HOUSTON
PUBLIC WORKS

FREEDMEN'S TOWN BRICK STREETS DESIGN CONCEPT REPORT

COMMUNITY MEETING

MARCH 12, 2024

MEETING AGENDA

Arrival 6:00

Project Presentation 6:15

Open House Discussions 6:45

Wrap up 7:45

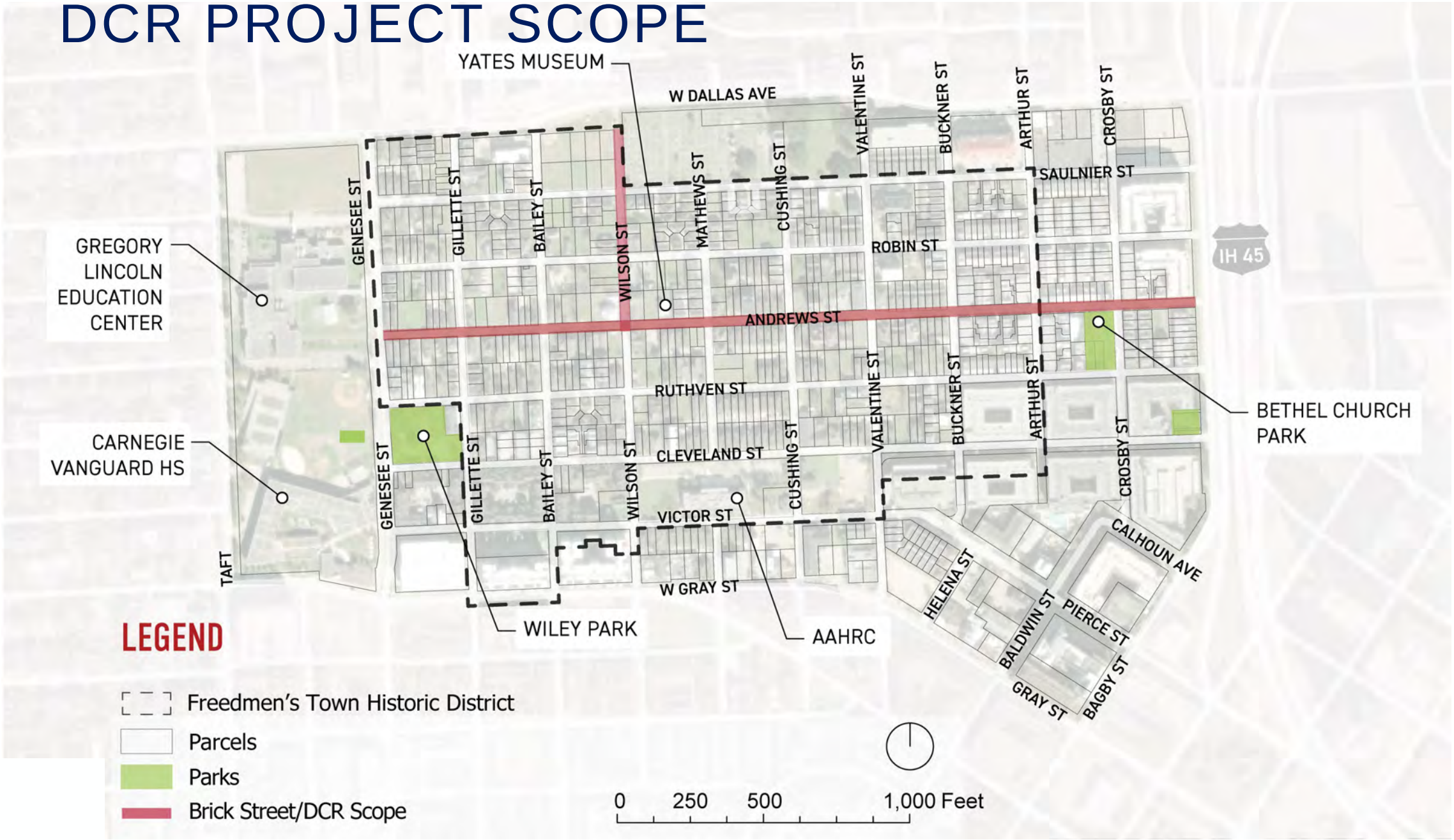
PURPOSE

together we create a strong foundation for Houston to thrive

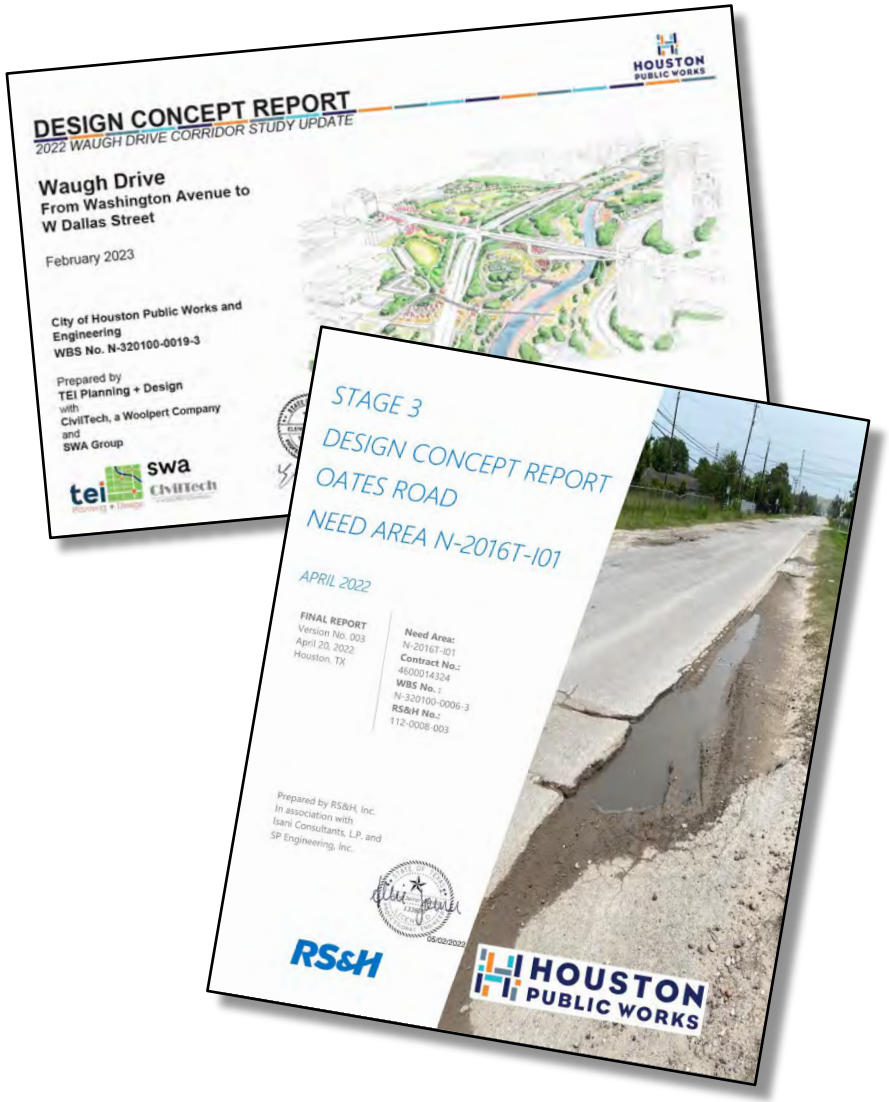
5 TO THRIVE VALUES

respect | ownership | communication | integrity | teamwork

FREEDMEN'S TOWN BRICK STREETS
