

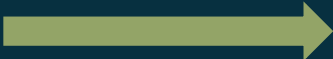


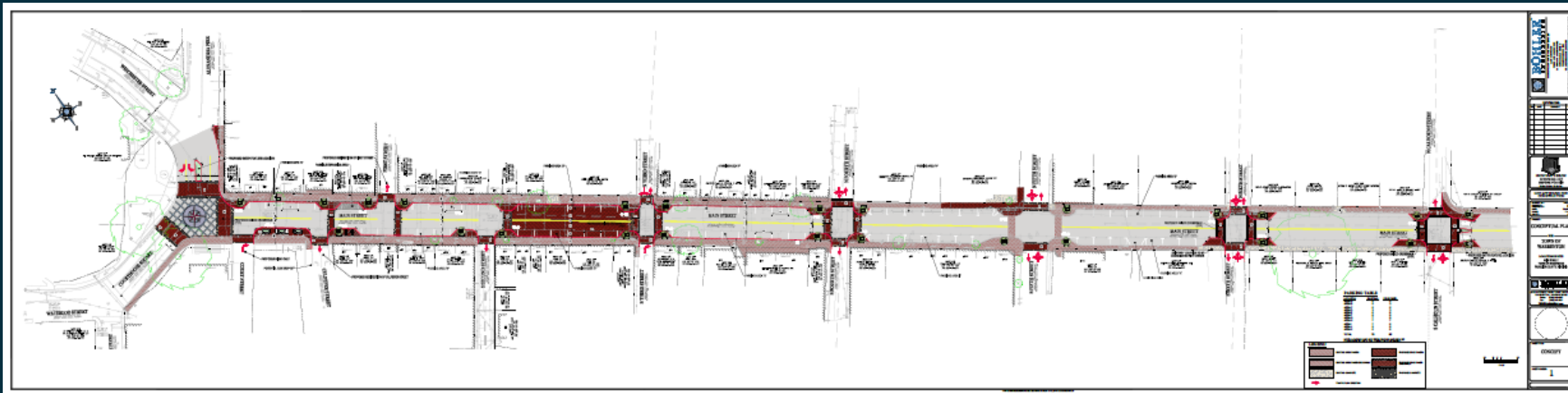
**Town Council**  
**2021 FY27/28 Revenue Sharing Grants**  
**November 9, 2021**

# VDOT Revenue Sharing Grants

FY 2027/2028 Cycle

# Background

- VDOT Revenue Sharing Grants 2 Year Cycle 50/50 Match
- Pandemic Budgeting changed FY Obligation
- Programmed FY 2021/2022  FY2025/2026
- VDOT Funded First \$1 million, Partially Funded
- Previous Applications:
  - Main Street Improvements (\$1,471,125; \$735,562/\$735,562)
  - Walker Drive/E. Lee Street Roundabout (\$1,400,000; \$700,000/\$700,000)



# This Round

- FY 2027/2028
- Tier 1 Projects: Previously Funded
  - Main Street Improvements
  - Walker Drive/E. Lee Roundabout
- Tier 2 Projects: In CIP
  - Falmouth Street Roundabout (Previous HSIP Application)
  - Bear Wallow/Roebling Roundabout (Previous Smartscale Application)
- Pre-Screened – Notified July 30<sup>th</sup>
- Held Work Session in August
- VDOT Cost Estimates Provided September 23<sup>rd</sup>
- Due October, 2021
- Resolution of Support Required



# Changes this Cycle

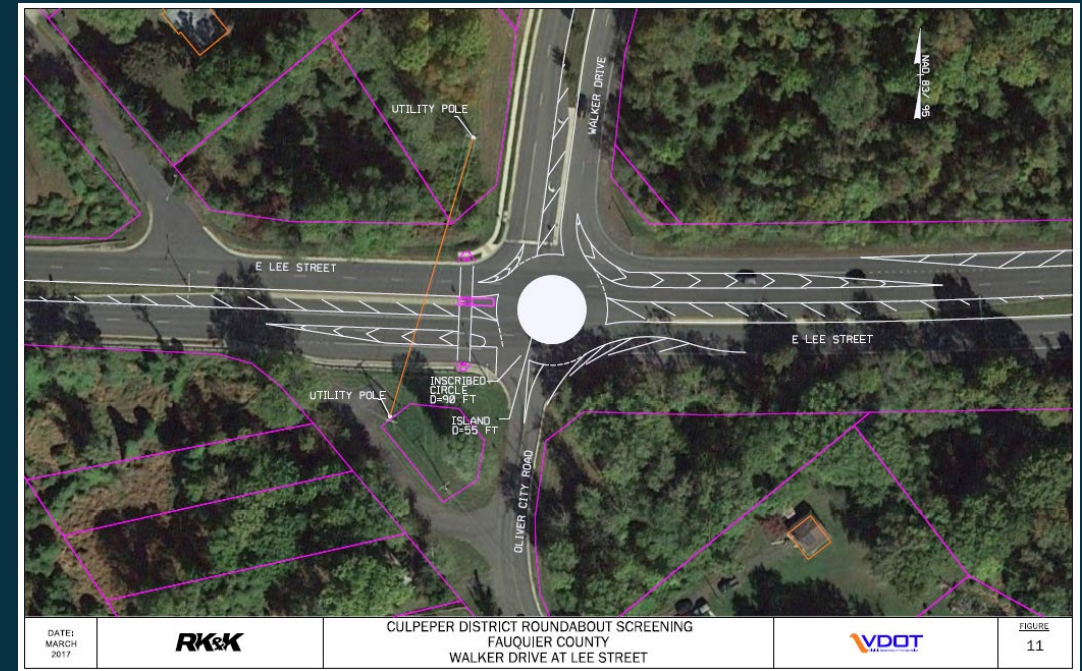
- IIM260 states *“For ALL project applications being considered for inclusion in the SYIP, each application will receive the same level of review and validation by ALL relevant disciplines in order to facilitate the implementation of an appropriate scope and successful on-time, on-budget delivery.”*
- Result VDOT L&D (Location and Design Division) will be reviewing ALL transportation applications for concurrence with applicants on cost estimates.

