



Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group

February 16, 2022 Meeting

Tonight's Agenda

1. Electronic meeting notice (7:00)
2. Approval of the December 8, 2021 meeting minutes (7:05)
3. Chair's Comments (7:10)
4. Staff Update (7:15)
 - a. Large capacity projects
 - b. Neighborhood spot improvements
 - c. Sanitary sewer projects and investigations
 - d. Master baseline schedule
 - e. State and federal grant funding
 - f. Communications and public information
5. Legislative update from the Ad Hoc Group (8:15)
6. Questions and public comment (8:20)
7. Adjourn (8:30)

Electronic Meeting Notice

AGENDA ITEM #1

Electronic Meeting Notice

Due to the COVID-19 Pandemic emergency, this meeting is being held electronically pursuant to Virginia Code Section 2.2- 3708.2(A)(3), the Continuity of Government ordinance adopted by the City Council on June 20, 2020 or Section 4-0.01(g) in HB29 and HB30, enacted by the 2020 Virginia General Assembly (Virginia Acts of Assembly Ch. 1283 and 1289), to undertake essential business. All of the members of the Advisory Group and staff are participating from remote locations through Zoom.

Note: this meeting is being recorded.

Approval of Minutes of the December 8, 2021 Meeting

AGENDA ITEM #2

Chair's Comments

AGENDA ITEM #3

Staff Update

AGENDA ITEM #4

Staff Update Overview

- a. Large capacity projects (Sabu Paul)
- b. Neighborhood spot improvements (Mitch Dillon)
- c. Sanitary sewer asset renewal (Erin Bevis-Carver)
- d. Master baseline schedule (Dan Medina)
- e. State and federal grant funding (Jesse Maines)
- f. Communications and public information (Amanda Dolasinski)

