

North Carolina Department of Transportation

NEPA/SEPA Consultation Form

U.S. 74 Improvements
from West of Idlewild to I-485 (Charlotte Outer Loop) in Charlotte and Matthews
Mecklenburg County, North Carolina

Reevaluation of January 6, 2020, Environmental Assessment

STIP Project No.	U-2509
WBS Element	38965.1.1
Federal Aid Project No.	NHS-74(70)

A. Project Description, Location, and Purpose:

U-2509 proposes to widen and upgrade US 74 with additional general purpose lanes, auxiliary lanes, and express lanes in the median and replace at-grade intersections with grade-separated intersections, interchanges and overpasses. The project would also extend and connect several parallel collector roads along the corridor. US 74 is a major northwest-southeast roadway connecting Charlotte with the Town of Matthews, Mint Hill, and Stallings in Mecklenburg County. The project is located within NCDOT Division 10. The purpose of the proposed action is to provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within the study area. During the preliminary design phase, the proposed extension and connection of parallel collector roads were designated in the NCDOT STIP as U-2509A, and the US 74 mainline improvements became U-2509B. During the final design phase and the current approved NCDOT STIP (2024-2033), NCDOT further divided U-2509 into eight (8) funded segments and one (1) unfunded segment, described in Table 1 and shown in Figure 1. Phased construction of the project is planned to enhance connectivity throughout the corridor before implementing other capacity improvements along US 74.

Table 1. U-2509 Revised Funded and Unfunded Segment STIP Numbers

Previous Segment STIP #	Current Segment STIP #	Description of Proposed Segment Improvements	Right of Way Fiscal Year	Construction Fiscal Year
U-2509A	U-2509AA	<ul style="list-style-type: none"> › Sharon Forest Drive Grade Separation › Harris Boulevard, Village Lake, and Margaret Wallace Grade Separated Intersection 	2024	2029
	U-2509AB	<ul style="list-style-type: none"> › Sardis Road North, and Sam Newell Road Grade Separated Intersections › Arequipa Drive extension from Sardis Road North to Sam Newell Road 	2024	2029
	U-2509AC	<ul style="list-style-type: none"> › Independence Pointe Parkway extension from Windsor Square Drive to NC 51 	2024	2029

Previous Segment STIP #	Current Segment STIP #	Description of Proposed Segment Improvements	Right of Way Fiscal Year	Construction Fiscal Year
	U-2509AD	<ul style="list-style-type: none"> › Matthews-Mint Hill Road Grade Separated Intersection › Northeast Parkway Extension from Overcash Drive to Waiting Street 	2024	2029
	U-2509EA	› Margaret Wallace Road and Arequipa Drive Intersection Improvements	2025	2028
	U-2509EB	› Independence Pointe Parkway from Sardis Road to Sam Newell Road	2025	2028
U-2509B	U-2509B	<ul style="list-style-type: none"> › Widen US 74 mainline to include additional general-purpose lanes and express lanes west of Idlewild Road to Wallace Lane › Direct Connector on the west side of Conference Drive 	2025	2029
	U-2509C	› Widen US 74 mainline to include additional general-purpose and express lanes Wallace Lane to Sardis Road	Funded for Preliminary Engineering Only	
		› Express lane grade-separated intersections at Sardis Road		
	U-2509D	<ul style="list-style-type: none"> › Widen US 74 mainline to include additional general-purpose and express lanes Sardis Road to I-485 › Express lane interchanges on I-485 and the east side of Conference Drive › Reconstruct the interchange at NC 51 	Funded for Preliminary Engineering Only	
Unfunded Segments				
U-2509A	U-2509E	› New segments of Krefeld Drive, Arequipa Drive, and Independence Pointe Parkway on new location	N/A	N/A

B. Consultation Phase: (Check one)

Other: Reevaluation due to design revisions and time elapsed since Environmental Assessment (EA) approval

C. NEPA/SEPA Class of Action Initially Approved as: (Check one)

FHWA Class III (EA/FONSI) 1/6/2020

Additional Notes: EA approval only; no approved FONSI to date

D. Changes in Proposed Action & Environmental Consequences:**Project Description**

The project presented in the EA approved on January 6, 2020, included two (2) alternatives at the Sardis Road North interchange and three (3) alternatives for extending Independence Pointe Parkway from Windsor Square Drive to Matthews Township Parkway. At the April 8th, 2020, Concurrence Point meeting, agencies selected the preferred alignments at these locations to become part of the Preferred Alternative (see [Appendix A](#)). The two-quadrant loop alternative was selected for the Sardis Road North interchange (U-2509AB / U-2509C), and Option 1 was selected for the extension of Independence Pointe Parkway (U-2509E).

In addition, based on supplementary traffic data and continued coordination with Mecklenburg County, City of Charlotte and Town of Matthews, further roadway design refinements were identified and are summarized below in Table 2. These design revisions are not expected to notably change previously reported impacts.

Table 2. Design Revisions by Segment

Current Segment STIP #	Location	Design Revision
U-2509AA	Margaret Wallace Road at Sharon Forest Drive	> Roundabout revised to conventional intersection design
U-2509AB	Sardis Road Interchange with US 74	> Interchange with loops and ramps has been revised to quadrant roadway configurations in north/east quadrant
	Scenic Drive/Hayden Way cul-de-sac	> Removed from design
	Sam Newell Road from Northeast Parkway to Independence Pointe Parkway	> Roadway median width reduced from 16 feet to 4 feet across structures
U-2509AD	Northeast Parkway from NC 51 to Matthews-Mint Hill Road	> Typical section to a two-way, two-lane median divided design; partially constructed by developers, including 5-foot sidewalk and 10-foot side path
		> Driveway to EB Northeast Parkway, north of Matthews-Mint Hill Road, near the quadrant ramp was removed due to property redevelopment (Matthews Square)
U-2509EA	Krefeld Drive at Margaret Wallace Road	> Intersection revised to a roundabout design
	Margaret Wallace Road, west of Krefeld Drive	> 6-foot sidewalks with 8-foot planting strips on both sides of the road were added
U-2509EB	Hayden Way at US 74	> Cul-de-sac was removed to retain through movement to US 74
	Independence Pointe Parkway at Rice Road extension	> The intersection revised to a roundabout design
U-2509C	Sardis Road Interchange with US 74	> Interchange with loops and ramps has been revised to quadrant roadway configurations in south/east quad
	Crownpointe Executive Drive cul-de-sac	> Removed from design
U-2509E	Independence Pointe Parkway	> Reduced the proposed extension by 1,500 feet west of Matthews-Mint Hill Road
		> Roundabouts east and west of Matthews-Mint Hill Road removed
U-2509E	Krefeld Drive Extension at Ardis Court	> Roundabout revised to conventional intersection design
U-2509E	Independence Pointe Parkway at Campus Ridge Road	> The intersection revised to a roundabout design

Cost Estimates

Project cost estimates were updated to address the design revisions proposed since the 2020 EA. Table 3 presents the current segment STIP number cost estimates based on the NCDOT 2024-2033 STIP.

Table 3. Project Cost Estimates

Current Segment STIP #	Right-of-Way	Utilities	Construction	Total Cost
U-2509AA	\$64,401,000	\$1,800,000	\$40,401,000	\$106,602,000
U-2509AB	\$66,499,000	\$2,700,000	\$45,306,000	\$114,505,000
U-2509AC	\$18,201,000	\$3,000,000	\$11,199,000	\$32,400,000
U-2509AD	\$51,601,000	\$1,800,000	\$26,999,000	\$80,400,000
U-2509EA	\$8,568,000	\$0	\$5,796,000	\$14,364,000
U-2509EB	\$12,600,000	\$600,000	\$8,200,000	\$21,400,000
U-2509B	\$26,001,000	\$0	\$25,250,000	\$51,251,000
U-2509C	\$39,200,000	\$5,600,000	\$70,350,000	\$115,150,000
U-2509D	\$92,300,000	\$10,300,000	\$202,205,000	\$304,805,000
U-2509E ¹	\$43,200,000	\$3,500,000	\$61,200,000	\$107,900,000
Current Total	\$422,571,000	\$29,300,000	\$496,906,000	\$948,777,000
2020 EA Total	\$417,344,623 - \$426,344,623	\$47,534,048 - \$48,036,759	\$484,4440,000	\$949,821,382 - \$958,318,671

1. U-2509E is currently unfunded

Relocations

Since the 2020 EA, the selection of a Preferred Alternative and design revisions have resulted in changes to the anticipated number of project relocations. Relocations are anticipated in two (2) of the ten (10) segments, shown in Table 4.

Table 4. Anticipated Relocation Impacts

Current Segment STIP #	Residential Relocations	Business Relocations	Place of Worship Relocations
U-2509AB	7	6	0
U-2509B	5	98	7
Current Total	12	104	7
2020 EA Total	12	106	7

Source: NCDOT EIS Relocation Report, August 20, 2020

Section 4(f) Coordination

The 2020 EA identified potential impacts to properties protected by Section 4(f) of the USDOT Transportation Act, which requires consideration of impacts to park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development, and determined whether and to what extent the project would use each property. The design revisions are anticipated to result in minor changes in impact areas but are not expected to change the Section 4(f) use determinations previously documented.

Coordination with Mecklenburg County, the official with jurisdiction over all the Section 4(f) properties along the project corridor, has occurred throughout project development and preliminary design. Since the 2020 EA, Section 4(f) coordination meetings were held with Mecklenburg County on March 15, 2023, May 9, 2023, and June 21, 2023. As a result of this continued coordination, Mecklenburg County provided a letter of concurrence to a *de minimis* finding on July 27, 2023. The letter describes the project's anticipated effects on parks based on the preliminary design and requests that NCDOT agrees to adhere to certain future design and impact commitments, also outlined in the letter. After proper coordination and outreach, Mecklenburg County, owner of all Section 4(f) properties identified to be potentially impacted has concurred with a *de minimis* determination on these impacts. See [Appendix B](#) for Section 4(f) coordination documentation.

Traffic Noise

The 2020 EA documented predicted traffic noise impacts to 445 to 458 receptors. A traffic noise evaluation was performed that identified six (6) noise barriers that preliminarily met the feasibility and reasonableness criteria. NCDOT's Traffic Noise Manual was updated in 2022 following the completion of the Traffic Noise Report (TNR) for U-2509, which was approved on November 17, 2020. The U-2509 TNR was performed in accordance with the NCDOT Traffic Noise Policy and Traffic Noise Manual dated October 6, 2016, as well as Title 23 Code of Federal Regulations, Part 772 (23 CFR 772). A review of the TNR was completed to determine whether changes in base conditions and/or modeling procedures abatement criteria could lead to different recommendations for incorporating into section specific Design Noise Reports (see [Appendix C](#)).

Air Quality

An updated Qualitative Air Quality Report for the project was approved in March 2024. The updated Air Quality Report confirmed there are no adverse effects on air quality as a result of the project (see [Appendix D](#)).

Section 176(c) of the Clean Air Act Amendment (CAAA) requires that transportation plans, programs, and projects conform to the intent of the state air quality implementation plan (SIP). The current SIP does not contain any transportation control measures for Mecklenburg County. The 2050 Charlotte Regional Transportation Planning Organization (CRTPO) MTP and the 2024-2033 CRTPO TIP conform to the intent of the SIP. The USDOT made a conformity determination on the MTP and the TIP on September 28, 2023.

The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. There are no significant changes in the project's design concept or scope, as used in the conformity analyses.

The Council of Environment Quality (CEQ) issued *NEPA Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, on January 9, 2023, to expand and update the CEQ's 2016 *Final Guidance for Federal Departments and Agencies on the Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Review*, which established an approach for federal agencies for analyzing greenhouse gas (GHG) emissions relative to a proposed action. Under the CEQ's current guidance, GHG emissions are quantified and compared to the No-Action alternative, social costs of GHG (SC-GHG) are estimated, climate change implications on environmental justice populations are determined, and integration of relevant mitigation and resiliency measures are identified. Based on NCDOT policy, a project-level analysis of GHG emissions was not required since the Least Environmentally Damaging Practicable Alternative (LEDPA) was selected on May 6, 2020, prior to the implementation of the revised guidance.

The Air Quality Report completes the assessment requirements for air quality of the 1990 Clean Air Act Amendments and the NEPA process. No additional reports are necessary.

GeoEnvironmental Sites of Concern

One hundred eleven (111) sites of concern were identified as documented in the July 18, 2017, U-2509 Phase I report and 2020 EA (see [Appendix E](#)). The changes to the design are not anticipated to alter the analysis presented in the 2020 EA, and the findings remain valid. However, the revised segments within the NCDOT STIP 2024-2033 required revisions to the project's commitments (i.e., the project's green sheet), which included reducing the number of sites of concern by excluding those associated with U-6103 which is concurrently undergoing its own NEPA review process. Twenty-two (22) of those sites have been determined to be located within the adjacent U-6103 project extents. Those located within the extents of U-2509 include:

- Sixty-nine (69) sites with petroleum-related, UST concerns for which low monetary and scheduling impacts are anticipated,
- Ten (10) sites with drycleaners for which moderate monetary and scheduling impacts resulting from are anticipated, and
- Ten (10) industrial sites, for which low to high monetary and scheduling impacts are anticipated. In particular, the three (3) sites for which high monetary and scheduling impacts are anticipated comprise a single superfund site: Academy Steel Drum. High geoenvironmental impacts are anticipated because intensive further investigation is required before acquisition recommendations are issued for a superfund site.

Figure 2 illustrates the locations and anticipated level of monetary and scheduling impacts, grouped by STIP segment. Table 5 summarizes these locations and impacts.

Table 5. Potential Jurisdictional Stream and Wetland Impacts

Current Segment STIP #	USTs with <i>low</i> anticipated impacts	Dry cleaners with <i>moderate</i> anticipated impacts	Industrial Sites with <i>low</i> anticipated impacts	Total
U-2509AA	14	2	0	16
U-2509AB	0	0	1	1
U-2509AC	1	1	2	4
U-2509AD	12	1	0	13
U-2509EA	0	0	0	0
U-2509EB	0	0	0	0
U-2509B	18	4	0	22
U-2509C	13	1	1	15
U-2509D	11	1	2	14
U-2509E ¹	0	0	1/3 ²	4
Total	69	10	10	89

1. U-2509E is currently unfunded

2. 3 sites are anticipated to have *high* monetary and scheduling impacts related to the Academy Steel Drum superfund site

Land Use

The design revisions would occur within the right of way (ROW) anticipated by the 2020 EA. A minor reduction in ROW is expected due to removing Scenic Drive and a portion of the Independence Pointe Parkway extension from the project. These changes to the design are not anticipated to alter land-use trends and growth patterns predicted for the project area in the land-use study or the indirect and cumulative impacts analysis presented in the 2020 EA, and the findings remain valid.

Jurisdictional Water Resource Impacts

Since the 2020 EA, a Preferred Alternative has been selected, and design revisions have resulted in an increase in the anticipated stream and wetland impacts, shown in An additional factor in the increase in impact area is the use of final survey data to measure impacts more accurately. At the time of this Reevaluation, updated delineations for these jurisdictional features have not been conducted. Due to the implementation plan for the multiple phases of this project over a number of years, the final design effort for each phase should incorporate an update to these delineations and surveying for use in required permit applications. Table 6 summarizes the preliminary impacts by STIP segment Table 6.

Table 6. Potential Jurisdictional Stream and Wetland Impacts

Current Segment STIP #	Streams (ft.)	Bridged Streams (ft.²)	Relocated Streams (ft.)	Wetlands (ac.)
U-2509AA	857	1,612	0	1.41
U-2509AB	1,032	0	0	0.03
U-2509AC	1,976	2,091	667	0.22
U-2509AD	135	0	0	0
U-2509EA	433	0	0	0
U-2509EB	656	0	0	0.05
U-2509B	0	0	0	0
U-2509C	997	4,607	0	0.01
U-2509D	167	99	0	0.07
U-2509E ³	0	0	0	1.36
Current Total	6,252	8,409	667	3.14
2020 EA Total	4,823 – 5,158	943 - 991	249	1.97 – 2.04

1. All current quantities are calculated with slope stakes limits plus a 25-foot buffer. No pond impacts are anticipated.

2. Bridged Streams are not included in the Stream Impacts. Bridged streams include bridge width plus 25 feet on each side for anticipated bank stabilization.

3. U-2509E is currently unfunded.

Protected Species

Protected species were addressed in the 2020 EA and the Natural Resources Technical Report (NRTR) completed in October 2018. In the 2020 EA, the United States Fish and Wildlife Service (USFWS) identified six (6) federally protected species for Mecklenburg County and three (3) for Union County. Since that time, the USFWS has revised procedures and now provides study area specific lists of threatened or endangered species via the USFWS IPaC (Information for Planning and Consultation) website by screening a specific project study area boundary. A review of all STIP segments was conducted on June 26, 2023; results of the segment-specific screenings are detailed in Table 7, and species added since the 2020 EA are in bold. At the time of this Reevaluation, updated surveys for these species have not been conducted. Due to the implementation plan for the multiple phases of this project over a number of years, the final design effort for each segment should incorporate an update to these surveys for use in permitting applications.

Table 7. Federally Protected Species by Segments¹

Current Segment STIP #	Scientific Name	Common Name	Federal Status
U-2509AA	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509AB	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509AC	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509AD	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Fusconaia masoni</i>	Atlantic pigtoe	T
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509EA	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Fusconaia masoni</i>	Atlantic pigtoe	T
	<i>Lasmigona decorata</i> ²	Carolina heelsplitter	E
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509EB	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509B	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T

Current Segment STIP #	Scientific Name	Common Name	Federal Status
U-2509C	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509D	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Fusconaia masoni</i>	Atlantic pigtoe	T
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T
U-2509E ³	<i>Perimyotis subflavus</i>	Tricolored bat	PE
	<i>Fusconaia masoni</i>	Atlantic pigtoe	T
	<i>Lasmigona decorata</i>	Carolina heelsplitter	E
	<i>Rhus michauxii</i>	Michaux's sumac	E
	<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E
	<i>Echinacea laevigata</i>	Smooth coneflower	T

1. Species in bold added after the 2020 EA.

2. The 2020 EA indicated a lack of appropriate habitat; no known occurrences of the species within study area streams, and a lack of field observations during surveys.

3. U-2509E is currently unfunded.

Conclusions and assessments, including any necessary surveys, will be updated during final design and permitting for each segment.

E. Conclusion:

The above NEPA/SEPA documentation has been reevaluated (as required by either 23 CFR 771 or by NC General Statute Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted in Section D. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above-referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

G. Coordination

NCDOT personnel have discussed the current project parameters with qualified NCDOT representatives and FHWA (where applicable). The NCDOT Project Manager, Bryan Key, hereby verifies the involvement of the following staff and the incorporation of their technical input:

Design Engineer:	Tim Goins, PE	3/25/24
Environmental Specialist:	Lauren Triebert, PE	3/25/24
FHWA (if applicable):	Loretta Barren	3/25/24
Other:	Name	Date

H. Consultation Approval for NCDOT Project STIP U-2509

Prepared By:

5/30/2024

Date

DocuSigned by:

Lauren Triebert

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Lauren Triebert, PE; Project Manager
VHB Engineering NC, P.C.

Prepared For:

Bryan Key, PE

NCDOT, Project Management Unit

Reviewed By:

5/30/2024

Date

DocuSigned by:

Marissa Cox


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Marissa Cox, Western Regional Environmental Policy Consultant
NCDOT, Environmental Policy Unit

- ☐ **Approved** In adherence with 23 CFR 771 (NEPA) or NC General Statute Chapter 113A Article 1 (SEPA), NCDOT approves this Consultation.
- or
- ☒ **Certified** NCDOT staff certifies if FHWA signature was previously required or where changes have resulted in FHWA signature being required.

6/3/2024

Date

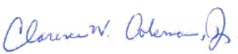
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John Jamison, Unit Head – Environmental Policy Unit
North Carolina Department of Transportation

FHWA Approved: FHWA signature required for Type I(B) CE, Type II(B) CE, Type III CE, FONSI or ROD.

5/30/2024

Date

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for Yolonda K. Jordan, North Carolina Division Administrator
Federal Highway Administration

Project Commitments (as of 10/18/23)

STIP Project No. U-2509

U.S. 74 (Independence Boulevard) Improvements from West of Idlewild Road to I-485
(Charlotte Outer Loop) in Charlotte and Matthews

Mecklenburg and Union County

WBS 38965.1.1

The following special commitments have been agreed to by NCDOT. STIP # are included for commitments that apply to a specific phase, if a STIP # is not noted within the commitment, the commitment is applicable to all phases of U-2509:

City of Charlotte, Town of Matthews, and Mecklenburg County/NCDOT Local Programs Office

- All three jurisdictions will complete municipal agreements prior to construction and contribute their cost-share portions of the funds for the requested inclusion of bicycle and pedestrian accommodations in the project.

NCDOT Division 10 and the Project Management Unit – Coordination CATS, Mecklenburg County, and Town of Matthews

- NCDOT will continue to coordinate with CATS, Mecklenburg County, and the Town of Matthews to ensure the final design accommodates CATS proposed LYNX Silver Line.

NCDOT Division 10

- NCDOT will attempt to avoid and minimize impacts to streams and wetlands to the greatest extent practicable; investigate potential on-site stream and wetland mitigation opportunities for the build alternative once a final decision has been rendered on the location of the preferred Independence Point Parkway option. If on-site mitigation is not feasible, mitigation will be provided by the North Carolina Division of Mitigation Services (NCDMS).
- This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed As-built construction plans to the Hydraulics Unit upon completion of structure construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

NCDOT Environmental Analysis Unit

- If on-site mitigation is not feasible, mitigation will be provided by the North Carolina Division of Environmental Quality Division of Mitigation Services (NCDMS) or through the use of private mitigation banks.

NCDOT Environmental Analysis Unit and the Project Management Unit

- During final design, NCDOT will revise delineations of jurisdictional water resources that are five years or greater post-approval.
- NCDOT will prepare Design Noise Reports for U-2509C during final design. All feasible and reasonable noise abatement measures will be constructed.

NCDOT Hydraulics Unit

- The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine the status of the project with regard to the applicability of NCDOT's Memorandum of Agreement or approval of a Conditional Letter of Map Revision (CLOMR)* and subsequent final Letter of Map Revision (LOMR).
- **U-2509E** - During final design, the NCDOT Hydraulics Unit will review the arch culvert design to ensure compatibility with the concrete bench requested by Mecklenburg County.

*If the project segment is in Mecklenburg County, CLOMR submittals should be coordinated with Charlotte-Mecklenburg Storm Water Services.

NCDOT Geotechnical Engineering Unit, Project Management Unit

Eighty-nine (89) sites of concern were identified within the current extents of U-2509 as documented in the July 18, 2017, U-2509 Phase I 2017 report.¹ Sites of concern by segment STIP number are listed below:

- › U-2509AA – Sites 48-53, 59, 62-70
- › U-2509AB – Site 79
- › U-2509AC – Sites 83, 87-89
- › U-2509AD – Sites 84-85, 90-100
- › U-2509B - Sites 23-44
- › U-2509C – Sites 45-47, 54-61, 71-75
- › U-2509D – Sites 76-78, 80-82, 101-108
- › U-2509E – Sites 86, 109-111

Sites of concern that will be impacted by the project will have a Phase II GeoEnvironmental Investigation performed on them during final design, and Right of Way Acquisition Recommendations will be provided prior to the right of way being acquired. Contaminated soil, underground fuel storage tanks, and groundwater monitoring wells in conflict with the project will be removed prior to let or addressed in a Project Special Provision.

NCDOT Division 10 and the Project Management Unit - Mecklenburg County

- NCDOT will adhere to design and impact commitments outlined in the Section 4(f) *de minimis* letter signed 7/27/23 and included as an Appendix.
- NCDOT will provide a 12-month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration.

¹ The 2017 report included 22 sites for U-6103 and 89 sites for U-2509.

- At the request of the City of Charlotte and the Town of Matthews, NCDOT will provide planting strips through betterment at several locations, as well as replace or compensate for impacts to existing landscaping by project construction. Aesthetic features/landscaping will also be included in roadway designs where practicable and cost-effective.
- **U-2509AA** - NCDOT commits to continue coordination with Mecklenburg County regarding the Village Lake Drive extension that may affect the Campbell Creek Greenway, including further refining the design at the Campbell Creek Greenway crossing of Margaret Wallace Road. NCDOT will explore Mecklenburg County's requests to reconstruct the Campbell Creek Greenway to eliminate the at-grade crossing at Margaret Wallace Road and realign the greenway under the proposed Margaret Wallace Road bridge.
- **U-2509AA** - At the request of Mecklenburg County, NCDOT will incorporate a 150-foot pedestrian bridge, through betterment, along the Campbell Creek Greenway near Margaret Wallace Road.
- **U-2509AA** – NCDOT commits to continue coordination with Mecklenburg County regarding impacts from the widening of the eastbound bridge on US 74 over McAlpine Creek, including a connection to the greenway from US 74 in this area and coordination on reconstruction of the cross-country track and maintenance entrance south of US 74, on the east side of McAlpine Creek.
- **U-2509AB** - NCDOT commits to continue coordination with Mecklenburg County regarding the replacement of the bridge on Sam Newell Road with 8-foot (minimum) to 10-foot (recommended) for vertical clearance and 14-foot recommended to accommodate the proposed Irvins Creek Greenway.
- **U-2509AC** - NCDOT commits to continue coordination with Mecklenburg County regarding the design of the future bridge on Independence Point Parkway Extension with 8-foot (minimum) to 10-foot (recommended) for vertical clearance and 14-foot recommended to accommodate the proposed Irvins Creek Greenway.
- **U-2509C** - NCDOT commits to continue coordination with Mecklenburg County during final design regarding the potential early widening of the US 74 bridge over McAlpine Creek that may affect the McAlpine Creek Greenway.
- **U-2509C** - NCDOT commits to continue coordination with Mecklenburg County during final design regarding proposed McAlpine Creek Greenway connections meeting Mecklenburg County specifications from sidewalks along US 74.
- **U-2509C** - NCDOT will ensure driveway access that meets the county's specifications is maintained for Mecklenburg County-owned parcel 193-561-05.
- **U-2509C** - NCDOT commits to continue coordination with Mecklenburg County during final design regarding the proposed Campbell Creek Greenway connections from sidewalks along US 74.
- **U-2509E** - NCDOT commits to continue coordination with Mecklenburg County regarding the design of the future bridge on Krefeld Drive Extension with 8-foot (minimum) to 10-foot (recommended) for vertical clearance and 14-foot recommended to accommodate the proposed Irvins Creek Greenway.
- **U-2509E** - NCDOT commits to continue coordination with Mecklenburg County during final design regarding the US 74 concrete arch culvert to accommodate the proposed Irvins Creek

Greenway. The Mecklenburg County requested an 8-foot (minimum) to 10-foot (recommended) for vertical clearance and 14-foot horizontal recommended clearance.

- **U-2509E** - During final design, NCDOT will explore a possible grade-separated crossing at the Independence Point Parkway extension with an 8-foot (minimum) to 10-foot (recommended) for vertical clearance and 14-foot horizontal recommended clearance to accommodate the Four Mile Creek Greenway.
- **U-2509E** - NCDOT will ensure vehicular connection for Mecklenburg County Park and Recreation maintenance facility at the Mecklenburg County Regional Sportsplex from the Independence Point Parkway extension.
- **U-2509E** - Commit to modify plans to ensure there is no loss of existing parking or access at the Mecklenburg County Regional Sportsplex
- **U-2509E** - Where trees cannot be saved, NCDOT agrees to provide a replanting plan approved by Mecklenburg County. Any trees planted per the replanting plan, NCDOT will provide the County with a one-year warranty.

U-2509 EA Re-Evaluation

A

Preferred Alternative

Section 404/NEPA Merger Project Team Meeting

Concurrence Point No. 4A

Avoidance and Minimization

TIP Project No.: U-2509

FA Project No.: NHS-74(70)

WBS No.: 38965.1.1

Project Name/Description: US 74 (Independence Boulevard) Improvements from west of Idlewild Road to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

A concurrence meeting was held with members of the Merger Team via email during the week of February 5-12, 2024 to discuss Avoidance and Minimization measures for the proposed project. The Project Team has concurred on this date that the Avoidance and Minimization measures are as described below.

Avoidance and Minimization:

NCDOT has avoided and minimized impacts throughout the development of this project. NCDOT will also investigate potential on-site stream and wetland mitigation opportunities for the Build Alternative. If on-site mitigation is not feasible, mitigation will be provided by North Carolina Division of Environmental Quality Division of Mitigation Services (NCDMS) or through the use of private mitigation banks.

Jurisdictional resource avoidance and minimization efforts throughout the project are listed below:

- Bridges have been used to cross streams and wetlands, and some bridges have been extended from what was originally anticipated to further minimize impacts to streams, wetlands, and floodplains.
- Project designs include bridges over streams and wetlands to avoid/minimize impacts in the following locations:
 - Bridging on Margaret Wallace Road over Campbell Creek
 - Bridging on proposed Arequipa Drive extension over Irvins Creek and tributary
 - Bridging on proposed Krefeld Drive over Irvins Creek
 - Replace culvert on Existing Sam Newell Road with a 90-foot bridge
 - Widen existing bridge on US 74 over McAlpine Creek
 - Bridging on Independence Pointe Parkway over tributary of Irvins Creek (Option 1)
- Along Sam Newell Road, south of Independence Pointe Parkway, there is an existing culvert. During CP2A, the Merger Team agreed that if NCDOT could not terminate the road improvements prior to the site, an 80-foot bridge would be needed. During the refined design planning stage, the bridge included was 90 feet to meet hydraulic needs.
- An existing bridge along Margaret Wallace Road over Campbell Creek is being replaced by a longer bridge, which will be a benefit hydraulically, as well as provide space for an existing greenway to cross Margaret Wallace Road under the bridge instead of at-grade as it does today.
- Most streams in the area are impaired. Efforts to improve the quality of the streams in the area is encouraged. To the extent practicable, natural channel design techniques for the stabilization of the UT to Irvin's Creek will be considered during the final design phase of the project. These could include step pools with large rock structures or other techniques as much as possible to help stabilize the streams.

Additional avoidance strategies used throughout the project are listed below:

- Retaining walls were added at numerous locations along U.S. 74 and along some parallel roads and cross streets to avoid and minimize impacts to natural and human resources, such as streams, wetlands, residences, and businesses and related parking.
- A retaining wall was added along the planned extension of Independence Pointe Parkway from Matthews-Mint Hill to Campus Ridge Road through the Mecklenburg County Regional Sportsplex to avoid impacts to the soccer fields.
- Potential UST sites have been avoided during design by use of retaining walls.
- Potential hazardous waste sites have been avoided during design.
- The Academy Steel Drum parcels are avoided in the current design.

Additional minimization strategies used throughout the project are listed below:

- Right of way impacts were avoided as much as possible by utilizing the existing right of way for U.S. 74, which is between 200 and 210 feet in width.

- Extensive bicycle and pedestrian infrastructure are being added to the project. This has increased the impact to sensitive resources but provides for improved mobility across all modes of transportation and is expected to minimize the need for reliance on single occupant vehicles.
- Extensive coordination with business and property owners has led to providing better access to enhance new travel patterns. These additions are aimed to minimize the impact to businesses and to help keep businesses viable.
- NCDOT has worked with FHWA and Mecklenburg County to minimize and mitigate the de minimis impacts to park properties.
- NCDOT will coordinate with municipalities on whether to design multi-use paths using pervious materials to minimize stormwater runoff. NCWRC has proposed that this could help mitigate stream impacts in the area and improve downstream habitat.

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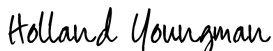
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N.C. Department of Transportation, Project Management Unit

Section 404/NEPA Merger Project Team Meeting
STIP Project No. U-2509
U.S.74 (Independence Boulevard)
From West of Idlewild Road to I-485 (Charlotte Outer Loop) in Mecklenburg County and within
the City of Charlotte and the Town of Matthews

Concurrence Point 4A

April 8, 2020

*Revised February 2024
for Concurrence Point 4A*

NCDOT STIP No. U-2509, F.A. Project
No. NHS-74(70), WBS No. 38965.1.1.

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Appendix

Figures

Figure 1 – Project Vicinity Map

Figure 2 – Project Location Map

Figure 3 – Community Facilities (1A)

Figure 4 – Community Facilities (1B)

Figure 5 – Potential Hazardous Materials

Signed CP1, CP1 Amendment, CP2, and CP2A Concurrence Forms

Public Comments

US 74 (Independence Boulevard) Improvements

From West of Idlewild Road to I-485 (Charlotte Outer Loop) in Charlotte and Matthews

Mecklenburg County, North Carolina

Federal Aid Project No. NHS-74(70)

NCDOT STIP Project No. U-2509

WBS No. 38965.1.1

Purpose of this Meeting

The purpose of this Merger Team meeting is to concur on the Avoidance and Minimization (CP4A) for the subject project. The original package has been revised to include a 240-foot bridge length for the Independence Point Parkway Option 1 and Option 2 evaluation. Also noted is a design refinement of the Sardis Road partial clover interchange concept to a grade separated quadrant roadway intersection concept. Throughout the packet, text that is gray represents material that is unchanged in this revision. Revised text is shown as black italics.

Project Description

The North Carolina Department of Transportation (NCDOT) is in the process of planning for improvements and implementing a network of express lanes in southeastern Charlotte and Matthews. Independence Boulevard (U.S. 74) is a multilane, median-divided arterial route that serves as the main gateway to Uptown Charlotte from southeast Mecklenburg County and northwest Union County.

To accommodate the growth, NCDOT is undertaking a series of express lane projects on I-77, I-485, and U.S. 74 (Independence Boulevard). These express lane projects are intended to provide users with a network of reliable travel time options throughout the region, especially during peak travel hours, to help improve traffic capacity.

The project is to be let in two sections, U-2509A and U-2509B. The U-2509A section includes improvements on routes parallel to U.S. 74 to provide better connectivity within the communities and help minimize congestion during construction on U.S. 74. These parallel roads to be connected and extended are Independence Pointe Parkway, Northeast Parkway, Arequipa Drive, and Krefeld Drive. The U-2509B section includes upgrading U.S. 74 to an expressway by replacing all signalized intersections with interchanges and overpasses, widening the existing road to provide additional general purpose lanes, and providing express lanes in the median from west of Idlewild Road to I-485. The project vicinity and location are shown in **Figures 1 and 2**, and the Community Facilities figures are shown in **Figures 3 and 4**, located in the Appendices.

Purpose and Need of Project

The purpose of the project is to provide reliable travel time and improve mobility along the U.S. 74 corridor, provide system sustainability, and maintain and improve connectivity across and along U.S. 74 to, from, and between adjacent communities within the study area.

The need for this project is summarized as follows:

- Existing U.S. 74 does not provide reliable travel time and connectivity for residents, business patrons, and commuters in southeastern Charlotte and Matthews.
- Traffic estimates indicate that U.S. 74 will require additional capacity to achieve a goal of level of service (LOS) 2 D for users by the design year (2040).

- This project is needed to provide reliable travel time, system sustainability, and connect to a system of express lanes planned on U.S. 74 to the northwest, I-485 to the south, and the Monroe Expressway to the southeast.

Project Status, Background and Schedule

The project is included in the 2020-2029 NCDOT State Transportation Improvement Program (STIP) and will be funded using both Federal, State and local funds. The project is to be let in two sections (A and B), with the following schedules (subject to change):

U-2509A: Design-Bid-Build Begin ROW Acquisitions – 2021 Begin Construction – 2022

U-2509B: Design-Build Let - 2023

*A federal [Environmental Assessment \(EA\)](#) for U-2509 was signed by FHWA on January 6, 2020. An EA Reevaluation is currently in progress, with approval expected in April 2024. A Finding of No Significant Impact (FONSI) will be prepared with any updates that occur since completion of the EA *ReEvaluation*, including, but not limited to, information from the Design Noise Report, public comments, final anticipated impacts, updated cost estimates (from the Cost Estimate Review being conducted by FHWA), and results of Merger Concurrence Points 3 and 4A. The final document (FONSI) is anticipated in May 2024.*

The following projects are located in the vicinity of U-2509:

- I-5507: I-485, I-77 South of Charlotte to US 74 (Independence Boulevard). Add Express Lane in each direction,
- I-5718: Express lanes on I-77 from I-277 (Brookshire Freeway) to NC 150 in Iredell County,
- I-5405: The northern section of I-77 Express Lanes from Hambright Road near I-485 to NC 150,
- I-5405: The southern section of the I-77 Express Lanes from I-277 to Hambright Road, and
- U-6103: Proposed widening and improvements to U.S. 74 from I-277 to west of Idlewild Road.

In addition to these projects, STIP project I-5718 is under study to provide express lanes from I-277 to the South Carolina state line.

Merger History

Concurrence Point 1: (Purpose and Need and Study Area Defined) was achieved on March 19, 2015. Information about the existing and projected traffic conditions along the corridor were presented in the meeting package. The study area agreed on includes proposed improvements to existing U.S.74 (Independence Boulevard) and an existing network of parallel roads and their proposed connections. The study area ranges from 500 to approximately 2,000 feet on either side of the existing U.S.74 centerline. The study area also includes an expanded area around the I-485 interchange to evaluate express lane connection alternatives to I-485 and an extension to the southeast along U.S.74 to include access to the proposed Monroe Connector/Bypass toll lanes.

An amendment to CP1 was approved by the merger team on March 21, 2019. The study area was amended because of shifts in the alignment.

Concurrence Point 2: (Detailed Study Alternatives to be Carried Forward) was achieved on May 18, 2016. In addition to the No-Build Alternative, the merger team selected the Detailed Study Alternatives to be carried forward to include:

- Expressway concept with best-fit alignments: Improvements to U.S.74 from west of Idlewild

Road to I-485, to include widening and the addition of grade separations and interchanges to bring the facility to the level of an Expressway as well as the addition of Express Lanes in the median. Express lane connections to the proposed I-485 express lane project to the south and the proposed Monroe Bypass/Connector Toll Road will be included, as well as the connection of parallel roads and the construction of an interchange at Sardis Road North.

- Parallel roads being considered:
 - Krefeld Drive Extension (Krefeld Drive to Sardis Road North)
 - Arequipa Drive/Northeast Parkway (Margaret Wallace Road to Sam Newell Road)
 - Krefeld Drive/Independence Pointe Parkway (Crownpoint Executive Drive to Sam Newell Road)
 - Northeast Parkway (Overcash Drive to Matthews-Mint Hill Road)
 - Independence Pointe Parkway Alternatives (Windsor Square Drive to Matthews Township Parkway) – 3 options
 - Independence Pointe Parkway (Matthews Township Parkway to Campus Ridge Road)
- Sardis Road North Interchange Alternatives:
 - Half-Clover
 - City Design

Concurrence Point 2A: (Bridging Decisions and Alignment Review) was achieved during a merger field review meeting on June 20, 2016. The merger team concurred on the recommendations for 14 major drainage structures, as presented in the Preliminary Hydraulics Study for Environmental Impacts prepared in April 2016 and revised based on the field review.

Project Schedule

Environmental Assessment	January 6, 2020
Public Hearing	January 28-29, 2020
<i>EA ReEvaluation</i>	<i>February 2024</i>
FONSI	<i>April 2024</i>
ROW Acquisition	<i>FY 2024 – 2025; Parallel Collector Roads FY 2025; US 74 Mainline (Design-Build)</i>
Construction	<i>FY 2028 – 2029; Parallel Collector Roads FY 2028; US 74 Mainline (Design-Build)</i>

The tentative project schedule is shown above. Dates are subject to change.

Public Involvement

NCDOT is planning for additional public engagement for U-2509, in coordination with U-6103, in Spring/Summer 2024.

Alternatives Recommended for Detailed Study

Based on the May 18, 2016 merger meeting, the following alternatives were carried forward for detailed study.

Sardis Road North Interchange Alternatives

Two Sardis Road North Interchange options were carried throughout the design process.

Sardis Road North – City Design

This interchange alternative would have a quadrant loop road between Sardis Road North and US 74 in the northwest quadrant of the interchange, allowing for entrance/exit to/from US 74 westbound. For eastbound travel along US 74, Ardis Court would have been a right-in only from US 74 and Crownpoint Executive Drive would have been a right-out only connection to US 74. The quadrant loop, right-in, and right-out movements would have functioned together as an interchange.



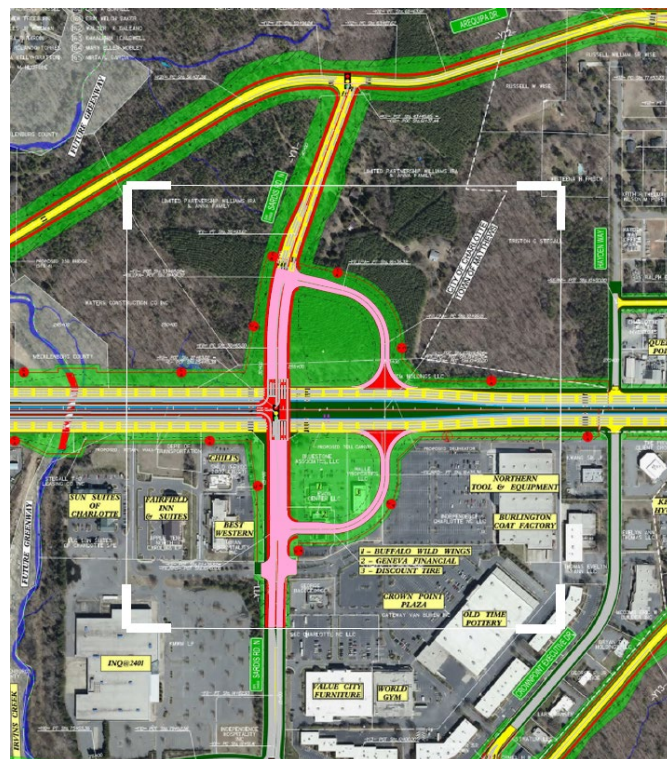
City Design Option for Sardis Road North Interchange

Sardis Road North – Partial Cloverleaf

This interchange alternative would have entrance and exit ramps between Sardis Road North and US 74 in the northeast and southeast quadrants of the interchange. In addition, Ardis Court would be a right-in right-out access at US 74 and Crownpoint Executive Drive would be closed with a cul-de-sac and no longer connected to US 74. Because this option became the only option in December 2018, it is discussed in the EA as part of the Build Alternative. *Since the approval of the EA in 2020, the design of Sardis Road North interchange has been refined. To reduce business displacements and retain access to US 74 from Hayden Way and Crownpoint Executive Dr., a quadrant roadway with a grade separation of Sardis Road North over US 74 is proposed instead of a partial cloverleaf access-controlled interchange. The footprint of the revised design is not expected to result in notable changes to previously evaluated environmental impacts.*



Partial Cloverleaf Option for Sardis Road North Interchange



*Grade Separated Quadrant Roadway Option for Sardis Road North Interchange
taken from 2020 Public Hearing Map

Independence Pointe Parkway Alternatives

The three Independence Pointe Parkway Options *and revised potential jurisdiction resource impacts are described below.*

Independence Pointe Parkway – Option 1

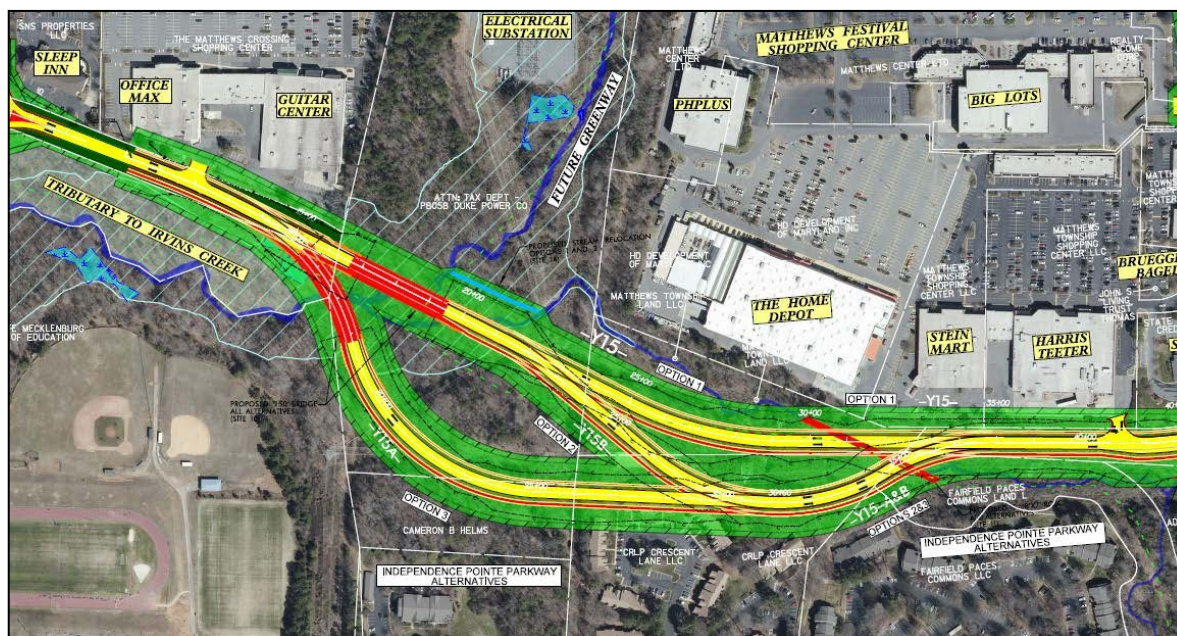
Option 1 would connect the existing sections of Independence Pointe Parkway from Windsor Square Drive to NC 51 in a relatively straight line, following behind the existing development at Matthews Festival Shopping Center currently fronting US 74. *It would include a 240-foot bridge and impact approximately 1,976 feet of streams (plus bridging 2,091 square feet of streams and relocate another 667 feet of streams).* There are no residential or business relocations with this option. Duke Energy has evaluated the alternatives and prefers this option due to crossing under a transmission line only once, and impacts are minimal compared to other options. *The original CP4A description of this alternative indicated a 425' bridge would be built. The potential to lengthen the bridge from 250' to 425' to span both jurisdictional streams was initially made to minimize impacts to the streams and was included in the LEDPA documentation. At that time, the longer bridge option was not reviewed by Duke Energy. During subsequent design reviews and revisions, the substantial conflicts with the Duke Energy transmission and distribution lines and towers were investigated further for the longer bridge including a review by Duke Energy. The result of these continued reviews and refinements is the reversion back to a shorter bridge length of approximately 240'.*

Independence Pointe Parkway – Option 2

Option 2 would connect similar to Option 1 but slightly curving away from the back of Home Depot and then tying back to Option 1 just east of Irvins Creek – Tributary 1. It would include a 240-foot bridge and impact approximately 1,762 feet of streams (plus bridging 2,091 square feet of streams and relocate another 667 feet of streams). Two apartment buildings would be impacted with 24 relocatees, Duke Energy's evaluation indicated this was their "least preferred" option and "has been ruled out completely." as it would require some work in the floodplain which would complicate and minimize their relocation options.

Independence Pointe Parkway – Option 3

Option 3 is the southern-most alignment pulling away from Option 1 at the same location as Option 2 but staying south until it ties back into the existing road on the western end. It would include a 350-foot bridge and impact approximately 1,255 feet of streams (plus bridging 1,899 square feet of streams and no stream relocation). Three apartment buildings with 36 relocatees, would be acquired. Duke Energy's evaluation reported it compounds upon the structure replacement required for Option 1 with an additional transmission line crossing to the northwest. Structure changeouts would be required on both 100kV transmission lines rather than the singular line. This option also requires the purchase of the adjacent apartments to have clear ROW, which is not preferred.



Three Alternatives for Independence Pointe Parkway

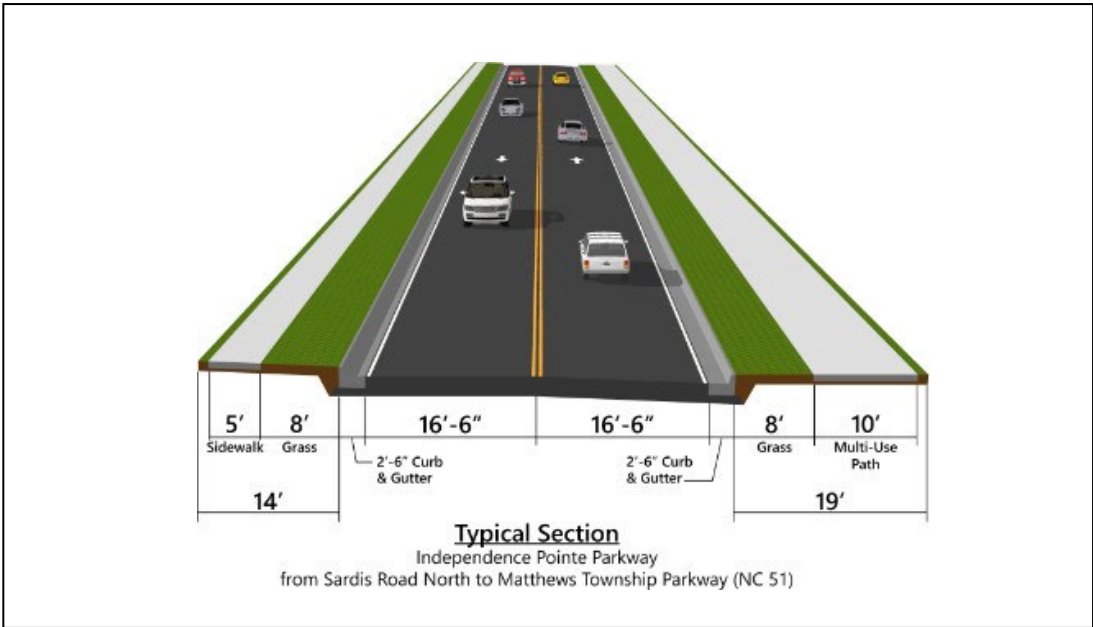
Typical Sections

There are several typical sections being used for the various parallel roads and cross streets. A sample of the proposed typical sections are shown below, including the Independence Boulevard mainline, Independence Pointe Parkway (where 3 alternative alignments are being considered), Matthews-Mint Hill Road, and Sardis Road North.

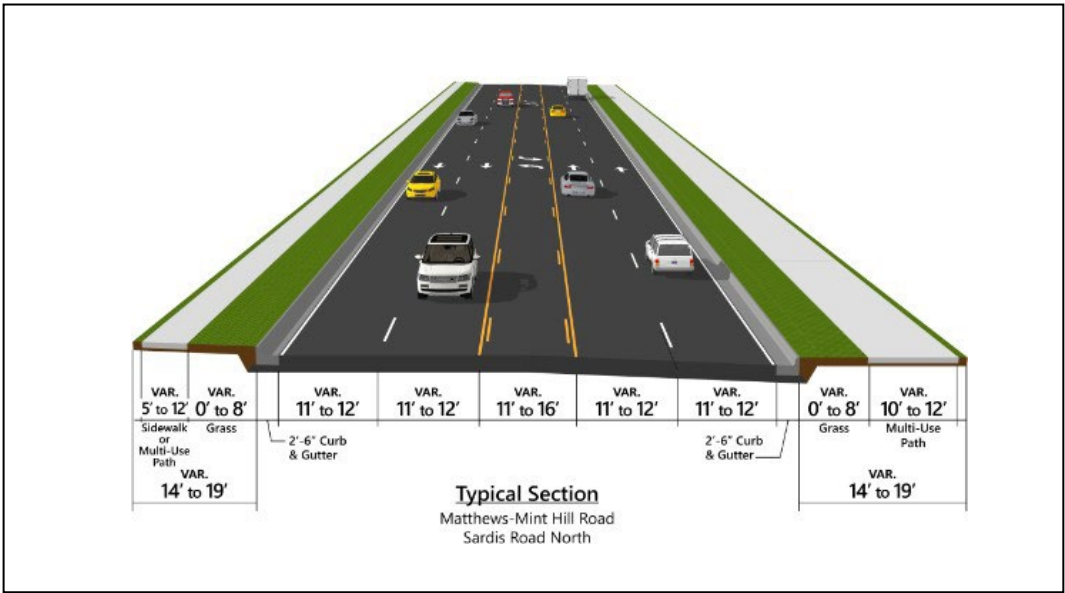
Independence Boulevard Typical Section



Independence Pointe Parkway (Alternatives) Typical Section



Matthews-Mint Hill Road and Sardis Road North Typical Section



Environmental Consequences

Parks, Recreation Facilities, and Conservation Easements

There are numerous recreational resources within the project vicinity that are potential Section 4(f) properties. McAlpine Creek Park is part of the Charlotte-Mecklenburg parks system and located just west of Independence Boulevard near Village Lake Drive. The park is 114 acres and includes soccer fields, trails, a lake, play structures, the McAlpine Creek Greenway, and the Campbell Creek Greenway. According to local planners, a portion of a very popular 5K running course in McAlpine Creek Park is located along the McAlpine Creek and Campbell Creek Greenways.

The Mecklenburg County Regional Sports Complex is located near the Independence Boulevard/I-485 interchange, it is partially constructed sports complex is under development and includes several soccer fields to tournament standards and associated parking, lighting, restrooms, greenway trails, and a playground.

Two future parks will be located within the project vicinity – Independence Pointe Neighborhood Park, currently in the planning stages, and a currently undeveloped park property near Central Piedmont Community College.

Several greenways and greenway extensions are also planned within the vicinity, including the Irvins Creek Greenway Corridor, the Matthews Sports Complex Collector, and the Four Mile Creek Greenway extension.

All Section 4(f) property impacts are proposed *de minimis* impacts. NCDOT has worked with FHWA and Mecklenburg County to minimize and mitigate the *de minimis* impacts to these properties.

Major Utility Crossings

Utilities are available from various providers within the vicinity of the project. Power distribution and transmission is provided by Duke Energy, and there are overhead utility lines and power poles along the project corridor as well as a substation located between U.S. 74 and the proposed Independence Pointe Parkway extension just west of the Matthews Festival Shopping Center. In this area there are many transmission towers and distribution poles. Coordination with Duke Energy continues as they are presently evaluating potential impacts and relocations of towers to coincide with the three options for extending Independence Pointe Parkway. Water and sewer are provided by Charlotte Water to the City of Charlotte and the Town of Matthews. Natural gas is provided by Piedmont. Telecommunications are provided by multiple companies. A fiber optic network/ITS is maintained by NCDOT.

The project team held coordination meetings with Duke Energy in April and May 2019 to discuss alternatives and mitigation measures regarding the Independence Pointe Parkway extension alternatives. Each of the alternatives would require moving and/or raising transmission towers. Duke Energy has conducted a study of the three alternatives and their impacts, plan for relocations and rehabilitation, and their costs. They indicated Option 1 as their preference *due to the horizontal alignment resulting in fewer impacts. The original CP4A description of this alternative indicated a 425' bridge would be built. During design refinement, the substantial conflicts with the Duke Energy transmission and distribution lines and towers were investigated further for the 425' bridge including a review by Duke Energy. Among other Duke Energy constructability concerns, the longer bridge configuration would result in a bridge end bent approximately 48 ft from the nearest transmission line, which is less than the required 75 ft needed for constructability and would likely require a tower relocation. The result of these continued refinements is the reversion back to a shorter bridge length of approximately 240'.*

An additional 15 feet was added to the proposed right-of-way along each corridor of the project (U.S.74 as well as all cross streets and collector roads) to accommodate potential utility relocations.

GeoEnvironmental

A GeoEnvironmental Planning Report for U-2509 was prepared in 2017, which documents sites of concern within the project study area that are or may be contaminated. Sites of concern may include but are not limited to underground storage tanks (USTs), dry cleaners, industry, hazardous waste, regulated landfills and unregulated dumpsites. One hundred and eleven sites of concern were identified in the proposed study area. This includes:

- Ninety-two sites with petroleum-related UST concerns for which low monetary and scheduling impacts are expected;
- Nine sites with dry cleaning facilities for which moderate monetary and scheduling impacts can be anticipated; and
- Ten industrial sites where low to high monetary and scheduling impacts are expected.
 - Three of these sites are anticipated to compromise a single superfund site, Academy Steel Drum.
 - High GeoEnvironmental impacts are anticipated because further investigation is required before acquisition recommendations are issued for a superfund site.

The project is likely to impact three sites along the project corridor at either U.S.74, cross streets, or in the ramps and loops associated with interchanges. All three sites are USTs and are illustrated in **Figure 5 in the appendix**. The Academy Steel Drum parcels are avoided in the current design; the proposed Independence Pointe Parkway alignment is not anticipated to cut below the existing grade to minimize the potential for encountering contaminated materials.

Archaeological Resources

In 2015, the SHPO recommended no archaeological investigation because there are no known archaeological sites in the proposed study area. The SHPO deemed it highly unlikely, based on knowledge of the area, that any archaeological resources eligible for the NRHP would be affected by the project. In 2017, the study area was expanded to encompass new design alterations in the northwest and southeast. The SHPO determined that the additional areas would not require systematic, intensive archaeological survey because of the disturbance from existing development and sloped and/or eroded soils. Accordingly, the project is not anticipated to adversely impact archaeological resources.

Historic Architecture Resources

In 2015, the SHPO recommended conducting an architectural survey for the area of potential effect (APE). The subsequent 2016 architectural investigation recorded 104 resources. Of the resources evaluated, three were recommended for further evaluation. NCDOT later concluded that those three resources were ineligible for listing on the NRHP. SHPO concurred with these findings in February 2017.

Later in 2017, the APE was expanded to encompass new design alterations in the northwest and southeast. NCDOT Historic Architecture determined, and SHPO confirmed, that no resources within the expanded study area are listed on or eligible for the NRHP. The project is not anticipated to adversely impact historic resources and is in compliance with Section 106 and General Statutes for historic architecture resources.

Natural Resources

NCDOT completed a Natural Resources Technical Report (NRTR) for the project from November 2015 through January 2016, in June and September of 2017 and an updated species investigation in September 2018.

The US Fish and Wildlife Service (USFWS) lists six federally protected species for Mecklenburg County and three federally protected species for Union County. As of March 6, 2020, the latest USFWS list of federally protected species is dated February 19, 2020. A brief description of each species' habitat requirements follows, along with the Biological Conclusion rendered based on the survey results of the study area.

Table 1. Federally Protected Species

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion	County
<i>Lasmigona decorata</i>	Carolina heelsplitter	E	No	No Effect	Both
<i>Rhus michauxii</i>	Michaux's sumac	E	Yes	No Effect	Both
<i>Echinacea laevigata</i>	Smooth coneflower	E	Yes	No Effect	Mecklenburg
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E	Yes	No Effect	Both
<i>Myotis septentrionalis</i>	Northern long-eared bat	T	*	*	Mecklenburg
<i>Bombus affinis</i>	Rusty-patched bumble bee	E	**	N/A	Mecklenburg

T: Threatened, E: Endangered;

* May Affect, Likely to Adversely Affect- NLEB is exempt due to consistency with 4(d) rule.

**The USFWS does not and will not require surveys for rusty-patched bumble bee in North Carolina because USFWS assumes the state is unoccupied by the rusty-patched bumble bee.

The project is anticipated to impact jurisdictional streams and wetlands. The table below summarizes the jurisdictional resource impacts for the parallel collector roads, each Independence Pointe Parkway Option, and U.S. 74 Mainline.

Table 2. Potential Jurisdictional Resource Impacts

Feature	Impacts from Refined Designs (Current) ¹				
	Parallel Collector Roads ²	Independence Pointe Parkway Extension ³ Alternatives			U.S. 74 Mainline
		Option 1	Option 2	Option 3	
Streams (ft.)	3,112	1,976	1,762	1,255	1,163
Bridged Streams ⁴ (ft ² .)	1,612	2,091	2,091	1,899	4,706
Relocated Streams (ft.)	0	667	667	0	0
Wetland Impacts (ac.)	2.84	0.22	0.22	0.22	0.08

¹ Calculated with slope stakes limits plus 25-foot buffer. No pond impacts are anticipated.

² Excludes IPP Extension Alternatives (Windsor Square to NC 51).

³ Windsor Square Drive to NC 51.

⁴ Bridged Streams are not included in the Stream Impacts.

Environmental Justice

As a result of the Environmental Justice analysis completed, both minority and low-income populations that meet the Environmental Justice criteria were identified in the project vicinity. Notably adverse community impacts are anticipated with this project but appear to affect all populations equally; thus, impacts to minority and low-income populations do not appear to be disproportionately high and adverse. Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community. No disparate impacts are anticipated under Title VI and related statutes.

Constructability Review

In November 2019, the NCDOT Value Management Unit conducted a constructability field review. Included in the meeting were the NCDOT Division Construction Engineer, Area Construction Engineer, and Regional Bridge Construction Engineer, three contractors, and members of the project team. The February 2020 Value Engineering Study shows that all three alternatives are constructible. However, the study noted that the introduction of the reverse curve geometry with Options 2 and 3 may make the road difficult to navigate. Additional concern voiced at the meeting but not included in the Value Management Study was the structure on Option 3 is located within the limits of reversed curves requiring transitioning super elevation for the entire length of the structure. This is a constructability issue easily avoided with the other Options. The conclusion was to avoid this geometry by constructing Option 1.

Concurrence Point 3 – Least Environmentally Damaging Practicable Alternative

The detailed study alternatives are described on pages 6-8 above.

Sardis Road North Interchange

As part of the initial best fit design, NCDOT developed three options for the Sardis Road North Interchange. These three options (Diamond Interchange, Partial Cloverleaf, and City Design) were presented to the merger team on May 18, 2016. The diamond interchange was eliminated from consideration at that merger meeting because of the extensive stream and wetland impacts. The Partial Cloverleaf and City Design options were included by the merger team as the detailed study alternatives carried forward. In collaboration with the merger team in December 2018, the City Design Interchange was eliminated from further consideration because it did not meet traffic demand at an acceptable level of service and thus, did not meet the purpose and need of the project. Therefore, the Partial Cloverleaf design for the Sardis Road North Interchange became the only option for the Build Alternative. *During subsequent design revisions, the Partial Cloverleaf design was revised to reflect a quadrant roadway configuration, maintaining the grade separation over US 74, to allow for better parcel access and connections to US 74.*

Independence Pointe Parkway

Below is a table summarizing the impacts that are different among the three Independence Pointe Parkway Extension alternatives. Although Option 1 has the greatest stream impact, it has the same amount of wetland impacts as Options 2 and 3, and it has no residential relocations, as opposed to 24 and 36 relocations in Option 2 and 3, respectively. USACE has been involved with the project team and alternative development throughout the Merger Process and has been made aware of the alternatives that are being evaluated as well as the impacts associated with each. Even where a practicable alternative exists that would have less adverse impact on the aquatic ecosystem, the Section 404(b)(1) Guidelines allow it to be rejected if it would have significant adverse environmental consequences. This allows for consideration of evidence of damages to other ecosystems in deciding whether there is a 'better' alternative. As there are only minor differences in natural environmental impacts among the alternatives, the damage to the human environment must be considered. The residential relocations associated with Options 2 and 3 would result in a more environmentally damaging option to the human environment as compared to Option 1 impacts. Applicable Best Management Practices for construction of culverts and bridges over surface waters will be used to control storm water runoff, sedimentation, and erosion.

Table 3. Comparison of Impacts by Alternative

Feature	Impacts from Refined Designs (Current)				
	Parallel Collector Roads	Independence Pointe Parkway Extension ¹ Alternatives			U.S. 74 Mainline
		Option 1	Option 2	Option 3	
Human Environment					
Residential Relocations	4	0	24	36	5
Business Relocations	8	0	0	0	94
Section 4(f) ²	<i>De minimis</i> (4)	<i>De minimis</i> (1)	<i>De minimis</i> (1)	<i>De minimis</i> (1)	<i>De minimis</i> (4)
Places of Worship	0	0	0	0	7 ³
Natural Environment					
Streams (ft.)	3,112	1,976	1,762	1,255	1,163
Bridged Streams ⁴ (ft. ²)	1,612	2,091	2,091	1,899	4,706
Relocated Streams (ft.)	0	667	667	0	0
Wetland Impacts (ac.) ⁵	2.84	0.22	0.22	0.22	0.08

¹Windsor Square Drive to NC 51.²Based on impacts to public lands/parks, FHWA is proposing *de minimis* impacts to the number of resources in parentheses.³The 7 churches operate in rental office space.⁴Bridged Streams are not included in the Stream Impacts.⁵Calculated with slope stake limits plus 25-foot buffer.

Recommended Preferred Alternative

Based on NCDOT's evaluation, Option 1 has the following:

- Option 1 has no residential relocations (as opposed to 24 relocations with Option 2 and 36 relocations with Option 3).
- Option 1 has the same amount of wetland impacts as Option 2 and 3. Stream impacts from Option 1 are 214 ft. and **720** ft. greater than Options 2 and 3, respectively.

Duke Energy has evaluated the three alternatives¹ against the resulting impacts to their transmission lines and easements such as line and tower relocations, additional towers, raising of the lines, and their resulting impacts and costs. Their resulting comments are below.