# October Work Session and Public Hearing

- Town Council held a Public Hearing
- Several members of the public spoke to the Falmouth/E.Lee/Main Street Roundabout application
- Town Council voted to hold the Public Hearing open until November
- VDOT was requested to attend November meeting
- Town Council directed staff to focus on Tier 1 applications; seek input from professional transportation consultants

# Walker Drive/E. Lee Roundabout Project

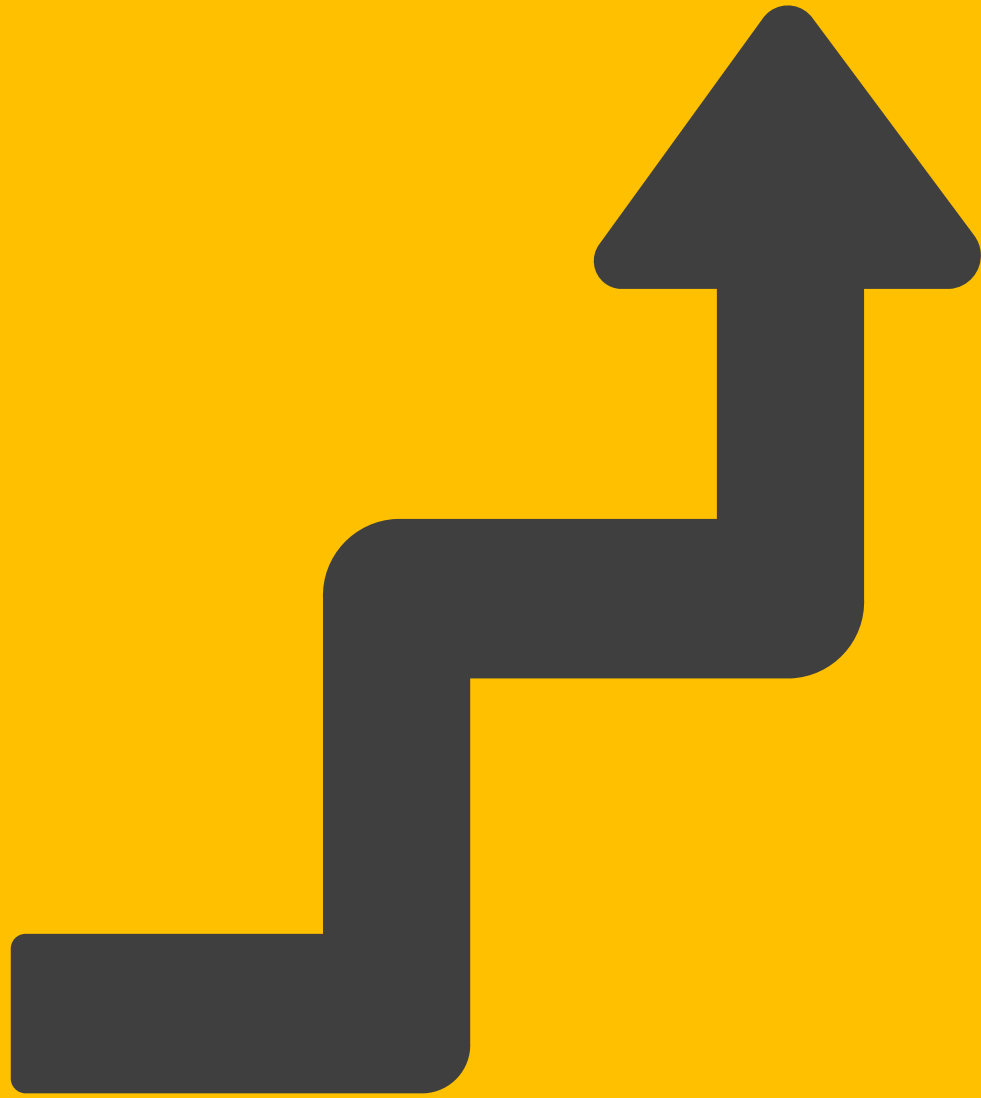
- 2002 Comprehensive Plan Calls for Roundabouts in lieu of lights when possible
- 2017 Walker Drive Rezoning TIA Feasibility
- 2018 HSIP Application
- 2019 VDOT Revenue Sharing cycle for \$1.4 million – Prorated
- Not Full 50/50 Match  $\Delta$  \$92,117
- The new L&D estimate, with a new concept not requested by the Town, is now \$6,757,059 million (2021 uninflated)
- Portal Inflation \$9,307,453 (Project Completion 2031)
- Variables: Administration, Timing, PE Design, SWM, ROW, Scope, MOT, contingency percentage



# E LEE STREET/WALKER DRIVE ROUNDAABOUT

CONCEPTUAL DESIGN & COST





**TRAFFIC VOLUME  
FORECAST**

# TRAFFIC VOLUME FORECAST



- Design year 2040
- Accounts for planned/known developments and regional growth
- Reasonably conservative projection of future demand



# TRAFFIC OPERATIONS

# APPROACH & RESULTS

- Operational models developed in accordance with VDOT TOSAM
- Lane configuration optimized to minimize footprint/impacts
- Analyses focused on weekday PM and Saturday midday
- 2040 Peak Hour Level of Service (LOS) and volume-to-capacity (v/c) ratio:
  - Weekday PM – **LOS C, v/c 0.82**
  - Saturday Midday – **LOS A, v/c 0.64**

