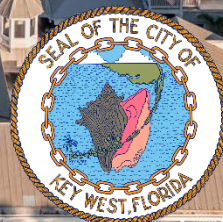




DUVAL FOR ALL REVITALIZATION & RESILIENCY PLAN

Concept Plan Public Presentation and
Open House

October 30, 2024



Duval Street Revitalization & Resiliency Plan

Why

undertake this project

Protecting Duval Street in a future of increasing hazards requires a series of bold actions today. **Also important to do this in a way that reflects the concerns we have already heard.**

What

the project concepts are

This means changes to key infrastructure supporting Duval Street, but also brings opportunity to address the street's evolution while honoring its historic resources.

How

the project is implemented

Bold actions require carefully guided approaches. The City must balance funding opportunities with practical reality of **managing the project's impacts on the corridor community.**

Why

undertake this project



Duval Street flooding during Hurricane Rita in 2005

Understanding the corridor's **resiliency challenges**: this feasibility study and concept design is funded by a state grant for economic development and resiliency

Understanding Risk: Vulnerability Assessment

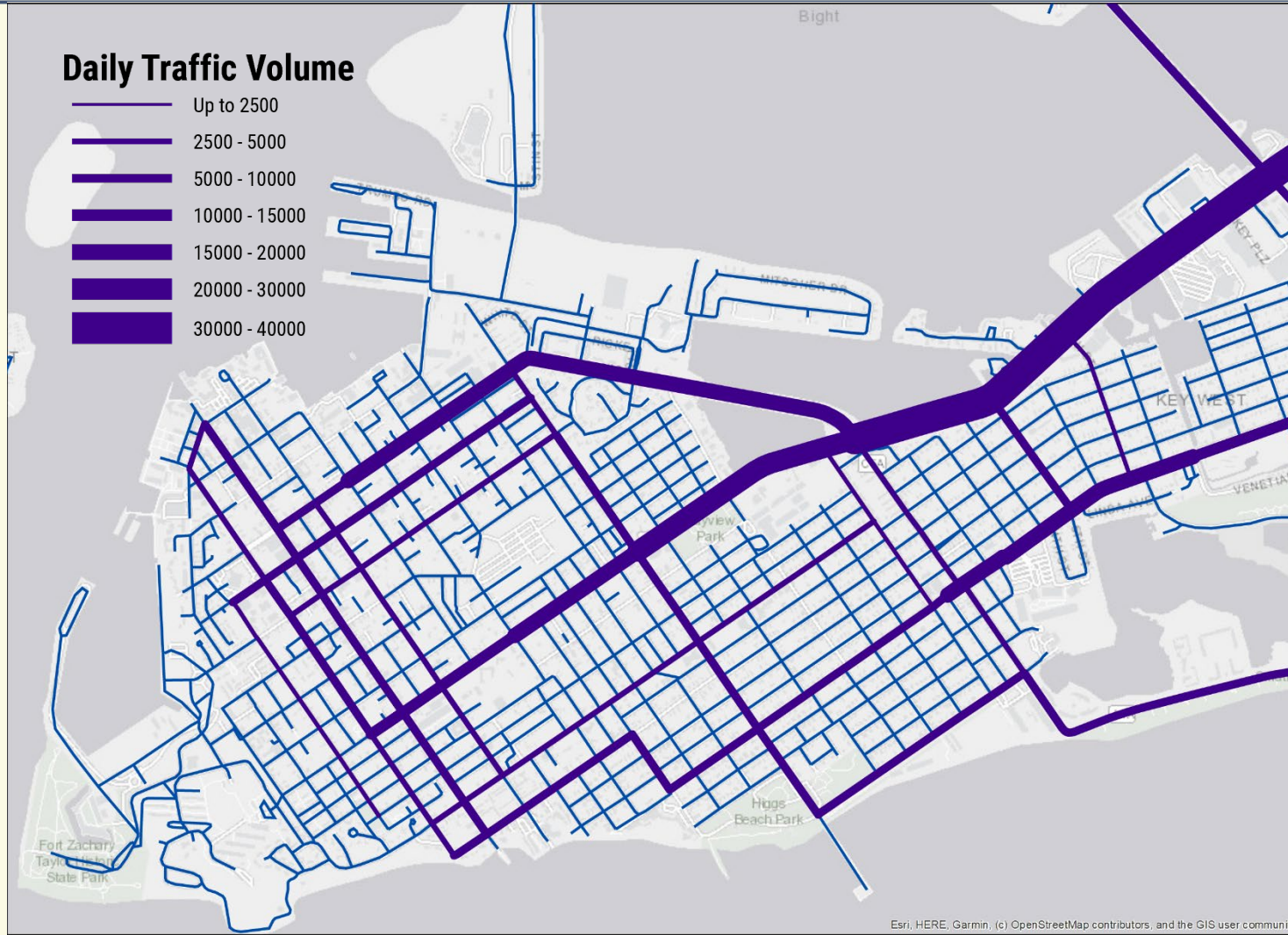


Depth in feet of inundation from a 2040 Category 3 hurricane

In future flooding events, the corridor is at ever greater risk of flooding and inundation.

In severe future events, such as Category 3 hurricane storm surges, most of the Duval corridor faces heavy inundation.

The Transportation System: Rethinking Right-of-Way

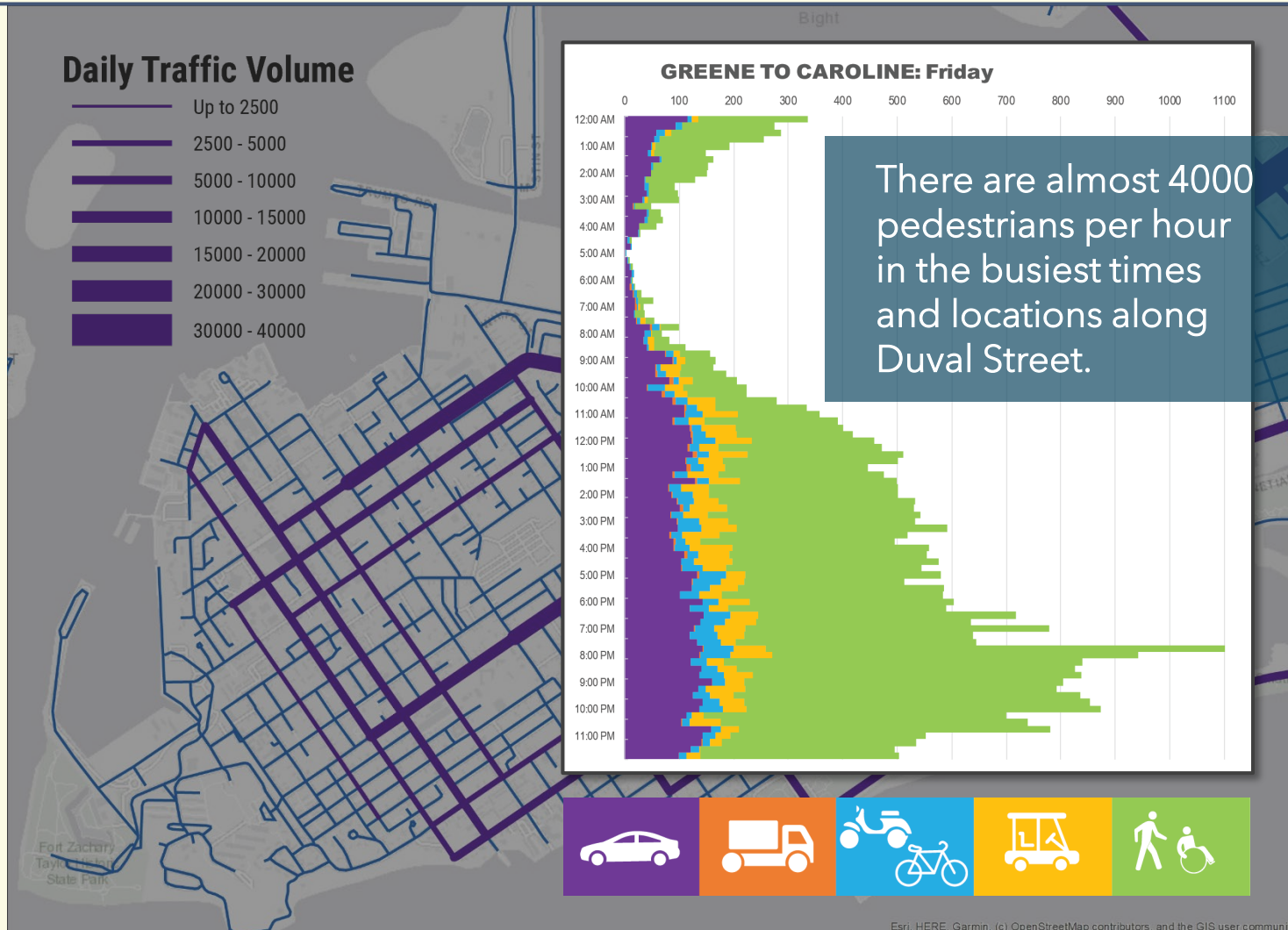


Duval is also a transportation corridor, though not just for vehicles.

Indeed, most of the vehicle traffic entering Key West's historic downtown reaches its destinations through other routes.

This is an opportunity to rethink Duval Street's mobility functions, and how other City policies and services can support them.

