

Appendix D

Miscellaneous Environmental Documents

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D.1 - Hazardous Waste Assessment Summary

Hazardous Waste Assessment, I-270 North

PREPARED FOR: Robert Miller/COL
PREPARED BY: Rachel Grand/STL
DATE: December 3, 2013

CH2M HILL has completed a hazardous waste assessment for the I-270 North project (Project) in St. Louis, Missouri. The area of the assessment was Interstate 270 between Interstate 70 and the Chain-of-Rocks Bridge (Corridor). This technical memorandum was prepared to provide information regarding properties that pose a potential for environmental concern and possible contamination within, adjacent, or near the Corridor during the Project.

Introduction

To facilitate the assessment, a database and records search report was obtained from Environmental Data Services (EDR). This report searched 54 federal, 38 state, five tribal and three EDR proprietary databases (historic dry cleaners and gas station/filling station/service stations) and presented sites that are listed in these databases. These databases are discussed in the EDR report (see **Attachment 1**).

CH2M HILL reviewed this EDR report and identified sites of potential interest. The EDR report included sites within approximately 2 miles on either side of I-270. Based on alternatives developed during the life of the Project, additional sites may need to be added to this report, but for the purpose of this report, CH2M HILL focused on sites directly adjacent to I-270 (within 1/8 of a mile).

Once the potential sites were identified, CH2M HILL conducted a windshield reconnaissance survey to document current land use and conditions and identify any potential sites that were not included in the EDR report. Photographs were taken of the sites to document current conditions (see **Attachment 2**).

Using information gathered as part of this study, CH2M HILL has identified the potential facilities of concern that are discussed in the following sections, and evaluated their possible impact or risk. To assess these issues, CH2M HILL used its best professional efforts to evaluate the contaminants that could be present, the toxicity and mobility of these contaminants, and geological factors that could influence the migration of possible contaminants.

Sites of Potential Concern

CH2M HILL identified 20 facilities that pose a potential for environmental concern and possible contamination within, adjacent, or near the Corridor. Two Superfund sites within the buffer area of the report are included at the end of this report.

The facilities are listed below and discussed in more depth in the following sections. The focus map number and the map ID correspond to the EDR report (Attachment 1):

Site Name	Address	Focus Map #	Map ID #
Former Sweeny Sunoco	3063 McKelvey Rd	45	649
One Hour Cleaner	8482 Pershall Rd	19	249
Bernadette Print Group and Bernadette Business Forms	8950 Pershall Rd	19	208
Interlock Pharmacy Systems LLC	345 Dunn Rd	19	234
Allied Systems and Metro Truck	9050 A and B Pershall	19	198
One Hour Cleaner	8410 Pershall	20	254
Paramount Dry Cleaners	62 Grandview Plaza	20	263
Shell/Circle K Gas Station	1545 New Florissant Rd.	20	247
Ryder Truck	12655 Pennridge	31	508
Former Grandview Texaco	1625 Dunn Road	36	296
Gateway Cleaners	11294 Florissant	37	288
Dunn Road ZX	3555 Dunn	37	326
GEM Cleaner	1795 Dunn	39	341
Former Circle K	11011 Bellefontaine Road	39	348
MO Cigarette and Liquor Outlet	1375 Dunn	39	372
Production Products	1285 Dunn Rd	39	393
Bellefontaine BP	10846 and 10844 Bellefontaine	39	387
Former Zephyr Service Station	1173 Dunn Rd	40	411
Former Airfield Improvement and Repair	801 Dunn	40	402
Jomico Metal Fabricators	1194 Pershall	40	421

Former Sweeny Sunoco

Located at 3063 McKelvey Road, this is currently an empty lot. According to the EDR report, this site was formerly a gas station called Sweeny Sunoco. It has been in a groundwater monitoring program, but according to the EDR, the groundwater plume is stable and the site is under legal review for activity use and limitation by MDNR. There is a risk from exposure to site contamination in groundwater or soil.

One Hour Cleaner

This is a dry cleaner located at 8482 Pershall Road. According to the EDR report, there was a prior dry cleaner at the same location, One Hour Martinizing. There is no report of a release from either of these businesses, however there is a potential for soil or groundwater contamination from chlorinated solvents (such as tetrachloroethylene) used in dry cleaning operations. During the windshield survey, this was observed to be an empty storefront in a small shopping center.

Bernadette Print Group and Bernadette Business Forms

This is a closed business located at 8950 Pershall Road. The building is empty and listed for sale. According to the EDR report, the Bernadette Print Group and Bernadette Business Forms was a former small quantity generator that has received notices of violation in the past. There is a potential risk of a release to soil or groundwater from chemicals used in the printing activities such as volatile organic compounds (VOCs) and metals.

Interlock Pharmacy Systems LLC

Interlock Pharmacy Systems LLC is located at 345 Dunn Road and is a listed large quantity generator (LQG), Hazardous Waste Biennial Reporter with a United States Environmental Protection (USEPA) identification (ID) number of 1014472598. The most recent year for reporting was 2013, and the types and volumes of waste generated are listed below:

Waste code	Waste name	Amount (pounds)
D001	Ignitable hazardous waste	410
D004	Arsenic	2620
P081	Nitroglycerine	2620
P075	Nicotine and salts	2620
P046	Benzene ethanamine, alpha, alpha-dimethyl waste	2620
P042	1,2 Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, R	2620
P001	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts	410
D013	Lindane	410
D011	Silver	410
D010	Selenium	410
D009	Mercury	410
D005	Barium	2620

The EDR report indicates that Interlock Pharmacy Systems received a notice of violation from the Missouri Department of Natural Resources (MDNR) in 2011 but achieved compliance in 2011. Based on interviews with staff, Interlock Pharmacy receives pharmaceutical waste (such as used prescriptions) and then ships the material for recycling. There is a potential for release to soil or groundwater from spills or releases of any of the chemicals listed above.

Allied Systems and Metro Truck

This property, located at A and B Pershall Road, is not currently used. It was formerly Allied Systems and Metro Truck, according to the EDR report. During the site reconnaissance, thirteen large truck bays and two above ground gas pumps were observed. Based on the EDR report, there are at least two active underground storage tanks (USTs) at the site. There is a risk of soil or groundwater contamination at this site from historic surface spills or leaking USTs.

One Hour Cleaner

One Hour Cleaner is located at 8410 Pershall Road and is an active dry cleaner with conditionally exempt small quantity generator status. One Hour Cleaner received a notice of violation from MDNR in 2009 and achieved compliance in 2011. There is no report of a release in the EDR, however there is a potential for soil or groundwater contamination from chlorinated solvents that are used in dry cleaning operations.

Paramount Dry Cleaner

Paramount Dry Cleaner is a former dry cleaner located at 62 Grandview Plaza. The site was visited during the windshield survey; it is part of a shopping center and is currently vacant. There is no report of a release in the EDR, however there is a potential for soil or groundwater contamination from chlorinated solvents that are used in dry cleaning operations.

Shell/Circle K Gas Station

The Shell/Circle K gas station is located at 1545 New Florissant Road. The EDR report notes that groundwater monitoring is currently being performed due to groundwater contamination from a leaking UST. This location was previously a dry cleaner in 1961. There is a risk from soil and groundwater contamination from historic and current site activities.

Ryder Truck

Ryder Truck is located at 12655 Pennridge Drive. The EDR report indicates that in 1996 a leaking diesel UST was reported, but there is no documentation of cleanup or investigations performed at this site. There is a risk of exposure from the diesel release to soil or groundwater. During the windshield survey, this was observed to be an active facility, with a waste oil above ground storage tank and several filling bays.

Former Grandview Texaco

This site at 1625 Dunn Road, is a former gas station, called Grandview Texaco. The EDR report notes that this was a historic gas station in 1979. There is a risk from spills or other releases, including lead or gasoline products, to the soil or groundwater. During the windshield survey, this specific address could not be located, but appears to now be the parking lot of a shopping center.

Gateway Cleaners

The EDR report lists a former drycleaner, Gateway Cleaner, at 11294 Florissant Avenue. This address did not correspond to any current properties and it could not be located during the windshield survey. There is no report of a release in the EDR, however there is a potential for soil or groundwater contamination from chlorinated solvents that are used in dry cleaning operations. If the Project will encompass this property, additional records searches should be performed to determine the current site location and usage.

Dunn Road ZX

Located at 3555 Dunn Road, Dunn Road ZX is an active gas station. It is currently in a groundwater monitoring program due to a leaking UST. According to the EDR, MDNR has requested additional groundwater monitoring and noted that soil contamination may not be fully delineated and that site chemicals may be impacting a nearby surface water body, Maline Creek. There is a potential risk of exposure from soil or groundwater.

Former GEM Cleaner

This is an empty paved lot located at 1795 Dunn Road. This property was formerly a retail store, GEM, which had USTs removed and for which MDNR issued a no further action letter. According to the EDR report, prior to the retail store, the property was the site of a dry cleaner called GEM Cleaner. There is no indication of spills or releases in the EDR report, however there is a potential for soil or groundwater contamination from chlorinated solvents that are used in dry cleaning operations.

Former Circle K

This is an empty lot located at 11011 Bellefontaine Road. It was formerly a Circle K gas station with a leaking UST. MDNR has not approved closure of this site, requiring additional groundwater and surface water sampling of Watkins Creek. The potential impacts to site soil and groundwater from this UST has not been delineated.

MO Cigarette and Liquor Outlet

This is a gas station called MO Cigarette and Liquor Outlet located at 1375 Dunn with a historic leaking UST. According to the EDR report, MDNR has sent a comment letter to the site owners that soil and groundwater impacts have not been delineated yet and additional investigation is required.

Production Products

Production Products, located at 1285 Dunn Road, is a military supplier, making products such as engineered textiles and protective shelters (<http://www.ppstl.net/index.html>). Based on the EDR report and the site reconnaissance, there do not appear to be any environmental risks from current activities. The property was formerly International Paper Company and UST associated with this business were removed prior to any state regulations, so there is a potential for soil or groundwater impacts from leaks or spills. In addition, there is a potential of chemicals being released during paper making processes at the site.

During the windshield survey, a large pile of asphalt shingles was observed directly north of the site property boundary. The manager of Production Products reported that the pile was abandoned by an out-of-town company that was issued a permit by the county to store the shingles there. If this site is used for the Project, additional records searches should be conducted to identify the owner of the shingles.

Bellefontaine BP

The EDR report contained three records for sites adjacent to each other: Hwy 270 @ Bellefontaine Road, 10846 Bellefontaine and 10844 Bellefontaine. Currently there is a gas station, Bellefontaine BP, located at this property. The EDR report notes that soil contamination, possibly associated with a leaking underground storage tank at an Amoco gas station, was reported. There is no record of subsequent investigations or cleanup activities, so there is a potential for exposure to petroleum products in soil or groundwater at this location.

Former Zephyr Service Station

This is an empty lot located at 1173 Dunn Road. According to the EDR report, this was previously Zephyr Service Station, a gas station as recently as 1973. There are no cleanup or closure records. There is a risk of contamination from leaks, spills or improperly abandoned tanks at this site. The date of the gas station suggests that lead as well as petroleum byproducts could be chemicals of potential concern at this site. Due to heavy traffic and safety concerns, no photograph was taken during the windshield survey.

Former Airfield Improvement and Repair

This is an empty lot located at 801 Dunn Road. According to the EDR report, this was the site of a business called Airfield Improvement and Repair, listed as an auto station as recently as 2009. There are no cleanup or closure records. There is a risk of contamination from leaks, spills or improperly abandoned tanks at this site.

Jomico Metal Fabricators

Jomico Metal Fabricators is a large quantity generator located at 1194 Pershall. The EDR report does not include a recent report of the types of materials handled, but reports that in 1979 the facility handled multiple chemicals, including cadmium, lead, ignitable hazardous waste, corrosive hazardous waste and wastewater treatment sludges from electroplating operations. There are no findings documented in EDR that this facility is not in compliance, but there is a potential for an undocumented release or spill from this facility.

Additional Sites

There are two National Priority List (NPL), also known as Superfund, sites within the Corridor. While not directly adjacent to I-270, the sites should be included in this report because of the nature and extent of contamination.

Westlake Landfill Superfund Site

Westlake Landfill is located on a 200-acre parcel about 1 mile north of the I-70 interchange within the city limits of Bridgeton, Missouri (<http://westlakelandfill.com/History.aspx>). The site contains a mixture of radiologically-contaminated soils, municipal refuse and construction/demolition debris.

St. Louis Airport/Hazelwood/ Futura Coatings Site

The St. Louis Airport/Hazelwood Interim Storage/Futura Coatings Co. Site consists of three areas used for storing radioactive and other wastes from uranium processing operations conducted in St. Louis by the Atomic Energy Commission (AEC) and its successor, the U.S. Department of Energy (USDOE). The St. Louis Airport area covers 21.7 acres immediately north of Lambert St. Louis International Airport, approximately 15 miles northwest of downtown St. Louis. It is bounded by a railroad track, Coldwater Creek, and McDonnell Boulevard. Radioactive metal scrap and drums of waste were stored in the airport area in uncovered and unstabilized piles from 1947 to the mid-1960s, when they were transferred 0.5 mile northeast to AEC's Hazelwood Interim Storage (HIS) area. Buildings in the airport area were razed, buried, and covered with clean fill after 1967. In 1969, the land was conveyed to the Lambert St. Louis Airport Authority. HIS and the Futura Coatings Co. plant cover 11 acres adjacent to Latty Avenue, Coldwater Creek, and Hanley Avenue. In 1966, Continental Mining and Milling Co. acquired the property and recovered uranium from wastes purchased from AEC's St. Louis operations. In 1967, the company sold the property, and by 1973 most processing residues had been removed. Under the direction of the Nuclear Regulatory Commission (NRC), the present owner excavated contaminated soil and is storing it in two large piles in the eastern portion of the 11 acres. Since the 1970s, Futura Coatings, a manufacturer of plastic coatings, has leased the western portion. The chemicals of concern include uranium, thorium, and radium in sediment and soil. Investigations and removals are ongoing at this site (<http://www.epa.gov/superfund/sites/npl/nar1244.htm>).

USEPA conducted a radiological survey in 2013 to identify areas of elevated gamma radiation in the Coldwater Creek area. The study showed surface gamma emissions consistent with background levels throughout the Coldwater Creek survey area (<http://www.epa.gov/superfund/sites/npl/nar1244.htm>).

Coldwater Creek passes under I-270 in the Corridor. Additional care will need to be taken if work is conducted in this area.

There are currently groundwater use restrictions for a portion of the Corridor (encompassing a portion of Focus Map 18, 19, 33 and 34 as shown on the map in Attachment 2) near this site. If construction is required, additional information should be obtained for depth to groundwater to insure construction workers are properly equipped to work under these conditions.

Wells

There are numerous wells within the Corridor (see **Attachment 3**), including monitoring wells, private wells and oil and gas test wells. It is likely that most of the private wells are no longer in use as the area has municipal water supply, however, additional investigation will be necessary to determine if the wells are still present. If the work will encroach on any of these wells, they will need to be properly abandoned in accordance with Missouri Well Construction Rules (<http://www.dnr.mo.gov/pubs/pub2175.pdf>).

Conclusions

Based on the information gathered as part of this study a review of relevant data, and an understanding of the Project, CH2M HILL offers the following conclusions and recommendations:

The following sites have known contamination of site soil and/or groundwater:

- Former Sweeny Sunoco
- Shell /Circle K Gas Station
- Dunn Road ZX
- Former Circle K
- MO Cigarette and Liquor Outlet
- Bellfontaine BP
- Westlake Landfill Superfund Site
- St. Louis Airport/Hazelwood/ Futura Coatings Site

Additional information should be obtained for these sites to determine the nature and extent of the contamination, and to determine if any potential construction activities would encounter site contamination. Information can be obtained from MDNR for the UST sites and from USEPA for the two Superfund sites.

There is a low to moderate risk that the remainder of the identified facilities has adversely impacted the Project area. The identified facilities pose a potential threat of contamination and a Phase 1 Environmental Site Assessment should be conducted in the areas of planned construction to evaluate whether contamination was actually present, and at what concentrations.

Workers who encounter unknown contamination may be at risk, and may unknowingly spread or mishandle this contamination. If there is known or suspected contamination, workers should be notified so that the appropriate procedures can be put in place. Any waste generated, such as water or soil, should be managed in accordance with appropriate local, state, and/or Federal rules and regulations. Construction within the Superfund site boundaries may require additional handling procedures.

Attachment 1
EDR Report

I-270 N Expansion

St. louis, MO

Inquiry Number: 3736836.1s

September 27, 2013

EDR DataMap™ Environmental Atlas™

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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D.2 - SHPO Concurrence



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

May 20, 2016

Buddy Desai
CH2M St. Louis
300 Hunter Ave, Suite 300
St. Louis, MO 63124

Re: Job No. J613020 I-270 North Environmental Assessment Cultural Resource Survey, St. Louis County, Missouri (FHWA)

Dear Mr. Desai:

Thank you for submitting information about the above-referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which require identification and evaluation of cultural resources.

Based on the information provided, we concur that the Myers residence and Taille de Noyer are listed on the National Register, and the Gittemeier House and Ferguson Pine Meadows 1st Addition historic district may be eligible for inclusion in the National Register. In addition, we concur that site 23SL2379 is not eligible for listing. After taking into account the effects of this project on cultural resources, we concur that the Reasonable Alternative 1 (the preferred alternative), as proposed, will have **no adverse effect** on historic properties.

Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review and comment on possible effects to historic properties. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.

If you have any questions please write Missouri Department of Natural Resources, State Historic Preservation Office, Attn: Review and Compliance, P.O. Box 176, Jefferson City, Missouri 65102, or call Amanda Burke (573) 522-4641. Please be sure to include the **SHPO Project Number (078-SL-14)** on all future correspondence relating to this project. If the information is provided via telephone call, please follow up in writing for our files.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Toni M. Prawl, Ph.D.
Director and Deputy
State Historic Preservation Officer

TMP:ab

c Raegan Ball, FHWA
Roopa Banerjee, FHWA
Michael Meinkoth, MoDOT



D.3 - Noise Sensitive Receptors and Noise Measurements Technical Memorandum

Noise Sensitive Receptors, Noise Study Areas and Noise Measurements

I-270 North Environmental Assessment I-70 to the Chain of the Rocks Bridge

April 7, 2014

Introduction

This technical memo outlines the noise sensitive land uses, Noise Study Areas and Noise Measurements within the I-270 North Environmental Assessment study area. For the noise analysis the study area is approximately 500 feet from I-270, between I-70 and the Chain of the Rocks Bridge. This technical memo is also intended to clarify the scope of the noise analysis for the emerging Reasonable Alternatives. The NSA delineation was reviewed with MODOT during a site visit in April 2014.

Existing Noise Sensitive Land Uses

A total of 28 noise sensitive land uses have been identified within 500 feet of I-270. The location of these areas is shown on the attached map. These areas are described below from west to east.

Of these 28 noise sensitive land uses, a total of 19 are proposed to be Noise Study Areas. This determination is based on the changes that the Reasonable Alternatives might have on the traffic noise environment. To be a Noise Study Area, the Reasonable Alternatives will either: add capacity, involve roadways on new locations, result in changes in vehicle mix, alter the existing vertical or horizontal roadway alignments, move travel lanes closer to the receptors, add auxiliary lanes or alter existing shielding. Those areas that will not experience those changes will not be evaluated further. Additionally, if there are no outdoor areas of frequent human use, the land use will not be considered a Noise Study Area.

Those noise sensitive land uses that are proposed to Noise Study Areas have undergone initial noise monitoring. This data will primarily be used for validating/calibrating the Traffic Noise Model (TNM), but also provides useful background data for the conditions within the study area. The monitoring data will also be summarized in this section.

The names given to the noise sensitive land uses/Noise Study Areas is typically the name of a prominent local feature, such as the subdivision name.

- 1) The Sarah Community (12284 DePaul Lane)** - This complex offers retirement apartments, assisted living apartments and nursing care facilities. This is a residential medical facility located in the south east quadrant of the I-270/I-70 interchange. The back of the facility is closest to the northbound I-70 to eastbound I-270 ramp. Frequent human uses include balconies and patios. These are about 250 feet from the nearest roadway. The Reasonable Alternatives do not propose alterations to the I-270/I-70 interchange. Consequently, changes to the traffic noise environment are not expected.

Because this area is outside the work area of the Reasonable Alternatives, the complex is not considered a Noise Study Area. This land use will be addressed within the I-70 improvement project.

- 2) **Holy Angels Apartments (3499 DePaul Lane)** – Located in the south west quadrant of the I-270/St. Charles Rock Road intersection. The back of the facility is closest to the northbound I-70 to eastbound I-270 ramp. These apartments are senior citizen facilities within the DePaul Health Center complex. There are very limited outdoor uses, adjacent to the highway. The few existing portable benches are not considered a Frequent Human Use. Additionally, the Reasonable Alternatives do not propose alterations to the I-270/I-70 interchange. Traffic noise impacts are not expected. Consequently, the Holy Angels Apartments will not be considered a Noise Study Area. This land use will be addressed within the I-70 improvement project.
- 3) **Bridgeton Airport Park** – To the west of the Lambert Airport’s runways is an abandoned residential subdivision. Within this area, is a facility often identified as the Bridgeton Airport Park. This area has been converted to the Bridgeton Maintenance Depot. There are no longer any recreational facilities in the area. Consequently, there are no noise sensitive resources and the area will not be a Noise Study Area.
- 4) **Carrollton Village Condominiums and Disc Golf Course NSA** – At the edge of the airport exclusion area, between St. Charles Rock Road and Woodford Way is the Carrollton Apartments and the Carrollton Disc Golf Course. Each apartment building contains 4 dwelling units, each have outdoor patios and balconies. The disc course occupies the entire area adjacent to I-270 along Gallatin Lane. Although no right-of-way takes are expected in this area, the configuration of the roadway is expected to change as a result of the Reasonable Alternatives. Consequently, this area will be considered a Noise Study Area.

The monitoring location for this Noise Study Area was located at the 8th Tee Box of the Golf Course – nearest to the Gallatin Road/Rall Road intersection. The noise meter was located 80 feet from the I-270 right-of-way fence. The monitoring period corresponded to the peak traffic hour (8 AM). Roughly 3,500 cars used I-270 eastbound that hour. The Leq during the measurement period was 66.2 dBA. The Lmax was 72.9 dBA. Based on these levels, a traffic noise impact should be expected in

Carrollton Village Condominium, right-of-way fence and I-270 traffic



this Noise Study Area. There are 6 apartment buildings in the quadrangle closest to I-270 totaling 24 dwelling units. For the disc course, using the study area's average 100 foot frontage per receptor, approximately 20 equivalent receptors are expected.

Given the unique circumstances¹, coordination will be necessary to handle the disc course within the noise analysis.

- 5) **Heritage Heights NSA**– Located in the northeastern quadrant of the I-270/Route 370 interchange, this area is a large/ dense single-family complex. The nearest highway features are the I-270 WB ramp to Route 370 SB and the Missouri Bottom Road ramp to I-270 WB. The Missouri Bottom Road ramp overpasses the I-270 WB ramp. Volumes at these ramps seem low. The I-270 mainline is over 400 feet away. Nevertheless, this area is considered a Noise Study Area.

The monitoring location for this Noise Study Area was located at the nearest home to the ramps (the patio of # 4857 Heritage Heights Drive). The patio is roughly 40 feet below the nearest ramp. This effectively shields the community. In fact, noise from the adjacent rail line is larger noise source. The Leq during the measurement period was 59.3 dBA. The Lmax was 76.3 dBA. Based on these levels, a traffic noise impact is not expected in this Noise Study Area.

Heritage Heights as seen from right-of way fence



- 6) **Ville Maria Subdivision NSA** – Located between Missouri Bottom Road and McDonnell Boulevard, this is a typical suburban-style neighborhood. In addition to single family residences, there are apartments and the Garrett Elementary school playground, adjacent to I-270. This area is considered a Noise Study Area.

The monitoring location for this Noise Study Area was located at the nearest multi-family apartment block adjacent to I-270 (# 5236 Villa Rosa Lane). The monitoring location was approximately 200 feet from I-270, near the right-of-way fence. The Leq during the measurement period was 62.8 dBA. The Lmax was 74.7 dBA. This location

¹ The disc course is a unique resource. It appears to have been developed using Land and Water Conservation fund (ie a Section 6(f) resource). It is listed as a park by the City of Bridgeton (ie a Section 4(f) resource). The disc course resides in the area where residential uses were removed as a result of airport operational impacts, consequently noise impacts seem to be unimportant to the facility.

was chosen because of its visibility to I-270. There are numerous receptors in this area, so it's unclear if a traffic noise impact will occur.

- 7) **Knollwood Apartments** – Located in the northwest quadrant of the McDonnell Boulevard interchange. These multi-family units are over 1,000 feet from the I-270 mainline, obstructed by a wooded knoll. The apartments are in closer proximity to the ramps and other elements of the McDonnell Boulevard interchange. However, the Reasonable Alternatives provide for no alterations closer than 400 feet. These are reconfigurations of ramps that maintain the existing alignment and elevation of McDonnell/Howdershell. There will be no substantial vertical or horizontal elevation alterations. None of the other physical alterations that constitute a Type I project², will occur in proximity to the Knollwood Apartments. Consequently, this area is not considered a Noise Study Area.
- 8) **Kindercare and Library NSA**– The Prairie Commons Library and the Kindercare Child Care operation occupy the area adjacent to I-270 at the Dunn Road/Utz intersection. Both have outdoor areas of frequent human use. The library has picnic benches and gardens. Kindercare has an outdoor playground. This area is considered a Noise Study Area.

The monitoring location for this Noise Study Area was located at the benches near the library garden. The monitoring location was approximately 200 feet from I-270. At least one of the Reasonable Alternatives proposes altering the outer road system in this location. The Leq during the measurement period was 60.8 dBA. The Lmax was 70.6 dBA.

I-270, Prairie Commons Library and Kindercare



- 9) **St. Martin De Porres NSA**- In the northwestern quadrant of the I-270 /Lindbergh Boulevard interchange is a large suburban-style single-family neighborhood. There

² The physical alterations that constitute a Type I Project according to Section 127.13 of the MoDOT Engineering Policy Guide include:

1. The construction of a highway on new location.
2. The physical alteration of an existing highway where there is either a Substantial Horizontal Alteration or a Substantial Vertical Alteration.
3. The addition of a through-traffic lane(s).
4. The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane.
5. The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange.
6. Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane.
7. The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

are also ball fields and educational institutions associated with the St. Martin De Porres Church in this area (255 Imperial Drive). This area is considered a Noise Study Area.

The monitoring location for this Noise Study Area was located backyard fence line of # 644 Undercliff Drive, adjacent to the United Autoworkers Union (UAW) Headquarters. The monitoring location was approximately 270 feet from the nearest lanes of I-270. The Leq during the measurement period was 64.9 dBA. The Lmax was 74.6 dBA.

- 10) **Brookes Park NSA** - In the southwestern quadrant of the I-270/Lindbergh Boulevard interchange is Brookes Park and a large suburban-style single-family neighborhood. These are immediately adjacent to I-270, there is no frontage road in this area³. This area is considered a Noise Study Area.

The monitoring location for this Noise Study Area was located at the nearest park attraction to I-270 (the log ring exhibit). The monitoring location was approximately 120 feet from the nearest lanes of I-270. The Leq during the measurement period was 71.4 dBA. The Lmax was 80.8 dBA. Based on these levels, a traffic noise impact should be expected in this Noise Study Area. Approximately 19 first row residential units exist in this area; although not all are as close to I-270 as the monitoring location. The average lot width is roughly 100 feet.