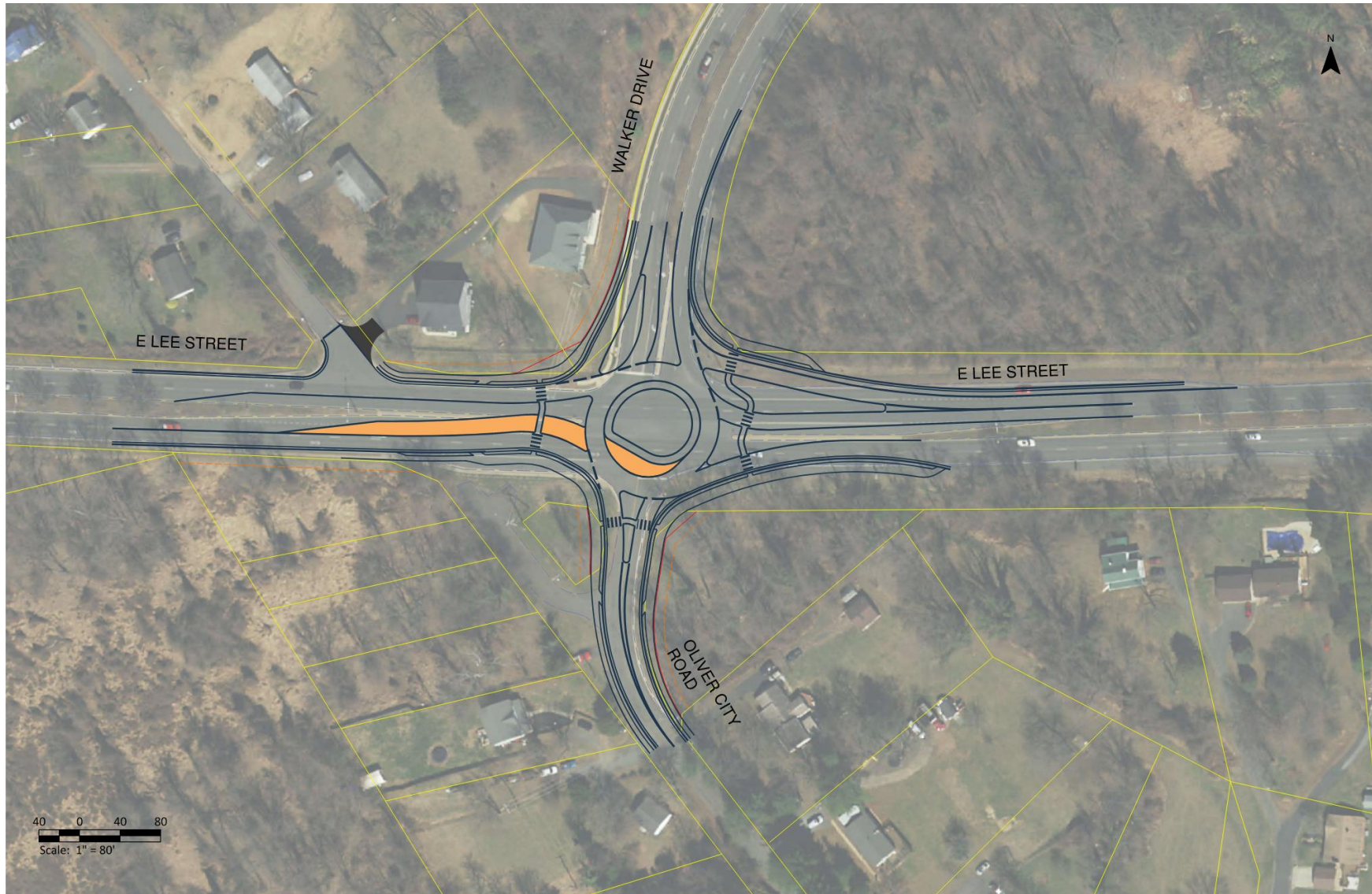


# CONCEPT DESIGN

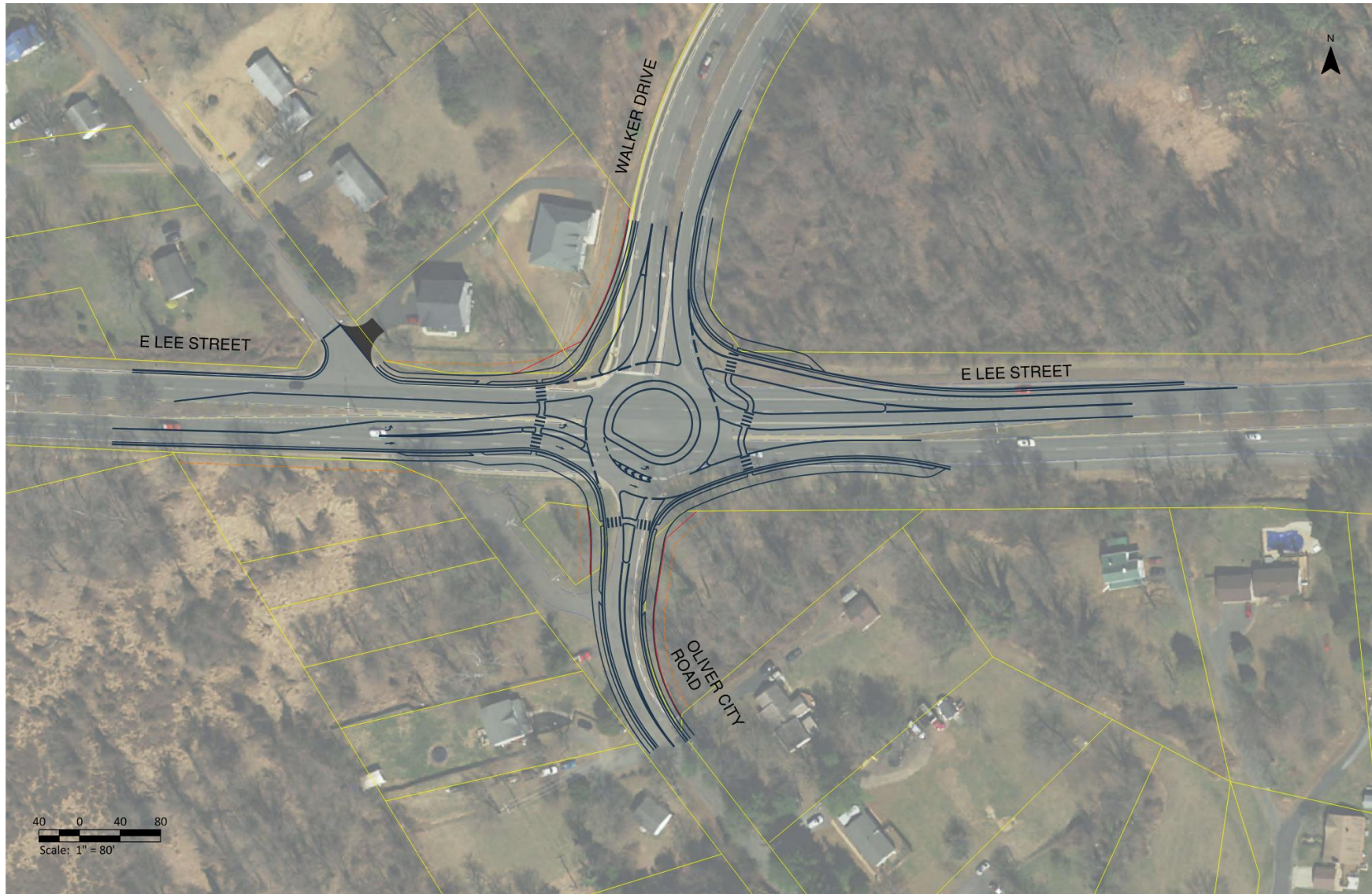
# DESIGN APPROACH

- Focused on minimizing costs while delivering optimal long-term operational/safety performance
- SU-40 school bus/fire truck primary design vehicle (no off-tracking or need to use truck apron)
- Considered phased design/construction approach
  - Simplifies community acclimation/navigation
  - “Full” roundabout may not be needed for several years (or ever?) depending on development/growth – design set up for simple/cost effective Phase 2 retrofit

