

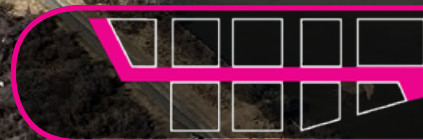
2-22-2019

Integrated Design and Engineering Solution at the Yards in the Future-Proofing of It's Infrastructure

Claire Bedat



**YARDS WEST
DISTRICT**



THE STREET

Infrastructure

Resiliency

Social Space



Existing Condition: Parking and service vehicle lots surrounded by up and coming neighborhoods with active public spaces and amenities

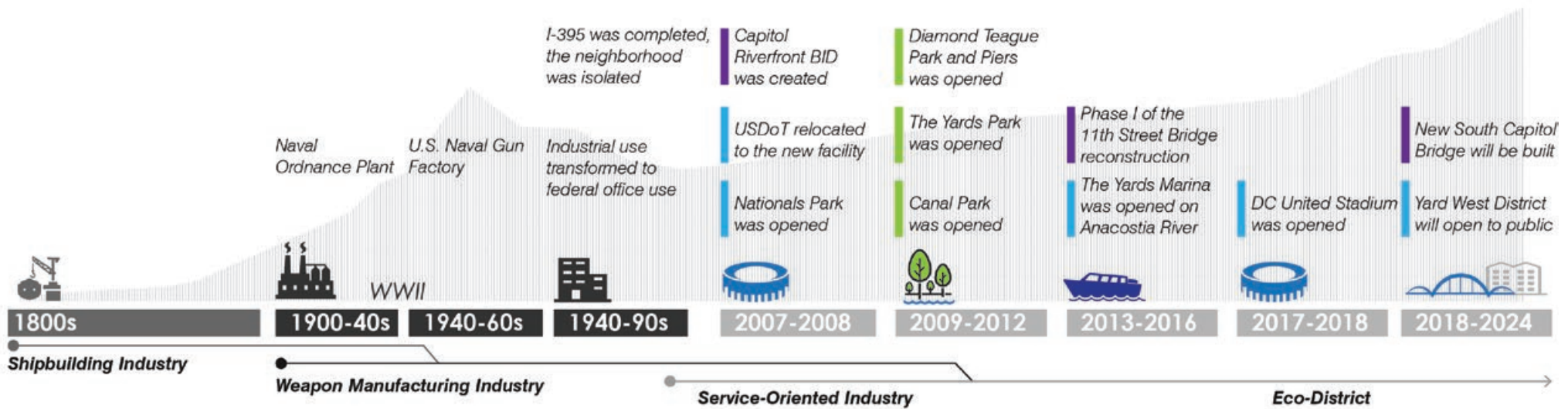


Photo # NH 91945 Washington Navy Yard, D.C., and vicinity, looking westward, circa 1947-50



The Washington Navy Yard during the 1947-50

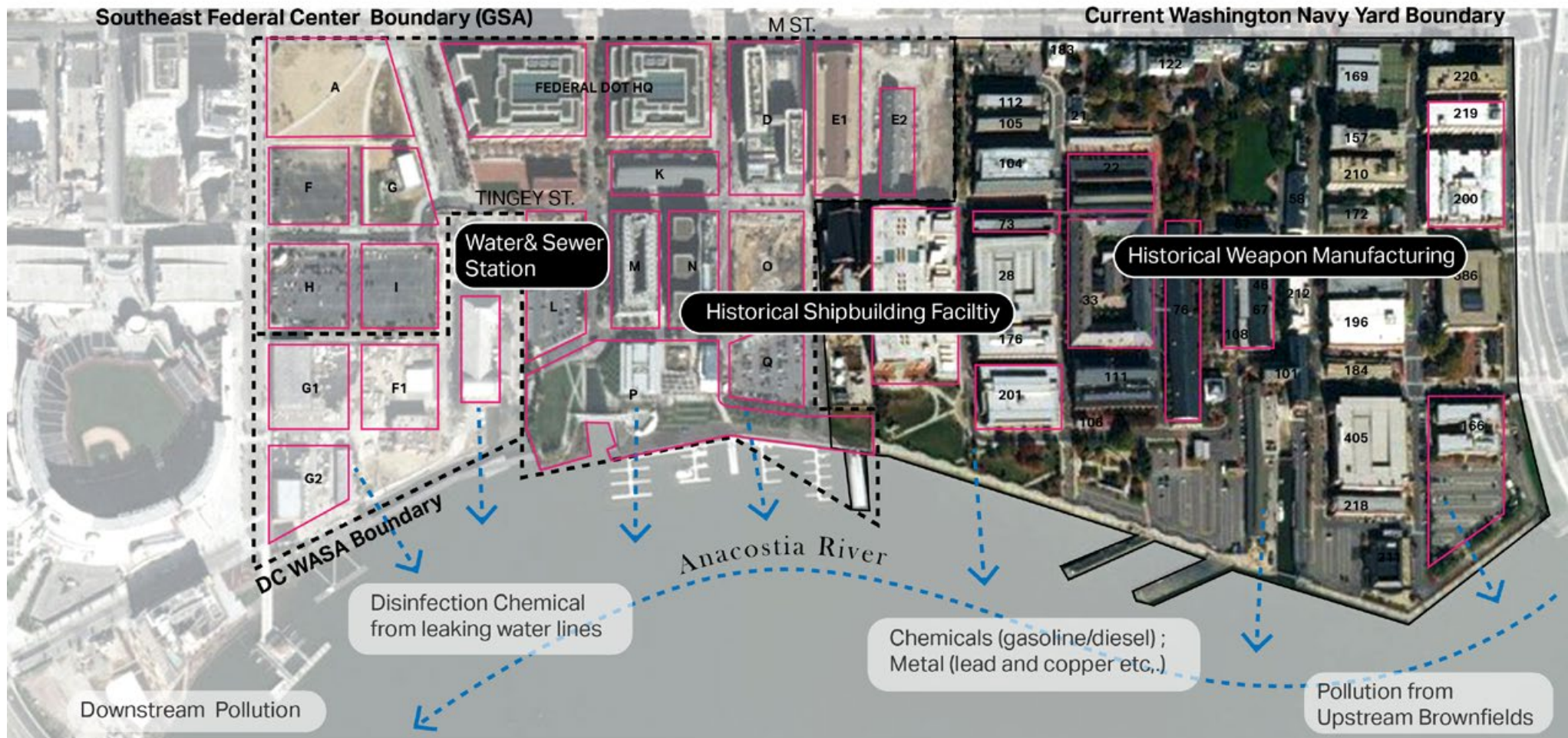
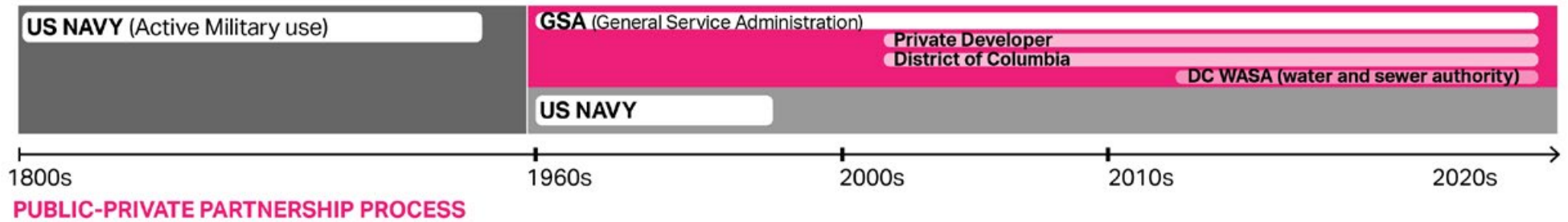
Image Source: Naval History and Heritage Command



