City of Lawrence

TRANSPORTATION COMMISSION
Monday, February 5, 2018 6:00 PM
City Commission Room, City Hall, 6 E. 6th Street

MEETING AGENDA

1. Approve Dec 4, 2017 Regular Meeting minutes and Dec 14, 2017 Study Session minutes
2. **General Public Comment** *(The public is allowed to speak to any items or issues that are not scheduled on the agenda)*
3. **Elect Chair and Vice Chair**
4. **E 9th Street, New Hampshire Street to Delaware Street**

   Receive Field Check plan update and public comments
5. **Lawrence Loop Alignment Study**

   Recommend acceptance of the Lawrence Loop Alignment Study
6. **Non-motorized Projects Prioritization Policy**

   Approve Policy No. TC18-001 Non-motorized Projects Prioritization Policy
7. **CDBG Application Proposed Project List**

   Approve CDBG Application Proposed Project List
8. **Funding Split for 2017 and 2018 Bike/Ped Funding**

   Approve proposed funding split for Ramp, Sidewalk Gap and Bicycle Projects
9. **Staff Items**

   - Staff memo on Traffic Calming and Signage Moratorium
   - Speed Monitoring Trailer use
   - The City of Lawrence Public Works and Parks & Recreation staff received a 2017 Kansas Ready Mix Concrete Association award for the Baldwin Creek Recreational Trail. The trail is a 10' wide concrete shared-use path that is part of the Lawrence Loop north of the Lawrence Sports Pavilion.
   - Update on 10th St and Indiana St signage

- Update on Haskell Lane and 29th Street cut-through traffic

10. Commission Items

Complete Streets Subcommittee Minutes December 14, 2017 and January 4, 2018

11. Calendar

Next Study Session – February 28, 3:30 PM

12. Adjournment

City of Lawrence
Transportation Commission
December 4, 2017 Minutes

MEMBERS PRESENT:	Charlie Bryan, David Hamby, Chris Storm, Mark Hurt, Steve Evans, John Ziegelmeyer, Erin Paden, Jeff Severin, Michele Dillon
MEMBERS ABSENT:	Ron May, Kathryn Schartz
STAFF PRESENT:	David Cronin, Public Works Department Amanda Sahin, Public Works Department Jessica Mortinger, MPO
PUBLIC PRESENT:	Michael Almon, Gary Webber, Tonya Dye, Travis Robinett, Bob Bechtel, Joleen Bechtel, Diane Bannerman Joracek, Marsha Haufler, Tom Stephens, James Minor, Chris Coovert, John Shakelford, Ian Smith

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A complete video recording of the meeting is available on the City's website at https://lawrenceks.org/boards/transportation-commission/

The meeting was called to order by Charlie Bryan at 6:00 p.m. in the City Commission Room, City Hall, 6 E. 6th Street.

ITEM NO. 1:

Approve of Nov 6 2, 2017 Regular Meeting Minutes and Nov 9, 2017 Study Session Minutes

Moved by Commissioner Hamby, seconded by Commissioner Hurt, to approve minutes. The motion carried, 8-0. Commissioner Ziegelmeyer abstained since he was not present at the Nov 9th meeting.

ITEM NO. 2:

General Public Comment

Public Discussion:

Travis Robinett– Schwegler neighborhood parking issues.

ITEM NO. 3:

Non-motorized Infrastructure Prioritization Policy

Staff Presentation:
Amanda Sahin and Jessica Mortinger presented the updated draft of the Non-motorized Prioritization Policy. Staff recommends approval of this policy to move forward to City Commission.

Moved by Commissioner Hamby, seconded by Commissioner Ziegelmeyer, to recommend approval of the Non-motorized Prioritization Policy (with the addition of cost sharing opportunities to the additional criteria to consider in project selection).

The motion passed, 9-0.

ITEM NO. 4:

Monterey Way – 6th Street to Bob Billings Parkway (Traffic Calming)

Staff Presentation:
Amanda Sahin presented a request for traffic calming on Monterey Way from 6th Street to Bob Billings Parkway. Staff recommends approval of the request.

Moved by Commissioner Hamby, seconded by Commissioner Severin, to deny traffic calming on Monterey Way from 6th St to Bob Billings Parkway. The Commission would like the City staff to evaluate pedestrian and bicycle facilities (i.e. bike lanes, pedestrians islands, crosswalks, etc).

The motion passed, 9-0.

ITEM NO. 5:

Kingston Drive (Traffic Calming)

Staff Presentation:
Amanda Sahin presented a request for traffic calming on Kingston Drive. Staff recommends denial of the request.

Moved by Commissioner Ziegelmeyer, seconded by Commissioner Hurt, to approve traffic calming on Kingston Drive.

The motion carried, 9-0.

ITEM NO. 6:

Goodell Court (No Parking)

Staff Presentation:
Amanda Sahin presented a request for no parking on one side of Goodell Court. Staff recommends denial of the request.

Moved by Commissioner Paden, second by Commissioner Storm, to deny the no parking request for one side of the street on Goodell Court.

The motion carried, 9-0.

ITEM NO. 7:

Cambridge Road (Traffic Calming)

Staff Presentation:
Amanda Sahin presented a request for traffic calming on Cambridge Road between Avalon Road and High Drive. Staff recommends denial of this request.

Moved by Commissioner Evans, seconded by Commissioner Hurt, to deny the request for traffic calming on Cambridge Road from Avalon Road to High Drive.

The motion carried, 9-0.

ITEM NO. 8

School Area Traffic Control Policy

Staff Presentation:
David Cronin presented the School Area Traffic Control Policy.

Moved by Commissioner Ziegelmeyer, seconded by Commissioner Severin, to recommend approval of the School Area Traffic Control Policy.

The motion carried, 9-0.

ITEM NO. 9

Staff Items

None

ITEM NO. 10

Commission Items

Complete Streets Subcommittee Minutes November 16, 2017

Commissioner Bryan thanked Commissioner Storm and Commissioner Hamby for their contributions to the Commission.

ITEM NO. 11

Calendar

Next Study Session is December 14, 2017 at Noon in City Commission Room.

All day Transportation Commission Retreat on January 26, 2017

No regular meeting or study session in January due to scheduling conflicts and all day retreat.

ITEM NO. 12

Adjournment

Moved by Commissioner Hamby, seconded by Commissioner Storm, to adjourn at 9:33 p.m.

The motion carried, 9-0.

City of Lawrence
Transportation Commission Study Session
December 14, 2017 Minutes

MEMBERS PRESENT:	Charlie Bryan, David Hamby, Chris Storm, Mark Hurt, Steve Evans, Erin Paden, Ron May, Kathryn Schartz
MEMBERS ABSENT:	Michele Dillon, John Ziegelmeyer, Jeff Severin
STAFF PRESENT:	David Cronin, Public Works Department Nick Voss, Public Works Department Zach Baker, Public Works Department Amanda Sahin, Public Works Department Steve Lashley, Public Works Department
PUBLIC PRESENT:	None

A complete video recording of the meeting is available on the City's website at https://lawrenceks.org/boards/transportation-commission/

ITEM NO. 1:

Review 2018 Street Maintenance Plan

Steve Lashley gave a presentation on the 2018 Street Maintenance Plan.

ITEM NO. 2:

Review sidewalk maintenance enforcement procedures

David Cronin gave a presentation on the current sidewalk maintenance enforcement procedures.

Item No. 3:

Review Calendar

Discussed the 2018 meeting calendar and potential study session topics.

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Amanda Sahin, Transportation Engineer
DATE: January 29, 2018
RE: Agenda Item for Transportation Commission 2/5/18:
Elect Chair and Vice Chair

The following Commissioners have expressed interest to City staff in either the Chair or Vice Chair position:

Commissioner Ziegelmeyer – first term expires 12/31/19

Commission Paden – first term expires 12/31/19

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Dave Cronin, City Engineer
DATE: January 29, 2017
RE: Agenda Item for Transportation Commission 2/6/2017:
E 9th Street Reconstruction Project Update; 2018 CIP Project

Background

In 2017 the City Commission authorized staff to proceed with final design plans for the reconstruction of 9th Street from New Hampshire to Pennsylvania to meet the 'basic street' design concept presented by staff. The 'basic street' design includes reconstruction with concrete pavement, storm sewer, 6' sidewalks on both sides of street, on-street parking, pedestrian lighting, street trees, retaining walls and preserving green space. The 'basic street' design does not include bike facilities, underground electrical or decorative street lighting poles at intersections.

Plans are at the field check stage (50% plans complete) and are being provided for public comment. The project team will be meeting with adjacent property owners and utility companies to discuss project details. Construction is anticipated to begin in Summer 2018 and take 4-6 months. The project will be constructed in two phases: New Hampshire to New York; New York to Delaware. The project is in the 2018 CIP with a budget of $2,500,000.

Action

Receive Field Check plan update and public comments.

Attachments

Preliminary Plans

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Jessica Mortinger, Senior Transportation Planner
DATE: January 29, 2018
RE: Agenda Item for Transportation Commission 2/5/18:
Lawrence Loop Alignment Study

Background

The Lawrence Loop is currently a section of Shared-Use Path surrounding the city that is identified in the Countywide Bikeway Plan. The loop began over 20 years ago and the City has increased the number of segments during that time. The remaining sections, which are needed to complete the loop only have preliminary alignments that have been identified by the community. However, alignments of incomplete sections have not been studied for their community preference or feasibility. This study analyzed alternative alignments to determine the feasibility and public preference for two incomplete sections of bikeway between the north end of Burroughs Creek Rail Trail along 11th Street to the Shared Use Path in Burcham Park and the west side of the Sandra Shaw Trail to the Peterson Road Shared Use Path."

The public was asked to share their vision for routes to close the incomplete sections. Based on the community feedback the study proposed alignments and developed a Strength, Weaknesses, Opportunities and Treats (SWOT) analysis for each proposed alignment. The public was again asked to weigh in on their preferred alignment. Overwhelmingly the pubic shared their desire for routes that avoided street, driveways and intersections, provided access to natural/scenic areas and had grade separation(bridge/tunnel) to avoid crossings.

This study has been approved by the Metropolitan Planning Organization (MPO) Policy Board on January, 15 2018.

Next Steps

With the acceptance of this study these priority routes will be incorporated into the non-motorized prioritization policy for funding considerations. Further discussions should occur with the BNSF Railway and KTA to design routes and get appropriate approvals. The priority routes will also be incorporated into the Countywide Bikeway Plan update planned for 2018-2019.

Action Request

Recommend acceptance of the Lawrence Loop alignment study.

Attachments

Lawrence Loop Alignment Study

BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS

LAWRENCE - DOUGLAS COUNTY
MPO
METROPOLITAN PLANNING ORGANIZATION

LAWRENCE LOOP

Alignment Study

2017

Table of Contents

Introduction

The Lawrence Loop is currently a section of 16.4 miles of mostly 10 foot wide Shared-Use Path surrounding the city that is identified in the Countywide Bikeway Plan. The loop began over 20 years ago and the City has increased the number of segments during that time. Its goal is to accommodate residents and visitors of all ages and abilities and serve people who are walking, biking, or using assistive devices. The remaining sections, which are needed to complete the loop only have preliminary alignments that have been identified by the community.

In 2013 the Countywide Bikeway Plan[1] identified and prioritized the needs of existing and future bikeway networks for the Lawrence Urban Area and propose bikeway connections throughout the remainder of Douglas County, including the Cities of Eudora, Baldwin City, and Lecompton. The plan emphasized a network of bikeway facilities. Types of bikeways included: buffered, climbing, or colored bike lane, shared lane markings, signed bike routes, bike routes with paved shoulders, shared-use path, or side path.

The initial loop was identified by highlighting completed sections and connecting those sections along other defined bikeways in the Countywide Bikeway Plan. The number one bicycling priority of the Lawrence Pedestrian Bicycle Issues Task Force was to complete the Lawrence Loop.[2]

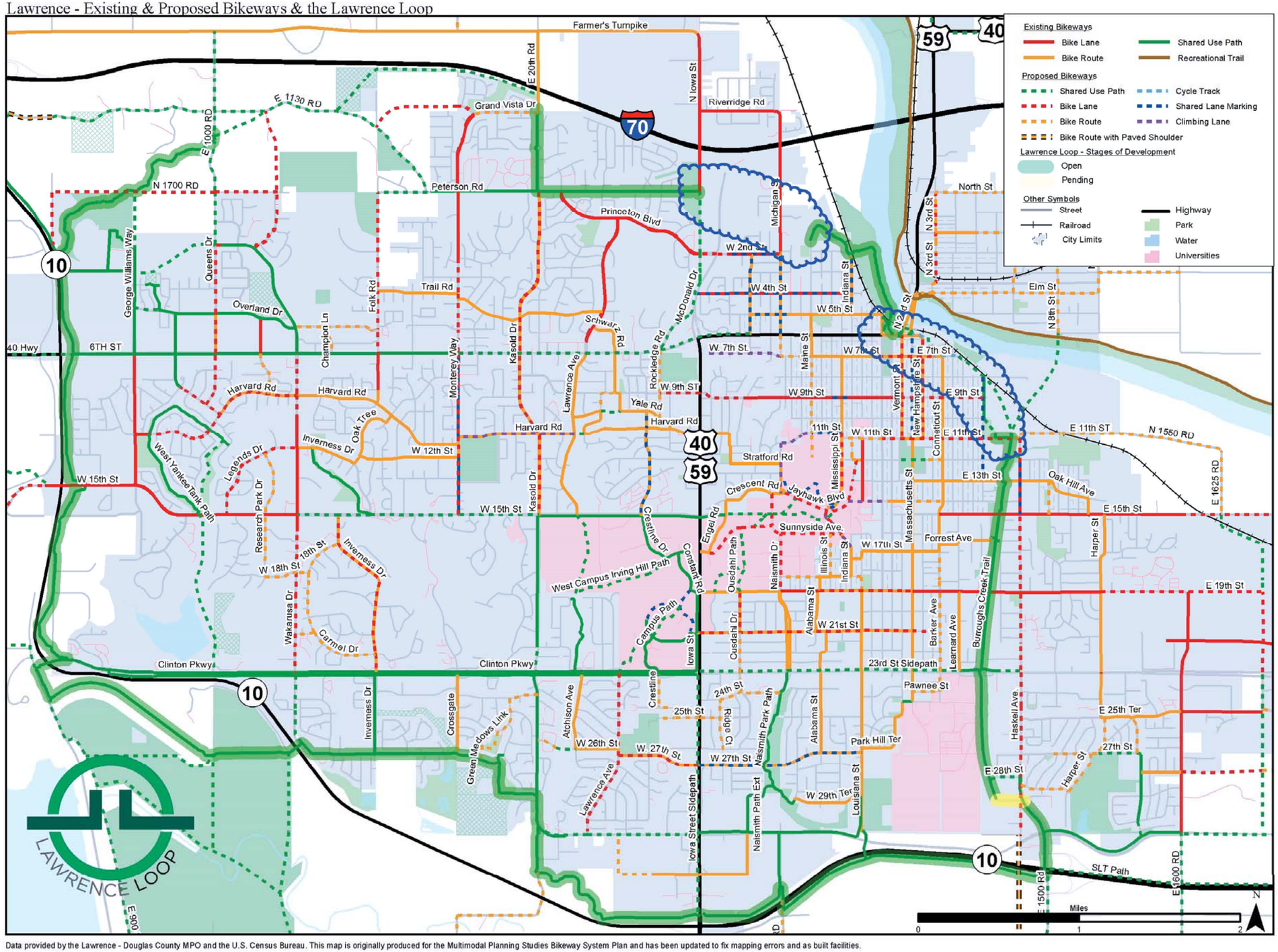
However, alignments of incomplete sections have not been studied for their community preference or feasibility. The City of Lawrence has submitted two unsuccessful grants to the Kansas Department of Transportation to fund sections of the Loop as currently proposed. Based on feedback from KDOT and additional conversations between staff and community members, the need to study alignment alternatives in greater detail to finalize the Loop alignment, has become apparent.

This study analyzed alternative alignments to determine the feasibility and public preference for two incomplete sections of bikeway between the north end of Burroughs Creek Rail Trail along 11th Street to the Shared Use Path in Burcham Park and the west side of the Sandra Shaw Trail to the Peterson Road Shared Use Path." A map of the existing Lawrence Loop showing the missing sections studied as part of this project is included as Figure 1.

[1] Countywide Bikeway Plan (2013) https://assets.lawrenceks.org/assets/mpo/study/reports/bike.pdf
[2] Pedestrian Bicycle Issues Task Force Report (2016) https://assets.lawrenceks.org/assets/boards/pedestrian-bicycle/PBITF_Final_Report_2.29.16.pdf

Figure 1

Lawrence - Existing & Proposed Bikeways & the Lawrence Loop



Data provided by the Lawrence - Douglas County MPO and the U.S. Census Bureau. This map is originally produced for the Multimodal Planning Studies Bikeway System Plan and has been updated to fix mapping errors and as built facilities.

The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.. Plot date 09/25/2015.

Initial Open House Meeting and Lawrence Listens Online Survey

The first part of the process was ensuring there was adequate notification of potential affected property owners regarding the project. Therefore a postcard notification, Figure 2 was developed for the initial open house meeting and sent to 1,707 property owners within 200 feet of a boundary shown on Figure 3. An additional 200 postcards were printed and distributed in various venues.

Figure 2

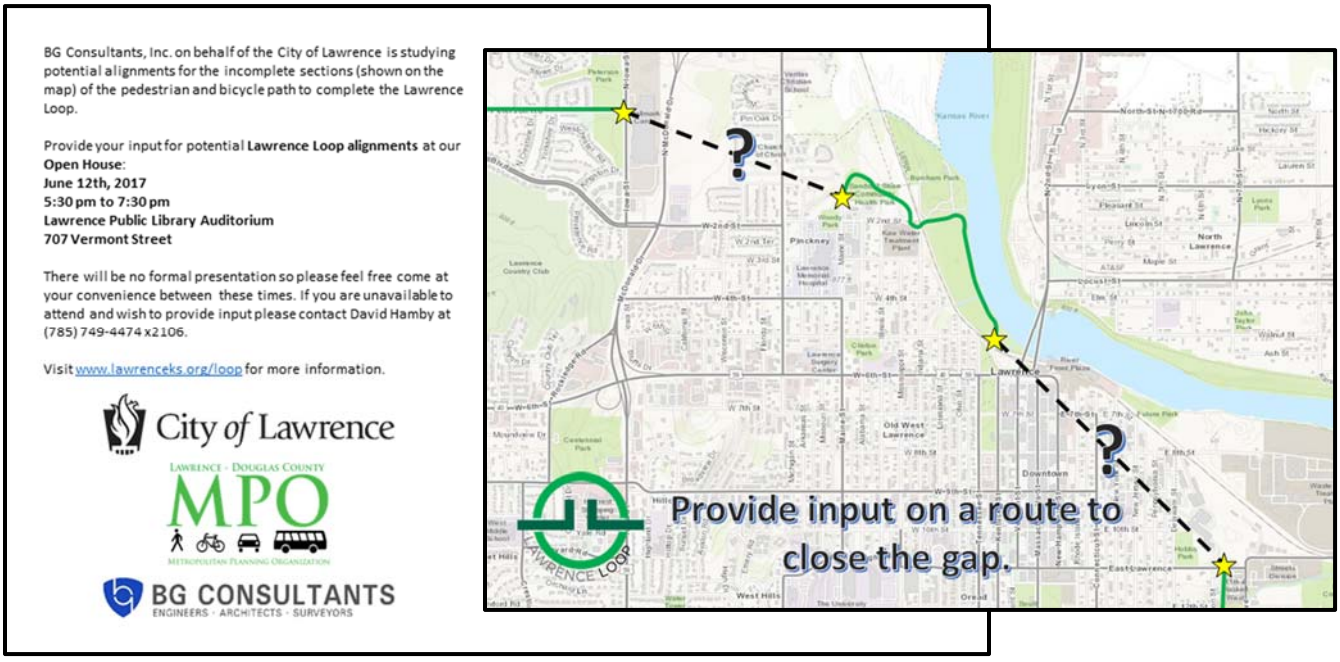
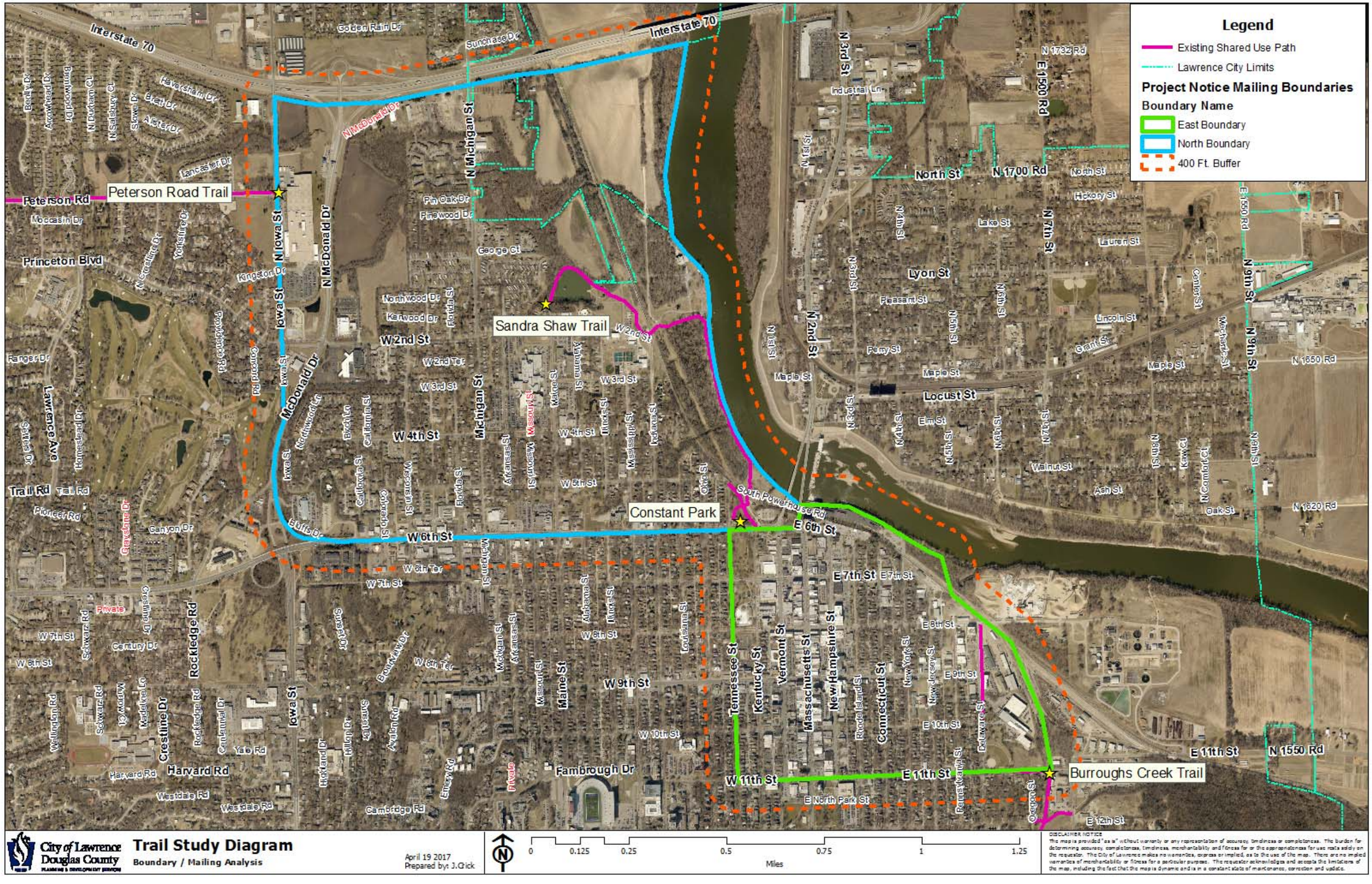


Figure 3


Legend
Existing Shared Use Path
Lawrence City Limits
Project Notice Mailing Boundaries
Boundary Name
East Boundary
North Boundary
400 Ft. Buffer
Interstate 70
Peterson Road Trail
Sandra Shaw Trail
Constant Park
Burroughs Creek Trail
N Michigan St
N McDonald Dr
Iowa St
W 2nd St
W 4th St
W 6th St
W 7th St
W 9th St
W 11th St
E 6th St
E 7th St
E 11th St
North St
Lyon St
Locust St
Maple St
Harvard Rd
Fambrough Dr
N 1700 Rd
N 1550 Rd
N 1650 Rd
N 1820 Rd
N 1732 Rd
E 1500 Rd
N 9th St
N 7th St
N 3rd St
N 2nd St
Princeton Blvd
Trail Rd
Rockledge Rd
Crestline Dr
Tennessee St
Kentucky St
Vermont St
Massachusetts St
New Hampshire St
Connecticut St
Rhode Island St
New York St
New Jersey St
Delaware St
Pennsylvania St
Oregon St
City of Lawrence Douglas County
Trail Study Diagram
Boundary / Mailing Analysis
April 19 2017
Prepared by: J.Crick
0
0.125
0.25
0.5
0.75
1
1.25
Miles
DISCLAIMER NOTICE
This map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requestor. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requestor acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.

