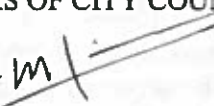



City of Alexandria, Virginia

MEMORANDUM

DATE: MARCH 16, 2015

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

THROUGH: MARK B. JINKS, ACTING CITY MANAGER 

FROM: NELSIE L. BIRCH, DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET 

SUBJECT: BUDGET MEMO #4: UPDATE ON THE KING STREET/QUAKER LANE/BRADDOCK ROAD INTERSECTION IMPROVEMENTS PROJECT

The purpose of this memorandum is to update Council on the status of the revised King Street/Quaker Lane/Braddock Road Intersection Improvement Project as proposed in the FY 2016 CIP, and to detail the rationale as to why this project is proposed to be substantially rescaled from a \$6.6 million plus project to a project of \$2.38 million.

This complicated intersection connects three major arterials and has been extensively studied by the Department of Transportation & Environmental Services (T&ES). Preliminary work has been completed, consistent with the scope of work outlined in a staff update to City Council in December of 2011 (see attachment). The project was initially created to improve vehicular and pedestrian safety and minimize delays through the intersection while also minimizing to the degree feasible right-of-way impacts to adjacent properties and businesses. The City's Adopted FY 2015 – 2024 Capital Improvement Program (CIP) included \$6.6 million in funding for this project.

As part of the preliminary design work, staff performed a value engineering effort which is a normal step in development of CIP projects. This evaluation demonstrated that reductions in motorist delays resulting from the proposed additional left turn lanes would be too small to affect the overall Level of Service (LOS) at most of the approaches and are not significant enough to warrant the level of proposed investment. In addition given the right-of-way need the cost to implement this project might have exceeded its \$6.6 million budget. The updated traffic study notes that, by the year 2020, the maximum reduction in delays through the intersection from the proposed improvements would be just 16 seconds from eastbound King Street onto North Quaker Lane and just 33 seconds from eastbound King Street onto West Braddock Road.

Given the City's current budget climate and concerns about impacts on adjacent businesses that project benefits are limited in relation to the large project cost, staff is recommending the project be significantly re-engineered in the FY 2016 – 2025 CIP. At this new \$2.38 million budgeted funding level, the project will be redefined to more specifically mitigate the driver confusion that is leading to crashes at the intersection. It is proposed that the project scope will be modified to replace the existing span wire traffic signals with overhead mast arm traffic signals. The installation of mast arms will allow for the placement of directional signs and more precise placement of signal heads. This improvement will provide clearer directional information to

drivers, allow signal heads to be oriented to reduce driver confusion, improve intersection efficiency, and will incorporate pedestrian safety improvements through improved signalization and signage. Analysis of Alexandria Police Department crash data indicates that driver confusion is the leading cause of crashes at this intersection.

These improvements can be accomplished with a City budget of no more than \$2.0 million plus \$0.38 million in developer contributions from the Bradlee Safeway project. The developer contributions have been received by the City and will be formally appropriated through technical adjustments made as part of the Approved FY 2016 – 2025 CIP. The project will not require the acquisition of additional right-of-way. In addition to the mast arms, signage and signal head improvements referenced above, the refined project includes previously planned modifications to the slip lane between the service road and King Street as well as modifications to the service road entrance at North Quaker Lane that would take its operation from two-way to one-way. These service road modifications will better facilitate traffic flow and reduce driver confusion. As part of this revised scoping, improvements would be proposed for completion by FY 2017.

Of the original \$6.15 million budgeted in City funding - including General Obligation Bonds supported from Transportation Improvement Program (TIP) revenues - \$4.15 million has been proposed in the FY 2016 – 2025 CIP to be reallocated for other transportation capital investments. This project also included \$448,000 in prior year Urban Funds. After staff review of the total funding sources utilized to finance the project, it was determined that the \$448,000 in Urban Funds had been previously transferred to the Information Technologies System (ITS) Integration project in FY 2012 to support technology improvements at this intersection and are no longer available for the construction of physical improvements. Urban Funds will be removed from the project funding sources as part of the Approved FY 2016 – 2025 CIP document. The total revised budget after removing the Urban Funds and reducing the City contribution will be \$2.38 million.

Staff will work to finalize the scaled-back design and conduct a community outreach effort. This effort will notify stakeholders (including adjacent businesses and civic associations) of the new approach and will explain how the redefined project will address the highest-priority vehicular and pedestrian safety measures identified in prior efforts.

If at some time in the future adjacent businesses decide to redevelop, the City would consider acquiring additional right-of-way so that some or all of the proposed additional turn lanes and other related improvements could be added.