Proposed Yards District

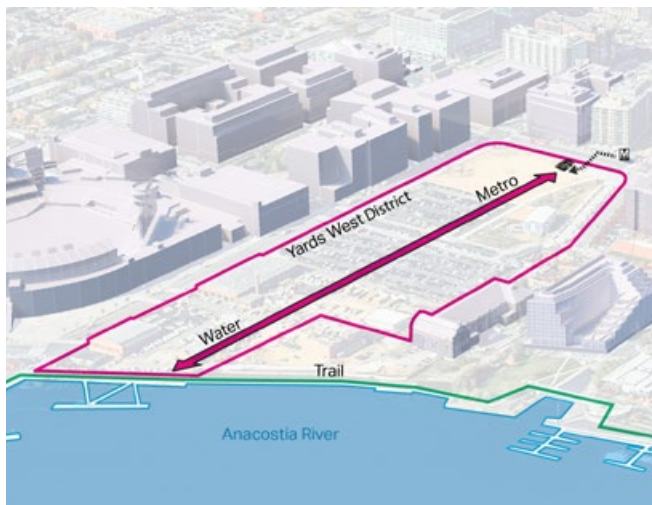
Image Source: D.C. office of the Deputy Major for Planning and Economic Development

- Under RCRA Section 3013 EPA ordered GSA and the US Navy to abate the site contaminants through corrective actions.

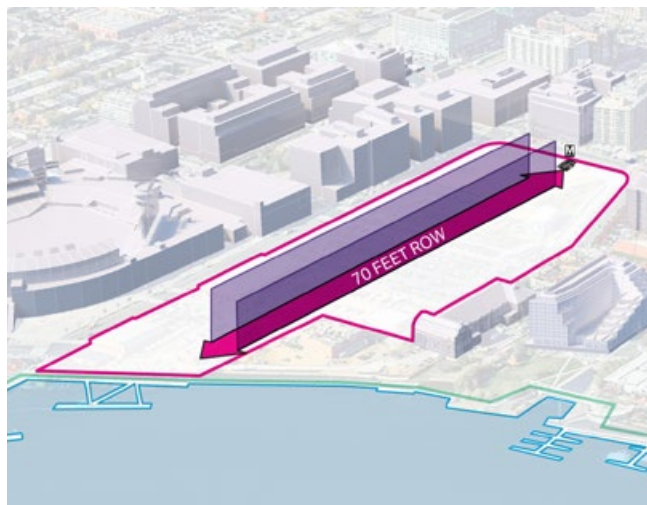


Site History

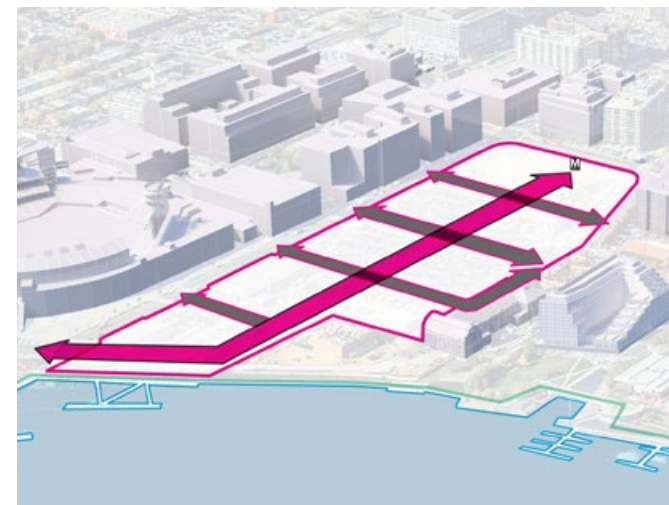
Analysis and Planning



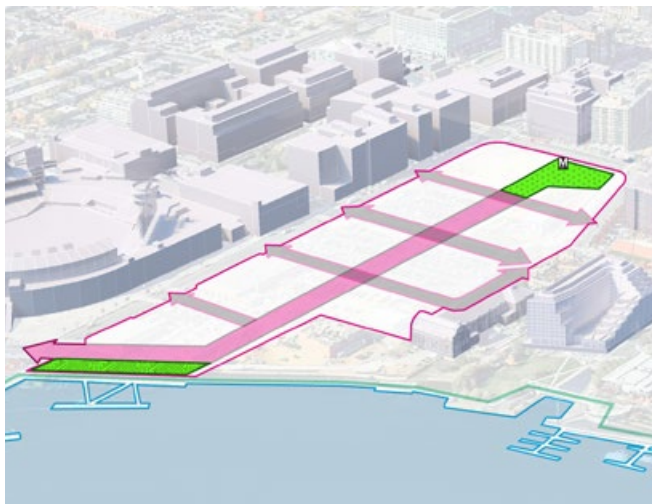
1 Add metro entrance to existing station on the south side of M Street and connect to water



