

AGENDA
REGULAR MEETING OF THE BIRMINGHAM MULTI-MODAL BOARD
THURSDAY AUGUST 4TH, 2022
151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI*
*******6:00 pm*******

The highly transmissible COVID-19 Delta variant is spreading throughout the nation at an alarming rate. As a result, the CDC is recommending that vaccinated and unvaccinated personnel wear a facemask indoors while in public if you live or work in a substantial or high transmission area. Oakland County is currently classified as a substantial transmission area. The City has reinstated mask requirements for all employees while indoors. The mask requirement also applies to all board and commission members as well as the public attending public meetings.

- A. Roll Call
- B. Introductions & Chairpersons Comments
- C. Review of the Agenda
- D. Approval of Minutes, Meeting of **July 7th, 2022**
- E. New Business
 - 1. Brown Street Review**
- F. Unfinished Business
 - 1. Brown & Peabody Intersection Design**
 - 2. Multi-Modal Transportation Plan Updates**
 - i. Sidewalk Network**
 - ii. Regional Connectivity**
- G. Meeting Open to the Public for items not on the Agenda
- H. Miscellaneous Communications
 - 1. Oak Street Sidewalk, Lakeside Road to Greenwood Road**
- I. Next Meeting – **September 1st, 2022**
- J. Adjournment

Please note that board meetings will be conducted in person once again. Members of the public can attend in person at Birmingham City Hall or may attend virtually at <https://us06web.zoom.us/j/88295194746> or dial: **929 205 6099 US Toll-free, Meeting ID: 824 7795 4435**

DRAFT

City Of Birmingham Multi-Modal Transportation Board Thursday, July 7, 2022

151 Martin Street, City Commission Room 205, Birmingham, MI

Minutes of the regular meeting of the City of Birmingham Multi-Modal Transportation Board held Thursday, July 7, 2022. Chair Doug White convened the meeting at 6:00 p.m.

A. Rollcall

Present: Chair Doug White; Board Members David Hocker, Anthony Long, Joe Zane; Alternate Board Member Mark Doolittle; Student Representative Ben Rosenfield

Absent: Board Member Michael St. Germain, Tom Peard, Victoria Policicchio; Alternate Board Member Amanda Fishburn; Student Representative Isabela Betanzos

Administration:

Brooks Cowan, Senior Planner
Laura Eichenhorn, City Transcriptionist
Ryan Kearney, Lieutenant
Jim Surhigh, Consulting City Engineer

F&V: Julie Kroll

MKSK: Brad Strader

B. Approval of MMTB Minutes of June 2, 2022

Motion by Mr. Zane

Seconded by Mr. Hocker to approve the MMTB Minutes of June 2, 2022 as submitted.

Motion carried, 5-0.

VOICE VOTE

Yeas: White, Hocker, Long, Zane, Doolittle

Nays: None

C. Introductions & Chair Comments

D. Review of the Agenda

E. New Business

1. Brown & Peabody Intersection Design

SP Cowan introduced the item. Mr. Strader and Ms. Kroll presented the item. Both answered informational questions from the Board.

Board comments indicated that the general consensus favored the mid-block crossing by the

Peabody parking structure.

Mr. Zane said he was interested in the consequences of moving the stop sign back further from the intersection.

Mr. Strader said he and Ms. Kroll would return with more information at the August 2022 meeting based on Board inquiries, including:

- Should one of the on-street spaces on Brown be removed;
- Should westbound left turns into Jax be either discouraged or prevented (including potentially installing a porkchop island);
- Should westbound left turns into Jax be better accommodated in some way; and/or,
- Whether the stop sign on Brown could be moved further back, and what the consequences would be.

Lt. Kearney said eliminating the left turn into Jax may be confusing for customers at first, but would not likely pose a long-term issue.

In reply to Mr. Strader, Lt. Kearney said he would prefer that pedestrians be directed to one crosswalk given the number of different traffic and pedestrians variables in the area.

Mr. Long explained his support for the mid-block crossing by noting that one crosswalk would require pedestrians coming from the parking structure to double back to reach the fitness center.

The Chair recommended that both options be presented to the Board at the August 2022 meeting.

With one eastbound lane on Brown instead of two, Mr. Strader noted the mid-block crossing was also less likely to pose an issue.

2. Latham & Southlawn – All Way Stop Analysis

CCE Surhigh introduced the item. Ms. Kroll presented the item.

There were no questions or comments from the Board.

Motion by Mr. Zane

Seconded by Mr. Long to recommend to the City Commission that the intersection of Latham and Southlawn be changed to an all-way stop condition from its current condition of a single stop required for westbound Southlawn.

Motion carried, 5-0.

VOICE VOTE

Yeas: White, Hocker, Long, Zane, Doolittle

Nays: None

3. Multi-Modal Transportation Plan – Sidewalk Gaps

SP Cowan and CCE Surhigh presented the item and answered informational questions from the

Board.

Mr. Zane supported the proposal to prioritize areas with no sidewalks over areas with small sidewalk gaps. He said adding sidewalks to the area around Northlawn would be valuable.

In reply to a question from Mr. Zane, SP Cowan said he would clarify whether there is a difference between the neighborhood connector route and the loop.

Mr. Hocker said it would be helpful to add the loop to the map.

SP Cowan said he would return with a draft update.

F. Unfinished Business


G. Meeting Open to the Public for Items not on the Agenda

H. Miscellaneous Communications

I. Adjournment

No further business being evident, the Board adjourned at 7:16 p.m.

Brooks Cowan, Senior Planner

A handwritten signature in black ink, appearing to read 'Laura Eichenhorn', with a stylized, flowing script.

Laura Eichenhorn, City Transcriptionist



MEMORANDUM

Planning Division

DATE: July 29th, 2022

TO: Multi-Modal Transportation Board

FROM: Scott Grewe, Operations Commander
Jim Surhigh, Engineering Department
Brooks Cowan, Planning Department

SUBJECT: Brown Street Review

INTRODUCTION:

The City has received complaints regarding the intersection of Brown and Chester regarding the safety of the intersection for both pedestrians and motorists. One resident on W Brown reports high speed cars/ trucks etc. traveling on Brown Street and that it continues to be a very difficult street to cross at Chester and other intersections that Cross Brown. The resident has requested the evaluation on Brown Street to consider installation of a traffic signal or a four way stop.

BACKGROUND:

A similar requested was made by a resident in April 2020 to evaluate the corridor. As part of that evaluation mitigation measures were installed along the corridor, including pedestrian gateway treatments, "Yield to Pedestrians" signs, at the Bates, Chester and Henrietta intersection. "Cross-traffic Does Not Stop" signs were added under the STOP signs on these intersection approaches at Brown Street. Additionally there is a flashing beacon above the stop sign on Bates at Brown. This is the only traffic control at this location. There is a traffic signal at Pierce and at Southfield, which provides a controlled pedestrian crossing and traffic metering along the corridor.

F&V and MKSK were contacted and asked to update the previous study performed at the Chester, Bates and Henrietta intersections on Brown Street to determine if additional mitigation measures are warranted and recommended with the existing traffic volumes.

SUMMARY:

The report provided by F&V indicates that these intersections do not meet the requirements in the Michigan Manual on Uniform Traffic Control Devices. Therefore, a multiway stop is not warranted and other options have been reviewed.

ATTACHMENTS:

1. F&V report and recommendations.
2. Speed Data and Traffic counts.

SUGGESTED RECOMMENDATION:

Motion to recommend to City Commission that the City stripe eastbound Brown Street to delineate the existing parking lane with solid white line on eastbound Brown Street at Chester Street, to add a "Turning Vehicles Yield to Pedestrians" sign on the southbound Chester St. approach, and to add "Pedestrian Crossing Ahead" signs in advance of the Chester St. and Henrietta Street intersection.

MEMO

VIA EMAIL

To: Lt. Ryan Kearney
Birmingham Police Department

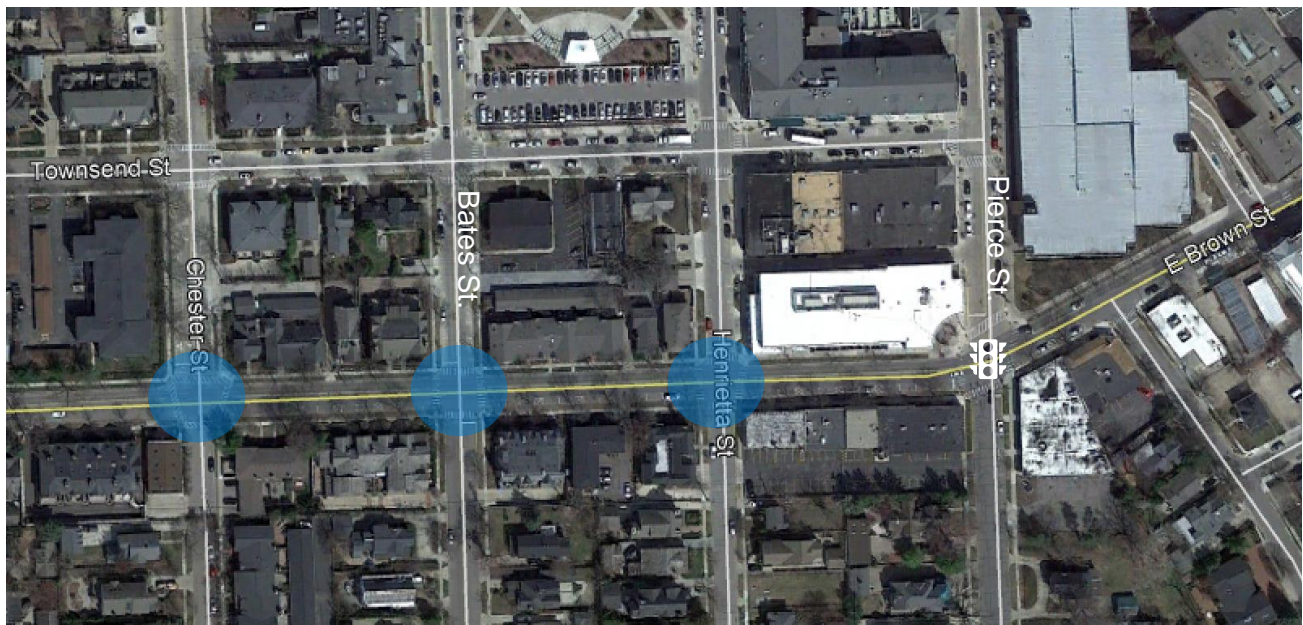
From: Julie M. Kroll, PE, PTOE
Fleis & VandenBrink Engineering

Date: July 29, 2022

Re: Brown Street Intersection Operations and Safety Review

Fleis & VandenBrink (F&V) staff is pleased to present this memorandum to the City Birmingham regarding the intersection traffic control measures at the following intersections:

- Brown St. & Henrietta St.
- Brown St. & Bates St.
- Brown St. & Chester St.



F&V previously performed an evaluation of these intersections in May 2020 at the request from the Birmingham Police Department pursuant to the receipt of a request from the neighborhood to add all-way stop control at intersections along the corridor. The results of the May 2020 was that neither multi-way stop control or traffic signals were recommended. The purpose of this study is to update the analysis previously performed to determine if additional traffic control measures are currently recommended and provide recommendations for additional mitigation measures, as necessary.

27725 Stansbury Boulevard, Suite 195
Farmington Hills, MI 48334
P: 248.536.0080
F: 248.536.0079
www.fveng.com

The guidance regarding regulatory traffic measures is provided in the *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)* Sections 2B.04 and 2B.07. Additional information is provided in the American Association of State Highway and Transportation Officials (AASHTO) *Geometric Design of Highway and Streets (Green Book)*. F&V referenced the *MMUTCD* and additional documents to evaluate the existing intersection conditions and develop a recommendation. The results of the analysis and the recommendations are included herein.

