EASTERN MARKET METRO PARK

REVISED CONCEPT DESIGN SUBMISSION

AMT LLC CONSULTING ENGINEERS AND LAND SURVEYORS

Keystone PLUS CONSTRUCTION

MOVA DESIGN PARTNERS

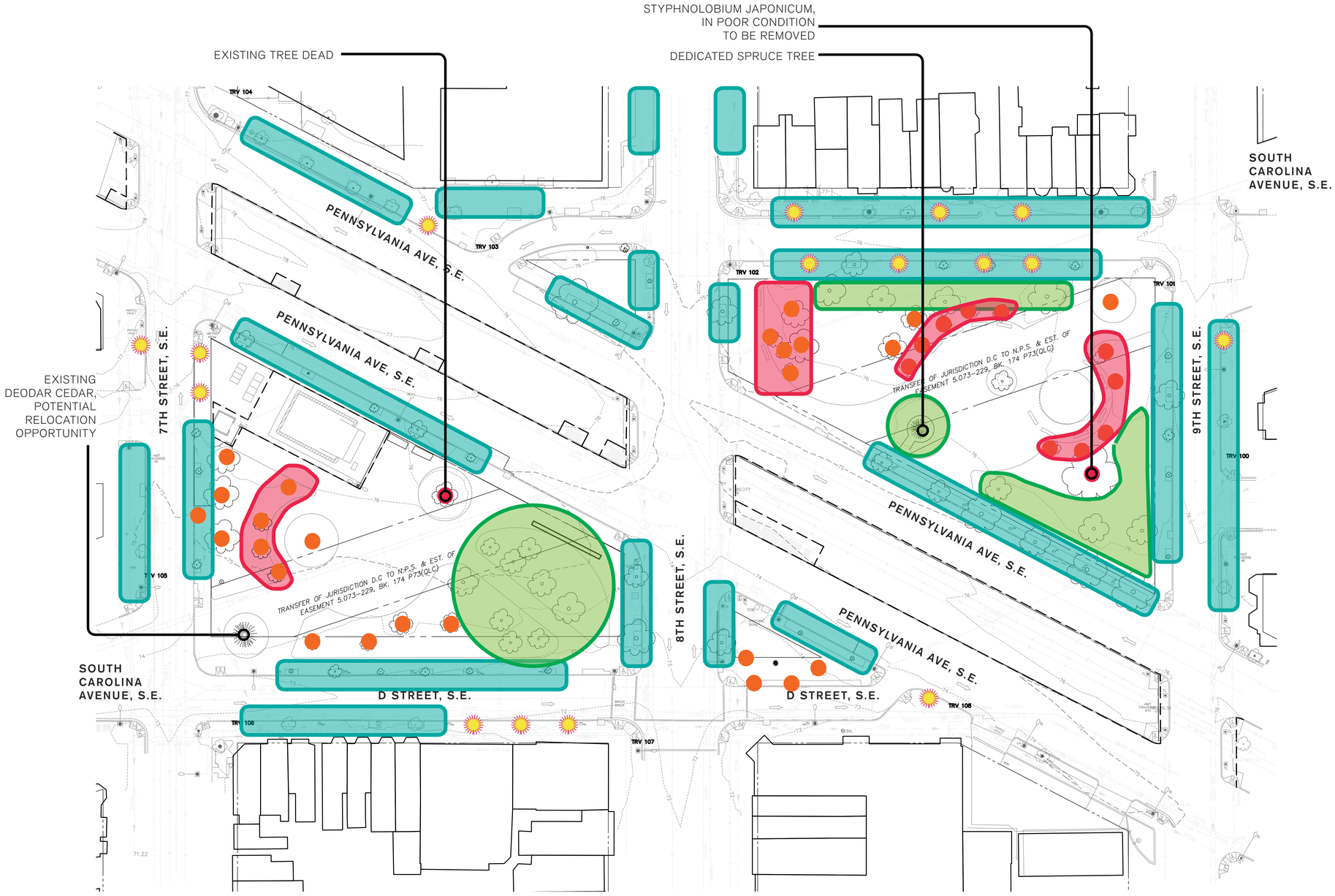
LandDesign. CREATING PLACES THAT MATTER.

▪ 01.09.2019 ▪

EXISTING CONDITIONS ANALYSIS
Trees + Canopy

NARRATIVE

The park's streetscape trees provide good edges to the spaces and with a few exceptions should be saved where in good health. Consideration should be given to opening the view to the Library for a stronger connection. Ornamental trees interior to the site, predominately crab apples, are less desirable as they block visibility through the space. However, several other interior trees including shade trees and an evergreen tree dedicated to the founding president of the Capitol Hill BID, may be saved and/or relocated. The Urban Forester Department has evaluated the trees and found all in at least good condition, except two noted here on the plan. Discussions will continue with the department on tree saving strategies, particularly as they relate to bioretention requirements.



EXISTING CONDITIONS PHOTOS

DEDICATED SPRUCE TREE

STREETSCAPE ALONG PENNSYLVANIA AVE.

CRAB APPLES BLOCK VIEWS

20" DBH OAK

GROVE AT PARCEL 4

GROVE AT PARCEL 4

LEGEND

- Potential Tree Saves
- Existing Street Trees Create Significant Edges
- Existing Tree In Poor Condition Or Dead
- Street Tree Planting Opportunity
- Existing Tree Considered For Removal
- Low Branching Ornamental Trees Create Visual Barrier

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

EXISTING CONDITIONS ANALYSIS
Site Furniture

NARRATIVE

Very little site furniture exists within the park today, and some of what does remain is in poor condition or inappropriate arrangements. While Parcel 1 does have a number of benches, most of these are deteriorated and the linear layouts are not conducive to social engagement. A new solar bench near the corner could be relocated and replicated in the new plan. Parcel 4 lacks benches altogether. The existing bus shelters on Parcel 4 are placed very close to the Metro entrance and should be considered for relocation several feet further away for improved circulation. There are two existing water fountains that are out of service.