- 11) **Hazelwood Acres** - Located just south the I-270/I-170 interchange (west side), is a small single-family residential complex, on Heather Lane and Nyflot Avenue. None of the Reasonable Alternatives propose alterations to the I-270/I-170 interchange. Because this area is outside the work area of the Reasonable Alternatives (at least 800 feet from I-270), it is not considered a Noise Study Area.
- 12) **Granada Condominiums** - Located just south the I-270/I-170 interchange (east side), is a large multi-family complex and a small single family residential complex. None of the Reasonable Alternatives propose alterations to the I-270/I-170 interchange.

³ This Noise Study Area also includes the mobile home park located at 6301 North Lindbergh Boulevard, in the same quadrant of the interchange. This small complex is accessed by the service road typically called Brookes Lane.

During the construction of the existing interchange, noise studies resulted in the placement of a noise barrier in this location. Because this area is outside the work area of the Reasonable Alternatives at least 800 feet from I-270), it is not considered a Noise Study Area.

Existing Noise Barrier between I-170 and Granada Condominiums



Study Area.

13) Taylor Road to Graham Road

NSA - This area is located adjacent to the north side of Dunn Road at the I-170 interchange. A wide variety of land uses occupy this rather large area (4,500 feet long). Not all of the land uses have frequent outdoor uses. The land uses in this area,

from west to east include:

- | | |
|--------------------------------|--|
| • Archway Funeral Home - | One small outdoor sitting area |
| • Hazelwood Community Center - | No outdoor uses |
| • United Pentecostal Church - | Two residential structures on property |
| • Islamic Center - | No outdoor uses |
| • Hazelcrest Condominiums | Many residential uses |
| • Spirit and Truth Church - | Outdoor Daycare Playground |
| • Meyers House - | Historic building used as offices |

The monitoring location for this Noise Study Area was located at the Hazelcrest Condominiums. The monitoring location was approximately 250 feet from the nearest lanes of I-270. Various on and off ramps are closer. During the measurement period the Leq was 69.3 dBA. The Lmax was 81.3 dBA. Based on these levels, a traffic noise impact should be expected in this Noise Study Area.

- 14) Maryville NSA** - On the north side of I-270, between I-170 and New Florissant Avenue are intermittent portions of suburban-style single-family homes that abut the project corridor. Commercial land uses shield most of the homes. The North County Christian School is also located in this area.

The monitoring location for this Noise Study Area was located at the North County Christian School. The frequent outdoor uses at the school include its athletic field, which abut Dunn Road. During the measurement period the Leq was 69.6 dBA. The

Lmax was 80.3 dBA. Based on these levels, a traffic noise impact should be expected in this Noise Study Area.

- 15) **San Fernando Subdivision NSA** - On the south side of I-270, between I-170 and New Florissant Avenue is an expansive suburban-style single-family home neighborhood.

The monitoring location for this Noise Study Area was located at Pershall and Du Bourg Lane (AKA Desmet). During the measurement period, the Leq was 71.6 dBA. The Lmax was 88.2 dBA. Based on these levels, a traffic noise impact should be expected in this Noise Study Area.

- 16) **Duchesne Subdivision NSA** - On the north side of I-270, between New Florissant Avenue and Washington Avenue, is a small section of typical suburban-style single-family homes. A slip ramp is located in this area. Elevation changes will make this a difficult area to model.

The monitoring location for this Noise Study Area was located at 2 St. Michaels Court. During the measurement period the Leq was 63.6 dBA. The Lmax was 83.0 dBA.

- 17) **McCluer High School NSA** - The ball fields and other athletic areas, associated with the school, are located adjacent to I-270, between New Florissant Avenue and Washington Avenue. None of these areas are open to the public. Field workers could not gain access to the facility to take monitoring readings.

- 18) **Florissant Townhouses and Grandview Gardens NSA**- On the north side of I-270, east of Washington Avenue, in the vicinity of the St. Louis Christian College are several multi-family developments - including the Florissant Townhouses and the Grandview Gardens.

The monitoring location for this Noise Study Area was located at 1084 Grandview Gardens Court. During the measurement period, the Leq was 72.0 dBA. The Lmax was 80.6 dBA.

- 19) **The Knolls NSA**- Between Elizabeth Avenue and the St. Louis Community College is a dense array of single- and multi-family housing developments.

The monitoring location for this Noise Study Area was located at Knoll apartment 3630. During the measurement period, the Leq was 64.9 dBA. The Lmax was 79.2 dBA.

Little Creek Nature Area



- 20) **Little Creek Nature Area/Singing Pines NSA** - The Little Creek Nature Area includes gardens, hiking trails and educational facilities. It is owned by the Florissant School District. Also in this area is the Singing Pines Apartments.

The monitoring location for this Noise Study Area was located at an outdoor teaching area at the Little Creek Nature Area. During the measurement period, the Leq was 63.6 dBA. The Lmax was 83.0 dBA (bus unloading). This was over 400 feet from the nearest I-270 lanes.

- 21) **Sugarpines Apartments NSA** - Between West Florissant Avenue and New Halls Ferry Road is the Sugar Pines Apartment complex. Only a single building is immediately adjacent to the project corridor, the rest are shielded by other land uses.

During the measurement period, the Leq was 69.1 dBA. The Lmax was 78.2 dBA.

- 22) **Hathaway Manor (N) NSA** -On the north side of I-270 is a similar single-family home neighborhood.

During the measurement period, at apartment 11007, the Leq was 68.1 dBA. The Lmax was 78.0 dBA.

- 23) **Hathaway Manor (S) NSA** On the south side of I-270, immediately west of Hall's Ferry Road is an expansive suburban-style single-family home neighborhood.

The monitoring location was 2410 Pershall. During the measurement period the Leq, in the front yard, was 64.1 dBA. The Lmax was 74.4 dBA. In the backyard, the Leq was 58.0, the Lmax was 72.7.

- 24) **Bellefontaine Conservation Area NSA** - Passive recreation opportunities exist adjacent to I-270 in the southeast quadrant of the Route 367 interchange.

Two monitoring locations were used. One at the walking trail to the Fishing Pond. The other was at the Mullvaney Apartments. During the measurement period, the Leq was between 54.7 and 55.4 dBA. The Lmax was between 69.7 and 78.9 dBA.

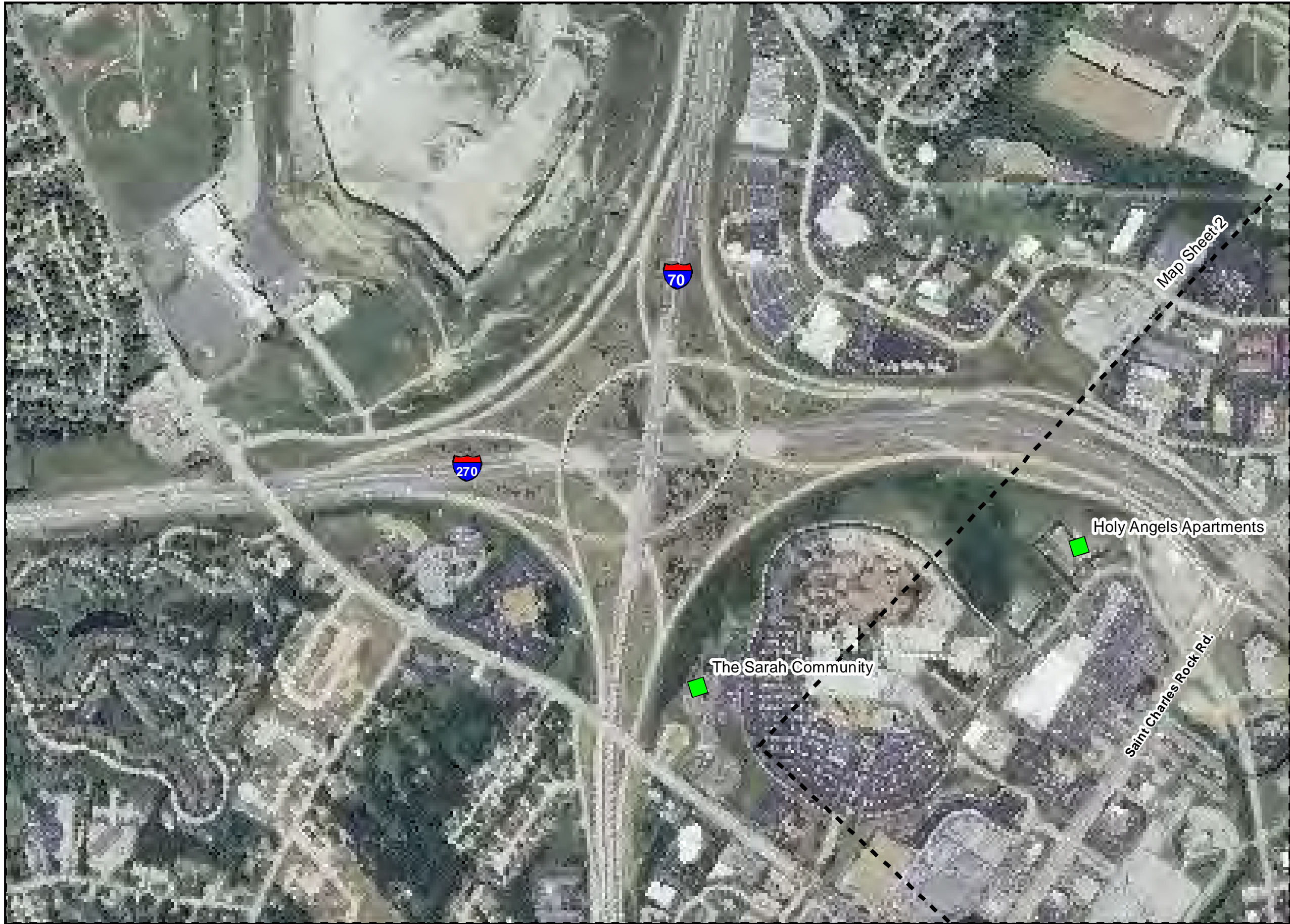
- 25) **Hazelwood East High School NSA** - The ball fields and other athletic areas, associated with the school, are located in the northeast quadrant of the I-270/Route 367 interchange. None of these areas are open to the public. Field workers could not gain access to the facility to take monitoring readings.

26. **Garden Drive Apartments NSA**- These apartments and hotels were added as a NSA because small portions of the sites fall within 500 feet of I-270, during the NSA review meeting with MODOT.

- 27) **Northgate NSA** - In the northeast quadrant of the I-270/Lilac Avenue is the Northgate (AKA Raintree) Apartments. Numerous multi-family buildings are located adjacent to I-270.

Two monitoring locations were used. One at the walking trail to the Northgate Apartments (Mollerous Road). The other was at the 1305 Dunn View Road. During the measurement period, the Leq was between 65.2 and 71.0 dBA. The Lmax was between 77.2 and 79.3 dBA.

- 28) **Missouri Tourist Office** - In the northwest quadrant of the I-270/Riverview Drive is an unnamed parcel identified as owned by the Metropolitan Parks and Recreation District. It is in the Watkins Estate subdivision. Also in this area is the Missouri Tourist office. Outdoor facilities are limited but occur informally. MoDOT does not consider this facility a noise sensitive land use.



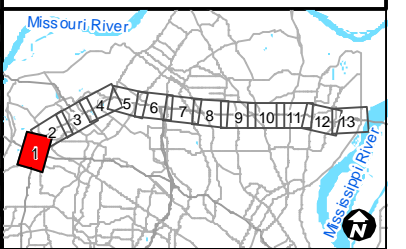
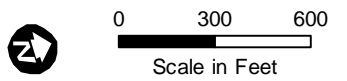
Noise Sensitive Receptor Map Sheet 1

Legend

- Noise Study Areas**
- Noise Study Area (NSA)
 - Non-NSA
 - Matchlines

Sheet Legend




- 1: I-70/I-270 Interchange
- 2: St. Charles Rock Road
- 3: Route 370 interchange
- 4: McDonnell Boulevard
- 5: Lindbergh Boulevard
- 6: I-170 Interchange
- 7: S. New Florissant Road
- 8: Washington/Elizabeth
- 9: West Florissant Avenue
- 10: New Halls Ferry Road
- 11: Route 367 Interchange
- 12: Lilac Avenue
- 13: Chain of Rocks Bridge





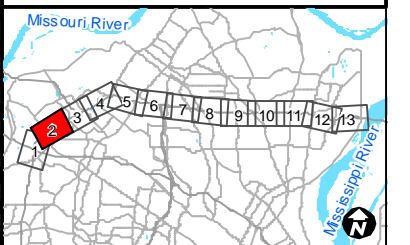
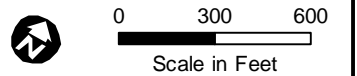
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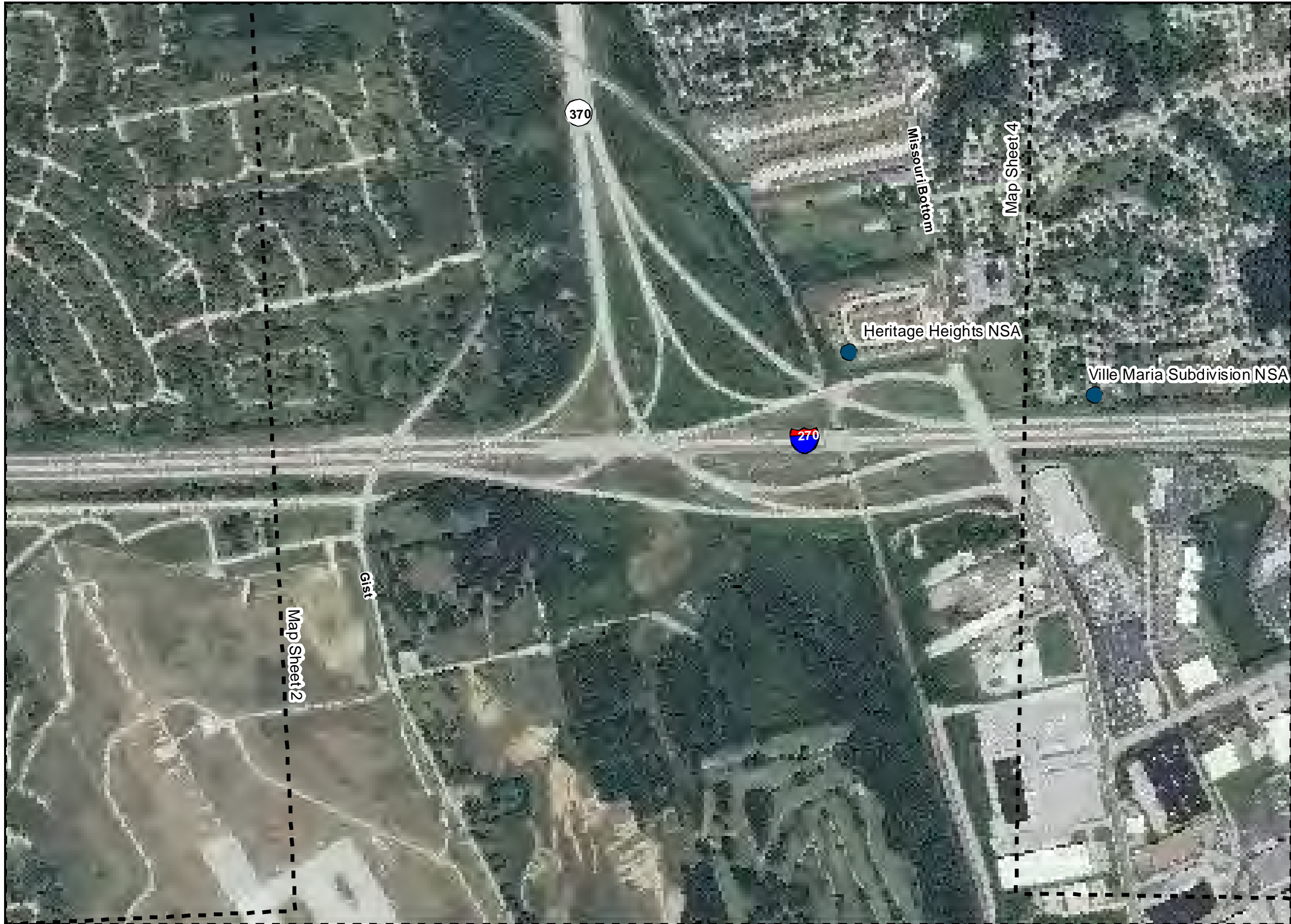
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- Noise Study Areas**
-  Noise Study Area (NSA)
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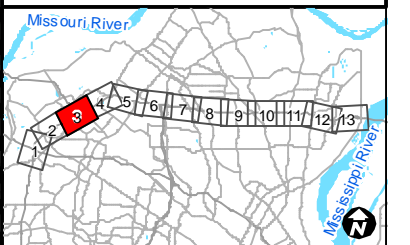
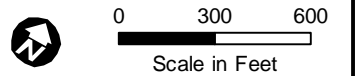
Noise Sensitive Receptor Map Sheet 3

Legend

- Noise Study Areas**
-  Noise Study Area (NSA)
 -  Non-NSA
 -  Matchlines

Sheet Legend

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Noise Sensitive Receptor Map Sheet 4

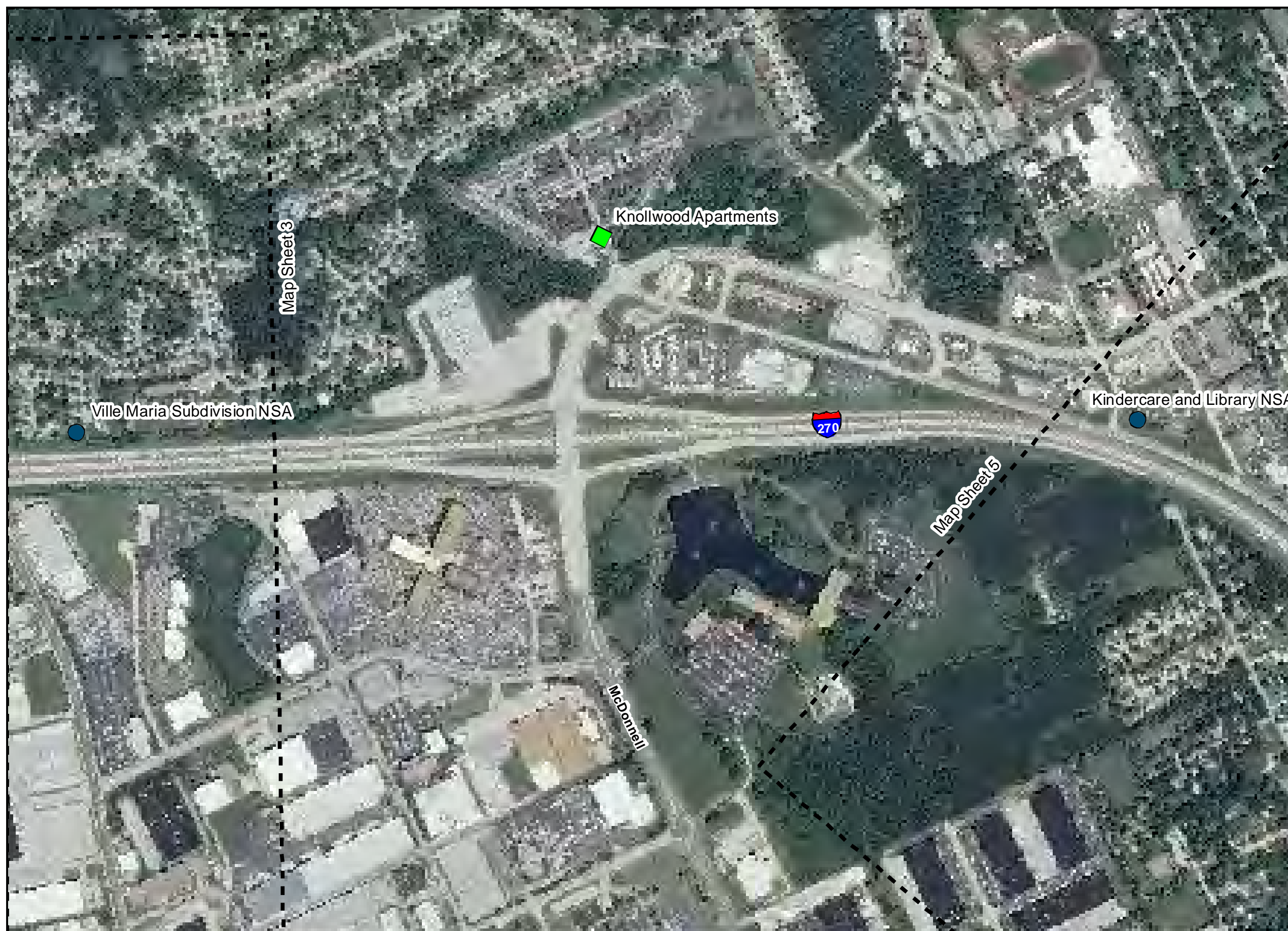
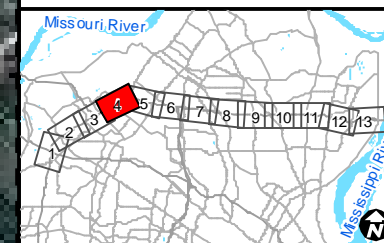
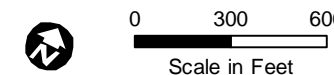
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Noise Study Areas

-  Noise Study Area (NSA)
-  Non-NSA
-  Matchlines

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Noise Sensitive Receptor Map Sheet 5

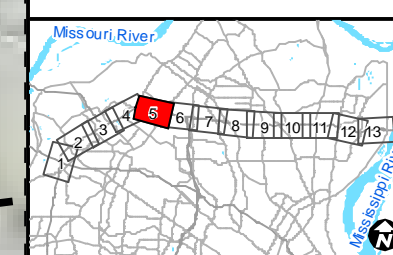
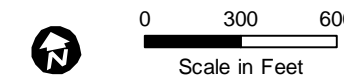
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Noise Study Areas

-  Noise Study Area (NSA)
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-  Matchlines

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Noise Sensitive Receptor Map Sheet 6

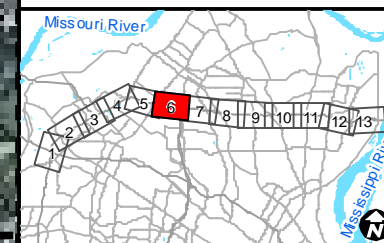
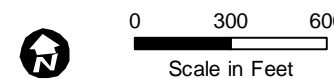
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Noise Study Areas

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-  Non-NSA
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Noise Sensitive Receptor Map Sheet 7

Legend

Noise Study Areas

- Noise Study Area (NSA)
- Non-NSA
- Matchlines

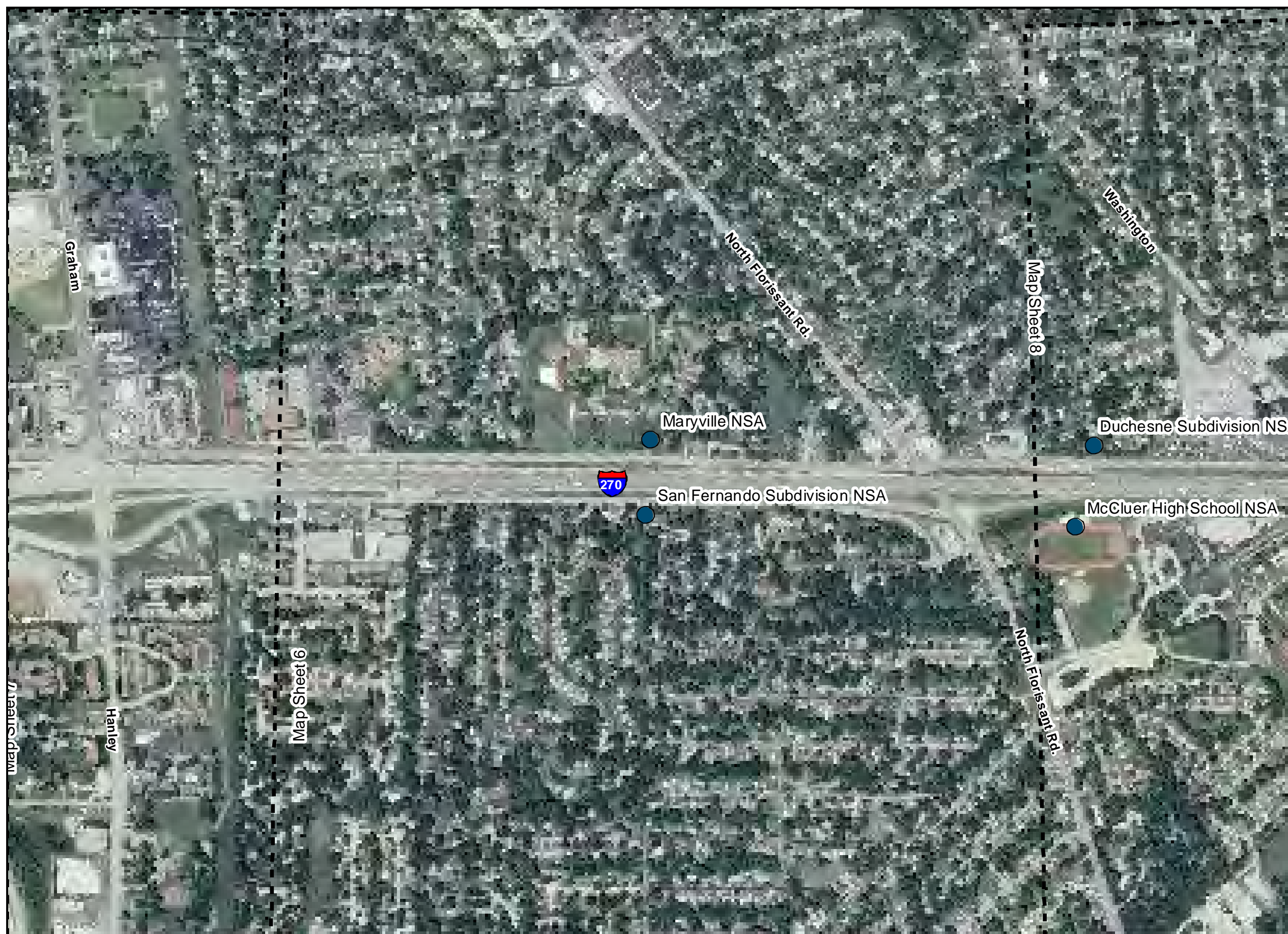
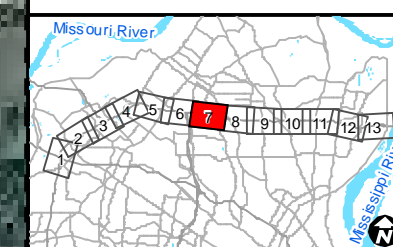
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Scale in Feet








