to the letter describing the project footprint changes on December 16, 2016 and agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP. The SHPO staff also concurred with the conclusions and recommendations in the Phase 1A archaeological reconnaissance addendum report.

A finding of "No Adverse Effect" was signed by INDOT, on behalf of FHWA, on December 27, 2016 and transmitted to consulting parties. A Public Notice of the FHWA finding of "No Adverse Effect" was published in the *Indianapolis Star* and *The Times* in Noblesville on December 30, 2016. A 30-day comment period was given, and no comments were received.

All of the correspondence detailed above may be found in Appendix E.

### **2017**

On January 20, 2017, the SHPO staff sent a letter stating, in part, "We concur with INDOT's December 27, 2016, Section 106 finding, on behalf of FHWA, of "No Adverse Effect" for this federal undertaking as a whole. We also concur that the only historic property identified within this project's area of potential effects – the 1916, three-span, reinforced concrete Hamilton County Bridge No. 151 – will not be adversely affected by this project."

Due to changes in the project scope and location since the original Section 106 finding of "No Adverse Effect" was signed on December 27, 2016, an Addendum to the Section 106 800.11(e) documentation was prepared reaffirming the original finding of "No Adverse Effect." This second finding (dated March 13, 2017) was signed by INDOT, on behalf of FHWA, on March 20, 2017, and transmitted to consulting parties on March 22, 2017.

On April 20, 2017, Indiana Landmarks sent an email with an attached letter in response to the (first) Addendum to the 800.11e (March 13, 2017). The email requested information on how the changes in the project scope, specifically the placement of underground drainage pipes in two areas west of SR 37

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Des. No. 1600540 et. al.

(between 126<sup>th</sup> and 131<sup>st</sup> streets and along 146<sup>th</sup> Street), would affect the Nickel Plate Railroad should the railroad be determined potentially eligible for the National Register.

On April 21, 2017, Lochmueller Group responded to Indiana Landmarks stating, in part, "The drainage pipes will be installed under the railroad using trenchless excavation. Trenchless excavation involves installing the pipe without long, open cuts in the ground. Receiving pits, approximately 20 feet long by 15 feet wide, will be excavated at approximately 400-900 feet intervals and sections of pipe will be pushed/pulled into place below ground via the pits. Because the pipes will be installed under the ground, using trenchless technology, we don't believe there will be any adverse impacts to the railroad even if it was eligible for the National Register."

Indiana Landmarks responded in an email dated April 21, 2017, stating, in part, "We expected that the Nickel Plate Railroad would probably be left undisturbed through the trenchless excavation process, but just wanted to make sure it did not coincide with the location of any receiving pits. We are pleased to hear that there will be no damage to the rails."

On April 24, 2017, the SHPO staff sent a letter in response to the (first) Addendum to the 800.11(e) (March 13, 2017). The letter agreed that there are no aboveground properties within the expanded APE listed in or eligible for the NRHP, and concurred with the conclusions and recommendations in the second Phase 1A archaeological reconnaissance addendum report. The letter further stated, "Therefore, we concur with INDOT's March 20, 2017 finding on behalf of the Federal Highway Administration of "No Adverse Effect."

All of the 2017 correspondence detailed above may be found in Appendix D. No other consulting party comments were received.

Because no new resources in the APE expansion areas are recommended NRHP-eligible—and Archaeological Sites 12H1811 and 12H736 will be avoided by all project activities—the previous findings for the project of "No Adverse Effect" remain valid. A 30-day comment period will be given to all consulting parties. This document will be revised, if necessary, after the comment period to reflect any comments received. Because the effect finding for the project did not change, no new public notice is required.

### **APPENDICES**

- A Maps & Current Conceptual Layouts
- B Photographs of Additional Area of Potential Effects (APE #3) for second Addendum to the 800.11(e)
- C Phase 1a Archaeological Survey Interim Report Summary (Addendum #3)
- D Consulting Parties Correspondence Following the first Addendum to the 800.11(e)
- E Previous Section 106 Findings/800.11e Documentation (Original and first Addendum to the 800.11(e))

Appendices have been removed to reduce file size, but may be accessed via IN SCOPE

### The Indianapolis Star

130 South Meridian Street Indianapolis, IN 46225 Marion County, Indiana

Federal Id: 06-1032273

LOCHMUELLER GROUP

Account #: INI-48319 Order #:0001825808 Total Amount of Claim:\$17.33

Please Mail Payments To: The Indianapolis Star - 130 South Meridian Street - Indianapolis, IN 46225

LOCHMUELLER GROUP ATTN Christine Scherl 3502 WOODVIEW TRCE STE 150 INDIANAPOLIS, IN 46268

## PUBLISHER'S AFFIDAVIT

STATE OF INDIANA, County Of Marion

Personally appeared before me, a notary public in and for said county and state, the undersigned

I, being duly sworn, say that I am a clerk for THE INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 times., the dates of publication being as follows:

The insertion being on the

12/30/2016

Newspaper has a website and this public notice was posted in the same day as it was published in the newspaper.

Pursuant to the provisions and penalties of Ch. 155, Acts 1953,

I benefy certify that the foregoing account is just and correct, shat the amount claimed is legally due, after allowing all just

game has been paid.

-30 20 16 THE Clerk

Subscribed and sworn to before me this 29 day of December, 2016

Des. No. 1600540 et. al.

Attachment 2

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### **Public Notice**

The Federal Highway Administration (FHWA) and City of Fishers propose to proceed with the SR 37 Improvement Project from I-69 to SR 32. The project is in Fishers and Noblesville, Delaware and Noblesville Townships, Hamilton County, Indiana (DES 1600540). Adjacent land usage is predominantly commercial and industrial with some agricultural and residential properties.

The proposed project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32, It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 corridor from I-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st west of SR 37 and one along 141st Street and west of SR 37. The drainage would be conveyed via gravity and outlet to streams west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. The roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32.

One resource, Hamilton County Bridge No. 151, was determined to be eligible for listing on the National Register of Historic Places (National Register) and is located near the project area. The proposed action will not adversely impact Hamilton County Bridge No. 151. In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on historic resources as per 36 CFR 800.2(d), 800.3(e), 800.3(g), and 800.6(a)(4).

Pursuant to 36 CFR 800.6(a)(4), the documentation specified in 36 CFR 800.11(d) is available for inspection in Lochmueller Group's Indianapolis office and can be viewed electronically by via INDOT's Section 106 document posting website IN SCOPE at http://erms.indot.in.gov/Section106Documents/. This documentation serves as the basis for the FHWA's "No Adverse Affect" finding. Please reply with any comments no later than January 29, 2017 to the contact listed below.

Gary Francis Quigg Historian-Archaeologist/Section 106 Specialist Lochmueller Group, Inc. 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268 317.222.3880 gquigg@lochgroup.com

In accordance with the "Americans with Disabilities Act", if you have a disability for which the City of Fishers needs to provide accessibility to the document(s) such as interpreters or readers, please contact Caleb Gutshall at (317) 595-3126 or at gutshallc@fishers.in.us

(LJC-12/30/16-0001825808)

### PUBLISHER'S AFFIDAVIT

State of Indiana )
) ss
Hamilton County )

Personally appeared before me, a notary public in and for said county and state, the undersigned Tim Timmons who, being duly sworn, says that he is Publisher of The Times newspaper of general circulation printed and published in the English language in the city of Noblesville in state and county afore-said, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time(s), the date(s) of publication being as follows:

### 12/30/2016

The Times as

Subscribed and sworn to before me this Friday, December 30, 2016.

Notary Public

My commission expires: 05/28/2020

Jennifer Louise May Resident of Marion County

Publisher's Fee: \$40.77



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#### **Public Notice**

The Federal Highway Administration (FHWA) and City of Fishers propose to proceed with the SR 37 Improvement Project from I-69 to SR 32. The project is in Fishers and Noblesville, Delaware and Noblesville Townships, Hamilton County, Indiana (DES 1600540). Adjacent land usage is predominantly commercial and industrial with some agricultural and residential properties.

The proposed project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. The traffic signal at the intersection of SR 32/38 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 corridor from 1-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st west of SR 37 and one along 141st Street and west of SR 37. The drainage would be conveyed via gravity and outlet to streams west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. The roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges at 126th Street, 131st Street, 141st Street, 146th Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32.

One resource, Hamilton County Bridge No. 151, was determined to be eligible for listing on the National Register of Historic Places (National Register) and is located near the project area. The proposed action will not adversely impact Hamilton County Bridge No. 151. In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on historic resources as per 36 CFR 800.2(d), 800.3(e), 800.3(g), and 800.6(a)(4).

Pursuant to 36 CFR 800.6(a)(4), the documentation specified in 36 CFR

Pursuant to 36 CFR 800.6(a)(4), the documentation specified in 36 CFR 800.11(d) is available for inspection in Lochmueller Group's Indianapolis office and can be viewed electronically by via INDOT's Section 106 document posting website IN SCOPE at http://erms.indot.in.gov/Section106Documents/. This documentation serves as the basis for the FHWA's "No Adverse Affect" finding. Please reply with any comments no later than January 29, 2017 to the contact listed below.

Gary Francis Quigg
Historian-Archaeologist/Section 106 Specialist
Lochmueller Group, Inc.
3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268
317.222.3880
gquigg@lochgroup.com

In accordance with the "Americans with Disabilities Act", if you have a disability for which the City of Fishers needs to provide accessibility to the document(s) such as interpreters or readers, please contact Caleb Gutshall at (317) 595-3126 or at gutshallc@fishers.in.us

TL11471 12/30 1t hspaxlp

# Attachment 3 Section 4(f) De Minimis Documentation



January 19, 2017

Kia Gillette Lochmueller Group, Inc. 3502 Woodview Trace; Suite 150 Indianapolis, Indiana 46268

RE: Section 4(f) *De Minimis* Finding
Designation (DES) Number: 1600540
SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana
City of Fishers Existing & Planned Trails

Dear Ms. Gillette,

The City of Fishers has received your letter and attached materials dated January 18, 2017 regarding the SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana (DES Number: 1600540). The project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135<sup>th</sup> Street. After review of the materials, the City of Fishers agrees that use of the recreational trails listed in Table 1 of your letter dated January 18, 2017 would qualify as a *de minimis* finding. The City of Fishers concurs that the use of the property would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Sincerely,

**CITY OF FISHERS** 

Jason M. Taylor, P.E.

Assistant Director of Engineering

cc: Jeff Hill, Director of Engineer: City of Fishers

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O @fishersin

One Municipal Drive

Fishers, Indiana 46038



Department of Engineering

January 20, 2017

Kia Gillette Lochmueller Group, Inc. 3502 Woodview Trace; Suite 150 Indianapolis, Indiana 46268

RE: Section 4(f) Temporary Occupancy
Designation (DES) Number: 1600540
SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana
City of Noblesville Existing & Planned Trails

Dear Ms. Gillette,

The City of Noblesville has received your letter and attached materials dated January 20, 2017 regarding the SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana (DES Number: 1600540). The project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. After review of the materials, the City of Noblesville agrees that use of the recreational trails listed in Table 1 of your letter dated January 20, 2017 would qualify as a de minimis finding. The City of Noblesville concurs that the use of the property would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Sincerely,

John Beery, PE, PTOE, PT City of Noblesville

City Engineer

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### **Public Notice**

FHWA, INDOT, City of Fishers, City of Noblesville, and Hamilton County propose to proceed with the SR 37 Improvement Project (Des. Nos. 1600540, 1601831, 1601829, 1601827, 1601830, 1592345, 1592348, 1601826, 1601828, 1592346, 1592347, 1592349, 1602229, 1602231) located in Fishers and Noblesville, Hamilton County, Indiana. The City of Fishers is the lead agency sponsoring the project. The project is located on SR 37, approximately 2,034 feet south of the SR 37/126<sup>th</sup> Street intersection in Fishers to approximately 1,875 feet north of the SR 37/SR 32 intersection in Noblesville, for a length of approximately six miles. Specifically, the project is located within Delaware and Noblesville Townships; Fishers, McCordsville, Noblesville, and Riverwood U.S. Geological Survey (USGS) Quadrangles; Sections 31 and 32, Township 19 North, Range 5 East; Sections 5, 6, 7 and 8, Township 18 North, Range 5 East; Sections 18, 19, 30 and 31, Township 18 North, Range 5 East; and Sections 24 and 25, Township 18 North, Range 4 East. Adjacent land usage is predominantly commercial and industrial with some agricultural and residential.

The proposed project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135<sup>th</sup> Street. The traffic signal at the intersection of SR 32 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The environmental document will be completed for the SR 37 corridor from approximately I-69 to SR 32. There are two proposed drainage easements included in the project: one approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 and one along 141<sup>st</sup> Street and west of SR 37. The drainage would be conveyed via gravity and outlet to streams west of SR 37. Trenchless excavation would be used with holes excavated for the receiving pits. Building removal is not anticipated as part of the pipe installation. The roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and cyclist traffic. Construction of the interchanges at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street will occur prior to those at Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32.

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Kia Gillette
Environmental Manager
Lochmueller Group
3502 Woodview Trace, Suite 150
Indianapolis, Indiana 46268
317.222.3880
kgillette@lochgroup.com

### The Indianapolis Star

130 South Meridian Street Indianapolis, IN 46225 Marion County, Indiana

Federal Id: 06-1032273

### LOCHMUELLER GROUP

Account #:tNI-61279 Order #:0001678062 Total Amount of Claim:5102.06

Please Mail Payments To: The Indianapolis Star - 130 South Meridian Street - Indianapolis, IN 46225

LOCHMUELLER GROUP ATTN Jane Wilder 5200 VOGEL RD EVANSVILLE, IN 47715

RECEIVED

JAN 2 6 2017

### PUBLISHER'S AFFIDAVIT

**EVANSVILLE** 

STATE OF INDIANA, County Of Marion

ss {

Personally appeared before me, a notary public in and for said county and state, the undersigned

I, being duly sworn, say that I am a clerk for THE INDIANAPOLIS NEWSPAPERS a DAILY STAR newspaper of general circulation printed and published in the English language in the city of INDIANAPOLIS in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 times., the dates of publication being as follows:

The insertion being on the

01/24/2017

Newspaper has a website and this public notice was posted in the same day as it was published in the newspaper.

Fursuant to the provisions and penalties of Ch. 155, Acts 1951.