# PHASE 1 – SINGLE LANE ROUNDABOUT



# PHASE 2 – HYBRID MULTILANE ROUNDABOUT





## **PRELIMINARY OPINION OF COST**

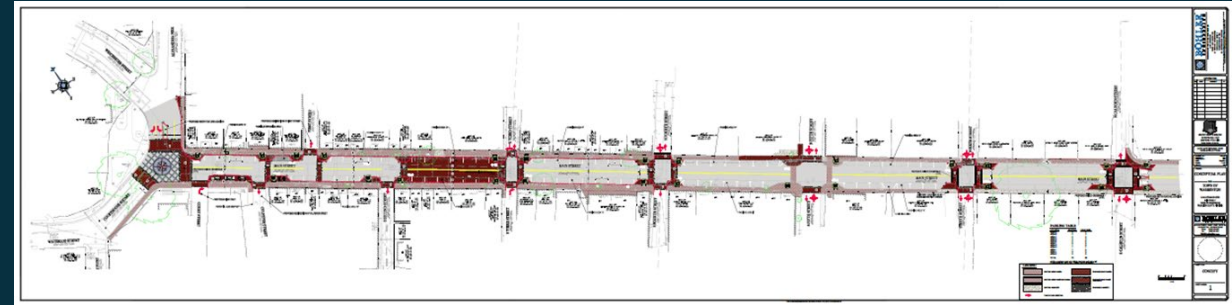
# PRELIMINARY OPINION OF COST

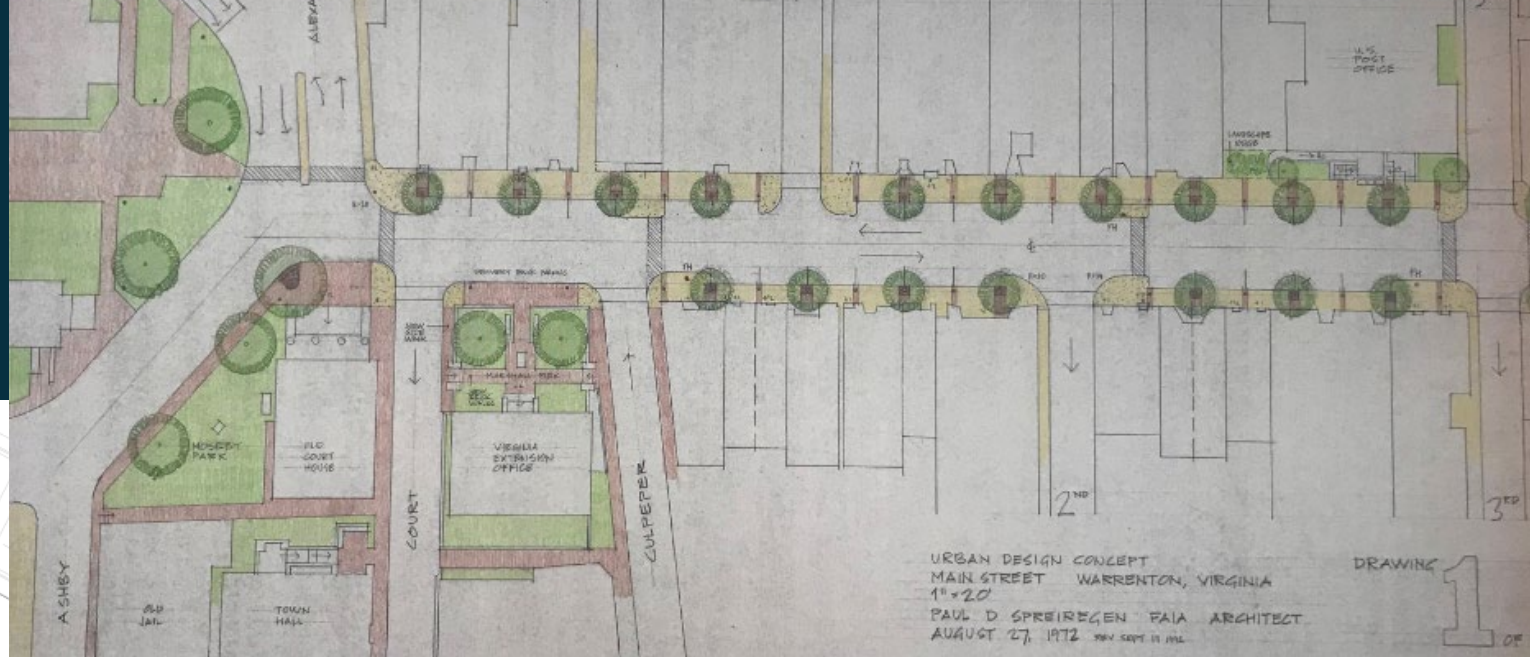
- Preliminary estimate developed with VDOT Culpeper District Workbook tool
- Worked collaboratively with VDOT L&D staff to refine estimate assumptions
- Future opportunities to further value engineer design/reduce costs in the design phase