The Transportation System: Rethinking Right-of-Way

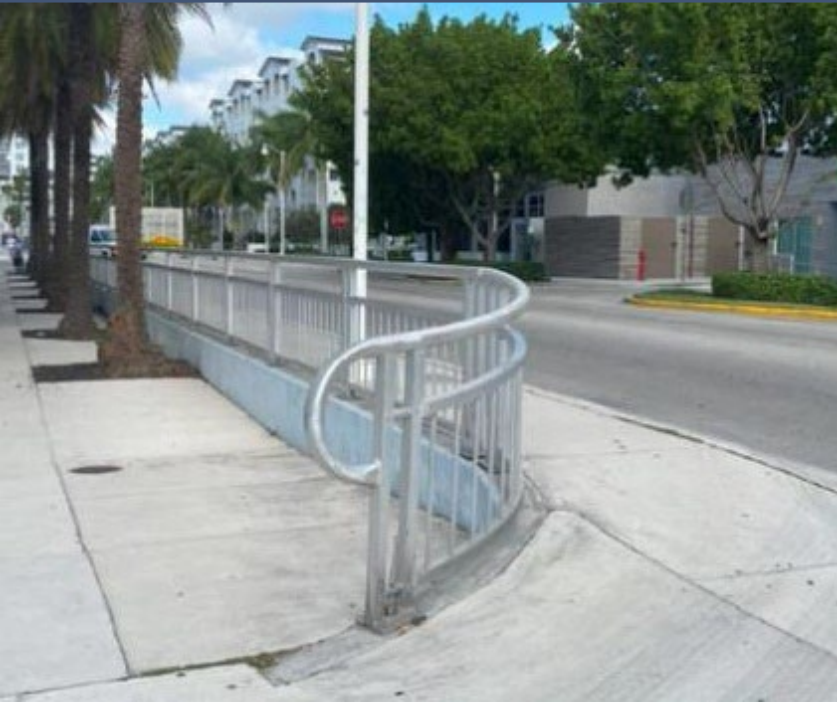


Duval is also a transportation corridor, though not just for vehicles.

Indeed, most of the vehicle traffic entering Key West's historic downtown reaches its destinations through other routes.

This is an opportunity to rethink Duval Street's mobility functions, and how other City policies and services can support them.

Resiliency and Street Function: A creative solution



What WILL NOT work for Duval is an overly aggressive approach to mitigating risk.

The street's historic buildings are a vital part of its identity, and must continue to connect as seamlessly to the street as they do today.

Why

undertake this project



The project's overall purpose:
To preserve and protect iconic Duval Street as a major tourism destination and economic driver.

What

the project includes



We understand the importance of taking steps to protect Duval.

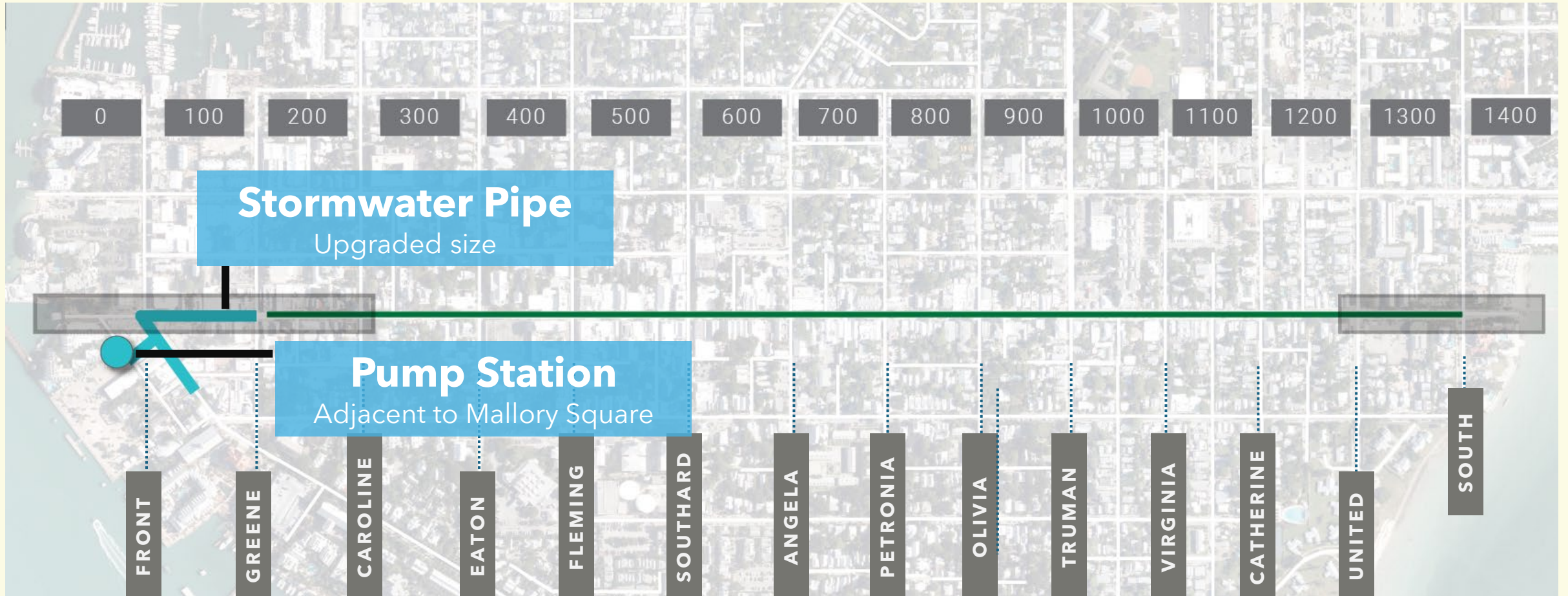
Now let's discuss what those steps are.

This is the project concept.