EXISTING CONDITIONS PHOTOS

WATER FOUNTAIN

SOLAR BENCH

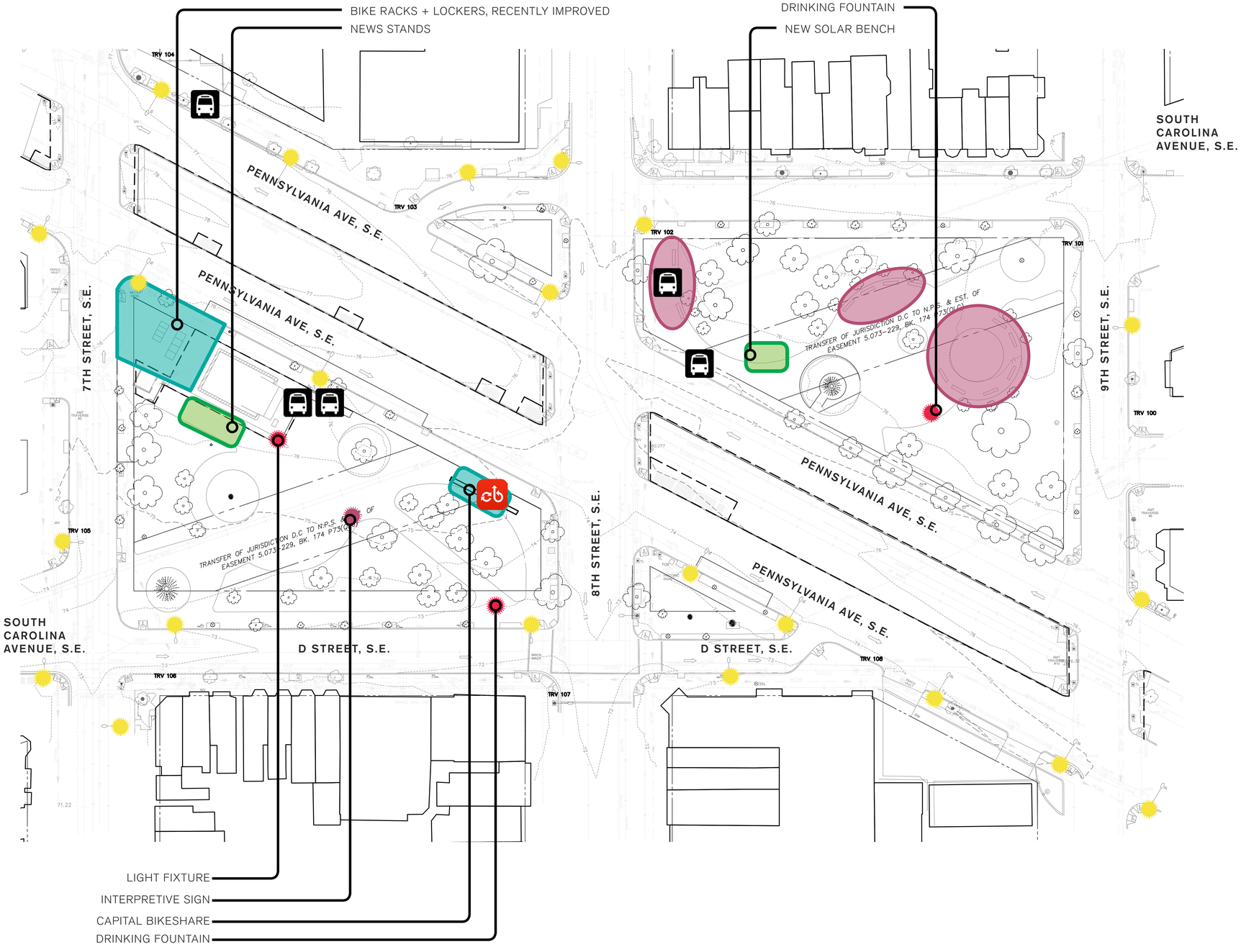
LIGHT FIXTURE

HISTORICAL SIGN

BIKESHARE

BUS STOP

BIKE LOCKER



LEGEND

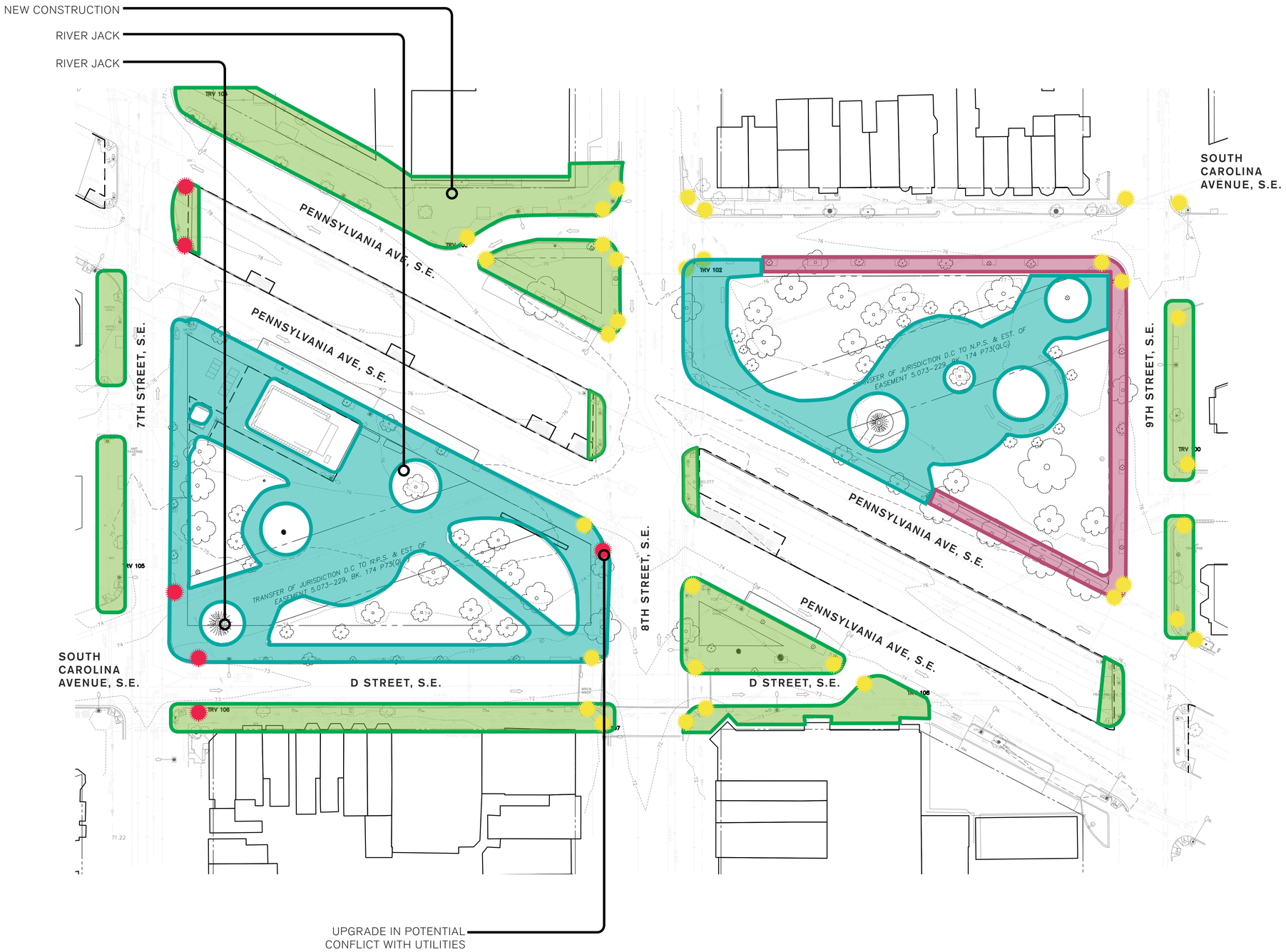
- Furniture To Be Relocated
- Benches Do Not Encourage Conversation Or Relaxation
- Bicycle Facilities
- Bikeshare
- Bus Shelters
- Failing Infrastructure
- Street Lights
- Interpretive Signage