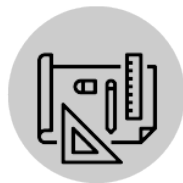
Large Capacity Projects

AGENDA ITEM #4.a

Large Capacity Projects



Combined two projects to streamline design



Design for top 3 projects funded in FY 22: \$19.9 million



Construction estimates for FY 23, FY 24, FY 25: \$87.6 million

Design 1 & 2

East Glebe Road and Commonwealth Avenue and Ashby Street and East Glebe Road

Request for Qualifications: Jan. 21, 2022

Estimated Contract Award: Spring 2022

Design Completion Target: Spring 2025

Awarded Community Flood Preparedness Fund Grant

Design 3

Hooffs Run Culvert Bypass

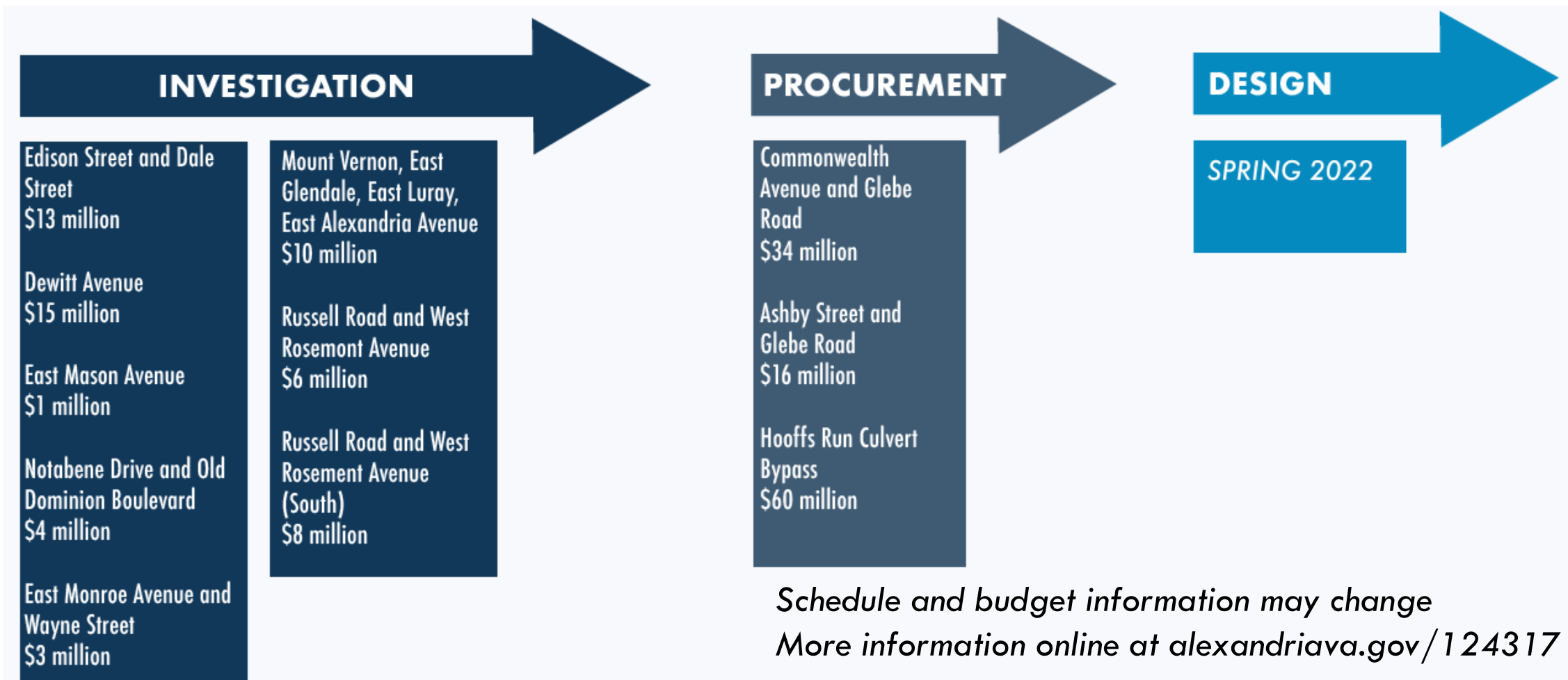
Request for Qualifications: April 2022

Estimated Contract Award: Spring 2022

Design Completion Target: Spring 2025

*Schedule and budget information may change
More information online at alexandriava.gov/124317*