Noise Sensitive Receptor Map Sheet 8

Legend

Noise Study Areas

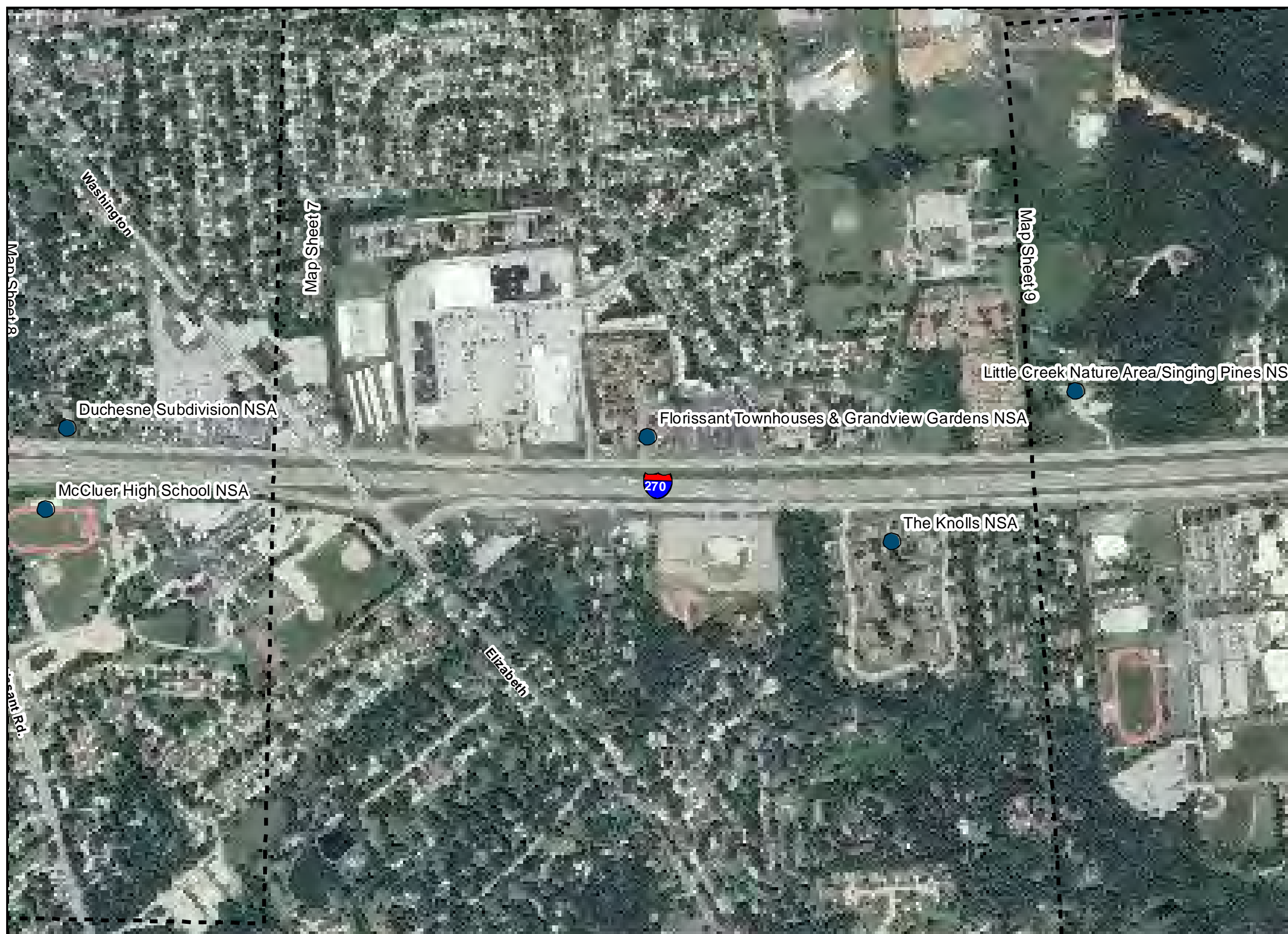
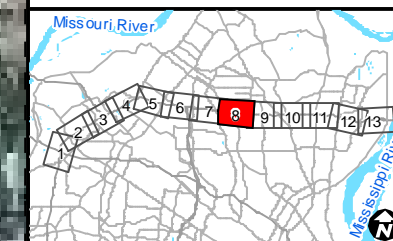
-  Noise Study Area (NSA)
-  Non-NSA
-  Matchlines

Sheet Legend

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Scale in Feet








Noise Sensitive Receptor Map Sheet 9

Legend

Noise Study Areas

-  Noise Study Area (NSA)
-  Non-NSA
-  Matchlines

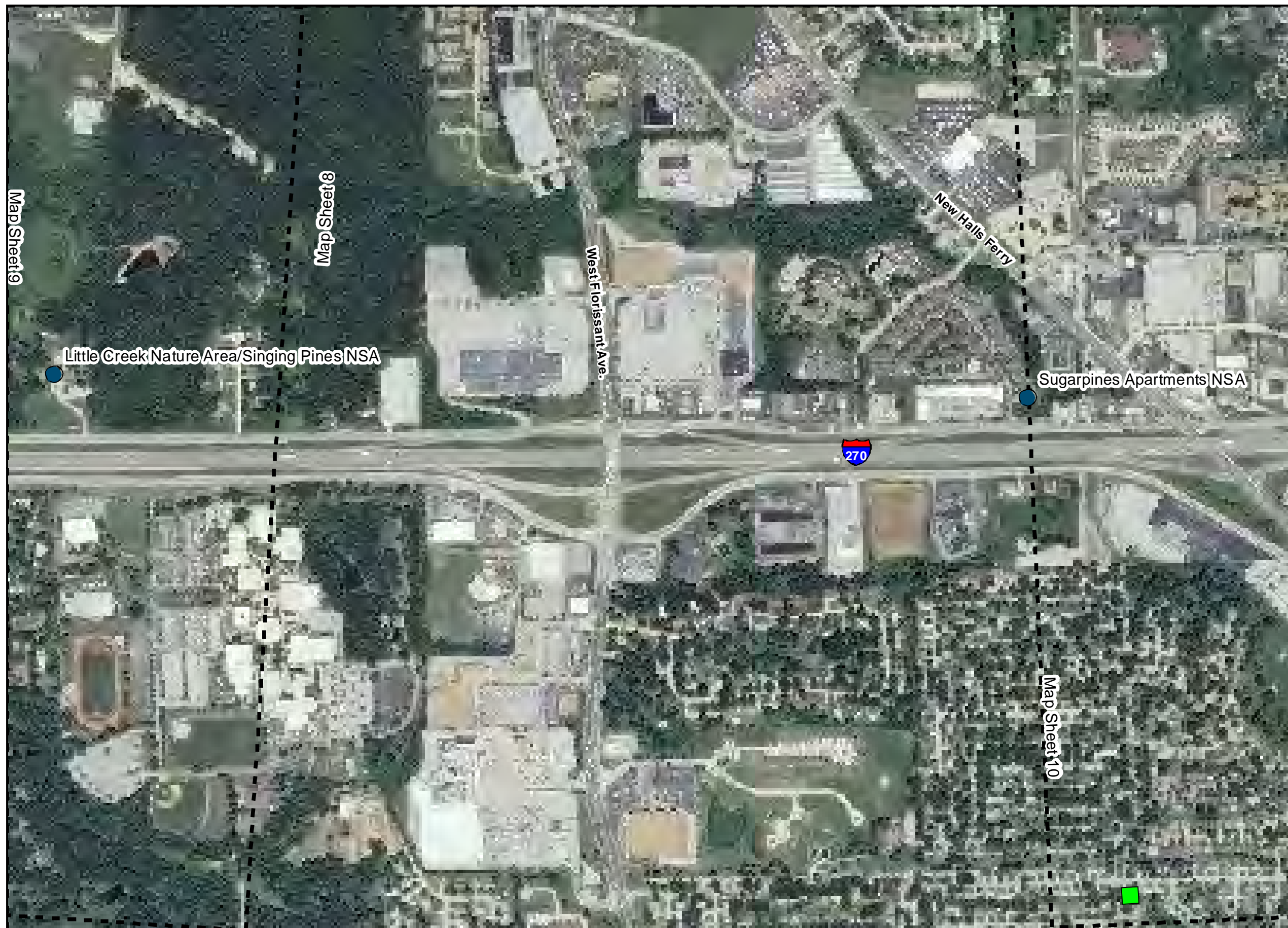
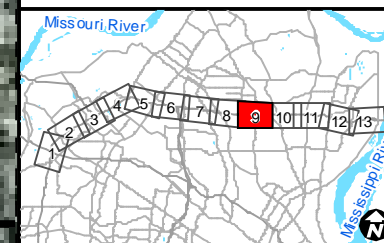
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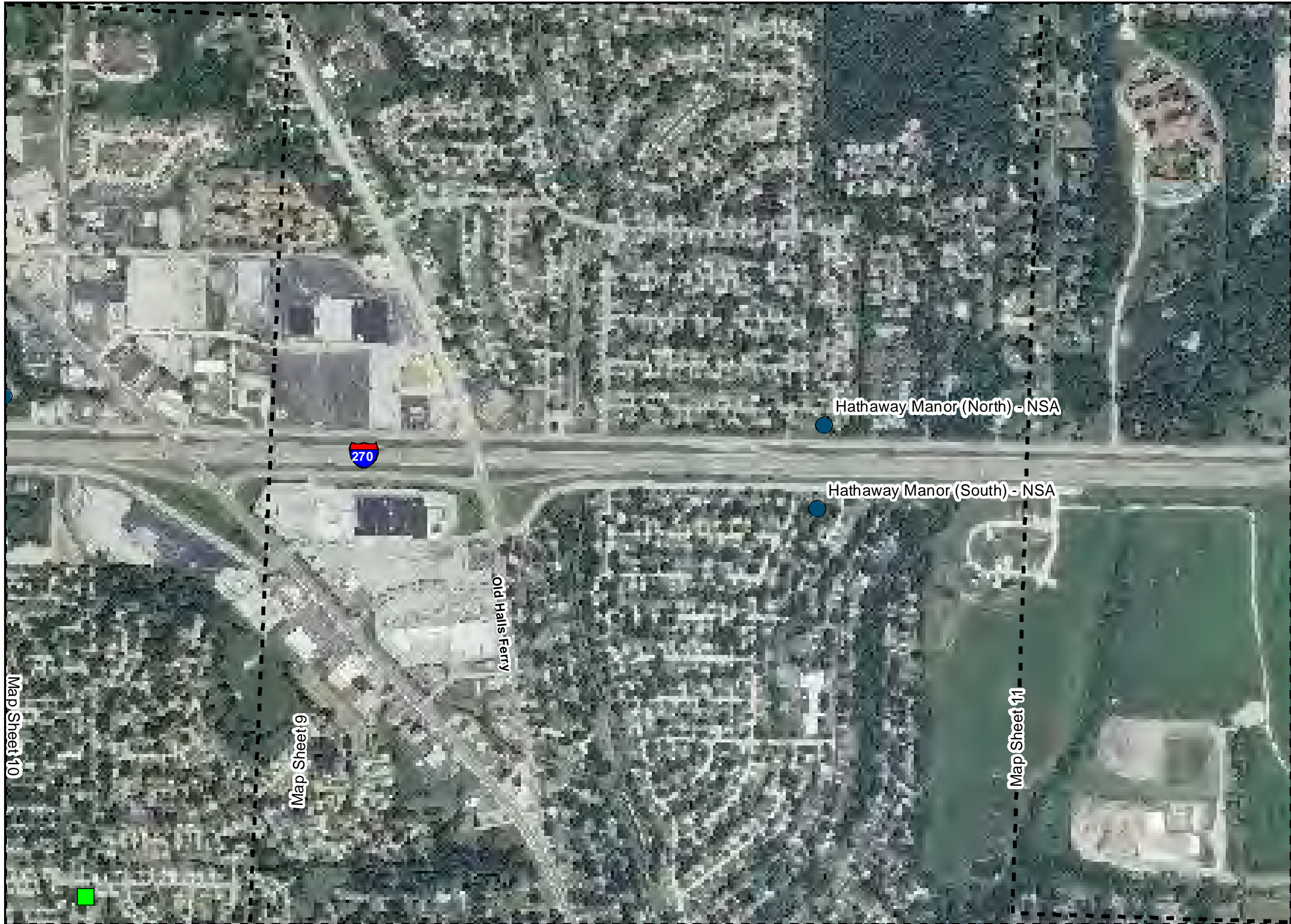
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Scale in Feet





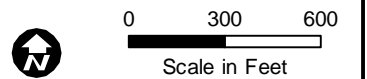
Noise Sensitive Receptor Map Sheet 10

Legend

- Noise Study Areas**
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Map Sheet 10

Map Sheet 9

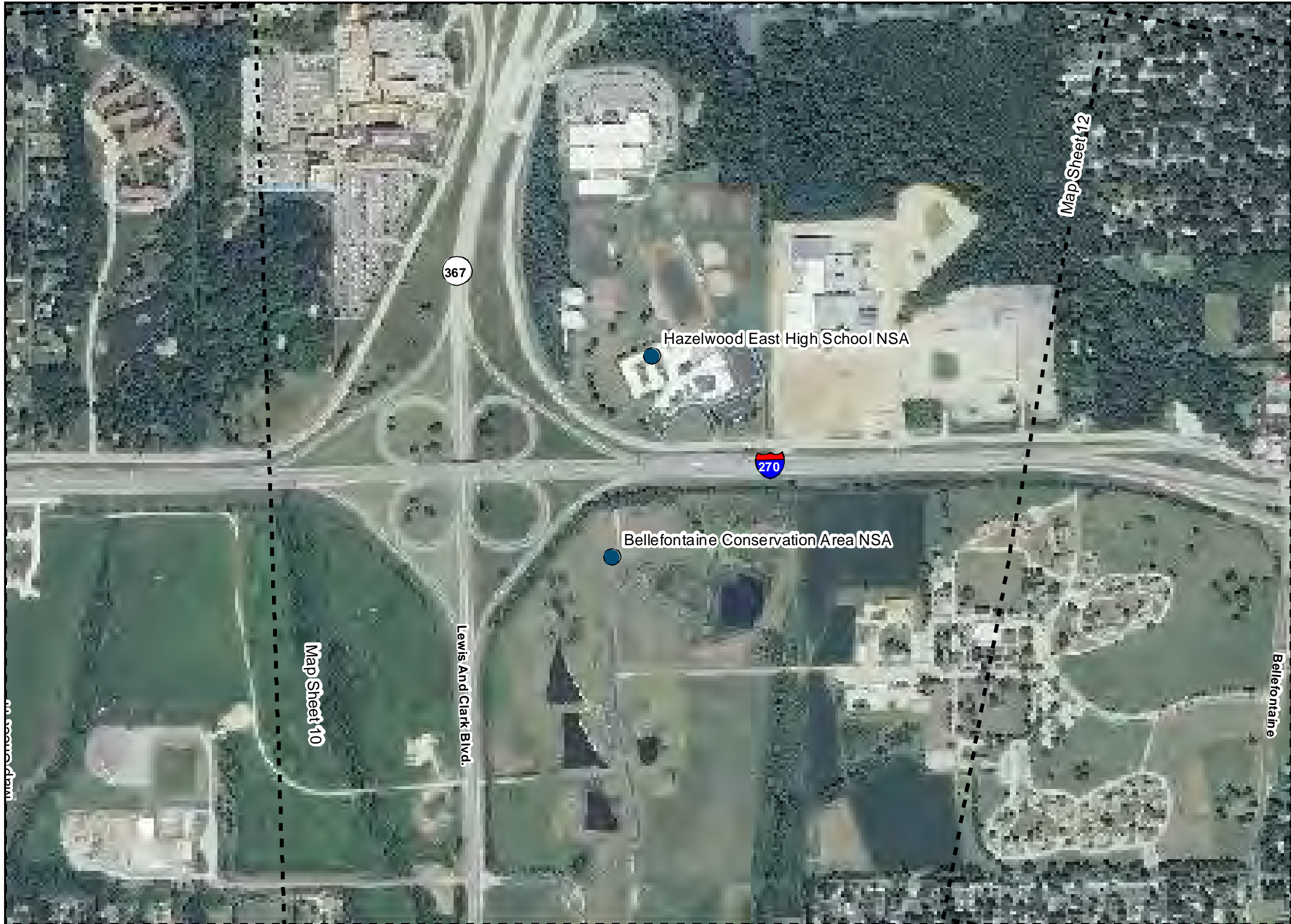
Map Sheet 11

Old Halls Ferry

Hathaway Manor (North) - NSA

Hathaway Manor (South) - NSA

270



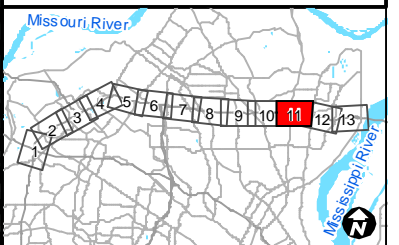
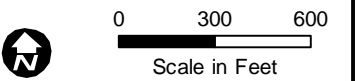
Noise Sensitive Receptor Map Sheet 11

Legend

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Noise Sensitive Receptor Map Sheet 12

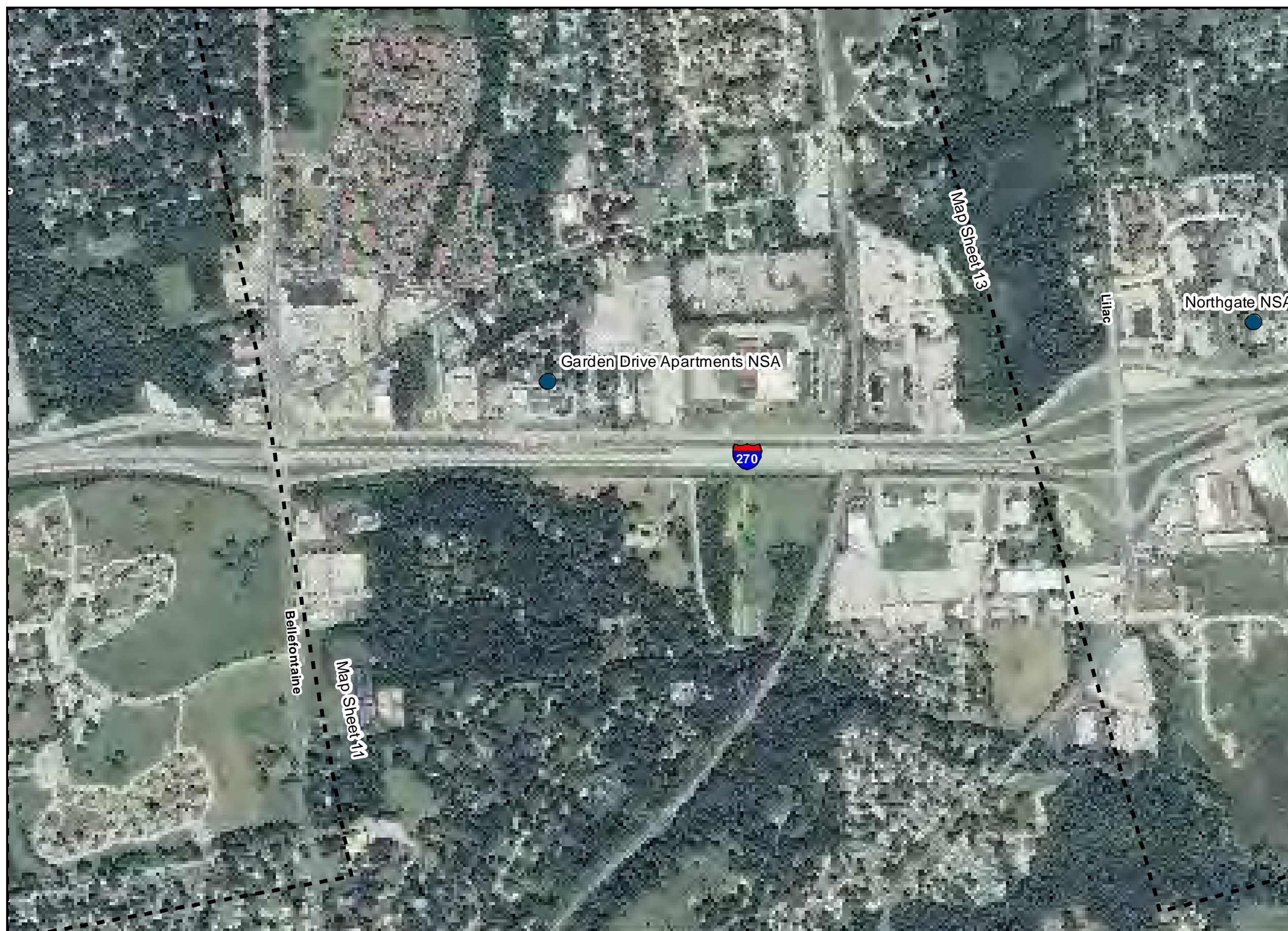
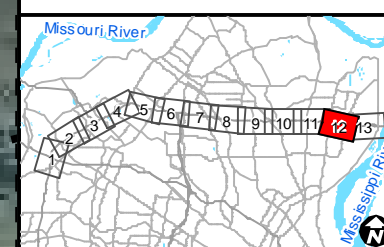
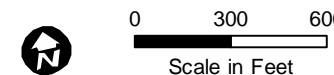
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Noise Study Areas

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-  Non-NSA
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Noise Sensitive Receptor Map Sheet 13

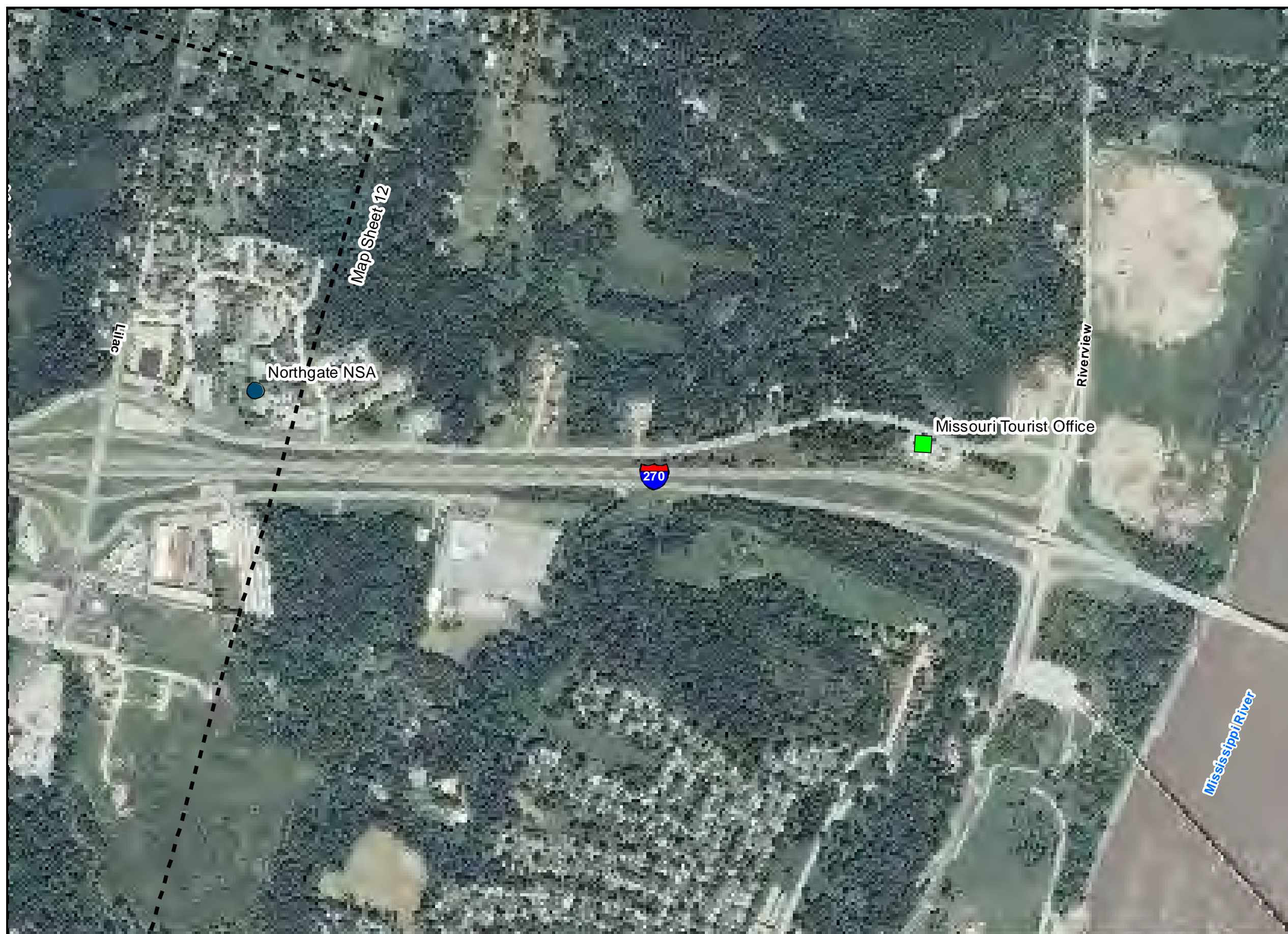
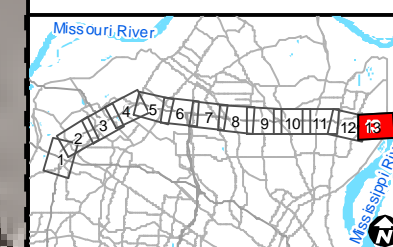
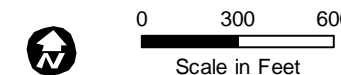
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Noise Study Areas

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D.4 - MDC Natural Heritage Report and USFWS Species Correspondence



Missouri Department of Conservation Natural Heritage Review Report

May 16, 2014 -- Page 1 of 3

Resource Science Division
P. O. Box 180
Jefferson City, MO 65102
Prepared by: Emily Clancy
Emily.Clancy@mdc.mo.gov
(573) 522 – 4115 ext. 3182

Robert Miller, AICP
CH2MHill
Robert.Miller@CH2M.com

Project type:	Road
Location/Scope:	Map on Last Page
County:	St. Louis
Query reference:	I-270 North EA
Query received:	May 5, 2014

This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially affected by the proposed project. On-site verification is the responsibility of the project. Natural Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information is at <http://mdc.mo.gov/discover-nature/places-go/natural-areas> and mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. Contact information for the department's Natural History Biologist is online at <http://mdc.mo.gov/contact-us>.

Level 3 issues: Records of federal-listed (these are also state-listed) species or critical habitats near the project site:

Natural Heritage records identify no wildlife preserves, no designated wilderness areas or critical habitats, no federal-listed species records within one mile of the site, or in the public land survey section listed above or sections adjacent

The project should be managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Permit" conditions. Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species compatible with the local landscape and wildlife needs. Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages, and monitor those after rain events and until a well-rooted ground cover is reestablished.

FEDERAL LIST species/habitats are protected under the Federal Endangered Species Act. **Consult with the U.S. Fish and Wildlife Service** (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132).

Level 2 issues: Records of state-listed (not federal-listed) endangered species AND / OR state-ranked (not state-listed endangered) species and natural communities of conservation concern. The Department tracks these species and natural communities due to population declines and/or apparent vulnerability.

Natural Heritage records identify no state-listed endangered species within 1 mile of the site.

Natural Heritage records identify an American Badger (*Taxidea taxus*, state rank SU) within section 36 of township 47 north range 7 east. This species may be found in grassland matrix, row/close grown crops or savanna pasture/orchard habitat types. The state rank of SU is defined as currently unrankable due to lack of information or due to substantially conflicting information about status or trends.

See http://mdc.mo.gov/sites/default/files/resources/2010/04/2014_species_concern.pdf for a complete list of species and communities of conservation concern.

STATE ENDANGERED species are listed in and protected under the Wildlife Code of Missouri (3CSR10-4.111).

General recommendations related to this project or site, or based on information about the historic range of species (unrelated to any specific Natural Heritage records):

- The project area contains multiple MDC properties (see map below). If any of the projects will

impact these areas, please coordinate further with the Missouri Department of Conservation.

- Indiana bats (*Myotis sodalis*, federally and state listed endangered) hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats, especially from September to April. **If any trees need to be removed by your project, please contact the U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132).**
- St. Louis County has known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area. See http://mdc.mo.gov/nathis/caves/manag_construc.htm for best management information.
- Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. Best management recommendations relating to streams and rivers may be found at: http://mdc.mo.gov/sites/default/files/resources/2013/02/constprojnearstreams_2013.pdf.
- Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites.
 - ◆ Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
 - ◆ Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
 - ◆ When possible, wash and rinse equipment thoroughly with hard spray or HOT water ($\geq 104^{\circ}$ F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.



These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Natural Heritage records largely reflect sites visited by specialists in the last 30 years. Many privately owned tracts have not been surveyed and could host remnants of species once but no longer common.