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

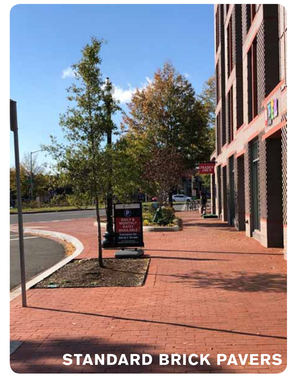
EXISTING CONDITIONS ANALYSIS
Materials

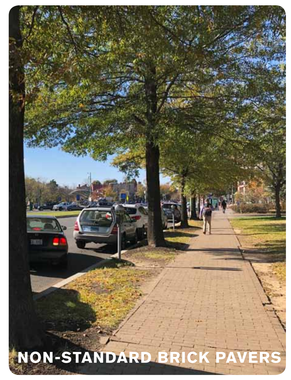
NARRATIVE

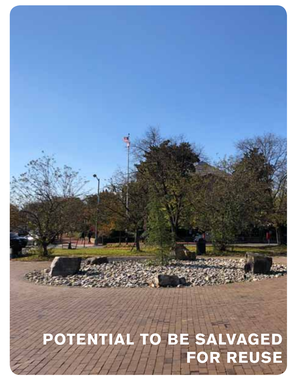
The site area contains a mix of pavement types which include the standard red brick, a non-standard darker brick, and concrete. There is potential to salvage the non-standard darker brick for reuse as a specialty paver to accent specific areas of the new plan. The concrete pavement around the Metro entrance is under WMATA jurisdiction and will not be altered. Many curb ramps that were recommended for replacement in the 2015 Master Plan have already been reconstructed and now comply with ADA guidelines.



EXISTING CONDITIONS PHOTOS







LEGEND

- Standard Brick Pavers
- Non-Standard Brick Pavers
- Non-Standard, Potential To Be Salvaged + Reused
- Curb Ramp In Need of Replacement
- Recently Replaced Curb Ramp

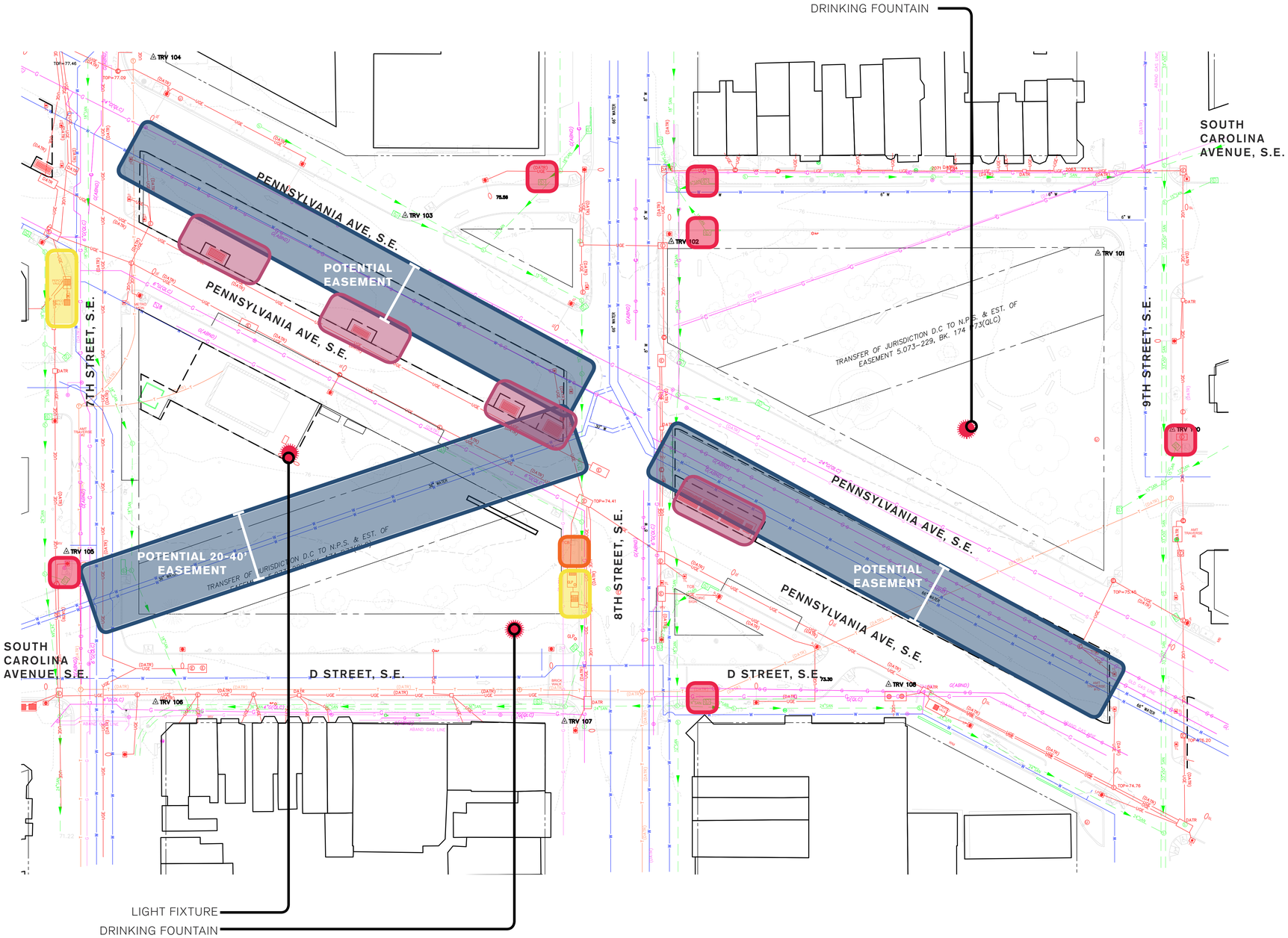
15 0' 15 30 60

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

EXISTING CONDITIONS ANALYSIS
Utilities

NARRATIVE

The majority of the area's utilities are located at the edges of the Parcels. However, a few key utilities do pass through them in critical locations. These primarily include WMATA's tunnel facility and significant pipes belonging to DC Water. Additional refinement to the Master Plan may be required as the implications of these become fully understood through further discussions.