INTERSECTION CONTROL ANALYSIS

All three study intersections are four-leg intersection with stop-control on minor approaches (i.e. Bates St., Chester St., and Henrietta St.). The City has received requests for the addition of STOP control on the Brown Street approaches, to provide ALL-WAY stop control at Brown St & Bates St intersection. The City also requested F&V to examine the two other intersections to east and west of Bates St. Section 2B.07 of the *MMUTCD* provides the following criterion to evaluate for the consideration of multi-way stop control at an intersection.

1. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
2. *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
3. *Minimum volumes:*
 - 1 *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 - 2 *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
 - 3 *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*

Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

A. TRAFFIC SIGNAL

Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Criteria	Brown St. & Chester St.	Brown St. & Bates St.	Brown St. & Henrietta St
A. Traffic Signal	Not Met	Not Met	Not Met

A traffic signal is not warrant or recommended at any of the study intersections.

B. CRASH HISTORY

Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

Criteria	Brown St. & Chester St.	Brown St. & Bates St.	Brown St. & Henrietta St
B. Crash History	Not Met	Not Met	Not Met

A crash analysis was performed for the study intersections using the most recent 3 years (January 2019 – December 2021) of available data. The results of the analysis are presented in following table which show that there is no existing crash pattern (5 or more crashes in 12 months) that would indicate the need to install stop signs on any of these intersections, therefore this criteria is not met.

CRASH ANALYSIS SUMMARY

Intersection	Date	Crash Type	Injury	Pedestrian/ Bicyclist Involved?	Direction	
					Brown	Minor St.
Brown & Bates	10/9/2019	Angle	Possible injury (C)	No	WB	NB
	2/16/2020	Angle	No injury (O)	No	WB	SB
	3/8/2020	Single Veh.	No injury (O)	Yes	WB	NB
	11/10/2020	Sideswipe	No injury (O)	No	WB	NB
Brown & Chester	6/28/2020	Single Veh.	Possible injury (C)	Yes	n/a	SB
	8/13/2020	Sideswipe	No injury (O)	No	EB/WB	n/a
	10/21/2020	Angle	No injury (O)	No	WB	SB

C. TRAFFIC VOLUMES

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour (vph), for any 8 hours of an average day.

The average hourly traffic volume data on Brown St. exceeds 300 vph for eight (8) hours of the day.

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour;

The average hourly traffic volume data on minor approaches (i.e. Bates St., Henrietta St, and Chester St.) is below 200 vph for the same eight (8) hours of the day.

3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

Existing speed data was provided by the Birmingham Police Department shows the 85th percentile speed for both eastbound and westbound Brown Street is currently 27 mph which is below the 40 mph threshold; therefore, the 70% volume evaluation is not applicable. It's worth noting that the 85th percentile speed was 29 mph prior to the implementation of the pedestrian gateway treatments along the corridor, which is a reduction of 2 mph (9% speed reduction).

Criteria	Brown St. & Chester St.	Brown St. & Bates St.	Brown St. & Henrietta St
C. Traffic Volumes (1)	Met	Met	Met
C. Traffic Volumes (2)	Not Met	Not Met	Not Met
C. Traffic Volumes (3)	n/a	n/a	n/a
Overall	Not Met	Not Met	Not Met

D. 80% CRITERIA

Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are **all** satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition. **Not met.**

Criterion B, C.1 and C.2 were evaluated at 80% of the minimum values and criterion C.2 none of the criterion are met based on these reduced thresholds.

SUMMARY

The results of the analysis are summarized below.

Multi-Way Stop Sign Criterion (MMUTCD Section 2B.07)		Brown St. & Chester St.	Brown St. & Bates St.	Brown St. & Henrietta St
A. Signal	<i>Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.</i>	No	No	No
B. Crashes	<i>Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.</i>	No	No	No
C. Traffic Volumes	<ol style="list-style-type: none"> <i>The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, AND</i> <i>The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but</i> <i>If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.</i> 	No	No	No
		No	No	No
D. 80% Criteria	<i>Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.</i>	No	No	No
Multi-Way Stop Control Recommended		No	No	No

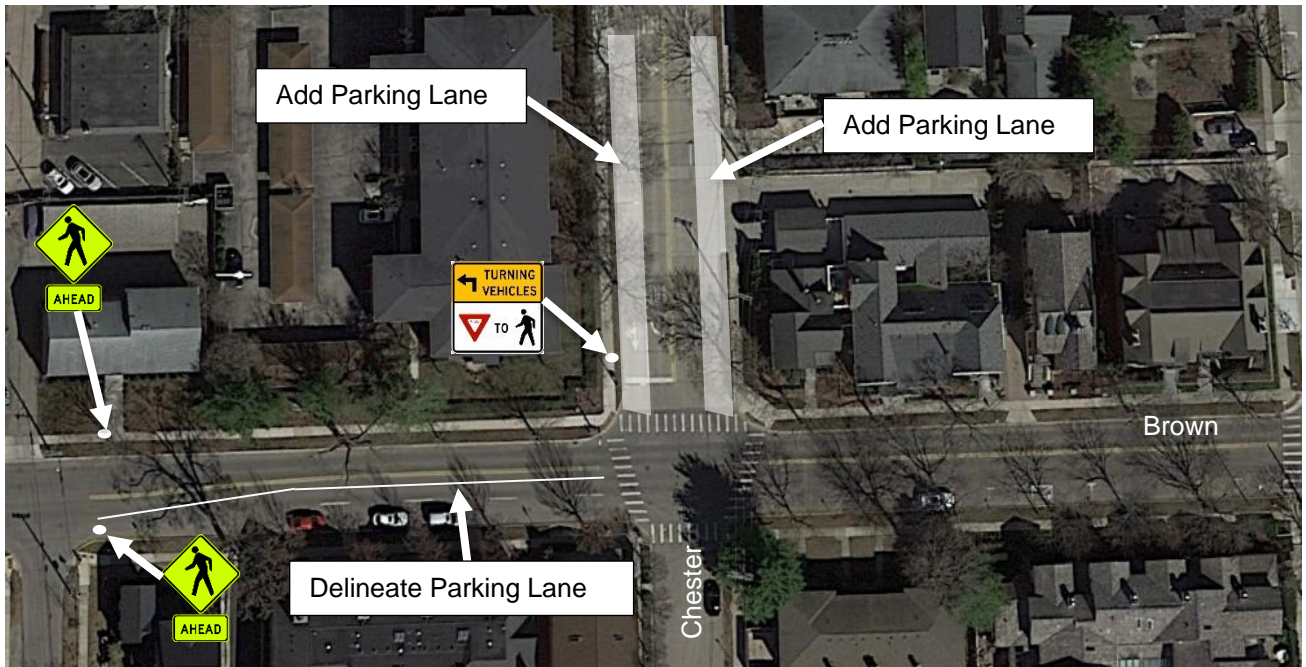
RECOMMENDATIONS

Based on the results of this study, Traffic Signals or Multi-Way Stop Control is **not recommended** at the study intersections. However, based on the crash history at the study intersections, other mitigation measures may be considered. As part of a study performed on this corridor in 2020 the City installed pedestrian gateway treatments along the corridor which have been effective measure to increase awareness along the corridor. The mitigation measures also reduced the 85th percentile speeds from 29 mph to 27 mph, with average speed on the corridor of 22 mph.

Additional mitigation measures may be considered to improve the pedestrian visibility at the study intersections:

BROWN STREET & CHESTER STREET

1. Delineate the existing parking lane with solid white line (currently dashed) on eastbound Brown Street at Chester Street.
2. Add a "Turning Vehicles Yield to Pedestrians" sign on the southbound Chester St. approach.
3. Add "Pedestrian Crossing Ahead" signs in advance of the Chester St. intersection. These signs could also be equipped with flashing beacons to increase awareness.
4. Delineate parking lanes on the block of Chester St. north of Brown Street. This will narrow the roadway to one lane, reducing the pedestrian / vehicle conflicts at this intersection.



BROWN STREET & CHESTER STREET

1. Add "Pedestrian Crossing Ahead" sign in advance of the Henrietta St. intersection. This sign could also be equipped with flashing beacons to increase awareness.



If you have any questions or concerns regarding this engineering analysis, please contact our office.



MEMORANDUM

(Police Department)

DATE: July 29th, 2022

TO: Multi-Modal Transportation Board

FROM: Scott Grewe, Operations Commander
Jim Surhigh, Engineering Department
Brooks Cowan, Planning Department

SUBJECT: Brown Street, S. Old Woodward to Woodward Ave ([Updates in Blue](#))

INTRODUCTION:

At the June 27, 2022, City Commission meeting, the Commission agreed with the Multi-Modal Transportation Board (MMTB) and passed a resolution to reduce eastbound Brown from Peabody to Woodward to one lane. The MMTB is now being asked to review design options at this location.

BACKGROUND:

In early 2020, the police department received a complaint regarding the operation of the intersection at Brown and Peabody as it relates to pedestrian safety. As a result, the police department contact the Transportation Improvement Association (TIA) to conduct a review of the intersection. Due to the Covid-19 pandemic, which caused a drastic drop in the volume of traffic, the study was delayed. The review was completed in February of 2021 and a report was submitted to the City from TIA with multiple options at this location. This report was shared with the Engineering Department and the City's consultants, Fleis and Vandebrink and MKSK.

Additionally, there have been two fatal accidents on Woodward at or near Brown during this same time period involving pedestrians.

1. On August 8, 2020 at 0150 hours (PD report #20-13309) a person walking across the northbound lanes of Woodward was struck by a vehicle and passed away. The person was walking on an angle near the gas station lot, in a northwest direction, not in a crosswalk, when struck.
2. On September 12, 2021 at 2113 hours (PD report #14244) a person walking eastbound from Brown, in the crosswalk, crossing the southbound lanes of Woodward was stuck by a vehicle and passed away. The vehicle had a green light.

In both incidents, the pedestrians were found at fault. However, the safety of the crossing at this location became a primary concern. Staff and our consultants have met numerous times

reviewing options at this location. Meetings have also been held with MDOT as Woodward is under their control, and any changes to Woodward requires their approval.

The City requested the addition of crosswalks on the south side of the intersection at both Brown and Woodward and Woodward and Forest. MDOT reviewed the request and advised they would not support the change unless eastbound Brown was reduced to one lane to reduce the turning conflict between vehicles and pedestrians. At the June 2, 2022 MMTB meeting, the board passed a recommendation to the City Commission to reduce east bound Brown to one lane between Peabody and Woodward. At the June 27, 2022, City Commission meeting the Commission agreed and passed a resolution to reduce this section of roadway to one eastbound lane.

On July 7th, the MMTB began their discussion regarding Brown Street by reviewing issues with the current setup. The Fleis and Vandebrink traffic consultant showed a Brown Street video recording of cars driving over the sidewalk while exiting Jax Karwash and driving against traffic on Brown Street to make a left turn into Jax Karwash. It was also discussed how a number of pedestrians cross in the middle of the street going to and from the Peabody Parking Structure. There was general consensus from the MMTB that the updated plans should address the main safety issues discussed.

MKSK presented multiple concepts for reconfiguring Brown Street. The main difference in the plans reviewed was the provision of a mid-block crossing west of Peabody Street, connecting to the Peabody Parking Structure entrance/exit. MMTB members and staff discussed the pros and cons of providing a mid-block crossing versus using planters to redirect pedestrian to the Peabody intersection. A concern was that pedestrians may just walk over the planters to take the shortest route to and from places such as Powerhouse Gym.

MKSK discussed providing parking along the north side of Brown Street after witnessing cars try to briefly park in the street and grab their orders from Birmingham Roast Coffee. The plans depicted removing planters and installing three parking spaces. The MMTB voiced concerns about queuing onto Woodward Ave as a result of waiting for cars to enter or exit such parking spaces. MKSK said they could reduce the parking to two spaces to make it easier and more expedient to pull in and out of the parking spaces for review at the next meeting.