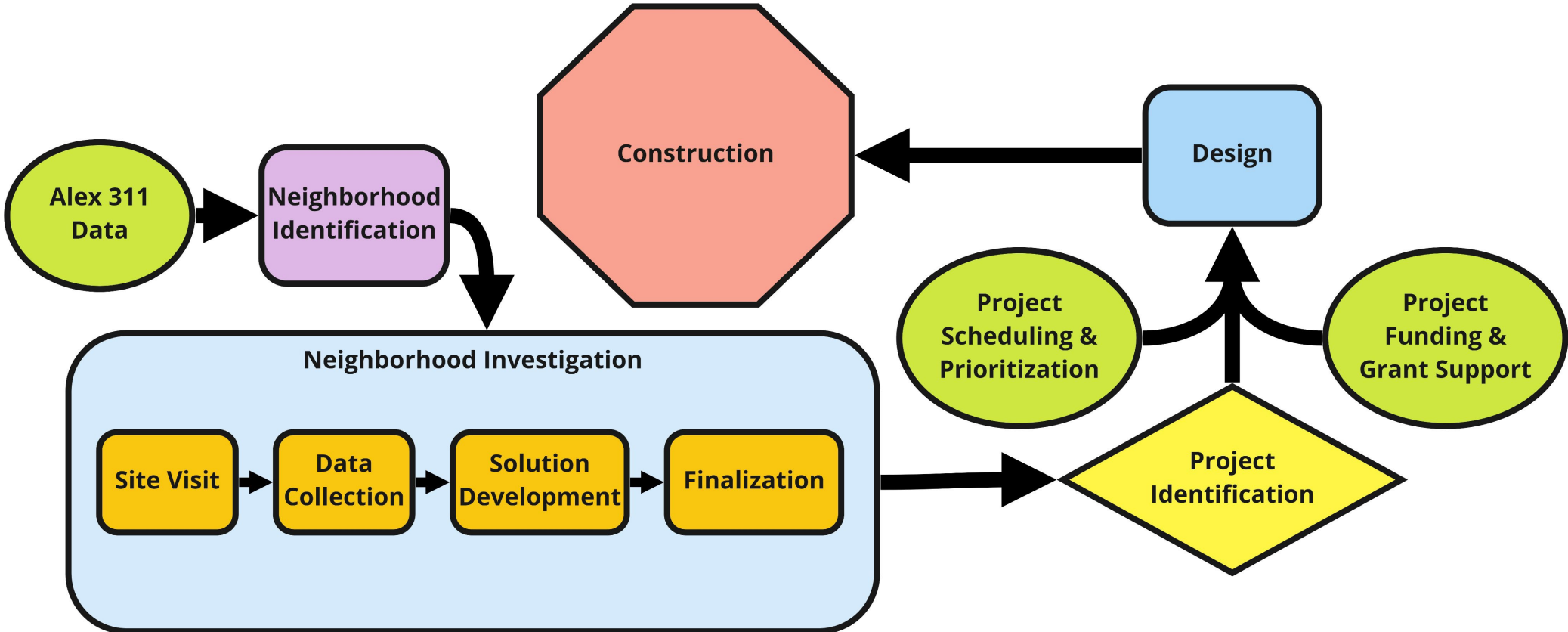
Large Capacity Project Phase Timeline



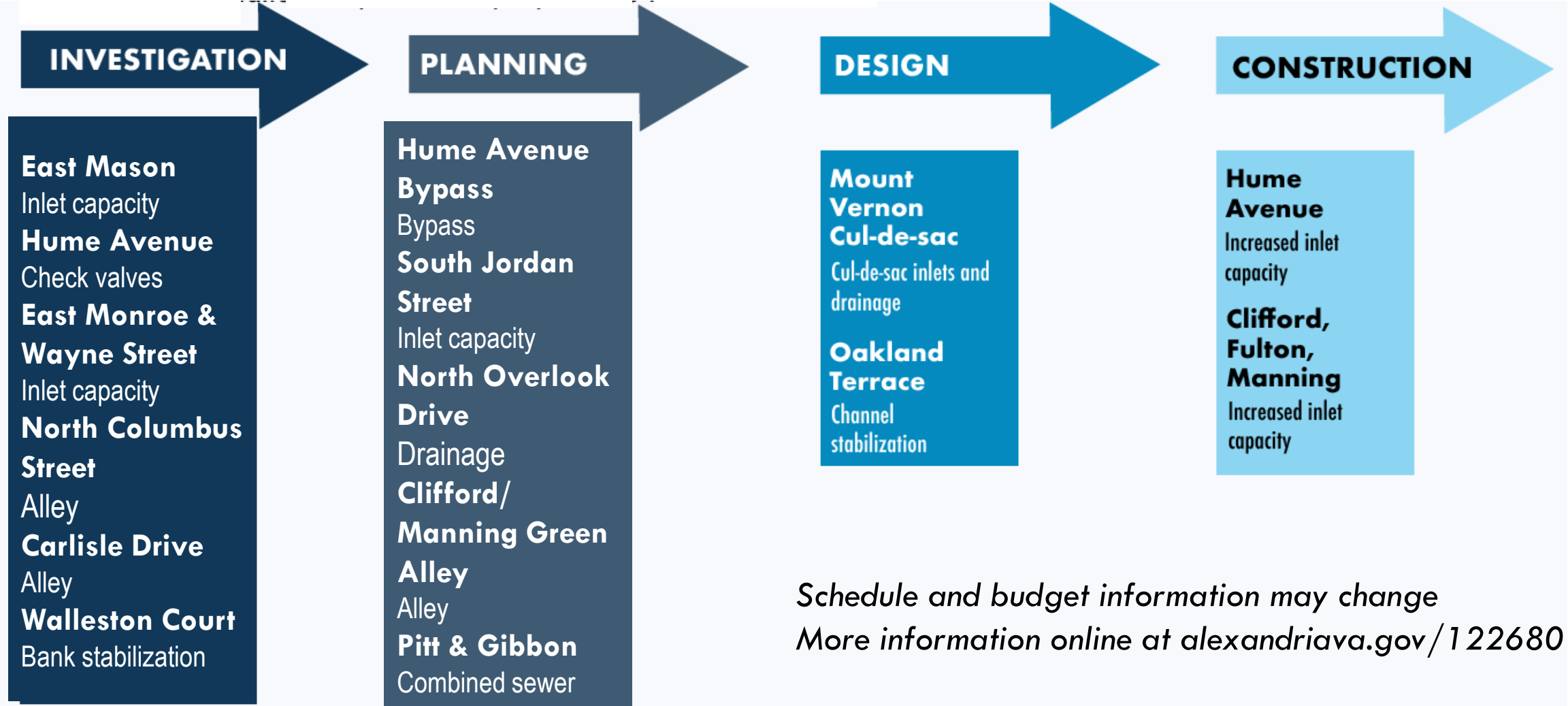
Neighborhood Spot Improvements and Ongoing Investigations

AGENDA ITEM #4.b

Neighborhood Spot Improvements Workflow



Spot Improvement Project Phase Timeline



*Schedule and budget information may change
 More information online at alexandriava.gov/122680*

Neighborhood Spot Improvements

Inlet Capacity Spot Improvement Projects

Larger inlets convey runoff into the storm sewers. Otherwise, this runoff would contribute to street flooding. Residents will notice reduced flooding immediately.

- Hume Avenue
Expected to be completed in February, 2022
- Clifford, Fulton, Manning
Expected to begin in February, 2022



A crew pours concrete to form the catch basins for the new, wider inlets on Hume Avenue.

Engineer Brian Rahal, of the Stormwater Management Division, monitors progress on larger inlet installation on Hume Avenue on Jan. 24, 2022