| PROJECT ESTIMATE  |                    |                  |                   |                     |
|-------------------|--------------------|------------------|-------------------|---------------------|
|                   | Uninflated<br>Base | % Cont. &<br>CEI | \$ Cont. &<br>CEI | Uninflated<br>Total |
| Total Estimate    | \$3,759,294        | 34.2%            | \$1,284,113       | \$5,043,408         |
| PE Estimate       | \$1,103,916        | 5.0%             | \$55,196          | \$1,159,112         |
| RW Property Acq.  | \$566,805          | 60.0%            | \$340,083         | \$906,888           |
| RW Utility Reloc. | \$40,000           | 20.0%            | \$8,000           | \$48,000            |
| RW Estimate Total | \$606,805          | 57.4%            | \$348,083         | \$954,888           |
| CN Estimate       | \$2,048,573        | 43.0%            | \$880,835         | \$2,929,407         |
| -Contingency      |                    | 23.3%            | \$477,884         |                     |
| -CEI              |                    | 19.7%            | \$402,950         |                     |

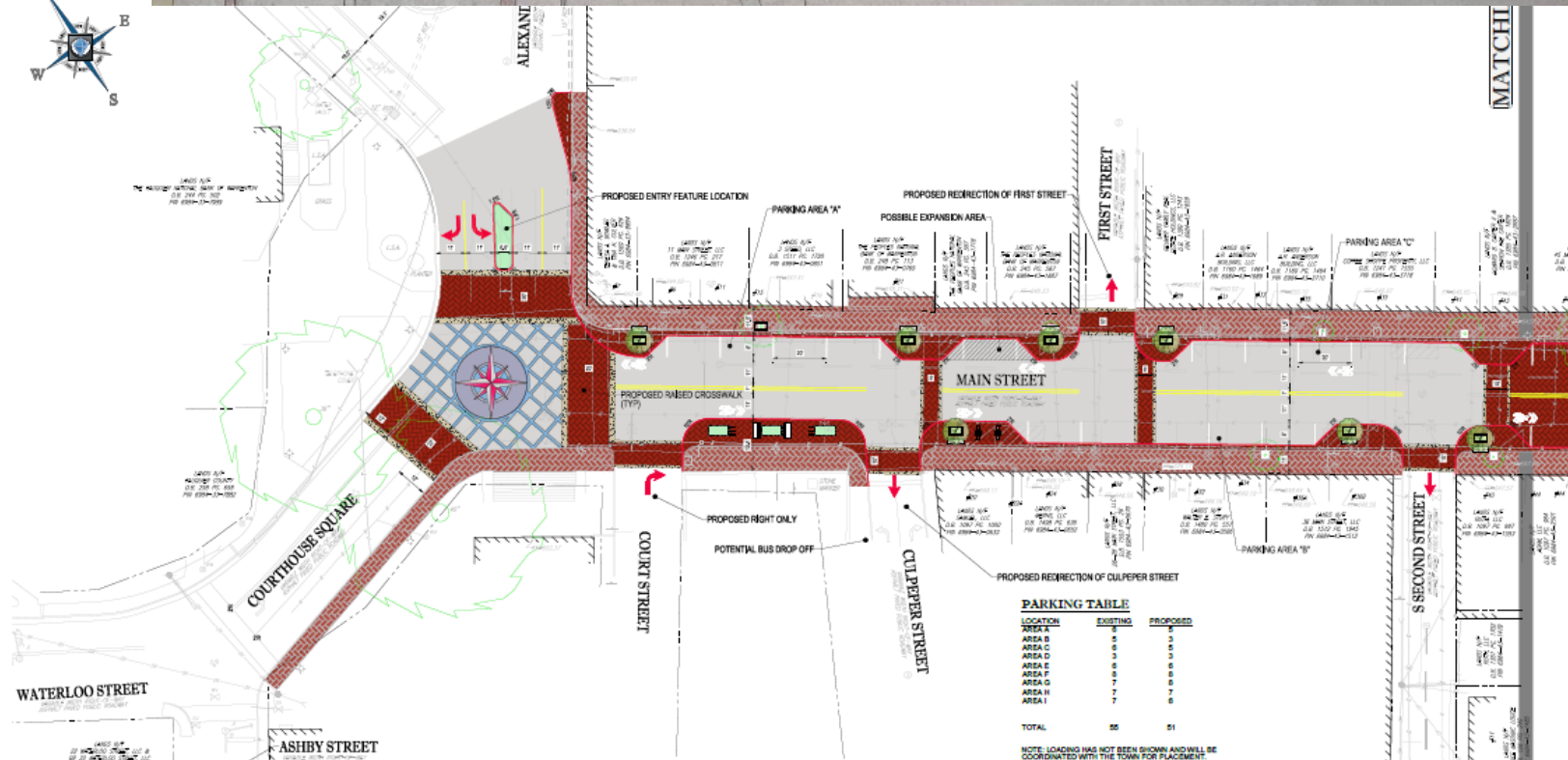
# Main Street Improvement Project

- 1992 Spreiregen Plan
- 2002/2013 Comprehensive Plan
- 2018 HSIP Grant
- 2019 VDOT Revenue Sharing cycle for \$1.47 million
- The new L&D estimate, the same concept with deeper cost analysis, \$4,163,746 (2021 uninflated)
- Portal Inflation \$5,698,974 (Project Completion 2031)
- Variables: Administration, Timing, PE Design Bid, materials, ROW, Scope, MOT, contingency percentage