Redesigning Brown Street to prevent illegal turning movements to and from Jax Karwash was also discussed. The curb cut at Jax Karwash facing Brown Street is meant to be ingress only. The MMTB discussed if Brown Street should be designed to allow access from eastbound and westbound Brown Street. The City's traffic consultants commented that left turn motions into Jax Karwash from westbound Brown Street creates too much backup into the Peabody and Woodward Avenue intersections. It was recommended that Brown Street be designed to allow ingress to Jax Karwash from eastbound only. Doing so would prevent hazardous queuing into intersections.

In regards to vehicles from Jax Karwash driving over the sidewalk and making illegal turns, City staff discussed issues with the tenant's access and circulation as well as requirements of a masonry screenwall between the sidewalk and parking lot to prevent illegal movements. For background on the issue, Jax Karwash appeared before the Planning Board seven times in an attempt to update their site plan between July 2019 and October 2021. Proposing changes to the site plan requires that the entire property be brought up to current Zoning Ordinance standards in order to obtain approval from the Planning Board.

Concerns regarding vehicles driving over the sidewalk and making illegal turning motions was brought up by the Planning Board during every meeting. The applicant, Jax Karwash, did not want to install the required masonry screenwall between the sidewalk and parking area. On December 14th, 2021, Jax Karwash appeared before the Board of Zoning Appeals to request a

variance from providing a screenwall. The variance was denied, therefore Jax Karwash cannot make proposed updates to the building and site operations without providing a parking facility screenwall.

MKSK has provided two updated conceptual designs for Brown Street to address comments discussed at the July 7th MMTB meeting. Both proposals include a new median along Brown Street to prevent vehicles from making a left turn into Jax Karwash. Each design also includes a “half pork chop” ingress point to Jax Karwash to further discourage left turns into the business from Brown Street. The proposed parking spaces in front of Birmingham Roast have been reduced from three down to two, and the sidewalk on the south side of Brown Street has been extended with planters.

The main difference between the two concepts is how to address pedestrians crossing the street from the Peabody Parking Structure. Option A uses planters on the north side of Brown Street and the median to direct pedestrians to the Peabody intersection where there is a crosswalk, while Option B provides a midblock crossing near the Peabody Parking Structure stairway entrance. The MMTB may wish to discuss their preference of options and provide any other additional comments for proposed enhancements.

SAMPLE MOTION LANGUAGE:

Motion to recommend _____ of the proposed Brown Street design to the City Commission for the purpose of enhancing the safety and flow of traffic along Brown Street between S. Old Woodward and Woodward Avenue.

Multi-Modal Transportation
Board Training Session:

Brown – Woodward – Peabody Design Alternates

July 28th, 2022



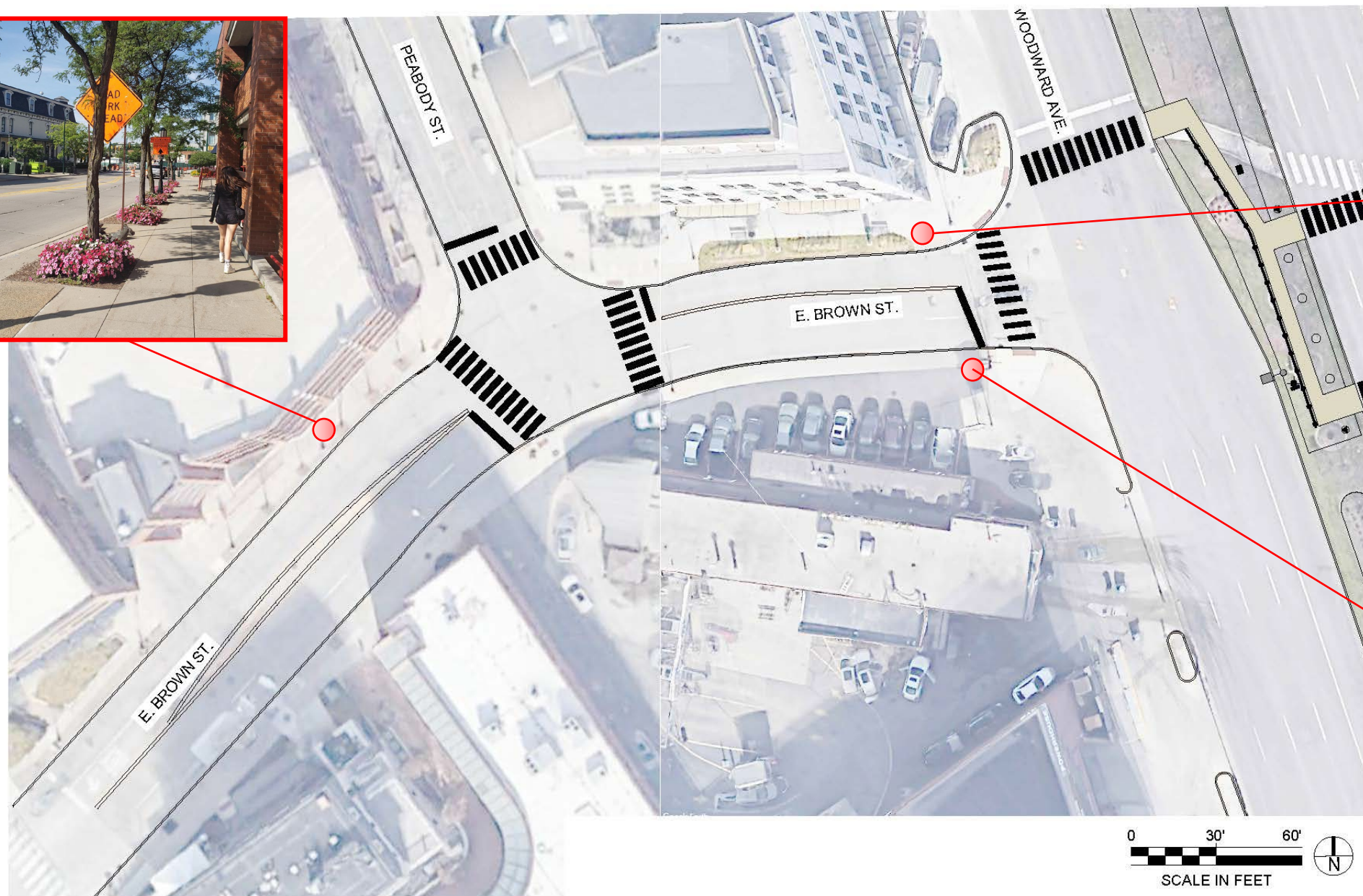
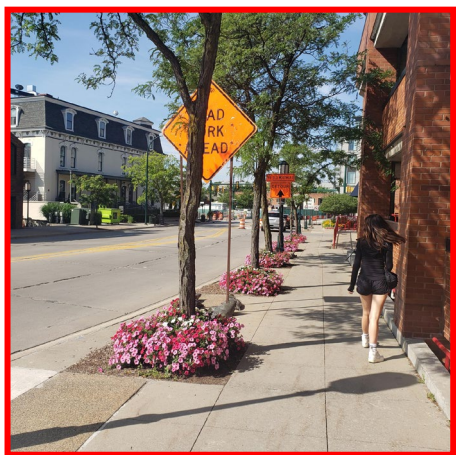
MKSK



Overall Site Map



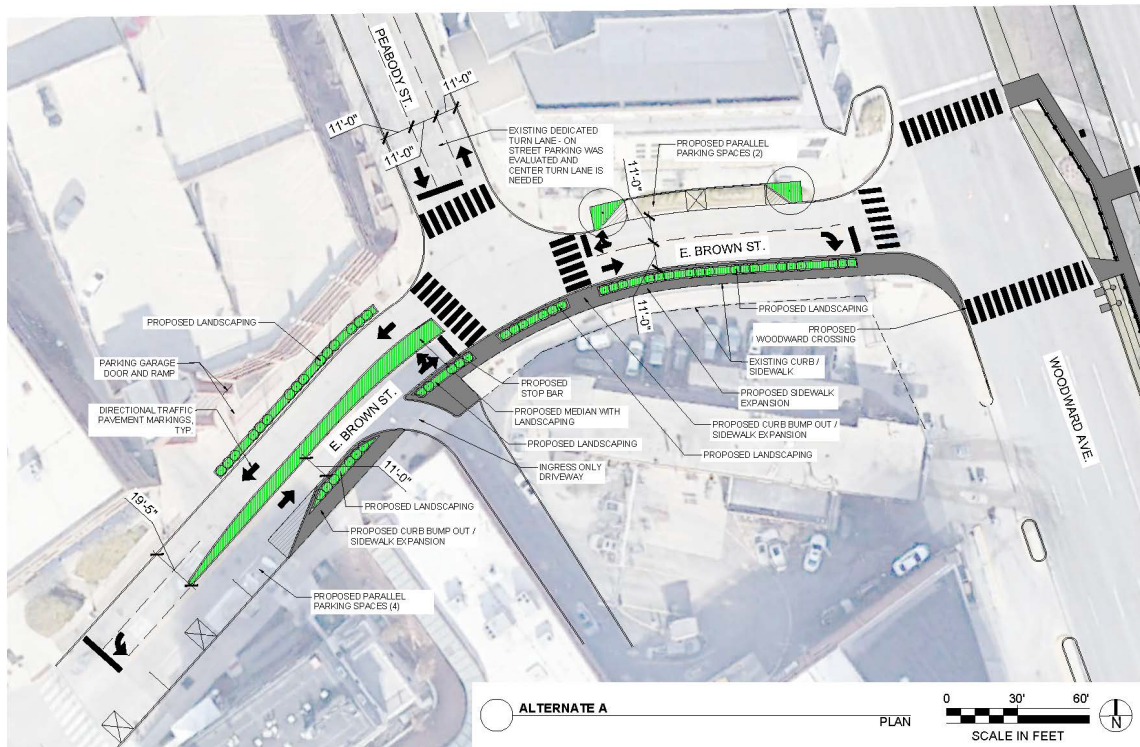
Site Photos



Differences Between Alternates

Alternate A

- Proposed continuous landscaped median stopping at Brown - Peabody intersection

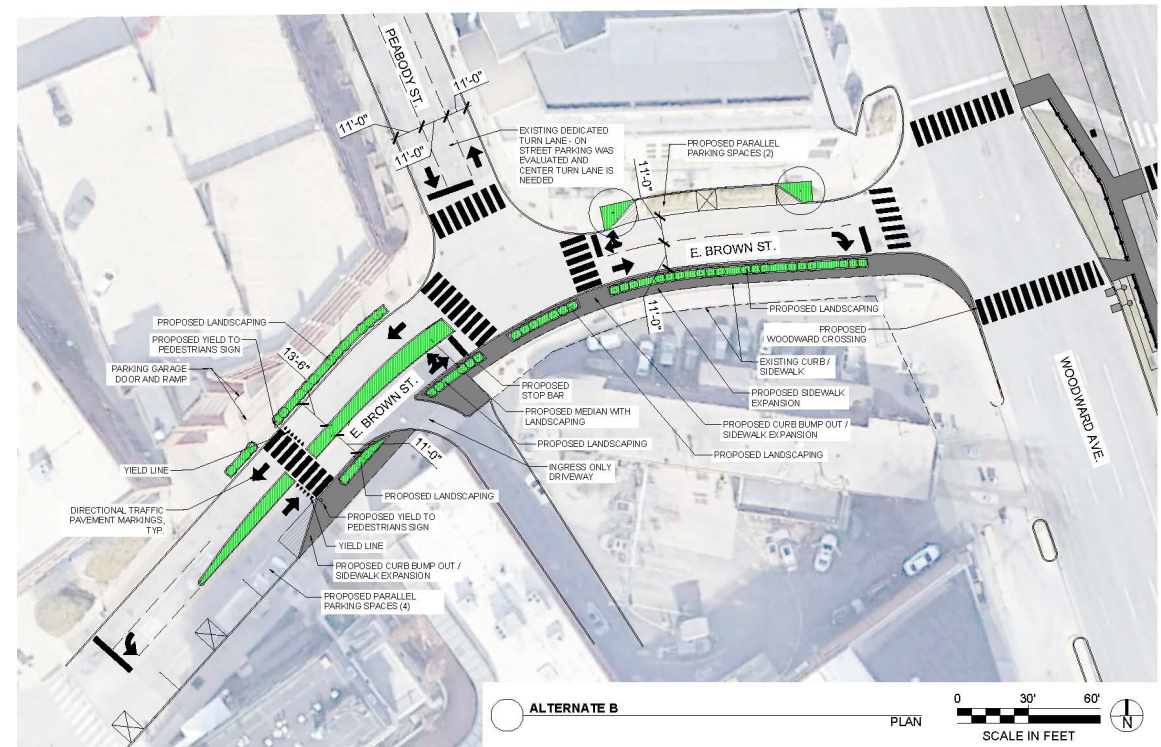


Both Options Have:

- New parallel parking on north side of Brown St. (2 spots)
- New parallel parking on south side of Brown St. (4 spots)
- New sidewalk expansions on south side of Brown St.

