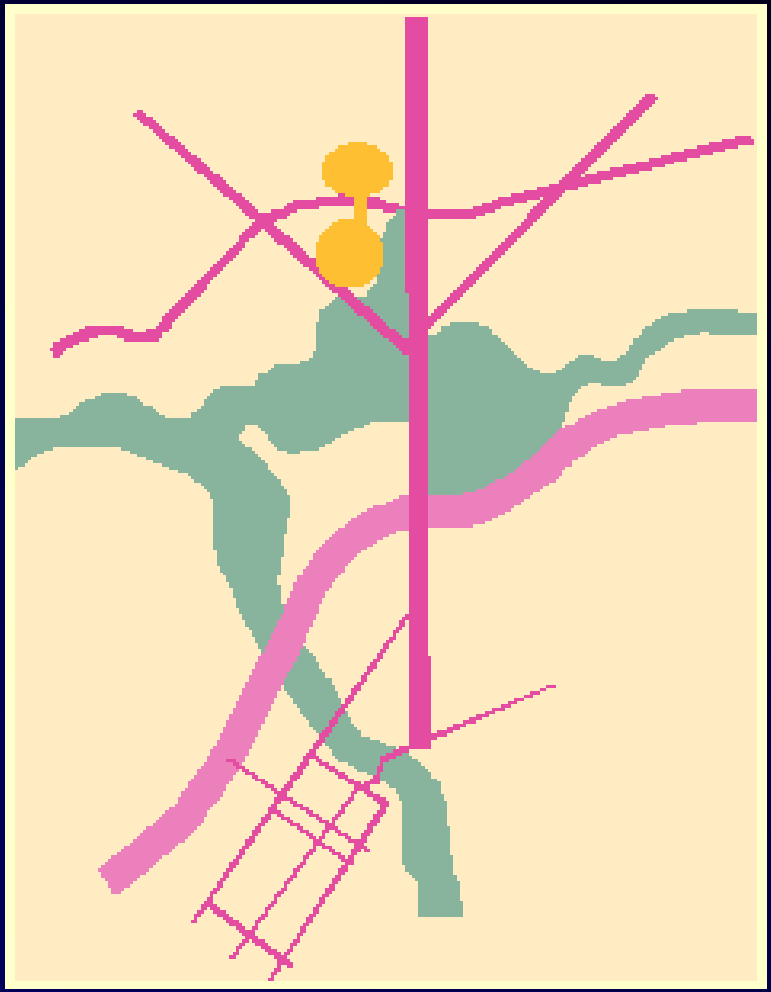


BLUE BALL PROPERTIES

MASTER PLAN

Transportation Technical Committee Meeting
December 29, 1999

December 29, 1999
Transportation Committee Meeting
Agenda

I. Welcome & Introduction

II. Augustine Cut-Off Discussion - Continued

III. Evaluation Surveys

IV. Next Steps

I. Welcome & Introduction

II. Augustine Cut-Off Discussion - Continued

Augustine Cut-Off - Topics

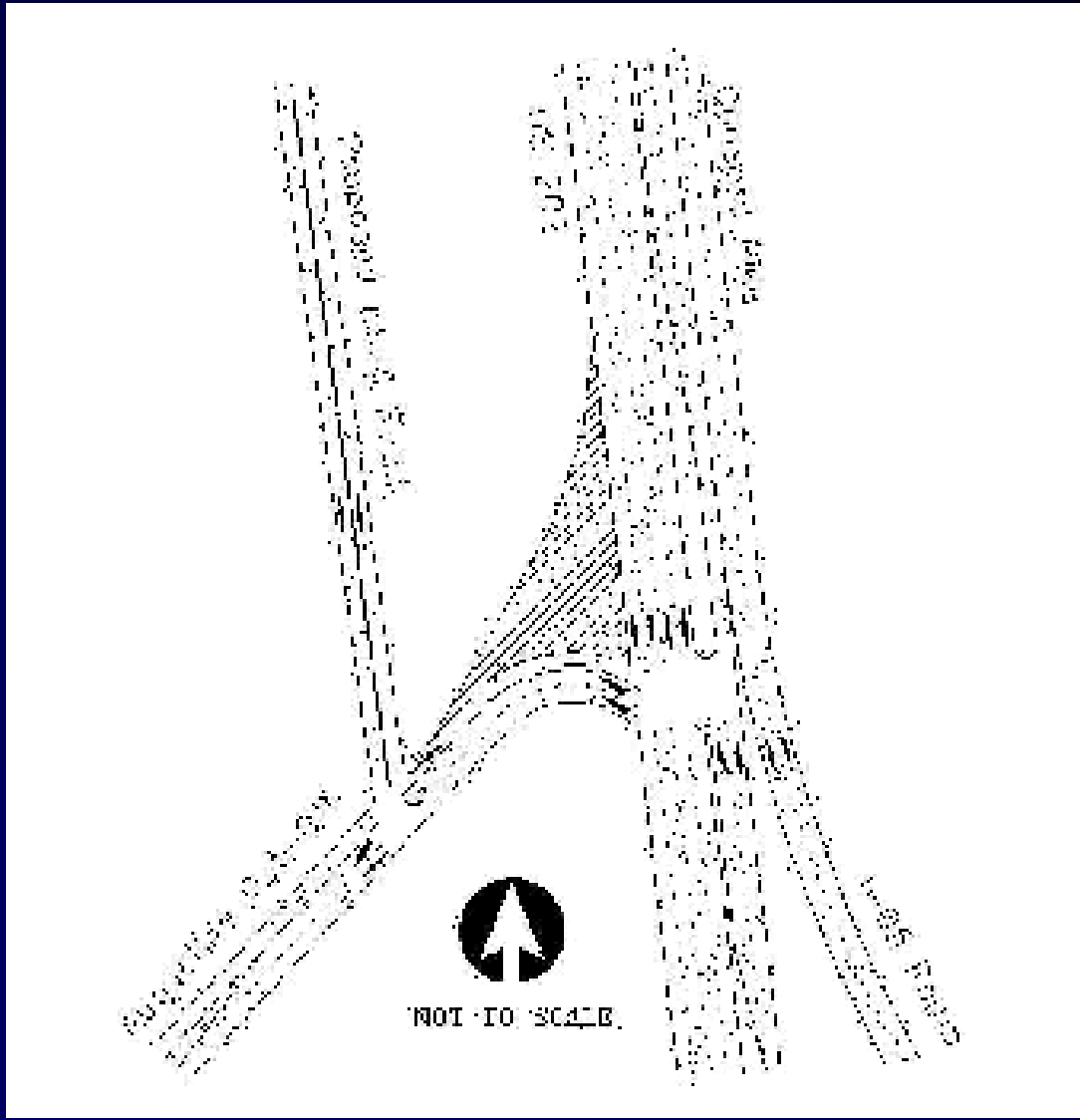
- Options Considered
- Traffic Distribution
- Safety Issues
- Capacity Analyses
- Simulation Model

Augustine Cut-Off - Options Considered

- No Change from Existing Conditions (with signal)
- Right-In / Right-Out (no signal)
- Fully Relocated Access (no signal)
- Right-Out / Left-In Partial Traffic Signal (Option 6 Only)

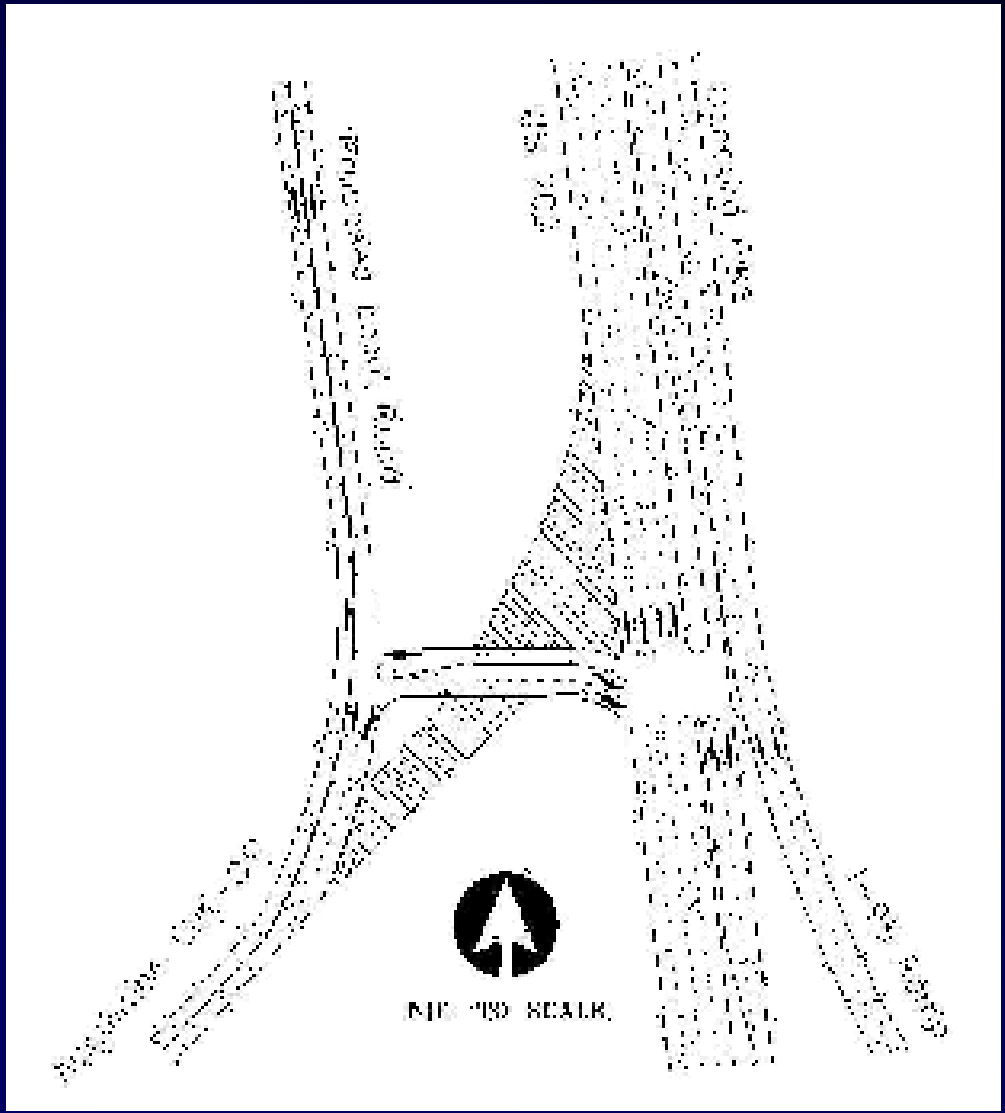
US 202 & Augustine Cut-Off

EB Right-Turns & NB Left-Turns Allowed ("Partial Signal" Option)



US 202 & Augustine Cut-Off

EB Right-Turns & NB Left-Turns Allowed ("Partial Signal" Option)



Augustine Cut-Off - Average Peak Hour Traffic Distribution

- 35% towards US 202 north
- 29% towards Foulk/Weldin Roads
- 25% towards I-95
- 6% towards US 202 south
- 5% towards Route 141

Augustine Cut-Off - Safety Issues

The existing safety problem at the intersection of US 202/Augustine Cut-Off has several contributing factors:

- High volumes
- Signalized intersection near approach to I-95 ramps in southbound direction
- Weaving problem southbound from Foulk Road to Augustine Cut-Off to I-95
- Tie-in of northbound I-95 ramp to US 202 and the corresponding weave problem northbound between Augustine Cut-Off and Foulk Road

Augustine Cut-Off - "Fully Relocated Access" Option

- Advantages
  - No traffic signal (less driver decisions)
  - No delay
  - No weave southbound from Foulk Road to Augustine Cut-Off
- Disadvantages
  - No traffic signal (higher speeds)
  - Circuitous route for some movements
  - Some traffic diverted to city streets (Broom Street, 18th Street) and Alapocas Drive, although this is reduced when combined with a new local road system

Augustine Cut-Off - "Partial Signal" Option

- Advantages
  - Retains traffic signal (lower speeds)
  - No weave southbound from Foulk Road to Augustine Cut-Off
  - Direct routes for all movements
  - No traffic diverted to city streets (Broom Street, 18th Street) and Alapocas Drive when combined with new local road system
- Disadvantages
  - Retains traffic signal (more driver decisions)
  - Some delay due to signal (but meets "no degradation" criteria)

Capacity Analysis: Augustine Cut-Off Options

Average Intersection Delay (seconds per vehicle)

	Baseline Conditions		2010 Conditions Full Access (No-Build) at US 202 & Augsline Cut-Off[1] (unrestrained)[2]		2010 Conditions with No Access at US 202 & Augustine Cut-Off and New East Side Local Road Only[1]		2010 Conditions with No Access at US 202 & Augustine Cut-Off and New East & West Side Local Roads[1]		2010 Conditions with Partial Access at US 202 & Augsline Cut-Off and New East & West Side Local Roads[1]	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Signalized Intersection										
US 202 & Augustine Cut-Off	49	83	188	301	Note 3		Note 3		16	90
Concord Avenue & Broom Street	33	39	43	59	79	120	59	84	43	59
Rt 141 & Alapocas Drive	17	11	45	42	63	47	50	45	45	42
Augustine Cut-Off & Alapocas Drive	14	22	24	38	30	31	33	25	24	38
Augustine Cut-Off & 18th Street	29	21	37	37	74	35	55	33	37	37
Broom Street & 18th Street	14	15	18	19	25	45	21	23	18	19

