



Eastern Rockingham Corridor Study Richmond County STIP Project U-5706

MERGER TEAM MEETING Preliminary Alternative Corridors July 20, 2017

MEETING PURPOSE

The purpose of today's meeting is to select the study corridors to be shown at the project's upcoming public meeting. Concurrence on the alternatives for detailed study (Concurrence Point 2) will be requested following the Public Meeting.

PROPOSED ACTION

The Eastern Rockingham Corridor Study is included in NCDOT's 2016-2025 State Transportation Improvement Program (STIP) as U-5706. The project would connect US 74 Business in the southeast part of Rockingham to US 1 and SR 1423 (Richmond Road) in the city's northeastern area. The total length of the project is about 3.5 miles. Exhibit 1 shows the project location and study area and Exhibit 2 shows the environmental features in the project area.

PROJECT PURPOSE

The purpose of the proposed project is to provide direct connectivity between commercial areas along US 74 Business and residential areas northeast of central Rockingham and reduce conflicts between through traffic and local traffic on Long Drive.

PROJECT ALTERNATIVES

The preliminary alternative corridors developed for the project include new location corridors having widths of 600 feet and one alternative along existing roadways with a corridor width of 300 feet. The new location alternatives require a wider corridor in order to allow opportunities for avoidance of resource impacts. Exhibit 3 shows the preliminary alternative corridors, which are color-coded for clarity. Table 1 lists preliminary impact information for the preliminary alternative corridors.

Non-Roadway Alternatives

Considering the size and location of Rockingham, non-roadway alternatives, such as improving transit and implementing Transportation Demand Management (TDM) or Transportation Systems Management (TSM) strategies were not considered viable for this project. There is no existing transit system in the Rockingham area.

Upgrade Existing Roadways – Alternative 1 (Blue Corridor)

The corridor for Alternative 1 follows existing SR 1646 (Long Drive) and SR 1423 (Richmond Road) from US 74 Business to SR 1424 (Roberdell Road). Long Drive is currently a three-lane roadway with a center turn lane and Richmond Road is a two-lane roadway. The corridor for this

alternative has a width of 300 feet, with impacts calculated within the middle third, a width of 100 feet.

Alternative 2 (Green Corridor)

The proposed route for Alternative 2 would provide a direct route for through traffic to get from the commercial areas along US 74 Business to residential areas in northeast Rockingham. The corridor generally follows existing SR 1641 (Clemmer Road) from US 74 Business to SR 1624 (County Home Road) and then extends northward on new location, following SR 1426 (Old Aberdeen Road) to Richmond Road. The corridor for Alternative 2 has a width of 600 feet, with impacts calculated within the middle third, a width of 200 feet. This is the shortest of the new location alternatives.

Alternative 3 (Red to Green)

Most of the corridor for Alternative 3 would be on new location, starting further east than Alternative 2 along US 74 Business. It begins near the intersection of US 74 Business and SR 1670 (Pineleigh Road), then extends northward, crossing County Home Road and Falling Creek, and then follows Old Aberdeen Road to Richmond Road. Similar to Alternative 2, the corridor width and impact width for Alternative 3 are 600 feet and 200 feet, respectively. It is the longest of the new location alternatives.

Alternative 3 would intersect US 74 Business at approximately the same location as the selected alternative for the proposed US 1 Rockingham Bypass (STIP Project R-2501), but the proposed bypass extends further to the northeast than Alternative 3. The Record of Decision for Project R-2501 was approved in June 2013, but the new location portions of the project (R-2501 A and B) are unfunded in the STIP.

Alternative 4 (Green to Orange to Red to Green)

The corridor for Alternative 4 is similar to Alternative 2 at its starting and end points, but it follows a more eastern path in its new location portion. It follows SR 1641 (Clemmer Road) until it crosses County Home Road. The new location portion then turns northeastward to cross Alternative 3 before crossing Falling Creek. From that point, the alternative would follow existing Old Aberdeen Road until its intersection with Richmond Road. The corridor width and impact width for this alternative are 600 feet and 200 feet, respectively.

Alternative 5 (Green to Orange to Brown to Green)

Like Alternatives 2 and 4, Alternative 5 starts at Clemmer Road and ends at the intersection of Old Aberdeen Road and Richmond Road. It follows existing Clemmer Road from US 74 Business to County Home Road, then runs northwest until it crosses US 1 and follows existing Old Aberdeen Rd. Alternative 5 has a corridor width of 600 feet and an impact width of 200 feet.