FLOODACTION

SPOT IMPROVEMENT: Larger inlets to alleviate flooding in neighborhoods

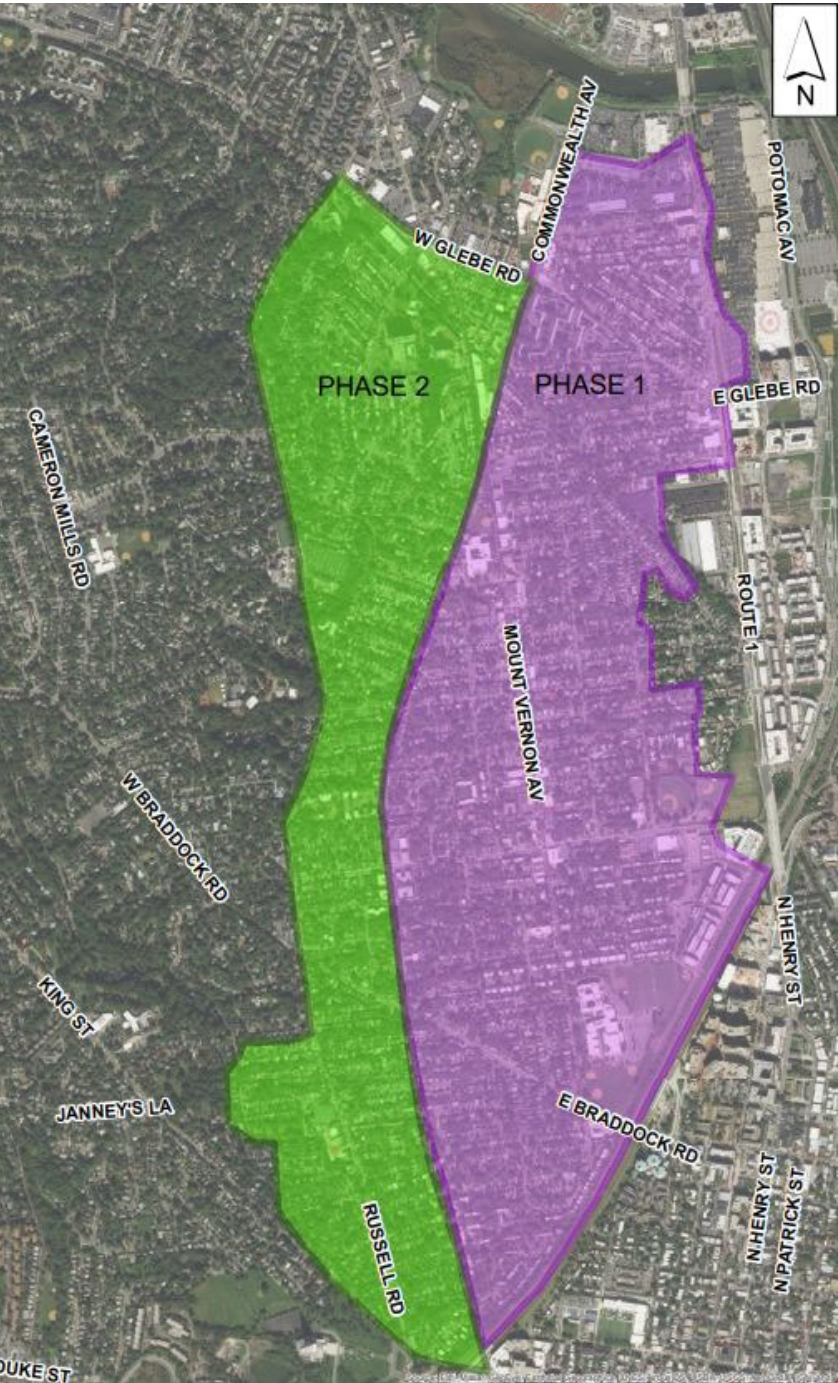
Brian Rahal, civil engineer and project manager for the Hume Avenue spot improvement project, explains how increased capacity inlets make a difference for this neighborhood and other flood-prone neighborhoods.

Sanitary sewer and combined sewer updates

AGENDA ITEM #4.c

Citywide Sanitary Sewer Asset Renewal Program

- Phase 1 inspections completed
- Phase 1 rehab recommendations report to be completed Spring 2022
- Phase 2 inspections to start March 2022
- Rehabilitation contract under development



Jeff Harden, a closed-circuit television operator conducts an inspection of sanitary sewer lines.

Combined Sewer System Overland Flooding



➤ Nethergate Flooding

- Initial study completed Jan 2022 (alternatives identified)
 - Alternatives: Storage, pipe upsizing
- Next steps: feasibility investigations/alternatives evaluation/project selection
- Scale of project: Large spot improvement project
- Project funding: Sanitary Sewer CIP

➤ Pitt/Gibbon Flooding

- Initial study completed Feb 2022 (alternatives identified)
 - Alternatives: storage, relief sewer, additional sewer separation, or combination
- Next steps: feasibility investigations/alternatives evaluation/project selection
- Scale of project: Likely large capacity project
- Project funding: Sanitary Sewer CIP

Sanitary and Combined Sewer System Modeling

- Existing hydraulic model covers about two-thirds of the City
- Contractor to model remaining areas, including combined sewer system
 - Request for Proposals to be advertised Spring 2022
 - Contract award 6 months from advertisement
 - Detailed modeling schedule to be developed following award of contract
- Modeling efforts do not negatively impact proposed flood mitigation projects
- Could help identify problem areas