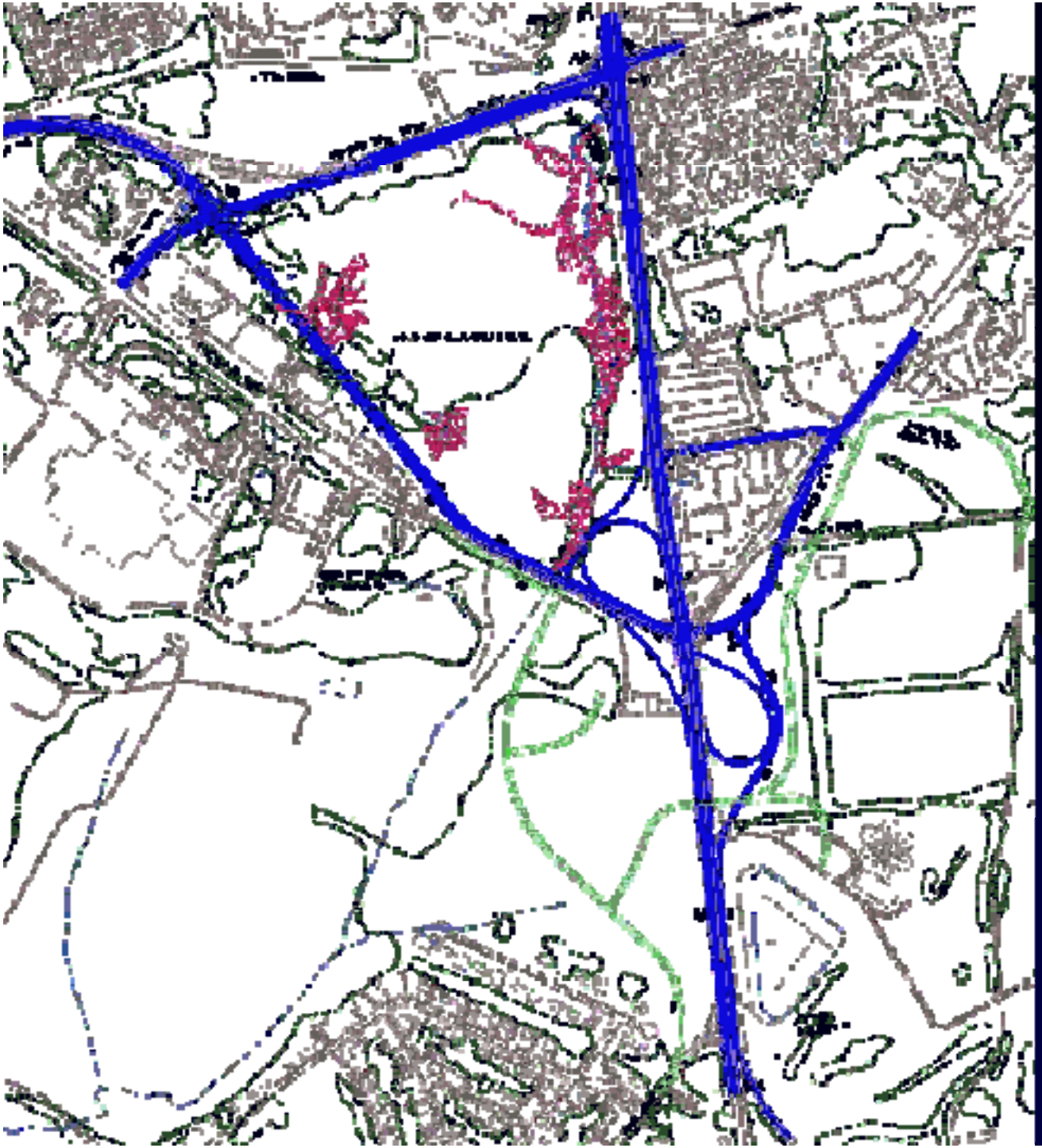
Note 1: All 2010 conditions reflect traffic projections with AstraZeneca and DuPont expansions

Note 2: "Unrestrained" projections assume traffic is not diverted from US 202/Augustine Cut-Off due to congestion

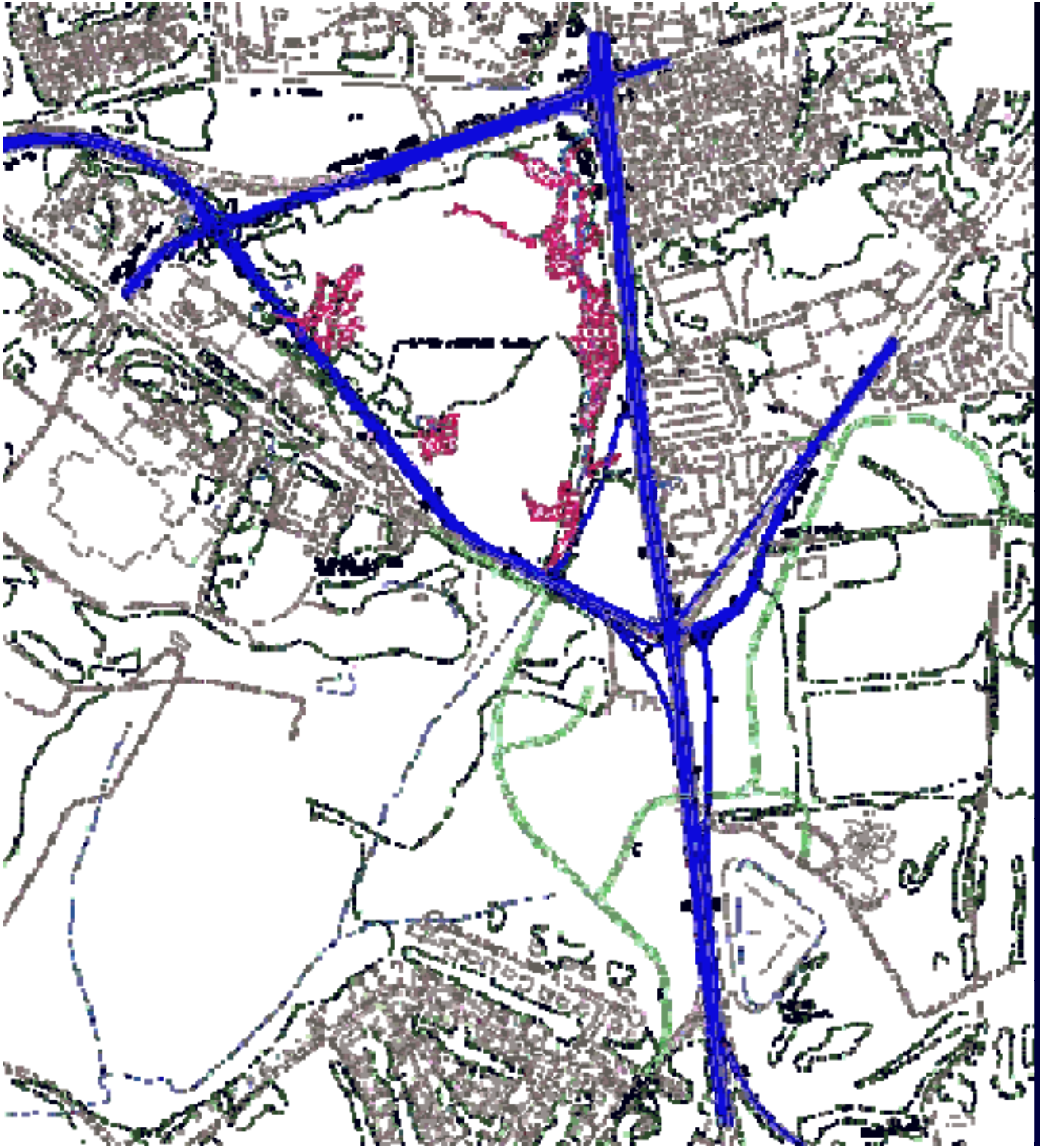
Note 3: This intersection has been relocated under this option

NOTE:

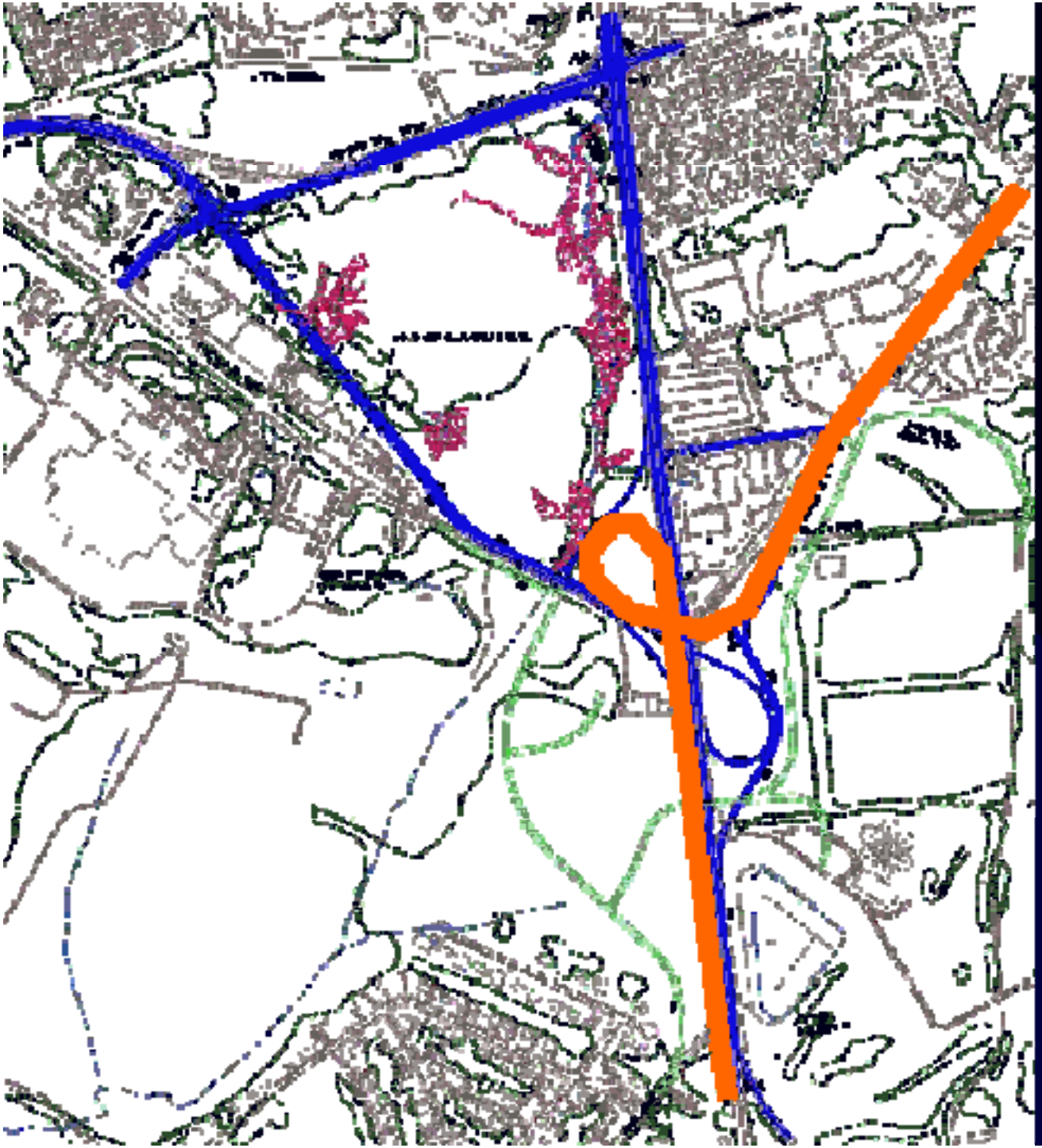
The following slides have been modified from those presented on December 29, 1999, due to the fact that the traffic movement animation cannot be easily shown on the web. The information is the same, although the format is different.



Review of
Option 5
"Bow-Tie"



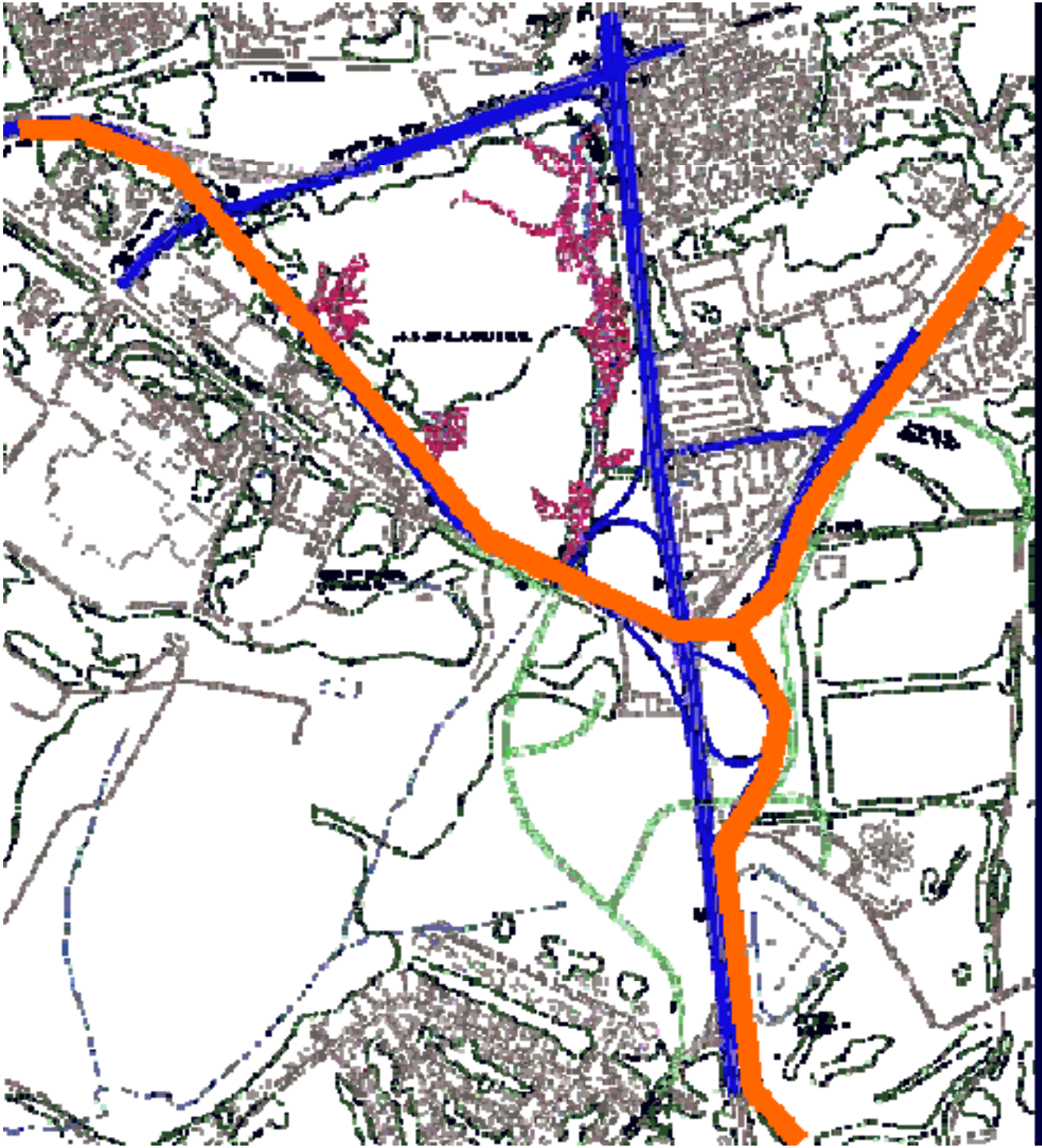
Review of
Option 6
"Diamond"