Alternative 6 (Red to Brown to Green)

Alternative 6 is similar to Alternative 3, but provides a more direct route between project termini. It begins close to the intersection of US 74 Business and Pineleigh Road then turns northeastward, crossing County Home Road, Falling Creek, and US 1. After crossing US 1, the corridor follows Old Aberdeen Road to Richmond Road. Alternative 6 has a corridor width of 600 feet and an impact width of 200 feet.

TABLE 1 - COMPARISON OF PRELIMINARY ALTERNATIVE CORRIDORS
STIP PROJECT U-5706

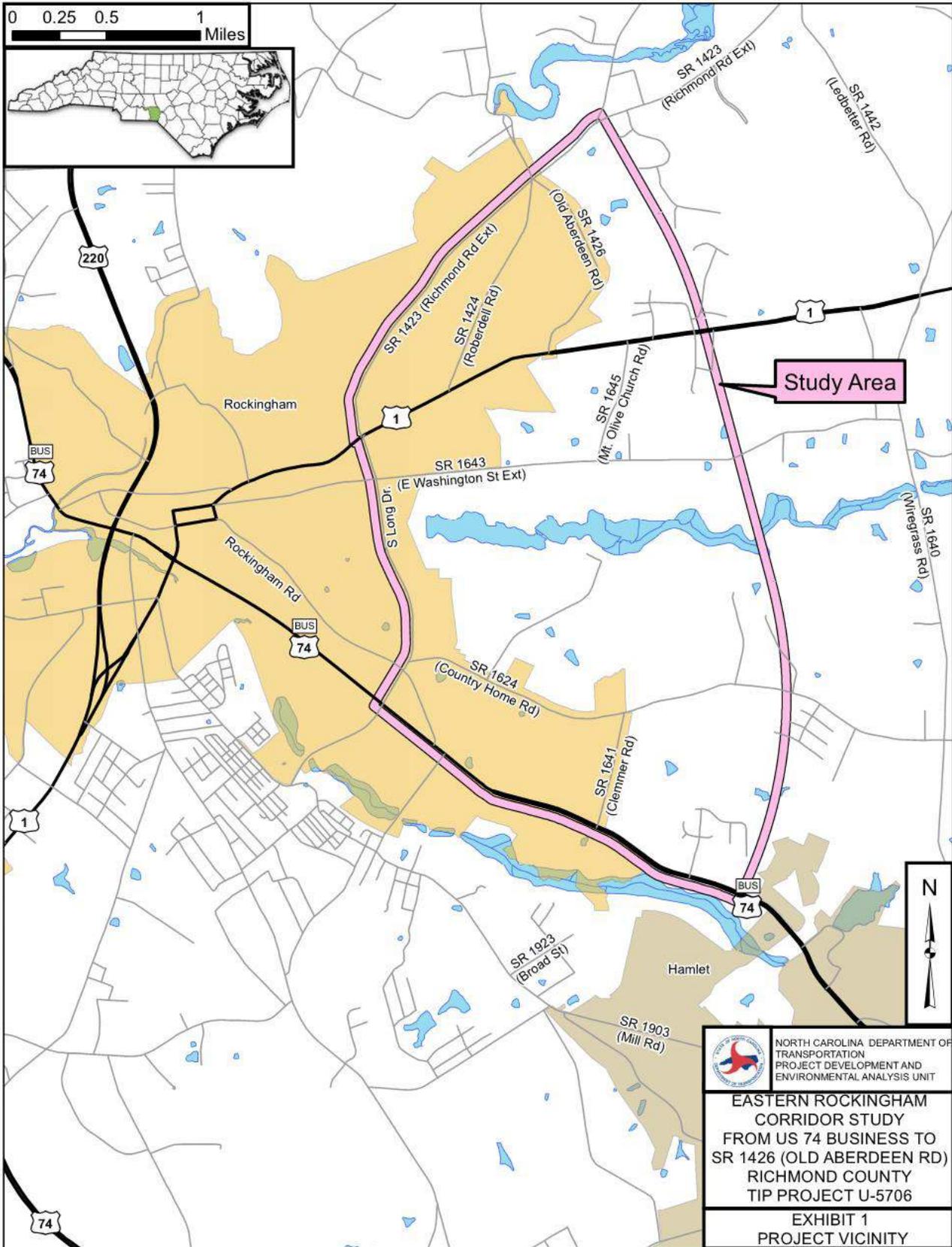
| | ALT. 1 UPGRADE EXISTING | ALT. 2 | ALT. 3 | ALT. 4 | ALT. 5 | ALT. 6 |
|---|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| Length on New Location (mi) | 0.00 | 2.2 | 3.6 | 2.6 | 2.5 | 3.5 |
| Total Length (mi) | 3.2 | 3.6 | 4.2 | 3.8 | 3.8 | 4.1 |
| Relocations ¹ | 14 | 39 | 35 | 42 | 35 | 30 |
| Properties Impacted ¹ | 261 | 156 | 107 | 130 | 123 | 100 |
| Historic Properties ² | 0 | 0 | 0 | 0 | 0 | 0 |
| Parks² | 0 | 0 | 0 | 0 | 0 | 0 |
| Potential Underground Storage Tanks / Hazardous Materials Sites ² | 7 | 2 | 7 | 3 | 3 | 7 |
| NWI Wetlands Affected (acres) ¹ | < 1 | 4 | 6 | 5 | 6 | 7 |
| Stream Crossings (no.) / (Linear Feet)¹ | 6 / 550 | 7 / 2,740 | 6 / 1,965 | 7 / 2460 | 6 / 1,818 | 6 / 1,327 |
| Acres in Water Supply Watershed¹ | 0 | 65 | 72 | 71 | 69 | 70 |
| Acres in Water Supply Watershed Critical Area¹ | 0 | 34 | 31 | 35 | 32 | 27 |
| Acres of Floodplain Impacts ¹ | 1 | 3 | 4 | 4 | 3 | 3 |