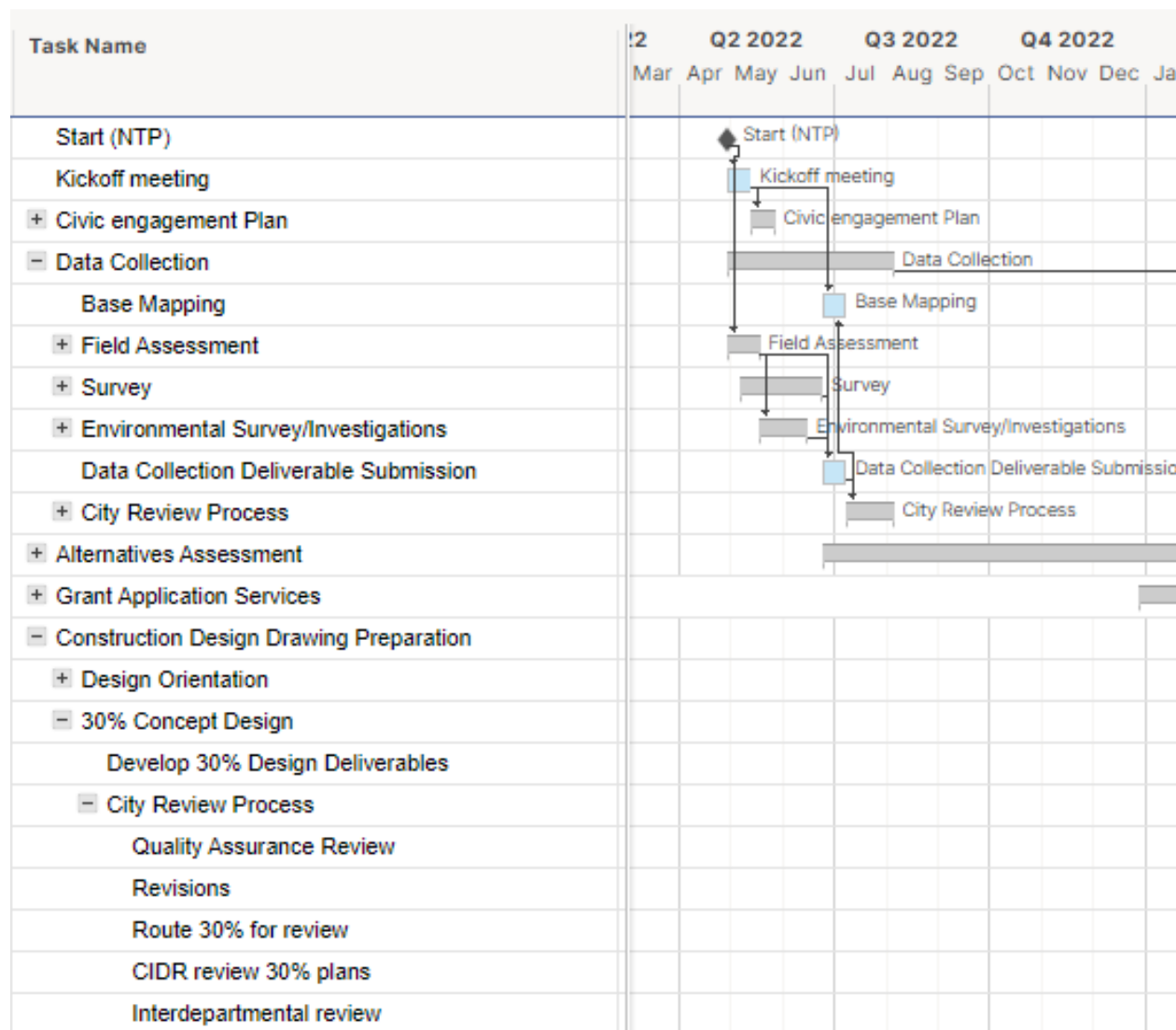


Master Baseline Schedule

AGENDA ITEM #4.d

Master Baseline Schedule

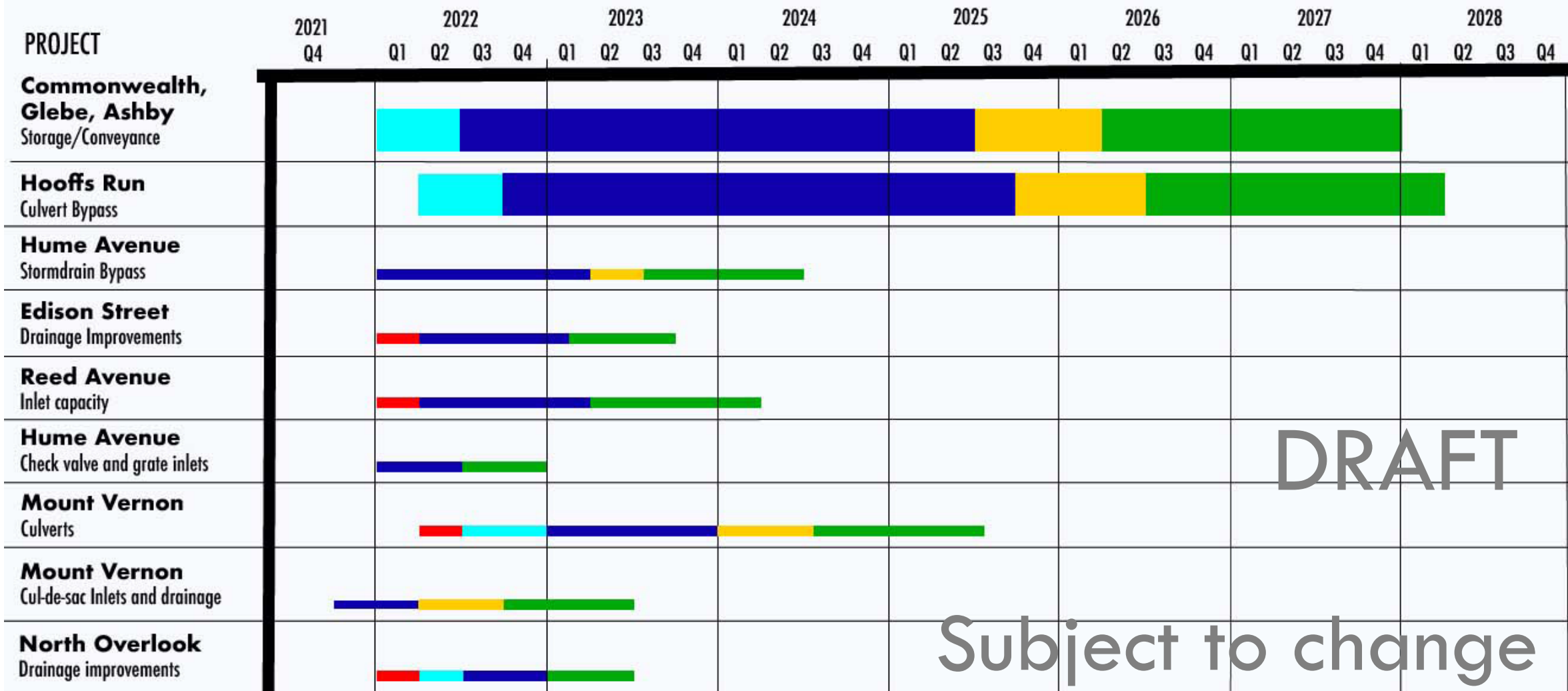
- Detailed tasks for all steps in the process
 - Large capacity and spot improvements
 - Series of design steps
 - Quality checks
 - Review by City departments
 - Public comment periods
 - Ad Hoc Group engagement