Review of
Option 5
"Bow-Tie"

Major Movements:

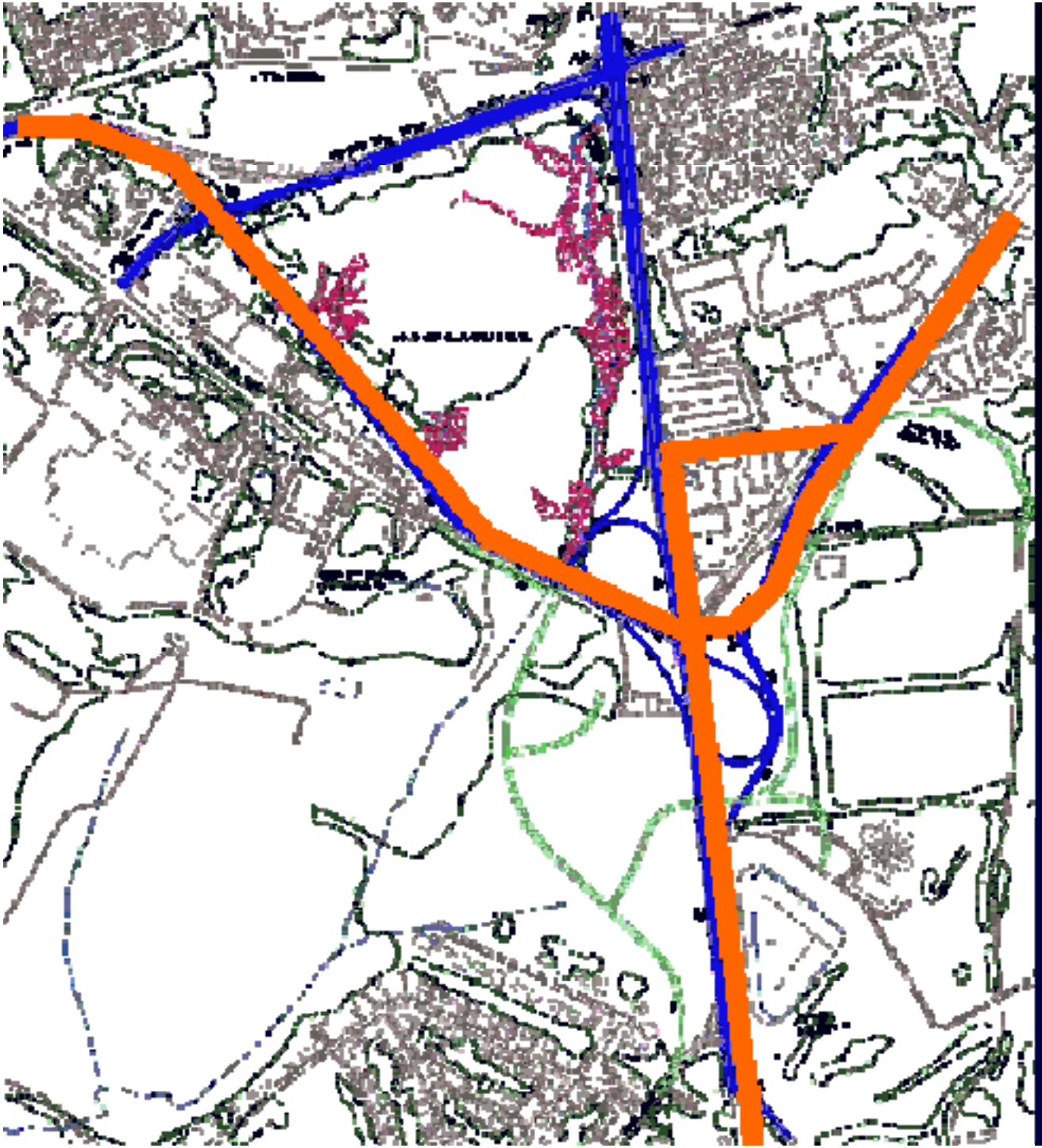
Foulk - I-95/City



Review of
Option 5
"Bow-Tie"

Major Movements:

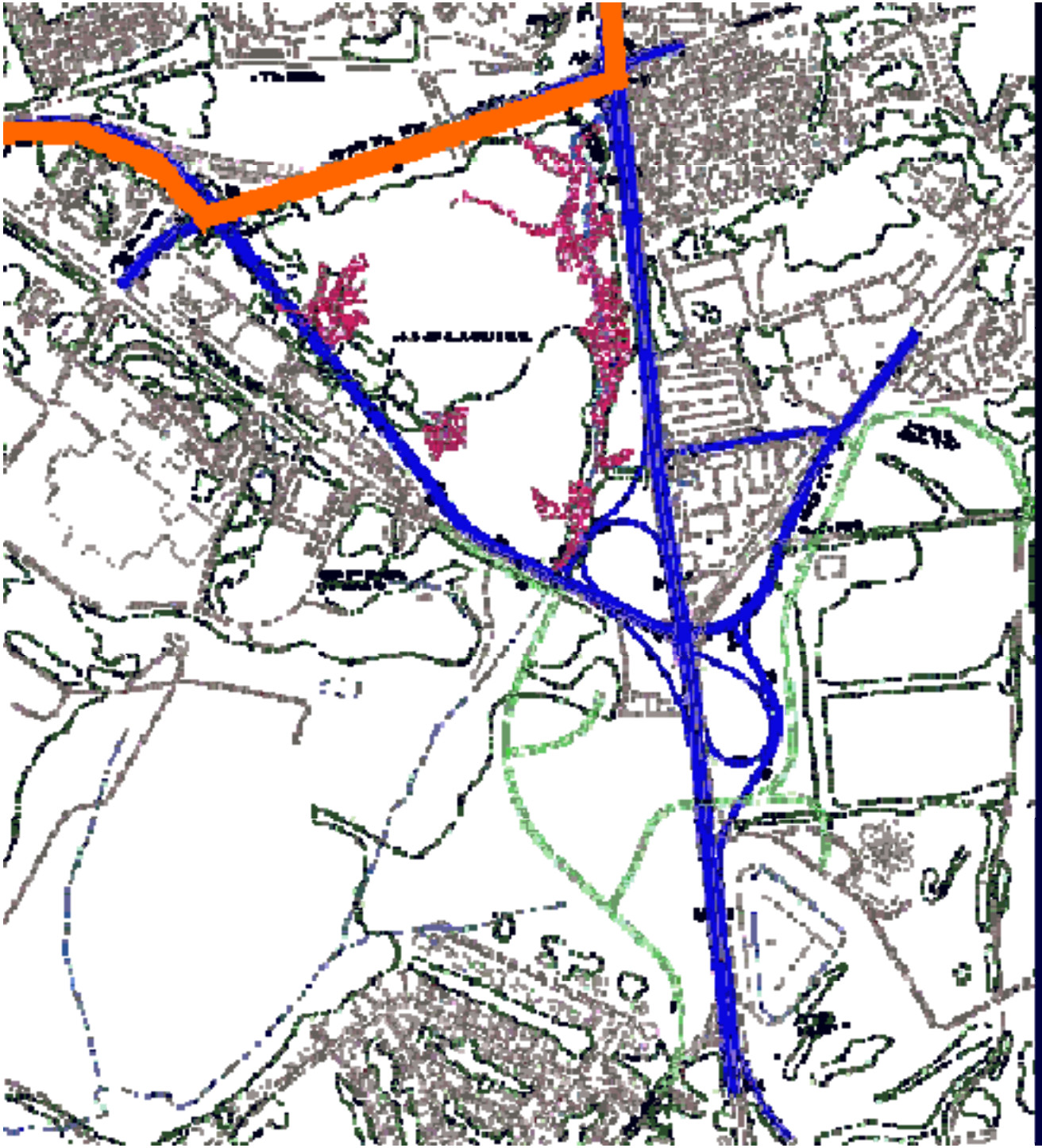
I-95 - Foulk/Rel. 111



Review of Option 5 "Bow-Tie"

Major Movements:

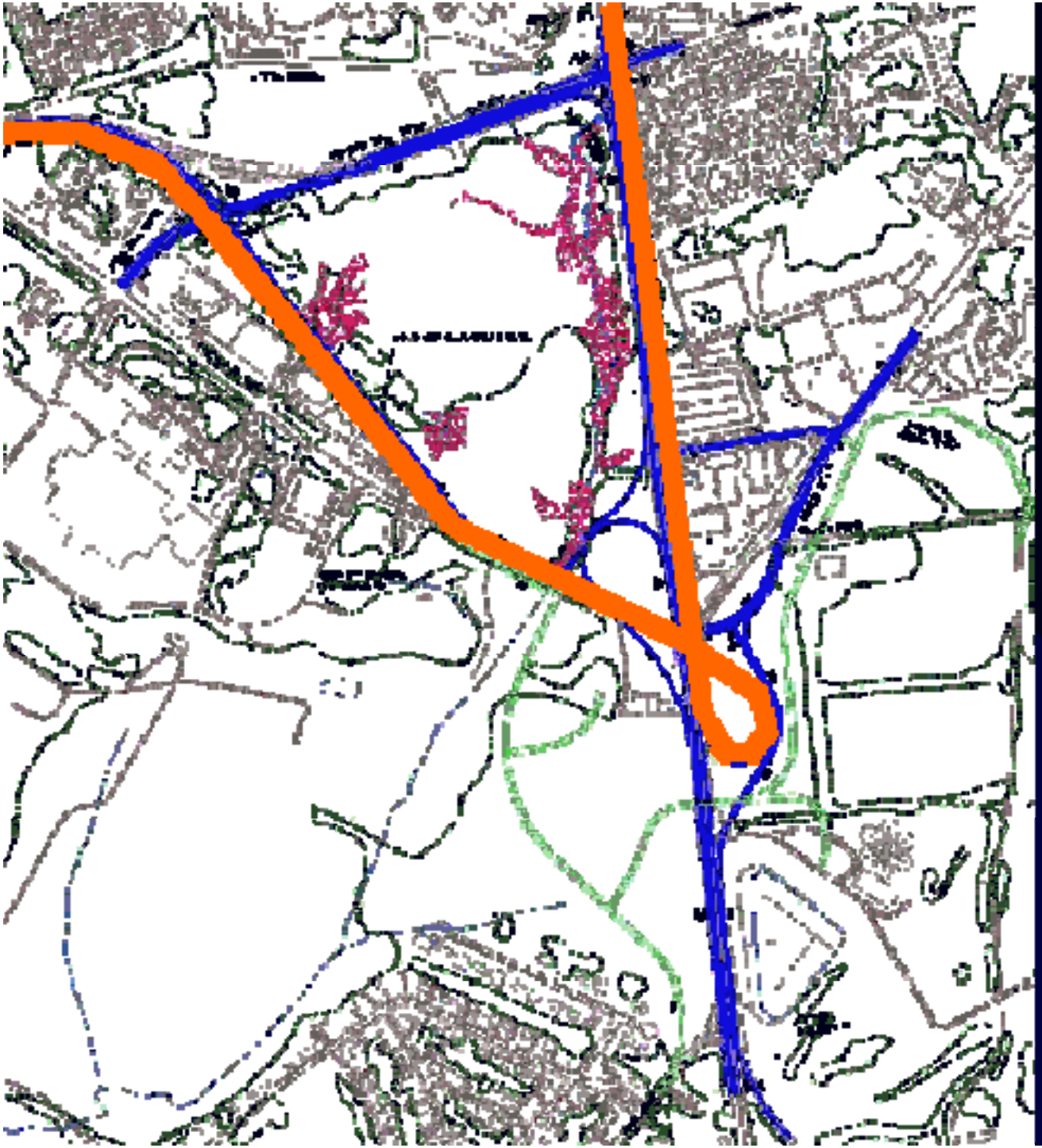
City - Poulk. Rel. 111



Review of Option 5 "Bow-Tie"

Major Movements:

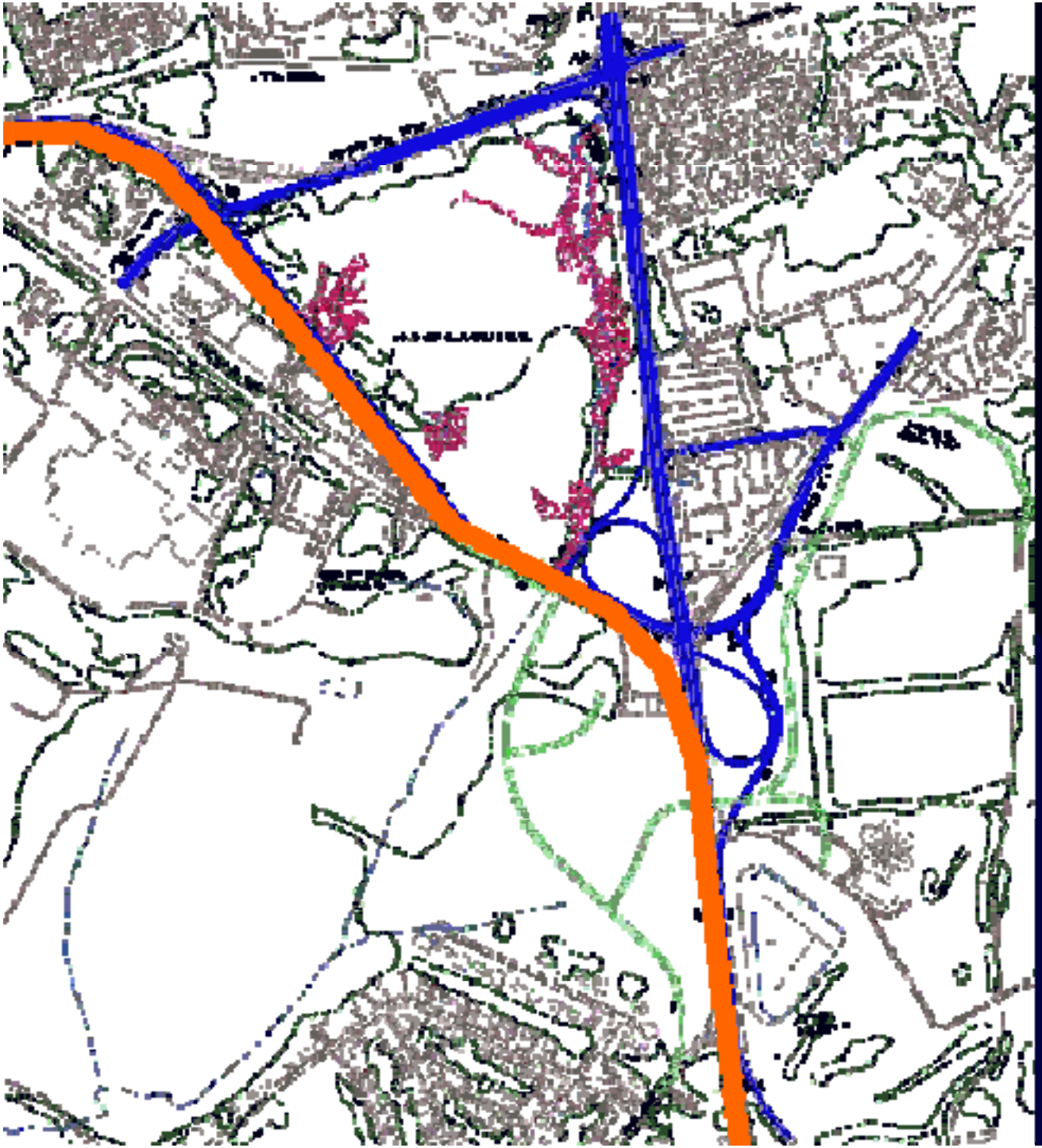
I 11 - 202 N (1)



Review of Option 5 "Bow-Tie"

Major Movements:

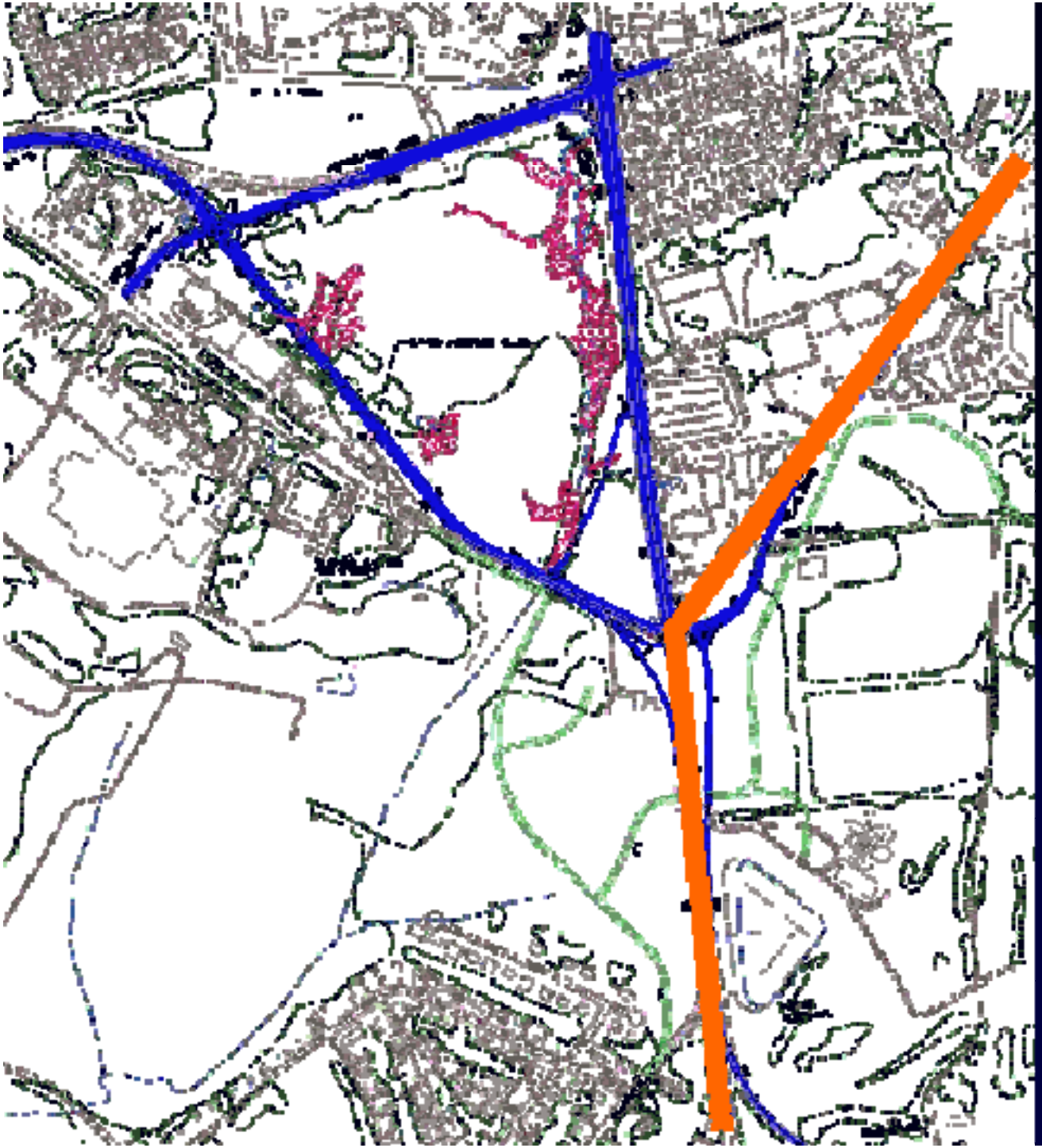
I 11 - 202 N (2)



Review of Option 5 "Bow-Tie"

Major Movements:

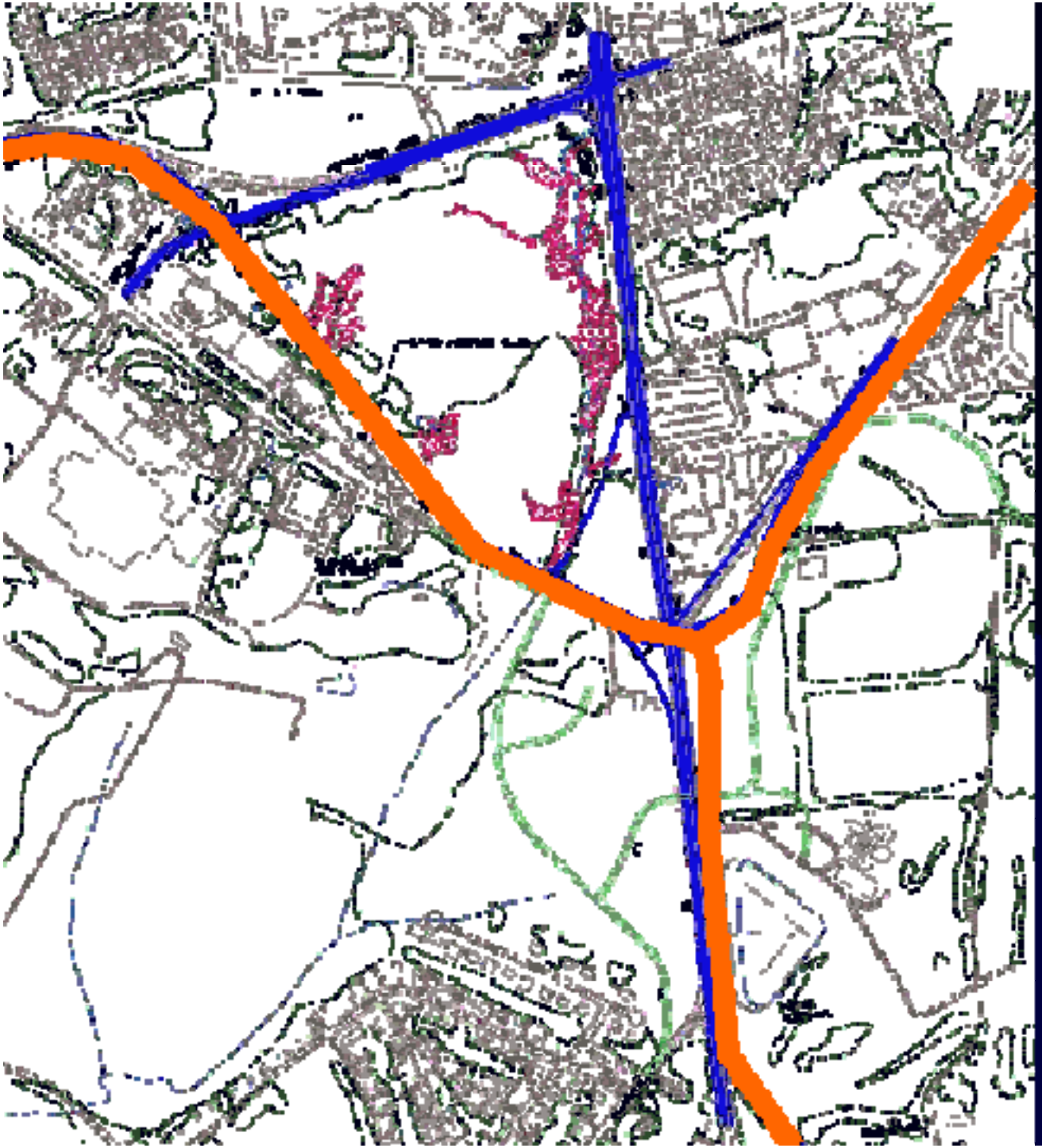
I-11 - I-95 Corridor



Review of Option 6 "Diamond"

Major Movements:

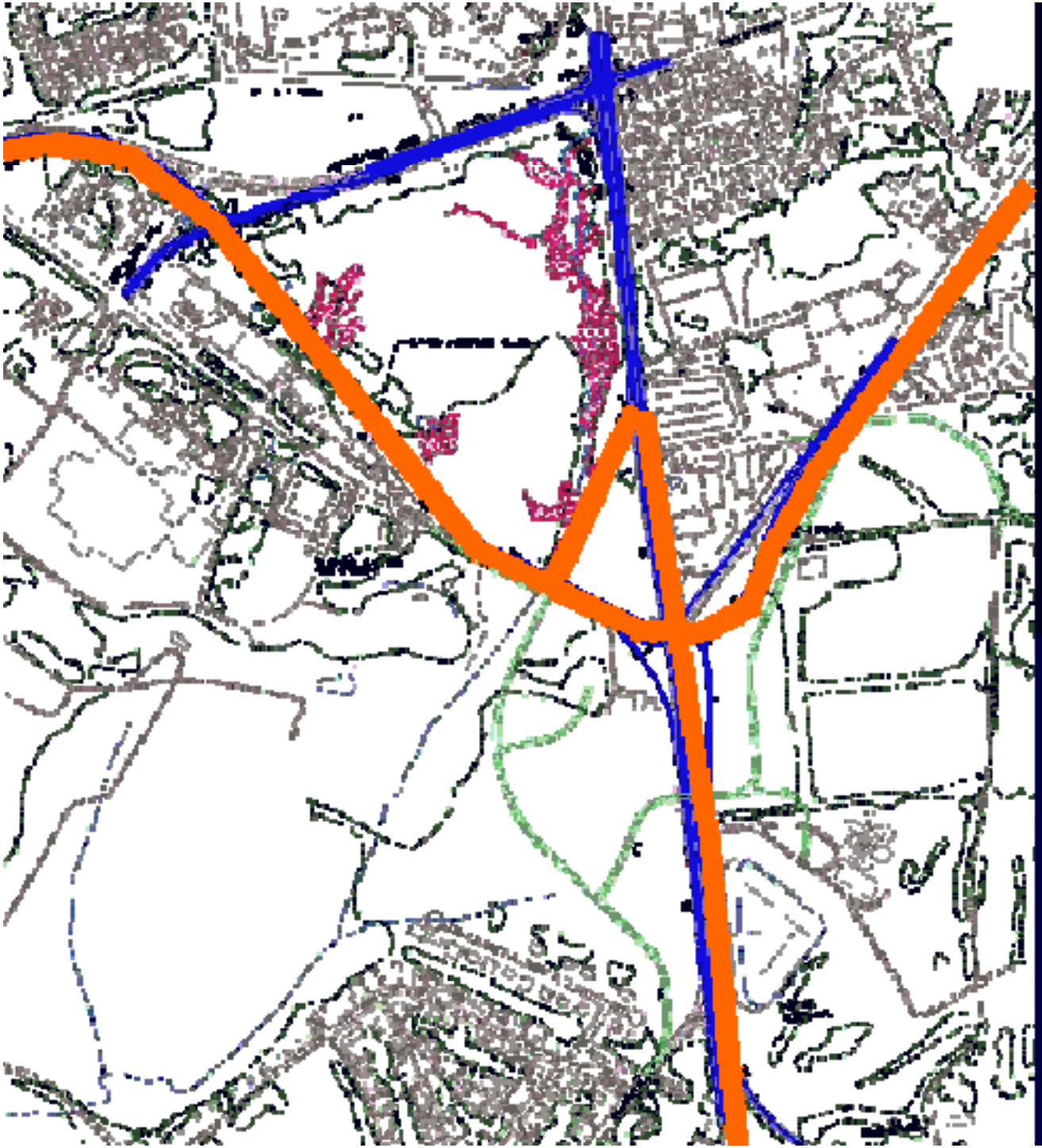
South - I-95/City



Review of
Option 6
"Diamond"