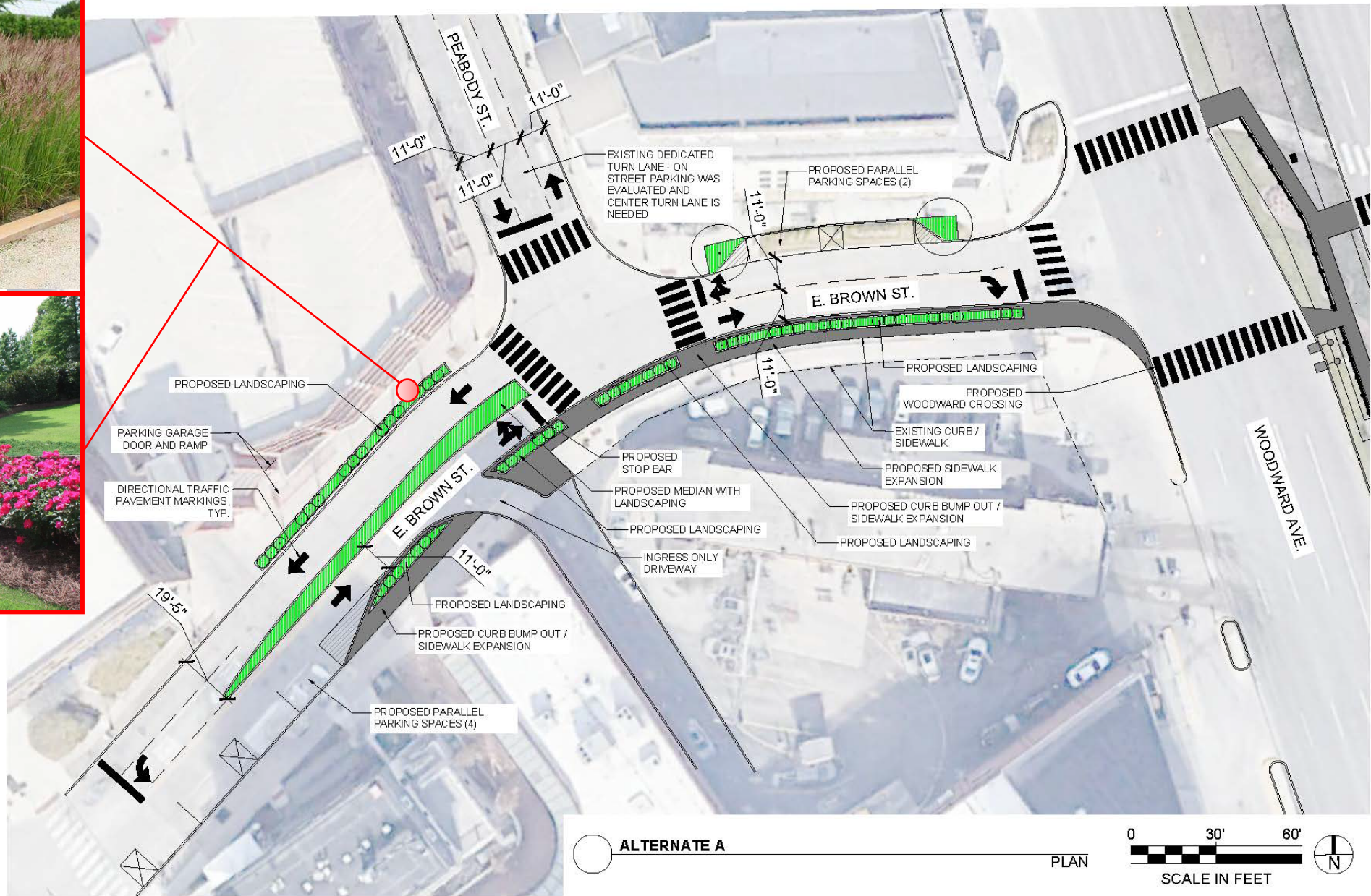
Alternate B

- Proposed landscaped median with yield at mid-block crossing on Brown St.

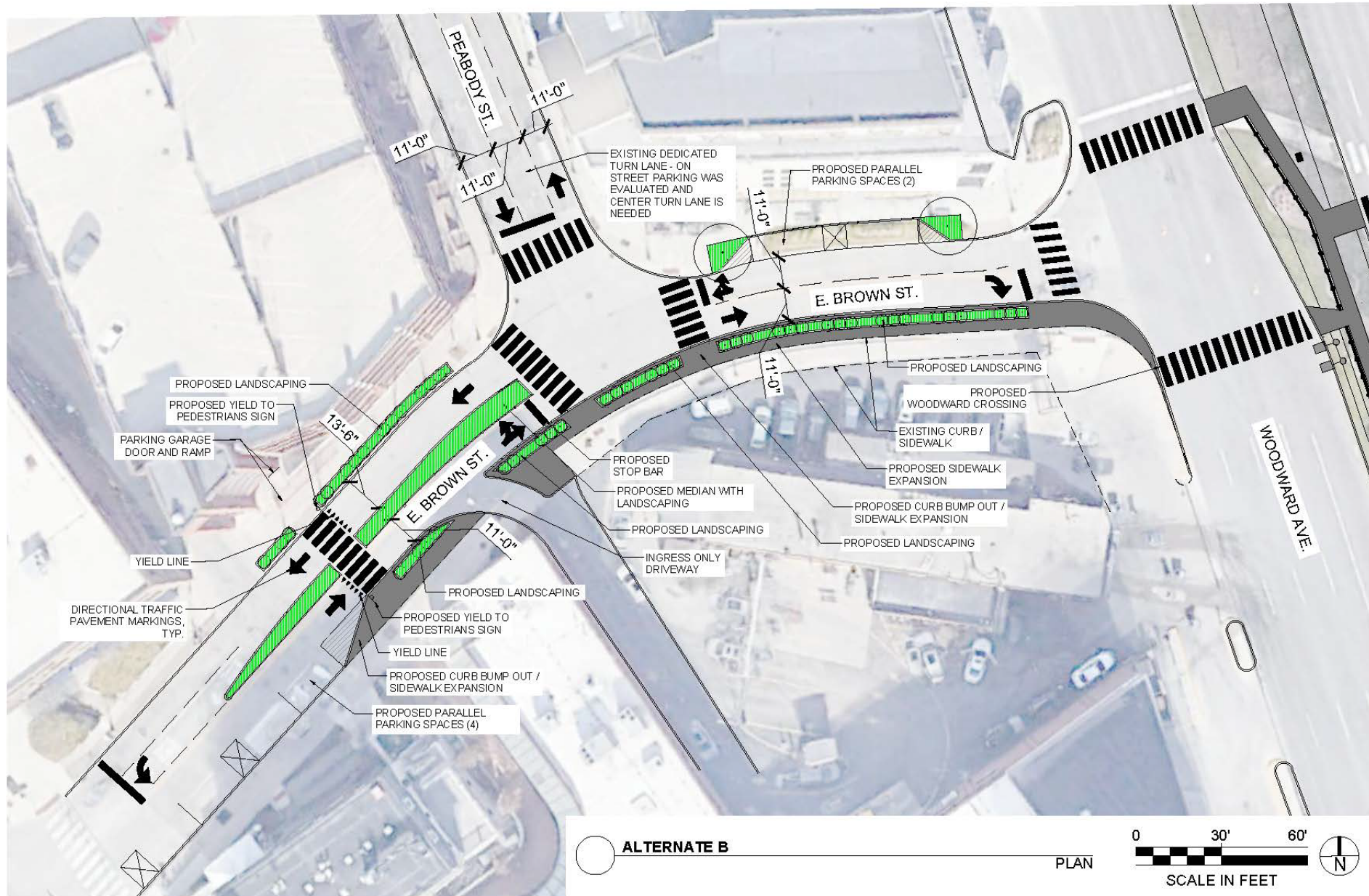


- New landscaping on north, south, and median of Brown St.
- Ingress only driveway into Jax Kar Wash
- 3-Way stop signs at Peabody St.

Alternate A



Alternate B





MEMORANDUM

Planning Division

DATE: July 29th, 2022

TO: Multi-Modal Transportation Board

FROM: Scott Grewe, Operations Commander
Jim Surhigh, Engineering Department
Brooks Cowan, Planning Department

SUBJECT: Multi-Modal Transportation Plan Updates – Sidewalk Network ([Updates in Blue](#))

INTRODUCTION:

The Multi-Modal Transportation Board (MMTB) has discussed making updates to the Multi-Modal Transportation Plan (MMTP) which is approaching 10 years of age. The Multi-Modal Transportation Board has also discussed updating the City of Birmingham's sidewalk network priorities.

BACKGROUND:

The Multi-Modal Transportation Plan (MMTP) was finalized in 2013 with Section 3.2 Physical Environment Recommendations for sidewalks. The Plan ranked top three priorities for sidewalks and provides a map with general areas for recommendations. Issues with the map and recommendations is that it does not provide specific locations of where the sidewalk gaps exist.

In the fall of 2021, MMTB requested to examine sidewalk gaps in the City. Staff provided a map that indicated locations of all sidewalks and where the gaps existed. The MMTB also wanted to compare the sidewalk gaps to a map of unimproved streets.

Upon review of actual sidewalk gaps and unimproved streets when compared to MMTP's priorities of 2013, The MMTB concluded that the priorities in the MMTP should be rearranged. One of the major changes was to include "improved streets" without sidewalks within the top priority. The likelihood of these streets having to be redone is very low, therefore a new sidewalk would not run the risk of having to be torn out if new utilities needed to be installed underground.

Areas without sidewalks were also prioritized above neighborhood with sidewalk gaps. The reasoning being that in the Board's opinion, having one sidewalk is better than nothing at all along a road, and that the City should focus on enhancing safety in areas where pedestrians have to walk in the street. This reversed the priorities in the MMTP (2013) that prioritized completing sidewalk gaps over areas without any sidewalks.

In November of 2021, staff discussed how the recommendations for sidewalk priorities would be considered in the Capital Improvements Plan budgeting process. Incorporating such recommendations into the MMTP would enable greater implementation during CIP review and construction project planning.

On July 7, 2021, the MMTB revisited the Sidewalk Network Memo from November of 2021. The Board did not feel the need to make any more updates and directed staff to place the new map in the Multi-Modal Transportation Plan.

Such updates to the Multi-Modal Transportation Plan have been made. A copy of the original Plan pages are provided below with removed text highlighted in red. The proposed new pages have also been provided with updated text highlighted in blue.

The Board may wish to provide further commentary on items or wording to include in the update for the sidewalk network.

CITY OF BIRMINGHAM MULTIMODAL TRANSPORTATION PLAN PHYSICAL ENVIRONMENT RECOMMENDATIONS

3.2 SIDEWALKS

DESCRIPTION

Sidewalks are the unsung heroes of a multi-modal system. They are usually the first facilities to be constructed and provide a backbone to a complete multi-modal network. They are one of the key components to a walkable community and should be completed on both sides of all roads in an urban area.

A community's long term goal should be to provide sidewalks on both sides of the roadway along all roads.