United States Department of the Interior



FISH AND WILDLIFE SERVICE
Columbia Ecological Services Field Office
101 PARK DEVILLE DRIVE, SUITE A
COLUMBIA, MO 65203
PHONE: (573)234-2132 FAX: (573)234-2181

Consultation Code: 03E14000-2016-SLI-2103

August 31, 2016

Event Code: 03E14000-2016-E-02068

Project Name: I-270 North Environmental Assessment

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

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system in order to provide information on natural resources that could be affected by your project. The response is provided by the U.S. Fish and Wildlife Service (Service) under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact our office if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. **Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days.** This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, please visit species profiles at <http://www.fws.gov/midwest/endangered/section7/s7process/lifehistory.html>. Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

Gray bats - Gray bats roost in caves or mines year-round and use forest riparian areas for foraging. If your project will impact caves or mines or will involve tree removal around these areas (particularly within stream corridors, riparian areas, or associated upland woodlots), gray bats could be affected.

Indiana and northern long-eared bats - These species hibernate in caves or mines only during the winter. The rest of the year they roost under loose tree bark in tree crevices or cavities during the day and forage around tree canopies of floodplain, riparian, and upland forests at night. Trees which should be considered potential roosting habitat include those exhibiting loose or shaggy bark, crevices, or hollows. Tree species often include, but are not limited to: shellbark or shagbark hickory, white oak, cottonwood, and maple. If your project will impact caves or mines or will involve clearing forested habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected. If your project will involve removal of over 5 acres of forested habitat, you may wish to complete a Summer Habitat Assessment prior to contacting our office in order to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the Range-wide Indiana Bat Summer Survey Guidelines, located at www.fws.gov/midwest/Endangered/mammals/inba/ under the heading Summer Survey Guidance.

If no suitable habitat for any federally-listed, candidate, or proposed species is present, and no species or their critical habitat will be affected, then no further consultation or coordination is required. However, if any of the following apply, please contact our office for further consultation:

1. Designated critical habitat is present within the project area,
2. Suitable habitat for listed, candidate, or proposed species is present within the project area (see above for habitat descriptions for bat species), or
3. You determine that project activities may affect these species or their critical habitat (e.g., project occurs upstream or within a distance such that the species or habitat could be affected).

The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. For additional conservation measures that may benefit species identified in the enclosed list, please contact our office.

Other Considerations

Bald and Golden Eagles - Although the bald eagle has recently been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden

Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

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

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts and these can be found at <http://www.fws.gov/habitatconservation/communicationtowers.html>.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. In order to minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee's and the Service at http://www.aplic.org/uploads/files/2634/APPguidelines_final-draft_Apr12005.pdf. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas known to support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow guidelines located at <http://www.fws.gov/windenergy>. In addition, please refer to the Service's Eagle Conservation Plan Guidance, located at http://www.fws.gov/windenergy/eagle_guidance.html, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

Next Steps

Should you determine that project activities may impact any of the natural resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.

We appreciate your concern for threatened and endangered species and please feel free to contact our office with questions or for additional information.

Amy Salveter

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: I-270 North Environmental Assessment

Official Species List

Provided by:

Columbia Ecological Services Field Office
101 PARK DEVILLE DRIVE
SUITE A
COLUMBIA, MO 65203
(573) 234-2132

Consultation Code: 03E14000-2016-SLI-2103

Event Code: 03E14000-2016-E-02068

Project Type: TRANSPORTATION

Project Name: I-270 North Environmental Assessment

Project Description: The Interstate 270 (I-270) North Environmental Assessment (EA) study is a transportation study to investigate and identify improvements to I 270 from the I 70/I 270 interchange in Bridgeton, Missouri, to the Mississippi River/Chain of Rocks Bridge, between Missouri and Illinois.

In its very broadest sense, the purpose and need of the I 270 North EA project can be defined as follows:

- The need to address the aging infrastructure along I 270
- The need to improve mobility and operations within the I 270 corridor
- The need to achieve accessibility consistent with the designated uses of I 270
- The need to improve safety within the I 270 corridor

The process that led to the identification of the Preferred Alternative included evaluating impacts. The impact analysis was multi-faceted, encompassing numerous elements, such as right-of-way requirements, environmental impacts, socio-economic consequences, disruptions to important cultural resources, community impacts, building relocations, and engineering considerations along with an examination of the compatibility with local transportation priorities. The Preferred Alternative includes the following elements:

Map Area #1: I 70 to McDonnell Boulevard

The existing numbers of I 270 lanes is maintained, with auxiliary lanes added to accommodate the



United States Department of Interior
Fish and Wildlife Service

Project name: I-270 North Environmental Assessment

operation of I 270. At St. Charles Rock Road, a diverging diamond interchange will replace the diamond interchange. At McDonnell Boulevard, a diverging diamond interchange will replace the existing diamond interchange.

Map Area #2: McDonnell Boulevard to Hanley/Graham Road

The only alternative at the existing cloverleaf Lindbergh Boulevard interchange is a partial cloverleaf configuration. It will add an additional lane on I 270, east of Lindbergh Boulevard. It will remove the WB to SB loop ramp at Lindbergh Boulevard with a direct connection to the north. Dunn Road will be extended through (under) the interchange. An auxiliary lane will be added (EB) between Lindbergh Boulevard and I 170.

Map Area #3: Hanley/Graham Road to Old Halls Ferry Road

The focus of Reasonable Alternative 1 is converting the outer road system (Dunn Road and Pershall Road) from a two-way system to a one-way system. There are two different variations under consideration (1 and 1a). An additional through lane on I 270 in each direction will be constructed. The interchange ramps within this area will be consolidated into a split diamond configuration. Variation 1 will extend the split diamond configuration from West Florissant Avenue to Old Halls Ferry Road. Variation 1a will limit the split diamond to between West Florissant Avenue to New Halls Ferry Road. To minimize out-of-direction travel on the one-way system, two EB-to-WB U-turn lanes will be added at New Florissant Road and West Florissant Avenue. An additional U turn lane for both EB to WB and WB to EB located between Elizabeth Avenue and West Florissant Avenue (nearest Knollway Drive) has two options. Auxiliary lanes will be added as needed.

Map Area #4: East of Old Halls Ferry Road to Chain of Rocks Bridge

The only alternative at the existing cloverleaf MO 367 interchange is a partial cloverleaf configuration. It will eliminate two loop ramps, using a fly-over ramp for the EB-to- NB movement and diamond exit ramp from WB I 270 to NB and SB MO 367. At the Bellefontaine Road interchange, the existing diamond interchange will be reconfigured. The slip ramps will be removed and Dunn Road relocated. At the Lilac Avenue interchange, the existing diamond configuration will be modified. Most noticeably, the ramps will be moved closer to I 270. At the Riverview Road interchange, the existing diamond configuration will be modified.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by'



United States Department of Interior
Fish and Wildlife Service

Project name: I-270 North Environmental Assessment

section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: I-270 North Environmental Assessment

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: St. Louis, MO | St. Louis (city), MO



United States Department of Interior
Fish and Wildlife Service

Project name: I-270 North Environmental Assessment

Endangered Species Act Species List

There are a total of 5 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Fishes	Status	Has Critical Habitat	Condition(s)
Pallid sturgeon (<i>Scaphirhynchus albus</i>) Population: Entire	Endangered		
Flowering Plants			
Decurrent False aster (<i>Boltonia decurrens</i>)	Threatened		
Mammals			
Gray bat (<i>Myotis grisescens</i>) Population: Entire	Endangered		
Indiana bat (<i>Myotis sodalis</i>) Population: Entire	Endangered		
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened		



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Critical habitats that lie within your project area

There are no critical habitats within your project area.



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Project name: I-270 North Environmental Assessment

Appendix A: FWS National Wildlife Refuges and Fish Hatcheries

There are no refuges or fish hatcheries within your project area.



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Fish and Wildlife Service

Project name: I-270 North Environmental Assessment

Appendix B: NWI Wetlands

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of



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this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following NWI Wetland types intersect your project area in one or more locations. To understand the NWI Classification Code, see <https://ecos.fws.gov/ipac/wetlands/decoder>. To view the National Wetlands Inventory on a map go to <http://www.fws.gov/wetlands/Data/Mapper.html>.

Wetland Types	NWI Classification Code
Freshwater Emergent Wetland	PEM1A
Freshwater Emergent Wetland	PEM1Ad
Freshwater Emergent Wetland	PEM1C
Freshwater Emergent Wetland	PEM1Ch
Freshwater Forested/Shrub Wetland	PFO1A
Freshwater Forested/Shrub Wetland	PFO1Ax
Freshwater Forested/Shrub Wetland	PFO1C
Freshwater Forested/Shrub Wetland	PFO1Cx
Freshwater Forested/Shrub Wetland	PSS1A
Freshwater Forested/Shrub Wetland	PSS1C
Freshwater Pond	PUBF
Freshwater Pond	PUBFh
Freshwater Pond	PUBFx
Freshwater Pond	PUBG
Freshwater Pond	PUBGh



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Freshwater Pond	PUBGx
Freshwater Pond	PUBKx
Freshwater Pond	PUSAh
Lake	L1UBKx
Riverine	R2UBG
Riverine	R2UBGx
Riverine	R2UBHx
Riverine	R4SBC
Riverine	R4SBCx
Riverine	R5UBH
Riverine	R2UBH

**D.5 - Indiana Bat Photos, Phasing Map
and Potential Habitat Map**

Appendix D: Photographs of Selected Treed Areas Along the Corridor



Photo 1: Facing west toward McDonnell Blvd. on eastbound I-270. This phase will take place in 2026 - 2035.



Photo 2: West of McDonnell Blvd. facing east on eastbound I-270. This phase will take place in 2026 – 2035.



Photo 3: Facing east toward Lindberg on the south side of I-270. This area is in the first phase of the project, 2016 - 2025.



Photo 4: Facing south on eastbound I-270 west of Lindberg. First phase of the project, 2016 - 2025.



Photo 5: Facing west on eastbound I-270 west of Lindberg. First phase of the project 2016 - 2025.



Photo 6: Facing northeast from Dunn Road west of Bellefontaine. This area may be impacted by a new connector road. This phase will take place in 2026 – 2035.



Photo 7: Facing south toward hillside east of Bellefontaine. This phase will take place in 2026 – 2035.



Photo 8: Facing west on Dunn Road at the east end of the project. The Welcome Center is on the left outside of the view of the picture. This phase will take place in 2026 – 2035.



Photo 9: Facing south looking at the Welcome Center from Dunn Road at the east end of the project corridor. This phase will take place in 2026 – 2035.



Photo 10: Facing south from Dunn Road at the east end of the project corridor. This phase will take place in 2026 – 2035.



Photo 11: Facing east from the eastbound exit ramp at Riverview Drive looking at the hillside on the south side of I-270. This phase will take place in 2026 – 2035.



Photo 12: Facing west from the eastbound exit ramp at Riverview Drive looking at the hillside on the south side of I-270. This phase will take place in 2026 – 2035.

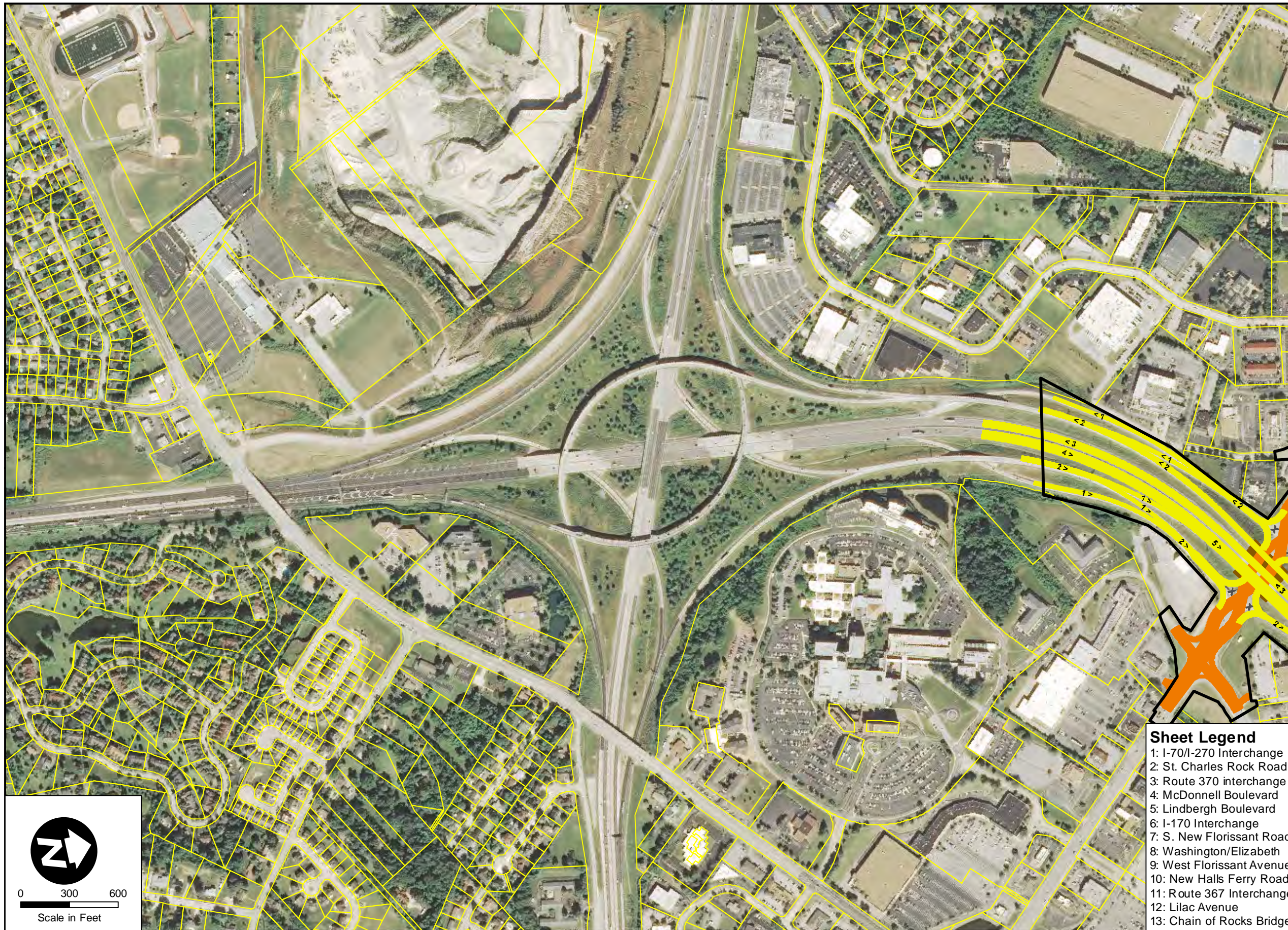


Photo 13: Facing south from the eastbound exit ramp at Riverview Drive looking at the hillside on the south side of I-270. This phase will take place in 2026 – 2035.



Photo 14: Facing south from the eastbound exit ramp at Riverview Drive looking into the thick bush honeysuckle on the hillside on the south side of I-270. Path was cleared recently by a survey crew. This phase will take place in 2026 – 2035.

Map Area 1



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2> One-Way - Number of Lanes
- <3> Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT
PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 1 OF 13

Sheet Legend

- 1: I-70/I-270 Interchange
- 2: St. Charles Rock Road
- 3: Route 370 interchange
- 4: McDonnell Boulevard
- 5: Lindbergh Boulevard
- 6: I-170 Interchange
- 7: S. New Florissant Road
- 8: Washington/Elizabeth
- 9: West Florissant Avenue
- 10: New Halls Ferry Road
- 11: Route 367 Interchange
- 12: Lilac Avenue
- 13: Chain of Rocks Bridge

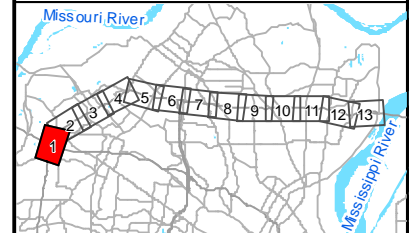
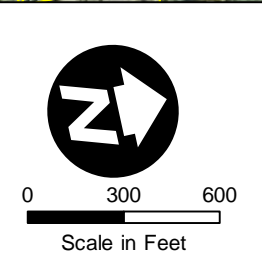
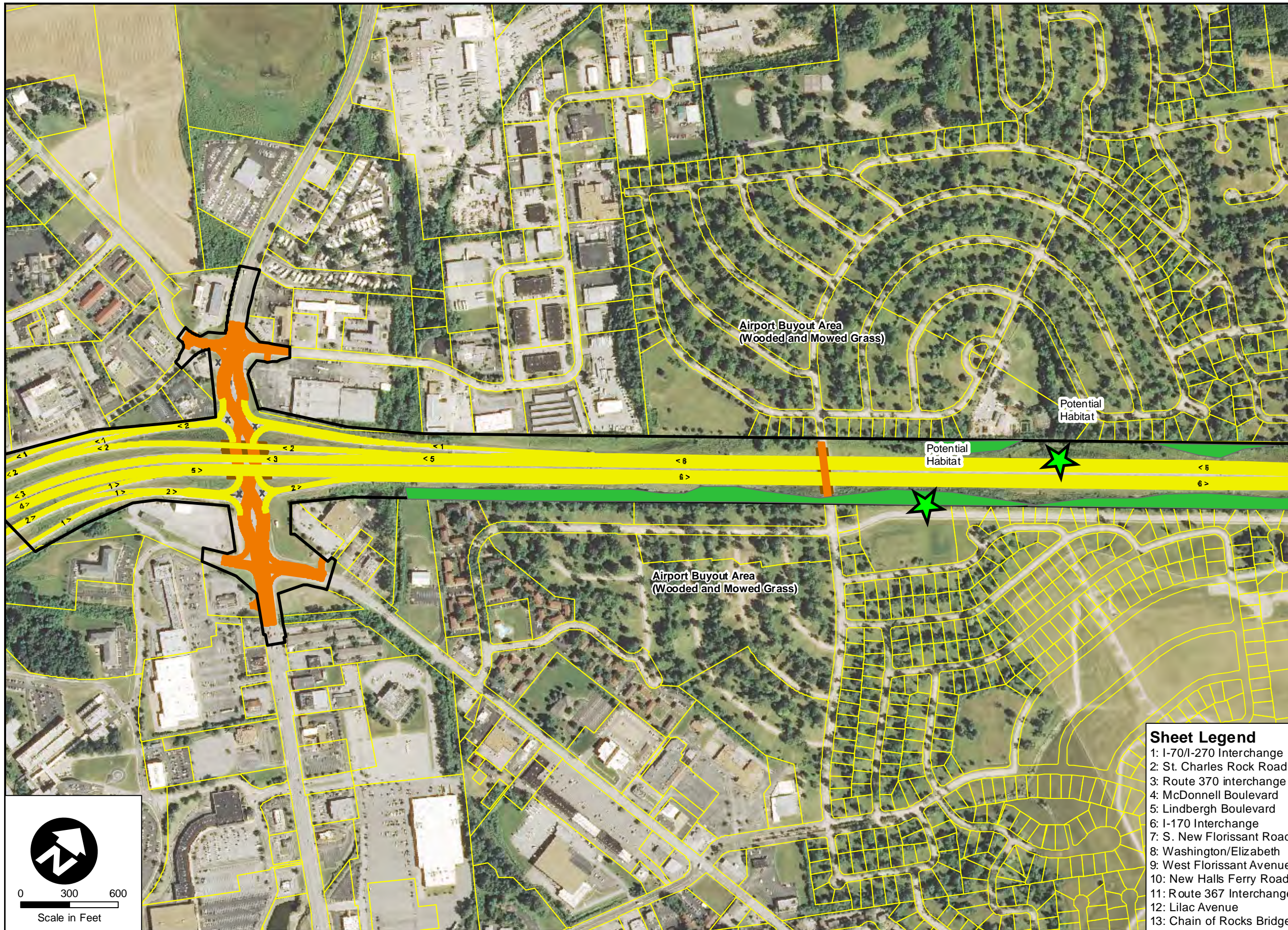


Exhibit 7



Map Area 1



Indiana Bat Survey Areas

- Legend**
- Parcel Boundary
 - Freeway/Ramps
 - One-Way Local/Connector Road
 - Two-Way Local/Connector Road
 - Bridge
 - Wall
 - ★ Potential Habitat Survey Areas

- Wooded Areas**
- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT
PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 2 OF 13

- Sheet Legend**
- 1: I-70/I-270 Interchange
 - 2: St. Charles Rock Road
 - 3: Route 370 interchange
 - 4: McDonnell Boulevard
 - 5: Lindbergh Boulevard
 - 6: I-170 Interchange
 - 7: S. New Florissant Road
 - 8: Washington/Elizabeth
 - 9: West Florissant Avenue
 - 10: New Halls Ferry Road
 - 11: Route 367 Interchange
 - 12: Lilac Avenue
 - 13: Chain of Rocks Bridge

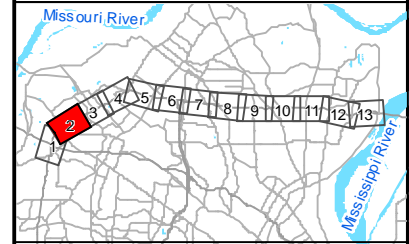
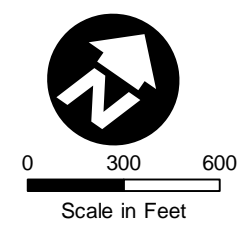
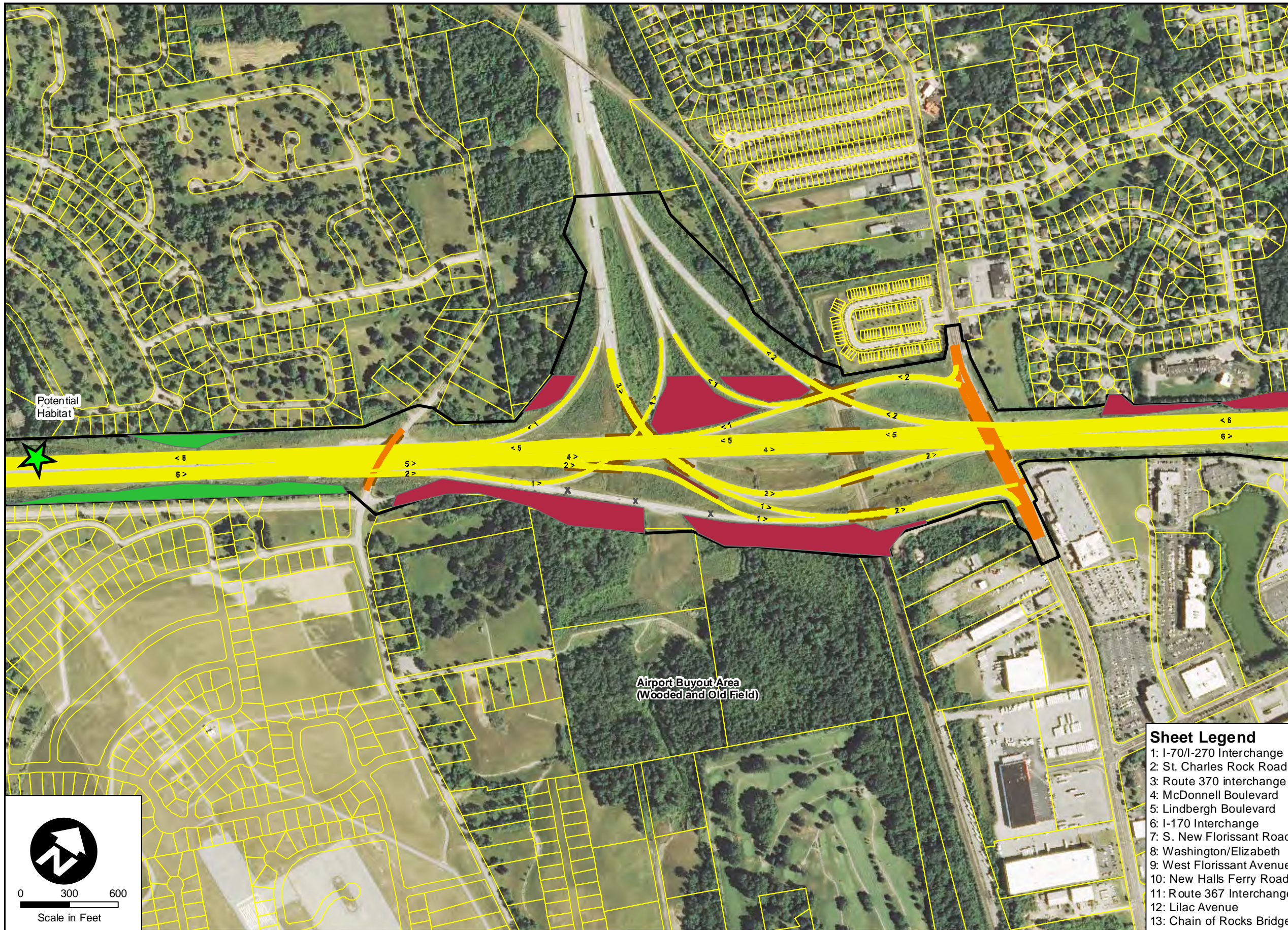


Exhibit 7



Map Area 1



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 3 OF 13

Sheet Legend

- 1: I-70/I-270 Interchange
- 2: St. Charles Rock Road
- 3: Route 370 interchange
- 4: McDonnell Boulevard
- 5: Lindbergh Boulevard
- 6: I-170 Interchange
- 7: S. New Florissant Road
- 8: Washington/Elizabeth
- 9: West Florissant Avenue
- 10: New Halls Ferry Road
- 11: Route 367 Interchange
- 12: Lilac Avenue
- 13: Chain of Rocks Bridge

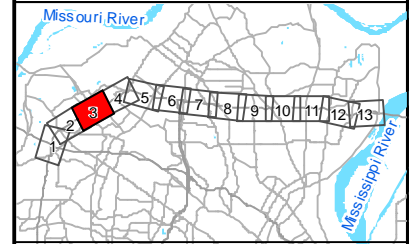
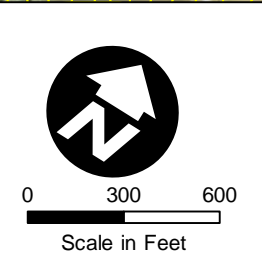


Exhibit 7



Map Area 1

Map Area 2



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2> One-Way - Number of Lanes
- < 3> Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 4 OF 13

