


COUNCIL COMMUNICATION

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|  | Number: | 19- | Meeting: | August 5, 2019 |
| | Agenda Item: | # | Roll Call: | [] |
| | Submitted by: | Steven L. Naber, P.E., City Engineer | | |

AGENDA HEADING:

Approving 2nd Avenue Reconstruction Concept Plan for a 4-lane roadway section with turn lanes at select intersections and access control measures along the corridor from University Avenue to Des Moines River and authorization and direction to proceed with design.

SYNOPSIS:

Recommend approval of 2nd Avenue Reconstruction Concept Plan for a 4-lane roadway section with turn lanes at select intersections and access control measures along the corridor from University Avenue to Des Moines River and authorization and direction to proceed.

FISCAL IMPACT:

Amount: \$11.5 million (estimated)

Funding Source:

- 2019-20/2024-25 CIP, Page Street Improvements – 24, Road Reconstruction – 2nd Avenue, ST277, \$5.05 million
- 2019-20/2024-25 CIP, Page Sanitary Sewer Improvements – 8, River Bend and King Irving Sewer Separation, SS138, \$4.95 million
- Funding has not been established for the remaining \$1.5 million

ADDITIONAL INFORMATION:

- In May 2017, the River Bend and King Irving Sewer Separation Concept Report was completed. As part of the report, a new storm sewer was proposed to be constructed on the west side of 2nd Avenue from Clark Street north to the Des Moines River. Additionally, the 2nd Avenue pavement between University Avenue and the Des Moines River needs reconstruction. The pavement reconstruction and sewer project provide an opportunity to make geometric changes to the roadway. As a result, City staff hired a consultant to complete a traffic study of the 2nd Avenue corridor from University Avenue to the Des Moines River to determine if traffic improvements were needed.
- 2nd Avenue from University Avenue to the Des Moines River is currently a 40-foot-wide, 4-lane cross section (lane width 9.5-feet to 10-feet) with discontinuous 4-foot sidewalks on either side.

- Snyder and Associates, a traffic engineering consultant, completed the traffic study in February 2019. The study looked at crash trends, existing and future traffic operations, and multi-modal accommodations. Three (3) cross-section alternatives analyzed 3-lanes, 4-lanes with select turn lanes, and 5-lanes.
- The analysis showed that 2nd Avenue had a higher than average corridor crash rate and several intersections were above the average statewide crash rate for similar intersections. Safety issues were due to no turn lanes being provided at intersections, narrow lanes with close proximity of utility poles to the road, and no access management.
- Due to the volume of vehicles on the corridor, a 3-lane cross section would not operate at acceptable levels (some intersections would operate at a level of service F). Both the 4-lane with turn lanes and 5-lane alternatives provide adequate capacity for existing and future (2040) traffic volumes.
- Recommendations from the report included:
 - Realigning Forest Avenue (currently Forest Avenue is offset causing sight distance issues).
 - Left-turn lanes at the following intersections:
 - Franklin Avenue (north bound)
 - College Avenue (north bound and south bound)
 - Forest Avenue (north bound and south bound)
 - Redundant driveway closures/modifications/consolidation to address safety concerns along corridor.
 - 5-foot sidewalks on both sides of the street along the entire corridor.
- Both the 4-lane with turn lanes and 5-lane alternatives require Right-of-Way (ROW) acquisitions. Below is a summary of the ROW needs:

| | <u>4 Lanes w/Turn Lanes</u> | <u>5 Lanes</u> |
|--------------------------------|-----------------------------|----------------|
| West ROW Required | 4-feet | 9.5-feet |
| East ROW Required | 4-feet | 9.5-feet |
| Full Acquisition Required | 3 properties | 4 properties |
| Full Acquisition Possible | 3 properties | 12 properties |
| Property with Parking Affected | 4 properties | 8 properties |

Note: Properties with “Full Acquisition Possible” means this alternative will drastically impact site parking and/or access due to roadway widening. If traffic flow on these properties cannot be altered to fit the existing property’s needs, a full acquisition may be necessary. Properties with “Parking Affected” means they will lose on-site parking spaces but will not be impacted to the degree of needing a full acquisition.

- Capital Improvement Program 2019-2020/2024-2025 has \$10 million for construction budget between the Roadway Reconstruction – Second Avenue and River Bend and King Irving Sewer Separation. Additional funds will need to be allocated for this project in the next Capital Improvement Program 2020-2021/2025-2026.

- Total project costs are estimated to include:

| | <u>4-Lanes</u> | <u>5-Lanes</u> |
|--------------------------------|-----------------|-----------------|
| Roadway Construction | \$ 5.50 million | \$ 6.05 million |
| Storm Sewer Construction | \$ 3.00 million | \$ 3.00 million |
| Construction Contingency (20%) | \$ 1.50 million | \$ 1.75 million |
| Right-of-Way | \$ 1.50 million | \$ 5.20 million |
| TOTAL | \$11.50 million | \$16.00 million |

- The traffic engineering consultant and staff recommend the 4-lane roadway section with turn lanes at select intersections and access control measures along the corridor because it addresses the predominate intersection crash types, maintains traffic operations, and minimizes property impacts.

PREVIOUS COUNCIL ACTION(S): NONE

BOARD/COMMISSION ACTION(S):

Board: Transportation Safety Committee

Date: July 9, 2019

Resolution Number: N/A

Action: Motion was made by Jim Windsor to approve the 2nd Avenue Reconstruction from University Avenue to the Des Moines River Concept Plan for a 4-lane roadway section with turn lanes at select intersections and access control measures along the corridor; seconded by Blake Hanson. Motion passed 7:1. Opposed: Dave Ferree.

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:

- Approval of Professional Services Agreement related to design and construction phase services.
- Actions related to construction including council hearing and contract award.

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