Option 1: This option is most preferred. This proposed road route only crosses under our transmission line once. Though there may be some Asset Protection concern with the roadway's proximity to one of the existing structures (pending final plans and survey), it is minimal compared to the other two options. Based upon preliminary plans and the amount of proposed fill, there would be approximately 6-8 structures that would need to be changed out.

Option 2: This option is least preferred. Option 2 would require some construction in the floodplain which would complicate and minimize our relocation options, so it has been ruled out completely. This also requires the purchase of the adjacent apartments in order to have clear R/W, which is not preferred.

Option 3: This option is second choice. Option 3 compounds upon the structure replacements required for Option 1 with an additional transmission line crossing to the northwest. This means structure changeouts would be required on both 100kV transmission lines rather than the singular line. This also requires the purchase of the adjacent apartments in order to have clear R/W, which is not preferred.

Feasibility of wholesale relocation: This is not feasible. A wholesale relocation was assessed, but due to various factors, this option is not seen as feasible as real estate costs would be high, Duke Transmission Asset Protection would have to make excessive compromises on requirements for clear rights-of-way, and project duration would be several years long. In summary, more issues would be created with this option than finding a solution to relocate in the existing R/W.

These assumptions are based upon the preliminary plans and are not final.

The length of stream impact for Option 1 is 214 feet greater than Option 2 and **720** feet greater than Option 3. There are 667 linear feet of relocated stream with Option 1, and Option 2, and none with Option 3. However, because it would have the least impact on the human environment and is preferred by Duke Energy due to their independent analysis, NCDOT is recommending Option 1 as its Recommended Preferred Alternative.

¹ The original CP4A description of this alternative indicated a 425' bridge would be built. The potential to lengthen the bridge to from 250' to 425' spanning both jurisdictional streams was initially made to minimize impacts to the streams and was included in the LEDPA documentation. However, during design revisions, the substantial conflicts with the Duke Energy transmission and distribution lines and towers were investigated further for the 425' bridge including a review by Duke Energy. The result of these continued refinements is the reversion back to a shorter bridge length of approximately 240'.

Concurrence Point 4A – Avoidance and Minimization

NCDOT has avoided and minimized impacts throughout the development of this project. NCDOT will also investigate potential on-site stream and wetland mitigation opportunities for the Build Alternative. If on-site mitigation is not feasible, mitigation will be provided by North Carolina Division of Environmental Quality Division of Mitigation Services (NCDMS) or through the use of private mitigation banks.

Avoidance strategies used throughout the project are listed below:

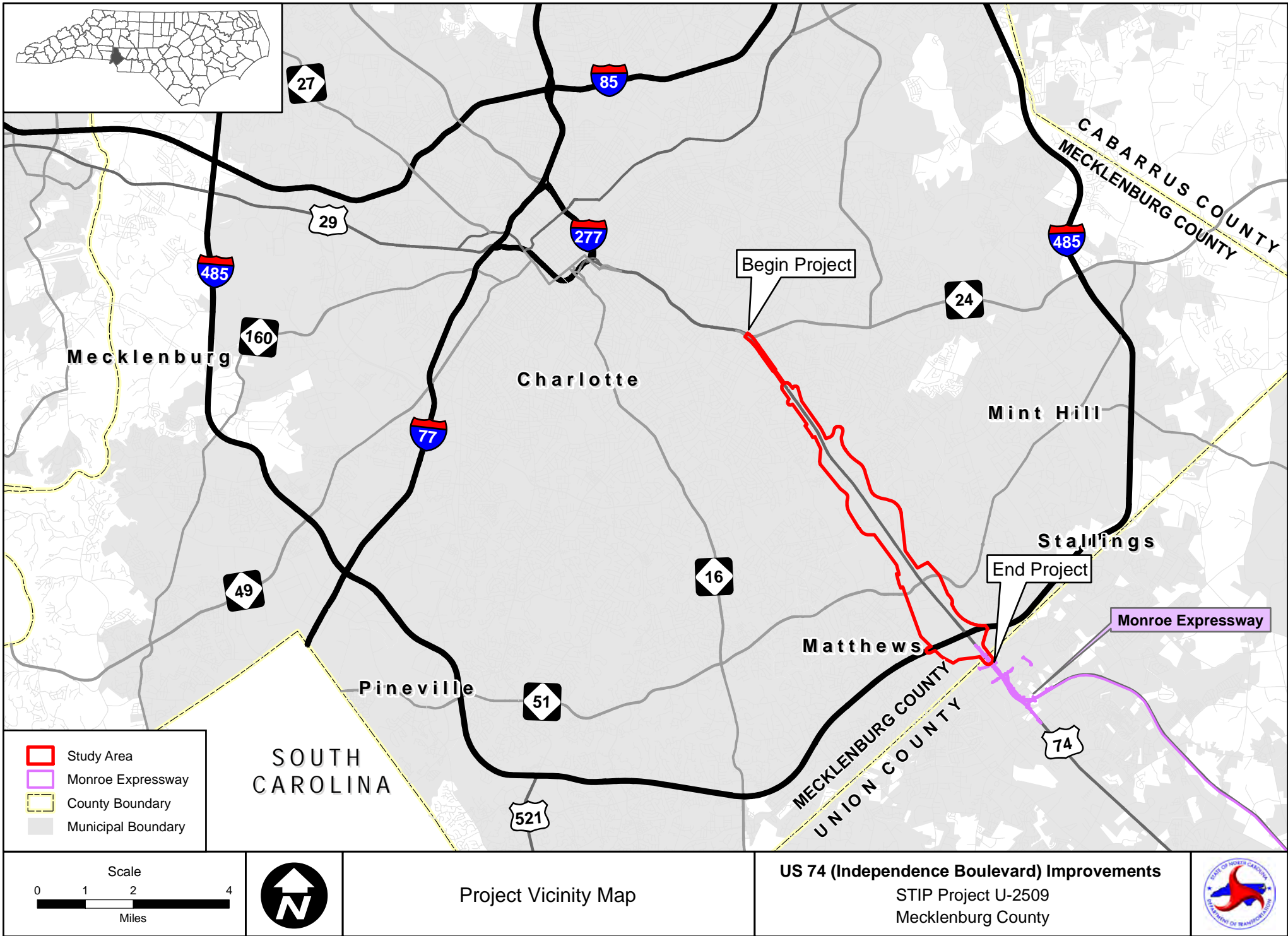
- Retaining walls were added at numerous locations along U.S. 74 and along some parallel roads and cross streets to avoid and minimize impacts to natural and human resources, such as streams, and wetlands, and taking residences, businesses and related parking.
- A retaining wall was added along the planned extension of Independence Pointe Parkway from Matthews-Mint Hill to Campus Ridge Road through the Mecklenburg County Regional Sportsplex to avoid greater impacts to the soccer fields. (Note: because this road extension is part of Mecklenburg County's plan, it is a *de minimis* impact.)
- Potential UST sites have been avoided during design by use of retaining walls.
- The Academy Steel Drum parcels are avoided in the current design.
- Bridges have been used to cross streams and wetlands, ~~and some extended from what was originally anticipated to further minimize impacts to streams, wetlands, and floodplains.~~
- Project designs include bridges over streams and wetlands to avoid impacts in the following locations:
 - Bridging on Margaret Wallace Road over Campbell Creek
 - Bridging on proposed Arequipa Drive over Irvins Creek and tributary
 - Bridging on proposed Krefeld Drive over Irvins Creek
 - Replace culvert on Existing Sam Newell Road with a 90-foot bridge
 - Widen existing bridge on US 74 over McAlpine Creek
 - Bridging on Independence Pointe Parkway over tributary of Irvins Creek (3 Options)
- Along Sam Newell Road, south of Independence Pointe Parkway, there is an existing culvert. During CP2A, the Merger Team agreed that if NCDOT could not terminate the road improvements prior to the site, an 80-foot bridge would be needed. During the refined design planning stage, the bridge included was 90 feet to meet hydraulic needs.
- An existing bridge along Margaret Wallace Road over Campbell Creek is being replaced by a longer bridge, which will be a benefit hydraulically as well as provide space for an existing greenway to cross Margaret Wallace Road under the bridge instead of at-grade as it does today.

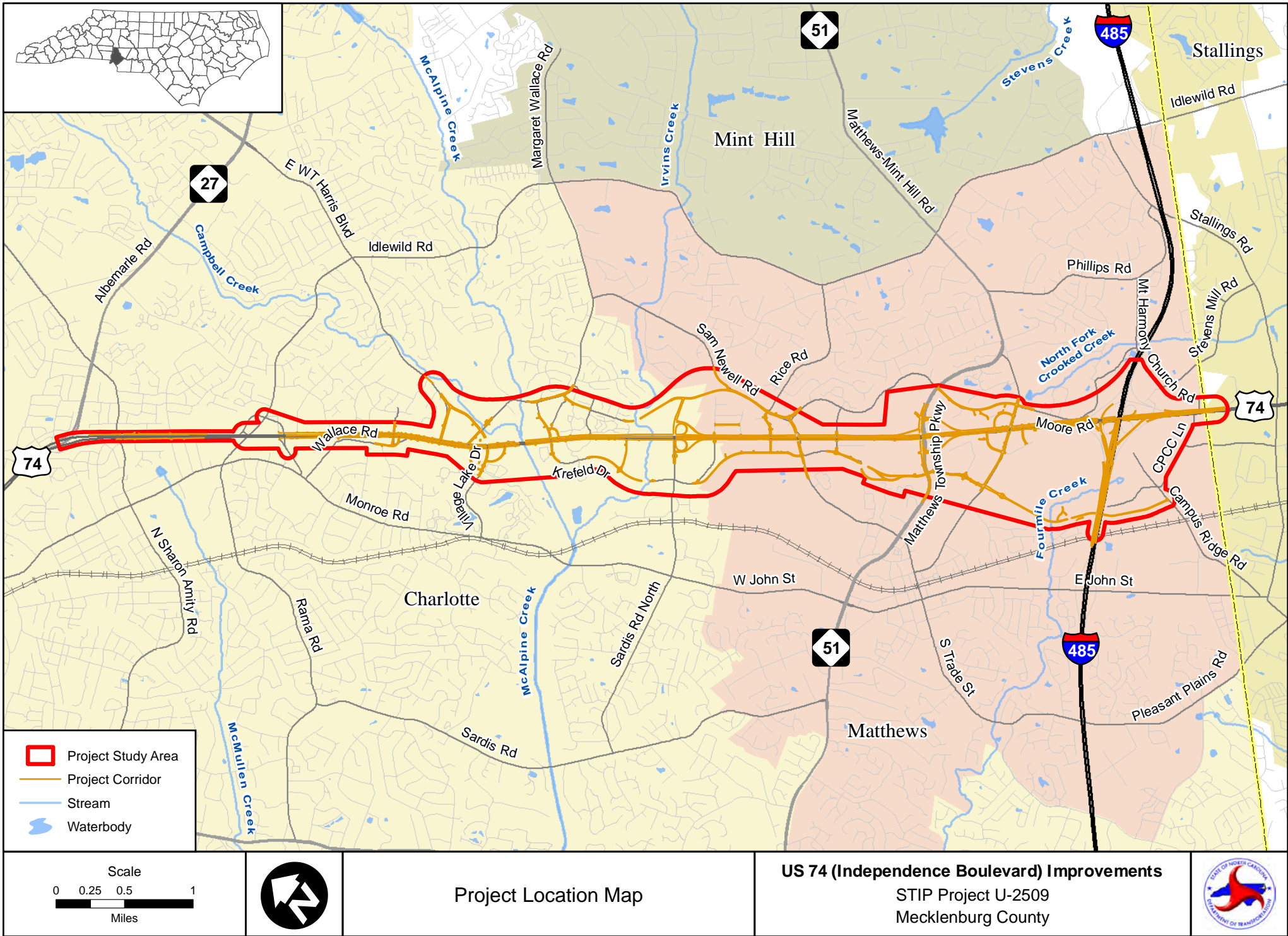
Minimization strategies used throughout the project are listed below:

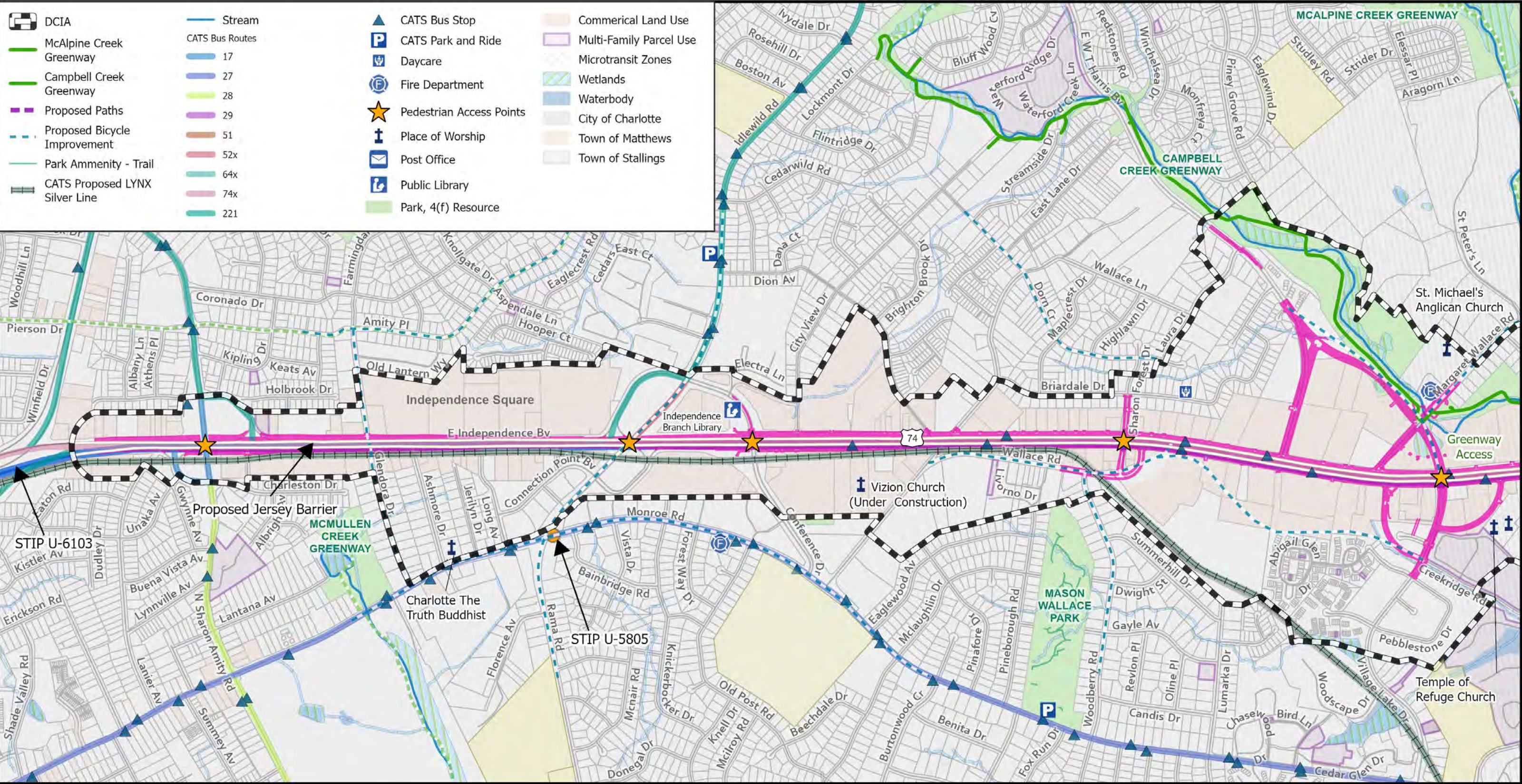
- Right of way impacts were avoided as much as possible by utilizing the existing right of way for U.S. 74 which was between 200 and 210 feet.
- Extensive bicycle and pedestrian infrastructure are being added to the project. This has increased the impact to sensitive resources but providing for improved mobility across all modes of transportation is expected to minimize the need for reliance on single occupant vehicles.
- Potential Hazardous sites have been avoided during design.

- Extensive coordination with business and property owners has led to providing more access to enhance new travel patterns. These additions are aimed to minimize the impact to businesses and to help keep businesses viable.
- NCDOT has worked with FHWA and Mecklenburg County to minimize and mitigate the *de minimis* impacts to those properties.

Appendix



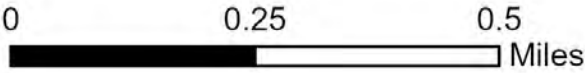




NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
DIVISION 10

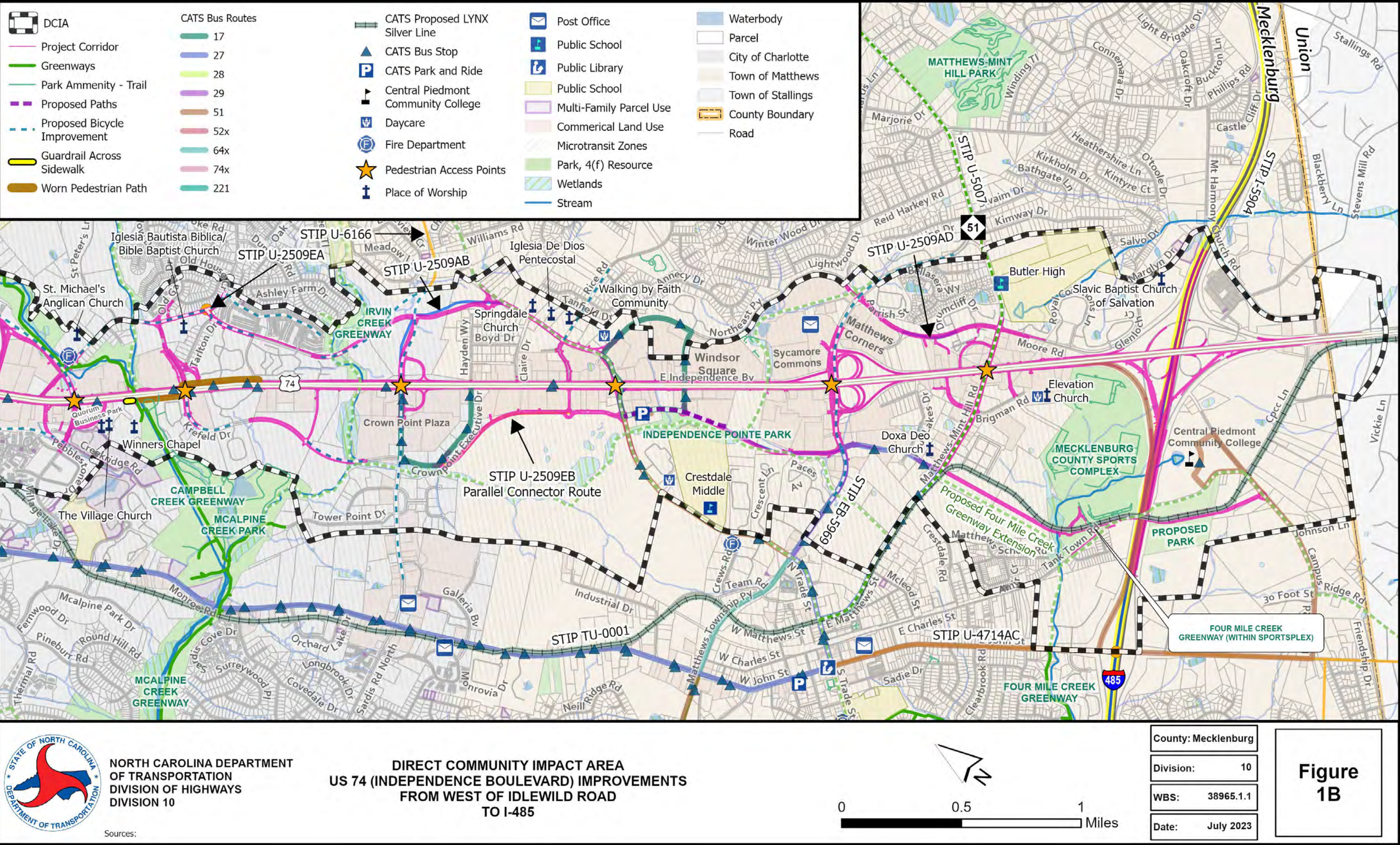
Sources: NCDOT GIS Unit, NCDOT STIP Unit

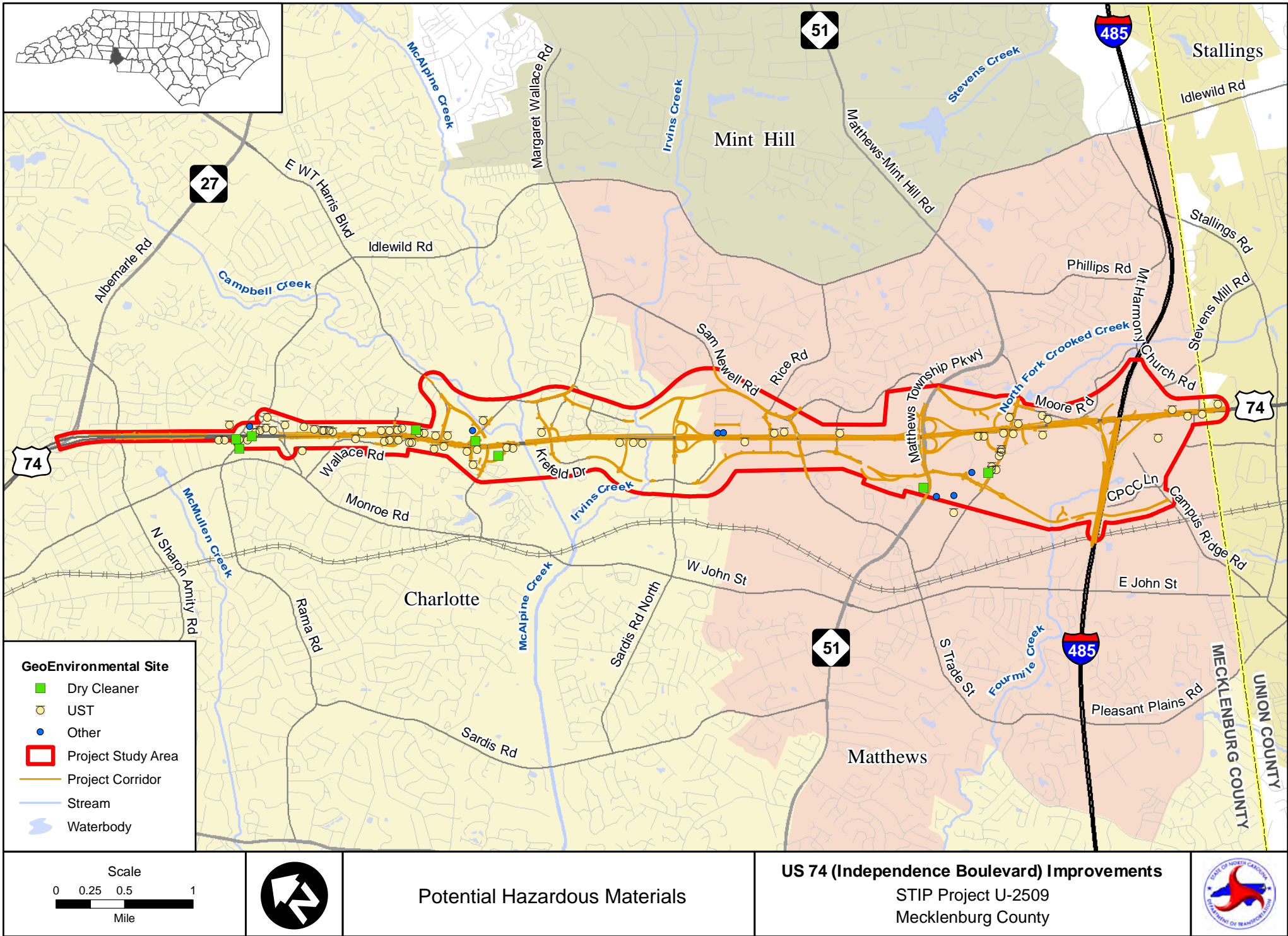
**DIRECT COMMUNITY IMPACT AREA
US 74 (INDEPENDENCE BOULEVARD) IMPROVEMENTS
FROM WEST OF IDLEWILD ROAD
TO I-485**



County: Mecklenburg
Division: 10
WBS: 38965.1.1
Date: July 2023

**Figure
1A**





Section 404/NEPA Merger Project Team Meeting Agreement

Concurrence Point No. 1

Purpose and Need and Study Area

TIP Project No.: U-2509

FA Project No.: NHS-74(70)

WBS No.: 38965.1.1

Project Name/Description:

US 74 (Independence Boulevard) Improvements from Conference Drive to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

A concurrence meeting was held with members of the Merger Team on March 19, 2015 to discuss the Purpose & Need and Study Area of the proposed project. Information about the existing and projected traffic conditions along the corridor was presented in the meeting package. The Project Team has concurred on this date with the Purpose & Need and Study Area as described below.

The study area for this project includes proposed improvements to existing US 74 (Independence Boulevard) and an existing network of parallel roads and their proposed connections. The study area ranges from 500 to approximately 2,000 feet on either side of the existing US 74 centerline. The study area also includes an expanded area around the I-485 interchange to evaluate express lanes connection alternatives and an extension to the southeast along US 74 to include connection alternatives to the proposed Monroe Connector/Bypass toll lanes.

The need for this study can be summarized as follows:

- *Existing US 74 does not provide reliable travel time and connectivity for residents, business patrons, and commuters in Southeastern Charlotte and Matthews.*
- *Traffic estimates indicate that US 74 will require additional capacity to achieve a goal of LOS D for users by the design year (2040).*
- *This project is needed to provide reliable travel time, system sustainability, and connect to a system of express lanes planned on US 74 to the northwest, I-485 to the south, and the Monroe Bypass/Connector toll road to the southeast.*

The purpose for the proposed action is as follows:

- *To provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within the study area.*


U.S. Army Corps of Engineers


U.S. Environmental Protection Agency


Federal Highway Administration


U.S. Fish and Wildlife Service

Renee Hedrick-Early 3.20.15

N.C. Department of Cultural Resources Historic Preservation Office

[Signature]

N.C. Department of Environment and Natural Resources -- Division of Water Resources

[Signature]

N.C. Department of Transportation, PDEA Unit

Marla Chambers

N.C. Wildlife Resources Commission

[Signature] for Bob Cook

Charlotte Regional Transportation Planning Organization

Section 404/NEPA Merger Project Team Meeting Agreement

Concurrence Point No. 1 Amendment

Purpose and Need and Study Area

TIP Project No.: U-2509

FA Project No.: NHS-74(70)

WBS No.: 38965.1.1

Project Name/Description:

US 74 (Independence Boulevard) Improvements from west of Idlewild Road to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

A concurrence meeting was held with members of the Merger Team on March 19, 2015 to discuss the Purpose & Need and Study Area of the proposed project. Information about the existing and projected traffic conditions along the corridor was presented in the meeting package. The Project Team concurred on that date with the Purpose & Need and Study Area as described in the signed CP 1 Form.

The study area for this project has been amended because of shifts in alignment. The revised study area attached is accepted by the merger team as of March 21, 2019.

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Mark Matthews

3/22/2019

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U.S. Army Corps of Engineers

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Amanetta Somerville

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U.S. Environmental Protection Agency

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Federal Highway Administration

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U.S. Fish and Wildlife Service

DocuSigned by:

Renee Gledhill-Earley

3/21/2019

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N.C. Department of Cultural Resources Historic Preservation Office

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N.C. Department of Environment and Natural Resources – Division of Water Resources

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N.C. Department of Transportation, PDEA Unit

DocuSigned by:

Marla Chambers

3/22/2019

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N.C. Wildlife Resources Commission

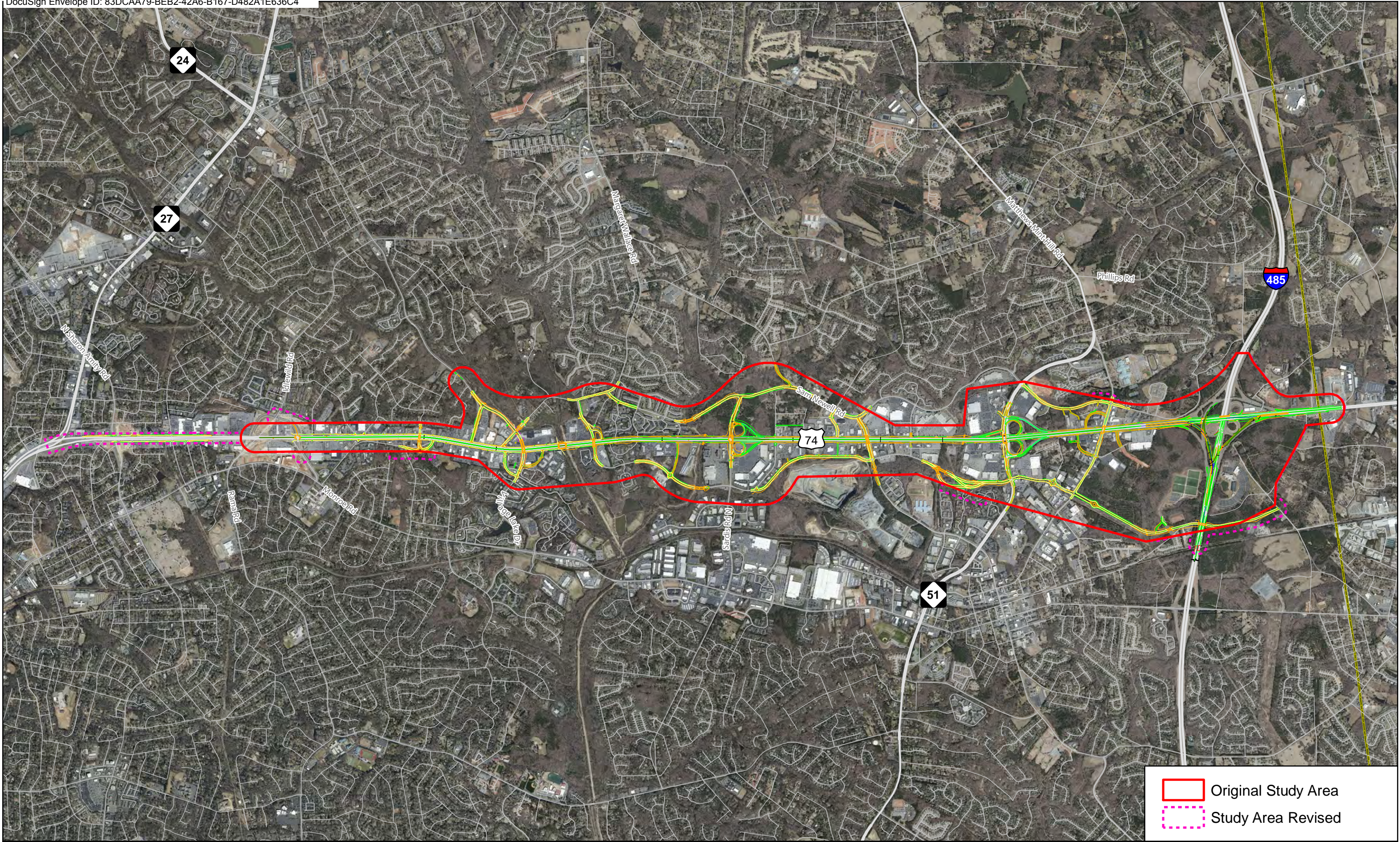
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Robert Cook


3/21/2019

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Charlotte Regional Transportation Planning Organization



 Original Study Area

 Study Area Revised

Section 404/NEPA Merger Project Team Meeting Agreement

Concurrence Point No. 2

Detailed Study Alternatives Carried Forward

TIP Project No.: U-2509

FA Project No.: NHS-74(70)

WBS No.: 38965.1.1

Project Name/Description:

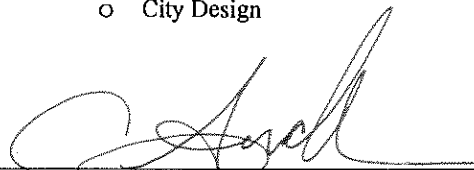
US 74 (Independence Boulevard) Improvements from Conference Drive to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.


A concurrence meeting was held with members of the Merger Team on May 18, 2016 to discuss Detailed Study Alternatives to be carried forward for the proposed project. In addition to the No-Build Alternative, the Project Team has concurred on this date that the Detailed Study Alternatives to be Carried Forward include:

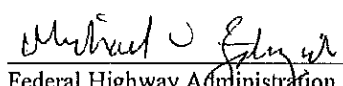
Expressway Concept

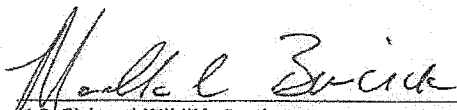
Improvements to US 74 from Conference Drive to I-485, to include widening and the addition of grade separations and interchanges, to bring the facility to the level of an Expressway (with limited segments of freeway) as well as the addition of Express Lanes in the median. Express Lane connections to the proposed I-485 Express Lane project to the south (STIP Project I-5507) and the proposed Monroe Bypass/Connector Toll Road (STIP Projects R-3329 and R-2559) will be included, as well as the connection of parallel roads and the construction of an interchange at Sardis Road North, as described below.

- **Parallel Roads being considered:**
 - Krefeld Drive Extension (Krefeld Drive to Sardis Road North)
 - Arequipa Drive/Northeast Parkway (Margaret Wallace Road to Sam Newell Road)
 - Krefeld Drive/Independence Pointe Parkway (Crownpoint Executive Drive to Sam Newell Road)
 - Northeast Parkway (Overcash Drive to Matthews-Mint Hill Road)
 - Independence Pointe Parkway Alternatives (Windsor Square Drive to Matthews Township Parkway [NC 51])
 - Option 1
 - Option 2
 - Option 3
 - Independence Pointe Parkway (Matthews Township Parkway [NC 51] to Campus Ridge Road)
- **Sardis Road North Interchange Alternatives:**
 - Half-Clover
 - City Design

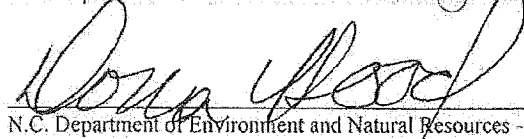

U.S. Army Corps of Engineers

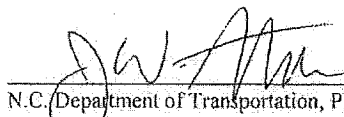
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U.S. Environmental Protection Agency

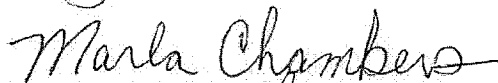
 5-18-16
Federal Highway Administration


 5/27/16
U.S. Fish and Wildlife Service

 5-23-16
N.C. Department of Natural and Cultural Resources - State Historic Preservation Office

 5/18/16
N.C. Department of Environment and Natural Resources - Division of Water Resources

 5-18-16
N.C. Department of Transportation, PDEA Unit

 6/2/2016
N.C. Wildlife Resources Commission

 6/6/2016
Charlotte Regional Transportation Planning Organization

Section 404/NEPA Merger Project Team Meeting Agreement

Concurrence Point No. 2A

Bridging and Alignment Review

TIP Project No.: U-2509

FA Project No.: NHS-74(70)

WBS No.: 38965.1.1

Project Name/Description:

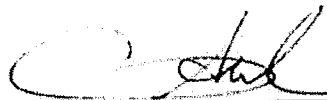
US 74 (Independence Boulevard) Improvements from Conference Drive to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

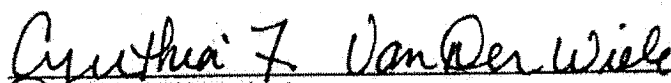
A concurrence meeting was held with members of the Merger Team on June 20, 2016, in conjunction with a field review meeting, to discuss the Bridging Decisions and Alignment Review for the proposed project. The project team has concurred on the recommendations for the following major drainage structures, as presented in the Preliminary Hydraulics Study for Environmental Impacts prepared in April 2016 and revised based on the field review:

U-2509 Mecklenburg County				
Site	Alignment	Stream	Existing Structure Size	Recommended Structure Size
1	East WT Harris Blvd -Y9-	UT to Campbell Creek	1 @ 8' x 6' RCBC	Extend Existing 1 @ 8' x 6' RCBC Downstream end only
2	Margaret Wallace Rd -Y8-	Campbell Creek	4 @ 13' x 9' RCBC	150' Bridge
3	US 74 -L-	McAlpine Creek	4 @ 40' Bridge	225' Bridge
4	Northeast Parkway Extension -Y12-	Irvins Creek	N/A (New Location Alignment)	250' Bridge w/ 72" overflow pipe
5	US 74 -L-	Irvins Creek	1 @ 38' x 18.5' Concrete Arch Bottomless Arch on Footings	Extend existing 1 @ 38' x 18.5' Bottomless Concrete Arch Upstream and Downstream
6	Krefeld Drive Extension -Y10-	Irvins Creek	N/A (New Location Alignment)	300' Bridge
7	US 74 -L-	UT to Irvins Creek Trib 1	1 @ 66" RCP at inlet 1 @ 72" RCP at outlet	Extend existing 1 @ 66" RCP Upstream end only
8	US 74 -L-	Irvins Creek Trib 1	2 @ 8' x 10' RCBC	Extend existing 2 @ 8' x 10' RCBC Upstream and Downstream
9	Sam Newell Rd -Y14-	Irvins Creek Trib 1	1 @ 18' x 7.8' Structural Plate Arch	Terminate Road Improvements prior to site if possible. If not, recommend 80' Bridge
10	Independence Pointe Pkwy Extension -Y15-	Irvins Creek Trib 1	N/A (New Location Alignment)	Alternatives 1 and 2 - 250' Bridge and Realign Stream so no crossing at Site 14; Alternative 3 - 250' Bridge
11	Independence Pointe Pkwy Extension -Y15-	UT to Irvins Creek Trib 1	N/A (New Location Alignment)	2 @ 8' x 7' RCBC Bury inverts 1'
12	Independence Pointe Pkwy Extension -Y15-	UT to Irvins Creek Trib 1	1 @ 16.4' x 8.2' Structural Plate Arch	Extend existing 1 @ 16.4' x 8.2' Structural Plate Arch Downstream end only
13	CPCC Lane Extension -Y19-	Foumle Creek	N/A (New Location Alignment)	2 @ 8' x 7' RCBC Bury inverts 1' with Equalizer Pipes
14	Independence Pointe Pkwy Extension -Y15-	UT to Irvins Creek Trib 1	N/A (New Location Alignment)	Alternatives 1 and 2 - Realign Stream so only crosses at Site 10; Alternative 3 - no crossing

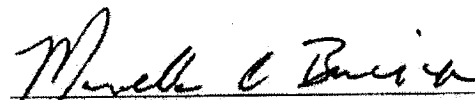
Additionally, the project team has concurred on the review of the preliminary alignment for each Detailed Study Alternative resulting from CP 2, including these adjustments, if necessary:

- NA
- _____
- _____
- _____


 6/20/2016
U.S. Army Corps of Engineers

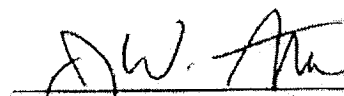
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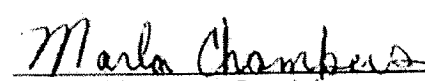
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Federal Highway Administration

 6/20/16
U.S. Fish and Wildlife Service

 7-5-16
N.C. Department of Natural and Cultural Resources - State Historic Preservation Office

 6/20/16
N.C. Department of Environment and Natural Resources - Division of Water Resources

 6-20-16
N.C. Department of Transportation, PDEA Unit

 6/20/2016
N.C. Wildlife Resources Commission

 7/5/2016
Charlotte Regional Transportation Planning Organization

Commenter	Comment on	Comment
Steven Shepherd	Public Hearing	Economic divestment away from the urban core, i.e., the state is paying too make Charlotte poorer. Re-enforcement of existing racial and economic segregation between the east and west sides of U.S. 74
Steven Shepherd	Section 4f	Relative to everything else, this is fine.
Ronald Cabrera	Public Hearing	Only concern is that neighbors in the affected areas will be notified about these changes.
Phillip Gussman	Public Hearing	Pedestrian Access and safety. Integration with Silver Line. Pedestrian and Bike access across 74.
Gwen Cook	Public Hearing	Excellent job presenting a most difficult and complex project. Most greenways appear to be accommodated. You are to investigate the crossing of future Irvins Creek Greenway under Krefeld Drive and at grade crossing of Irvins Trib and Sam Newell. I will coordinate with Matthews on the letter.
Gwen Cook	Section 4f	A lot of land will be required by Matthews Regional Sportsplex.
Linda Olscamp	Public Hearing	I am absolutely AGAINST toll express lanes. I do like the idea of adding general purpose lanes - However, I do not like the impact on businesses. I do not understand why a road cannot be built alongside Independence that runs parallel to it so its customers can access the business. We have seen it in other communities. When we moved to Charlotte 14 years ago, we heard that previously, Independence had it all for businesses. But in the area that heads uptown, it was a desolate ghost town. We are concerned the same thing will happen to the area from Idlewild to 485, we have little in services on the east side. We will have nothing if those businesses close. NO EXPRESS TOLL LANES!
Kombiz Salehi	Public Hearing	Blocking cross traffic on intersections that cross 74 (Near Walmart and Lidl) are exercises in poor to lousy design. NCDOT staff do not receive wages to make life miserable for the tax payers. These obstacles do not contribute to safety or efficiency.
Kombiz Salehi	Section 4f	Passing the roads is much more time consuming.
Vince Manno	Public Hearing	There are a group of businesses off HWY 74 that will be hard to access in Matthews. One way to help alleviate the issue is the take Claire Drive and extend it to a road behind the Harley Davidson dealership - eventually, the road next to I-HOP is accessible in both directions off HWY 74 - with the changes there will be only 1 access road heading west on HWY 74 and no accessibility heading east on HWY 74 unless you make a left @ Sam Newell.
Joesph F. Jones Jr.	Section 4f	Please insert a greenway under the existing 74 corridor for the greenway (currently under construction)

Commenter	Comment on	Comment
Joseph F. Jones	Public Hearing	<p>The idea of express toll lanes is interesting but I wonder if it really solves many of the traffic problems for the region? I see on the I-77 north design that a few select vehicles can drive faster (usually above the speed limit) but rarely is the number of vehicles reduced on the roadway by alternative means of transport. The busway on 74 seems currently underused, but the design bus never really worked for access on the corridor. What about mass-transit for the corridor to reduce cars?</p>
Joseph F. Jones Jr.	Public Hearing	<p>Briar Creek Greenway: Please insert a walkway under the existing 74 corridor for the greenway (currently under construction)</p>
Wenonah Haire, Catawba Indian Nation	Public Hearing	<p>The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However the Catawba are to be notified if Native American artifacts and/or human remains are located during the ground disturbance phase of this project.</p> <p>If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or email Caitlin.Rogers@catawba.com</p>
Robinson, Bradshaw, and Hinson, P.A.		<p>This firm represents the Mecklenburg County ABC Board (the "ABC Board"), which owns the property at 7212 E. Independence Blvd. (U.S. Hwy. 74), Charlotte, NC 28227 (the "Property").</p> <p>At NCDOT's recent public meeting on STIP Project No. U-2509, the ABC Board learned that the Property will be impacted by transportation improvements that NCDOT proposes to construct in connection with the Project at the intersection of Independence Boulevard and Village Lake Drive.</p> <p>Based on information provided at the meeting, completion of the Project will deprive the Property of reasonable access both to Village Lake Drive and to Independence Boulevard. As a result, if the Project is completed as currently contemplated in NCDOT's plans, the ABC Board believes that the Project will eliminate any value it has in the Property and will result, effectively, in a taking of the entire Property.</p> <p>To that end, the ABC Board would like to engage in discussions with NCDOT about Project design alternatives that will protect its interest in the Property by providing access to Village Lake Drive and Independence Boulevard that is substantially similar to the access that the Property has today. Alternatively, if NCDOT elects to proceed with the Project as currently planned, the ABC Board is prepared to discuss with NCDOT the manner by which it will acquire</p>

Commenter	Comment on	Comment
		<p>the entirety of the Property at its fair market value, as required under applicable condemnation law.</p> <p>We look forward to discussing this matter with you in more detail. This letter is, of course, sent without prejudice to any of the ABC Board's rights, each of which is expressly reserved.</p>
<p>Amanetta Somerville, U.S. Environmental Protection Agency</p>	<p>EA</p>	<p>Consistent with Section 102(2)(c) of the National Environmental Policy Act (NEPA) and section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) appreciates the opportunity to review the joint Federal Highway Administration (FHWA) and the North Carolina Department of Transportation (NC DOT) Administrative Action Environmental Assessment (EA) for improvements to 6.4 miles of US 74 (Independence Boulevard) from west of Idlewild Road to I-485 (Charlotte Outer Loop) in Charlotte and Matthews in Mecklenburg County, North Carolina. The proposed project will widen and upgrade US 74 with additional general-purpose lanes, auxiliary lanes, express lanes in the median, and the replacement of at-grade intersections with interchanges and overpasses, as well as the extension and connection of six secondary roads along the corridor. The Administrative Action Environmental Assessment (DEA) document identifies two proposed alternatives for consideration. A No-Build Alternative and a Build Alternative with a Best-Fit Widening to US 74 and parallel road connections with a Sardis Road North Interchange with a Partial Cloverleaf design and three alignment options for the connection of Independence Pointe Parkway.</p> <p>The EPA understands that the purpose of the Proposed Action is to provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within Mecklenburg County, North Carolina. Based on the information provided in the Administrative EA, the proposed project will result in moderate adverse impacts to access and mobility within the proposed project community. With the potential relocation of seven places of worship, over 100 business relocations and up to 40 residential relocations, the EPA recommends that the FHWA and the NCDOT continue to keep the local community informed and involved as the project moves forward. Additionally, the EPA notes that the proposed project will likely lead to substantial land-use changes resulting from the increase in roadway capacity, the alteration of existing driveways and cross streets along US</p>

Commenter	Comment on	Comment
		<p>74, and the improvement of connectivity among adjacent communities. The EPA recommends that a detailed Land Use Scenario Assessment be included in the Final EA.</p> <p>Thank you for the opportunity to provide comments on this proposed action. Please provide this office one hard copy with one electronic of the Final EA and Finding of No Significant Impact (FNSI), when available. If you have any questions, please feel free to contact me via the information provided below.</p>
Captain Stason Tyrell	Public Hearing	<p>On behalf of the Matthews Police Department, and with great concern for the citizens in our town, we are asking that serious consideration be given to design plans that improve pedestrian safety. We currently have pedestrians that regularly cross Independence Blvd. within the town of Matthews between, and at, signalized intersections. The reality of their desire to find the shortest most direct route to their destination will not end when the intersections are eliminated. This has been proven on a regular basis in Charlotte where recent road development has been completed and they still see pedestrians crossing. Matthews has a much higher concentration of restaurants and retail, along with surrounding apartment complexes (many still under construction and will increase future population), which leads to more pedestrian movement in the area. Our minimum request is a center barrier or fencing that prevents the ability for a pedestrian to cross. Providing alternative passage points would also be beneficial, but experience shows us it will not prevent some from continuing to cross at the most direct location to their destination. I would be happy to speak with anyone on this topic and assist in any way possible to help prevent the future loss of life within our town.</p>
Michael Weeks	Public Hearing	<p>While I would prefer the light rail option from Matthews, this is clearly a viable alternative to the existing traffic conditions. Coming from the Hemby Bridge area to uptown is a 17 mile , 50-55 minute commute. I would love to save 10-15 minutes for a few dollars a day.</p>
Tracy Hamm	Public Hearing	<p>I'm surprised there are no express lane access ramps between U.S. 74 and I-277, similar to the ramps that will be added at 74 and 485. Realizing express lanes are not currently planned for I-277, I still would have thought access ramps would have been added at this critical interchange to provide a seamless expressway-to-interstate connection. Is this an option, even if over the longer term? Otherwise, this interchange will continue to be a bottleneck and inhibit mobility in the central business district. Thank you.</p>

Commenter	Comment on	Comment
Jason Lamb	Public Hearing	<p>This is my location on this map. (Second Chance Financial LP @ 10800 Independence Pointe Pkwy)As it stands I have just enough parking spaces to meet the ADA and Matthews zoning requirements. This is what the road project proposal plans on doing to my front parking lot taking more than half of the spaces including the corner of the building.</p> <p>In response to the drawings viewed at the Jan 28th meeting presented at Levine's Campus I would like to file a formal complaint/request that the proposed traffic circle on the 10800 block of Independence Point Pkwy be redrawn, removed and or discarded. I (Second Chance Financial LP) own the Capital Pointe building who's address is 10800 Independence Pointe Pkwy and my property will be decimated by the proposed traffic circle and the needed easement. This proposed traffic circle will not only destroy the access to the parking lots and property but will remove more than half of the front parking lot (which is my primary lot) and leave me in a zoning violation. This will happen because I will not have enough parking spaces as required by law to suffice the finished square footage of the building itself to meet its zoning classification. The easement shown with the traffic circle also overlaps the corner of the building itself.</p> <p>Based on the information given to me during the meeting it is fair to say that my tenants will be put out of business by the construction, my building will be ruined and the parking will be lost ultimately depreciating the property to a point where it will have no value or future use. The proposed easement encroaches onto the physical structure itself, takes the utilities access to the property, and leaves me with no where to expand or way to recover from the said construction. This is why I am requesting that if the traffic circle remains in place then include in the budget the purchase of my entire property building included since it would no longer comply with Matthews zoning or the ADA requirements for parking.</p>
Anonymous		<p>I was at the meeting at CPCC-Levine Center and at that time looked up Sharon Forest Drive to see what you are planning for our entrance. At that time I talked to a representative and he said they were planning an overpass of some kind. This is not mentioned on the sheet that you passed out by the way.</p> <p>I also let him know that they were planning hundreds of townhomes on the corner of Wallace and 74 that would generate 800+ cars per day from just those townhomes. Now how do you think that is going to affect Sharon Forest</p>

Commenter	Comment on	Comment
		<p>Drive and Briardale Drive? As it is, there are four housing development behind Dorn and Wallace and everyone of them cut through our neighborhood to get to them from Harris Blvd. Some go to City View to get out but there is no left turn there.</p> <p>This is going to create a back up mess. Sharon Forest dead ends into a cul-de-sac one block from Sharon Forest and Briardale Dr. There is only one way to turn left on 74 and that is to go to Wallace and Laura Drive, make a U-turn on Harris if you want to go to Idlewild. Believe me cars will go this way if you shut off driveways along 74. drawing attached</p>
Ralph Messera		Can't be completed soon enough for me. Get it done.
Moe Mohsen Shams	Public Hearing	<p>I own 4800 and 4930 E. Independence Blvd. Your planned bollards and the proposed taking of more property across the front of 4800 E. Independence has caused me to loose a contract to sell the properties. I am a small business man and this is devastating to my family business. I greatly appreciate Mr. Bryan Key discussing the urgency to change the Preliminary Plan showing removing the bollards preventing E. Independence traffic from turning in and removing the taking of additional property and possible front of my building with John Jones my real estate agent. As you will see on the attached map the traffic count has dropped 900 cars over the last 18 years so these drastic damaging plans for a toll lane through a retail district are NOT justified. an HOV lane is reasonable. This is a most urgent matter because my buildings are now and have been vacant for many years due to the lengthy construction that was recently finished. I believe that if you move the toll lane weave just 2,000 feet towards Charlotte, there would be no need to take my land or my neighbors land and there would be no need for bollards preventing East bound Independence traffic from entering our properties. Another solution would be to make the toll lane into an HOV lane which would not need a protected weave. Either of these solutions would save you millions of dollars in costs and not destroy the value of our properties. I immediately requested Randy Goddard of Design Group 3 to setup a meeting so my buyer, myself and Randy could meet with Bryan Key as soon as possible, but Randy says he has not been able to set up this most urgent meeting. Bryan please respond as soon as possible to Randy Goddard at 704-343-0608. If we can meet and resolve these issues quickly I may be able to get my buyer back under contract. Please help me. Mr. Jones has also requested this meeting, time is of the essence.</p>

Commenter	Comment on	Comment
Jack McNeely		Caller is wondering how his property that is 3/4 of a mile away from Independence will be impacted by the 74 Corridor improvements
Town of Matthews	EA	<p>The Purpose and Need statement in the EA states on page 8, “The purpose for the proposed action is to provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within the study area.” The Town believes that “mobility” means being able to reach one’s destination, within all modes, not just motor vehicle. Providing adequate pedestrian connectivity across US 74 is critical. NCDOT is currently conducting a study under Brian Mayhew to evaluate crossings for pedestrians and bicyclists along the whole corridor. Recommendations were not available at the time the EA was completed. However, we expect that NCDOT will incorporate the findings of the study into the U-2509 project. There are several potential greenway connections that need to be funded with the development of this project. Within this document, pages 108-109 state that several greenway improvements need to be provided by “others.” There are no crossing opportunities between Sam Newell Road and Matthews Township Parkway, which is almost a mile-long stretch. This segment of US 74 has a number of origins and destinations on both sides of the roadway and the Purpose and Need will not be met if an additional crossing is not included. The new Pedestrian and Bicycle Policy reiterates connectivity and says cost share for greenways that are within a locally-adopted plan will be at NCDOT’s cost. The Irvins Creek Tributary #1 greenway tunnel is included in the Town’s adopted Pedestrian & Bicycle Composite Plan and should be fully implemented as a part of this project.</p>
Town of Matthews	EA	<p>The Town applauds NCDOT on its efforts to provide network connectivity by providing infrastructure linkages on both Northeast Parkway and Independence Pointe Parkway. This will provide route options for local traffic to avoid having to use US 74. Within the EA, there were three options provided for Independence Pointe Parkway which are described in Figure 3-3H and described on page 36. As of the publication of this document, the final alignment had not been chosen. The Town prefers Option 2. The impacts are more than Option 1 and slightly less than Option 3. The cost is less than Option 1 and roughly the same as Option 3, as indicated in Table 1-3 on page 7. The Town believes that Option 2 provides the much-needed connectivity to the Matthews</p>

Commenter	Comment on	Comment
		Festival Shopping Center. This alignment goes behind the shopping center and creates a rear entrance. This will help alleviate traffic moving through the NC 51/US 74 interchange.
Town of Matthews	EA	The current practice in transportation design is to match the design speed to the desired operating speed and to design speed controls into the roadway design to increase safety for vulnerable users, bicyclists and pedestrians. This practice is supported by NACTO and is in use in the Charlotte region. All of the design speeds listed in Table 4-2, page 49 are five miles faster than posted speeds. a. Additionally, as the project moves forward in establishing Design Criteria, superelevation is not appropriate on local streets and needs to be avoided to the maximum extent practicable. We expect there are no superelevation needs for NCDOT- or Town-maintained streets posted 35 mph or less.
Town of Matthews	EA	The Town would like to state that business accesses that are cut off by Quadrant/Loop Roads need to be accommodated. There are several businesses at the corner of Matthews-Mint Hill Road and US 74 that need to have access drives off of the quadrant roadway. If not, it will cause drivers to have to meander across private property circuitously to gain access to their destination.
Town of Matthews	EA	<p>Cross Street Access Changes, on pages 52-53, highlight how intersections will be reconfigured.</p> <p>a. When the project creates a cul-de-sac adjacent to US 74, it should be moved away from US 74 with a vegetated buffer to help prevent the appearance of connection to US 74 and unwanted pedestrian crossings. Moving the cul-de-sac to the last driveway on the street, and removing the old pavement to US 74, is ideal. The Town wants to encourage pedestrian movement in designated locations, typically where there are sidewalks.</p> <p>b. Pedestrians need to understand where and how to cross this upgraded facility. Upgraded US 74, closer into Charlotte, has pedestrians dangerously crossing because foot traffic was not fully evaluated prior to the project's implementation.</p> <p>c. At Windsor Square Drive, there is currently a lot of pedestrian crossing activity. This is one of the locations where this project is going to reconfigure the intersection as a right-in/right-out intersection. The Town is concerned that foot traffic will continue to cross along Windsor Square Dr unless convenient alternatives are made with the project. Potential solutions are incorporating the Irvins Creek Tributary #1 greenway tunnel as one critical connection into</p>

Commenter	Comment on	Comment
		the project; another is routing CATS bus service to the north side of US 74. We would like to see additional options provided by the project.
Town of Matthews	EA	There are several properties along NC 51 and other roads in the project that will have impacts to Town-required landscaping. In some cases, this landscape is required as a part of its parcel's zoning change. The Town will provide NCDOT and the consultant with a map and a list of parcels that follow under this special circumstance. The Town would like assistance ensuring property owners would be compensated for required landscape buffers. There may be some property owners that may not want to reinstall the landscape; thus, it would fall to the Town to cite them with a Notice of Violations and require the landscaping to be reinstalled.
Town of Matthews	EA	The NC 51 corridor in the vicinity of US 74 is heavily traveled due to the number of large retail centers flanking the interchange. The current design shows keeping all access points on NC 51 in their current configuration. However, the section of NC 51 between Independence Pointe Pkwy and the US 74 ramps, currently extremely congested at all times of the day, can only be expected to get worse. Better congestion management principles need to be applied to this section of roadway. We understand that signal timing is a large factor in congestion. However, we request additional traffic simulation done at this location to consider more thoroughly restricting left turn movements at driveways and additional laneage. This traffic study should be presented to the Town prior to letting the design-build project.
Town of Matthews	EA	The Town will provide a map and a table with additional location-specific comments, including several involving our pedestrian network. The table on page 108 regarding Bicycle and Pedestrian Facilities should be revised using the map. A few changes include continuing bicycle and pedestrian accommodations in new portions of the project, clarifying which side of the street a sidepath should be located, and to fully fund The Irvins Creek Tributary #1 greenway underpass.
Town of Matthews	EA	The requested pedestrian and bicycle accommodations are all included in adopted Town documents such as our Composite Bicycle and Pedestrian Plan, our Town Unified Development Ordinance, and Mecklenburg County Land Development Standards.
Town of Matthews	EA	There are several bus stops on US 74. Once this project is built, the bus stops will have to be relocated to Northeast Parkway and Independence Point Parkway. Riders will have limited choices to cross US 74 on foot, so NCDOT and

Commenter	Comment on	Comment
		Charlotte Area Transit System will have to coordinate access for this user group.
Town of Matthews	EA	It is imperative to the project’s success to continue to involve the local municipalities in every project phase. We look forward to timely receipt of project plans and documents for both segments of the project.

U-2509 EA Re-Evaluation

B

Section 4(f) Documents



Meeting Notes

Date: March 15, 2023 Notes Taken By: Jessica Kim

Place: Microsoft Team's Meeting Re: U-2509 Independence Boulevard Improvements - Section 4(f)
Coordination for NEPA EA Reevaluation

Project No.: NCDOT STIP Project U-2509

ATTENDEES:

Lauren Triebert, VHB	Sean Epperson, NCDOT	Gwen Cook, Mecklenburg County	Andy Mock, CATS
Mark Hussey, VHB	Felix Obregon, NCDOT	Jacqueline McNeil, Mecklenburg County	Susan Paschal, WSP (CATS)
Jessica Kim, VHB	Susan Woolard, Town of Matthews	Bert Lynn, Mecklenburg County	Moriah Ellington, WSP (CATS)
Bryan Key, NCDOT	Darin Hallman, Town of Matthews	Gregory Sigmon, STV	Brett Wallace, WSP (CATS)
Sean Stephens, NCDOT	Scott Cole, RS&H	Jenna Nichols, CATS	

Project Status Overview

Lauren Triebert provided a general overview of the project's status concerning the environmental document, anticipated schedule, and recent coordination with the Charlotte Area Transit System (CATS) regarding the proposed Silver Line light rail project.

Review of Revised Exhibits

The current design for extending Independence Pointe Parkway (IPP) proposed under U-2509 and potential CATS Silver Line light rail alignments were reviewed. The design exhibits show the combined potential area of effect. Please note that as the design process continues, avoidance and mitigation measures will be incorporated to minimize impacts where feasible. Neither project is currently funded.

Exhibit 1. CATS Silver Line North of IPP

Discussion of design revision and features:

- › The previously proposed retaining wall would be maintained to avoid impacts to the Mecklenburg Sportsplex soccer fields.
- › The proposed right of way would align with the Sportplex's parking lot boundary and is not anticipated to result in a permanent reduction in available parking spaces.
- › A Temporary Construction Easement (TCE) would reduce the number of available parking spaces during construction.
- › The roundabout at IPP and Sports Parkway was revised to a T-intersection design.
- › The potential combined construction footprint for the IPP extension and Silver Line could require the acquisition of a portion of the Town of Matthews maintenance facility parcel. Assuming a 2:1 slope along IPP, the number of available parking spaces within the parcel could be permanently reduced (as noted above, through the design process, impacts may be avoided, minimized, or mitigated).

Place: Microsoft Team's Meeting
Date: March 15, 2023
Ref: NCDOT STIP Project U-2509
Page 2

Exhibit 2. CATS Silver Line South of IPP

Discussion of design revision and features:

- › Design of the Silver Line and IPP extension reduced potential impacts to the Sportsplex by maintaining the location of the retaining wall and shifting the alignments south.
- › Construction of both projects is feasible, and the order of construction is not anticipated to increase potential impacts

Summary of Discussion

- › The goal is to ensure Mecklenburg County will feel comfortable moving forward with reissuing the Section 4(f) De Minimis Letter.
- › The conditions included within the Section 4(f) De Minimis Letter would be retained. It's anticipated that the conditions will be met and therefore removed at the final design project milestone.
- › U-2509 may explore a quadrant intersection design at IPP and Tank Town Road to eliminate an at-grade rail crossing of the proposed Silver Line. Mecklenburg County indicated that maintaining three (3) points of exit from the Sportsplex is preferred.
- › Mecklenburg County noted support for eliminating the roundabout at the IPP extension and Sports Parkway intersection.

Action Items

1. VHB will schedule a meeting with Mecklenburg County and the Town of Matthews to discuss the potential project use of county and town-owned parcels. and to review all potential Section 4(f) – parkland.
2. VBH will provide additional information on the potential quadrant intersection design to Gwen Cook.



Meeting Notes

Date: May 9, 2023 Notes Taken By: Jessica Kim, VHB

Place: Microsoft Teams Re: U-2509 Section 4(f) De Minimis Coordination Meeting

Project No.: NCDOT STIP U-2509

ATTENDEES:

Lauren Triebert, VHB
Jessica Kim, VHB

Gwen Cook, Mecklenburg County
Dana Stoogenke, Town of Matthews

Bryan Key, NCDOT

Project Segment Updates

- › Lauren Triebert reviewed the updated project segments.
- › Segments AA, AB, AC AD, EA, and EB are in the final design phase, with construction anticipated to start in 2027 or 2028.
- › The U-2509 EA Re-Evaluation will address all segments. However, as each segment approaches construction, a consultation document will likely be needed to confirm that no notable design changes or base conditions occurred.

Project Development Tracking Tool – NCDOT Connect/Sharepoint

- › Lauren Triebert provided a walkthrough of the tracking tool.
 - The tool assigns a responsible party for each commitment to ensure continuity and accountability throughout the project's duration.
 - A completion date is captured for each commitment as part of the tool's tracking features.

Section 4(f) *De Minimis* Letter Discussion

- › Campbell Creek Greenway
 - Anticipate providing 15% design plans for review and comment this fall
 - Lauren Triebert noted a slight adjustment to the commitment to provide 6 months advance notice of construction, delays, and accelerations are possible, and NCDOT commits to keeping stakeholders informed.
- › McAlpine Creek Greenway
 - Segment AA is assessing an alternative with a single southeast quadrant connecting Village Lake Drive to US 74. This alternative may require partially replacing the US 74 bridge over McAlpine Creek which could require closure(s) of the McAlpine Creek Greenway.
 - Gwen Cook requested minimizing greenway closures and ensuring ample public notice.

Place: Microsoft Teams
Date: May 9, 2023
Ref: NCDOT STIP U-2509
Page 2

› Irvins Creek Greenway (Proposed)

- The proposed Krefeld Drive extension would bridge Irvins Creek and is not anticipated to preclude the construction of the proposed greenway.
- The project requests that Mecklenburg County review the greenway's typical section to confirm that the proposed Krefeld Drive bridge meets the necessary vertical and horizontal clearances to accommodate the planned greenway.
- Mecklenburg County requests the floodplain modeling assess a proposed bench within the culvert under US 74.

› Mecklenburg County Sportsplex

- Lauren Triebert discussed coordination conducted to date with the Charlotte Area Transit System (CATS) regarding the alignment of the proposed Silver Line light rail.
- Gwen Cook requested a copy of the meeting exhibits and indicated the County's primary concerns are impacts to the parking lot, north entrance, and visual impacts of the wall.
- Additional language was proposed to commitment number three: "including aesthetics/planting review."