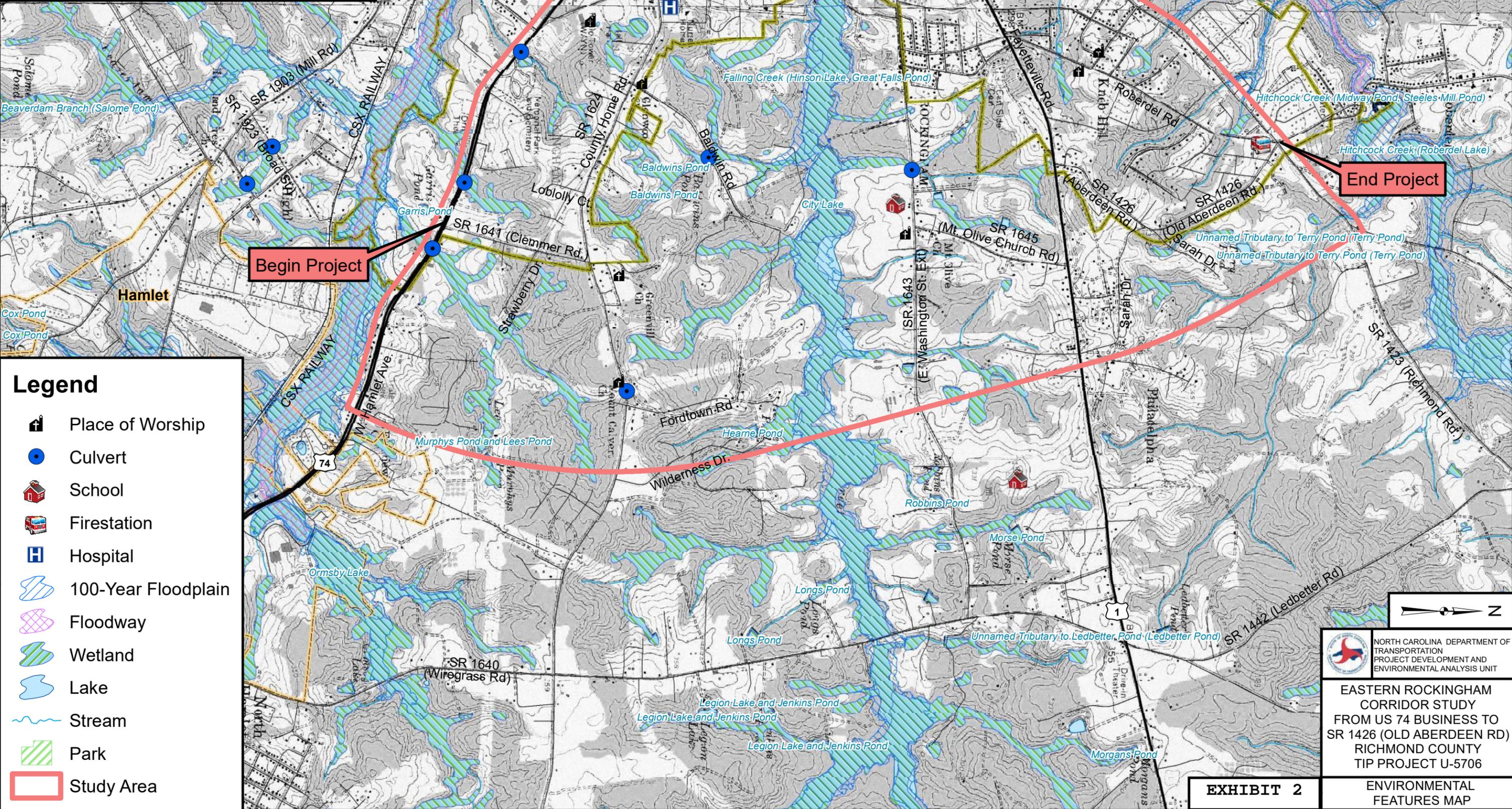
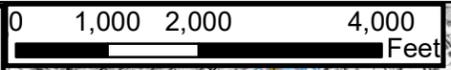
Notes:

Impacts based upon 1/3 width of corridor.

¹ *Within 200-foot corridor on new location and 100-foot corridor along existing Long Drive and Richmond Road*

² *Within study corridor*





Legend

- Place of Worship
- Culvert
- School
- Firestation
- Hospital
- 100-Year Floodplain
- Floodway
- Wetland
- Lake
- Stream
- Park
- Study Area

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

**EASTERN ROCKINGHAM
CORRIDOR STUDY
FROM US 74 BUSINESS TO
SR 1426 (OLD ABERDEEN RD)
RICHMOND COUNTY
TIP PROJECT U-5706**

EXHIBIT 2

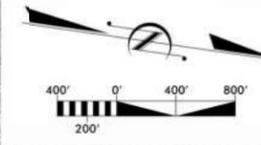
**ENVIRONMENTAL
FEATURES MAP**

**Eastern Rockingham Corridor Study
Richmond County
STIP Project U-5706**



LOCHNER
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
(919) 271-2111

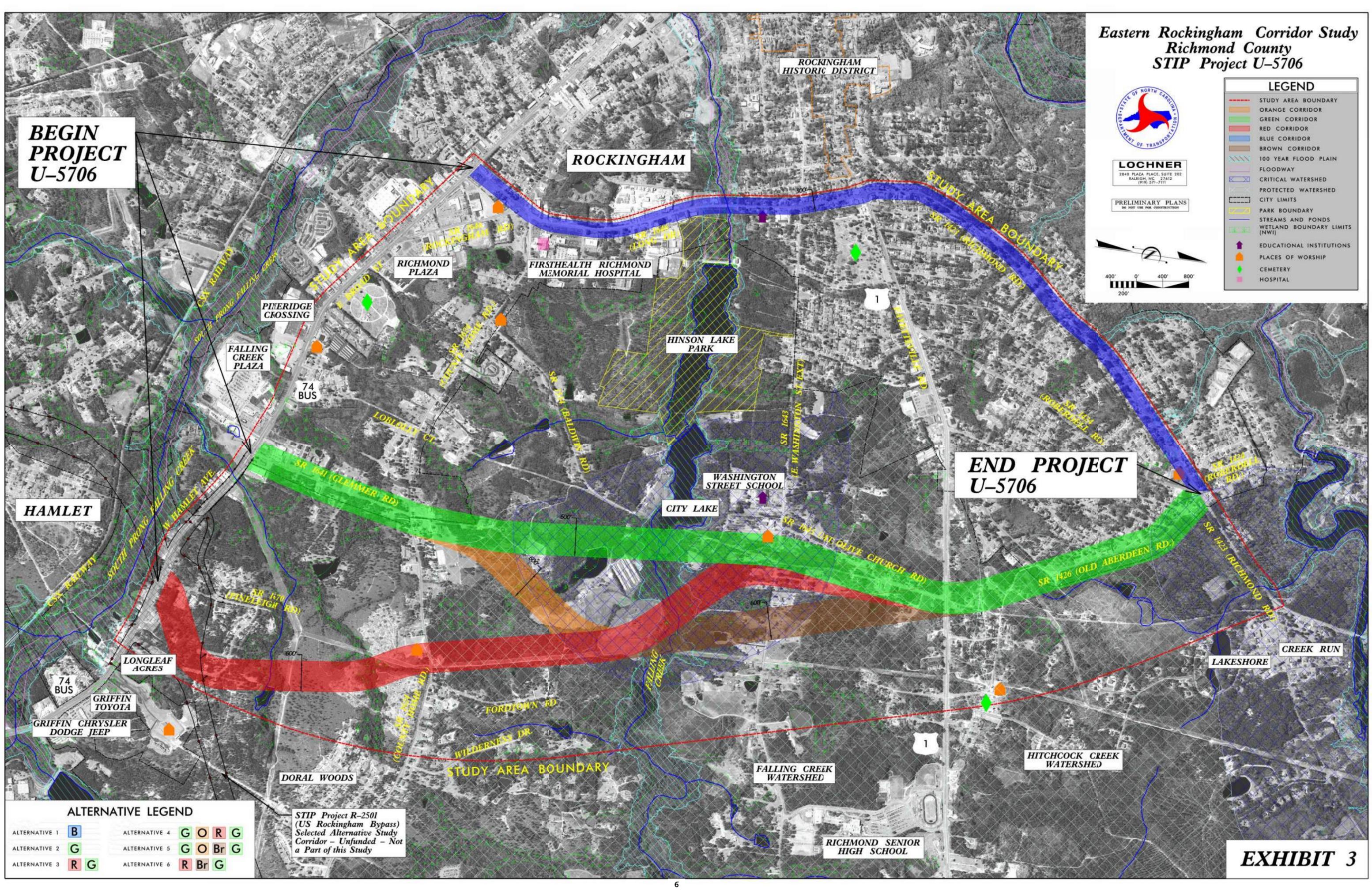
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



| LEGEND | |
|---------------------------|-------------------------------|
| [Red dashed line] | STUDY AREA BOUNDARY |
| [Orange shaded area] | ORANGE CORRIDOR |
| [Green shaded area] | GREEN CORRIDOR |
| [Red shaded area] | RED CORRIDOR |