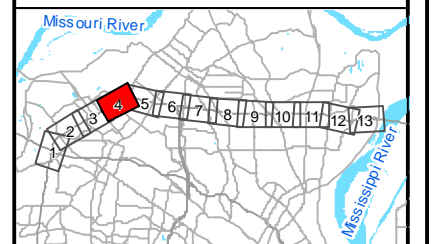
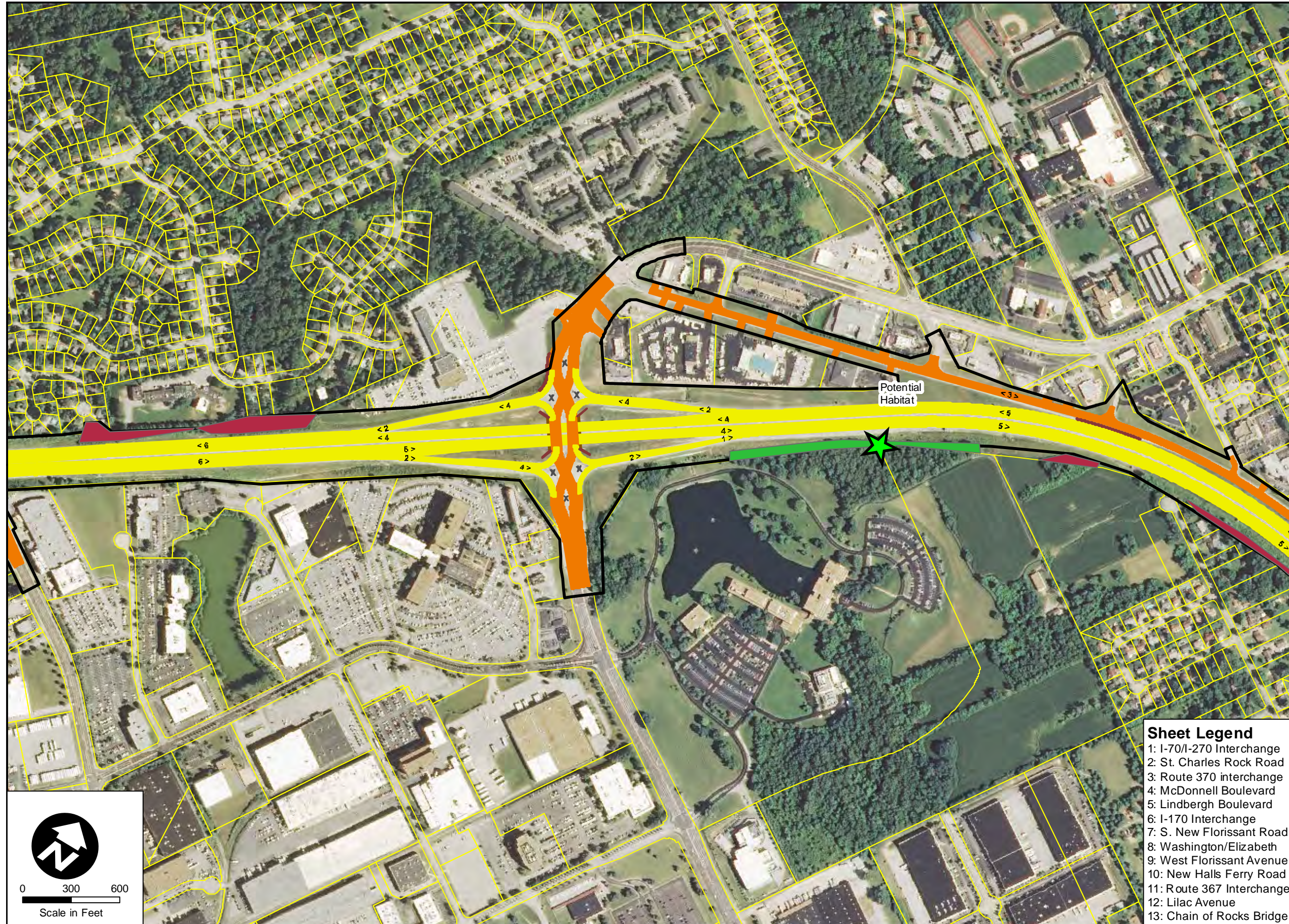


Exhibit 7

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- 1: I-70/I-270 Interchange
- 2: St. Charles Rock Road
- 3: Route 370 interchange
- 4: McDonnell Boulevard
- 5: Lindbergh Boulevard
- 6: I-170 Interchange
- 7: S. New Florissant Road
- 8: Washington/Elizabeth
- 9: West Florissant Avenue
- 10: New Halls Ferry Road
- 11: Route 367 Interchange
- 12: Lilac Avenue
- 13: Chain of Rocks Bridge



Map Area 2



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 5 OF 13

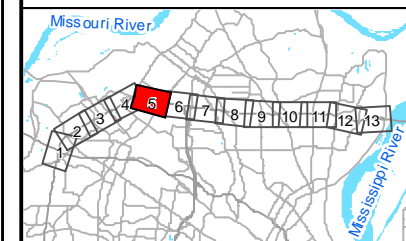
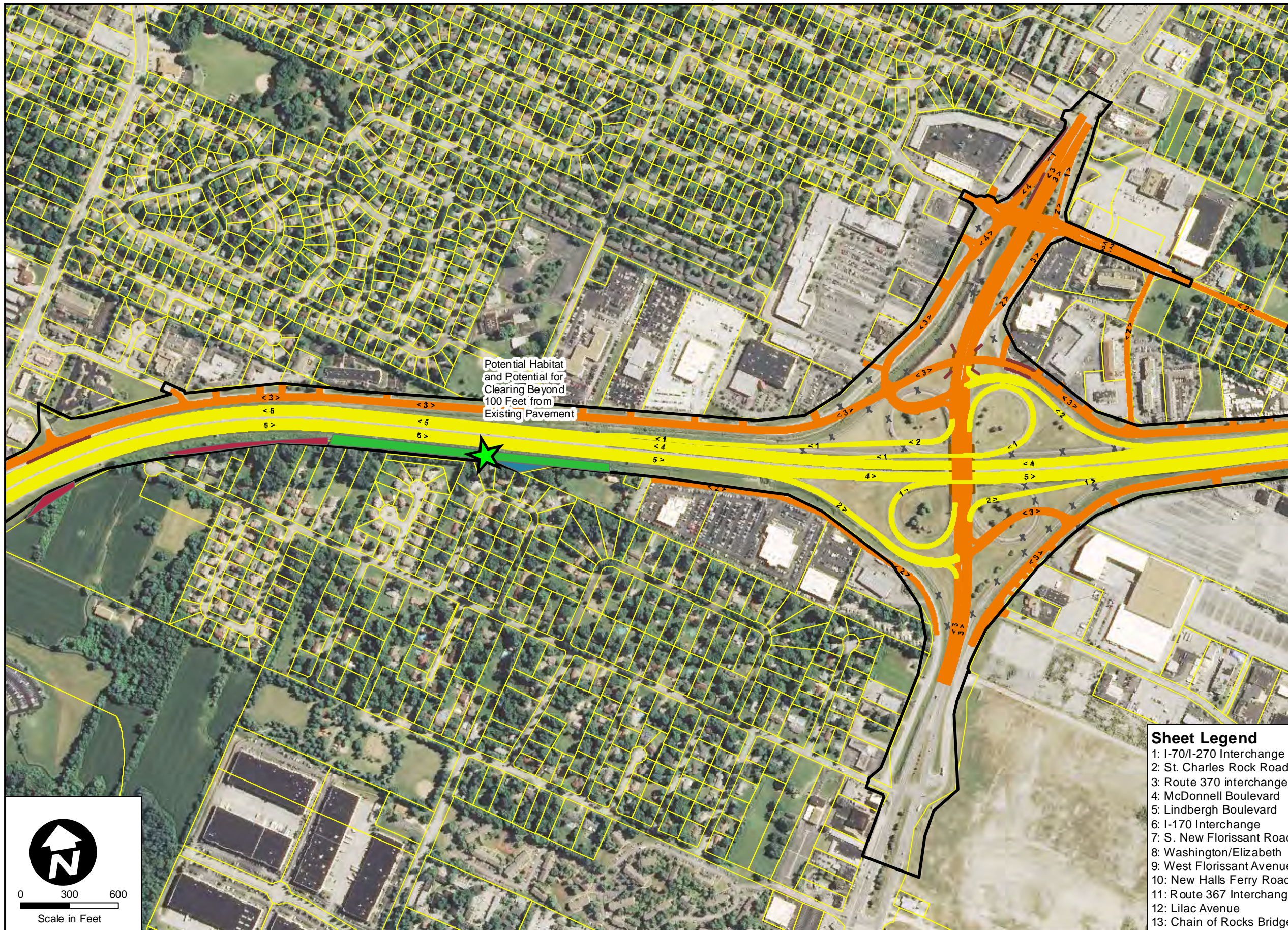


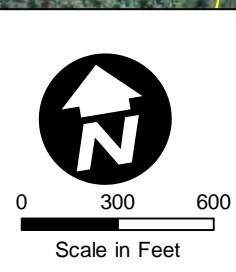
Exhibit 7



Potential Habitat and Potential for Clearing Beyond 100 Feet from Existing Pavement

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Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
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 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
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- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 6 OF 13

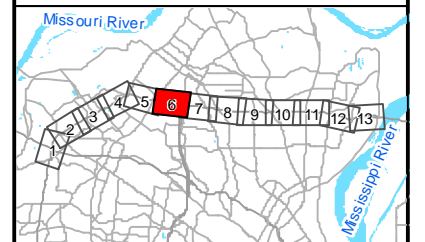
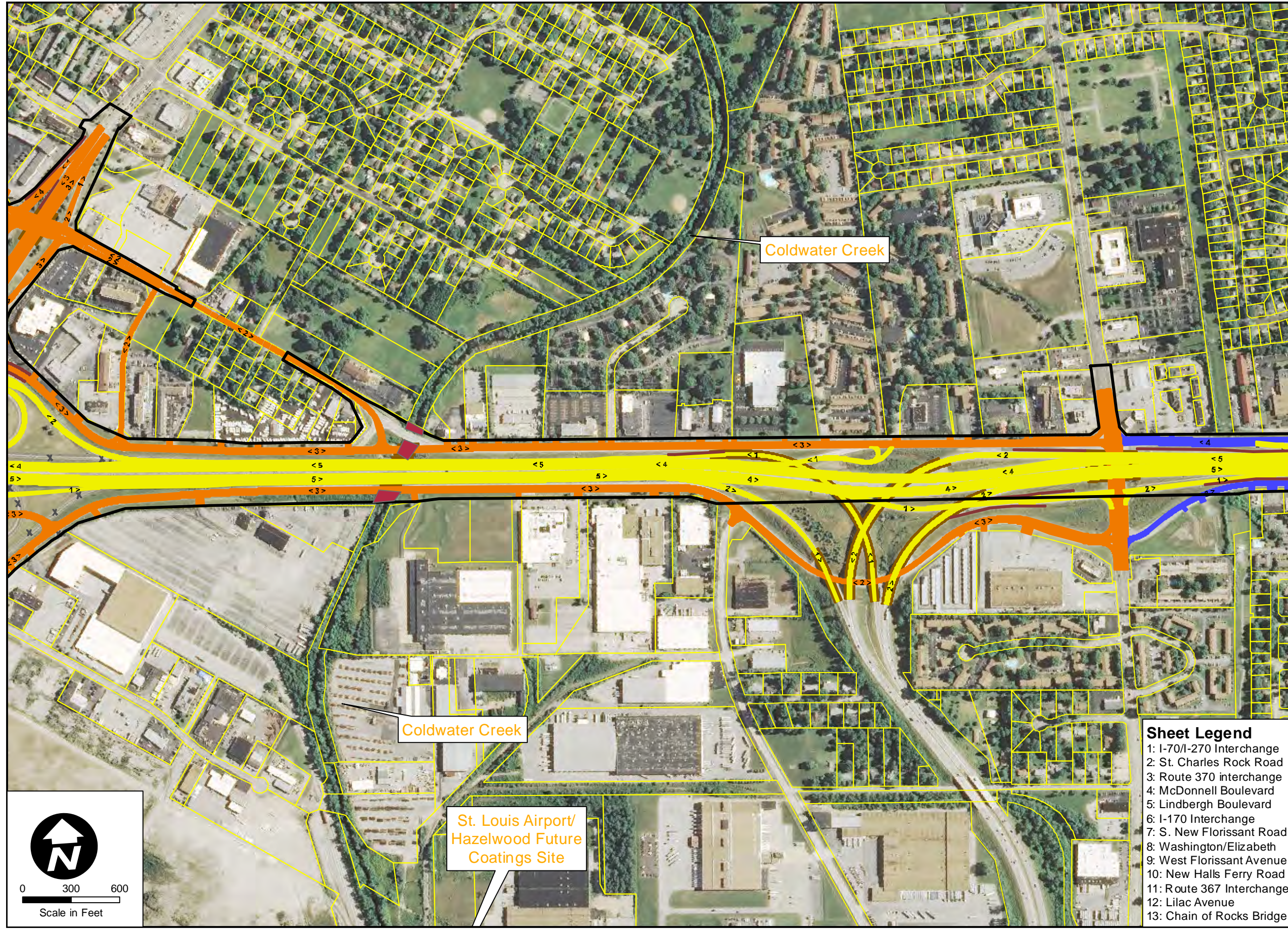
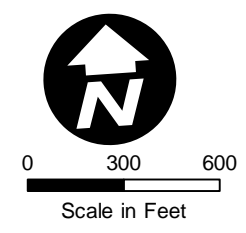


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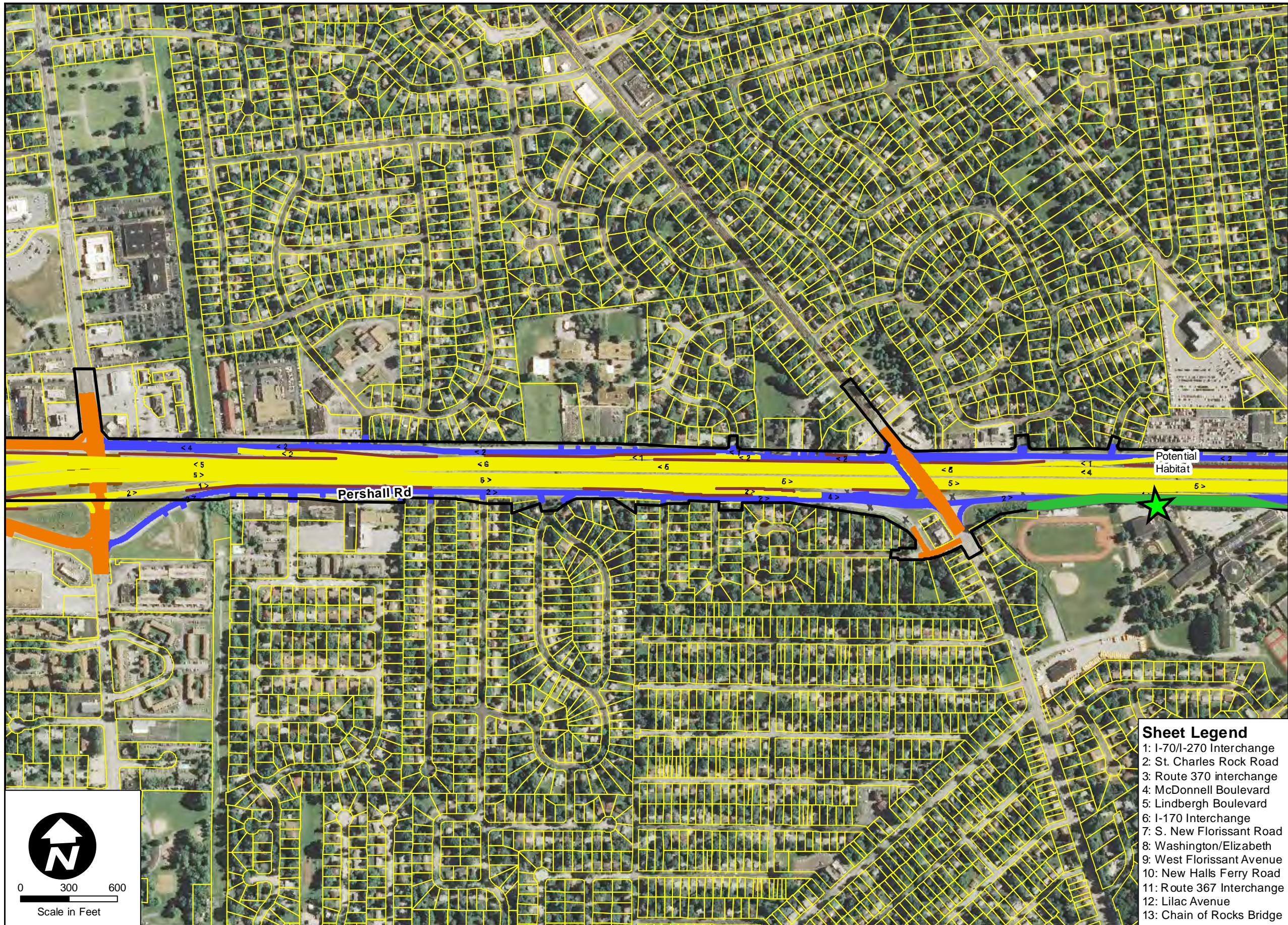


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- 12: Lilac Avenue
- 13: Chain of Rocks Bridge



Map Area 3



Indiana Bat Survey Areas

- Legend**
- Parcel Boundary
 - Freeway/Ramps
 - One-Way Local/Connector Road
 - Two-Way Local/Connector Road
 - Bridge
 - Wall
 - Potential Habitat Survey Areas

- Wooded Areas**
- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 7 OF 13

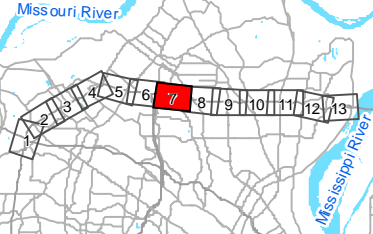
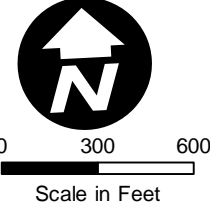


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- 10: New Halls Ferry Road
- 11: Route 367 Interchange
- 12: Lilac Avenue
- 13: Chain of Rocks Bridge



Map Area 3



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

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- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT
PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 8 OF 13

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- 13: Chain of Rocks Bridge

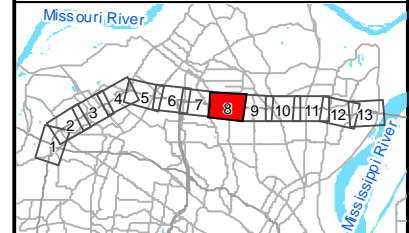
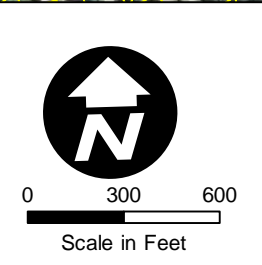
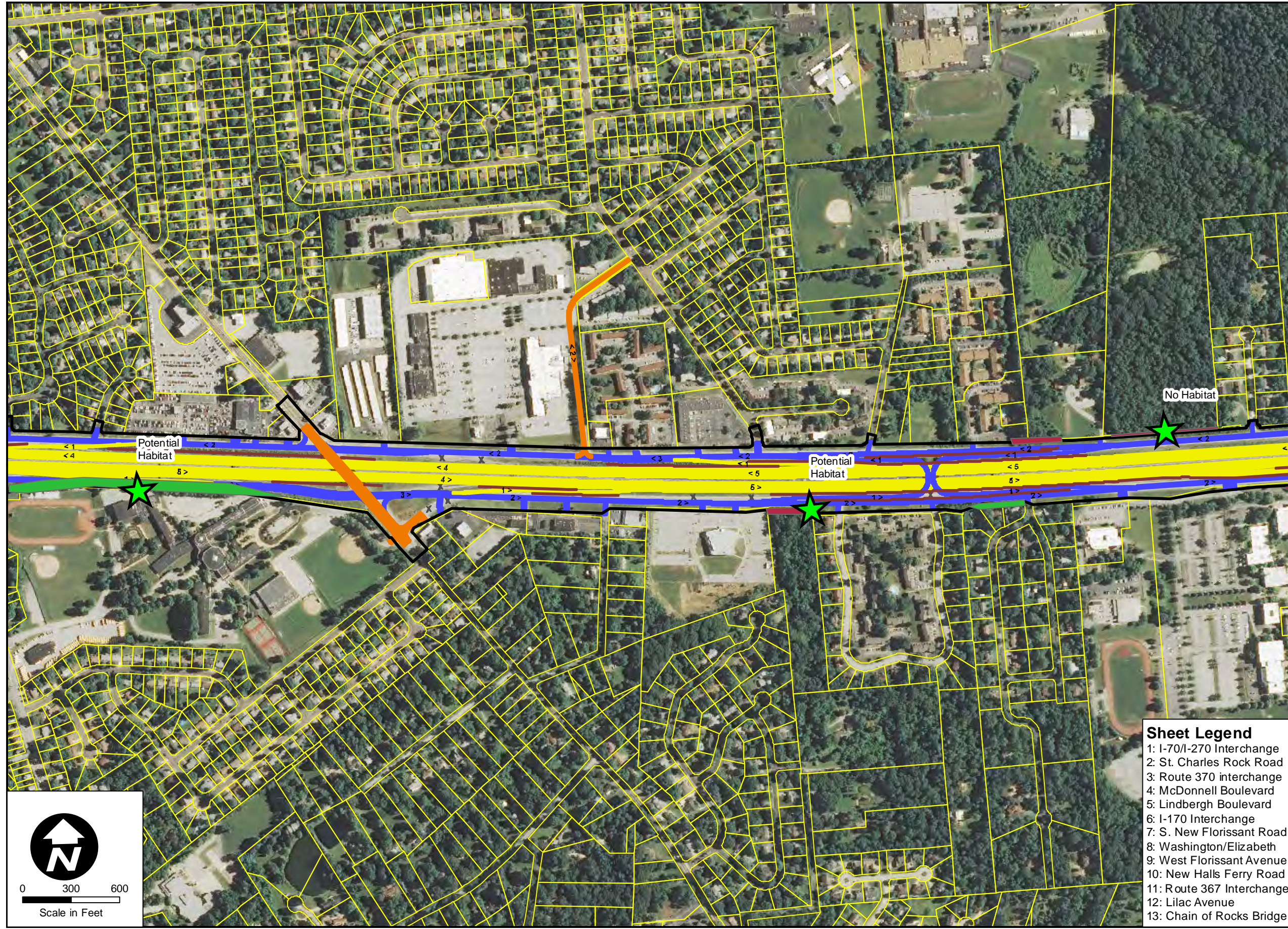
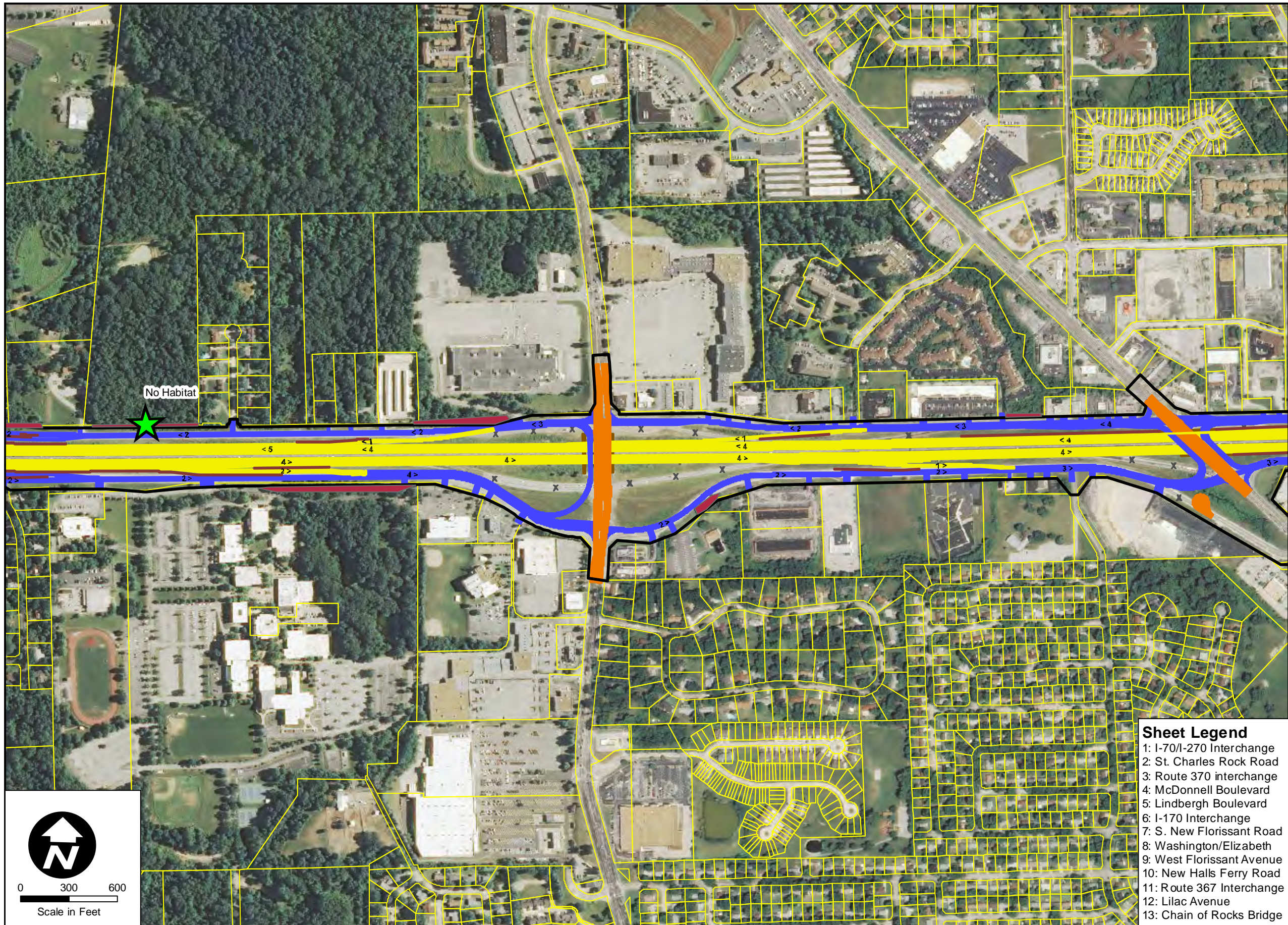


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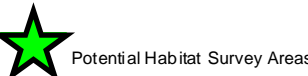
Map Area 3



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall



Wooded Areas

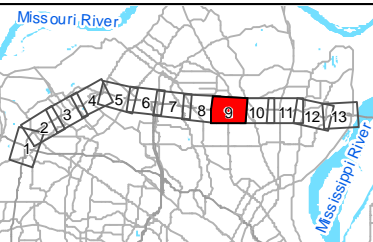
- Type
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 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
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- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 9 OF 13



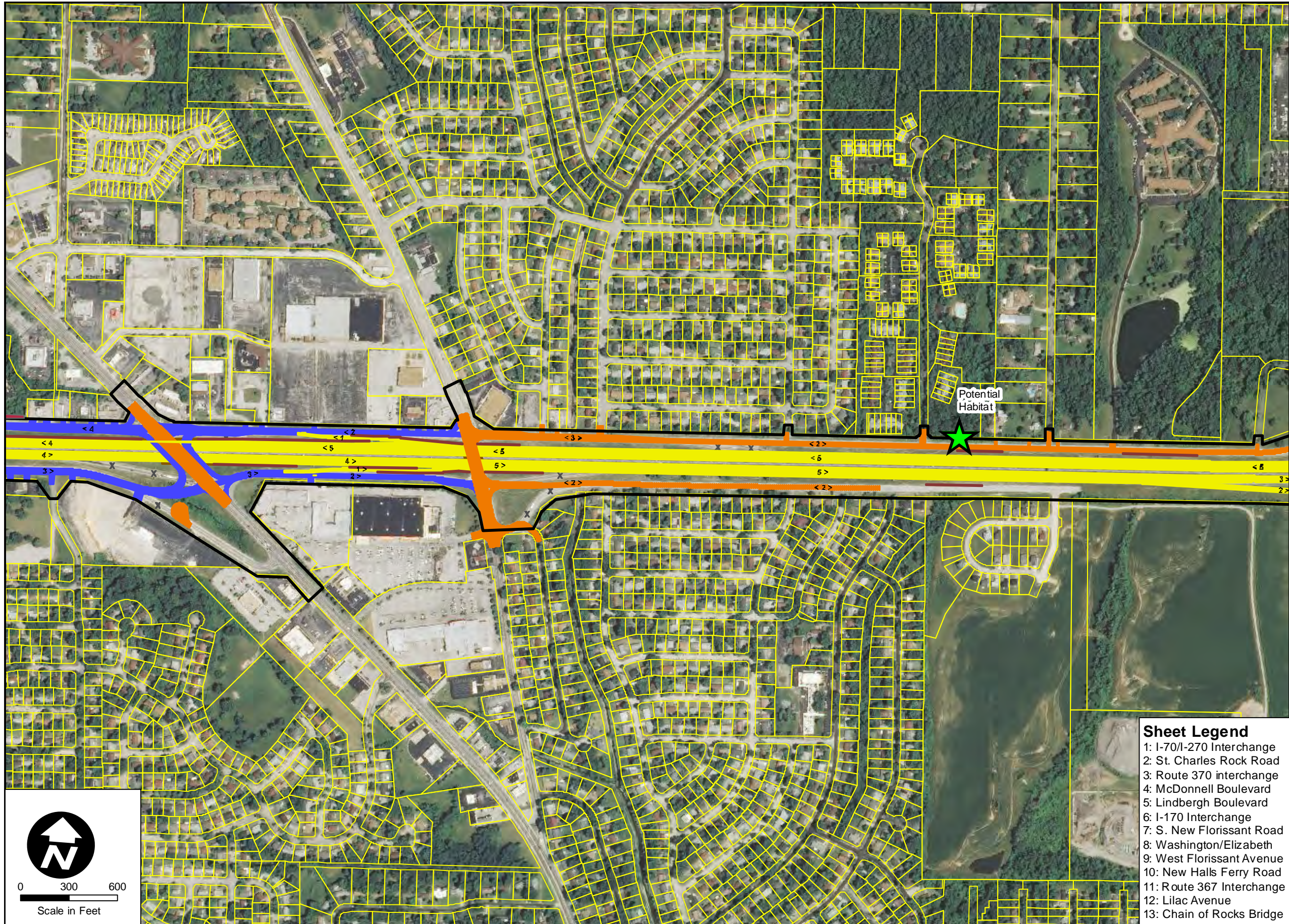
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- 11: Route 367 Interchange
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- 13: Chain of Rocks Bridge