Next Steps

1. Project Team will provide the anticipated area of impact and temporary construction easement within the Mecklenburg County Sportsplex to Glen Cook / Mecklenburg County and the Town of Matthews for review and comment.
2. Project Team will provide the Section 4(f) *De Minimis* Letter with meeting notes to Glen Cook / Mecklenburg County for additional review and discussion.
3. Mecklenburg County, once no further changes are required, will add County letterhead to the *de minimis* letter, and the County Manager will sign the letter, concluding the 4(f) process for the EA Reevaluation.



Meeting Notes

Meeting Date:	June 21, 2023	Notes Taken By:	Jessica Kim
Place:	Microsoft Team's Meeting	Re:	U-2509 Independence Boulevard Improvements - Section 4(f) Coordination for NEPA EA Reevaluation
Project No.:	NCDOT STIP Project U-2509		

ATTENDEES:

Lauren Triebert, VHB
Jessica Kim, VHB
Brian Key, NCDOT

Jason Klingler, Mecklenburg County
Bert Lynn, Mecklenburg County
Gwen Cook, Mecklenburg County

Susan Habina-Woolard, Town of Matthews

Review of De Minimis Letter Comments

Comment 1: Campbell Creek Greenway- Mecklenburg County is concerned about direct construction impacts on the greenway and changes in roadway elevation impacting the feasibility of a crossing at the existing site.

Response: Current plans show a greenway crossing under Margert Wallace Drive, and NCDOT will reconstruct any portion of the greenway directly impacted by construction. During the final design phase, NCDOT will work with Mecklenburg County to determine betterment costs.

Comment 2: Irvins Creek and Four Mile Creek Greenways – Mecklenburg County comment requests 10-foot vertical and 14-foot horizontal bridge clearances.

Response: Final design will determine if those dimensions are feasible; therefore, NCDOT cannot commit to specific dimensions at this time. NCDOT will include a commitment for 8-foot minimum, and 10-foot recommended bridge clearances along the proposed greenways.

Comment 3: CATS' 30 percent plan shows a bridged crossing of the Four Mile Creek and Sports Parkway, will NCDOT do the same?

Response: Currently, the plans show a culvert at Four Mile Creek and an intersection with Sports Parkway - not a bridge. This portion of the project is unfunded, and details of the creek and greenway crossing will be established in later phases of design through continued coordination as documented in the Green Sheet.

Comment 4: Mecklenburg County needs a 12-month notice due to the typical nature and scheduling at the Mecklenburg County Sportsplex. The county is concerned about revenue loss due to construction impacts.

Response: NCDOT will provide a 12-month advance notice and provide any revisions to the schedule (delays or accelerations) if/when they become known. In addition, NCDOT revised the letter to commit to maintaining access and existing parking spaces at the Sportsplex during construction.



MECKLENBURG COUNTY
Office of the County Manager

July 27, 2023

Brian Key, P.E
 Team Lead
 NCDOT Project Management Unit
 1000 Birch Ridge Drive
 Raleigh, NC 27610

Subject: Section 4(f) *de minimis* determination for NCDOT Project U-2509 – US 74 (Independence Boulevard) west of Idlewild Road to I-485. Upgrade roadway to expressway with express lane.

Dear Mr. Key,

This letter is a follow up to North Carolina Department of Transportation's ("NCDOT") request to review and concur with a Section 4(f) *de minimis* impact determination for the proposed widening of US 74 with additional general-purpose lanes, auxiliary lanes, express lanes in the median, and replace at-grade intersections with interchanges and overpasses. The project would also extend and connect several existing parallel collector roads along the Charlotte and Matthews corridor. The project aims to provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity along US 74.

Within the project boundaries, Mecklenburg County owns and operates the recreational resources and parcels identified in the table below:

Mecklenburg County Recreational Resource	ROW Map Parcel No.	Total Parcel Area (AC)	ROW Take (Acres)	Total Easement (Acres)	Area Remaining (Acres)
Campbell Creek Greenway- Exhibit A	104	39.54	2.83	0.50	36.71
	126	4.90	0.20	0.17	4.59
McAlpine Creek Greenway-	133	0.79	0.20	0.07	0.59

Exhibit B	134	2.61	0.13	0.10	2.48
	135	14.54	0.13	0.04	14.41
	136	13.29	0.55	0.11	12.74
Irvins Creek Greenway (Planned)-Exhibit C	165	4.78	1.04	0.10	3.74
	402	4.11	0.69	0.17	3.42
Independence Pointe Neighborhood Park-Exhibit D	262	8.58	0.63	0.22	7.96
	405	2.84	0.04	0.09	2.80
Mecklenburg County Sportsplex / Four Mile Creek Greenway- Exhibit E	387	47.08	9.66	1.63	37.42
County Property Adjacent to CPCC Lane (Planned Park)- Exhibit F	390	20.95	2.11	0.45	18.84

Mecklenburg County's Park and Recreation Department has reviewed the potential impacts to these parcels resulting from the proposed U-2509 project. The County has determined that the project does not adversely affect the activities, features, or attributes that qualify these parcels for protection under section 4(f), conditional upon adherence to the commitments noted on the following Exhibits A-F, specific to each resource area.

Thank you for allowing Mecklenburg County to weigh in on project U-2509. If you have any questions related to the comments above, please contact Jacqueline McNeil at 980-314-2511.

Sincerely,

DocuSigned by:

 5D875F12E82042B...

Dena R. Diorio
 Mecklenburg County Manager
 Mecklenburg County, North Carolina

C: Leslie Johnson, Deputy County Manager
 Lee Jones, Park and Recreation Director
 Bert Lynn , Park and Recreation Division Director

Attachments: Exhibits A-F

Exhibit A

Campbell Creek Greenway

County Property Impact: As part of U-2509, NCDOT will raise the bridge at Margaret Wallace Road to create a connection to the new Independence Expressway (Highway 74). NCDOT is requesting removal of the existing greenway trail to accommodate the bridge project on Mecklenburg County owned Tax Parcels 165-151-23 and 165-161-16.

County's Request: Due to the impact on Campbell Creek Greenway caused by NCDOT's planned removal and rerouting of the trail, the County requests that NCDOT and FHWA include the following commitments in the project's Finding of No Significant Impact (FONSI):

1. Commit to fund and construct the realignment of that portion of the existing Campbell Creek Greenway destroyed and/or damaged as part of its project.

NCDOT Response: *It is standard procedure to replace anything we damage, so this will not be included as a special project commitment; but the trail will be reconstructed as part of the project. The County requested the rerouting of the trail from the present at-grade crossing to go under the new bridge on Margaret Wallace Road. See **figure 1** for specific design requests made by the County for incorporation into this design. See proposed diagram below.*

2. Commit to coordinating with Mecklenburg County on the necessary design, review and approval for trail relocation and greenway features at Campbell Creek Greenway (Section 4(f) resource) due to NCDOT's project.

NCDOT Response: *NCDOT will include final design coordination with the County as a special project commitment for each of the locations where County-owned Section 4(f) resources will be impacted, with this letter serving as a list of those locations. This commitment will not include final design "approval" by the County.*

3. Commit to obtaining only the minimal necessary property rights needed for its project. Where sufficient, temporary property rights should be secured instead of permanent property rights.

NCDOT Response: *This is standard NCDOT procedure and a requirement of the 4(f) process and will not be included as a special project commitment.*

4. Provide Mecklenburg County with the necessary easements and/or encroachment agreements needed to operate and maintain any portion of rebuilt greenway that will encroach onto new State controlled right-of-way or parcels due to the project impacts.

NCDOT Response: *This is standard procedure and will not be included as a special project commitment.*

5. Provide a minimum of twelve (12) months' notice to Mecklenburg County before construction that will impact County owned property.

NCDOT Response: *NCDOT will provide a 12 month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration. This will be included as a special project commitment and will include all County-owned Section 4(f) resources.*

Figure 1

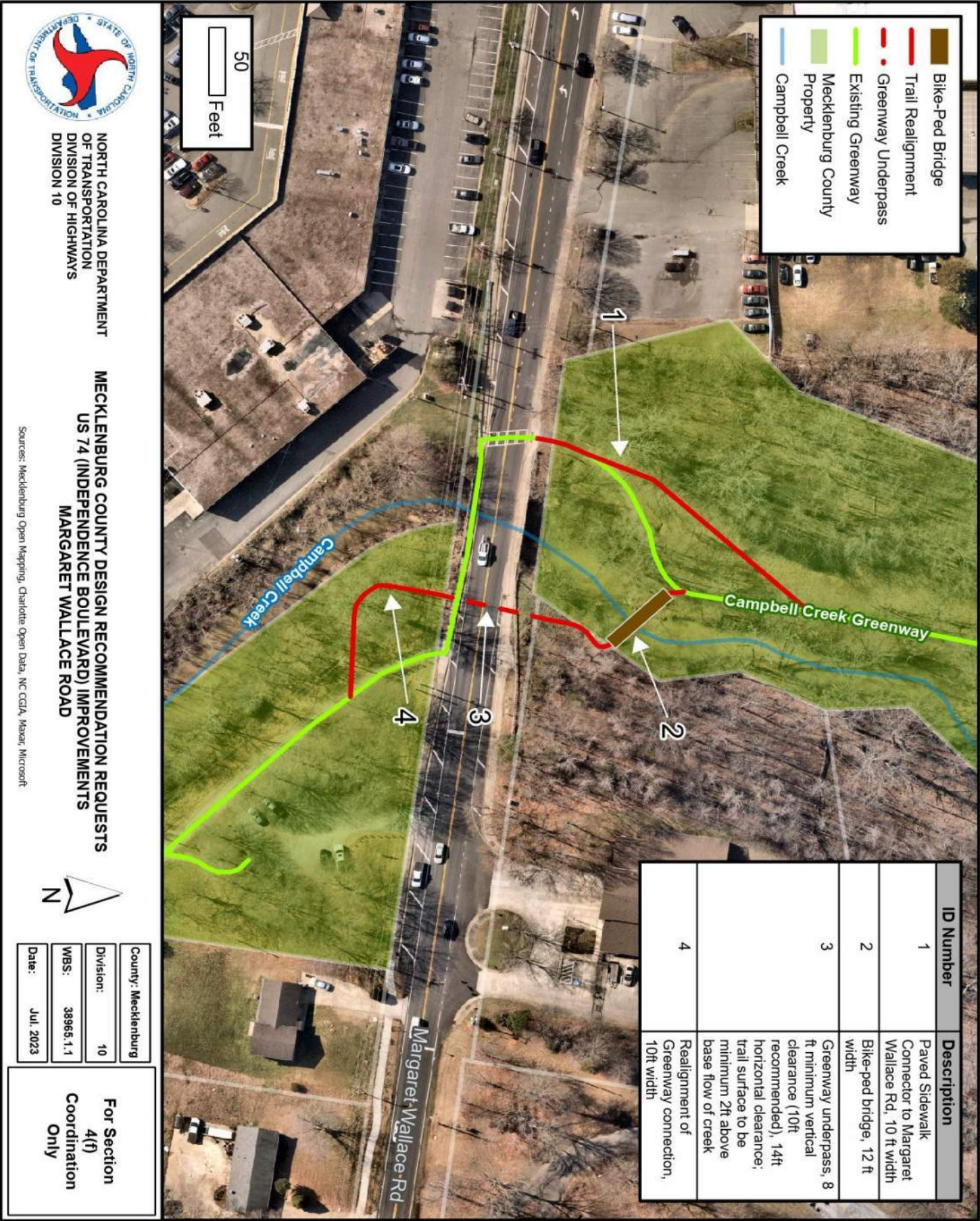


Exhibit B

McAlpine Creek Greenway

NCDOT Project: As part of U-2509, NCDOT will widen the existing bridge at E. Independence Blvd. NCDOT will need to obtain land on Mecklenburg County owned Tax Parcels 165-161-26, 193-073-05, 191-071-16, and 193-561-05.

County's Request: Due to the impact on McAlpine Creek Greenway caused by NCDOT's project, the County requests that NCDOT and FHWA include the following commitments in the project's Finding of No Significant Impact (FONSI):

1. Commit to obtaining only the minimal necessary property rights needed for its project. Where sufficient, temporary property rights should be secured instead of permanent property rights.

NCDOT Response: *This is standard NCDOT procedure and a requirement of the 4(f) process, thus will not be included as a special project commitment.*

2. Commit to building a pedestrian access, to Mecklenburg County specifications, connecting McAlpine and Campbell Creek Greenways to U.S. 74.

NCDOT Response: *These connections were previously committed to the public when they were included on the Public Hearing maps for the project. NCDOT will include this location in the special project commitment for coordination with the County during final design, as noted previously for item #2 under Campbell Creek Greenway. Coordination with the final design of U-2509AA will include any commitments related to the potentially early widening of the US 74 bridge over McAlpine Creek and greenway, including measures to minimize greenway closure times.*

3. Commit to take all necessary precautions, including those identified by the County during future project design and construction reviews, to avoid damage to the County's existing cross-country and greenway trails on Tax Parcel ID 191-071-16 and Tax Parcel ID 193-561-05. NCDOT further commits to remediate damage to any McAlpine Creek trails caused by its presence on the property to the County's specifications.

NCDOT Response: *This is standard procedure and will not be included as a special project commitment.*

4. The County has an access drive from U.S. 74 across Tax Parcel 193-561-01 to reach County-owned Tax Parcel 193-561-05. NCDOT will ensure that the County maintains driveway access from U.S. 74 to Tax Parcel 193-561-05 that meets the County's specifications.

NCDOT Response: *This access drive was previously committed to the public when it was included on the Public Hearing maps for the project. NCDOT will include this location in the special project commitment for coordination with the County during final design, as noted previously for item #2 under Campbell Creek Greenway.*

5. The County requests that NCDOT continues to coordinate with the County on the aim of keeping the cross-country trails at McAlpine Creek open during NCDOT's construction project.

NCDOT Response: *NCDOT will include this location in the special project commitment for coordination with the County during final design, as noted previously for item #2 under Campbell Creek Greenway.*

6. Provide a minimum of twelve (12) months' notice to Mecklenburg County before construction that will impact County owned property.

NCDOT Response: *NCDOT will provide a 12 month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration. This will be included as a special project commitment and will include all County-owned Section 4(f) resources.*

Exhibit C

Irvins Creek Greenway (Planned)

NCDOT Project: As part of U-2509, NCDOT will extend Krefeld Drive to Sardis Road North which will include a 300-foot bridge over Irvins Creek and the future greenway. NCDOT will need to obtain land on Mecklenburg County owned Tax Parcels 193-081-19.

County's Request: Due to the impact on Irvins Creek Greenway caused by NCDOT's project, the County requests that NCDOT and FHWA include the following commitments in the project's Finding of No Significant Impact (FONSI):

1. Commit to obtaining only the minimal necessary property rights needed for its project. Where sufficient, temporary property rights should be secured instead of permanent property rights.

NCDOT Response: *This is standard procedure and will not be included as a special project commitment.*

2. Commit to continued review, coordination, and approval by Mecklenburg County staff to ensure NCDOT's project will not preclude construction of the future greenway.

NCDOT Response: *NCDOT will include this as a special project commitment. This commitment will not include final design "approval" by the County. NCDOT will provide floodplain modeling as part of final design for U-2509E to prove there is no preclusion of the planned bench within the culvert under US 74 and that the Krefeld Drive bridge will meet necessary vertical (8' minimum, 10' recommended) and horizontal (14' recommended) clearances to accommodate the planned greenway.*

3. Provide Mecklenburg County with the necessary easements and/or encroachment agreements needed to operate and maintain any portion of greenway that will encroach onto new State controlled right-of-way or parcels due to the project impacts.

NCDOT Response: *This is standard procedure and will not be included as a special project commitment.*

4. Provide a minimum of twelve (12) months' notice to Mecklenburg County before construction that will impact County owned property.

NCDOT Response: *NCDOT will provide a 12 month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration. This will be included as a special project commitment and will include all County-owned Section 4(f) resources.*

Exhibit D

Independence Pointe Park at Irvins Creek Trib 1 Greenway:

NCDOT Project: As part of U-2509, NCDOT will extend Independence Point Parkway across Sam Newell Road, continuing along the Vulcan quarry. NCDOT will need to obtain land on Mecklenburg County owned Tax Parcels 193-231-35.

County's Request: Due to impact at Irvins Creek Trib 1 Greenway caused by NCDOT's project, the County requests that NCDOT and FHWA include the following commitments in the project's Finding of No Significant Impact (FONSI):

1. Commit to obtaining only the minimal necessary property rights needed for its project. Where sufficient, temporary property rights should be secured instead of permanent property rights.

NCDOT Response: *This is standard NCDOT procedure and a requirement of the 4(f) process and will not be included as a special project commitment.*

2. Commit to continued review, coordination, and approval by Mecklenburg County staff, to ensure NCDOT's project will not preclude construction of the proposed park or greenway.

NCDOT Response: *NCDOT will include this location in the special project commitment for coordination with the County during final design as noted previously for item #2 under Campbell Creek Greenway. This commitment will not include final design "approval" by the County.*

3. Commit to providing a grade separated crossing under Independence Pointe Parkway and Sam Newell Road with 8' (minimum) to 10' (recommended) for vertical clearance and 14' recommended to accommodate the future greenway.

NCDOT Response: *NCDOT will include this as a special project commitment in the green sheet.*

4. Provide Mecklenburg County with the necessary easements and/or encroachment agreements needed to operate and maintain any portion of rebuilt greenway that will encroach onto new State controlled right-of-way or parcels due to the project impacts.

NCDOT Response: *This is standard procedure and will not be included as a special project commitment.*

5. Provide a minimum of twelve (12) months' notice to Mecklenburg County before construction that will impact County owned property.

NCDOT Response: *NCDOT will provide a 12 month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration. This will be included as a special project commitment and will include all County-owned Section 4(f) resources.*

Exhibit E

Mecklenburg County Regional Sportsplex and Four Mile Creek Greenway:

NCDOT Project: As part of U-2509, NCDOT is constructing Independence Pointe Parkway across Mecklenburg County Regional Sportsplex and over I-485. NCDOT will need to obtain land that will impact the existing Four Mile Creek Greenway and Mecklenburg County Regional Sportsplex future uses and operations on Mecklenburg County owned Tax Parcel ID 215-081-15.

County's Request: Due to impact at the Sportsplex and Four Mile Creek Greenway, the County requests that NCDOT and FHWA include the following commitments in the project's Finding of No Significant Impact (FONSI):

1. NCDOT, CATS, the Town of Matthews and Mecklenburg County will continue to have discussions regarding adjustments in the alignment of Independence Pointe Parkway at this location. Since NCDOT's plans are not finalized, the potential exists for impacts to the property which are not yet known. Mecklenburg County requests the opportunity to provide additional impact information as the project is more fully designed.

NCDOT Response: *This coordination will be included as a special project commitment. Further, coordination with CATS is ongoing; potential impact area encompassing both Independence Point Parkway and the Silver line was discussed with Mecklenburg County and the Town of Matthews on 3/14/23. As either project moves toward funding and implementation, the County will continue to be involved in design coordination.*

2. Commit to coordinating with Mecklenburg County and the Town of Matthews regarding the Four Mile Creek Greenway as it passes through the Mecklenburg County Regional Sportsplex (both are Section 4(f) resources), including providing a grade separated crossing treatment at Independence Pointe Parkway.

NCDOT Response: *This continued coordination will be included as a special project commitment for final design and will include discussion of a possible grade-separated crossing at Independence Point Parkway with 8' (minimum) to 10' (recommended) for vertical clearance and 14' recommended to accommodate the future greenway. The methods for funding and responsibility of construction will be discussed as part of future coordination efforts.*

3. Commit to continued coordination with the County and CATS to minimize effects to the Mecklenburg County Regional Sportsplex and Four Mile Creek Greenway (both are Section 4(f) resources) by refining the design of the Sports Parkway, Tank Town Road, and Independence Pointe Parkway alignments and intersections, including providing a grade separated crossing treatment under Independence Pointe Parkway at/or near Four Mile Creek Greenway.

NCDOT Response: *This continued coordination will be included as a special project commitment for final design, including aesthetics/planting review, and will include discussion of a possible grade-separated crossing at Independence Point Parkway. Further, coordination with CATS is ongoing; potential impact area encompassing both Independence Point Parkway and the Silver line was discussed with Mecklenburg County and the Town of Matthews on 3/14/23. As either project moves toward funding and implementation, the County will continue to be involved in design coordination.*

4. Provide a vehicular connection for Mecklenburg County Park and Recreation maintenance facility at the Regional Sportsplex on Independence Point Parkway.

NCDOT Response: *The Public Hearing Maps include a vehicular connection to the Regional Sportsplex via Sports Parkway. NCDOT requests more information regarding the location of the County's maintenance facility. NCDOT will include a special project commitment to coordinate these designs with the County.*

5. To the greatest extent practicable, NCDOT commits to avoiding impacts to Mecklenburg County Park and Recreation maintenance facilities at the Regional Sportsplex and perform activities to mitigate the loss of function, if impacts are unavoidable.

NCDOT Response: *It is standard practice to avoid and minimize impacts; however, NCDOT will include a special project commitment to coordinate these designs with the County. Further, coordination with CATS is ongoing; potential impact area encompassing both Independence Point Parkway and the Silver line was discussed with Mecklenburg County and the Town of Matthews on 3/14/23. As either project moves toward funding and implementation, the County will continue to be involved in design coordination.*

6. Commit to modify plans to ensure there is no loss of existing parking or access at the Regional Sportsplex.

NCDOT Response: *It is standard practice to avoid and minimize impacts; however, NCDOT will include a commitment to coordinate these designs with the County. Further, coordination with CATS is ongoing; potential impact area encompassing both Independence Point Parkway and the Silver line was discussed with Mecklenburg County and the Town of Matthews on 3/14/23. As either project moves toward funding and implementation, the County will continue to be involved in design coordination.*

7. Commit to modify plans to ensure there is no loss of existing picnic shelters at the Regional Sportsplex.

NCDOT Response: *It is standard practice to avoid and minimize impacts; however, NCDOT will include a commitment to coordinate these designs with the County.*

8. Commit to modify plans to ensure there is no loss of existing recreation fields at the Regional Sportsplex.

NCDOT Response: *It is standard practice to avoid and minimize impacts; however, NCDOT will include a commitment to coordinate these designs with the County.*

9. Commit to providing a sound wall, to the County's specifications, to act as a barrier between the proposed road improvements and existing recreation fields at Mecklenburg County Sportsplex.

NCDOT Response: *The final design noise analysis to be performed during final design, which will be documented in a Design Noise Report (DNR), will include The Sportsplex, since it was permitted prior to the project's Date of Public Knowledge, which will be the date the U-2509 Finding of No Significant Impact is signed. If a noise wall meets the feasibility and reasonableness criteria stipulated by the FHWA-approved NCDOT Traffic Noise Policy, it will be recommended in the DNR, and it will be designed in accordance with the NCDOT Traffic Noise Policy, Traffic Noise Manual, and other relevant NCDOT design criteria. In the event a noise wall is not found to be feasible and reasonable, the County can take advantage of a provision in the Traffic Noise Policy for third-party participation, which currently states:*

"If a local government insists on the provision of a noise barrier deemed not reasonable by NCDOT, a noise barrier may be installed provided the local government assumes 100% of the costs and obtains an encroachment permit from NCDOT to perform the work. These costs

include, but are not limited to, preliminary and final engineering, actual construction, and all related maintenance. In addition, local governments must ensure that NCDOT's material, design, and construction specifications are met. The local government must also assume 100% of the liability associated with the measure and hold harmless the NCDOT”.

10. Commits to obtaining only the minimal necessary property rights needed for its project. Where sufficient, temporary property rights should be secured instead of permanent property rights.

NCDOT Response: *This is standard NCDOT procedure and a requirement of the 4(f) process and will not be included as a special project commitment.*

11. Will work with Mecklenburg County staff to minimize tree loss to the greatest extent practicable.

NCDOT Response: *This is standard procedure and will not be included as a special project commitment.*

12. Where trees cannot be saved, NCDOT agrees to provide a replanting plan approved by Mecklenburg County. Any trees planted per the replanting plan, NCDOT will provide the County with a one-year warranty.

NCDOT Response: *NCDOT will replace any trees in the replanting plan that die within one year after planting and will include this as a special project commitment.*

13. Provide a minimum of twelve (12) months’ notice to Mecklenburg County before construction that will impact the Sportsplex property.

NCDOT Response: *NCDOT will provide a 12 month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration. This will be included as a special project commitment and will include all County-owned Section 4(f) resources*

Exhibit F

County Property Adjacent to CPCC Lane (Tax Parcel ID: 215-061-06):

NCDOT Projects: As part of U-2509, NCDOT will be constructing new Independence Expressway (Hwy 74). NCDOT will need to obtain land on Mecklenburg County owned Tax Parcels 215-061-06.

County's Request: Due to impact at County owned Tax Parcel ID 215-061-06, the County requests that NCDOT and FHWA include the following commitments in the project's Finding of No Significant Impact (FONSI):

1. Commit to obtaining only the minimal necessary property rights needed for its project. Where sufficient, temporary property rights should be secured instead of permanent property rights.

NCDOT Response: *This is standard NCDOT procedure and a requirement of the 4(f) process and will not be included as a special project commitment.*

2. Provide a minimum of twelve (12) months' notice to Mecklenburg County before construction that will impact this property.

NCDOT Response: *NCDOT will provide a 12 month notice before Construction Let, providing any revisions to the schedule (delays or acceleration) if/when they become known. The contractor sets the schedule within the allocated duration. This will be included as a special project commitment and will include all County-owned Section 4(f) resources.*

U-2509 EA Re-Evaluation

C

Traffic Noise Memo



To: Tracy E. Roberts, AICP
Traffic Noise and Air Quality Group Leader
EAU, NCDOT

Date: March 11, 2024

Project #: 38385.00

Memorandum

From: Lauren Triebert, PE
Re: U-2509 TNR Re-Evaluation

Project History

Project Background

NCDOT STIP No. U-2509 proposes improvements to US 74 (Independence Boulevard) from west of Idlewild Road to I-485. The project would widen US 74 to include additional general-purpose lanes and express lanes in the median and replace at-grade intersections with interchanges and overpasses. The project would extend and connect several existing parallel collector roads. A Traffic Noise Report (TNR) was approved for U-2509 on November 17, 2020.

Environmental Assessment Re-Evaluation

This memo is meant to support the EA Re-Evaluation for U-2509 by evaluating what impacts, if any, changes in base conditions and design revisions may have on the conclusions of the TNR completed and approved on November 17, 2020. The Re-Evaluation is being completed due to a lapse in time between its original approval and now; a Finding of No Significant Impact (FONSI) is expected in summer of 2024.

STIP Segment Renaming

NCDOT STIP No. U-2509 proposes improvements to US 74 (Independence Boulevard) from west of Idlewild Road to I-485. During the preliminary design phase, the proposed extension and connection of parallel collector roads were segmented into U-2509A, and the mainline improvements became U-2509B. Under the final design phase, NCDOT further segmented U-2509 into eight (8) funded segments and one (1) unfunded segment described in Table 1 below. Phased construction of the segments is planned to enhance connectivity throughout the corridor prior to implementing control of access along US 74.

Table 1: U-2509 Revised Funded and Unfunded Segments

Previous Segment STIP #	Current Segment STIP #	Proposed Segment Improvements	Construction Year
U-2509A	U-2509AA	› Sharon Forest Drive Grade Separation	2029
		› Harris Boulevard, Village Lake, and Margaret Wallace Grade Separated Intersection	
	U-2509AB	› Sardis Road North and Sam Newell Road Grade Separated Intersections	2029
		› Arequipa Drive extensions from Sardis Road North to Sam Newell Road	
	U-2509AC	› Independence Pointe Parkway extension from Windsor Square Drive to NC 51	2029
	U-2509AD	› Matthews-Mint Hill Road Grade Separated Intersection	2029
		› Northeast Parkway Extension from Overcash Drive to Waiting Street	

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Table 1: U-2509 Revised Funded and Unfunded Segments

Previous Segment STIP #	Current Segment STIP #	Proposed Segment Improvements	Construction Year
	U-2509EA	› Margaret Wallace Road and Arequipa Drive Intersection Improvements	2027
	U-2509EB	› Independence Pointe Parkway extension from Sardis Road North to Sam Newell Road	2027
	U-2509B	› Widen US 74 mainline to include additional general-purpose lanes and express lanes- west of Idlewild Road to Wallace Lane › Direct Connector on the west side of Conference Drive	2029
U-2509B	U-2509C	› Widen US 74 mainline to include additional general-purpose and express lanes- Wallace Lane to Sardis Road North › Express lane grade separated intersections at Sardis Road North	Funded for Preliminary Engineering Only
	U-2509D	› Widen US 74 mainline to include additional general-purpose and express lanes- Sardis Road North to I-485 › Express lane interchanges with I-485 and the east side of Conference Drive › Reconstruct the interchange at NC 51	Funded for Preliminary Engineering Only
Unfunded Segments			
U-2509A	U-2509E	› New segments of Krefeld Drive, Arequipa Drive, and Independence Pointe Parkway on new location	N/A

Summary of Noise Analysis to Date

As part of the NEPA Environmental Assessment documentation, a TNR was completed and approved on November 17, 2020. A revised TNR is not being undertaken as part of this Re-Evaluation; however, this memo is intended to lay out modeling and base condition revisions that should be included when segment specific Design Noise Reports (DNRs) are completed as part of the final design for each section. Table 2 summarizes 5 (five) of the six (6) likely noise walls from the 2020 TNR, noting which STIP section they are located in. Since the original U-2509 TNR study area extended beyond the U-2509 project limits, Noise Wall NW1, located along US 74 southbound lanes, between Mount Pleasant Dr and Glendora Dr, terminating north of the large power lines running perpendicular to US 74, will not be considered in the Design Noise Report, as it falls within the current extent of STIP U-6103. This area will be evaluated for noise impacts as part of the U-6103 TNR. This eliminates the need for NW1 to be included in any future STIP U-2509 TNR Re-evaluation work efforts.

Table 2: TNR Likely Noise Walls by Segment

Current Segment STIP #	Noise Wall Name, Location
U-2509AA	› n/a
U-2509AB	› n/a
U-2509AC	› n/a
U-2509AD	› n/a

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Current Segment STIP #	Noise Wall Name, Location
U-2509EA	› n/a
U-2509EB	› n/a
U-2509B	› n/a
U-2509C	› NW 2: along Wallace Road, south/west of US 74 › NW 3b3: along south/east side of US 74, south of Krefeld Drive › NW 10a1, NW 10a2, NW 10a3: along north/west side of US 74, from Krefeld Drive to Cross Point Circle
U-2509D	› n/a
U-2509E	› n/a

NCDOT Noise Policy Review (2016 vs 2021) and Manual (2016 vs 2022)

The 2020 TNR was completed per the 2016 NCDOT Traffic Noise Policy (Policy) and 2016 Traffic Noise Manual (Manual). Since that time, updated versions of the Policy and Manual have been adopted. The 2021 Policy and 2022 Manual should be used for any future noise analysis efforts since the initial project's FONSI will be signed after the effective date of the 2021 Policy and 2022 Manual. Revisions in the 2021 Policy were minor and would not affect the number of impacts or the results of likely abatement. The notable modeling changes that should be applied to all Traffic Noise Models that may be used in section specific DNRs include, but are not limited to:

- New guidance for ER calculations (2022 Manual Appendix C)
- A 50/50 directional split is applied to roadway volumes for most roadways (2022 Manual Section 7.4)
- Revised receptor naming convention
- Revised guidance on receptor placement (2022 Manual Section 7.10.2)
- New guidelines for modeling buildings and other structures (2022 Manual Section 7.10.5)
- Revised guidance for barrier design (2022 Manual Section 7.10.6)

Review of Segments

Each STIP section of the project was reviewed against the previously approved TNR (November 17, 2020) and needed revisions to the models for the DNR are noted below. Revisions are recommended due to changes in design alignment or because developments have been built since the TNR analysis. Developments under construction or permitted are also noted for inclusion in future DNRs. Currently, a DNR is being completed for U-2509AA/AB/AC/AD. The model revisions recommended below for these sections are included in the approved Noise Analysis Work Plan for that DNR.

U-2509AA

Description

- Part of former Segment U-2509A
- Sharon Forest Drive Grade Separation, Harris Boulevard, Village Lake, and Margaret Wallace Interchanges
- TNR NSAs 2, 3, 8, and 9
- No needed changes to NSAs

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Design / Traffic changes

- Design alignment shift from EWT Harris to Margaret Wallace Rd and along Wallace Road

New Developments and Newly Permitted Buildings

- Allora Wallace Park Apartments (7326 Wallace Road)

Changes to NAC Designations / Equivalent Receptor Calculations

- Remove Receptors at 7700 Wallace Road as the church has been replaced with a non-noise sensitive land use
- Add appropriate receptors for Allora Wallace Park Apartments areas of frequent human use (Activity Category B)

Implications for Traffic Noise Impacts

- TNM model updates will be required due to design shifts and the addition/removal of receptors
- Allora Wallace Park Apartments – low potential for impacts requiring a noise barrier as these apartments do not have balconies; pool is already partially shielded

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. While a new receptor will be added for the Allora Wallace Park Apartment pool, no outdoor areas of frequent human use are associated with the residential buildings; thus, no new receptors will be needed to represent individual apartments. The receptors previously analyzed in the vicinity of the Allora Wallace Park Apartment pool and adjacent residential uses were not impacted in the original TNR and are unlikely to be impacted in the DNR. Note that discussion of 7700 Wallace Road and Allora Wallace Park Apartments also occurs in Section U-2509C; this to ensure the most comprehensive discussion of all sections as well as consistency between sections in this memo. U-2509AA accounts for improvements to Wallace Road; U-2509C accounts for improvements to mainline US 74. The receptor changes noted above are currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509AB

Description

- Part of former Segment U-2509A
- Sardis Road North and Sam Newell Road Interchanges; Arequipa Drive extension from Sardis Road North to Sam Newell Road
- TNR NSAs 10 and 11
- No needed changes to NSAs

Design / Traffic changes

- None

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New Developments and Newly Permitted Buildings

- Walking by Faith Community Church (2105 Rice Road), new construction permit issued 01/2022; project not yet completed

Changes to NAC Designations / Equivalent Receptor Calculations

- Remove receptor at 1935 Rice Rd as Daycare is no longer there
- Add appropriate receptors for Walking by Faith Community Church (Activity Categories C/D)

Implications for Traffic Noise Impacts

- TNM model updates will be required due to the addition/removal of receptors

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. The receptor changes noted above are currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509AC

Description

- Part of former Segment U-2509A
- Independence Pointe Parkway extension from Windsor Square Drive to NC 51
- TNR NSAs 4 and 5
- Expand NSAs 4 and 5 to cover design extension along Matthews Township Parkway

Design / Traffic changes

- Design changes along Independence Point Py (alternatives were eliminated from previous design)

New Developments and Newly Permitted Buildings

- None

Changes to NAC Designations / Equivalent Receptor Calculations

- Add appropriate receptors at Crestdale Middle School (940 Sam Newell Rd) (Activity Category C/D); Receptors for recreational area should be placed in a grid array and ERs recalculated if impacted
- Add appropriate receptors at Novant Health Matthews Medical Center (1500 Matthews Township Pkwy)(Activity Category C/D)

Implications for Traffic Noise Impacts

- TNM model updates will be required due to the addition/removal of receptors

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Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. The receptor changes noted above are currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509AD

Description

- Part of former Segment U-2509A
- Matthews-Mint Hill Road Interchange; Northeast Parkway Extension from Overcash Drive to Waiting Street
- TNR NSAs 5, 6, and 12
- Expand NSAs 5 and 6 to cover updated design along Matthews Mint Hill Rd, west of US 74
- Expand NSA 12 to cover updated design along Northeast Parkway to Matthews Township Parkway, west of US 74

Design / Traffic changes

- Design updates along Matthews Mint Hill Rd, west of US 74 near NSAs 5 and 6
- Removal of quadrant roadway connection in the northeast quadrant of US 74 and Matthews Mint Hill Road in NSA 12
- Design extension along Northeast Parkway near NSA 12

New Developments and Newly Permitted Buildings

- AVA Matthews, residential development under construction at Northeast Parkway and Overcash Drive
- Matthews Square (4010 Waiting St), new residential development along Northeast Pkwy at Matthews-Mint Hill Road

Changes to NAC Designations / Equivalent Receptor Calculations

- Add appropriate receptors for Fountains Matthews Apartments (10624 Parrish St) since this location should now be evaluated due to the design extension near NSA 12; Residential development along Northeast Pkwy at NC 51/Matthews Township Parkway – include due to design change (Activity Category B/C)
- Add appropriate receptors for Fountains Matthews Apartments areas of frequent human use (Activity Category B)
- Add appropriate receptors for AVA Matthews areas of frequent human use (Activity Category B)
- Add appropriate receptors for Matthews Station Apartments areas of frequent human use (Activity Category B)
- Remove TNR receptor 5-1999 due to re-zoning near Four Lakes Drive from residential to commercial use

Implications for Traffic Noise Impacts

- New residential developments in this area may increase the likelihood of additional traffic noise impacts within the Project Study Area

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Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. The receptor changes noted above are currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509EA

Description

- Part of former Segment U-2509A
- Margaret Wallace Road and Arequipa Drive Intersection Improvement
- TNR NSAs 9 and 10
- Expand NSAs 9 and 10 to cover updated design

Design / Traffic changes

- Design extension along Margaret Wallace Rd, Old Gate Dr, and Krefeld Dr

New Developments and Newly Permitted Buildings

- None

Changes to NAC Designations / Equivalent Receptor Calculations

- Add appropriate receptors for Bible Baptist Church and Christian School (2724 Margaret Wallace Rd) (Activity Category C/D) since this location should now be evaluated due to expanded design
- Add appropriate receptors for Pheasant Knoll Townhouses (Category B), along Old Gate Rd, since this location should now be evaluated due to expanded design
- Add appropriate receptors at residential sites (Activity Category B) along Old House Circle and Tarton Drive since these locations should now be evaluated due to expanded design

Implications for Traffic Noise Impacts

- Design changes resulting in the addition of receptors may increase the likelihood of traffic noise impacts

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. The receptor changes noted above are currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509EB

Description

- Part of former Segment U-2509A
- Independence Point Parkway from Sardis Road North to Sam Newell Road

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- TNR NSA 4
- No needed changes to NSAs

Design/Traffic changes

- Extension of design along Sam Newell Rd, west of Independence Pointe Py; culvert will be replaced with a bridge and additional length is needed to tie back to existing.

New Developments and Approved Plans

- Matthews Commons, 905 Matthews Commons Dr – include due to design change

Changes to NAC Designations / Equivalent Receptor Calculations

- Matthews Commons recreation areas
- Matthews Commons unit balconies

Implications for Traffic Noise Impacts

- Potential for additional impacts at Matthews Commons

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. The receptor changes noted above are currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509B

Description

- Part of former Segment U-2509B
- Widen US 74 mainline to include additional general-purpose lanes and express lanes- west of Idlewild Road to Wallace Lane; Direct Connector on the west side of Conference Drive
- TNR NSAs 2 and 8
- No needed changes to NSAs

Design/Traffic changes

- None

New Developments and Newly Permitted Buildings

- None

Changes to NAC Designations / Equivalent Receptor Calculations

- None

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Implications for Traffic Noise Impacts

- None

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. This conclusion is not expected to change as there are no changes to the design and no receptor or NAC designation updates. Therefore, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509C

Description

- Part of former Segment U-2509B
- Widen US 74 mainline to include additional general-purpose and express lanes- Wallace Lane to Sardis Road North; Express lane interchange at Sardis Road North
- TNR NSAs 2 through 4 and 8 through 11
- No needed changes to NSAs

Design/Traffic changes

- None

New Developments and Newly Permitted Buildings

- Allora Wallace Park Apartments (7326 Wallace Road)

Changes to NAC Designations / Equivalent Receptor Calculations

- Remove receptors at 7700 Wallace Road as the church has been replaced with a non-noise sensitive land use
- Add receptor for Allora Wallace Park Apartment's areas of frequent human use (Activity Category B)

Implications for Traffic Noise Impacts

- TNM model updates will be required due to design shifts and the addition/removal of receptors
- Allora Wallace Park – low potential for impacts requiring a noise barrier as these apartments do not have balconies; pool is already partially shielded

Preliminary Wall Recommendation Implications

The following noise barriers were found to be preliminarily feasible and reasonable in the TNR: NW2, NW3b3, NW10a1, NW10a2, and NW10a3. These five (5) walls should be re-evaluated in a segment specific DNR when U-2509C moves into final design; however, unless there is a notable change in projected traffic volumes on US 74 resulting in fewer impacted receptors, noise walls at these locations are expected to remain likely and will require full evaluation in a future DNR.

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While a new receptor will be added for the Allora Wallace Park Apartment pool, no outdoor areas of frequent human use are associated with the residential buildings; thus, no new receptors will be needed to represent individual apartments. The receptors previously analyzed in the vicinity of the Allora Wallace Park Apartment pool and adjacent residential uses were not impacted in the original TNR and are unlikely to be impacted in the DNR. The receptor changes noted above will be verified as part of a future DNR conducted for the noise walls that were identified in the original TNR; thus, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

U-2509D

Description

- Part of former Segment U-2509B
- Widen US 74 mainline to include additional general-purpose and express lanes- Sardis Road North to I-485; Express Lane interchanges on I-485 and the east side of Conference Drive; Reconstruct the interchange at NC 51
- TNR NSAs 4 through 6 and 11 through 13
- Expand NSA 13 to account for additional design along I-485

Design / Traffic changes

- Removal of quadrant roadway connection in the northeast quadrant of US 74 and Matthews Mint Hill Road in NSA 12.
- Additional ramp improvements related to expressway direct connections within the interchange

New Developments and Newly Permitted Buildings

- Inspire at Royal Park, 4101 Glenloch Circle
- AVA Matthews, residential development under construction at Northeast Parkway and Overcash Drive

Changes to NAC Designations / Equivalent Receptor Calculations

- Add appropriate receptors for Inspire at Royal Park areas of frequent human use (Activity Category B)
- Add appropriate receptors for AVA Matthews areas of frequent human use (Activity Category B)

Implications for Traffic Noise Impacts

- TNM model updates will be required due to design shifts and the addition/removal of receptors
- New developments in this area may increase potential for traffic noise impacts

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. The AVA Matthews development noted above is currently being evaluated as part of the U-2509AA/AB/AC/AD DNR; thus, no additional noise modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

Regarding the new receptors associated with Inspire at Royal Park development, U-2509D is currently only funded for preliminary engineering; thus, it would be prudent use of NCDOT funding to undertake additional preliminary noise analysis (TNR) at a future date as more development is possible in this area. If future analysis does indicate the need for

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noise mitigation for new receptors, it would not result in a change to the Preferred Alternative and the FONSI would remain valid.

U-2509E

Description

- Part of former Segment U-2509A but currently Unfunded
- New segments of Krefeld Drive, Arequipa Drive, and Independence Pointe Parkway on new location
- TNR NSAs 3, 5, and 6
- No needed changes to NSAs

Design/Traffic changes

- None

New Developments and Newly Permitted Buildings

- None

Changes to NAC Designations / Equivalent Receptor Calculations

- None

Implications for Traffic Noise Impacts

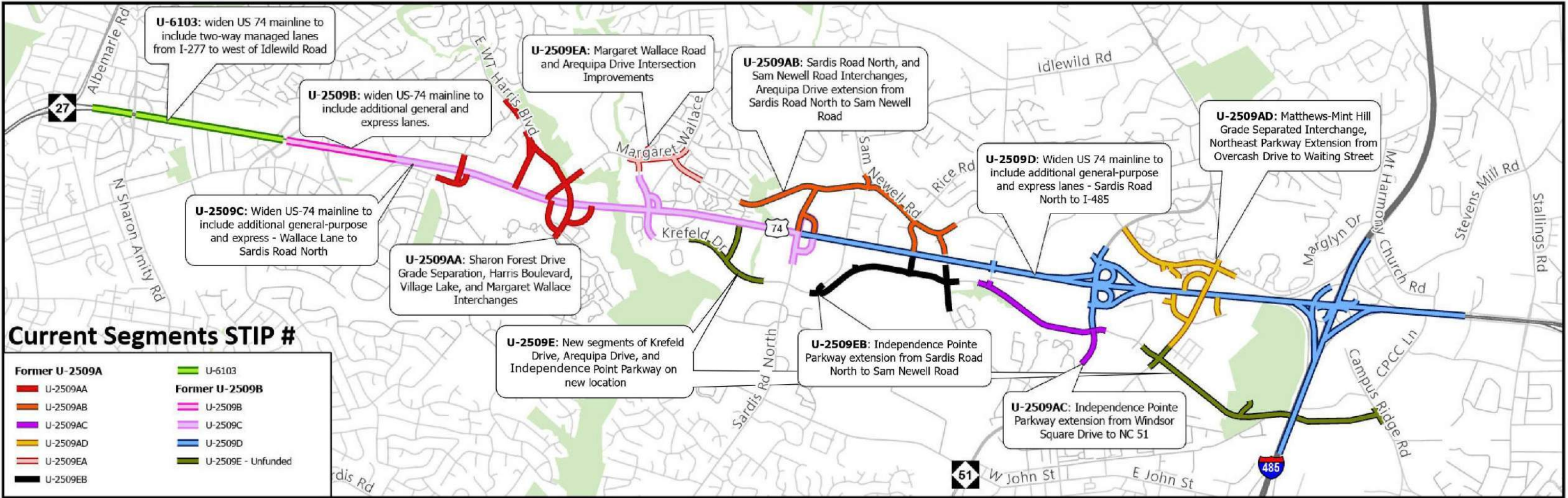
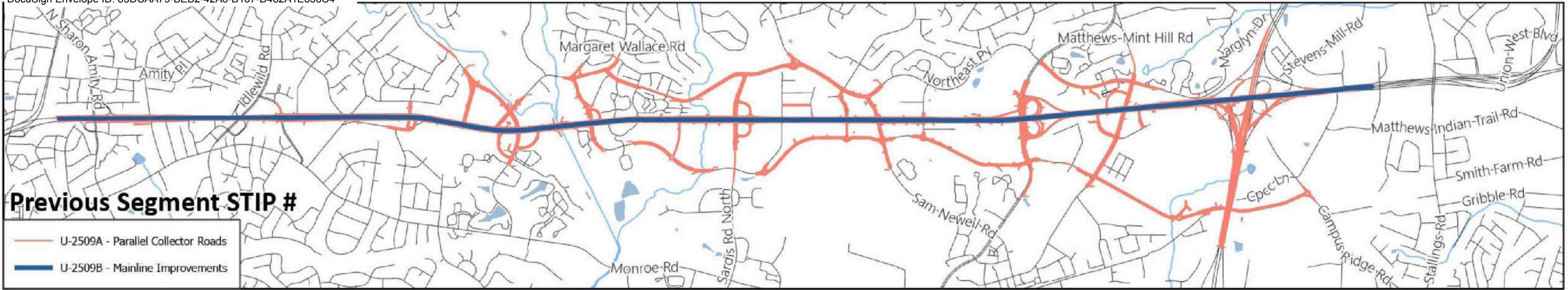
- None

Preliminary Wall Recommendation Implications

No noise barriers were found preliminarily feasible and reasonable in the TNR. This conclusion is not expected to change as there are no changes to the design that would affect the noise analysis and no receptor or NAC designation updates. Therefore, no additional modeling is recommended for the TNR used in the NEPA EA Re-Evaluation.

Summary

Design Noise Reports for specific STIP sections of U-2509 will be prepared in accordance with the 2021 NCDOT Traffic Noise Policy and 2022 NCDOT Traffic Noise Manual. The above-mentioned changes in base conditions between the TNR and January 2024 should be used as a starting point for developing DNR work plans. The U-2509 Preferred Alternative evaluated in the NEPA EA and EA Re-Evaluation would not change if an updated traffic noise analysis were to include the identified changes in base conditions and modeling procedures. Traffic noise abatement measures will be considered for all impacts identified in a DNR, will be evaluated for feasibility and reasonableness, and the appropriate public engagement procedures will take place. The Preferred Alternative is the only alternative that could be implemented and continue to meet the established purpose and need for the overall project, regardless of changes to the 2020 TNR. Any issues raised in this memo should be addressed as part of future DNRs. Additional noise impacts will be identified and considered for abatement during the final design process. Thus, a FONSI remains as the appropriate finding even without a revised TNR at this stage. The date of the approved FONSI will serve as the Date of Public Knowledge for inclusion of future developments in segment specific DNRs.



U-2509 EA Re-Evaluation

D

Air Quality Report



QUALITATIVE AIR QUALITY REPORT

US 74 (Independence Blvd) Improvements from Conference Drive to I-485 (Charlotte Outer Loop)

Mecklenburg County

**WBS Element No. 38965.1.1
STIP Project No. U-2509**

Prepared for:

**North Carolina Department of Transportation
Environmental Analysis Unit
Traffic Noise and Air Quality Group**

Submitted by:

**VHB Engineering NC, P.C.
940 Main Campus Dr Ste 500,
Raleigh, NC 27606**

July 2019

Revised – March 2024

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Accepted By:



March 21, 2024

NCDOT Environmental Analysis Unit, Date
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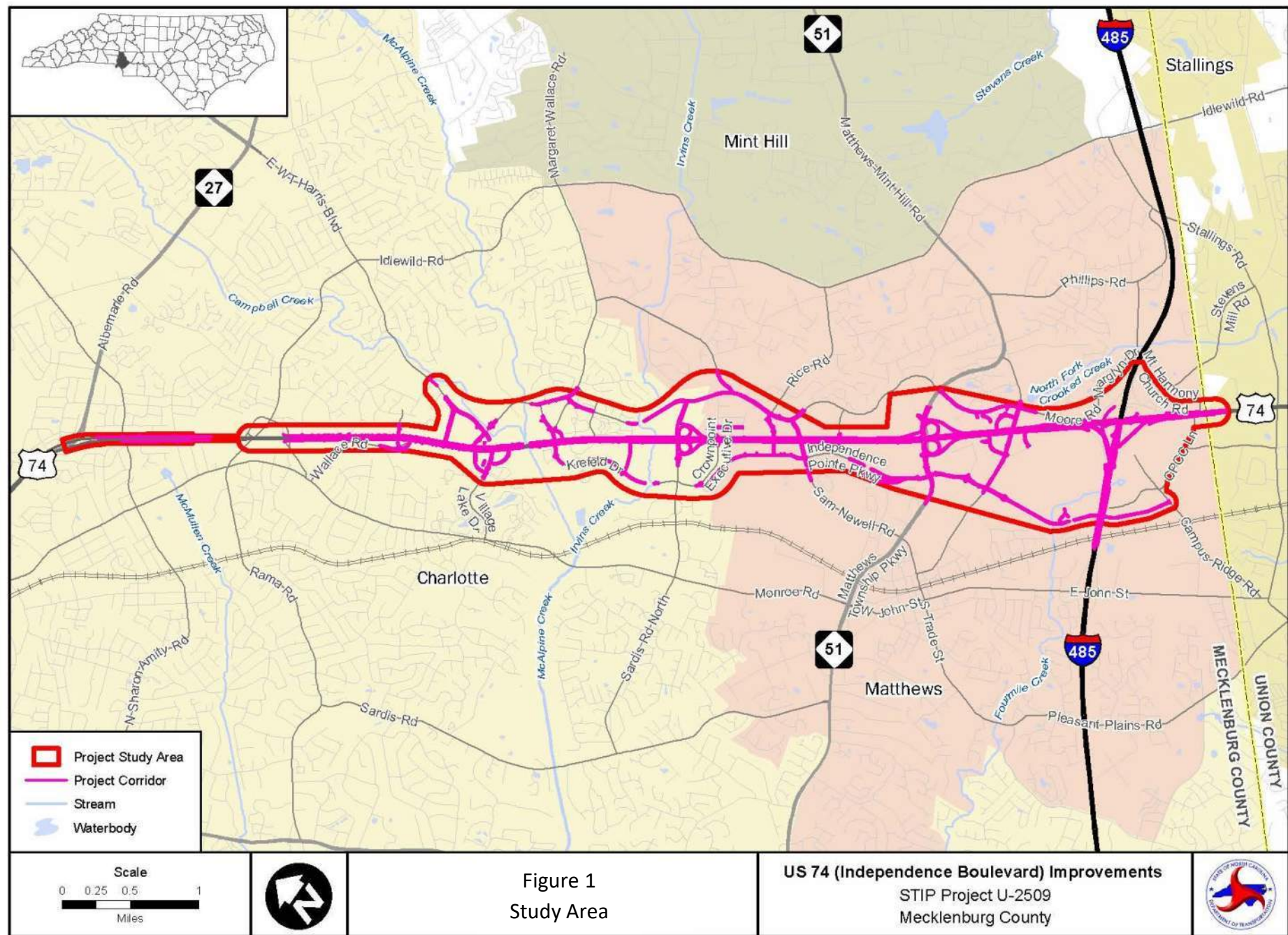
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1. Introduction

The North Carolina Department of Transportation (NCDOT) proposes U-2509, which would provide additional capacity along US 74 (Independence Blvd). The project is located in Mecklenburg County, as shown in **Figure 1**.

The build alternative (shown in **Figures 3-1a-1m** at the end of this report) proposes to widen and upgrade US 74 (Independence Blvd) with additional general purpose lanes, an auxiliary lane in each direction, express lanes in the median, and the replacement of at-grade intersections with interchanges and overpasses from west of Idlewild Road in Charlotte to I-485 in Matthews. The project would also extend and connect several existing parallel connector roads along the US 74 corridor.

The primary purpose for the proposed improvements to US 74 (Independence Blvd) is to provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within the study area. A Federal Environmental Assessment and Finding of No Significant Impact are being prepared for this project; federal funds are expected to be used in this project.



2. Methodology

The project is included in the North Carolina Department of Transportation's 2024- 2033 State Transportation Improvement Program (STIP) as Project U-2509. The project is included within the Charlotte Regional Transportation Planning Organization 2050 MTP (adopted April 2022) as MTP ID 2050-E342. The project is included within the 2045 funding horizon year at an estimated project cost of \$1,203,200,000. A federal Environmental Assessment is being prepared for the proposed project. The length of the project is approximately 9.3 miles. The project is located in Mecklenburg County, which is within the Charlotte maintenance area for the 2008 ozone (O₃) standard as defined by the EPA. Per NCDOT guidance, the following traffic scenarios were considered as a part of this study:

- Design Year (2040) No-Build
- Design Year (2040) Build

The build alternative consists of a minor widening and upgrade of US 74 with maximum Average Annual Daily Traffic (AADT) projection of approximately 122,000 vehicles per day (vpd) along the project corridor for the 2040 design year. The build alternative is anticipated to improve operations without creating a facility that is likely to meaningfully increase MSAT emissions, as the future year volume less than 140,000 vehicle per day. Thus, it is considered a project with low potential mobile source air toxics (MSAT) effects and this air quality assessment includes a qualitative MSAT analysis.

3. EPA National Ambient Air Quality Standards (NAAQS)

Air pollution originates from various sources. Emissions from industry and internal combustion engines are the most prevalent sources. The impact resulting from highway construction ranges from intensifying existing air pollution problems to improving the ambient air quality. Changing traffic patterns are a primary concern when determining the impact of a new highway facility or the improvement of an existing highway facility. Motor vehicles emit carbon monoxide (CO), nitrogen oxide (NO), hydrocarbons (HC), particulate matter, sulfur dioxide (SO₂), and lead (Pb) (listed in order of decreasing emission rate).

The Federal Clean Air Act of 1970 established the National Ambient Air Quality Standards (NAAQS). These were established in order to protect public health, safety, and welfare from known or anticipated effects of air pollutants. The NAAQS contain criteria for SO₂, particulate matter (PM₁₀, 10-micron and smaller, PM_{2.5}, 2.5 micron and smaller), CO, nitrogen dioxide (NO₂), ozone (O₃), and lead (Pb). The National and North Carolina Ambient Air Quality Standards are presented in Table 1.

The primary pollutants from motor vehicles are unburned hydrocarbons (HC), Nitrogen oxides (NO_x), CO, and particulates. HC and NO_x can combine in a complex series of reactions catalyzed by sunlight to produce photochemical oxidants such as O₃ and NO₂. Because these reactions take place over a period of several hours, maximum concentrations of photochemical oxidants are often found far downwind of the precursor sources.

Table 1. National and North Carolina Ambient Air Quality Standards (NAAQS)

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)		primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead (Pb)		primary and secondary	Rolling 3 month average	0.15 µg/m ³ ⁽¹⁾	Not to be exceeded
Nitrogen Dioxide (NO ₂)		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	1 year	53 ppb ⁽²⁾	Annual Mean
Ozone (O ₃)		primary and secondary	8 hours	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM)	PM _{2.5}	primary	1 year	9.0 µg/m ³	annual mean, averaged over 3 years
		secondary	1 year	15.0 µg/m ³	annual mean, averaged over 3 years
		primary and secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO ₂)		primary	1 hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m³ as a calendar quarter average) also remain in effect.

(2) The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O₃ standards.

(4) The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the require NAAQS.

Source: US EPA, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>, accessed March 11, 2024.

4. Attainment Status

The project is located in Mecklenburg County, which is within the Charlotte maintenance area for the prior 1997 ozone National Ambient Air Quality Standard (NAAQS) as defined by the EPA. The Charlotte area was designated moderate nonattainment under the 1997 ozone NAAQS on June 15, 2004, and due to improved air quality in the region was re-designated maintenance on January 2, 2014. The Charlotte area was designated marginal nonattainment for the 2008 ozone NAAQS resulting in the 1997 ozone NAAQS being revoked on April 6, 2015. On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (“South Coast II,” 882 F.3d 1138) held that transportation applies for the revoked 1997 ozone NAAQS areas. Transportation conformity for plans and TIPs for the 1997 Ozone NAAQS can be demonstrated without a regional emissions analysis pursuant to 40 CFR 93.109(c).

The project is located in Mecklenburg County, which is within the Charlotte maintenance area for the 2008 ozone (O₃) standard as defined by the EPA. This area was designated marginal nonattainment under the 2008 ozone NAAQS on July 20, 2012, and due to improved air quality in the region was re-designated maintenance on August 27, 2015. Section 176(c) of the CAAA requires that transportation plans, programs, and projects conform to the intent of the state air quality implementation plan (SIP). The current SIP does not contain any transportation control measures for Mecklenburg County. The Charlotte Region Transportation Planning Organization **2050** Metropolitan Transportation Plan (MTP) and the **FY 2024- 2027** Transportation Improvement Program (TIP) conform to the intent of the SIP. The USDOT made a conformity determination on the MTP and the TIP on **September 28, 2023**. The current conformity determination is consistent with the final conformity rule found in 40 CFR Parts 51 and 93. There are no significant changes in the project’s design concept or scope, as used in the conformity analyses.

4.1. Carbon Monoxide

Carbon monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes approximately 56 percent of all carbon emissions nationally. State and federal guidance suggests using CO predictions as the primary indicator for vehicular induced pollution. CO is sensitive to variations in temperature; emissions are twice as high in winter months as compared to summer months. CO is also sensitive to vehicle speed; emissions decrease with an increase in speed (up to 50 mph), and then increase again at higher speeds. Idling and low speeds (less than 15 mph) can produce the highest CO levels. Recent trends in air quality indicate CO levels have dramatically improved. The decline in CO concentrations is primarily due to stricter controls on automobile exhaust resulting in cleaner cars. This drop is remarkable because it is occurring while the nation’s population is growing rapidly yielding more traffic and urban sprawl.

Carbon monoxide regional and project-level conformity requirements in North Carolina have ended. Therefore, regional and project-level transportation conformity requirements no longer apply to CO in North Carolina. As such, project-level CO hot-spot analyses using MOVES and CAL3QHC emission and dispersion models are no longer required in North Carolina as part of the NEPA/SEPA process.

4.2. Ozone & Oxides

Ozone (i.e., a gaseous component of ground-level photochemical smog) results from a chemical reaction between volatile organic compounds and oxides of nitrogen in the presence of sunlight. Also, the concentration and dispersion of ozone are significantly affected by an area's meteorology and topography. Because it is primarily an areawide pollutant, it is typically assessed in system-level planning as part of the air quality State Implementation Plan (SIP) development and conformity process. Through the Transportation Improvement Program (TIP)/SIP evaluation process, this pollutant is evaluated on a regional level, but is not evaluated at the project-level.

Nitrogen oxides are a group of highly reactive gases. One of these gases, nitrogen dioxide, along with particles in the air, is often seen as a reddish-brown layer over urban areas. The primary source of nitrogen oxides are motor vehicles, electric utilities, and industrial, commercial, and residential sources that burn fuel.

Motor vehicles emit approximately 49 percent of the nation's level of nitrogen oxides. Nitrogen dioxide (along with other oxides of nitrogen) is considered an ozone precursor and is evaluated as part of the regional conformity requirements during the project planning phases. Therefore, nitrogen dioxide is not considered in project-level analyses.

4.3. Particulate Matter & Sulfur

Particle pollution is a term used to describe particles in the air including dust, dirt, soot, smoke, and liquid droplets. Sources that directly emit particle pollution include motor vehicles, construction activities, and unpaved roads. Sources of particles that form in the air from chemical processes involving sunlight and water vapor include fuel combustion in motor vehicles, at power plants, and in industrial processes. Particle pollution is of increased interest because diesel vehicles emit significant levels of the pollutant and diesel particulate has been identified as a probable carcinogen by the Environmental Protection Agency (EPA).

PM₁₀ is used as a measure of "coarse" particulate, in which the particles are 10 microns or less in size. Coarse particles of this size are typically formed by earth-based materials such as brake or tire wear. PM_{2.5} is used as a measure of "fine" particulate, in which the particles are 2.5 microns or less in size. Fine particles of this size are typically formed as a product of combustion. There are three counties (Catawba, Davidson, and Guilford) that were identified for the 1997 PM_{2.5} as maintenance in North Carolina. The 1997 Primary Annual PM_{2.5} NAAQS (level of 15 µg/m³) has been revoked in attainment and maintenance areas for the NAAQS, effective October 24, 2016. Therefore, no hot spot analysis is required in North Carolina for PM_{2.5}.

On-road motor vehicles are not considered to be a significant source of sulfur dioxide. Sulfur dioxide is not a pollutant of concern for project-level analyses.

4.4. Lead

Lead is a metal found naturally in the environment. The major sources of lead emissions were historically motor vehicles. However, due to a phase-out of leaded gasoline beginning in the 1970s, metal processing is currently the major source of lead emissions. Lead is not a pollutant of concern for on-road transportation projects.

5. Mobile Source Air Toxics (MSAT)

5.1. Background

Controlling air toxic emissions became a national priority with the passage of the CAAA, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA assessed this expansive list in its rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are part of EPA's [Integrated Risk Information System \(IRIS\)](#).¹ In addition, EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the [2014 National Air Toxics Assessment \(NATA\)](#).² These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority MSAT, the list is subject to change and may be adjusted in consideration of future EPA rules.

5.2. Motor Vehicle Emissions Simulator (MOVES)

According to EPA, MOVES3³ is a major revision to MOVES2014 and improves upon it functional improvements and features. It incorporates substantial new data for emissions, fleet, and activity developed since the release of MOVES2014. These new emissions data are for light- and heavy- duty vehicles, exhaust and evaporative emissions, and fuel effects. MOVES3 also adds updated vehicle sales, population, age distribution, and vehicle miles traveled (VMT) data. In the November 2020 EPA issued [MOVES3 Mobile Source Emissions Model Questions and Answers Guide](#)⁴ EPA states that for on-road emissions, MOVES3 updated heavy-duty (HD) diesel and compressed natural gas (CNG) emission running rates and updated HD gasoline emission rates. They updated light-duty (LD) emission rates for hydrocarbon (HC), carbon monoxide (CO) and nitrogen oxide (NOx) and updated light-duty (LD) particulate matter rates, incorporating new data on Gasoline Direct Injection (GDI) vehicles.

Using EPA's MOVES3 model, as shown in the chart below (see **Figure 2**), FHWA estimates that even if VMT increases by 31 percent from 2020 to 2060 as forecast, a combined reduction of 76 percent in the total annual emissions for the priority MSAT is projected for the same time period.