The initial open house meeting was conducted on June 12, 2017 from 5:30 pm to 7:30 pm at the Lawrence Public Library. Attendees were given three sheets which consisted of aerial maps of each missing Loop section and a comment form. These sheets have been included in Appendix A. Approximately 70 responses were received at the meeting.
The responses received from the meeting were generally focused on the following items:

Sandra Shaw Trail to Peterson Road Shared Use Path

- Grade separation (bridge/tunnel) for McDonald Drive crossing
- 2nd and McDonald intersection is difficult to cross
- Stay off streets
- Avoid driveways/intersections
- Prefer natural route/scenic areas

Burroughs Creek Trail to Constant Park

- Avoid streets, driveways and intersections
- Use railroad right-of-way and build parallel to the tracks
- Prefer shortest, most direct route
- Avoid hills
- Route under Kansas River bridges
- Avoid un-signalized railroad crossing in Constant Park
- Build close to Kansas River, prefer natural/scenic route
- Avoid residential property

The individual responses have been included in Appendix B. The responses were compiled onto a map for each missing Loop Section and are shown in Figures 4 and 5.

Participants at the June 12th Open House

Figure 4

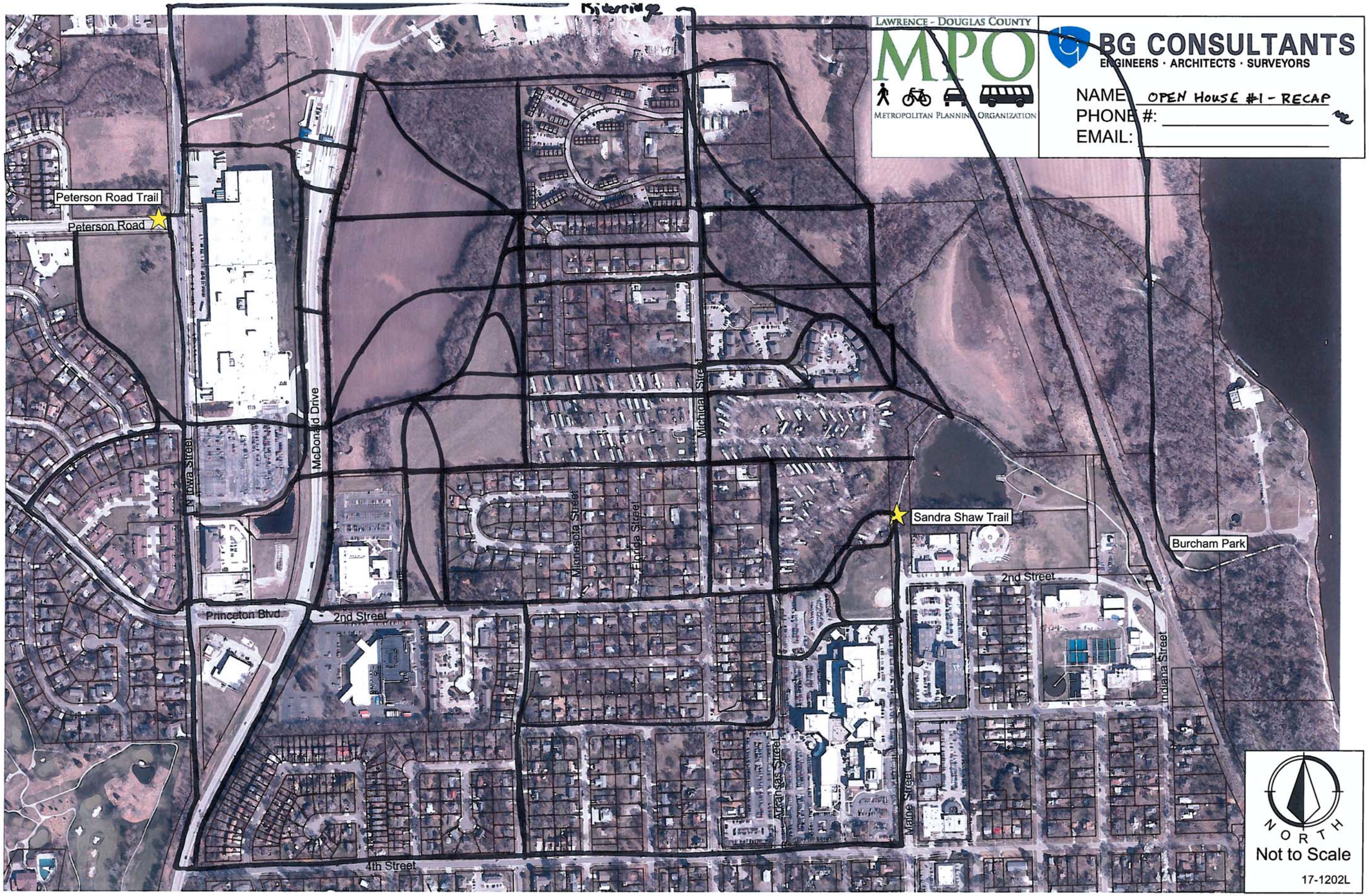
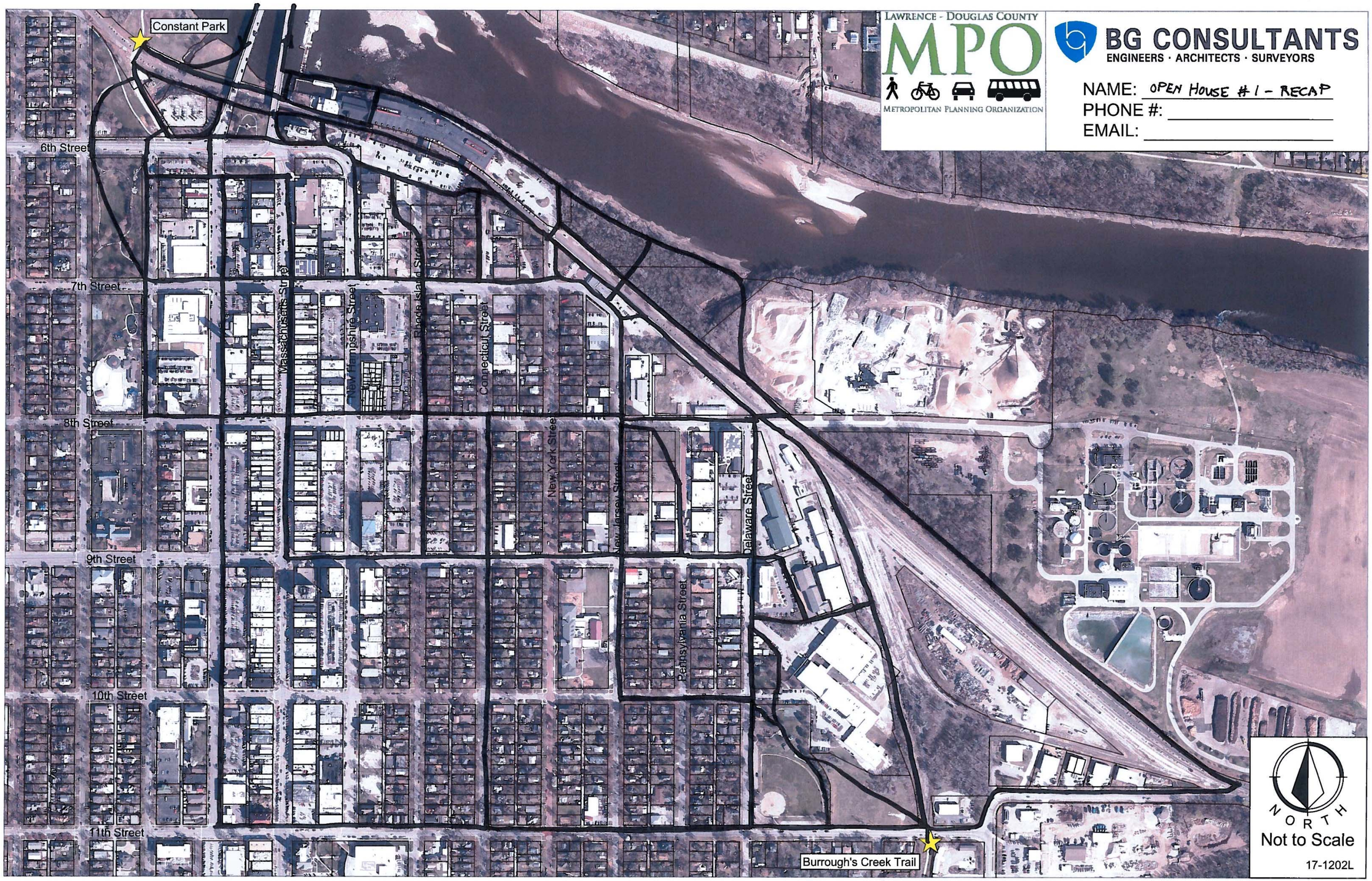

LAWRENCE - DOUGLAS COUNTY
MPO
METROPOLITAN PLANNING ORGANIZATION
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
NAME: OPEN HOUSE #1 - RECAP
PHONE #:
EMAIL:
Peterson Road Trail
Peterson Road
Iowa Street
McDonald Drive
Michigan Street
Minnesota Street
Florida Street
Sandra Shaw Trail
Burcham Park
2nd Street
Princeton Blvd
2nd Street
Arkansas Street
Maine Street
Indiana Street
4th Street
NORTH
Not to Scale
17-1202L

Figure 5


Constant Park
6th Street
7th Street
8th Street
9th Street
10th Street
11th Street
Massachusetts Street
New Hampshire Street
Rhode Island Street
Connecticut Street
New York Street
New Jersey Street
Pennsylvania Street
Delaware Street
Burrough's Creek Trail
LAWRENCE - DOUGLAS COUNTY
MPO
METROPOLITAN PLANNING ORGANIZATION
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
NAME: OPEN HOUSE #1 - RECAP
PHONE #:
EMAIL:
NORTH
Not to Scale
17-1202L

Selecting Alignments to Field Check and Analyze

A Study Team consisting of MPO, City of Lawrence Public Works, City of Lawrence Parks & Rec and KDOT guided the work for this study. The Study Team reviewed the responses from the initial open house meeting and discussed the merits of the possible alignments. The team chose alignments for further study and analysis based upon the values that were offered on the comment forms. The alignments selected for further study are shown in Figures 6 and 7.

Figure 6

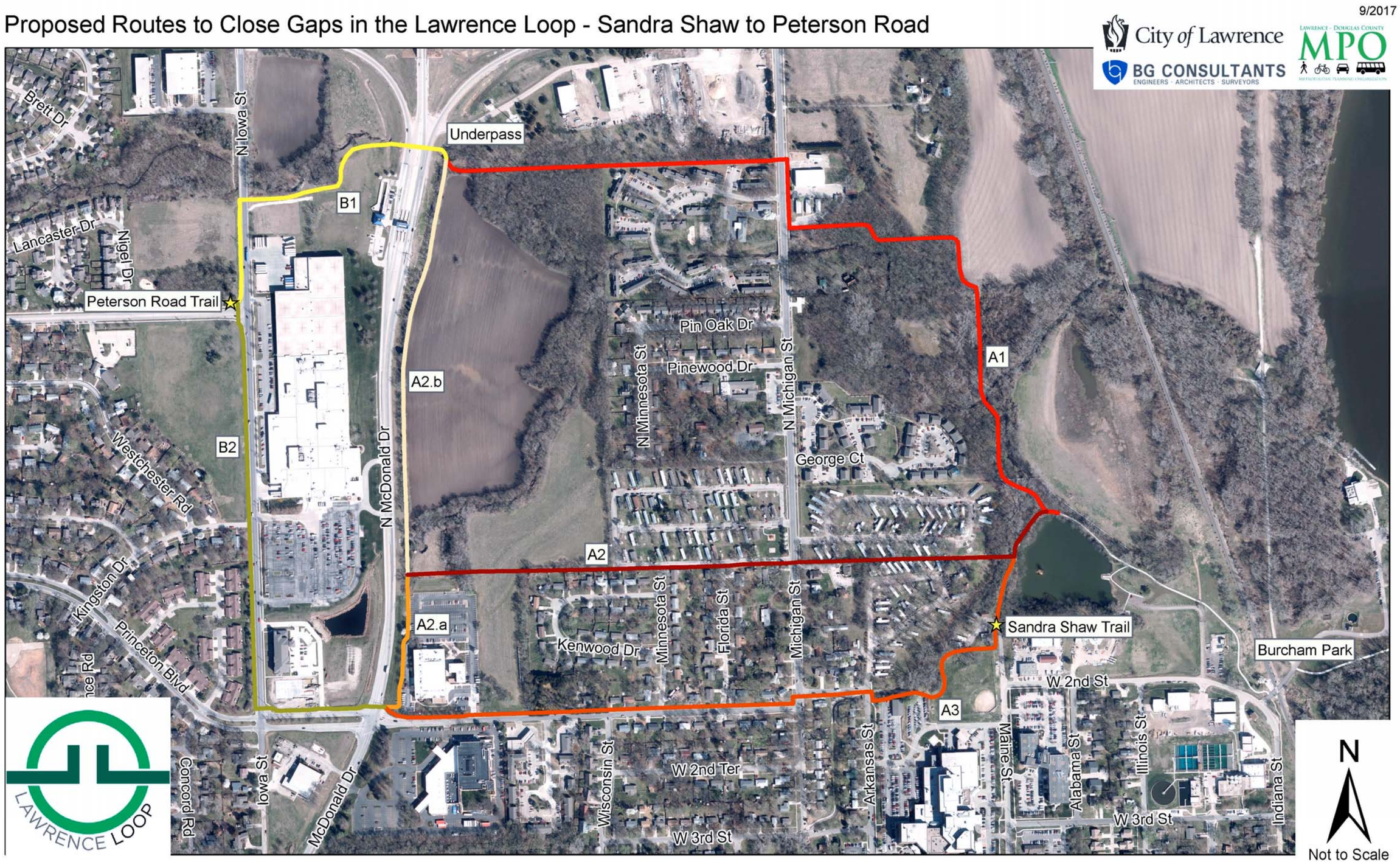
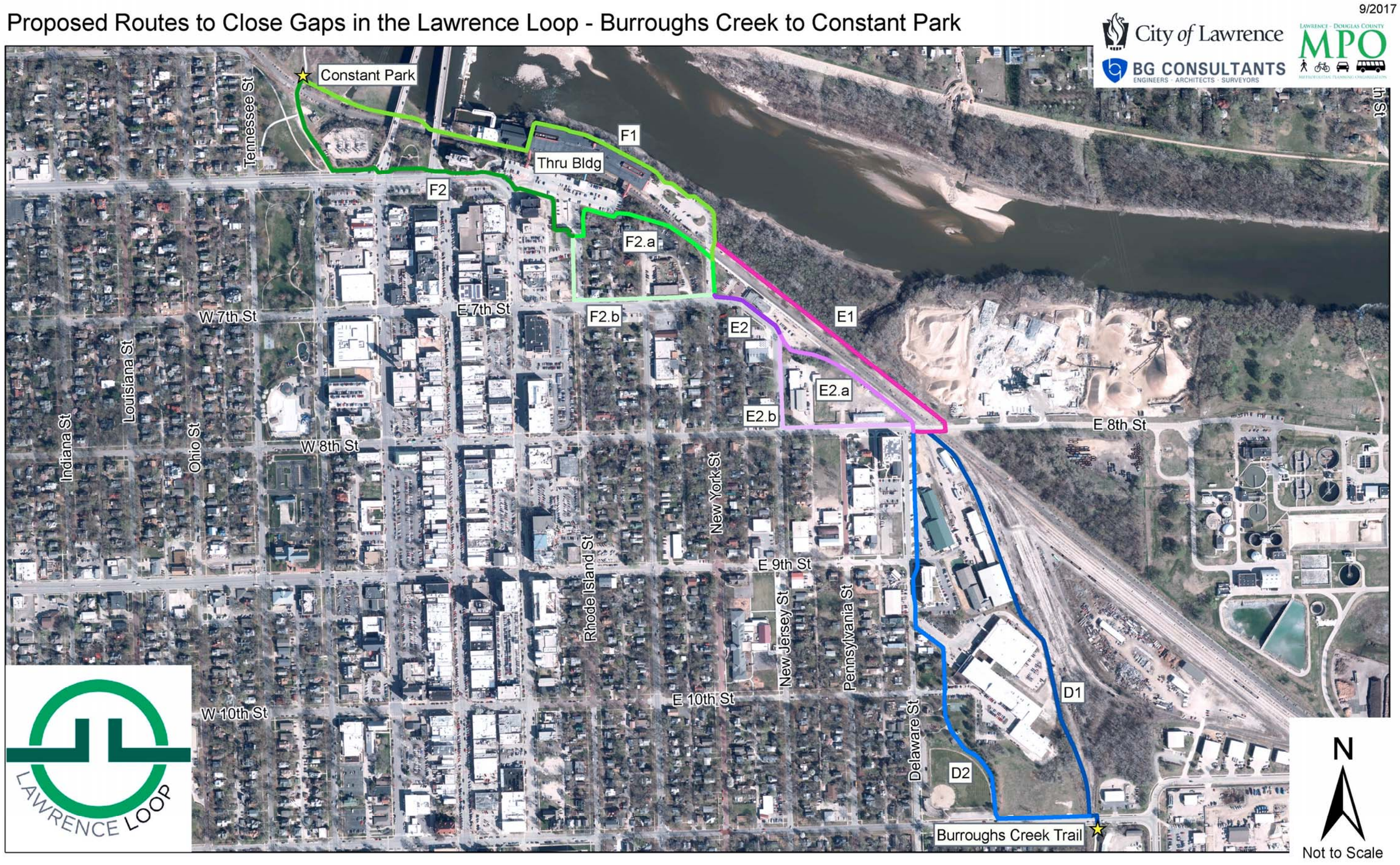

Proposed Routes to Close Gaps in the Lawrence Loop - Sandra Shaw to Peterson Road
9/2017
City of Lawrence
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
MPO
Brett Dr
N Iowa St
Underpass
B1
Lancaster Dr
Nigel Dr
Peterson Road Trail
Pin Oak Dr
Pinewood Dr
N Minnesota St
N Michigan St
A1
A2.b
B2
Westchester Rd
N McDonald Dr
George Ct
A2
Kingston Dr
Princeton Blvd
A2.a
Kenwood Dr
Minnesota St
Florida St
Michigan St
Sandra Shaw Trail
Burcham Park
W 2nd St
A3
Maine St
Alabama St
Illinois St
Indiana St
Concord Rd
Iowa St
McDonald Dr
Wisconsin St
W 2nd Ter
W 3rd St
Arkansas St
LAWRENCE LOOP
N
Not to Scale