Sidewalks are proven to reduce pedestrian crashes and are critical to children safely walking to school, especially in dark conditions. Providing a complete sidewalk network along all roadways is important from a safety and connectivity standpoint and the city should work towards completing its network.

For the most up-to-date guidelines please refer to AASHTO's *Guide for the Planning, Design, and Operation of Pedestrian Facilities*.

All newly constructed and reconstructed sidewalks and shared use pathways should be in compliance with Title II of the Americans with Disabilities Act of 1990 (ADA). Please refer to the *Accessible Public Rights-of-Way: Planning and Designing for Alternatives* guide for more information.



RECOMMENDATIONS

The first priority is to provide sidewalks along all the major roadways. In the near-term the City should focus on completing sidewalk gaps along S Cranbrook Road to connect to the high school and dog park and along S Old Woodard to connect on-street parking to the businesses along the corridor. Please refer to the Network Implementation Plan for more details.

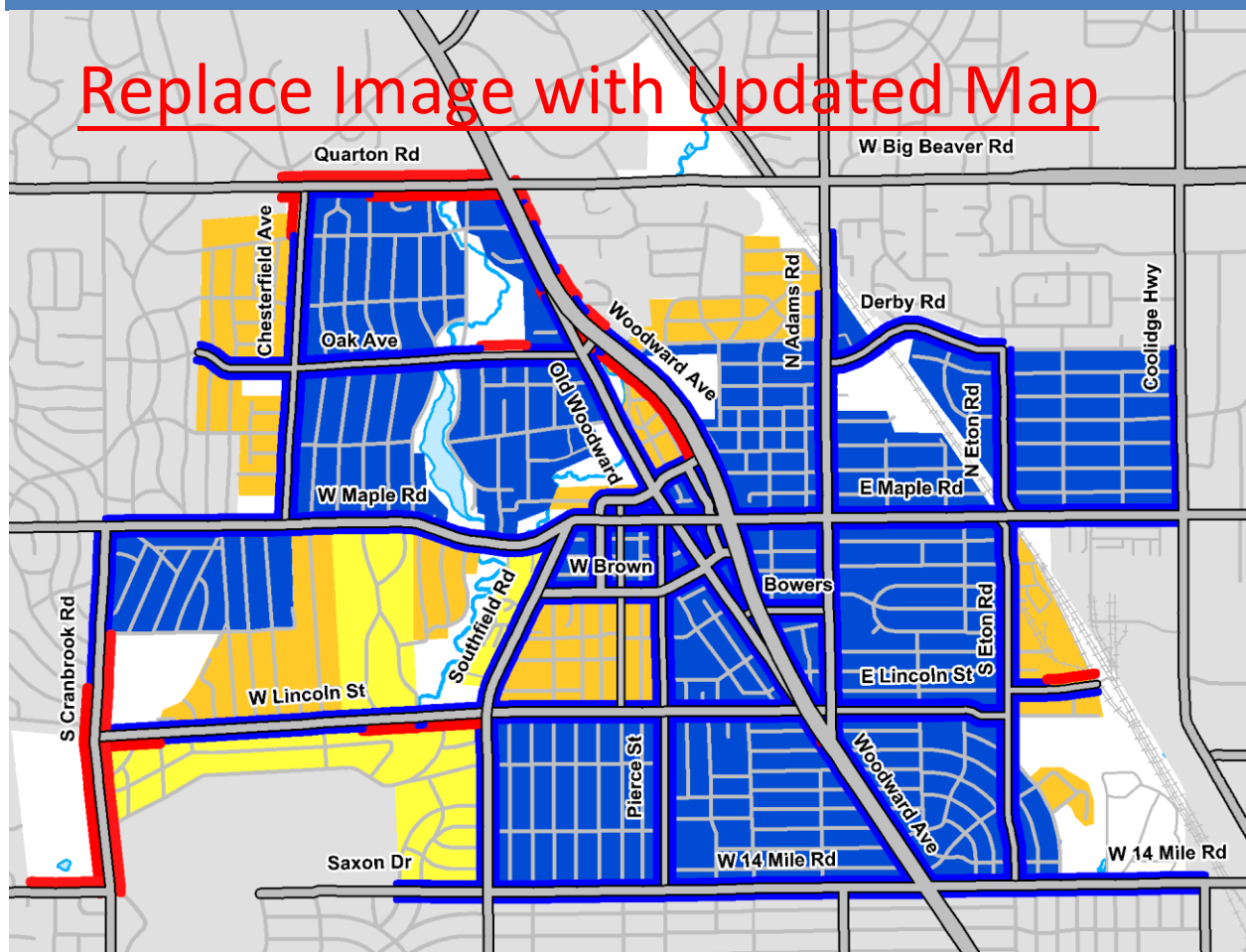
The second priority should be to complete the sidewalk gaps in neighborhoods that already have an existing sidewalk system partially in place.

The third priority should be to complete sidewalks in all neighborhoods.

In general, sidewalks should be installed by developers when constructing or reconstructing buildings or homes and by local city, county or state agencies during a roadway improvement project. Sidewalks should be a minimum of 5' wide. 6' is preferred along Collector roadways and 8' is preferred along Arterial roadways.

Please refer to Fig. 3.2A for a map of the proposed sidewalks.

FIGURE 3.2A PROPOSED SIDEWALKS



Proposed Sidewalks:

- Existing Sidewalks
- Priority 1: Complete Sidewalks along Major Roads
- Priority 2: Complete Sidewalk Gaps in Neighborhood
- Priority 3: Add Sidewalks to Neighborhood

APPROXIMATELY 2.5 MILES OF SIDEWALK ARE PROPOSED ALONG PRIMARY ROADS IN THE CITY OF BIRMINGHAM

Web Survey Results:

- About 38% of respondents walk to work and/or the store daily or weekly
- About 80% of respondents walk for fun and/or exercise daily or weekly
- Around 79% of respondents feel a complete sidewalk system is very important to non-motorized trips actually happening in the future

CITY OF BIRMINGHAM MULTIMODAL TRANSPORTATION PLAN PHYSICAL ENVIRONMENT RECOMMENDATIONS

3.2 SIDEWALKS

DESCRIPTION

Sidewalks are the unsung heroes of a multi-modal system. They are usually the first facilities to be constructed and provide a backbone to a complete multi-modal network. They are one of the key components to a walkable community and should be completed on both sides of all roads in an urban area.

A community's long term goal should be to provide sidewalks on both sides of the roadway along all roads.

Sidewalks are proven to reduce pedestrian crashes and are critical to children safely walking to school, especially in dark conditions. Providing a complete sidewalk network along all roadways is important from a safety and connectivity standpoint and the city should work towards completing its network.

For the most up-to-date guidelines please refer to AASHTO's *Guide for the Planning, Design, and Operation of Pedestrian Facilities*.

All newly constructed and reconstructed sidewalks and shared use pathways should be in compliance with Title II of the Americans with Disabilities Act of 1990 (ADA). Please refer to the *Accessible Public Rights-of-Way: Planning and Designing for Alternatives* guide for more information.



RECOMMENDATIONS

Priority 1 is completing sidewalks along major roads, the neighborhood connector route, and improved streets in neighborhoods without sidewalks.

Priority 2 is completing sidewalks in neighborhoods without sidewalks, predominantly along unimproved streets – highlighted in orange.

Priority 3 is completing sidewalks in neighborhoods with sidewalk gaps – highlighted in pink.

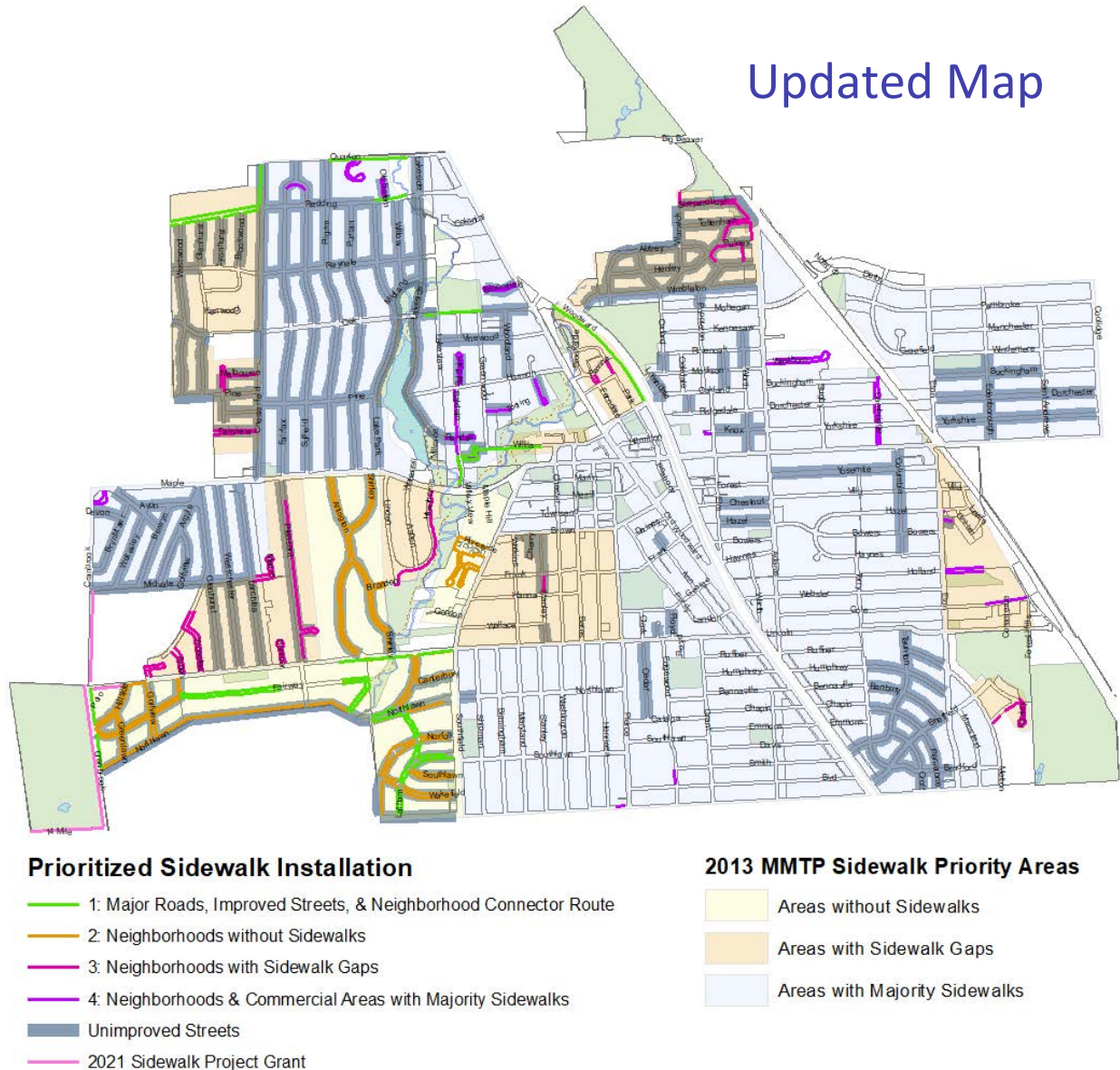
Priority 4 is complete sidewalks in neighborhoods and commercial areas with majority sidewalks – highlighted in purple.

In general, sidewalks should be installed by developers when constructing or reconstructing buildings or homes and by local city, county or state agencies during a roadway improvement project. [Plausibility of sidewalk installations should be reviewed in conjunction with the prioritized locations.](#) Sidewalks should be a minimum of 5' wide. 6' is preferred along Collector roadways and 8' is preferred along Arterial roadways.

Please refer to Fig. 3.2A for a map of the proposed sidewalks.