I hersby certify that the foregoing account it just and correct, that the amount claimed is legally due, after allowing all just

cross to and that no part of the same has been paid

1-74 17 000

Subscribed and sworn to before me this 24 day of January, 2017

reotary Public

July 08, 2017

YAGER

DIANES.

Form (Rev. )	Prescribed by State Board of Accounts (002)	General Form No. 99P	
-	(Governmental Linit)	To INDIANAPOLIS STAR	
_	County, Indiana	Indianapolis, IN	
	PU	BLISHER'S CLAIM	
COM	PUTATION OF CHARGES		
		88 lines, 2 columns wide equals 176 equivalent lines at 50.58 per line # 1 days,	\$102.08
		Website Publication	50
Act # (NI-612) Ad #: 0001878		Charge for proof(s) of publication	\$2.00
		TOTAL AMOUNT OF CLAIM	5107.09
	FOR COMPUTING COST Width of single column 9.5 ams Number of insertions § lise of type <u>7 point</u>		
laim No	Warrant No	I have examined the within claim and hereby	
	IN FAVOR OF	certify	
	The Indianapolis Star	as follows:	
	Indianapolis, IN Marion County	That it is in proper form.	
130	5. Meridian St. Indianapolis, IN 46225		
		This it is duly authenticated as required by law.	
	5	That it is based upon statutory authority.	
	On Account of Appropriation For	That it is apparently (correct)	
	FED. ID	management (incorrect)	
	#06-1032273		
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certify that ti	he within claim is true and correct, that the		
	in itemized and for which charge is made were		
	and were necessary to the public business.		
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### PUBLIC NOTICE

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> Kia Gillette Environmental Manager Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268 317.222.3880 kgillette@lochgroup.com

(S - 1/24/17 - 0001878062)



April 11, 2017

Kia Gillette Lochmueller Group, Inc. 3502 Woodview Trace; Suite 150 Indianapolis, Indiana 46268

RE: Section 4(f) *De Minimis* Finding
Designation (DES) Number: 1600540
SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana City of Fishers Existing & Planned Trails and Revised Project Limits

Dear Ms. Gillette,

The City of Fishers has received your letter and attached materials dated April 11, 2017 regarding the SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana (DES Number: 1600540) and changes to the proposed project. The project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135<sup>th</sup> Street. After review of the materials, the City of Fishers agrees that use of the recreational trails listed in Table 1 of your letter dated April 11, 2017 would qualify as a *de minimis* finding. The City of Fishers concurs that the use of the property would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Sincerely,

Jason Taylor
City of Fishers
Assistant Director of Engineering



April 14, 2017

Kia Gillette Lochmueller Group, Inc. 3502 Woodview Trace; Suite 150 Indianapolis, Indiana 46268

RE: Section 4(f) De Minimis Finding
Designation (DES) Number: 1600540
SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana
City of Noblesville Existing & Planned Trails and Revised Project Limits

Dear Ms. Gillette,

The City of Noblesville has received your letter and attached materials dated April 11, 2017 regarding the SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana (DES Number: 1600540) and changes to the proposed project. The project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135th Street. After review of the materials, the City of Noblesville agrees that use of the recreational trails listed in Table 1 of your letter dated April 11, 2017 would qualify as a *de minimis* finding. The City of Noblesville concurs that the use of the property would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Sincerely,

John Beery City of Noblesville City Engineer

Ph: (317) 776-6330, jbeery@noblesville.in.us

5:\Capital Projects\SR 37\Section 4(f) De Minimix Finding, SR 37 Train, 4-14-17.dutx

16 South 10th Street, STE 155, Noblesville, Indiana | P: 317-776-6330 F: 317.776-6322 | cityofnoblesville.org

Des. No. 1600540 et. al. Attachment 3 Page 8



### HIGHWAY DEPARTMENT

Bradley Davis, P.E. - Director Joel Thurman, P.E. - Acting County Engineer Bob Davis - Superintendent

April 11, 2017

Kia Gillette Lochmueller Group, Inc. 3502 Woodview Trace; Suite 150 Indianapolis, Indiana 46268

RE: Section 4(f) De Minimis Finding

Designation (DES) Number: 1600540

SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana

Hamilton County Existing & Planned Trails and Revised Project Limits

Dear Ms. Gillette,

The Hamilton County Highway Department has received your letter and attached materials dated April 11, 2017 regarding the SR 37 Improvement Project in Fishers and Noblesville, Hamilton County, Indiana (DES Number: 1600540) and changes to the proposed project. The project would involve the reconstruction of SR 37 to an expressway with grade separated interchanges (roundabouts) at 126<sup>th</sup> Street, 131<sup>st</sup> Street, 141<sup>st</sup> Street, 146<sup>th</sup> Street, Greenfield Avenue, Town & Country Boulevard, Pleasant Street and SR 32. It would provide right in/right out access at 135<sup>th</sup> Street. After review of the materials, the Hamilton County Highway Department agrees that use of the recreational trails listed in Table 1 of your letter dated April 11, 2017 would qualify as a *de minimis* finding. The Hamilton County Highway Department concurs that the use of the property would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Sincerely,

Bradley Davis Director

Des. No. 1600540 et. al. Attachment 3 Page 9

### **Public Notice**

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There have been two recent changes to the project. Originally the project proposed the installation of a drainage pipe along 141<sup>st</sup> Street. This has been removed from the project and a drainage pipe will now be installed along 146<sup>th</sup> Street. The drainage would be conveyed via gravity and outlet to the White River. Trenchless excavation would be used with holes excavated for the receiving pits from SR 37 to approximately Allisonville Road. A pipe, or open ditch, would then outlet to the White River. The project originally included the installation of a drainage pipe approximately midway between 126<sup>th</sup> and 131<sup>st</sup> west of SR 37 to Shoemaker Ditch. The second project change is the possible construction of a detention basin, approximately 1 acre in size, prior to out letting to Shoemaker Ditch.

There are several existing and planned recreational trails maintained and owned by the Cities of Fishers and Noblesville along the SR 37 corridor; as such, impacts to this resource are subject to evaluation under Section 4(f) of the Department of Transportation (DOT) Act of 1966. Minor right-of-way acquisition and reconstruction of the existing trails within the construction limits of the SR 37 Improvement Project new project areas will occur. In addition, pedestrian and bicycle connectivity will be provided across SR 37 as part of the interchanges listed above.

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Kia Gillette Environmental Manager Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268 317.222.3880 kgillette@lochgroup.com The Indianapolis Star

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LOCHMUELLER GROUP

Please Mail Payorenis To: The Indianspolis Star - 150 South Meridian Street - Indianspolis, th 46225

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Page 11

STATE OF INDIANA,

County Of Marion

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Attachment 3

### **Public Notice**

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Nia Gille te Environmental Mairager Lochtweller Group 0502 Weodview Trace Suite 150 Indianapo si India la 46268 on 4,222 16880 kg Jetusiji ochgloup com

(S - 38887 7 - 00020224 is)

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### **PUBLIC NOTICES**

NOTICE TO BIDDERS
CITY OF CARMEL

Notice is hereby given that the Board of Public Works and Safety for the City of Carmel,
Hamilton County, IN, will receive sealed bids for Department of Engineering vehicles during
regular business hours, up to, but not later than 10:00 A.M. local time, , at the office of the
Clerk-Treasurer, One Civic Square, 3rd Floor, Carmel, IN, 46032, for the following items:
2 (Two) New 2017 Hybrid System or Flex Fuel System Four Door, Four
Wheel Drive SUVs, Cloth Upholstery, Bluetooth hands-free
Connectivity. Exterior: White, Splash Guards, Rear Cargo Tray Anti
Slip Mats

Shp Mats 2 (Two) New 2017 Hybrid System Small to Mid-Size, FWD/AWD, Four Door Vehicles, Cloth Upholstery, Bluetooth hands-free connectivity. Exterior: White, Splash Guards A split bid will not be accepted. Vehicles to be traded

Three (3) 2008 Ford Escape Hybrids
One (1) 2008 Toyota Prius

Vehicles for trade may be examined at One Civic Square, Carmel, IN 46032

Please contact: Lisa Stewart, Department of Community Services, One Civic Square, Carmel, IN 46032 317-571-2418.

Please contact: Lisa stewart, Department of Community Services, One Civic Square, Carmel, IN 46032 317-571-2418.

Commencing as soon as practicable thereafter during the Board of Public Works Meeting on the same date. Such bids will be publicly opened and read aloud in the Council Chambers of City Hall. No late bids will be accepted. General Form No. 96 must be completed and filed as a part of the bid package. All bids are to be sealed with the words "BID – DOCS VEHICLES" on the lower left hand corner of the envelope. Bids will be opened and read aloud at 10:00 a.m. on, at the Board of Public Works and Safety meeting on the 2nd floor of Carmel City Hall, One Civic Square, Carmel, IN. All persons interested in bidding shall register a contact name and address with the Department of Community Services to ensure that all changes or questions and answers are available for review by all interested parties.

The specifications are set forth in detailed documents on file at the Carmel Department of Community Services, One Civic Square, Carmel, IN, 46032.

Questions regarding this solicitation must be written and delivered to the Carmel Department of Community Services to confirm whether any such written questions and/or responses exist. The submitted proposal must be in compliance with IC 36-1-9 et seq. The Board of Public Works and Safety reserves the right to reject any and all bids.

Christine Pauley, Clerk-Treasurer

TL11903 <u>3/27 1t hspaxlp</u>

Public Notice

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Kia Gillett

Environmental Manage Lochmueller Group 3502 Woodview Trace, Suite 150 Indianapolis, Indiana 46268 317.222.3880 kgillette@lochgroup.com TL11904 3/27 1t hspaxlp

### **Obituary deadline**

The Times publishes obituaries daily at www. thetimes24-7.com, and in its print product every day with the exception of Sundays and Tuesdays.

A photo may be included and should be sent as a highresolution JPEG. Daily obituary deadline is 4 p.m. for the following

day's print publication. To read more obituaries, visit www.thetimes24-7.com.

## Local life. Thanks for reading The Times

### **PUBLIC NOTICES**

COUNTY OF HAMILTON )

SS:

COUNTY OF HAMILTON )

F. THOMAS POTTRATZ, DECEASED

NOTICE OF UNSUPERVISED ADMINISTRATION

Notice is hereby given that on March 20, 2017, Michael J. Pottrat: was appointed as personal representative of the estate of F. Thomas Pottratz, Occased, who died on February 11, 2017, without leaving a will. The estate will be administered without Court Supervision.

All persons having claims against said estate, whether or not now due, must file the claim in the office of the Clerk of this Court within three (3) months from the date of the first publication of this notice, or within nine (9) months after the decedent's death, whichever is earlier, on the claims will be forever barred.

Dated this March 20, 2017.

Clerk of the Hamilton Superior Cour

MaryEllen K. Bishop Cohen Garelick & Glazier Attorney No. 4080-49 1888 Keystone Crossing, Suite 800 ndianapolis, Indiana 46240 317) 573-8888 317) 574-3855 (fax) narybishop@cgglawfirm.com

TL11901 3/27 4/3 2t hspaxlp

DOCUMENT 00 11 13 NOTICE TO BIDDERS

Project & Location: Sand Creek Intermediate School 11550 E 131st St, Fishers, IN 46038

Owner & Location: Hamilton Southeastern Schools (Administration Building) 13485 Cumberland Rd, Fishers, IN 46038

Bid Date & Time: Bid Date & Time:

Hamilton Southeastern Schools will receive sealed Bids until 1:00 PM. local time on April 18th, 2017 (at the Hamilton Southeastern Schools Administration Building, address above), for the replacement of sections of roofing at Sand Creek Intermediate School as detailed in the Contract

All Bids received at such place, date and time will be publicly opened and read aloud. Bids received after such time will be returned to the respective

Pre-Bid Meeting: Pre-Bid Meeting:

A Mandatory Pre-bid Conference will be held on April 11th, 2017 @ 10:00 am at the Sand Creek Intermediate School Building, (address listed above), for the purpose of reviewing the scope of work, project specifications and drawings, bid documents, bidder qualifying requirements and a tour of all proposed roof areas.

Questions regarding the project will be clarified by the Consultant listed below. Project Manuals/ Bid Documents shall be available on or after April 11th and may be obtained with a refundable deposit of \$50.00 at the location listed below, or may also be obtained at the Mandatory Pre-Bid Meeting.

Moisture Management 9855 Crosspoint Blvd. - Suite 100 Indianapolis, Indiana 46256 (317) 577-0910

(317) \$77-0910

Bidding Instructions and Information:
Bids shall be properly and completely executed on Indiana State Board of Accounts, Form 96, Revised 2013. Bidders shall also complete the Supplementary Bid Forms (including the the contract documents). Submit all original Bid Information and two (2) complete copies. Complete the entire Bid Form(s), including the Non-Collusion Affidavit, and the Bidders Financial Statement information as part of Indiana Form 96.
Bidders are required to include a Bid Bond or certified check in the amount of 10% of their Bid Price. Bidder receiving awards shall be required to provide acceptable surety in form of a Performance Bond and Labor and Materials Payment Bond in the amount of 100% of the contract. Include the cost of all bonds and insurance in the bid amount.
Each bid must be accompanied by a signed and completed Non-Discrimination Affidavi

Each bid must be accompanied by a signed and completed Non-Discrimination Affidavi or MBE-1) in accordance with any applicable Minority Business Participation Policy and

Kuies.

Each bid envelope shall be individually marked "Roofing Bid": Hamilton Southeastern Schools, (Sand Creek Intermediate School Re-Roof) Attention: Mr. Bill Taylor. The name of the Roofing Contractor and the Project Name shall be clearly indicated. Bids are to be in effect for 60 days.

Project Description:
Partial re-roof of Sand Creek Intermediate School as indicated in the Construction
Occuments. The contract will be awarded to the best responsible qualified bidder(s). Faxed bids

will not be accepted.

Construction Schedules:
Work under these contracts can commence upon May 26th, 2017. Timely completion of the work specified is an essential condition of this contract. Work is to be completed by Hamilton Southeastern Schools reserves the right to reject any and all bids; is not obligated to accept the lowest or any other Bid; and may waive any formalities in bidding procedure. Hamilton Southeastern Schools does not discriminate on the basis of race, color, religion, gender, national origin age, or individuals with disabilities, including limited English proficiency, in its programs or employment policies as required by the Indiana Civil Rights Act (I.C. 22-9.1), Title VI and VII (Civil Rights Act of 1964), the Equal Pay Act of 1973, Title IX (Educational Amendments), and Section 504 (Rehabilitation Act of 1973).