What

the project includes

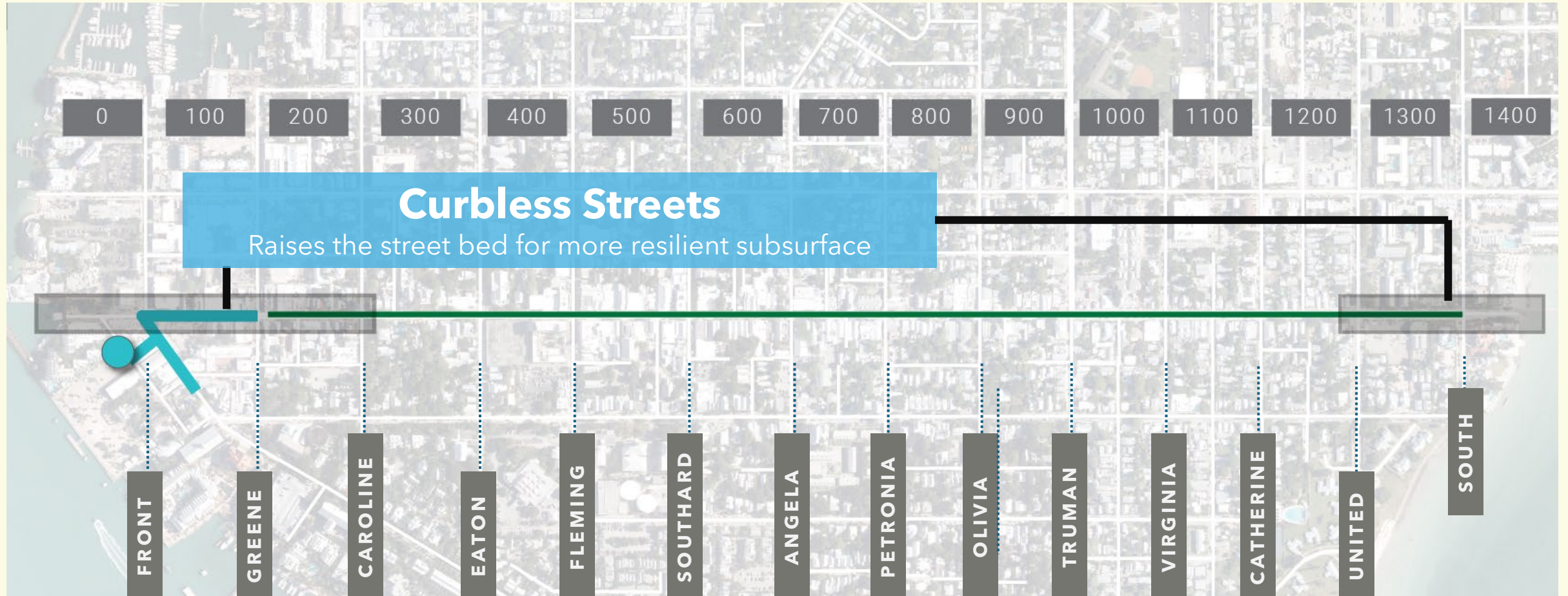
Underground infrastructure upgrades



What

the project includes

Underground infrastructure upgrades



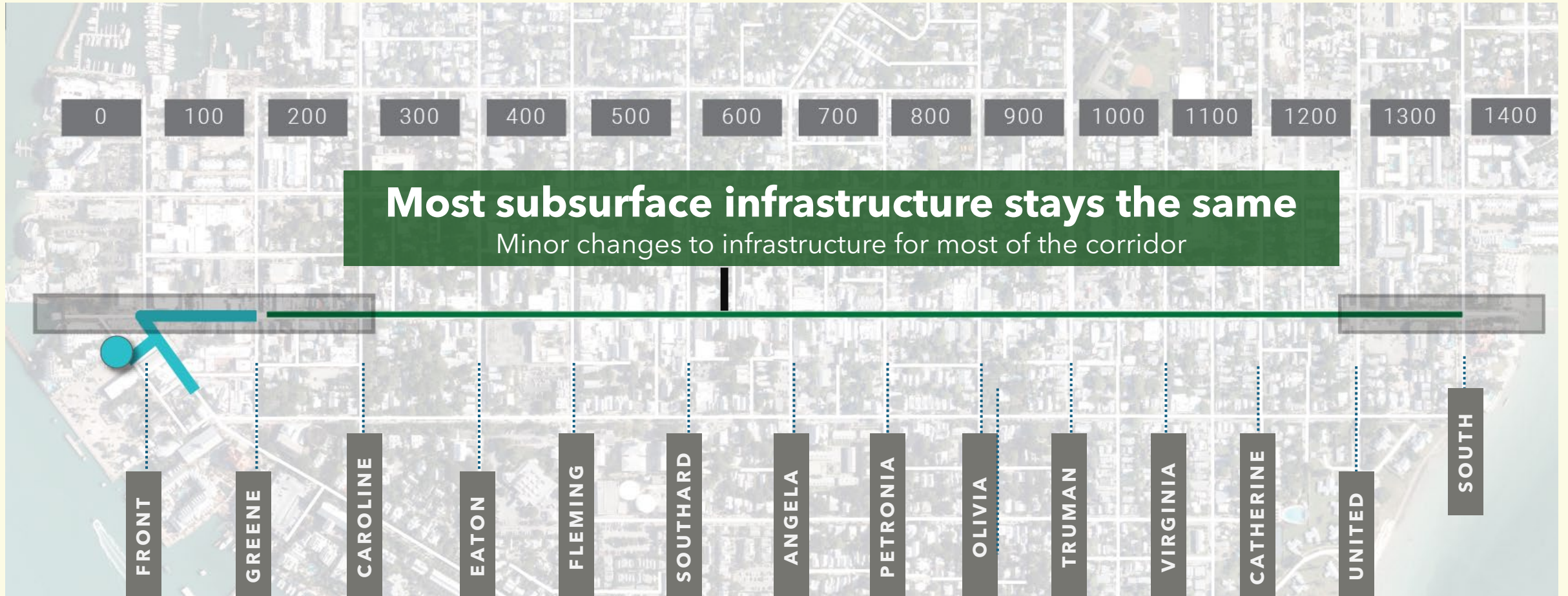
What

the project includes

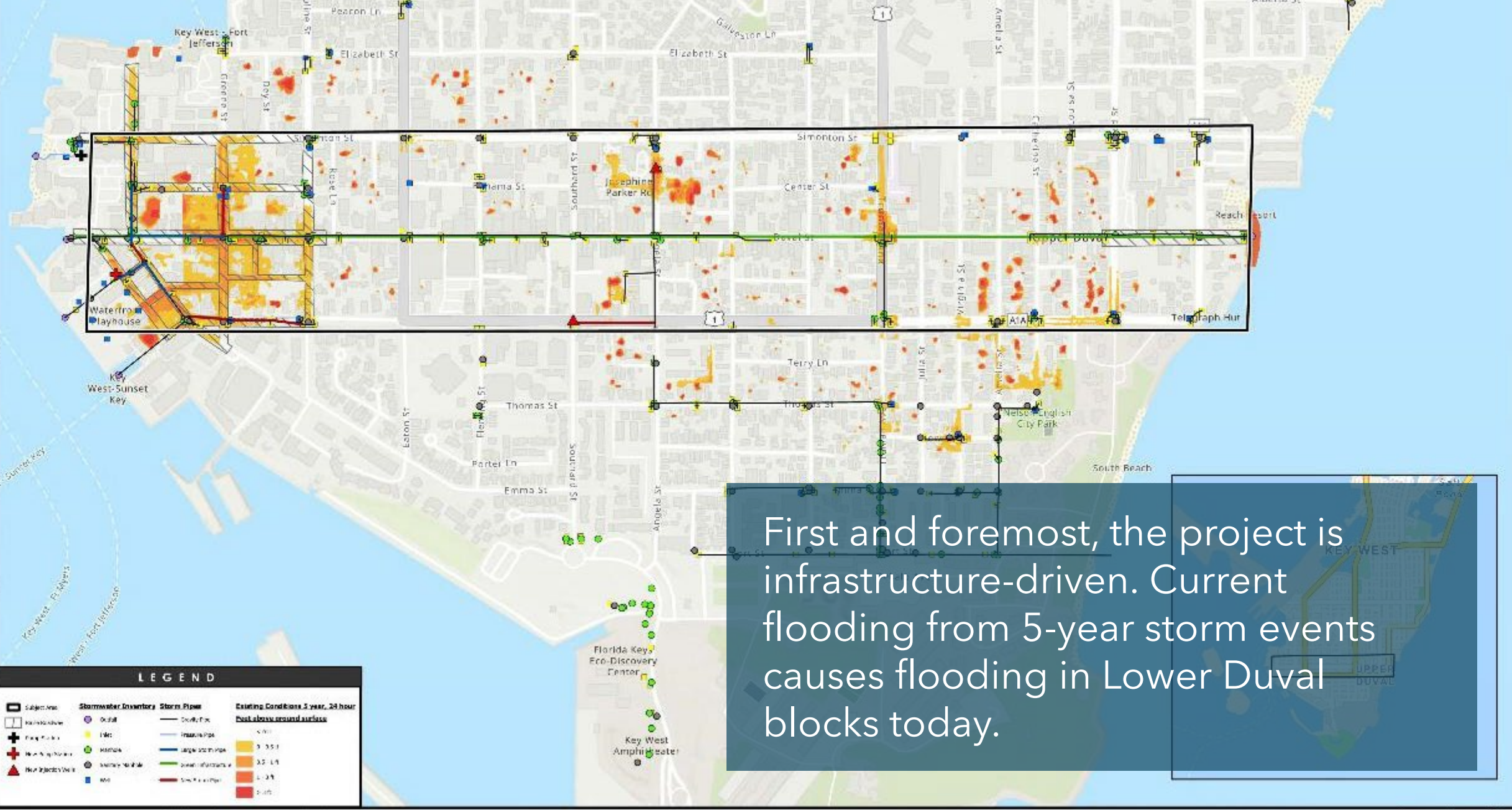
Underground infrastructure upgrades

Most subsurface infrastructure stays the same

Minor changes to infrastructure for most of the corridor



03/28/2024 10:17:00 AM - C:\Users\stc\OneDrive\Documents\A_20240328\A_20240328.mxd - View of 2024-03-28 10:17:00 AM



First and foremost, the project is infrastructure-driven. Current flooding from 5-year storm events causes flooding in Lower Duval blocks today.

LEGEND			
	Stormwater Inventory	Storm Pipe	Existing Conditions 5 year, 24 hour
			Feet above ground surface
			0.00
			0.5 - 1.0
			1.0 - 1.5
			1.5 - 2.0
			2.0 - 2.5
			2.5 - 3.0
			3.0 - 3.5
			3.5 - 4.0
			4.0 - 4.5
			4.5 - 5.0

STANTEC CONSULTANTS INC. 10000 WEST 100TH AVENUE, SUITE 1000, WESTMINSTER, CO 80234
 STANTEC CONSULTANTS INC. 10000 WEST 100TH AVENUE, SUITE 1000, WESTMINSTER, CO 80234
 STANTEC CONSULTANTS INC. 10000 WEST 100TH AVENUE, SUITE 1000, WESTMINSTER, CO 80234



CITY OF KEY WEST DUVAL STREET FLOODING MAPS
 Existing Conditions 5 year, 24 hour
 June 2024

Stantec Consulting Services Inc.
 4000 Professional Drive
 Sarasota, FL 34230
 Tel: 941.907.6800
 Fax: 941.907.6800