DCR PROJECT SCOPE



WHAT IS A DESIGN CONCEPT REPORT (DCR)?



A DCR is a plan document – and is the first step in project development

<u>It is not</u> an engineering drawing set, but rather a planning document used as the basis for future engineering designs

Includes community participation

It typically takes about 6 – 9 months to complete

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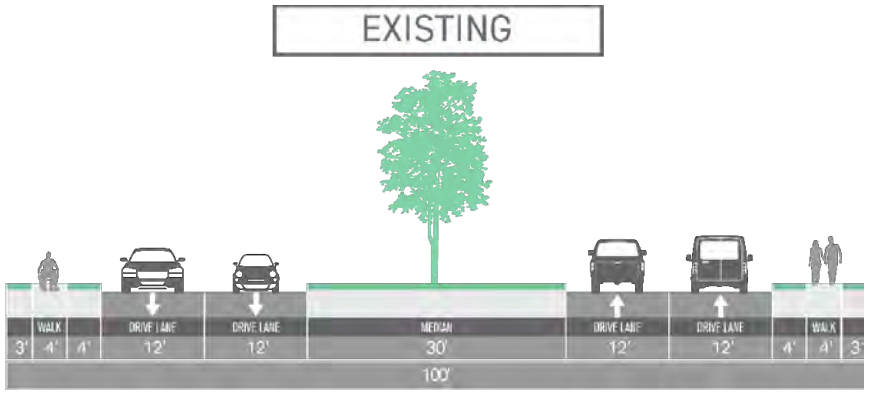
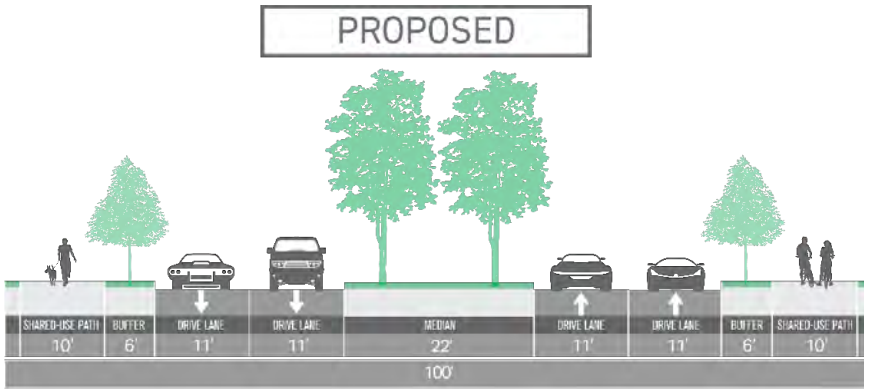