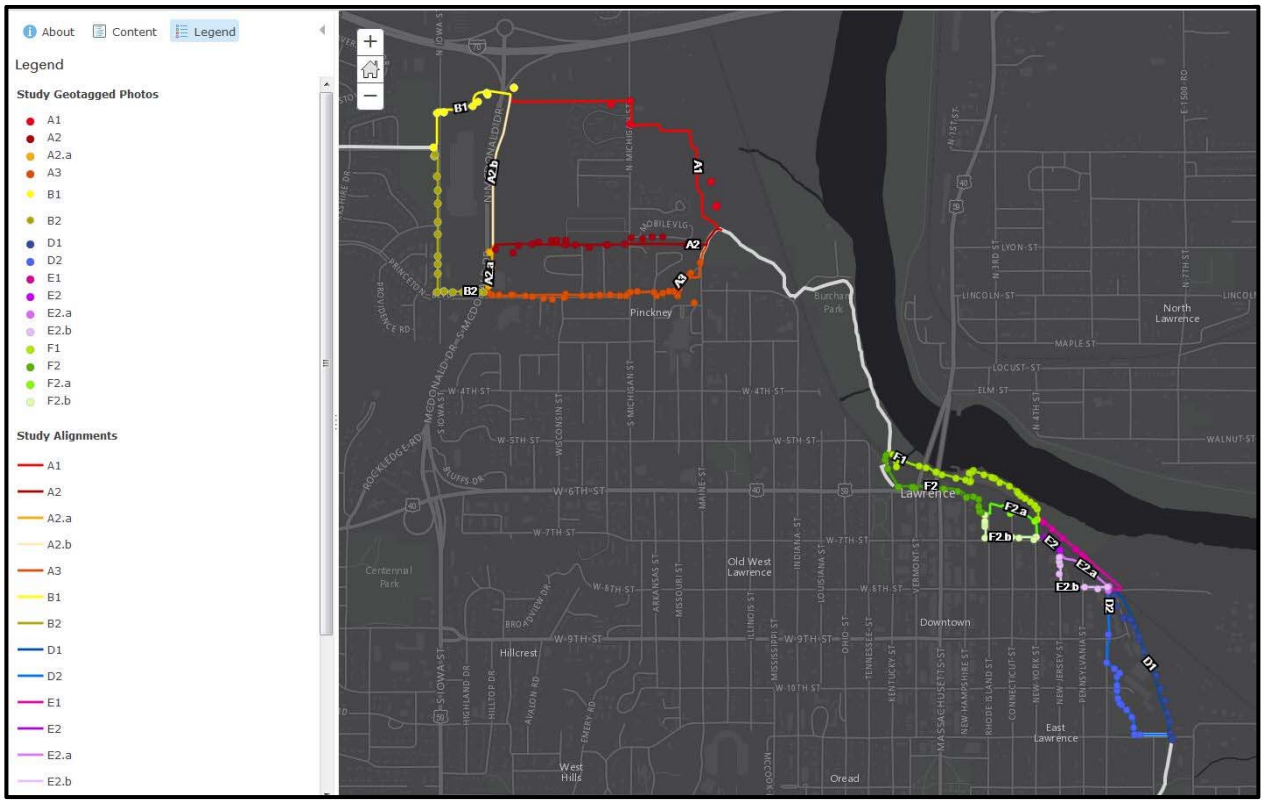
Figure 7


Proposed Routes to Close Gaps in the Lawrence Loop - Burroughs Creek to Constant Park
9/2017
City of Lawrence
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
MPO
Constant Park
F1
Thru Bldg
F2
F2.a
F2.b
E1
E2
E2.a
E2.b
D1
D2
Burroughs Creek Trail
Tennessee St
W 7th St
E 7th St
E 8th St
W 8th St
E 9th St
W 10th St
E 10th St
Louisiana St
Indiana St
Ohio St
Rhode Island St
New York St
New Jersey St
Pennsylvania St
Delaware St
LAWRENCE LOOP
N
Not to Scale

Field Check and Analysis of Selected Alignments

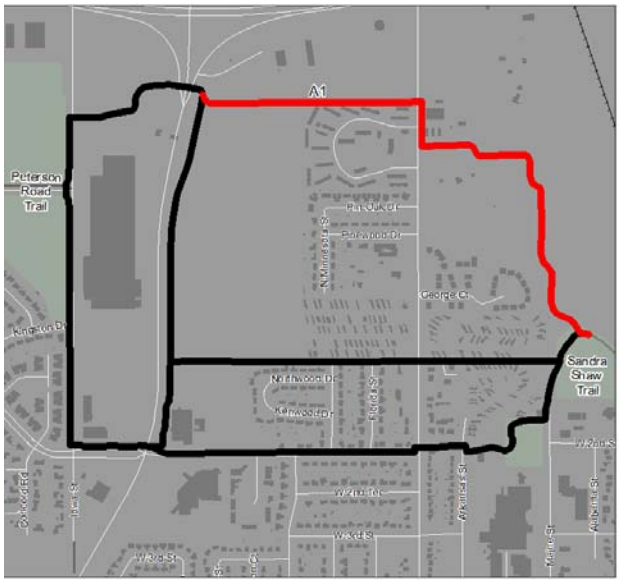
After the study team selected alignments to study, BG personnel walked and photographed each of the study alignments. The MPO developed an online map (Figure 8) that located the photographs with respect to the study alignment. A link to the online map can be found at the Lawrence Loop website (https://lawrenceks.org/loop).

Figure 8



A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis was prepared for each of the study alignments. This analysis described the strengths, weaknesses, opportunities and threats for each alignment along with the approximate length of the segment, the number of driveway and street crossings, pedestrian/bicycle crashes, adjacent roadway speed limit and average annual daily traffic. The SWOT analysis for each section follows.

Sandra Shaw Trail to Peterson Road
A1 (Map Color: Red)



This alignment connects to the Sandra Shaw Trail on the north side of the pond and heads north through undeveloped property and then west to Michigan Street just south of Veritas Christian School. The alignment then heads north along Michigan Street to the south edge of the Kansas Turnpike Authority Maintenance Facility and then runs west to McDonald Drive.

Strengths:

- This alignment could be a very scenic route avoiding developed areas. It would be similar to Rock Chalk Trail.
- This alignment avoids conflicts with a majority of the streets and driveways in the area.

Weaknesses:

- A section of this alignment is fairly remote so user safety security concerns exist. There appears to be several persons that may be currently or previously residing on the City of Lawrence property to the north of Sandra Shaw Park.
- This alignment, while fairly direct between the start and end points, eliminates connection to the path from the 2nd and McDonald area.

Opportunities:

- This route crosses City of Lawrence property to the north of the Sandra Shaw Park. This project could open up this property to future park development.
- This route provides a direct connection to Veritas Christian School.

Threats:

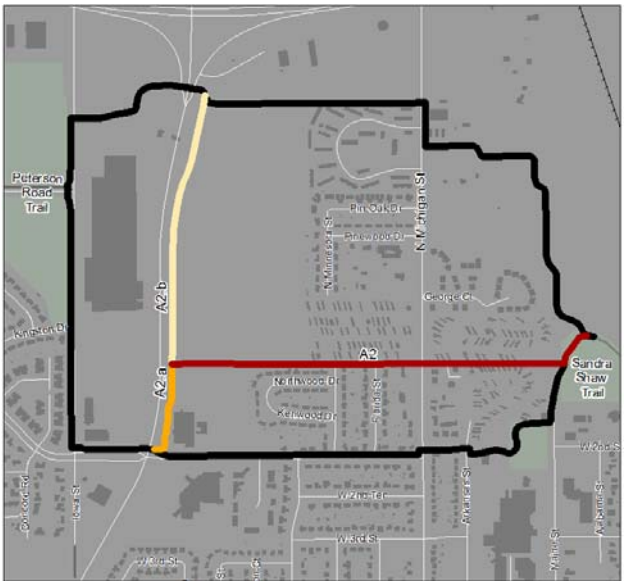
- This route crosses several areas of private property and easement acquisition would be necessary.
- This route crosses a major watercourse on the north side of the City of Lawrence property. A culvert structure or low water crossing would be necessary to cross this stream.

Section Statistics:
Approximate Length – 4,440 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 3
At-Grade Street Crossings – 1
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – 35 mph (N Michigan St.)
Adjacent Roadway Average Annual Daily Traffic – N/A

Sandra Shaw Trail to Peterson Road – A1 – Looking north from Sandra Shaw

Sandra Shaw Trail to Peterson Road – A1 – Looking west from Michigan St.

Sandra Shaw Trail to Peterson Road
A2 (includes A2.a & A2.b) (Map Color: A2-Maroon, A2.a-Gold, A2.b-Cream)



This alignment connects to the Sandra Shaw Trail on the west side of the pond and heads west through and along the south side of the Mobile Village and crosses Michigan Street. The route continues west along the south side of Pine Hills Manufactured Home Community and the north side of Northwood Hills until it reaches McDonald Drive. The alignment splits at this point into two options, A2.a and A2.b. Alignment A2.a heads south to 2nd Street along the east side of McDonald Drive. Alignment A2.b heads north along the east side of McDonald Drive until it reaches the Kansas Turnpike Authority maintenance area.

Strengths:

- This alignment avoids conflicts with a majority of the streets and driveways in the area.
- This alignment allows connection to either the B1 or B2 alignment.
- This route provides a connection to the 2nd and McDonald area.

Weaknesses:

- This route would be constructed in an already built up area and may be difficult to place the path to minimize negative impacts to the property owners.
- The portion of the Sandra Shaw Trail that is not 10' wide needs to be reconstructed to a 10' width to match the proposed section of the path.

Opportunities:

- This alignment would allow easy connection to the path by residents of two mobile home parks through which this route would pass.

Threats:

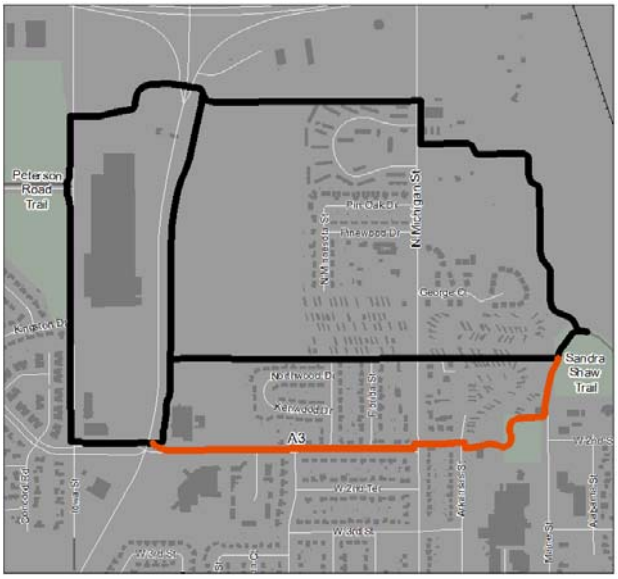
- The route through the Mobile Village is very confined and there may not be enough room to construct the path in this location. An alternate alignment would be along the north property line of the Mobile Village.
- This route crosses several areas of private property and easement acquisition would be necessary.

Section Statistics:
Approximate Length – 4,000 ft. (A2, A2.a), 5,350 ft. (A2, A2.b)
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 0
At-Grade Street Crossings – 3
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – 35 mph (McDonald Dr.), 30 mph (Michigan Way)
Adjacent Roadway Average Annual Daily Traffic – N/A

Sandra Shaw Trail to Peterson Road – A2 – Looking East across Michigan St.

Sandra Shaw Trail to Peterson Road – A2 – Looking east from McDonald Dr.

Sandra Shaw Trail to Peterson Road
A3 (Map Color: Orange)



This alignment connects to the south end of the Sandra Shaw Trail and then continues south and west along the north side of Woody Park and the Lawrence Memorial Hospital property until it reaches Arkansas Street. After crossing Arkansas Street, the alignment continues west to Michigan Street along the south side of 2nd Street. After crossing Michigan Street, the alignment continues west to McDonald Drive along the north side of 2nd Street.

Strengths:

- This route generally runs along existing streets and within public right-of-way.
- This route provides the most direct access between the end of the Sandra Shaw Trail and the 2nd and McDonald Area.

Weaknesses:

- The construction of this route would significantly impact the front yard of the properties along 2nd Street. Anticipated impacts are tree and landscaping removal and driveway reconstruction.
- The portion of the Sandra Shaw Trail that is not 10' wide needs to be reconstructed to a 10' width to match the proposed section of the path.
- This route includes a large amount of driveway conflicts and two major at-grade street crossings.

Opportunities:

- There is not currently a sidewalk on the north side of 2nd Street from Michigan to McDonald Drive so this path could assist with connectivity in this area. 2nd Street is designated as a bike route but it has no bike lanes.

Threats:

- This section would have the highest concentration of residential driveway crossings on any Loop section.

Section Statistics:
Approximate Length – 3,750 ft.
Residential Driveway Crossings – 6
Commercial Driveway Crossings – 2
At-Grade Street Crossings – 5
Pedestrian/Bicycle Crashes (2013 – 2016) – 2016 (Collision w/pedestrian at 2nd/Wisconsin)
Adjacent Roadway Speed Limit – 30 mph (W 2nd St.)
Adjacent Roadway Average Annual Daily Traffic – 2013: 4,875 (2nd St.)

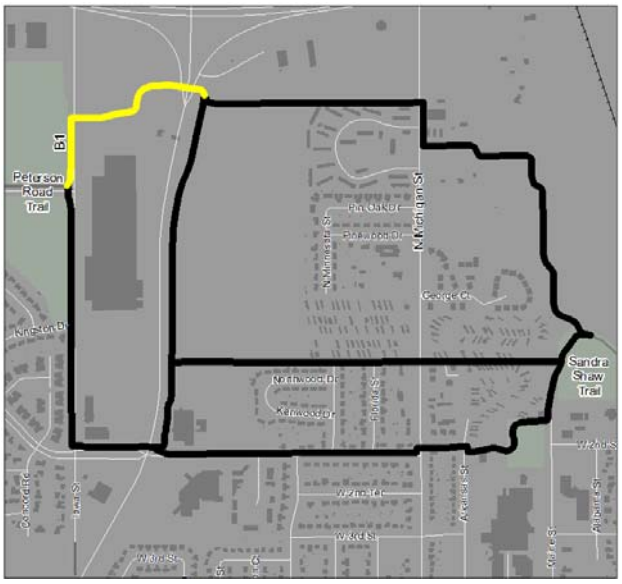
Sandra Shaw Trail to Peterson Road – A3 – Looking southwest towards Woody Park

Sandra Shaw Trail to Peterson Road – A3 – Looking west along 2nd St.

Sandra Shaw Trail to Peterson Road

B1 (Map Color: Yellow)

This alignment begins at the end of alignment A1 and A2.b and then continues west in a proposed tunnel under McDonald Drive. After crossing McDonald Drive the route continues west to North Iowa Street north of the Hallmark Building. A proposed at-grade crossing of North Iowa Street could include a HAWK beacon. The route would then head south along the west side of North Iowa Street and connect to Peterson Road.



Strengths:

- The proposed tunnel under McDonald Drive creates a safe crossing of this road that users have requested.
- A HAWK beacon on North Iowa Street at the crossing would assist users in crossing that street.
- This alignment would eliminate the need to cross Peterson Road.

Weaknesses:

- The proposed tunnel would add a significant cost to the project budget.

Opportunities:

- Possibly could time work to coordinate with any work the Kansas Turnpike Authority plans to do where the tunnel would cross. This could result in savings in cost.

Threats:

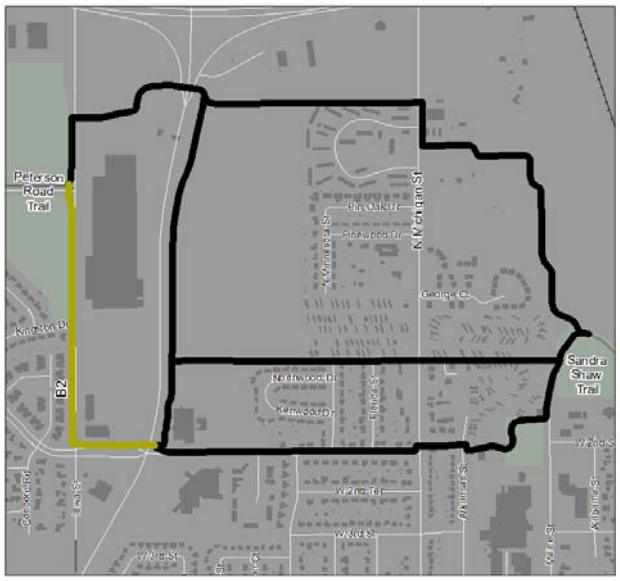
- The construction of the tunnel under McDonald Drive would require Kansas Turnpike Authority approval.

Section Statistics:
Approximate Length – 1,700 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 0
At-Grade Street Crossings – 1
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – 40 mph (N Iowa St.)
Adjacent Roadway Average Annual Daily Traffic – N/A

Sandra Shaw Trail to Peterson Road – B1 – Looking southwest from McDonald Dr.

Sandra Shaw Trail to Peterson Road – B1 – Looking south on North Iowa Street

Sandra Shaw Trail to Peterson Road
B2 (Map Color: Yellow-Green)



This alignment begins at the end of alignment A2.a and A3 and crosses McDonald Drive with an at-grade crossing. The alignment continues west along the north side of Princeton Boulevard and crosses North Iowa Street with an at-grade crossing. The route continues on the west side of North Iowa Street until it reaches Peterson Road, crossing Peterson Road with an at-grade crossing.

Strengths:

- The majority of this alignment will likely be located in or adjacent to existing right-of-way thus minimizing property acquisition.

Weaknesses:

- This route includes at-grade street crossings for McDonald Drive, North Iowa Street, Kingston Drive and Peterson Road.
- The existing intersection of 2nd Street and McDonald Drive is not square thus creating visibility concerns for users trying to cross this intersection.

Opportunities:

- Hallmark Park is adjacent to the path and the path could be tied to the existing picnic area in the park.

Threats:

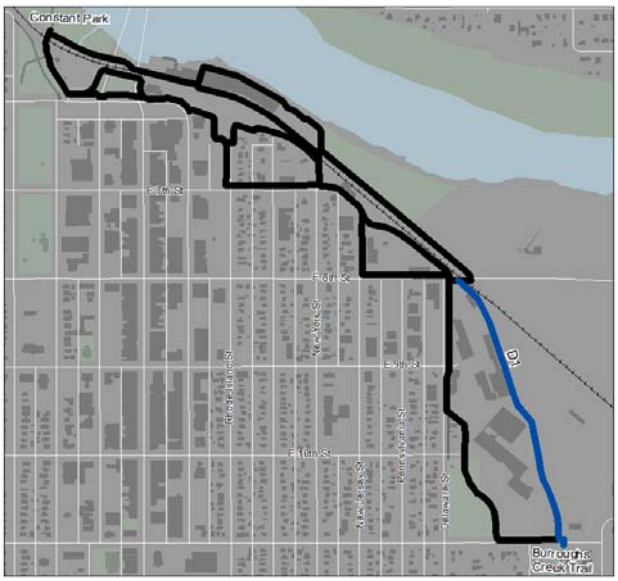
- The 2nd Street and McDonald Drive is under Kansas Turnpike Authority control and the project would need to be coordinated with the Authority.

Section Statistics:
Approximate Length – 2,645 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 1
At-Grade Street Crossings – 4
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – 35 mph (McDonald Dr.), 30 mph (Princeton Blvd.), 40 mph (N Iowa St.)
Adjacent Roadway Average Annual Daily Traffic – 2014: 20,342 (Princeton/McDonald), 2013: 9,080 (Iowa/Princeton)

Sandra Shaw Trail to Peterson Road – B2 – Looking west across McDonald Dr.

Sandra Shaw Trail to Peterson Road – B2 – Looking north along North Iowa St.

Burroughs Creek Trail to Constant Park
D1 (Map Color: Dark Blue)



This alignment connects to the north end of the Burroughs Creek Trail and continues along the west side of the Railroad to 8th Street.

Strengths:

- This alignment avoids conflicts with a majority of the streets and driveways in the area.
- This route is fairly flat and avoids the hill that alignment D2 crosses.

Weaknesses:

- About half of this alignment is adjacent to the railroad which has the possibility to create safety concerns and noise, dust and other nuisance concerns.

Opportunities:

- This route could reclaim some of the abandoned railroad area and clean the area up. There is a substantial amount of trash and dumping happening in the area.

Threats:

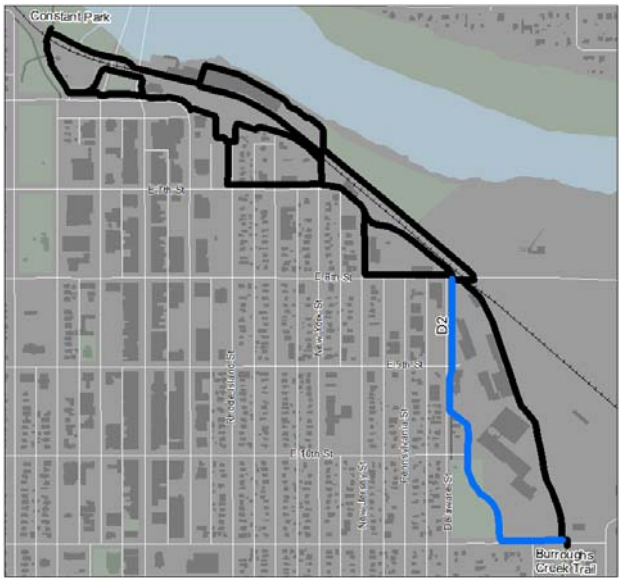
- The majority of this route is aligned on Railroad property. An agreement with the Railroad would be necessary to allow this route to be constructed as shown.

Section Statistics:
Approximate Length – 2,270 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 1
At-Grade Street Crossings – 0
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – N/A
Adjacent Roadway Average Annual Daily Traffic – N/A

Burroughs Creek Trail to Constant Park – D1 – Looking north from 11th St.

Burroughs Creek Trail to Constant Park – D1 – Looking north towards 8th St.

Burroughs Creek Trail to Constant Park
D2 (Map Color: Light Blue)



This alignment connects to the north end of the Burroughs Creek Trail and continues along the north side of 11th Street to the east edge of Hobbs Park. The route continues north along the east side of the Hobbs ballfield crossing 10th Street and running along the west side of the Allen Press property until it intersects with Delaware Street. The alignment continues along the east side of Delaware Street until it intersects 8th Street.

Strengths:

- A majority of this route already has established sidewalks or paths although the desired width of 10' is generally not present.

Weaknesses:

- The route has a fairly substantial hill cresting in Hobbs Park. The grade will create some difficulties for less experienced users.

Opportunities:

- This route is adjacent to the restroom in Hobbs Park creating an opportunity for users of the Lawrence Loop to use the facilities here.
- The existing concrete sidewalk on the east side of Delaware is 8' wide.