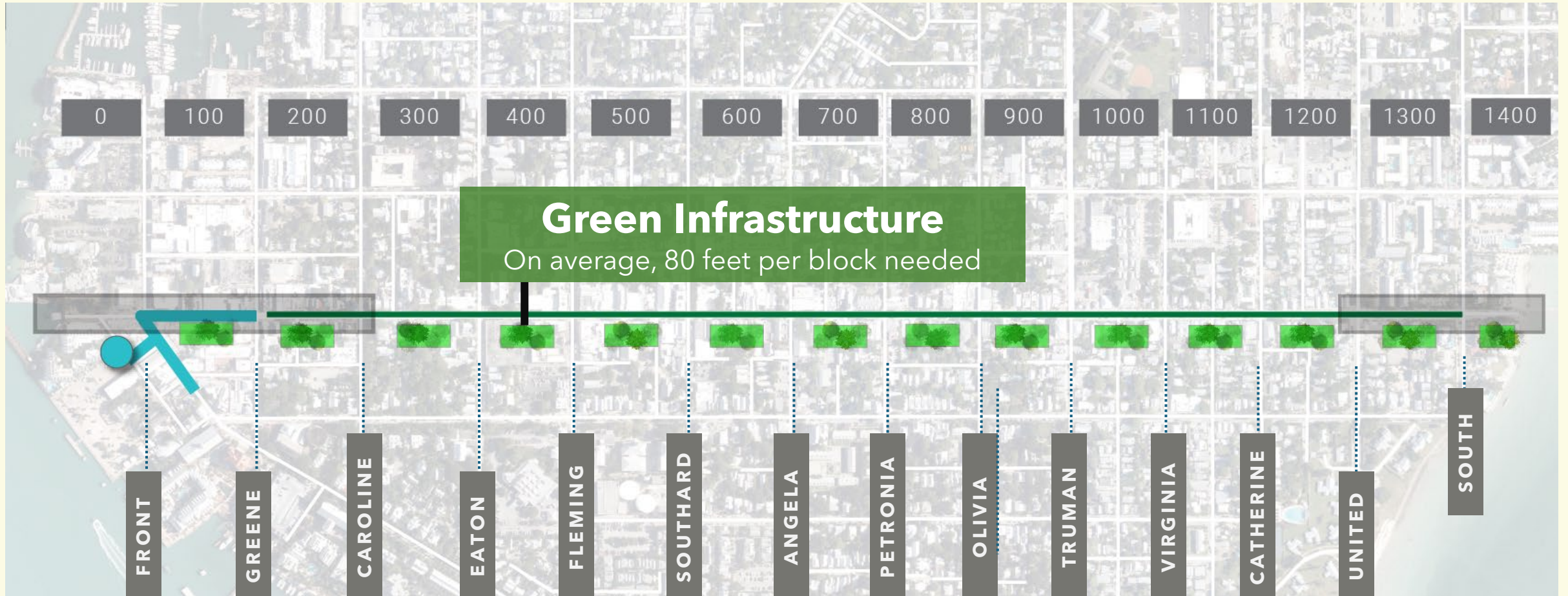


0 200 400 Feet
 Prepared by: JS 06/28/24
 Technical Review by: DS 06/28/24
 Independent Review by: JG 06/28/24

What

the project includes

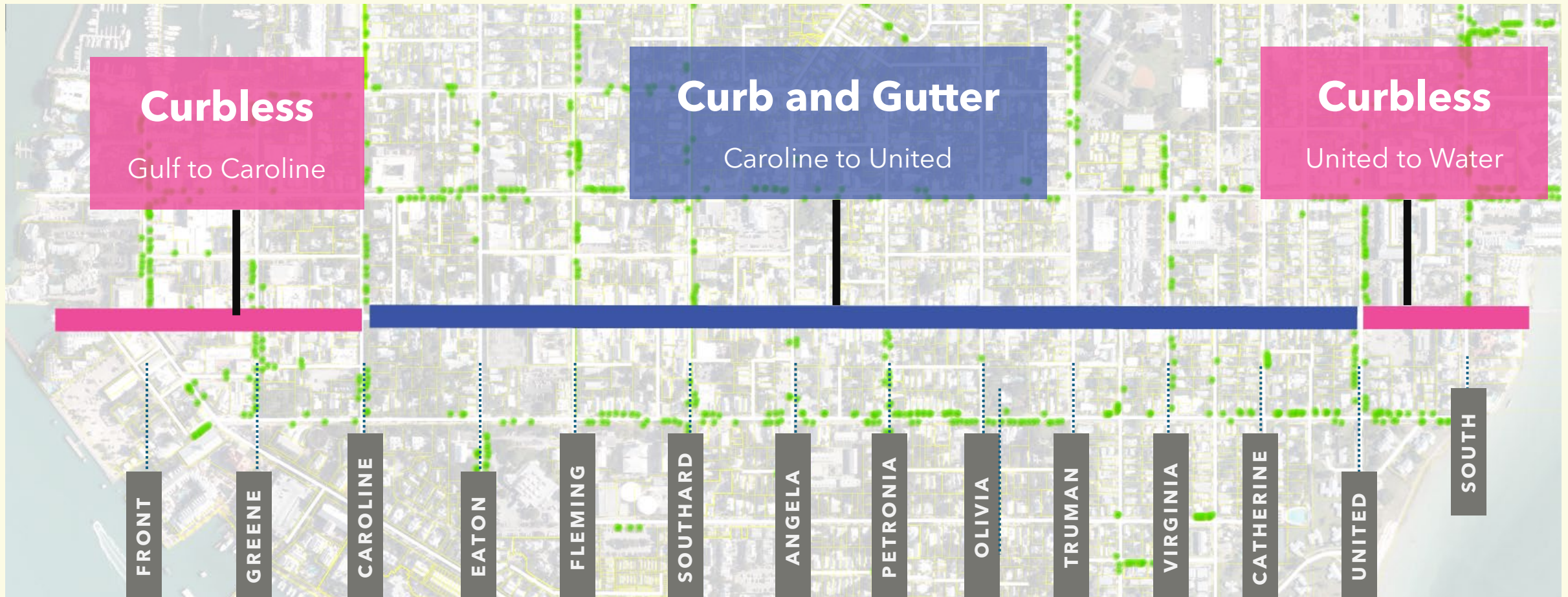
Underground infrastructure upgrades



What

the project includes

Curbless street would be used sparingly in these two areas



Relevant Examples: Curbless Streets



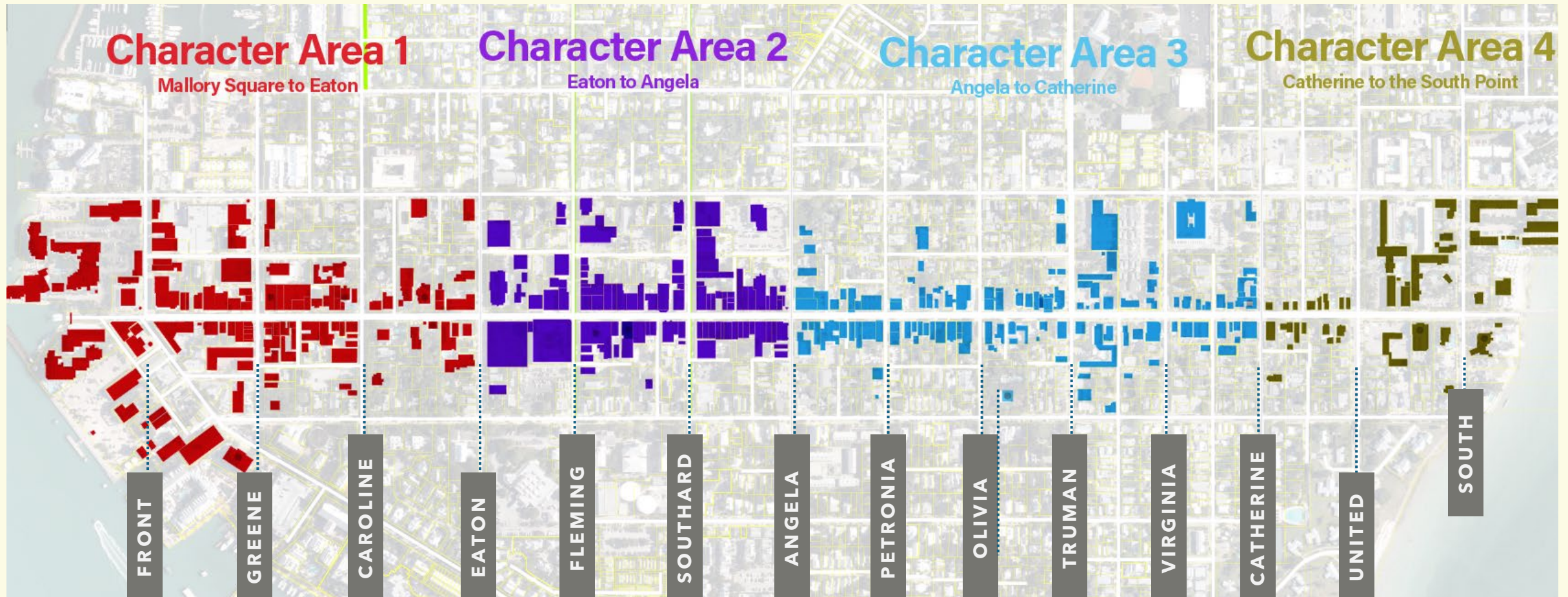
Most curbless street designs keep all typical street functions.

There is defined space for vehicles, parking, landscaping, and pedestrian movement (sidewalks).