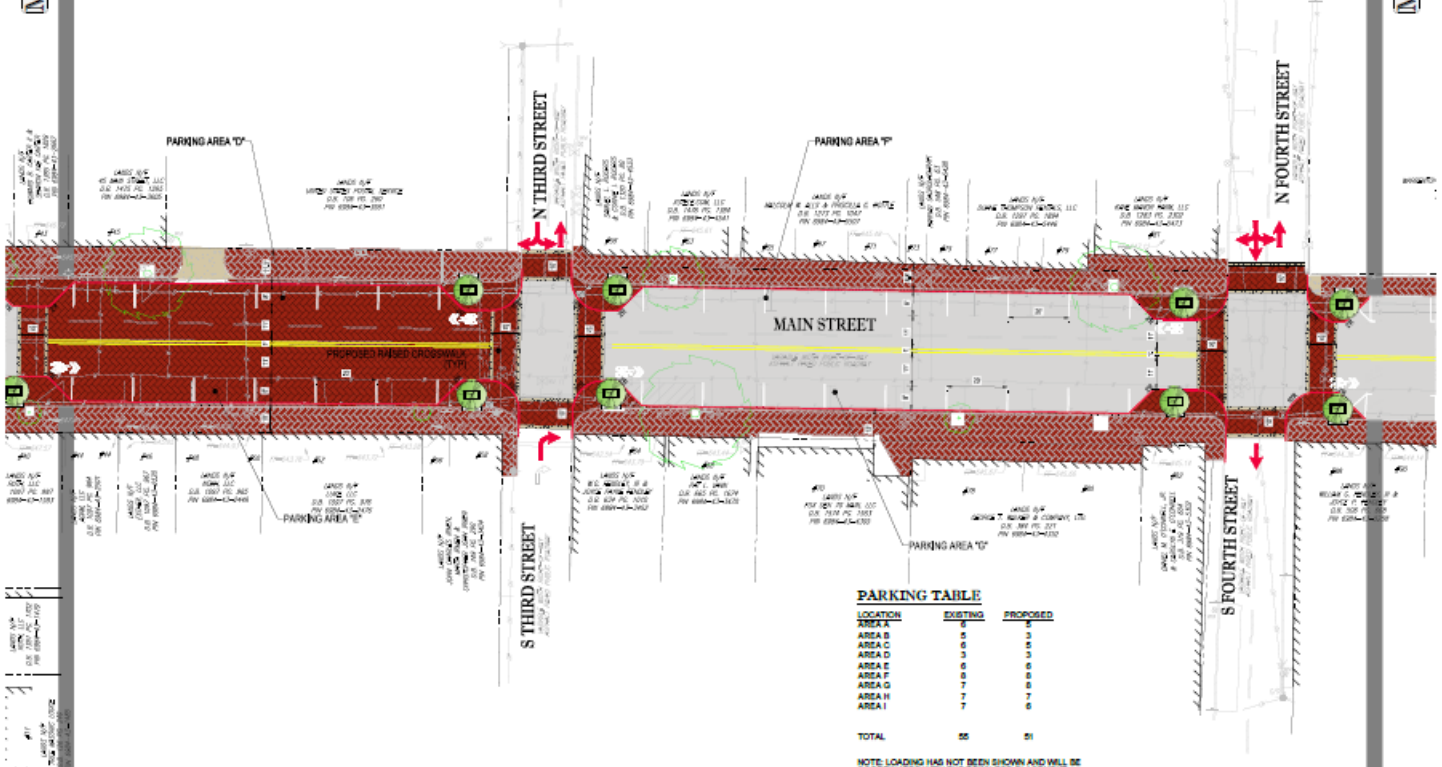
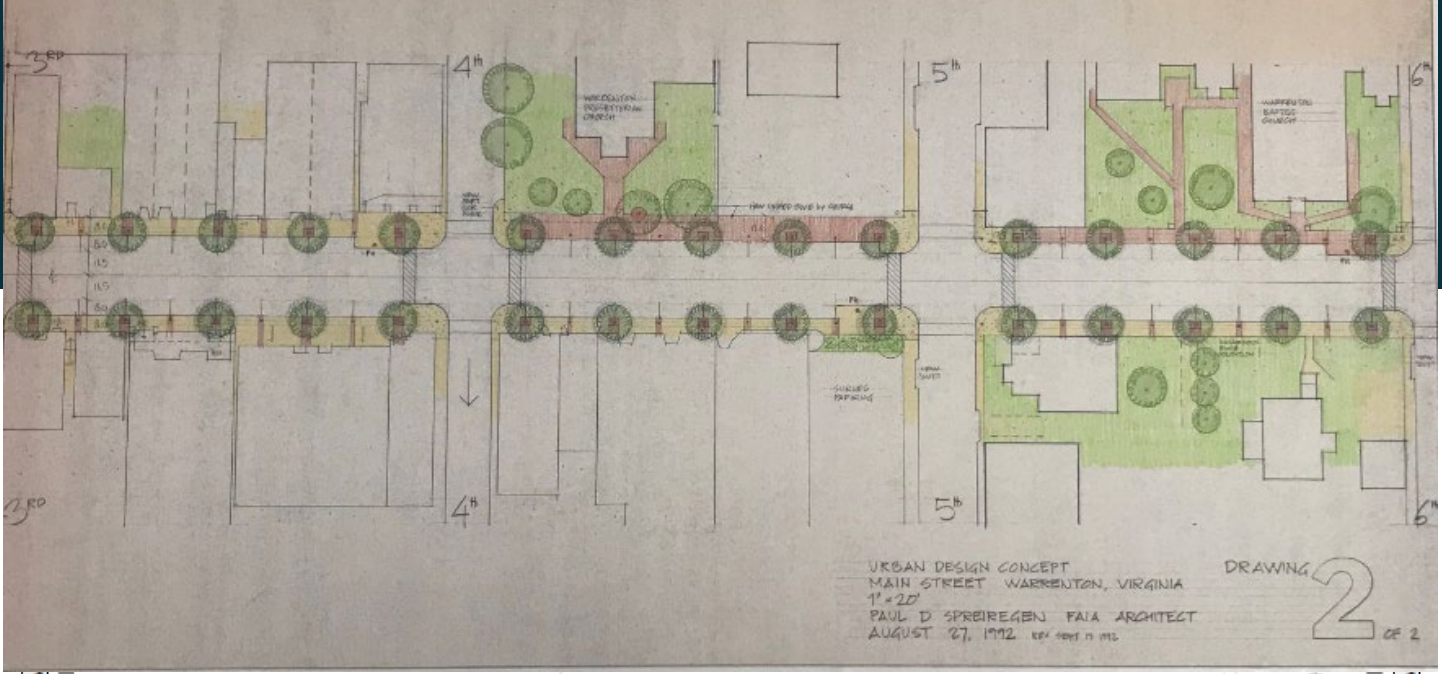