Tier 1- In Motion

PLANNING
DESIGN
PROCUREMENT
DESIGN
CONSTRUCTION
PROCUREMENT
CONSTRUCTION

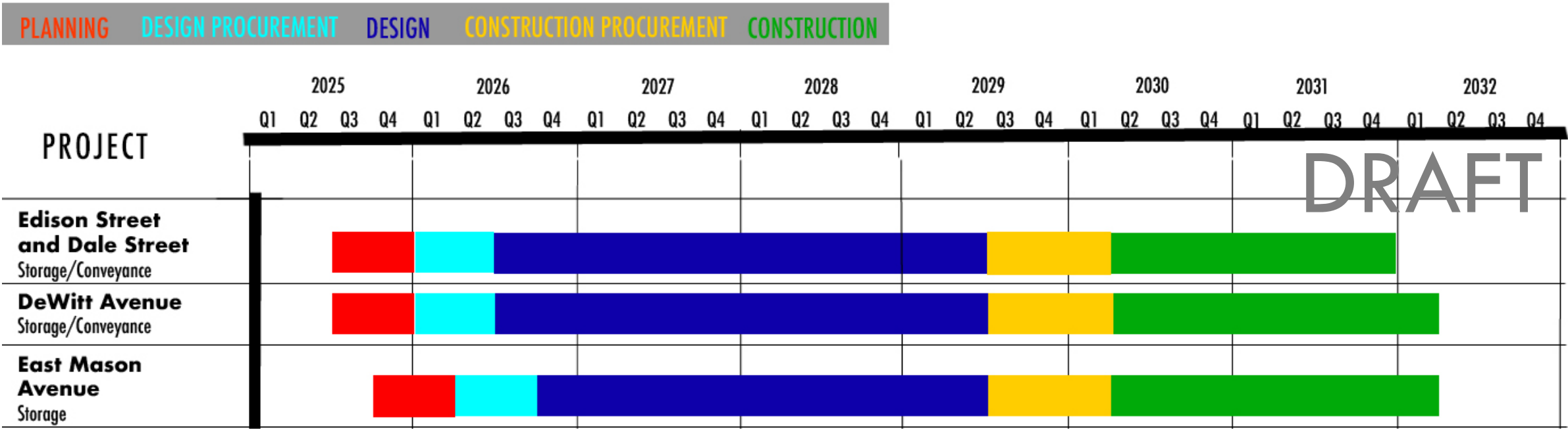
Spot improvement
 Large capacity



DRAFT

Subject to change

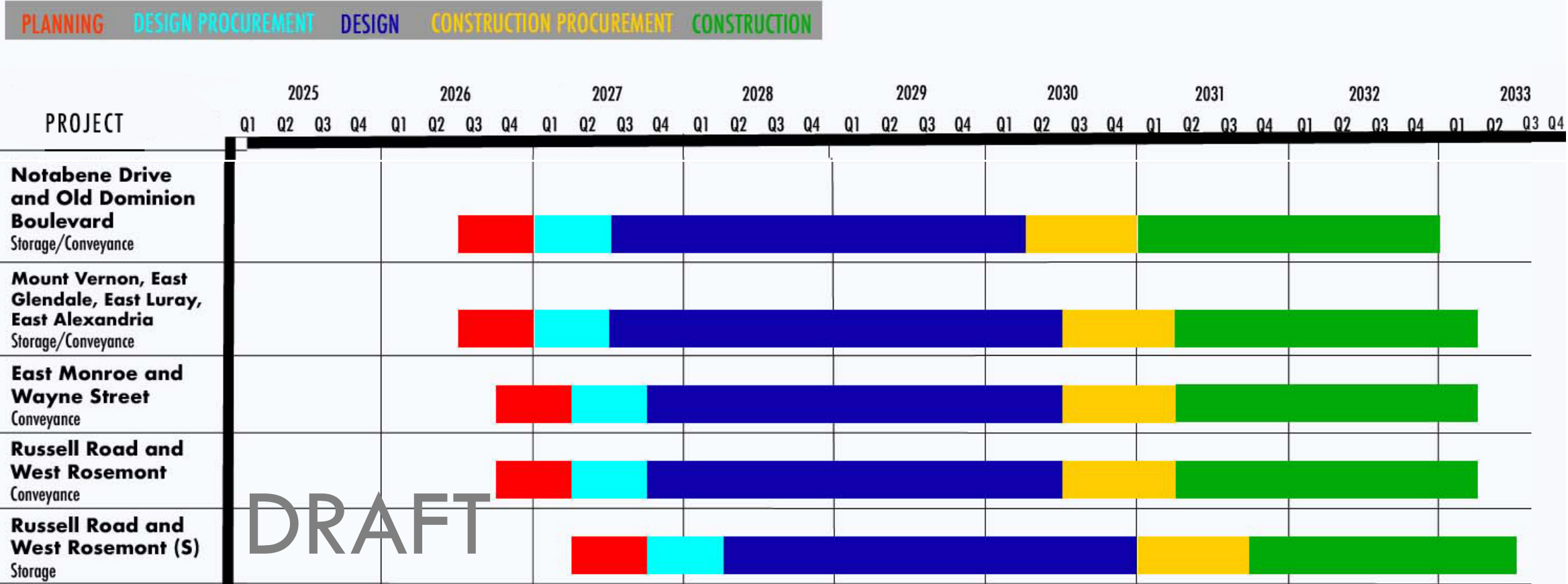
Tier 2 – On Deck



DRAFT

Subject to change

Tier 3- In the Pipeline



DRAFT

Subject to change

Factors Affecting Schedules

- Delays

- Need to collect additional data
- Unexpected conditions in the field
- Utility conflicts
- Weather
- Traffic
- Public opposition
- Permitting
- Labor, cost

- Accelerators

- Field conditions better than expected
- Streamlined procurement
- Grant money
- Synergies with other projects