What

the project includes

Divided into four 'character areas' for plan purposes



Duval Street's changes: before and after

200 Duval

Looking south from Greene Street

BEFORE



200 Duval

Looking south from Greene Street

BEFORE



6-7'
Sidewalk/
Streetscape

4-5'
Flex
Zone

1.5'
C/G

11.5'
Travel Lane

10.5'
Travel Lane

6'
Curb Ext.
Parking/
Loading

9'
Sidewalk

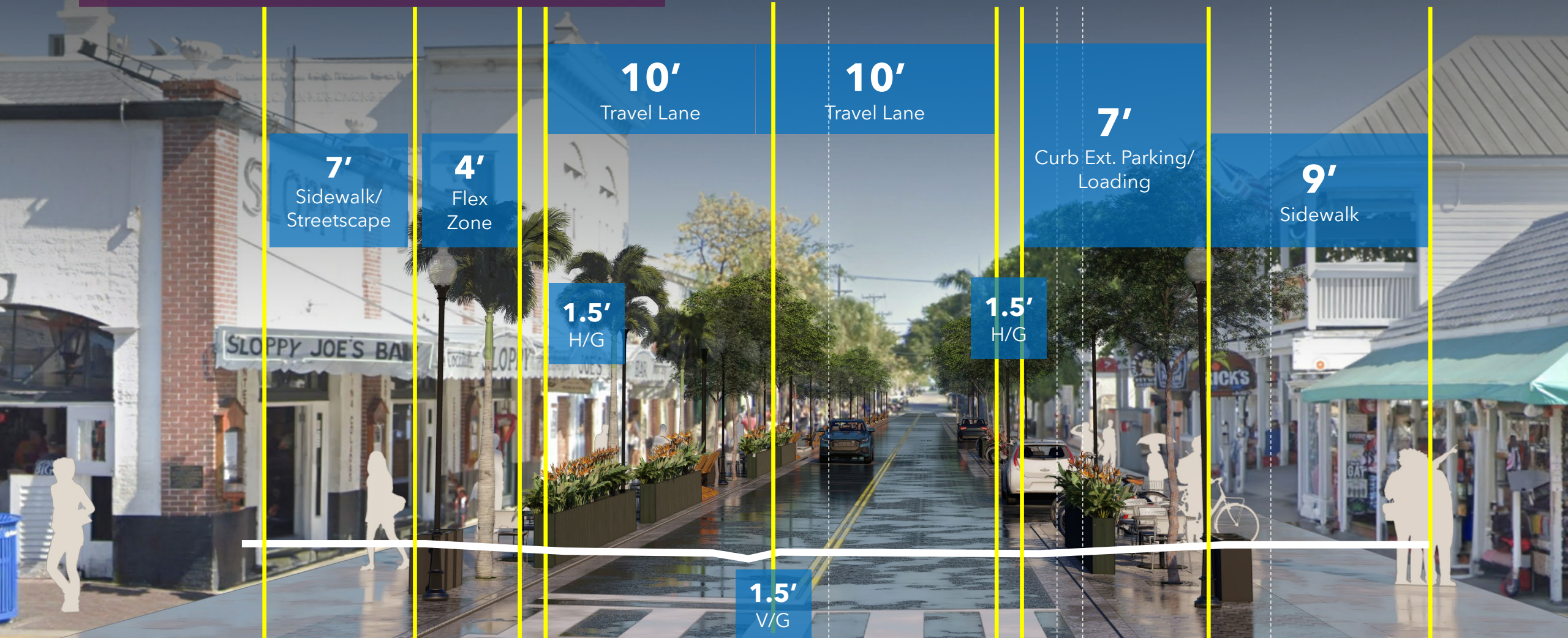
1.5'
C/G

1.5'
C/G

200 Duval

Looking south from Greene Street

AFTER



7'
Sidewalk/
Streetscape

4'
Flex
Zone

1.5'
H/G

10'
Travel Lane

10'
Travel Lane

1.5'
H/G

7'
Curb Ext. Parking/
Loading

9'
Sidewalk

1.5'
V/G

200 Duval

Looking south from Greene Street

AFTER



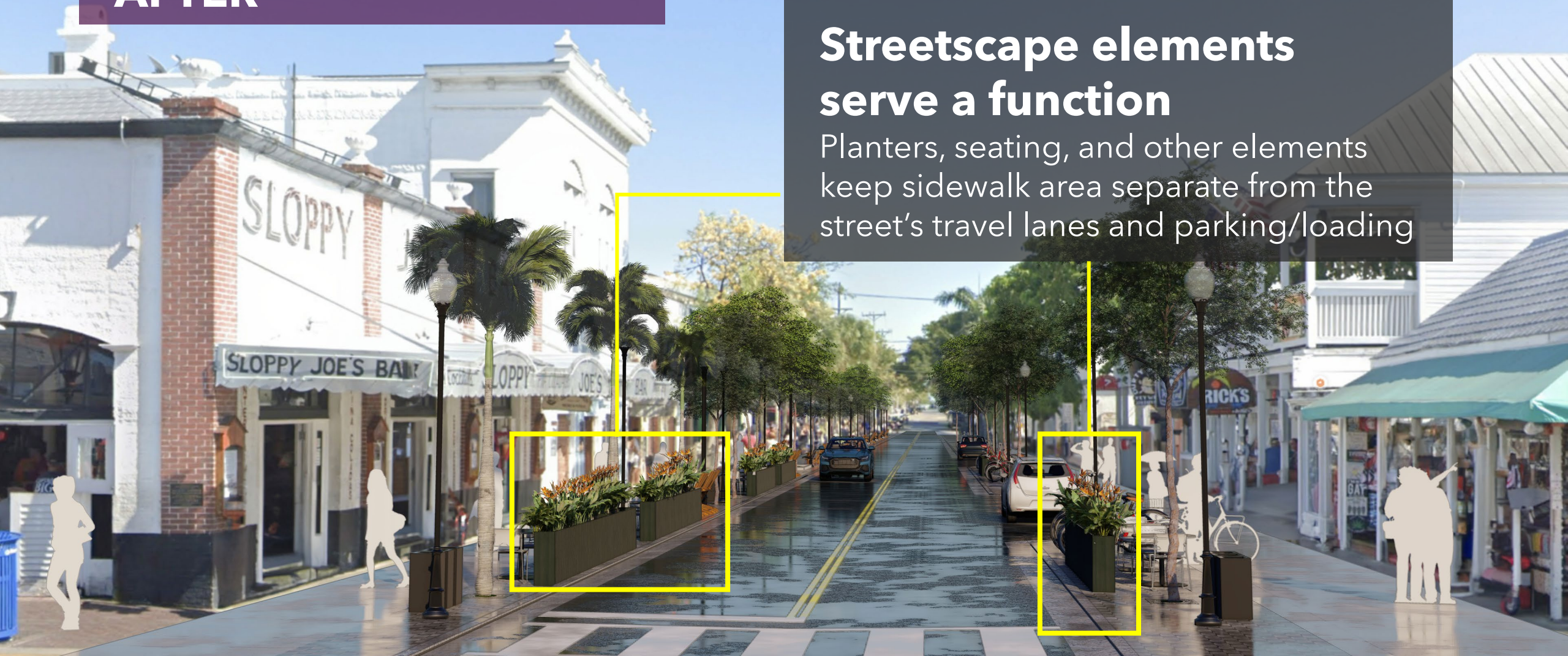
200 Duval

Looking south from Greene Street

AFTER

Streetscape elements serve a function

Planters, seating, and other elements keep sidewalk area separate from the street's travel lanes and parking/loading



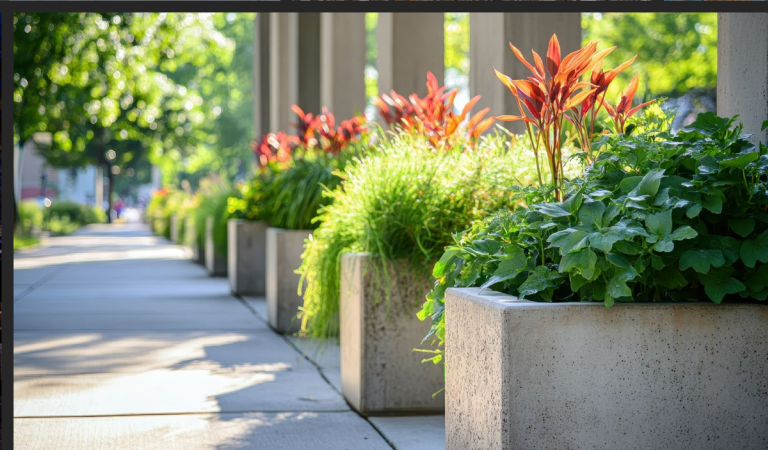
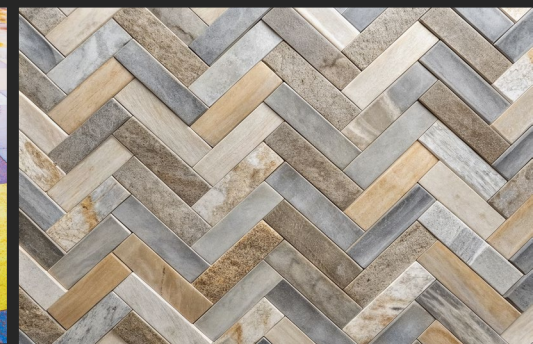
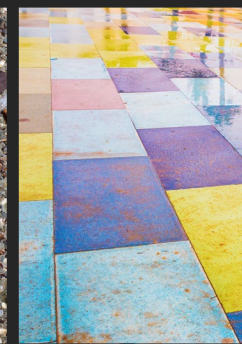
200 Duval

Looking south from Greene Street

AFTER

...but they should also reflect the character of the block.

It's important to remember that we have numerous options for materials, designs, and finishes.

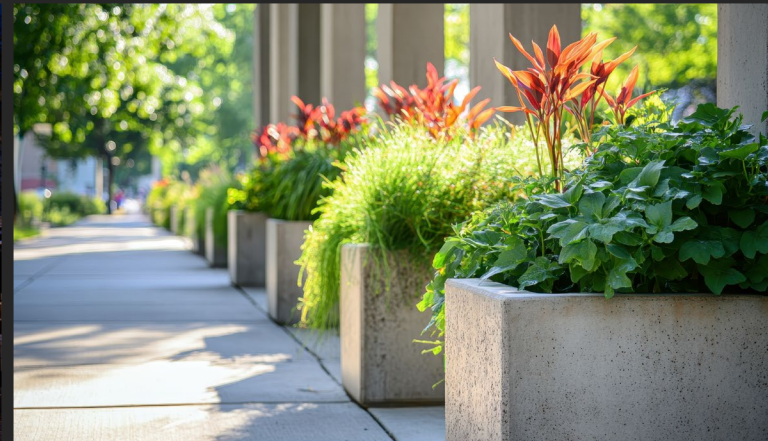
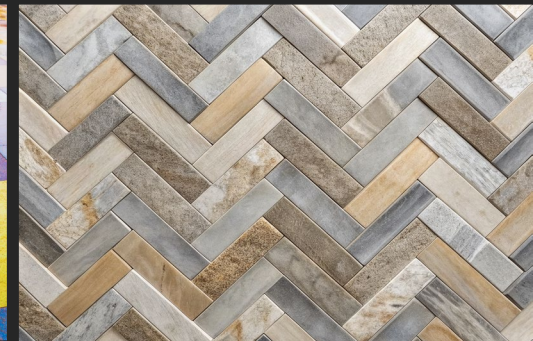


200 Duval

Looking south from Greene Street

AFTER

The community's engagement in making these choices is a key next step.