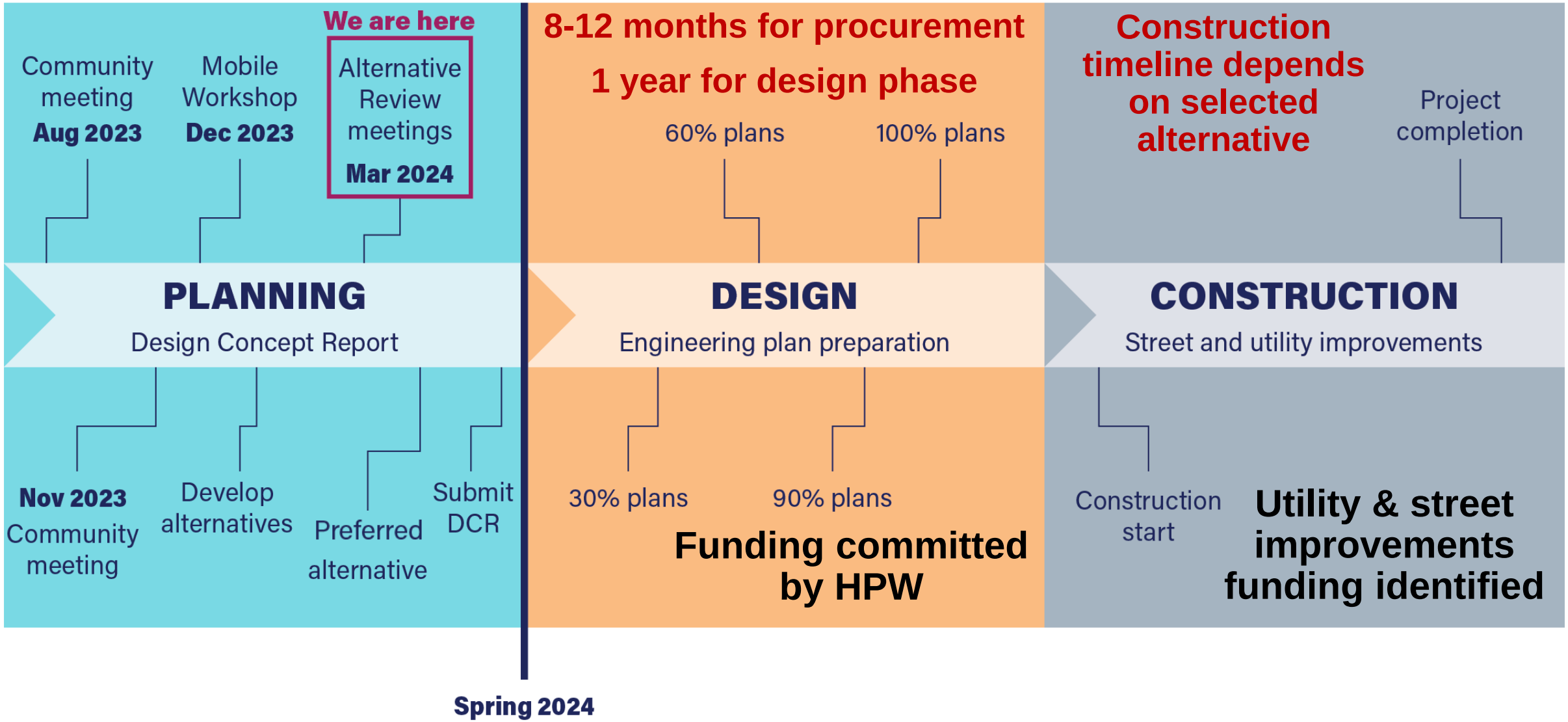
It starts off with existing conditions analyses and research of previous studies/work

Alternatives are considered and vetted

With community buy-in, a final alternative is recommended for engineering design

Cost estimates are provided for the final alternative

PROJECT TIMELINE



DESIGN CONCEPT REPORT (DCR)

EXISTING CONDITIONS

Stage 1

- Evaluate need and define project scope
- Collect data and assess existing conditions
- **Share findings with public**

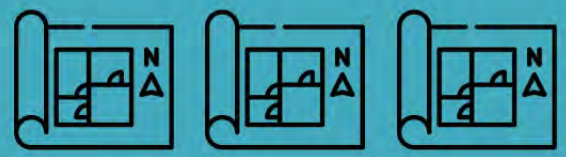
DESIGN ALTERNATIVES

Stage 2

- Develop and evaluate alternative designs

We are here

- **Share design alternatives with community and public**
- Recommend preferred alternative



RECOMMENDED ALTERNATIVE

Stage 3

- Develop design concept for preferred alternative
- **Share preferred alternative with community and public**
- Submit concept plan and Design Concept Report

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DCR PROJECT OBJECTIVE

Develop a community supported approach to improve the historic brick streets in Freedmen's Town

GOALS WE HAVE HEARD FOR THE BRICK STREETS

- **Preserve and care for historic bricks**
- **Engage community at all steps of the process**
- **Upgrade aging underground utilities**
- **Repair the street foundation for the long term**
- **Improve walkability**
- **Designate streetcar tracks**
- **Create opportunities to share and celebrate neighborhood's history**