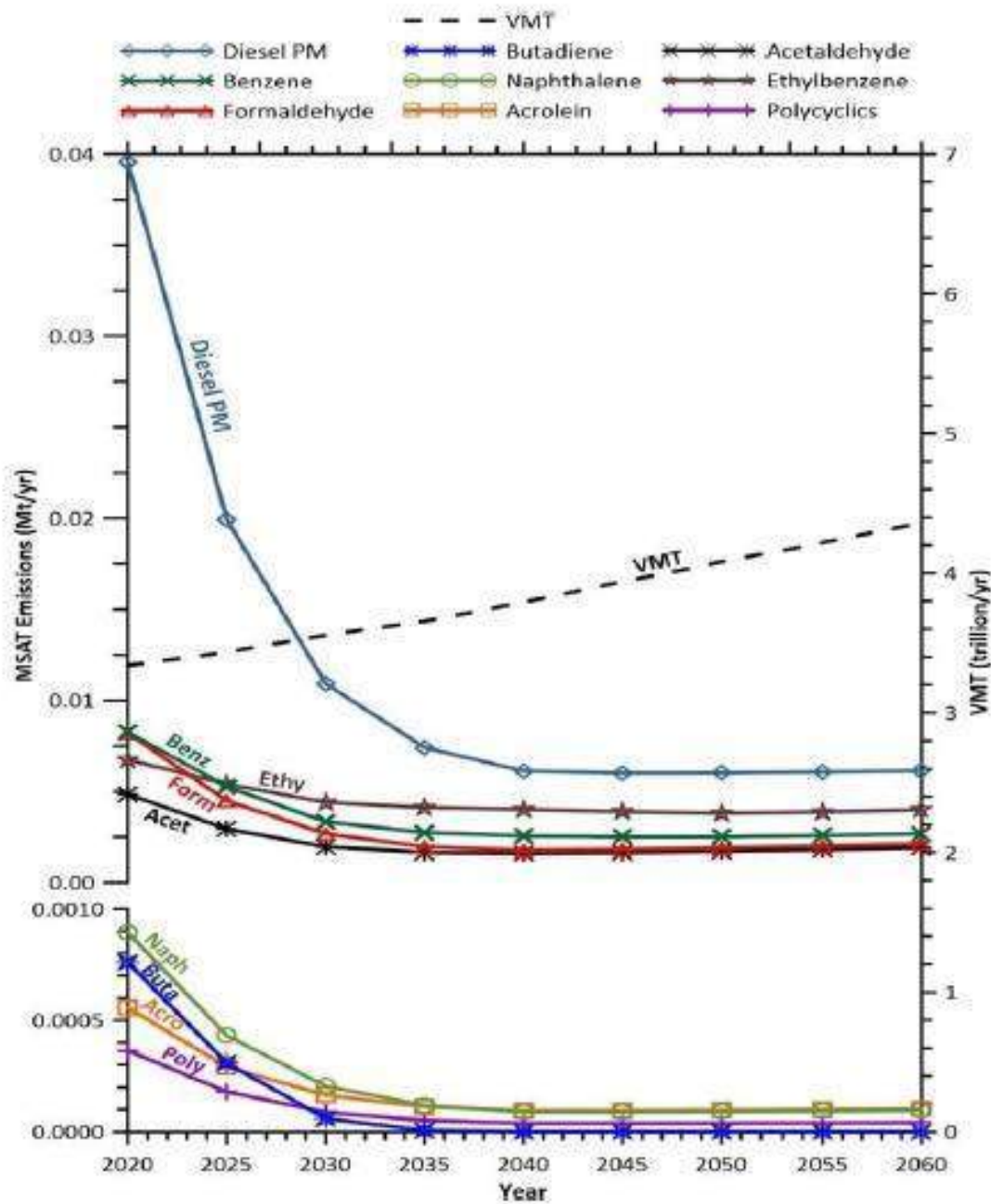
¹ <https://www.epa.gov/iris>

² <https://www.epa.gov/national-air-toxics-assessment>

³ The EPA approved MOVES4 in September 2023 with a two-year grace period extending until September 2025.

⁴ <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P1010M06.pdf>

Figure 2. EPA's MOVES3 Model



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors. Source: EPA MOVES3 model runs conducted by FHWA, March 2021.

Diesel PM is the dominant component of MSAT emissions, making up 36 to 56 percent of all priority MSAT pollutants by mass, depending on calendar year. Users of MOVES3 will notice some differences in emissions compared with MOVES2014. MOVES3 is based on updated data on some emissions and pollutant processes compared to MOVES2014, and also reflects the latest Federal emissions standards in place at the time of its release. In addition, MOVES3 emissions forecasts are based on slightly higher VMT projections than MOVES2014, consistent with nationwide VMT trends.

5.3. MSAT Research

Air toxics analysis is a continuing area of research. While much work has been done to assess the overall health risk of air toxics, many questions remain unanswered. In particular, the tools and techniques for assessing project-specific health outcomes as a result of lifetime MSAT exposure remain limited. These limitations impede the ability to evaluate how potential public health risks posed by MSAT exposure should be factored into project-level decision-making within the context of National Environmental Policy Act (NEPA).

Nonetheless, air toxics concerns continue to arise on highway projects during the National Environmental Policy Act (NEPA) process. Even as the science emerges, the public and other agencies expect FHWA to address MSAT impacts in its environmental documents. The FHWA, EPA, the Health Effects Institute, and others have funded and conducted research studies to try to more clearly define potential risks from MSAT emissions associated with highway projects. The FHWA will continue to monitor the developing research in this field.

5.4. NEPA Context

The NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals, and that Federal agencies use an interdisciplinary approach in planning and decision-making for any action that adversely impacts the environment (42 U.S.C. 4332). In addition to evaluating the potential environmental effects, FHWA must also take into account the need for safe and efficient transportation in reaching a decision that is in the best overall public interest (23 U.S.C. 109(h)). The FHWA policies and procedures for implementing NEPA are contained in regulation at 23 CFR Part 771.

5.5. Consideration of MSAT in NEPA Documents

The FHWA developed a tiered approach with three categories for analyzing MSAT in NEPA documents, depending on specific project circumstances:

- (1) No analysis for projects with no potential for meaningful MSAT effects;
- (2) Qualitative analysis for projects with low potential MSAT effects; or
- (3) Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

For projects warranting MSAT analysis, all nine priority MSAT should be considered.

(1) Projects with No Meaningful Potential MSAT Effects, or Exempt Projects.

The types of projects included in this category are:

- Projects qualifying as a categorical exclusion under 23 CFR 771.117
- Projects exempt under the Clean Air Act conformity rule under 40 CFR 93.126; and
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

For projects that are categorically excluded under 23 CFR 771.117, or are exempt from conformity requirements under the Clean Air Act pursuant to 40 CFR 93.126, no analysis or discussion of MSAT is necessary. Documentation sufficient to demonstrate that the project qualifies as a categorical exclusion and/or exempt project will suffice. For other projects with no or negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is recommended. However, the project record should document the basis for the determination of no meaningful potential impacts with a brief description of the factors considered.

(2) Projects with Low Potential MSAT Effects

The types of projects included in this category are those that serve to improve operations of highway, transit, or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase MSAT emissions. This category covers a broad range of projects.

FHWA anticipates that most highway projects that need an MSAT assessment will fall into this category. Examples of these types of projects are minor widening projects; new interchanges; replacing a signalized intersection on a surface street; and projects where design year traffic is projected to be less than 140,000 to 150,000 annual average daily traffic (AADT).

For these projects, a qualitative assessment of emissions projections should be conducted. This qualitative assessment should compare, in narrative form, the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic and the associated changes in MSAT for the project alternatives, including no-build, based on VMT, vehicle mix, and speed. It should also discuss national trend data projecting substantial overall reductions in emissions due to stricter engine and fuel regulations issued by EPA. Because the emission effects of these projects typically are low, we expect there would be no appreciable difference in overall MSAT emissions among the various alternatives.

In addition to the qualitative assessment, a NEPA document for this category of projects must include a discussion of information that is incomplete or unavailable for a project specific assessment of MSAT impacts, in compliance with the Council on Environmental Quality (CEQ) regulations (40 CFR 1502.22(b)). This discussion should explain how current scientific techniques, tools, and data are not sufficient to accurately estimate human health impacts that could result from a transportation project in a way that would be useful to decision-makers. Also, in compliance with 40 CFR 150.22(b), this discussion should contain information regarding the health impacts of MSAT.

(3) *Projects with Higher Potential MSAT Effects*

This category includes projects that have the potential for meaningful differences in MSAT emissions among project alternatives. FHWA expects a limited number of projects to meet this two-pronged test. To fall into this category, a project should:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel PM in a single location, involving a significant number of diesel vehicles for new projects or accommodating with a significant increase in the number of diesel vehicles for expansion projects; or
- Create new capacity or add significant capacity to urban highways such as Interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000⁵ or greater by the design year;

And also

- Be proposed to be located in proximity to populated areas.

Projects falling within this category should be more rigorously assessed for impacts. If a project falls within this category, the project sponsor should contact the Office of Natural Environment (HEPN) and the Office of Project Development and Environmental Review (HEPE) in FHWA Headquarters for assistance in developing a specific approach for assessing impacts. This approach would include a quantitative analysis to forecast local-specific emission trends of the priority MSAT for each alternative, to use as a basis of comparison. This analysis also may address the potential for cumulative impacts, where appropriate, based on local conditions. How and when cumulative impacts should be considered would be addressed as part of the assistance outlined above.

If the analysis for a project in this category indicates meaningful differences in levels of MSAT emissions among alternatives, mitigation options should be identified and considered.

The project sponsor should also consult with HEPN and HEPE if a project does not fall within any of the types of projects listed in Category (3) above but may have the potential to substantially increase future MSAT emissions.

The U-2509 project falls under Category (2) because it does not qualify as a categorical exclusion under 23 CFR 771.117; is intended to improve the operations of the existing road network; and the 2040 Design Year traffic is not projected to meet or exceed the 140,000 to 150,000 AADT criterion. The project's Design Year traffic ranges as follows:

- US 74 (Independence Blvd) - 102,700 vpd near Sam Newell Road to 121,900 vpd near the I-485 Interchange
- I-485 in project vicinity – 117,800 vpd south of US 74 (Independence Blvd)

⁵ Using EPA's MOVES2014a emissions model, FHWA determined that this range of AADT would result in emissions significantly lower than the Clean Air Act definition of a major hazardous air pollutant (HAP) source, i.e., 25 tons/yr. for all HAPs or 10 tons/yr. for any single HAP. Variations in conditions such as congestion or vehicle mix could warrant a different range for AADT.

5.6. Qualitative MSAT Analysis

A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the various alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA entitled *A Methodology for Evaluating Mobile Source Air Toxic Emissions Among Transportation Project Alternatives*, found at:

https://www.fhwa.dot.gov/environment/air_quality/air_toxics/research_and_analysis/mobile_source_air_toxics/msatemissions.cfm

The VMT estimated for the Build Alternative is higher than that for the No Build Alternative, because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network. Table 2 summarizes the projected VMTs within the project network by link.

For each alternative in this EA, the amount of mobile source air toxics (MSAT) emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. The VMT estimated for the Build Alternative is higher than that for the No Build Alternative because the additional capacity increases the efficiency of the roadway and attracts rerouted trips from elsewhere in the transportation network.

Table 2. Calculated VMT's for 2040 No Build and 2040 Build Alternative

	Start	End	No Build VMT	Build VMT	% Change in VMT
US 74 (Independence Blvd) Mainline	Project Start	Pierson Drive On-Ramp	32,700	43,300	32%
	Pierson Drive On-Ramp	Sharon Amity Road	32,300	42,900	33%
	Sharon Amity Road	Glendora Drive	31,700	41,100	30%
	Glendora Drive	Ashmore Drive	8,100	10,500	30%
	Ashmore Drive	Jerilyn Drive	7,600	9,900	30%
	Jerilyn Drive	Idlewild Road	34,100	44,300	30%
	Idlewild Road	City View Drive	26,200	39,200	50%
	City View Drive	Dion Avenue	21,000	31,500	50%
	Dion Avenue	Wallace Lane	2,000	3,000	50%
	Wallace Lane	Sharon Forest Drive	26,400	43,200	64%
	Sharon Forest Drive	Wallace Road	6,800	11,100	63%
	Wallace Road	E. WT Harris Boulevard	16,100	26,300	63%
	E. WT Harris Boulevard	Margaret Wallace Road	16,200	22,500	39%
	Margaret Wallace Road	Village Lake Drive	11,200	15,700	40%
	Village Lake Drive	Krefeld Drive	33,700	50,500	50%
	Krefeld Drive	Ardis Court	68,500	103,700	51%
	Ardis Court	Sardis Road	19,400	32,900	70%

	Start	End	No Build VMT	Build VMT	% Change in VMT
US 74 (Independence Blvd) Mainline	Sardis Road	Rice Road	27,200	48,500	78%
	Rice Road	Sam Newell Road	14,400	22,300	55%
	Sam Newell Road	Windsor Square Drive	16,200	32,200	99%
	Windsor Square Drive	NC 51	41,400	74,600	80%
	NC 51	Matthews-Mint Hill Road	45,300	74,400	64%
	Matthews-Mint Hill Road	I-485	63,000	90,200	43%
	I-485	Project End	51,200	71,200	39%
US 74 (Independence Blvd) Mainline Total			652,700	985,000	51%
Monroe Road	Jerilyn Drive	Rama Road/Idlewild Road	5,200	5,800	12%
	Rama Road/Idlewild Road	Conference Drive	20,100	20,700	3%
	Conference Drive	Wallace Lane	1,800	1,600	-11%
	Wallace Lane	Eaglewood Avenue	4,400	4,000	-9%
Margaret Wallace Road	US 74	Krefeld Drive	9,200	9,700	5%
	Krefeld Drive	Arequipa Drive Extension	4,400	4,200	-5%
	Arequipa Drive Extension	Summerfield Ridge Lane	2,100	1,900	-10%
Arequipa Drive	Margaret Wallace Road	Sardis Road	300	7,100	2267%
	Sardis Road	Sam Newell Road	0	2,300	n/a
Krefeld Drive	US 74	Ardis Court	1,400	1,400	0%
	Ardis Court	Sardis Road	200	1,900	850%
Independence Point Parkway	Sardis Road	Rice Road	2,800	1,400	-50%
	Rice Road	Sam Newell Road	0	900	n/a
	Sam Newell Road	Windsor Square Drive	1,400	700	-50%
	Windsor Square Drive	NC 51	100	1,700	1600%
	NC 51	Matthews-Mint Hill Road	3,500	2,500	-29%
	Matthews-Mint Hill Road	Sports Parkway	0	8,200	n/a
	Sports Parkway	Campus Ridge Drive	0	6,500	n/a
Sam Newell Road	south of Williams Road	Arequipa Drive Extension	4,400	4,400	0%
	Arequipa Drive Extension	Rice Road	6,700	5,900	-12%
	Rice Road	Northeast Parkway	3,900	3,300	-15%
Northeast Parkway	Sam Newell Road NE Pkwy	Windsor Square Drive	6,900	5,700	-17%
	Windsor Square Drive	NC 51	16,900	10,600	-37%
	NC 51	Matthews-Mint Hill Road	700	2,100	200%

	Start	End	No Build VMT	Build VMT	% Change in VMT
Moore Road	Matthews-Mint Hill Road	Royal Commons Lane	1,100	900	-18%
I-485	N of US 74	--	113,100	118,400	5%
	S of US 74	--	90,800	101,600	12%
<i>US 74 (Independence Blvd) Parallel Connectors Total</i>			<i>301,400</i>	<i>335,400</i>	<i>11%</i>
<i>Network Total</i>			<i>954,100</i>	<i>1,320,400</i>	<i>38%</i>

Mainline US 74 (Independence Blvd) links show an increase in VMT along these links. This increase in VMT would lead to higher MSAT emissions for the preferred action alternative along the highway corridors, along with a corresponding decrease in MSAT emissions along some parallel routes. As a whole, the network is expected to show a 38% increase in VMT. The emissions increase is offset somewhat by lower MSAT emission rates due to increased speeds; according to the Environmental Protection Agency's (EPA) MOVES3 model, emissions of all of the priority MSAT decrease as speed increases. The estimated VMT between the No Build and Build Alternative varies by approximately 38% at the network level; however, there is expected to be no appreciable difference in overall MSAT emissions between the No-Build and Build alternatives when evaluating the area network. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of the EPA's national control programs that are projected to reduce annual MSAT emissions by over 76 percent from 2020 to 2060 (*Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, January 18, 2023*). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in virtually all locations.

The additional travel lanes contemplated as part of the project will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No Build Alternative.

The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections that would be built along US 74 (Independence Blvd) from west of Idlewild Road to I-485, and the parallel collector routes, including: Krefeld Drive extension from Krefeld Drive to Sardis Road North, Arequipa Drive extension from Margaret Wallace Road to Sam Newell Road, two extensions of Independence Point Parkway from Windsor Square Drive to NC 51, and from Matthews-Mint Hill Road to Campus Ridge Road, and the Northeast Parkway extension from NC 51 to Matthews-Mint Hill Road under the Build Alternative. However, the magnitude and the duration of these potential increases compared to the No-Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other

locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region wide MSAT levels to be significantly lower than today.

5.7. Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, <https://www.epa.gov/iris/>). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, <https://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA states that with respect to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (EPA IRIS database, Diesel Engine Exhaust, Section II.C. https://iris.epa.gov/static/pdfs/0642_summary.pdf).”

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable ([https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/\\$file/07-1053-1120274.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)).

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

6. Construction Air Quality

During construction of the proposed project, all materials resulting from clearing and grubbing, demolition or other operations will be removed from the project, burned, or otherwise disposed of by the Contractor. Any burning done will be done in accordance with applicable local laws and ordinances and regulations of the North Carolina SIP for air quality in compliance with 15 NCAC 2D.1900. Care will be taken to ensure burning will be done at the greatest distance practical from dwellings and not when atmospheric conditions are such as to create a hazard to the public. Burning will be performed under constant surveillance. Also during construction, measures will be taken to reduce the dust generated by construction when the control of dust is necessary for the protection and comfort of motorists or area residents.

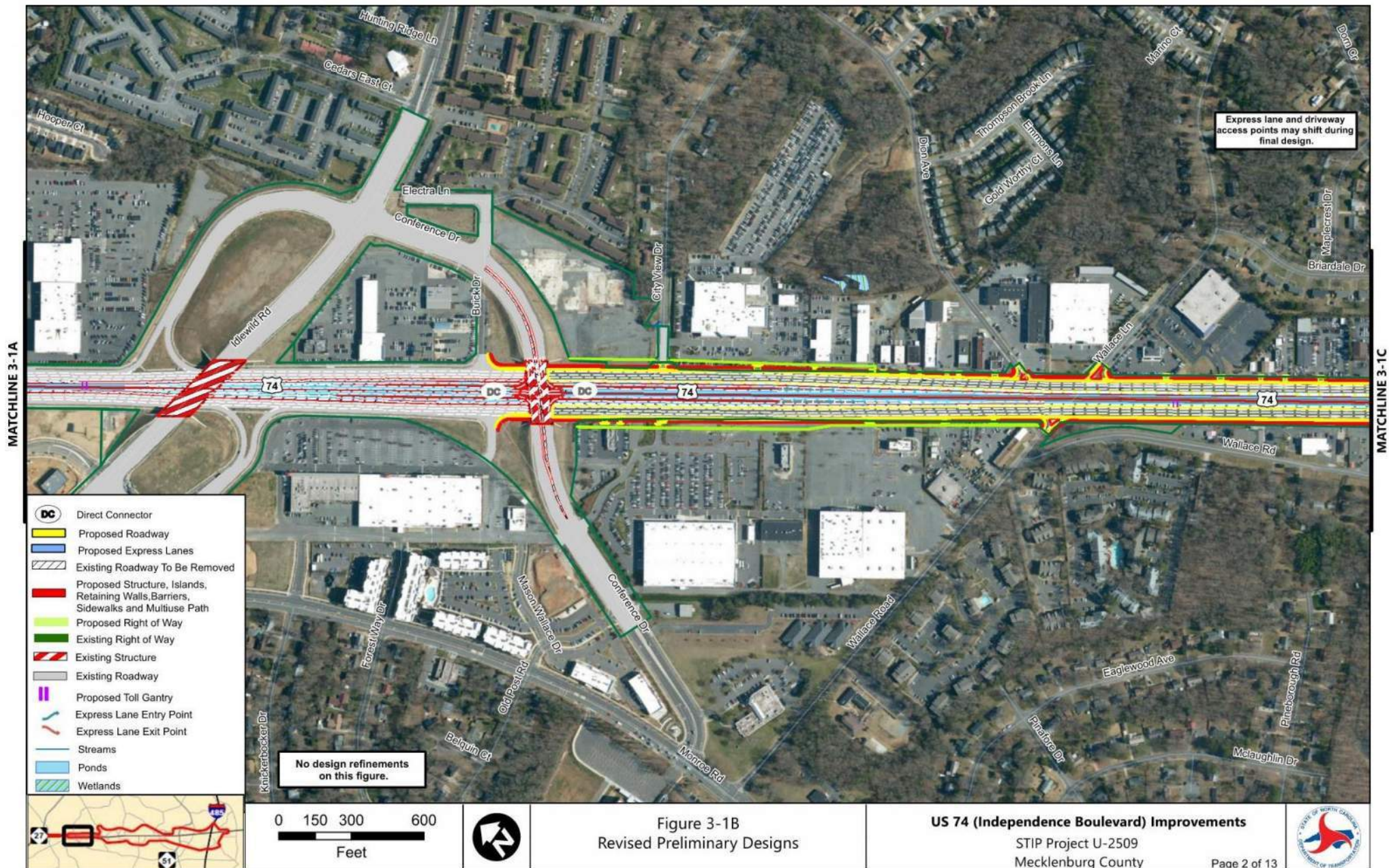
Air quality impacts resulting from roadway construction activities are typically not a concern when contractors utilize appropriate control measures. In North Carolina, contractors shall perform all construction activities with adequate control measures in place, e.g. watering exposed surfaces, covering, or maintaining free board space on haul trucks, limiting vehicle speeds on unpaved roads, and minimizing equipment idling time. The temporary air quality impacts from construction are not expected to be significant.

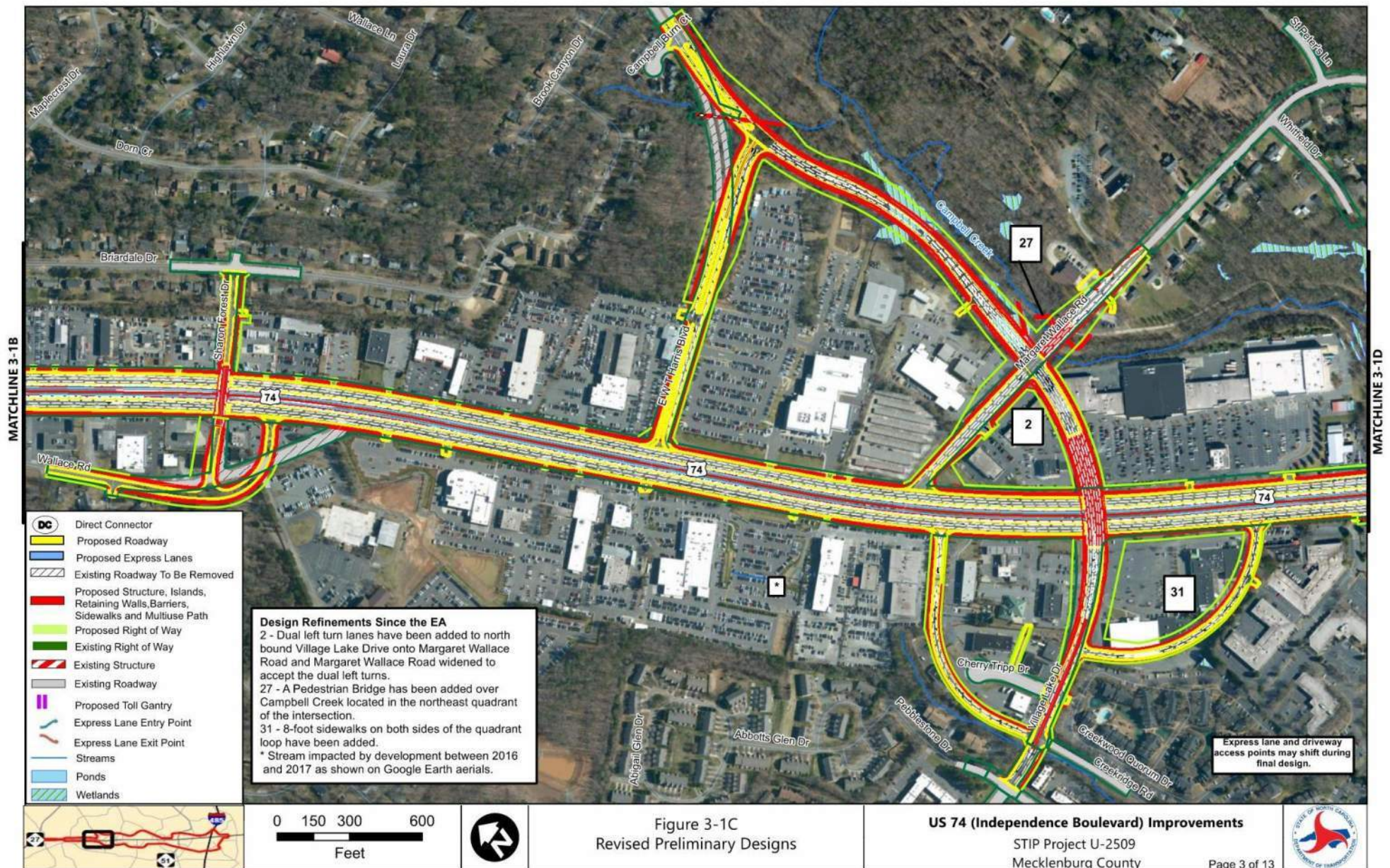
7. Summary

Vehicles are a major contributor to decreased air quality because they emit a variety of pollutants into the air. Changing traffic patterns are a primary concern when determining the impact of a new highway facility or the improvement of an existing highway facility. New highways or the widening of existing highways increase localized levels of vehicle emissions, but these increases could be offset due to increases in speeds from reductions in congestion and because vehicle emissions will decrease in areas where traffic shifts to the new roadway. Significant progress has been made in reducing criteria pollutant emissions from motor vehicles and improving air quality, even as vehicle travel has increased rapidly.

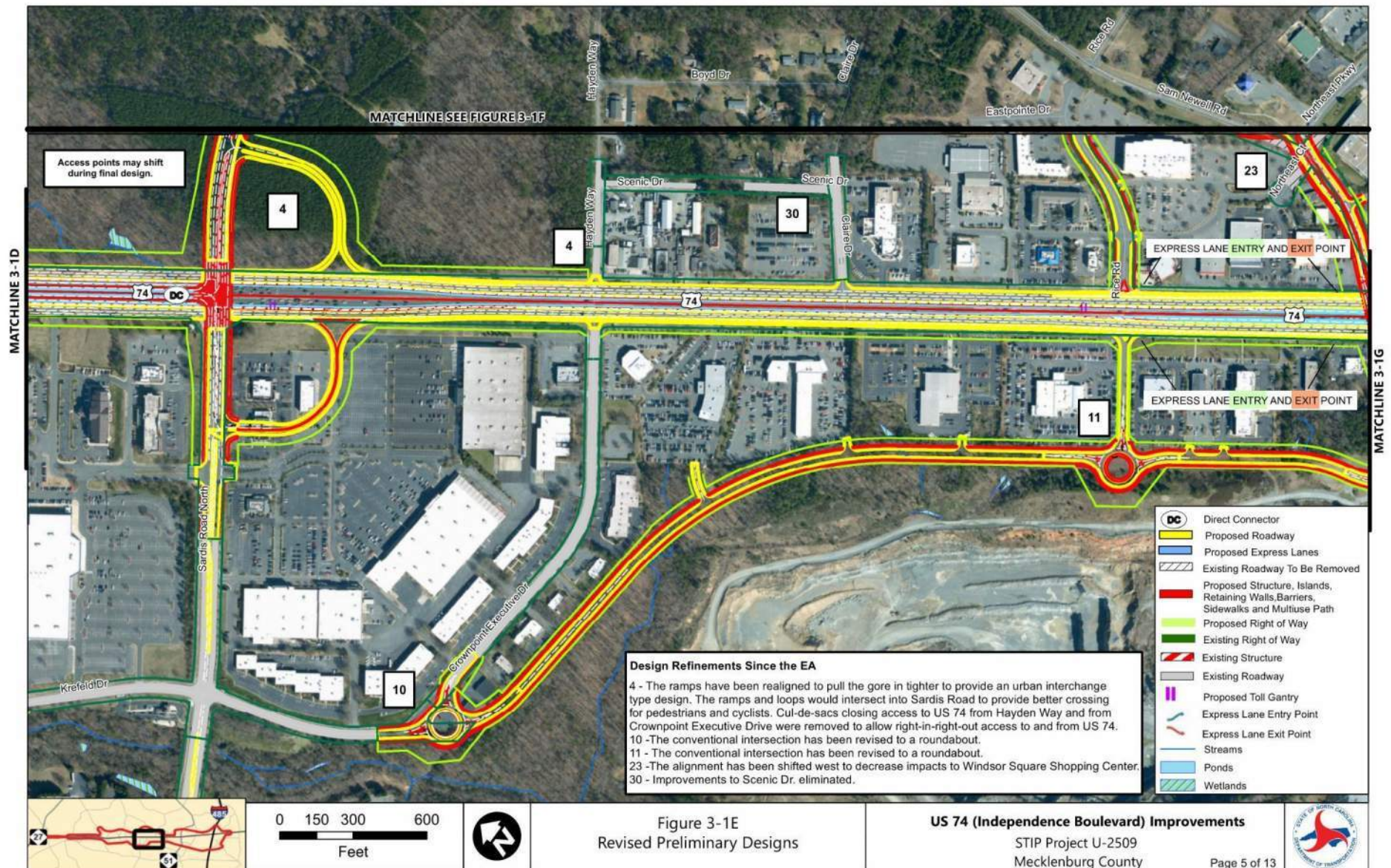
The project is in Mecklenburg County, which is within the Charlotte maintenance area for the prior 1997 and 2008 8-hour ozone as defined by EPA. The proposed project is not expected to create any adverse effects on the area's air quality. This evaluation completes the assessment requirements for air quality of the 1990 Clean Air Act Amendments and the NEPA process. No additional reports are necessary.

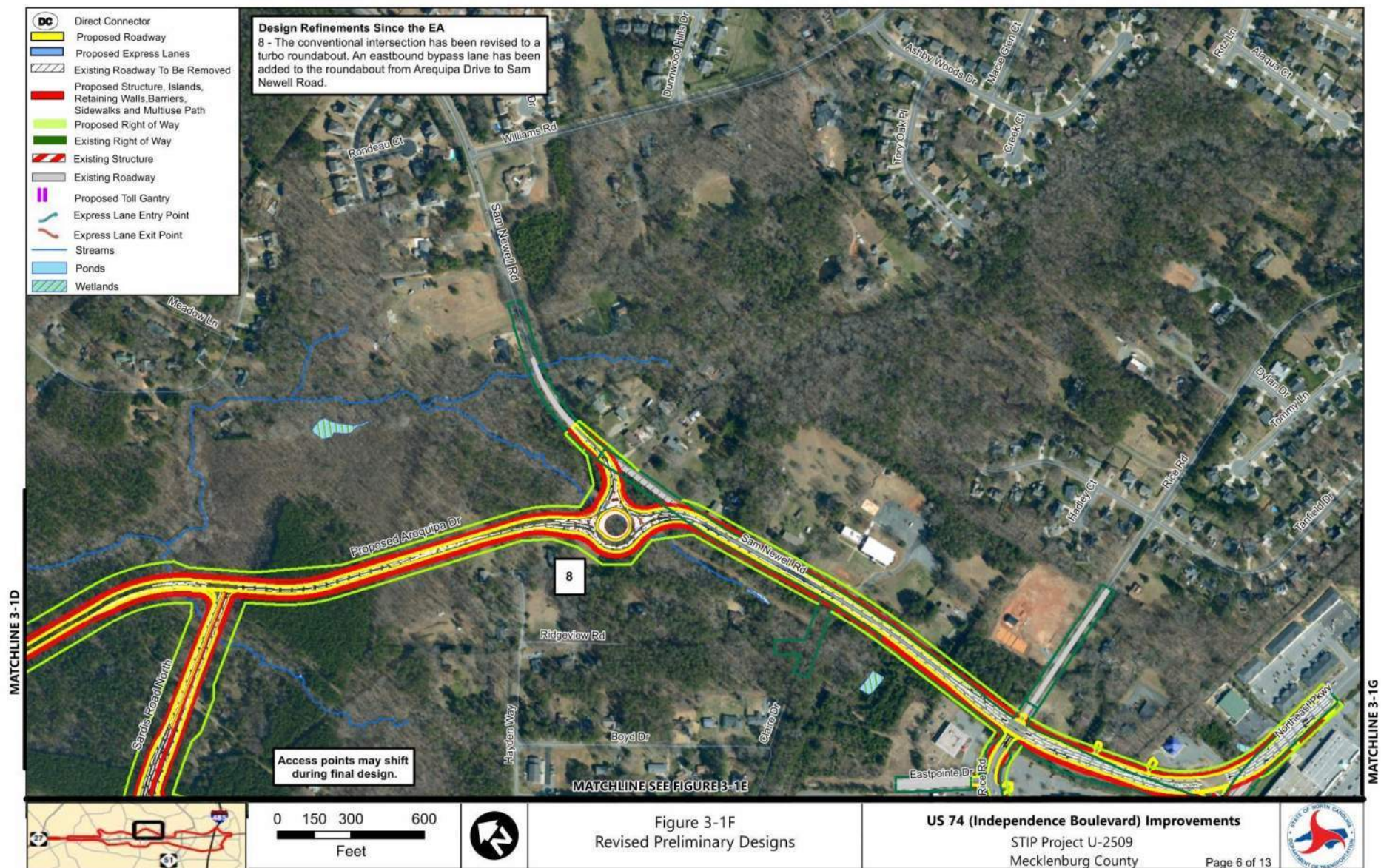


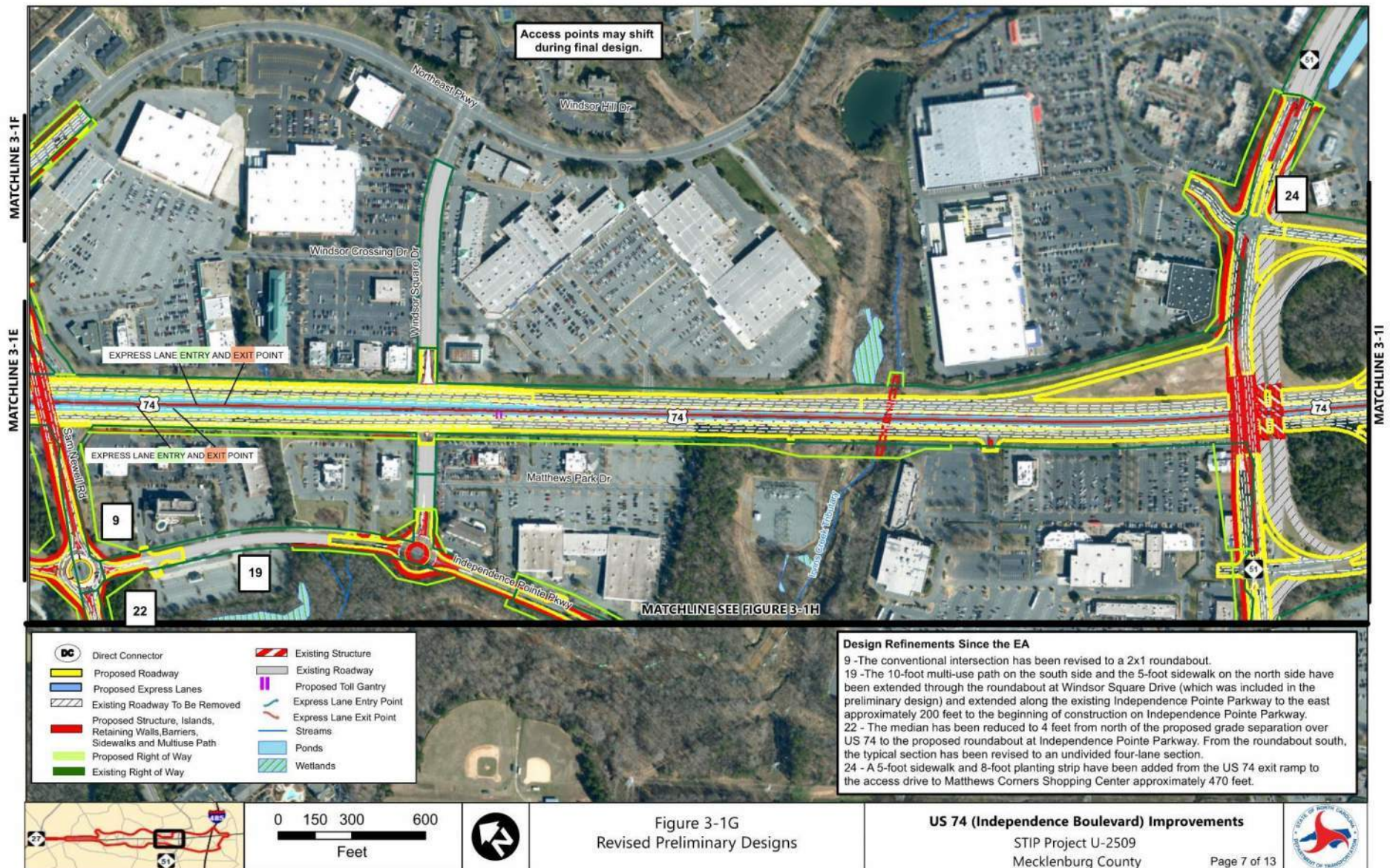


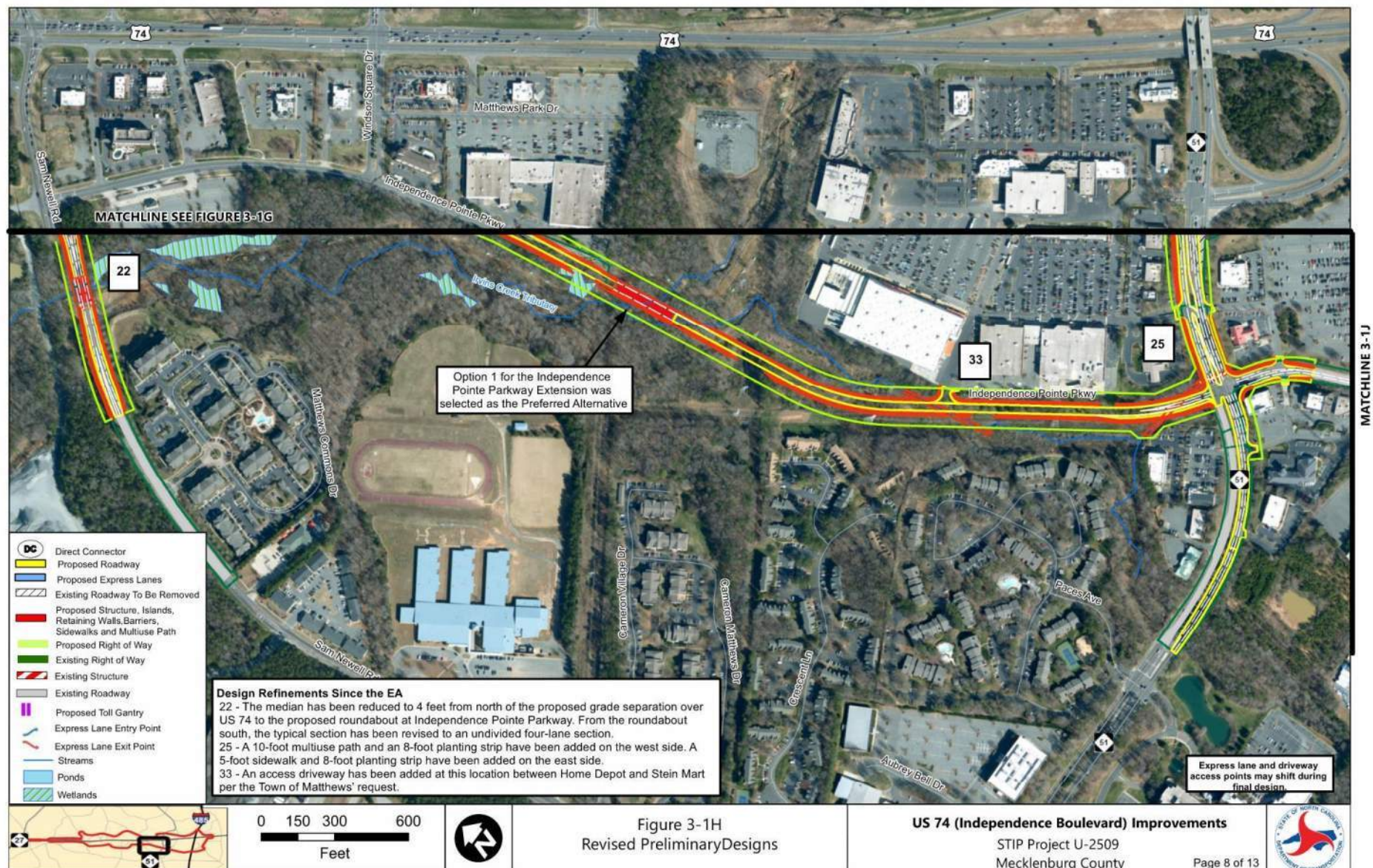


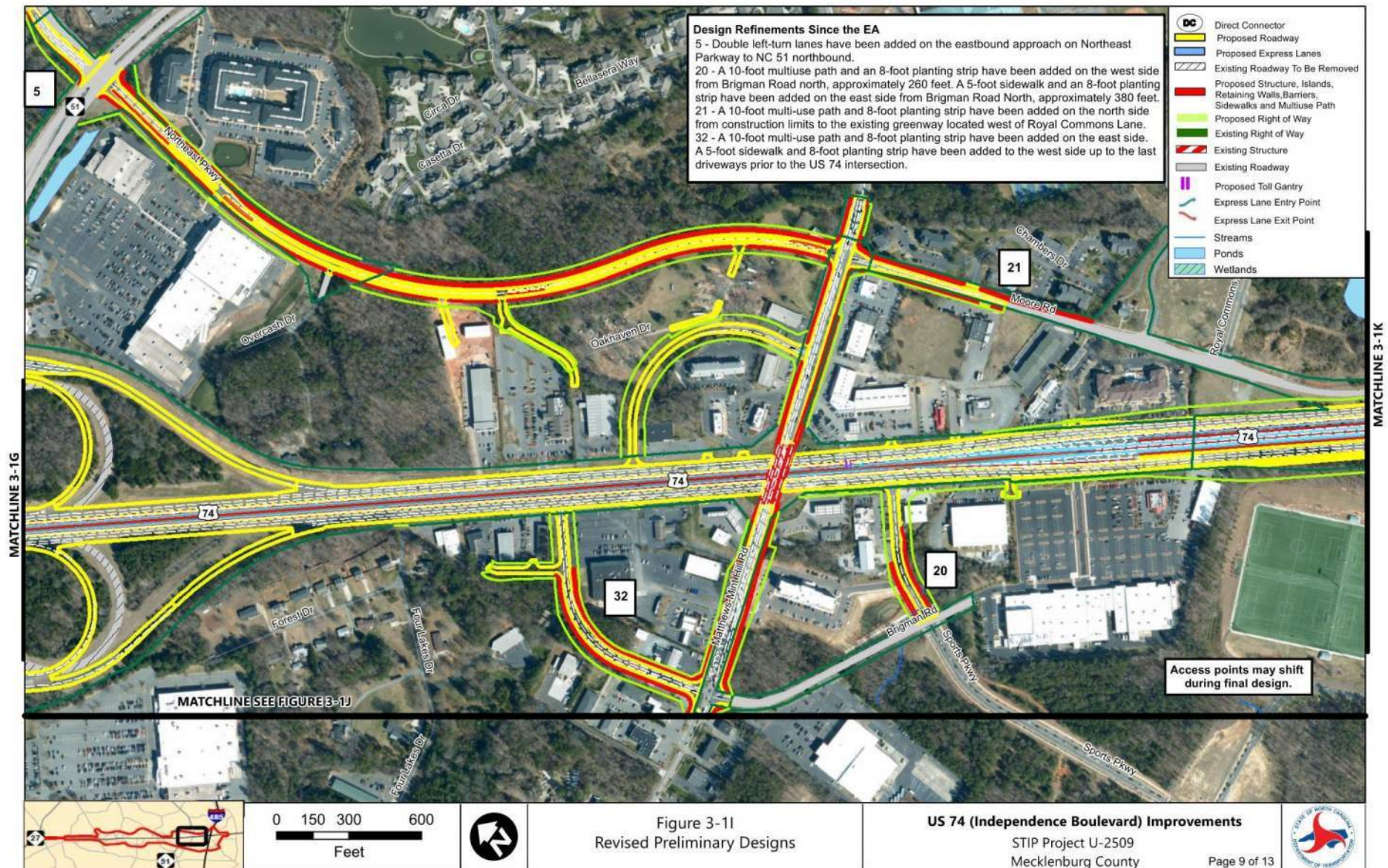


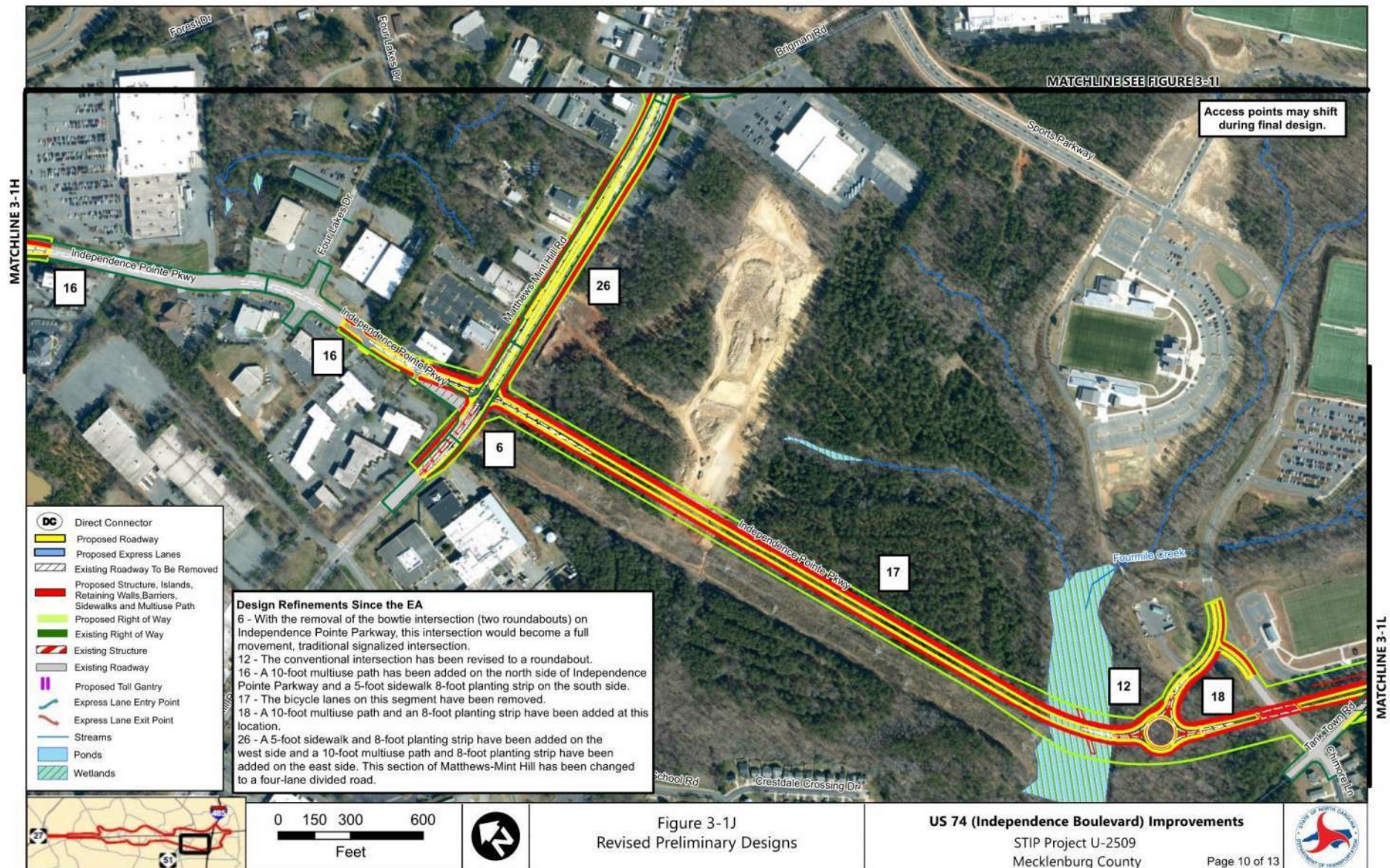




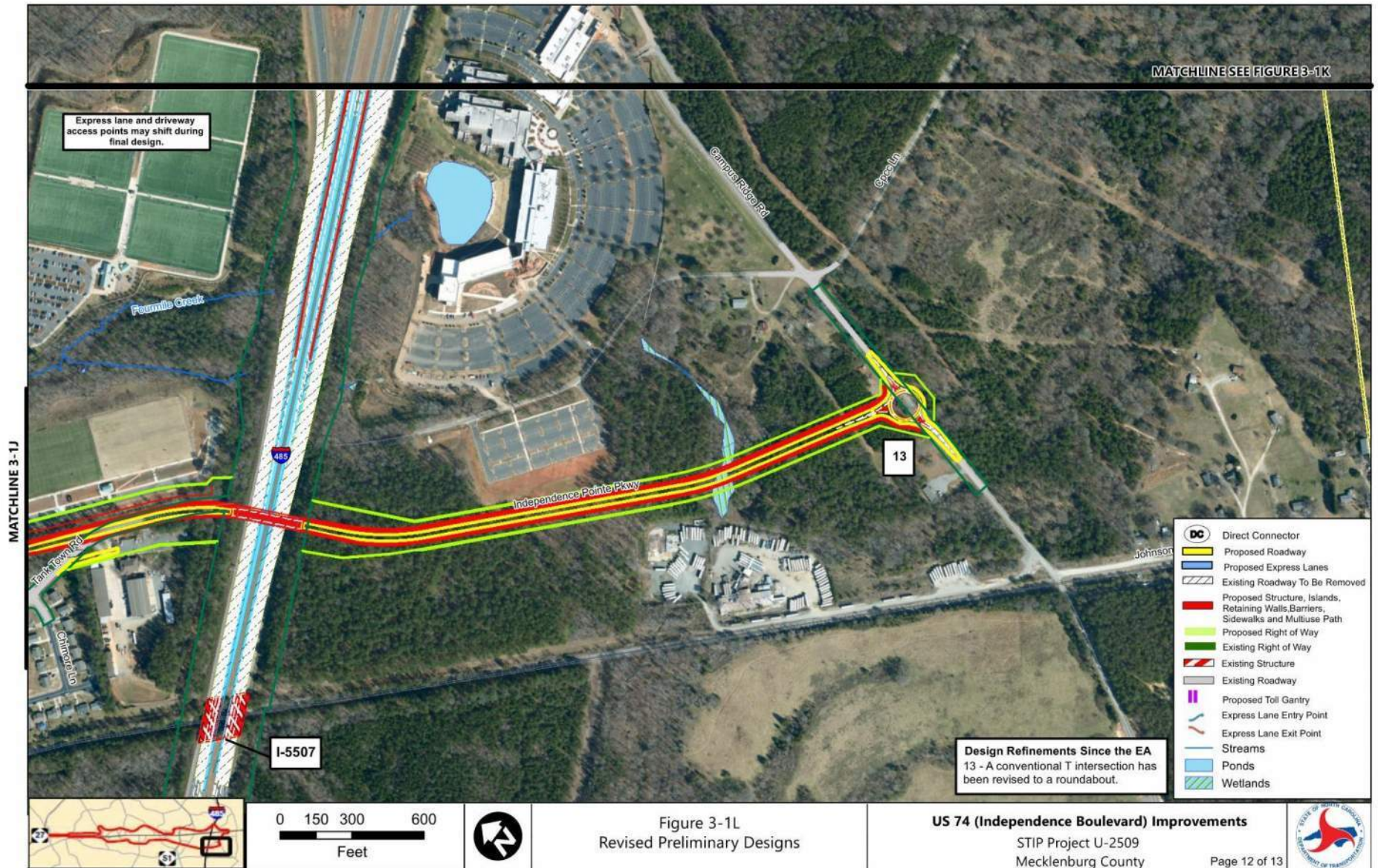


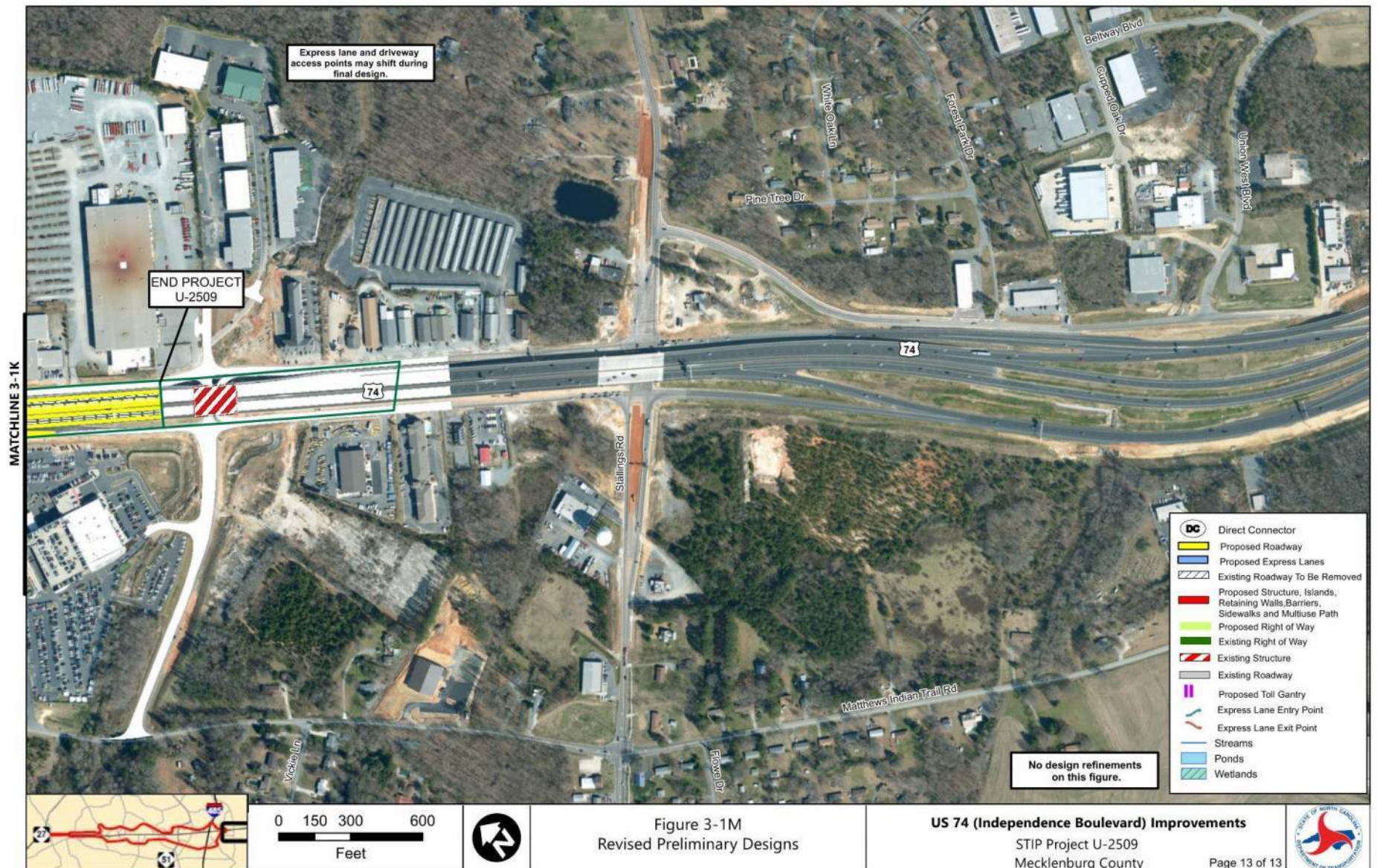


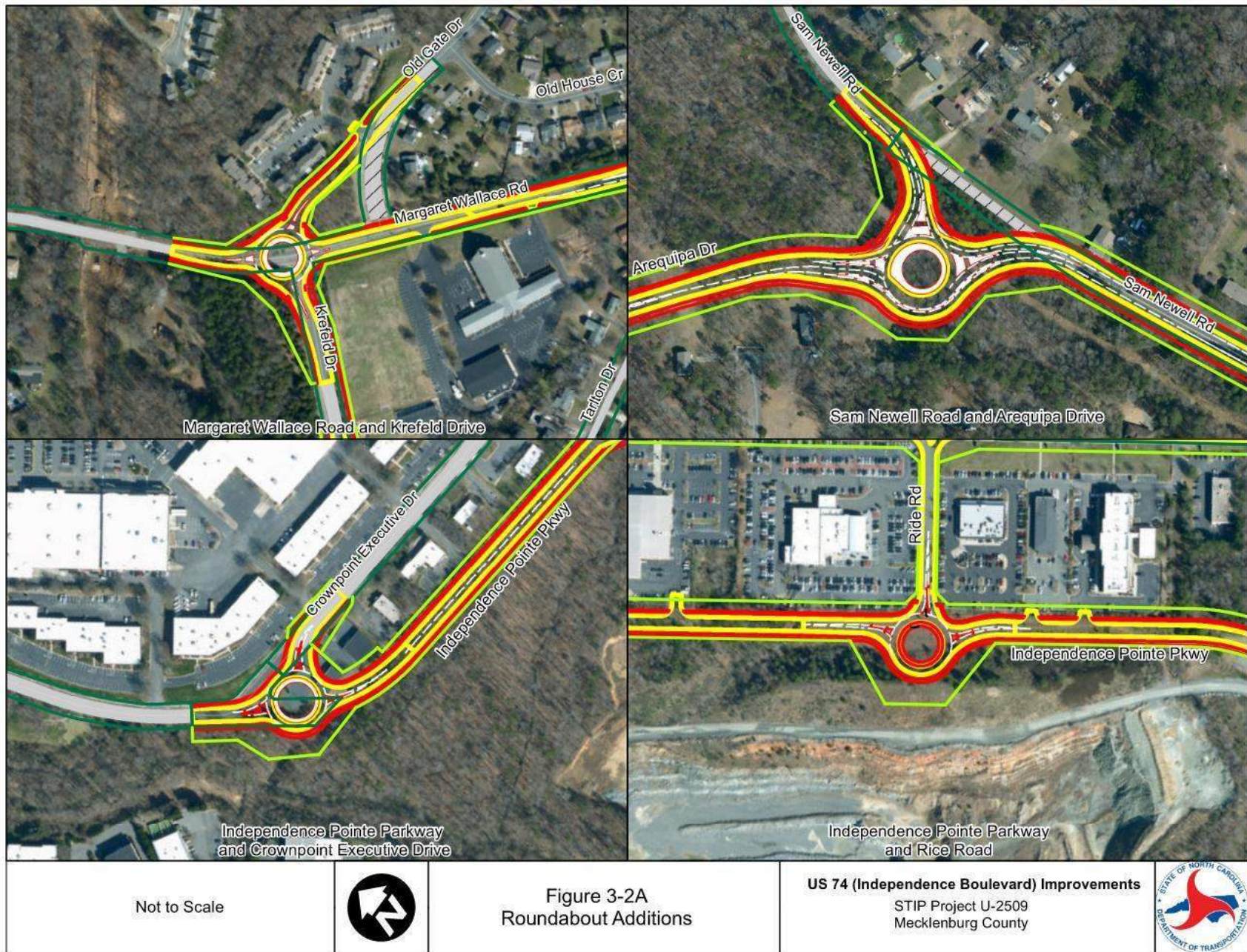


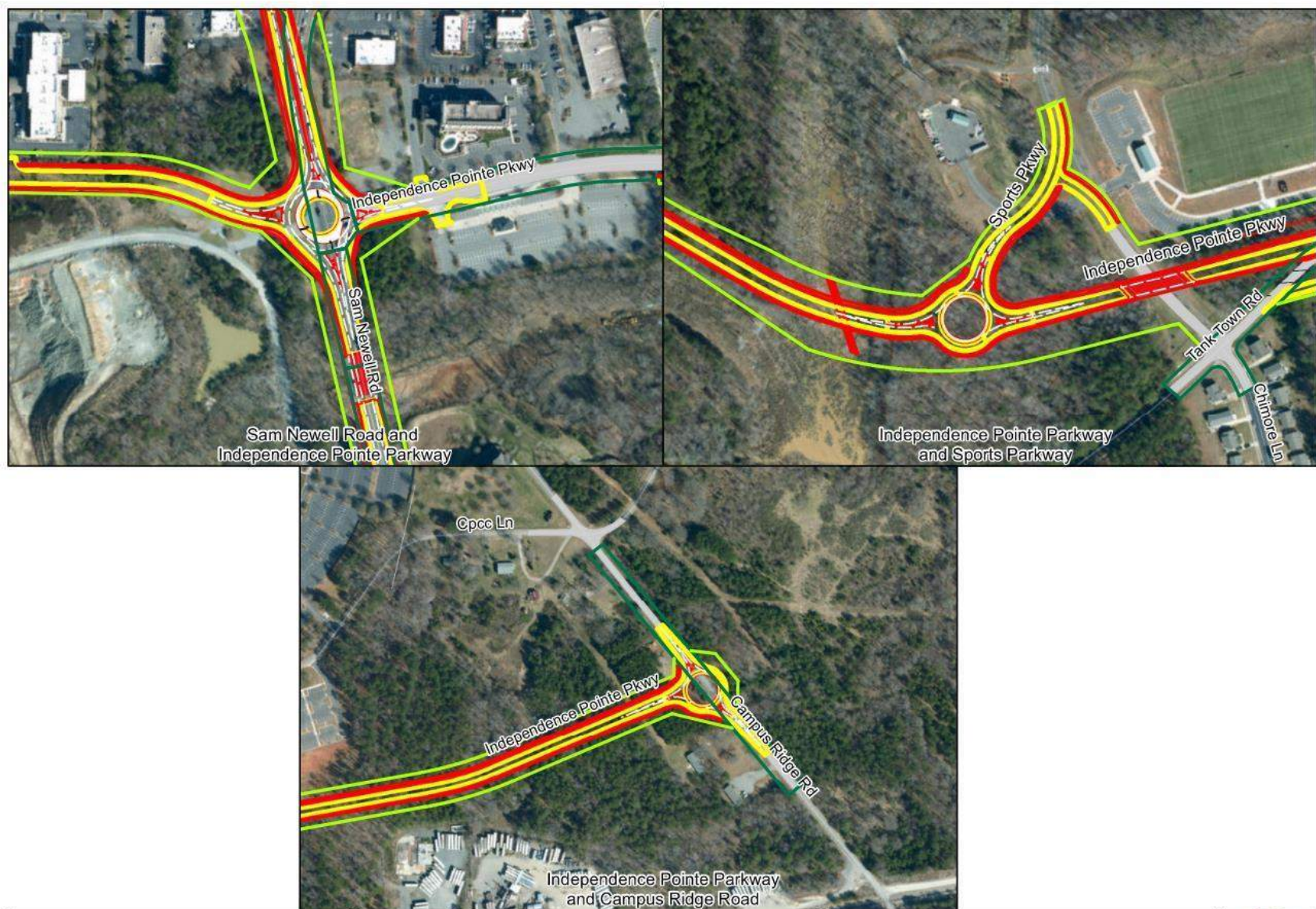












Not to Scale



Figure 3-2B
Roundabout Additions

US 74 (Independence Boulevard) Improvements
STIP Project U-2509
Mecklenburg County



U-2509 EA Re-Evaluation

E

GeoEnvironmental Reports



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

July 18, 2017

MEMORANDUM TO: Donald Brown, Senior Project Planner
VHB

FROM: Gordon Box, LG
GeoEnvironmental Project Manager
GeoEnvironmental Section
Geotechnical Engineering Unit

TIP NO: U-2509
WBS: 38965.1.1
COUNTY: Mecklenburg
DIVISION: 10
DESCRIPTION: US 74 (Independence Boulevard) Improvements from Albemarle Road (NC 24/27) to I-485 in Mecklenburg County

SUBJECT: **Revised GeoEnvironmental Planning Report**

The GeoEnvironmental Section of the Geotechnical Engineering Unit previously performed a GeoEnvironmental Planning Report for U-2509, described as *Charlotte – US 74 (Independence Blvd.) from Charlotte Outer Loop to Idlewild Rd. *Programmed for planning and environmental studies only**, dated 7/7/2016. The study area was subsequently revised to *Charlotte – US 74 (Independence Blvd.) from Charlotte Outer Loop to Conference Drive, *Programmed for planning and environmental studies only**, which was a subset of the original. In March 2017, the study area was enhanced to begin at Albemarle Rd. Therefore, a new GeoEnvironmental Planning Report was requested.