Major Movements:

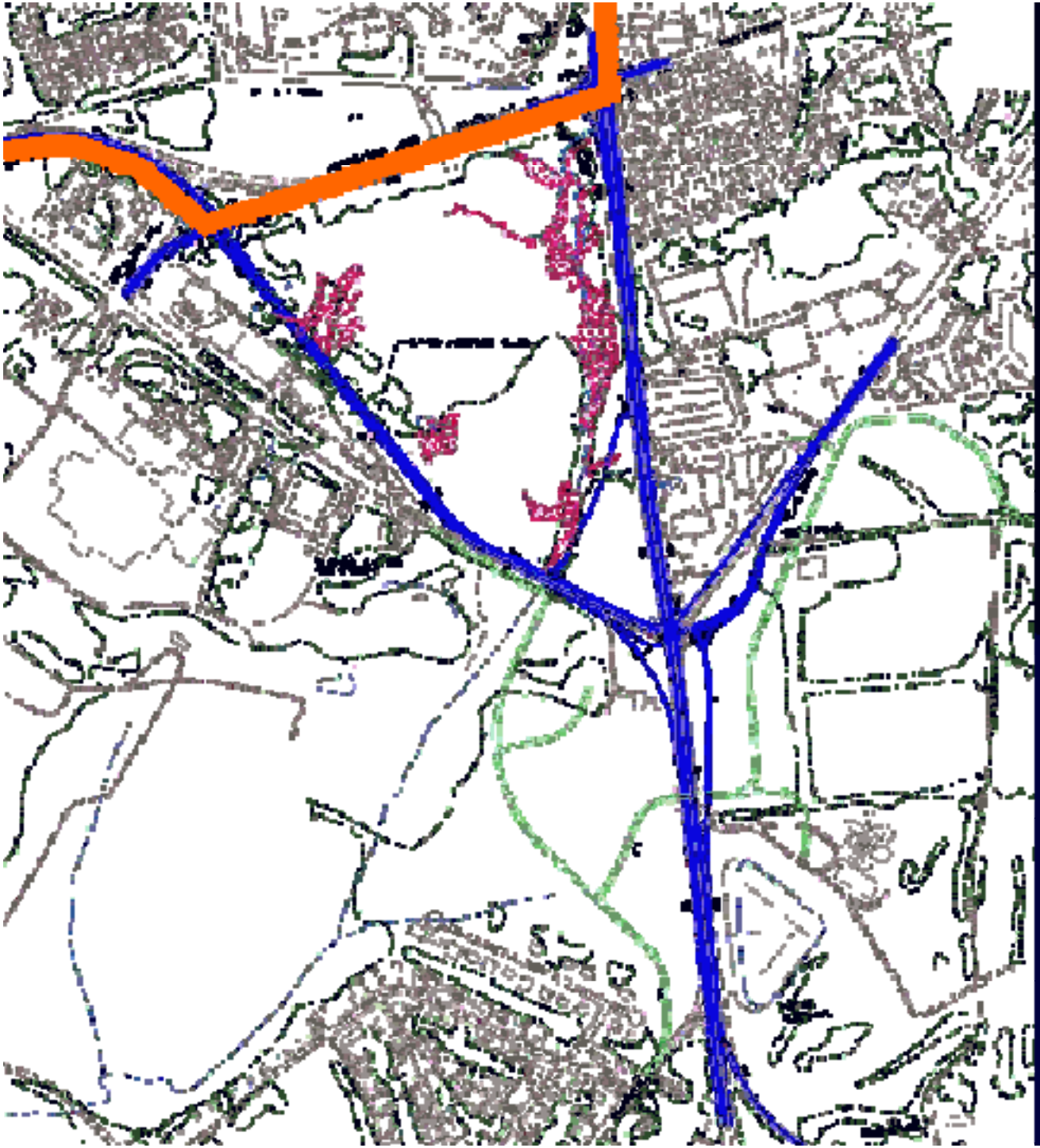
I-95 - Foulk/Rel. 111



Review of
Option 6
"Diamond"

Major Movements:

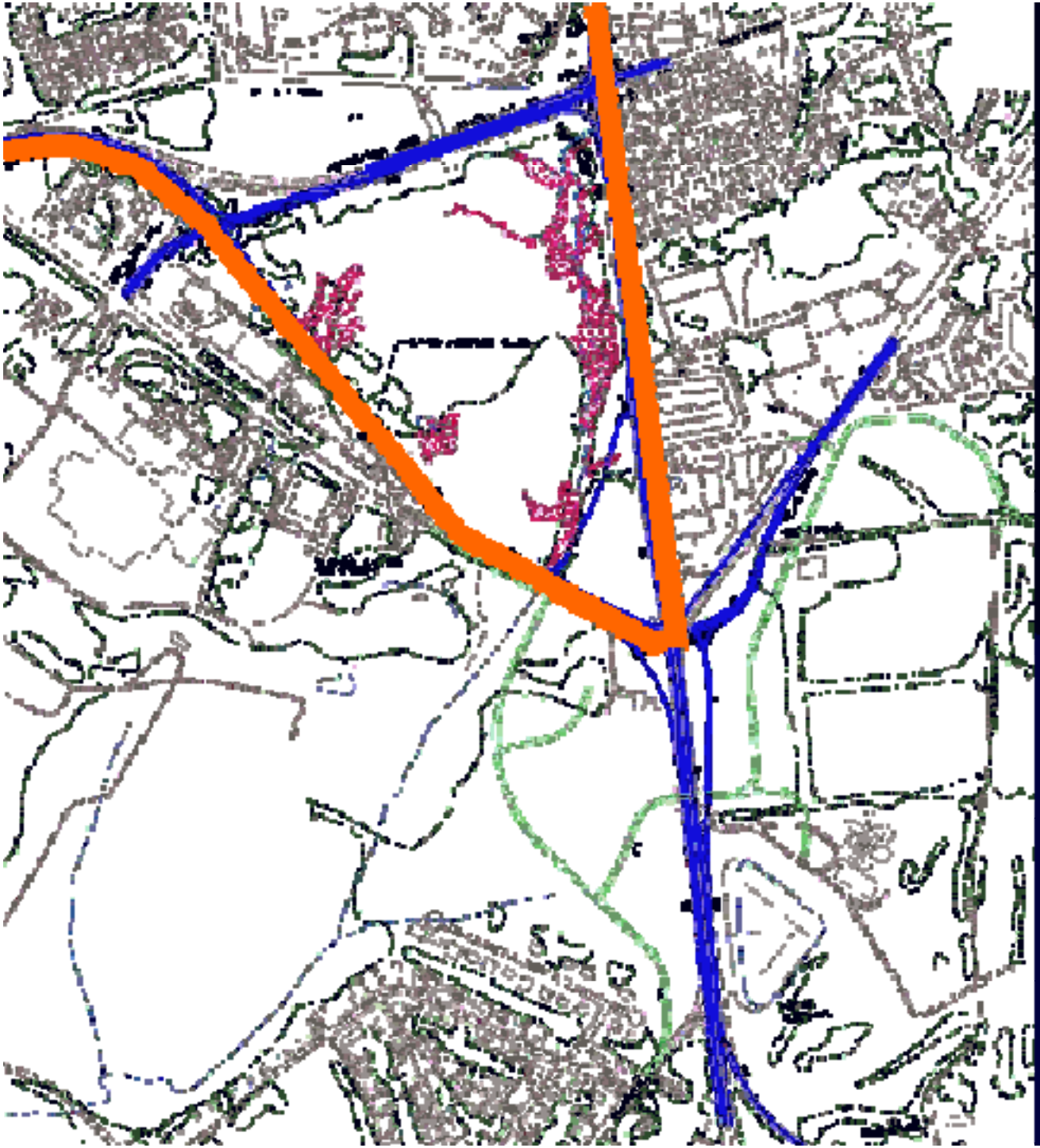
City - Foulk Rd. 111



Review of Option 6 "Diamond"

Major Movements

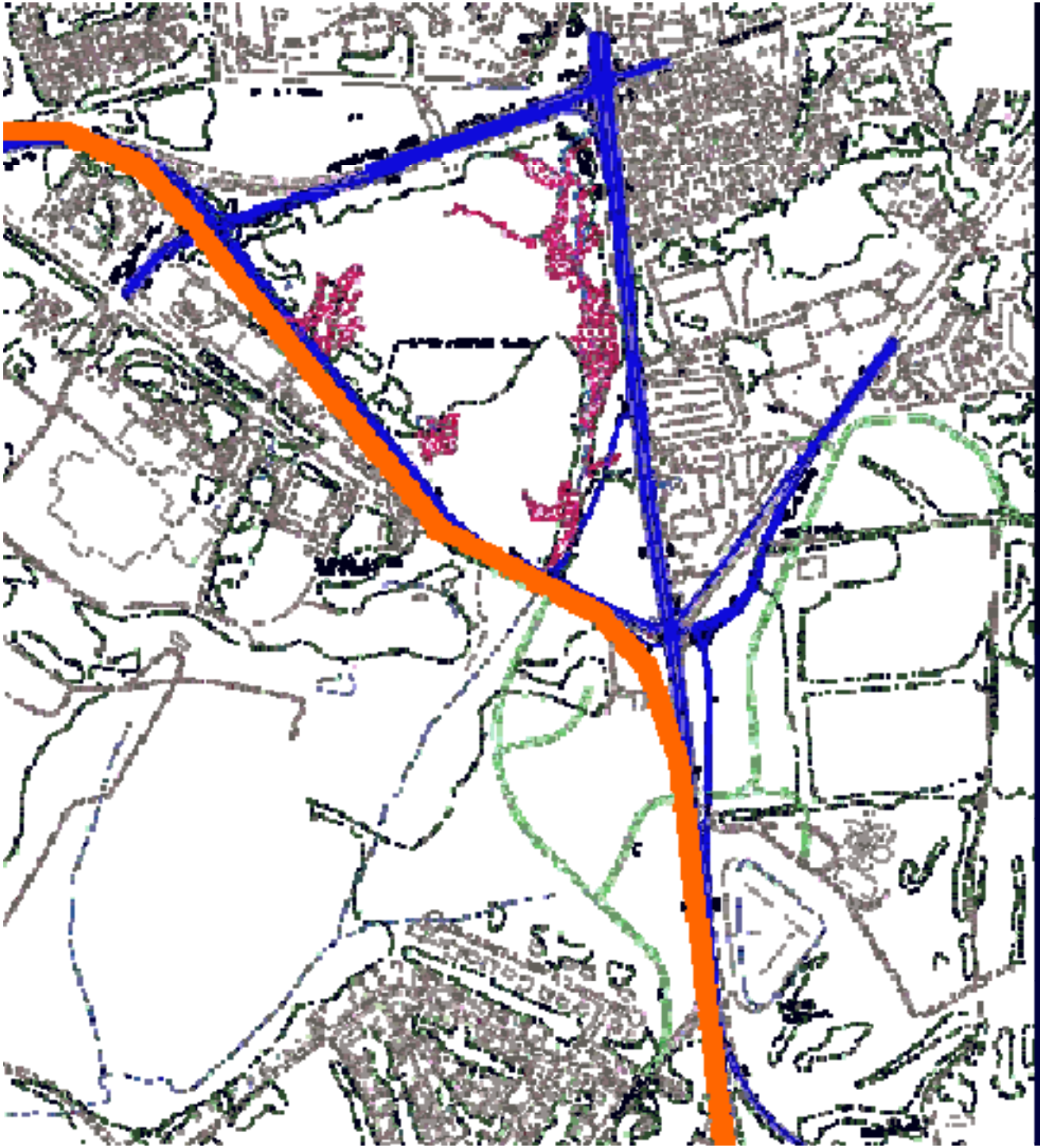
I 11 - 202 N (1)



Review of Option 6 "Diamond"

Major Movements:

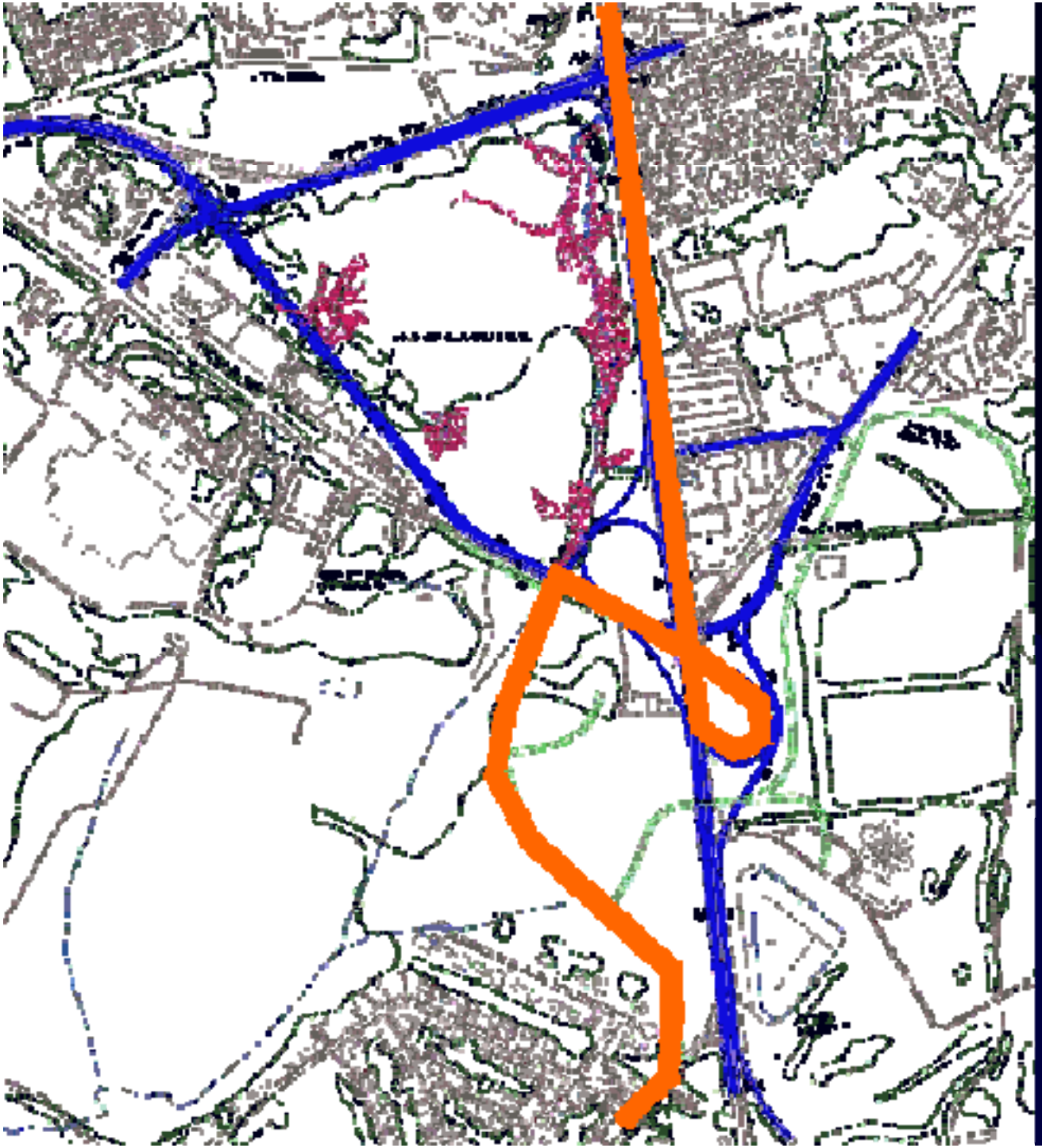
I 11 - 202 N (2)



Review of Option 6 "Diamond"

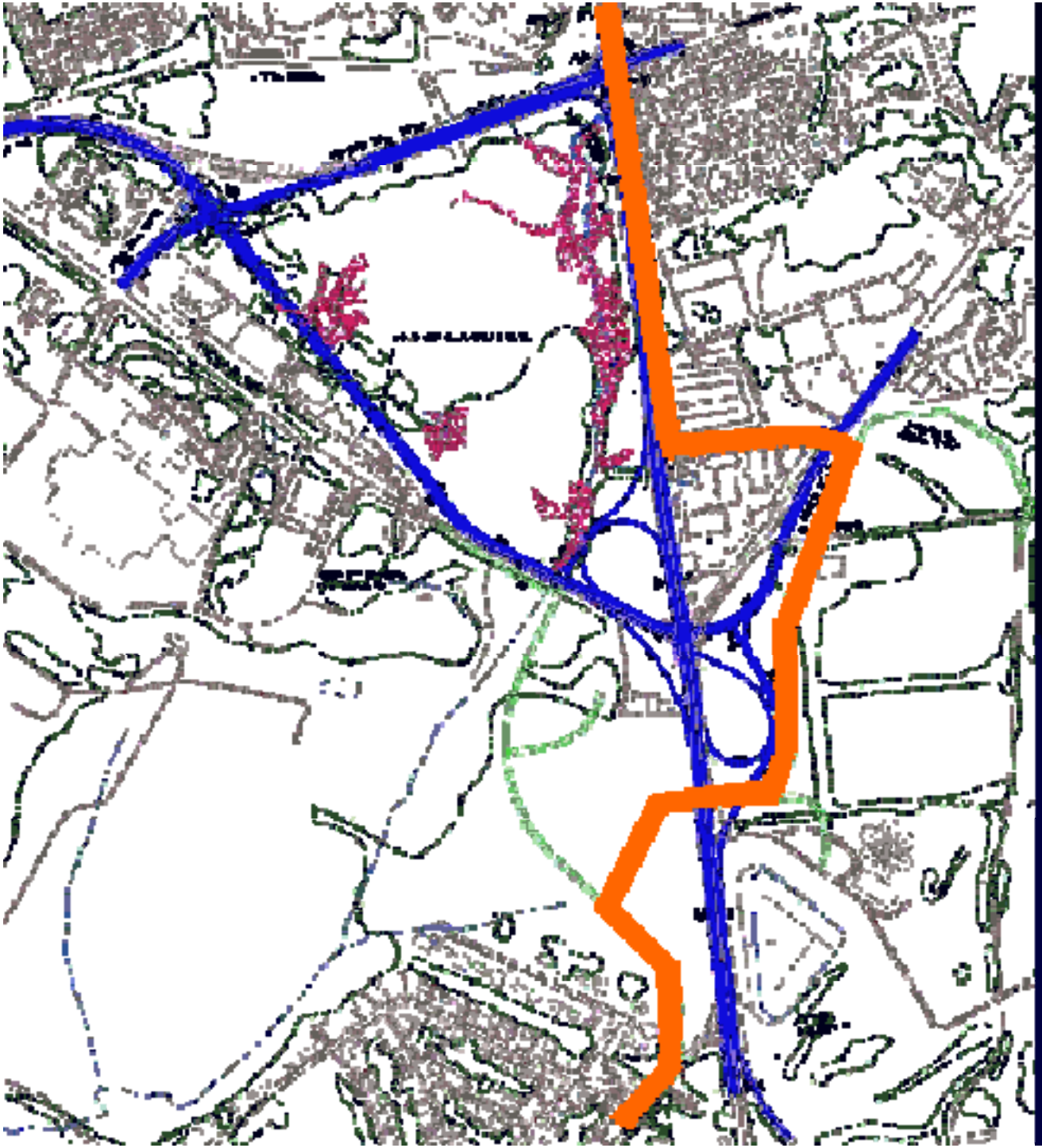
Major Movements:

141 - I-95/City



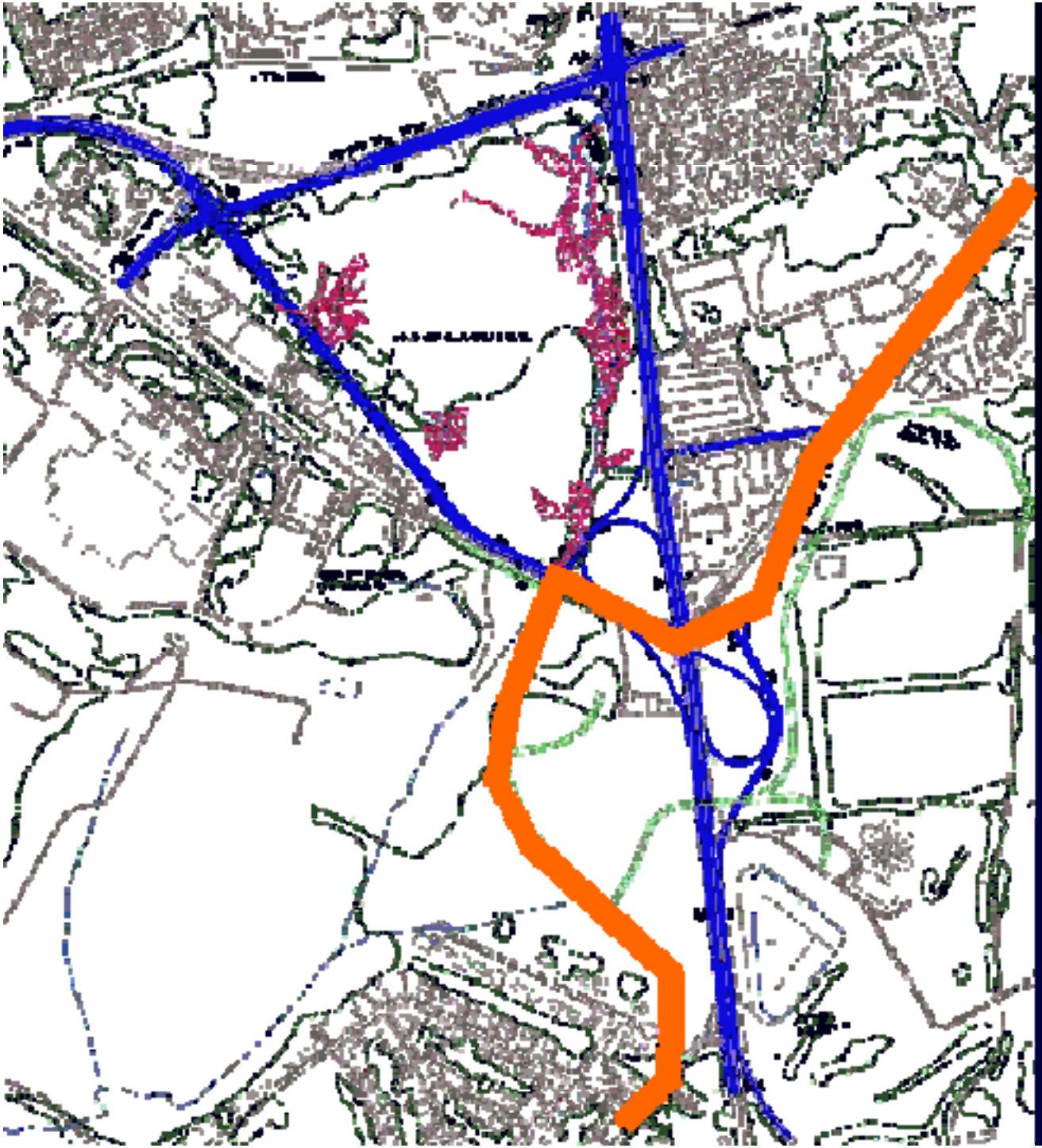
Review of "Fully Relocated Access" option for Augustine Cut-off

A.C.O. - 202 N (1)



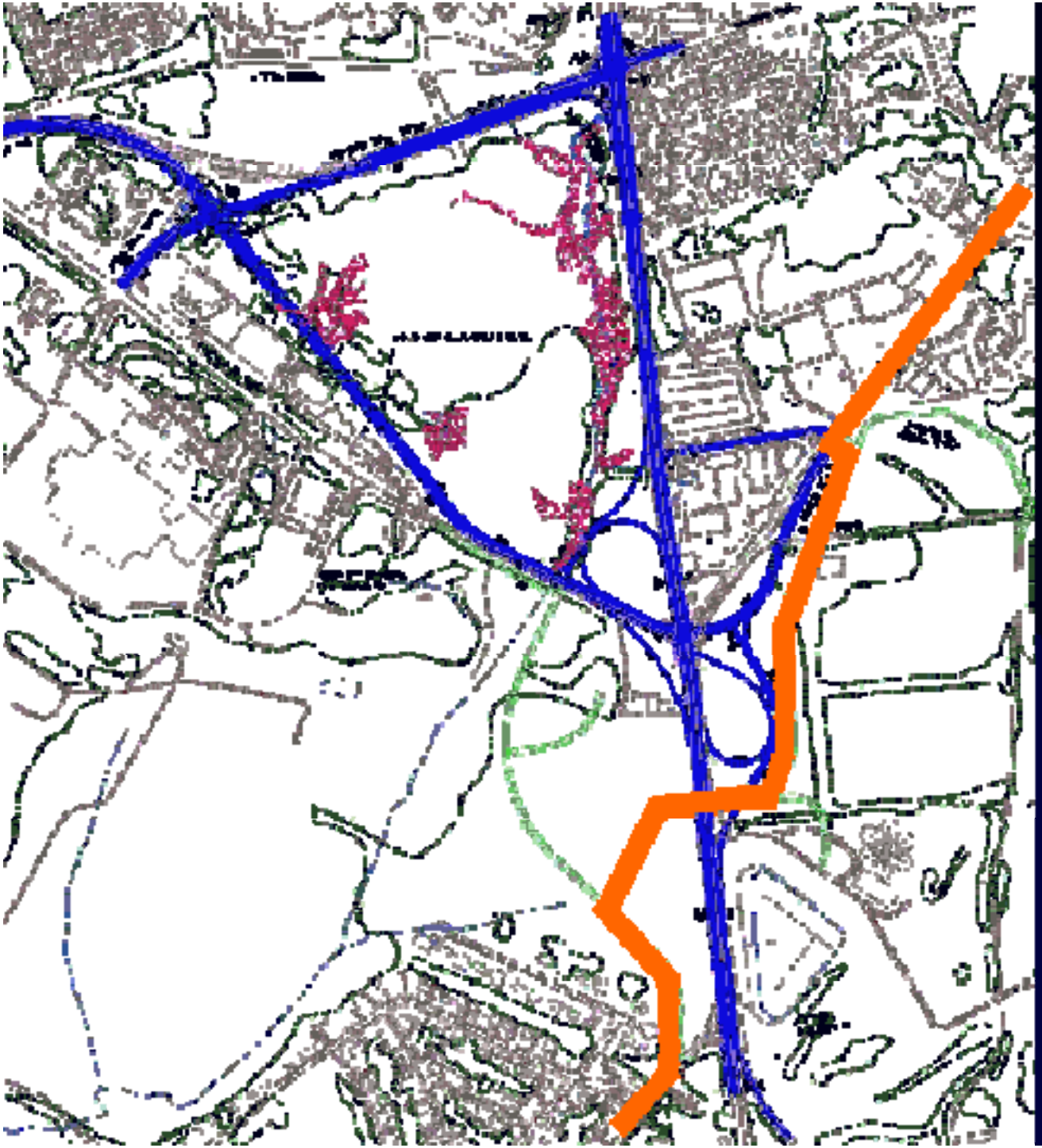
Review of "Fully Relocated Access" Option for Augustine Cut-Off