EXISTING CONDITIONS PHOTOS

LEGEND

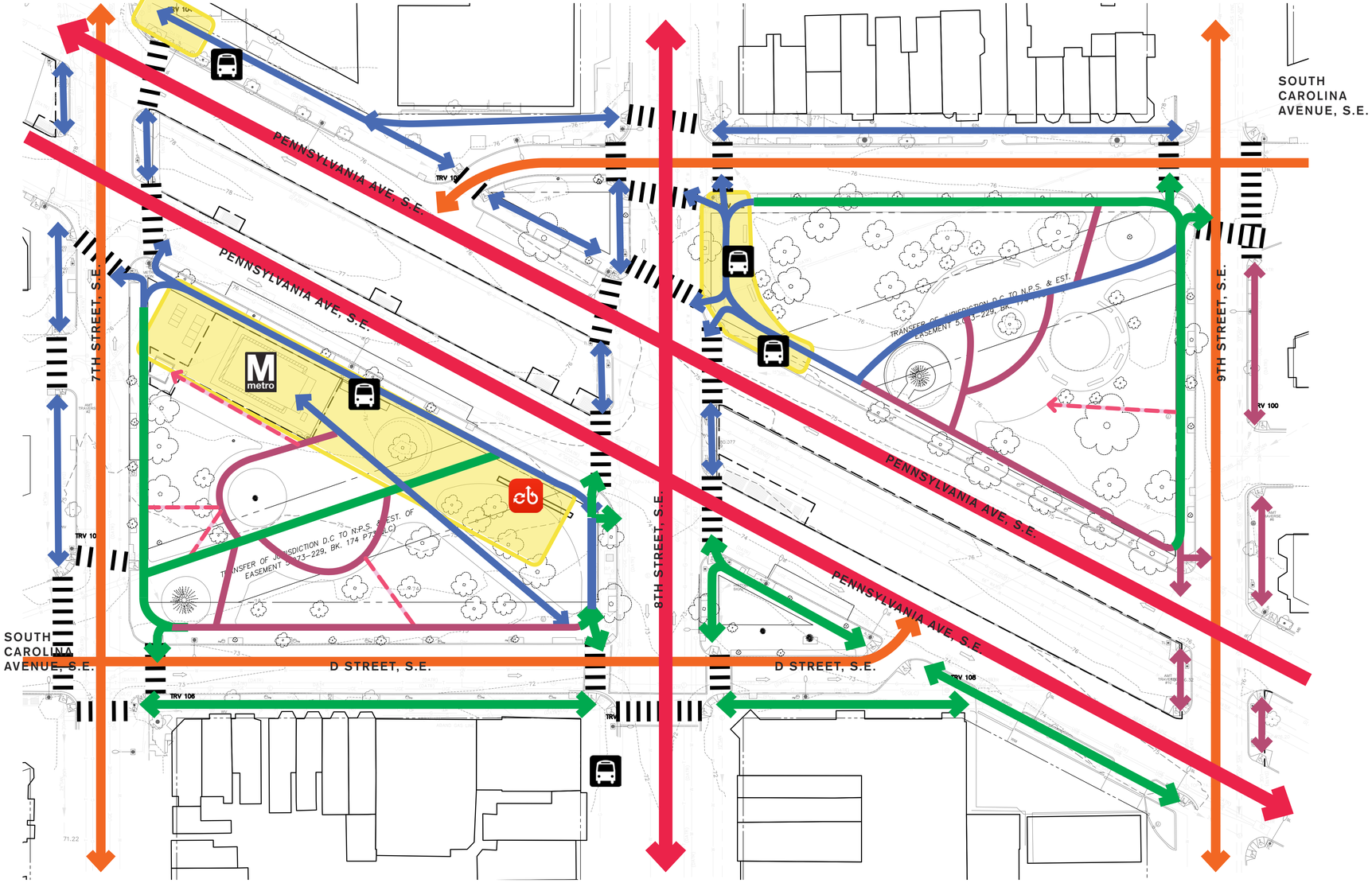
- SWM Inlet In Conflict With Potential Curb Alignment
- WMATA Structure
- Above Ground Utility Structure
- Below Ground Utility Structure
- Potential 40' Water Easement
- Failing Infrastructure
- Electric Utilities
- Water Utilities
- Storm Utilities
- Telecom Utilities
- Gas Utilities

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

EXISTING CONDITIONS ANALYSIS
Transportation + Circulation

NARRATIVE

Site observations indicate a number of vehicular and pedestrian circulation patterns, as well as areas of high pedestrian traffic which should be considered when planning pavement areas and widths. A traffic analysis is being performed and will provide additional clarity and information for vehicular, pedestrian, and bicycle, at which time this graphic will be updated.



EXISTING CONDITIONS PHOTOS

LEGEND

- Eastern Market Metro Station
- Bus Stop
- Capital Bikeshare
- Primary Pedestrian Circulation
- Secondary Pedestrian Circulation
- Tertiary Pedestrian Circulation
- Pedestrian "Cow Path"
- High Volume Foot-traffic Area
- Primary Vehicular Circulation
- Secondary Vehicular Circulation
- Crosswalk

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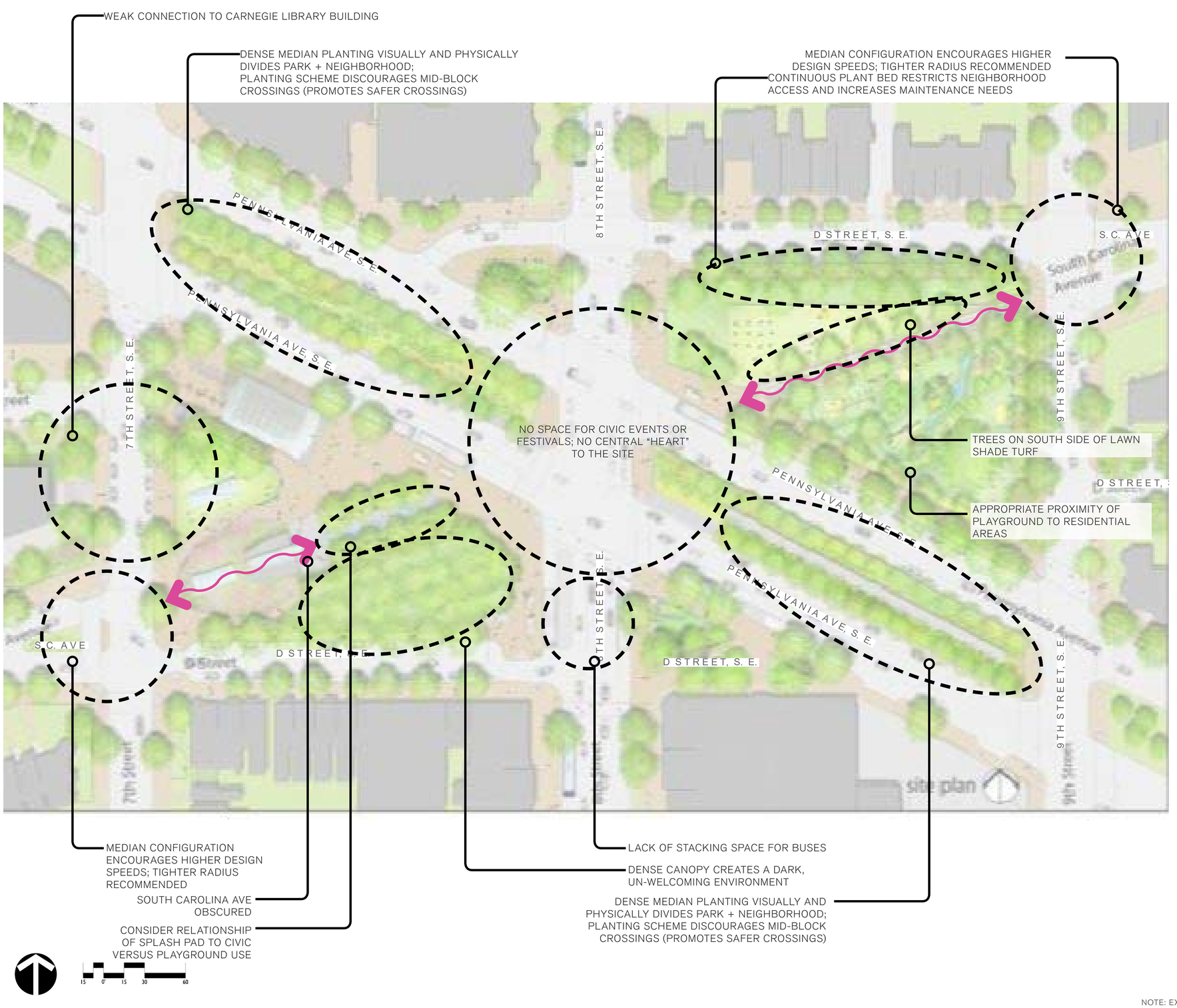

ORIGINAL MASTER PLAN EVALUATION

NARRATIVE

The existing Master Plan competed in 2015 is based on an overall design structure that successfully aligns park programming with adjacent uses, creates a new playground amenity, opens views and provides seating areas for social activity. The site benefits from having good streetscape edges in many places, which may be left in place and augmented as needed. One significant omission is a response to the Comprehensive Plan's objective for the park to be the "New Town Center for Capitol Hill," as evidenced by the lack of a central gathering space for the community. Another significant change is necessitated by DCPL's decision not to pursue an underground expansion into the park. Additional improvements could be made to the porosity of the northern edge of Parcel 1.