Sites along Independence Boulevard were also previously included on a GeoEnvironmental Planning Report for U-5526, dated 12/19/2014, described as *US 74 (Independence Blvd.) from I-277 to I-485 Convert Existing and Proposed Busway to Managed Lanes from I-277 to Wallace Lane and Construct New Managed Lanes from Wallace Lane to I-485 US 74 (Independence Blvd.) from I-277 to I-485 Convert Existing and Proposed Busway to Managed Lanes from I-277 to Wallace Lane and Construct New Managed Lanes from Wallace Lane to I-485*.

This Revised GeoEnvironmental Planning Report for U-2509 is a compilation of the sites previously reported as U-2509, together with a subset of sites reported as U-5526, with the addition of three (3) parcels of high concern that comprise a single superfund site referred to as Academy Steel Drum.

The purpose of this report is to document sites of concern within the project study area that are or may be contaminated. These sites of concern should be included in the environmental planning document in an effort to assist the project stakeholders in reducing or avoiding impacts to these sites. Sites of concern may include,

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
GEOTECHNICAL ENGINEERING UNIT
1589 MAIL SERVICE CENTER
RALEIGH NC 27699-1589

Telephone: 919-707-6850
Fax: 919-250-4237
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH NC

but are not limited to sites with concerns regarding, underground storage tanks (USTs), dry cleaners, industry, hazardous waste, regulated landfills, and unregulated dumpsites.

Findings

One hundred and eleven (111) sites of concern were identified within the proposed study area, including:

- 1) Ninety-two (92) sites with petroleum-related, UST concerns for which *low* monetary and scheduling impacts are anticipated,
- 2) Nine (9) sites with drycleaners for which *moderate* monetary and scheduling impacts resulting from are anticipated, and
- 3) Ten (10) industrial sites, for which *low to high* monetary and scheduling impacts are anticipated. In particular, the three (3) sites for which *high* monetary and scheduling impacts are anticipated comprise a single superfund site: Academy Steel Drum. High geoenvironmental impacts are anticipated because intensive further investigation is required before acquisition recommendations are issued for a superfund site.

See the following table and figure for details.

Please note that discovery of additional sites not recorded by regulatory agencies and not reasonably discernible during the project reconnaissance may occur. The GeoEnvironmental Section should be notified immediately after discovery of such sites so their potential impact(s) may be assessed.

If there are questions regarding the geoenvironmental issues, please contact me, at 919-707-6859.

cc:

John Pilipchuk, LG, PE, State Geotechnical Engineer

Matt Lauffer, PE, Hydraulics Assistant Unit Head

Brain Hanks, PE, State Structures Engineer

Dale Burton, PE, PLS, Ass't State L&S Engineer Carl Barclay, PE, State Utilities Manager

Rick W Baucom, PE, Division Construction Engineer

Kenny Hill, Division Right of Way Agent

Eric Williams, PE, Geotechnical Regional Manager

Kevin Miller, PG, Regional Geological Engineer

Steve Grimes, ROW Unit, Negotiations, State Negotiator

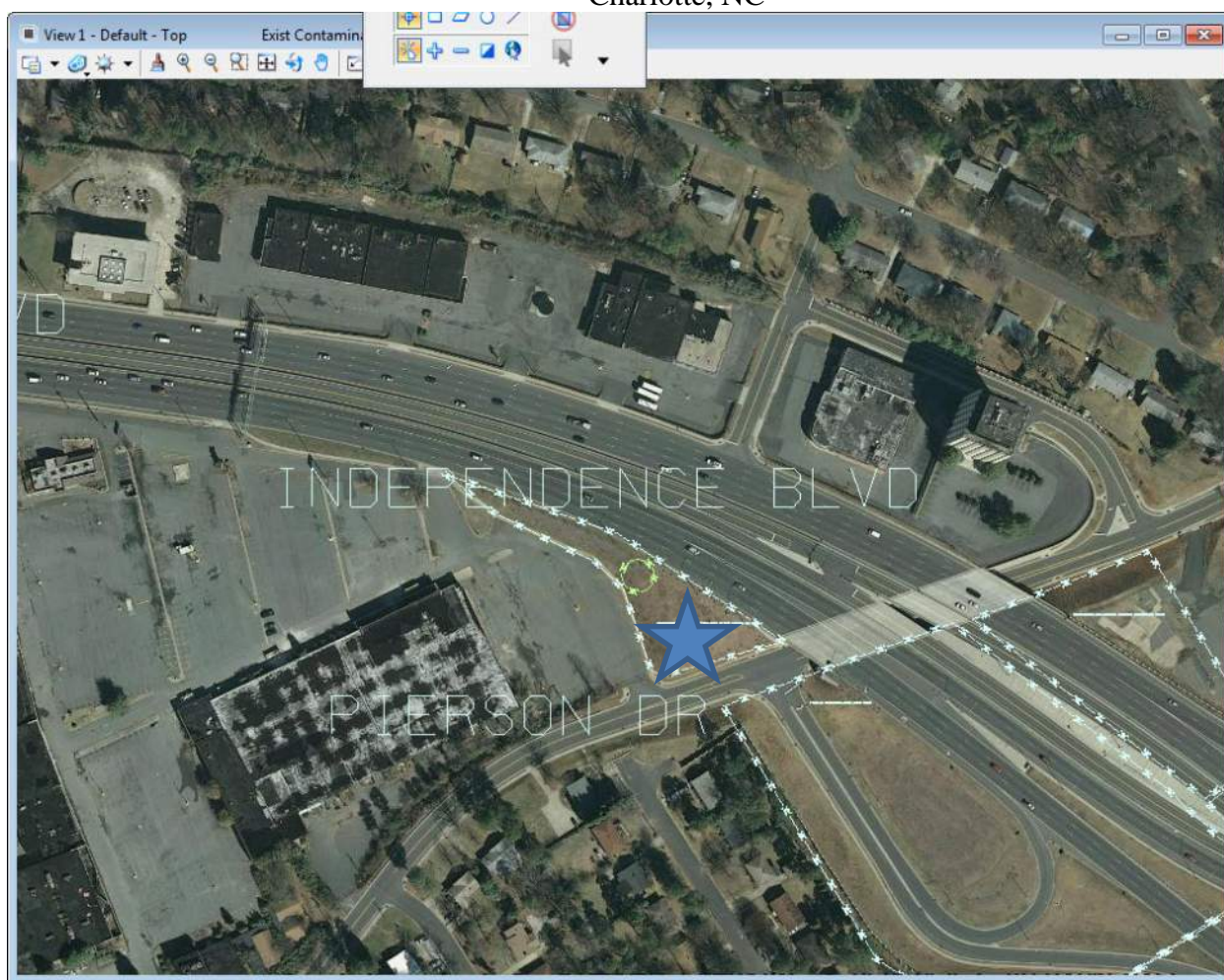
row-notify@ncdot.gov

roadwaydesign@ncdot.gov

File

Sites of Concern

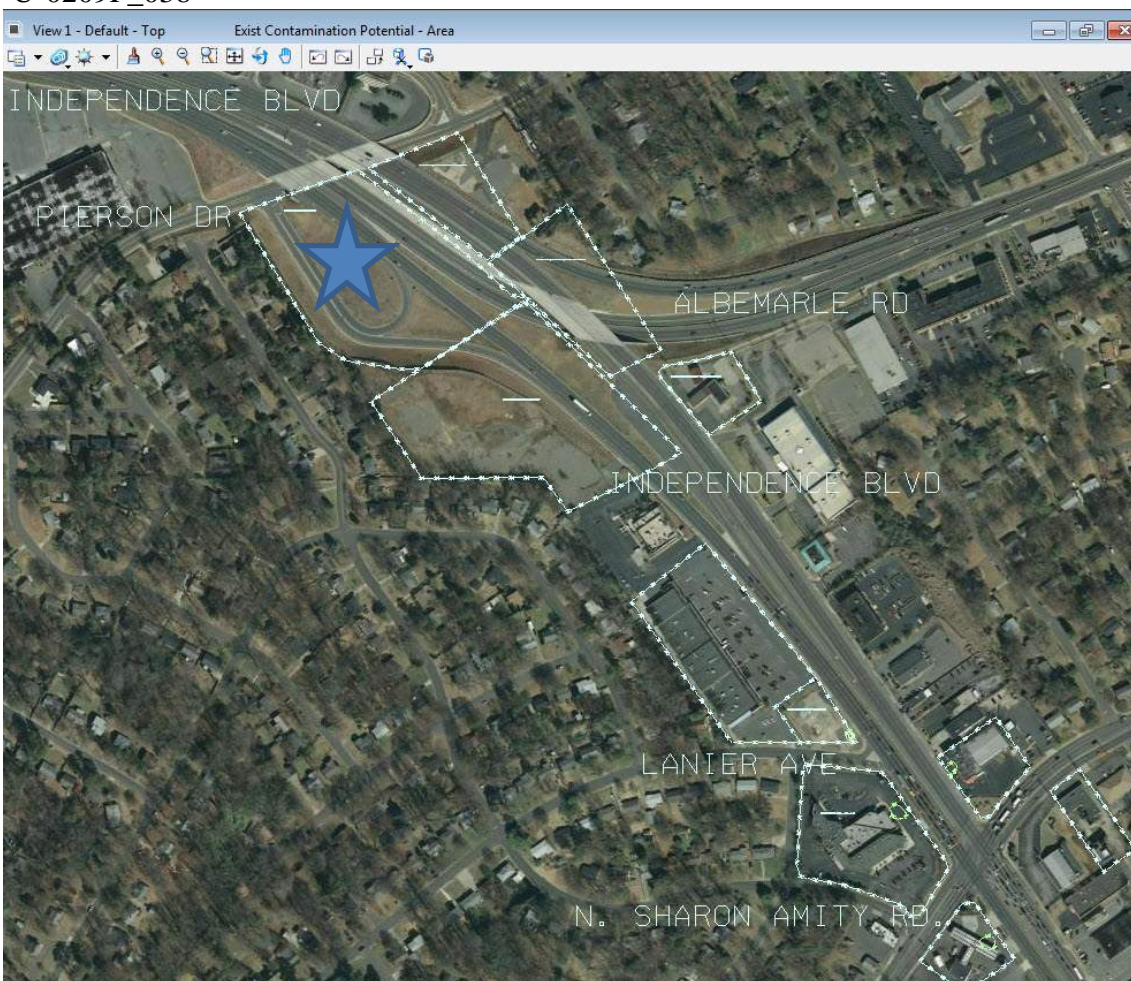
- | | |
|---|---|
| 1) Property Name
NCDOT ROW/
Former Ace Auto Brokers
Former Shell gas station
4016 E. Independence Blvd.
Charlotte, NC | Property Owner: (Site 25 in U-5526)
NCDOT/
Formerly The Executive Building Company Property |
| Facility ID: NA
Incident: NA
NCDOT Parcel Number:
U-0209F_024 | UST Owner:
Former Ace Auto Brokers
Former Shell gas station
4016 E. Independence Blvd.
Charlotte, NC |



Aerial from NCDOT

This former Shell gas station was located in the current Right of Way at the southwestern intersection of E. Independence Blvd. and Pierson Dr. A PSA was conducted, report dated 12/22/2000, a UST closure report was issued 7/23/2002. It is unclear if contaminated soil remains on site after construction of the current footprint of E. Independence Blvd. **This site is anticipated to present low geoenvironmental impacts.**

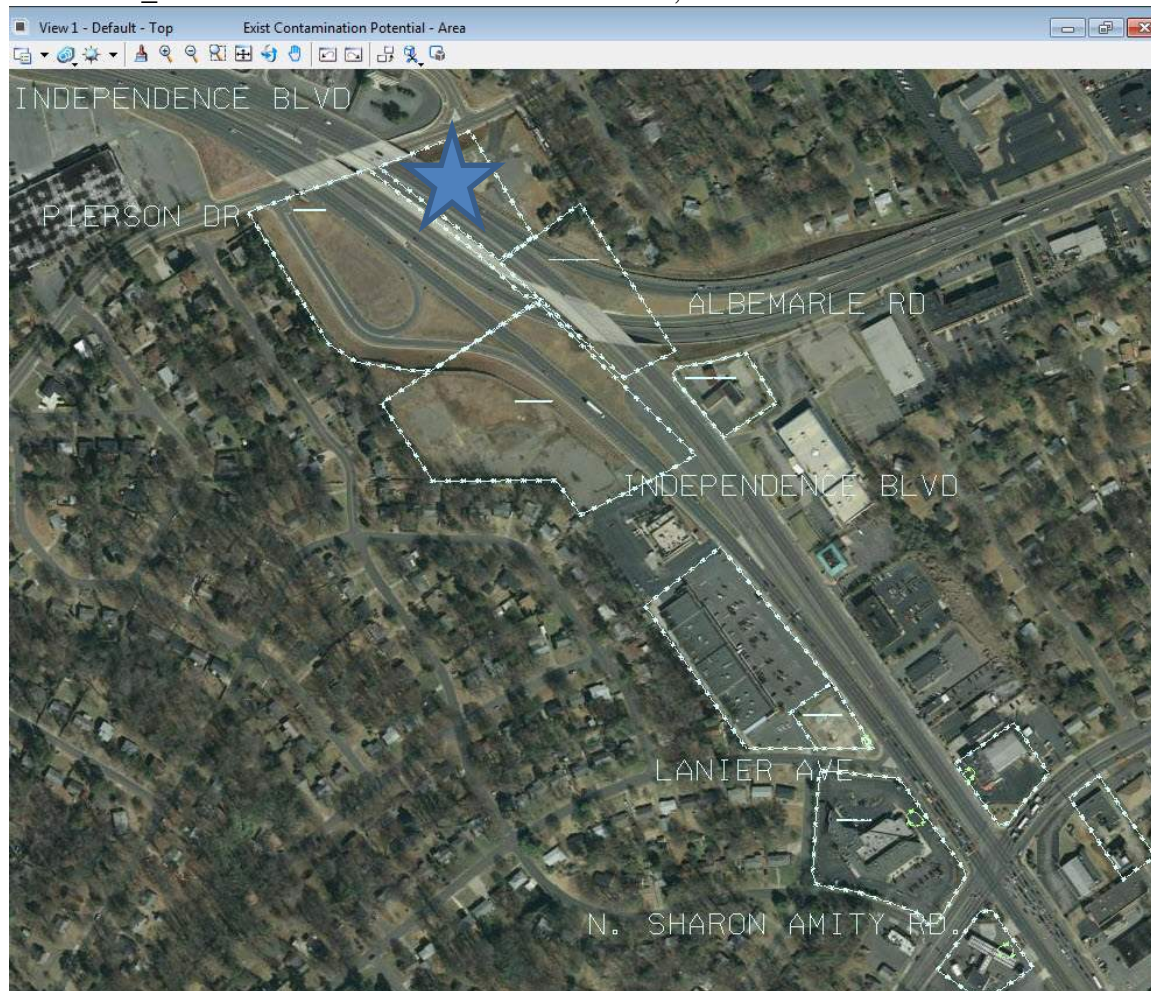
2)	Property Name Former Frank LaPoint Hyundai Dealership 4100 E. Independence Blvd. Charlotte, NC 28205	Property Owner: (Site 26 in U-5526) NCDOT
	Facility ID: 0-013414 (MO-4303; MO-6125) Incident: 23171 & 13886 NCDOT Parcel Number: U-0209F_038	Hydraulic Lift Owner: Frank LaPoint, Hyundai Dealership 4100 E. Independence Blvd. Charlotte, NC 28205



Aerial from NCDOT

This former parcel is at the southern quadrant of the intersection of eastbound Independence Blvd. and Pierson Dr. It was formerly a car dealership with two waste oil USTs removed from behind the building c. 1993. Additional soil was excavated from the former tank pit in 1995. Clean UST Closure samples were collected c. 1995. Two USTs associated with the hydraulic lifts remained under the building upon issuing of ROW Recommendations. It is unclear if the USTs were removed. A Notice of Regulatory Requirements (NORR) addressed to NCDOT was dated 5/15/2001. A No Further Action letter (NFA) was issued by NCDENR dated 10/5/2001. Soil contamination report dated 8/8/2001 documented removal of seven hydraulic lifts, and soil excavation. It is unclear if contaminated soil or USTs remains on site. Reports are on file with NCDENR's Mooresville Regional Office. **This site is anticipated to present low geoenvironmental impacts.**

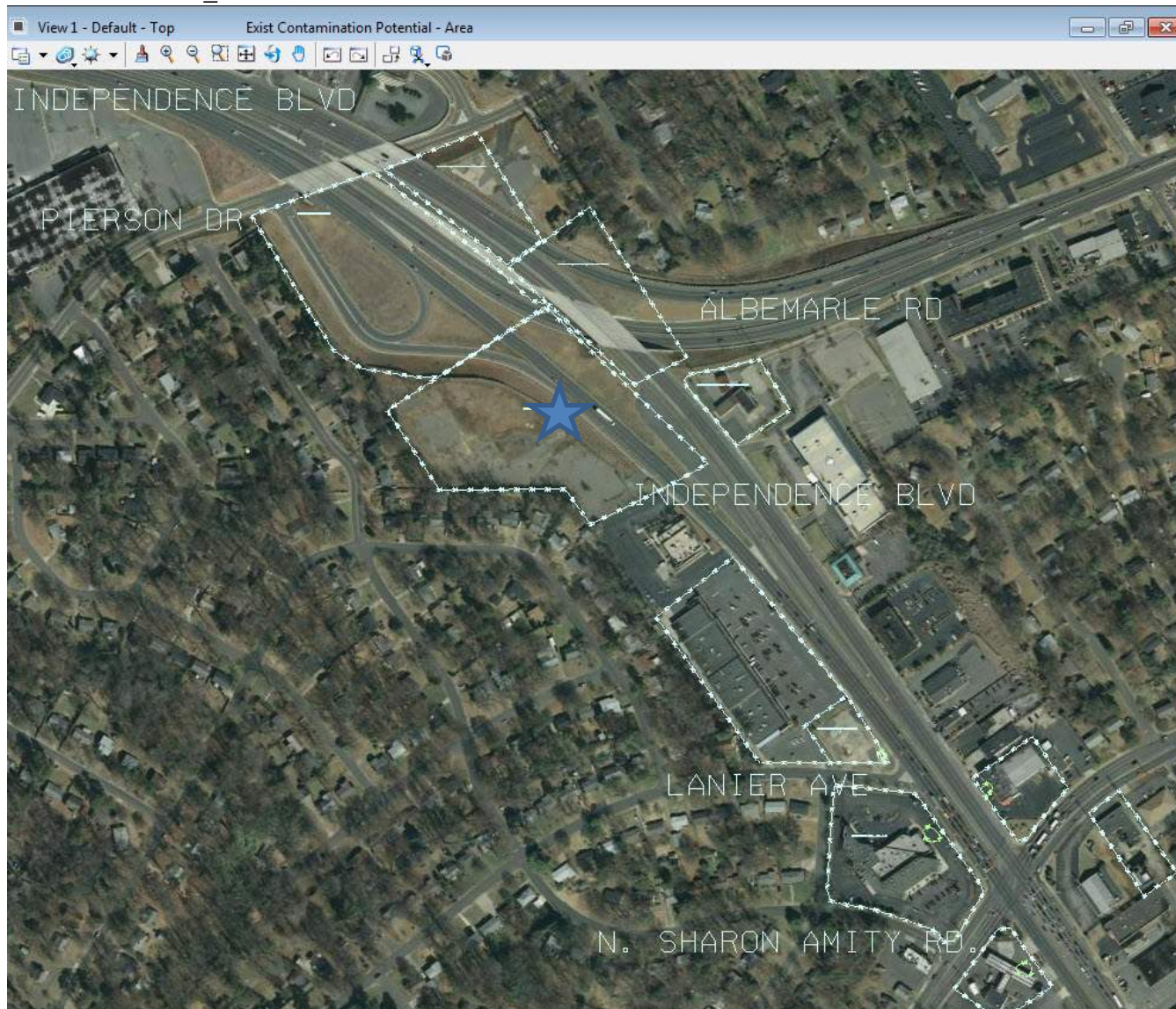
-
- 3) **Property Name**
U-Haul of W. NC/NCDOT ROW
4101 E. Independence Blvd.
Charlotte, NC
- Facility ID:** 0-014196
Incident: 15687
NCDOT Parcel Number:
U-0209F_037
- Property Owner: (Site 27 in U-5526)**
U-Haul of W. NC (remnant)/
NCDOT (Right of Way)
- UST Owner:**
U-Haul of W. NC
4101 E. Independence Blvd.
Charlotte, NC
-



Aerial from NCDOT

This parcel is located at the northern quadrant of the intersection of westbound E. Independence Blvd. and Pierson Dr. The dimensions of the former parcel are unclear. Apparently, a portion of the parcel remains under ownership of U-Haul of W. NC. This former U-Haul location had oil water separator(s) removed, as documented in a closure report from S&ME dated 8/16/2002. No evidence of a release was documented. Reportedly, four USTs were registered for this property: two 8,000 gasoline, one 8,000 diesel and one 8,000 heating. DENR assigned this site an Incident after the 1993 UST closure. Additional soil was removed from the tank pit area to obtain a clean closure. Reports are on file with NCDENR's Mooresville Regional Office for this parcel. It is unclear if contaminated soil remains on site. **This site is anticipated to present low geoenvironmental impacts.**

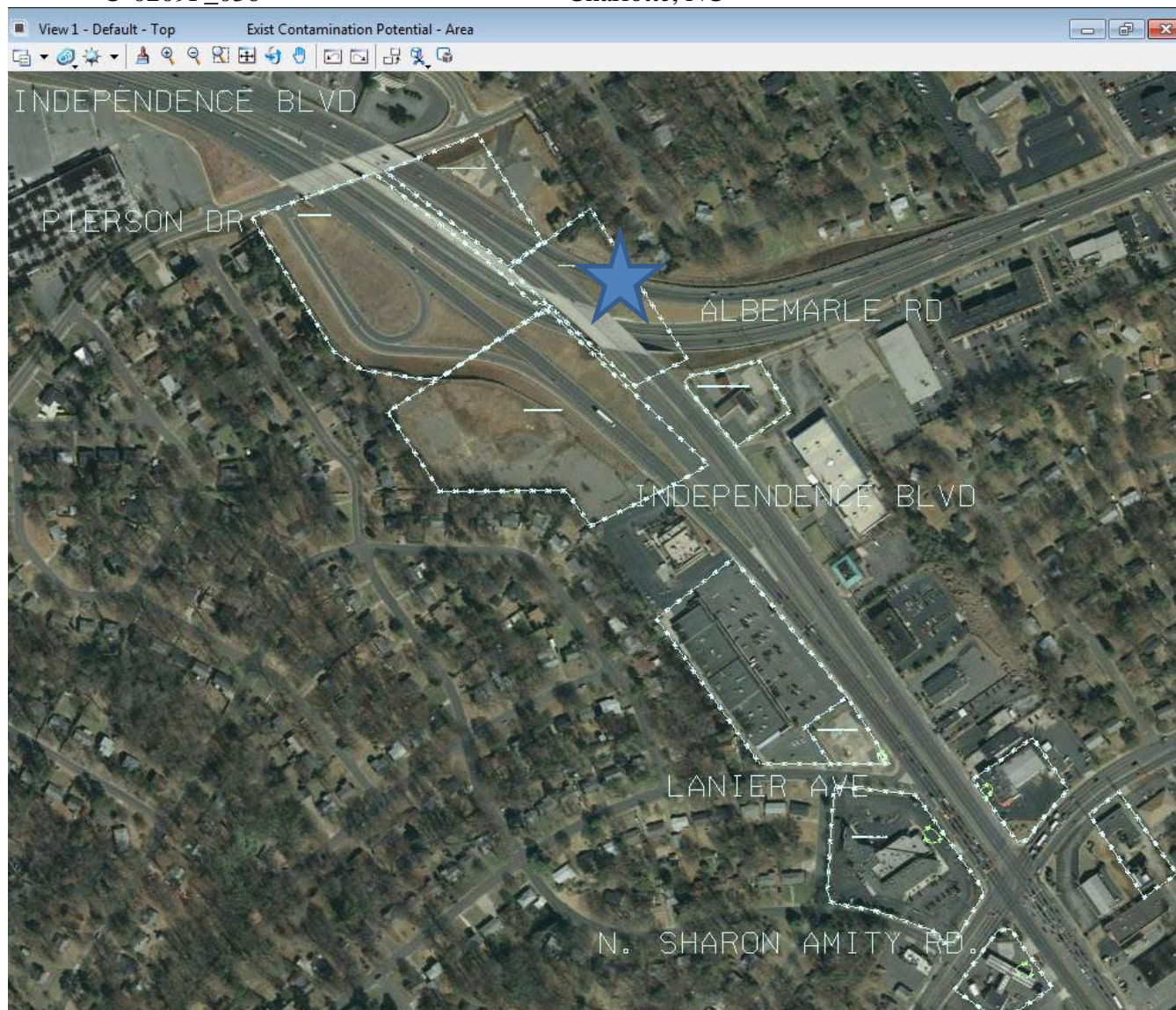
-
- 4) **Property Name**
NCDOT ROW/Former Piece Goods
Shope, Inc.
4220 E. Independence Blvd.
Charlotte, NC
- Property Owner: (Site 28 in U-5526)**
NCDOT
- Facility ID: NA**
Incident: NA
NCDOT Parcel Number:
U-0209F_043
- UST Owner:**
NA
-



Aerial from NCDOT

This parcel is located on the southern side of E. Independence Blvd., southwest of Albemarle Rd. A PSA was conducted, report dated 5/28/1999, that discovered no USTS, and little contamination. **This site is anticipated to present low geoenvironmental impacts.**

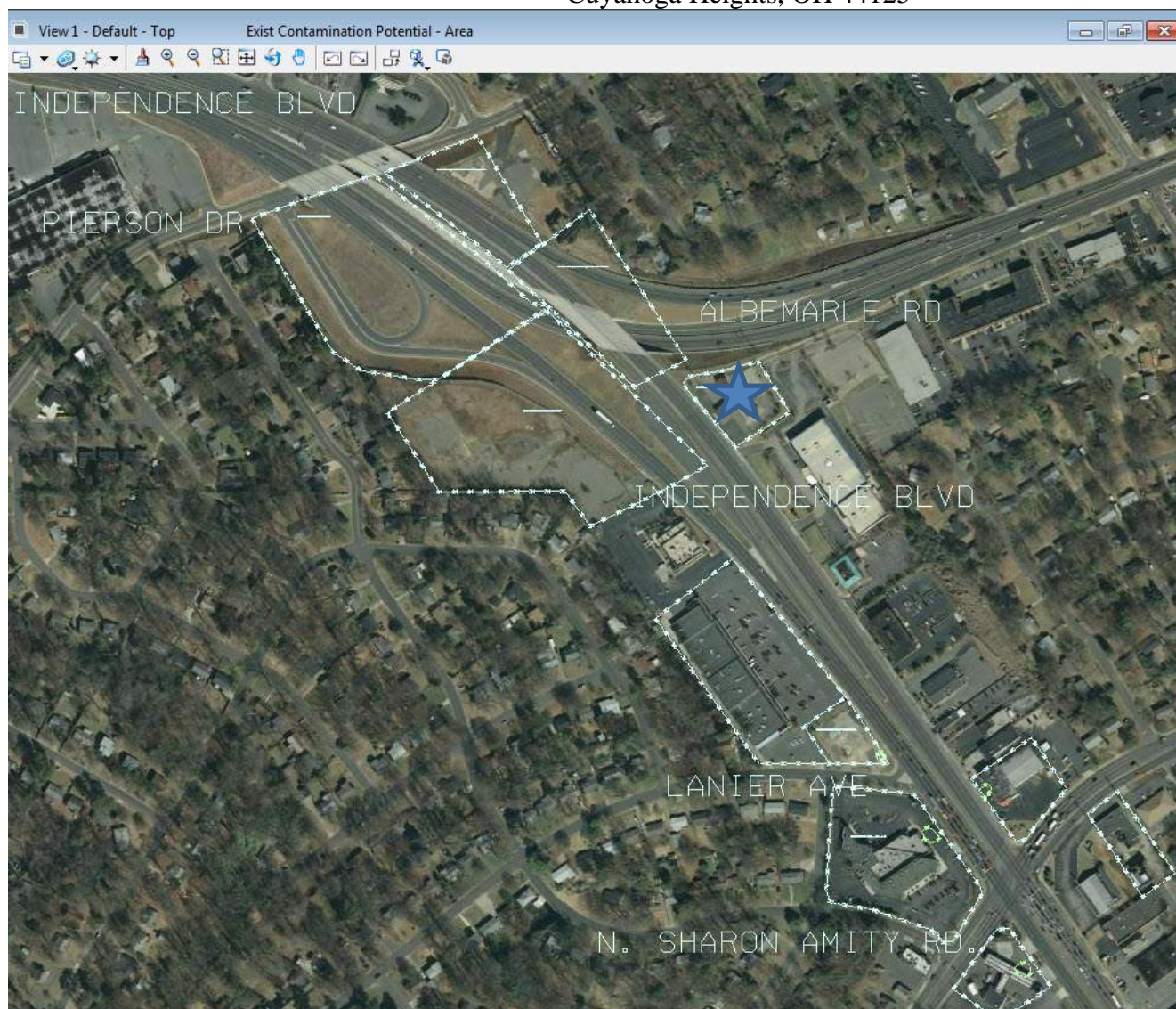
-
- 5) **Property Name**
NCDOT ROW/Former Ron McManus
Property Courtesy Auto Sales
4133 E. Independence Blvd.
Charlotte, NC
- Property Owner: (Site 29 in U-5526)**
NCDOT
- Facility ID:** (MO-0705)
Incident: NA
NCDOT Parcel Number:
U-0209F_036
- UST Owner:**
Courtesy Auto Sales
4133 E. Independence
Charlotte, NC
-



Aerial from NCDOT

This parcel is located at the northern quadrant of the intersection of westbound E. Independence Blvd. and Albemarle Rd. Dimensions of the former parcel are unclear. The entire parcel may have been acquired by NCDOT. The former Samson's used auto sales location had four USTs removed, as documented in a letter from Nationwide Tank and Environmental Services, Inc., dated 1/ 27/1992. Confirmatory samples showed no sign of soil contamination. It is unclear if contaminated soil or USTs remains on site. **This site is anticipated to present low geoenvironmental impacts.**

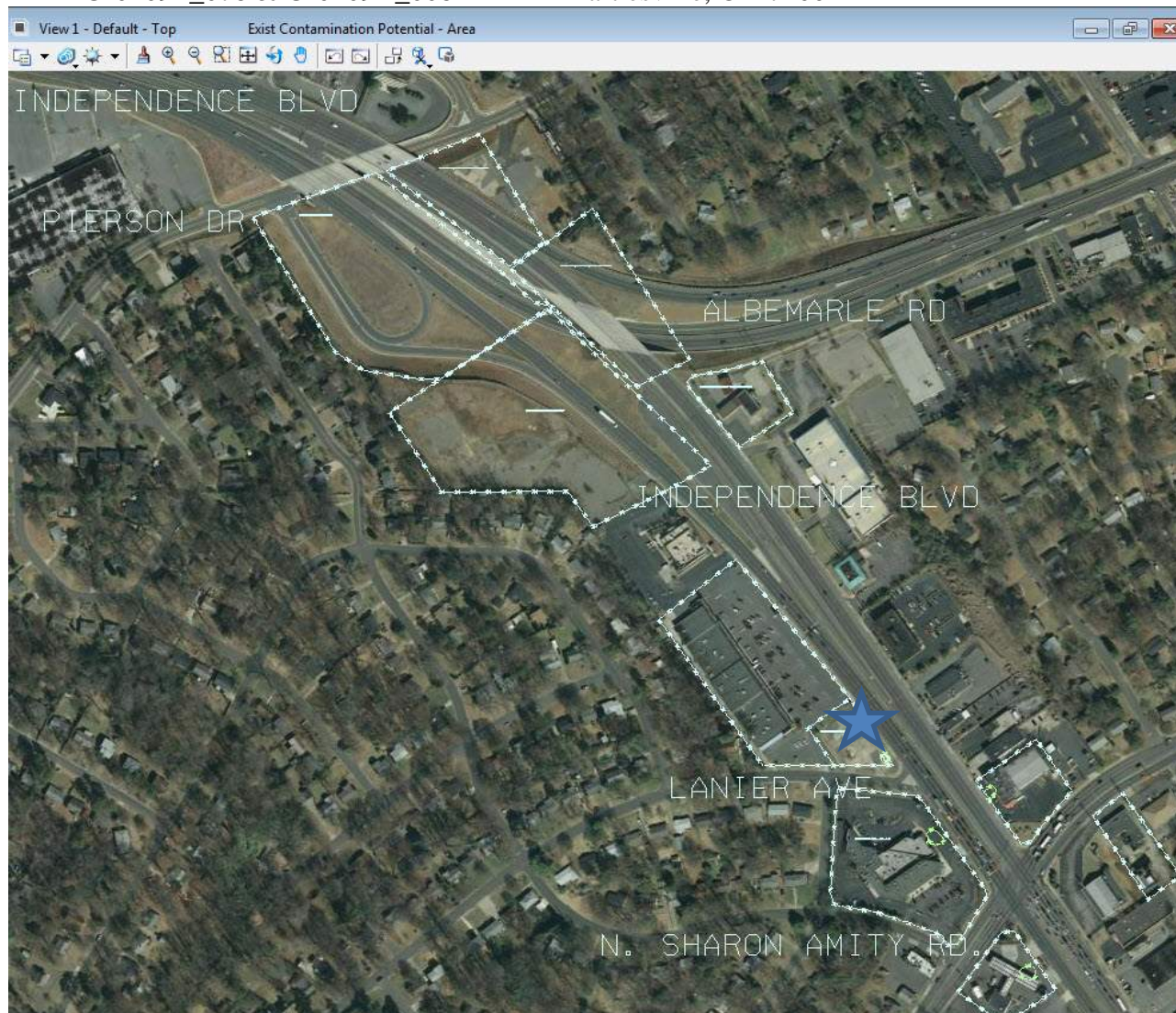
-
- 6) **Property Name**
American Oil Property
4301 E. Independence Blvd.
Charlotte, NC
- Facility ID:** 0-013792 (MO-3624)
Incident: 9187
NCDOT Parcel Number:
U-0209F_060
- Property Owner: (Site 30 in U-5526)**
Terry Simon
4118 N. Sharon Amity Rd.
Charlotte, NC 28205
- UST Owner:**
AMOCO Oil Co. Attn: Eric Kryska
375 N. Ridge Rd. Suite 600
Atlanta GA
AKA BP Products of North America
Greg Frisch 4850 E. 49th St, MBC-3 Rm 103B
Cuyahoga Heights, OH 44125
-



Aerial from NCDOT

This parcel is located at the northeastern corner of the intersection of Albemarle Rd. and E. Independence Blvd. Seven USTs were reportedly closed c. 1995. Soil contamination reportedly extended to the northern property line. It is unclear if contaminated soil or USTs remains on site. A DENR Incident was assigned c. 1992. **This site is anticipated to present low geoenvironmental impacts.**

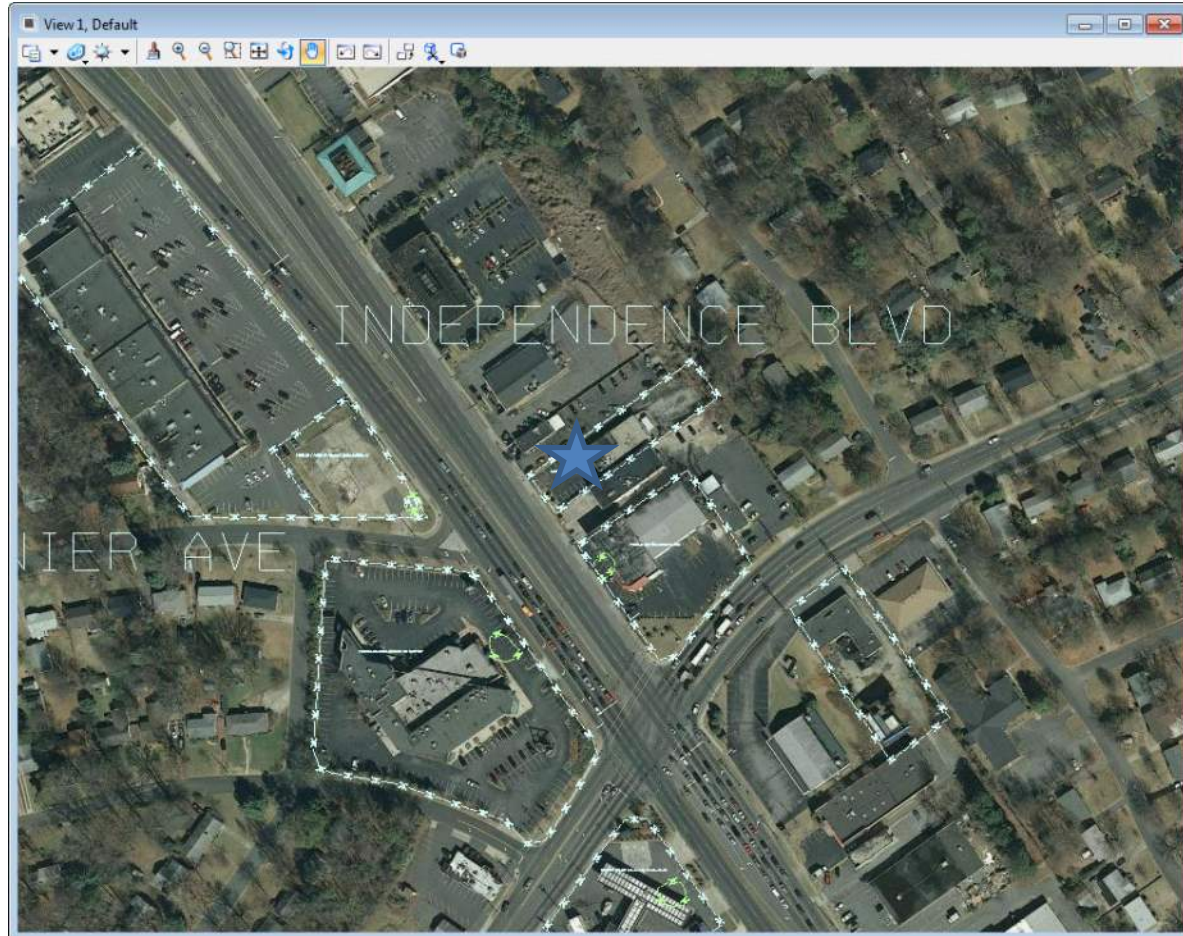
7)	Property Name Lincoln Savings & Loan Address Unavailable (per Co GIS) AKA 4430 E. Independence Blvd. Charlotte, NC	Property Owner: (Site 31 in U-5526) City of Charlotte 600 E. 4th St. Charlotte, NC 28202
	Facility ID: 0-013801 (MO-6559) Incident: 27107 NCDOT Parcel Number: U-0209F_078 & U-0209B_008	UST Owner: Phillips 66 Company/Attn Larry Harjo 686 Adams Bldg. Bartlesville, OK 74004



Aerial from NCDOT

This parcel is located at the northwestern corner of the intersection of Lanier Ave. and E. Independence Blvd. Five USTs were reportedly installed c. 1964 and closed c. 1989. A PSA was conducted for U-0209F by Ogden Environmental and Engineering Services Co., dated 12/22/2000. A subsequent PSA was conducted by AMEC for U-0209B_008, dated 8/20/2010 for a larger ROW acquisition. Evidence was reported of an existing or former UST bed, and localized soil contamination. It is unknown if USTs remain in the UST bed, as geophysics was inconclusive and the investigation did not extend beyond the proposed ROW. **This site is anticipated to present low geoenvironmental impacts.**

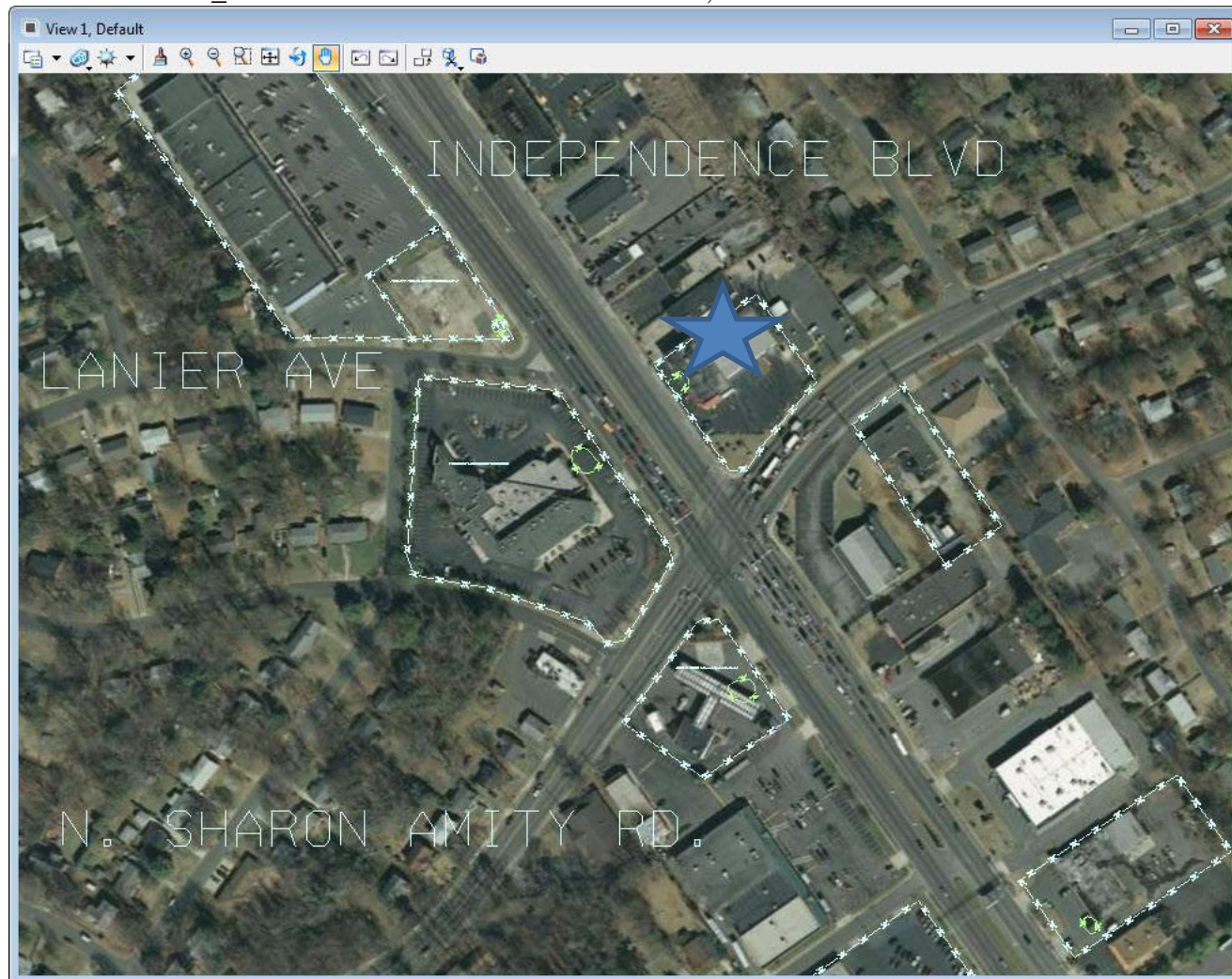
-
- 8) **Property Name**
The Speaker Doctor/ Little Drum
Studio
4509 E. Independence Blvd.
Charlotte, NC
- Property Owner: (Site 32 in U-5526)**
Boulevard LLC
4509 E. Independence Blvd.
2231 Richardson Dr.
Charlotte, NC 28211
- Facility ID:** NA
Incident: NA
NCDOT Parcel Number:
U-0209B_011
- UST Owner:**
NA



Aerial from NCDOT

A geophysical investigation was performed By Schnabel, Report on Geophysical Surveys dated July 30, 2010. No USTs were identified in the proposed ROW. **This site is anticipated to present low geoenvironmental impacts.**

9)	Property Name Floors for Less/Independent Auto Sales 4521 E. Independence Blvd. Charlotte, NC	Property Owner: (Site 33 in U-5526) Oxford Homes LLC 4521 E. Independence Blvd. Charlotte, NC
	Facility ID: NA Incident: NA NCDOT Parcel Number: U-0209B_012	UST Owner: Oxford Homes LLC 4521 E. Independence Blvd. Charlotte, NC



Aerial from NCDOT

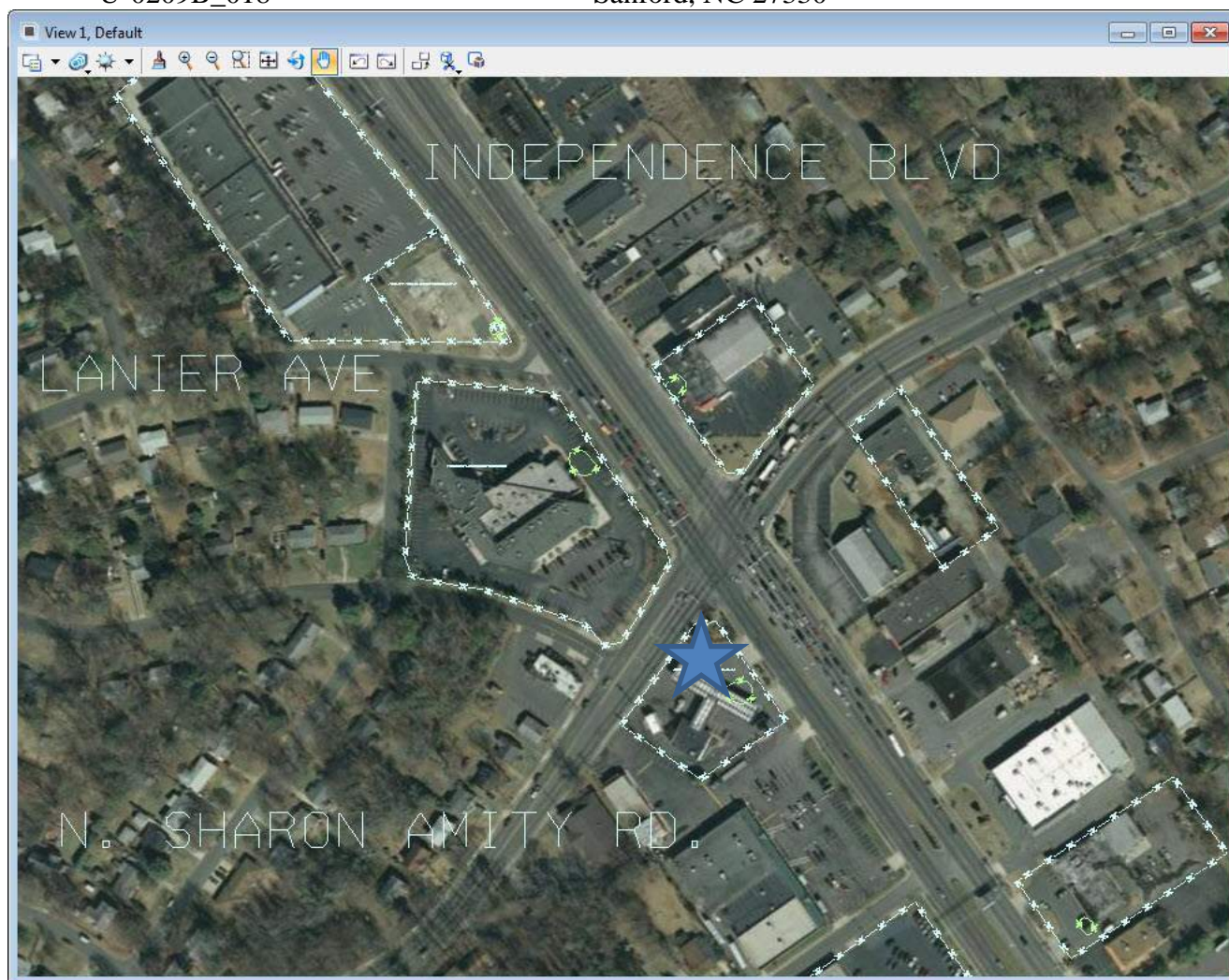
This parcel is located at the northern quadrant of N. Sharon Amity Rd. and E. Independence Blvd. Historical aeriels indicate that the property functioned as a gas station in 1966. A UST(s) may be present because product lines were discovered during construction, report dated 9/13/13 by AMEC, within the PUE along N. Sharon Amity Rd. Construction between the building and E. Independence Blvd. is evident in 2014 Google Streetview. A PSA was conducted by AMEC dated August 18, 2010. USTs and contaminated soil may be present. **This site is anticipated to present low geoenvironmental impacts.**

10)	Property Name NCDOT/ Former B.V. Belk Investments Property 4444 E. Independence Blvd. Charlotte, NC 28205	Property Owner: (Site 34 in U-5526) NCDOT
	Facility ID: NA Incident: NA NCDOT Parcel Number: U-0209B_017	UST Owner: B.V. Belk Investments Property 4444 E. Independence Blvd. Charlotte, NC 28205



Photo from AMEC PSA viewing southeastward along US 74 from the northwestern portion of the site. This site is reportedly NCDOT ROW. This former parcel was located at the western quadrant of the intersection of N. Sharon Amity Rd. and E. Independence Blvd. Historical aeriels indicate that the property functioned as a gas station c. 1966. A PSA was conducted by AMEC, report dated 8/20/2010. No USTs were discovered. Limited soil contamination is documented to be present. **This site is anticipated to present low geoenvironmental impacts.**

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| 11) | Property Name
NCDOT/Former National Rental
Property
2583-2599 N Sharon Amity Rd. AKA
4600 E. Independence Blvd.
Charlotte, NC 28205 | Property Owner: (Site 35 in U-5526)
NCDOT |
| | Facility ID: 0-034144
Incident: 36323
NCDOT Parcel Number:
U-0209B_018 | UST Owner:
The Pantry, Renee Thomas
1801 Douglas Dr.
Sanford, NC 27330 |
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Aerial from NCDOT

This former parcel was located on the western side of E. Independence Blvd. southeast of the intersection with N. Sharon Amity Rd. Revised Right of Way Recommendations were issued May 15, 2012. The Pantry Inc. (Pantry#3921) contracted with Withers and Ravenel and A&D Environmental to remove the registered fuel tanks from the Petro Express in Charlotte. Withers and Ravenel removed three fuel tanks and approximately 2,700 tons of soil from the property in February 2012. The March 13, 2012, Initial Abatement Action Report is on file. A PSA was conducted, report dated 8/23/2010 for U-0209B. The report also documents that petroleum contaminated soil remains on the property. **This site is anticipated to present low geoenvironmental impacts.**

12)	Property Name Tire King 4701 E. Independence Blvd. Charlotte, NC 28212 Facility ID: 0-001911 Incident: 19185; 8122 NCDOT Parcel Number: U-0209B_078	Property Owner: (Site 36 in U-5526) Kenneth D Sauder 100 Bluff View Dr. Belleair Bluffs, FL 33770-1322 UST Owner: General Tire Realty Corp 1 General Street Akron, OH 44329
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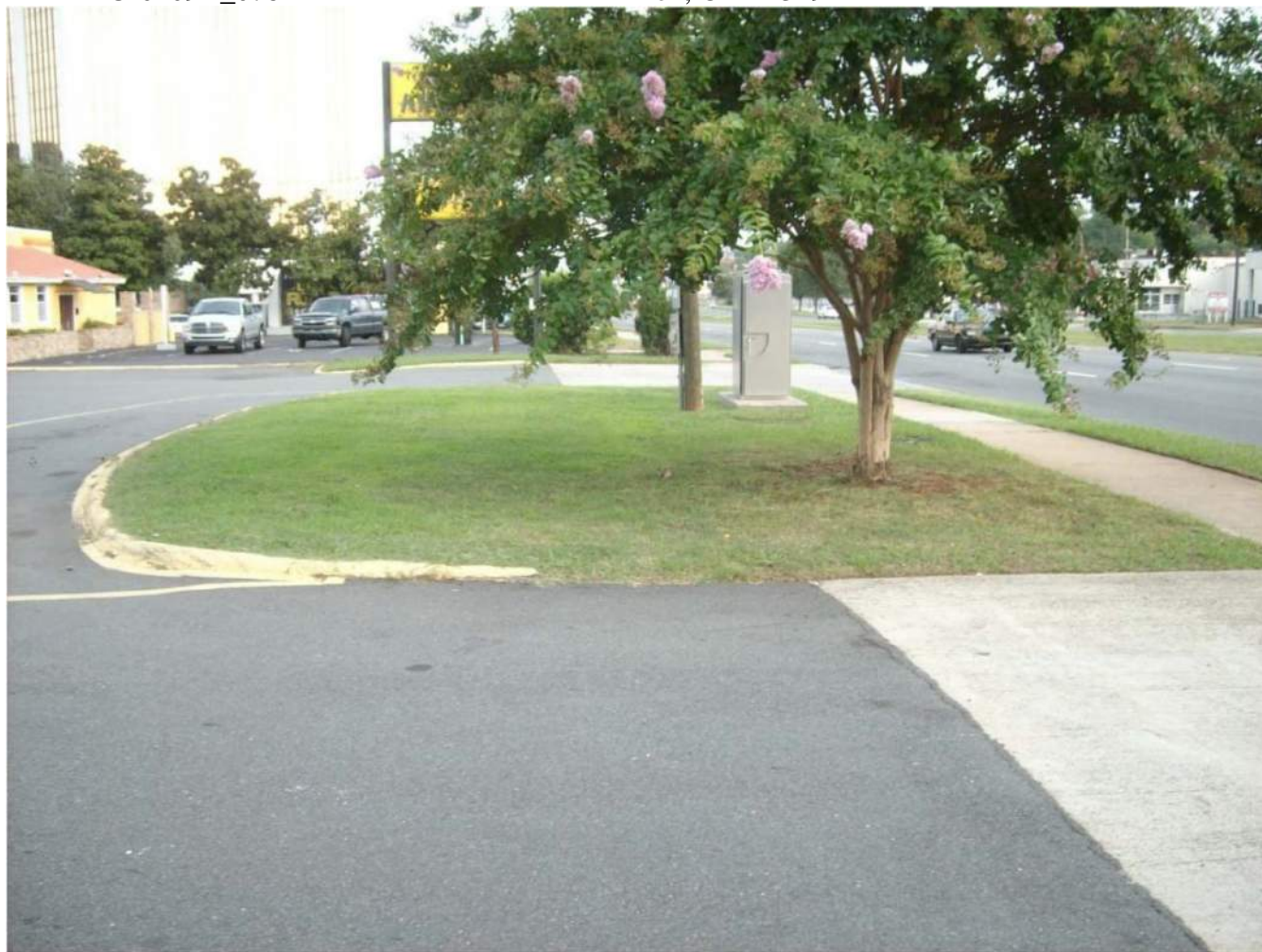


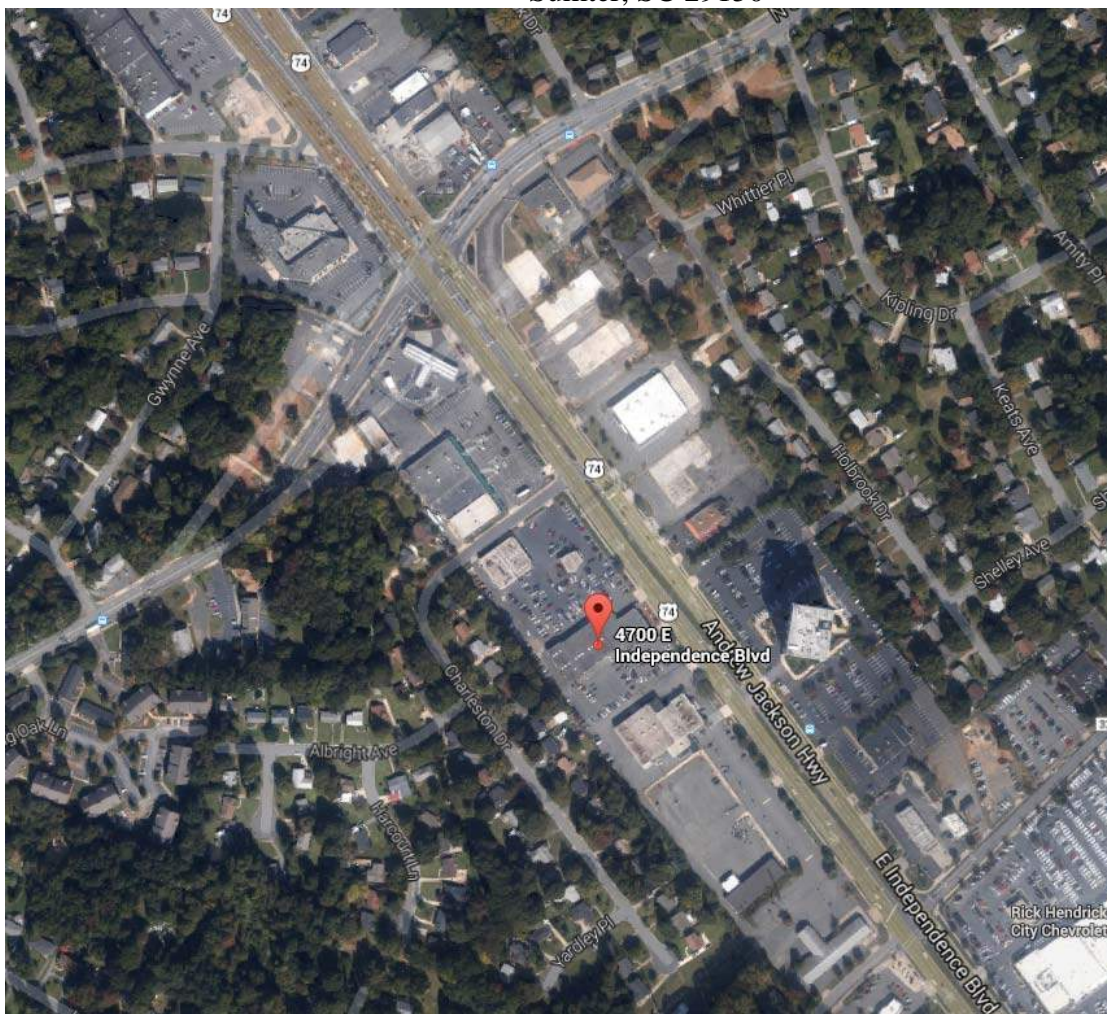
Photo from AMEC PSA Viewing east from the south western corner of the site.