500 Duval

Looking south from Fleming Street

BEFORE



500 Duval

Looking south from Fleming Street

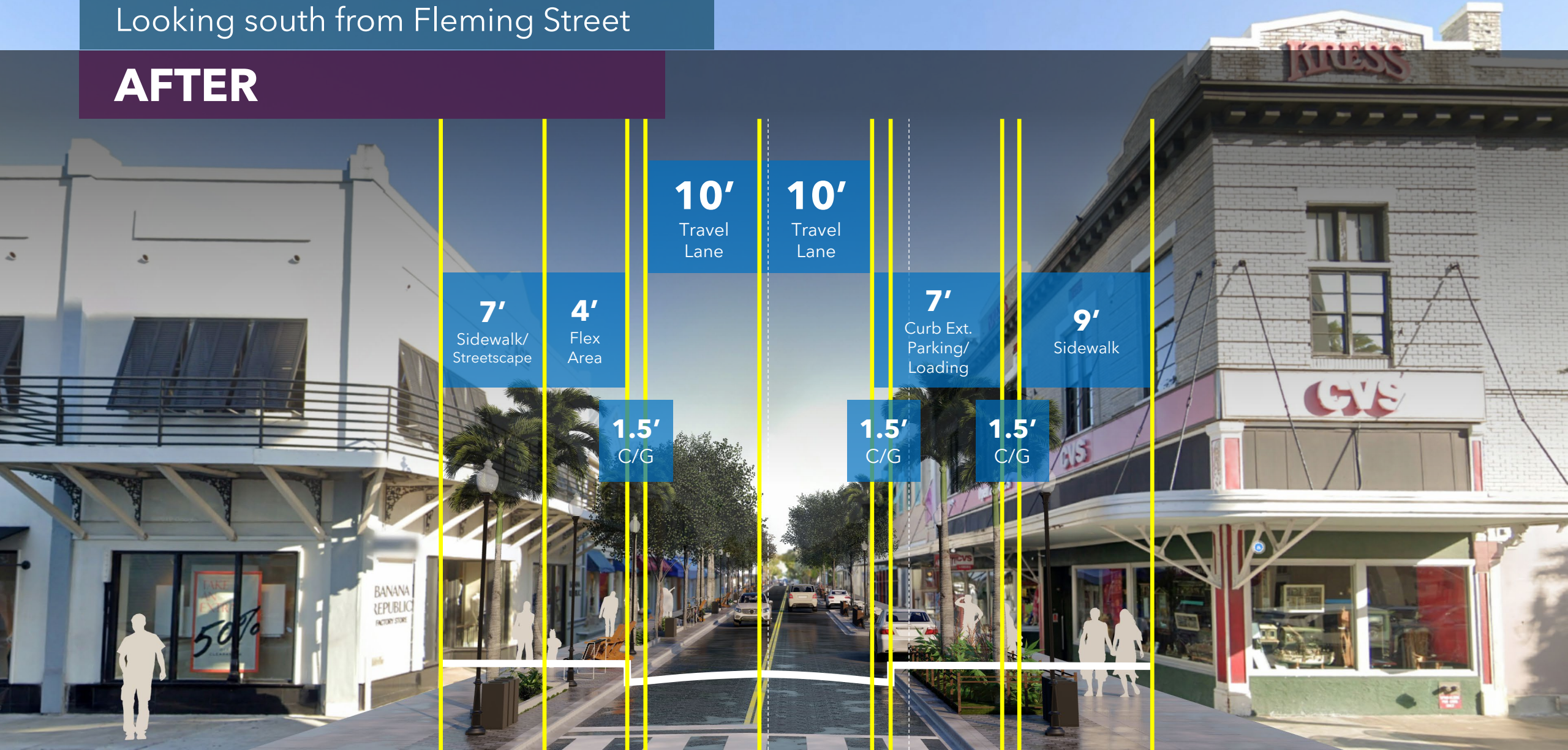
BEFORE



500 Duval

Looking south from Fleming Street

AFTER



7'
Sidewalk/
Streetscape

4'
Flex
Area

10'
Travel
Lane

10'
Travel
Lane

7'
Curb Ext.
Parking/
Loading

9'
Sidewalk

1.5'
C/G

1.5'
C/G

1.5'
C/G

500 Duval

Looking south from Fleming Street

AFTER



900 Duval

Looking south from Olivia Street

BEFORE



900 Duval

Looking south from Olivia Street

BEFORE



6-7'
Sidewalk

4-5'
Flex
Zone

1.5'
C/G

11'
Travel Lane

10.5'
Travel Lane

6'
Curb Ext.
Parking/
Loading

9'
Sidewalk

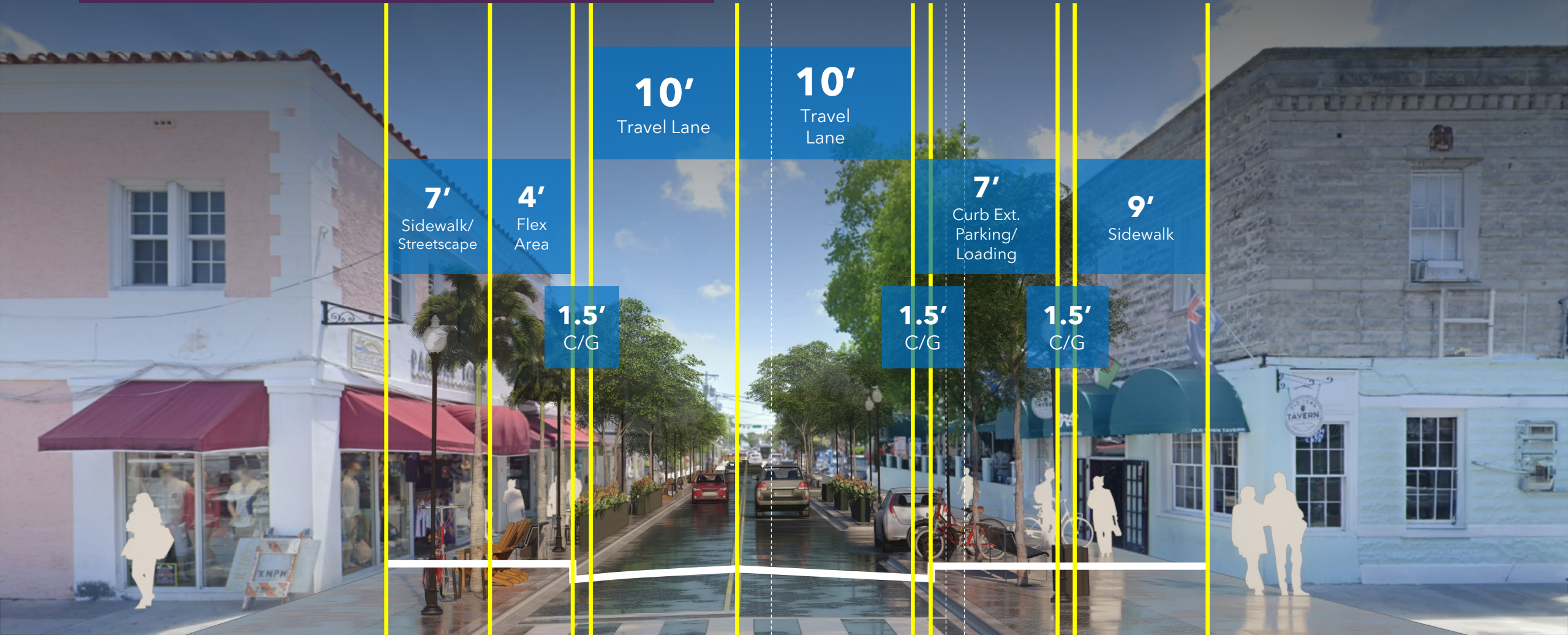
1.5'
C/G

1.5'
C/G

900 Duval

Looking south from Olivia Street

AFTER



10'
Travel Lane

10'
Travel Lane

7'
Sidewalk/
Streetscape

4'
Flex
Area

1.5'
C/G

7'
Curb Ext.
Parking/
Loading

9'
Sidewalk

1.5'
C/G

1.5'
C/G

900 Duval

Looking south from Olivia Street

AFTER



1129 Duval

Looking south from Catherine Street



1129 Duval

Looking south from Catherine Street

BEFORE

7'
Sidewalk

1.5'
C/G

6'
Parking/
Loading

11'
Travel
Lane

11'
Travel
Lane

6'
Parking/
Loading

1.5'
C/G

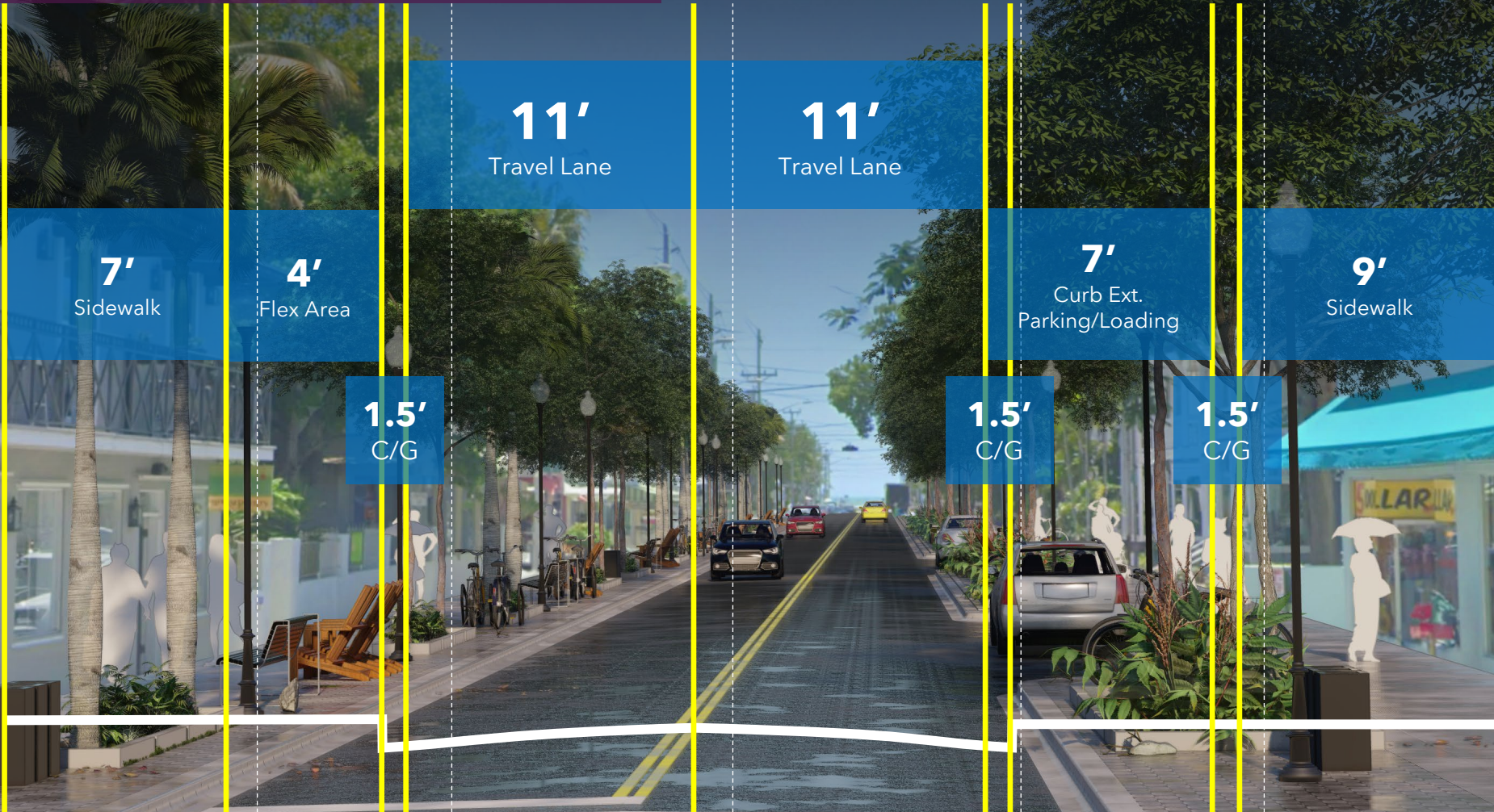
6'
Sidewalk



1129 Duval

Looking south from Catherine Street

AFTER



1129 Duval

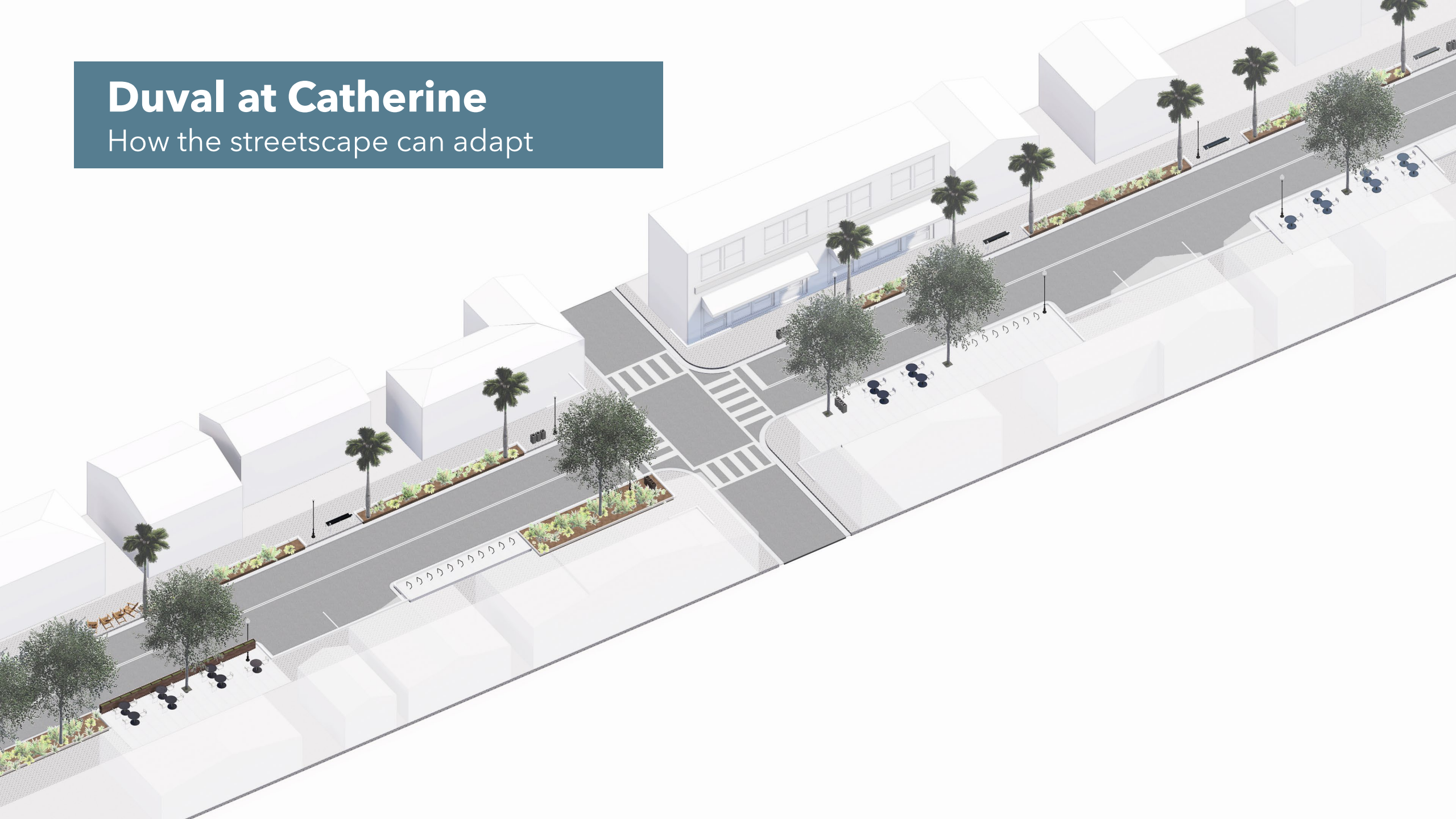
Looking south from Catherine Street

AFTER



Duval at Catherine

How the streetscape can adapt



Duval at Catherine

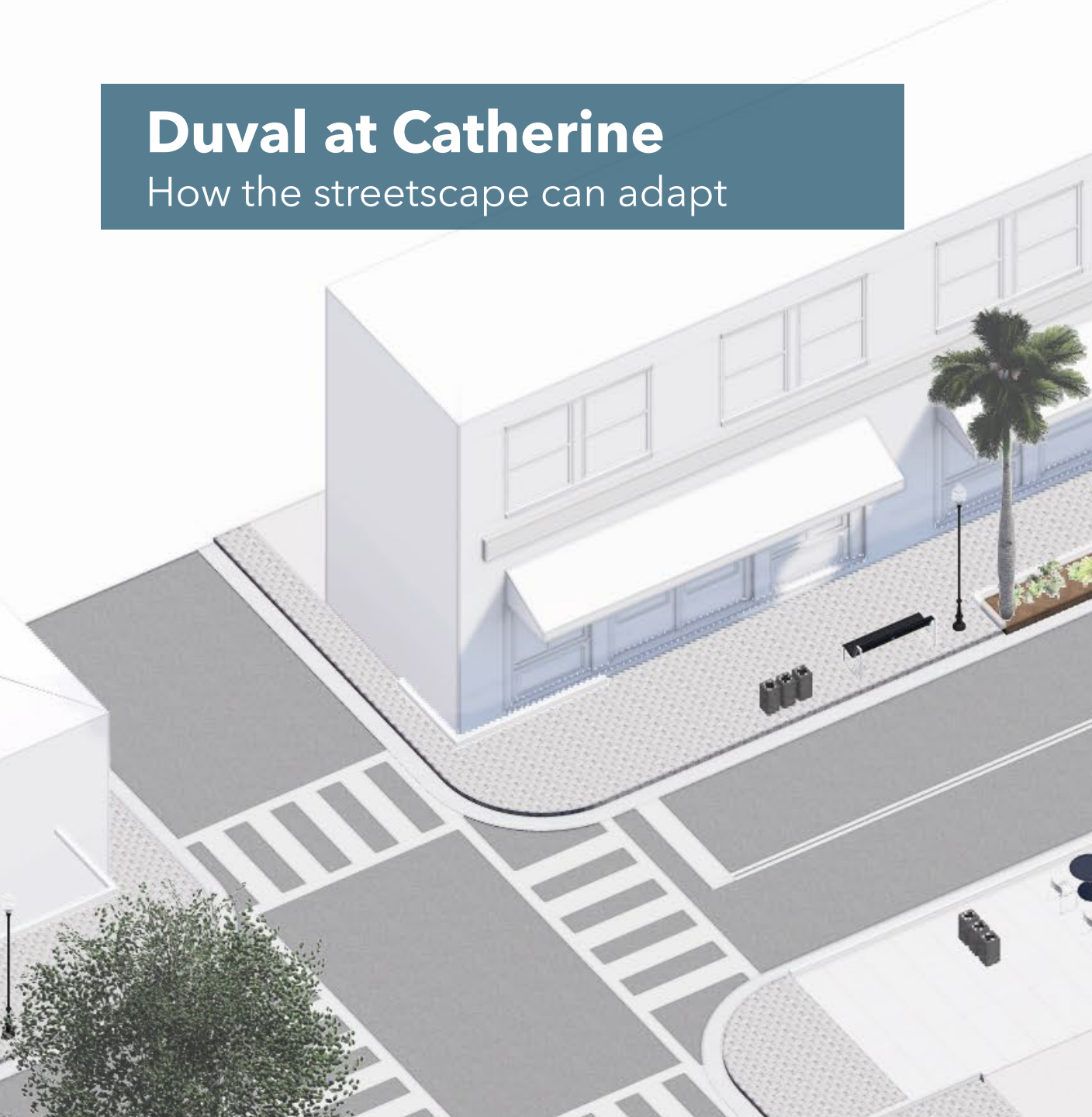
How the streetscape can adapt



Duval at Catherine

How the streetscape can adapt

Each of the street's blocks and frontages has numerous options to adapt to the needs of the properties.



What

the project includes

New Mobility Approaches



The fundamental uses of the street are not changing, and only minor shifts will occur in the use of the street space.

This project is still an opportunity for rethinking mobility options on Duval Street.

What

the project includes

Guidance to combine resiliency and preservation

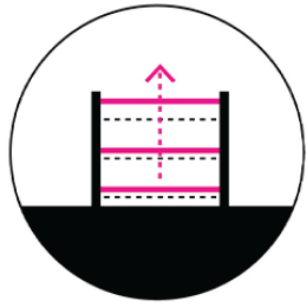


A key objective of this project was to make streets more resilient without negative impacts to the corridor's historic properties.

What

the project includes

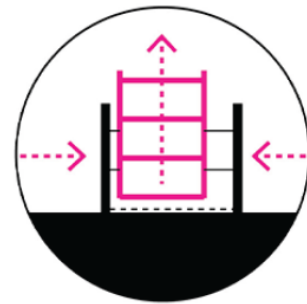