- Stakeholder support
- Additional data available

State and Federal Grant Funding and Local Flood Mitigation Grant

AGENDA ITEM #4.e

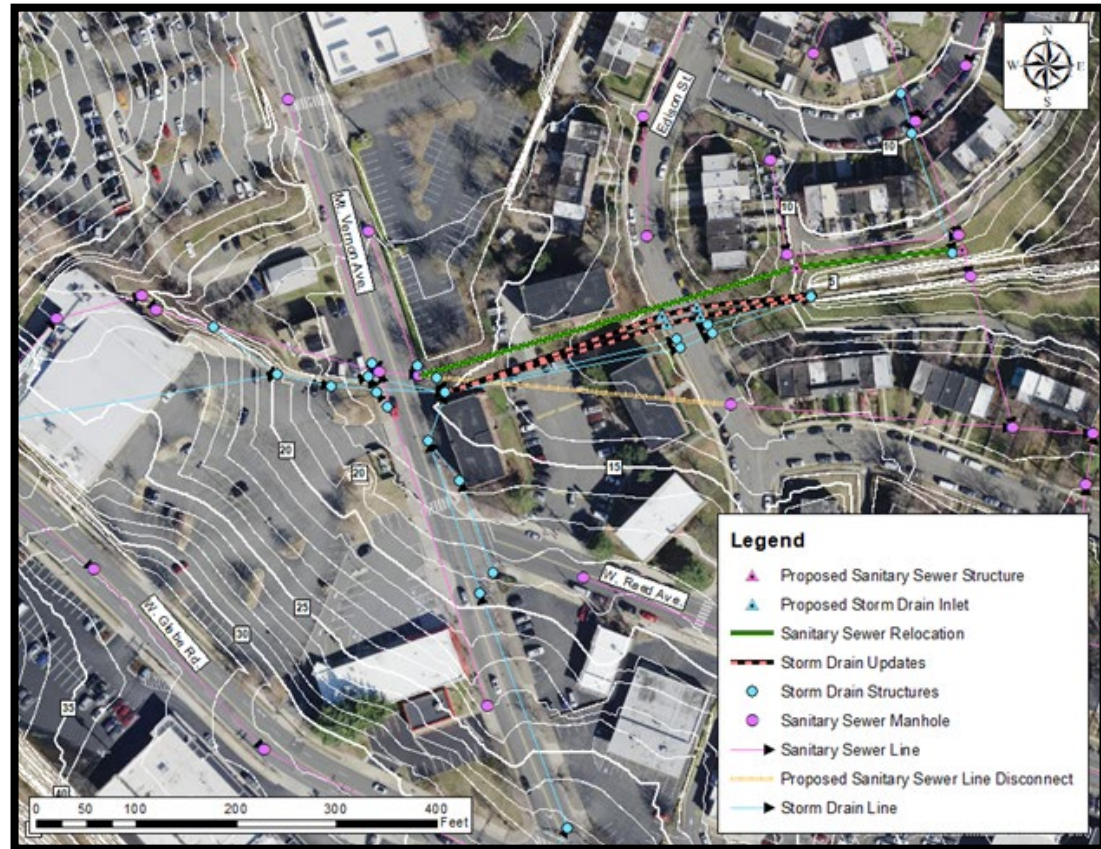
State and Federal Grants - Awarded

Virginia Community Flood Preparedness Fund (CFPF) Grant

- Sept. 2021 Solicitation: Awarded Commonwealth Ave / E. Glebe Rd. / Ashby St “Resilient Green Streets” design in conjunction with the top 2 large capacity projects
- Nov. 2021 Solicitation
 - Awarded \$516,000 match for Early Phase #4 Edison and Dale Streets to accelerate the large capacity project (10-Year funding schedule FY26)
 - \$3.24M match: Waterfront Project early phase (total \$5.4M)