This facility reportedly is or was a repair shop. It is located on the northeastern side of Independence Blvd. southeast of N. Sharon Amity Rd. Eleven USTs were reportedly removed. A PSA was conducted (with boring locations strategically placed over proposed catch basins), dated August 19, 2010. A geotechnical report was prepared by Ethan Caldwell, the Geotechnical Project Manager for NCDOT, on October 9, 2008 as a Hazardous Material Evaluation. The location of the former UST tank bed was not identified. **This site is anticipated to present low geoenvironmental impacts.**

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| 13) | Property Name
Crown Oldsmobile
4700 E. Independence Blvd.
Charlotte, NC 28212

Facility ID: 0-023298; 0-021209
Incident: 27123; 8122
NCDOT Parcel Number:
U-0209B_081 | Property Owner: (Site 37 in U-5526)
Jordon Motors Inc.
359 Riverside Dr.
Greenville, SC 29605

UST Owner: Jordon Volkswagen
6111 E. Independence Blvd.
CHARLOTTE, NC 28212
AKA Southeastern Chemical & Solvent
170 South La Fayette Blvd
Sumter, SC 29150 |
|-----|--|---|
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Aerial from Google Maps

This facility reportedly and formerly operated as a car dealer and repair shop. It is located on the southeast quadrant of Charleston Dr. and E. Independence Blvd. According to the UST section registry, six USTs were removed under Facility ID #: 0-021209. These USTs were listed as being used for paint thinner. Four USTs were removed under Facility ID #: 0-023298. These USTs were reportedly used for petroleum and other organic material. Locations of the former USTs tank beds were not identified. A site map is on file dated March 11, 1999 by Turner, Hart & Hickman. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts to the project.**

14)	Property Name Friendly Dodge 4800 E. Independence Blvd. Charlotte, NC 28212	Property Owner: (Site 38 in U-5526) Richard and Constance Keffer 8200 E. Independence Blvd. CHARLOTTE, NC 28227
	Facility ID: 0-013588	UST Owner: Richard Keffer
	Incident: NA	4800 E. Independence Blvd.
	NCDOT Parcel Number: U-0209B_083	Charlotte, NC 28227



View toward the southwest from Google Streetview

This facility reportedly operates as a car dealer. It is located on the southern side of E. Independence Blvd. According to the UST section registry two USTs were reportedly removed in 1988. Locations of the former USTs tank beds were not identified. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts.**

15)	Property Name Circle K 4921 E. Independence Blvd. Charlotte, NC 28212 Facility ID: 0-014394 Incident: 20990 NCDOT Parcel Number: U-0209B_085	Property Owner: (Site 39 in U-5526) Cole CK Portfolio II LLC PO Box 52085 Phoenix, AZ 85072 UST Owner: Circle K Stores Inc. 2440 Whitehall Park Dr., Suite 800 Charlotte, NC 28273
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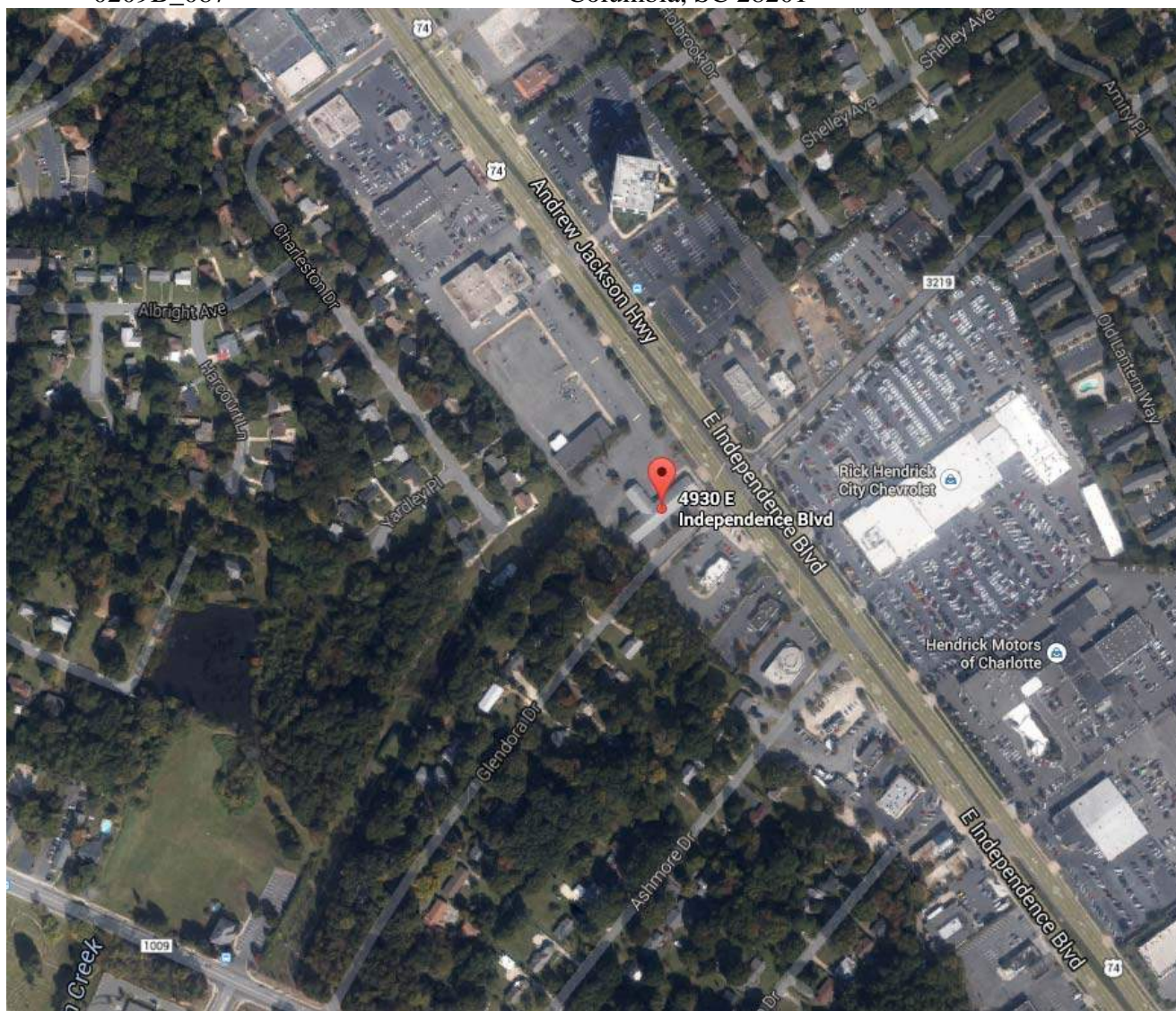
View toward the north from Google Streetview

This facility reportedly operates as a gas station and convenient store. A UST bed is located approximately 15 feet from the edge of pavement of Farmingdale Dr., 80 feet from the edge of pavement of E. Independence Blvd. According to the UST Section registry, four USTs are reportedly registered. The facility is located on the northeastern corner of Farmingdale Dr. and E. Independence Blvd. A PSA, dated August 23, 2010, was prepared by AMEC. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts.**

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| 16) Property Name
Constan (sic) Car Wash
4930 E. Independence Blvd.
Charlotte, NC 28212

Facility ID: 0-017278
Incident: 10774
NCDOT Parcel Number: U-0209B_087 | Property Owner: (Site 40 in U-5526)
Richard and Constance Keffer
8200 E. Independence Blvd.
Charlotte, NC 28227

UST Owner:
Stance Inc.
PO Box 93
Columbia, SC 28201 |
|--|--|
-



Aerial from Google Maps

This facility reportedly operates as a car dealer. It is located on the southwest quadrant of Charleston Drive and Independence. According to the UST section registry three USTs were removed in 1991. Locations of the former USTs tank beds were not identified. A PSA, dated August 20, 2010, was prepared by AMEC. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts.**

17)	Property Name City Chevrolet 5101 E. Independence Blvd. Charlotte, NC 28212	Property Owner: (Site 41 in U-5526) Hendrick Automotive Group 6000 Monroe Rd. Suite 100 Charlotte, NC 28212-6178
	Facility ID: 0-014669	UST Owner: City Chevrolet
	Incident: Number Not Assigned	5101 E. Independence Blvd.
	NCDOT Parcel Number: U-0209B_093	Charlotte, NC 28212



View toward the northeast from Google Streetview

This facility is reportedly a car dealership and repair shop. According to the UST registry one UST is reportedly on site and three USTs were removed from the facility in 1991 and 1997. Locations of the tank beds were not identified. A DENR Incident with no number has been assigned. The facility is located on the southeastern corner of Farmingdale Dr. and E. Independence Blvd. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts.**

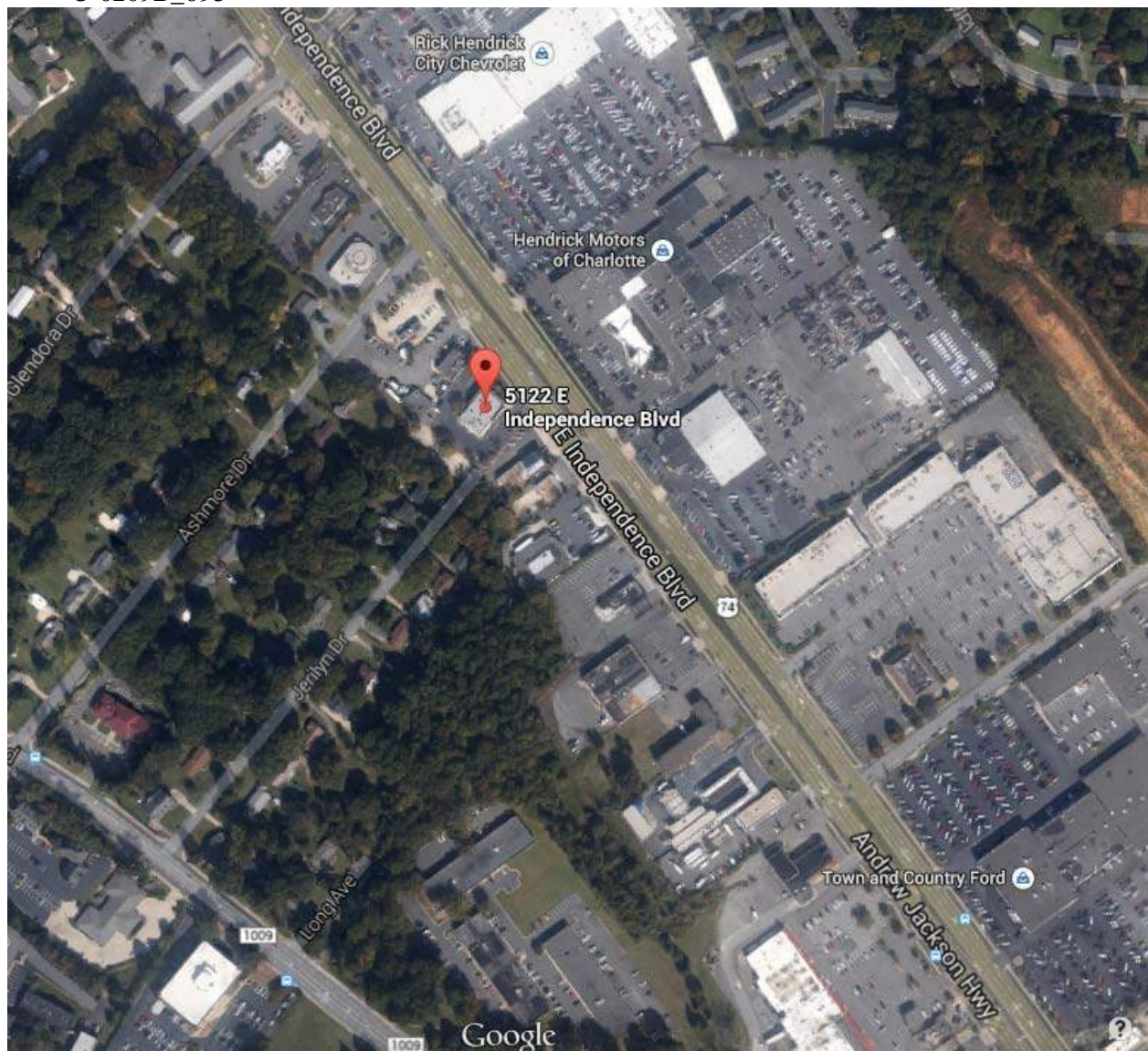
18)	Property Name Beck Mercedes 5141 E. Independence Blvd. Charlotte, NC 28212	Property Owner: (Site 42 in U-5526) Corps Rim MJM & AAM Investment 5141 E. Independence Blvd. Charlotte, NC 28212-6168
	Facility ID: 0-013715	UST Owner: Beck Imports
	Incident: 15865	5141 Independence
	NCDOT Parcel Number: U-0209B_094	Charlotte, NC 28212



Image from Google Streetview, View toward the northeast

This facility reportedly operates as a car dealer and repair shop. The site is located on the northeast side of E. Independence Blvd. According to UST section registry three USTs were removed in 1991. Locations of the former USTs tank beds were not identified. A site map is on file dated September 4, 1991 prepared by Spatco Environmental. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts.**

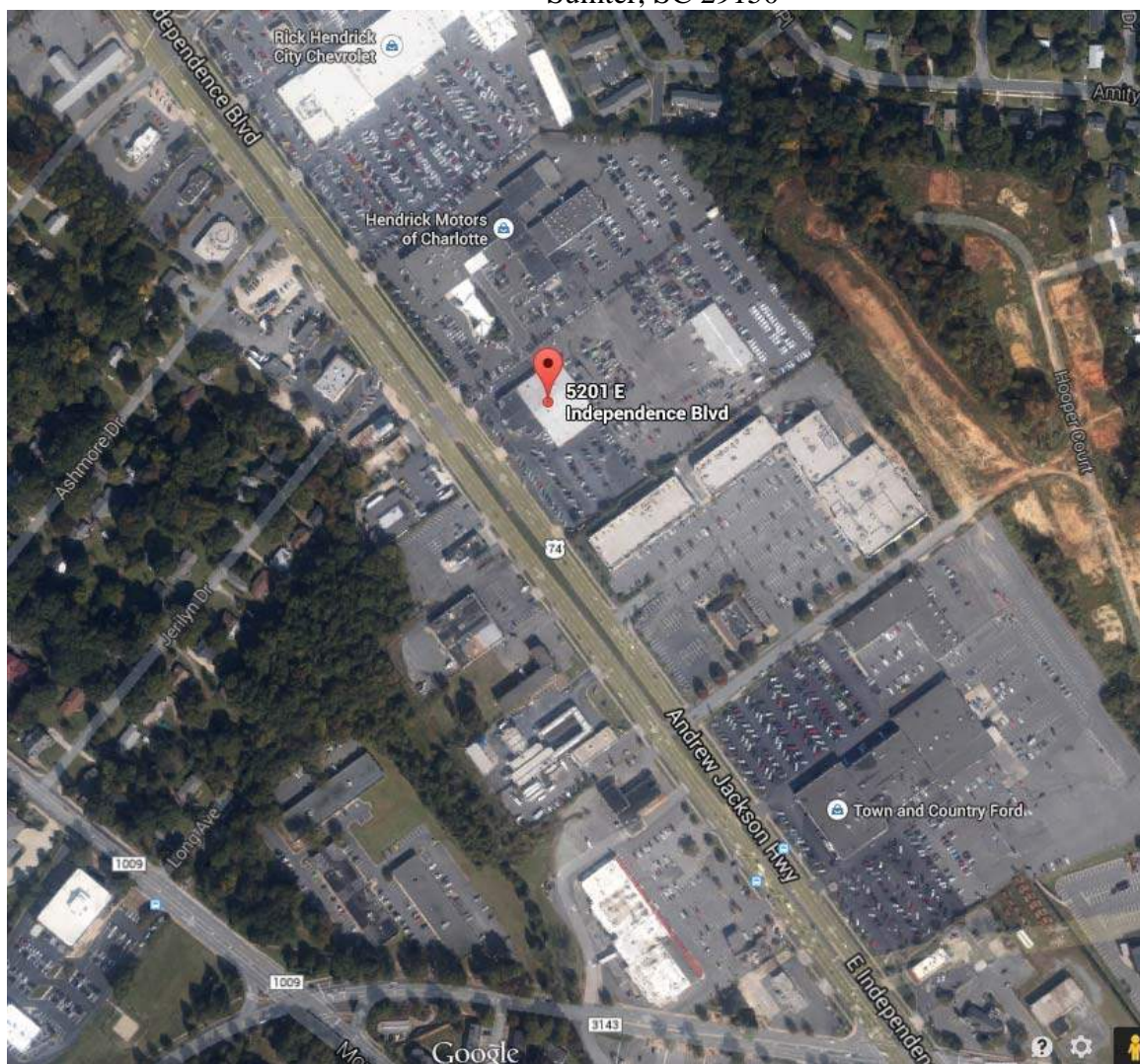
-
- 19) **Property Name**
Agora Greek Market
ASAP Cleaners
5122 E. Independence Blvd.
Charlotte, NC 28212
- Property Owner: (Site 43 in U-5526)**
Peter Marinakos and Ted Mavroidis
11440 Bloomfield Dr.
Charlotte, NC 28277
- Facility ID:** NA
Incident: NA
NCDOT Parcel Number:
U-0209B_095
- UST Owner:**
NA



Aerial from Google Maps

This facility was observed on October 9, 2008 to operate as dry cleaner. It is located on the south side of Independence Blvd. According to Google Streetview it was Agora Greek Market c. May 2014. No USTs are known to be present or have been removed. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present moderate geoenvironmental impacts to the project.**

20)	Property Name Advantage 5201 E. Independence Blvd. Charlotte, NC 28212	Property Owner: (Site 44 in U-5526) Borough Land LTD Ptnrship (sic) PO Box 36244 Charlotte, NC 28236
	Facility ID: 0-021031; 0-021031; 0-021032	Closed UST Owner: Ford Leasing and Development The American Road Dearborn, MI 48121
	Incident: 8638 NCDOT Parcel Number: U-0209B_099	Current UST Owner: Southeast Chemical & Solvent 170 South La Fayette Blvd Sumter, SC 29150



Aerial from Google Maps

The parcel is located on the northeast side of E. Independence Blvd. The facility at this parcel formerly operated as a car dealer and repair shop. The facility is reportedly vacant. Five USTs are reportedly onsite and eight USTs were removed in 1998. A site plan and sample locations, dated May 26, 2006 is on file prepared by Hart & Hickman. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts to the project.**

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- 21) **Property Name**
Griffin Tire
5200 E. Independence Blvd.
Charlotte, NC 28212
- Property Owner: (Site 45 in U-5526)**
Ronald Griffin and Anne Griffin
16232 Leeward Ln.
Huntersville, NC 28078
- Facility ID:** NA
Incident: NA
NCDOT Parcel Number:
U-0209B_096
- UST Owner:**
NA
-



Image from Google Streetview, View toward the southwest

This facility reportedly operates as an automotive facility. It is located on the southwestern side of E. Independence Blvd. No USTs are known to be on site. A Report on Geophysical Surveys, dated July 30, 2010, was prepared by Schnabel. A Hazardous Material Evaluation report was prepared by NCDOT, on October 9, 2008. **This site is anticipated to present low geoenvironmental impacts.**

22)	Property Name The Flower Hut 5208 E. Independence Blvd. Charlotte, NC 28212	Property Owner: (Site 46 in U-5526) Dorothy H Et Al Marshall 301 S College St #3880 Charlotte, NC 28202
	Facility ID: NA	UST Owner:
	Incident: NA	NA
	NCDOT Parcel Number: U-0209B_097	

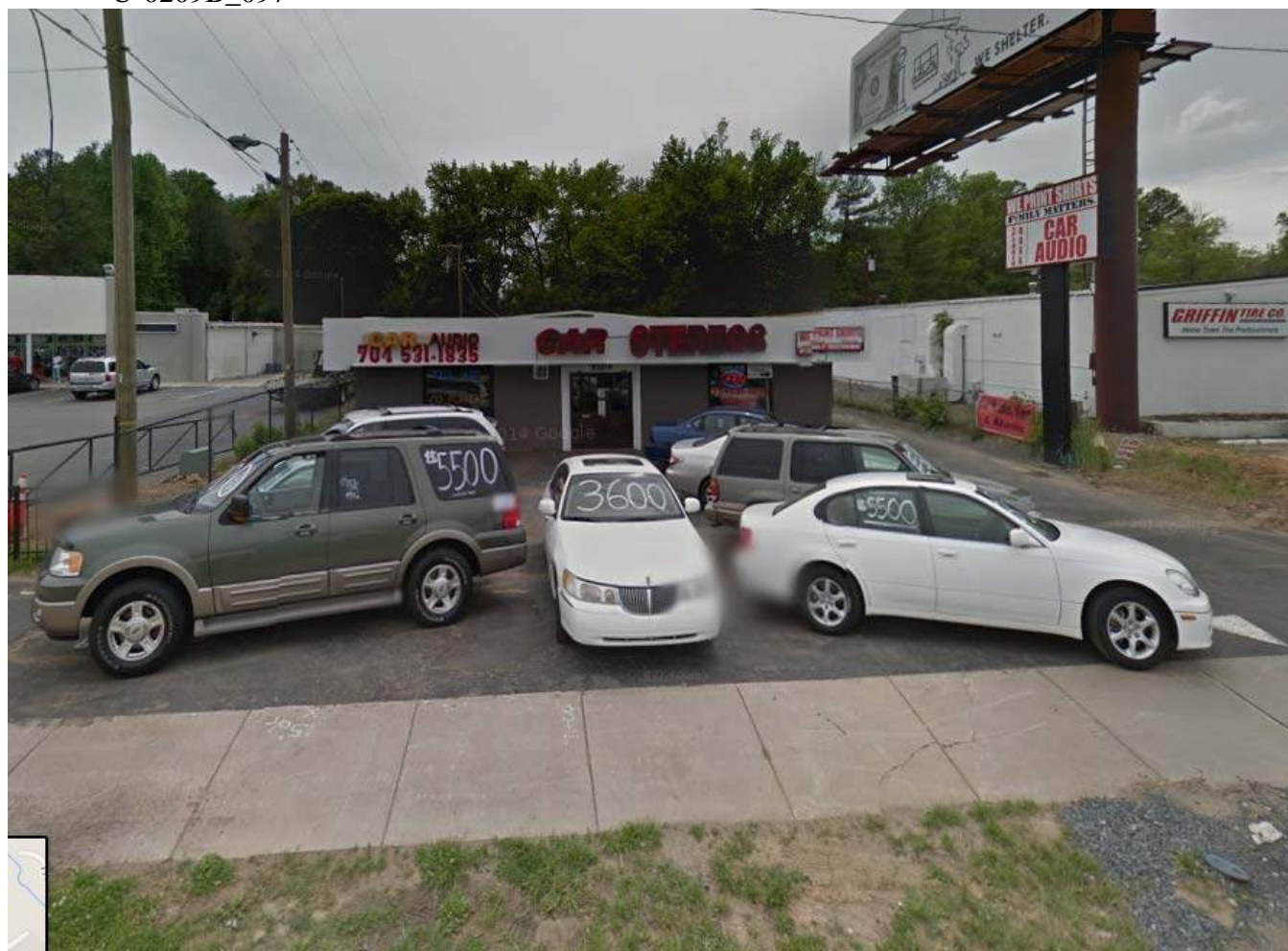


Image from Google Streetview, View toward the west

The architectural style of the building on this site suggests it could have been a gas station. No groundwater incidents. A Report on Geophysical Surveys, dated July 30, 2010, was prepared by Schnabel. **This site is anticipated to present low geoenvironmental impacts.**

23)	Property Name: AAN Real Estate, LLC 5324 AKA 5320, 5326E. Independence Blvd. Charlotte, NC 28212	Property Owner: AAN Real Estate LLC 5326 E. Independence Blvd. Charlotte NC 28212
	Facility ID: 0-017131 Incident: 3469 NCDOT Parcel Number: U-0209B_104	UST Owner: NA



Top of page is northward (Google Maps)

The parcel and ROW appears to remain classified as a Brownfields. A letter dated April 23, 2014 from the North Carolina Department of Environmental Quality (DEQ) states that DEQ does not object to the use as NCDOT ROW, but that all laws and regulations concerning management, handling and disposal of regulated waste shall be followed. Right of Way Recommendations were issued February 20, 2014. A PSA was conducted by AMEC Earth and Environmental, Inc., dated August 20, 2010. A Brownfield Site Assessment Report, dated March 27, 2006, was prepared by Hart & Hickman. A Soil Sample Results report, dated June 13, 2005 was prepared by Hart & Hickman. A Limited Environmental Sampling report, dated September 7, 2004 was prepared by Geoscience Group. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section, on October 9, 2008 for U-0209B. **This site is anticipated to present low geoenvironmental impacts.**

24)	Property Name Firestone 5340 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Rhesa R Tull PO Box 35264 Charlotte, NC 28202
	Facility ID: 0-014851, (UST #MO-4666) Incident: 15691 NCDOT Parcel Number: U-0209B_107	UST Owner: Nally Commercial Properties PO Box 728 Easley, SC 29640



View toward the southwest (Google Streetview)

This facility reportedly operates as an automotive facility. It is located on the southwestern side of E. Independence Blvd. Parcel U-0209B_107 includes multiple facilities. According to the UST section registry one UST was removed from this facility in 1994. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section, on October 9, 2008 for U-0209B. **This site is anticipated to present low geoenvironmental impacts to the project.**

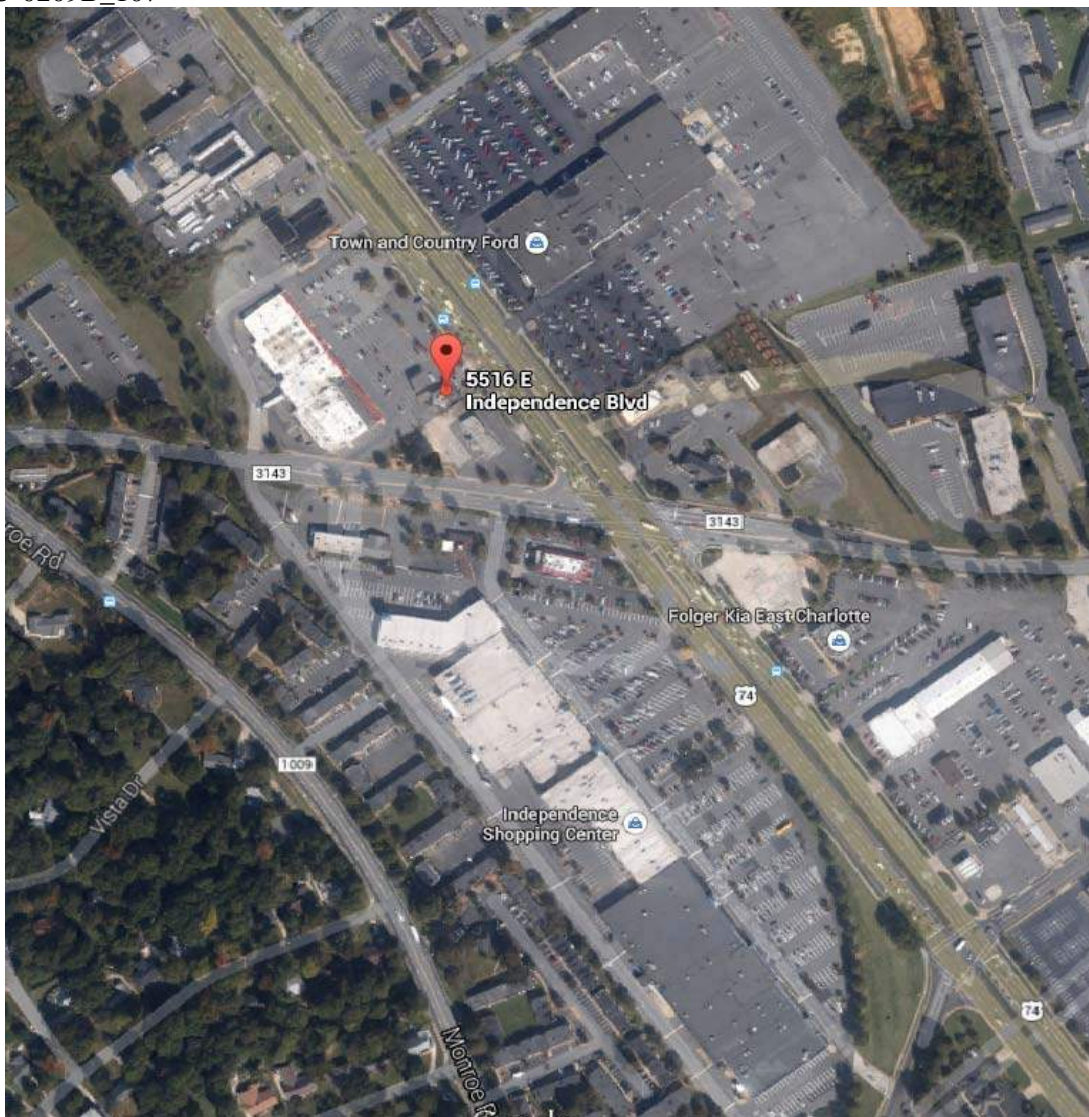
-
- 25) **Property Name**
Town and Country Ford
5401 E. Independence Blvd.
Charlotte, NC 28212
- Property Owner:**
MMR Holdings LLC
8270 Greensboro Dr. #950
McLean, VA 22102-4909
- Facility ID:** 0-014219 (UST # MO-8731, MO-8811)
Incident: 21388, 36708, 40250, 40321
Brown Fields ID: 09015-05-60 (Bruce Nicholson 12/6/07)
NCDOT Parcel Number:
U-0209B_106
- UST Owner:** Town and Country Ford
5401 E. Independence Blvd.
Charlotte, NC 28212
-



View is eastward (Google Streetview)

This facility is located on the northeastern side of E. Independence Blvd. This facility reportedly operates as a car dealership and repair shop. According to the UST section registry, four USTs are registered. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section, on October 9, 2008 for U-0209B. **This site is anticipated to present low geoenvironmental impacts.**

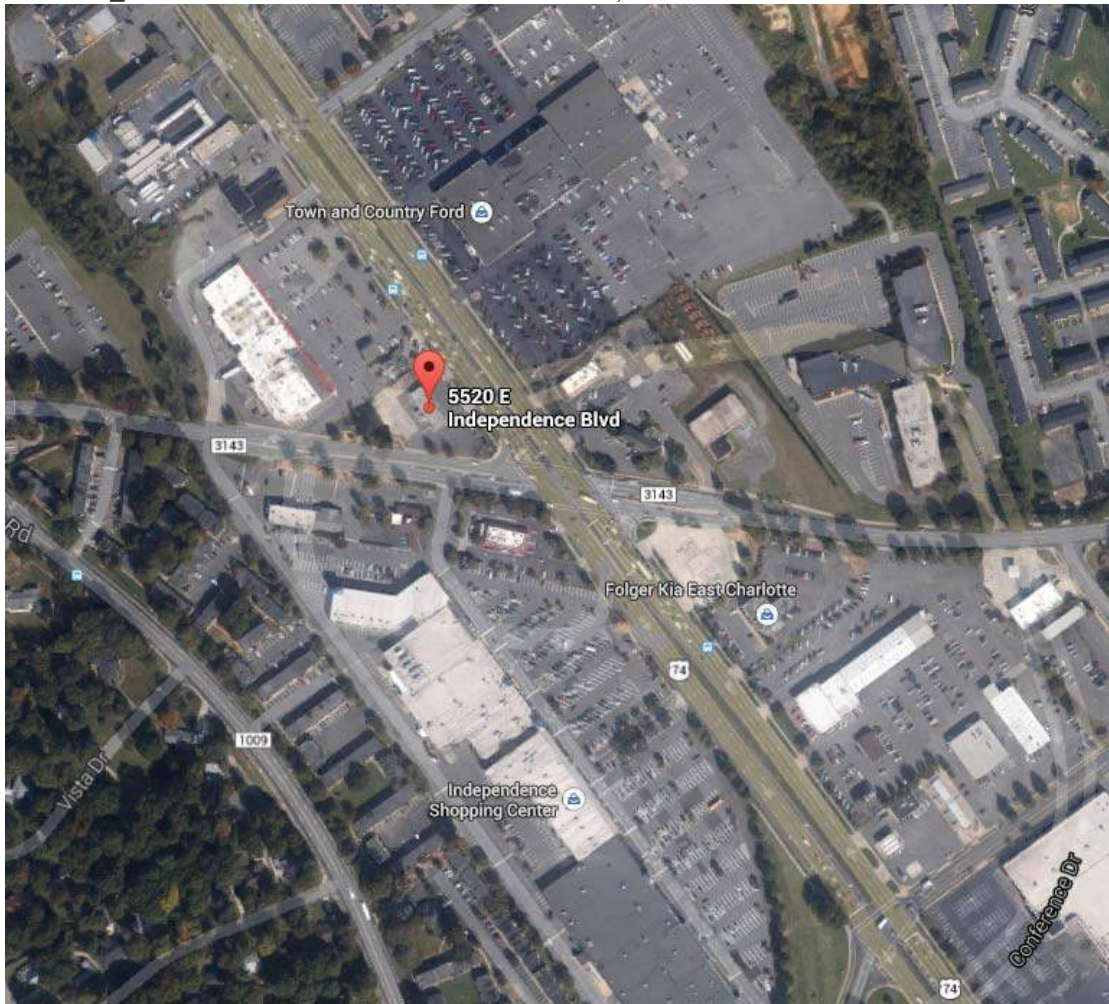
26)	Property Name Country Side Cleaners 5516 E. Independence Blvd. Charlotte, NC 28212	Property Owner: RR & CW & WVS Tull PO Box 35264 Charlotte, NC 28235
	Facility ID: NA	UST Owner:
	Incident: NA	NA
	NCDOT Parcel Number: NA & U-0209B_107A (formerly U-0209B_107	



Top of page is northward (Google Maps)

This site is located on the southwestern side of E. Independence Blvd formerly. The onsite facility operated as a dry cleaner. Reportedly the site also operated as a used-car lot. U-0209B_107 includes multiple facilities. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A PSA dated August 20, 2010 was prepared by Kleinfelder. A report was issued by GeoEnvironmental Section personnel, on October 9, 2008 for U-0209B. **This site is anticipated to present moderate geoenvironmental impacts to the project.**

27)	Property Name Idlewild Amoco 973 5520 E. Independence Blvd. Charlotte, NC 28212	Property Owner: RR & CW & WVS Tull PO Box 35264 Charlotte, NC 28235
	Facility ID: 0-013789 (UST # MO-4193) Incident: 12863, 40110 NCDOT Parcel Number: U-0209B_107A	UST Owner: Amoco Oil Company 375 Northridge Rd. Suite 600 Atlanta, GA 30350

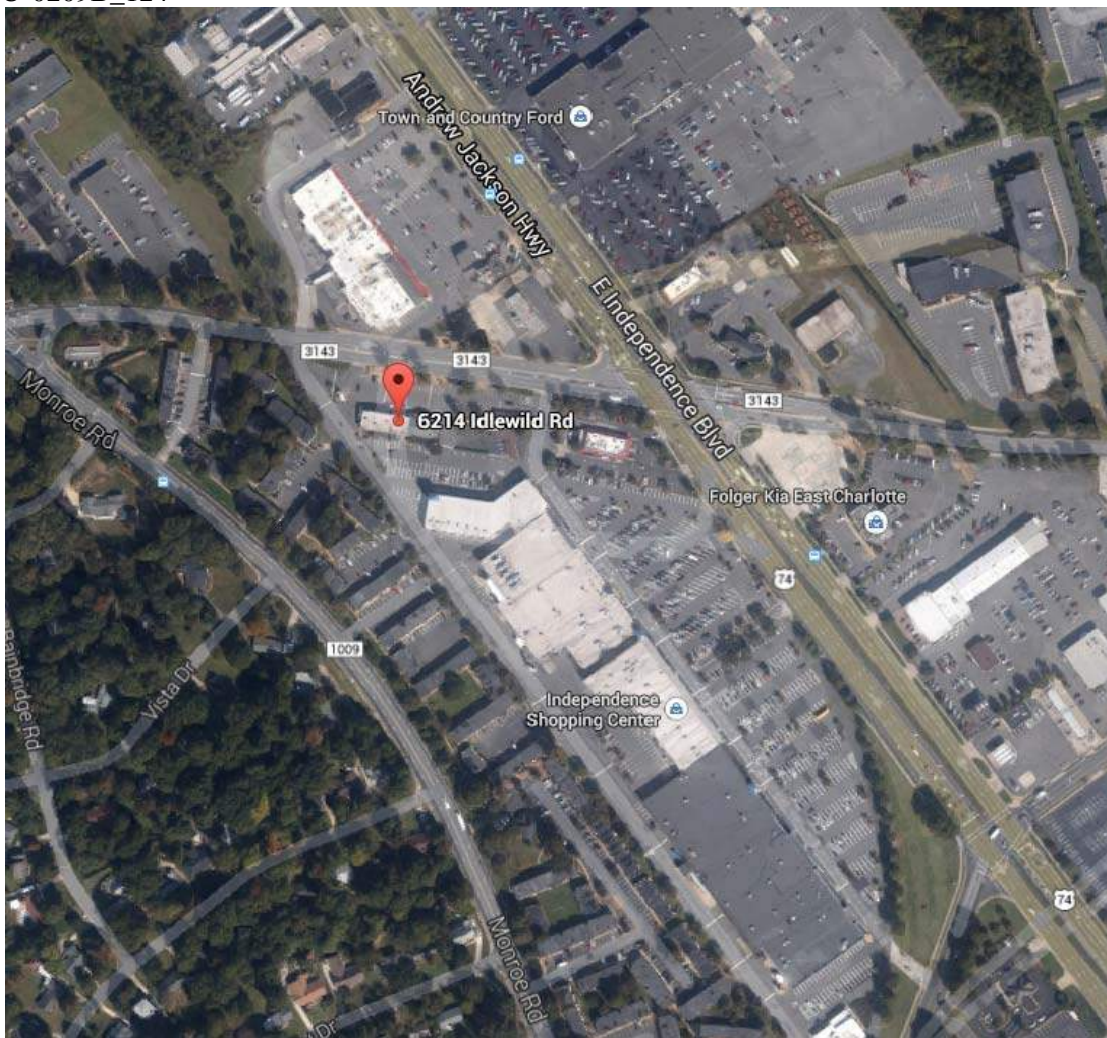


Top of page is northward (Google Maps)

This site is located in the northwestern quadrant of Idlewild Rd. and E. Independence Blvd. intersection. This facility reportedly operated as a convenience store and gas station. The UST bed is located behind the store, approximately 40 feet from the edge of pavement of Idlewild Rd. Four USTs were reportedly in use. A PSA dated August 20, 2010 was prepared by Kleinfelder. U-0209B_107 includes multiple facilities. Revised Right of Way Recommendations were issued December 17, 2012 to accommodate a further distinction among Parcel 107: Parcels 107 and 107A. A UST Closure Report, dated August 1, 2012 was prepared by Terraquest. Soil contamination was noted on the database. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section, on October 9, 2008 for U-0209B. **This site is anticipated to present low geoenvironmental impacts.**

28)	Property Name Prestown Laundry Cleaners 6214 Idlewild Rd. Charlotte, NC 28212	Property Owner: NCDOT/Formerly T Lor PO Box 35264 Charlotte, NC 28235
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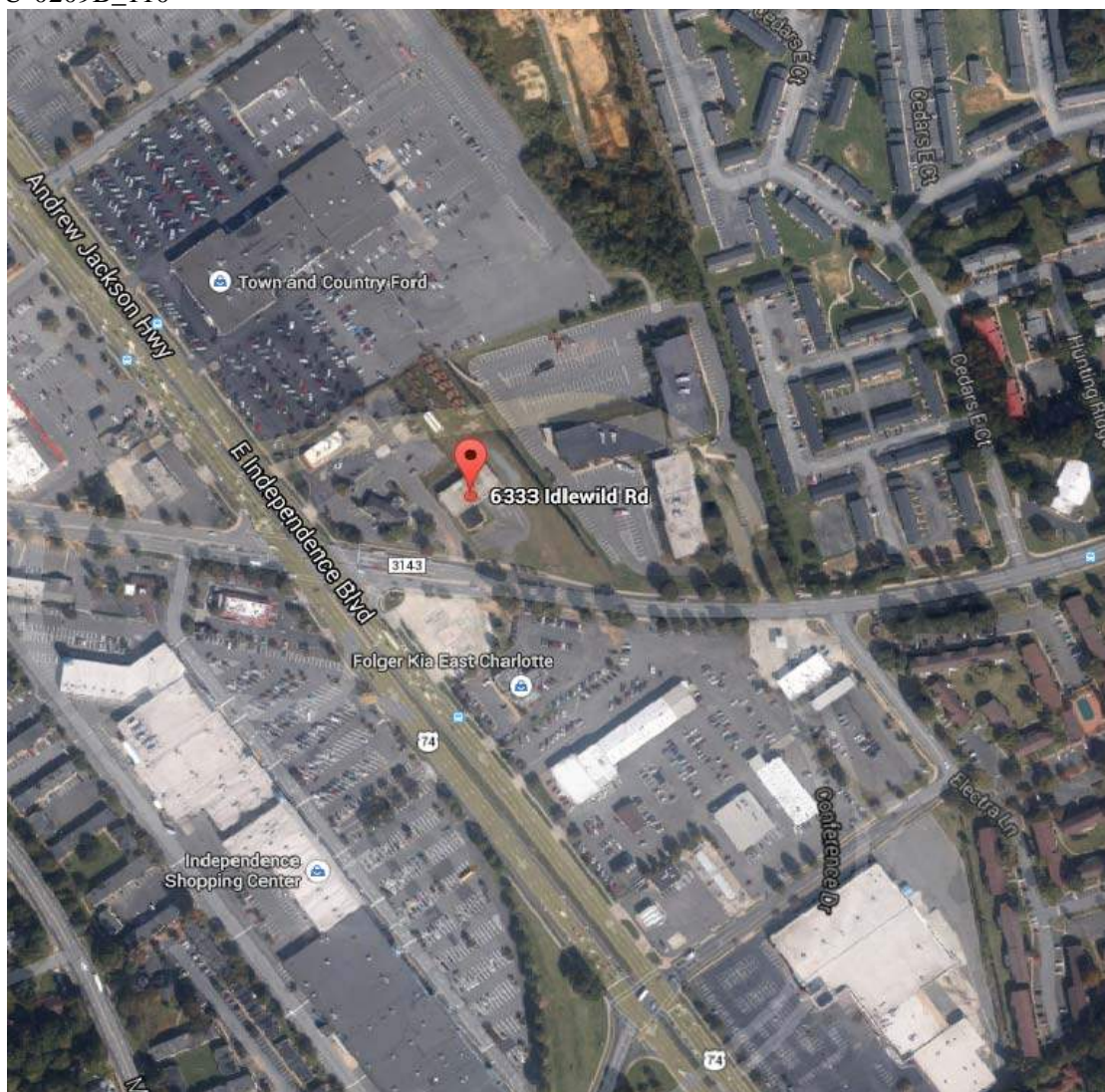
Small Quantiyt Generator Haz. Waste	UST Owner:
Permit Number: NCR000140632	NA
NC DSCA: 060-0023 (Al Chapman)	
NCDOT Parcel Number: U-0209B_124	



Top of page is northward (Google Maps)

This site is located south of Idlewild Rd. between Monroe Rd and E. Independence Ave. This facility formerly operated as a laundry and dry cleaner. This parcel was acquired by NCDOT for U-0209B. The DSCA program was joined by NCDOT. DSCA Site ID: 60-0023. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present moderate geoenvironmental impacts.**

29)	Property Name Repair Shop 6333 Idlewild Rd. Charlotte, NC 28212	Property Owner: Idlewild Road, LLC 8100 E. Independence Blvd. Charlotte, NC 28227
	Facility ID: NA	UST Owner:
	Incident: NA	NA
	NCDOT Parcel Number: U-0209B_110	



Top of page is northward (Google Maps)

This facility formerly operated as an automotive repair shop. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This site is located on the northern side of Idlewild Rd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

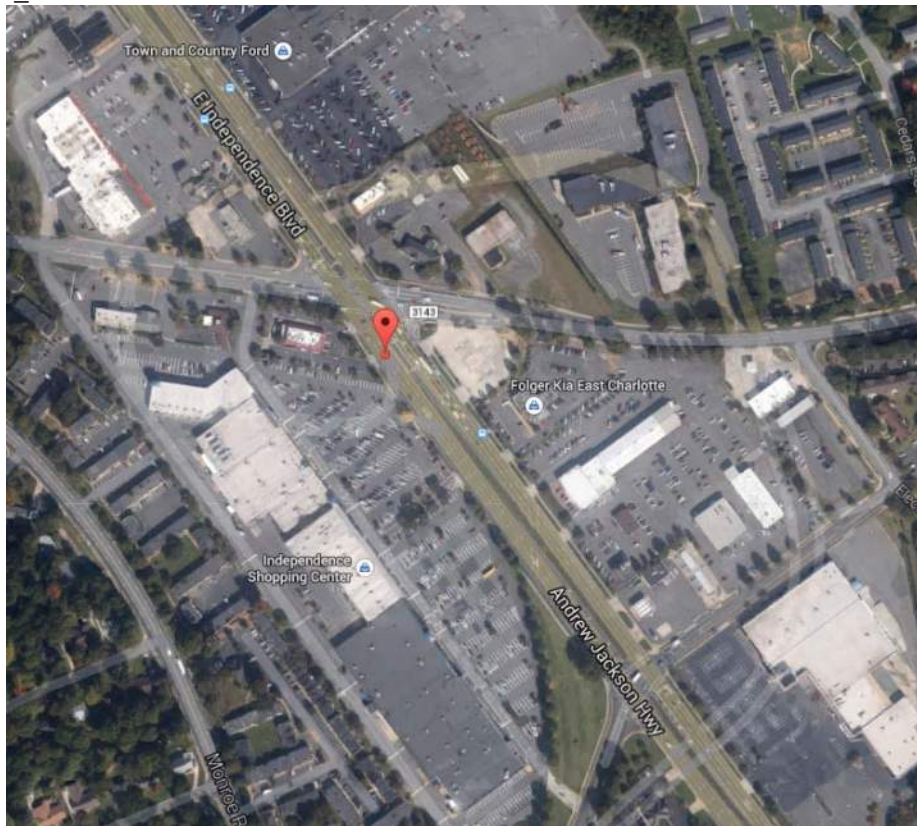
30)	Property Name Former Unocal Service station 5600 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Charlotte NC LP 2400 Crown Point Ex Dr., Suite 800 Charlotte, NC 28235
	Facility ID: 0-017131 Incident: 3469 NCDOT Parcel Number: U-0209B_125	UST Owner: D H & S Associates 4718 N. Graham Charlotte, NC 28213



Top of page is northward (Google Maps)

This site is located in the northeast quadrant of Idlewild Rd. and Independence Blvd. intersection. This facility is currently McDonalds. Formerly the facility operated as a gas station. According to the UST registry three USTs were removed from the facility c. 1987. A PSA was prepared by Kleinfelder, dated August 20, 2010. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

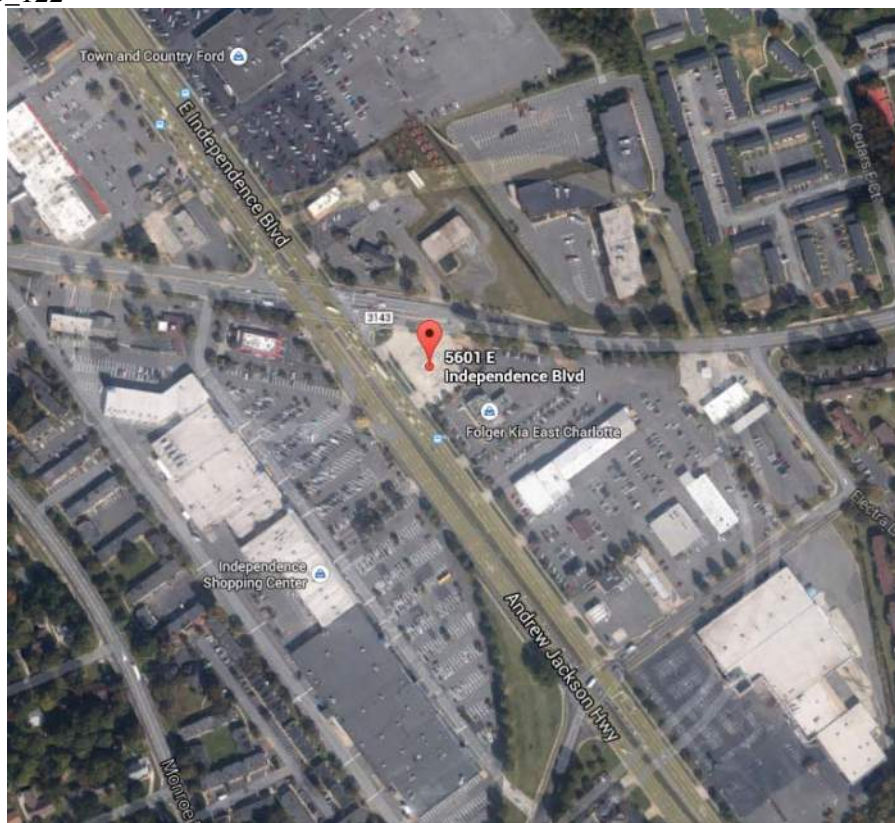
-
- 31) **Property Name**
Dry Cleaner at Independence Shopping
Center
5616 E. Independence Blvd.
Charlotte, NC 28212
- Property Owner:**
Charlotte NC, LP
2700 Commerce Dr.
Rochester NY, 14623
- Facility ID:** NA
Incident: NA
NC DSCA: N/A
NCDOT Parcel Number:
U-0209B_125
- UST Owner:**
NA



Aerial photo from Google Maps

This site was reportedly located on the western side of E. Independence Blvd. The location of this no longer clear because the site has been incorporated into NCDOT Right of Way. This facility operated as a shopping center. One store was identified as a dry cleaner, at 5616 E. Independence Blvd., south of Idlewild Rd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present moderate geoenvironmental impacts.**

32)	Property Name Shell 5601 E. Independence Blvd. Charlotte, NC 28212	Property Owner: NCDOT/ formerly Alpha Omega Land Development, Inc., Sam's Investments, Inc. 6407 Idlewild Rd. Charlotte, NC 28212
	Facility ID: 0-014323, (UST# MO-8525) Incident: 40066 NCDOT Parcel Number: U-0209B_122	UST Owner: Alpha Omega Land Development, Inc. PO Box 3196 Mathews, NC 28106



Top of page is northward (Google Maps)

The facility was located on the southeastern quadrant of Idlewild Rd. and E. Independence Blvd. The parcel was acquired by NCDOT and the building demolished. This facility reportedly operated as a convenience store and gas station. The tank bed was located behind the building approximately 40 feet from the edge of pavement of Idlewild Rd. According to the UST Section registry four tanks were registered. A UST Removal, Initial Abatement Action and Post Excavation Soil Contamination Assessment Report is on file, c. February 2013, by Groundwater & Environmental Services. Soil contamination was noted on the database. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts to the project.**

33)	Property Name Folger Kia East Charlotte 5625 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Folger Leasing Co., CEW Properties 5701 E. Independence Blvd. Charlotte, NC
	Facility ID: NA	UST Owner:
	Incident: NA	NA
	NCDOT Parcel Number: U-0209B_121	



View toward the northeast (Google Streetview)

This site is located south of Idlewild Dr. and east of E. Independence Blvd. The Automotive dealer and service facility. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section on October 9, 2008 for U-0209B. **This site is anticipated to present low geoenvironmental impacts to the project.**

34)	Property Name Lee Folger/Folger Buick 5701 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Folger Leasing Co., CEW Properties 5701 E Independence Blvd. Charlotte, NC
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Small Quantity Generator Haz. Waste**Permit Number:**

NCD024473084 (Gus Matchunis)

Facility ID: 0-014635 (UST # MO-3697)**Incident:** 9568**NCDOT Parcel Number:**

U-0209B_120

UST Owner: Lee Folger

5701 E. Independence

Charlotte, NC 28212



View toward the northeast (Google Streetview)

The site encompasses most of the block along Independence Blvd. between Buick Dr. and Idlewild Rd. This facility reportedly operates as a car dealership and repair shop. According to the UST section registry five USTs were closed c. 1992. Locations of the former UST tank beds were not identified. A vault of unknown purpose was observed in northern portion of the property near the Circle K property line. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

35)

Property Name

Circle K #4644
6420 Idlewild Rd.
Charlotte, NC 28212

Property Owner:

Circle K Stores, Inc.
377 Carowinds Blvd. Suite 124
Ft. Mill, SC 29708

Facility ID: 0-000135 (UST # MO-8488)**Incident:** 27507, 40032**NCDOT Parcel Number:**

U-0209B_119

UST Owner: Circle K Stores Inc.

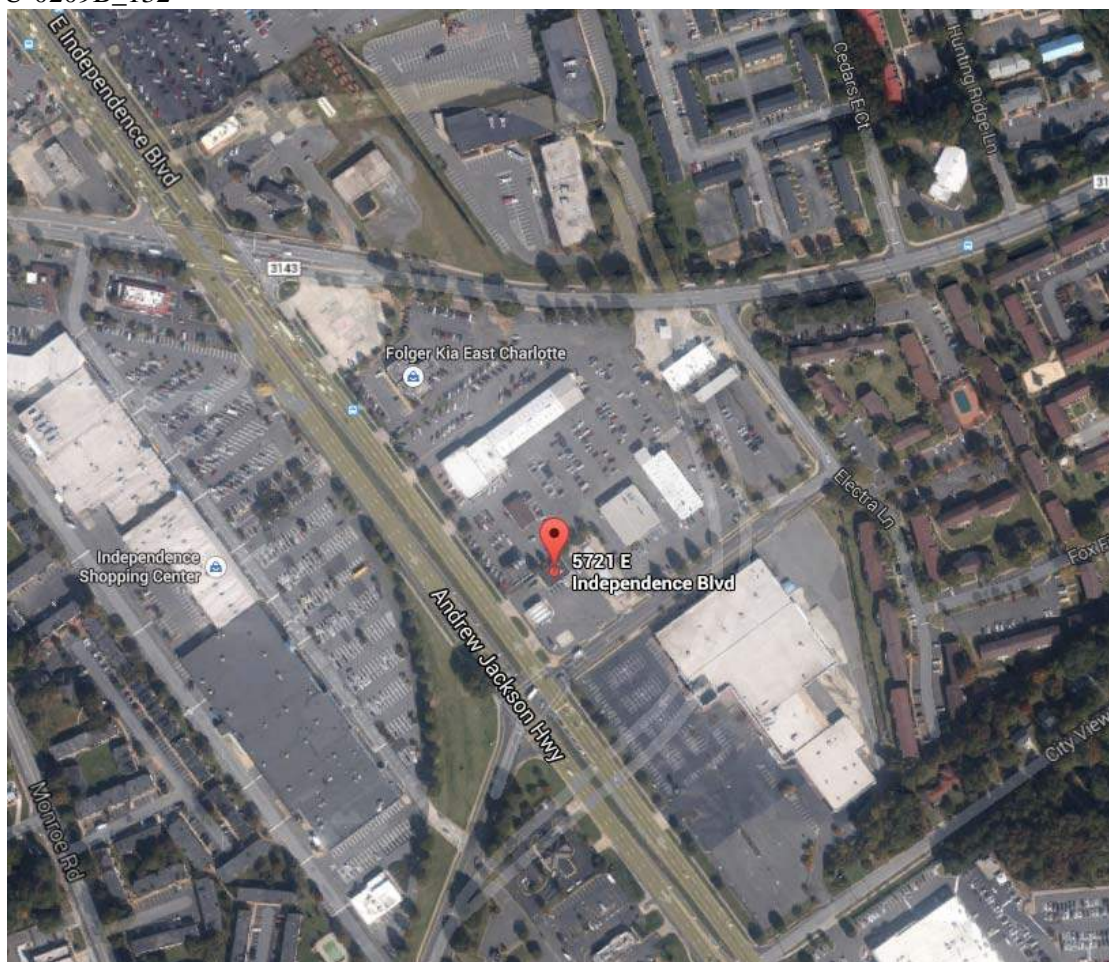
2440 Whitehall Park, Suite 800
Charlotte, NC 28273



Top of page is northward (Google Maps)

This site is located on the southwestern corner of Electra Ln. and Idlewild Rd. This facility reportedly operated as a convenience store and gas station. According to the UST Section Registry two USTs were closed c. 2003. Three USTs were reportedly removed by Kleinfelder, report dated February 9, 2012. A PSA was conducted by Kleinfelder, report dated August 20, 2010. Soil contamination was noted on the database. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low/moderate geoenvironmental impacts.**

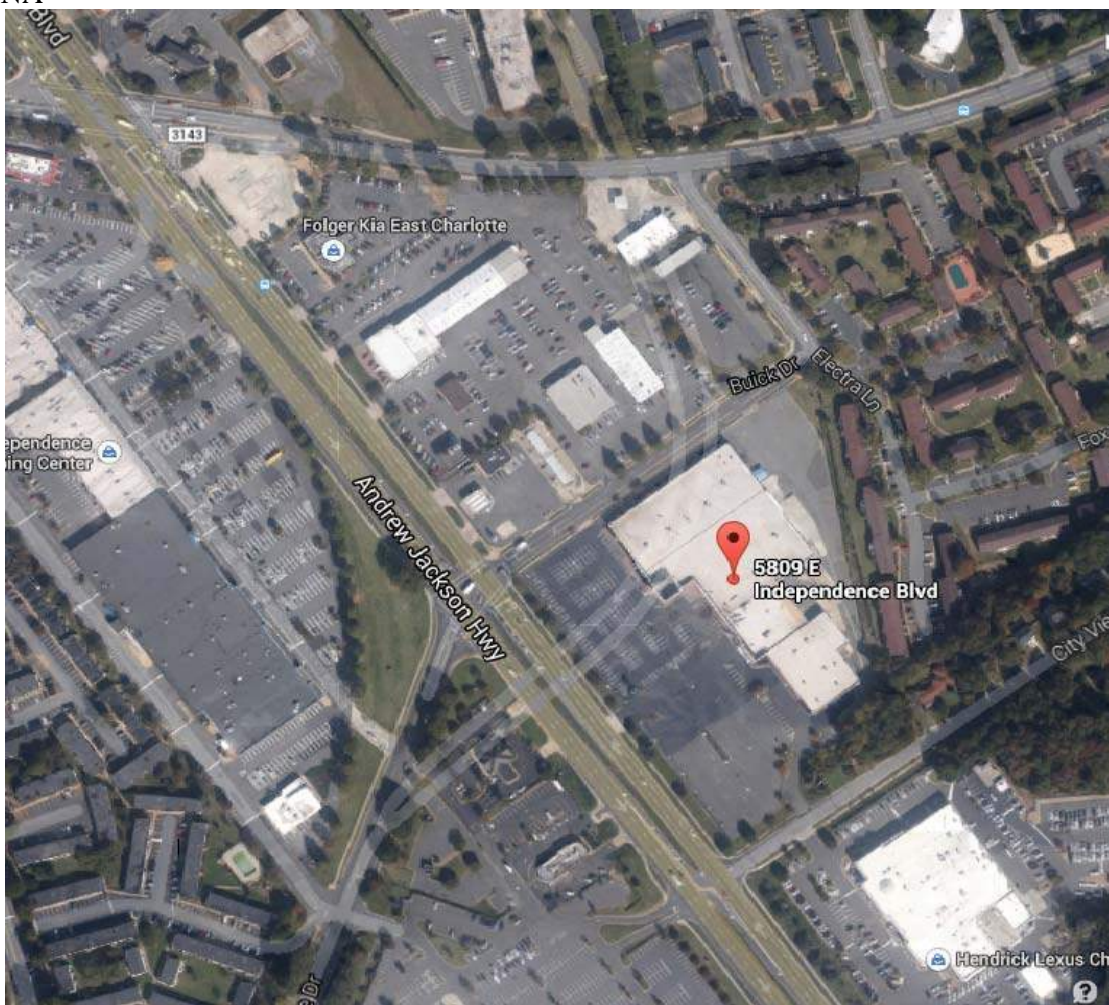
36)	Property Name Shell/Sams Club #32/Tenneco Oil 5721 E. Independence Charlotte, NC 28212	Property Owner: Folger Leasing 5701 E. Independence Charlotte, NC 28212
	Facility ID: 0-013878 Incident: 8129 NCDOT Parcel Number: U-0209B_132	UST Owner: LSAA. Inc. DBA Sams Mart 7935 Council Place Suite 200 Charlotte, NC 28212



Top of page is northward (Google Maps)

This site is located on the northwest corner of Buick Dr. and Independence Blvd. This facility reportedly operates as a convenience store and gas station. The tank bed is located behind the store approximately 50 feet back from the edge of pavement of Independence and 20 feet from the edge of pavement of Buick. Soil contamination was noted in the DEQ database. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts to the project**

37)	Property Name Cadillac Auto 5809 E. Independence Blvd. Charlotte, NC 28212	Property Owner: LLC Assent Property Management 5809 E. Independence Blvd. Charlotte, NC 28212
	Facility ID: (UST #MO-7090) Incident: 27785 NCDOT Parcel Number: NA	Closed UST Owner: East Mecklenburg Corp PO Box 35309 Charlotte, NC 28235-5309



Top of page is northward (Google Maps)

This site is located on the southeast corner of Buick drive and Independence Blvd. This facility reportedly operates as a car dealer and repair shop. According to the UST section registry one UST was closed c. 2004. Location of the former UST tank bed was not identified. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

38) **Property Name**
Hendrick Lexus
6025 E. Independence Blvd.
Charlotte, NC 28212
AKA (same parcel in County website)
2301 Dion Ave
Charlotte, NC 28212

Property Owner:
Hendrick Automotive Group
6000 Monroe Rd. #100
Charlotte, NC 28212

Facility ID: 0-013716

Incident: 14166

NCDOT Parcel Number:

NA

UST Owner: Hendrick Lexus LTD Partnership
6025 E. Independence Blvd.
Charlotte, NC 28212



View toward the northeast (Google Streetview)

This site is located on the eastern side of Independence Blvd. This facility reportedly operates as a car dealer and repair shop. According to the UST section registry three USTs were closed c. 1989, 1990, 2002. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

39)

Property Name

Target Store T-385 (former gas station)
6030 E. Independence Blvd.
Charlotte, NC 28212

Property Owner:

ST Honoree Investments LP
27520 Hawthorne Blvd
Rolling Hills Estates, CA 90274

Facility ID: 0-025164, 0-036368**Incident:** 22376, 22375 (waste oil)**NCDOT Parcel Number:**

U-0209B_139

Closed UST Owner: Gold Circle Stores

PO Box 63

Worthington, OH 43085

Active UST Owner: BJ's Wholesale Club Inc.

One Mercer Road

Natick, MA 01760



Top of page is northward (Google Maps)

The site is located on the western side of E. Independence Blvd. This site is currently, reportedly a BJ's wholesale club with an active gas station. A former gas station appears to have operated near the entrance to the site. According to the UST Registry three USTs were removed c. 1988. Soil contamination was noted on the database. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

40)	Property Name B&R Body Shop 6111 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Paul and Sherri Morgan 215 Iverson Way Charlotte, NC 28203-5628
	Haz. Waste Permit Number: NCD986194975 (Tommy Morgan 704-972-1972)	Closed UST Owner: J G Blackmon/ J. Volkswagen 2019 Queens Road East Charlotte, NC 28207
	Facility ID: 0-014421	
	Incident: Not Assigned	
	NCDOT Parcel Number: U-0209B_136	



View toward the northeast (Google Streetview)

This site is located on the eastern side of Independence Blvd. This facility reportedly operates as an auto repair service station and automotive detail/repair shop. According to the UST section registry two USTs were closed c. 1998. An Incident with no number was assigned by DEQ. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

-
- 41) **Property Name**
AutoXtras
6145 E. Independence Blvd.
Charlotte, NC 28212
- Property Owner:**
Billy and Edith Lineberger
7730 Matthews Mint Hill Rd
Charlotte, NC 28227-7598
- Facility ID:** NA
Incident: Not Assigned
NCDOT Parcel Number:
U-0209B_149
- UST Owner:** NA

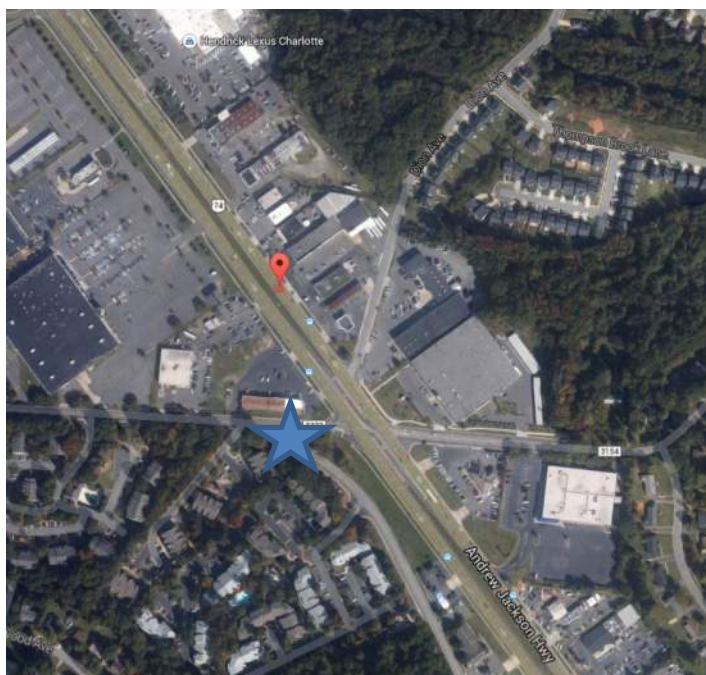


Upper image, top of page is northward (Google Maps), lower image view to the east c. 2008.

This site is located on the eastern side of E. Independence Blvd. This facility reportedly operates as an automotive detail shop. According to the UST section registry there is no record of USTs associated with this property, however, the architectural style and age of the facility, suggests it could have been a gas station. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

The facility is located on the eastern side of E. Independence Blvd. This facility reportedly operates as an automotive detail shop. According to the UST section registry there is no record of USTs associated with this property. A suspicious vent or fill port was observed on the southeastern side of the building, which may also be associated with an unregulated UST. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

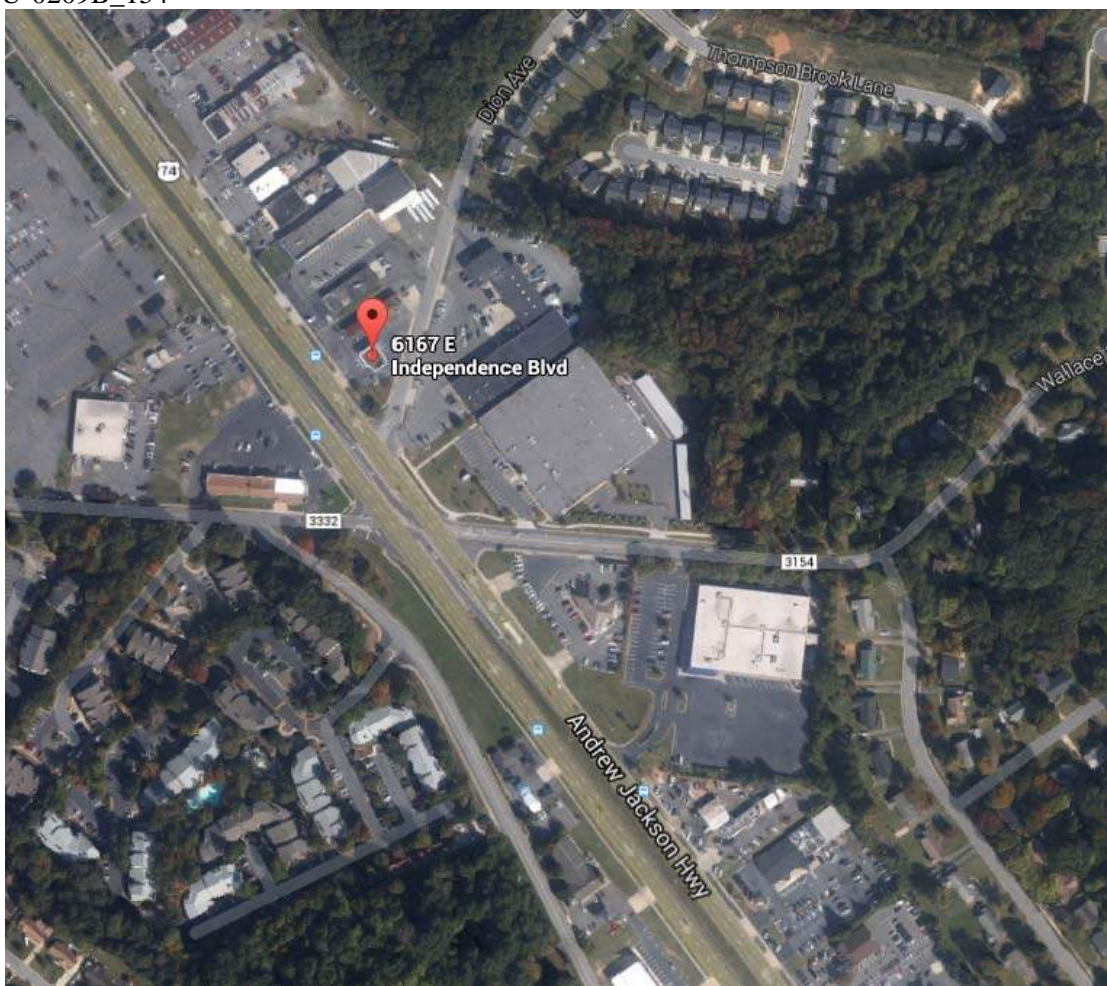
-
- 43) **Property Name**
Ed Griffin Company
6161 AKA 6157 E. Independence Blvd.
Charlotte, NC 28212
- Property Owner:**
Shirley N Hill
3750 Matthews Weddington Rd.
Matthews, NC 28105
- Facility ID:** 0-014645
Incident: N/A
NCDOT Parcel Number:
U-0209B_153
- Closed UST Owner:** Ed Griffin Company
6157 E. Independence Blvd.
Charlotte, NC 28212



Upper image, top of page is northward (Google Maps), lower image view to the east c. 2008.