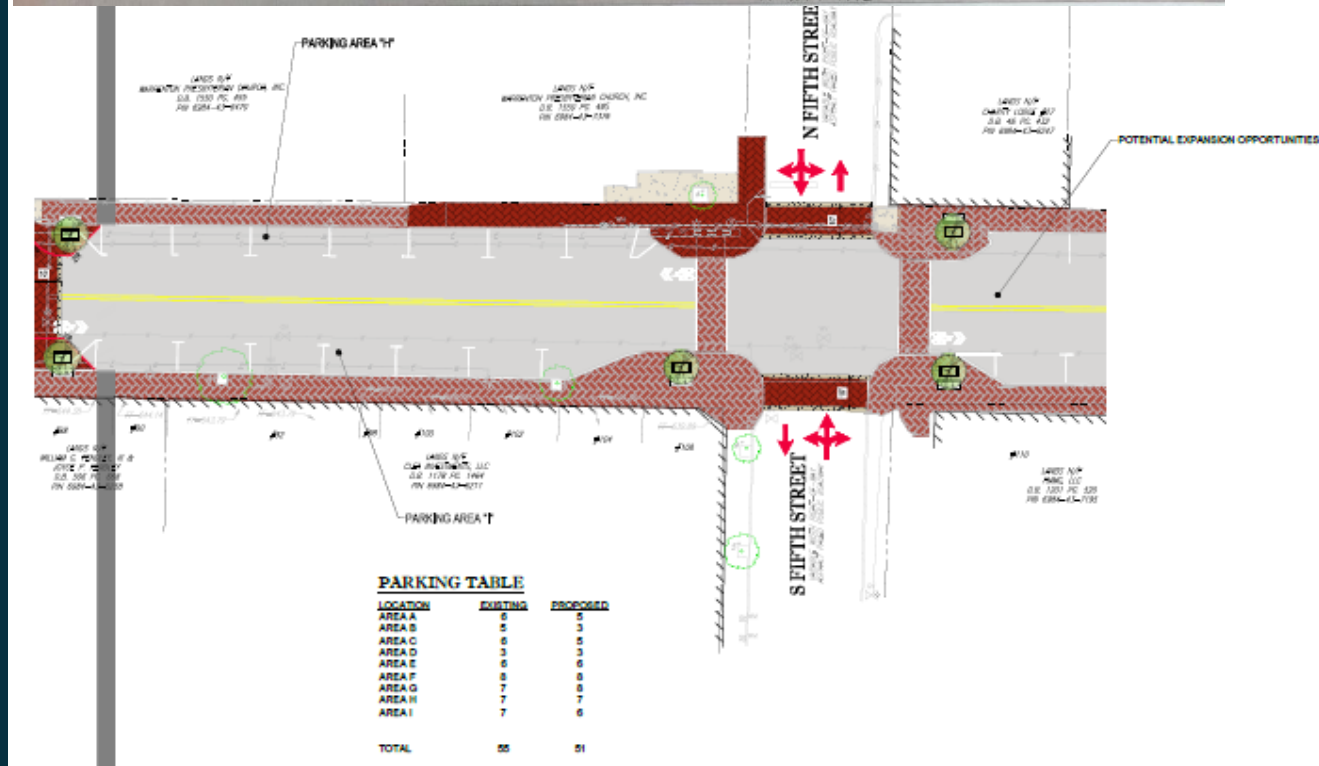
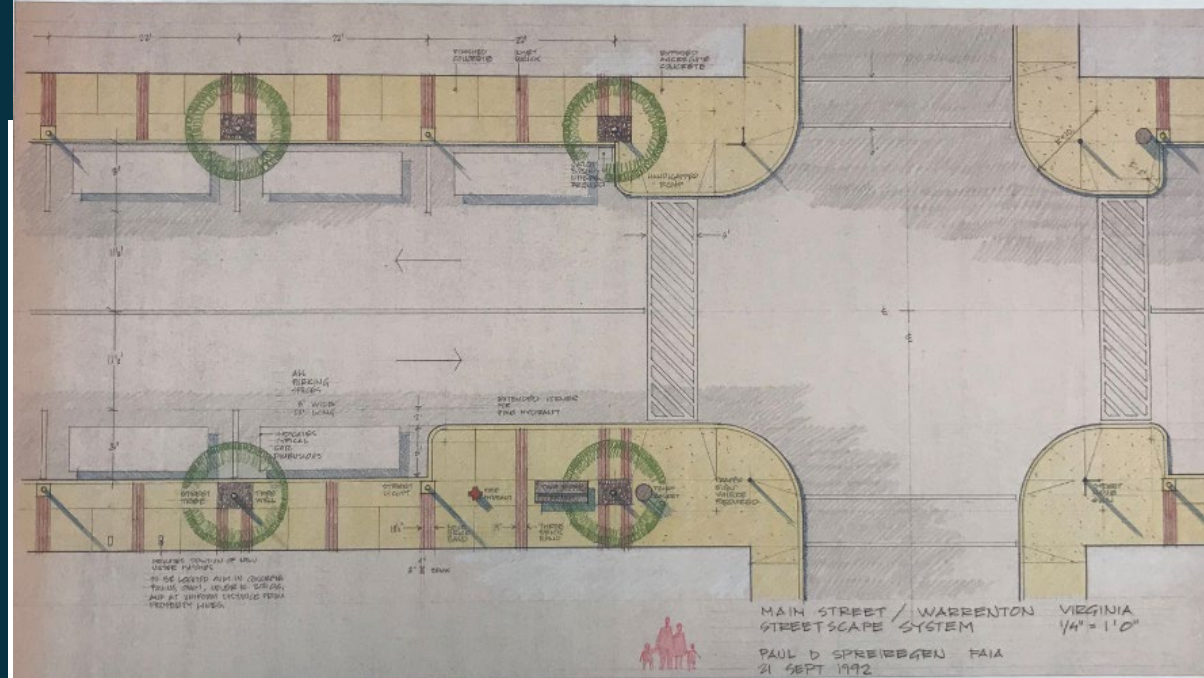
- Wider brick crosswalks on all sides of the intersections.
- Design in the intersection to provide visual interest.
- Wider sidewalk opportunity in front of Juvenile Court Building.
- Reverse directions of Court and Culpeper Streets to enhance traffic flow and safety.
- Signage on Alexandria Pike to mark entrance into Old Town.
- Raised crosswalks as part of increased traffic calming and walkability as recommended in the Walkability Audit.