EXISTING INFRASTRUCTURE

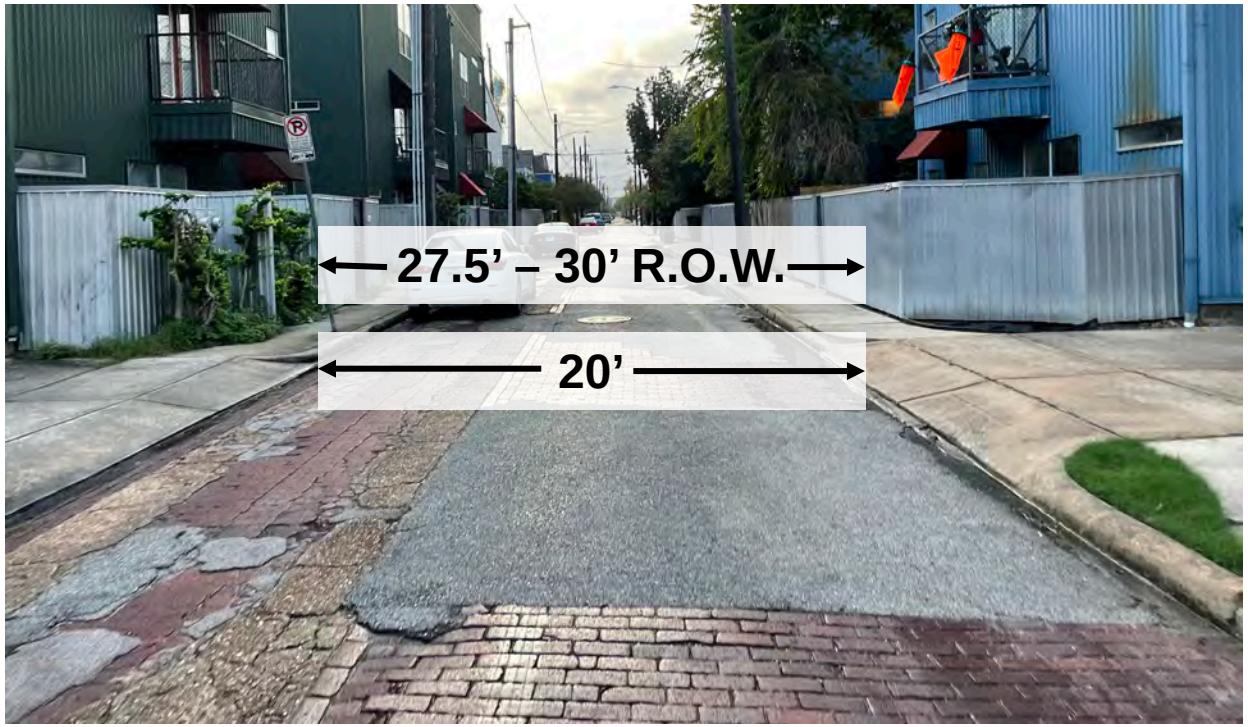
Narrow right-of-way

Deteriorating brick condition

Aging utilities

Poor drainage

Challenging accessibility



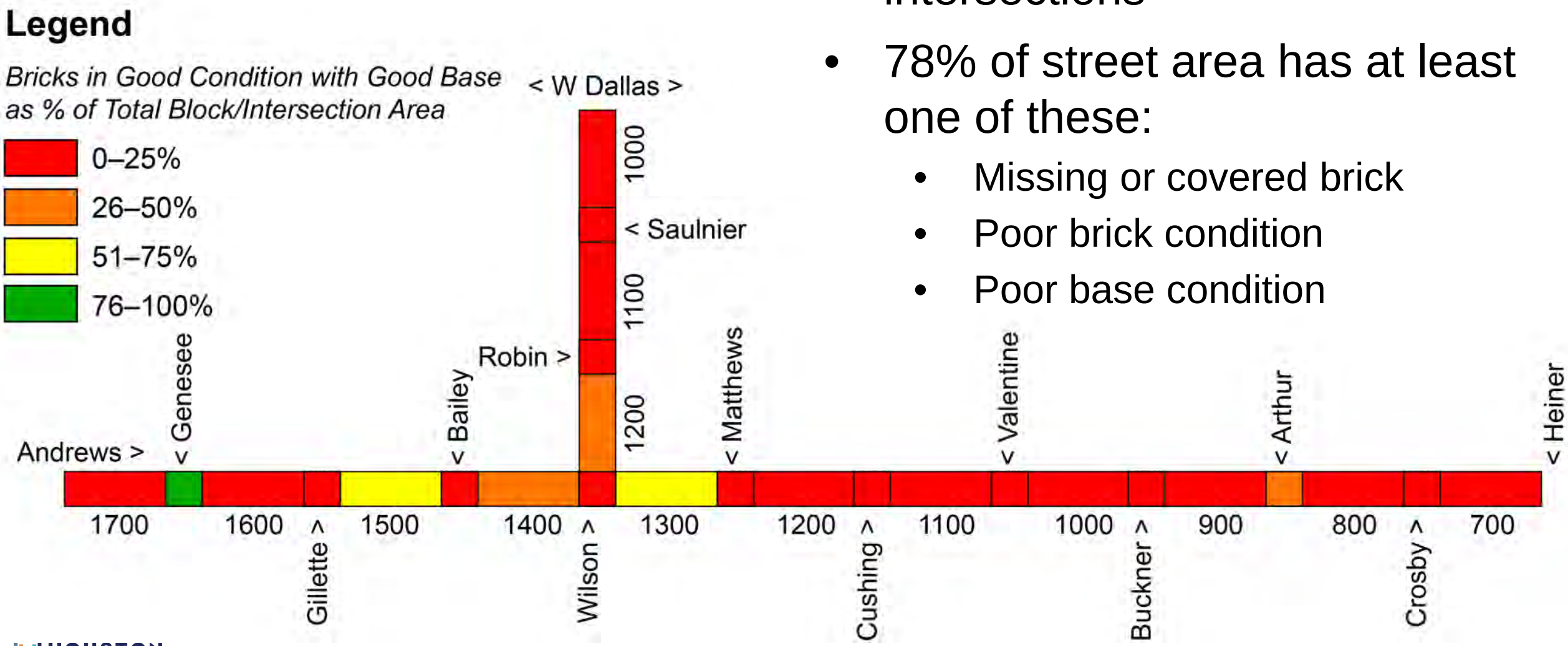
NARROW RIGHT-OF-WAY

- Uniquely narrow streets
  - 27.5 – 30 ft ROW
  - Typical local street ROW is 60 ft
- Street width approx. 20’
- Many buildings with narrow (<5 feet) setbacks from ROW limiting space for easements

AGING UTILITIES

- Water and sanitary sewer under streets with some segments over 100 years old
  - Breaks in aging lines jeopardize bricks
- Replacement will have surface impacts, whether open trench or trenchless
- Replacement approach should consider future maintenance and service connections

BRICK CONDITION



- Completed visual condition assessment of 14 blocks and intersections
- 78% of street area has at least one of these:
  - Missing or covered brick
  - Poor brick condition
  - Poor base condition

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BRICK CONDITION EXAMPLES

Bricks in Good Condition with Good Base as % of Total Block/Intersection Area

0–25%

51–75%

STREET MATERIALS

- Existing is mix of:
  - Historical brick
  - Brick patches
  - Concrete & asphalt patches
  - Former streetcar tracks
- Final design will need to determine where/how materials are used based on availability and community feedback

DRAINAGE

- Most blocks and intersections experience ponding
- Ponding weakens base and could damage bricks
- Drainage inlets do not meet current standards
- Cross-street tie-ins need adjustment to ensure proper drainage

ACCESSIBILITY & MOBILITY

- Sidewalks are very narrow and frequently blocked by utilities
- Sidewalk, ramp, and curb conditions are not suitable for all users
- Uneven street surface makes crossing streets difficult, especially for people using mobility devices

PRESERVATION APPROACH

- All options will involve some degree of impact to the existing bricks
- The bricks as a cultural asset will be handled according to the brick management preservation plan
- The plan will recommend a cultural monitor be present for all activities surrounding the brick removal, storage, and replacement
- The limited supply of stored bricks will be used to fill gaps in existing brick paving, especially at intersections
- If necessary, visually distinct new materials (e.g., non-historic bricks, concrete) may be incorporated to address brick shortage
- The community will be consulted in final design regarding desired brick patterns

DESIGN OPTIONS

OPTION 1

- Minimize disturbance to historic bricks
- Utility replacement using trenchless methods
- Restoration only of impacted surface areas
- Minimal changes to drainage or sidewalk