Guidance to combine resiliency and preservation



1A
Internal Raise



1B
Adaptive Use Approach



1C
Building in a Building



2A
Individual Approach



2B
Combined Approach

Adapting buildings is a next stage of a more resilient Key West, but the City will not mandate this.

The City will provide technical guidance to property owners and facilitate keeping buildings preserved as part of downtown's character.

What

the project includes



- More advanced stormwater approaches
- Opportunities for new transportation/ mobility management
- Enhanced streetscape with added space for the street's most active users
- Guidance for buildings to follow with their own adaptations

An aerial photograph of a coastal town, likely in Florida, showing a dense residential area with many houses, palm trees, and a central street. The ocean is visible in the background under a clear sky. A large white text overlay is centered on the image.

What the project includes

Questions

How

Key West implements the project




Understanding the next steps and a project process

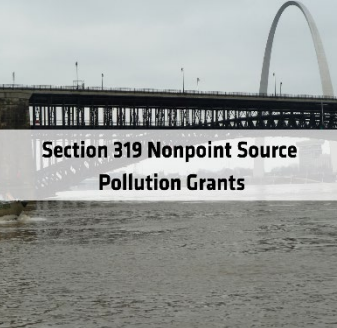

Creating a funding strategy that leverages the project's numerous benefits and disciplines

Developing an action plan that **minimizes impact to businesses and community**

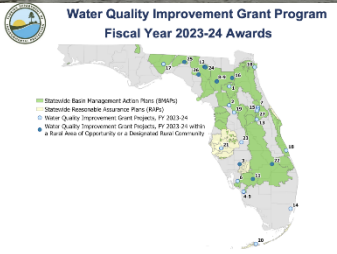
The first step is funding it.



FY 2023 Building Resilient Infrastructure and Communities
Subapplication Selections for the BRIC National Competition
July 2024



Section 319 Nonpoint Source Pollution Grants



Water Quality Improvement Grant Program
Fiscal Year 2023-24 Awards

- Statewide Basin Management Action Plans (BMAPs)
- Statewide Nonpoint Source Pollution Plans (NPSPPs)
- Water Quality Improvement Grant Projects, FY 2023-24
- Water Quality Improvement Grant Projects, FY 2023-24 (with)
- Local Area of Opportunity or a Designated River Community

- Resilient Florida Implementation Funds
- BRIC - Building Resilient Infrastructure and Communities
- Transportation Alternative Program Grant
- Pre-Mitigation Grant
- Section 319 Non-Point Pollution Grant
- State Water Quality Grant
- Legislative Water, Transportation & Economic Development Appropriations



TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM (TA)



APPLY NOW
CLICK HERE