Historical marker for  
the original crossroads.



## Four part crosswalk treatment.





# Preliminary Cost Revisions

## Bohler

| PROPOSED ESTIMATE |             |     |             |
|-------------------|-------------|-----|-------------|
| Phase             | Base        | %   | 2021 Total  |
| PE                | \$343,750   |     | \$343,750   |
| RW/UT             | \$0         | \$0 | \$0         |
| CN (CEI)          | \$1,295,350 | 15% | \$1,619,187 |
| CN (CONT)         |             | 25% |             |
| Total Estimate    |             |     | \$1,962,937 |

### Bohler states:

Approximately \$1,962,937.50 (UNIFLATED 2021)  
 Assumes Locally Administered  
 Assumes costs based on 5th Street Improvements  
 Assumes no ROW Acquisition  
 Assumes 30 days for construction

## VDOT

| PROPOSED ESTIMATE* |             |     |             |                  | PROPOSED SCHEDULE |             |
|--------------------|-------------|-----|-------------|------------------|-------------------|-------------|
| Phase              | Base        | %   | 2021 Total  | Inflated Total** | Phase (Task)      | Target Date |
| PE                 | \$502,377   | 5%  | \$527,496   | \$611,525        | PE Start (12)     | 5/2/2025    |
| RW/UT              | \$0         | 0%  | \$0         | \$0              | RW Start (52)     | N/A         |
| CN (CEI)           | \$2,089,585 | 20% | \$3,050,794 | \$4,085,623      | CN Start (80)     | 9/13/2027   |
| CN (Cont)          |             | 26% |             |                  | CN End (91)       | 9/13/2028   |
| Total Estimate     |             |     | \$3,578,290 | \$4,697,148*     |                   |             |

\*This estimate is contingent upon the project being Administered by the Town of Warrenton.

\*\*Inflation to be as determined by Smart Portal

### VDOT states:

\$200,000 higher for Preliminary Engineering  
 \$800,000 higher for base construction  
 Assumes Locally Administered  
 Believes MOT is too low  
 Higher estimate for drainage, signs, and markings

# VDOT Main Street Estimate

## What is included:

- Site Plans/Geotechnical/Design
- Mill and Overlay
- Bumps Outs
- ADA Curb Ramps
- Brick
- Landscaping

## What is not included:

- Full sidewalk rebrick
- Local Administration True Costs
- Right of way
  - \$392,790/30% Contingency
  - Total \$510,627 (2021)

# Options Moving Forward

- 2019 Awarded Revenue Sharing - RECOMMENDED OPTION (Main Street \$1.47 m/Walker Drive \$1.4 m)
  - Do Not Submit Any 2021 Applications
  - Modify Scope as Needed at Time
- 2021 Revenue Sharing
  - Submit Only Priority 1 (Main Street/Walker Drive) and come to “consensus” with VDOT on design and cost estimates
  - Alternate, remove match from a 2019 application to apply to ONE project
  - Fund projects up to \$10 million for match (@ 5-10x CIP annual)

# Next Steps

- Motions or Resolutions November Meeting
  - CTB Action Spring 2022
  - If Appropriated, FY27/28
- 
- Potential State Actions
    - Move Revenue Sharing UP two years
    - Requires General Assembly to Approve CTB Action

# Council Direction

- Staff Recommends:
  - Abandon 2021 Applications
  - Maintain 2019 Awards at this Time
  - Allow for State to Determine Cycle
  - Recalibrate with VDOT and County



**Town Council**  
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