Threats:

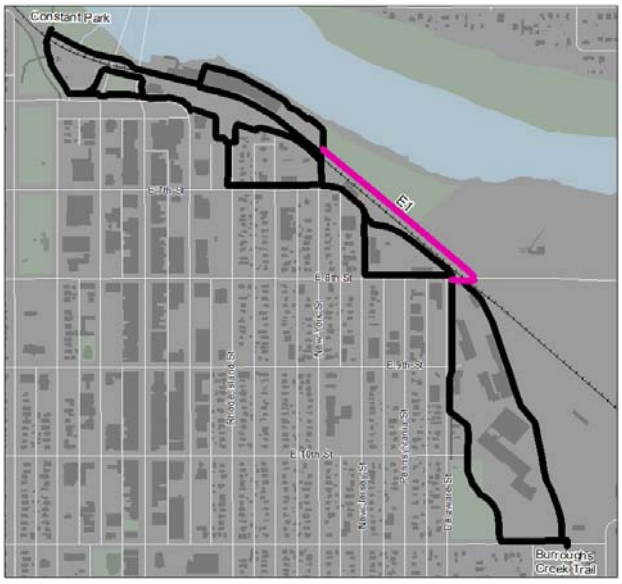
- This route crosses or is adjacent to three historic properties/areas. The implications would need to be determined.
- A portion of this route is located on private property. Property acquisition would be required.

Section Statistics:
Approximate Length – 2,630 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 7
At-Grade Street Crossings – 1
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – 30 mph (E 11th St., Delaware St.)
Adjacent Roadway Average Annual Daily Traffic – 2014: 2,524 (Delaware St.), 2014: 1,824 (W 8th St./Delaware St.)

Burroughs Creek Trail to Constant Park – D2 – Looking north behind Hobbs Park

Burroughs Creek Trail to Constant Park – D2 – Looking north along Delaware Street

Burroughs Creek Trail to Constant Park
E1 (Map Color: Pink)



This alignment connects to the north end of the D1 and D2 alignment and continues northwest along the northeast side of the Railroad to the Riverfront Mall parking lot.

Strengths:

- This route does not cross any driveways and is isolated from vehicle traffic.
- This route is adjacent to the Habitat Restoration area.

Weaknesses:

- This alignment is adjacent to the railroad which has the possibility to create safety concerns and noise, dust and other nuisance concerns.
- There is not a dedicated pedestrian/bicycle crossing at 8th Street but there is a signalized railroad crossing.

Opportunities:

- A route adjacent to the Habitat Restoration area could create a possibility of opening this area up with more trails.

Threats:

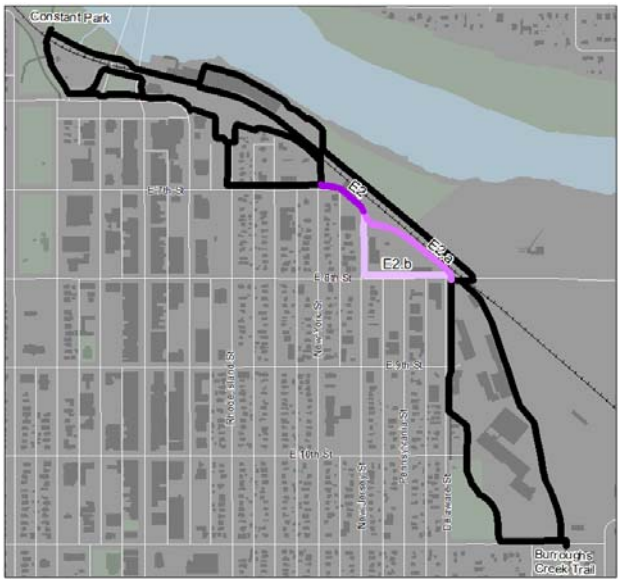
- This route is aligned on Railroad property. An agreement with the Railroad would be necessary to allow this route to be constructed as shown.

Section Statistics:
Approximate Length – 1,710 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 0
At-Grade Street Crossings – 1
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – N/A
Adjacent Roadway Average Annual Daily Traffic – 2014: 1,824 (W 8th St./Delaware St.)

Burroughs Creek Trail to Constant Park – E1 – Looking northwest from 8th St.

Burroughs Creek Trail to Constant Park – E1 – Looking northwest towards New York St.

Burroughs Creek Trail to Constant Park
E2 (E2.a and E2.b) (Map Color: E2-Purple, E2.a-Light Purple, E2.b-Lilac)



This alignment connects to the north end of the D1 and D2 alignment and splits into two alignment options, E2.a and E2.b. E2.a continues northwest along the southwest side of the Railroad until it reaches the southeast edge of the Depot property. E2.b heads west along the north side of 8th Street and continues north along the east side of New Jersey Street until it reaches the Depot property. Alignment E2.a and E2.b merge into Alignment E2 at the Depot and continues along the north side of New Jersey Street and 7th Street until it reaches New York Street.

Strengths:

- Route E2.a does not cross any driveways and is isolated from vehicle traffic until it reaches the Depot property.
- Routes E2.b and E2 are generally familiar routes for existing Loop users connecting between existing sections.

Weaknesses:

- Alignment E2.b crosses the driveways of several businesses along the route.

Opportunities:

- This route provides a direct connection to the Amtrak Depot.
- Route E2.b is on a route that is located within street right-of-way but does not have any existing sidewalk. This alignment would fill that gap.
- Plans for the Depot include a 10' path with the proposed improvements.

Threats:

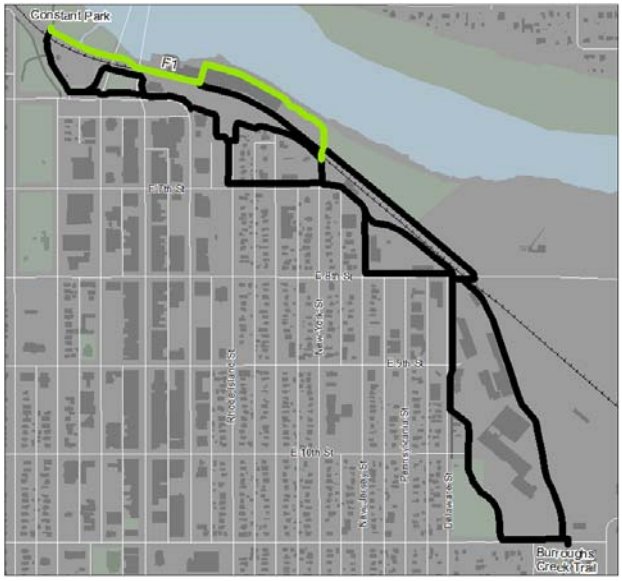
- Route E2.a is aligned on Railroad property. An agreement with the Railroad would be necessary to allow this route to be constructed as shown.

Section Statistics:
Approximate Length – 1,300 ft. (E2, E2.a), 1,560 ft. (E2, E2.b)
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 2 (E2, E2.a), 7 (E2, E2.b)
At-Grade Street Crossings – 1
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – 30 mph (E 8th St., New Jersey St.)
Adjacent Roadway Average Annual Daily Traffic – 2013: 1,430 (E 8th St.), 2014: 1,824 (W 8th St./Delaware St.)

Burroughs Creek Trail to Constant Park – E2 – Looking northwest from 8th St.

Burroughs Creek Trail to Constant Park – E2 – **Looking** northwest along New Jersey St.

Burroughs Creek Trail to Constant Park
F1 (Map Color: Light Green)



This alignment connects to the north end of the E1 and E2 alignments and continues along the east and north sides of the Riverfront Mall parking area. The route continues onto the Riverfront Mall Promenade area until it reaches the west end of the building. The proposed route would cut through the existing building and continue west along the north side of the Railroad until it reaches the existing path.

Strengths:

- This route does not cross any driveways and is isolated from vehicle traffic and at-grade street crossings.
- This is a very scenic route as it is adjacent to the Kansas River.

Weaknesses:

- The section of the route adjacent to the Railroad may feel confined due to the buildings on one side and the Railroad on the other.
- The section of the route adjacent to the Railroad would occupy a space that is currently used for deliveries to the adjacent building.
- Improvements would be necessary on the Promenade to correct drainage issues and eliminate standing water.
- There is not a dedicated pedestrian/bicycle crossing at New York Street but there is a signalized railroad crossing (connection to F1 from E2 only).

Opportunities:

- The pass thru in the existing building would create a unique feature on the Lawrence Loop. Other amenities could be considered in this pass thru to provide services.

Threats:

- A portion of this route is aligned on Railroad property. An agreement with the Railroad would be necessary to allow this route to be constructed as shown.
- A portion of this route is located on the Promenade of the Riverfront Mall. The Promenade is closed from January 1 to March 1 by Order of the Corps of Engineers. This restriction would need to be removed for a year round connection.
- The owners of the Riverfront Mall would need to agree to allow the construction of the pass thru in the building and the use of the Promenade.

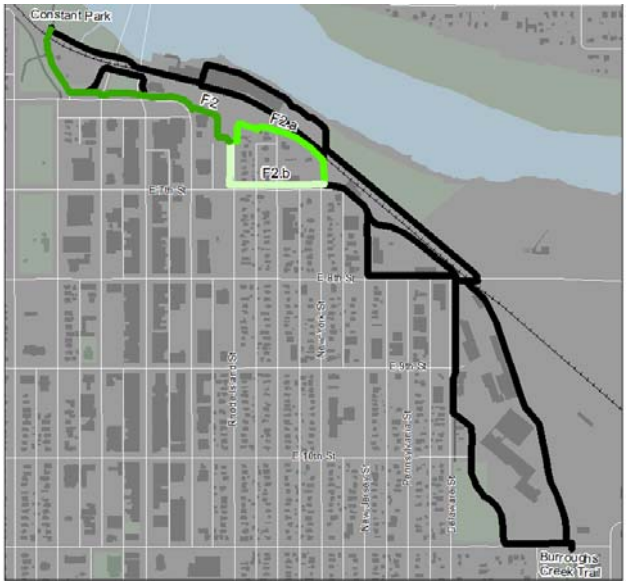
Section Statistics:
Approximate Length – 2,680 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 1 (adjacent to Commercial Driveway)
At-Grade Street Crossings – 0
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – N/A
Adjacent Roadway Average Annual Daily Traffic – 2013: 220 (New York St./Railroad)

Burroughs Creek Trail to Constant Park – F1 – Looking northwest along Riverfront Plaza

Burroughs Creek Trail to Constant Park – F1 – Looking west along the BNSF Railway

Burroughs Creek Trail to Constant Park
F2 (F2.a & F2.b) (Map Color: F2-Green, F2.a-Neon Green, F2.b-Mint Green)

This alignment connects to the north end of the E1 and E2 alignments and splits into two alignment options, F2.a and F2.b. Route F2.a heads north along the east side of New York Street until it reaches the south side of the Railroad. The route continues west along the south side of the Railroad and Parking Garage until it reaches Rhode Island Street. Route F2.b heads west along the north side of 7th Street and continues north along the west side of Rhode Island Street to the Parking Garage. F2.a and F2.b merge into F2 at the Parking Garage and continues north and west along the west and south edges of the Parking Garage to New Hampshire Street. The route continues on the north side of 6th Street to the access road and heads north and crosses the Railroad and connects to the existing path.



Strengths:

- Route F2.b and F2 are generally within or adjacent to existing right-of-way.
- Routes F2.b and F2 are generally familiar routes for existing Loop users connecting between existing sections.

Weaknesses:

- Route F2.b crosses an alley between Rhode Island Street and Connecticut Street that has poor visibility and multiple streets with at-grade crossings.
- Route F2.b requires the removal of landscaping and trees along 7th Street.
- Route F2 crosses Massachusetts Street and Vermont Street with signalized at-grade crossings and the Railroad with an un-signalized at-grade crossing.
- Route F2.a crosses terrain that would make meeting ADA requirements difficult. Less experienced users may find the route challenging to navigate.

Opportunities:

- Route F2 could be expanded in the future to create an underpass on the south side of the Railroad under the existing Kaw Bridges which could be tied to Robinson Park. This bypass would eliminate the at-grade crossings of Massachusetts Street and Vermont Street.

Threats:

- A portion of Route F2.a is aligned on Railroad property. An agreement with the Railroad would be necessary to construct the route as shown. This route crosses areas of private property and easement acquisition would be necessary.

Section Statistics:
Approximate Length – 3,110 ft. (F2, F2.a), 3,050 ft. (F2, F2.b)
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 2 (F2, F2.a), 6 (F2, F2.b)
At-Grade Street Crossings – 5 (F2, F2.a), 4 (F2, F2.b)
Pedestrian/Bicycle Crashes (2013 – 2016) – 2016 (Collision w/pedestrian at 6th/Vermont)
Adjacent Roadway Speed Limit – 30 mph (New York St., Rhode Island St., E 7th St., E 6th St.)
Adjacent Roadway Average Annual Daily Traffic – N/A

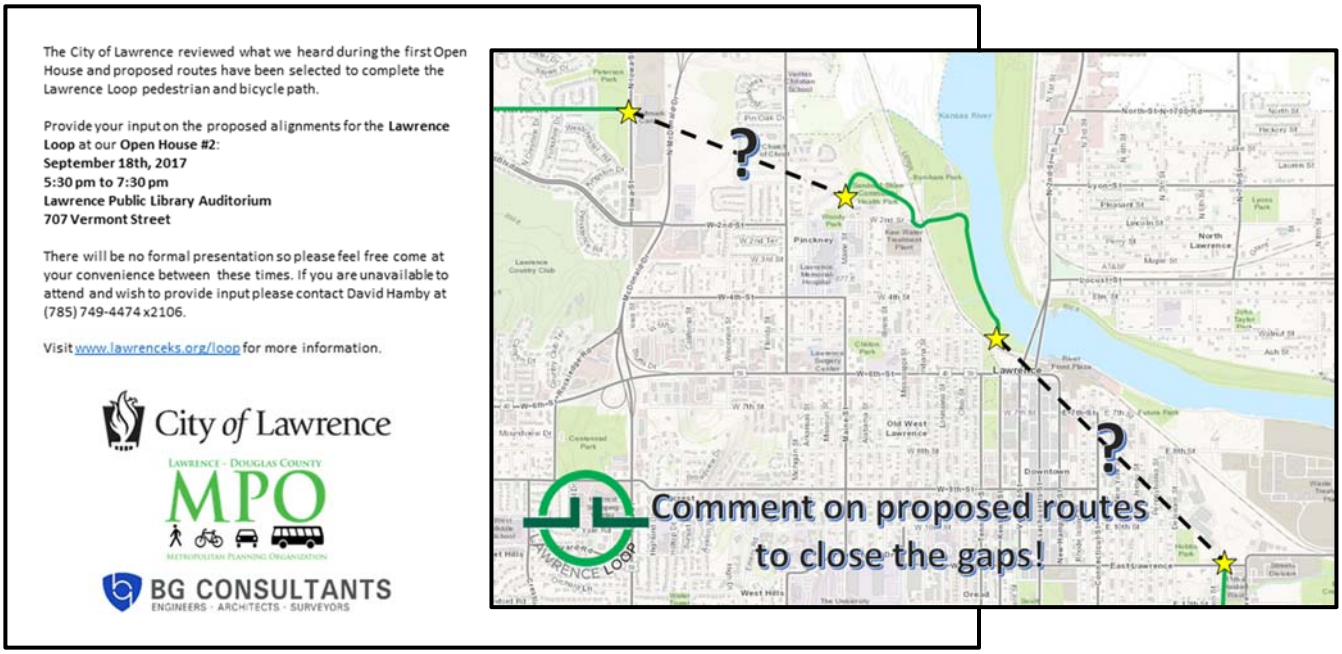
Burroughs Creek Trail to Constant Park – F2 – Looking West along 7th Street

Burroughs Creek Trail to Constant Park – F2 – Looking northwest onto City Hall

Final Open House Meeting and Lawrence Listens Online Survey

After the alignments were field checked and the SWOT analysis was conducted, a final open house meeting and Lawrence Listens online survey was conducted as an opportunity to receive public input on the study alignments and analysis. A postcard notification (Figure 9) was developed for the final open house meeting and sent to the same 1,707 property owners that were notified for the initial open house meeting.

Figure 9



Prior to the final open house meeting, the Lawrence Listens platform was used to host an online survey to receive public input of the study alignments and SWOT analysis. The survey was active from September 5, 2017 to September 19, 2017. A copy of the survey has been included in Appendix C.

The final open house meeting was conducted on September 18, 2017 from 5:30 pm to 7:30 pm at the Lawrence Public Library. Attendees were given a paper copy Lawrence Listens online survey. Ninety-five copies of the survey were returned by the end of the meeting.

Participants at the September 18th Open House

The survey results from the online survey and the final open house meeting were then compiled. The general findings of the survey were in line with the responses obtained from the first open house meeting. The preferred route for the Sandra Shaw Trail to Peterson Road Shared Use Path gap was the A1 and B1 segments. The preferred route for the Burroughs Creek Trail to Constant Park gap was the D1, E1 and F1 segments. Route maps with the vote count percentages have been included as Figures 10 and 11. The detailed survey results and the vote counts are as follows:

Sandra Shaw Trail to Peterson Road Shared Use Path

Segment	%	Vote Count
A1 (Red)	76.6%	128
A2 (Maroon/Dark Red)	15.6%	26
A3 (Orange)	7.8%	13
A2.a (Gold)*	60.9%	14
A2.b (Cream)*	39.1%	9
B1 (Yellow)	74.4%	122
B2 (Yellow-Green)	25.6%	42

*A2.a and A2.b options were only available to those who selected A2 as their preferred route.

Burroughs Creek Trail to Constant Park

Segment	%	Vote Count
D1 (Dark Blue)	73.6%	120
D2 (Light Blue)	26.4%	43
E1 (Pink)	66.1%	109
E2 (Purple)	33.9%	56
E2.a (Light Purple)*	72.7%	40
E2.b (Lilac)*	27.3%	15
F1 (Light Green)	81.3%	135
F2 (Green)	18.7%	31
F2.a (Neon Green)*	70.0%	21
F2.b (Mint Green)*	30.0%	9

*E2.a, E2.b, F2.a & F2.b options were only available to those who selected E2 and F2 as their preferred route, respectively.

The individual survey responses have been included in Appendix C.

Figure 10

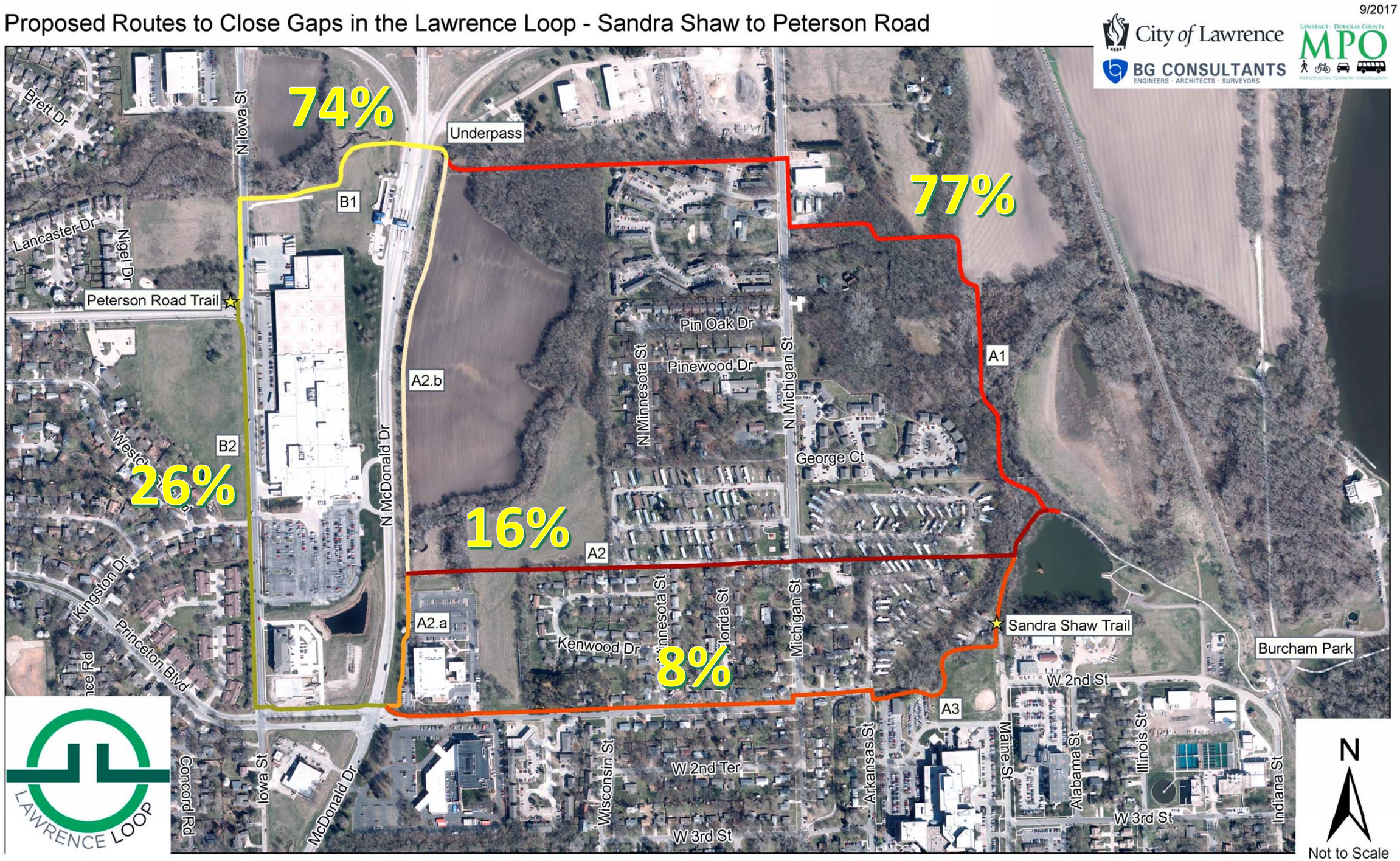
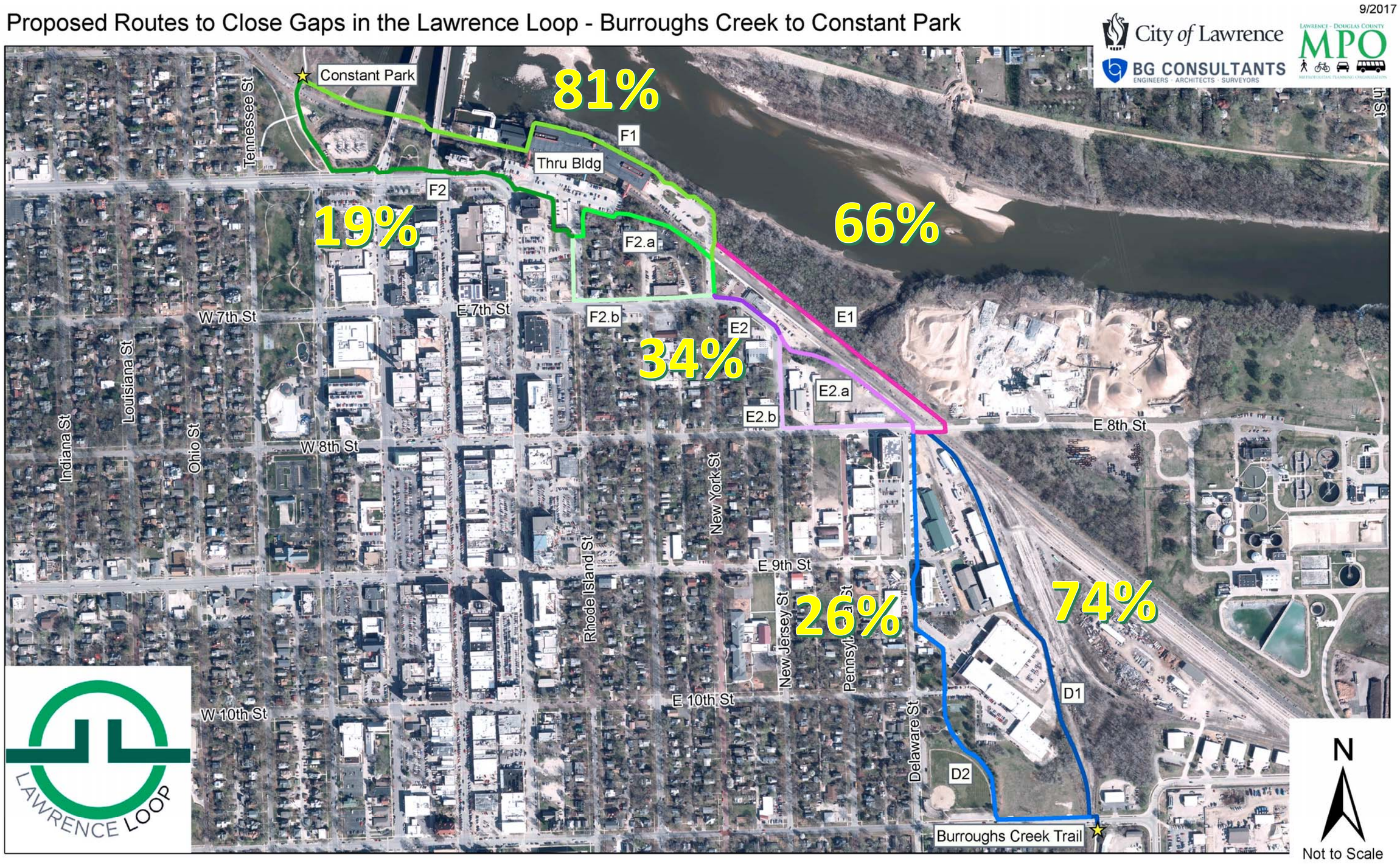