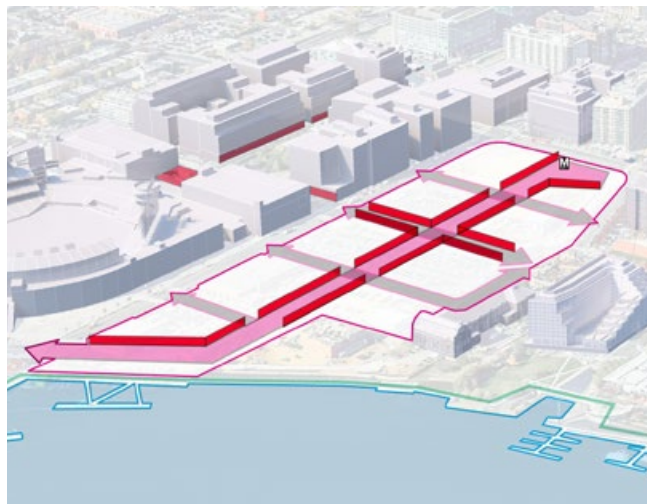
2 Give the main axis a 70' right-of-way and 2:1 height-to-width ratio for a well defined environment



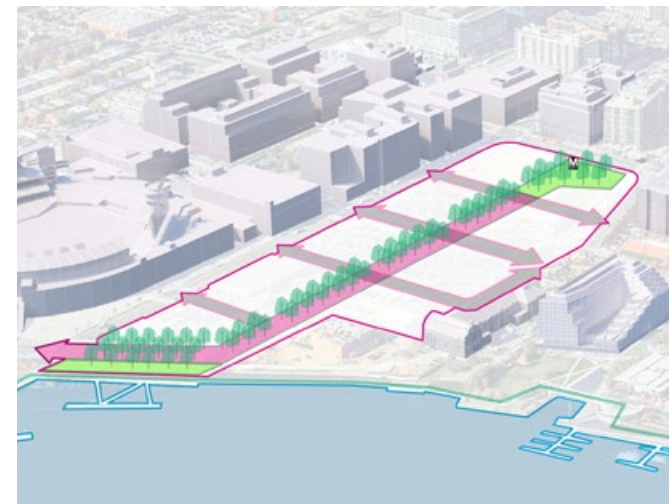
3 Connect the street grid concentrating major utilities and service drives on the cross streets freeing up the main axis for amenities



4 Anchor the axis with public space on each end: plaza along M Street, Park along the river



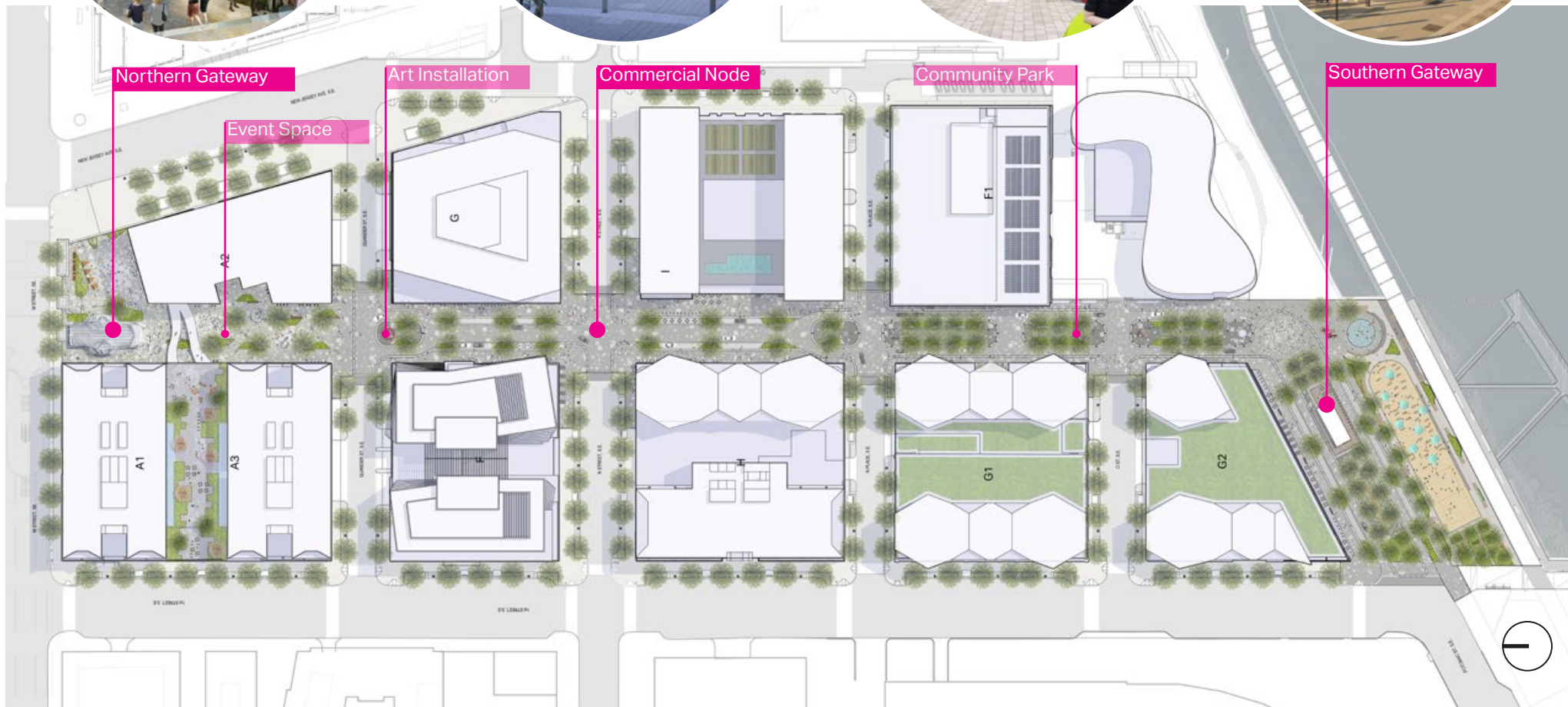
5 Activate retail frontage along axis and major cross axis connecting to main entrance of stadium



6 Grow a dense shade tree canopy along the main axis for micro-climatic cooling in the hot summer months of Washington DC

Programming and Activities

THE STREET--- the 1,800 ft long central spine provides a strong urban linkage from vibrant urban/ retail environment to riverfront/ leisure atmosphere.