State and Federal Grants – Proposed CFPF Application

- March 8, 2022: City Council Docket
- April 8, 2022: Submission packet due
- #1 Mt. Vernon/Edison Dual Pipe Replacement
 - Potomac West Apts., townhomes, and street flooding
 - Pipe deteriorating and under capacity
 - #117 area identified in CASSCA
 - \$2.5 million with 50/50 local to state match



State and Federal Grants – Proposed CFPF Application

- March 8, 2022: City Council Docket
- April 8, 2022: Submission packet due
- #2 Inlet Capacity and New Inlets Program
 - Develop a program to identify, design, and implement increases to the storm sewer inlet capacity for a chosen neighborhood
 - The program approach is portable to address inlets in various neighborhoods
 - \$1.2 million with 50/50 local to state match
 - Larger inlets convey runoff into the storm sewers. Otherwise, this runoff would contribute to street flooding. Residents will notice reduced flooding immediately.



Before



After

City Flood Grant Program

PART OF LARGER MITIGATION STRATEGY

- Early mitigation before capital project delivery

FUNDING AVAILABLE FY 2022 SWU Fee:

- \$750,000 (\$769,000 for FY 2023)

FUNDING PER APPLICANT:

- Up to \$5,000, 50/50 match

STATS TO DATE:

- 150 applications
- \$104k paid out
- \$769k in proposed FY23
- Continuing communications to increase participation



Communications and Public Information

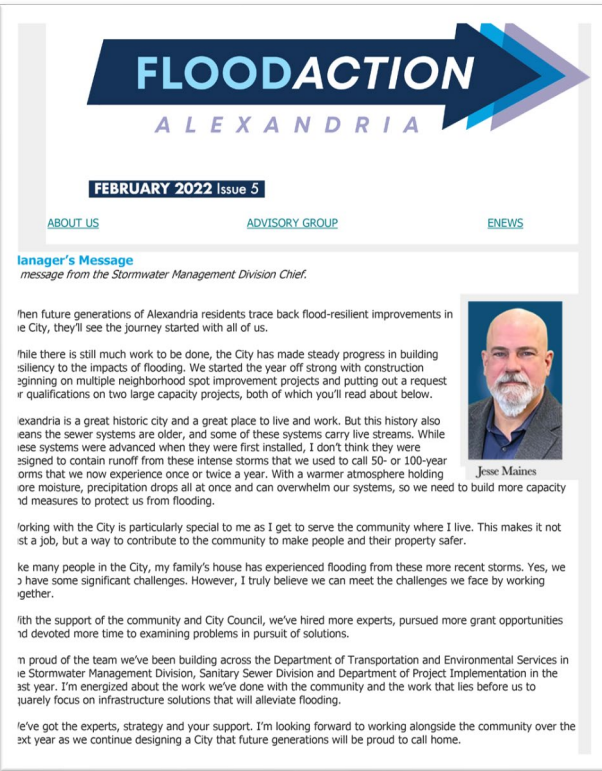
AGENDA ITEM # 4.f

Communications

How we are keeping you informed.

FLOOD ACTION NEWSLETTER

Project updates, news and messages directly from senior leaders.



VIDEO STORYTELLING

Informative and educational video messaging from the experts on staff.



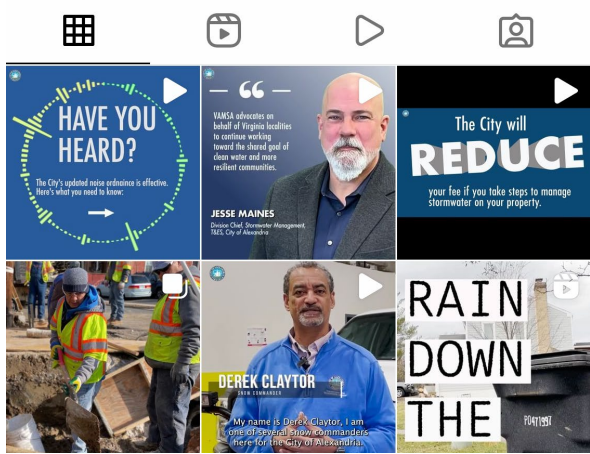
SOCIAL MEDIA

Are you following T&ES?
Get an inside look at our projects.

T&ES Alexandria, VA
The official account for the City of Alexandria VA Department of Transportation & Environmental Services.
alexandriava.gov/TES
301 King St, Rm 4100, Alexandria, Virginia

Followed by alexandriavapd, dashbus_ and 23 others

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Virginia/City Flood Awareness Week Proclamation

- City is kicking off Virginia Flood Awareness Week with a Proclamation during the March 8 City Council legislative meeting
- Social media campaign throughout the week, the City plans a social media campaign to inform and educate residents on:
 - flooding issues, including how to protect themselves
 - what to know about flood insurance
 - information from FEMA to help residents prepare emergency kits
 - know what to do if driving during a flash flood.



Legislative update from the Ad Hoc Group

AGENDA ITEM # 5



From Katie Waynick

Questions and Public Comments

AGENDA ITEM #6

Adjourn

AGENDA ITEM #7