Date: Monday, March 27th, 2017
Monday, April 3rd, 2017
By: Harry Delks, Bill Taylor & Board of Trustees, Hamilton Southeastern Schools

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## The Times **Your Local News Source** TheTimes24-7.com

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## THE LOCKHORNS



WE CAN'T EVEN KEEP UP WITH THE JONESES, AND THEY'RE LIVING OFF THE GRID."

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**Your Local News Source** TheTimes24-7.com

## TODAY'S MIX-UP

can be found in the Mix-Up. They may be written forward, backward, or even diagonally. The solution will be in the next edition of *the times*.

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## SOLUTION TO PREVIOUS PUZZLE

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## **SUDOKU**

Sudoku is a number-placing puzzle based on a 9x9 grid with several given numbers. The object is to place the numbers 1 to 9 in the empty squares so that each row, each column and each 3x3 box contains the same number only once. The difficulty level of the Conceptis Sudoku increases from Monday to Saturday

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### **PUBLIC NOTICES**

City Releases Combined Sewer Overflow (CSO) Information

The City of Noblesville is a Combined Sewer Community, which means that some of the sewers in the older part of the City transport both storm and sanitary wastewater to the treatment plant. During rain events, the capacity of the lines transporting this liquid to the treatment plant may be exceeded. Overflow points exist to allow the system to relieve the excess flow to a receiving stream. It is discharge into a receiving stream is combination of the storm and sanitary flow. The Utility has placed signs at each of the eight (8) outfall structures where the combined waste flow is discharged to a receiving stream. It is important that when you see water coming out of these structures, you stay out of the water. There is a risk of becoming sick if you come into contact with his water.

The probability of the combined sewer system having an overflow from one of our eight (8) outfall structures is high during a 0.25 inch rainfall within a 15 minute period. It is advisable that you do not wade in the streams during these times. If you have any questions or would like to be notified about CSO events, please contact Noblesville Utilities at cso\_notification@noblesville.in.us or at (317) 776-6353 ext. 3106

NOTICE OF PUBLIC HEARING
TRAFFIC SCHEDULE AMEADMENT
On March, 27 2017, the Fishers Board of Public Works and Safety passed Resolution R032717
at a duly noticed public meeting at the Fishers City Hall, One Municipal Drive, Fishers, Indiana
46038, at 4:00 p.m. The following resolution was presented for adoption into the City of Fisher.

Traffic Code:

A RESOLUTION OF THE CITY OF FISHERS TO AMEND SCHEDULE III. "SPEED LIMITS" OF THE FISHERS TRAFFIC CODE (TITLE VII)

Speed Limits Amendment: Chapter 74: Traffic Schedules – Schedule III. "Speed Limits" of the Fishers Traffic Code is hereby amended as attached. Such amendments are permitted by duly adopted resolution of the City Council under Fishers City Code § 71.16 "ESTABLISHMENT OF SPEED LIMITS ON CERTAIN STREETS".

EXHIBIT A: The list of speed limits in this exhibit will be added in the City of Fishers Traffic Schedule

CHAPTER 74, SCHEDULE III "EXHIBIT A" – ADDITIONS Subdivision Name Speed Limit Speed Limit Five Parkway to Cumberland Road until

construction complete, then 40

SECTION 00 11 13
NOTICE TO BIDDERS

Notice is hereby given that Hamilton Heights School Corporation, by and through its Board is requesting sealed bids for furnishing all labor, materials, tools, equipment and transportation necessary for the Hamilton Heights Primary School and Elementary School Roofing Project (the "Project").

The sealed bids will be received until Thursday, April 6, 2017, at 4:00 p.m. (EST). Bids shall be delivered to:

Ms. Peggy Jackson, Associate Superintendent Hamilton Heights School Corporation
410 W. Main Street
Arcadia, Indiana 46030
Bids will be opened and read aloud in public at the address listed above immediately after the posted time. All bid packages received after the above time shall be returned unopened.

after the posted time. All bid packages received after the above time shall be returned unopened.

All work for the complete construction of the project shall be performed under one or more prime contracts with the Owner. The form of the contract is set forth in the Bidding Documents. Two copies of bid forms shall be submitted on forms provided in the project manual, and shall be executed in accordance with the current edition of the Indiana Board of Accounts Form 96 - "Contractor's Bid for Public Works", with a financial statement complying with Section III of Form 96, and a satisfactory Bid Bond or certified check pursuant to LC. 36-1-12-4.5, payable to the Hamilton Heights School Corporation. Bid Security shall be in the amount of not less than 10% of the total base bid price. Should a successful Bidder withdraw their Bid, fail to provide the required payment and performance bonds, or execute the contract, the Owner may then declare the Bid security forfeited as liquidated damages.

Wage rates shall not apply to this Project. All Contractors and Sub-Contractors shall comply with the provisions of LC. 5-16-13 et seq. as detailed in the front ends. Contractor must be qualified pursuant to LC. 5-16-13-10(c).

The bidding documents for the Project, including the Plans and Specification are on file with the Owner and may be examined at the following locations:

1. Bidtool: (800) 652-0008, www.bidtool.net.

2. Builders Exchange – Indiana: 1028 Shelby St., Indianapolis, IN
46203. (317) 423-7080. www.bxindiana.com.

3. Construction Market Data: (800) 330-8629. www.cmdgroup.com.

4. Dodge Data & Analytics: (877) 784-9556. www.dodgeprojects.

3. Construction Market Data: (800) 330-8629. www.cmdgroup.com.
4. Dodge Data & Analytics: (877) 784-9556. www.dodgeprojects.
construction.com.
5. ISQFT: (317) 248-1293. www.isqft.com.
Copies of the Bidding Documents may be obtained from Eastern Engineering Supply, Inc., 9901 Allisonville Road, Fishers, IN, (317) 598-0661, www.easternengineering.com.
Costs associated with digital and printed plans and specifications secured through Eastern Engineering Supply Inc. are to be incurred by the bidding contractor and are non-refundable. Prior to execution of the Contract, the Contractor(s) receiving the contract shall furnish an approved Performance and Payment Bond in the amount of 100% of the contract shall furnish an approved Performance and Payment Bonds shall remain in full force and effect for a period of one year after the Owner's final settlement with the successful Bidder.
The Owner expects to award the Contract(s) for the Work to the lowest, responsible and responsive Bidder(s). The Owner reserves the right to hold bids, including any alternates, for up to 60 days from the date of the bid opening. The Owner reserves in its sole discretion the right to reject any and all bids, and to waive any irregularities, discrepancies, omissions, variances or informalities in the bids.

A pre-bid meeting for discussion of the Project, the bidding requirements and other important matters will be held on meeting will be held at Hamilton Heights Primary School, 25350 S.R. 19 Arcadia, Indiana 46030 on Thursday, March 23, 2017 at 4:00 p.m. (EST). The meeting will be held at the Hamilton Heights Primary School Media Center. Please enter at the main entrance and check in at the Main Office. Immediately following the pre-bid meeting, an opportunity to tour the project site will be offered. All prospective bidders are encouraged to attend this meeting. Bidders will be responsible for items discussed at the meeting.

Questions, or requests for equal status, shall be directed in writing (via email) to:

Stuart M. Godfrey, Project A

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Never miss a public notice on legal proceedings! After it prints in your local newspaper, it goes online:

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## Thanks for reading The Times

Page 14

Des. No. 1600540 et. al.

All obituaries must come from a funeral home.

Local news. Local sports.

Below the puzzle is a list of words that **By THOMAS JOSEPH** 

Garden Compost Lawnmower Weeds

Attachment 3

# Attachment 4 Public Hearing Materials:

Notice of Public Hearing
Publisher's Affidavit
Sign In Sheet
PowerPoint Presentation
Information Packet

Public Hearing Presentation Summary and Public Comment Transcript

Letters and E-mails Received from Public Hearing Reponses to Comments

December 11, 2017 Public Information Meeting (PowerPoint Presentation, Sign-In Sheet, and Minutes) Property Owner Coordination Memo

### LEGAL NOTICE OF PUBLIC HEARING

The City of Fishers, City of Noblesville, Hamilton County, Federal Highway Administration (FHWA), and Indiana Department of Transportation (INDOT) propose to proceed with the SR 37 improvement project located on SR 37 from I-69 to SR 32 in Noblesville and Delaware Townships, Hamilton County, Indiana (DES Number 1600540). The purpose of this project is to reduce congestion and improve safety along this stretch of SR 37.

A public hearing regarding this project will be held on Tuesday, May 16, 2017 at Fishers High School, 13000 Promise Road, Fishers Indiana, 46038. Doors will open at 5:30 p.m. with the Public Hearing beginning at 6:00 p.m. and ending at 8:00 p.m. The purpose of this hearing is to inform the community of the project scope and schedule, describe preliminary design plans, solicit input and comments from the community and address any questions or concerns.

The proposed SR 37 improvement project would involve the reconstruction of SR 37 to an expressway with grade-separated, dual-lane teardrop roundabout interchanges at 126th Street, 131st Street, 141st Street, 146th Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street and SR 32. The project would provide right in/right out access at 135th Street. SR 37 would be depressed under the roundabout interchanges and reconstructed with two 12-foot wide travel lanes, 10-foot wide outside shoulder, and 2.7-foot wide inside shoulder in each direction. The traffic signal at the intersection of SR 32 and Cumberland Road in Noblesville is also anticipated to be upgraded as part of the project. The project would also include construction of a storm sewer trunk line and inlets to collect water in the depressed areas of SR 37. Two drainage pipes would be installed as part of the project: one drainage pipe would be located approximately midway between 126th and 131st Streets west of SR 37 and one drainage pipe would be located along 146th Street and west of SR 37. The drainage would outlet to Shoemaker Ditch and the White River north of 146th Street and west of SR 37. A detention basin, approximately one acre in size, may be constructed for the drainage midway between 126th and 131st Streets prior to the outlet to Shoemaker Ditch. A storm sewer system would be installed along the intersecting roads to connect to existing and/or proposed storm sewer systems.

Total project length is approximately 6 miles. Construction of the project would require approximately 42 acres of new permanent right-of-way, 1 acre of temporary right-of-way and 2.2 acres of permanent easement (for drainage). Two residential relocations would be required; however, no business relocations are anticipated. Construction is anticipated to begin in the fall of 2018. The proposed project would maintain two lanes of traffic in each direction along SR 37 during construction, with some detours of the intersecting roads during interchange construction. The FHWA and INDOT have agreed the project falls within the guidelines of an Environmental Assessment (EA) document, which is an environmental document prepared for projects of this level of scope and impact. Project related information can be found at the following website: <a href="http://www.fishers.in.us/SR37improvements">http://www.fishers.in.us/SR37improvements</a>.

Preliminary design plans and the environmental document are available for review at the following locations:

- 1. City of Fishers City Hall, 1 Municipal Drive, Fishers, Indiana 46038, Phone (317) 595-3111 (8:30 a.m. to 4:30 p.m.)
- 2. Hamilton East Public Library, Five Municipal Drive, Fishers, Indiana 46038, Phone (317) 579-0300 (9:00 a.m. to 5:30 p.m.)
- 3. Lochmueller Group Incorporated, 3502 Woodview Trace, Suite 150, Indianapolis, Indiana 46268, Phone (317) 222-3880 (8:30 a.m. to 4:30 p.m.)

4. RQAW Corporation, 10401 N. Meridian Street, Suite 401, Indianapolis, Indiana 46290, Phone (317) 815-7200 (8:30 a.m. to 4:30 p.m.)

Public comments are being sought with regard to this proposed project. Should you wish to submit comments regarding this project please send to: Troy Woodruff, RQAW Corporation, 10401 N. Meridian Street, Suite 401, Indianapolis, Indiana 46290, or at <a href="twoodruff@rqaw.com">twoodruff@rqaw.com</a>.

The project sponsors respectfully request that public comments be submitted by May 31, 2017, for inclusion into the public record for this project. Public comments will be reviewed, evaluated and receive consideration as part of the decision making process.

In accordance with the "Americans with Disabilities Act," if you have a disability in which the City of Fishers needs to provide accessibility to the above documents and/or participation during the public hearing, such as interpreters or readers, please contact Tami Houston at (317) 595-3412 or at <a href="https://houstonto.com/houston-tami-

This notice is published in compliance with the (1) Code of Federal Regulations (CFR), Title 23, Section 771 (CFR 771.111(h)(1) stating, "Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program;" (2) 23 CFR 450.210(a)(1)(ix) stating, "Provide for the periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all interested parties and revise the process, as appropriate;" and (3) Approved by the Federal Highway Administration and Indiana Department of Transportation on August 16, 2012.

### The Indianapolis Star

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ROAW CORPORATION

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Des. No. 1600540 et. al. Attachment 4 Page 3

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- Hamilton Fast Public I brary, Five Municipal Drive, I shers, Indiana 66938, Phone (317) 579-6300 (9:00 amilto 5:50 pists)
   Lochmueller Group Incorporated, 3502 Woodview Trace.
- Bochmueller Group Incorporated, 3302 Woodview Trace. Suite 350, Indianapolis, Incliana 48268, Phone (317) 222-3886 (8:30 a.m. to 4:30 a.m.)
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## SR 37 Improvements Project Environmental Public Hearing Tuesday, May 16, 2017 Fishers High School

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# SR 37 Improvements Project Environmental Public Hearing Tuesday, May 16, 2017 Fishers High School

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#### 5R 37 Improvements Project Environmental Public Hearing Tuesday, May 16, 2017 Fishers High School

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#### SR 37 Improvements Project Environmental Public Hearing Tuesday, May 16, 2017 Fishers High School

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## SR 37 Improvements Project Environmental Public Hearing Tuesday, May 16, 2017

Fishers High Schoot

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#### Welcome

- Meeting Format
- Purpose of Meeting
- Informal Q & A in project display area with project engineers and project officials
- Information Packet

W/A037

#### Introductions

- Introduction of Project Officials
  - · City of Fishers
  - City of Noblesville
  - Hamilton County
- Design Consultant Team
- Recognition of Elected Public Officials

INVAP37

#### **Public Hearing**

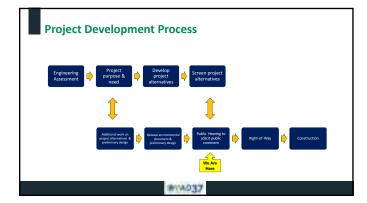
- Legal Notice of Public Hearing was published in the Indianapolis Star on the following dates:
  - Monday, May 1, 2017
  - Monday, May 8, 2017
- Copies of the legal notice were mailed to property owners and project stakeholders on project mailing list
- Announcements were posted to the SR 37 website
- Project mailing list will be updated following the public hearing, please sign in during the hearing
- Project documents available for viewing at local repositories

WYA037

#### Purpose of the Hearing

- Introduce this project to the community
- Discuss purpose and need for project
- Present a preliminary proposal for consideration
- Solicit input from the community
- Discuss public involvement for project
- Address questions & concerns

W/A037





#### **PURPOSE & NEED**

#### **PURPOSE: Reduce Congestion**

 Eliminate existing and forecasted congestion at the eight signalized intersections on SR 37 between 126<sup>th</sup> Street and SR 32.