This facility reportedly operates as an office building. According to the UST section registry one UST was closed in 1991. An incident was identified with no number in the DEQ database. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This facility is located on the eastern side of Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

44)	Property Name Quaker State (Former Minit-Lube) 6167 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Hico Juan LLC 3623 Latrobe Dr. Suite 214 Charlotte, NC 28211
	Facility ID: 0-021018 (UST # MO-4171) Incident: 12618 NCDOT Parcel Number: U-0209B_154	UST Owner: Quaker State Minit-Lube 1385 W 2200 South Salt Lake City, UT 84119



Top of page is northward (Google Maps)

This facility reportedly operates as a Jiffy Lube service station. According to the UST section registry three USTs were closed in 1994. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the northern corner of Dion Ave. and E. Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geo environmental impacts.**

45)	Property Name Barn Yard 6248 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Dorothy B Stanley 235 Wingrave Dr. Charlotte, NC 28211
	Facility ID: NA	UST Owner: NA
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the southwest (Google Streetview)

This facility reportedly operates as a storage building sale lot. Visual inspection indicated that the facility may have operated as a gas station. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. It is located on the western side of E. Independence Blvd. and the eastern side of Wallace Rd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

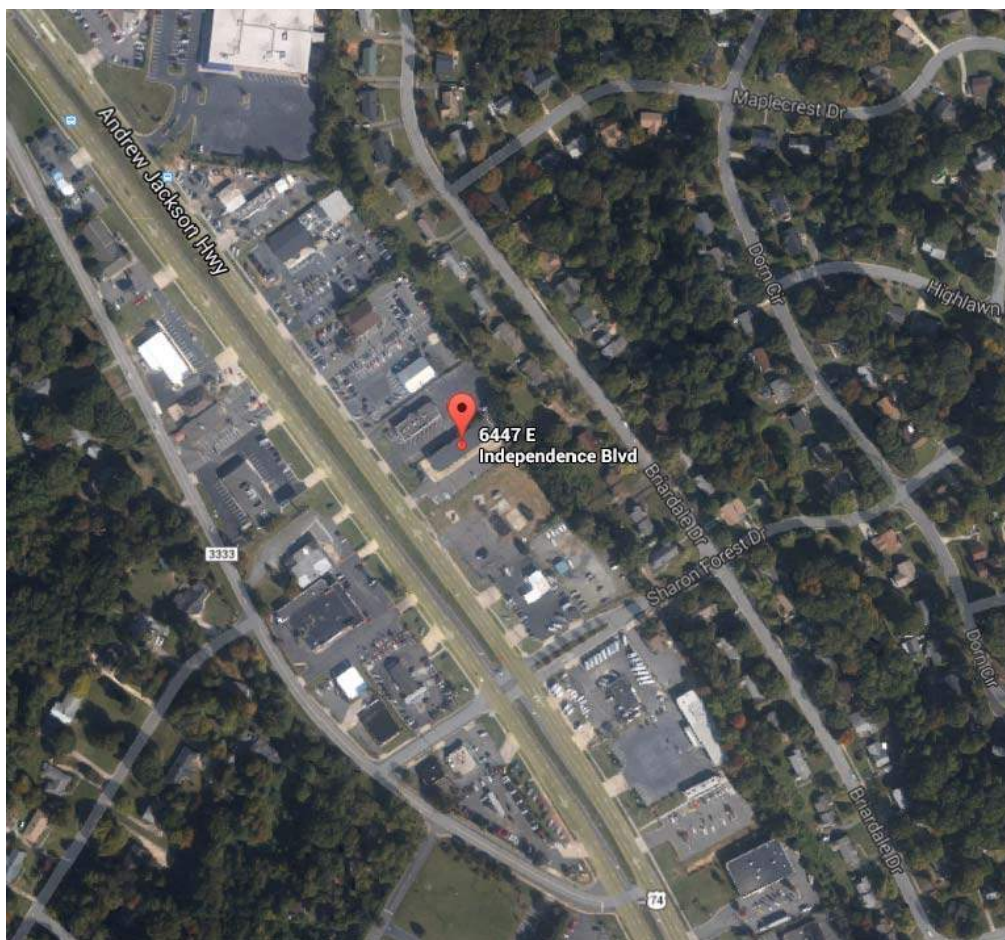
46)	Property Name DRx Detail 6335 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Ward Hudson Cagle 2000 Marglyn Dr. Matthews, NC 28105
	Facility ID: NA	UST Owner: NA
	Incident: Not Assigned	
	NCDOT Parcel Number: NA	



View toward the northeast (Google Streetview)

This facility reportedly operates as an automotive detail shop. According to the UST section registry there is no record of USTs associated with this property. A suspicious cap that may be associated with an unregulated UST was identified adjacent to the Right of Way. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the eastern side of Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

47)	Property Name Meineke 6447 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Bakis Associates, Inc. 6600 Rocky Falls Rd Charlotte, NC 28211
	Facility ID: NA	UST Owner:
	Incident: NA	NA
	NCDOT Parcel Number: NA	



Top of page is northward (Google Maps)

This facility reportedly operates as an auto repair service station. According to the UST section registry there is no record of USTs associated with this property. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This site is located on the eastern side of Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental properties.**

48)	Property Name Triangle Rent-A-Car 6541 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Bakis Associates Inc. 6600 Rocky Falls Rd. Charlotte, NC 28212
	Facility ID: NA	UST Owner: NA
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the north (Google Streetview)

This facility reportedly operates as a car rental store. According to the UST section registry there is no record of USTs associated with this property. Field reconnaissance suggested that the site may have operated as a gas station and service station. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the east side of E. Independence Blvd. at the intersection with Sharon Forest Dr. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

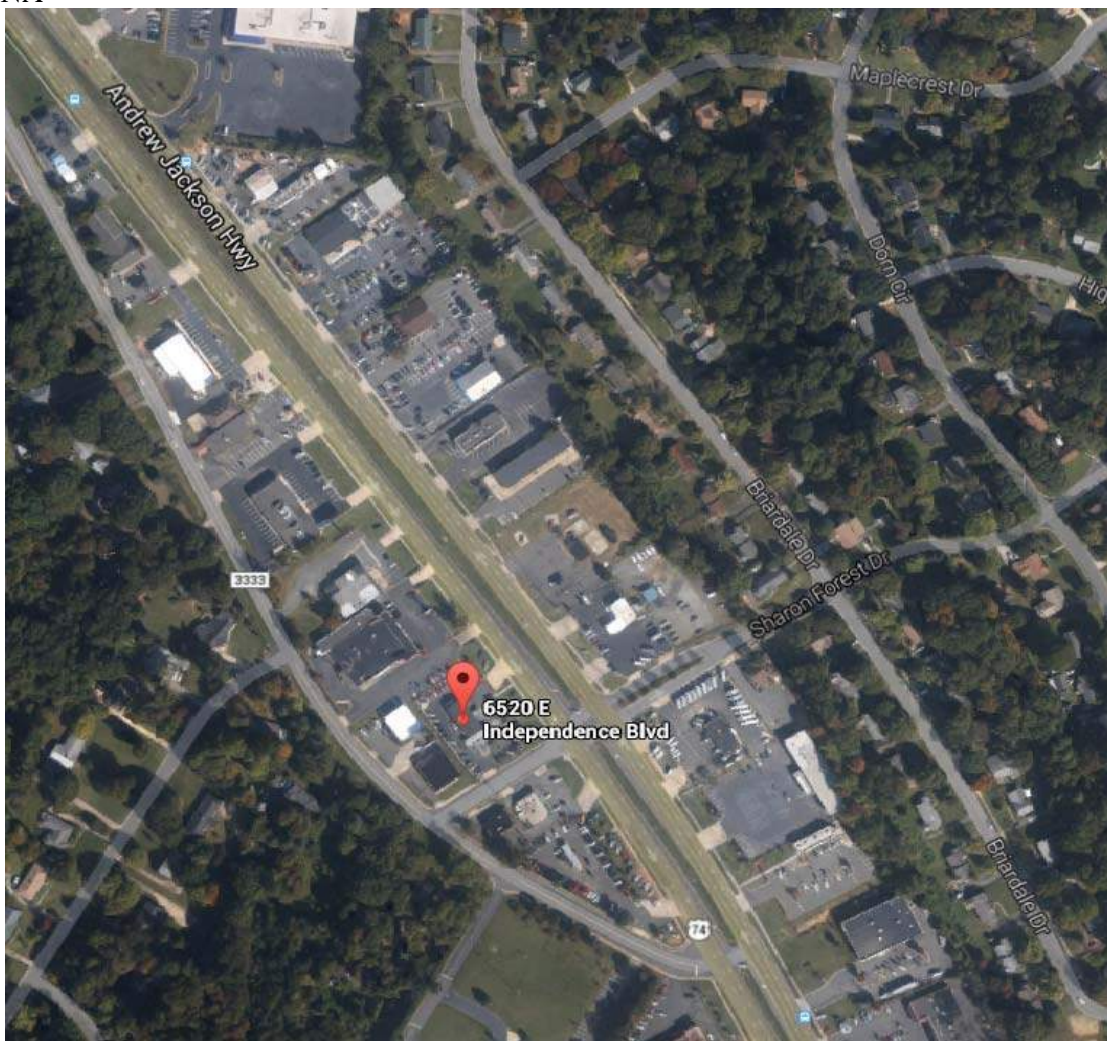
49)	Property Name UNOCAL #9342-305 6500 E. Independence Blvd. Charlotte NC 28212	Property Owner: Norman Levin/Ross Levin/Revocable Trust Norman Levin 3700 Tradewinds Cr. Pepper Pike OH 44124
	Facility ID: (UST #MO-2779) Incident: 3469 NCDOT Parcel Number: NA	UST Owner: UNOCAL Corporation c/o Richard Horn 13 Corporate Square Atlanta, GA



(Google Streetview)

This facility operated as a gas station. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the western side of E. Independence Blvd. north of Sharon Forest Dr. **This site is anticipated to present low geoenvironmental impacts.**

50)	Property Name Former BP Station DriveTime Car Sales 6520 E. Independence Blvd. Charlotte, NC 28212	Property Owner: DriveTime Car Sales 4020 East Indian School Rd. Phoenix, AZ 58018
	Facility ID: 0-014383, MO-5813 Incident: 20776, 27931 NCDOT Parcel Number: NA	UST Owner: Conoco Phillips Company PO Box 52085 Phoenix, AZ



Top of page is northward (Google Maps)

This facility is reportedly a DriveTime Car Sales. A former gas station operated at this facility. According to the UST section registry three USTs were removed from the facility in 1989 and five USTs were removed in 2005. One tank bed is located approximately 60 feet from the edge of pavement of Independence Blvd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The facility is located on the western side of E. Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impact.**

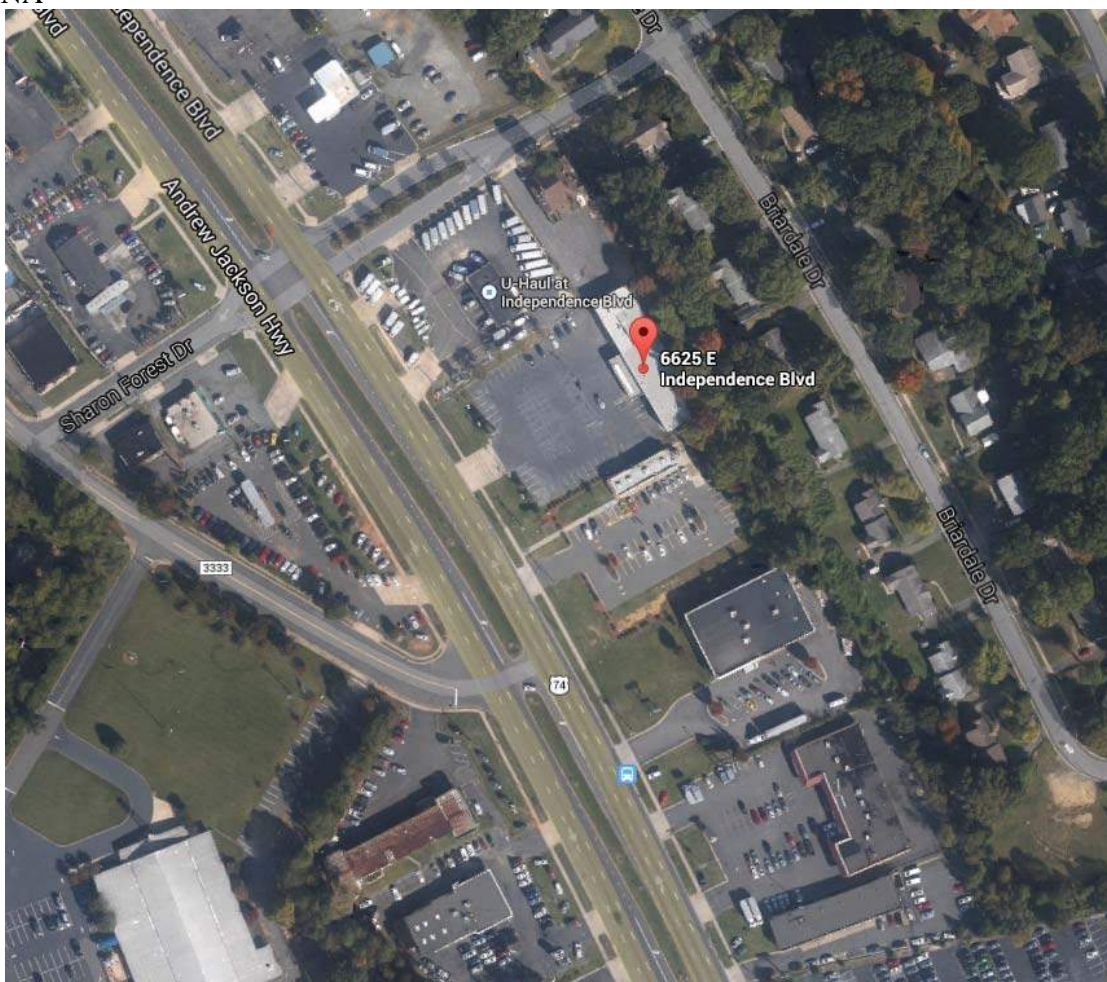
51)	Property Name U-Haul/Oak Leaf Auto Sales 6601 E. Independence Blvd. Charlotte, NC 28212	Property Owner: U-Haul Real Estate Co 2721 N. Central Ave. Phoenix, AZ 85004
	Facility ID: MO-2432	UST Owner: AMERCO Real Estate Co.
	Incident: 27122	Reid Riner
	NCDOT Parcel Number: NA	(address not in DEQ database)



View toward the northeast (Google Streetview)

This site is located on the eastern side of E. Independence Blvd. This facility reportedly operates as a U-Haul rental center. According to the UST section registry one UST was removed in 1989. The site appeared to operate as a gas station at one time. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. There is no indication that gasoline USTs were removed from this site. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

52)	Property Name Autosports/Carolina Volkswagen 6625 E. Independence Charlotte, NC 28212	Property Owner: Arnold Dieter Leege and Joe Ledford 130 McDowell St. #A Charlotte, NC 28212
	Facility ID: 0-033525 (UST # MO-7010) Incident: 23253, 27719 NCDOT Parcel Number: NA	Closed UST Owner: K Management 6000 Monroe Rd Charlotte, NC 28212



Top of page is northward (Google Maps)

This facility reportedly operates as a repair shop and automotive detail shop. According to the UST section registry one UST was removed in 1994. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the east side of E. Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

53)	Property Name Independence Hummer/Conoco Store 33069 6610 Independence Charlotte, NC 28212	Property Owner: Joe William Ingram 6706 E. Independence Charlotte, NC 28212
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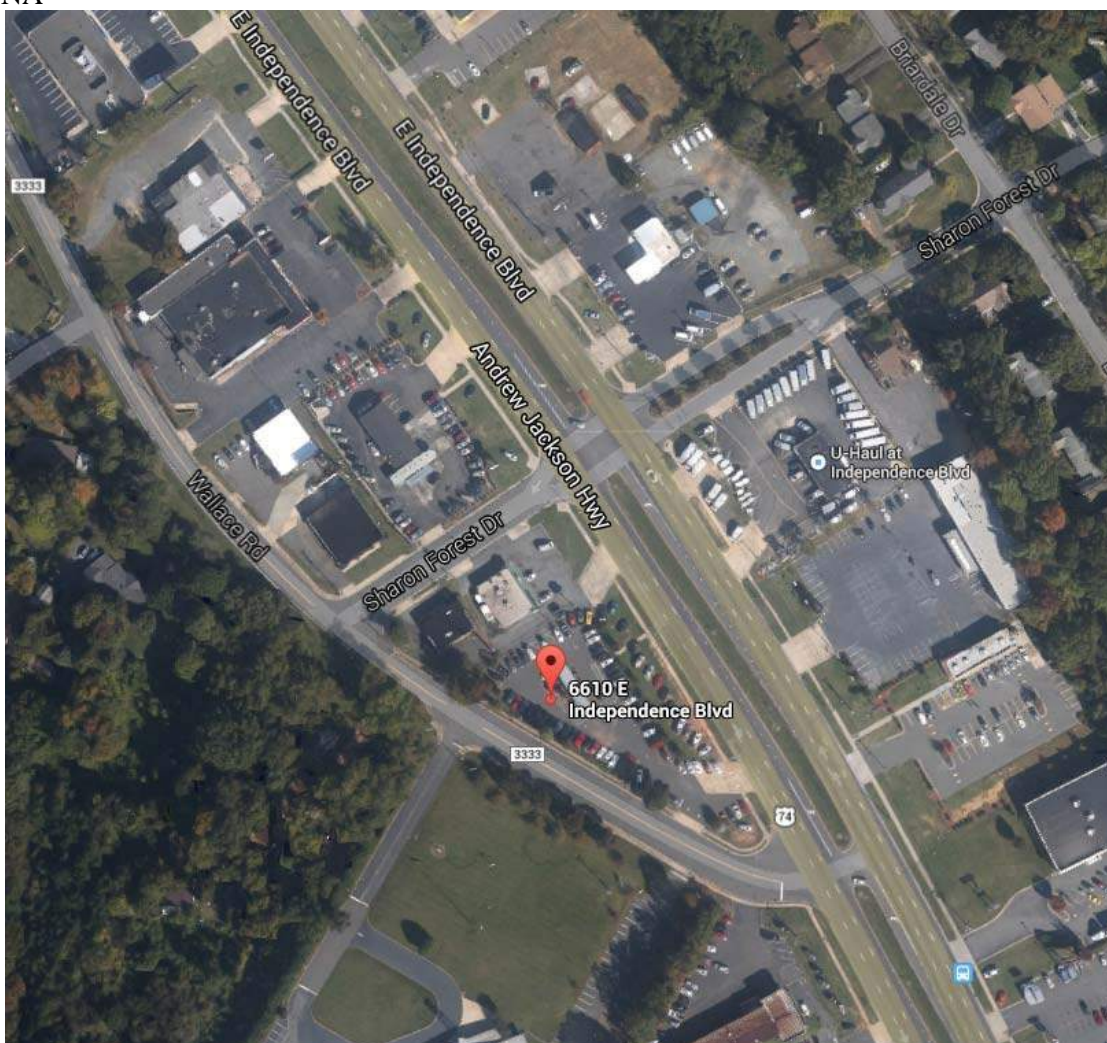
Facility ID: 0-014719**Incident:** 8547**NCDOT Parcel Number:**

NA

Closed UST Owner: Kayo/Conoco Inc.

600 N. Dairy Asford

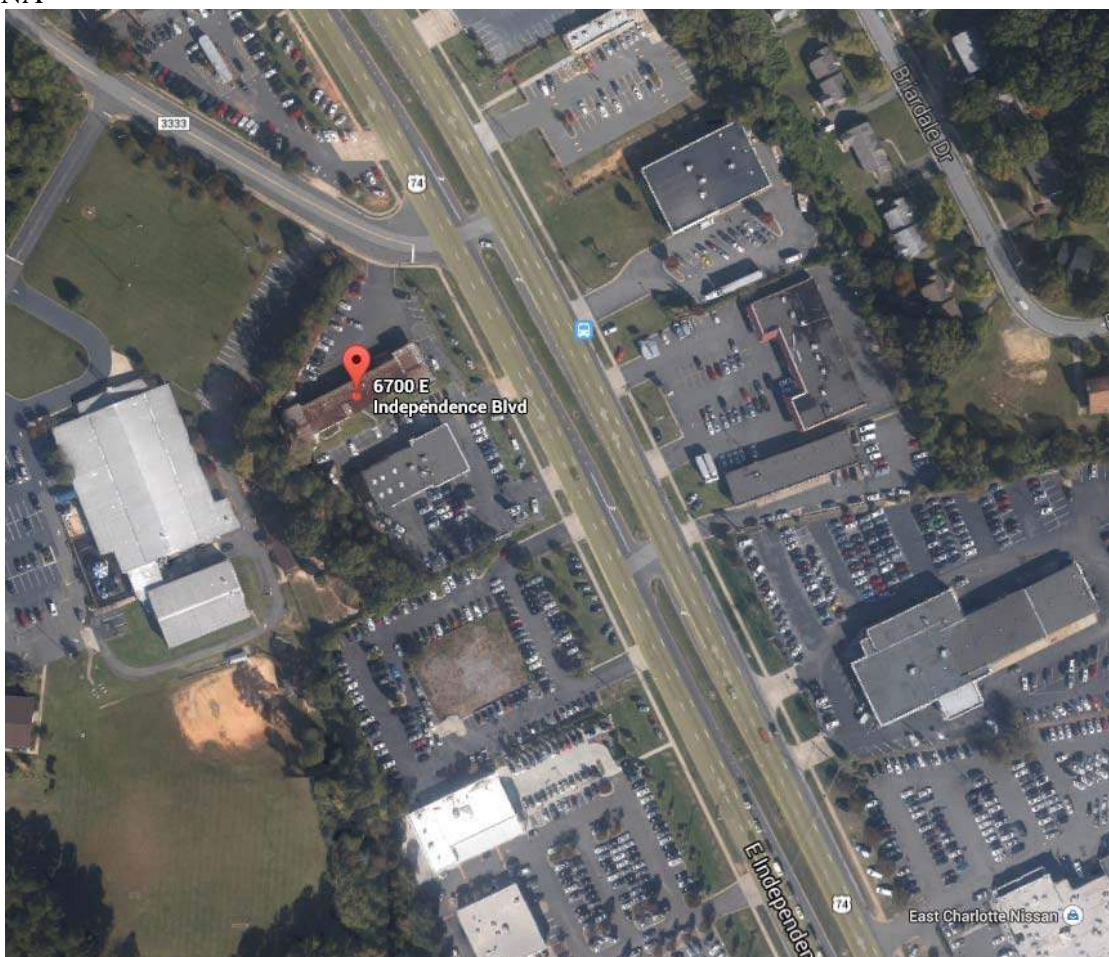
Houston, TX



Top of page is northward (Google Maps)

This facility reportedly operates as Hummer Auto Sales. A former gas station operated at this facility in 1991. According to the UST registry six USTs were removed from the facility in 1991. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This facility is located on the northwest corner of Margaret Wallace road and Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. This site is anticipated to present low geoenvironmental impacts.

54)	Property Name Repair Shop 6700 E. Independence Charlotte, NC 28212	Property Owner: Joe William Ingram 6811 Honors Ct. Charlotte, NC 28210
	Facility ID: NA	UST Owner: NA
	Incident: N/A	
	NCDOT Parcel Number: NA	



Top of page is northward (Google Maps)

This facility reportedly operates as a repair shop. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This facility is located on the southwest quadrant of the intersection of Margaret Wallace Rd. and Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. This site is anticipated to present low geoenvironmental impacts.

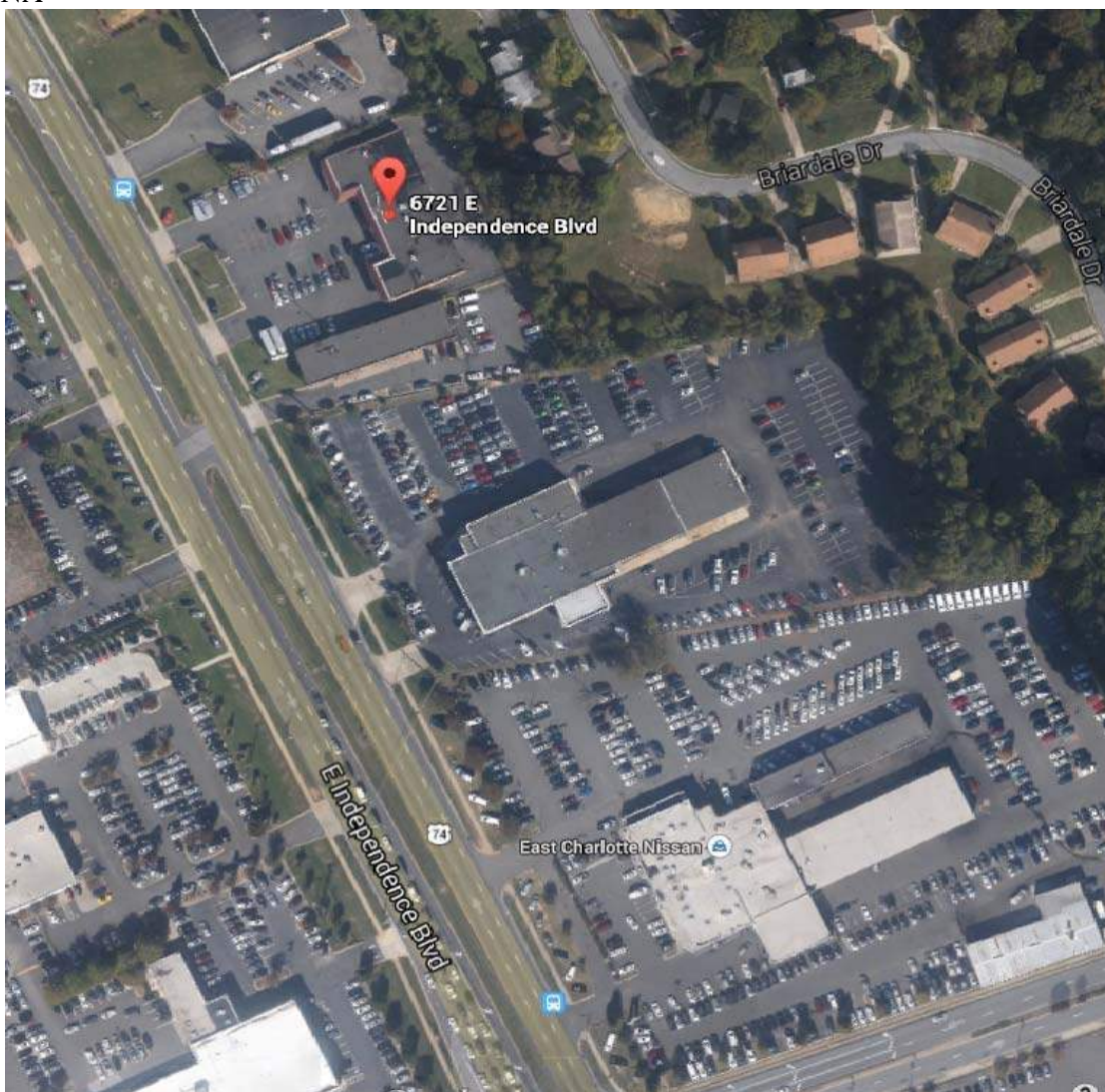
55)	Property Name Hummer Service/Independence Mitsubishi 6706 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Joe William Ingram 6811 Honors Ct. Charlotte, NC 28210
	Facility ID: 0-023374 (UST # MO-8723) Incident: 40242 NCDOT Parcel Number: NA Small Quantity Generator Haz. Waste Permit Number: NCD986229292 (Contact Mike Terry 704 971-3400)	UST Owner: Joe William Ingram 6811 Honors Ct. Charlotte, NC 28210



Top of page is northward (Google Maps)

This facility reportedly operates as an automobile repair shop. According to the UST registry three USTs were removed from the facility in 1991. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This facility is located on the west side of Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **The site is anticipated to present low geoenvironmental impacts.**

56)	Property Name Celebrity Cleaners 6721-H E. Independence Charlotte, NC 28212	Property Owner: 6721 Independence Blvd. LLC 6512 Newhall Rd. Charlotte, NC 28270
	Facility ID: NA	UST Owner: NA
	Incident: NA	
	NC DSCA: NA	
	NCDOT Parcel Number: NA	



Top of page is northward (Google Maps)

This facility reportedly or formerly operated as a dry cleaner. This site is located on the eastern side of E. Independence Blvd. A report was issued by GeoEnvironmental Section on October 9, 2008 for U-0209B. **This site is anticipated to present moderate geoenvironmental impacts.**

57)	Property Name Auto Tune Up/ Goodyear Service Center #2373 6729 E. Independence Charlotte, NC 28212	Property Owner: Glass Gorham Company 7700 Austin Ave Skokie, IL 60077
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Facility ID: (UST #MO-1094)**UST Owner:** NA**Incident:** 27238**NCDOT Parcel Number:**

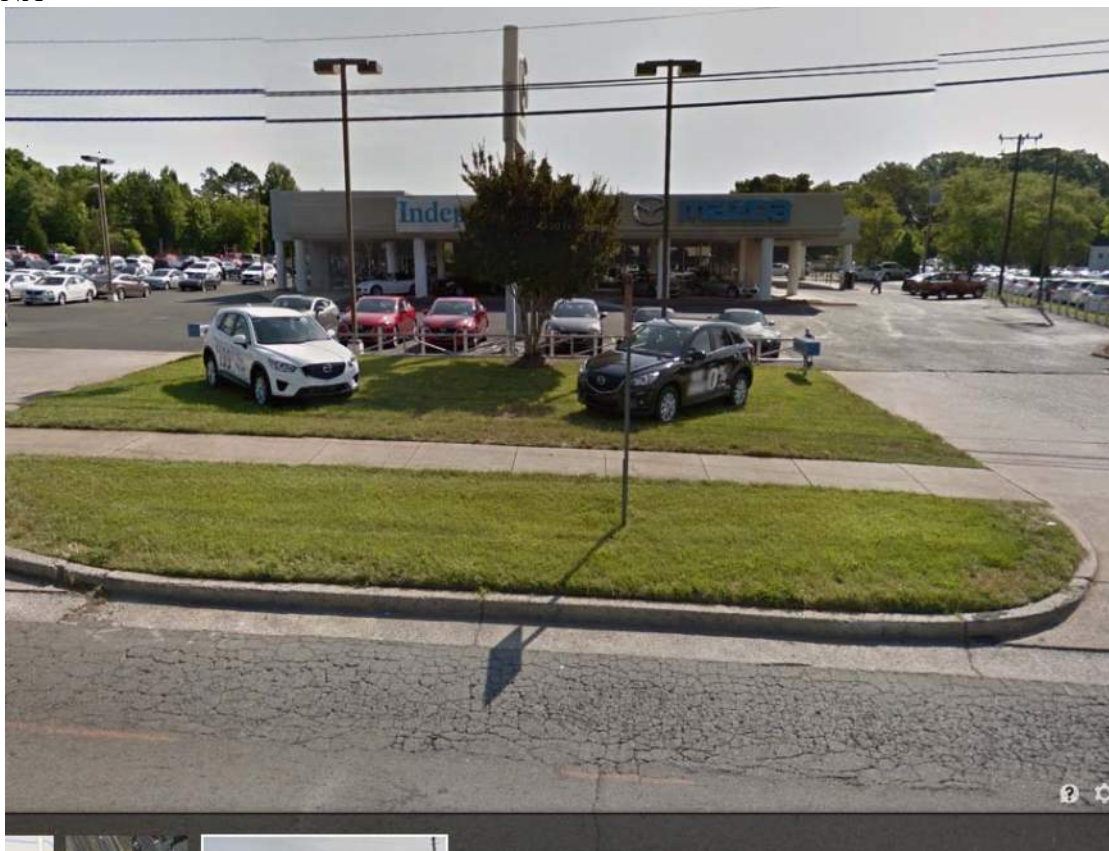
NA



View is northward c. 2008

This facility reportedly operates as an auto repair service station. The site is located on the eastern side of Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

58)	Property Name Montgomery Mazda 6735 E. Independence Blvd. Charlotte, NC 28212	Property Owner: LLC Montgomery Family Properties 6735 E. Independence Blvd. Charlotte, NC 28212
	Facility ID: 0-030791 (UST #MO-1597) Incident: 40352 NCDOT Parcel Number: NA	UST Owner: Charlie and Lennie Montgomery 4301 Singingwood Ln. Charlotte, NC 28266



View toward the northeast (Google Streetview)

This facility reportedly operates as a car dealer and service station. According to the UST section registry two USTs were removed in 1990. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the east side of Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

59)	Property Name Toyota City Inc. AKA Independence Nissan 6801 E. Independence Blvd. AKA 6901 E. Independence Blvd. Charlotte, NC 28212	Property Owner: TT Of East Charlotte LLC 505 S Flagler Dr., # 700 West Palm Beach, FL 33401
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Facility ID: 0-003638, 0-024928, (UST # MO-3675; MO-1282) **UST Owner:** N/A

Incident: 9490, 27272

NCDOT Parcel Number:

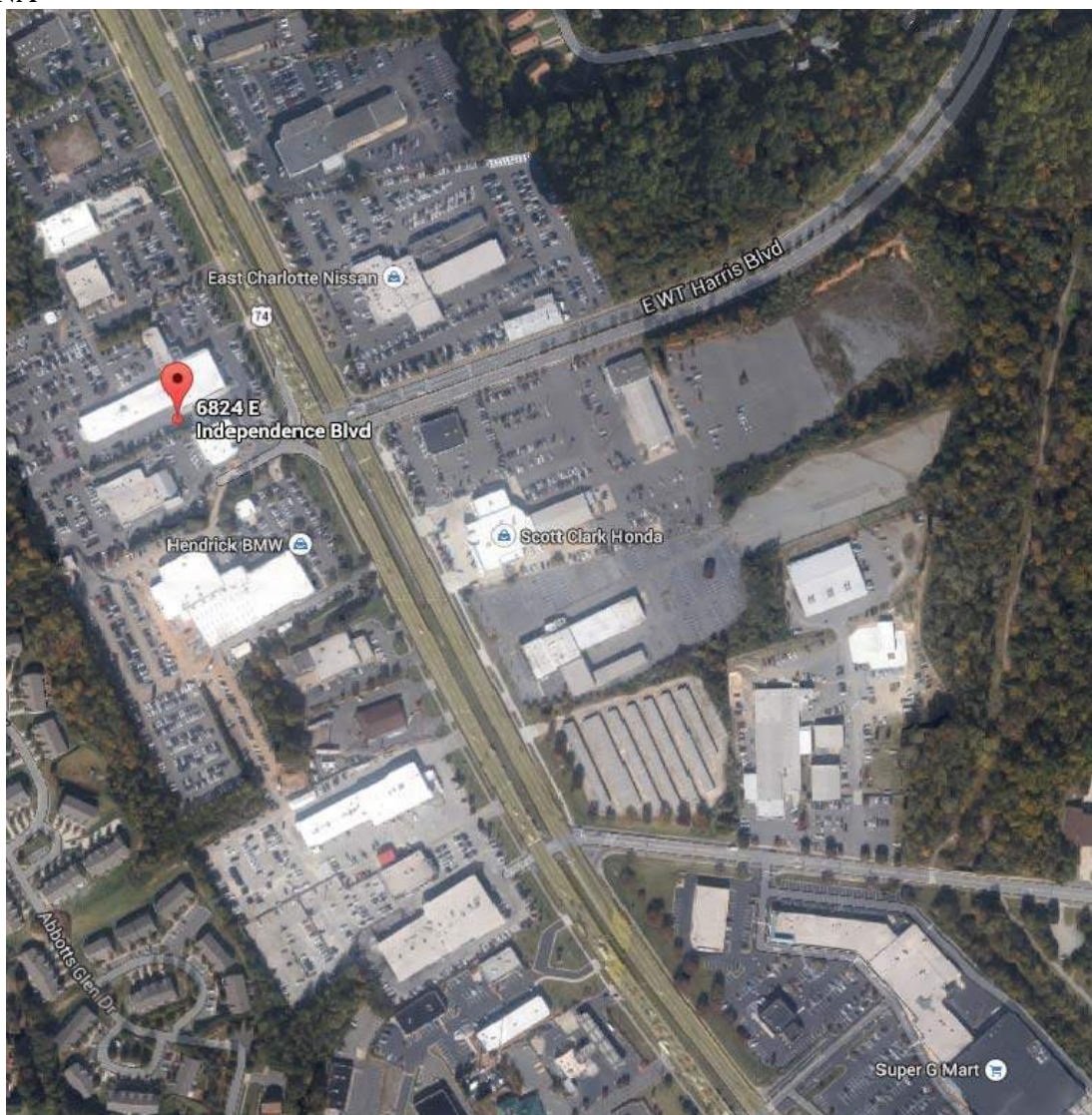
NA



View toward the northeast (Google Streetview)

Address not found of 6801; the site could be part of 6901. This facility operates as an auto dealer. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. The site is located on the eastern side of the intersection of Independence Blvd. and EWT Harris Blvd. **This site is anticipated to present low geoenvironmental impacts.**

60)	Property Name Hendrick Lexus/Hendrick Acura 6824 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Hendrick Automotive Group 6000 Monroe Rd. Suite 100 Charlotte, NC 28212-6178
	Facility ID: 0-001911, 01-0-0000029367 (UST # MO-4375)	UST Owner: Hendrick Automotive Group 6000 Monroe Rd. Suite 100 Charlotte, NC 28212-6178
	Incident: 14168	
	NCDOT Parcel Number: NA	



Top of page is northward (Google Maps)

This facility reportedly operates as a car dealer and repair shop. According to the UST section registry one UST is on site and two USTs were removed in 1994. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. This facility is located on the west side of E. Independence Blvd. Reports were issued by GeoEnvironmental Section on October 9, 2008 for U-0209B and on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

61)	Property Name Hendrick Imports 6950 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Hendrick Automotive Group 6000 Monroe Rd. Suite 100 Charlotte, NC 28212-6178
	UST #: 4374	UST Owner: Hendrick Imports
	Facility ID: 0-023439	Doug Winchester
	Incident: 14167	6950 E. Independence Blvd.
	NCDOT Parcel Number:	Charlotte, NC 28212
	NA	



View is southwestward

This facility operates as an auto dealer. This facility is located west of the intersection of E. Independence Blvd. and E. WT Harris Blvd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

62)	Property Name Crown Honda 7001 E. Independence Blvd. Charlotte, NC 28212	Property Owner: TT Of Harris LLC 505 S Flagler Dr., Ste. 700 West Palm Beach, FL 33401
	Facility ID: N/A (MO-6893) Incident: 27618 Brown Fields ID: 16064-12-60 (Carolyn Minnich signed 4/23/2015) NCDOT Parcel Number: NA	UST Owner: Lapointe, Inc. c/o Frank LaPointe 2424 Beretania Circle Charlotte, NC 28211



Aerial from Google Maps, view is eastward

This facility operates as a car dealer. This facility is located on the eastern corner of E. Independence Blvd and E.W.T Harris Blvd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

63)	Property Name Charlotte Import Cars 7040 E. Independence Blvd. Charlotte, NC 28212	Property Owner: County LLC Collins Family of Mecklenburg 7040 E. Independence Blvd. Charlotte, NC 28212
	Facility ID: N/A	UST Owner: N/A
	Incident: N/A	
	Small Quantity Generator Haz. Waste	
	Permit Number: NC0000901348 (Eugenia Allen 704-563-8816)	
	NCDOT Parcel Number: NA	



View toward the southwest

This facility operates as an auto dealer. This facility is located on the western side of E. Independence Blvd., straight across from the intersection with Margaret Wallace Rd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

64)	Property Name Wilburn Auto Body Shop 2033 Margaret Wallace Rd. Matthews, NC 28105	Property Owner: D&B Realty Group LLC 1829 Dickerson Blvd. PMB 157 Monroe, NC 28110
-----	---	---

Facility ID: N/A**UST Owner:** N/A**Incident:** N/A**Small Quantity Generator Haz. Waste****Permit Number:** NCD081432122 (Duke
Durfee 704-535-3231)**NCDOT Parcel Number:**

NA



View toward the north

This facility operates as an auto body shop. This facility is located on the northern side of Margaret Wallace Rd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

65)	Property Name Swan Cleaners C/O Slate Acquisitions 7303 E. Independence Blvd. Charlotte, NC	Property Owner: Suso 2 Independence LP 200 Front St. West, Ste. 2400 Toronto, ON M5V 3K2
	Facility ID: NA	UST Owner: NA
	Incident: NA	
	DSCA ID: DC600068	
	NCDOT Parcel Number: NA	



View toward the northwest

This facility operates as a dry cleaner. This facility is located on the eastern side of E. Independence Blvd. southeast from its intersection with Margaret Wallace Rd. **This site is anticipated to present moderate geoenvironmental impacts.**

66)	Property Name Fire Station #29 2121 Margaret Wallace Rd. Charlotte, NC 28105	Property Owner: City of Charlotte 600 E 4 th St Charlotte NC 28202
	Facility ID: 0-035049 (UST # MO-5613)	UST Owner: same as property owner
	Incident: 19801	
	NCDOT Parcel Number: NA	



View toward the north

This facility operates as a fire station. This facility is located on the northern side of E. Independence Blvd. southeast from its intersection with Margaret Wallace Rd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

67)	Property Name Kangaroo/Pantry 3922/Petro Express #2/Conoco Store #33077 7208 E. Independence Blvd Charlotte, NC 28227	Property Owner: C/O The Pantry Inc. ARC PSCLTNC001 LLC 1130 W. Warner Rd Bldg. B Unit DC17 Tempe, AZ 85284
	Facility ID: 0-032205; (UST # MO-7650, MO-7897, MO-4569) Incident: 30282, 36509, 15288 NCDOT Parcel Number: NA	UST Owner: Pantry 3922 DBA Petro Express 7208 E Independence PO Box 1410/1801 Douglass Dr. Sanford, NC AKA Paul Taylor Conoco Inc. PO Box 4784 Houston, TX



View toward the southwest

This facility operates as an active gas station. This facility is located on the western side of E. Independence Blvd. west of Village Lake Dr. Multiple groundwater monitoring wells were observed. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

68)	Property Name Orkin Ext Co. Inc. 7205 Cherry Tripp. Dr. Charlotte, NC 28212	Property Owner: Guy Properties LLC 4401 E. Independence Blvd. Charlotte, NC 28205
	Facility ID: 0-017220 Incident: 8625 NCDOT Parcel Number: NA	UST Owner: Orkin Exterminating Co. Inc. 7205 Cherry Tripp Dr. Charlotte, NC



View toward the north

This facility repeatedly operated as an exterminating company that had a registered UST. This facility is located on the northern side of Cherry Tripp Dr. The tank reportedly was closed c. 1989. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

69)	Property Name Quorum Cleaners 7308 E. Independence Blvd. Charlotte, NC 28227	Property Owner: Kun Soon Kim (919) 439 5000 Quorum MP LLC 3717 National Dr., Ste. 104 Raleigh NC 27612
-----	--	--

Facility ID: N/A**UST Owner:** N/A**Incident:** N/A**Small Quantity Generator Haz. Waste****Permit Number:** NCD986191047**NC DSCA:** 060-0034**NCDOT Parcel Number:**

NA

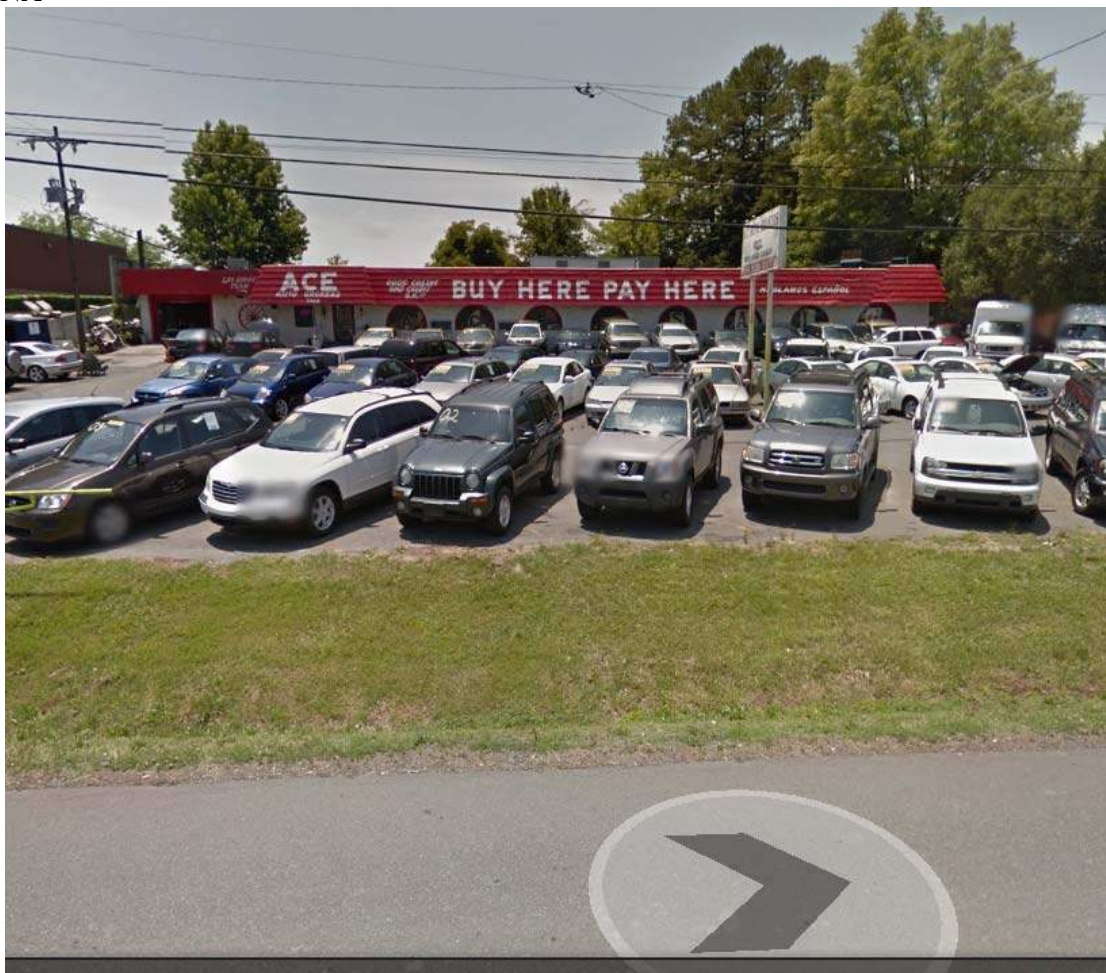


View toward the southwest

This facility operates as a dry cleaner. This facility is located on the western side of E. Independence Blvd and approximately 40 feet east of Lakewood Quorum Dr. A dry cleaning machine was observed in the store window.

This site is anticipated to present moderate geoenvironmental impacts.

70)	Property Name Ace Auto Brokers 7400 E. Independence Blvd. Charlotte, NC 28212	Property Owner: Adnan Nasrallah and Ziad Nasrallah 2300 Oakmeade Dr. Charlotte, NC 28270
	Facility ID: (UST # MO-6478) Incident: 24573 NCDOT Parcel Number: NA	UST Owner: NA



View toward the southwest

This facility reportedly operates as an auto dealer. This facility is located on the western side of E. Independence Blvd., across from the southern entrance to Independence Square. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. A report was issued by GeoEnvironmental Section on December 19, 2014 for U-5526. **This site is anticipated to present low geoenvironmental impacts.**

71)	Property Name Harris Teeter Inc. 7500 E. Independence Blvd. Charlotte, NC 28212	Property Owner: C/O Andy English BP Quorum LLC 3717 Nation Dr. Ste. 104 Raleigh, NC 27612
	Facility ID: 0-028724 (UST # MO-1158) Incident: 27115 NCDOT Parcel Number: NA	UST Owner: Harris Teeter Inc. 13000 York Rd. Charlotte, NC



View toward the southwest

This facility reportedly operates as a corporate office. This facility is located on the western side of E. Independence Blvd., approximately 800 feet north of Village Lake Dr. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. There is a potential for USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

72)	Property Name Carmax #7106 7700 Krefeld Dr. Matthews, NC 28105	Property Owner: Realty Income Properties 25 LLC PM Dept. #4394 11995 El Carmino Real San Diego, CA 92130
	Small Quantity Generator Haz. Waste Permit Number: NCR000136705 Facility ID: 0-035183 Incident: N/A NCDOT Parcel Number: NA	UST Owner: C/O Ali Woodworth Carmax Auto Superstore 4900 Cox Rd Attn. Dan Bickett Glen Allen, VA



View toward the southwest

This facility operates as auto sales. This facility is located on the eastern side of E. Independence Blvd., at the northern corner of the intersection of E. Independence Blvd. and Krefeld Dr. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

73)	Property Name Arnold Palmer Cadillac/Hendrick Pontiac GMC Truck 8218 E. Independence Blvd. Charlotte, NC 28227	Property Owner: Stegall T.G. Leasing Co. Inc. 8110 E. Independence Blvd. Charlotte, NC 28227
	Facility ID: 0-027163, 0-023508 (UST # MO-8857, MO-3515) Incident: 40366, 8774 NCDOT Parcel Number: NA	UST Owner: Arnold Palmer Cadillac 8218 E. Independence Blvd. Charlotte NC 28227 AKA T.G. Stedall [sic] Leasing C/O Prestige P.O. Box 17047 C/O Pontiac GMC Charlotte, NC 28227



View toward the southwest

This facility operates as a car dealer. This facility is located on the western side of E. Independence Blvd., across from Cross Point Cr. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

74)	Property Name T.G. Stegall Trucking 8100 E. Independence Blvd. Charlotte, NC 28227	Property Owner: T.G. Stegall Leasing PO Box 98 Matthews, NC 28106
	Facility ID: 0-017168, (UST # MO-4314)	UST Owner: T.G. Stegall Trucking Co. PO Box 98 Matthews, NC 28106
	Incident: 27286, 13905	
	NCDOT Parcel Number: NA	



View toward the southwest

This facility reportedly operates as a trucking facility. This facility is located on the western side of E. Independence Blvd., east of McAlpine Creek Regional Park. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

75)	Property Name Lazer Carwash 8434 E. Independence Blvd. Charlotte, NC 28227	Property Owner: All Stor NC LLC 9226 Teddy Lane Lone Tree, CO 80124
	Facility ID: N/A	UST Owner: N/A
	Incident: N/A	
	NCDOT Parcel Number: NA	



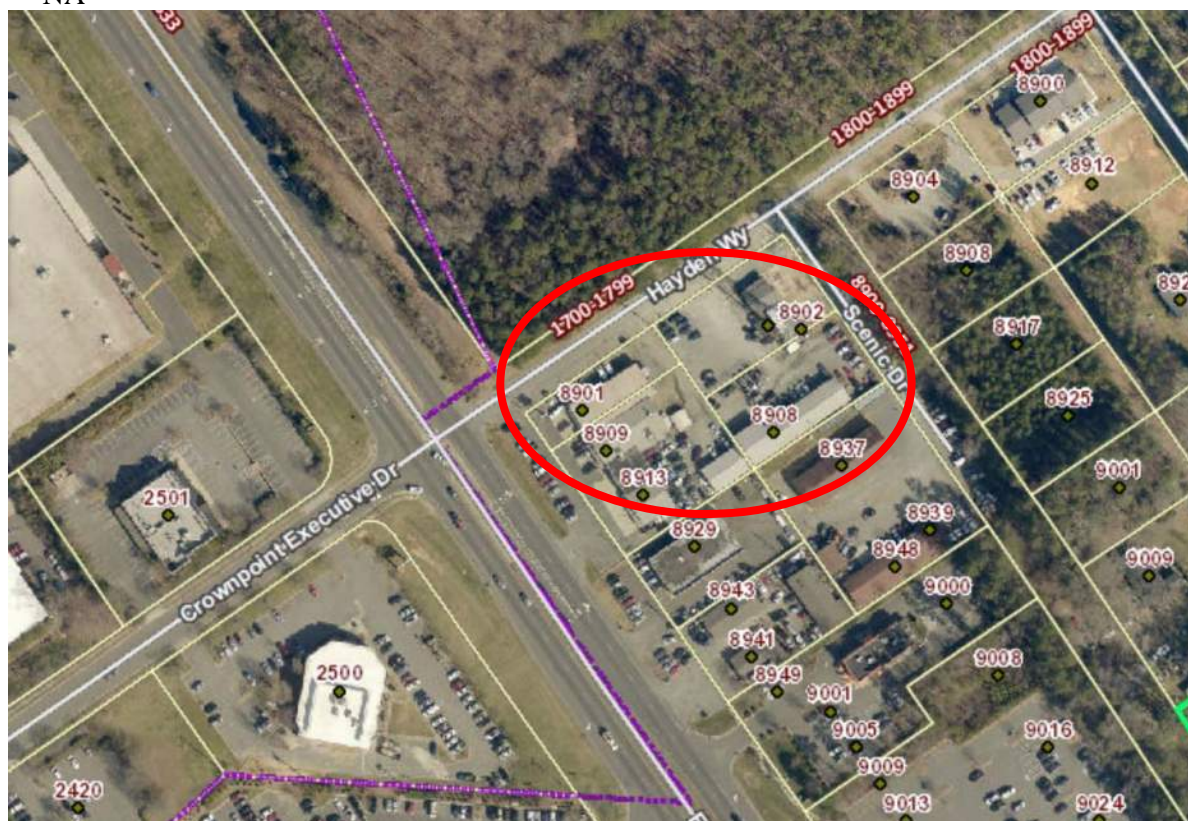
View toward the southwest

This facility operates as a car wash with likely has oil water separator(s). This facility is located on the western side of E. Independence Blvd north of Irvin Creek Greenway. **The site This site is anticipated to present low geoenvironmental impacts.**

76)	Property Name Charlotte Realty Investors 8901, 8902, 8908, 8909, 8913 E. Independence Blvd. Matthews, NC 28105	Property Owner: Charlotte Realty Investors 1100 Kenilworth Ave #200 Cornelius, NC 28204
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Facility ID: N/A**UST Owner:** N/A**Incident:** N/A**NCDOT Parcel Number:**

NA



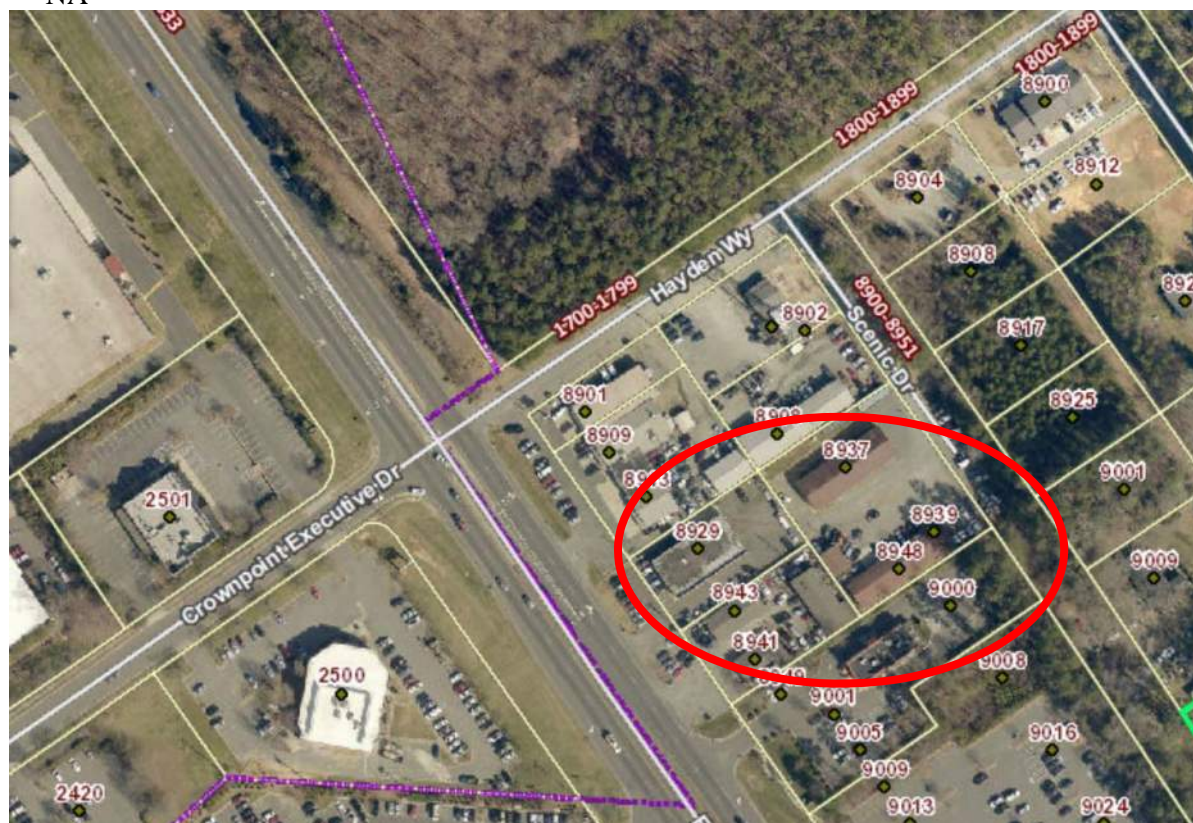
North toward top of page

These parcels, under single ownership, operate as multiple automotive service providers. They are located on the western side of E. Independence Blvd. There is a potential for chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

77)	Property Name Michael Todd 8929, 8937, 8943, 8941, 8939, 8948 E. Independence Blvd. Matthews NC 28105	Property Owner: Michael E R/T Todd 17900 Culross Ln. Charlotte NC 28278
-----	--	---

Facility ID: NA**UST Owner:** N/A**Incident:** NA**NCDOT Parcel Number:**

NA



North toward top of page

These parcels, under single ownership, operate as multiple automotive service providers. They are located on the western side of E. Independence Blvd. There is a potential for chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

78) **Property Name**
Former Elizabeth Barbee Residence
9100 E. Independence Blvd.
Matthews NC 28105

Property Owner:
Barbee Land Holdings
1302 Lawyers Rd West
Indian Trail, NC 28079

Facility ID: (UST # MO-7005)

UST Owner: same as property owner

Incident: 27711

NCDOT Parcel Number:

NA



North toward top of page, Google Earth images, upper c. 2015, lower c. 2002

This facility operates as a parking lot and was a former residence with a registered UST and Incident. This facility is located on the western side of E. Independence Blvd. across the street from its intersection with Claire Dr. **This site is anticipated to present low geoenvironmental impacts.**

79)	Property Name Car Wash 9331 E. Independence Blvd. Matthews, NC 28105	Property Owner: National Retail Properties LP 450 South Orange Ave #900 Orlando, FL 32801
	Facility ID: NA	UST Owner: N/A
	Incident: N/A	
	NCDOT Parcel Number: NA	



North toward top of page (Mecklenburg County website Birdseye View)

This facility operates as a car wash with likely oil water separator(s). This facility is located on the eastern side of E. Independence Blvd. across the. **This site is anticipated to present low geoenvironmental impacts.**

-
- 80) **Property Name**
Pep Boys Store #150
9415 E. Independence Blvd.
Matthews, NC 28105
- Property Owner:**
Jack & the Pep Boys
Manny, Moe/ John Kerelo
3111 W. Allegheny Ave.
Philadelphia, PA 19132
- Facility ID:** 0-030821, (UST # MO-5581, MO-7573) **UST Owner:** same as property owner
Incident: 19514, 36213
NCDOT Parcel Number:
NA



View toward the southwest

This facility operates as an auto service. This facility is located on the western side of E. Independence Blvd. west of Northeast Ct. Hydraulic lifts are present – two hydraulic lifts appear to have in ground components. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

81)	Property Name Exxon Convenience Store 4-001 1700 Windsor Square Dr. Matthews, NC 28105	Property Owner: ATTN/SAMI I NAFISI SL&E Investments LLC 7935 Council Pl., Ste. 200 Matthews, NC 28105
-----	--	--

Facility ID: 0-021638**Incident:** N/A**NCDOT Parcel Number:**
NA**UST Owner:** Exxon Mobil Corp.
PO Box 4386
ATTN: SHE (sic)
Houston, TX

View toward the southwest

This facility operates as an active gas station. This facility is located on the eastern side of E. Independence Blvd at its intersection with Windsor Square Dr. Two groundwater monitoring wells were observed. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

82)	Property Name HO Cleaner 10420 E. Independence Blvd. Matthews, NC 28105	Property Owner: Matthews Festival Limited Partnership 200 Wingo Way, Ste. 100 Mt. Pleasant, SC 29464
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Small Quantity Generator Haz. Waste**Permit Number:** NC0991302814**Facility ID:** N/A**Incident:** N/A**NC DSCA ID:** 060-0034**NCDOT Parcel Number:**

NA

UST Owner: N/A

View toward the southwest

This facility operates as a dry cleaner. This facility is located on the western side of E. Independence Blvd west of Matthews Township Parkway. **This site is anticipated to present moderate geoenvironmental impacts.**

83)	Property Name \$2.49 Cleaner 1641 Matthews Township Pkwy. Matthews, NC 28105	Property Owner: Genesis Ventures LLC 1635 Matthews Township Pkwy. Matthews, NC 28105
	Haz. Waste Permit Number: NA Facility ID: N/A Incident: N/A NC DSCA ID: NA NCDOT Parcel Number: NA	UST Owner: N/A



View toward the north

This facility operates as a dry cleaner. This facility is located on the northern side of Matthews Township Parkway. **This site is anticipated to present moderate geoenvironmental impacts.**

84)	Property Name Vacant Facility 10928 E. Independence Blvd. Matthews, NC 28105	Property Owner: Attn: Pm Dept. 0909 Realty Income Corporation 11995 El Camino Real San Diego, CA 92130
-----	--	---

Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** N/A**Incident:** N/A**NCDOT Parcel Number:**

NA



View toward the southwest

This vacant facility apparently operated as an automotive service facility. This facility is located on the western side of E. Independence Blvd west of Matthews Township Parkway. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

85)	Property Name Black's Tire/Goodyear 2331 11008 E. Independence Blvd. Matthews, NC 28105	Property Owner: Jack LaTrobe 1337 SW 1st Ave Ft. Lauderdale, FL 33315
	Haz. Waste Permit Number: NA Facility ID: (UST # MO-1092) Incident: 0-027254 NCDOT Parcel Number: NA	UST Owner: Joe Smerglia 1144 E. Market St. Akron, NC 43316



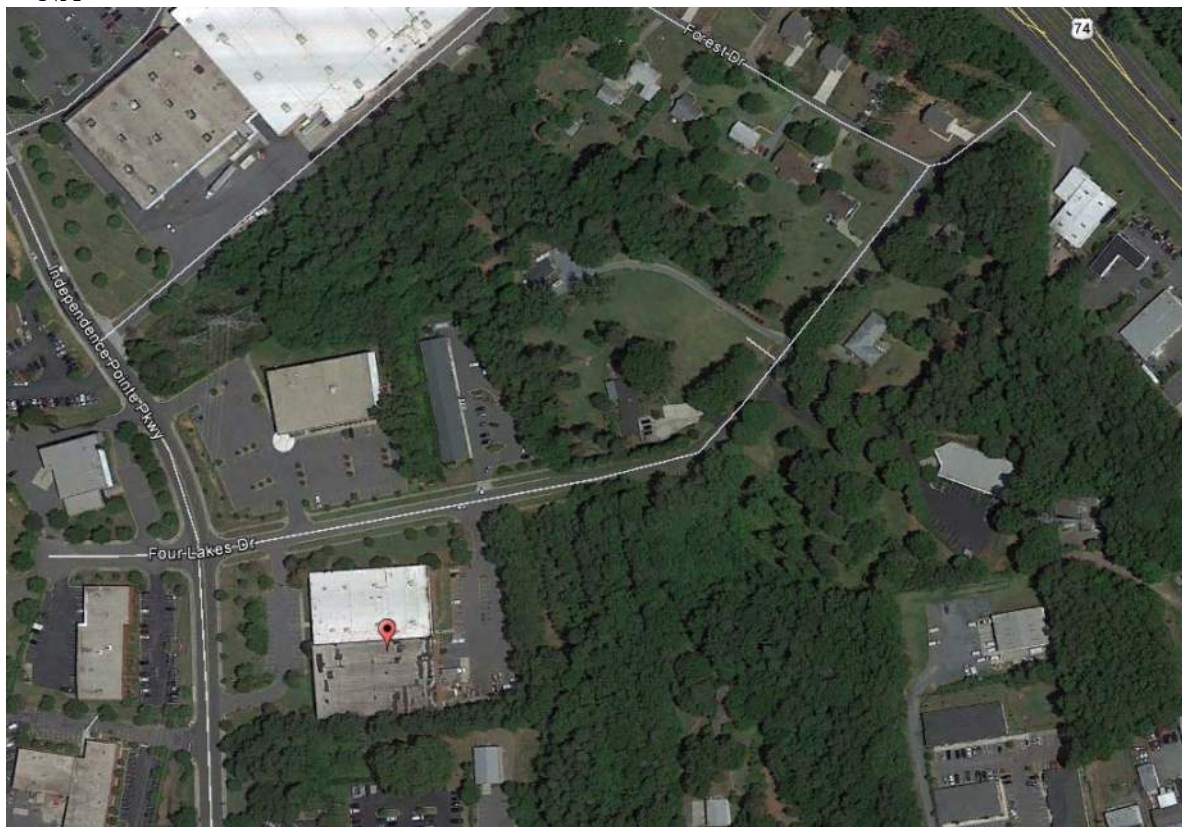
View toward the south

This facility operates as a tire retailer. This facility is located on the western side of E. Independence Blvd. Five hydraulic lifts with in-ground components were observed on site. There is a potential for USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