Exhibit 7

Map Area 3

Map Area 4



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

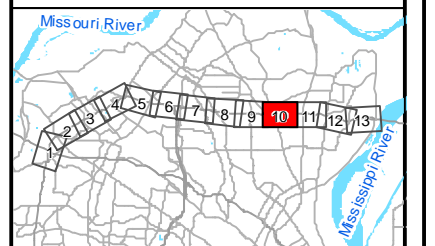
- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 10 OF 13



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Exhibit 7

Map Area 4



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall



Potential Habitat Survey Areas

Wooded Areas

Type

- No Habitat - Inside 100'
- Potential Habitat - Beyond 100'
- Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 11 OF 13

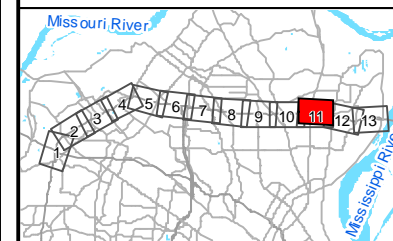


Exhibit 7

Potential Habitat and Potential for Clearing Beyond 100 Feet from Existing Pavement

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- 1: I-70/I-270 Interchange
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- 12: Lilac Avenue
- 13: Chain of Rocks Bridge



0 300 600

Scale in Feet

Map Area 4



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall
- Potential Habitat Survey Areas

Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 12 OF 13

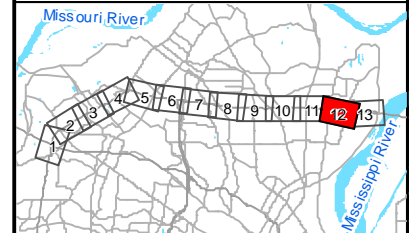
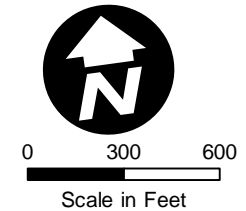
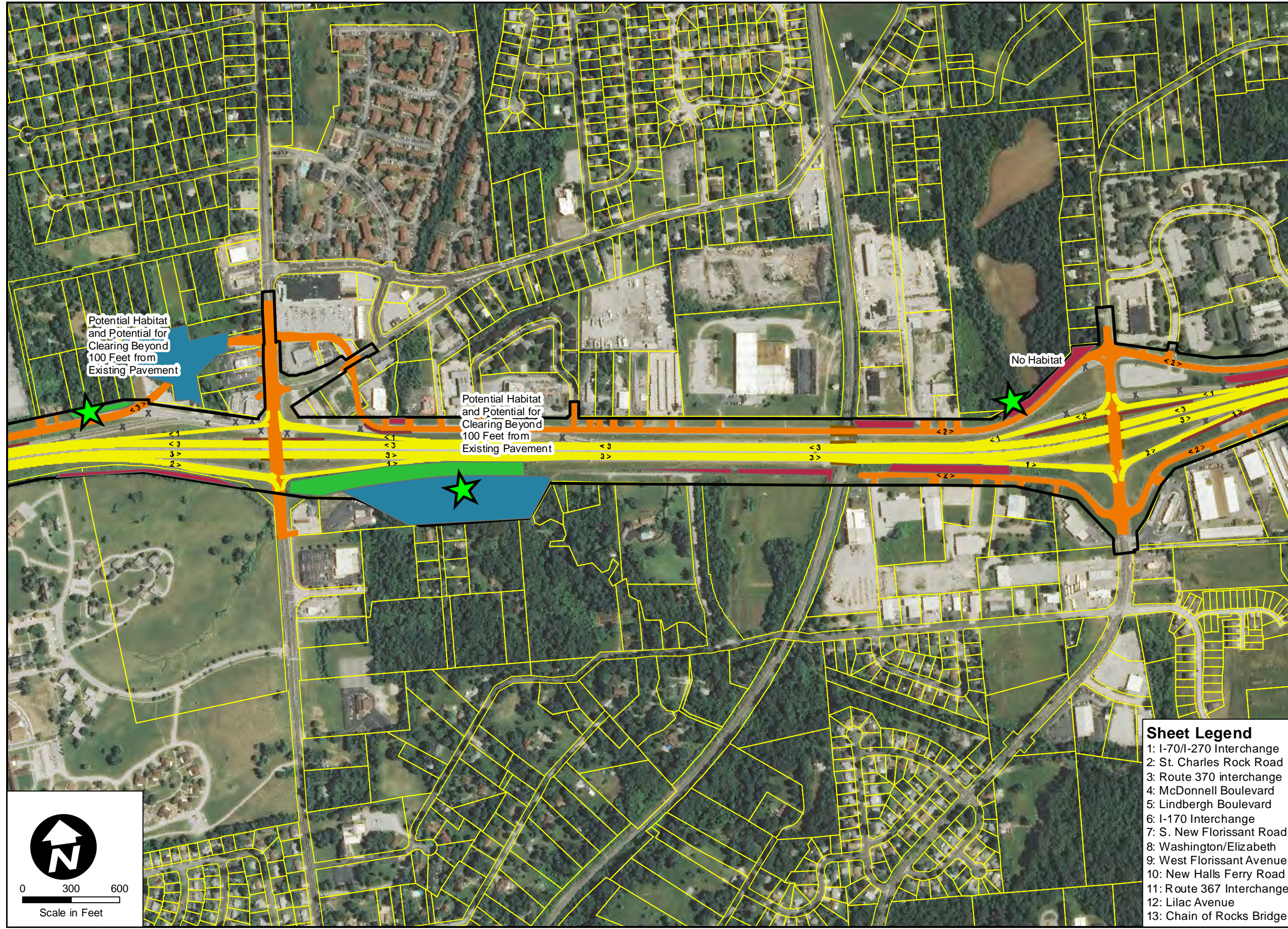


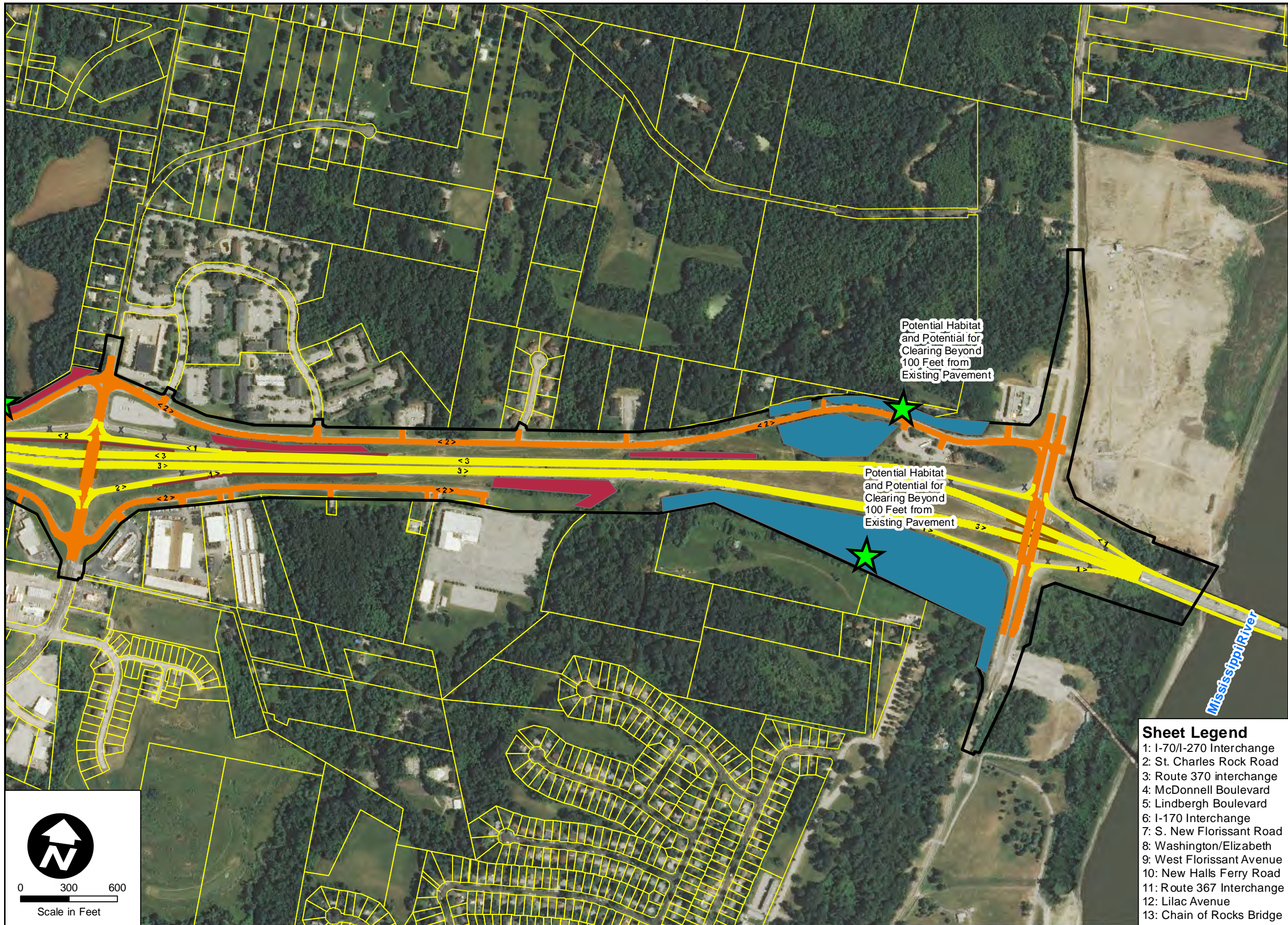
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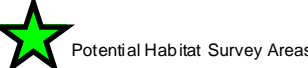
Map Area 4



Indiana Bat Survey Areas

Legend

- Parcel Boundary
- Freeway/Ramps
- One-Way Local/Connector Road
- Two-Way Local/Connector Road
- Bridge
- Wall



Wooded Areas

- Type
- No Habitat - Inside 100'
 - Potential Habitat - Beyond 100'
 - Potential Habitat - Inside 100'

- 2 > One-Way - Number of Lanes
- < 3 > Two-Way - Number of Lanes
- Signalized Intersection
- X Removal of Existing Pavement

Updated on 10/28/2016

I-270 NORTH ENVIRONMENTAL ASSESSMENT

PREFERRED ALTERNATIVE AND LANE CONFIGURATION SHEET 13 OF 13

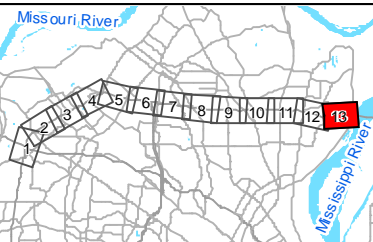
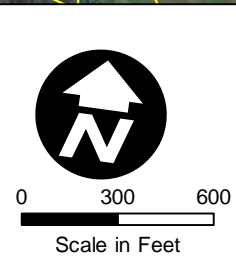


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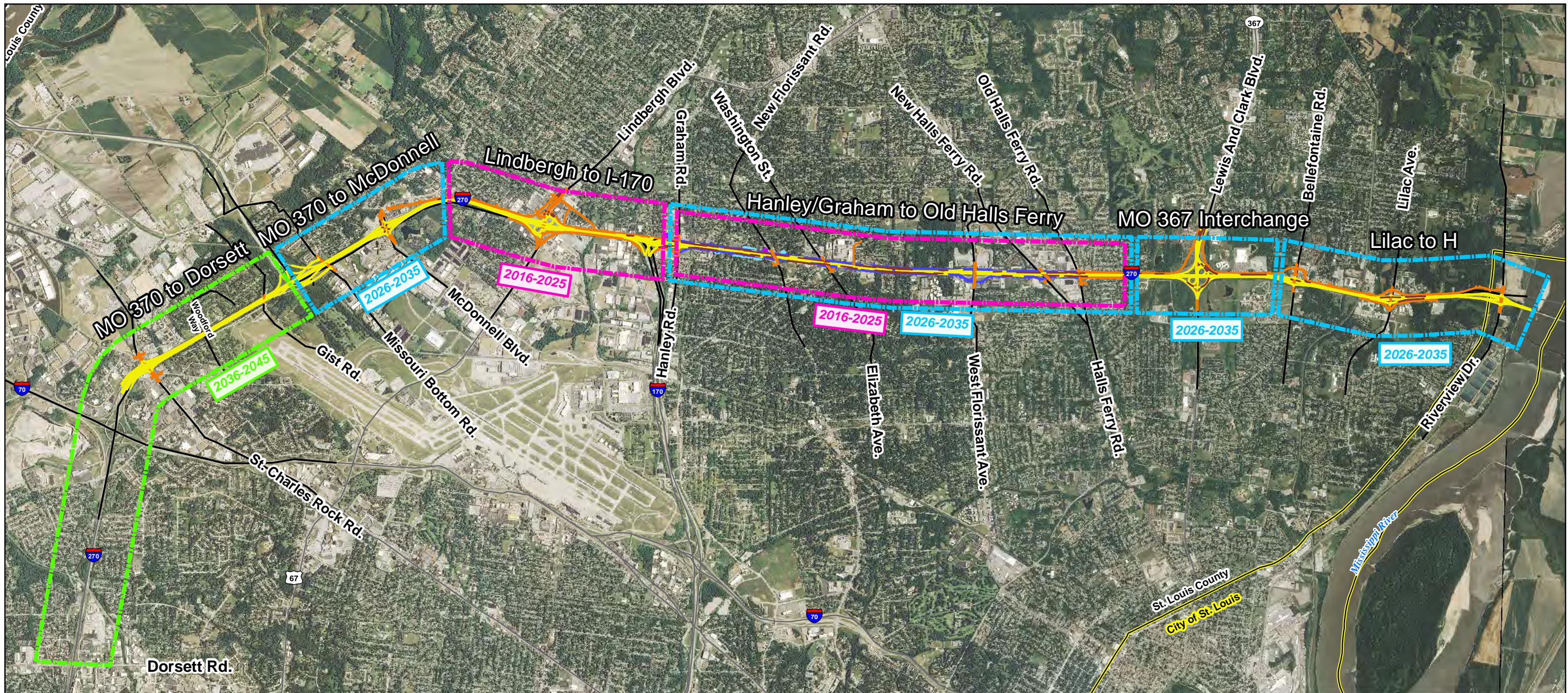
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I-270 North Environmental Assessment Phasing based on Long-Range Transportation Plan



Legend

Period

- 2016-2025
- 2026-2035
- 2036-2045



1 inch = 1 miles



D.6 - Section 4(f) Findings

LITTLE CREEK NATURE AREA

Little Creek Nature Area is a 97-acre outdoor educational facility owned and operated by the Ferguson-Florissant School District. Since 1974, teachers have provided ecology, environmental science, field biology and living history programs for district students. Located in North St. Louis County, the Nature Area is situated near the east-central perimeter of the district, bounded on the south by I-270 and surrounded on the east and west by subdivision, institutional, and commercial development. Its northern boundary is shared in common with Dunegant Park, a Florissant city park.

The Nature Area supports approximately eighteen acres of developed facilities. Included are a residence converted to a museum and office space, a high school classroom adjoined by a pavilion with picnic tables and restroom facilities, and an elementary building with two classrooms. A small farm is comprised of a barn, chicken coop, apiary, a vegetable garden, pastures, and a caretaker's workshop and garage. There is a nineteenth century log cabin, a butterfly garden, a reconstructed prairie, a conservation windbreak, and an arboretum.

The remaining acreage is largely wooded and preserved as natural areas. It includes five designated trails, two woodland ponds, a field pond, and several tributary streams that drain into the Maline Creek watershed.

The instructional programs offered at the Nature Area both support and enhance the pre-K to 12 curricula in a variety of ways. The pre-K and elementary programs allow students and teachers the opportunity to meet state and local science, social studies and communication arts objectives not easily accomplished in a traditional classroom setting. Hands-on inquiry-based activities provide students with experiences which not only enhance achievement, but cultivate a life-long interest in the natural world.

At the secondary level, Field Biology and AP Environmental Science are offered to students from all three district high schools. Students enrolled in these courses are transported daily to the Nature Area, where they have the unique opportunity to study the natural world in a field-based setting. Short-term and long-term field studies can be accomplished, and students also participate in the stewardship work required to meet the challenges of maintaining a nature area in an urban setting.

In addition, individual teachers are welcome to bring their classes out for field activities. A limited amount of equipment is available to check out on a pre-arranged basis. A reservation form and prior approval are required. Little Creek is also used for professional development, summer camps and other community-based activities.

Little Creek also has an ongoing partnership with North County Technical High School, operated by the Special School District. Students in the general construction trade classes practice and enhance their skills while performing needed work at Little Creek. Thus far, projects have included rehabbing of the log cabin, replacing the garage roof, building a new chicken coop, and concrete work for sidewalks.

In the forty years it has been in operation, Little Creek Nature Area has adapted its mission and focus to the changing needs of the school district and community it serves. As efforts to boost student achievement have intensified in recent years, the programs offered by the Nature Area have been refocused to meet this challenge for both students and their teachers.

Little Creek is open Monday through Friday, from 9:00 a.m. to 4:00 p.m. Our trails are not open to the public on weekends or after normal business hours, except by reservation or during special events. Please check the District website for more information: www.fergflor.org Little Creek is under the Program tab.



MEETING SUMMARY

CH2MHILL

TO: I-270 North EA Project Team

FROM: CH2M HILL

PROJECT: I-270 North Environmental Assessment (J6I3020)

SUBJECT: Little Creek Nature Center Section 4(f) Meeting

MEETING DATE: May 29, 2014

MEETING TIME: 10:00AM

LOCATION: Little Creek Nature Center

ATTENDEES **Missouri Department of Transportation (MoDOT)**
Lisa Kuntz

Little Creek Nature Center
Eric Hadley

CH2M HILL
Buddy Desai

MoDOT coordinated a meeting with staff from the Little Creek Nature Center (NC) to discuss possible impacts to the NC and potential Section 4(f) impacts.

The following topics were discussed:

- Lisa Kuntz provided an overview of the project including the limits of the study.
- Buddy Desai explained the NEPA process and the protection the park receives under Section 4(f) of the US DOT Act of 1966.
- A general discussion of the project ensued. Included was a detailed conversation on the improvements in front of the NC. Lisa and Buddy explained the various freeway, ramps, and outer roads operations.
- The potential impacts to the NC were then discussed. It was explained that a strip of right-of-way ranging from 15'-20' may be required for the improvements. This is primarily due to the development of a mid-interchange overpass to eliminate long out of direction travel. It was noted that the actual strip taking may be smaller when actual design takes place. During the NEPA study, the team tends to be conservative so that designers have more flexibility.
- Buddy explained that because the park qualifies as a Section 4(f) resource, MoDOT must analyze impacts to the park in greater detail.
- Lisa and Buddy noted that the study team goes to great lengths to protect Section 4(f) resources and looked for alternatives to avoid the acquisition of the narrow strip of right-of-way from the NC.
 - Buddy explained that Section 4(f) analysis could be completed in a number of ways. In this case, because the impact is of a de minimis (trifling or minimal) nature, the processing of the issue requires coordination with the Official with Jurisdiction to document that determination.
- MoDOT is requesting that the NC concur that the strip taking would be a de minimis impact to the NC.
- Eric Hadley noted that the NC uses the far eastern portion of the land adjacent to Dunn Road for educational activities. He said that noise is already a problem.



- Eric asked if MoDOT could do some tree planting on their southern boundary to mitigate for the impact due to the strip taking.
- Eric noted that he would need to discuss with Larry Larue/ Acting Superintendent and Gwenn Diggs/Supervisor over the NC. After discussions with them, they will reach out should another face-to-face meeting be required.
- Lisa offered to have the existing R/W and proposed footprint flagged to help the NC visualize how much impact may occur.
- Eric added that he will be going on a four-week vacation beginning June 13th. Lisa and Buddy asked if Eric could coordinate with Larry and Gwenn prior to that so that the team knows what direction to take related to the impacts to the NC. Eric agreed to do so.



MEETING SUMMARY

CH2MHILL

TO: I-270 North EA Project Team

FROM: CH2M HILL

PROJECT: I-270 North Environmental Assessment (J6I3020)

SUBJECT: Little Creek Nature Center Meeting

MEETING DATE: October 30, 2014

MEETING TIME: 8:30AM

LOCATION: Little Creek Nature Center

ATTENDEES **Missouri Department of Transportation (MoDOT)**
Lisa Kuntz – MoDOT Project Manager
Matt Burcham – MoDOT Environmental Specialist

Little Creek Nature Center
Terry O’Neil – Ferguson-Florissant School District Director of Facilities
Eric Hadley – Little Creek Nature Center Education Director

CH2M HILL
Buddy Desai – Consultant Project Manager

Eric Hadley and Terry O’Neil, representing the the Little Creek Nature Center (NC), requested a meeting with MoDOT to discuss the Preferred Alternative and its effect on the NC. MoDOT and their consultant, CH2M HILL, brought maps of the Preferred Alternative in the vicinity of the NC to aid in the discussion.

The following topics were discussed (*please note that while in most cases below only Terry O’Neil is referenced, the dialogue involved both Terry O’Neil and Eric Hadley*):

- The School District’s priority is to keep the NC in its current location and configuration.
- This NC is only one of three of its kind in the entire U.S.
- Out of Direction Travel
 - Terry O’Neil noted that he met with the Superintendent and his Cabinet about the proposed improvements and noted that they have concerns with the one-way outer road (OWOR) system.
 - The predominant concern is with out of direction travel, and related costs, for the buses that bring students to the NC, parents and other community members visiting or bringing children to the NC, and for administrative staff to get to the NC.
 - The study team explained that while there will be out of direction travel with the OWOR system, there are free flow U-turn Bridges to the east (approximately 3000’) and to the west (approximately 1000’) from the driveway to the NC. This will allow NC visitors to make U-turns without having to stop.
 - Terry acknowledged this but pointed out that much of their visitors come from further west and they would have to travel west on Dunn Road, make a U-turn at Washington/Elizabeth, go east on Pershall, and then U-turn back onto Dunn Road at West Florissant. Very little of their traffic comes from east of the NC.
- Proximity of Driveway to Western U-turn Bridge
 - Terry asked that if the OWOR must remain, would it be possible to relocate the NC’s driveway further to the east to provide more distance between their driveway and the U-turn Bridge.



- It was also requested that MoDOT provide a natural visual buffer of trees/shrubs along the relocated driveway.
- The study team explained that the Environmental Assessment (EA) will include environmental commitments to coordinate with the NC on mitigation efforts when design efforts begin.
 - Examples of environmental commitments could be discussed (e.g. moving the driveway to the east) in the EA, but the details are best left for the subsequent phase of project design so that the NC's priorities at that time can be discussed.
- Schedule
 - The group discussed the schedule for the EA and beyond.
 - The EA should be available for review in early 2015.
 - There will be a Public Hearing after the EA is circulated for review and comment (also early 2015).
 - The study team will then address any substantive comments on the EA and submit that information to the Federal Highway Administration (FHWA).
 - FHWA, once satisfied that all substantive comments have been addressed, will issue a Finding of No Significant Impacts.
 - After this, MoDOT could begin with preliminary design, final design, and eventually, construction.
 - MoDOT does not have funding for the design or construction of this project so the timing of such is unknown.
- Administrative Structure
 - Terry noted that Cabinet is comprised of the Superintendent and six Assistant Superintendents.
 - The Cabinet reports to the Board, which is an elected body.
 - The Cabinet reviews issues and determines which ones need to be elevated to the Board.

Students/Visitors Served at Little Creek

School Year	High School	7th Grade	Elementary Schools	EE/ECSE (includes parents)	District: Other users	Outside groups:	Other: Non-District School groups	Total Visitors
2010-2011	56	862	9,469	1180	528	1117	188	13400
2011-2012	38	869	9481	1572	546	713	184	13403
2012-2013	47	883	9661	1405	565	786	77	13424
2013-2014	41	915	9523	1058	543	1096	292	13468
2014-2015						327		327
2015-2016								0
2016-2017								0
2017-2018								0
2018-2019								0
2019-2020								0

Avoidance of Adverse Impacts to Potentially Eligible Property Located at Pershall Road and Starlight Drive

I-270 North Environmental Assessment

PREPARED BY: CH2MHILL
DATE: December 15, 2014
PREPARED FOR: Missouri Department of Transportation

Introduction & Goals of Technical Memo

This technical memo presents proposed cross section revisions that would allow for the avoidance of impacts to a property along the I-270 North Environmental Assessment (EA) corridor that has been identified potentially eligible for the National Register of Historic Places (NRHP). The property is a part of a subdivision that was identified as being potentially eligible to the NRHP during the cultural resources/architectural review drive-thru of the I-270 North EA corridor. The drive-thru involving representatives from the Missouri Department of Transportation (MoDOT), Missouri Department of Natural Resources State Historic Preservation Office (MDNR SHPO), CH2M HILL, and Archaeological Research Center of St. Louis (ARC), was conducted on November 6, 2014.

The cross section revisions identified in this technical memo, if accepted by MoDOT, should result in the finding of “No Adverse Effect” on the potentially eligible property/subdivision. Should the cross section revision be deemed appropriate, the study team will proceed with revising the study documentation to reflect avoidance of the subject property.

Potentially Eligible Property & Subdivision

During the course of the cultural resources/architectural review drive-thru on November 6, 2014, a subdivision located off of Pershall Road at Starlight Drive/Moonlight Drive between Washington/Elizabeth and West Florissant Avenue was the subject of interest. Upon review, it was concluded that the overwhelming majority of the homes along Starlight Drive contribute to the overall unique architecture of the subdivision within the local context of Ferguson, MO.

The red dashed outline in **Figure 1** depicts the approximate boundary of the subdivision plat considered to be potentially eligible. The two filled red shapes indicate properties previously identified as being potential full acquisitions as part of the I-270 North EA Preferred Alternative.

Figure 1 – Potentially Eligible Subdivision



Screen capture from CH2M HILL MicroStation drawing

The yellow-shaded area of **Figure 2** below depicts a zoomed view of the two properties. The property to east (right) is located at 1563 Starlight Drive, is part of the potentially eligible subdivision, and would be subject to Section 4(f) evaluation if adversely impacted by the I-270 North EA project. The property to the west (left) is located at 1559 Moonlight Drive, is part of a separate subdivision plat that has no significantly unique characteristics, and is not subject to added Section 4(f) evaluation if impacted by the project.

