

Armour Road Complete Street City Council Discussion and Decision Points

7/31/2019

| | Date | Meeting | Presentation/Discussion | Action | Documentation |
|---|--------------------|-------------------------|--|--|---|
| 1 | June 21, 2016 | Council Regular Session | Resolution supporting the City's Planning Sustainable Places grant application for the Armour Road Complete Street Plan - Council memo stated "In 2015, traffic modeling of Armour Road showed that there is an excess of roadway capacity on this segment of Armour compared to current and future demand and that some lanes could be reduced without a significant impact on levels of service." | Approved 6-1 (Zach Clevenger voted no, Anita Lodahl was absent) | Council Memo, June 21, 2016 |
| 2 | May 2, 2017 | Council Work Session | Work session included an overview of available data and survey findings. Jennifer Pangborn provided an overview of traffic study findings: "The findings is that they looked at capacity, they determined that there was excess capacity and that we could look at reallocating some of the space in that area and that zone to remove a lane and look at on-street bike lanes or bike facilities and still have acceptable operations." (See video starting at 17:11) | n/a | Presentation, May 2, 2017 Meeting Video - https://www.youtube.com/watch?v=OQP6y-c395Y |
| 3 | June 13, 2017 | Public Meeting | First community workshop to discuss Armour Road; attendees included Fred Steffen, Don Stielow, Bryant DeLong, Zach Clevenger, Valerie Pearman. Presentation noted traffic study "Showed removal of 1 lane each direction would not have significant impact to vehicle travel." Mid-day traffic travel times would be expected to increase 38 seconds in the eastbound direction and 35 seconds in the westbound direction. Meeting materials included roadway concepts showing removal of a lane of traffic in both Transition and Commercial Zones with various bicycle lane configurations. | Attendees provided feedback via dot polling and comment cards. | Meeting presentation Survey summary showing roadway concept graphics presented at meeting |
| 4 | September 13, 2017 | Budget Workshop | Armour Road Complete Street improvements were discussed as part of the FY2018 budget (Convention & Tourism Fund) | Improvements were included in adopted budget. | |
| 5 | September 27, 2017 | Public Meeting | Demonstration project; Attendees included Valerie Pearman, Zach Clevenger, Bryant DeLong (sign in sheet is incomplete) Demonstration included temporary striping of parking protected bike lane removing a lane of traffic from Armour east of Fayette | Attendees provided feedback via comment cards. | See photo showing temporary bike lane |
| 6 | November 21, 2017 | Council Work Session | Presentation of the draft plan. Cover memo noted "Key recommendations for the Transition and Commercial zones are the addition of bike lanes on Armour Road, facilitated by removal of a vehicle traffic lane. Traffic modeling shows this change can be made with limited impact to vehicular traffic." | Approved minutes note "Council consensus was to proceed with the recommended improvements in the Commercial and Transition zones..." | Council Memo, November 21, 2017 |