FIGURE 3.2A PROPOSED SIDEWALKS

Future Sidewalk Construction Recommendations



Web Survey Results:

- About 38% of respondents walk to work and/or the store daily or weekly
- About 80% of respondents walk for fun and/or exercise daily or weekly
- Around 79% of respondents feel a complete sidewalk system is very important to non-motorized trips actually happening in the future



MEMORANDUM

Planning Division

DATE: July 29th, 2022

TO: Multi-Modal Transportation Board

FROM: Scott Grewe, Operations Commander
Jim Surhigh, Engineering Department
Brooks Cowan, Planning Department

SUBJECT: Multi-Modal Transportation Plan Updates: Study Session – Regional Connectivity & Micromobility

INTRODUCTION:

The Multi-Modal Transportation Board (MMTB) has discussed making updates to the Multi-Modal Transportation Plan (MMTP) which is approaching 10 years of age. Staff recommends updating elements of the MultiModal Transportation Plan to address trends occurring in non-vehicular transportation that connects people to various parts of Birmingham as well as the region.

BACKGROUND:

The Multi-Modal Transportation Plan (MMTP) provides a Multi-Modal Network map in Figure 3.1E on page 47 of the plan (pg. 51 in the PDF). This map has provided the framework for numerous crossing improvements, new bike lanes, and new road configurations. City staff recommends that the Multi-Modal Network map also be considered as a framework for regional connectivity and as a basis for new micromobility options as well.

Terms such as “micromobility” and “last mile infrastructure” have become more prevalent in transportation planning with the growth of bike sharing and scooter sharing programs. Such non-vehicular options may help people connect to places outside of comfortable walking distance without having to use a car or deal with parking.

As Board members may recall, the MMTB conducted a field trip to Ferndale, Michigan in May of 2022 by taking the bus down Woodward Avenue and then traveling the City by Mogo rental bikes, predominantly in bike lanes. There was discussion that having such bike rentals available in Birmingham could be a convenient way to connect parts of the City to one another, such as the Downtown and the Rail District. It was also discussed how the bike rentals could be used to connect to other Cities in the region as well. A map of [existing Mogo stations](#) (click link) indicates nearby towns of Royal Oak, Berkley, Oak Park, and Ferndale all offer bike sharing programs.

Scooter sharing has also been brought up for discussion and companies have made a number of efforts to contact Birmingham to have their scooter sharing program allowed. The Board may wish to discuss if scooter sharing should be included as a recommendation in the updated transportation plan.

The Multi-Modal Network provides effective guidelines for connectivity in Birmingham. City staff recommends that the Multi-Modal Board consider an additional Regional Connectivity section for the Multi-Modal Transportation Plan to serve as a segue for local connectivity and micromobility.

In relation to bike lanes, Detroit is making improvements to its Riverwalk and creating a new loop through the City called the [Joe Louis Greenway](#). The bikeway is planned to connect to Ferndale at Livernois Ave, near the bikelanes Boardmembers rode on their Transportation Day field trip. Cities between Detroit and Birmingham such as Ferndale, Royal Oak, Berkley and Oak Park have been making efforts to create more cycling connectivity. Staff recommends such efforts be mentioned in an updated regional connectivity section.

In relation to public transit, the Multi-Modal Transportation Plan has a chapter titled Transit Facility Amenities (Section 3.12) where it makes recommendations for bus stops. City staff recommend that information regarding the regional network of public transit connectivity be included in the MMTP to help guide decisions for transit stop designs. Providing a broader understanding of what the region's transit system connects to may help guide better decision processes.

SUGGESTED ACTION:

City Staff recommends the MMTB have a study session discussion to guide recommendations for highlighting regional connectivity and how Birmingham may connect the region to its multi-modal network and implement new micromobility options if desired.

PROPOSED MULTI-MODAL NETWORK

The solution for a community's multi-modal network is not one dimensional, but rather responds to the needs of the various users and trip types. By doing so, the plan addresses the needs of the majority of the community's population, not simply a small interest group.

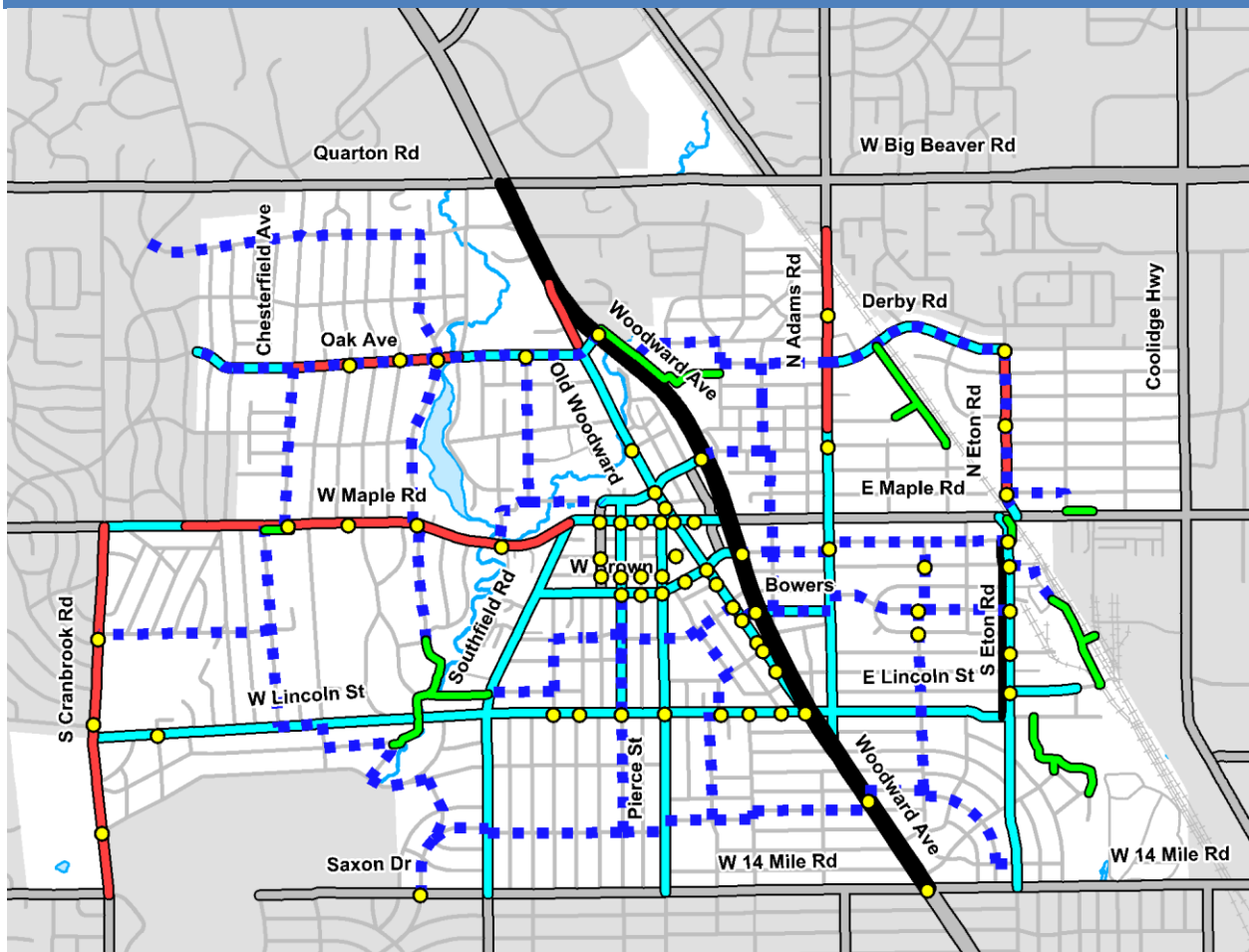
The proposed multi-modal network recognizes that pedestrians, bicyclists and transit users are a diverse population and that no one solution will apply to all users. Thus, bike lanes and sidewalks have been proposed along the primary roads in the City. Some of these roads are more oriented to bicyclists and pedestrians than others, as they carry fewer motor vehicles and will be designed such to keep motor vehicle speeds in the 30 to 35 mph range. Complementing the primary road system will be a network of neighborhood connectors and off-road trails that provide access to key destinations in the City while minimizing exposure to a large volume of high speed motor vehicles. Once implemented, together they will provide a city wide multi-modal network that users of all ages and abilities will be able to enjoy.

The following pages provide a more detailed breakdown of the multi-modal network:

- *Sidewalks*
- *Road Crossing Improvements*
- *Bike Lanes*
- *Buffered Bike Lanes*
- *Shared Lane Markings*
- *Neighborhood Connector Routes*
- *Pedestrian & Bicycle Wayfinding*
- *Neighborhood Greenway*
- *Tree Extensions*
- *Bicycle Parking*
- *Transit Facilities Amenities*
- *Intersections*

Please refer to Fig. 3.1 for an overview map of the proposed multi-modal network. In addition, a large map of the proposed network can be downloaded from the project webpage at <http://greenwaycollab.com/Projects/Birmingham/Birmingham.html>

FIGURE 3.1E OVERVIEW OF PROPOSED MULTI-MODAL NETWORK

**Legend**

- Proposed Crossing Improvement
- Proposed Off-road Trail
- - - Proposed Neighborhood Connector Route
- Proposed Bike Lane
- Proposed Buffered Bike Lane
- Proposed Shared-lane Marking

Due to the scale of this map some facilities were not included.
Please refer to the following maps for more details.

Web Survey Results:

- About 72% of respondents would walk to work and/or do errands if there was a system of sidewalks, pathways, crosswalks, bike lanes, etc.
- Around 84% of respondents feel that a complete network for bicycle facilities such as bike lanes, signed routes and trails are very important or somewhat important to making future bicycling trips actually happen

3.12 TRANSIT FACILITY AMENITIES

DESCRIPTION

When developing a multi-modal plan it is important to consider transit users because at some point the transit user becomes a pedestrian. Many times, people who use transit do not own an automobile, so walking and bicycling are their main forms of transportation. It is important to not only to provide safe and convenient ways to access transit but also to provide infrastructure and amenities at the transit stop.



At the very minimum bus stops should provide a concrete pad so wheelchair users can safely access the bus stop.

Super Stops are essentially bus stops with additional amenities such as benches, shelters, maps and schedules, bus pull-off area and lighting. Since there are additional amenities, the stops will have a larger draw area. Generally these occur where a bicycle and pedestrian route intersects a bus route and in areas of high ridership.