#### **NEED: Congestion**

- Under existing conditions (2010), 3 of the 8 intersections operate at substandard LOS in the PM peak period. 6 of the 8 intersections have at least one leg operating at substandard LOS in the PM peak period.
- In the forecast year (2036) 7 of the 8 intersections are forecasted to operate at LOS F in the PM peak period; the 8th intersection is forecasted to operate at LOS E.

W/A037

#### **PROJECT DESCRIPTION**

- Reconstruct SR 37 to expressway with grade separated interchanges (roundabouts) at: 126<sup>th</sup> St., 131<sup>st</sup> St., 141<sup>st</sup> St., 146<sup>th</sup> St., Greenfield Ave., Town & Country Blvd., Pleasant St. and SR 32
- Right in/right out access at 135th St.
- + 2 Drainage easements: 1  $^{\sim}$  midway between 126th St. & 131st St. and 1 along 146th St. both west of SR 37
- Interchanges will include sidewalks and crosswalks for pedestrians and cyclists
- Construction of the 126th St., 131st St., 141st St., 146th St. prior to the northern 4

W/A037

#### **PREFERRED ALTERNATIVE**

- Reconstruction of SR 37 to an expressway
- Grade-separate, dual lane teardrop roundabout interchanges
- $\bullet$  SR 37 will be depressed under the round about interchanges

WYA037

#### **PREFERRED ALTERNATIVE**

- SR 37 Mainline
  - · Four 12-foot-wide travel lanes, 2 in each direction
  - 10-foot-wide outside shoulder, 2.7-foot-wide inside shoulder
  - 26.5-foot-wide grass median with roll curb
  - Retaining walls used within depressed sections
  - No additional travel lanes will be added

INVAD37

#### **PREFERRED ALTERNATIVE**

- Intersecting Roadways
  - 12-foot-wide travel lanes
  - Curb and gutter
  - 8-foot-wide multi-use path constructed on both sides of roadway
  - Crosswalks will be installed to allow pedestrian and cyclist traffic across SR 37
  - Lighting will be installed at the new roundabout interchanges

WYA037

# ROADWAY TYPICAL SECTION

#### PREFERRED ALTERNATIVE

- Storm sewer trunk lines and inlets will be used to collect water in depressed areas of SR 37
- Two proposed installation locations
  - One drainage easement approximately midway between 126th and 131st Streets west of SR 37
  - One pipe installation within existing and proposed right-of-way along 146th Street and west of SR 37.
- Drainage will be conveyed via gravity and outlet to Shoemaker Ditch and the White River

W/A037



# DRAINAGE - North Corridor 146% St Away Burgary Barrier Barri

#### MAINTENANCE OF TRAFFIC (MOT)

- Will construct 2 interchanges per year
  - 2019 131st and 141st Street
  - 2020 126<sup>th</sup>, 135<sup>th</sup>, and 146<sup>th</sup> Street
- Anticipate similar phasing for each interchange
- SR 37 will maintain 2 travel lanes in both North and South directions
- Drainage trunk line will begin construction in 2018

W/A037

#### **MAINTENANCE OF TRAFFIC (MOT)**

- Initial Phases
- $\bullet$  Full access maintained at existing intersection
- Traffic Maintained on existing pavement during
  - Shoulder Widening
  - Median Widening
  - Median Crossovers

WAD37

#### **MAINTENANCE OF TRAFFIC (MOT)**

- Main Construction Phase 1
- All SR 37 traffic shifted to one existing side
- Right-in/Right-out maintained in select locations
- Some movements will be restricted (i.e. across SR 37)
- Construct opposite half of the interchange

WYAD33

3

#### **MAINTENANCE OF TRAFFIC (MOT)**

- Main Construction Phase 2
- All SR 37 traffic shifted to new proposed pavement
- One direction of travel may use the new ramps
- Right-in/Right-out maintained in select locations
- Some movements will be restricted (i.e. across SR 37)
- Construct remaining half of the interchange

W/A037

#### MAINTENANCE OF TRAFFIC (MOT)

- Final Phases
- SR 37 thru traffic in final configuration
- Some traffic movement restrictions in place, vary by location
- Construction will consist of finishing details and final clean up

W/A037

#### **OTHER ALTERNATES STUDIED**

- 1. No-Build Alternative
  - · Does not meet the purpose and need.
- 2. Tight Diamond Interchanges
  - Grade separated interchanges with signals
  - Meets purpose and need
  - Does not improve Level of Service compared to preferred alternative

WYA037

#### **OTHER ALTERNATES STUDIED**

- 3. At-Grade Roundabout
  - · Roundabout intersection instead of interchange
  - Combined volumes in the corridor exceed roundabout capacity
- 4. Improvements to Existing Signalized Intersections
  - Require additional turn lanes and adjusted signal timing
  - Does not fully satisfy purpose and need
  - Does not address safety concerns with accidents and pedestrian movements across corridor

W/A037

#### **OTHER ALTERNATES STUDIED**

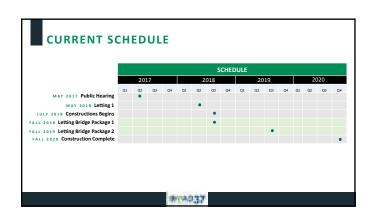
- 5. SR 37 Elevated and At-Grade Interchanges
  - SR 37 over cross streets
  - Visual barrier between east and west sides
  - Would not promote improved connectivity
- 6. Wetland Avoidance Alternative
  - Several wetlands present within side ditches along SR 37
  - Avoidance requires additional right-of-way impacts over preferred alternative

WYA037

#### **OTHER ALTERNATES STUDIED**

- 7. Drainage Pipe Installation Along 141st Street
  - Initial location of northern drainage outlet
  - Has increased impacts over current location at 146<sup>th</sup> Street

**WYAD3** 



## Requirement of the National Environmental Policy Act (NEPA) Environmental Assessment (EA) EA Approved by INDOT & FHWA on April 28, 2017 EA is + 850 pages Discusses Preferred Alternative and environmental impacts

WYA037



- 2 residential relocations
- 41.89 acres of permanent right-of-way acquisition
  - 28.6 acres of commercial
  - 6.9 acres of forest
  - 4.2 acres residential
  - 1.2 acres agricultural
  - <1 acre wetlands, open water, religious, and library
- 1.11 acres of temporary right-of-way (commercial)
- 2.16 acres of drainage easement (commercial, residential, & forest)

W/A037

#### **Natural Resource Impacts**

- 1,128 linear feet to 7 streams
- 0.748 acres to 17 wetlands
- 6.9 acres of forest
- Not Likely to Adversely Affect federally listed species (2 bats and 1 bee)
- Possible impacts to Britton Branch, Shoemaker Ditch, White River, Stony Creek and UNT 2 to Stony Creek 100year floodplains
- Stream & wetland mitigation may be required

W/A037



5

#### **Cultural Resource Impacts**



- Resources on or eligible for the National Register of Historic Places
- Hamilton County Bridge No. 151 Eligible for the National Register
- No Adverse Effect to Bridge No.
- 21 archaeological sites 1 eligible for the National Register – site will be avoided

WYA037

#### **Hazardous Materials**

- Phase I Environmental Site Assessment (ESA) completed for corridor
- Possible hazardous material sites identified
- Additional sampling recommended for 12 locations
- May require disposal at a special landfill during construction

WYAD33

#### **Noise Impacts**

- · Noise analysis completed
- Impacts if noise approaches or exceeds the Noise Abatement Criteria (NAC)
- 54 receptors with noise impacts
  - 43 residences
  - 2 daycare locations, 1 church, & 1 outdoor recreation area
  - · 7 commercial businesses
- Sound barriers investigated at 7 locations

WYA037

#### **Noise Impacts**

- Sound barriers must be both feasible based on performance and engineering considerations <u>and</u> reasonable based on cost considerations and views of residents/property owners
- 2 sound barrier locations were considered both feasible and reasonable
  - Sunlake Apartments
  - · Woods of Britton Apartments
- Asking for public input for those benefited by the 2 sound barriers

WYA937

#### **Real Estate Acquisition Process**





W/A037

#### **Real Estate Acquisition Process**

- "Uniform Act" of 1970
  - All federal, state, and local governments must comply
  - Requires an offer for just compensation
- Acquisition Process
  - Appraisals
  - Review Appraisals
  - Negotiations

WYA037

#### We Would Like to Hear From You

- Talk with project team members
- Comment sheet in information packet
- E-mail or Mail comments to RQAW Corporation
- Visit SR 37 website at: http://www.driveSR37.com
- All comments are very much appreciated and will be given full consideration by project team

WYA037

#### **Project Resource Locations**

- City of Fishers City Hall, 1 Municipal Drive, Fishers, Indiana 46038, Phone (317) 595-3111 (8:30 a.m. to 4:30 p.m.)
- Hamilton East Public Library, Five Municipal Drive, Fishers, Indiana 46038, Phone (317) 579-0300 (9:00 a.m. to 5:30 p.m.)
- RQAW Corporation, 10401 N. Meridian Street, Suite 401, Indianapolis, Indiana 46290, Phone (317) 815-7200 (8:30 a.m. to 4:30 p.m.)

WYAD33

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#### **Public Comment**

- You can fill out the public comment form and return it to one of the project representatives
- You can mail/email your comment to RQAW as indicated on the comment form
- Or you can participate in this Public Comment Session to have your comment recorded for the official hearing transcript
- Please note that your comment will be addressed in the Final Environmental Document

Questions/Comments?

W/A037

#### Thank You

- Thank you for your attendance this evening
- Project Open House
  - Project maps, plans, displays and project officials for informal Q&A
     A special thanks to Fishers High School

W/A937



Tuesday, May 16, 2017

Dear Local Resident, Concerned Citizen, and Elected Public Official:

Welcome to the SR 37 Public Hearing for the proposed roadway/intersection improvement project on SR 37 in the Cities of Fishers and Noblesville, Hamilton County. The project includes SR 37 and intersections at the following roads: 126th Street, 131st Street, 135th Street, 141st Street, 146th Street, Greenfield Avenue, Town and Country Boulevard, Pleasant Street, and SR 32. The project limits along SR 37 extend from approximately 2,034 feet south of the SR 37/126th Street intersection to approximately 1,875 feet north of the SR 37/SR 32 intersection, for a length of approximately six miles. There are two proposed drainage easements included in the project: one approximately midway between 126th and 131st Streets, west of SR 37 for a length of approximately 2,667 feet and one along 146th Street and west of SR 37, for a length of approximately 5,310 feet.

The purpose of this public hearing is to offer all interested persons an opportunity to meet with project officials, review the project proposal including environmental document and preliminary design plans, and provide input and public comment regarding the proposal.

There are several ways your comments may be presented this evening. You may submit comments in the following manner:

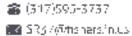
- 1. Complete one of the comment forms and return it to any of the SR 37 project officials attending the public hearing. Comment forms are attached to this page and additional forms are available at the sign-in table.
- 2. Mail your comments to RQAW Corporation Attn: Troy Woodruff, 10401 N Meridian St; Ste 401, Indianapolis, Indiana 46290; Phone (317) 815-7200 (8:30 a.m. to 4:30 p.m.) The SR 37 project officials respectfully requests comments be submitted by Wednesday, May 31, 2017.
- 3. Participate during the Public Comment Session and have your comments recorded for inclusion into the official hearings transcript / public record.
- 4. Comments may be emailed to RQAW Corporation at: <a href="mailto:Twoodruff@RQAW.com">Twoodruff@RQAW.com</a>

All public comments submitted during the comment session or during the public comment period will be included in the official hearing transcript (public record) and will be reviewed, evaluated and given full consideration by SR 37 project officials during the decision making process. The SR 37 project officials sincerely appreciates your attendance this evening.

Thank you for attending this public hearing for the proposed SR 37 project. Please submit comments by using the space provided below. The SR 37 project officials appreciates your attendance and participation this evening. The SR 37 project officials respectfully requests comments be submitted by Wednesday, May 31, 2017 for inclusion into the official hearings transcript / public record.



TODAY'S DATE: Tuesday, May 16, 2017		
COMMENT:		
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SIGNATURE:		
PRINTED NAME:		
ADDRESS:		
CITY, STATE, ZIP:		





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## SR 37 Public Hearing Presentation Summary and Public Comment Transcript

Fishers High School 13000 Promise Road Fishers, IN 46038

May 16, 2017

#### **Public Hearing Presentation Summary**

#### **Project Representatives**

Troy Woodruff – RQAW
Randall Brooks – RQAW
Joe Dabkowski – RQAW
Aaron Lawson – RQAW
Jeff Hill – City of Fishers
Jason Taylor – City of Fishers
Kia Gillette – Lochmueller Group
Daniel Townsend – Lochmueller Group
Eric Farny – Structurepoint
Mike McBride – Structurepoint
Hatem Mekky – Structurepoint
Jeromy Richardson -United

The public hearing began at approximately 6:30 with Troy welcoming the guests. Troy discussed the following.

- Meeting format
- · Purpose of the meeting
- Informal question and answer in project display area with project engineers and officials
- Information packets for public comment submittal

Troy introduced the project officials and design consultant team and recognized the elected public officials.

Troy informed the attendees of the published legal notice in the Indianapolis Star newspaper and copies of the legal notices were mail to the property owners and project stakeholders.

Troy also indicated that the announcement was posted on the SR 37 website and project documents were made available for viewing at Fishers City Hall, RQAW, and Hamilton East Public Library.