Electric Power

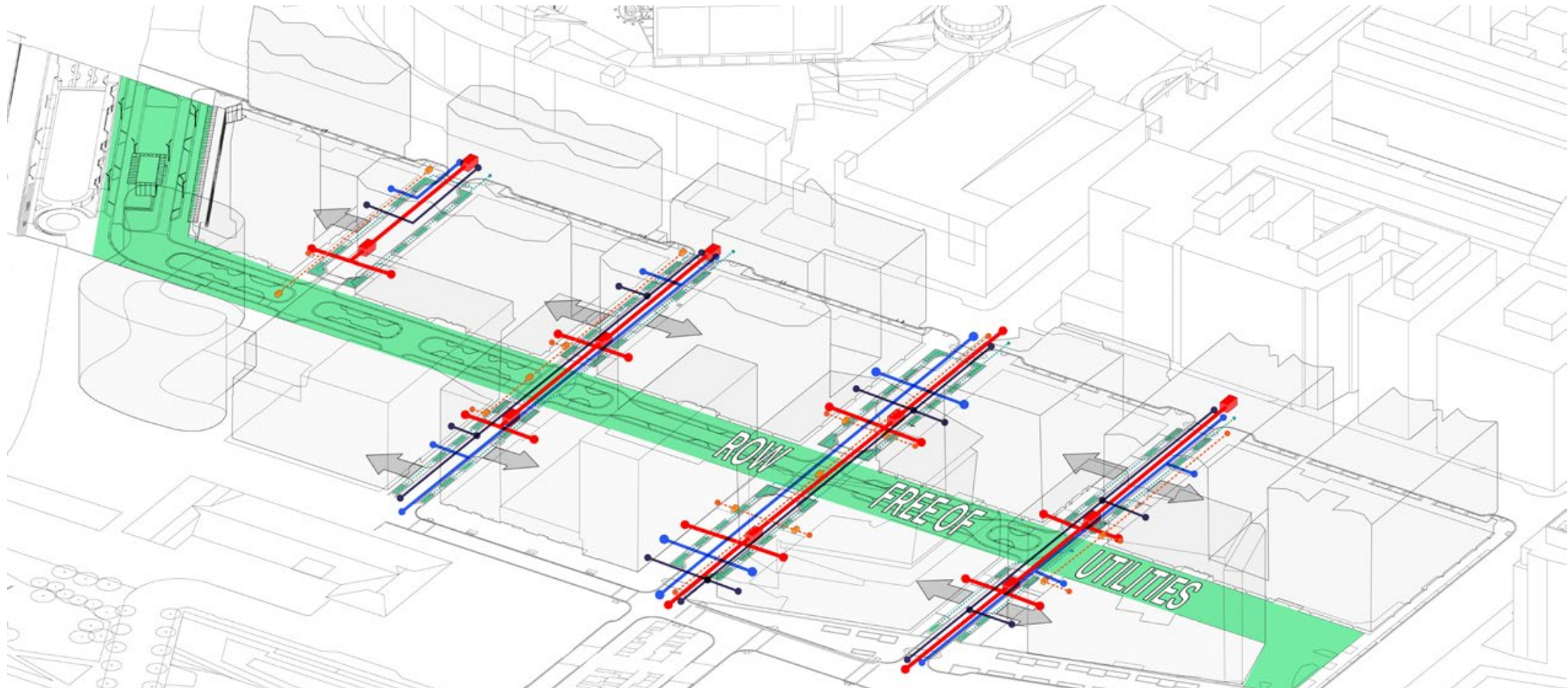
Telecom

LID Storm Water

Water

Sanitary

Service Drives

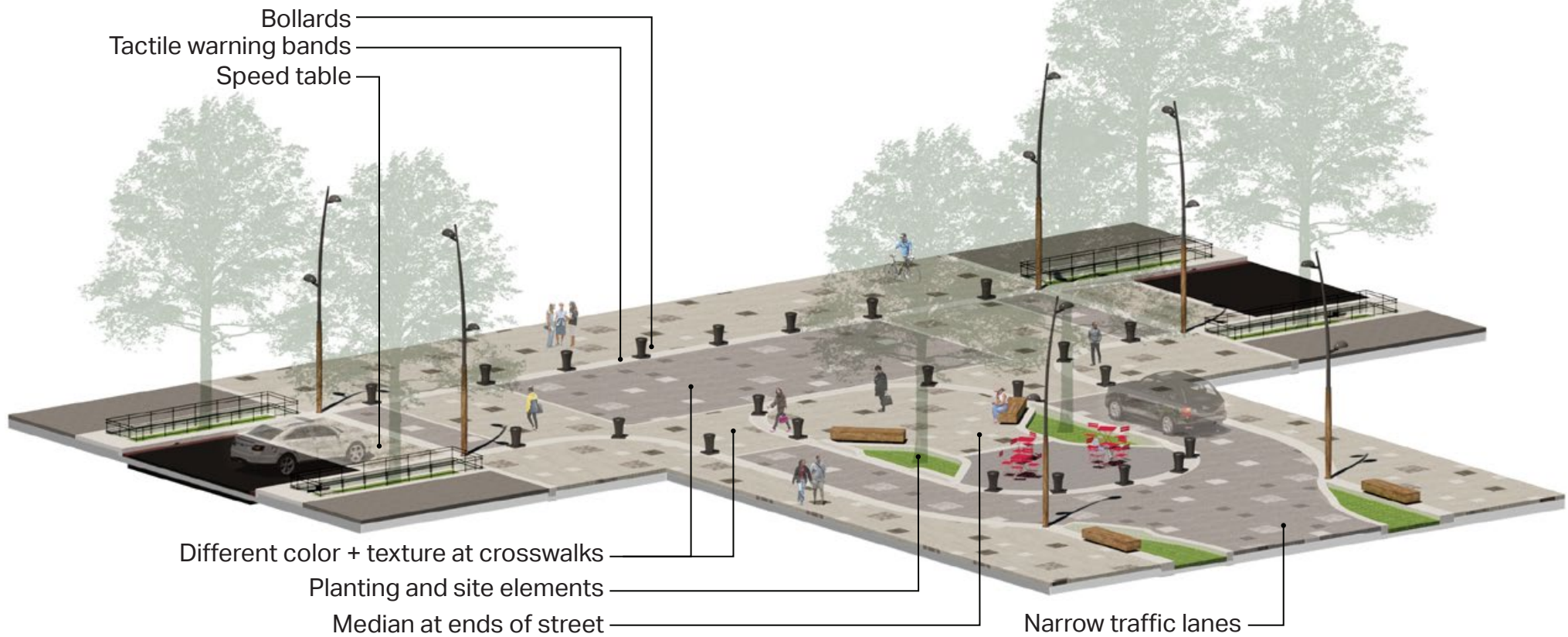


The cross streets do the heavy lifting of the infrastructure and service drives freeing up *THE STREET* for pedestrian oriented design and unencumbered soil for tree growth.