Finally in the next six weeks staff will refine the revised \$2.38 million amount budgeted for FY 2016 and potentially adjust it downward so that any excess funds could be reallocated to other priority capital projects.

ATTACHMENTS:

Attachment 1 – December 5, 2011 Staff Update on the Recommendations to Address Safety and Traffic Operations at the King-Quaker-Braddock Intersection and the Surrounding Area

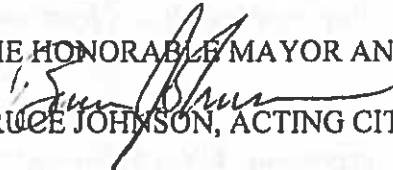
**cc: Emily A. Baker, P.E., Acting Deputy City Manager
Sandra Marks, AICP, Deputy Director, T&ES
William Skrabak, Deputy Director, T&ES
Bob Garbacz, Division Chief, T&ES**

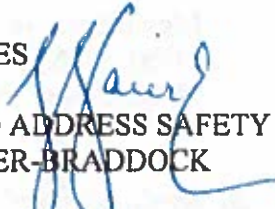
City of Alexandria, Virginia

MEMORANDUM

DATE: DECEMBER 5, 2011

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

THROUGH:  BRUCE JOHNSON, ACTING CITY MANAGER

FROM: RICHARD J. BAIER, P.E., LEED AP, DIRECTOR, T&ES 

SUBJECT: STAFF UPDATE ON THE RECOMMENDATIONS TO ADDRESS SAFETY AND TRAFFIC OPERATIONS AT THE KING-QUAKER-BRADDOCK INTERSECTION AND SURROUNDING AREA

In part because of the upcoming Planning Commission and City Council consideration of the proposed Bradlee Safeway redevelopment on December 13, staff wanted to provide you with an update on the recommendations to address safety and traffic operations at the King-Quaker-Braddock intersection and surrounding area.

DISCUSSION: Because of safety and traffic operations issues at the King-Quaker-Braddock intersection and surrounding area, the City conducted a study to assess alternative improvement options and develop recommendations. To date, the study team has held three public meetings and several meetings with stakeholders. The final report for this study was completed in April, 2010. This study provided recommendations to improve pedestrian safety, vehicular safety, transit operations and vehicular movements. The study, which is posted on the T&ES website, recommended the following improvements:

1. Addition of left turn lanes for several approaches at the intersection of King-Quaker-Braddock and closure of the service road parallel to King Street at Quaker Lane (see Attachment 1). Double left turn lanes would be provided from eastbound King Street onto Quaker Lane and onto West Braddock Road; from westbound West Braddock Road onto North Quaker Lane; and from northbound North Quaker Lane onto King Street.
2. Modification of the service road at the intersection of King and Taylor to include a transit center and restriction on a portion of the service road to allow buses only (see Attachment 2)

In early 2011, T&ES staff conducted an assessment of the consultant recommendations. T&ES staff held two meetings with representatives of businesses in the vicinity of the King-Quaker-Braddock intersection. T&ES evaluated the impacts on access and egress to the commercial areas, safety conditions and traffic operations and developed a modified set of conceptual improvements to address the safety and traffic operations issues. The revised improvement concept includes the addition of left turn lanes as described in item 1 above. However, the

revised concept includes modifications to the previously proposed service road improvements to mitigate the impacts on ingress to and egress from the commercial establishments in the vicinity of the King-Quaker-Braddock intersection. The listing below summarizes the revised recommendations.

1. Addition of left turn lanes for several approaches at the intersection of King-Quaker-Braddock (see Attachment 3). Double left turn lanes would be provided from eastbound King Street onto Quaker Lane and onto West Braddock Road; from westbound West Braddock Road onto North Quaker Lane; and from northbound North Quaker Lane onto King Street.
2. Modification of the service road at the intersection of the service road parallel to King Street and North Quaker Lane to allow vehicles to turn right from the service road to North Quaker precluding vehicles to turn right from southbound North Quaker onto the Service Road (see Attachment 3).
3. Modification of the traffic signal at the intersection of King Street and Taylor to include the two legs of the service road as approaches controlled by the traffic signal at this intersection and provision of enhanced transit shelters in the vicinity of this intersection (see Attachment 4).