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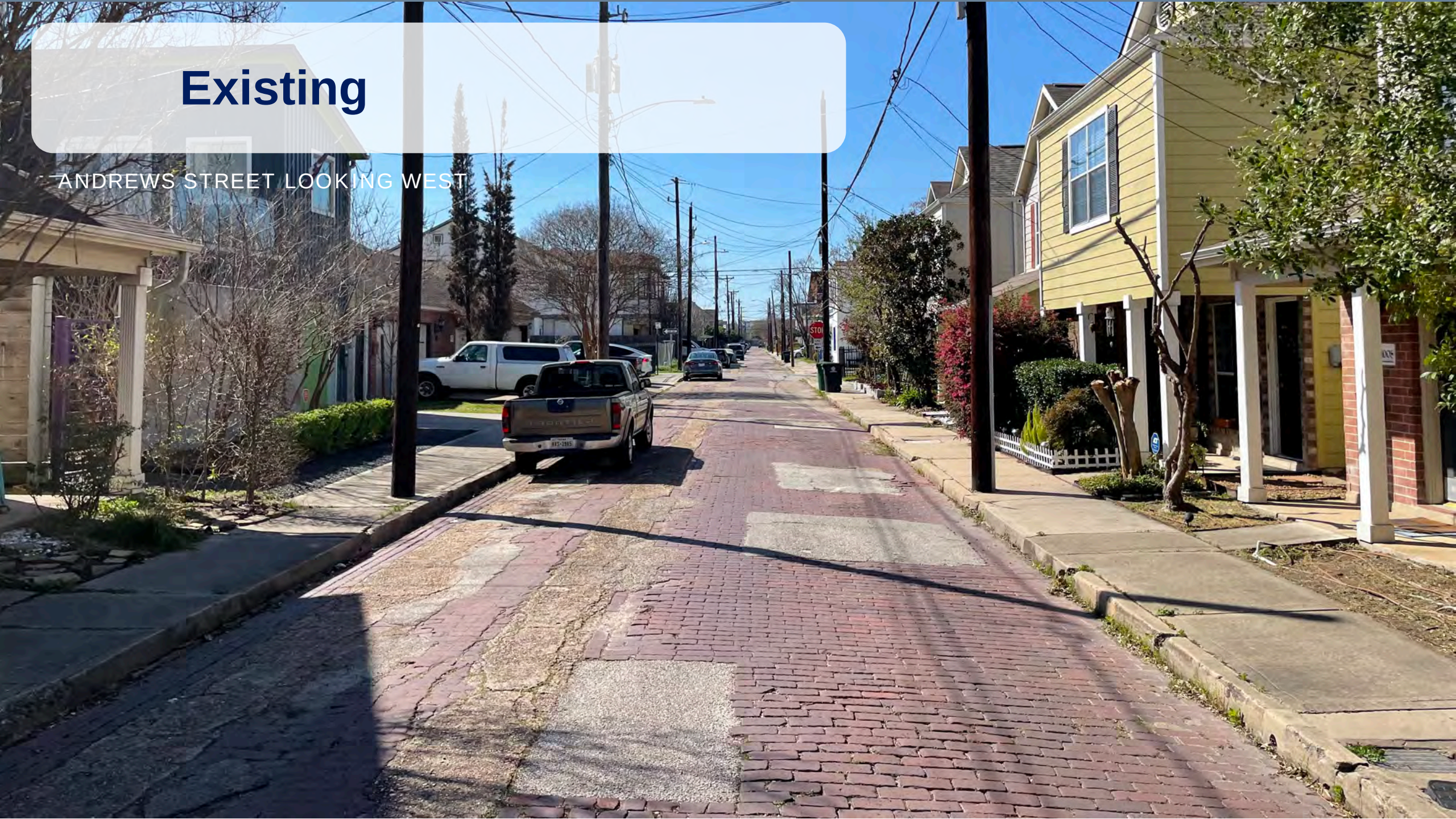
OPTION 2

- Reconstruct street while leaving selected sections of brick in place
- Utility replacement using open trench and trenchless methods
- Drainage improvements
- Opportunity to consider wider sidewalk

Existing

ANDREWS STREET LOOKING WEST



1 Minimize Brick Disturbance

ANDREWS STREET LOOKING WEST

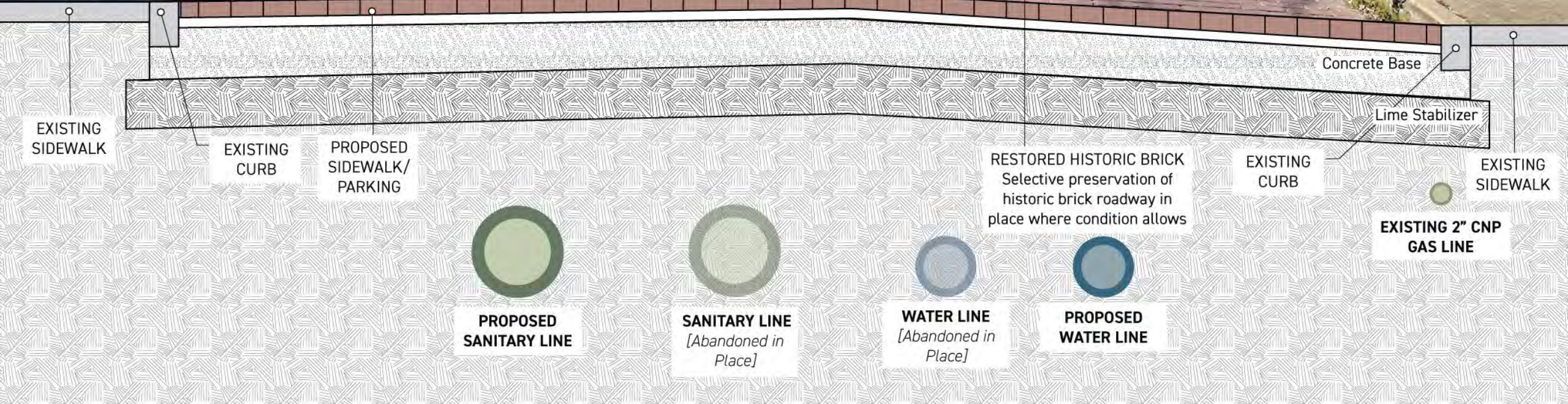

1
Minimize Brick Disturbance
ANDREWS STREET LOOKING WEST
Existing narrow sidewalk with utility obstructions
Surface restoration where impacted by utility connections

1 Minimize Brick Disturbance

ANDREWS STREET LOOKING WEST

Launch pits in/near intersections; restored with historic brick & drainage improvements

Primarily trenchless utility installation



OPTION 1 BENEFITS + DRAWBACKS

Benefits

- Minimizes disruption to existing bricks, allowing more to remain untouched and in place
- Provides opportunities to use stored bricks to restore intersections and service connection street cuts
- Rebuilds intersections to enhance drainage and replace historic brick patterns