Figure 2 – Properties Previously Identified as Potential Full Acquisitions



Screen capture from St. Louis County Parcel Viewer

Previously Proposed Cross-Section & Potential Cross-Section Reduction

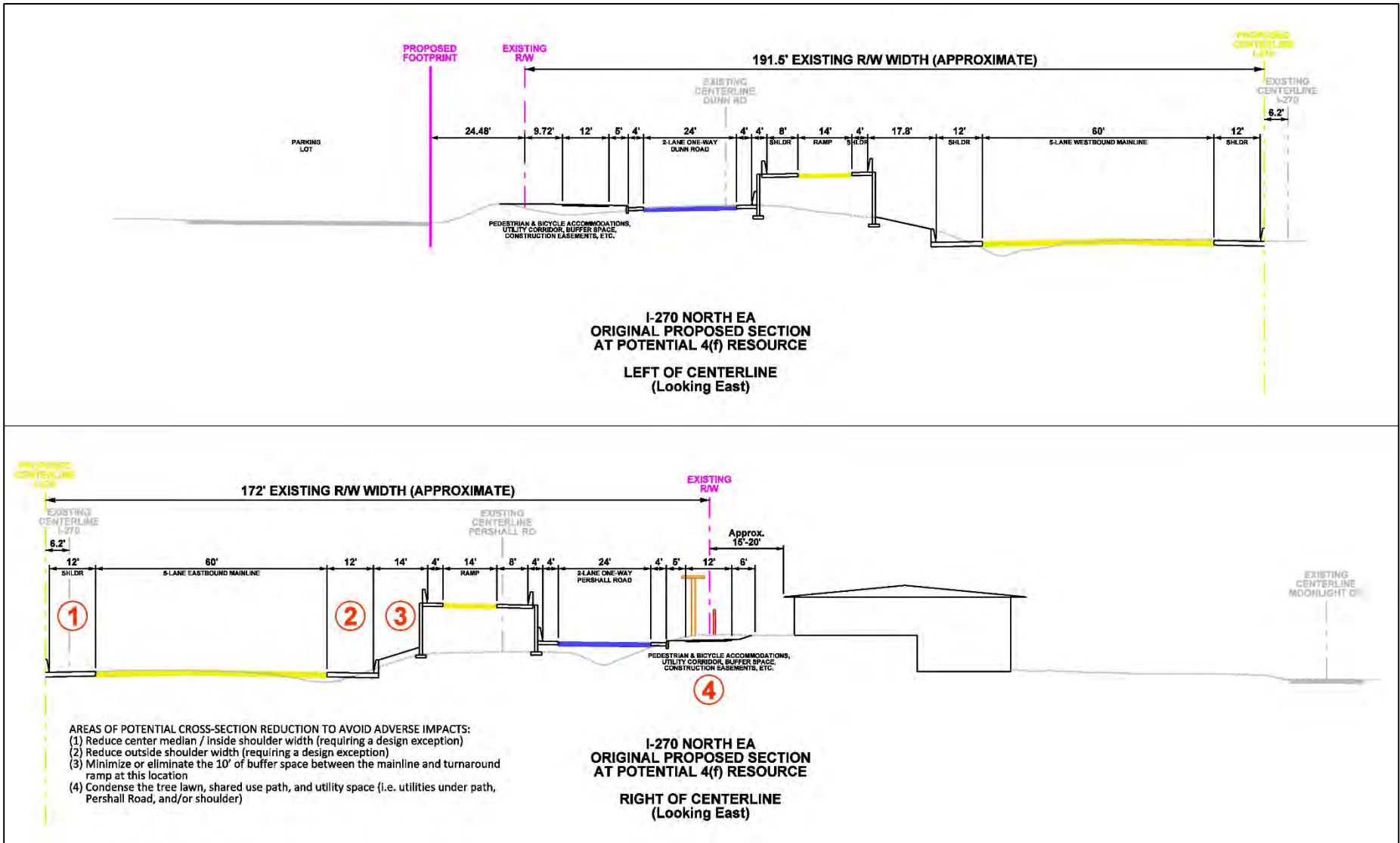
The figures on the following pages depict the cross section as currently proposed for the Preferred Alternative. At this location, the cross section includes Dunn Road, the westbound ramp to the turnaround, westbound I-270, eastbound I-270, the eastbound ramp from the turnaround, and Pershall Road. Also, included are placeholder widths for pedestrian or share-use path accommodations and utilities, as well as buffer space for constructability, flexibility, and/or construction easements.

Figure 3 depicts the full cross-section and adjacent development. **Figure 4** depicts just cross section from centerline I-270 and south. In both figures, the perspective is looking east. There are four areas within the cross-section which are identified as areas of potential reduction to avoid adverse impacts to the potentially eligible property. Each of these areas is highlighted by a numbered callout as follows:

- 1) Reduce center median/inside shoulder width (requiring a design exception)
- 2) Reduce outside shoulder width (requiring a design exception)
- 3) Minimize or eliminate the 10' of buffer space between the mainline and turnaround ramp at this location
- 4) Condense the tree lawn, shared use path, and utility space (e.g. utilities under path, Pershall Road, and/or shoulder)

(Refer to the following pages for **Figure 3** and **Figure 4**)

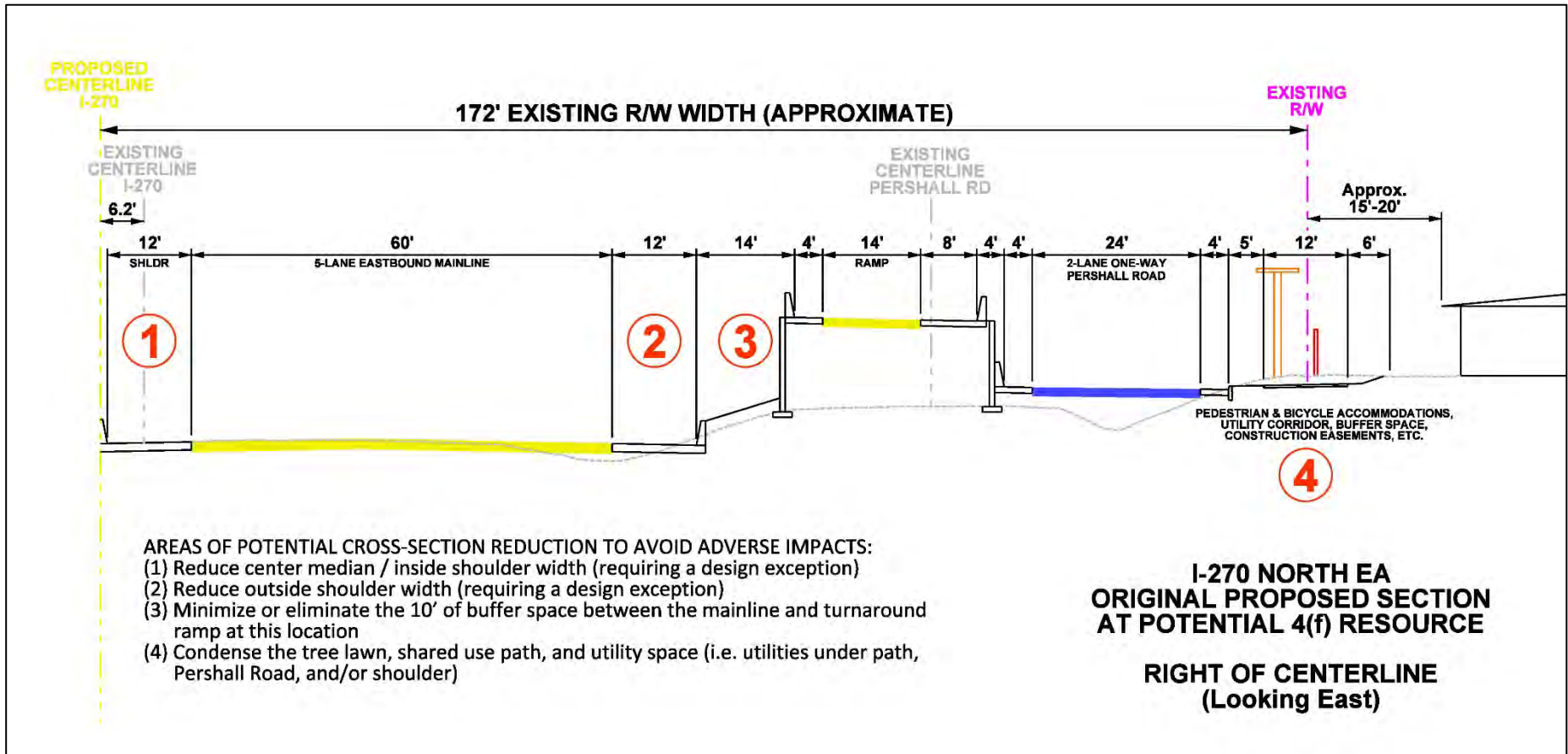
Figure 3 – Currently Proposed Cross-Section & Potential Cross-Section Revision



Export from CH2M HILL MicroStation drawing

I-270 NORTH EA – AVOIDANCE OF ADVERSE IMPACTS TO POTENTIALLY ELIGIBLE PROPERTY

Figure 4 – Currently Proposed Cross-Section & Potential Cross-Section Revision



Export from CH2M HILL MicroStation drawing

Proposed Cross-Section Revision

The approach to the proposed revisions is to allow cross-section reductions outside of mainline I-270 at this stage of project delivery. This would preserve the possibility of a full-build along mainline I-270 without anticipated design exceptions other than those currently identified in other areas of the corridor. Should further cross-section reduction(s) be required during future phases of project delivery (past the EA) in order to enhance constructability or mitigate constraints not currently known, cross-section reductions including mainline shoulders could be considered and applicable design exceptions could be pursued at that time.

The figures on the following pages depict the proposed revision to the cross section for the Preferred Alternative.

Figure 5 depicts the full cross-section and adjacent development for the proposed revision. **Figure 6** depicts just cross section from centerline I-270 and south for the proposed revision. In both figures, the perspective is looking east. There are three areas within the proposed cross-section revision which contribute to avoiding adverse impacts to the potentially eligible property. Each of these areas is highlighted by a lettered callout as follows:

- A) Centerline shift to the north (previously included in Preferred Alt to avoid/minimize impacts)
- B) Eliminate 8' of the 10' buffer between mainline and turnaround ramp
- C) Condense tree lawn, narrow the shared use path to 10' (if needed), and utility space

The centerline shift listed as Item A in the above list was previously included in the Preferred Alternative to avoid/minimize impacts on the south side of I-270 related to the development of the turnaround located between Washington/Elizabeth and West Florissant Avenue and the added basic and auxiliary lanes along I-270. The centerline shift – achieved through a slight reduction in radius of the mainline curvature – is maintained as previously proposed. The shift takes advantage of the additional space between existing mainline I-270 and existing Dunn Road.

The reduction in buffer space listed as Item B in the above list is a reduction of the additional width between mainline I-270 and the eastbound ramp from the turnaround above the minimum needed to achieve grade separation with standard barriers and MSE walls. In the revised cross-section, there is a minimum of two feet of width in excess of that needed for grade separation. This two feet could be utilized at any other location within the cross-section, as desired. Constructability concerns with minimum widths at the grade separations of this particular ramp are minimized by the fact that the ramp is higher than both mainline and Pershall Road. As such, Mechanically Stabilized Earth wall tie-backs can be located under the ramp itself.

The consolidated/condensed tree lawn, shared use path, and utility space identified as Item C in the above list limits the proposed footprint in this immediate area to a minimum width of 18' extending from face of curb. This space is shown in the revised cross-section as 5' from face of curb to edge of shared use path, 12' shared use path, and a minimum of 1' from edge of shared use path to existing right of way line. It would be conceded that utilities in this location need to be located in the same space as the tree lawn, shared use path, and/or Pershall Road. It is noted that this condition would be largely localized to area in proximity to the potentially eligible property.

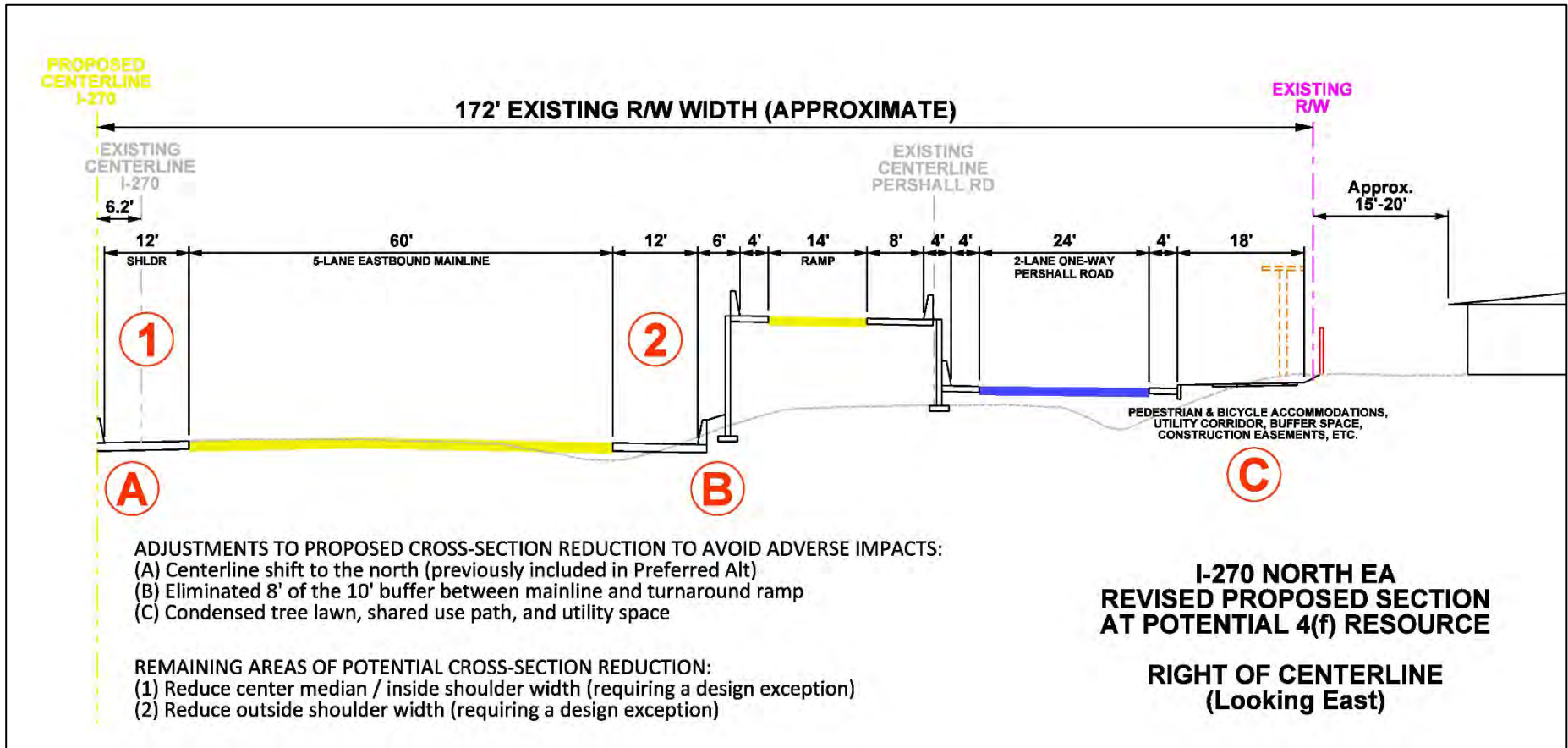
Also noted in Figure 5 and Figure 6 – and highlighted by numbered callouts – the remaining areas of potential cross-section reduction include that may be considered in future phases of project delivery include:

- 1) Reduce center median/inside shoulder width (requiring a design exception)
- 2) Reduce outside shoulder width (requiring a design exception)

It is noted that any narrowing of mainline I-270 inside or outside shoulder widths should be kept to a minimum for the length of the narrowing and no less than 10 feet in widths. In addition, the design exception must be supported by a Highway Safety Manual analysis which concludes that the narrowing of the shoulders would have a minimal impact on safety.

*(Refer to the following pages for **Figure 5** and **Figure 6**)*

Figure 6 – Revised Proposed Cross-Section with Reductions



Export from CH2M HILL MicroStation drawing

Proposed Revised Drawing

Figure 7 below depicts the revised Preferred Alternative configuration as it will appear if the proposed revisions to the cross section are carried forward as specified above. The dashed purple line represents the existing right of way limits as determined by MoDOT survey and available records. The solid yellow outlines depict property limits as determined by MoDOT survey and available records. The dashed red line depicts the “full width footprint” that has been used in other areas of the corridor which are not as constrained. The dashed orange line depicts the proposed consolidated/condensed footprint beyond Pershall Road shoulder as presented and discussed above.

Figure 7 – Proposed Revised Preferred Alternative Drawing



Screen capture from CH2M HILL MicroStation drawing

MoDOT Concurrence on Proposed Revisions & Related Action Items

MoDOT concurs with the alternative/cross-section revisions outlined in this memorandum. These revisions allow for the avoidance of any adverse impacts to the potentially eligible property – as part of the potentially subdivision – identified in the November 6, 2014 cultural resources/architectural review drive-thru. As a result of this concurrence, the following actions will be taken by the I-270 North EA study team to implement the agreed upon revisions:

- Preferred Alternative mapping will be revised to reflect the revised cross-section in the area
- Takings will be revised to reflect avoidance of the potentially eligible property and appropriate assumptions for the adjacent properties will be made in coordination with MoDOT
- Costs related to takings will be reviewed and adjusted as necessary in coordination with MoDOT
- EA and other project related documentation will be updated to reflect the Preferred Alternative revisions and associated reduction in impacts at this location

D.7 - Other Agency Correspondence



I-270 Environmental Assessment Communication/Interaction

This form is to be used by team members to monitor public input and communications during the I-270 Environmental Assessment. It must be completed after each interaction with citizens or other stakeholders that occur outside of study sponsored public events. Please send this form to Rachel Powers of Vector Communications (rpowers@vector-comm-corp.com) within **two (2) business days** of the initial meeting.

Team Member Name: Lisa Kuntz

Of: MoDOT

Date of contact: April 23, 2014

Date form completed: May 12, 2014

Contact was with: Lambert Airport

Of:

Address:

Phone #: H

Address:

Phone #: W

City:

Phone #: C

State

ZIP

E-mail:

Summary of discussion:

Attendees: Larry Welty & Lisa Kuntz – MoDOT

Lambert Airport:

- Gerald Beckmann, Airport Deputy Director, Planning & Development : gabeckmann@flystl.com
Office (314) 551-5034
- Angel Ramos, Assistant Director – Engineering: aeramos@flystl.com or 314-551-5008
- Jan Titus

Purpose of the meeting is to share the reasonable alternatives from MO 370 to McDonnell Blvd; specifically the importance of providing access to the east to Missouri Bottom.

The airport does see the economic potential of providing access to MO Bottom to/from the east. Since the Boeing Proposal (early 2014), there has been continued interest in the property adjacent (North of runway – golf course) In the airport's opinion, additional access to the interstate would help promote the redevelopment of this property. They are actively marketing the site along Gist Road with the Missouri Partnership for Economic Development and the Missouri Economic Development Council.

In addition, the airport LRP is to promote the movement of freight along the north side of the runway – called "Cargo City" that they would like to develop along Banshee Road. There is currently two freight restrictions on Lindbergh (tunnel to the south & rail crossing to the north) – providing addition access at MO Bottom may provide a needed additional route to I-270 east.

One important item they mentioned other than I-270 is the removal of the ramp from Lambert International Boulevard to WB I-70. They would like to eliminate the left hand entrance from Natrual Bridge.

Airport Officials also provided us with a map of roadway projects surrounding the airport – in no priority. Please see attachment.

For Use by Vector Staff Only:

- Vector Received Form: Date: _____ From: _____
- Follow-up Completed: Date: _____ By Whom: _____

I-270 Environmental Assessment

Charlie A. Dooley
County Executive

Saint Louis
COUNTY
HIGHWAYS & TRAFFIC
PUBLIC WORKS

Sheryl L. Hodges, D.E., P.E., L.P.G.
Director

June 16, 2014

Lisa Kuntz, P.E.
Project Manager
Missouri Department of Transportation
St. Louis District
1590 Woodlake Drive
Chesterfield, Missouri 63017-5712

RE: I-270 North Environmental Assessment
Agency Collaboration Point #2
MoDOT Job No J612288

Dear Ms. Kuntz:

Thank you for your letter of May 22, 2014 summarizing the Reasonable Alternatives for the I-270 North Environmental Assessment (EA) and discussing the Agency Collaboration Point #2. Thank you for the attached compact disc which included detailed maps depicting the various alternatives, the Performance Measures and Environmental Impact Summary for the alternatives and the March 18, 2014 Public Involvement Meeting, and other information related to the I-270 North EA.

We have reviewed the information which you have provided. We concur that this is a reasonable range of alternatives. We also concur with the summary of the performance measures and environmental impacts.

We will continue to review material which you provide to us as part of the I-270 North EA. We appreciate our partnership with MoDOT on this and other projects that are important to our region. If you have any questions, please do not hesitate to call me at 314-615-8637 or John Hicks at 314-615-8532.

Sincerely,

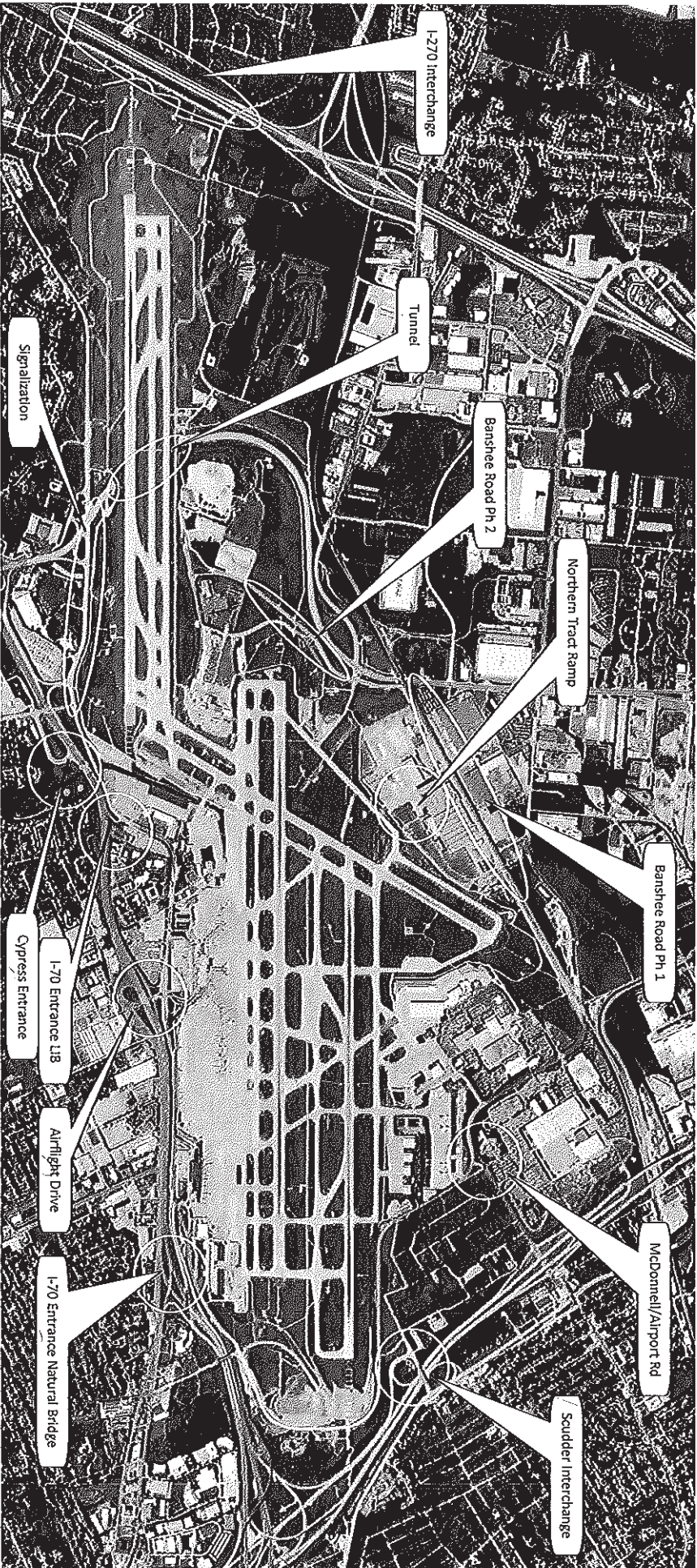


Ted Medler, P.E., S.E.
Division Manager
Highway Planning and Programming

TM:JJH:pdh

cc: Stephanie Leon Streeter, P.E., Deputy Director
Gus Heck, P.E., North Area Engineer
John Hicks, PTP, AICP, Transportation Development Analyst

22-30 = 500 = 30



LAMBERT-ST. LOUIS
INTERNATIONAL AIRPORT®

Airport Projects
Eligible for MODOT Funding

Prepared by: Planning Development
Date: February 24, 2014
Not to Scale

25-30M
25-30
30M

(54)

712


Lambert St. Louis International Airport
Airport Projects Eligible for MoDOT Funding

Project	Infrastructure Category	Cost	Description	Capacity	Safety	LOS	Support Economic Development	Environmental Review	Priority
Up-grade/Improve Existing Facility									
Banshee Rd Phase 1	E	\$5.0m	reconstruct from MoBottom to McDonnell	N	Y	Y	Y	N	1
Cypress Entrance I-70 <i>- safety</i>	E	\$3.0m	extend EB on-ramp	N	Y	Y	N	N	2
Northern Tract Ramp	E	\$5.0m	reconstruct ramp for two (2) B747	Y	N	Y	Y	N	3
Signals Natural Bridge (ITE)	E	\$25.0k	synchronize Airport & MODOT traffic signals	Y	N	Y	N	N	4
Lindbergh Tunnel	E	\$600.0k	upgrade IT systems	N	Y	Y	N	N	5
<i>✗</i> I-70 Entrance Lindbergh Int'l Blvd	E	\$500.0k	<u>eliminate WB I-70 entrance from LIB</u>	N	Y	N	N	N	6
Banshee Rd Phase 2	E	\$2.0m	reconstruct from MoBottom to Navaid	N	Y	Y	N	N	7
McDonnell/Airport Rd Intersection	E	\$3.0m	eliminate S curve and create T-intersection at Airport Rd	N	Y	Y	Y	N	8
Scudder Rd Interchange	E	\$2.0m	eliminate SB exit/entrance to I-170	N	N	N	Y	N	10
Develop New Facility									
<i>✗</i> Airflight Drive Interchange	D	\$50.0m	enhance/improve	Y	Y	Y	N	Y	9
I-270 Interchange Gist/Woodford	D	\$80.0m	new 1/2 diamond interchanges at Gist Rd and Woodford Way	Y	N	N	Y	Y	11
<i>✗</i> I-70 Entrance Natural Bridge	D	\$30.0m	eliminate left hand WB entrance and add new right hand WB entrance	N	Y	Y	N	Y	12

E Existing Facility
D New Facility
Y Yes
N No

Prepared by: Planning Development
Date: February 24, 2014

** LIBover airflight drive - will do repair → under*



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

MAR - 7 2014

Lisa Kuntz, P.E., Project Manager
MoDOT, St. Louis District
1590 Woodlake Drive
Chesterfield, MO 63107-5712

Re: I-270 North Environmental Assessment Location Study & Draft Purpose & Need

Dear Ms. Kuntz:

The Missouri Department of Natural Resources (department) appreciates the opportunity to review the information submitted and provide comments for the I-270 North Environmental Assessment Location Study & Draft Purpose & Need. The department offers the following comments for consideration.

Several Solid Waste permitted facilities are located in the vicinity of the study area and should be considered regarding any work in the area.