Troy then discussed the purpose of the hearing.

- Introduce this project to the community
- Purpose and Need
- Present a preliminary proposal for consideration
- Solicit input from the community

- Discuss public involvement for the project
- Address questions and concerns

Troy then discussed the project development process and where the project stands within this process.

Troy then turned over the presentation to Eric Farny. Eric discussed the project area and limits of the project. Eric then discussed the purposed and need of the project.

- Purpose: Reduce congestion
- Need: Congestion

Eric then discussed the project description that included the depressed interchanges, right in/right out locations, roundabout configurations, drainage easements, and pedestrian facilities.

Eric then discussed the preferred alternative.

- Reconstruct SR 37 to an expressway
- Grade separated dual lane teardrop roundabout interchanges
- Depressed SR 37 under interchanges
- SR 37 mainline configuration
- Intersecting roadway configuration
- Drainage line easements

Eric discussed the maintenance of traffic for the project. Eric indicated the project will construct two interchanges per year while SR 37 will maintain two travel lanes in both north and south directions.

Eric indicated that the drainage line construction will begin construction in 2018.

Eric discussed the phases of maintenance of traffic during construction.

Eric discussed the other alternatives that were considered for the project.

Eric discussed the project schedule and where we are at in the schedule.

Eric then turned over the presentation to Kia Gillette.

Kia discussed the environmental document requirements. Kia indicated that this project is an environmental assessment or EA document. Kia discussed the following.

- Community impacts
- · Natural resource impacts
- Cultural resource impacts
- Hazardous materials
- Noise impacts

Kia then turned the presentation back over to Troy.

Troy informed the attendees of the real estate acquisition process and the information booklets that are available.

Troy then informed the attendees where they can access the project documents and explained how the public can submit formal comments. Troy then turned over the hearing for public comment.

#### **Public Comment Transcript**

The following represents the verbatim transcript of the questions/comments and responses orally delivered at the Public Hearing.

Question 1: Well our question is about Shoemaker Ditch – it can't handle what it's got now what are we looking at there I mean we are looking to dump more water in there now, it covers the sidewalks when it rains a lot, it's a its got a problem. I don't know.. I can't understand by look at that where it's going...it looks like it's going to dump it right there at that at that pumping station or whatever that is there. So that's where it's going to go?

Troy: Well, ok umm we are going to be able to take your question down and I think the question you are asking is the current amount of water, just so I have it clear for the record, current amount of water you're saying that comes in there is already at a high level. When we take the water in are we going to increase the size of this level of water?

Question 1: What are we going to do..obviously we are going to put more water in there, and right now its backing up the water we already got and it covers the sidewalk with a good rain. What we are wondering is are we going to straighten that out or are we going...what are we going to do when we put more water in there?

Troy: OK, so your comment is what will we do with Shoemaker Ditch when we put additional water in there.

Question 1: Yeah, Shoemaker Ditch can't handle what it's got now, so we are just wondering how we are going to handle when we put more water from 37 in there?

Question 2: You talked about putting in sound barriers uuhh behind Sunlake apartments and uhhh North Britton apartments I believe it was, umm ok, that's south of 146 street but then starting in 2021 you are going to be doing work north of 146 street for those interchanges. Umm what about the Wellington Northeast neighborhood that goes up against SR 37 do you intend to put sound barriers there or not? That's my questions.



#### REMAIN CORPORATION

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#### CERTIFIED MAIL RETURN RECEIPT REQUESTED 7014 3490 0000 7520 2387

May 8, 2017

Mr. Troy Woodruff ROAW Corporation 10401 N. Meridian Street, Suite 401 Indianapolis, IN 46290

Re: SR 37 Improvement Project

Dear Mr. Woodruff.

Thank you for meeting with me last week to discuss the proposed SR 37 Improvement. Project and its impact on our shopping center, The Shoppes at 141st Street (Incated at the southeast comer of SR 37 & 141st Street).

As a follow-up to that meeting and in response to the Legal Notice of Public Hearing we received regarding the project we offer the following comments to be submitted for the record.

While we understand Hamilton County's desire to improve traffic flow along the SR 37 corridor, the design as proposed will cause in eparable harm to a number of the areas. businesses and property owners. The modifications are especially burdensome to The Shoppes at 141st Street and other properties immediately adjacent to the proposed rounda-bouts. As we discussed, property owners at those intersections made major investments in the Fishers & Noblesville communities because those properties benefitted from the exposure they had to commuters travelling on SR 37. In fact, those property owners paid top dollar because of that exposure. The SR 37 improvements as proposed eliminate that visibility entirely as commuters passing in front of those properties will see nothing but concrete walls from the depressed roadway.

In addition to this loss of visibility, the proposed median on 141st Street drastically. impacts traffic flow to and from our property. It eliminates the cross connection to the shopping center on the north side of the street, eliminates the left-hand (westbound) movement exiting our main entrance and eliminates access to eastbound traffic at our main entrance.

While the current trend in Hamilton County is to follow Carmel's lead and change signalized intersections to round-a-bouts, it's not always the solution to solving traffic congestion, especially in those areas already established as commercial coundors. The impacts to the business community and tax base associated therewith could be catastrophic as retail business fail and shopping centers with poor visibility and access sit vacant.

You need look no further than the area around Merchants Square in Carmel (116th & Keystone Avenue) to see the negative impact similar modifications have had on adjoining retail properties. Prominent retailers and restaurants that were originally attracted to that corner have been replaced with second tier operators, including a church that now occupies what was a retail anchor space on the southwest corner of that intersection.

Round-a-bouts can be designed to have minimal impacts when they are incorporated into the design of a <u>new</u> road. In those cases access points to adjoining properties can be incorporated into the design and visibility impacts can be taken into account on the front end of development, insuring buildings are positioned with frontage to the appropriate roadways. Conversely, converting existing signalized intersections in major commercial corridors where development already exists damages the viability of those commercial properties unless access and viability can be maintained at its currently existing level, which in this case it cannot.

The round-a-bout design also exacerbates the financial stress put on property owners and their tenants during the construction phase by requiring long periods of limited or reduced access while the bridges are constructed. You estimated there would be no east and west access across SR 37 on 141st Street for at least 6 consecutive months and during that time there would be a three month period when not even right-in/ right-out access to and from SR 37 could be made. If in fact this project moves forward as currently designed, many of the existing businesses will not survive the existruction phase. These massive periods of roud clusure will not be required if alternative designs are utilized to improve the intersection, designs that don't include depressing the road and adding bridges.

Lastly, we are concerned about the additional R.O.W. that may be taken to accommodate the round-a-bout design. Any taking that results in a diminution of purking will further during the property even if the taking is limited to the outlots in front of our shopping center. A reduction in parking on the outlots will transfer additional cars to the shopping center lot.

Based on the above, we believe that the currently proposed round-a-bout design will be detrimental to our property and many others along the corridor. We believe an alternative design with grade level improvements should be considered as that type of design will improve traffic flow without the negative long term impacts associated with the round-a-bout design. It an alternative design will not be considered it is imperative that everything possible is done to eliminate each of the issues addressed herein or you will jeopardize the success of the business along the corridor as well as the county's tax base.

Please contact me if you have any questions or wish to discuss any of these issue further.

Sincerely.

David A. Cheslyn

Executive Vice President

Leasing, Development & Real Estate Sales

Gompany

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Mr. Troy Woodruff RQAW Corporation 10401 N. Meridian Street, Suite 401

Indianapolis, IN 46290

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Des. No. 1600540 et. al.

Attachment 4

#### Gillette, Kia

**From:** Troy Woodruff <twoodruff@RQAW.com>

**Sent:** Tuesday, May 16, 2017 11:07 AM **To:** Joseph Dabkowski; Gillette, Kia

**Cc:** Jeff Hill; Jason Taylor

**Subject:** Fwd: SR37 Improvement Project -- public comments

Submitted questions for tonight's hearing. Troy

Sent from my iPhone

Begin forwarded message:

From: "mbs" < mbs6560@comcast.net>

To: "Troy Woodruff" <twoodruff@RQAW.com>

Cc: "loretta101@comcast.net" < loretta101@comcast.net>
Subject: SR37 Improvement Project -- public comments

Dear Mr. Woodruff:

We are unable to attend this evening's Public Hearing on the SR37 Project but we do have three questions we would like to pose.

1: Traffic diversion from SR37 between 126<sup>th</sup> St. and 131<sup>st</sup> St. over to Lantern Rd. raises concerns for Lantern Rd. At that location, Lantern is very narrow with no shoulders. It is subject to repeated potholes which, whenever they are repaired, seem to reappear in short order. Are there plans to improve Lantern Rd. before putting this additional traffic load, bound to include heavy trucks, onto it? (Incidentally, we would object to any alteration involving the removal of trees, particularly along the west edge of the road.)

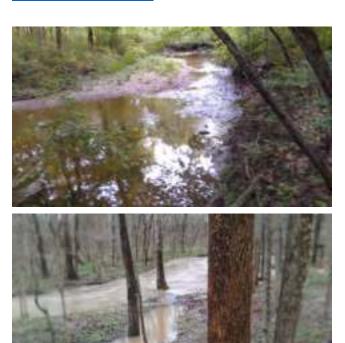
- 2: Shoe Overlook Drive is a short, dead-end street off of Lantern Rd. between 126<sup>th</sup> St. and 131<sup>st</sup> St. Residents of this street have no other means of ingress or egress from their neighborhood. Even now, it is difficult to turn north (left) on Lantern from Shoe Overlook during morning and afternoon busy hours. It will probably become impossible to do so with the addition of traffic diverted from SR37, and it may even be quite challenging to turn south (right). Are any temporary traffic control measures included for this intersection (Shoe Overlook Drive and Lantern Road) during the project?
- 3: Storm drainage from SR37 is planned to outlet at least in part to Shoemaker Ditch. The latest documentation we have seen states that a "detention basin . . . may [emphasis added] be constructed". Attached are two photos of Shoemaker Ditch, one at normal levels and one after heavy—but not unusual or torrential—rain. We have often seen the creek as depicted in the 2<sup>nd</sup> photo and have seen it even higher on rarer occasions. If the detention basin is not to be built, what other method might be employed to prevent serious flooding of Shoemaker Ditch? When will a final solution to potential flooding be identified and added to the Project Plan?

Thank you for your attention to these questions. We look forward to hearing further information as the project planning progresses.

Sincerely yours,

Michael and Loretta Scherperel 8365 Shoe Overlook Dr. Fishers IN 46038

317-436-8992 mbs6560@comcast.net



#### Gillette, Kia

From: Taylor, Jason <taylorjm@fishers.in.us>
Sent: Tuesday, May 23, 2017 11:45 AM

**To:** Troy Woodruff; Hill, Jeff; Randall Brooks; jdabkowski@rqaw.com

Cc: Gillette, Kia

**Subject:** Fwd: SR 37 Improvement Project April 18 meeting

See below.

Jason

Begin forwarded message:

From: Catherine Newman < <a href="mailto:catherine.newman003@gmail.com">catherine.newman003@gmail.com</a>>

**Date:** May 23, 2017 at 11:43:57 AM EDT

To: SR37@fishers.in.us

**Subject: SR 37 Improvement Project April 18 meeting** 

\*\*\*This email message is from an EXTERNAL SENDER. Please exercise increased caution.\*\*\*

\*\*\*DO NOT OPEN attachments or click links from unknown senders or unexpected email messages.\*\*\*

Dear SR 37 Improvement Team,

I am writing to ask if I might be able to receive a copy of the meeting materials from the April 18 meeting at the Delaware Township Event Center. I was unable to attend the meeting and noticed that the materials have not yet been uploaded to the SR 37 website.

Thank you, Catherine Newman

#### Gillette, Kia

From: Troy Woodruff <twoodruff@RQAW.com>
Sent: Wednesday, May 17, 2017 9:23 AM

To: mbs

Cc: loretta101@comcast.net; Jeff Hill; Jason Taylor; Joseph Dabkowski; Gillette, Kia; Farny,

Eric; Steve Fehribach; Randall Brooks

**Subject:** Re: SR37 Improvement Project -- public comments

Michael sorry you couldn't attend the hearing last night. Thank you for your questions. I wanted to let you know your comments have been received and responses to all questions will be provided after the public comment period (May 31) and posted to the website. Thank you, Troy

**From:** mbs <mbs6560@comcast.net> **Date:** Tuesday, May 16, 2017 at 10:48 AM **To:** Troy Woodruff <twoodruff@RQAW.com>

**Cc:** "loretta101@comcast.net" <loretta101@comcast.net> **Subject:** SR37 Improvement Project -- public comments

Dear Mr. Woodruff:

We are unable to attend this evening's Public Hearing on the SR37 Project but we do have three questions we would like to pose.

- 1: Traffic diversion from SR37 between 126<sup>th</sup> St. and 131<sup>st</sup> St. over to Lantern Rd. raises concerns for Lantern Rd. At that location, Lantern is very narrow with no shoulders. It is subject to repeated potholes which, whenever they are repaired, seem to reappear in short order. Are there plans to improve Lantern Rd. before putting this additional traffic load, bound to include heavy trucks, onto it? (Incidentally, we would object to any alteration involving the removal of trees, particularly along the west edge of the road.)
- 2: Shoe Overlook Drive is a short, dead-end street off of Lantern Rd. between 126<sup>th</sup> St. and 131<sup>st</sup> St. Residents of this street have no other means of ingress or egress from their neighborhood. Even now, it is difficult to turn north (left) on Lantern from Shoe Overlook during morning and afternoon busy hours. It will probably become impossible to do so with the addition of traffic diverted from SR37, and it may even be quite challenging to turn south (right). Are any temporary traffic control measures included for this intersection (Shoe Overlook Drive and Lantern Road) during the project?
- 3: Storm drainage from SR37 is planned to outlet at least in part to Shoemaker Ditch. The latest documentation we have seen states that a "detention basin . . . <u>may</u> [emphasis added] be constructed". Attached are two photos of Shoemaker Ditch, one at normal levels and one after heavy—but not unusual or torrential—rain. We have often seen the creek as depicted in the 2<sup>nd</sup> photo and have seen it even higher on rarer occasions. If the detention basin is not to be built, what other method might be employed to prevent serious flooding of Shoemaker Ditch? When will a final solution to potential flooding be identified and added to the Project Plan?

Thank you for your attention to these questions. We look forward to hearing further information as the project planning progresses.