STRENGTHS

- Space programming relates to adjacent uses
- South Carolina Avenue axis is emphasized
- 8th Street to Metro cut-through is maintained
- Provides new amenity with playground
- Improves pedestrian safety through traffic calming measures
- Provides passive open spaces for general use
- Integrates physical library extension
- Community local identity expressed in playground

WEAKNESSES

- Lack of civic use gathering space
  - Recommendation: Include space for civic and neighborhood events
- Lack of community identity in majority of spaces
  - Include opportunities for public art and interpretive features
- South Carolina Avenue viewshed is blocked with library addition
  - Recommendation: Maintain clear visual corridor
- 8th Street to Metro cut-throughs partially interrupted
  - Recommendation: Relocate water feature and maintain clear visual and physical corridor
- Splash pad location conflicts with primary circulation route
  - Recommendation: Relocate water feature and maintain clear visual and physical corridor

RISKS

- Stormwater management inlet conflicts with proposed curb alignments add significant cost impact
  - Recommendation: Include space for civic and neighborhood events
- Splash pad location conflicts with DC Water Line
  - Recommendation: Consider alternate locations and options for agreements with DC Water for locating within easement
- D Street closures and improvements require public space permit
  - Recommendation: Carefully coordinate with DDOT for successful permit process
- Potential maintenance risk in playground water pump feature
  - Recommendation: Consider alternate feature for play and education
- Extensive grading required to make Pennsylvania medians bioretention adds significant cost impact; Bioretention conflicts with utilities and easements.
  - Recommendation: Relocate bioretention
- Trees in Pennsylvania medians conflict with utilities and WMATA
  - Recommendation: provide shrubs, perennials, and groundcovers only in median planting.
- South Carolina median additions increase speeds and potential accident risk
  - Recommendation: Provide 90° intersection alignment

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

REFINED MASTER PLAN (OPTION 1)

The original community led 2015 Master Plan provides a good framework for moving forward. The general arrangement of spaces is appropriate and is carried through with slight adjustments in response to new information. The decision by DCPL not to pursue an underground expansion into the park necessitates the most significant change, however this opens up an opportunity to create a central gathering space for the community and fulfil the Comprehensive Plan's guidance for this park to be the "Town Center for Capitol Hill". This move also allows the visual axis of South Carolina Avenue to be maintained clear of obstructions. The Refined Plan emphasizes and celebrates this axis with a row of trees complemented by pedestrian light fixtures and specialty pavement that accent the corridor while providing important placemaking, wayfinding and safety.

The second most significant change is to the stormwater management strategy for the site. Due to unfavorable topography and WMATA and utility constraints, the medians of Pennsylvania Avenue are not feasible locations for the bioretention facilities envisioned by the original Master Plan. Instead, the refined plan recommends treating the site's stormwater on a parcel by parcel basis and seeks to align with the natural low points of each.

Specific elements in the plan will help mitigate existing rodent issues, including solar powered trash compactors, no new needled evergreen plants, minimal groundcovers and no standing water.

ALTERNATIVE MASTER PLAN (OPTION 4)

This alternate master plan design provides opportunities to explore different layout and form options within the established program requirements. Three big moves resulted from this study. The first was introducing curves to define the spaces. This improves circulation throughout Parcels 1 and 4, creating better connectivity and softening the strong angles of the parcels themselves. It also creates opportunities for social nodes, on Parcel 1 between the playgrounds and lawn, and on Parcel 4 creates a gathering space at the end of the lawn.

The second was switching the lawn and playground areas on Parcel 1 and moving the water feature to the playground area and making it an interactive splash pad for a complete play experience. This layout change aligns the playground spaces further from busy Pennsylvania Avenue and closer to D Street which is a quieter residential street. By locating the open lawn on the south side of the parcel, it allows the South Carolina axis to be lined with trees without creating excess shade that would harm the turf.

The third move is introducing an art-light scheme to the landscape in the medians of Pennsylvania Avenue through graphic plantings and sculptures, accented with carefully placed lighting. While this would require careful coordination with DC Water and WMATA to work through concerns regarding existing utilities and easements, the intent is to create a bold statement that would support community identity and pride, assist with wayfinding, and engage all visitors to the park.

Other opportunities in this plan alternate include the addition of a pavilion at the end of the lawn on Parcel 4 which improves programming potential for this civic area and simplified treatment of Parcels 3 and 6.

IMPLEMENTATION STRATEGY: PLAYGROUND FOCUS (OPTION 2)

Concept Option 2 will provide implementation of the Refined Master Plan for all of Parcels 1 and 6, as well as the South Carolina intersection realignment. The community's strong desire for the playground informed this strategy to build intergenerational and active spaces by concentrating the resources on this area of the plan. While the park provides basic open spaces in hardscape and landscape forms, the site does not currently contain a playground. The addition of a playground with the Master Plan would be a significant amenity addition to the community. This would also build community trust in the planning and implementation process, making any future phases to implement the remaining Master Plan elements more successful. Other features of the plan provide improved safety through clear wayfinding and lighting, and cultural enhancements in interpretive opportunities. Together these build a more cohesive, resilient community.

The remaining parcels would remain in their existing states until additional funding is secured for implementation of those Master Plan areas.

IMPLEMENTATION STRATEGY: SPLIT FOCUS (OPTION 3)

Concept Option 3 will provide implementation of the Refined Master Plan for portions of Parcels 1 and 4. This strategy is focused on building community cohesion and engagement across the entire park. It is informed by both the community's strong desire for a playground and the Comprehensive Plan's directive for this park to be the "Town Center" of the Capitol Hill neighborhood. The addition of a new playground and a community gathering space will provide multigenerational, multicultural and civic engagement opportunities, with a strong visual and physical connection to the Southeast Neighborhood Library. The implementation of the playground will build community trust in the planning and implementation process, making any future phases to implement the remaining Master Plan elements more successful. Other features of the plan provide improved safety through clear wayfinding and lighting, and cultural enhancements in interpretive opportunities. Together these build a more cohesive, resilient community.

The remaining areas of Parcels 1 and 4, as well as all of Parcels 2, 3, 5 and 6 would remain in their existing states until additional funding is secured for implementation of those Master Plan areas. At this time there is not sufficient funding for interim improvements on the remaining parcel areas.