| [Blue shaded area] | BLUE CORRIDOR |
| [Brown shaded area] | BROWN CORRIDOR |
| [Light blue hatched area] | 100 YEAR FLOOD PLAIN |
| [Blue hatched area] | FLOODWAY |
| [Blue outline] | CRITICAL WATERSHED |
| [Light blue outline] | PROTECTED WATERSHED |
| [Black outline] | CITY LIMITS |
| [Yellow outline] | PARK BOUNDARY |
| [Blue outline] | STREAMS AND PONDS |
| [Green outline] | WETLAND BOUNDARY LIMITS (NWI) |
| [Purple dot] | EDUCATIONAL INSTITUTIONS |
| [Orange dot] | PLACES OF WORSHIP |
| [Green dot] | CEMETERY |
| [Pink dot] | HOSPITAL |

BEGIN PROJECT U-5706

END PROJECT U-5706



HAMLET

ROCKINGHAM

CREEK RUN

LAKESHORE

DORAL WOODS

FALLING CREEK WATERSHED

HITCHCOCK CREEK WATERSHED

RICHMOND SENIOR HIGH SCHOOL

ALTERNATIVE LEGEND

| | | | |
|---------------|------------|---------------|-----------------|
| ALTERNATIVE 1 | B | ALTERNATIVE 4 | G O R G |
| ALTERNATIVE 2 | G | ALTERNATIVE 5 | G O Br G |
| ALTERNATIVE 3 | R G | ALTERNATIVE 6 | R Br G |

STIP Project R-2501
(US Rockingham Bypass)
Selected Alternative Study
Corridor - Unfunded - Not
a Part of this Study