T&ES staff held an additional meeting with representatives of the businesses in the vicinity of the King-Quaker-Braddock intersection on November 10 to present the recommended improvement concepts and discuss next steps in the process. Additionally, staff gave a presentation to the Fairlington Citizens Association Board on the proposed improvements on November 12. Staff will hold a public meeting to present the recommended improvement concepts in January, 2012. This project will require the acquisition of right-of-way from a number of businesses, who may or may not be supportive of these changes once more detailed information about right-of-way impacts is known. The cost of this project is estimated at \$6 million and is funded in the 10-Year Transportation Improvement Program approved by Council starting with FY 2012. The project is scheduled for implementation in FY 2013. While this project will assist traffic flow near the proposed redeveloped Safeway, and Safeway has agreed to contribute funds towards these improvements, the Safeway redevelopment is not dependent on this project being implemented.

Please contact me if you have further questions.

ATTACHMENTS:

Attachment 1: Preliminary King-Quaker-Braddock Intersection Recommended Improvements

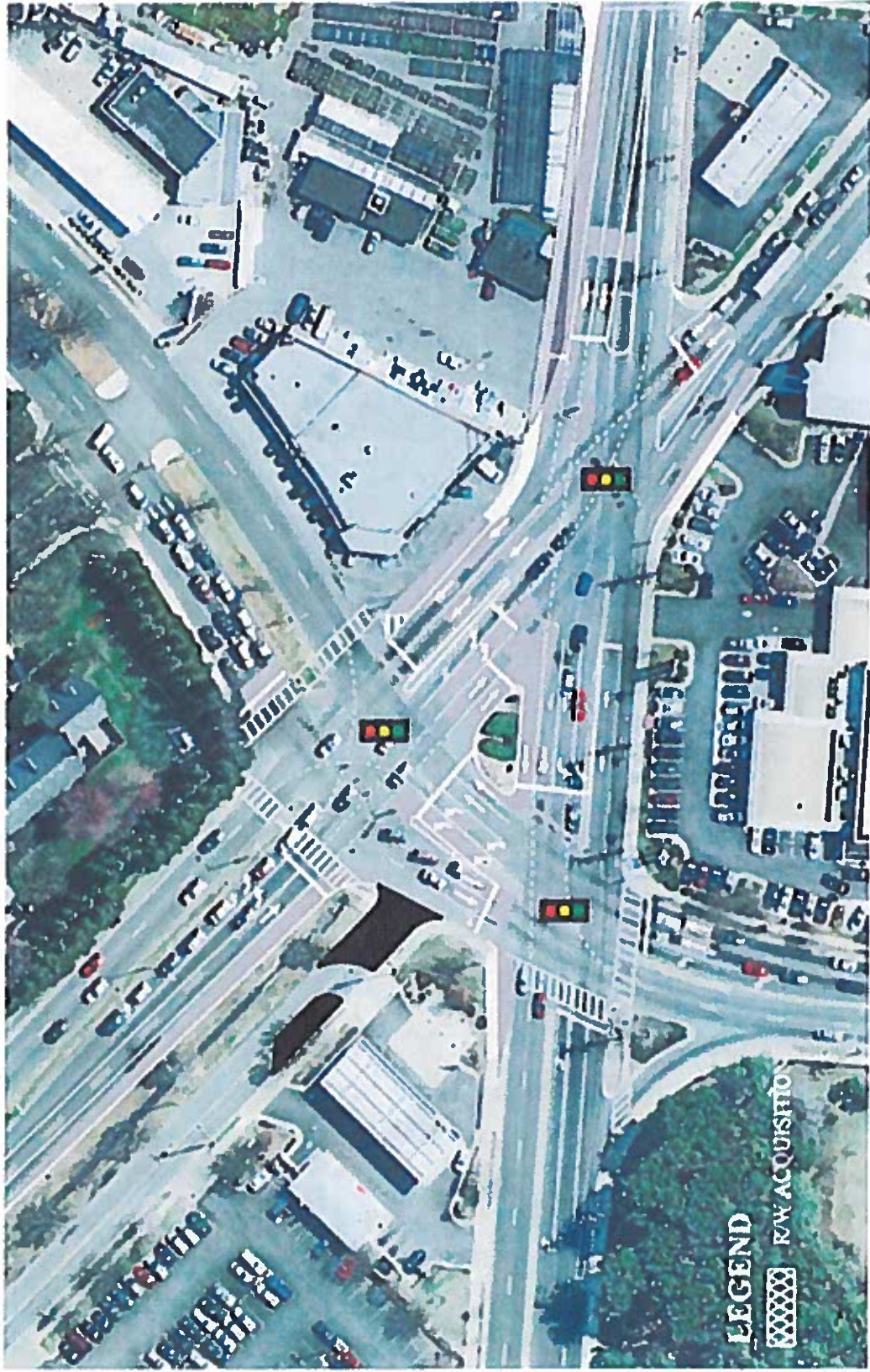
Attachment 2: Preliminary King-Taylor Intersection Recommended Improvements