REFINED MASTER PLAN

NARRATIVE

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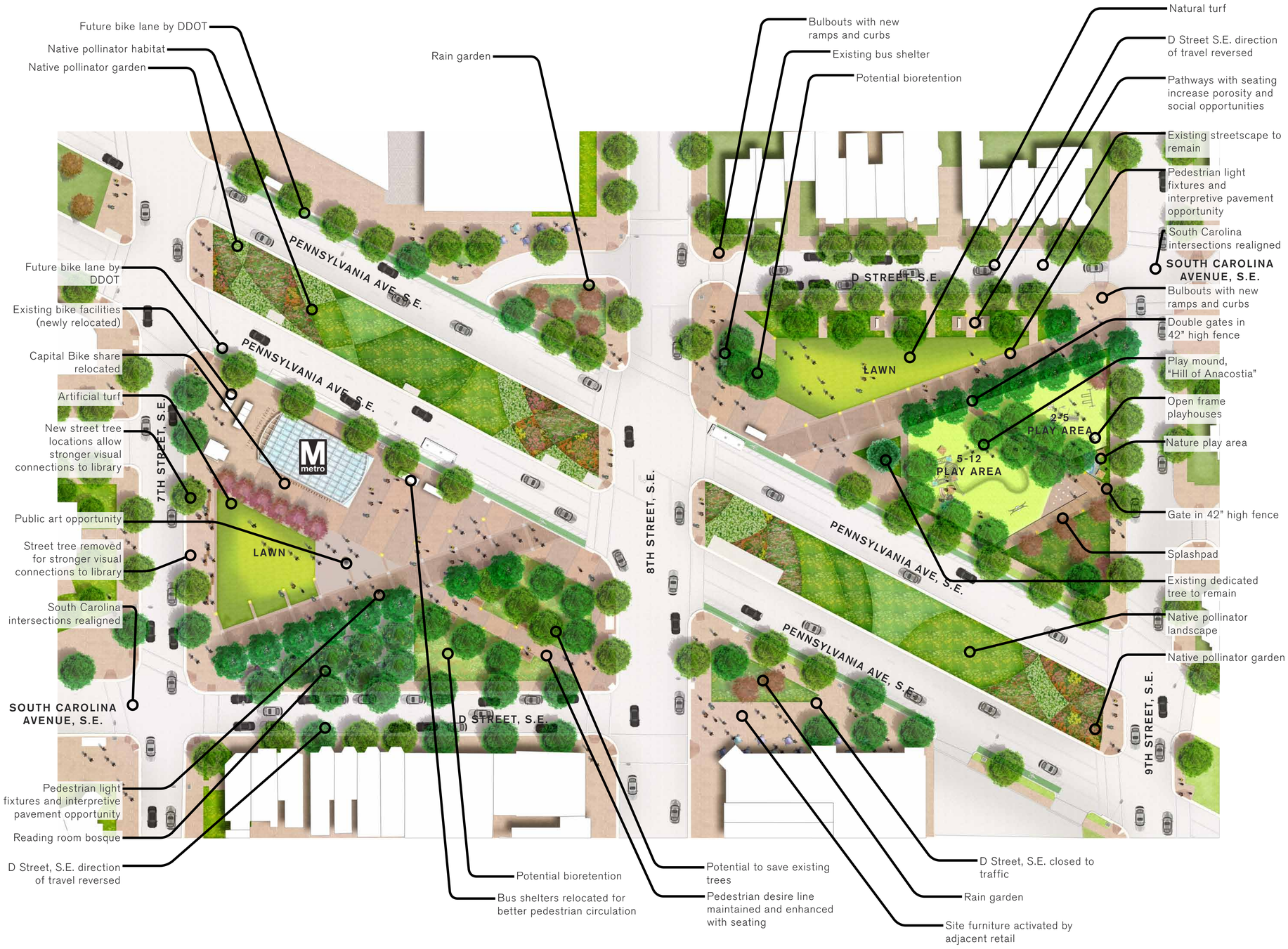
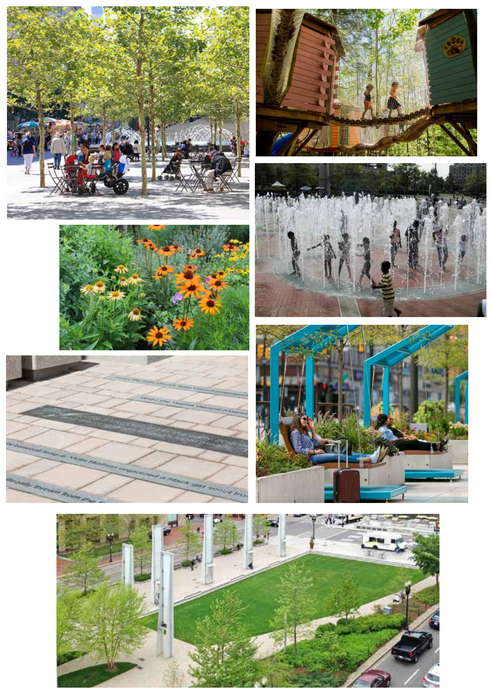




LEGEND

EXISTING TREE

PROPOSED TREE

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

REFINED MASTER PLAN
Solar Studies

NARRATIVE

Solar exposure across the park plays a significant role in a range of decisions on everything from the location of lawn areas, spacing and location of trees, position of benches and planting strategies. Balancing between sun and shade is critical to the enjoyment of the park and plays a significant role in its overall success.

A significant evaluation of the 2015 Master Plan is that the proposed tree cover would provide too much shade, particularly in the area of the bosque on Parcel 4. A deep shade for a use like this would appear uninviting and discourage visitors. To be a successful seating area it should have shade for summer comfort, but with dappled sunlight to help enliven the space. This is acheived by increasing the spacing of the grid on which the trees are arranged.

The lawn on Parcel 4 will be most healthy with more sun. Positioning trees only on the southern edge of the South Carolina Avenue axis and using pedestrian light fixtures on the north side allows full sun exposure for this edge of turf. Benches under the existing trees on the northern edge of the parcel creates a balanced experience for the park user.

The locations of trees in the playground area will continue to evolve as the playground equipment is selected and space requirements for fall zones is better understood. Maintenance considerations for the safety surface may inform the use of shade structures instead of trees for some of the shade requirements in the space.