Sincerely yours,

Michael and Loretta Scherperel

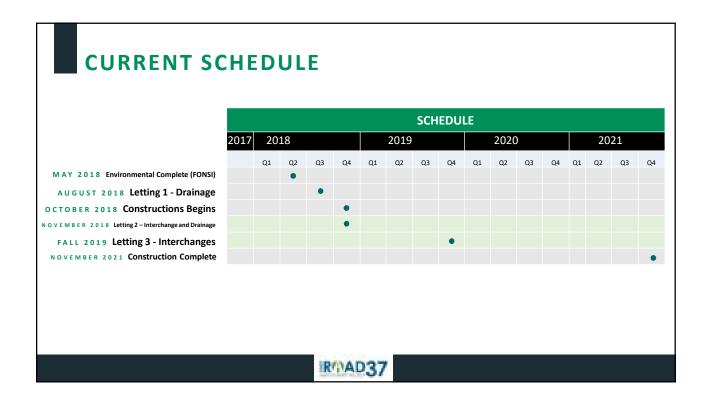
8365 Shoe Overlook Dr. Fishers IN 46038

317-436-8992 mbs6560@comcast.net

Comment No.	Name	Comment Detail	Response
1a	Public Hearing comment - Anonymous commenter	Well our question is about Shoemaker Ditch — it can't handle what it's got now what are we looking at there I mean we are looking to dump more water in there now, it covers the sidewalks when it rains a lot, it's a its got a problem. I don't know. I can't understand by look at that where it's goingit looks like it's going to dump it right there at that at that pumping station or whatever that is there. So that's where it's going to go?	The outlet location will be at Shoemaker Ditch, immediately east of where it crosses Lantern Road.
1b	Public Hearing comment - Anonymous commenter	What are we going to do. Obviously we are going to put more water in there, and right now its backing up the water we already got and it covers the sidewalk with a good rain. What we are wondering is are we going to straighten that out or are we goingwhat are we going to do when we put more water in there?	In-line detention within side ditches will be provided as a means for the proposed drainage outfall at Shoemaker Ditch and along \$R 37 to meet or exceed the existing drainage conditions. The scope of this project is not intended to eliminate existing floading issues, but rather to ensure drainage from the proposed improvements do not make drainage conditions worse. A Hydraulic Study has been completed to meet the outfall requirements of the state, county, and city. This study verifies the drainage conditions are not worsened by the project with incorporation of the proposed detention measures.
1c	Public Hearing comment - Anonymous commenter	Yeah, Shoemaker Ditch can't handle what it's got now, so we are just wondering how we are going to handle when we put more water from 37 in there?	In-line detention within side ditches will be provided as a means for the proposed drainage outfall at Shoemaker Ditch and along SR 37 to meet or exceed the existing drainage conditions. The scope of this project is not intended to eliminate existing flooding issues, but rather to ensure drainage from the proposed improvements do not make drainage conditions worse. A Hydraulic Study has been completed to meet the outfall requirements of the state, county, and city. This study verifies the drainage conditions are not worsened by the project with incorporation of the proposed detention measures.
2	Public Hearing comment - Anonymous commenter	You talked about putting in sound barriers uuhh behind Sunlake apartments and uhhh North Britton apartments I believe it was, umm ok, that's south of 146th street but then starting in 2021 you are going to be doing work north of 146th street for those interchanges. Umm what about the Wellington Northeast neighborhood that goes up against SR 37 do you intend to put sound barriers there or not? That's my questions.	The Wellington Northeast neighborhood was included in the highway noise analysis conducted for the project. This included considerations of the highway alignment, anticipated speed of traffic on SR37 and design year traffic volume composition. For the 28 fronting properties at Wellington Northeast along SR37 the 2080 predicted noise levels ranged from 55.5 to 65.5 dBA. As such a design year noise impact is not predicted to occur at this location. This is due in part to a low earthen berm that currently exists along property boundaries that front SR37 which partially provides some attenuation of sound between the highway and the residences.
3	Michael and Loretta Scherperal - e- mail dated May 16, 2017	Traffic diversion from SR37 between 126th St. and 131st St. over to Lantern Rd. raises concerns for Lantern Rd. At that location, Lantern is very narrow with no shoulders. It is subject to repeated potholes which, whenever they are repaired, seem to reappear in short order. Are there plans to improve Lantern Rd. before putting this additional traffic load, bound to include heavy trucks, onto it? (Incidentally, we would object to any alteration involving the removal of trees, particularly along the west edge of the road.)	(two lanes in each direction). During the construction this will allow any through traffic to continue along SR 37 with a large majority not diverting to the local streets. Some local traffic already on the local road network will divert to Lantern Road, but other roads will similarly also see a relatively small diversion amount, helping to disperse the amount of additional traffic specifically on Lantern Road. As part of the project, the construction documents will have miscellaneous traffic control items that could be implemented, if required, in order to reduce the effect of traffic diversion along the surrounding streets including Lantern Road.  Presently, there are no plans to widen Lantern Road between 126th Street and 131st Street. Roadway maintenance along this segment of Lantern Road is divided between Hamilton County and the City of Fishers. Later in 2018, ahead of any significant construction along SR 37, the City of Fishers will re-pave Lantern Road between 126th Street and 131st Street. This work will involve milling and resurfacing Lantern Road, as well as some deep patching where needed, and add new pavement markings. The improvements will not widen Lantern Road, and will not result in the removal of any trees. Completion of this work will better maintain the pavement as opposed to continuing to fill potholes. This will better serve the traffic today and any potential diverting traffic due to upcoming work on SR 37.  As design of the interchanges for the south section of the corridor (126th, 131st, 141st, and 146th Streets) advances, and the specific local detour routes are defined as part of the maintenance of traffic (MOT) plan, the City, and Hamilton County will independently assess the need for additional ancillary local improvements. The decisions that are made regarding MOT will be conveyed at future public meetings that are intended to keep the public updated on project developments.
4	Michael and Loretta Scherperal - e- mail dated May 16, 2017	Shoe Overlook Drive is a short, dead-end street off of Lantern Rd. between 126th St. and 131st St. Residents of this street have no other means of ingress or egress from their neighborhood. Even now, it is difficult to turn north (left) on Lantern from Shoe Overlook during morning and afternoon busy hours. It will probably become impossible to do swith the addition of traffic diverted from SR3 at it may even be quite challenging to turn south (right). Are any temporary traffic control measures included for this intersection (Shoe Overlook Drive and Lantern Road) during the project?	The access to Shoe Overlook Drive will be maintained as a full access during the construction of SR 37 to allow for maximum traffic flexibility. Under Phase 1 of the maintenance of traffic plan, the traffic model did not predict a significant increase in traffic along Lantern Road. Under Phase 2 of the project the traffic model did predict an increase of traffic along this segment of Lantern Road. However, the fact that there are roundabouts at 126th Street/Lantern Road and 131st Street/Lantern Road, it is anticipated that during the peak traffic hours of Phase 2 vehicles may need to make a right turn and proceed to one of the roundabouts to make a vulner to complete a left-turn movement out of a neighborhood. Currently, there are no plans to place additional traffic control measures at this intersection during the construction of SR 37. However, the construction documents will have traffic control items that can be implemented if conditions on local streets degrade beyond what the traffic model had predicted during construction.
5	Michael and Loretta Scherperal - e- mail dated May 16, 2017	Storm drainage from SR37 is planned to outlet at least in part to Shoemaker Ditch. The latest documentation we have seen states that a "detention basin may [emphasis added] be constructed". Attached are two photos of Shoemaker Ditch, one at normal levels and one after heavy—but not unusual or torrential—rain. We have often seen the creek as depicted in the 2nd photo and have seen it even higher on rarer occasions. If the detention basin is not to be built, what other method might be employed to prevent serious flooding of Shoemaker Ditch? Whei will a final solution to potential flooding be identified and added to the Project Plan?	In-line detention within side ditches will be provided as a means for the proposed drainage outfall at Shoemaker Ditch and along SR 37 to meet or exceed the existing drainage conditions. The scope of this project is not intended to eliminate existing flooding issues, but rather to ensure drainage from the proposed improvements do not make drainage conditions worse. A Hydraulic Study has been completed to meet the outfall requirements of the state, county, and city. This study verifies the drainage conditions are not worsened by the project with incorporation of the proposed detention measures.
6	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	While we understand Hamilton County's desire to improve traffic flow along the SR 37 corridor, the design as proposed will cause irreparable harm to a number of the areas businesses and property owners. The modifications are especially burdensome to The Shoppes at 141st Street and other properties immediately adjacent to the proposed round-a-bouts. As we discussed, property owners to intersections made majo investments in the Fishers & Noblesville communities because those properties benefitted from the exposure they had to commuters travelling on SR 37. In fact, those property owners paid top dollar because of that exposure. The SR 37 improvements as proposed eliminate that visibility entirely as commuters passing in front of those properties will see nothing but concrete walls from the depressed roadway.	The elected leadership of Fishers, Noblesville, and Hamilton County have partnered with INDOT to move this project forward to bring necessary capacity improvements to SR 37 in southeastern Hamilton County. Daily traffic congestion on SR 37 causes lengthy delay times in peak travel hours. Connectivity in Fishers has been negatively impacted due to significant local street delay where they intersect SR37 causing drivers to seek alternative routes. Making capacity improvements on SR 37, and the streets that intersect it, will bring reliability back to this commercial corridor and accommodate anticipated traffic volume increases which will enhance accessibility and exposure for local businesses. Installing grade-separated, roundabout-style interchanges will have some impact on the visibility to nearby businesses; however, in an effort to mitigate any negative impacts caused by visibility changes, the City of Fishers and Noblesville are exploring cohesive modifications to zoning ordinances that will allow for new wayfinding signage to provide motorist guidance to nearby businesses. Additionally, the project team's traffic consultant estimates that approximately 75% of the trips in the SR 37 corridor are made by those who live and work near the corridor and are already familiar with the many businesses in the corridor.

Comment No.	Name	Comment Detail	Response
7	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	In addition to this loss of visibility, the proposed median on 141st Street drastically impacts traffic flow to and from our property. It eliminates the cross connection to the shopping center on the north side of the street, eliminated the left-hand (westbound) movement exiting our main entrance and eliminates access to eastbound traffic at our main entrance.	Access to adjacent properties along cross streets remains an item under consideration by the City and INDOT as design of the interchanges for the south section of the corridor (126th, 131st, 141st, and 146th Streets) advances. The decisions that are made regarding changes to access will be conveyed at future public meetings that are intended to keep the public updated on project developments.
8	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	While the current trend in Hamilton County is to follow carmel's lead and change signalized intersections to round-a-bouts, it's not always the solution to solving traffic congestion, especially in those areas already established as commercial corridors. The impacts to the business community and tax base associated therewith could be catastrophic as a retail business fail and shopping centers with poor visibility and access sit vacant. You need to look no further that the area around Merchants Square in Carmel (116th & Keystone Avenue) to see the negative impacs similar modifications have had on adjoining retail properties. Prominent retailers and restaurants that were originally attracted to that corner have been replaced with second tier operators, including a church that now occupies what was a retail anchor space on the southwest corner of that intersection.	t the largest national recession in more than 30 years. There have been businesses that have in deed left the Keystone corridor, however there are also new businesses that have entered the corridor, and there are businesses who have reinvested in their current location.
9	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	Round-a-bouts can be designed to have minimal impacts when they are incorporated into the design of a new road. In those cases access point to adjoining properties can be incorporated into the design and visibility impacts can be taken into account on the front end of development, insuring buildings are positioned with frontage to the appropriate roadways. Conversely, converting existing signalized intersections in major commercial corridors where development already exists damages the viability of those commercial properties unless access and visibility can be maintained at its currently existing level, which in this case it cannot.	considered for the corridor including the construction of at-grade roundabout intersections (no grade separation), improvements to the existing signalized intersections (i.e., addition of turn lanes, signal timing alterations, etc.), and the No Build Alternative (maintaining
10	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	The round-a-bout design also exacerbates the financial stress put on property owners and their tenants during the construction phase by requiring long periods of limited or reduced access while the bridges are constructed. You estimated there would be no east and west access across SR 37 on the 141st Street for at least 6 consecutive months and during that time there would be a three month period when not even right-in/right-out access to and from SR 37 could be made. If in fact this project moves forward as currently designed, many of the existing businesses will not survive the construction phase. These massive periods of road closure will not be required if alternative designs are utilized improve the intersection, designs that don't include depressing the road and adding bridges.	The construction timelines are still being finalized, but the goal to minimize construction time periods and minimize any access restrictions remains a priority while implementing this project. If no improvements are made to SR 37, levels of service will continue to get worse, and travel time and motorist delay will continue to increase. A simple widening of SR 37 maintaining traditional at-grade traffic signals does not produce significant and sustained level of service improvement and does not improve the overall safety of the tocorridor for drivers or pedestrians. Constructing grade-separated interchanges using roundabouts while depressing SR 37 accomplishes the goals established by the local elected officials. The SR 37 and side streets traffic congestion will be significantly reduced; crashes will be reduced due to the elimination of right-angle, high-speed, at-grade intersections; and SR 37 will be lowered to better improve east-west connectivity for motorists, bicyclist, and pedestrians alkie. All of these goals will be accomplished while maintaining high-quality access to neighborhoods and businesses along and near the SR 37 corridor.
			The City of Fishers, City of Noblesville, and Hamilton County do recognize that any type of construction project will have an impact upon businesses and residents during the duration of the project—no matter the type of project. These agencies have partnered to develop a marketing plan, using an outside agency, for the businesses in the corridor to help encourage patrons to visit businesses in the corridor during construction. Input from local businesses will be sought in order to make this endeavor as successful as possible during the construction period.
11	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	We are concerned about the additional R.O.W. that may be taken to accommodate the round-a-bout design. Any taking that results in diminution of parking will further damage the property even in the taking is limited to the outlots in front of our shopping center. A reduction in parking on the outlots will transfer additional cars to the shopping center lot.	In their advancement of the right-of-way engineering phase (the process in which proposed right-of-way parcels needed for completion of the project are defined), the City will continue to evaluate ways to lessen impacts to adjacent property owners. All right-of-way acquired as part of the project will be purchased in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), as amended and the regulation titled Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs (49 CFR Part 24), and the Indiana Code Title 8 Article 23. The loss of parking will be considered in the City's review of the appraisal and buying process.
12	The Broadbent Company - David A. Cheslyn letter dated May 8, 2017	Based on the above, we believe that the currently proposed round-a-bout design will be detrimental to our property and many others along the corridor. We believe an alternative design with grade level improvements should be considered as that type of design will improve traffic flow without the negative long term impacts associated with the round-a-bout design. If an alternative design will not be considered it is imperative that everything possible is done to eliminate each of the issues addressed herein or you will jeopardize the success of the business along the corridor as well as the county's tax base.	considered for the corridor including one that elevated SR 37 over the cross streets, and a tight diamond configuration. The grade