Proposed Routes to Close Gaps in the Lawrence Loop - Sandra Shaw to Peterson Road
9/2017
City of Lawrence
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
Lawrence - Douglas County MPO
74%
77%
26%
16%
8%
B1
B2
A1
A2
A2.a
A2.b
A3
Underpass
Peterson Road Trail
Sandra Shaw Trail
Burcham Park
Brett Dr
N Iowa St
Lancaster Dr
Nigel Dr
Pin Oak Dr
Pinewood Dr
George Ct
N Minnesota St
N Michigan St
N McDonald Dr
Kingston Dr
Princeton Blvd
Kenwood Dr
Michigan St
W 2nd St
W 2nd Ter
W 3rd St
Wisconsin St
Arkansas St
Maine St
Alabama St
Illinois St
Indiana St
Concord Rd
Iowa St
McDonald Dr
LAWRENCE LOOP
N
Not to Scale

Figure 11


Proposed Routes to Close Gaps in the Lawrence Loop - Burroughs Creek to Constant Park
9/2017
City of Lawrence
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
MPO
Constant Park
81%
F1
Thru Bldg
F2
19%
66%
F2.a
F2.b
E2
34%
E1
E2.a
E2.b
D1
74%
D2
26%
Burroughs Creek Trail
Tennessee St
W 7th St
E 7th St
Louisiana St
Indiana St
Ohio St
W 8th St
New York St
E 8th St
E 9th St
New Jersey St
Rhode Island St
Delaware St
E 10th St
W 10th St
LAWRENCE LOOP
N
Not to Scale

Further Route Investigation Segment F.1 and F.2

BG met with City staff to further discuss the feasibility of segment F1. The segment alignment was walked and reviewed and it was determined that it would be infeasible to construct the Loop on that alignment. There is a grade change from the north side of Riverfront Mall to the south side of Riverfront Mall that would have difficult to make ADA accessible. It was also determined that the door located on the river side of the building at the west end is located below the Base Flood Elevation. An alternate alignment, segment F1.a, was chosen as an alternative to F1.

During the final open house meeting support was expressed for an alignment that routed under the Kansas River bridges on the south side of the railroad tracks. This route was labeled as segment F2.c in a map showing the two new segments (Figure 12). BG developed a SWOT analysis for each new segment (included after Figure 12).

An online survey was developed to determine public preference between Routes F1/F1.a and F2/F2.a/F2.c. The survey was posted on the Lawrence Listens platform and was active from October 16, 2017 to October 30, 2017. Previous open house attendees and other interested parties that had furnished an email address were notified about the online survey. A copy of the survey has been included in Appendix D.

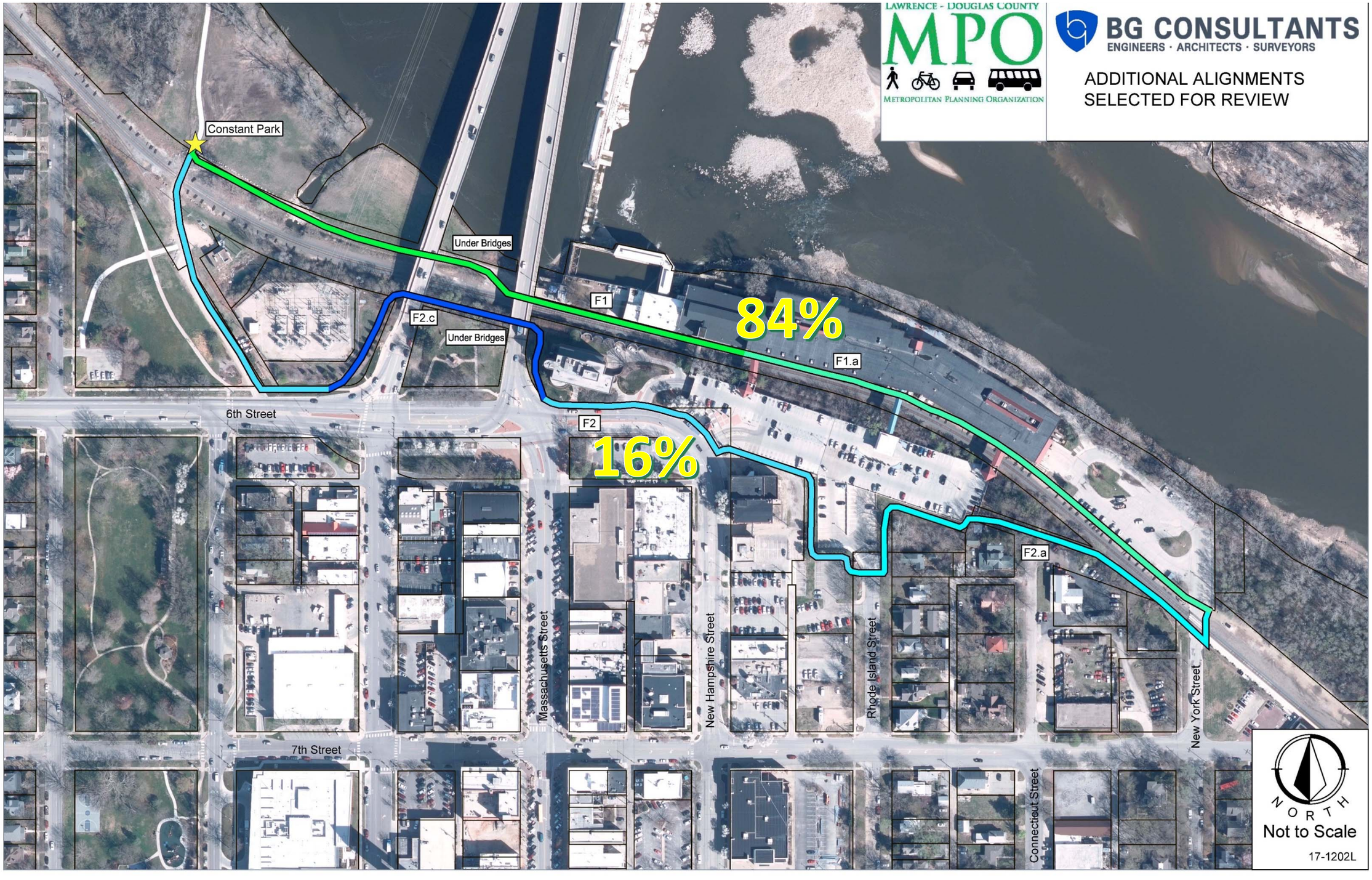
The results of the online survey indicated an overwhelming support for the F1/F1.a segment. The general findings of the survey are as follows:

Burroughs Creek Trail to Constant Park

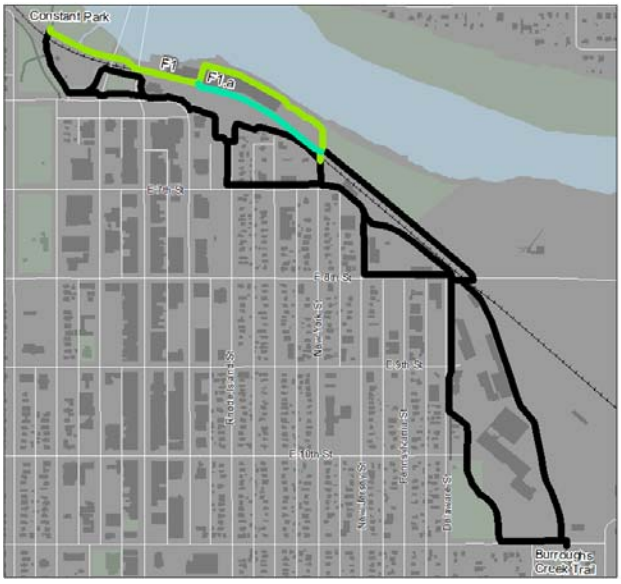
Segment	%	Vote Count
F1/F1.a (Green)	84.3%	150
F2/F2.a/F2.c (Blue)	15.7%	28

The individual survey responses have been included in Appendix D.

Figure 12


LAWRENCE - DOUGLAS COUNTY
MPO
METROPOLITAN PLANNING ORGANIZATION
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
ADDITIONAL ALIGNMENTS
SELECTED FOR REVIEW
Constant Park
Under Bridges
F1
F2.c
Under Bridges
84%
F1.a
6th Street
F2
16%
F2.a
Massachusetts Street
New Hampshire Street
Rhode Island Street
New York Street
7th Street
Connecticut Street
NORTH
Not to Scale
17-1202L

Burroughs Creek Trail to Constant Park
F1 (F1.a) (Map Color: F1-Green, F1.a-Light Green)



This alignment connects to the north end of the E1 and E2 alignments, crosses New York Street and continues along the north side of the railroad tracks. Once it reaches the Riverfront Mall building, the route continues between the railroad and the buildings on the north side of the railroad tracks. The proposed route continues west under the Kansas River bridges along the north side of the Railroad until it reaches the existing path.

Strengths:

- This route does not cross any driveways and is isolated from vehicle traffic and at-grade street crossings.

Weaknesses:

- The section of the route adjacent to the buildings may feel confined due to the buildings on one side and the Railroad on the other.
- The section of the route adjacent to the Railroad would occupy a space that is currently used for deliveries to the adjacent building.
- There is not a dedicated pedestrian/bicycle crossing at New York Street but there is a signalized railroad crossing (connection to F1 from E2 only).

Opportunities:

- The construction of the route in this location could provide a secondary route for emergency vehicle access to the Bowersock Power Plant and trash service to Abe and Jake's.

Threats:

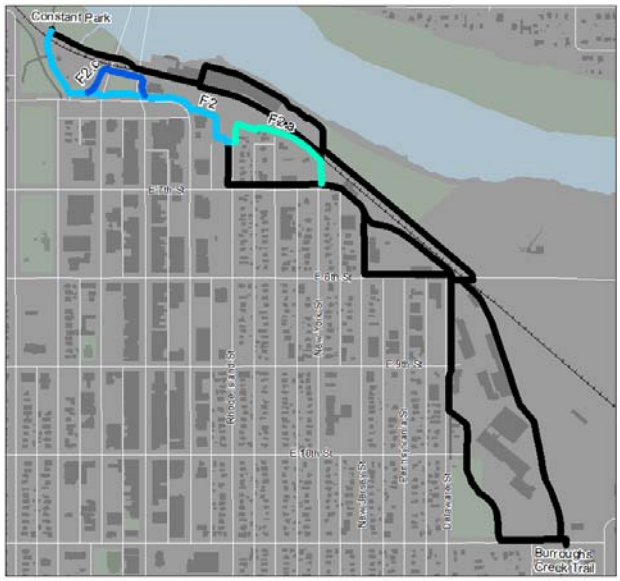
- A portion of this route is aligned on Railroad property. An agreement with the Railroad would be necessary to allow this route to be constructed as shown.

Section Statistics:
Approximate Length – 2,340 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 1 (adjacent to Commercial Driveway)
At-Grade Street Crossings – 1
Pedestrian/Bicycle Crashes (2013 – 2016) – N/A
Adjacent Roadway Speed Limit – N/A
Adjacent Roadway Average Annual Daily Traffic – 2013: 220 (New York St./Railroad)

Burroughs Creek Trail to Constant Park – F1.a – Looking southeast along Riverfront Plaza

Burroughs Creek Trail to Constant Park – F1.a – Looking southeast along Riverfront Plaza

Burroughs Creek Trail to Constant Park
F2 (F2.a and F2.c) (Map Color: F2-Light Blue, F2.a-Teal, F2.c-Dark Blue)



This alignment connects to the north end of the E1 and E2 alignments. Route F2.a heads north along the east side of New York Street until it reaches the south side of the Railroad. The route continues west along the south side of the Railroad and Parking Garage until it reaches Rhode Island Street. Route F2.a ends at the Parking Garage and Route F2 continues north and west along the west and south edges of the Parking Garage to New Hampshire Street. The route continues on the north side of 6th Street to the west side of Massachusetts Street where Route F2.c heads north and continues under the Kansas River Bridges on the south side of the railroad tracks. The route continues south of the west side of the Vermont Street to the north side of 6th Street to the access road and then continues heading north and crossing the Railroad and connects to the existing path.

Strengths:

- Route F2.c avoids the at-grade crossing of Massachusetts Street and Vermont Street.

Weaknesses:

- Route F2 crosses the Railroad with an unsignalized at-grade crossing.
- Route F2.a crosses terrain that would make the path difficult to construct and meet ADA requirements. Less experienced users may find the route difficult to navigate.

Opportunities:

- Route F2.c provides an opportunity to connect the Lawrence Loop to Robinson Park.

Threats:

- A portion of Route F2.a is aligned on Railroad property. An agreement with the Railroad would be necessary to allow this route to be constructed as shown.
- This route crosses several areas of private property and easement acquisition would be necessary.

Section Statistics:
Approximate Length – 3,220 ft.
Residential Driveway Crossings – 0
Commercial Driveway Crossings – 2
At-Grade Street Crossings – 2
Pedestrian/Bicycle Crashes (2013 – 2016) – 2016 (Collision w/pedestrian at 6th/Vermont)
Adjacent Roadway Speed Limit – 30 mph (New York St., Rhode Island St., E 7th St., E 6th St.)
Adjacent Roadway Average Annual Daily Traffic – N/A

BNSF Railway Coordination

BG and members of City staff met with Kamalah Young with BNSF Railway to discuss the City's potential use of the Railroad right-of-way for the Lawrence Loop. Ms. Young was provided a copy of the Rails-to-Trails Conservancy's report titled "*America's Rails-with-Trails*". Ms. Young was going to visit with her supervisors to discuss the project. On November 28, 2017 we received an email from Ms. Young. She indicated that "BNSF does not recommend the trail project as proposed." City Staff should follow up with the BNSF Railway to continue the discussion and determine what additional information or modifications can be made to allow BNSF to support the project on the alignment shown.

Kansas Turnpike Authority Coordination

BG sent David Jacobson, Director of Engineering with the Kansas Turnpike Authority (KTA) a copy of the study alignments map for the Sandra Shaw Trail and Peterson Road Shared Use Path section. Mr. Jacobson reviewed the drawing and indicated that a formal request needs to be made and additional details need to be provided before consideration.

Conclusions

Through a series of open houses and online surveys, this study process has provided an opportunity for the public to weigh in on selecting a preferred alignment to complete two missing Lawrence Loop segments.

The study process has facilitated the selection of route priorities for each section. The priorities for each section are listed below.

Sandra Shaw Trail to Peterson Road Shared Use Path (See Figure 13)
1st Priority – Segments A1/B1
2nd Priority – Segments A2/A2.b/B1
3rd Priority – Segments A2/A2.a/B2
4th Priority – Segments A3/B2

The 1st priority route for this section appears to be feasible but the route will involve constructing an underpass under the KTA's West Lawrence Interchange (Exit 202), working with the floodplain and floodway for a large section of the path east of Michigan Street and acquiring easements from several parcels. The 1st priority could be phased from Sandra Shaw Trail to Michigan Street and from Michigan Street to the Peterson Road Shared Use Path. The Engineer's Opinion of Probable Construction Cost (2017 Dollars) for each phase of the 1st Priority is below.

The 3rd priority route for this section provides an alternate route that does not involve the construction of the underpass under McDonald Drive. This route would cross McDonald Drive at the W. 2nd Street intersection. The Engineer's Opinion of Probable Construction Cost (2017 Dollars) for the 3rd Priority is also below.