SPRING/FALL

9 AM

12 PM

6 PM

SUMMER

9 AM

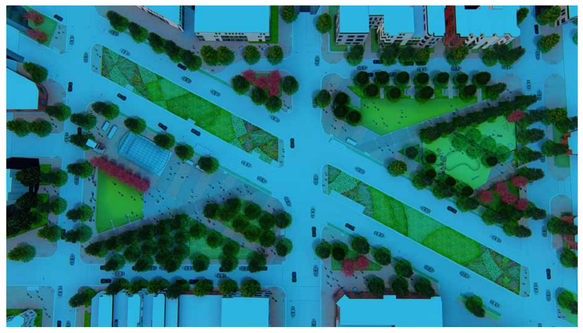
12 PM

6 PM

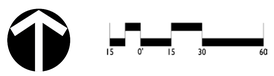
WINTER

9 AM

12 PM



6 PM



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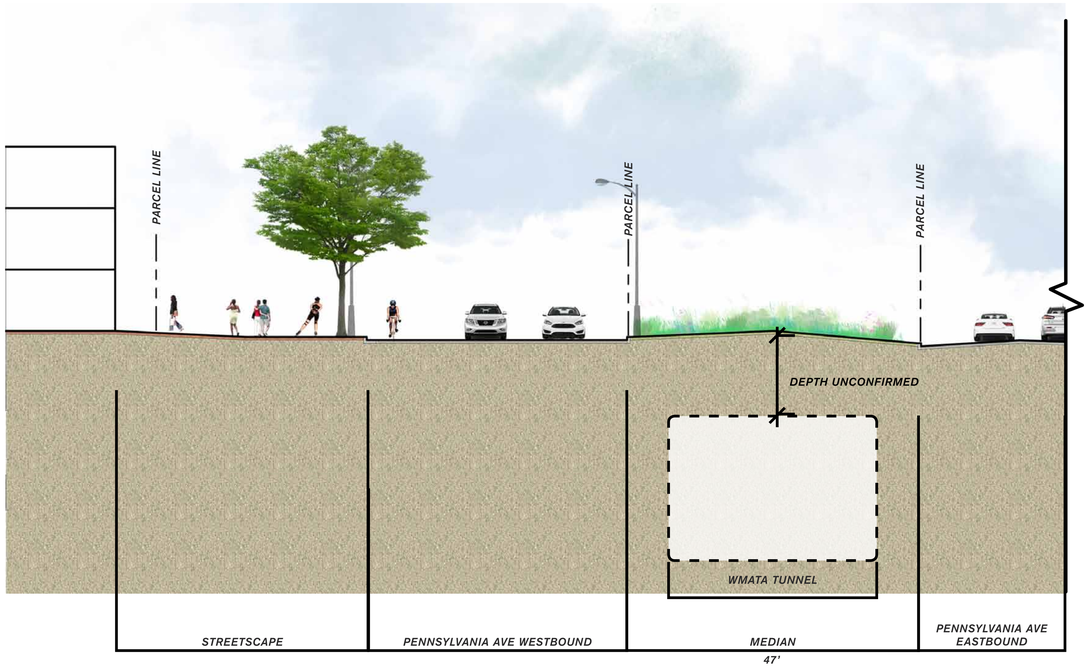
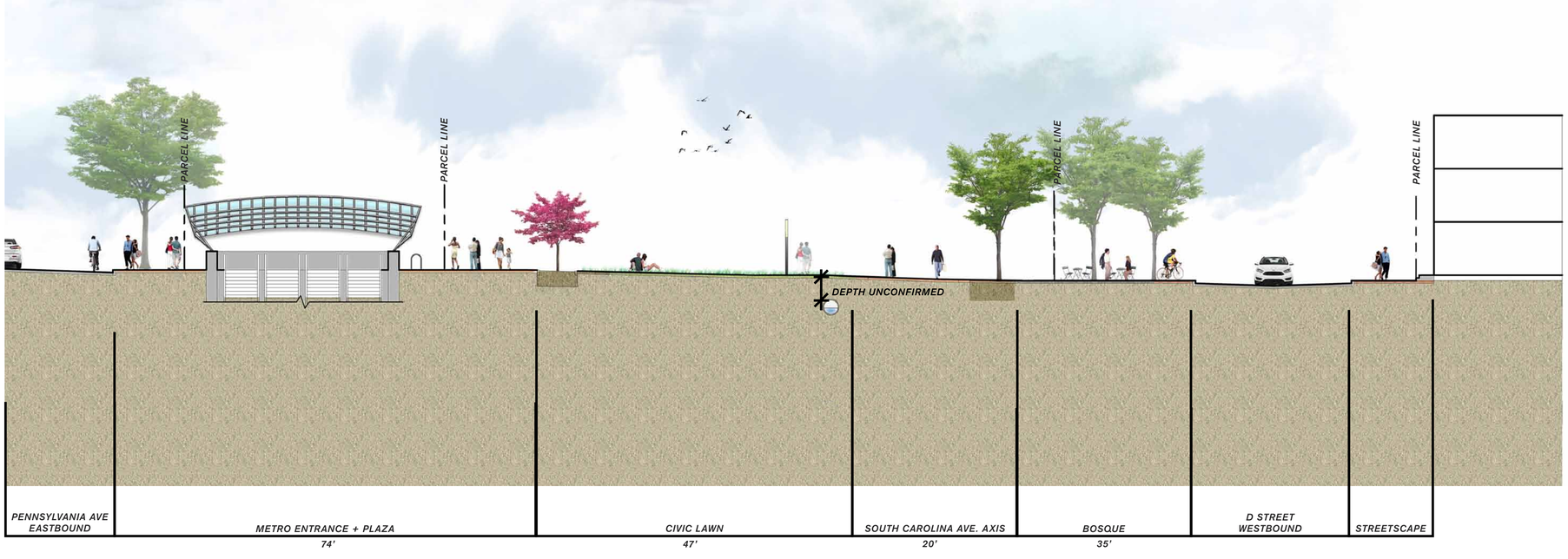
REFINED MASTER PLAN
Sections: West A

NARRATIVE

Overall there is a consistent slope from north to south across the park site. This allows for clear lines of sight in all directions, a benefit for designing to CPTED principles. The low point of Parcel 4 has been identified as a potential location for a bioretention facility.





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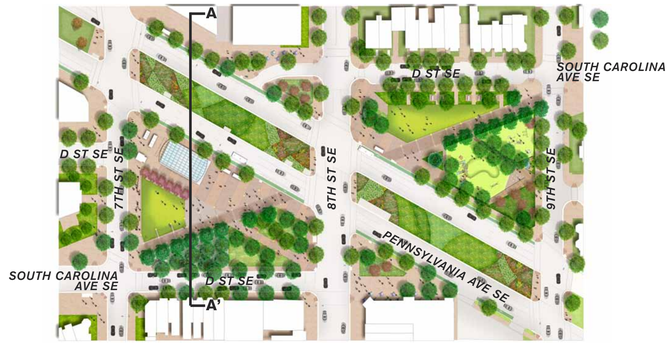
KEY PLAN



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REFINED MASTER PLAN
Sections: West B

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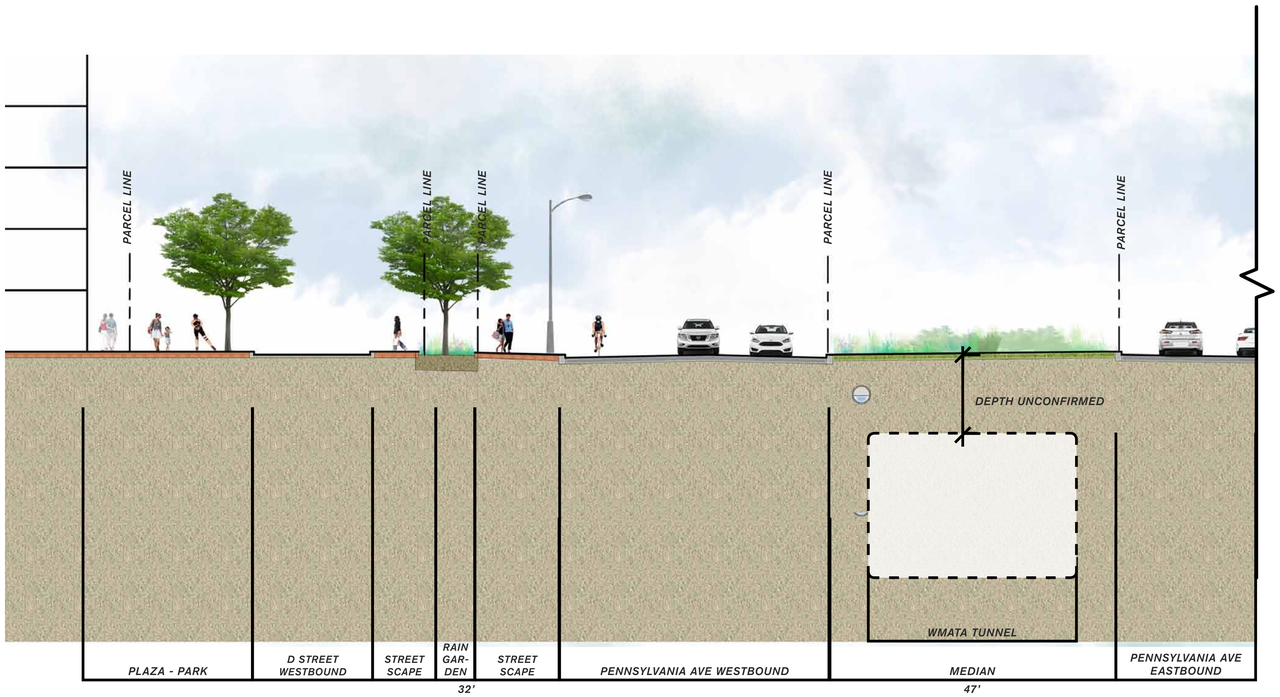