Drawbacks

- Street cuts
  - At installation for bore pits and service connections
  - In future for new service connections
- Sidewalk remains narrow and below ADA standards
- Many concrete patches would remain
- Street base not consistently improved
- Drainage not corrected except at intersections

Trenchless Utility Installation

- Lack of ROW or parallel alleys requires utilities to be replaced under Andrews and Wilson
- Trenchless installation requires bore and service connection pits
- Bricks in pit areas would be removed, securely stored, and placed back

Approximate surface impacts of a block of trenchless utility replacement

Bore pit

Service connection pit


UTILITIES
MATHEWS

OPTION 1

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OPTION 2

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OPTION 2 BENEFITS + DRAWBACKS

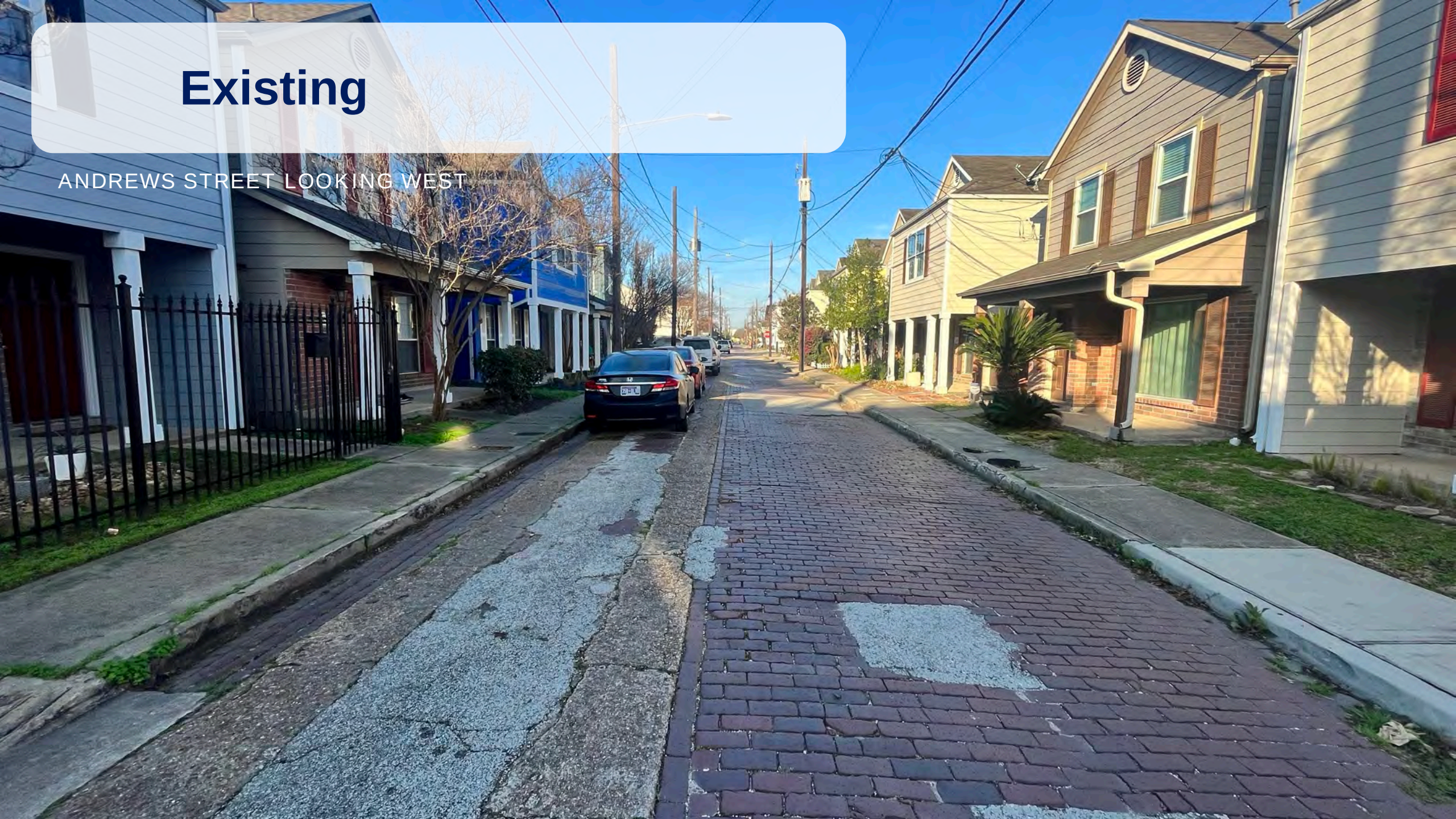
Benefits

- Repairs street base and resolves drainage issues
- Allows bricks to be safely stored and inventoried
- Preserves select areas of intact brick
- Provides accessible sidewalk on one side
- Locates most utilities under non-brick areas
- Minimizes future street cuts needed for service connections
  - Preemptively installed stubs and/or utilities placed under non-brick areas

Drawbacks

- Most bricks will be removed and reset
- May not be enough bricks in storage to fill in all gaps in bricks