A.C.O. - 202 N (2)



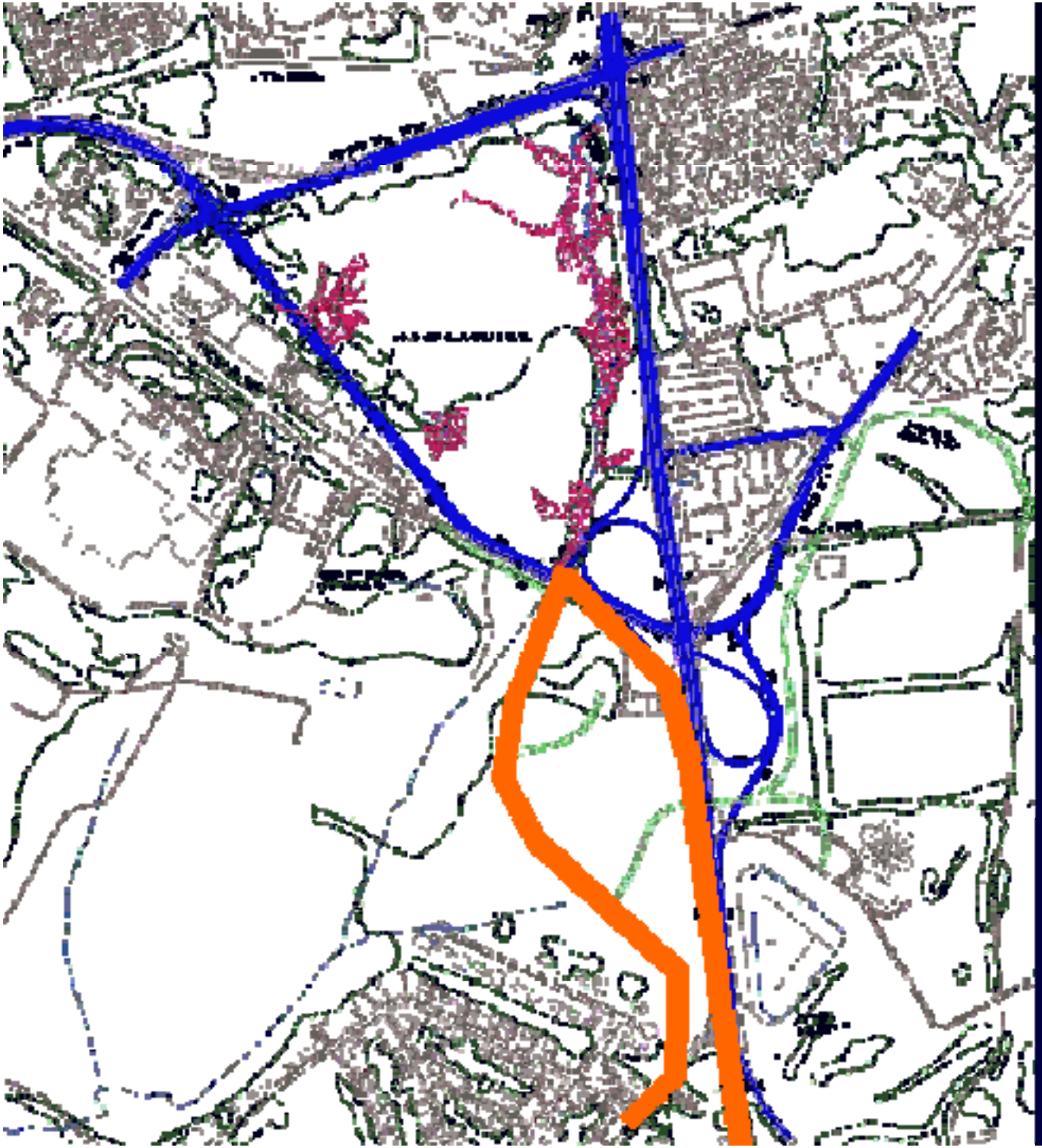
Review of "Fully Relocated Access" option for Augustine Cut-off

A.C.O. - Foulk (1)



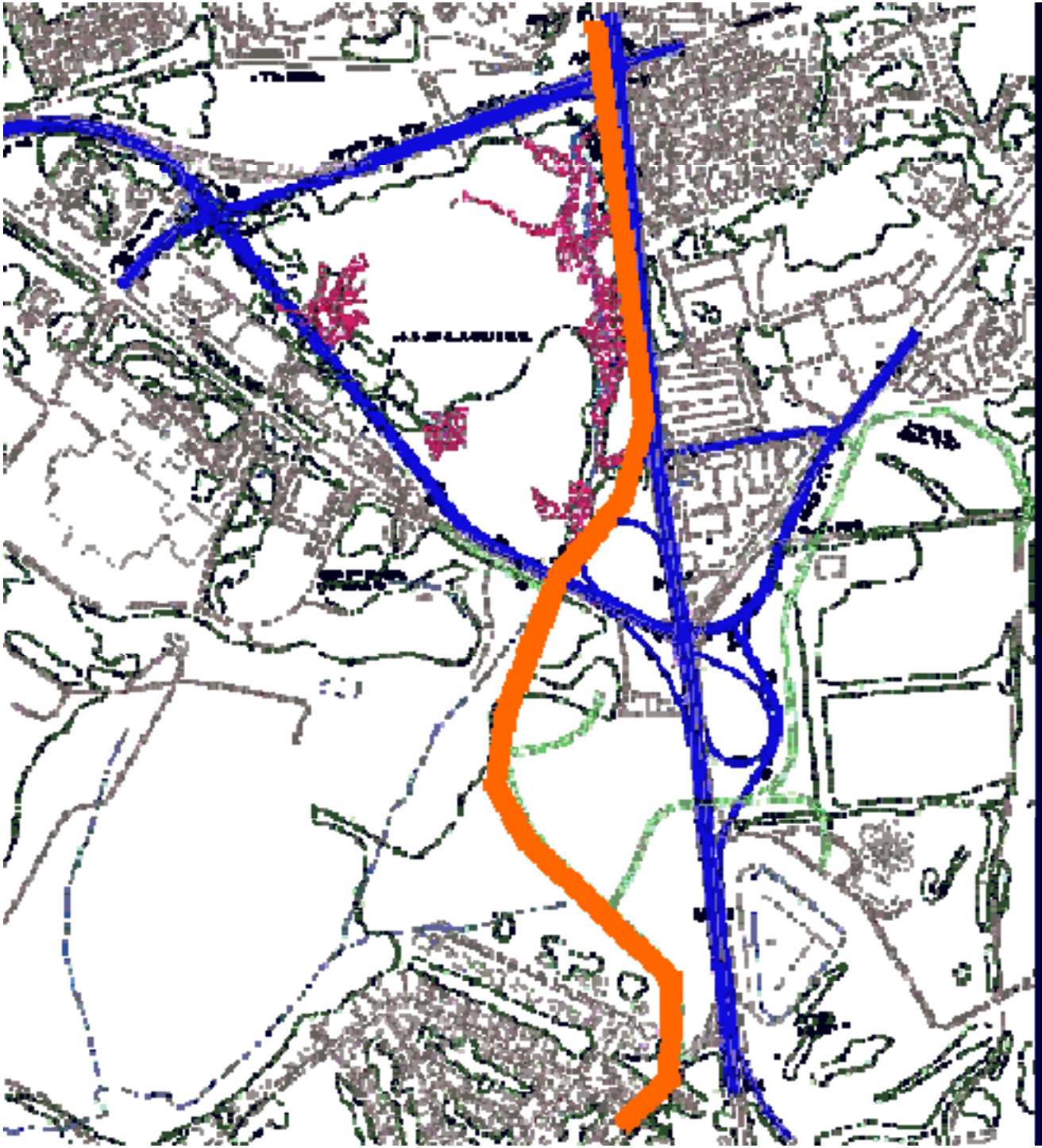
Review of "Fully Relocated Access" option for Augustine Cut-off

A.C.O. - Foulk (2)



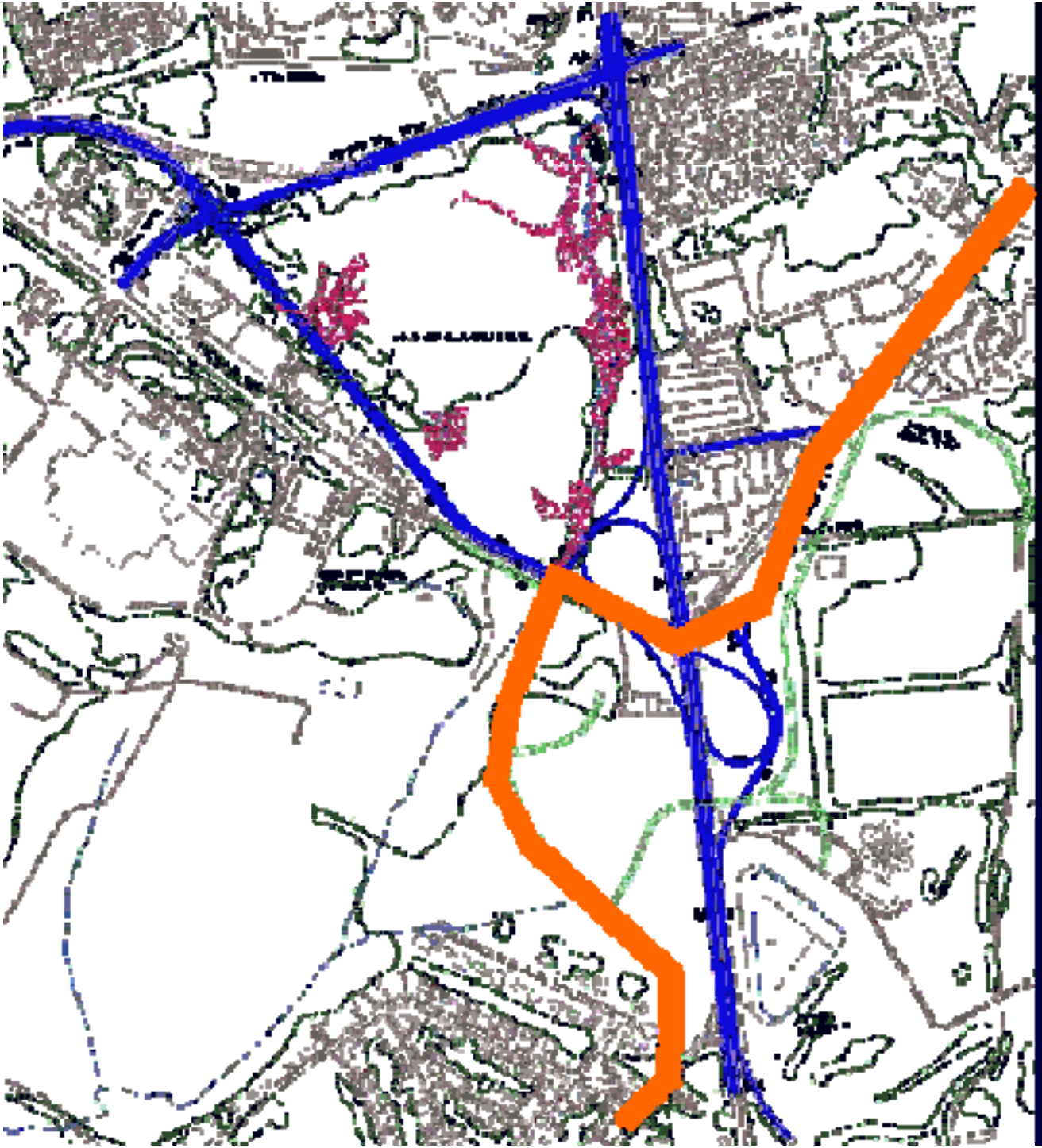
Review of "Fully Relocated Access" option for Augustine Cut-off