Attachment 3: Revised King-Quaker-Braddock Intersection and Service Road at Quaker
Recommended Improvements

Attachment 4: Revised King-Quaker-Braddock Intersection Area Recommended Improvements

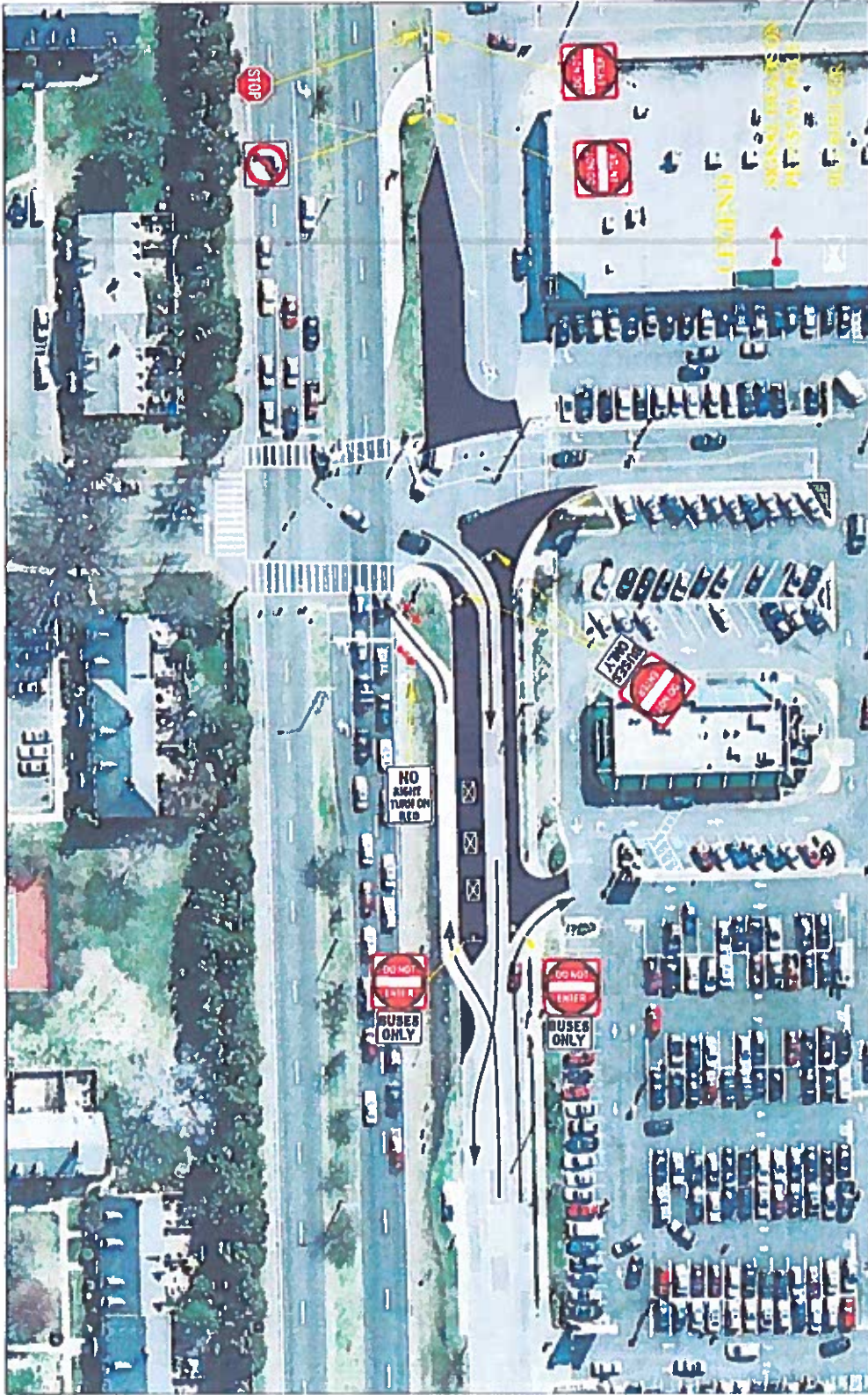
cc: Chair and Members, Planning Commission
Mark Jinks, Deputy City Manager
Abi Lerner, P.E., Deputy Director, T&ES

Attachment 1 – Preliminary King-Quaker-Braddock Intersection Recommended Improvements



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Attachment 2 – Preliminary King-Taylor Intersection Recommended Improvements