Engineer's Opinion of Probable Construction Cost*
Sandra Shaw Trail to Peterson Road Shared Use Path
1st Priority - Segments A1/B1

Section 1 - Sandra Shaw Trail to Michigan Street

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$7,000.00	$7,000.00
2.	Clearing, Grubbing	1	L.S.	$20,000.00	$20,000.00
3.	Earthwork	1	L.S.	$30,000.00	$30,000.00
4.	10'x6" Concrete Path	3340	S.Y.	$50.00	$167,000.00
5.	ADA Ramp	8	S.Y.	$100.00	$800.00
6.	4" AB-3 Subgrade	3348	S.Y.	$7.00	$23,436.00
7.	Drainage Structure	1	Each	$40,000.00	$40,000.00
8.	Storm Sewer Pipe Crossing	1	Each	$2,000.00	$2,000.00
9.	Erosion Control	1	L.S.	$5,000.00	$5,000.00
10.	Construction Staking	1	L.S.	$7,500.00	$7,500.00
11.	Traffic Control	1	L.S.	$1,500.00	$1,500.00
12.	Seed, Fertilize and Mulch	1	L.S.	$5,000.00	$5,000.00
				Subtotal =	$309,236.00
				+25% Construction Contingency =	$77,309.00
				Total =	$386,545.00

Section 2 - Michigan Street to Peterson Road Shared Use Path

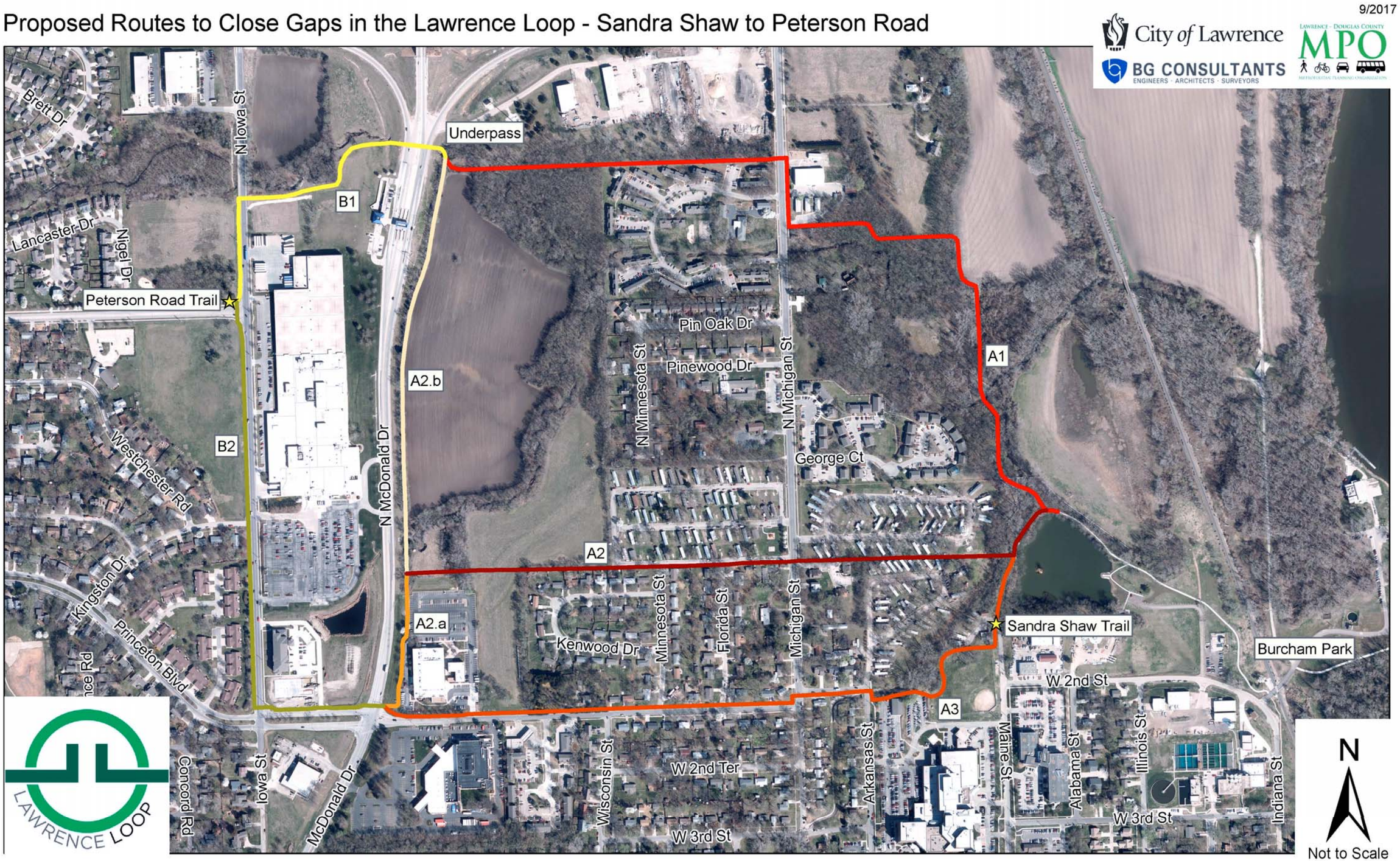
	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$20,000.00	$20,000.00
2.	Clearing, Grubbing	1	L.S.	$20,000.00	$20,000.00
3.	Earthwork	1	L.S.	$30,000.00	$30,000.00
4.	10'x6" Concrete Path	3450	S.Y.	$50.00	$172,500.00
5.	ADA Ramp	24	S.Y.	$100.00	$2,400.00
6.	4" AB-3 Subgrade	3348	S.Y.	$7.00	$23,436.00
7.	12'x10' Underpass	1	Each	$400,000.00	$400,000.00
8.	Storm Sewer Pipe Crossing	1	Each	$4,000.00	$4,000.00
9.	Concrete Pavement (12" A.E.)	310	S.Y.	$100.00	$31,000.00
10.	HAWK Signal	1	Each	$55,000.00	$55,000.00
11.	Erosion Control	1	L.S.	$5,000.00	$5,000.00
12.	Construction Staking	1	L.S.	$7,500.00	$7,500.00
13.	Traffic Control	1	L.S.	$10,000.00	$10,000.00
14.	Seed, Fertilize and Mulch	1	L.S.	$5,000.00	$5,000.00
				Subtotal =	$785,836.00
				+25% Construction Contingency =	$196,459.00
				Total =	$982,295.00

Sandra Shaw Trail to Peterson Road Shared Use Path*(non-underpass option)
3rd Priority - Segments A2/A2.b/B2

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$12,000.00	$12,000.00
2.	Clearing, Grubbing	1	L.S.	$20,000.00	$20,000.00
3.	Earthwork	1	L.S.	$60,000.00	$60,000.00
4.	10'x6" Concrete Path	7312	S.Y.	$50.00	$365,600.00
5.	ADA Ramp	112	S.Y.	$100.00	$11,200.00
6.	4" AB-3 Subgrade	7424	S.Y.	$7.00	$51,968.00
7.	Storm Sewer Pipe Crossing	2	Each	$2,000.00	$4,000.00
8.	Erosion Control	1	L.S.	$10,000.00	$10,000.00
9.	Construction Staking	1	L.S.	$15,000.00	$15,000.00
10.	Traffic Control	1	L.S.	$15,000.00	$15,000.00
11.	Seed, Fertilize and Mulch	1	L.S.	$10,000.00	$10,000.00
				Subtotal =	$574,768.00
				+25% Construction Contingency =	$143,692.00
				Total =	$718,460.00

* R/W and easement acquisition costs have not been included.

Figure 13


Proposed Routes to Close Gaps in the Lawrence Loop - Sandra Shaw to Peterson Road
9/2017
City of Lawrence
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
Lawrence - Douglas County MPO
Brett Dr
N Iowa St
Underpass
B1
Lancaster Dr
Nigel Dr
Peterson Road Trail
Pin Oak Dr
Pinewood Dr
N Minnesota St
N Michigan St
A1
A2.b
George Ct
B2
Westchester Rd
N McDonald Dr
A2
Kingston Dr
Princeton Blvd
A2.a
Kenwood Dr
Minnesota St
Florida St
Michigan St
Sandra Shaw Trail
Burcham Park
W 2nd St
A3
Maine St
Alabama St
Illinois St
Indiana St
Concord Rd
Iowa St
McDonald Dr
Wisconsin St
W 2nd Ter
W 3rd St
Arkansas St
W 3rd St
LAWRENCE LOOP
N
Not to Scale

Burroughs Creek Trail to Constant Park (See Figure 14)
1st Priority – Segments D1/E1/F1/F1.a
Alternate Substitutions – Segment D2 for D1, Segment E2/(E2.a or E2.b) for E1, Segment F2/(F2.a or F2.b)/(or F2.c) for F1/F1.a

The 1st priority route for this section is physically feasible to be constructed but is solely dependent upon the BNSF Railway's decision to allow their right-of-way to be used for construction of the path. The alternate routes appear to be feasible but each will involve acquiring easements, increased slopes for the trail, driveway and intersection crossings. Segment F2.b appears to be more physically feasible to construct than segment F2.a as segment F2.a will have difficult slopes, tight curves and easement acquisition. If segment F1/F1.a is determined to be not acceptable by the Railway, further discussion needs to occur about the un-signalized Constant Park railroad crossing. The 1st Priority could be phased as shown for the D1, E1 and F1 segments. The Engineer's Opinion of Probable Construction Cost (2017 Dollars) for each phase of the 1st Priority is below. An Engineer's Opinion of Probable Construction Cost (2017 Dollars) for alternate options D2, E2/E2.a and F2/F2.b are also below.

Engineer's Opinion of Probable Construction Cost*
Burroughs Creek Trail to Constant Park
1st Priority - Segments D1/E1/F1/F1.a

Section 1 - D1

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$6,000.00	$6,000.00
2.	Clearing, Grubbing	1	L.S.	$10,000.00	$10,000.00
3.	Earthwork	1	L.S.	$5,000.00	$5,000.00
4.	10'x6" Concrete Path	2530	S.Y.	$50.00	$126,500.00
5.	ADA Ramp	8	S.Y.	$100.00	$800.00
6.	4" AB-3 Subgrade	2538	S.Y.	$7.00	$17,766.00
7.	6' Chainlink Fence	2270	L.F.	$35.00	$79,450.00
8.	Erosion Control	1	L.S.	$3,000.00	$3,000.00
9.	Construction Staking	1	L.S.	$5,000.00	$5,000.00
10.	Traffic Control	1	L.S.	$1,500.00	$1,500.00
11.	Railroad Flagger	10	Days	$1,500.00	$15,000.00
12.	Seed, Fertilize and Mulch	1	L.S.	$4,000.00	$4,000.00
				Subtotal =	$274,016.00
				+25% Construction Contingency =	$68,504.00
				Total =	$342,520.00

Section 2 - E1

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$5,000.00	$5,000.00
2.	Clearing, Grubbing	1	L.S.	$4,000.00	$4,000.00
3.	Earthwork	1	L.S.	$4,000.00	$4,000.00
4.	10'x6" Concrete Path	1720	S.Y.	$50.00	$86,000.00
5.	ADA Ramp	16	S.Y.	$100.00	$1,600.00
6.	4" AB-3 Subgrade	1736	S.Y.	$7.00	$12,152.00
7.	6' Chainlink Fence	1540	L.F.	$35.00	$53,900.00
8.	Erosion Control	1	L.S.	$3,000.00	$3,000.00
9.	Construction Staking	1	L.S.	$4,000.00	$4,000.00
10.	Traffic Control	1	L.S.	$1,500.00	$1,500.00
11.	Railroad Flagger	10	Days	$1,500.00	$15,000.00
12.	Seed, Fertilize and Mulch	1	L.S.	$3,500.00	$3,500.00
				Subtotal =	$193,652.00
				+25% Construction Contingency =	$48,413.00
				Total =	$242,065.00

Section 3 - F1/F1.a

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$6,000.00	$6,000.00
2.	Clearing, Grubbing	1	L.S.	$4,000.00	$4,000.00
3.	Earthwork	1	L.S.	$5,000.00	$5,000.00
4.	10'x6" Concrete Path	2600	S.Y.	$50.00	$130,000.00
5.	ADA Ramp	8	S.Y.	$100.00	$800.00
6.	4" AB-3 Subgrade	2608	S.Y.	$7.00	$18,256.00
7.	6' Chainlink Fence	2340	L.F.	$35.00	$81,900.00
8.	Erosion Control	1	L.S.	$3,000.00	$3,000.00
9.	Construction Staking	1	L.S.	$5,000.00	$5,000.00
10.	Traffic Control	1	L.S.	$1,500.00	$1,500.00
11.	Railroad Flagger	10	Days	$1,500.00	$15,000.00
12.	Seed, Fertilize and Mulch	1	L.S.	$4,000.00	$4,000.00
				Subtotal =	$274,456.00
				+25% Construction Contingency =	$68,614.00
				Total =	$343,070.00

Engineer's Opinion of Probable Construction Cost*
Burroughs Creek Trail to Constant Park
Alternate Options - Segments D2, E2/E2.a, F2/F2.b

Section 1 - D2

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$5,000.00	$5,000.00
2.	Clearing, Grubbing	1	L.S.	$10,000.00	$10,000.00
3.	Earthwork	1	L.S.	$20,000.00	$20,000.00
4.	10'x6" Concrete Path	2400	S.Y.	$50.00	$120,000.00
5.	ADA Ramp	104	S.Y.	$100.00	$10,400.00
6.	4" AB-3 Subgrade	2504	S.Y.	$7.00	$17,528.00

7.	Erosion Control	1	L.S.	$5,000.00	$5,000.00
8.	Construction Staking	1	L.S.	$7,500.00	$7,500.00
9.	Traffic Control	1	L.S.	$10,000.00	$10,000.00
10.	Seed, Fertilize and Mulch	1	L.S.	$5,000.00	$5,000.00
				Subtotal =	$210,428.00
				+25% Construction Contingency =	$52,607.00
				Total =	$263,035.00

Section 2 - E2/E2.a

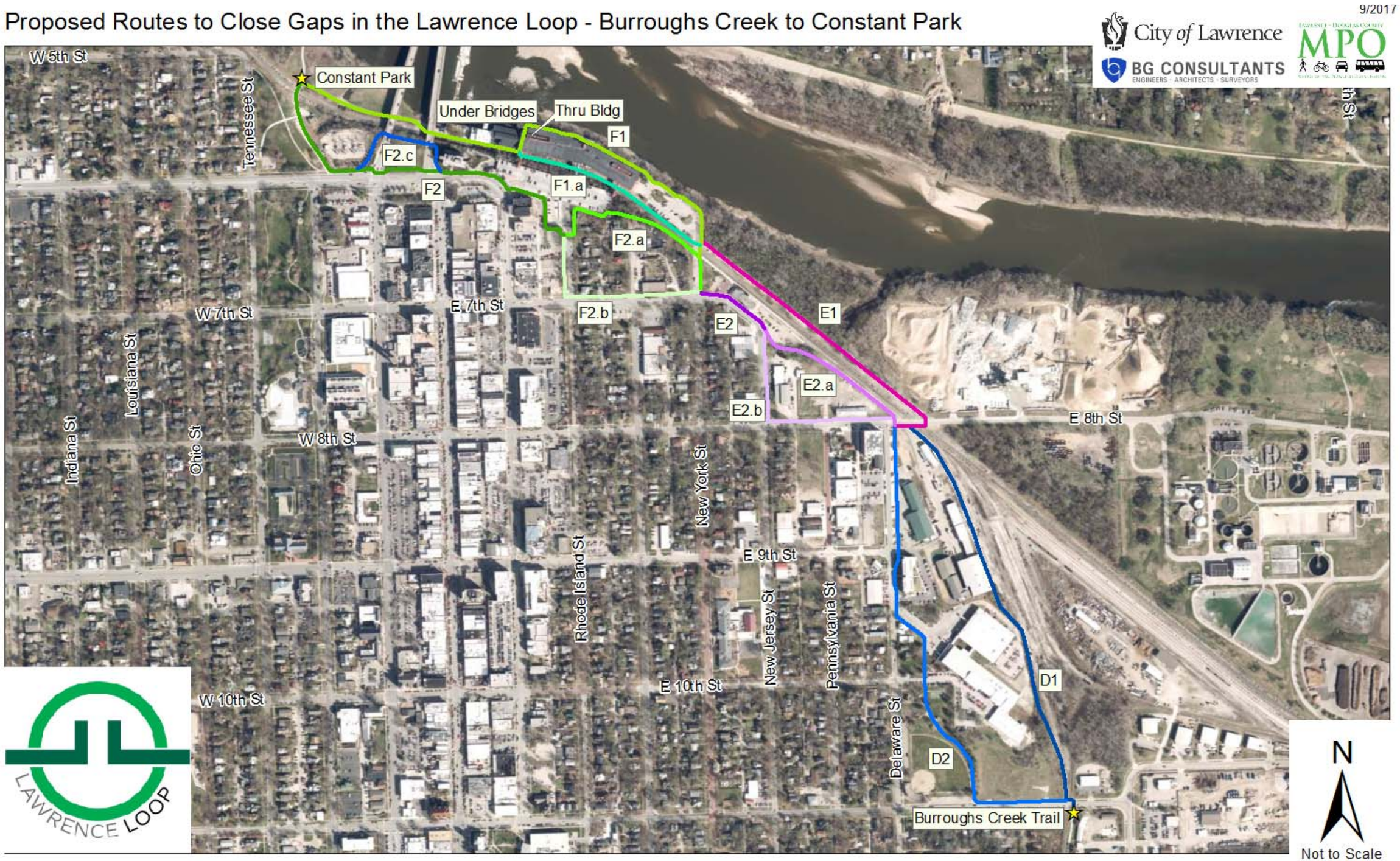
	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$5,000.00	$5,000.00
2.	Clearing, Grubbing	1	L.S.	$10,000.00	$10,000.00
3.	Earthwork	1	L.S.	$5,000.00	$5,000.00
4.	10'x6" Concrete Path	1450	S.Y.	$50.00	$72,500.00
5.	ADA Ramp	16	S.Y.	$100.00	$1,600.00
6.	4" AB-3 Subgrade	1466	S.Y.	$7.00	$10,262.00
7.	6' Chainlink Fence	600	L.F.	$35.00	$21,000.00
8.	Erosion Control	1	L.S.	$3,000.00	$3,000.00
9.	Construction Staking	1	L.S.	$4,000.00	$4,000.00
10.	Traffic Control	1	L.S.	$6,000.00	$6,000.00
11.	Seed, Fertilize and Mulch	1	L.S.	$4,000.00	$4,000.00
				Subtotal =	$142,362.00
				+25% Construction Contingency =	$35,591.00
				Total =	$177,953.00

Section 3 - F2/F2.b

	Work Item	Quantity	Units	Unit Price	Total Price
1.	Mobilization	1	L.S.	$10,000.00	$10,000.00
2.	Clearing, Grubbing	1	L.S.	$8,000.00	$8,000.00
3.	Earthwork	1	L.S.	$10,000.00	$10,000.00
4.	10'x6" Concrete Path	3100	S.Y.	$60.00	$186,000.00
5.	ADA Ramp	136	S.Y.	$100.00	$13,600.00
6.	4" AB-3 Subgrade	3236	S.Y.	$7.00	$22,652.00
7.	Erosion Control	1	L.S.	$5,000.00	$5,000.00
8.	Construction Staking	1	L.S.	$7,500.00	$7,500.00
9.	Traffic Control	1	L.S.	$10,000.00	$10,000.00
10.	Seed, Fertilize and Mulch	1	L.S.	$5,000.00	$5,000.00
				Subtotal =	$277,752.00
				+25% Construction Contingency =	$69,438.00
				Total =	$347,190.00

* R/W and easement acquisition costs have not been included.

Figure 14


Proposed Routes to Close Gaps in the Lawrence Loop - Burroughs Creek to Constant Park
9/2017
City of Lawrence
BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS
MPO
W 5th St
Tennessee St
Constant Park
Under Bridges
Thru Bldg
F1
F2.c
F2
F1.a
F2.a
F2.b
E1
E2
E2.a
E2.b
E 7th St
W 7th St
Louisiana St
Indiana St
Ohio St
W 8th St
E 8th St
New York St
E 9th St
Rhode Island St
New Jersey St
Pennsylvania St
Delaware St
E 10th St
W 10th St
D1
D2
Burroughs Creek Trail
LAWRENCE LOOP
N
Not to Scale

Next Steps

The MPO should incorporate the 1st priority routes into the Countywide Bikeway Plan update planned for 2018. Further discussions should occur with the BNSF Railway and KTA to design routes and get appropriate approvals. The City should also look for opportunities to share in the cost of the proposed improvements. The City should look and apply for grant programs that have the ability to fund all or a portion of the proposed improvements. Once the City has secured or programmed funding for the improvements, preliminary engineering should begin. The City should continue to look for opportunities to secure easements along the selected routes when possible.

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Amanda Sahin, Transportation Engineer
DATE: Jan 29, 2018
RE: Agenda Item for Transportation Commission 2/5/2018: Transportation Commission Non-motorized Projects Prioritization Policy, Policy No. TC18-001

Background

In December 2017 the Transportation Commission recommended approval of the Non-motorized Prioritization Policy. The intent was to have City Commission adopt it through a resolution. After input from the City Manager's Office and City Attorney's Office the policy will instead be adopted by the Transportation Commission.

Details

The policy has had minimal revisions recommended by the City Attorney's office, but is functionally the same policy that was previously recommended for approval. If approved this policy will be a Transportation Commission Policy that will be used to guide decisions on the projects that will be recommended for funding.

Action Request

Approve the City of Lawrence Transportation Commission Non-Motorized Projects Prioritization Policy, Policy No. TC18-001

Attachments:

City of Lawrence Transportation Commission Non-motorized Projects Prioritization Policy, Policy No. TC18-001

City of Lawrence, Kansas
Transportation Commission
Non-motorized Projects Prioritization Policy

SUBJECT Non-motorized Projects Prioritization Policy		**APPLIES TO** Infrastructure	
EFFECTIVE DATE Feb 5, 2018	**REVISED DATE** None	**NEXT REVIEW DATE** TBD	
APPROVED BY Transportation Commission date: Feb 5, 2018		**TOTAL PAGES** 5	**POLICY NO.** TC18-001

1.0 Purpose

In order to improve the built environment for people who walk, bicycle, or wheel, this policy implements recommendations of the Regional Pedestrian Plan, the Countywide Bikeway Plan, and the Pedestrian-Bicycle Issues Taskforce Report, and establishes a data-driven ranking procedure for prioritizing non-motorized projects that confer the greatest benefit to the community.

2.0 Scope

This policy applies to all non-motorized projects, including but not limited to the following: ADA curb ramps, sidewalks, curb extensions, shared-use paths, bike lanes, protected bike lanes, bicycle boulevards, signage, crossing improvements, and other projects that improve the built environment for people who walk, bicycle or wheel. This policy does not apply to non-motorized aspects of larger roadway projects that are not funded with pedestrian and bicycle funds (although such non-motorized projects may be ranked) or to sidewalk maintenance, which is the responsibility of abutting landowners.

3.0 Development of Project Lists

3.1 Non-motorized projects will be sorted into three lists: ADA ramps, pedestrian gaps, and bikeways.

3.2 Non-motorized projects identified in specific non-motorized plans will be placed on the appropriate list.

3.3 Additional non-motorized projects requested by the public during formal calls for projects, concurrent with the development of the Capital Improvement Program (CIP), may also be listed. Before a proposed project is placed on a list, it will be reviewed by City Staff to determine its appropriateness and feasibility.

3.4 Annually, all non-motorized projects appearing on the lists will be scored in accordance with Section 4.0 and ranked in accordance with Section 5.0. If new non-motorized projects are added, those new projects will also be scored and ranked. It must be noted that inclusion on a project list does not guarantee funding or implementation for a particular project.

4.0 Project Scoring

Non-motorized projects appearing on the Project Lists will be scored annually according to the following criteria:

4.1 ADA Ramp Prioritization Criteria

(a) *Priority Networks- 5 points max*

Projects that improve accessibility along priority networks recognized in adopted plans are accorded the highest weight. This criterion follows the Regional Pedestrian Plan Priority network: Safe Routes to School Routes are accorded the highest priority, followed by Arterial Streets, then Collector Streets, and finally Local streets.

(b) *Pedestrian Access to Priority Destinations – 5 points max*

Projects within closer proximity to priority destinations are given higher priority in order to promote access to high-demand pedestrian destinations. This score is symbolized on a map produced by creating buffers (based on the pedestrian network routing) of identified locations.

(c) *Crossing Type – 5 points max*

Projects that are located at signalized intersections are accorded the highest weight. Stop signs or beacon controlled crossings compose the next highest weight. Next are other marked crossings and then, lastly, unmarked crossings. The type of crossing is used as a priority because the highest volume of pedestrian demand is anticipated at controlled intersections.

(d) *User Request for Improved Route Accessibility – 10 points max*

This involves ramp requests made by citizens, or in their behalf, who use mobility devices, to provide specific accessible routes based on their location and travel needs and that are received through the ADA Transition Plan Coordinator. Such requests can be made at any time.