**Armour Road Complete Street
City Council Discussion and Decision Points**

7/31/2019

| | Date | Meeting | Presentation/Discussion | Action | Documentation |
|----|--------------------|-------------------------|---|--|---|
| 7 | December 5, 2017 | Council Regular Session | Adoption of plan | Approved 6-0 (Anita Lodahl was absent; Zach Clevenger had stepped out during this item) | |
| 8 | March 6, 2018 | Council Regular Session | Award of Contract for engineering services. Council memo noted "Key recommendations for the Transition and Commercial zones are the addition of bike lanes on Armour Road, facilitated by removal of a vehicle traffic lane. Traffic modeling shows this change can be made with limited impact to vehicular traffic." | Approved 7-0 (Fred Steffen was absent) | Council Memo, March 6, 2018 |
| 9 | May 31, 2018 | Public Meeting | Presentation of conceptual design for Armour Road phase 1 improvements from Fayette to Ozark. This meeting was held in conjunction with the Parking Management Plan. The conceptual design showed one lane of traffic in each direction between Fayette and Linn. Attendees included Don Stielow, Rita Pearce, Zach Clevenger, and Bryant DeLong. | n/a | Public Meeting Exhibit, May 31, 2018 |
| 10 | August 7, 2018 | Council Regular Session | Approval of Bus Stop Removal & Relocation. Council memo included an exhibit showing one lane of traffic between Fayette and Linn, bike lanes, and mid-block crossings at Gentry, Post Office, and Knox. | Approved 8-0 | Exhibit to Council Memo, August 7, 2018 |
| 11 | September 11, 2018 | Budget Workshop | Armour Road Complete Street improvements were discussed as part of the FY2019 budget (Convention & Tourism Fund). Staff notified the Council that the bids received in September 2018 were all above the adopted budget amount and recommended re-bidding the project in spring 2019 with a subsequent budget amendment. Council indicated support for this course of action. | Future phases of Improvements were included in adopted budget. | |
| 12 | December 18, 2018 | Council Regular Session | Approval of Task Order #2, rebid services | Approved 8-0 | |
| 13 | June 4, 2019 | Council Regular Session | Budget Amendment & Award of Contract, Gunter Construction The Council memo noted "The bike lanes and parking spaces will reduce the road to one travel lane in each direction with a center turn lane." | Both items approved 8-0 | Council Memo, June 4, 2019 |

MEMORANDUM



TO: Mayor and City Council
City Administrator

FROM: Sara Copeland, AICP, Community Development Director

DATE: June 21, 2016

RE: Planning Sustainable Places Grant Application Support

In 2015, the City received a Planning Sustainable Places (PSP) program grant from the Mid America Regional Council (MARC) to support the Burlington Corridor Complete Street Plan, a conceptual plan to improve the Burlington Corridor as a “complete street” that better serves vehicles, bicyclists, and pedestrians in a more inviting, greener corridor. The PSP program helps fund local projects that are transportation-focused and support sustainable redevelopment, environmental stewardship, and public engagement. The PSP program is funded with federal transportation funds and so requires a local match of at least 20 percent of the total project cost.

MARC recently opened the 2017 PSP program for applications. City staff intends to submit an application for the prepare of a complete street design for Armour Road between Ozark Street and downtown, focused on adding bicycle facilities to this street. In 2015, traffic modeling of Armour Road showed that there is an excess of roadway capacity on this segment of Armour compared to current and future demand and that some lanes could be reduced without a significant impact on levels of service. Our new Master Plan identifies a need to expand the bicycle network through the city, with Armour Road identified as an important component of this network. Staff believes that a reasonable budget for a complete street design project, with a vigorous public engagement component, would be approximately \$125,000. We intend to apply for \$100,000 in grant funds, with the necessary local match of \$25,000.

Applications are required to show that local match funds are available. Because of the timing of this application process, there is no source of match funds shown in our adopted FY2016 budget. MARC staff has indicated that a resolution supporting this application and committing to including match funds in the FY2017 budget is sufficient for program application purposes.

Traffic Study

- Completed in 2016
- Ozark to Fayette
- Findings
 - Analyzed Capacity of Armour Road
 - Determined Excess Capacity
 - Showed removal of single lane each direction would still operate at acceptable LOS

Traffic Study

- Independent traffic study completed in 2016
- Both this study and previous study have similar findings:
 - Analyzed Vehicle Capacity of Armour Road
 - Determined Excess Capacity
 - Showed removal of 1 lane each direction would not have significant impact to vehicle travel

Traffic Study

Existing vs Proposed Mid-day Traffic Travel Times

| | Existing | Proposed |
|-----------|--------------|--------------|
| Eastbound | 3 min 10 sec | 3 min 48 sec |
| Westbound | 3 min 26 sec | 4 min 1 sec |



Increase of:

- Eastbound 38 seconds
- Westbound 35 seconds



Enhanced pedestrian and bicycle awareness and safety

SURVEY RESULTS

June 13, 2017

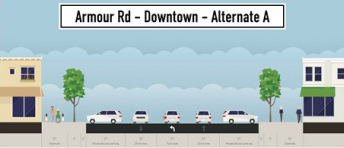
Armour Road Alternatives

Which alternative do you prefer for the Downtown Zone?