Adaptive Plan

Infrastructure

Safety and Traffic Calming Elements of *THE STREET*

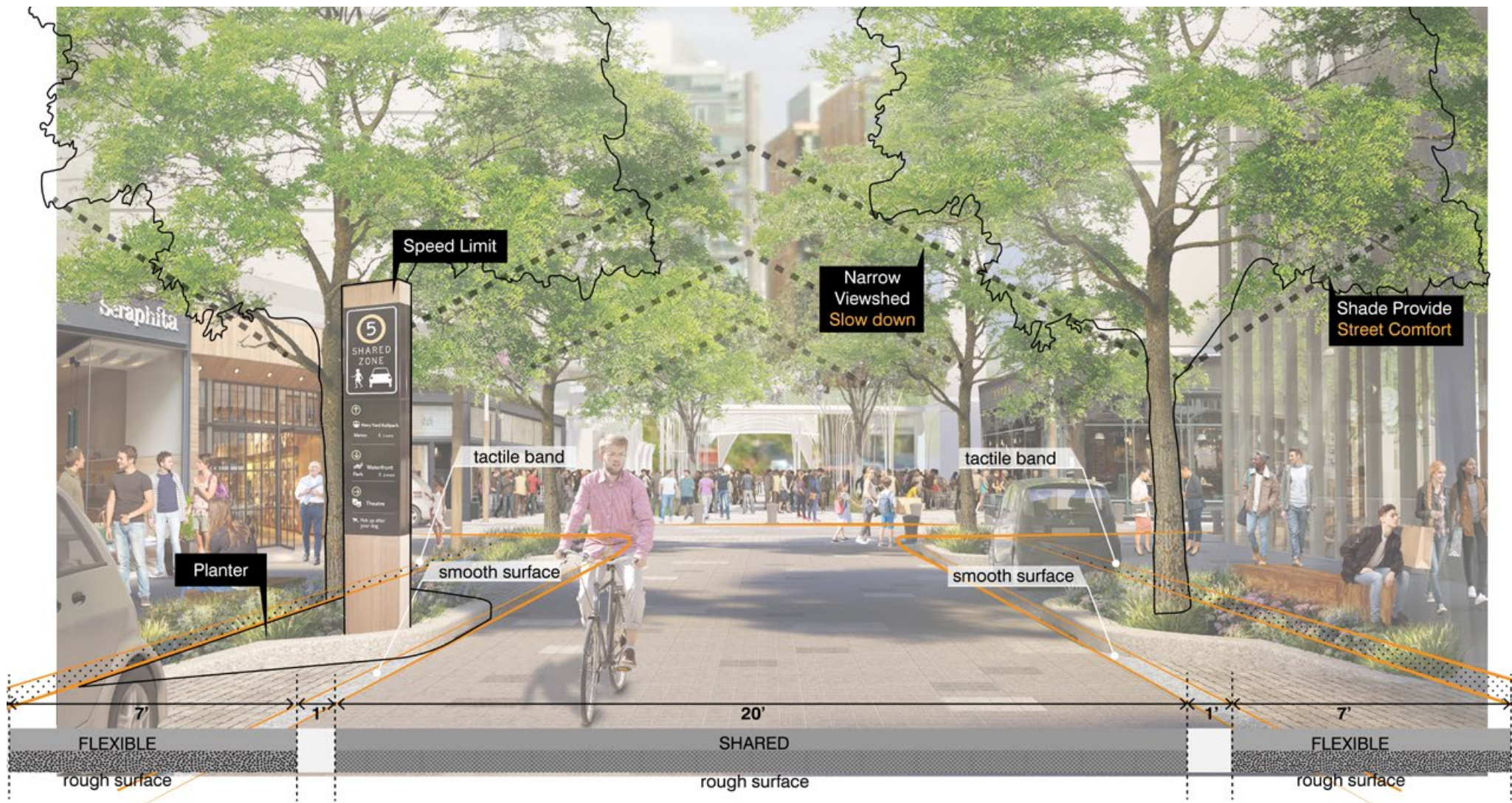


Standard DDOT Street in the District

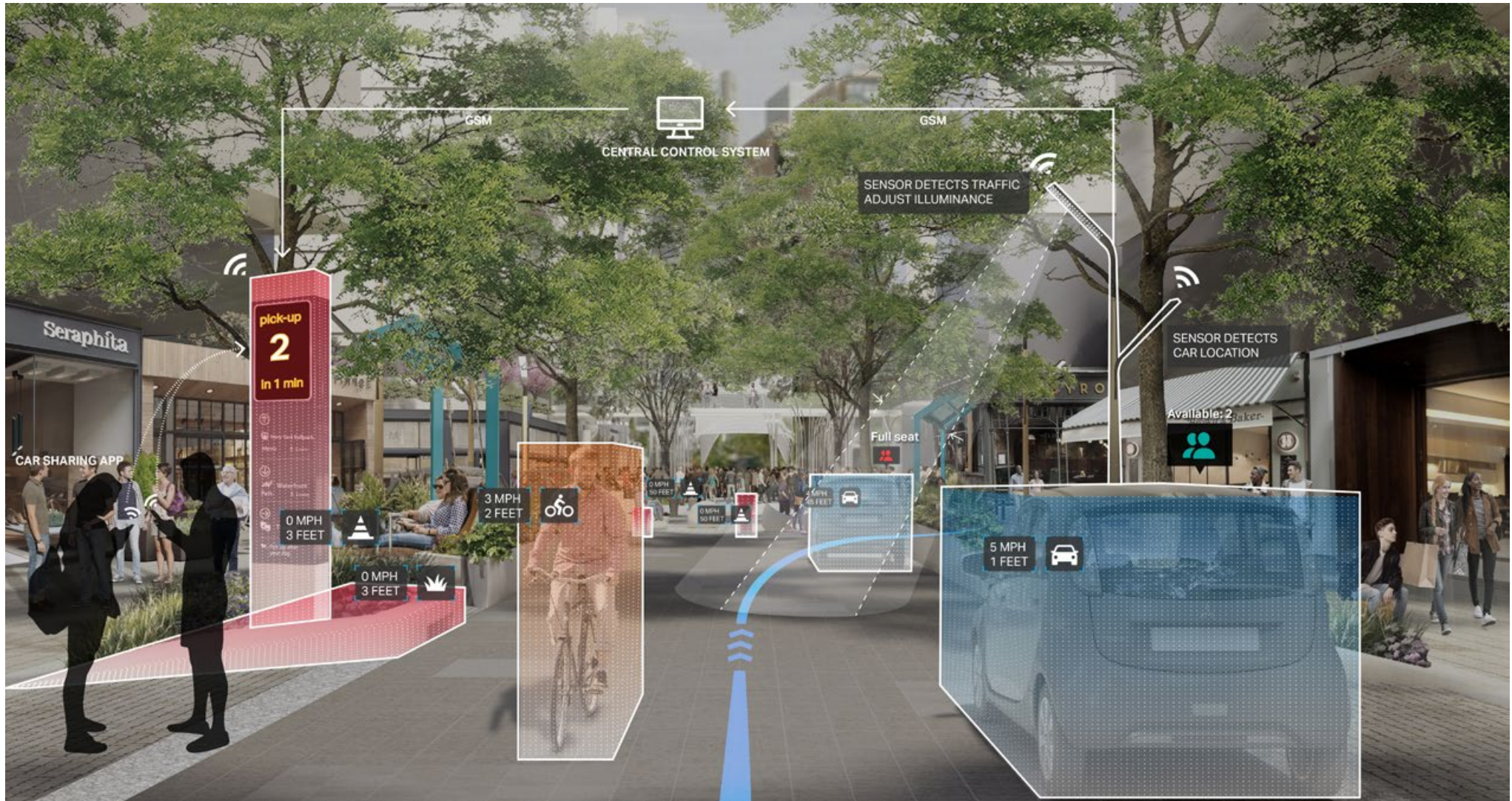


***THE STREET* Typical Section**

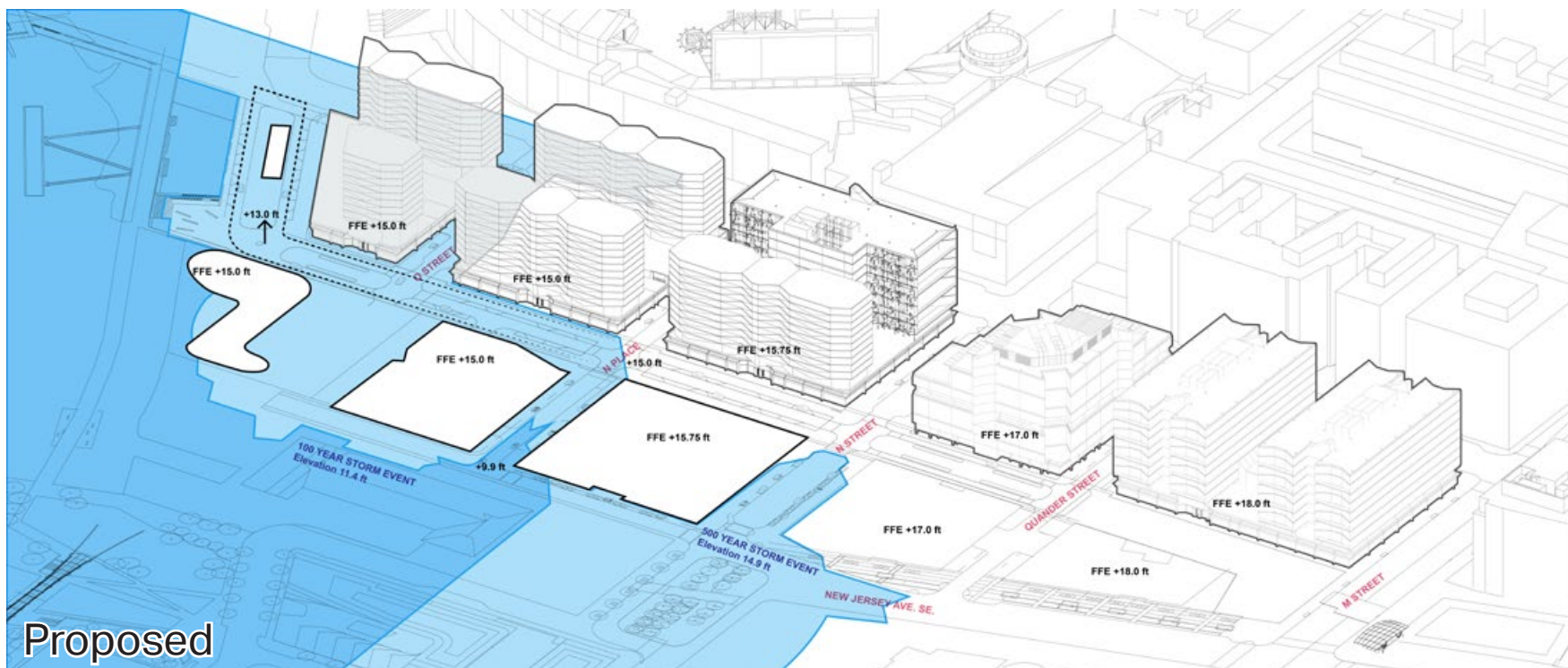
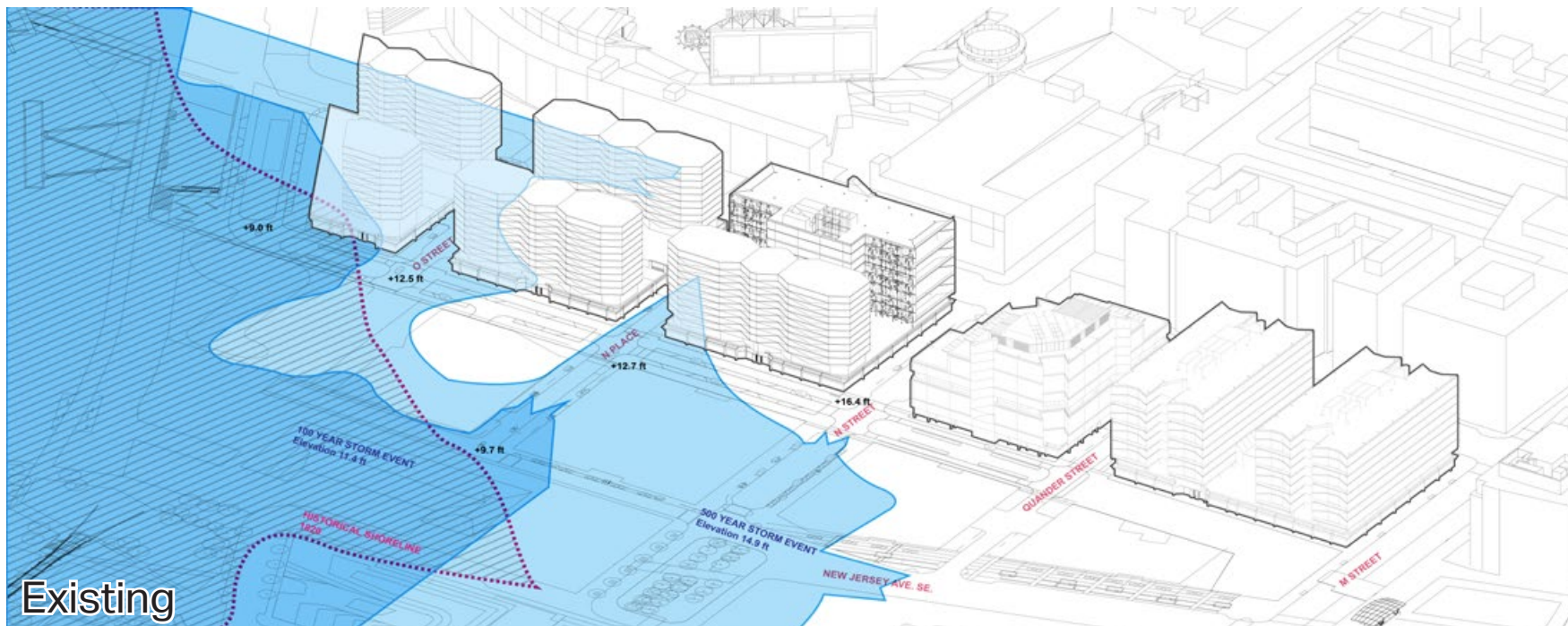




THE STREET is envisioned as a pedestrian centric experience while at the same time taking into account all forms of mobility. Being truly curbsless with lush planting, granite paving, and rich retail activation will create a unique urban experience.



Future Scenario of Transportation --Smart Tech + Autonomous Driving Scene



Condition After 100 Year and 500 Year Storm Events

Storm water flows off of road to trench drain

Treated overflow runs into perforated pipes and is released to storm drain after holding period

Storm water drains to bioretention planter and permeable pavement

Storm water infiltrates into suspended soil
for tree and plant root uptake

Treated overflow runs into perforated pipes and is released to storm drain after holding period