#### **DRAINAGE STATUS – South Corridor**

- Anticipated Schedule
  - Begin work Fall of 2018
  - Duration estimated around 8 months
  - Start at Lantern Road and move East toward SR 37
- Traffic Impacts
  - Construction areas location outside of roadways
  - May see increased construction traffic
  - Maintain access to all driveways

RANAD37

# DRAINAGE STATUS — South Corridor Shoemsker bitch 126th St IRMAD37

#### **DRAINAGE STATUS – North Corridor**

- Begin work anticipated late 2018
- Duration estimated around 10-12 months
- Start at White River and move East toward SR 37

RANAD37

#### **DRAINAGE STATUS – North Corridor (Construction Areas)**

- North Side of 146<sup>th</sup> between White River and railroad tracks
  - 6 access pits. estimated size of 15' by 35'
- South Side of 146<sup>th</sup> between railroad tracks and SR 37
  - 2 access pit. estimated size of 15' by 35'
- Located in curb line
- Maintain 2 lanes of traffic in both directions
- Maintain access to all driveways

RAAD37

#### **DRAINAGE STATUS - North Corridor**

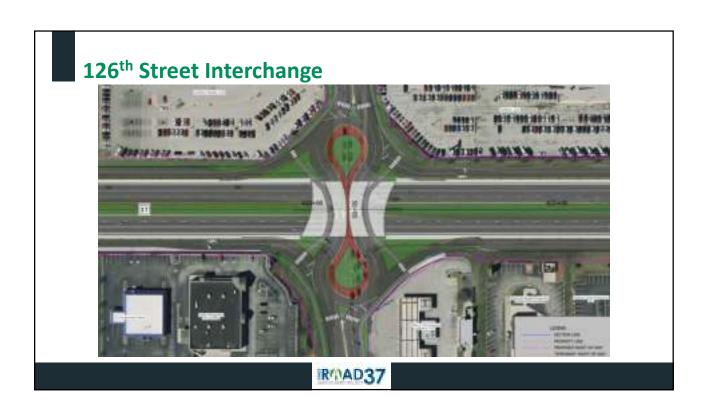


RMAD37

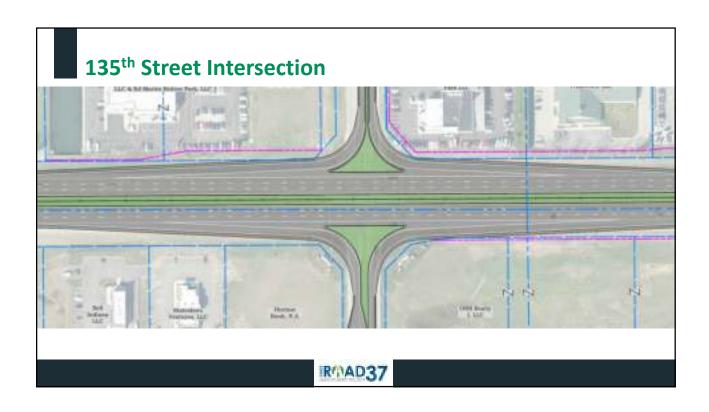
#### **ROADWAY DESIGN STATUS**

- 126<sup>th</sup>, 131<sup>st</sup>, and 135<sup>th</sup> Intersection
  - Design is 60% complete
  - In right-of-way process
  - No significant changes

RANAD37







#### **ROADWAY DESIGN STATUS**

- Northern Intersections had further traffic analysis
  - Changes in traffic growth and movements since original study
- Joint review effort between the design team, City of Fishers and Noblesville, Hamilton County, INDOT, and Federal Highway

RANAD37

#### **ROADWAY DESIGN STATUS**

- 141st Intersection
  - Modified to a single lane roundabout interchange
  - Lower anticipated traffic volumes
  - Reduced construction costs

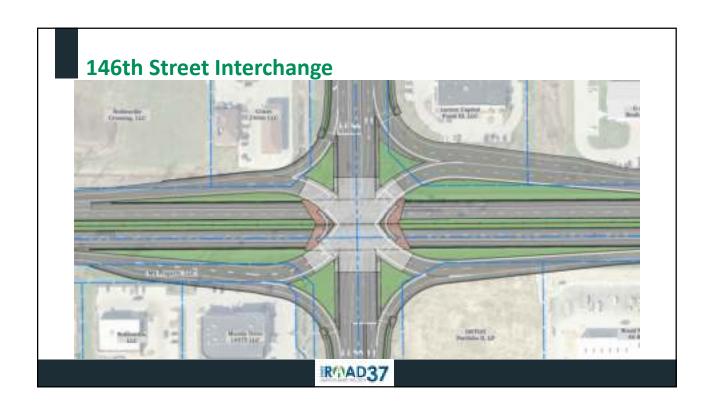
RMAD37

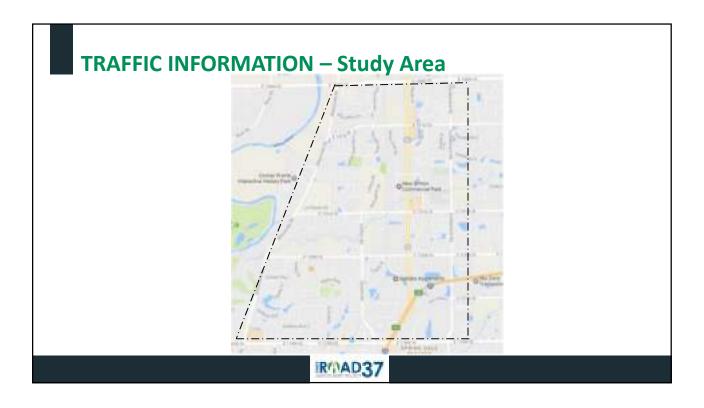
# 141st Street Interchange Hilliam Interchange Mary Thomas Interchange

#### **ROADWAY DESIGN STATUS**

- 146<sup>th</sup> Intersection
  - Modified to a Single Point Urban Interchange (SPUI)
    - (example: Allisonville Road and I-465)
  - Signalized Interchange
  - Similar footprint to Roundabout interchange
  - Better solution for
    - Revised traffic growth
    - Revised traffic movements (increased left turns)
  - Design is 15-20% complete

RMAD37





#### **TRAFFIC INFORMATION – Construction Scenario Model**

- Various interchange sequencing scenarios being investigated
- Simultaneous construction options being investigated due to construction feasibility
- SR 37 to remain two lanes in each direction under all scenarios
- Hot Spot Identification:
  - Identify areas with increased volumes
  - Identify potential improvements
  - Roadway closures
  - · Addition of turn lanes
  - Addition of temporary signals
  - Re-striping
  - Changing signal timings
  - Traffic calming devices

IRMAD37

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### PROJECTS TO BE COMPLETED PRIOR TO SR 37 CONSTRUCTION BEGINNING

#### Fishers:

- 1. 116<sup>th</sup> Street at Cumberland Road Intersection Improvement COMPLETE!
  - a. Additional eastbound right turn lane
  - b. Additional southbound through lane
- 2. 116<sup>th</sup> Street at Allisonville Road Reconstruction (overlay) COMPLETE!
- 3. 126<sup>th</sup> Street at Allisonville Road Intersection Improvement COMING 2018
  - · a. Additional northbound through lane
  - b. Additional northbound right turn lane
  - c. Additional southbound through lane
  - d. Additional westbound left turn lane

RANAD37

## PROJECTS TO BE COMPLETED PRIOR TO SR 37 CONSTRUCTION BEGINNING

- 4. 126<sup>th</sup> Street at Parkside Drive Intersection Improvement (Roundabout) COMING 2018
- 5. 131st Street at Cumberland Road Intersection Improvement (Roundabout) COMING 2018
- 6. 131st Street at Allisonville Road Intersection Improvement COMING 2018
  - · a. Additional northbound through lane
  - b. Additional southbound through lane

#### Carmel:

• 1. 116<sup>th</sup> Street at Hazel Dell Road – Intersection Improvement (Roundabout)—COMPLETE!

#### **Noblesville:**

1. Herriman Boulevard Extension – 146<sup>th</sup> Street to 141<sup>st</sup> Street COMING 2018

RAAD37



# **TRAFFIC INFORMATION – During Construction**

## **Ongoing Data collection**

- Traffic Volume Counts
- Bluetooth Capturing
- Travel Time Runs
- Site Visits

## **Implement Traffic Control Strategies**

RMAD37

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Date: December 22, 2017

#### **Meeting Minutes**

#### SR 37 Public Meeting

### Delaware Township Community Building, 6:00 pm

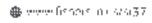
The City of Fishers, and its consultants RQAW and American Structurepoint, held a public meeting regarding the SR 37 Improvement project from I-69 to 146<sup>th</sup> Street on December 11, 2017. The meeting was held at the Delaware Township Community Building located at 9094 East 131<sup>st</sup> Street in Fishers. The meeting informed individuals interested in the SR 37 corridor on the current status of the project, overview of the proposed drainage changes, and addressed questions/comments from the community. The following is a summary of the meeting.

- Troy Woodruff of RQAW started the meeting at approximately 6:00 pm with project introductions.
- Troy gave an overview of the following:
  - Project schedule
  - Upcoming "construction" work to be done in 2018
  - New Interchange Type at 146<sup>th</sup> St
- Troy turned the meeting over to Eric Farny of American Structurepoint
- Eric discussed the following:
  - Summary of drainage lines
  - Overall Roadway Design is approximately 50% complete
  - Current focus items for design
  - Results of traffic analysis
- Eric then discussed the changes to the 146th Interchange
- Troy then discussed the relevant projects to be completed in the area ahead of SR 37 construction.
- Slideshow presentation available online.



The meeting turned over for questions (Q) and answers (A).

- Q Will there be upgrades at Allisonville and 126<sup>th</sup> St.?
- A Yes, there is a project scheduled for 2018 to improve the intersection.
- Q Will 131st and 141st intersections be completed first?
- A This is TBD.
- Q Will the drainage be gravity or use pumps?
- A the drainage will be gravity.
- Q How will the extra water placed in the creeks be dealt with?
- A The volume of water entering the creeks will not change, however the timing will be different because of detention techniques.
- Q Will the drainage line run down 141<sup>st</sup> St?
- A no, it will run down 146<sup>th</sup> St.
- Q Will 141<sup>st</sup> and Herriman intersection have a traffic signal?
- A It will be two-way stop controlled.
- Q Will the traffic signal at 146<sup>th</sup> and Herriman be timed with the signal at 146<sup>th</sup> and SR<sub>37</sub>?
- A Yes, the goal will be to time the signals to achieve the most efficient flow of traffic.
- Q Why was the green arrow at 146<sup>th</sup> and Herriman replaced with a caution yellow?
- A the caution yellow is used on a case by case basis at intersections to achieve the most efficient flow of traffic.
- Q will the 141<sup>st</sup> roundabouts be 1 lane?
- A yes
- Q -What is the status of the sound barriers?
- A the noise study is being updated and the need for barriers is TBD.
- Q What speed will SR 37 be posted?
- A 55 mph
- Q Will 146<sup>th</sup> and SR 37 be similar to Allisonville and I-465?
- A yes, it will be a similar design and interchange type.
- Q Will the design team provide clear lane markings?
- A yes
- Q Was an interchange configuration like I-69 exit 210 considered?
- A yes it was a possibility but has a larger footprint and would require more R/W than the chosen option.
- Q Will the corridor be lighted?



@DriveFishers



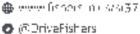
- A yes, all roundabouts will be lighted and the team is looking at possibilities to light beneath the underpasses.
- Q why do the sidewalks stop just beyond the limits of the corridor construction on the east/west streets?
- A the City/County has plans to upgrade the sidewalks and the corridor construction/design is incorporating the future sidewalks as best as can be done at this time.

The meeting was then turned over for general conversation.

The meeting adjourned at 7:15 pm.







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WWW.RGAW.COM

#### **Property Owner Coordination Memo**

On March 13, 2018 RQAW staff completed property owner coordination with adjacent property owners to the southern and northern drainage trunk lines associated with the SR 37 Road Improvements project. RQAW staff approached each residence/business that had an open pit location directly adjacent to their property to explain the dimensions and location of the proposed pit. RQAW staff identified the pit locations relative to the property on the most recent set of design plans to the property owner/business representative. RQAW staff explained the purpose of the pits and what will be taking place at these locations RQAW staff informed the property owner/business as well as the proposed construction timeframes. representative that the project stakeholders want to ensure that the residences/businesses that are adjacent to the pit locations are well informed of the details of the construction and what they will be experiencing during the construction of these pits and drainage trunk lines. RQAW staff inquired about any questions and/or concerns they may have. No property owner/business representative replied with any concerns about the pit locations or construction. Each property owner/business representative indicated that they are aware of the project and the trunk line pit locations. One common question was "When will the construction of the drainage trunk lines take place?" Response was the construction timeline currently was to begin late 2018 and finish up in 2019 before the major construction begins along SR 37.

Sincerely,

INDIANAPOLIS

**RQAW Corporation** 

Joe Dabkowski, PWS

Director of Environmental Services

VINCENNES

fosegh Dalkowski

LA PORTE

INDIANAPOLIS

Des. No. 1600540 et. al.