Downtown Zone


Burlington to Fayette

Armour Rd - Downtown - Alternate A



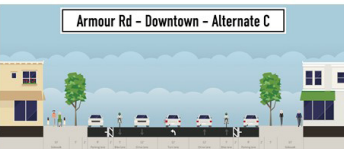
A. Neighborhood Greenways Behind Downtown
There would not be any bike lanes or sharrows in downtown on Armour Road.

Armour Rd - Downtown - Alternate B




B. Sharrows with Back-in Angled Parking
Sharrows on the road increases awareness for bicyclists. Back-in angled parking makes it safer for bicyclists on Armour Road.

Armour Rd - Downtown - Alternate C

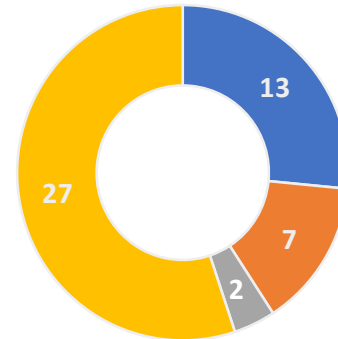


C. Bike Lanes with Parallel Parking
Parking stalls would be converted to on-street parallel parking next to the curb. A bike lane would be located in between the parallel parked cars and traffic.

Armour Rd - Downtown - Alternate D



D. Parking Protected Bike Lanes with Parallel Parking
Parking stalls would be converted to on-street parallel parking. A bike lane would be located between parallel parked cars and the sidewalk.



| Alternative | Count |
|---|-------|
| Alternative A: Neighborhood Greenways Behind Downtown | 13 |
| Alternative B: Sharrows with Back-in Angled Parking | 7 |
| Alternative C: Bike Lanes with Parallel Parking | 2 |
| Alternative D: Parking Protected Bike Lanes with Parallel Parking | 27 |

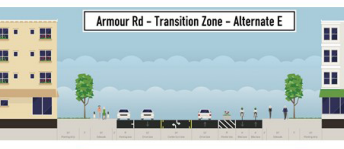
- Alternative A: Neighborhood Greenways Behind Downtown
- Alternative B: Sharrows with Back-in Angled Parking
- Alternative C: Bike Lanes with Parallel Parking
- Alternative D: Parking Protected Bike Lanes with Parallel Parking

Which alternative do you prefer for the Transition Zone?

Transition Zone

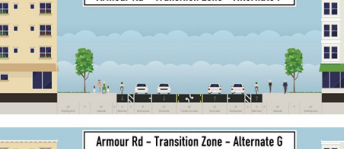
Fayette to Knox

Armour Rd - Transition Zone - Alternate E




E. Two-Way Cycle Track with Parking on the Other Side
Separated bike lanes allowing bicycle movement in both directions would be on one side of the road and on-street parallel parking would be put in place on the other side of the road.

Armour Rd - Transition Zone - Alternate F

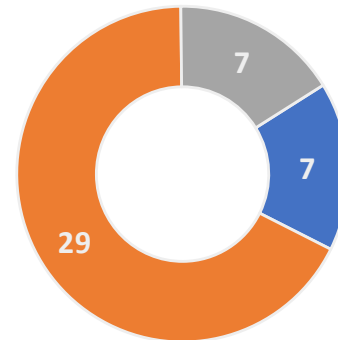


F. One-Way Parking Protected Buffered Bike Lanes
A bike lane would be located between the parallel parked cars and the sidewalk on both sides of the road.