86)	Property Name ABT Metals formerly known as Estul, Inc. 10737 Independence Point Pkwy. Matthews, NC 28105	Property Owner: Independence Point Investments LLC 2925 Carnegie Blvd., Ste. 200 Charlotte, NC 28209
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Small Quantity Generator Haz. Waste
Permit Number: NCR000139048 (W. K
Query 704-847-9188)
Facility ID: N/A
Incident: N/A
NCDOT Parcel Number:
NA

UST Owner: N/A



Top of page is northward (Google Maps)

This facility operates as a metal facility founded in 1954. This facility is located on the southwestern intersection of Independence Parkway and Four Lakes Dr. The metal stamping and drawing facility produces stampings for door closers, drainage systems, computer printer accessories and aircraft, and industrial and commercial batteries. Metals, lubricants, and degreasing agents, etc. are concerns at this site. **This site is anticipated to present low geoenvironmental impacts.**

87)	Property Name PCA 815 Matthews-Mint Hill Rd. Matthews, NC 28105	Property Owner: Matthews Property 1 LLC C/O Harris Teeter Properties 701 Crestdale Rd Matthews NC 28105
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Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** N/A**Incident:** N/A**NCDOT Parcel Number:**

NA

Brownfields Property: 16036-12-60

(Carolyn Minnich)



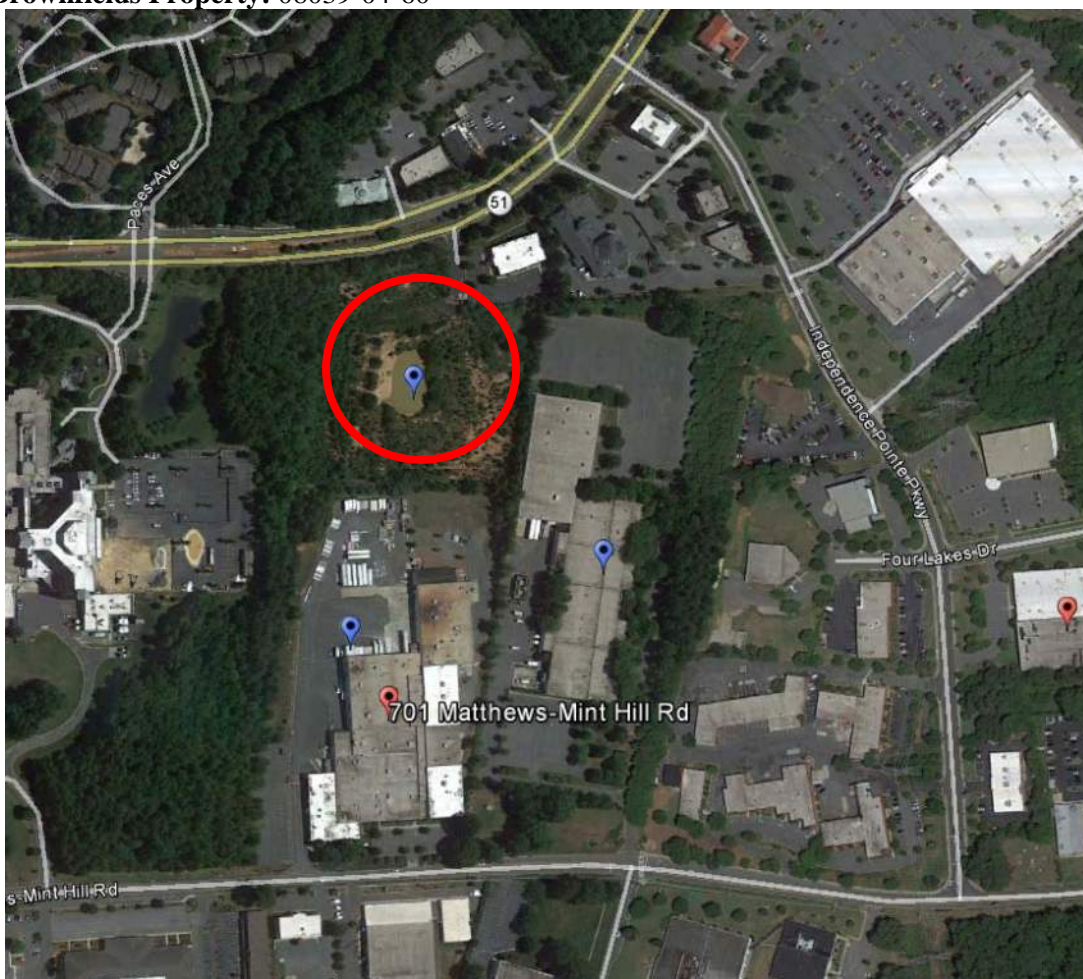
Top of page is northward (Google Maps)

This facility (red marker at center of photo) operates as a distribution and warehouse. This 15 acre site is located on the northern side of Matthews Mint Hill Rd. A Brownfields Property document was signed 4/15/2014. The property was the former site of PCA International that operated as a film processing and development center. Environmental contamination is present in soil, groundwater, and vapor. Matthews Property 1, LLC has currently committed to office, distribution and warehouse use. The property is surrounded by land in commercial, retail, and light industrial uses. Land use restrictions regarding commercial/warehousing use only and groundwater and/or soil contamination and vapor intrusion. Monitoring wells may be on site. **This site is anticipated to present low geoenvironmental impacts.**

88)	Property Name Carlton Development 1640 Matthews Township Parkway Former sediment basin of Conbraco Industries Facility 701 Matthews-Mint Hill Rd. Matthews, NC	Property Owner: LJW Land LLC C/O William W Waters (Manager) 7620 Baltusrol Ln. Charlotte NC 28210
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Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** N/A**Incident:** N/A**NCDOT Parcel Number:**

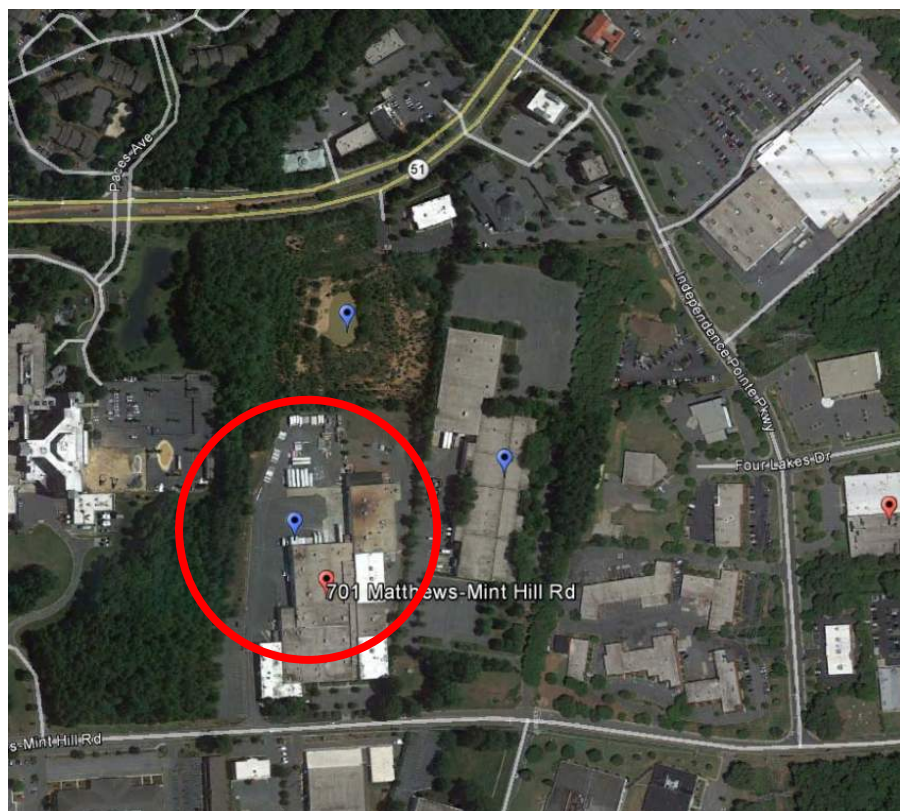
NA

Brownfields Property: 08039-04-60

Top of page is northward (Google Maps)

This is the site of the former sediment and runoff basin for the former Conbraco Industries facility. It is located on the southern side of Matthews Township Parkway, north of the Conbraco Industries facility on Matthews Mint Hill Rd. The site was remediated in the EPA Superfund Program and given a “No Further Remedial Action Planned (NFRAP)” status. A Brownfields Agreement was signed 1/4/2006. Carlton Development intends to redevelop the site as a medical office with other commercial uses. **This site is anticipated to present low geoenvironmental impacts.**

89)	Property Name Conbraco Facility 701 Matthews-Mint Hill Rd. Matthews, NC	Property Owner: PFT-ABQ LLC 26 Corporate Plaza, Ste. 150 Newport Beach, Ca 92660 C/O Skye Inc. Attn: Brian T Prinn LLC Frosh-Mayberry 18301 Von Karmen Ste 330 Irvine, CA 92612
	Haz. Waste Permit Number: N/A Facility ID: 0-013784, (UST # MO-7574) Incident: 36226 NCDOT Parcel Number: NA	UST Owner: Conbraco Industries Mr. Jamey Jones 701 Matthews-Mint Hill Rd. Matthews, NC 28105



Top of page is northward (Google Maps)

This is currently the site of the Conbraco Industries facility. It is located on the northern side of Matthews Mint Hill Rd. Established in 1928, Conbraco Industries manufactures a range of brass valves and fittings. The company also provides water gauges, marine fittings, backflow prevention devices, pop safety and relief valves, and plumbing and heating products. Conbraco Industries manufactures actuators, controls, and ball, butterfly, check and mixing valves and supplies bronze, carbonless steel and ductile iron pipeline strainers. Conbraco Industries provides calibration services for bore gages, calipers and adjustable thread rings. It maintains foundries and manufacturing facilities in South Carolina that has been certified by the International Organization for Standardization. The site had registered UST and reportedly a diesel-UST overflow incident, c. 2007. There is a potential for chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

90)	Property Name Matthews Shell 11124 aka 11130 E. Independence Blvd. Matthews, NC 28105	Property Owner: Nisbet E P Co PO Box 35367 Charlotte, NC 28235
	Haz. Waste Permit Number: N/A	UST Owner: Nisbet Oil
	Facility ID: 0-014162	1818 Baxter St.
	Incident: N/A	Charlotte, NC 28235
	NCDOT Parcel Number: NA	



View toward the north

This facility operates as an active gas station. This facility is located on the western side of E. Independence Blvd., north of Matthews Mint Hill Rd. No monitoring wells were observed. **This site is anticipated to present low geoenvironmental impacts.**

91)	Property Name Firestone 1601 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Oakhaven Enterprises, Inc. 50 Century [sic] Blvd. Nashville, TN 37214
	Haz. Waste Permit Number: N/A	UST Owner: N/A
	Facility ID: N/A	
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the north

This facility operates as an automobile service center. This facility is located on the northern side of Matthews Mint Hill Rd. east of E. Independence Blvd. Three hydraulic lifts with in-ground components were observed. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

92)	Property Name Swan Dry Cleaner 1115 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Tae Kyu Park, Oh Seon 3216 Old Monroe Rd. Stallings NC 28104
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Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** N/A**Incident:** N/A**NC DSCA:** NA**NCDOT Parcel Number:**
NA

View toward the southwest

This facility operates as a dry cleaner. This facility is located on the northern side of Matthews Mint Hill Rd. west of E. Independence Blvd. **This site is anticipated to present moderate geoenvironmental impacts.**

93)	Property Name Jiffy Lube 1201 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Norman E Goelzer Delores A Goelzer 20 Miller Point Dr. Taylorsville NC 28681
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Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** N/A**Incident:** N/A**NCDOT Parcel Number:**
NA

View toward the southwest

This facility operates as an oil change facility. This facility is located on the northern side of Matthews Mint Hill Rd. west of E. Independence Blvd. There is a potential for USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

-
- | | | |
|-----|---|--|
| 94) | Property Name
Car wash and other building
1215 - 1233 Matthews Mint Hill Rd.
Matthews, NC 28105 | Property Owner:
G Howard Jr Webb
PO Box 38367
Charlotte NC 28278 |
| | Haz. Waste Permit Number: N/A | UST Owner: N/A |
| | Facility ID: N/A | |
| | Incident: N/A | |
| | NCDOT Parcel Number:
NA | |

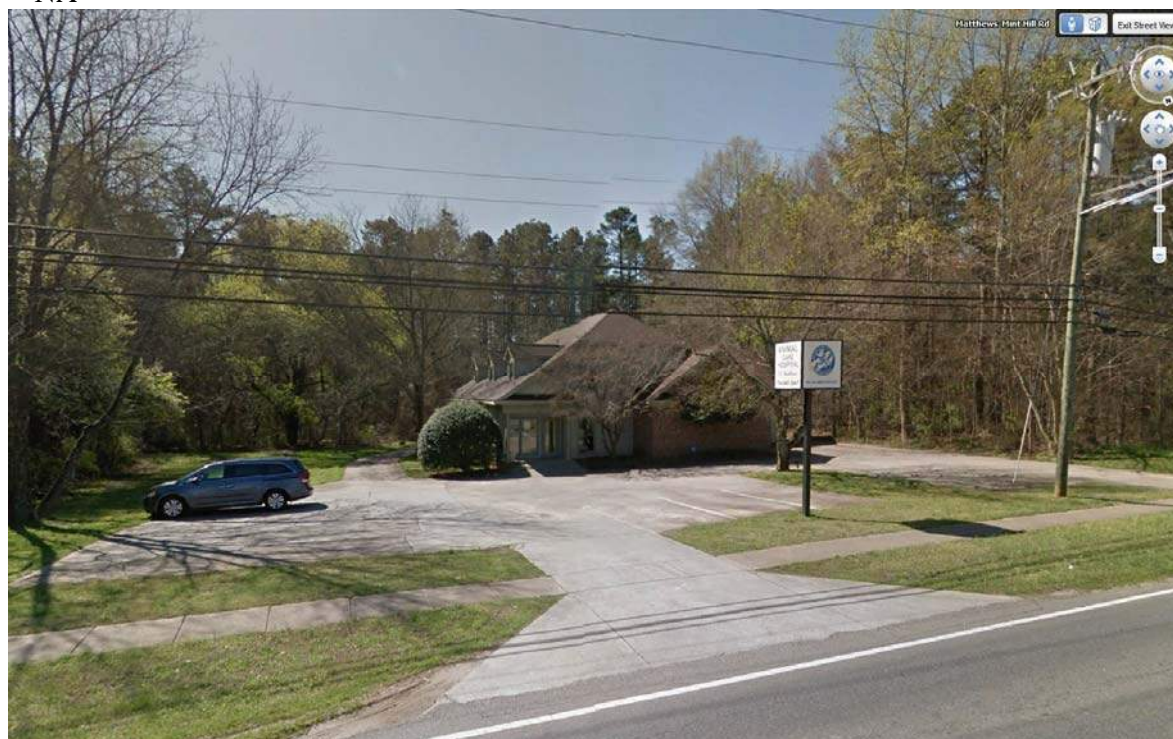


View toward the north

This facility operates as a car wash and unidentified white building. This facility is located along the northern side of Matthews Mint Hill Rd. It could be the site of a former gas station. Oil water separators are anticipated to be present associated with the car wash. There is a potential for hydraulic lifts, USTs and/or chemical use onsite.

This site is anticipated to present low geoenvironmental impacts.

95)	Property Name Animal Care Hospital 1216 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Frank J III Rutowski Michelle Kosempa Rutowski 903 Woodland Forest Rd Waxhaw, NC 28173
	Haz. Waste Permit Number: N/A	UST Owner: N/A
	Facility ID: N/A	
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the southwest

This facility operates as a veterinarian office. This facility is located along the southern side of Matthews Mint Hill Rd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

96)	Property Name Flooring America 1323 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Emanuel Properties LLC 2280 NW 16th St Pompano Beach FL 33069
	Haz. Waste Permit Number: N/A	UST Owner: N/A
	Facility ID: N/A	
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the north

This facility operates as a flooring retail facility. This facility is located along the north side of Matthews Mint Hill Rd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

97)	Property Name Antique Alley 1325 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Don R Edwards and Lois Edwards 8307 Langtree Ln. Charlotte NC 28227
	Haz. Waste Permit Number: N/A	UST Owner: N/A
	Facility ID: N/A	
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the north

This facility operates as an antique store. This facility is located along the north side of Matthews Mint Hill Rd. There is a potential for USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

98)	Property Name Smiths Automotive 1331 Matthews Mint Hill Rd. Matthews, NC 28105	Property Owner: Ethridge Z Smith And Nancy Smith PO Box 1071 Matthews, NC 28105
	Haz. Waste Permit Number: N/A	UST Owner: N/A
	Facility ID: N/A	
	Incident: N/A	
	NCDOT Parcel Number: NA	



View toward the north

This facility operates as an automotive service facility. This facility is located along the north side of Matthews Mint Hill Rd. There is a potential for hydraulic lifts, USTs and/or chemical use onsite. **This site is anticipated to present low geoenvironmental impacts.**

99)	Property Name 7-11/Exxon 4-3524 #2/ SAMS MART 218 11208 E. Independence Blvd. aka 1320 Matthews-Mint Hill Rd. Matthews, NC 28105	Property Owner: S L & E Investments LLC 7935 Council Pl Suite 200 Matthews, NC 28105
	Inactive Hazardous Sites Branch Number: NONCD0001696 Facility ID: 0-014847, (UST # MO-5886) Incident: 21425, 36942, 10609, 86198 NCDOT Parcel Number: NA	UST Owner: 7-11 Attn Gas Acct PO Box 711 Dallas, TX Beth Conklin 217 Country Club Park Pmp. 101 Birmingham AL



View toward the southwest

This facility operates as an active gas station with car wash with a likely oil water separator(s). This facility is located on the western side of E. Independence Blvd. Small concrete pads suggest that groundwater monitoring wells may have been present. Monitoring wells are documented in Environmental Resources Management report c. 2001. Solvent is reported to be in groundwater c. 1998 by NCDENR. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

100)	Property Name Fullwood Express Citco 11229 E. Independence Blvd. Matthews, NC 28105	Property Owner: Bill Gallis 4417 Waxhaw Indian Trail Rd Indian Trail NC 28079
	Haz. Waste Permit Number: N/A Facility ID: 0-026203 Incident: N/A	UST Owner: Empire Petrol. Partners 9055 Comprint Ct. Ste. 200 Gaithersburg, NC AKA Mansfield Oil Co of Gainesville 1025 Airport Pkwy Sw Attn Runner Gainesville, GA
	NCDOT Parcel Number: NA	



View toward the northeast

This facility operates as an active gas station with USTs. This facility is located on the eastern side of E. Independence Blvd. Four groundwater monitoring /observation wells were observed. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

101)	Property Name Current Office Space former Helms Property 2008 & 2016 Moore Rd. Matthews, NC	Property Owner: Rollins & Pace Properties LLC 2008 Moore Rd # C Matthews NC 28105
	Haz. Waste Permit Number: N/A Facility ID: 0-003303, (UST # MO-4907) Incident: 16669 NCDOT Parcel Number: NA	UST Owner: Helms Property Highway 74 & Bakers X-Roads Monroe, NC



Images Google Earth, upper c. 2015 View toward the west, -lower c. 1993, north toward top of page
This site may have operated as two residences or businesses with four USTs that were reportedly removed c. 1976. This facility is located northeast of E Independence Blvd. and southwest of Moore Rd. **This site is anticipated to present low geoenvironmental impacts.**

102)	Property Name 2049 Moore Rd. defunct address Currently Courtyard Marriot 11425 E Independence Blvd. Matthews, NC	Property Owner: LLC Oxford-Matthews/Rock Hill 24 350 W Hubbard St #440 The Oxford Capital Group LLC Chicago IL 60610
	Haz. Waste Permit Number: N/A Facility ID: (UST # MO-8018) Incident: 36622 NCDOT Parcel Number: NA	UST Owner: Liberty Healthcare Prop. 2334 S. 41St. Wilmington, NC



North toward top of page, upper image c. 2015 lower Google Earth image c. 1993

This facility operated as a former residence that was perhaps assimilated into the address or 11425 E. Independence Blvd. This facility is located on the western side of E. Independence Blvd. west of Matthews Township Parkway. **This site is anticipated to present low geoenvironmental impacts.**

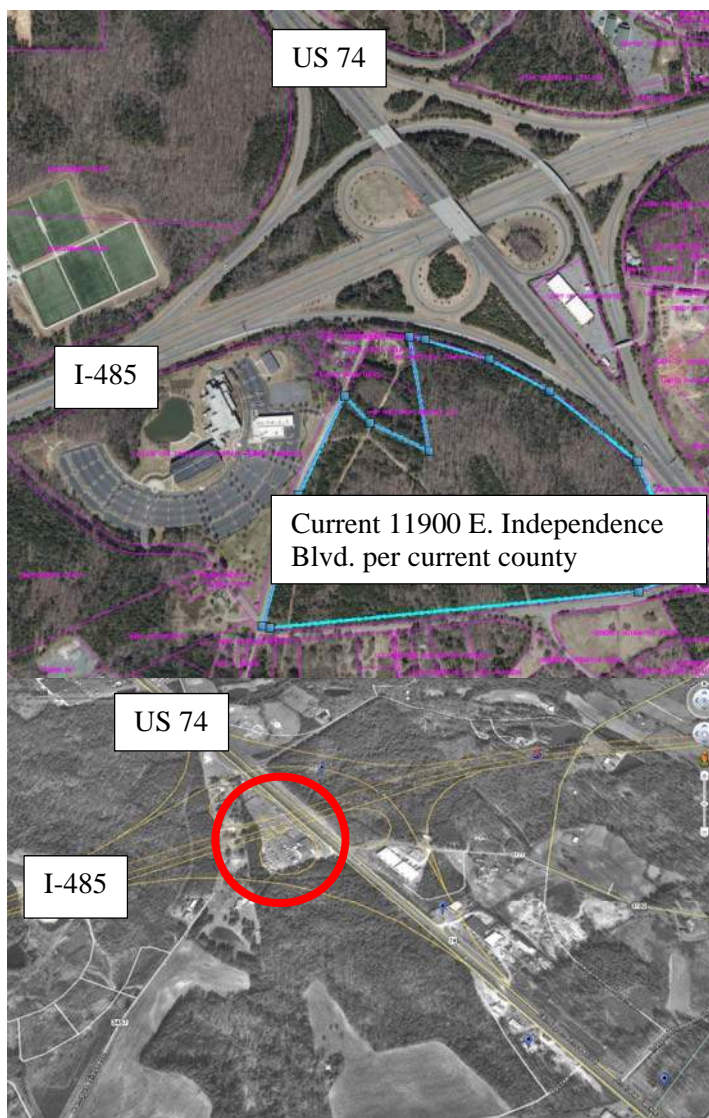
103)	Property Name Matthews Plaza, Ashley Furniture former Kmart 7406 11416 E. Independence Blvd. Matthews, NC	Property Owner: Elevation Church 11416 E Independence Blvd., Suite N Matthews NC 28105
	Haz. Waste Permit Number: N/A Facility ID: 0-013704 Incident: N/A NCDOT Parcel Number: NA	UST Owner: Kmart Corp. PO BOX 8073 Royal Oak, MI



View toward the southwest

This facility operates as a variety of retail stores. A tank was reportedly closed c. 1998 that was associated with Kmart. This facility is located on the western side of E. Independence Blvd. A report was issued by GeoEnvironmental Section on October 21, 2008 for U-2509. **This site is anticipated to present low geoenvironmental impacts.**

104)	Property Name Tracy Trigg RV Super Store 11900 E. Independence Blvd. Matthews, NC 28105	Property Owner: NCDOT Right of Way/Kay Fisher HEP Investment Company LLC 6000 Monroe Rd., Ste 100 Charlotte NC 28212
	Haz. Waste Permit Number: N/A Facility ID: 0-032226 (UST # MO-4767) Incident: 15847 NCDOT Parcel Number: NA	UST Owner: NCDOT Geotech. Unit Greg Smith 1020 Birch Ridge Drive Raleigh, NC

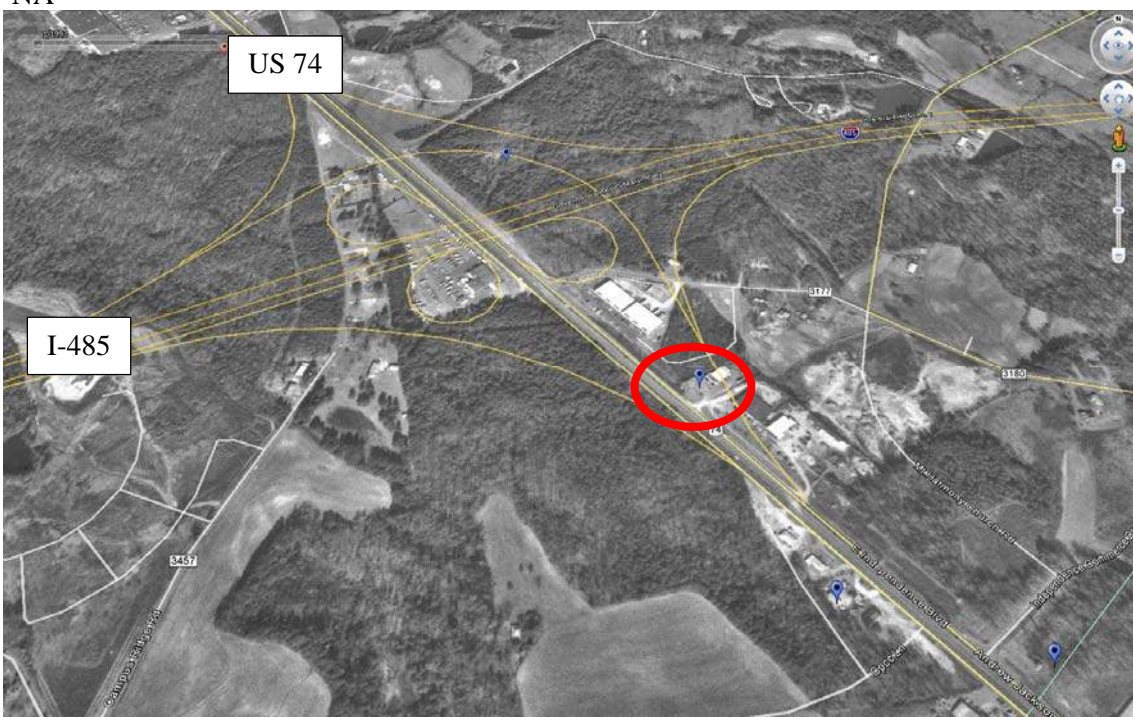


North toward top of page upper image c. 2015, NCDOT microstation, lower image c. 1993, Google Earth. This facility apparently formerly operated as an RV Super Store on the western side of E. Independence Blvd. The address of the site currently indicates a parcel south of the former store. The parcel likely extended north to below the current I-485 interchange. Based on the DEQ Database, the location is consistent with c. 1993 aerial image per Google Earth (lower image) that may show the location of the former RV Super Store before I-485 was constructed. USTs were reportedly formerly onsite. **This site is anticipated to present low geoenvironmental impacts.**

105)	Property Name Former Hill Property 12207 E. Independence Blvd. Matthews, NC 28105	Property Owner: NCDOT Right of Way
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Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** (UST # MO-0992)**Incident:** 27012**NCDOT Parcel Number:**

NA



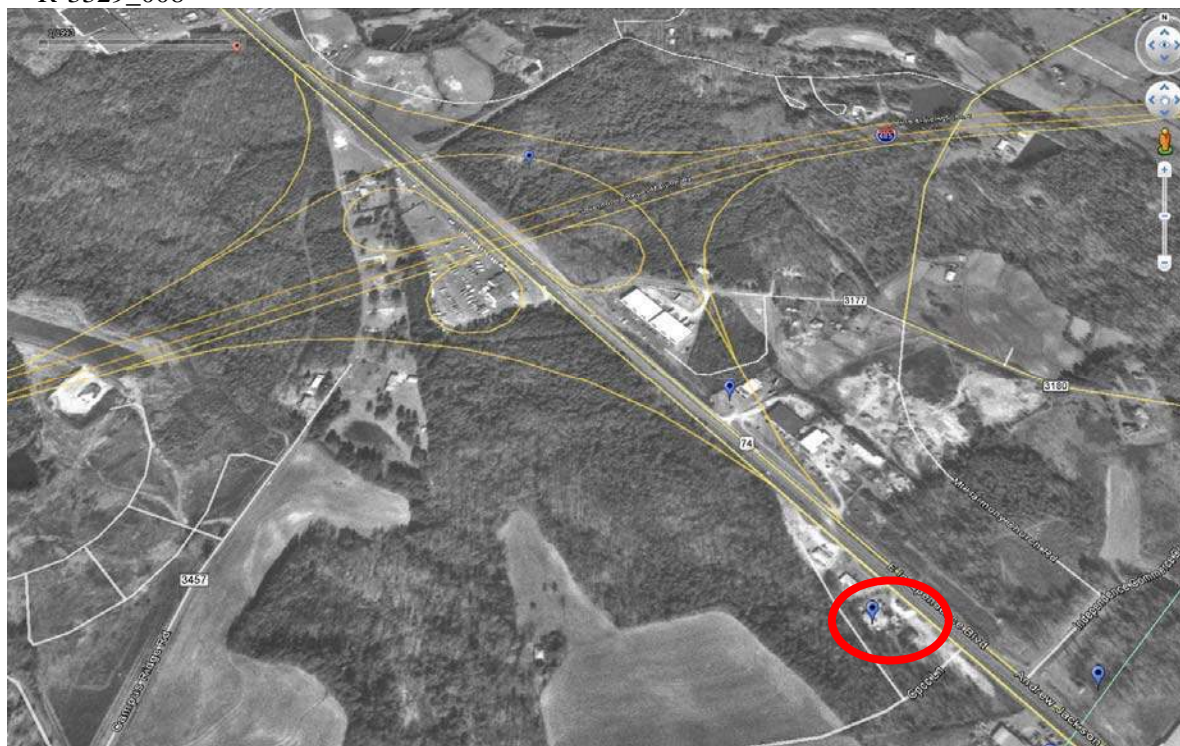
North toward top of page image c. 1993, Google Earth

This site was likely either a former residence or gas station on the eastern side of E. Independence Blvd. The location based on DEQ Database is consistent with c. 1993 aerial image per Google Earth that may show the former location before I-485 was constructed. USTs were reportedly formerly onsite. **This site is anticipated to present low geoenvironmental impacts.**

106)	Property Name Deason Property 12500 E. Independence Blvd. Matthews, NC 28105	Property Owner: Independence Real Estate Investors LLC 6000 Monroe Rd. Ste. 100 Charlotte, NC 28212
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Haz. Waste Permit Number: N/A**UST Owner:** N/A**Facility ID:** (UST # MO-6797)**Incident:** 27539**NCDOT Parcel Number:**

R-3329_008



North toward top of page image c. 1993, Google Earth

This site was a former gas station. The location based on DEQ Database corresponds with c. 1993 aerial image per Google Earth. The location is consistent with historical account of the northwestern property neighbor, Mr. Hinson. According to the DEQ database, the site was accepted into the State Lead Program on 12/18/2007. USTs were reportedly formerly onsite. **This site is anticipated to present low geoenvironmental impacts.**

107)	Property Name Handy Pantry #156 12518 E. Independence Blvd. Matthews, NC 28105	Property Owner: Independence Real Estate Investors LLC 6000 Monroe Rd. Ste. 100 Charlotte, NC 28212
	Haz. Waste Permit Number: N/A Facility ID: 0-0036128 (UST # MO-6750) Incident: 27501 NCDOT Parcel Number: R-3329_010	UST Owner: Petroleum & Fuel Company Pete Overton PO BOX 2359 Gastonia, NC



View toward the southwest, c. 2014

This facility operates as a gas station. Monitoring wells on site have previously been abandoned. An oil water separator is located onsite below the car wash structure. This facility is located on the western side of E. Independence Blvd west of Matthews Township Parkway. A Preliminary Site Assessment and Report of Preliminary Environmental Site Assessment were issued for R-3329 on October 20, 2015 and September 25, 2009, respectively. USTs onsite are anticipated to be removed for R-3329. **This site is anticipated to present low geoenvironmental impacts.**

108)	Property Name McGee Corp 12701 E. Independence Blvd. Matthews, NC 28105 (Union County)	Property Owner: McGee Corp. 12701 E. Independence Blvd. Matthews, NC 28105
	Haz. Waste Permit Number: N/A Facility ID: 0-0026363 Incident: 27342 NCDOT Parcel Number: R-3329_015	UST Owner: McGee Corp. 12701 E. Independence Blvd. Matthews, NC 28105



View toward the northeast

This facility operates as a warehouse/manufacturer. This facility is located on the eastern side of E. Independence Blvd. A UST was reportedly formerly onsite. A Report of Preliminary Environmental Site Assessment was issued for R-3329 and November 19, 2009. **This site is anticipated to present low geoenvironmental impacts.**

109) **Property Name:**
 Parcel Id: 21506101
 (Deed 03111-042 Sale 1/1/1975)
 Academy Steel Drum
 3212 Campus Ridge Rd aka Ridge Rd
 Matthews, NC 28105

Property Owner:
 Parcel Id 21506101
 Academy Steel Drum Co 5400 Five Knolls Dr.
 Charlotte NC 28226
 % C J Stewart Jr. 5400 Five Knolls Dr.
 Charlotte, NC 28226

Facility ID #: NA
UST Incident: 14976
EPA ID #: NCD024462327
 National Priorities List: No; Status:
 Archived; Site EPA Region: 4; Site
 Status: Archived; Federal Facility: No;
 Eligible Response Site (ERS) Exclusion:
 NR; No; Incident Category: Not
 Reported;

Responsible Party:
 Phil Guller, President Academy Steel Drum
 PO Box 1217
 Matthews, NC 28016 aka
 Phil Guller, Attorney at Law,
 PO Box 2248 317 South St.
 Gastonia, NC

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 Zoom To

Parcel ID	GIS ID
21506101	21506101

Address located on Property (Postal City)
 3212 CAMPUS RIDGE RD MATTHEWS NC 28105

Owner Name	Mailing Address
ACADEMY STEEL DRUM CO	5400 FIVE KNOLLS DR CHARLOTTE NC 28226
% C J STEWART JR	5400 FIVE KNOLLS DR CHARLOTTE NC 28226

Unselect Property

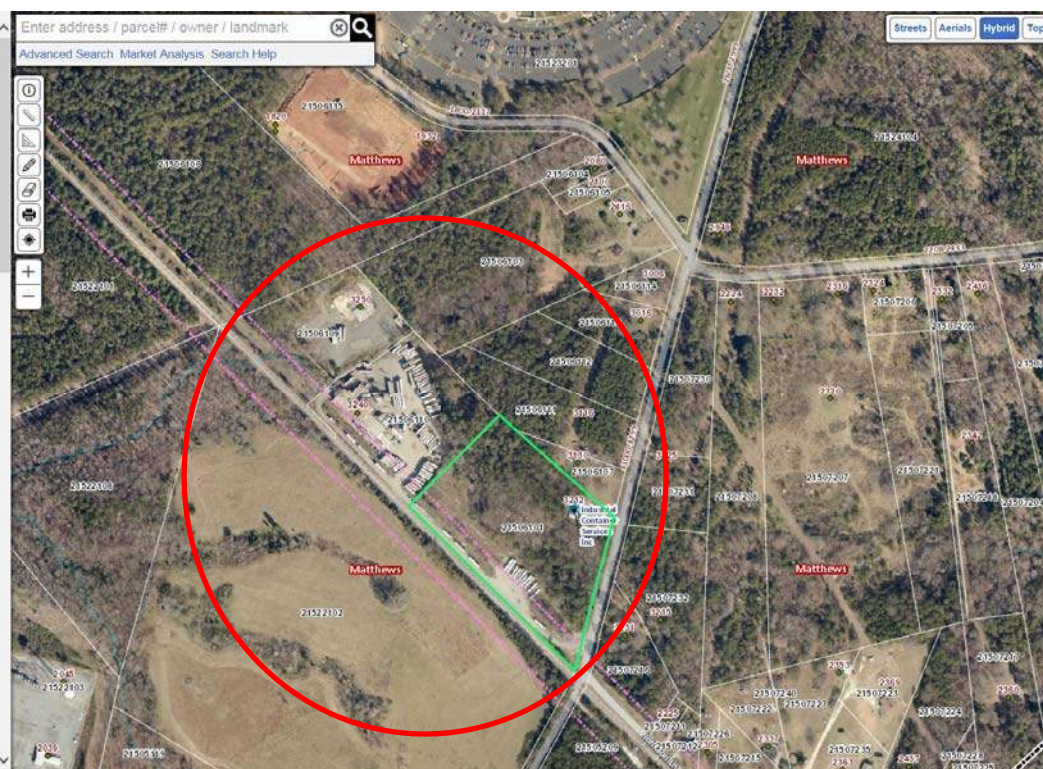
Photo: 1 / 2



Photo Date: 11/02/2013 Source: Mecklenburg County (iLookAbout)

Link To
 Google Street View
 Birdseye View maintained by Mecklenburg County

Associated Information



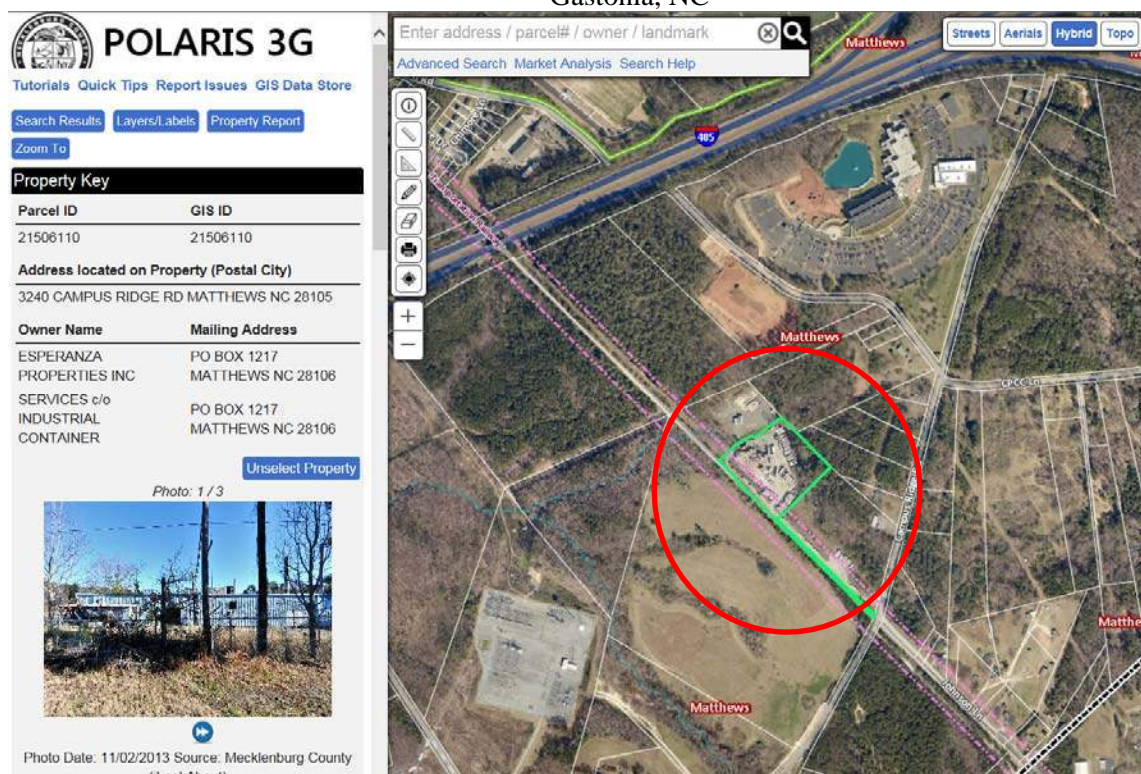
The Academy Steel Drum site is located northwest of Campus Ridge Rd. and northeast of Seaboard Coastline Railroad tracks. This site is a superfund site identified at 3212 Ridge Rd, Matthews, NC 28105 and referred to as Academy Steel Drum. Steel drum reconditioning and bio-medical waste incinerator was performed on site, reportedly originating as East Coast Container. NCDEQ documents activities for the superfund site were historically located at three parcels, County Parcel Id: 21506101, 21506110, & 21506109 (within red circle) that are currently owned by three entities. Site 110 and Site 111 follow. **This site is anticipated to present high geoenvironmental impacts as intensive further investigation is required before acquisition recommendations.**

110) **Property Name:**
 Parcel Id: 21506110
 (Deed 06893-729 Sale 5/29/1992;
 Deed 16624-86 12/31/2003)
 3240 Campus Ridge Rd aka Ridge Rd
 Matthews, NC 28105

Property Owner:
 Parcel Id: 21506110
 Esperanza Properties Inc.
 PO Box 1217/
 Matthews NC 28106
 Services C/O Industrial Container
 PO Box 1217
 Matthews, NC 28106

Facility ID #: NA
UST Incident: 14976
EPA ID #: NCD024462327

Responsible Party:
 Phil Guller, President Academy Steel Drum
 PO Box 1217
 Matthews, NC 28016 aka
 Phil Guller, Attorney at Law,
 PO Box 2248
 317 South St.
 Gastonia, NC



This site is located northwest of Campus Ridge Rd and northeast of Seaboard Airline RR tracks north of Stallings, NC and south of Charlotte. This site is a superfund site identified as 3212 Ridge Rd, Matthews, NC 28105 referred to as Academy Steel Drum. Steel drum reconditioning and bio-medical waste incinerator was performed on site. NCDEQ documents that activities for the superfund site were historically located at three parcels, County Parcel Id: 21506101, 21506110, & 21506109 (red circle) that are currently owned by three entities. Comments regarding Site 109, 3212 Campus Ridge Rd aka Ridge Rd Matthews, NC 28105, also applies to Site 110 and Site 111. **This site is anticipated to present high geoenvironmental impacts as intensive further investigation is required before acquisition recommendations.**

111) **Property Name:**
 Parcel Id: 21506109
 (Deed 10487-664 Sale 5/21/1999;
 Deed 26432-191 Sale 4/25/2011)
 3250 Campus Ridge Rd
 Matthews, NC 28105

Facility ID #: NA
UST Incident: 14976
EPA ID #: NCD024462327

Property Owner:
 Parcel Id: 21506109
 MNC Holdings LLC
 4357 Ferguson Dr. Suite 100
 Cincinnati OH 45245


Responsible Party:
 Phil Guller, President Academy Steel Drum
 PO Box 1217
 Matthews, NC 28016 aka
 Phil Guller, Attorney at Law,
 PO Box 2248
 317 South St.
 Gastonia, NC

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 Search Results Layers/Labels Property Report
 Zoom To

Property Key	
Parcel ID	GIS ID
21506109	21506109
Address located on Property (Postal City)	
3250 CAMPUS RIDGE RD MATTHEWS NC 28105	
Owner Name	Mailing Address
MNC HOLDINGS LLC	4357 FERGUSON DR SUITE 100 CINCINNATI OH 45245

Unselect Property

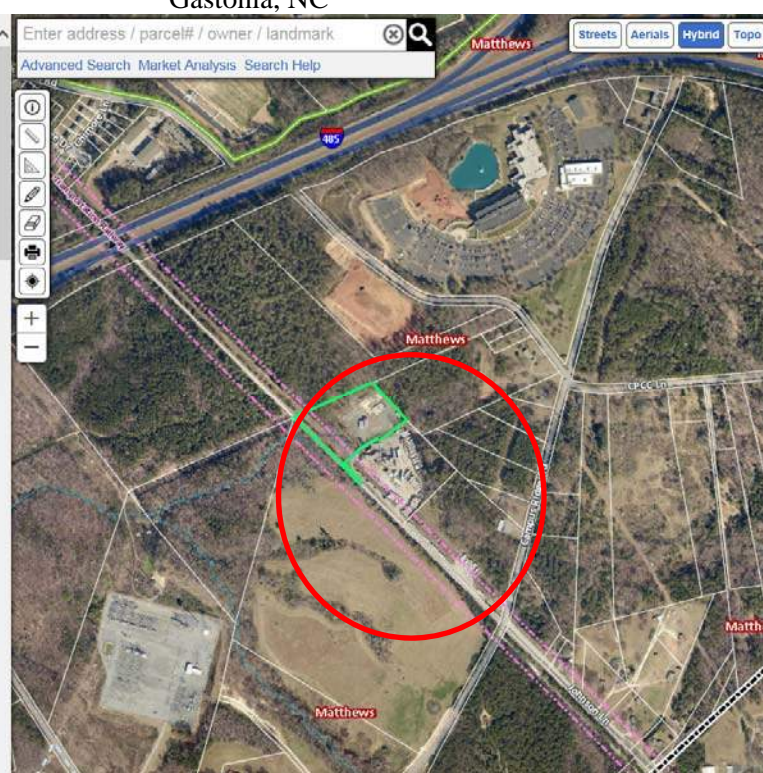
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21506109 001

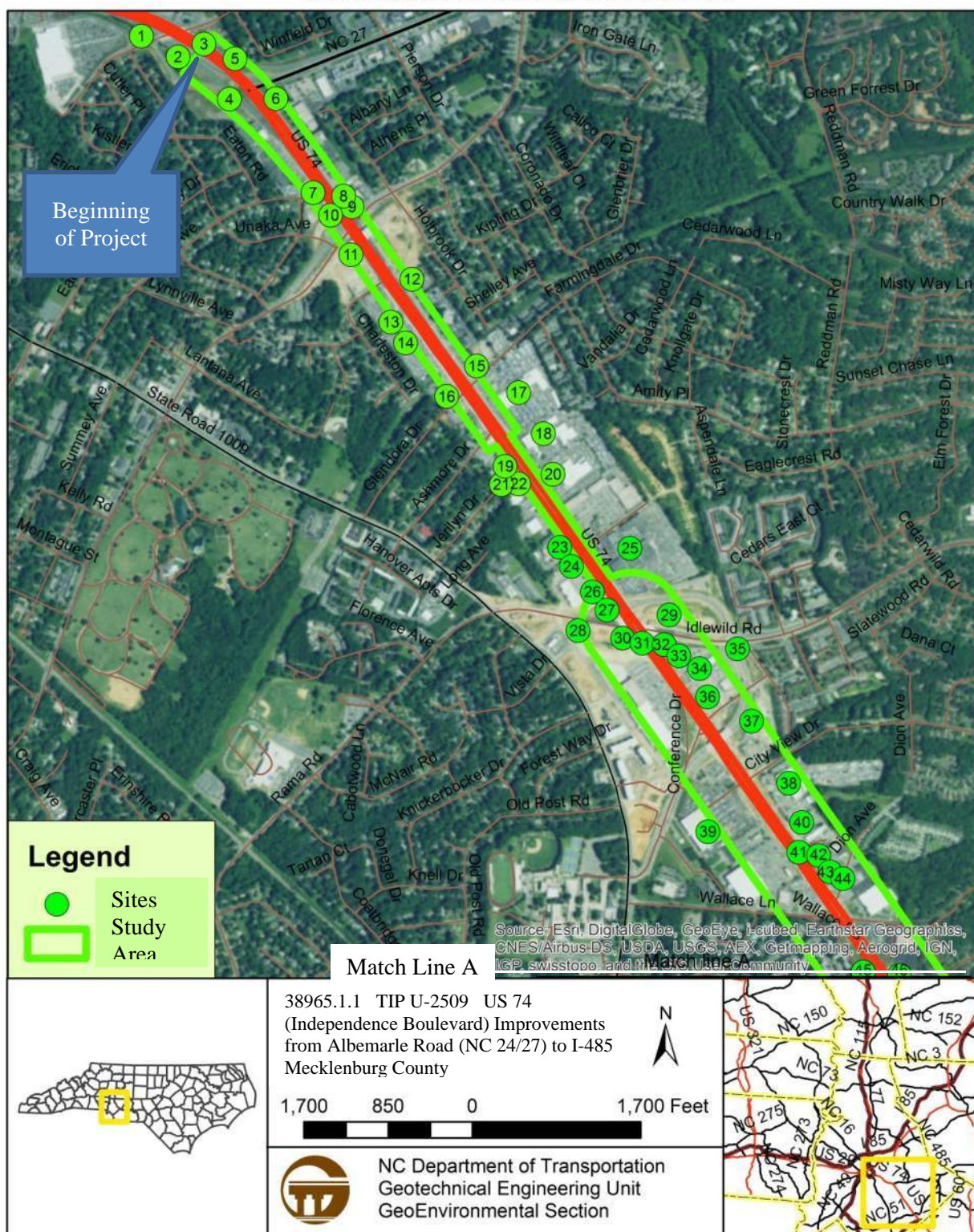
Photo Date: 02/02/2001 Source: Mecklenburg County (Historic)

Link To



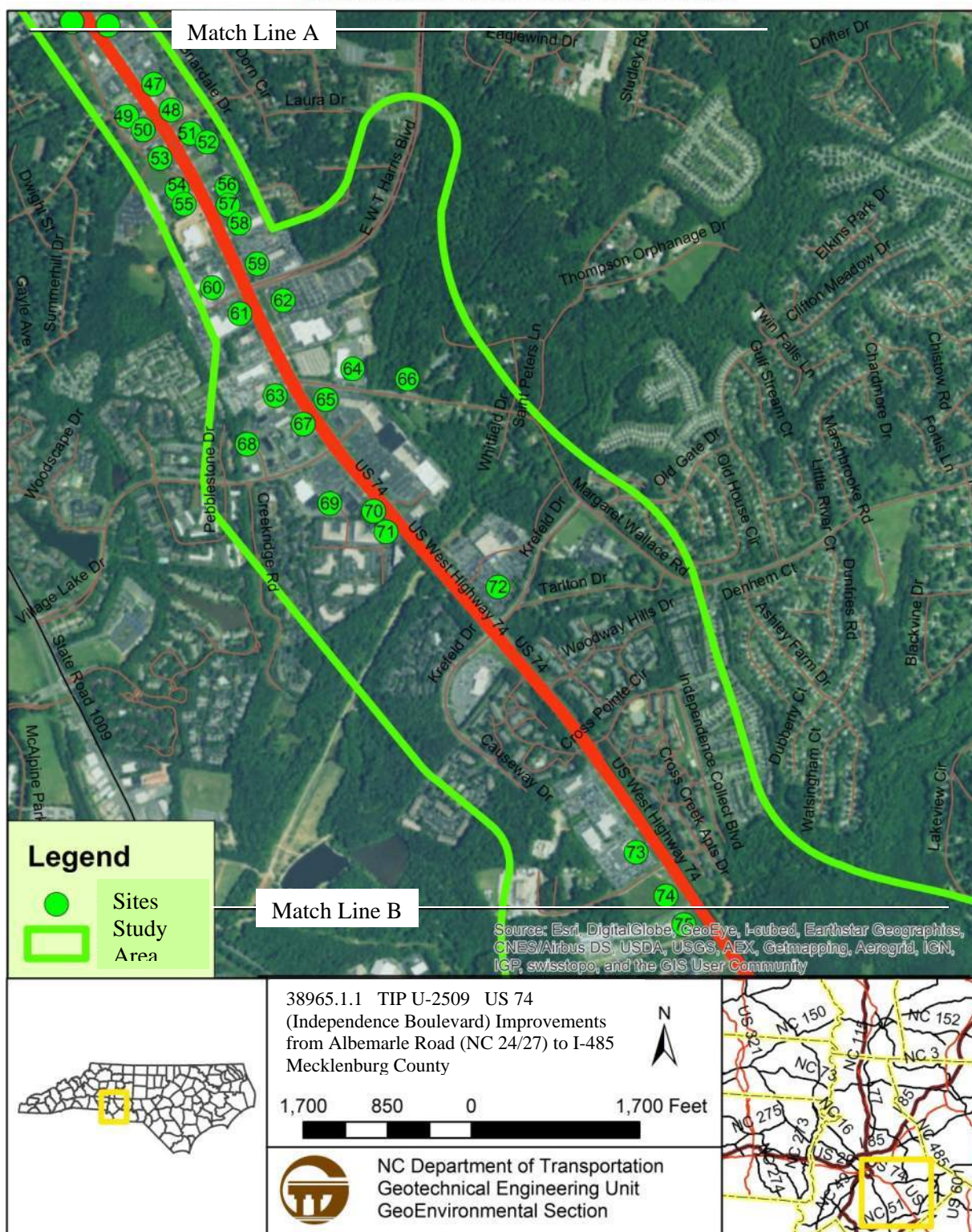
This site is located northwest of Campus Ridge Rd and northeast of Seaboard Airline RR tracks north of Stallings, NC and south of Charlotte. This site is a superfund site identified as 3212 Ridge Rd, Matthews, NC 28105 referred to as Academy Steel Drum. Steel drum reconditioning and bio-medical waste incinerator was performed on site. NCDEQ documents that activities for the superfund site were historically located at three parcels, County Parcel Id: 21506101, 21506110, & 21506109 (red circle) that are currently owned by three entities. Comments regarding Site 109, 3212 Campus Ridge Rd aka Ridge Rd Matthews, NC 28105, also applies to Site 110 and Site 111. **This site is anticipated to present high geoenvironmental impacts as intensive further investigation is required before acquisition recommendations.**

Appendix A Location of GeoEnvironmental Sites of Concern



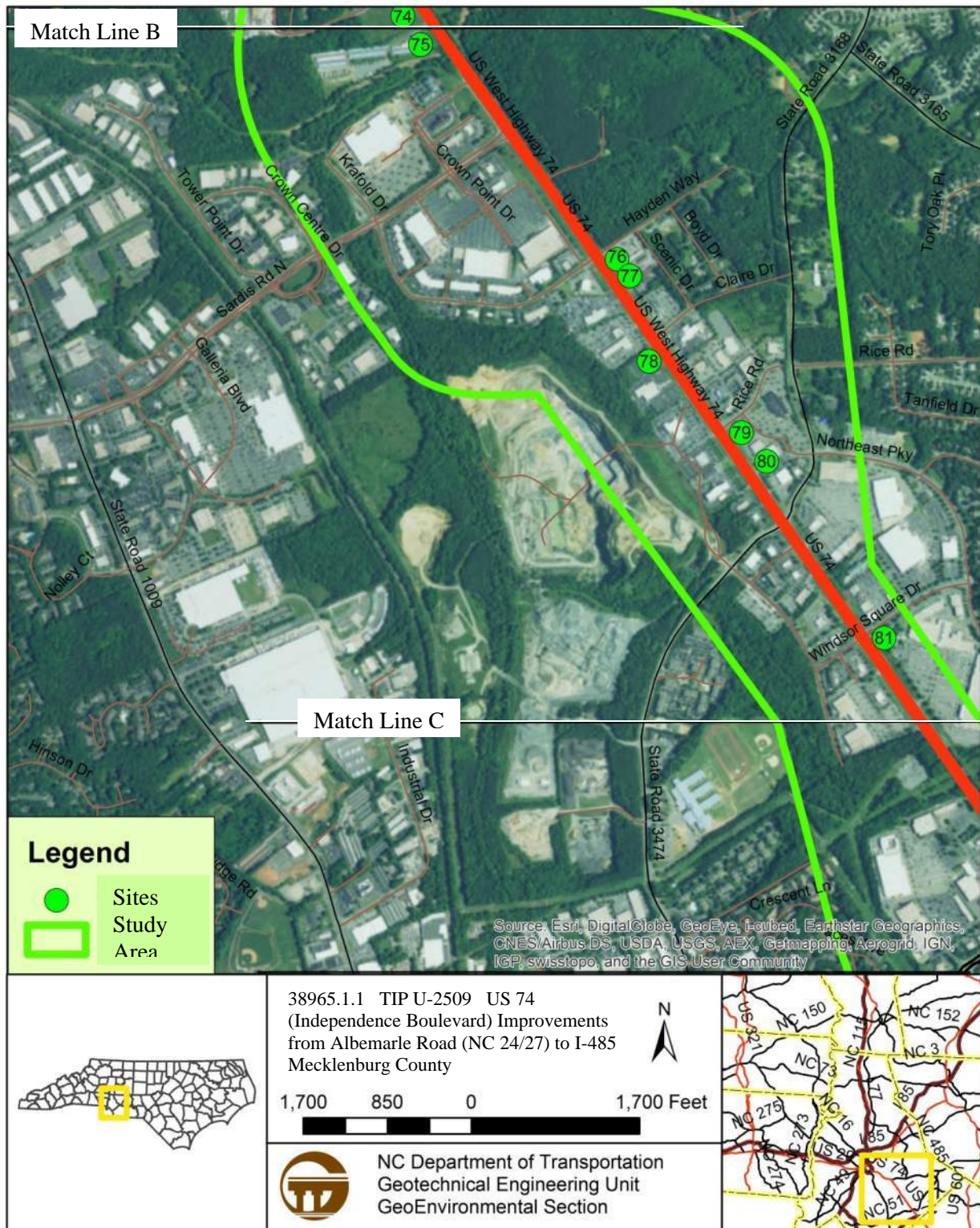
From Beginning of Project to Match Line A

Appendix A Location of GeoEnvironmental Sites of Concern

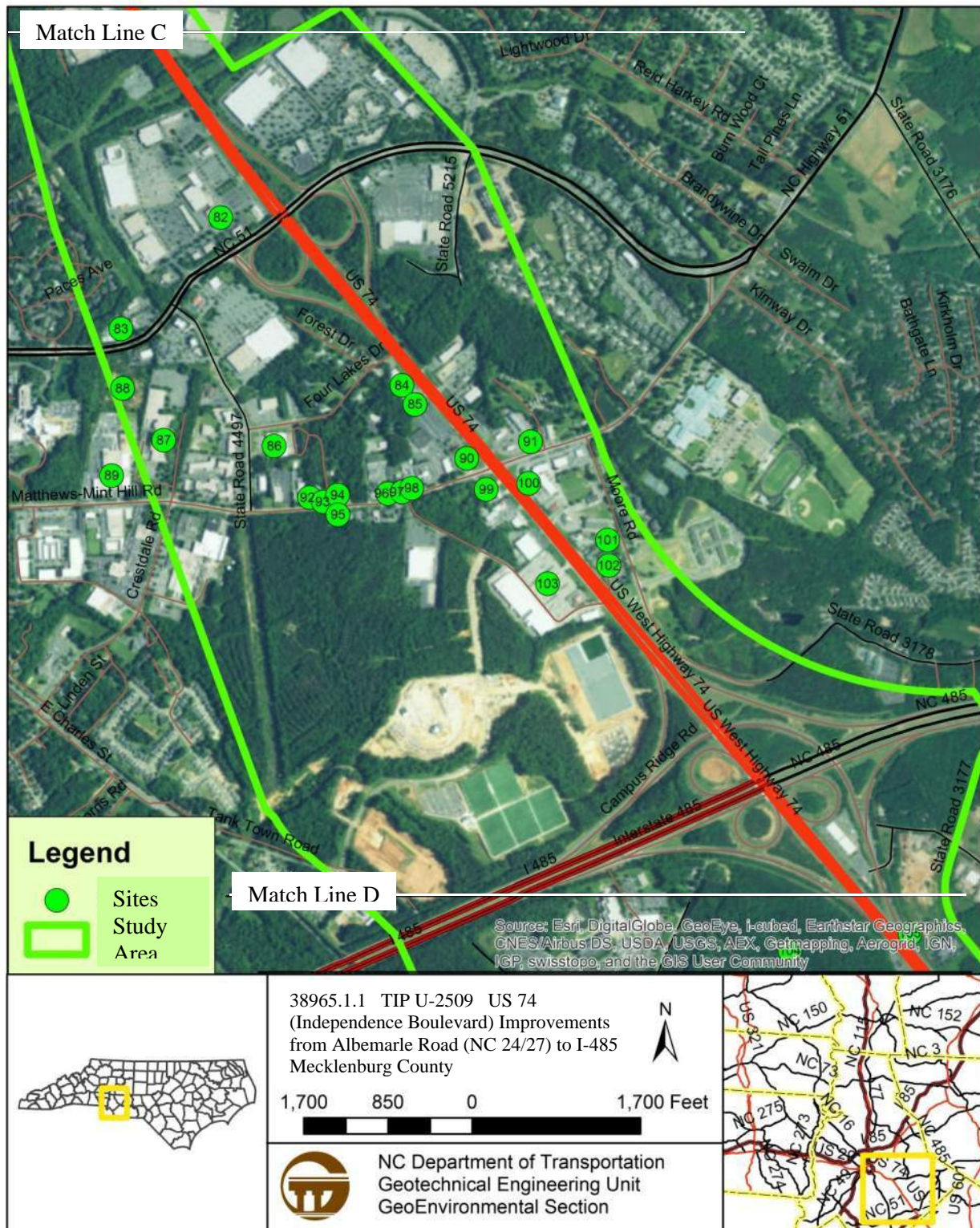


From Match Line A to Match Line B

Appendix A
Location of GeoEnvironmental Sites of Concern

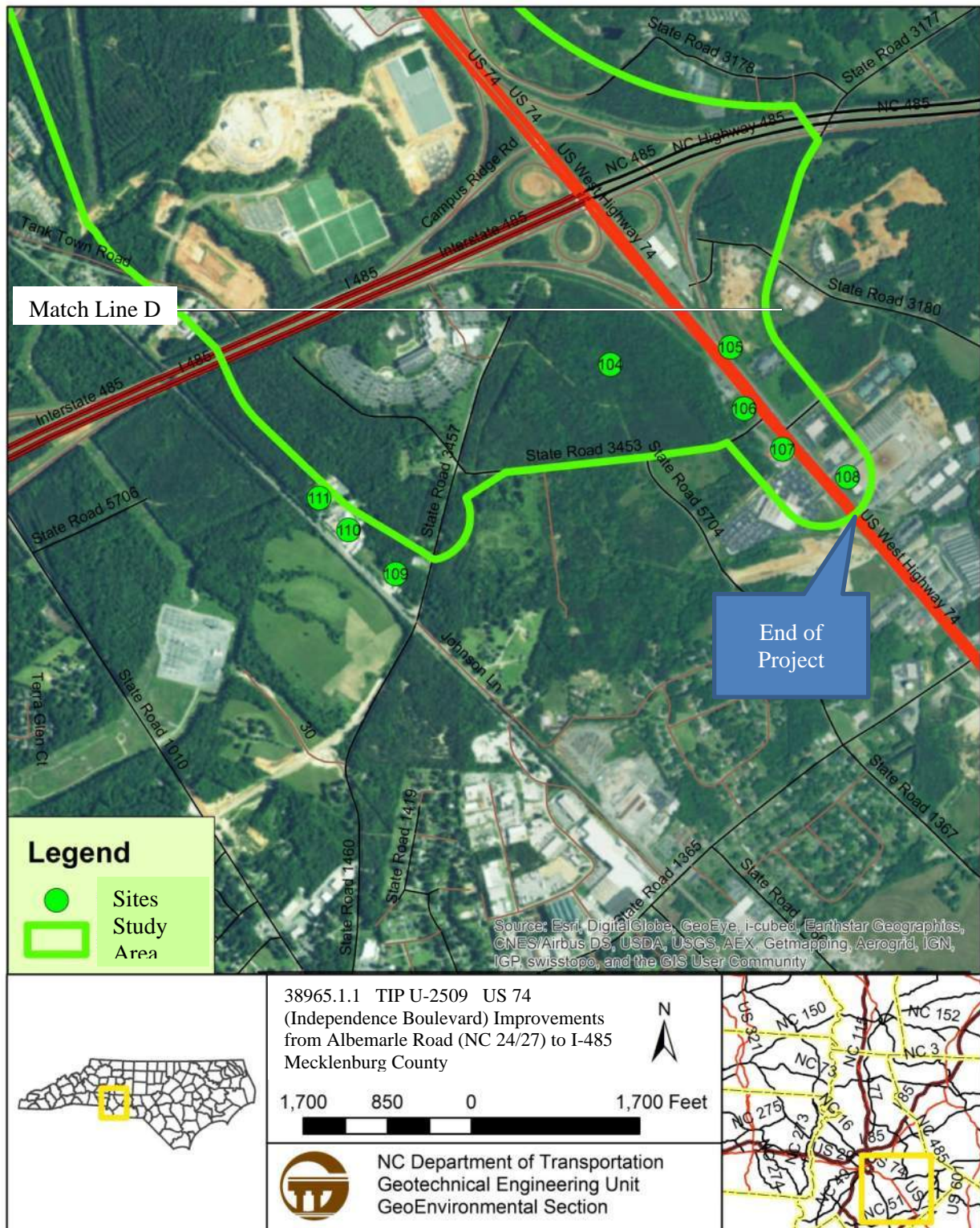


Appendix A
Location of GeoEnvironmental Sites of Concern



From Match Line C to Match Line D

Appendix A
Location of GeoEnvironmental Sites of Concern



From Match Line D to End of Project