West Lake Landfill

The West Lake Landfill site is on a parcel of approximately 200 acres in Bridgeton, Missouri. The site consists of the Bridgeton Sanitary Landfill (located at 13570 St. Charles Rock Road, Bridgeton, MO) which stopped receiving waste on December 31, 2004, and several old inactive areas with municipal solid waste and demolition debris. The site is divided into two Operable Units, or OUs. OU-1 consists of radiological areas and OU-2 consists of the other landfill areas, which did not receive any radiologically contaminated soil. In 1990, West Lake Landfill was listed on the National Priorities List making it a Superfund site. In May 2008, a Record of Decision was signed for OU-1, which describes the Selected Remedy to contain the radiological contamination using a modified solid waste landfill cover. EPA is the lead agency for this site. More information regarding West Lake Landfill can be found at <http://dnr.mo.gov/env/hwp/fedfac/westlakelandfill-ffs.htm>

Bridgeton Sanitary Landfill

Bridgeton Sanitary Landfill is currently experiencing a subsurface smoldering event. Bridgeton Sanitary Landfill is currently owned by Bridgeton Landfill LLC, and is a subsidiary of Republic Services Inc. The landfill waste mass encompasses approximately 52 acres with approximately 240 feet below the ground's surface and a total waste thickness of 320 feet. The waste is located in two distinct areas, known as the North and South Quarries. Bridgeton was initially permitted on November 18, 1985 and ceased accepting waste on December 31, 2004. For extensive information about the subsurface smoldering event, please refer to the Bridgeton Sanitary Landfill website on the department's webpage: <http://dnr.mo.gov/bridgeton/index.html>

Bridgeton Transfer Station

Bridgeton Transfer Station is an active transfer station also located at 13570 St. Charles Rock Road. This facility accepts solid waste which is bulked for further transported to an active sanitary landfill.

IESI MO Champ Landfill

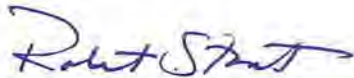
IESI MO Champ Landfill is an active sanitary landfill located just off I-70 in the location of the study area (Directions From I-70; south on Earth City Expressway; left (east) on Creve Coeur Mill Road; landfill entrance on left, description: T46N, R5E, St. Louis County). The landfill waste area is approximately 254 acres and the total permitted area is 524 acres.

We appreciate the opportunity to provide comments for the I-270 North Environmental Assessment Location Study & Draft Purpose & Need. If you have any questions or need clarification, please contact me, phone number (573) 751-3195. The address for correspondence is Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102.

Thank you.


Sincerely,

DEPARTMENT OF NATURAL RESOURCES



Robert Stout
Chief of Policy

RS/jbk



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

MAR - 7 2014

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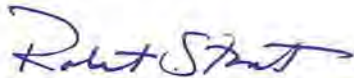
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Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES



Robert Stout
Chief of Policy

RS/jbk

From: [LISA L KUNTZ](#)
To: [Desai, Buddy/STL](#); [Miller, Robert/COL](#); [Ritter, James/STL](#)
Cc: [Matthew Burcham](#); [LARRY E WELTY](#)
Subject: EPA-comments-FW: I-270 North EA, Collaboration Point #2
Date: Thursday, June 26, 2014 12:12:04 PM

Buddy-

I hit send too quickly ☺ Larry was looking for an anticipated date for the EA review – Are we still anticipate August?

Thank you!

Lisa

From: Shepard, Larry [mailto:Shepard.Larry@epa.gov]
Sent: Tuesday, June 24, 2014 10:34 AM
To: LISA L KUNTZ
Cc: Horchem, Brad
Subject: FW: I-270 North EA, Collaboration Point #2

Hello, again, Lisa. I sent this off last Friday and almost immediately thought of two more advance issues for your consideration in EA development. Please give them some thought. Thanks.

Increased Stormwater Management Pressures

All of the alternatives proposed for this project will most likely significantly alter the quantity and, possibly, the pattern of surface runoff produced by roadway improvements with an increase in impervious surface. Although it would be expected that construction- and post-construction-related stormwater runoff will be addressed through stormwater permitting through the Missouri DNR, the EA should also estimate increases in the volume of area runoff, any changes in the patterns (i.e., receiving waters) of runoff and assess for localized impacts associated with the increased volume of precipitation runoff. Stormwater impacts could include water quality impacts in streams receiving runoff, erosive changes in stream shape affecting bank and bed stability and localized flooding in business and residential areas resulting from increased runoff and/or changes in runoff patterns. Early consideration of these changes and their impacts will support the inclusion of mitigation measures in project design (e.g., retention basins, permeable surface materials, greenspace, building relocations).

Construction-related Air Quality and Noise Impacts

Given the densely populated urban environment of the project area and the likely long-term construction period most likely required for continuing use of this heavily-used highway during construction, the EA must comprehensively assess air quality impacts resulting, specifically, from construction activities and associated changes to traffic patterns during construction. In addition to concerns with ozone pre-cursors and carbon monoxide, of special interest would be particulate levels originating from both construction-related dust and diesel-powered vehicles and generators,

i.e., PM/2.5 and PM/10. In addition the impacts of construction-related activities, air quality impacts associated with excessive idling during traffic stoppages and slower vehicle speeds associated with the construction period should be addressed and modeled in addition to those of more typical patterns associated with permanent increased traffic capacity post-construction. The EA should also assess for increases in noise and night-time light levels associated with construction.



Larry Shepard
NEPA Team
U.S. Environmental Protection Agency
Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219
913-551-7441
[*shepard.larry@epa.gov*](mailto:shepard.larry@epa.gov)

From: Shepard, Larry
Sent: Friday, June 20, 2014 4:02 PM
To: 'LISA L KUNTZ'
Cc: Horchem, Brad
Subject: I-270 North EA, Collaboration Point #2

I have reviewed the materials for Collaboration Point #2 addressing the identification of reasonable alternatives. I do not have any comments to offer on the range of reasonable alternatives at this time. I did note that you project completion of an environmental document by this Summer. I would very much appreciate some advance warning of when I might expect a draft NEPA document in our office for purposes of workload management.

I would also like to highlight several issues which I would expect will receive appropriate coverage in that NEPA compliance document in terms of environmental effects. Any highway or support road modifications which will increase or reduce the generation of greenhouse gases by motor vehicles through this corridor should be fully characterized and appropriate mitigation identified. Design changes resulting in increased vehicle use or changes in the pattern of use should be evaluated with regard to conformity with Clean Air Act requirements, particularly in non-attainment areas. Lastly, indirect impacts resulting from increased traffic capacity or improved access should be characterized.

Thanks for the opportunity to review the materials for Collaboration Point #2 and I look forward to reviewing any additional materials as well as the draft environmental assessment as soon as it becomes available.



Larry Shepard

NEPA Team

U.S. Environmental Protection Agency

Region 7

11201 Renner Blvd.

Lenexa, Kansas 66219

913-551-7441

shepard.larry@epa.gov



DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT, CORPS OF ENGINEERS
8945 LATTY AVENUE
BERKELEY, MISSOURI 63134

October 19, 2010

REPLY TO
ATTENTION OF

Formerly Utilized Sites Remedial Action Program (FUSRAP)

SUBJECT: Notification of possible FUSRAP contamination on your property located in
North St. Louis County

David M. Brunjes
Missouri Dept. of Transportation
North STL County- Sr. Traffic Specialist
620 Adie Road
Maryland Heights, MO 63043

Dear Mr. David M. Brunjes:

Your property is one of a number of properties comprising the St. Louis North County Sites of the Formerly Utilized Sites Remedial Action Program (FUSRAP). Under FUSRAP, the U.S. Army Corps of Engineers (USACE) is remediating radiological contamination generated by activities of the Manhattan Engineer District and the Atomic Energy Commission (MED/AEC) during the nation's early atomic energy program.

The USACE has not completed the sampling and characterization of all the vicinity properties located within the FUSRAP St. Louis North County boundaries. Until the sampling of your property for MED/AEC contamination has been completed, please notify the USACE if any earthwork or landscaping is planned for your property. In an effort to protect you, your employees, your tenant and their employees, and contractors performing earthwork at your property, the USACE will provide support during any planned work. The USACE also requests that soil is not taken offsite until the USACE has sampled it and confirmed that it is clean. If the soil contains MED/AEC contaminants, the USACE will remove the soil.

For more information about the St. Louis FUSRAP, please visit our website at:
<http://www.mvs.usace.army.mil/eng-con/expertise/fusrap.html>.

If you have any questions or comments, please contact Ms. Jo Anne Wade at (314) 260-3932 or josephine.a.wade@usace.army.mil.

Sincerely,

A handwritten signature in cursive script that reads "Sharon R. Cotner".

Sharon R. Cotner
FUSRAP Program Manager

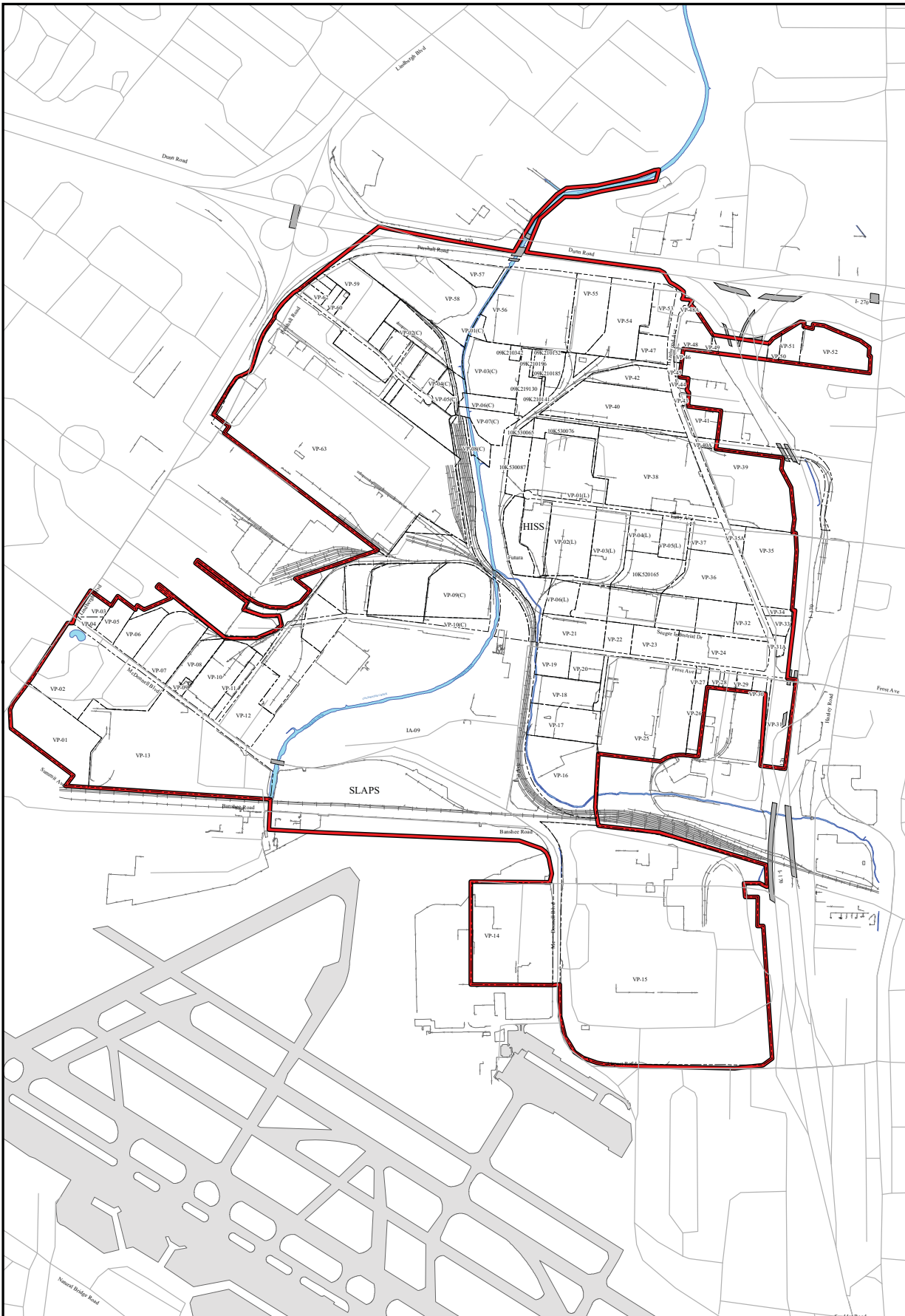


Figure 1. North St. Louis County

<p>LEGEND:</p> <ul style="list-style-type: none"> Fence Railroad Roads Airfield River/Stream Property Boundary North County ROD Boundary 		<p>MO-East State Plane (NAD 83, Feet)</p> <p>0 690 1,380 Feet</p>	<p>North St. Louis County St. Louis, Missouri</p>				
<p>FUSRAP</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">DRAWN BY:</td> <td style="font-size: small;">REV:</td> <td style="font-size: small;">DATE:</td> </tr> <tr> <td style="font-size: x-small;">R.L.H. DLL</td> <td style="font-size: x-small;">0</td> <td style="font-size: x-small;">07/29/2009</td> </tr> </table>			DRAWN BY:	REV:	DATE:	R.L.H. DLL	0
DRAWN BY:	REV:	DATE:					
R.L.H. DLL	0	07/29/2009					



For a clean, green, connected St. Louis region

www.grgstl.org

June 4, 2014

Ms. Lisa Kuntz, P.E.
Transportation Planning Specialist
Missouri Department of Transportation
1590 Woodlake Drive
Chesterfield, MO 63017

Re: I-270 North Environmental Assessment

Dear Ms. Kuntz:

In response to your email dated on May 12, 2014, Great Rivers Greenway District ("District") staff has reviewed the documents provided regarding the I-70/Riverview interchange.

The property, as noted in the documents, is owned by the District and the current use for it includes preserved open space. The District's intent will be to operate it as a public park. In the MoDOT documents provided, the second Reasonable Alternative details a partial cloverleaf interchange. This Alternative would require the relocation of Dunn Road onto the property owned by the District. This will impact the user experience, access to the property and wildlife habitat.

This Alternative could also impact the District's planned development of the Old Chain of Rocks Bridge trailhead site which is additional property owned by the District on Riverview Drive. If this Alternative is selected, the District would request to work closely with the Missouri Department of Transportation to coordinate transportation access to the Old Chain of Rocks Bridge trailhead.

Thank you for contacting me regarding this project. Please feel free to contact me if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd Antoine", is written over a horizontal line.

Todd Antoine, AICP
Director of Planning

From: [Miller, Robert/COL](#)
To: [Desai, Buddy/STL](#)
Subject: FW: MoDOT I-270 EA
Date: Monday, April 21, 2014 11:51:00 AM
Attachments: [DOC.PDF](#)

-----Original Message-----

From: LISA L KUNTZ [<mailto:Lisa.Kuntz@modot.mo.gov>]
Sent: Wednesday, January 29, 2014 4:03 PM
To: Desai, Buddy/STL; Ritter, James/STL; Miller, Robert/COL; Polk, Chad/STL; LARRY E WELTY; Matthew Burcham
Subject: FW: MoDOT I-270 EA

Please see the below email. They asked the question if we wanted comments & by when, which was not indicated in the letter.

Thank you!

Lisa

-----Original Message-----

From: Stafford, Cindy J [<mailto:Cindy.Stafford@illinois.gov>]
Sent: Wednesday, January 29, 2014 1:18 PM
To: LISA L KUNTZ
Subject: FW: MoDOT I-270 EA


Lisa, I just received the attached letter from MoDOT today. Unfortunately, it was being circulated within our district for a while until it found the right office. Is MoDOT looking for IDOT's comments on the Purpose and Need or is it just for our information? I wasn't sure based on the wording in the letter. If you are looking for a review, when do you need comments back by?

For your records, please note that the former Acting Local Roads Engineer, Rick Mauch (who the letter was addressed to), has retired and no longer works for IDOT. The current Local Roads Engineer is Lora Rensing. However, for future correspondence on this project, can you direct it to:

Jeffrey L. Keirn
Regional Engineer
Region 5/District 8
Attention: Frank Opfer (Studies and Plans Engineer)

Frank is my immediate supervisor and he'll make sure it gets to the right people. Thanks!

Cindy Stafford, P.E.
Location Studies Engineer
Illinois Department of Transportation
Region 5/District 8
(618) 346-3151



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

MAR - 7 2014

Lisa Kuntz, P.E., Project Manager
MoDOT, St. Louis District
1590 Woodlake Drive
Chesterfield, MO 63107-5712

Re: I-270 North Environmental Assessment Location Study & Draft Purpose & Need

Dear Ms. Kuntz:

The Missouri Department of Natural Resources (department) appreciates the opportunity to review the information submitted and provide comments for the I-270 North Environmental Assessment Location Study & Draft Purpose & Need. The department offers the following comments for consideration.

Several Solid Waste permitted facilities are located in the vicinity of the study area and should be considered regarding any work in the area.

West Lake Landfill

The West Lake Landfill site is on a parcel of approximately 200 acres in Bridgeton, Missouri. The site consists of the Bridgeton Sanitary Landfill (located at 13570 St. Charles Rock Road, Bridgeton, MO) which stopped receiving waste on December 31, 2004, and several old inactive areas with municipal solid waste and demolition debris. The site is divided into two Operable Units, or OUs. OU-1 consists of radiological areas and OU-2 consists of the other landfill areas, which did not receive any radiologically contaminated soil. In 1990, West Lake Landfill was listed on the National Priorities List making it a Superfund site. In May 2008, a Record of Decision was signed for OU-1, which describes the Selected Remedy to contain the radiological contamination using a modified solid waste landfill cover. EPA is the lead agency for this site. More information regarding West Lake Landfill can be found at <http://dnr.mo.gov/env/hwp/fedfac/westlakelandfill-ffs.htm>

Bridgeton Sanitary Landfill

Bridgeton Sanitary Landfill is currently experiencing a subsurface smoldering event. Bridgeton Sanitary Landfill is currently owned by Bridgeton Landfill LLC, and is a subsidiary of Republic Services Inc. The landfill waste mass encompasses approximately 52 acres with approximately 240 feet below the ground's surface and a total waste thickness of 320 feet. The waste is located in two distinct areas, known as the North and South Quarries. Bridgeton was initially permitted on November 18, 1985 and ceased accepting waste on December 31, 2004. For extensive information about the subsurface smoldering event, please refer to the Bridgeton Sanitary Landfill website on the department's webpage: <http://dnr.mo.gov/bridgeton/index.html>

Bridgeton Transfer Station

Bridgeton Transfer Station is an active transfer station also located at 13570 St. Charles Rock Road. This facility accepts solid waste which is bulked for further transported to an active sanitary landfill.

IESI MO Champ Landfill

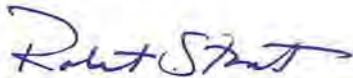
IESI MO Champ Landfill is an active sanitary landfill located just off I-70 in the location of the study area (Directions From I-70; south on Earth City Expressway; left (east) on Creve Coeur Mill Road; landfill entrance on left, description: T46N, R5E, St. Louis County). The landfill waste area is approximately 254 acres and the total permitted area is 524 acres.

We appreciate the opportunity to provide comments for the I-270 North Environmental Assessment Location Study & Draft Purpose & Need. If you have any questions or need clarification, please contact me, phone number (573) 751-3195. The address for correspondence is Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102.

Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES



Robert Stout
Chief of Policy

RS/jbk



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

July 7, 2014

Ms. Lisa Kuntz
MoDOT – St. Louis District
1590 Woodlake Dr.
Chesterfield, MO 63017-5712

Re: I-270 North Environmental Assessment

Dear Ms. Kuntz:

The Missouri Department of Natural Resources (department) appreciates the opportunity to review the I-270 North Environmental Assessment. The department offers the following comments for consideration.

Water Quality

The comments provided are mostly general in nature due to the scope. In addition, only the areas where construction is proposed have been reviewed for environmental impact. Should the sponsor or consultant have specific questions about a particular part of the project or location in the state while completing the Environmental Assessment, please contact the Missouri Department of Natural Resources' Water Protection Program for that information.

Ecological Drainage Unit: The proposed project lies all or partially within two ecological drainage units:

- Ozark/Moreau/Loutre; and
- Ozark/Apple/Joachim.

Watersheds: There are three 12-digit watersheds within the project area. Should specifics be required, please consult the department's geospatial data.

Rapid Watershed Assessment: The U.S. Department of Agriculture's Natural Resources Conservation Service has assessed several watersheds across the country. The reports and data for various watersheds in the state could provide valuable knowledge.

Classified Streams: Two classified waters exist within or near the project area. The Mississippi River, Water Body Identification Number 1707.01, is classified with the designated beneficial uses of protection of aquatic life and human health-fish consumption, drinking water supply, industrial use, irrigation, livestock and wildlife watering, secondary recreational use and whole

body contact recreation-Category B. Watkins Creek, Water Body Identification Number 1708, is with the designated beneficial uses of protection of aquatic life and human health-fish consumption, livestock and wildlife watering, and whole body contact recreation-Category B. Through their designated beneficial uses, streams are protected by numeric water quality criteria contained in 10 CSR 20-7.031(4) and Table A.

Unclassified Streams: The proposed project area contains several unclassified streams. Unclassified streams are protected by the general water quality criteria outlined in 10 CSR 20-7.031(3).

Project planners should ensure proper Best Management Practices are in place to protect the stream's chemical, physical and biological characteristics, especially when a stream is crossed by equipment. Re-establish vegetation as soon as possible on any stream banks and riparian corridors denuded of vegetation.

Biocriteria Reference Locations: There are no biocriteria reference stream segments within the proposed project boundary. Biocriteria reference locations are segments used in the development of aquatic life protection water quality standards due to their excellent biological integrity of existing aquatic communities. These waters should be protected in order to maintain their reference status.

Karst Topography – Losing Streams: According to existing data, there are no losing streams within the proposed project area. Planners should check with the department's Missouri Geological Survey at (573) 368-2100 to determine if they have more recent data and potentially additional sites. Should losing streams be found, additional precautions and Best Management Practices should be put in place to protect the area's sensitive water quality and ecology at all times. Losing streams are protected by stringent effluent regulations [10 CSR 20-7.015(1)(A)3 and (4)] and Water Quality Standards [10 CSR 20-7.031(1)(N), (4)(C) and (11)].

Karst Topography – Springs, Sinkholes and Caves: There may be springs, caves and sinkholes in or near the proposed study area. Project planners should be vigilant that activities near these resources do not adversely impact water quality, as Karst features can provide a more direct access to sensitive species and groundwater which supplies private and public drinking water. Should the construction impact these areas, extra precautions may be necessary to protect these sensitive resources.

Other Sensitive Waters: There do not appear to be any outstanding state and national resource waters or cold water fisheries in the project area.

Impaired Waters: Watkins Creek, 1708, is listed as impaired due to high levels of Chloride, bacteria and due to pH from urban runoff.

Total Maximum Daily Load: A Total Maximum Daily Load was approved for Chlordane and Polychlorinated Biphenyls (PCBs) on November 3, 2006, and allocations were set at zero pounds per day.

Land Disturbance Permits: Land disturbance activities disturbing one or more acres of total area for the entire project require a stormwater permit. Instructions on how to apply for and receive the on-line land disturbance permit are located at <http://www.dnr.mo.gov/env/wpp/epermit/help.htm>. Questions regarding permit requirements may be directed to the department's St. Louis Regional Office at (314) 416-2960.

National Wetland Inventory: A potential exists for the project to affect wetlands, particularly at stream crossings and within floodplains, depending on the exact location of the construction within the state highway right-of-way corridors. When wetlands exist, planners should take care to avoid and then minimize any impacts through alternatives analyses before compensatory mitigation is considered. If wetlands are not directly impacted but are near any land disturbance, planners should take care to protect the water quality, especially due to sedimentation.

Certified Wells: There are many certified wells located in or near the proposed project area. Please contact the department's Public Drinking Water Branch at (573) 751-5331 for additional information.

Public Drinking Water Protection Areas: There are no public drinking water well 20 year travel time zones within or near the proposed project area. If additional information is needed, please contact Ken Tomlin of the department's Water Protection Program's Public Drinking Water Branch at (573) 526-0269.

USGS Gaging Stations: There are several gaging stations existing near the project area. These sites may provide background water quality information if needed. Should specifics be required, please consult the department's geospatial data.

Water Quality Certification: A Clean Water Act Section 404 Department of the Army Permit and the Department's Clean Water Act Section 401 Water Quality Certification are needed when placing dredged or fill material into the jurisdictional waters of the United States. Examples are culverts under road crossings, riprap along stream banks and stormwater outfall pipes. The term jurisdictional waters refer to large lakes, rivers, streams and wetlands, including those that don't always contain water. Should any jurisdictional waters be impacted, please contact the U.S. Army Corps of Engineers' Regulatory Branch in the St. Louis District at (314) 331-8575 and the department's Water Protection Program's 401 Certification Unit at (573) 751-1300 for more information.

Location: The proposed project lies within northern St. Louis County and northern St. Louis City, Missouri.

Geospatial Data: Department geospatial data is available upon request, and all published data is available on the Missouri Spatial Data Information Service website at <http://msdis.missouri.edu/>.

Low Impact Development: The department encourages the consideration of environmentally-friendly design techniques such as Low Impact Development into project plans. Low Impact Development might include creating vegetated swales, rain gardens and porous pavement. More information regarding Low Impact Development can be found at these websites: <http://www.epa.gov/owow/nps/lid/> and www.lid-stormwater.net/lid_techniques.htm.

Geology

The uppermost bedrock of the study area consists of Mississippian-age St. Louis Limestone and Pennsylvanian-age Cherokee, Marmaton and Pleasanton groups. Based on the logs of wells, the St. Louis Limestone formation consists primarily of limestone in the vicinity of the study area. This formation is known for karst development. There are no recorded sinkholes within the project area, but undocumented sinkholes may be present. Areas of potential sinkhole development are illustrated in the attached figure. The Pennsylvanian-age bedrock consists of sandstone, shale and thin limestone beds and is not known for sinkhole development.

There are no recorded surface or underground mines within the project area.

There are no mapped fault traces within the project area.

Hazardous Waste

According to the underground storage tanks database, there are sixteen underground storage tank sites that potentially lie within the study area. These are illustrated in the attached figure. The following table provides facility names and addresses for the tank sites.

Facility ID	Name	Address	City
ST0003918	QuikTrip #615	5950 Howdershell Rd.	Hazelwood
ST0012403	Dunn Road Mobil	3675 Dunn Rd.	Florissant
ST0001155	BP	1590 S. New Florissant Rd.	Florissant
ST0002336	7-Eleven #26184	105 Dunn Rd.	Florissant
ST0007092	QuikTrip #628	2791 Dunn	Florissant
ST0010129	Pershall BP	3890 Pershall Rd.	St. Louis
ST0012841	Circle K #1622	1545 New S. Florissant Rd.	Florissant
ST0012846	Citgo Service Station	2609 Dunn Rd.	St. Louis
ST0013020	Petro Mart #9	1395 Dunn Rd.	Florissant
ST0013552	Cheap Cheap	1375 Dunn Rd.	St. Louis
ST0006441	Dunn Road Conoco	1125 Dunn Rd.	Florissant

ST0012407	#706 – G56 – Mobil Service	12650 St. Charles Rock Rd.	Bridgeton
ST0008425	Circle K #1617	11011 Bellefontaine	St. Louis
ST0008470	Dunn Road ZX	3555 Dunn Rd.	Florissant
ST0010118	Wallis Petroleum BP #9016	10844 Bellefontaine	St. Louis

We appreciate the opportunity to provide comments for the I-270 North Environmental Assessment. If you have any questions or need further clarification, please contact me or Ms. Jane Beetem, phone number (573) 751-3195. The address for correspondence is Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102. Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES



Robert Stout
Chief of Policy

RS/jbk