Armour Rd - Transition Zone - Alternate G



G. One-Way Wider Buffered Bike Lanes
Bike lanes would be located on both sides of the road and would feature a wide buffer to separate bicyclists from traffic.



| Alternative | Count |
|---|-------|
| Alternative E: Two-Way Cycle Track with Parking on the Other Side | 7 |
| Alternative F: One-Way Parking Protected Buffered Bike Lanes | 29 |
| Alternative G: One-Way Wider Buffered Bike Lanes | 7 |

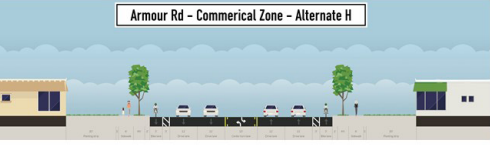
- Alternative E: Two-Way Cycle Track with Parking on the Other Side
- Alternative F: One-Way Parking Protected Buffered Bike Lanes
- Alternative G: One-Way Wider Buffered Bike Lanes

Which alternative do you prefer for the Commercial Zone?

Commercial Zone

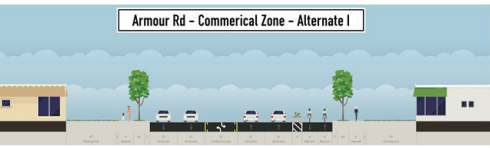
Knox to Ozark

Armour Rd - Commercial Zone - Alternate H

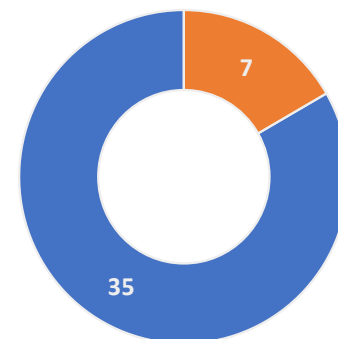


H. One-Way Buffered Bike Lanes
Bike lanes would be located on both sides of the road and would feature a buffer to separate bicyclists from traffic.

Armour Rd - Commercial Zone - Alternate I




I. Two-Way Cycle Track
Separated bike lanes allowing bicycle movement in both directions would be on one side of the road.



| Alternative | Count |
|--|-------|
| Alternative H: One-Way Buffered Bike Lanes | 35 |
| Alternative I: Two-Way Cycle Track | 7 |

- Alternative H: One-Way Buffered Bike Lanes
- Alternative I: Two-Way Cycle Track



NORTH KANSAS CITY

Virtually Urban. Supremely Suburban.

Demonstration Project Photo
of Temporary Bike Lane
September 27, 2017



MEMORANDUM



TO: Mayor and City Council
City Administrator

FROM: Sara Copeland, AICP, Community Development Director

DATE: November 21, 2017

RE: Armour Road Complete Street Plan

The Armour Road Complete Street Plan is a plan for improvements to Armour Road to provide a safe travel environment for all users that is sustainable, visually appealing, and economically vibrant. This project examined Armour Road between Burlington and Ozark, within the City's right-of-way.

This plan is based on the goals of the 2016 Master Plan and feedback from the community and has been guided by a stakeholders advisory committee made up of business representatives and community residents. Key milestones in the development of the plan included a community meeting and focus groups in May and the demonstration project/parklet community meeting in September. The draft plan was presented to both the advisory committee and the Planning Commission in October for feedback prior to this work session presentation.

The plan divides Armour Road into three segments – Downtown, Transition, and Commercial zones – and makes recommendations for each segment. Key recommendations for the Transition and Commercial zones are the addition of bike lanes on Armour Road, facilitated by removal of a vehicle traffic lane. Traffic modeling shows this change can be made with limited impact to vehicular traffic.

At the work session, the planning team will present the draft plan the City Council for feedback. The desired outcome of the work session is to receive final input before moving forward with adoption of the plan and implementation steps. Improvements to Armour Road are budgeted in the adopted FY 2018 budget.