3.1M
VISITORS

360
EVENTS

\$287
MILLION
REVENUE
GENERATED

9,500
POPULATION

1.53 acre
OPEN SPACE

1,052,464 gal/yr
STORMWATER
STORAGE

757,941 gal/yr
TREATED WATER

23,088 lb/yr
REDUCING CO₂

0.75 acre
PERVIOUS PAVING

29
PARKING
SPACES

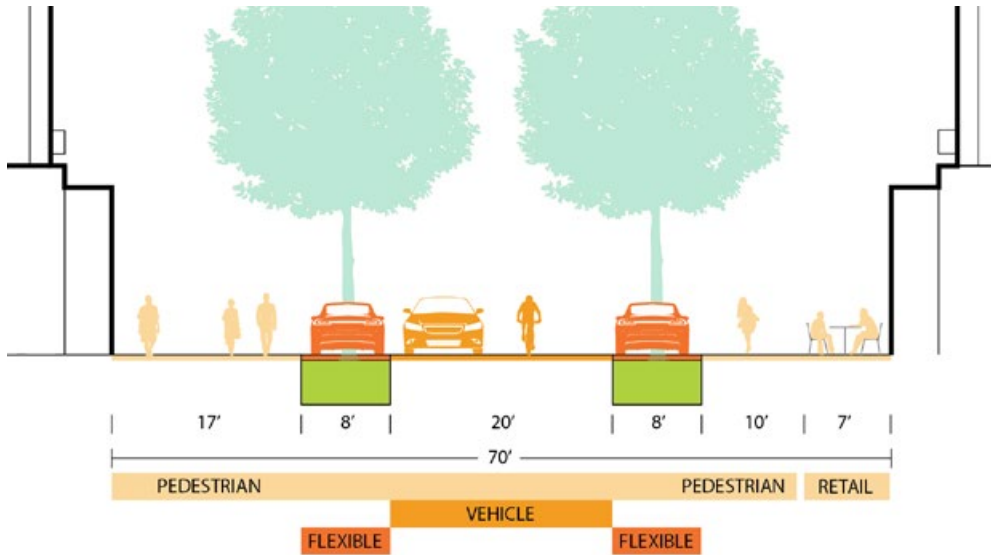
52
TREES



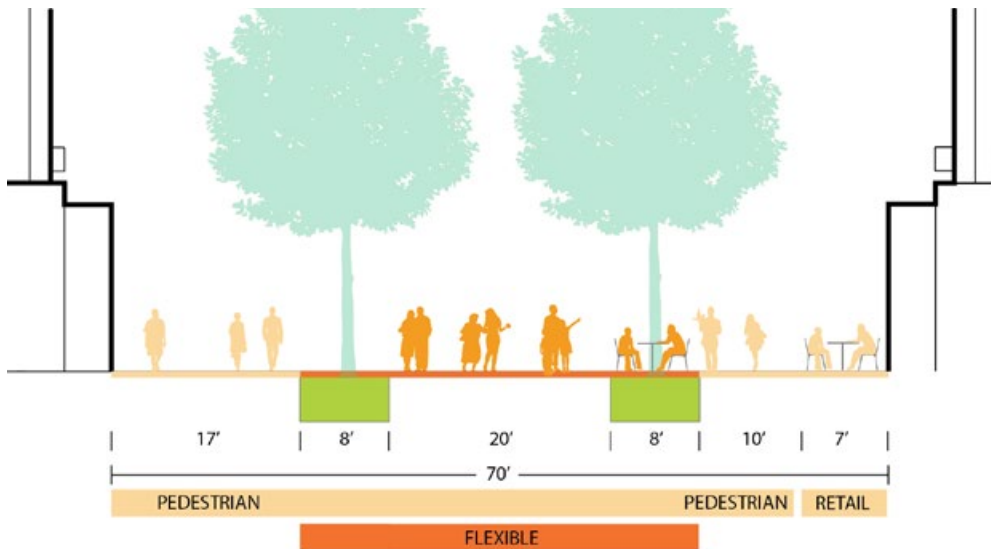
Park setting created in median of *THE STREET*

Adaptive Street

Social Space



Everyday Use

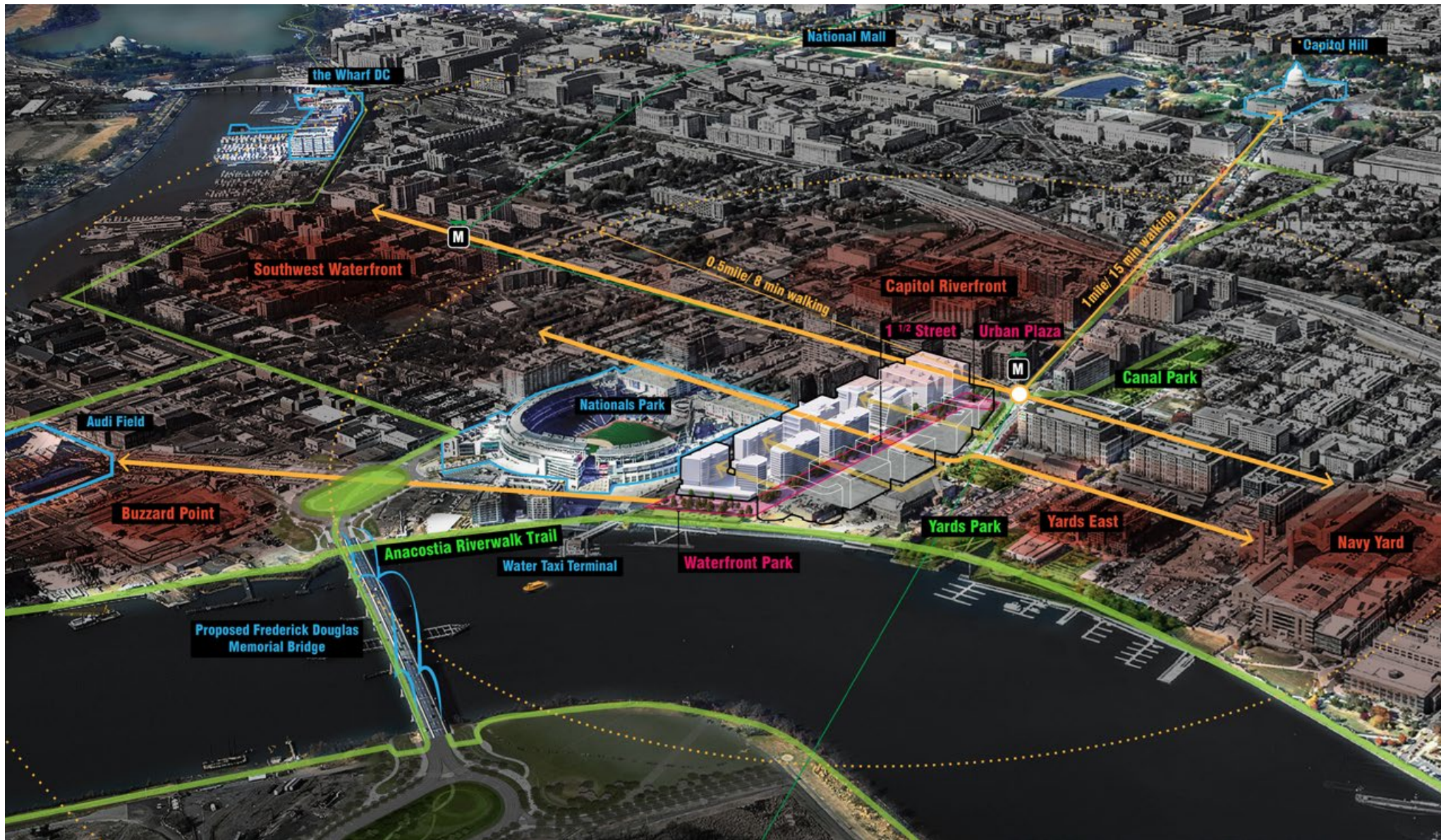


Street Closed to Vehicle Traffic for Event



Adaptive Street

Social Space



THE STREET creates a new place for the communities of Southwest and Southeast DC, drawing a diverse group of residents from the surrounding neighborhoods to a street that they may not use as their address, but that they can call their own.