A.C.O. - I-95/City



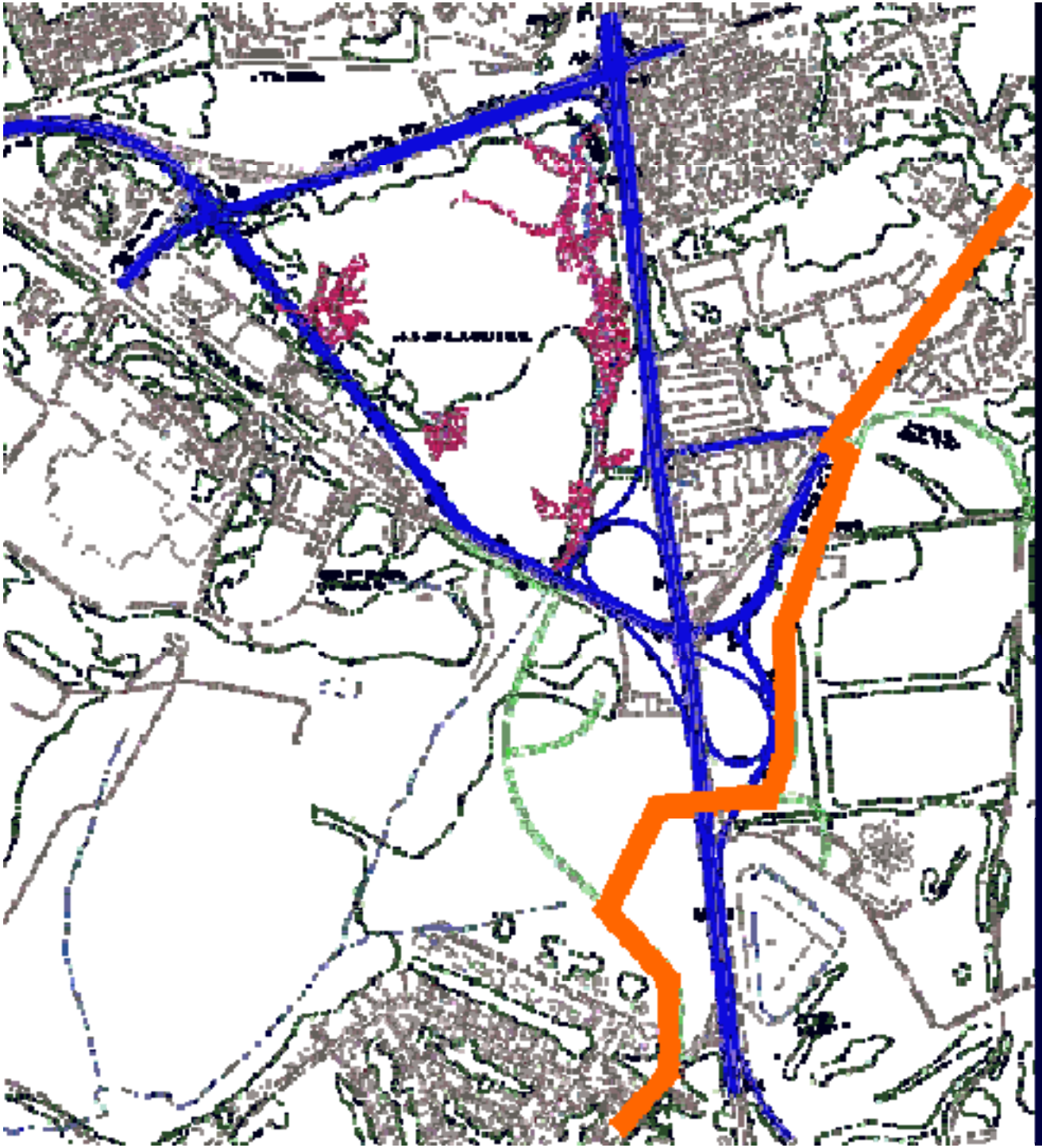
Review of "Fully Relocated Access" option for Augustine Cut-off

202 N - A.C.O.



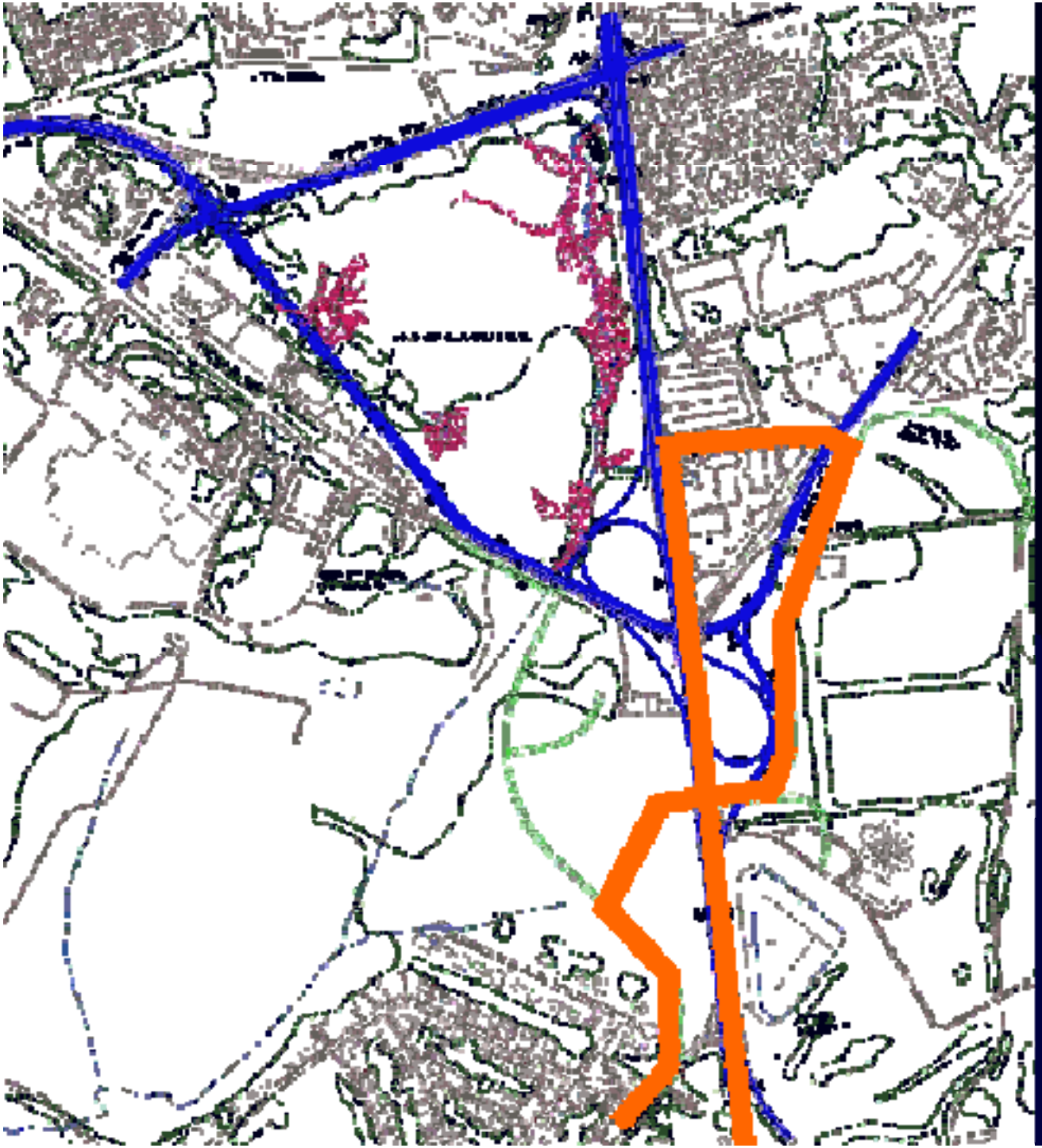
Review of "Fully Relocated Access" option for Augustine Cut-off

Foulk - A.C.O. (1)



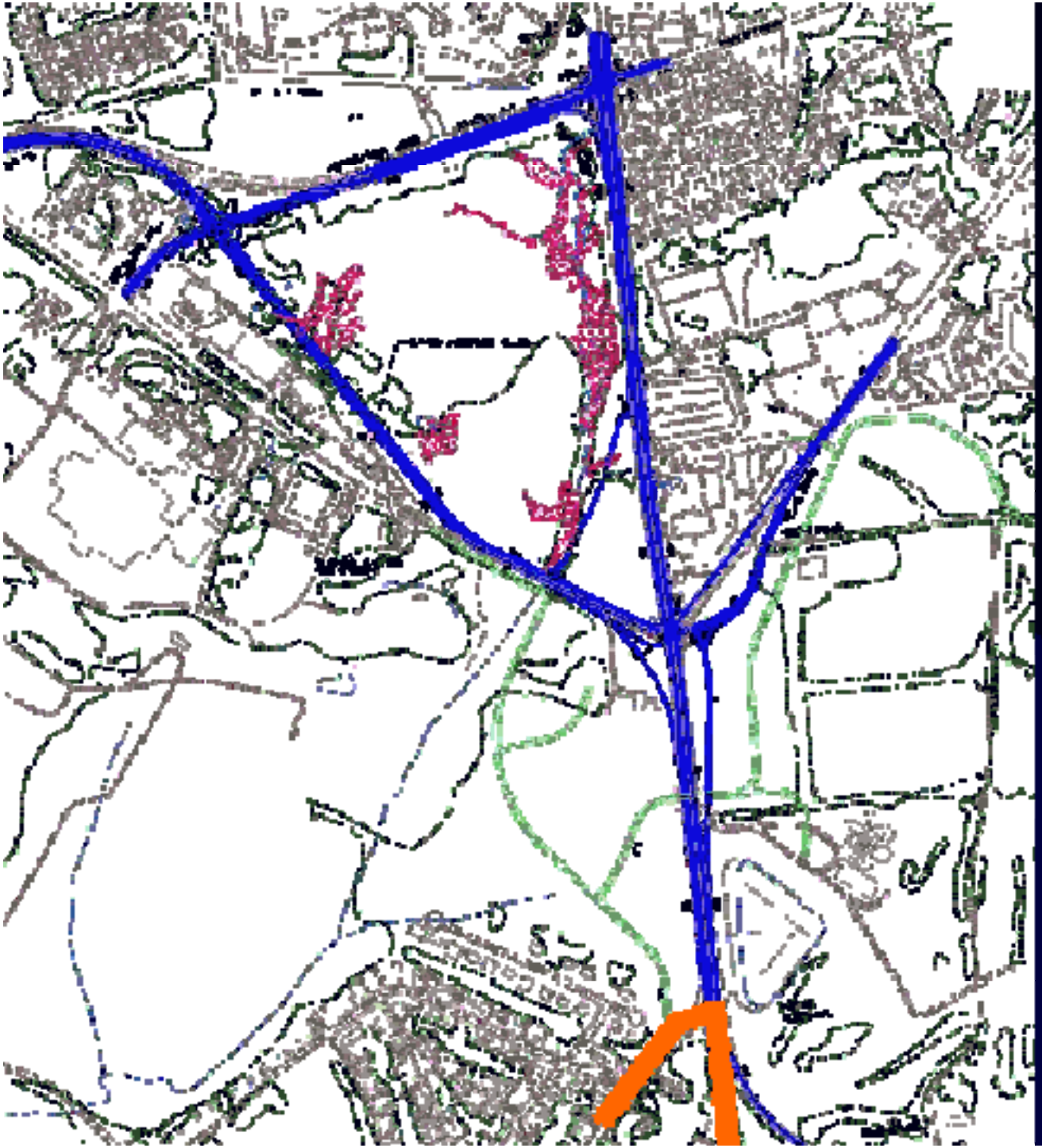
Review of "Fully Relocated Access" option for Augustine Cut-off

Foulk - A.C.O. (2)



Review of "Fully Relocated Access" option for Augustine Cut-off

City - A.C.O.



Review of "Partial Signal" Option for Augustine Cut-Off

Same as "Fully Relocated Access" Option except for:

A.C.O. - I-95/City

City - A.C.O.

III. Evaluation Survey

Transportation Committee Evaluation Survey

		EVALUATE	MEETS NO DISCRIMINATION CRITERIA	REPEATED LOCAL & REGIONAL TRAFFIC	MEETS IMPROVED SAFETY CRITERIA	MEETS AESTHETIC CRITERIA	PROVIDES HOSPITAL ACCESS
ST. DIE & POBLE ROAD	RECTIFICATION						
	DIAMOND OPTION						
ST. DIE & ARGENTINE CUT-OFF	PARTIALLY CLOSED (right-in/right-out)						
	NO DIRECT CONNECTION - USE PABLE ROADS TO ST. DIE						
EXISTING ST. 111	OPENED						
	CLOSED						
HOSPITAL ROAD AT ST. DIE	EIGHT TURN LANE						
	LEFT TURN LANE						
NEW ST. 111 AT PHILLIPPE'S DRIVE	MOVED HILDEBRAND DRIVE INTERSECTION FURTHER SOUTH ON ROCKLAND						
	FORM SECTION TO ACCESS AT EXISTING PHILLIPPE'S DRIVE						
ROCKLAND ROAD	ROCKLAND ROAD UPGRADED SOUTH OF ROCKLAND McDONALD HOUSE						
	EXTENSION ROUTE TO CONNECT ARGENTINE 1 & 1-4 CONNECTION						

Transportation Committee
Member Name _____
Representing _____

The completed evaluation should be returned to McCormick Taylor by Friday, December 21, 1989.

Send To:
McCormick, Taylor & Assoc.
Two Commerce Square, 10th Floor
2001 Market Street
Philadelphia, PA 19103

Attention: Dorothy Daly
or FAX to 216-692-8853

Evaluation of Road options

Using numbers 1-3, under the first column titled "EVALUATE," please evaluate the options for each of the affected intersections using the following scale:

1 - Not Recommended
2 - No Comment / Neutral
3 - Recommended

Evaluation of Blue Bell Transportation Committee Design Criteria and Principles

Use the remaining columns to determine whether the options for each of the affected intersections meets the design criteria and principles established by the committee. If the option meets the criteria, write "Y 00," and if you feel it does not meet the

IV. Next Steps

Thank you for your time!

Project Contacts:

Jim Lisa, Project Manager

302-577-8477

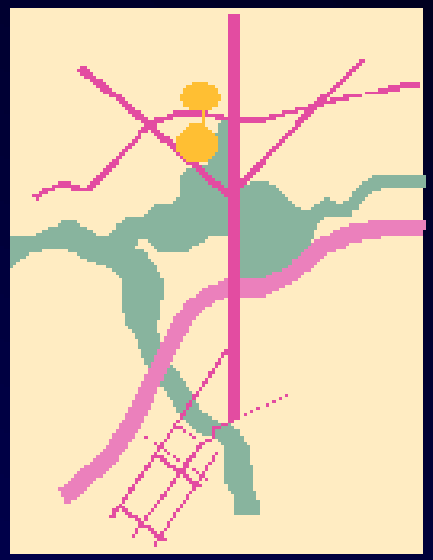
Mark Chura, Recreation & Historic Preservation

302-739-3091

Joe Wutka, Transportation

302-760-2094

www.blueball.net



WRT