MEMORANDUM



TO: Mayor and City Council
City Administrator

FROM: Sara Copeland, AICP, Community Development Director

DATE: March 6, 2018

RE: Engineering Services for Armour Road Complete Street Project –
Professional Services Agreement

| | | |
|-------------------|---|--------------------|
| Budget Authority: | FY 2018 Convention & Tourism Fund – Armour Road Complete Street: | \$480,000 |
| | This Agreement: | <u>(\$113,850)</u> |
| | Amount Remaining For Construction: | \$366,150 |

On November 21, 2017, the City Council adopted the Armour Road Complete Street Plan, a plan for improvements to Armour Road to provide a safe travel environment for all users that is sustainable, visually appealing, and economically vibrant. The plan divides Armour Road into three segments – Downtown, Transition, and Commercial zones – and makes recommendations for each segment. Key recommendations for the Transition and Commercial zones are the addition of bike lanes on Armour Road, facilitated by removal of a vehicle traffic lane. Traffic modeling shows this change can be made with limited impact to vehicular traffic.

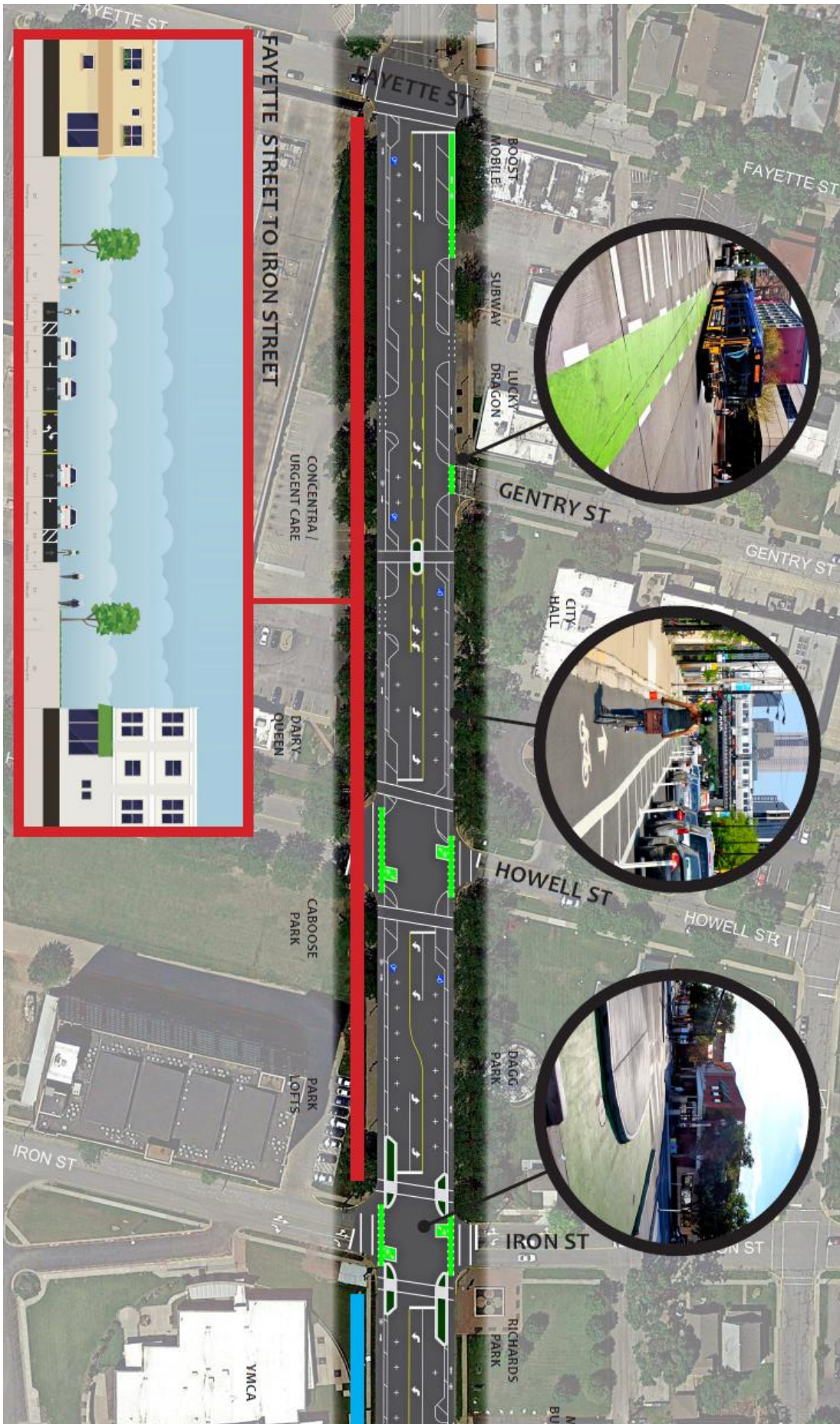
The adopted plan identified five main implementation steps. This contract advances work on two of those: Step #1: Make improvements to the Transition Zone & Commercial Zone, and Step #4: Phase in placemaking improvements along Armour Road. The engineering work included in this agreement will result in construction plans to be let for construction later this year.