VINCENNES



WWW.RQAW.COM

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Address
12910 Ford Dr
12840 Ford Dr
8732 E 146th
St
8872 Saville
Rd
9035 Thames

<sup>\*</sup>all other properties are owned by the County or its affiliation, vacant land, or no residence/business is immediately adjacent

LA PORTE

# Attachment 5 Project Commitments

#### Firm Commitments (Required):

- 1. If permanent or temporary right-of-way amounts change, the INDOT Environmental Services will be contacted immediately. (INDOT ES)
- 2. School districts and emergency services must be notified at least two weeks prior to construction. The project sponsor will also be responsible for contacting religious institutions, community centers, recreational facilities, and any local special events or festivals at least seven days prior to construction. (INDOT ES)
- 3. If any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470, et seq.; 36 CFR 800.11, et al.) and State Law (IC 14-21-1) require that work must stop immediately within 100 feet of the discovery and that the discovery must be reported to the Division of Historic Preservation and Archaeology in the Department of Natural Resources within two (2) business days. INDOT's Cultural Resources Office shall also be notified. (IDNR DHPA & INDOT ES)
- 4. If construction will take place in portions of archaeological sites 12-H-465, 478, 1773, 1774, 1776, 1783, 1784, or 1787 that were not examined (outside of the survey area), additional archaeological assessment may be required. These sites will be marked on the final plans and labeled environmentally sensitive areas. (IDNR DHPA & INDOT ES)
- 5. Archaeological Site 12H1811 will be avoided by all project construction activities. A 100-foot buffer of the site will be clearly marked on the design plans as an environmentally sensitive area and maintained during the design and construction of the project. (INDOT ES)
- 6. If dewatering is necessary during construction activities in the project area, then analytical testing will be performed before discharging the water to determine if contaminants of concern are present. (INDOT ES)
- 7. Phase II sampling activities will be completed at the following 12 locations prior to letting of the project for construction: Speedway filling station located at 3150 Conner Street (REC 1); the former Nally's Dry Cleaning located at 2640 Conner Street (strip mall) (REC 2); Valero filling station located at 2995 Conner Street (REC 3); the former Doskocil Specialty Brand Co. facility located at 2395 Conner Street (REC 4); Rickers/BP filling station located at 16788 Clover Road (REC 6); Boggs Wrecker Service located at 2180 Greenfield Avenue (REC 7); Speedway filling station located at 2290 Greenfield Avenue (REC 8); Marsh Village Pantry/Marathon filling station located at 2299 Greenfield Avenue (REC 9); Circle K filling station located at 14554 Herriman Boulevard (REC 11); Speedway filling station located at 14091 Trade Center Drive (REC 12); BP filling station located at 9290 East 131st Street (REC 16); and the Circle K (Shell) filling station located at 9510 East 126th Street (REC 21). (INDOT ES)
- 8. Phase II sampling activities will include soil borings in the areas where excavation will occur, a short report of the findings, and the analytical results of the sampling activities. IDEM will be coordinated with prior to the limited Phase II soil sampling activities. INDOT ES will review the Phase II soil sampling work plan and the results of the limited Phase II sampling activities. (INDOT ES)
- 9. If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) will be used. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM will be notified through the spill line at (888) 233-7745 within 24 hours of discovery of a release from a UST system and within 2 (two) hours of discovery of a spill. (INDOT ES)
- 10. Workers who are working in or near water with *E. coli* (Stony Creek) will take care to wear adequate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Exposure to PCBs in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. (INDOT ES)
- 11. If there will be sediment and/or soils disturbed by construction in or near Stony Creek, additional investigation may be necessary and coordination with INDOT ES will occur. (INDOT ES)
- 12. An IDEM Rule 5 Notice of Intent is required for the project. The project site owner shall post a permit notice near the main entrance of the project site. (IDEM)
- 13. Citizen's Energy Group has indicated that Citizen's Water has surface water intakes on the White River in Hamilton County and Marion County. Citizen's Energy Group emphasizes protection of this drinking water source by preventing contamination from reaching the White River and any of its tributaries by strictly complying with existing regulations. Regulations include programs such as Spill Prevention Control and Countermeasures (Oil Spill Prevention), Storm Water Pollution Prevention and Emergency Response Planning. Planning, documenting plans, procuring and deploying spill prevention equipment/control

- equipment, training/drills for the workforce and frequent inspections are needed in order to ensure protection of the waterways. (Citizen's Energy Group)
- 14. Citizen's Energy Group states that in the event contamination from construction activities reaches the White River that could adversely affect the drinking water resource, the responsible party should immediately contact the Citizens Water Central Control System at (317) 941-7124. However, in the event that contact is not made at this number, please call the Citizens Energy Group Environmental Hotline at (317) 402-8636. The caller should be prepared to describe the nature of the contamination (quantity and type of material), location and time of release. (Citizen's Energy Group)
- 15. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. (IDEM)
- 16. If any heavy cast iron metal pipes or wells are discovered during construction, the IDNR, Division of Oil and Gas will be notified immediately and construction in the area will cease until the IDNR has the opportunity to inspect the well and oversee plugging of wells if necessary. If a well is hit contact: Assistant Director of IDNR, Division of Oil and Gas at 317-233-0933 (office) or 317-450-6611 (cell); Field Specialist at 317-417-6556; and Northern Area Inspector at 765-618-0766. (IDNR, Division of Oil and Gas)
- 17. The Noblesville Airport runway is located 1.5 nautical miles east of the project. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the nearest point of the Noblesville Airport runway, FAA Form 7460 (Notice of Proposed construction or alteration) must be filed. For assistance contact Adam French, INDOT Office of Aviation, 317-232-1477. (INDOT Office of Aviation)
- 18. The Indianapolis Metropolitan Airport is located 16,000 feet (three miles) southwest of the project. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the airport FAA Form 7460 (Notice of Proposed construction or alteration) must be filed. For assistance contact Adam French, INDOT Office of Aviation, 317-232-1477. (INDOT Office of Aviation)
- 19. Based on the preliminary noise abatement analysis, barrier walls at the Sunlake and Woods of Britton apartment complexes warrant further consideration. Public involvement (i.e., public hearing or mailer postcards) will be completed to survey the viewpoints of the impacted residents and property management at these two apartment complexes. A final determination on noise abatement for the project would be made during the design phase. At such time, if design elements have changed that warrant a re-evaluation of the predicted noise levels, additional noise analysis would be performed to determine if impacts are anticipated, and if so, noise abatement measures would be evaluated. (INDOT ES)
- 20. Coordination will continue with the Cities of Fishers and Noblesville and Hamilton County regarding existing and planned recreational trails throughout the design phase of the project. (INDOT ES)
- 21. If any residential or public wells are encountered, they will be re-drilled as part of the right-of-way agreement with the property owner. If any identified well needs to be backfilled, it will be performed according to 312 IAC 13-10. (INDOT ES)
- 22. Trees greater than 3 inches diameter at breast height will not be removed from April 1 through September 30 to avoid impacts to potentially roosting bats. (USFWS)
- 23. 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 should be operated below the OHWM during this time unless the machinery is within the caissons or on the cofferdams. (USFWS)
- 24. Restrict below low-water work to placement of piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)
- 25. Restrict channel work and vegetation clearing to the minimum necessary. (USFWS)
- 26. Construct new structures with a widened span and benches on one or both sides to provide for wildlife crossing, if practical. The crossing should be above normal high water, relatively flat and with natural substrate suitable for use by a wide variety of wildlife. (USFWS)
- 27. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)
- 28. Implement temporary erosion and siltation control devices such as placement of riprap check dams in drainage ways and ditches, installation of silt fences, covering exposed areas with erosion control materials, and grading slopes to retain runoff in basins. (USFWS)
- 29. Re-vegetate all disturbed soil areas immediately upon project completion, using native trees and shrubs in the riparian zone wherever feasible. (USFWS)

- 30. Post DO NOT DISTURB signs at the construction zone boundaries and do not clear trees or understory vegetation outside the boundaries. (USFWS)
- 31. Impacts to Wetlands A, D, F, H, K, P, W, and the UNT to Overdorff Branch Fringe are not anticipated because they are all located outside of the proposed right-of-way limits of the project. However, due to their proximity to the project, do not disturb signs will be posted and proper erosion control measures will be implemented to prevent indirect impacts to these wetlands. (INDOT ES)
- 32. Coordination with INDOT Utilities and Railroads will occur during the planning stages of the project. (INDOT ES)
- 33. Coordination with Hamilton Southeastern Schools will occur during the planning stages of the project and at least two weeks prior to construction. (INDOT ES)
- 34. Coordination with Emmanuel United Methodist Church, Legacy Bible Church, and Prairie View Christian Church will occur during the planning stages of the project and at least two weeks prior to construction. (INDOT ES)
- 35. Coordination with the Hamilton County 4H Fairgrounds will occur during the planning stages of the project and at least two weeks prior to construction. (INDOT ES)
- 36. In order to address concerns from business owners regarding potential impacts to businesses along the SR 37 corridor in Fishers during construction, the City of Fishers will hire a marketing and advertising coordinator. The role of the marketing and advertising coordinator will research the needs of the businesses along the SR 37 corridor in Fishers during construction and engage the appropriate subcontractors to develop and implement the marketing campaign. The objective of the campaign is to promote the various businesses along the SR 37 corridor during construction. (City of Fishers)
- 37. Updates about the project prior to and through construction (including the MOT) will be provided on the project website: http://www.fishers.in.us/SR37Improvements. (City of Fishers)
- 38. A hydraulic design study that addresses various structure size alternates for the drainage outlet within the Shoemaker Ditch/UNT to Shoemaker Ditch floodplain will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans. (INDOT ES)
- 39. A hydraulic design study that addresses various structure size alternates for the drainage outlet within the White River floodplain will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans. (INDOT ES)
- 40. A hydraulic design study that addresses various structure size alternates for the Britton Branch small structure replacement will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans. (INDOT ES)
- 41. The storm water quality (SWQ) system will conform to the appropriate ordinances and standards of the City of Fishers, the City of Noblesville and Hamilton County. (Hamilton County)
- 42. Exhibits showing the plans for water quality and storm systems for the SR 37 project will be provided to the City of Fishers MS4 Coordinator, City of Noblesville MS4 Program Manager, and Hamilton County Surveyor's Office once they become available. (City of Fishers)
- 43. An Additional Information document will be needed to document if wetland, stream or habitat mitigation will occur on or adjacent to the project area. A separate Categorical Exclusion will be needed if the mitigation will not occur adjacent to the project. (INDOT ES)

#### For Further Consideration:

- 1. To maintain fish passage, IDNR recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. (IDNR)
- 2. If box or pipe culverts are used, the bottom should be buried a minimum of 6 inches (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2 feet) below the stream bed elevation. (IDNR)
- 3. Crossings should span the entire channel width (a minimum of 1.2 times the bankful width); maintain the natural stream substrate within the structure; have a minimum openness ration (height x width/length) of 0.25; and have stream depth and water velocities during low-flow conditions that are approximate to those in the natural stream channel. (IDNR)
- 4. For new, replacement, or rehabbed structures, and any bank stabilization under the structure(s), must not create conditions that are less favorable for wildlife passage when compared to current conditions. (IDNR)

- 5. For streambank stabilization, regrading to a stable slope (2:1 or shallower) and establishing native vegetation along the banks are the most effective techniques for stabilization and erosion control. A variety of methods to accomplish this include: planting plugs, whips, container stock, seeding, and live stakes. In addition to vegetation establishment, some additional level of bioengineered bank stabilization may be needed. Combining vegetation with any of the following bank stabilization methods can provide additional bank protection while not compromising benefits to fish, wildlife, and botanical resources: geotextiles (heavy-duty net-free biodegradable erosion control blankets and/or turf reinforcement maps), vegetated geogrids or soil lifts, fiber rolls, glacial stone, or riprap. (IDNR)
- 6. Riprap or other hard bank stabilization materials should be used only at the toe of the sideslopes up the OHWM with the exception of areas directly under bridges. The banks about the OHWM should be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR)
- 7. Riprap, or other stabilization materials should not be placed in the active stream channel above the existing streambed elevation. (IDNR)
- 8. IDNR Division of Fish and Wildlife recommends a mitigation plan be developed (and submitted with the permit application, if required) if habitat impacts will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <a href="http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf">http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf</a>. (IDNR)
- 9. Impacts to non-wetland forest of one acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR)
- 10. For impacts to trees and wooded habitat outside of the riparian areas along the proposed project corridor, consider using native trees and shrubs for any proposed on-site revegetation and landscaping. (IDNR)
- 11. IDNR recommends considering a more sustainable approach to stormwater management in general. The traditional model of stormwater management aims to drain urban 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 flood problems from one section of the basin to another section. A more sustainable approach aims to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, underground storage systems, etc.), recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.), and reusing runoff for irrigation elsewhere in the basin. (IDNR)
- 12. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. IDNR encourages visiting the International Dark-Sky Association's website to learn more about the potential negative impacts of improperly selected LED lighting systems. (IDNR)
- 13. Changes in zoning and direct access to major roadways as well as transportation alternative should be considered for future development along major transportation corridors (IDNR)
- 14. Revegetate all bare and disturbed areas using a mixture of grasses, sedges, wildflowers, shrubs and trees native to Central Indiana as soon as possible upon completion. (IDNR)
- 15. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush. (IDNR)
- 16. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife. (IDNR)
- 17. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR)
- 18. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR)
- 19. Operate equipment used to replace/rehabilitate/modify stream crossings from the existing roadway whenever possible. (IDNR)
- 20. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR)
- 21. Do not use broken concrete as riprap. (IDNR)
- 22. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap. (IDNR)

- 23. The sideslopes for the outlet section must be 2:1 or flatter. (IDNR)
- 24. Minimize the movement of resuspended bottom sediment from the immediate project area. (IDNR)
- 25. Do not deposit or allow demolition/construction materials or debris to fall or otherwise enter the waterway. (IDNR)
- 26. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized. (IDNR)
- 27. Seed and protect all disturbed streambanks that are 3:1 or steeper with heavy-duty net-free biodegradable erosion control blankets to minimize the entrapment and snaring of small wildlife such as snakes and turtles (follow manufacturer's recommendations for installation); seed and apply mulch on all other disturbed areas. (IDNR)
- 28. Seed and protect areas where runoff is conveyed through a channel/swale with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas. (IDNR)
- 29. Protect the area around and below any concentrated discharge points, down to the waterway's normal flow level, with an appropriate structural armament such as riprap. (IDNR)
- 30. IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM. (IDEM)
- 31. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule: (<a href="http://www.ai.org/legislative/iac/T03260/A00080.PDF">http://www.ai.org/legislative/iac/T03260/A00080.PDF</a>). (IDEM)
- 32. Appropriate structures and techniques should be utilized both during the construction phase, and after completion of the project, to minimize impacts associated with storm runoff. (IDEM)
- 33. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized. (IDEM)
- 34. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies will be limited to only that which is necessary to complete the project. (IDEM)