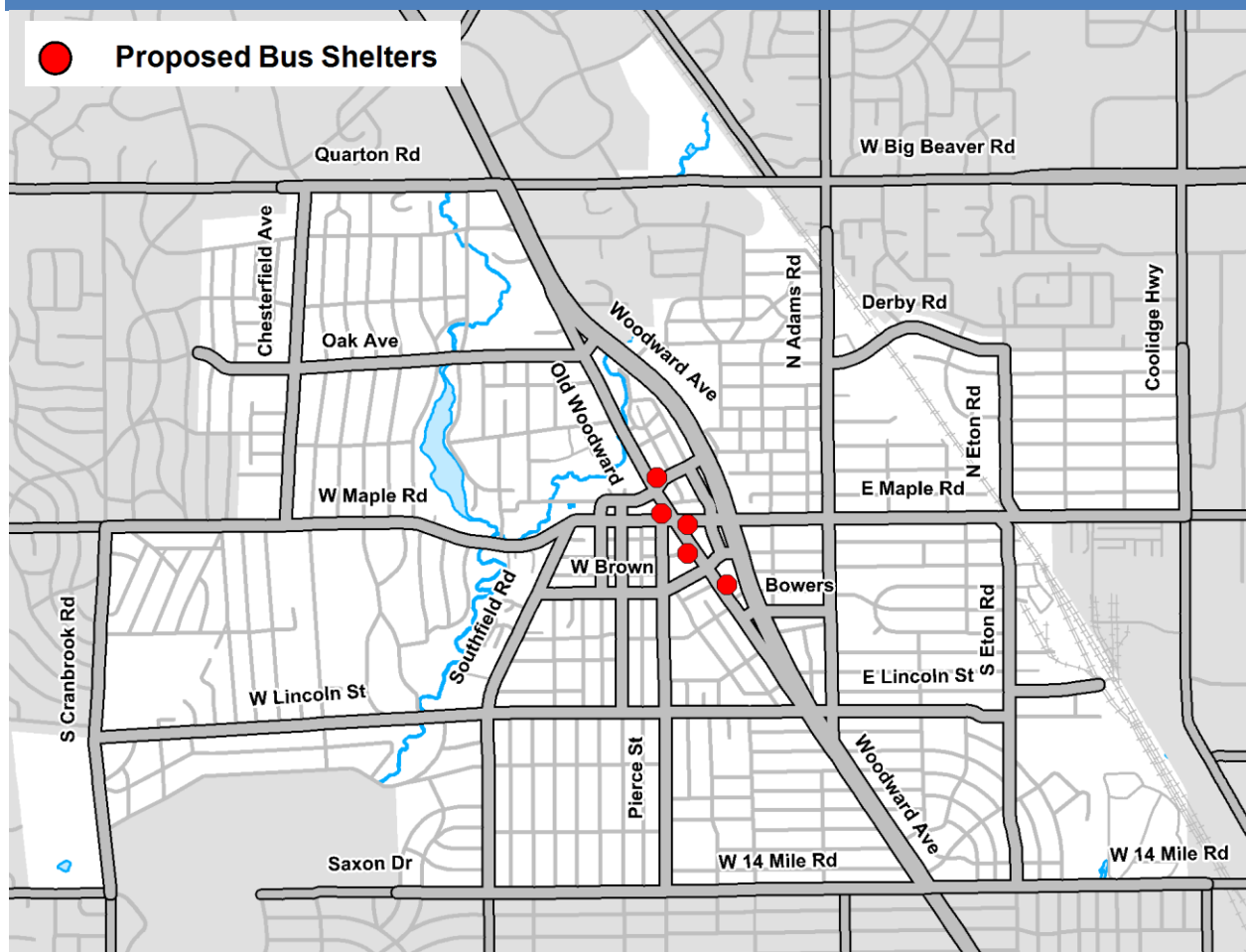


RECOMMENDATIONS

- ☐ At a minimum, all bus stops should provide a concrete pad so wheelchair users can safely access the bus stop
- ☐ Consistent bus stop signs should be used throughout the City
- ☐ In areas with a high number of people boarding or exiting buses, provide additional amenities such as shelter, lighting, benches, route maps and schedules

Please refer to the Special Area Concept Plans for more information.

FIGURE 3.12A PROPOSED DOWNTOWN BUS SHELTERS



5 BUS SHELTERS ARE PROPOSED IN THE DOWNTOWN

Web Survey Results:

- Around 43.7% of respondents who do not use transit said they would be encouraged to reconsider taking transit if a shelter was located at the bus stop
- 100% of the respondents who currently ride SMART said that bus shelters are very important or somewhat important to the comfort and convenience of their trip



MEMORANDUM

Planning Division

DATE: July 29th, 2022

TO: Multi-Modal Transportation Board

FROM: Scott Grewe, Operations Commander
Melissa Coatta, Engineering Department
Brooks Cowan, Planning Department

SUBJECT: Communications

Attached are the City's and AEW's memos for the 2022 sidewalk program that was approved by City Commission on 7/25. Phase 5 of the project includes a new sidewalk on the northside of Oak Street in front of the cemetery.

The City has started discussions with the property owner at 887 Lakeview Ave to obtain an easement along their frontage on Oak Street to install a new sidewalk. This would close the sidewalk gap on the south portion of Oak Street from 890 Lakeside Dr to Lakeview Ave.



MEMORANDUM

Engineering

DATE: July 19, 2022

TO: Thomas M. Markus, City Manager

FROM: Scott Zielinski, Assistant City Engineer
Melissa Coatta, City Engineer

SUBJECT: 2022 Concrete Sidewalk Repair Program
Contract #8-22 (SW) Contract Award

INTRODUCTION:

Bids for the 2022 Concrete Sidewalk Repair Program #8-22(P) were opened on June 16, 2022. Two bids were received for consideration, and the Engineering Department is recommending award of the project to Luigi Ferdinandi and Sons Cement Company, Inc.

BACKGROUND:

The 2022 Concrete Sidewalk Repair Program is focused this year on Residential Area 5 of the City's Sidewalk Repair Program and Downtown 1B. Area 5 extends in general from Southfield Rd to Cranbrook Rd, and Maple Rd to 14 Mile Road. Area 1B of the downtown general extends from Old Woodward to Woodward, and from Maple Road to Ravine. This program also includes Oak Avenue Sidewalk at Greenwood Cemetery, Ann Street Sidewalk, and miscellaneous repairs throughout the City.

The Engineering Department opened and read bids on June 16, 2022. Two (2) bids were received, as listed on the attached summary. The City held a meeting with the lowest read bidder, Luigi Ferdinandi and Sons Cement Company, Inc., regarding the project scope and schedule.

Based on the results of the meeting with the bidder, the engineering department recommends awarding the sidewalk contract to Luigi Ferdinandi and Sons Cement Company, Inc.

Luigi Ferdinandi and Sons Cement Company, Inc. has past experience in 2020 with the City's sidewalk program, and has shown an understanding for the needs and expectations related to the program's scope of services, schedule, and coordination with both the residents and businesses.

Luigi Ferdinandi and Sons Cement Company, Inc. bid was for \$399,928.00. The letter recommending award of the project from our engineering consultant, Anderson, Eckstein & Westrick, Inc. (AEW) is attached for reference.

As is required for all of the City's construction projects, Luigi Ferdinandi and Sons Cement Company, Inc. has submitted a 5% bid security with their bid which will be forfeited if they do not provide the signed contracts, bonds and insurance required by the contract following the award by the City Commission.

LEGAL REVIEW:

The City's standard contract language was used for this bidding document. No legal issues exist based on documentation.

FISCAL IMPACT:

This project was budgeted for in the 2022/2023 budget across the General Sidewalk Fund, Major Street Fund, and Local Streets Fund. The project award will be funded by the following accounts:

Funding Account	Fund ID Number	Project Award
General Sidewalk	101-444.001-981.0100	\$ 326,687.21
Major Streets Fund	202-449.001-981.0100	\$ 41,851.88
Local Streets Fund	203-449.001-981.0100	\$ 31,388.91
	Total Costs	\$ 399,928.00

No Amendments to the 2022/2023 fiscal year budgets are required for this work as there are adequate funds in the General Sidewalk Fund, Major Street Fund, and Local Street Fund to accommodate this request.

PUBLIC COMMUNICATIONS:

Communication with the residents in the project area will include the general project announcement.

SUMMARY:

It is recommended that the 2022 Concrete Sidewalk Repair Program #8-22(P), be awarded to Luigi Ferdinandi and Sons Cement Company, Inc.

ATTACHMENTS:

- Primary Project Area Map – (one page)
- AEW Recommendation and Bid Summary – (7 pages)
- Copy of Spec Book – (184 pages)
- Signed copy of Section 120 and Section 130 of the Contract Documents – (5 pages)

SUGGESTED COMMISSION ACTION:

Make a motion adopting a resolution to approve and award the 2022 Concrete Sidewalk Repair Program #8-22(P), to Luigi Ferdinandi and Sons Cement Company, Inc., in the amount not to exceed \$399,928.00. In addition, to authorize the Mayor and City Clerk to sign the agreement on behalf of the City. Funding for this project has been budgeting in the following accounts;

Funding Account	Fund ID Number	Project Award
General Sidewalk	101-444.001-981.0100	\$ 326,687.21
Major Streets Fund	202-449.001-981.0100	\$ 41,851.88
Local Streets Fund	203-449.001-981.0100	\$ 31,388.91
	Total Costs	\$ 399,928.00



ANDERSON, ECKSTEIN & WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road
Shelby Township, MI 48315

586.726.1234
www.aewinc.com

June 20, 2022

Scott Zielinski, P.E., Assistant City Engineer
City of Birmingham
151 Martin Street
Birmingham, Michigan 48009

Reference: 2022 Sidewalk Repair Program
City of Birmingham
Contract No. 8-22(SW)
AEW Project No. 0221-0055

Dear Mr. Zielinski:

Enclosed please find the tabulation of the bids received on June 16, 2022 for the above referenced project. Our office has reviewed the tabulation of the two (2) bids received and have attached to this correspondence for reference. In summary, bids received were as follows:

- | | |
|--|---------------|
| 1. Luigi Ferdinandi and Son Cement Company, Inc. | \$ 399,928.00 |
| 2. Italia Construction, Inc. | \$ 460,339.60 |

This project involves seven (7) phases of work summarized as follows:

Phase 1 – City Wide Scattered Concrete Repairs

This work will involve the replacement of pavement within the roadway and/or sidewalk at approximately 40 locations throughout the City where water main breaks or sewer repairs recently occurred or where water services or sanitary service leads were recently repaired or replaced.

Phase 2 – Sidewalk Replacement Program – Area 5

This work will involve the removal and replacement of concrete sidewalk flags within Sidewalk Maintenance Area No. 5 that have been identified as being in poor condition or deemed defective. Area No. 5 includes an area roughly bounded by Maple Road to the north, Southfield Road to the east, 14 Mile Road to the south and Cranbrook Road to the west. Defects encountered include cracked sidewalk, heaved or uneven sidewalk causing a trip hazard or sidewalks that may be holding water causing ice buildup in the Winter season.



Scott Zielinski, P.E.
June 20, 2022
Page 2

Phase 3 – Sidewalk ADA Ramp Program

This work will involve the removal of existing concrete sidewalk and sidewalk ramps at various locations within the Downtown district and placement of new sidewalk ramps in compliance with current Americans with Disabilities Act (ADA) requirements.

Phase 4 – Maple Road Granite Bench Concrete Pads

This work will involve the installation of 6-inch thick concrete pads at 16 locations along the Maple Road right-of-way from Southfield Road to the westerly City limits to provide for a granite bench. Locations were determined by the City of Birmingham as part of a study identifying the best locations for placement near bus stops, parks, open lawn area and major pedestrian crossings.

Phase 5 – Oak Avenue Sidewalk at Greenwood Cemetery

This work will involve the installation of new sidewalk along the north side of Oak Avenue along the frontage of Greenwood Cemetery. The installation of this sidewalk will connect with existing sidewalk on the north side of Oak Avenue at both ends of the cemetery filling a gap in the sidewalk network.

Phase 6 – Ice Arena Sidewalk Replacement

This work will involve the removal and replacement of defective sidewalk at the ice arena along with concrete joint repairs as required.

Phase 7 – Ann Street Sidewalk Replacement – Lincoln to Landon

The existing sidewalk along the west side of Ann Street from Lincoln to Landon abuts the back of the curb and does not meet current ADA requirements. Work for this phase involves removal and replacement of the existing sidewalk and reducing the width of Ann Street to accommodate for greenbelt between the street and sidewalk. Reducing the width of Ann Street will better align with the existing width of Ann Street north of Landon Street and will allow for the placement of a new sidewalk that meets current ADA requirements.

Luigi Ferdinandi and Son Cement Company (Luigi F) has completed numerous sidewalk replacement programs and concrete patch repair programs for several municipalities in Southeast Michigan and has completed several projects in the past administered by our office. In addition, Luigi F successfully completed the 2020 Sidewalk Repair Program for the City of Birmingham, administered by our office, which included sidewalk removal and replacement within Sidewalk Maintenance Area No. 3, concrete pavement repairs located throughout the City, several handicap ramp replacements in the Downtown district and bus stop pad installations. Our office has found Luigi F to be very knowledgeable of this type of work, well versed in ADA compliance with sidewalk replacement projects and have found their work to be of good quality.



Scott Zielinski, P.E.
June 20, 2022
Page 3

Therefore, based upon the bids submitted and past experience, we recommend that the 2022 Sidewalk Repair Program be awarded to Luigi Ferdinandi and Son Cement Company, Inc. of 16481 Common Road, Roseville, Michigan 48066 at their total bid amount of \$399,928.00.

If you have any questions or require any additional information, please feel free to contact me at any time.