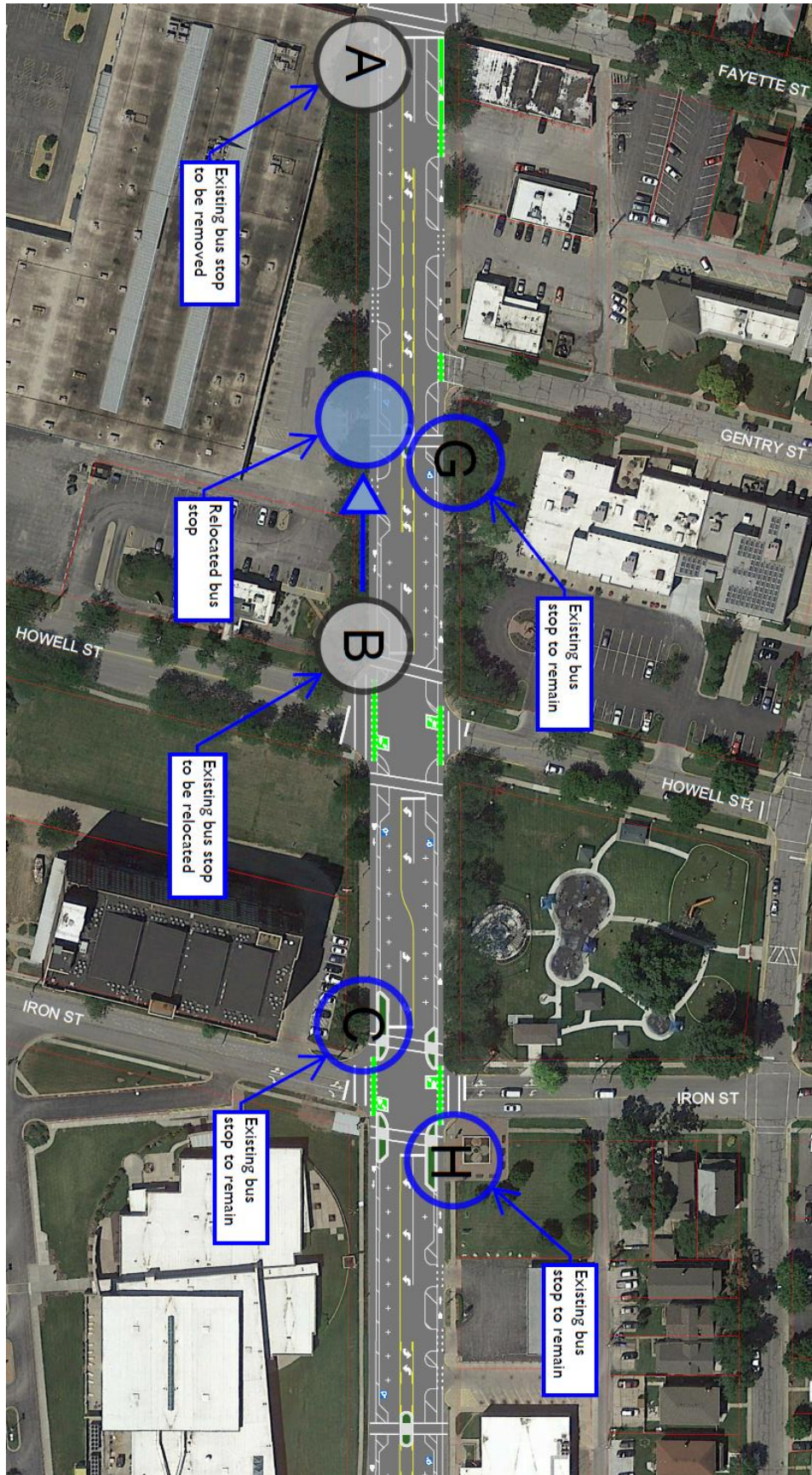
To identify the best qualified engineering firm to provide these services, the City issued a Request for Qualifications to provide engineering services for the Armour Road Complete Street project. We received submittals from four firms. The selection committee chose to interview WSP and recommends this firm as the most qualified to conduct this work. WSP worked with the City to develop the Armour Road Complete Street Implementation Plan last year.