Existing



ANDREWS STREET LOOKING WEST

2 Accessible Sidewalk

ANDREWS STREET LOOKING WEST

2 Accessible Sidewalk

ANDREWS STREET LOOKING WEST

Parking switched to opposite side

Occasional bulb-outs for utility poles, lights, curb ramps, placemaking

New materials for trolley track motif

Historic bricks preserved in place or removed & re-installed based on existing condition

Wider, accessible sidewalk on one side

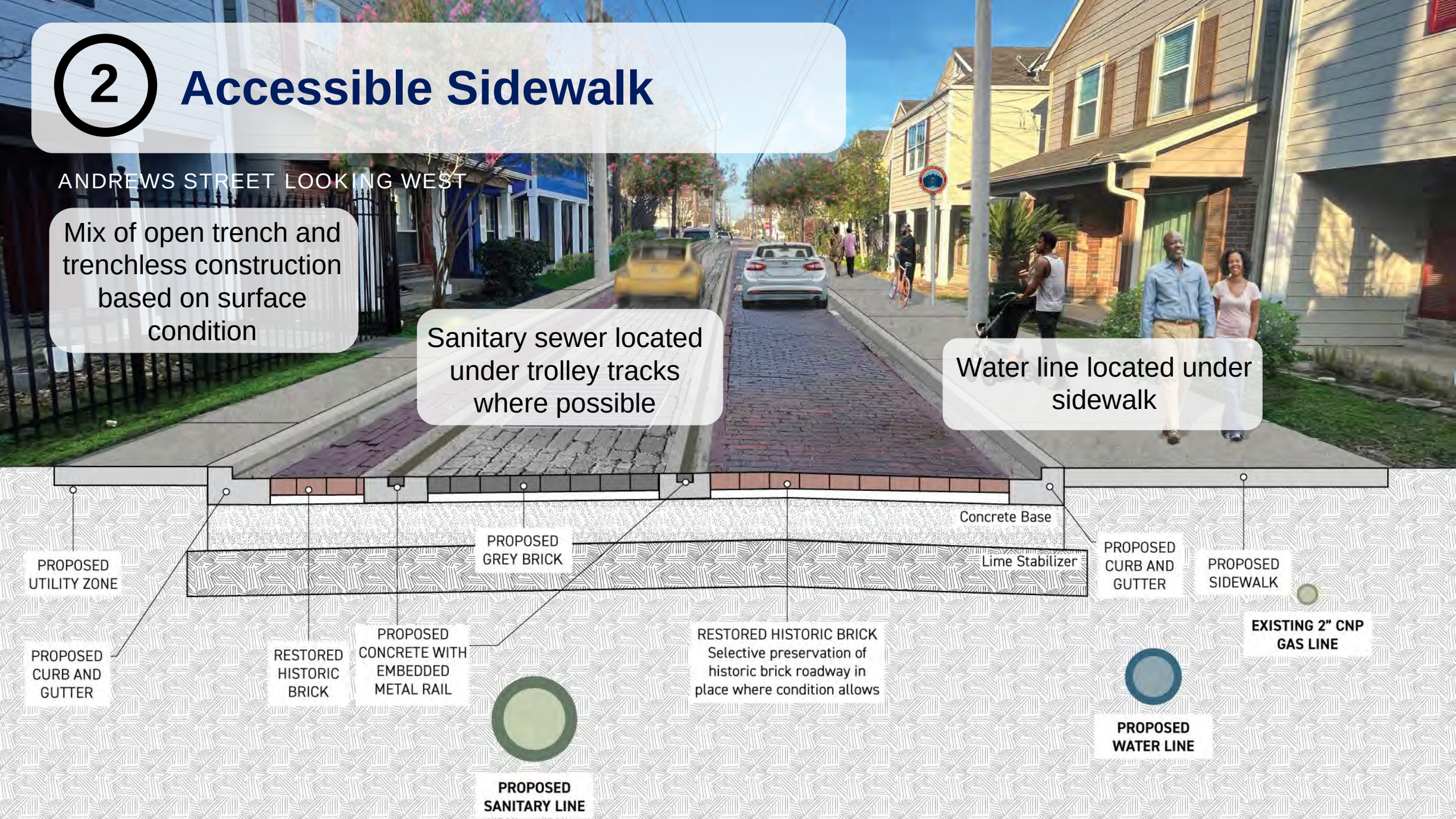
2 Accessible Sidewalk

ANDREWS STREET LOOKING WEST

Mix of open trench and trenchless construction based on surface condition

Sanitary sewer located under trolley tracks where possible

Water line located under sidewalk



INTERSECTION APPROACH

Rebuild intersections to:

- Fix drainage and subsurface
- Adjust tie-in elevations on intersecting streets
- Restore bricks to historical pattern based on community feedback
- Provide launch area where trenchless methods are used
- Improve accessibility (e.g. new curb ramps)

GATHERING YOUR FEEDBACK

- Open House Format
  - Existing Conditions
  - Review Alternatives

- Provide feedback:
  - Comment Cards
    - Your preferred alternative
    - What would improve your preferred alternative?

www.engagehouston.org /freedmenstown-plan

NEXT STEPS FOR DCR

- Refine design alternatives based on feedback
- Develop Draft DCR Recommendations
- Share with Community at future public meeting

thank you!

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