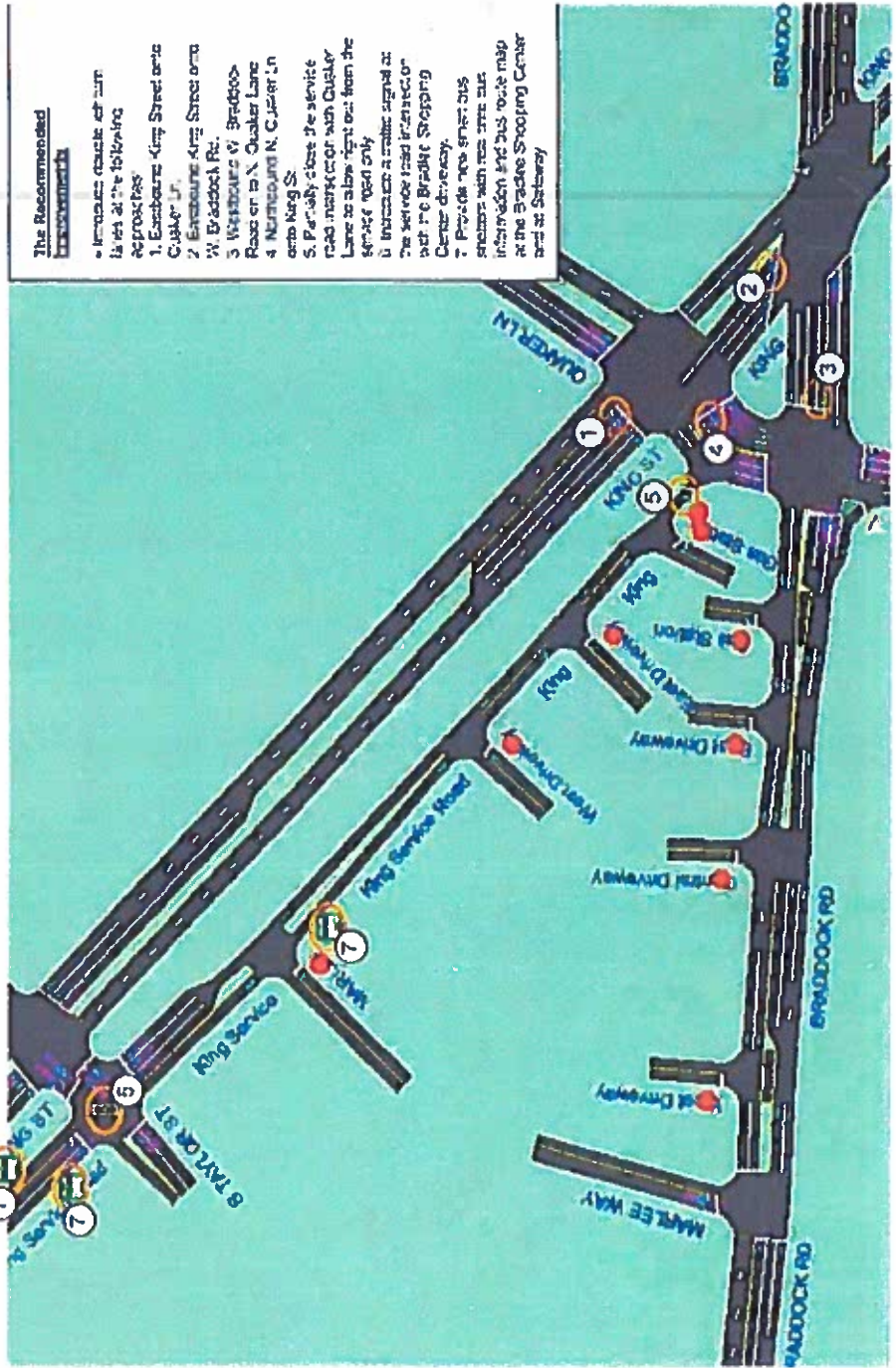


Attachment 3 – Revised King-Quaker-Braddock Intersection and Service Road at Quaker Recommended Improvements



Attachment 4 – Revised King-Quaker-Braddock Intersection Area Recommended Improvements

King_Quaker_Braddock Area Recommended Improvements



The Recommended Improvements

- Improve route of turn lanes at the following approaches
- 1. Exchange King Street onto Quaker Ln
- 2. Exchange King Street onto W. Braddock Rd.
- 3. Westbound W. Braddock Road on to N. Quaker Lane
- 4. Northbound N. Quaker Lane onto King St.
- 5. Partially close the service road marker with Quaker Lane to allow right out from the service road only
- 6. Install a traffic signal at the service road intersection with the Braddock Shopping Center driveway.
- 7. Provide new smart bus signals with red fire bus intervention and bus route map at the Braddock Shopping Center and at Salisbury