Staff has worked with WSP to develop the scope of work included with this agreement. This scope of work includes survey, field review, selection of materials and site furnishings, construction document plan production, construction cost estimates, and bidding assistance. On-call construction inspection will be provided during construction of improvements. The contract also includes outreach to the community and coordination with KCATA, MoDOT, and Operation Green Light.

A major milestone in this work is project bidding in August 2018. The cost of this scope of work is \$113,850. The remainder of funds budgeted for this project are reserved for construction.

A representative from WSP will be present at the Council meeting to answer any questions you have about this project.





MEMORANDUM



TO: Mayor and City Council
City Administrator

FROM: Sara Copeland, AICP, Community Development Director

DATE: June 4, 2019

RE: Construction Contract with Gunter Construction for Armour Road Bike Lanes

| | | |
|-------------------|-------------------------------------|----------------|
| Budget Authority: | FY 2019 Convention & Tourism Fund — | |
| | Armour Road Complete Street Phase 2 | \$ 73,000.00 |
| | Re-Bid Plans: | (\$ 14,800.00) |
| | Construction Contract Base Bid: | (\$314,533.60) |
| | Construction Contract Alternate B: | (\$ 65,892.50) |
| | Construction Contract Alternate F: | (\$ 39,000.00) |
| | City Material Purchase: | (\$ 8,000.00) |
| | | (\$369,226.10) |

On November 21, 2017, the City Council adopted the Armour Road Complete Street Plan, a plan for improvements to Armour Road to provide a safe travel environment for all users that is sustainable, visually appealing, and economically vibrant.

The FY 2018 and FY 2019 Budgets projected a five-year plan for accomplishing these improvements as follows:

| | | |
|----------|-----------|-----------|
| FY 2018: | Phase I | \$480,000 |
| FY 2019: | Phase II | \$ 73,000 |
| FY 2020: | Phase III | \$ 67,500 |
| FY 2021: | Phase IV | \$ 53,500 |

Armed with a budget of \$480,000 for Phase I of the project, the City entered into a contract with WSP in March 2018 for engineering services to prepare construction

documents for two of the Plan’s Implementation Steps: #1, Make improvements to the Transition Zone & Commercial Zone, and #4, Phase in placemaking improvements along Armour Road. Unfortunately, when bids were opened in September 2018, all bid amounts were above both the engineer’s estimate and the budgeted amount for the project. No contract was awarded, and the unexpended amount of \$366,150 was returned to the Convention and Tourism fund balance.