	ADA Ramp Prioritization Criteria	Points
1	**Priority Network (select one, max 5 pts)**	
	Safe Routes to School Route	5
	Arterial Street Classification of Roadway	4
	Collector Street Classification of Roadway	3
	Local Street Classification of Roadway	1
2	**Pedestrian Access to Priority Destinations (select one, max 5 pts)**	
	Within ¼ mi of school or $^1/_8$ mi of public transit stop	5
	Within ½ mi of school, ¼ mi of transit stop, ¼ mi of neighborhood or community retail (includes medical facilities, grocery store, farmers market and retail food outlets), 1/8 mi of park, 1/8 mi of library, or 1/8 of post office	3
	Farther than ½ mi of school, ¼ mi of transit stop, ¼ of neighborhood or community retail, 1/8 mi of park, 1/8 mi of library, or 1/8 mi of public institutions (ex: post office, city hall)	1
3	**Crossing Type (select one, max 5 pts)**	
	Signalized Controlled Intersections	5
	Stop Sign or Beacon Controlled Crossings	4
	Other Marked Crossings	2
	Unmarked Crossings	1
4	**User Request for Improved Route Accessibility(max 10 pts)**	10
	Max Points -25	

4.2 Pedestrian Gap Prioritization Criteria

(a) *Priority Networks- 5 points max*

Projects that improve connectivity along priority networks recognized in adopted plans are accorded the highest weight. This criterion follows the Regional Pedestrian Plan Priority network: Safe Routes to School Routes are accorded the highest priority, followed by Arterial and Collector Streets without sidewalks on either side followed by Arterial Streets, Collector Streets and finally Local streets.

(b) *Pedestrian Access to Priority Destinations – 5 points max*

Projects within closer proximity to priority destinations are given higher priority in order to promote access to high-demand pedestrian destinations. This score is symbolized on a map produced by creating buffers (based on the pedestrian network routing) of identified locations.

(c) *Safety – 10 points max*

Higher volume roadways are granted greater priority, as well as projects that improve crossing on roadways over 15,000 AADT. While crash history is not necessarily considered in project scoring, project design will consider crash history.

	Pedestrian Gap Prioritization Criteria	Points
1	**Priority Network (select one, max 5 pts)**	
	Safe Routes to School Route	5
	Arterial/Collector Street Classification of Roadway with no sidewalks on either side	4
	Arterial Street Classification of Roadway	3
	Collector Street Classification of Roadway	2
	Local Street Classification of Roadway	1
2	**Pedestrian Access to Priority Destinations (select one, max 5 pts)**	
	Within ¼ mi of school or $^1/_8$ mi of public transit stop	5
	Within ½ mi of school, ¼ mi of transit stop, ¼ mi of neighborhood or community retail (includes medical facilities, grocery store, farmers market and retail food outlets), 1/8 mi of park, 1/8 mi of library, or 1/8 of post office	3
	Farther than ½ mi of school, ¼ mi of transit stop, ¼ of neighborhood or community retail, 1/8 mi of park, 1/8 mi of library, or 1/8 mi of public institutions (ex: post office, city hall)	1
3	**Safety - Roadway Volume (select one, max 5 pts)**	
	Project on a road that has over 25,000 AADT on roadway	5
	Project on a road that has over 20,000 AADT on roadway	3
	Project on a road that has over 15,000 AADT on roadway	1
	Safety - Crossing (max 5 pts)	
	Project adds crossing improvements on a road over 15,000 AADT	5
	Max Points -20	

4.3 Bikeway Prioritization Criteria

(a) *Adopted Plan Priorities- 5 points max*

Projects that improve connectivity along networks recognized in adopted plans are accorded the highest weight. This criterion recognizes the priority network established by the Ped Bike Issues Taskforce Report and the Countywide Bikeway Plan.

(b) *Bicycle Demand Model – 5 points max*

Bicycle demand is calculated based on a scoring system that ranks areas based on 5 proximity factors: High density housing, medium density, K-12 schools, college/university, existing bike infrastructure. Those factors affect the demand for bicycle transportation throughout the community. Areas of higher demand are prioritized.

- Proximity Factors (max points for bicycle demand model score is 81)
  - *High-Density Housing*
    A buffer of high-density housing. High-density housing, as defined in the updated comprehensive plan, is greater than or equal to 16 people per acre.
  - *Medium-Density Housing*
    A buffer of medium-density housing. Medium density housing, as defined in the updated comprehensive plan, is greater than or equal to 7 people per acre and less than 16 people per acre.
  - *Schools K-12*
    A buffer distance from the property boundaries of public and private schools, kindergarten through 12th grade.
  - *College / University*
    A buffer distance from college/university boundaries.
  - *Existing Shared Use Path or Bike Lane*
    A buffer distance from existing shared use paths/bike lanes.

Proximity Factors and Scores

High Density Housing	
wihtin 1/4 mile	16
within 1/2 mile	12
within 1 mile	8
within 2 miles	4

Schools K-12 (public & private)	
wihtin 1/4 mile	18
within 1/2 mile	14
within 1 mile	6
within 2 miles	2

Existing Shared Use Path/Bike Lane	
wihtin 1/4 mile	18
within 1/2 mile	14
within 1 mile	6
within 2 miles	2

Medium Density Housing	
wihtin 1/4 mile	9
within 1/2 mile	7
within 1 mile	3
within 2 miles	2

College/University	
wihtin 1/4 mile	20
within 1/2 mile	18
within 1 mile	15
within 2 miles	7

(c) *Safety – 10 points max*

Higher volume roadways are granted greater priority, as well as projects that improve crossing on roadways over 15,000 AADT. While crash history is not necessarily considered in project scoring, project design will consider crash history.

	Bikeway Prioritization Criteria	Points
1	**Adopted Plan Priorities (select one, max 5 pts)**	
	Along the Ped/Bike Issues Taskforce Report Long Term Bikeway Priority Network	5
	Along network identified in approved Countywide Bikeway Plan	4
	Arterial/Collector with no Shared Use Path	3
2	**Bicycle Demand (select one, max 5 pts)**	
	Bicycle demand is calculated on the bicycle demand heat map which is a prioritization score based on proximity to housing density, K-12 private/public schools, college/university and existing bikeway infrastructure.	
	score greater than 66 up to 81	5
	score greater than 49 up to 65	4
	score greater than 33 up to 49	3
	score greater than 17 up to 33	2
	score greater than 0 up to 17	1
3	**Safety - Roadway Volume (select one, max 5 pts)**	
	Project on a road that has over 25,000 AADT on roadway	5
	Project on a road that has over 20,000 AADT on roadway	3
	Project on a road that has over 15,000 AADT on roadway	1
	Safety - Crossing (max 5 pts)	
	Project adds crossing improvements on a road over 15,000 AADT	5
	Max Points - 20	

5.0 Project Ranking and Selection

5.1 The scoring procedure outlined above provides the first step in identifying corridors that should be considered for non-motorized improvements. There are also many other, non-exclusive factors that should be considered in the final selection of non-motorized projects and, ultimately, in project design. Those non-exclusive factors are as follow:

- Equity in project distribution (environmental justice areas)
- Opportunities for parallel routes
- Grant funding opportunities
- Economies of scale
- Cost sharing opportunities
- Available funding
- Other relevant factors

5.2 The following procedure will be used to determine a final project ranking:

(a) The available funding for non-motorized infrastructure will be distributed between the three category areas (ADA ramps, pedestrian gaps, and bikeways) by recommendation of the Transportation Commission.

(b) City Staff will review the projects with the highest scores in each category. Project feasibility will be evaluated and planning-level cost estimates will be prepared.

(c) City Staff will present to the Transportation Commission for consideration, a list of projects ranked, using the established criteria and other factors as outlined above, for pedestrian gap and bikeway projects. City Staff will recommend Ramp projects, based not on specific locations but on recommended areas of focus.

(d) The Transportation Commission will recommend to the City Commission for approval, a final ranked project list for each category.

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Amanda Sahin, Transportation Engineer
DATE: Jan 29, 2018
RE: Agenda Item for Transportation Commission 2/5/2018: CDBG Sidewalk Gap Proposed Project List

Background

At the November 4, 2017 Transportation Commission meeting the Commission approved the application for $150,000 in 2018 CDBG Sidewalk Gap funds for sidewalk gap projects. Specific projects were not listed in the application, however, we need to provide a list of potential projects in order to make our application stronger.

Details

Staff recommends the following projects be included in the proposed project list for the grant application:

STREET	FROM	TO	CLASSIFICATION	SIDE	LENGTH (FT)	SRTS	CDBG
E 15th	Haskell Ln	Maple Ln	Arterial	south	200	yes	yes
E 19th St	Delaware St	Moodie Rd	Arterial	south	570	partial	yes
Naismith Dr	19th St	23rd St	Collector	east	2,500	no	yes

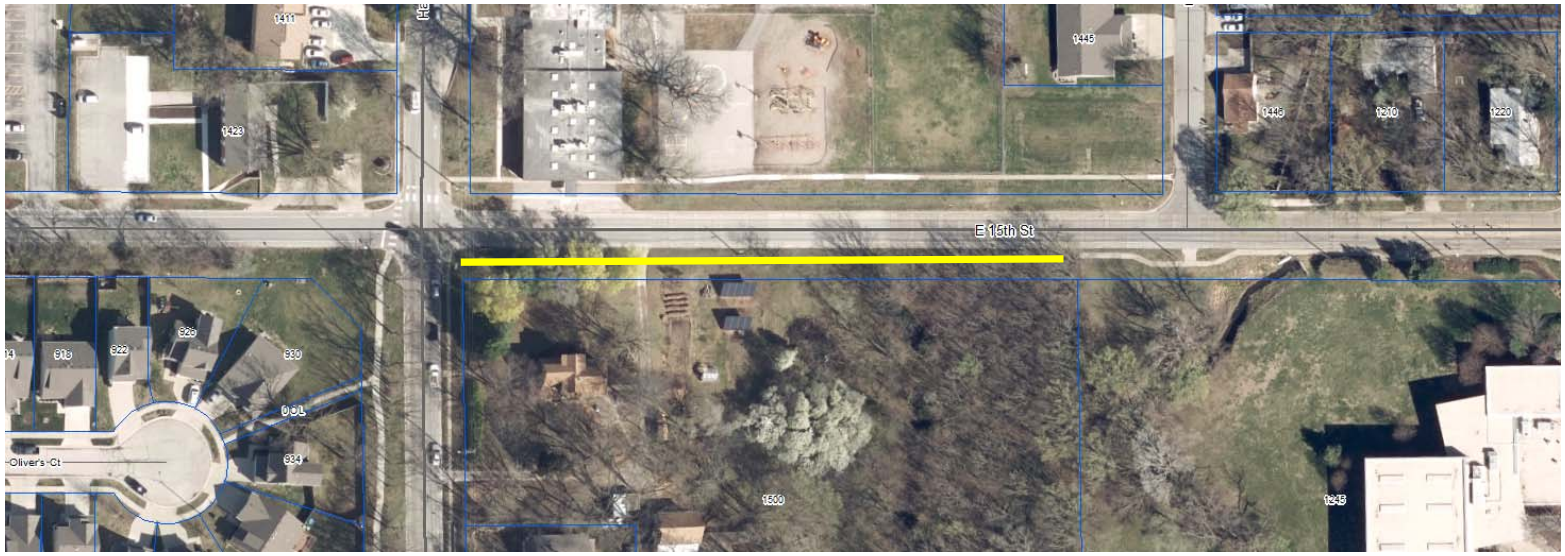
Action Request

Approve the 2018 CDBG Sidewalk Gap Proposed Project List

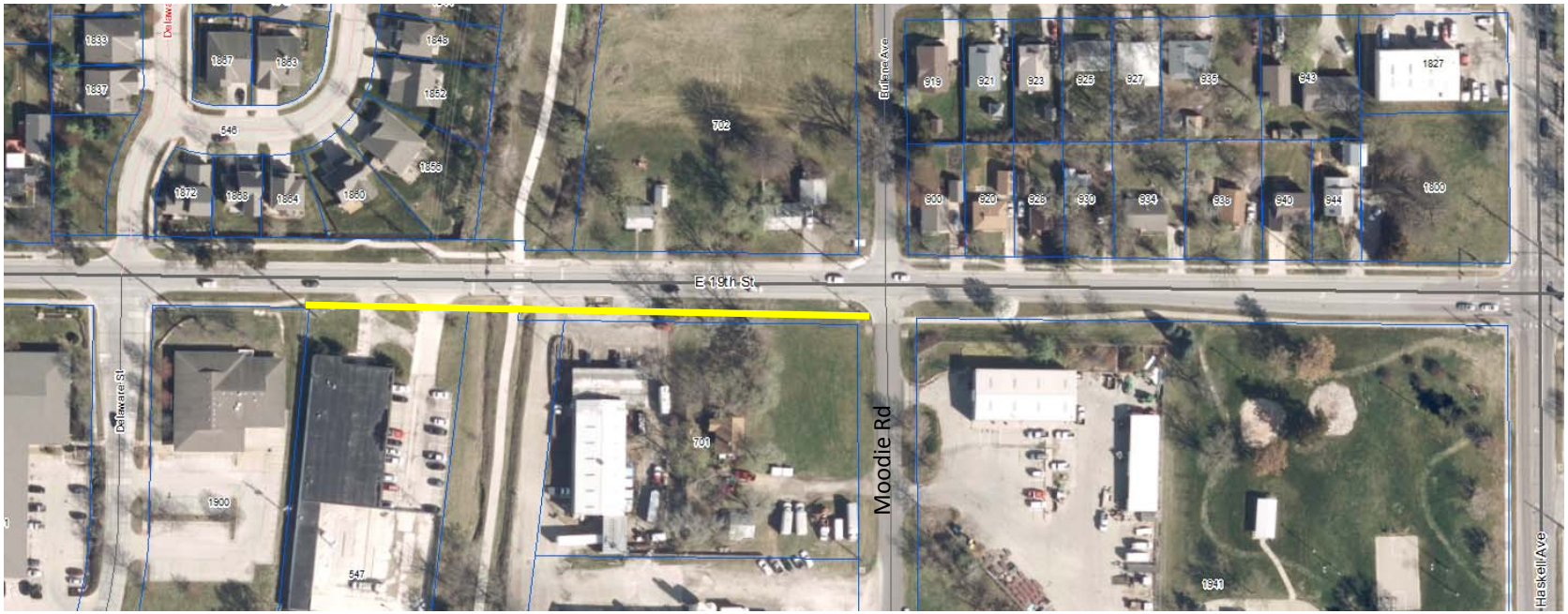
Attachments:

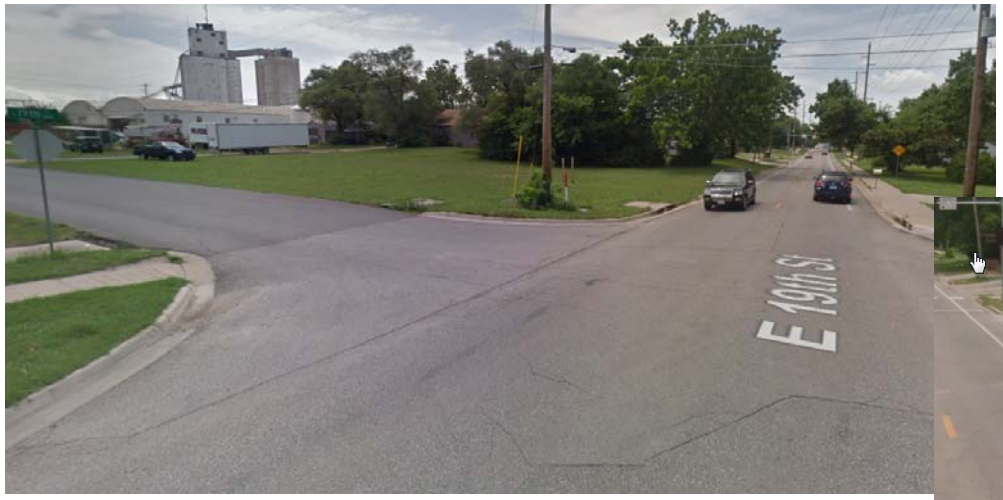
Aerials and photos

E 15th St – Haskell Ln to Maple Ln



E 19th St – Delaware St to Moodie Rd





Naismith Dr – 19th St to 23rd St

Naismith Dr – 19th St to 23rd St

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Amanda Sahin, Transportation Engineer
DATE: Jan 29, 2018
RE: Agenda Item for Transportation Commission 2/5/2018: ADA Ramp, Pedestrian, and Bicycle Funding Split

Background

The 2018 CIP includes a $450,000 line item for Sidewalk/Bike/Ped Improvements/ADA Ramps. There is also a remaining $150,000 from the 2017 CIP for the same line item. This totals $600,000 that can be used in 2018 for these types of facilities.

Details

Based on the review of the non-motorized project needs and other available funding sources, staff recommends the following approximate funding split for 2017/2018 funding:

ADA Ramps: $100,000
Pedestrian Facilities: $150,000
Bicycle Facilities: $350,000

Staff will bring specific project recommendations back at a future meeting.

Action Request

Approve the proposed approximate funding split for the 2017/2018 Sidewalk Gap/Ped Improvements/ADA Ramps CIP line item.

Attachments:

None

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: Amanda Sahin, Transportation Engineer
DATE: January 19, 2017
RE: Traffic Calming and Signage Moratorium

In the coming months staff will be working on a new policy to replace the current Traffic Calming policy. The new policy will take into account additional traffic calming measures and potentially a phased approach to traffic calming. Throughout this process we will also address other traffic control/signage requests and how they should be processed. The number of requests for traffic calming far outweigh the budget that is allotted for these types of projects. The current process is administratively burdensome and needs to be streamlined to be effective.

In order to get the new policy developed as quickly as possible, staff is instituting a moratorium on any new signage, pavement marking, or traffic calming requests until the new policy is approved. This will allow the staff and Transportation Commission the time to focus on the development of the policy and get it approved in a timely manner.

The 2018 Traffic Calming budget of $200,000 will be utilized on projects that are currently on the approved Traffic Calming list using the existing scoring criteria. Once a new policy is in place any previously approved projects will be reevaluated to conform to the new policy.

Memorandum
City of Lawrence
Public Works Department

TO: David Cronin, City Engineer
FROM: Zach Baker, Project Engineer
DATE: January 29, 2018
RE: Agenda Item for Transportation Commission 2/5/2018:
10th & Indiana Stop Sign Request Follow-up Report

Background

During the July 10, 2017 Transportation Commission meeting the commission was presented a request for a 4-way stop controlled intersection at 10th Street and Indiana Street. City staff reviewed traffic data obtained in May of 2017 and recommended denial of the request. After deliberation the Transportation Commission voted 9-1 to deny the request for a 4-way stop. However, the Transportation Commission did request that staff review crash data in November 2017 and report back to the Commission.

Details

City Staff reviewed crash data on November 30, 2017 and there have been no crashes at the 10th & Indiana intersection since the "Cross Traffic Does Not Stop" signs were installed in November 2016.

Attachments:

None

Memorandum
City of Lawrence
Public Works Department

TO: Transportation Commission
FROM: David Cronin, City Engineer
DATE: January 24, 2018
RE: Haskell Lane and 29th Street cut-through traffic

Background

In October 2016 the Traffic Safety Commission heard a request for the closure of Haskell Lane at 29th Street. The request was due to the approval of a plan to connect the Burroughs Creek Trail with the SLT shared use path and the large amount of cut-through traffic that the connection would have to cross. The Commission voted to defer the item until after the SLT was fully operational and then revaluate how traffic was flowing in the area.

Current Status

Traffic data in this area was collected on December 14, 2017 from 5:00 PM - 6:00 PM. The results are as follows (data from March 2016 shown in parenthesis for comparison):

Southbound on Haskell to westbound on 31st Street using Haskell Lane: 156 vehicles (236)
Southbound on Haskell to westbound on 31st Street using the signal: 21 vehicles (38)
Total percent of southbound to westbound traffic using cut-through: 88% (86%)

Eastbound on 31st Street to northbound on Haskell Ave using Haskell Ln: 126 vehicles (188)
Eastbound on 31st Street to northbound on Haskell Ave using the signal: 56 vehicles (83)
Total percent of southbound to westbound traffic using cut-through: 69% (69%)

While the raw numbers are about 30% less from the data taken in March of 2016, the cut-through percentage is almost identical.

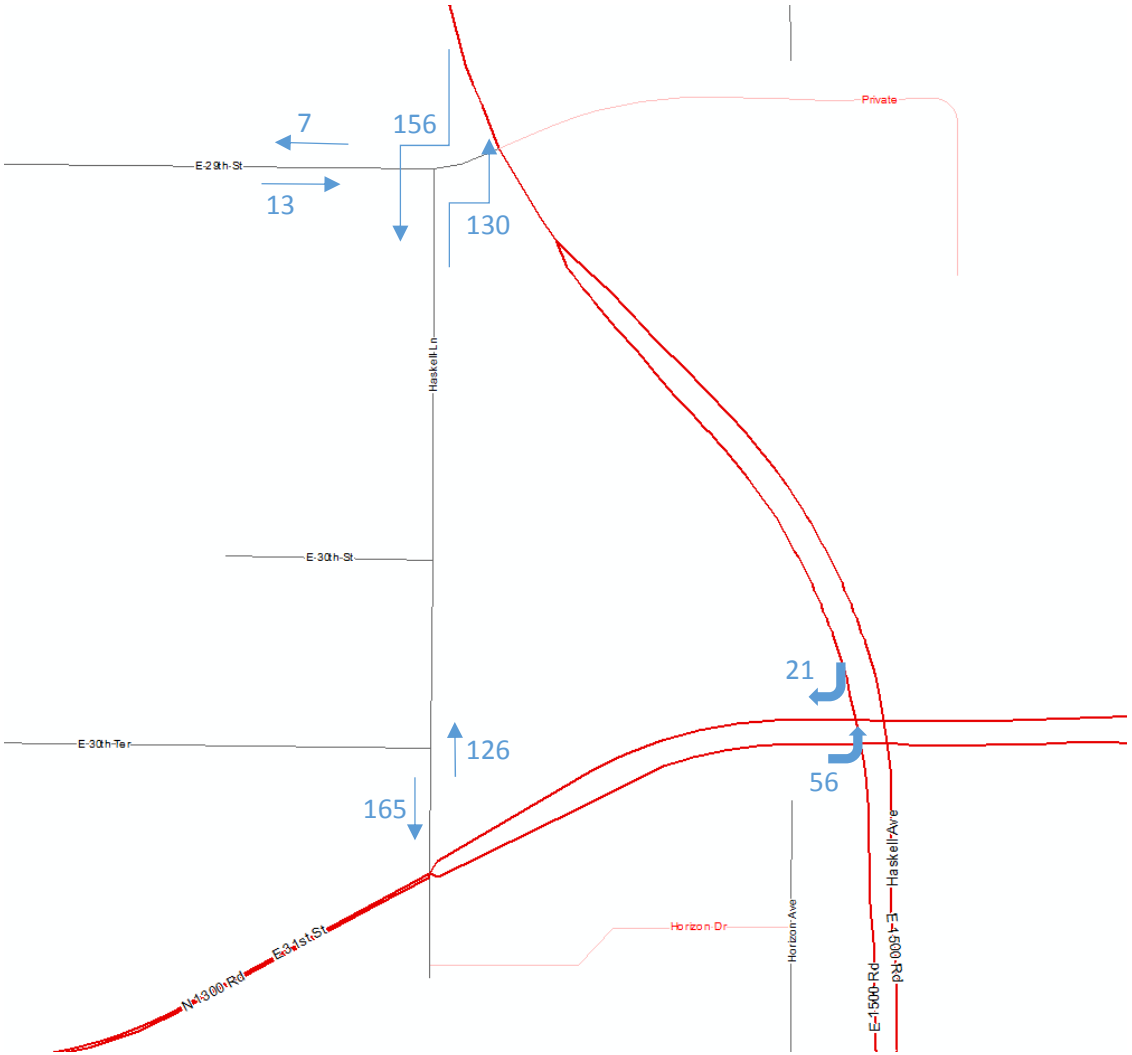
The shared use path that will connect the Burroughs Creek Trail and the SLT shared use path is scheduled to be constructed in 2018. This path will have a crossing at Haskell Lane on the south side of 29th Street.