Sincerely,

R. Ryan Kern, P.E.
Project Manager

Enclosures: Bid Tabulation

cc: James Surhigh, P.E., Consulting City Engineer, City of Birmingham
Chris Morton, Senior Engineering Technician, City of Birmingham



TABULATION OF BIDS
 2022 CONCRETE SIDEWALK
 REPAIR PROGRAM
 AEW PROJECT NO. 0221-0055

Prepared by: Anderson, Eckstein and Westrick, Inc.
 51301 Schoenherr Road
 Shelby Township, MI 48315

DATE: 6/16/2022
 TIME: 2:00 PM

BIDDER RANKING

RANK	BIDDER NAME	SUBTOTAL – 2022 CITY WIDE SCATTERED CONCRETE REPAIRS:	SUBTOTAL – 2022 SIDEWALK PROGRAM (AREA 5):	SUBTOTAL – 2022 SIDEWALK ADA RAMP PROGRAM:	SUBTOTAL WORK ITEMS – GENERAL WORK ITEMS:	SUBTOTAL WORK ITEMS – MAPLE ROAD GRANITE BENCH PADS:
1	Luigi Ferdinandi and Son Cement Company	\$ 109,700.00	\$ 37,000.00	\$ 67,530.00	\$ 62,000.00	\$ 12,450.00
2	Italia Construction, Inc.	\$ 119,376.00	\$ 31,312.50	\$ 82,264.00	\$ 106,800.00	\$ 10,655.00

RANK	BIDDER NAME	SUBTOTAL WORK ITEMS – OAK AVENUE SIDEWALK (GREENWOOD CEMETARY):	SUBTOTAL WORK ITEMS – ICE ARENA SIDEWALK REPLACEMENT:	SUBTOTAL WORK ITEMS – ANN STREET SIDEWALK REPLACEMENT:	TOTAL AMOUNT BID:
1	Luigi Ferdinandi and Son Cement Company	\$ 54,650.00	\$ 9,750.00	\$ 46,848.00	\$ 399,928.00
2	Italia Construction, Inc.	\$ 55,869.00	\$ 7,593.00	\$ 46,470.10	\$ 460,339.60



TABULATION OF BIDS
CITY OF BIRMINGHAM
2022 CONCRETE SIDEWALK
REPAIR PROGRAM
AEW PROJECT NO. 0221-0055

Luigi Ferdinandi and Son Cement Company, Inc
16481 Common Road
Roseville, Michigan 48066

Italia Construction, Inc.
57151 Deer Creek Court
Washington, Michigan 48094

Item No.	Description	Estimated Quantity	Units	Unit Price	Amount	Unit Price	Amount
WORK ITEMS - 2022 CITY WIDE SCATTERED CONCRETE REPAIRS							
1.	Earth Excavation	100	CYD	10.00	1,000.00	28.00	2,800.00
2.	Remove & Replace Concrete Curb & Gutter Match Existing Section	200	LF	50.00	10,000.00	53.00	10,600.00
3.	Remove & Replace 4" Concrete Sidewalk	1,600	SF	10.00	16,000.00	7.33	11,728.00
4.	Remove & Replace 6" Concrete Sidewalk/Ramp/Drive Approach	600	SF	11.00	6,600.00	8.83	5,298.00
5.	7" Concrete Pavement Repair – MDOT Type P1 Concrete	300	SYD	90.00	27,000.00	90.00	27,000.00
6.	9" Concrete Pavement Repair – MDOT Type P-NC Concrete	300	SYD	99.00	29,700.00	99.00	29,700.00
7.	Sidewalk Ramp Detectable Warning Plates	50	SF	50.00	2,500.00	83.00	4,150.00
8.	Subgrade Undercutting, 8" Limestone, MDOT 21AA	200	SYD	27.00	5,400.00	33.00	6,600.00
9.	Sawcutting	1,500	LF	2.00	3,000.00	3.00	4,500.00
10.	Utility Structure Cover Adjustment	5	EA	500.00	2,500.00	450.00	2,250.00
11.	Restoration, 3" Topsoil, Seed & Mulch	250	SF	4.00	1,000.00	23.00	5,750.00
12.	Traffic Control - Major Street Lane Closure	1	EA	5,000.00	5,000.00	9,000.00	9,000.00
SUBTOTAL – 2022 CITY WIDE SCATTERED CONCRETE REPAIRS:					109,700.00		119,376.00
WORK ITEMS – 2022 SIDEWALK PROGRAM AREA 5							
13.	Remove & Replace Concrete Curb or Curb & Gutter	100	LF	50.00	5,000.00	53.00	5,300.00
14.	Remove & Replace 4" Concrete Sidewalk	2,500	SF	10.00	25,000.00	7.33	18,325.00
15.	Remove & Replace 6" Concrete Sidewalk//Ramp/Drive Approach	250	SF	12.00	3,000.00	8.83	2,207.50
16.	Sawcutting for Curbs	100	LF	10.00	1,000.00	5.00	500.00
17.	Sidewalk Ramp Detectable Warning Plates	60	SF	50.00	3,000.00	83.00	4,980.00
SUBTOTAL – 2022 SIDEWALK PROGRAM (AREA 5):					37,000.00		31,312.50



TABULATION OF BIDS
CITY OF BIRMINGHAM
2022 CONCRETE SIDEWALK
REPAIR PROGRAM
AEW PROJECT NO. 0221-0055

Luigi Ferdinandi and Son Cement Company, Inc
16481 Common Road
Roseville, Michigan 48066

Italia Construction, Inc.
57151 Deer Creek Court
Washington, Michigan 48094

Item No.	Description	Estimated Quantity	Units	Unit Price	Amount	Unit Price	Amount
WORK ITEMS – 2022 SIDEWALK ADA RAMP PROGRAM							
18.	Earth Excavation	150	CYD	30.00	4,500.00	28.00	4,200.00
19.	Subgrade Undercutting, 8 inch Limestone, MDOT 21AA	20	CYD	60.00	1,200.00	33.00	660.00
20.	Remove Concrete Sidewalk/Ramp	1,800	SF	2.00	3,600.00	2.00	3,600.00
21.	Remove & Replace Concrete Curb or Curb & Gutter	100	LF	50.00	5,000.00	53.00	5,300.00
22.	4 inch Sidewalk/Ramp	1,500	SF	11.00	16,500.00	7.33	10,995.00
23.	9" Concrete Pavement Repair – MDOT Type P-NC Concrete	50	SYD	180.00	9,000.00	99.00	4,950.00
24.	6 inch Sidewalk/Ramp	300	SF	13.00	3,900.00	8.83	2,649.00
25.	4 inch Exposed Aggregate Sidewalk	250	SF	12.00	3,000.00	23.00	5,750.00
26.	6 inch Exposed Aggregate Sidewalk	50	SF	20.00	1,000.00	29.00	1,450.00
27.	Remove and Reuse Brick Pavers	250	SF	15.00	3,750.00	33.00	8,250.00
28.	Sidewalk Ramp Detectable Warning Plates	100	SF	50.00	5,000.00	83.00	8,300.00
29.	Utility Structure Cover Adjustment	4	EA	500.00	2,000.00	450.00	1,800.00
30.	Sawcutting for Curbs	100	LF	10.00	1,000.00	5.00	500.00
31.	Remove and Replace Signage	1	EA	500.00	500.00	500.00	500.00
32.	Sign Post, U-Channel	36	LF	30.00	1,080.00	10.00	360.00
33.	Caulking	500	LF	5.00	2,500.00	9.00	4,500.00
34.	Sealing Exposed Aggregate Concrete	1000	SF	2.00	2,000.00	7.00	7,000.00
35.	Restoration, 3" Topsoil, Seed & Mulch	500	SF	4.00	2,000.00	23.00	11,500.00
SUBTOTAL – 2022 SIDEWALK ADA RAMP PROGRAM:					67,530.00		82,264.00
WORK ITEMS – GENERAL WORK ITEMS							
36.	Bituminous Mixture No. 13 Wearing	100	TONS	250.00	25,000.00	435.00	43,500.00
37.	Handpatching, HMA 13A, Varying Thickness	100	TONS	250.00	25,000.00	435.00	43,500.00
38.	Inspector Crew Days	600	P/DAY	20.00	12,000.00	33.00	19,800.00
SUBTOTAL WORK ITEMS – GENERAL WORK ITEMS:					62,000.00		106,800.00
WORK ITEMS – MAPLE ROAD GRANITE BENCH PADS							
39.	Earth Excavation	35	CYD	30.00	1,050.00	33.00	1,155.00
40.	4 inch Aggregate Base	100	SYD	18.00	1,800.00	23.00	2,300.00
41.	6 inch Concrete Sidewalk	800	SF	12.00	9,600.00	9.00	7,200.00
SUBTOTAL WORK ITEMS – MAPLE ROAD GRANITE BENCH PADS:					12,450.00		10,655.00



TABULATION OF BIDS
CITY OF BIRMINGHAM
2022 CONCRETE SIDEWALK
REPAIR PROGRAM
AEW PROJECT NO. 0221-0055

				Luigi Ferdinandi and Son Cement Company, Inc 16481 Common Road Roseville, Michigan 48066		Italia Construction, Inc. 57151 Deer Creek Court Washington, Michigan 48094	
Item No.	Description	Estimated Quantity	Units	Unit Price	Amount	Unit Price	Amount
WORK ITEMS – OAK AVENUE SIDEWALK (GREENWOOD CEMETARY)							
42.	Earth Excavation	130	CYD	30.00	3,900.00	28.00	3,640.00
43.	4 inch Aggregate Base	425	SYD	18.00	7,650.00	33.00	14,025.00
44.	Relocate Tree	6	SF	500.00	3,000.00	900.00	5,400.00
45.	Relocate Sign	5	SF	100.00	500.00	500.00	2,500.00
46.	Remove Precast Paver Block Wall	20	SF	50.00	1,000.00	100.00	2,000.00
47.	4 inch Concrete Sidewalk	3500	SF	10.00	35,000.00	7.33	25,655.00
48.	Remove and Replace 6 inch Concrete Sidewalk	300	SF	12.00	3,600.00	8.83	2,649.00
SUBTOTAL WORK ITEMS – OAK AVENUE SIDEWALK (GREENWOOD CEMETARY):					54,650.00		55,869.00
WORK ITEMS – ICE ARENA SIDEWALK REPLACEMENT							
49.	Remove and Replace 6 inch Concrete Sidewalk/Ramp/Drive	600	SF	12.00	7,200.00	8.83	5,298.00
50.	Concrete Joint Repair	255	SF	10.00	2,550.00	9.00	2,295.00
SUBTOTAL WORK ITEMS – ICE ARENA SIDEWALK REPLACEMENT:					9,750.00		7,593.00
WORK ITEMS – ANN STREET SIDEWALK REPLACEMENT							
51.	Earth Excavation	10	CYD	30.00	300.00	28.00	280.00
52.	Earth Embankment	40	CYD	100.00	4,000.00	33.00	1,320.00
53.	Remove Concrete Sidewalk	140	SYD	18.00	2,520.00	23.00	3,220.00
54.	Remove Concrete Driveway	15	SYD	18.00	270.00	23.00	345.00
55.	Remove Concrete Pavement	181	SYD	18.00	3,258.00	25.00	4,525.00
56.	4 inch Concrete Sidewalk	770	SF	10.00	7,700.00	7.33	5,644.10
57.	6 inch Concrete Sidewalk/Ramp/Drive	1,200	SF	12.00	14,400.00	8.83	10,596.00
58.	Concrete Curb and Gutter, MDOT Detail F4	280	LF	50.00	14,000.00	63.00	17,640.00
59.	Restoration, 3" Topsoil and Sod	100	SYD	4.00	400.00	29.00	2,900.00
SUBTOTAL WORK ITEMS – ANN STREET SIDEWALK REPLACEMENT:					46,848.00		46,470.10
TOTAL AMOUNT BID:				\$	399,928.00	\$	460,339.60