The Fiscal Year 2019 budget contains \$73,000 for Phase 2 of Armour Road Complete Street improvements. During the September budget workshops with the City Council, the Council indicated support for staff’s recommendation that Phase I improvements be re-bid in the spring of 2019 and that a future budget amendment be brought forward for a Phase I construction budget totaling approximately \$450,000. This would result in shifting back planned Phase II improvements to 2020, Phase III to 2021, and Phase IV to 2022.

Upon rebid this spring, three construction companies submitted bids for the Armour Road Bike Lanes improvements. The chart below shows the three bids with all requested additional alternates.

| | Gunter | Musselman & Hall | Mega Industries |
|---------------------------------------|--------------|------------------|-----------------|
| Base Bid | \$314,533.60 | \$328,302.50 | \$421,752.35 |
| Alternate A: Microsurfacing | \$174,801.25 | \$175,929 | \$152,246.25 |
| Alternate B: Mid-Block Crossings | \$65,892.50 | \$105,548 | \$117,771 |
| Alternate C: Delineators | \$10,890 | \$8,470 | \$10,285 |
| Alternate D-1: Bike Protection | \$60,188 | \$30,828 | \$49,178 |
| Alternate D-2: Bike Protection | \$80,740 | \$44,040 | \$89,548 |
| Alternate E: Green Bike Lane Markings | 23,312 | \$24,800 | \$31,000 |
| Alternate F: Decorative Crosswalks | \$39,000 | \$40,000 | \$38,000 |
| Alternate G: Bike Turn Boxes | \$57,900 | \$69,600 | \$58,000 |
| Alternate H: Street Furnishings | \$65,120 | \$60,800 | \$61,100 |

Based on review of the bids, WSP, the City’s engineer for this project, and staff recommend moving forward with the Base Bid, Alternate B, and Alternate F. Under this scenario, Gunter Construction is the lowest and best bid.

The base bid includes the installation of bike lanes from Fayette to Ozark Street. Between Fayette and Linn, the bike lanes will be parking protected, with new on-street parallel parking spaces between the bike lane and the vehicle travel lanes. The bike lanes and parking spaces will reduce the road to one travel lane in each direction with a center turn lane. Between Linn and Ozark, the bike lanes will be separated from the vehicle travel lanes by a four-foot buffer area. In this section, there will be two travel lanes in each direction with a center turn lane. The base bid includes the installation of islands at the

intersection of Armour & Iron to provide improved bus stops and improved safety for pedestrians, new curb ramps at Armour & Howell, and new signage along Armour Road, including new truck route signs. Other work in the base bid includes signal modifications to line up the traffic signals with the vehicle traffic lanes at the Howell, Iron, and Linn intersections.

Alternate B addresses a key element of the Armour Road plan focusing on safe street crossings for pedestrians to connect residents to destinations on both sides of the street.

Alternate F meets the goal of improving aesthetics along the corridor; decorative crosswalks included in the pop-up demonstration project were one of the most popular recommendations with residents.

Staff also recommends the purchase and installation of the delineators (Alternate C) by Public Works crews. City purchase and installation is more economical for this element of the plan. Delineators are available from one city supplier for \$60.50 each; the 121 delineators shown on the plans will total \$7,320.50. Public Works has indicated that it can complete this work in-house.

With the two additional alternates and material purchase of delineators, the total project cost is:

| | |
|--|--------------------|
| Engineering – rebid services: | \$ 14,800.00 |
| Base Bid – Bike Lanes: | \$ 314,533.60 |
| Alternate B – Mid-Block Crossings: | \$ 65,892.50 |
| Alternate F – Decorative Crosswalks: | \$ 39,000.00 |
| <u>City Material Purchase – Delineators:</u> | <u>\$ 8,000.00</u> |
| Total Project Cost: | \$ 442,226.10 |

Staff recommends the following actions:

- A) Amend the FY 2019 Budget in the amount of \$369,227 (FY 2019 Project Costs of \$442,226.10 minus FY 2019 Budgeted Amount of \$73,000.00)
- B) Award a contract to Gunter Construction in the amount of \$419,426.10.