QUESTIONS? CONTACT TANYA BRANTON AT 850-330-1550



Funding Stacks: an example



**Transportation
Alternatives**

BRIC Grant

FL Water Quality Grant

**Safe Streets for All
Implementation**

Carrying Out Construction

Major property and business concerns must be addressed with care.

Although timing of project implementation is driven by funding, it is refined by the coordination needs to protect local businesses.



Typical Block

Construction Staging and Schedule



Typical Block

Construction Staging and Schedule

One side of the block

Achievable in six weeks, can be done separate from the other side



Typical Block

Construction Staging and Schedule

One side of the block

Achievable in six weeks, can be done separate from the other side

Within six-week period

Street and curb work can be done separately and leave partial pedestrian passage open



Typical Block

Construction Staging and Schedule

Other side of the block

Another six-week period, can be kept separate to preserve partial traffic flow

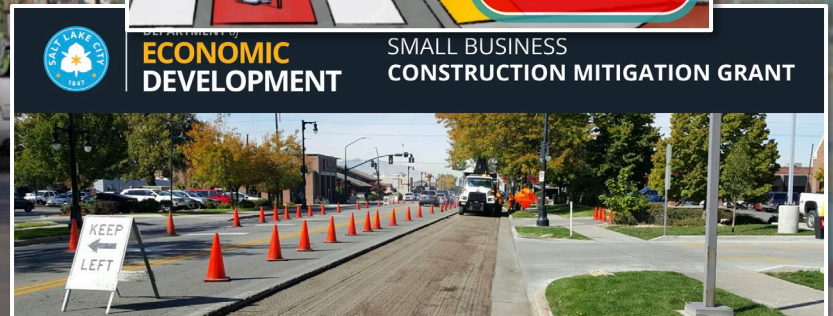
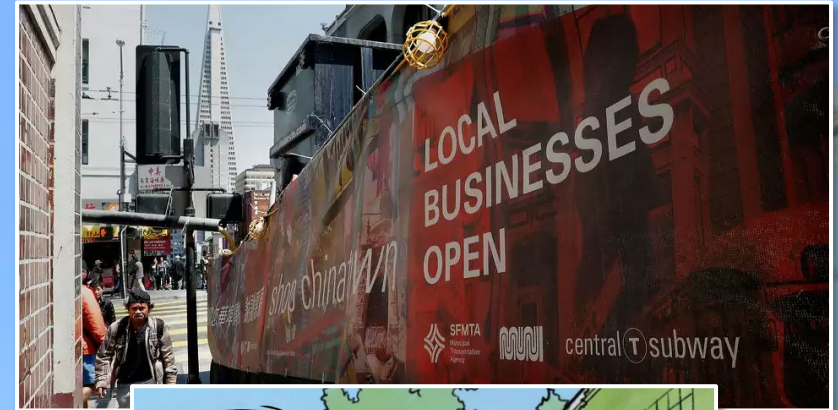


Typical Block

Construction Staging and Schedule

Within each construction period

- Signage and wayfinding guiding customers to open businesses
- Temporary staging to protect pedestrians from construction materials
- Public outreach and information campaigns to support businesses and encourage visits
- Potential timing of blocks/phases to avoid major event times of year



Duval Street Revitalization & Resiliency Plan



Next Steps:

- Continue community input: **this begins outside in the lobby this evening!**
- Continuation of infrastructure and preservation adaptation study
- Begin formal funding strategy development
- Detailed design for pilot segment

How

to implement the project



- Identify funding strategy and begin grant applications, lobbying efforts, and City budget planning
- Design and construct a pilot project
- Advance the rest of the corridor to final design and begin construction

Duval Street

for a vibrant, resilient future Key West



This corridor belongs to the community.

This project is yours to own and be a part of.

Thank you for your participation this evening!



DUVAL FOR ALL REVITALIZATION & RESILIENCY PLAN

Questions