A rezoning request has been submitted for a large portion of this area. This rezoning and redevelopment may incorporate a realignment of Haskell Lane.

Attachments

Dec 2017 Traffic Counts
October 2016 Traffic Safety Commission minutes

Traffic Data for 29th Street and Haskell Lane



Taken 12/14/17 from 1700-1800

Commissioner Crawford: I would just like to mention when you have a street with no parking, you may have more speeding.

Commissioner Koprince: This request may exacerbate the speeding, but, help the visibility problem; I would recommend approving the request if it is the will of the neighborhood.

MOTION BY COMMISSIONER ZIEGELMEYER, SECOND BY COMMISSIONER DEVLIN, TO RECOMMEND ESTABLISHING NO PARKING 8AM-5PM MON-FRI ALONG BOTH SIDES OF ST. ANDREWS DRIVE FROM BOB BILLINGS PARKWAY TO A POINT 790 FEET SOUTH OF THE CENTERLINE OF SEMINOLE DRIVE; THE MOTION CARRIED, 7-0-1.

ITEM NO. 5:

Consider request to CLOSE Haskell Lane at 29th Street.

Woosley reviewed the information provided in the staff report and noted receipt of additional correspondence supporting the request.

Public Comment:

Michael Almon, 1311 Prairie Avenue: This year, the City Commission, decided to build a connection of the "Lawrence Loop" along 29th Street, to connect the south end of the Burroughs Creek Trail with the South Lawrence Trafficway Shared-Use Path; the trouble is where the Lawrence Loop crosses Haskell Lane; that is why we proposed that the north end of Haskell Lane be permanently closed for the safety of bicyclists, when the bicycle track is completed; businesses will still be able to enter and exit the area from the arterial, 31st Street; we feel it is a bicycle and pedestrian safety issue.

Wesley Smith, 900 Massachusetts Street, Suite 500: attorney representing Kevin & Lisa Fredrickson, owners of Eagle Trailer Company, 920 E. 30th Street: They are very much against any closure of Haskell Lane; the traffic will decrease once the South Lawrence Trafficway is opened; it is premature to use a traffic count before the SLT opens; Capital City Oil is used by all the County vehicles; the Trail came after the design of this area was approved.

Bob Schumm, 1720 St. Andrews Drive: As a bicycle enthusiast, I don't know what the right solution is, one has been presented, but, there may be another one, so, my request would simply be to look at all the alternatives and try to come up with something that works; this intersection is cause for concern and needs to be looked at and handled properly; I don't know what the solutions is, but, you're going to see a lot more bicycle traffic as soon as it opens up.

Scott Zaremba, 718 E. 1300 Road: Putting all the traffic down to the south makes it extremely dangerous to get in and out of there; we are working on developing this entire area, which will change all the access points and have safer interactions; all I ask is that we table this for now, until we're able to develop this area.

Commission Discussion:

Commissioner Harrod: I would like to hear from the County as to how this closure would affect their operations.

Commissioner Ziegelmeyer: I would like to hear from Emergency Services as to how this closure would affect their operations.

Commissioner Storm asked when the Trail would be constructed; Almon advised that it should be this fall.

Commissioner Devlin: I'm inclined to believe that until we hear from the other businesses and until we get a good, solid indication of how this is going to impact our emergency personnel, I'm inclined to believe that we should table this until we have a better idea from the developers and we get an idea from our 911 response personnel.

Commissioner Koprince: I think closing a road is a pretty drastic measure; I don't think we have enough facts at this time; I agree that this is premature.

Commissioner Storm: I think when everything's opened up, people will learn the right way of doing things; I think traffic will drastically change in this area and we really have to see what will happen; I think we should wait and see how things change.

MOTION BY COMMISSIONER DEVLIN, SECOND BY COMMISSIONER CRAWFORD, TO TABLE THE REQUEST FOR 6 MONTHS; THE MOTION CARRIED, 8-0.

ITEM NO. 6:

Public Comment.

No Public Comment.

Sustainability Action Network
Local Solutions for Transition to a Sustainable Economy
P.O. Box 1064, Lawrence KS 66044
a Kansas 501(C)(3) not-for-profit

Traffic Safety Commission
C/O David Woosley
Lawrence City Hall
6 East 6th St.
Lawrence KS 66044

30 August 2016

re: closure of north end of Haskell Ln. at East 29th St.

Hello:
At the prompting of the City Commission on 7 June 2016, we are requesting the Traffic Safety Commission accept an agenda item to consider permanently closing the north end of Haskell Lane at East 29th St.

Sustainability Action has been engaged at times with design considerations for segments of the Lawrence Loop, the 22.4 mile bicycle-pedestrian circumferential trail around the City of Lawrence. About 75% of the Loop is complete, but one of the gaps is along East 29th St. When completed, this 3/16 mile segment will connect the south terminus of the Burroughs Creek Trail with the northern extent of the SLT shared use path.

On 7 June of this year, the City Commission approved moving forward with design and construction of the 29th St. segment, in the form of a bicycle track along the south side of 29th St. This will provide a facility for bicyclists that is safely removed from commercial traffic along 29th St. However, where the bicycle track will cross the north end of Haskell Ln., cyclists will encounter very dangerous bicycle-auto conflicts at this intersection. Haskell Lane is being dangerously and unnecessarily used by cut-through traffic traveling south, and then west onto 31st Street.

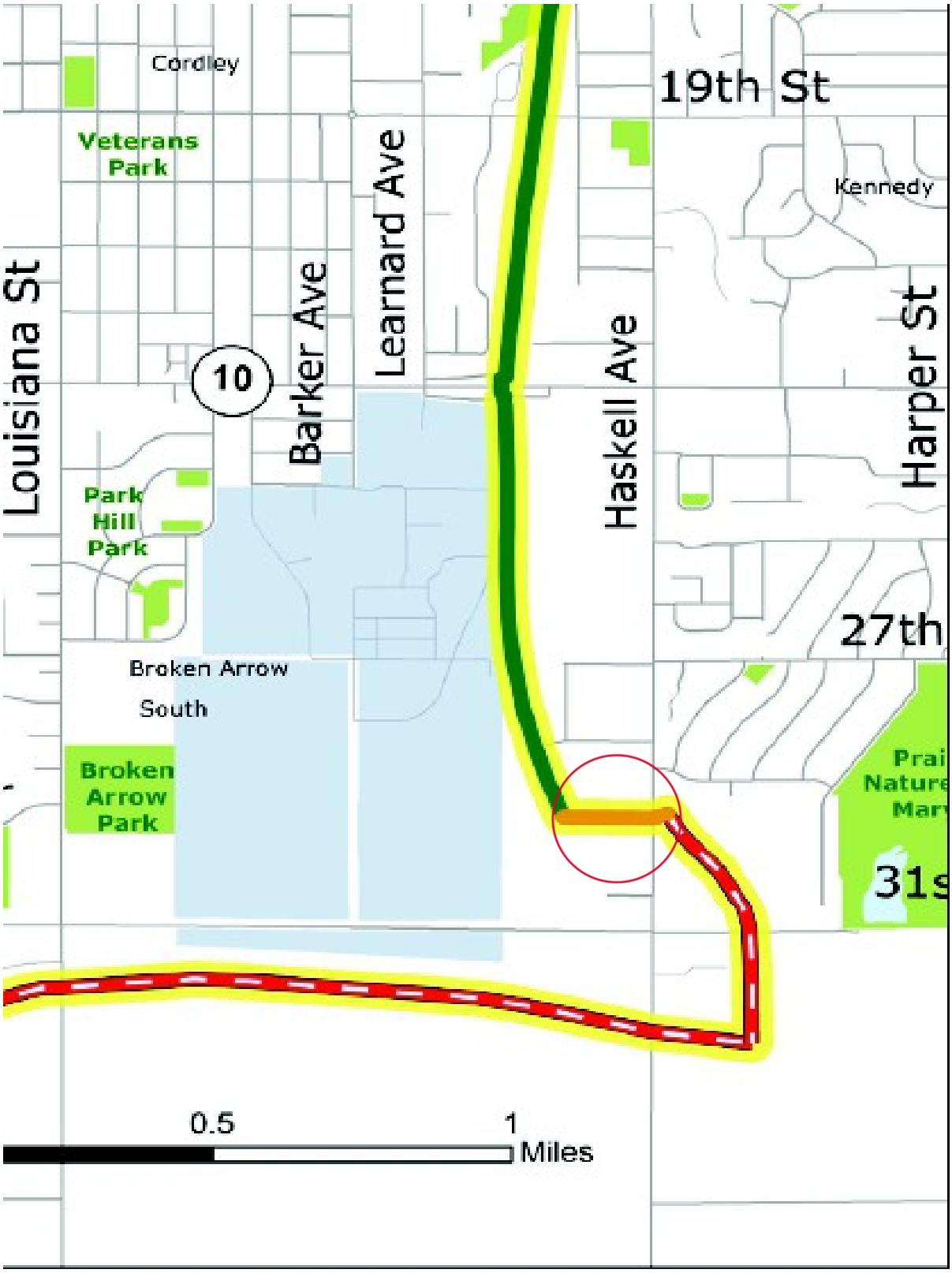
The large majority of southbound vehicles on Haskell Ave. who intend to turn west onto 31st St. don't take the new Haskell Ave. Instead they make a dangerous S-curve maneuver at 29th St., consisting of a rapid right turn onto 29th St., followed immediately by a rapid left turn onto Haskell Ln. Then at 31st and Haskell Ln., they turn right onto westbound 31st St. The same cut-through route is used by eastbound 31st St. drivers intending to go north on Haskell Ave.

If the north end of Haskell Ln. is closed, it will not harm local businesses. The few daily trips from the three businesses on Haskell Ln. can more appropriately be handled at its south intersection with 31st St. Likewise, the four businesses on East 29th St. could enter and exit via 29th St. at the new Haskell Ave., just as they do now. Please see attached maps, photos, and traffic counts for these intersections.

Michael Almon

Lawrence Loop Trail - S.E. portion

East 29th Street segment to connect
the Burroughs Creek Trail and the SLT Shared Use Path

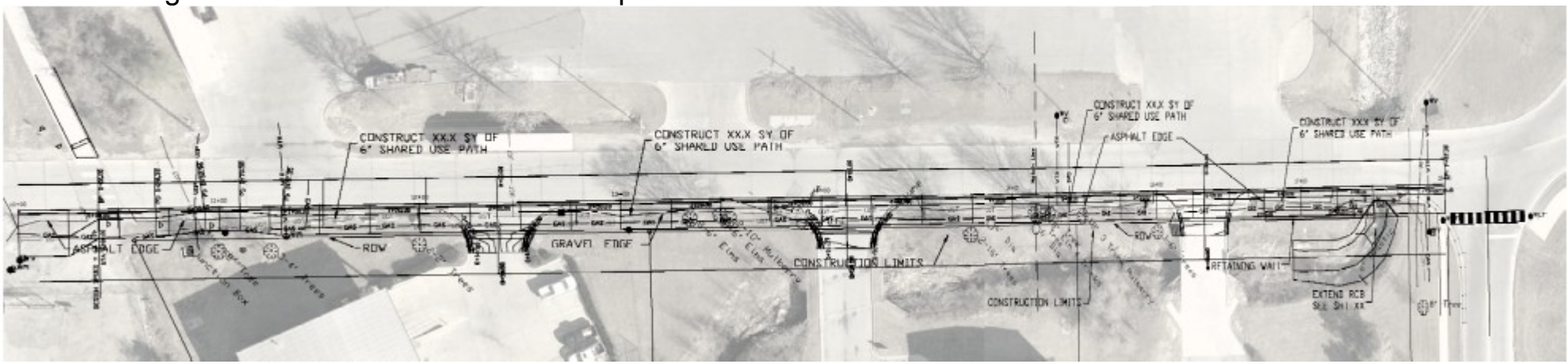


Safety Reasons for Closing the North End of Haskell Lane

Rapid S-curve maneuver from Haskell Ave. to 29th St. to Haskell Ln. (looking east)

<u>29th Street Bicycle Track</u>
from Burroughs Creek Trail to SLT shared use path

awkward nexus of Haskell Ave. and north end of Haskell Lane



credit: Engineering Division, Lawrence Public Works Dept.

Comparative Motor Vehicle Traffic Counts
Haskell Avenue vs Haskell Lane, at 29th St. and at 31st St.

When KDOT designed the South Lawrence Trafficway in the 1990's, they had yet to incorporate roundabouts into their tool box. If the project were to be designed today, they would have placed a roundabout at the very awkward and problematic nexus of the two intersections of Haskell Ave. at East 29th St., and Haskell Ln. at East 29th St. These two intersections are only 130 feet apart, and not functioning as intended.

A large majority of drivers are making inappropriate use of Haskell Ln. that has old pavement with a PCI of 75, instead of using the new Haskell Ave. that has new full-depth concrete pavement with a PCI of 100. The reason is because drivers perceive Haskell Ln. as a short-cut around the signal-controlled intersection at 31st and Haskell Ave.

86% of southbound drivers on Haskell Ave. intending to go west on 31st St. make a dangerous S-curve maneuver at 29th St., consisting of a rapid right turn onto 29th St., followed immediately by a rapid left turn onto Haskell Ln. Then at 31st and Haskell Ln., they turn right onto westbound 31st St. Only 14% of drivers stay on Haskell Ave. to turn west at 31st St. This phenomenon is also true of eastbound drivers on 31st St. intending to go north on Haskell Ave. 69% of drivers cut up Haskell Ln. instead of turning left at Haskell Ave.

The City Traffic Engineer has taken traffic counts at these four intersections, demonstrating the aforementioned driving patterns. They are as follows (see map below):

<u>Southbound Haskell Ave. going west on 31st St.</u>

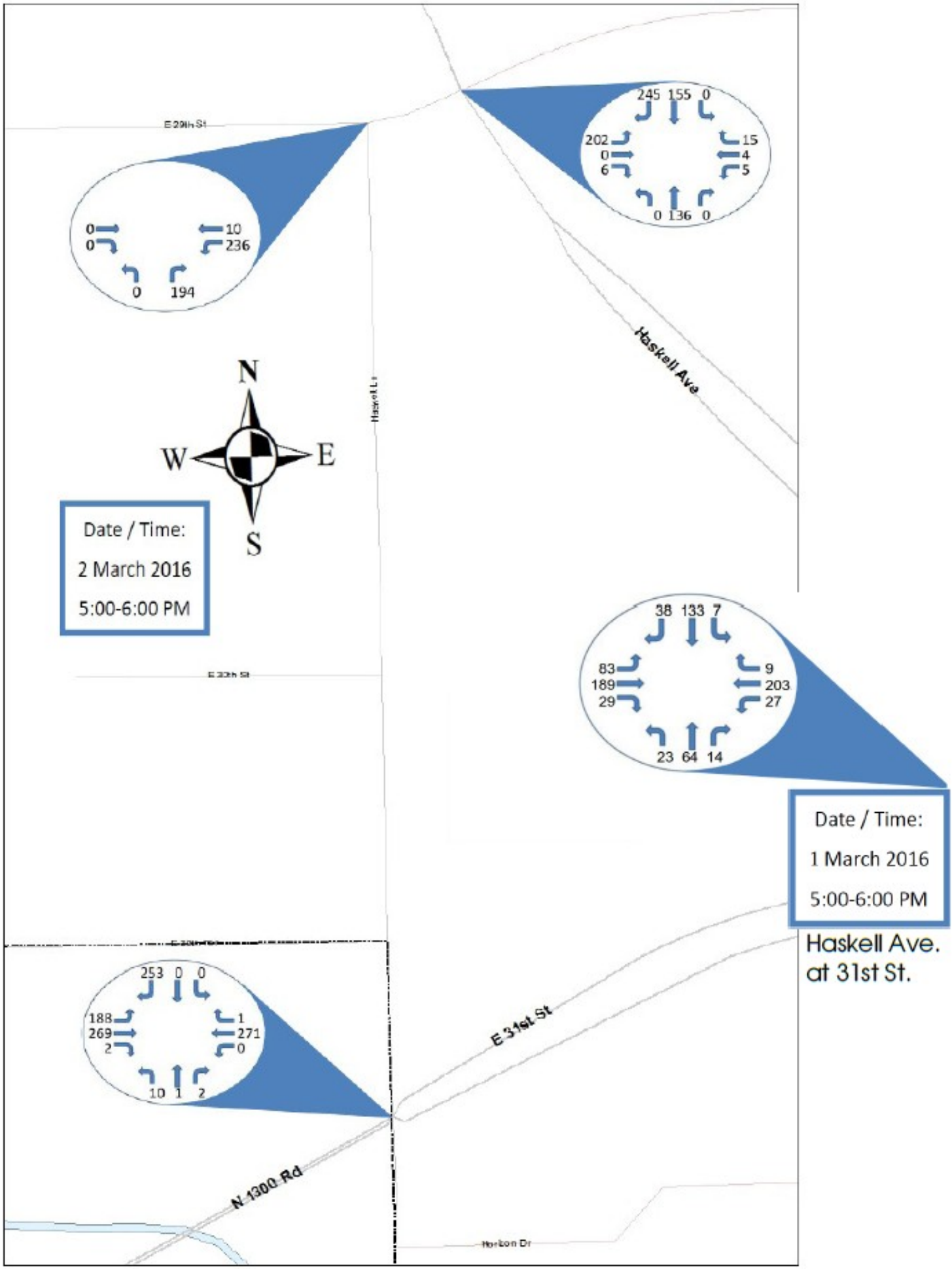
Total southbound	400	100%	
Right turn onto 29th St.	245	61.25%	(155 or 37.5% continue south)
Left turn south onto Haskell Ln.	**236**	59%	
Right turn onto 31st St.	253	63.25%	(difference is locally generated)
Haskell Ave. continuing south	155	37.5%	
Right turn onto 31st St.	**38**	9.5%	(140 or 35% continue south or go right)

Right onto 31st: from Haskell Ln. **236** + Haskell Ave. **38** = **274** turning west onto 31st St.
Right onto 31st: from Haskell Ln. **86%** + Haskell Ave. **14%** = 100% of turning traffic

<u>Eastbound 31st St. going north on Haskell Ave.</u>

Total eastbound	459	100%
Left turn north onto Haskell Ln.	**188**	40.96%
continuing east on 31st St.	269	59.61%
Right turn onto Haskell Ln.	2	0.44%
Left turn north onto Haskell Ave.	**83**	18.08%
continuing east on 31st St.	189	41.18%
Right turn onto Haskell Ave.	29	6.32%

Left turn from 31st St.: onto Haskell Ln. **188** + Haskell Ave. **83** = **271** turning north
Left turn from 31st St.: onto Haskell Ln. **69%** + Haskell Ave. **31%** = 100% of turning traffic


E 29th St
Haskell Ave
Haskell Ln
E 33rd St
E 31st St
N 1300 Rd
Horizon Dr
N
W
E
S
0 0 10 236 0 194
245 155 0 202 0 6 15 4 5 0 136 0
Date / Time:
2 March 2016
5:00-6:00 PM
38 133 7 83 189 29 9 203 27 23 64 14
Date / Time:
1 March 2016
5:00-6:00 PM
Haskell Ave.
at 31st St.
253 0 0 188 269 2 1 271 0 10 1 2

Transportation Commission Complete Streets Subcommittee Minutes

December 14, 2017 at 4:00 p.m. at Wheatfield's

Attendees: Michele Dillon, Steve Evans, Kathryn Schartz, Amanda Sahin

Items discussed:

1. Steve discussed the document sent out on Google Drive
    a. Use as a brainstorming tool
    b. Checklist development –
    c. Need to develop a tool specific to Lawrence
    d. Will divide up 10 items for review
    e. Steve
        i. Vision (1)
        ii. Design (6)
        iii. Land use (7)
        iv. Commitment (3)
    f. Kathryn
        i. Performance measures (8)
        ii. Clear, accountable expectations (4)
        iii. Implementation steps (10)
    g. Michelle
        i. Diverse users (2)
        ii. Jurisdiction (5)
        iii. Project selection (9)
2. Look at Topeka, Orlando Complete Streets Policy

Transportation Commission Complete Streets Subcommittee Minutes

January 4, 2018 at 4:00 p.m. at Wheatfield's

Attendees: Michele Dillon, Steve Evans, Kathryn Schartz, Amanda Sahin, David Cronin

Items discussed:

1. The Google Drive document was reviewed with discussion about how to categorize items from other Complete Streets policies
2. Amanda reviewed National Complete Streets criteria which we all agreed was helpful in deciding how to define our criteria
3. Members agreed to continue working on the document until the next meeting