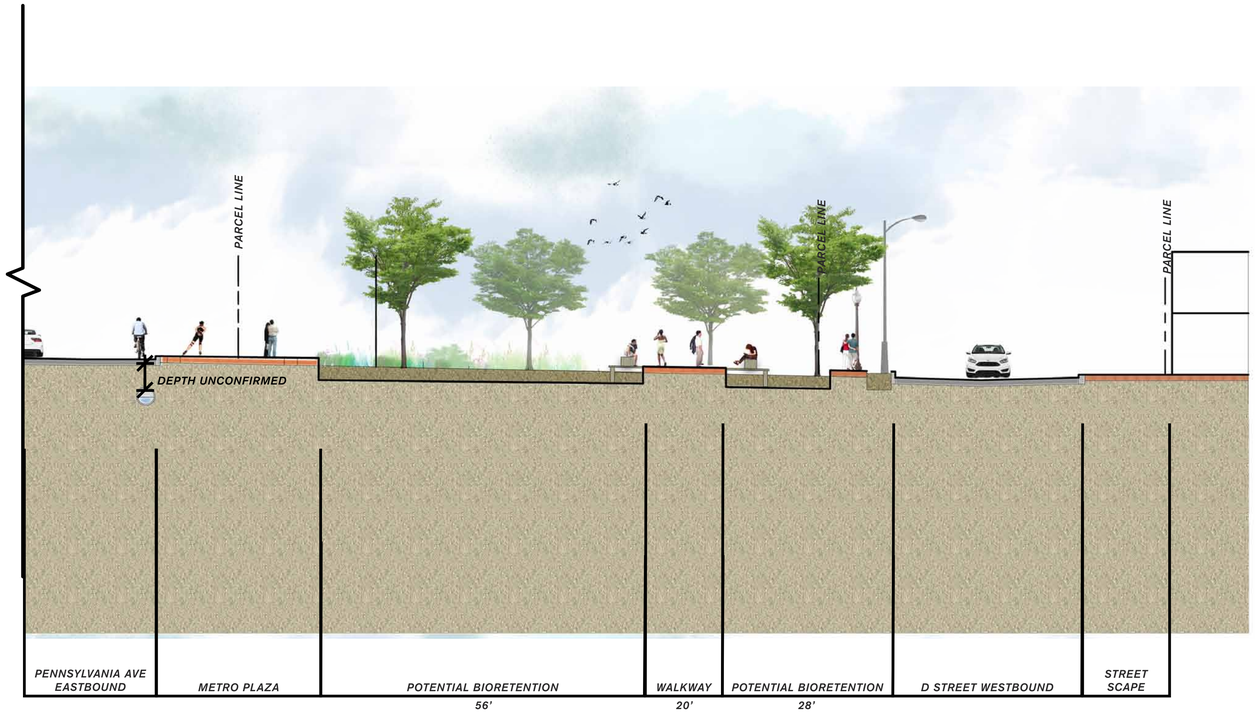

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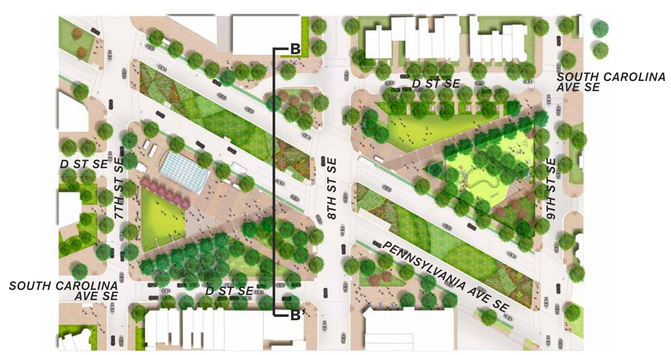
KEY PLAN



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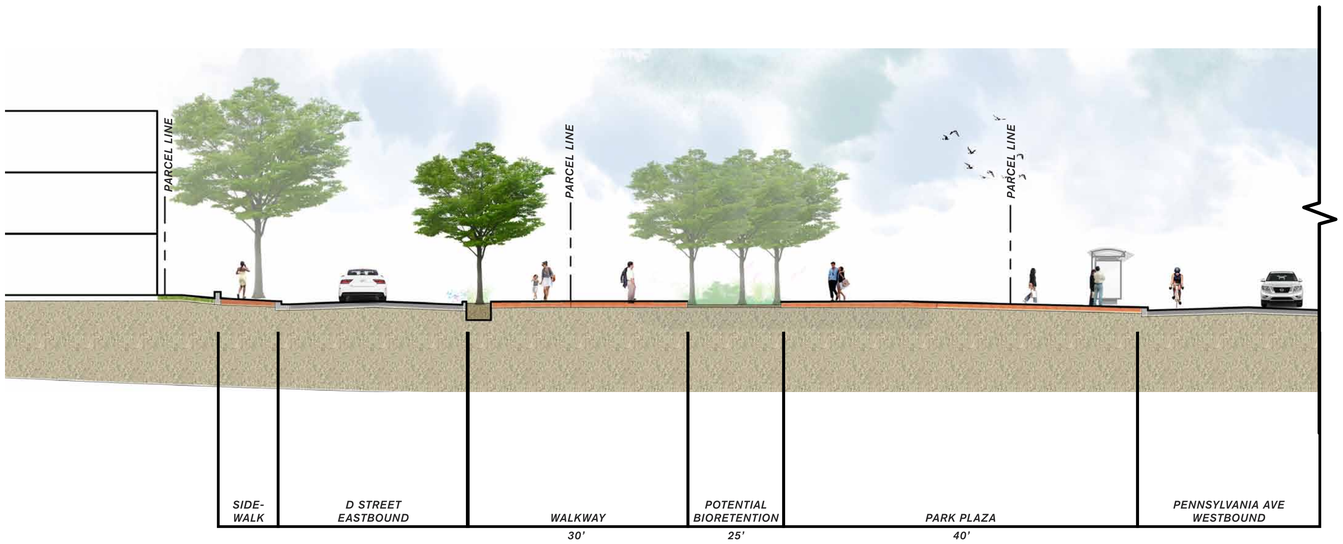

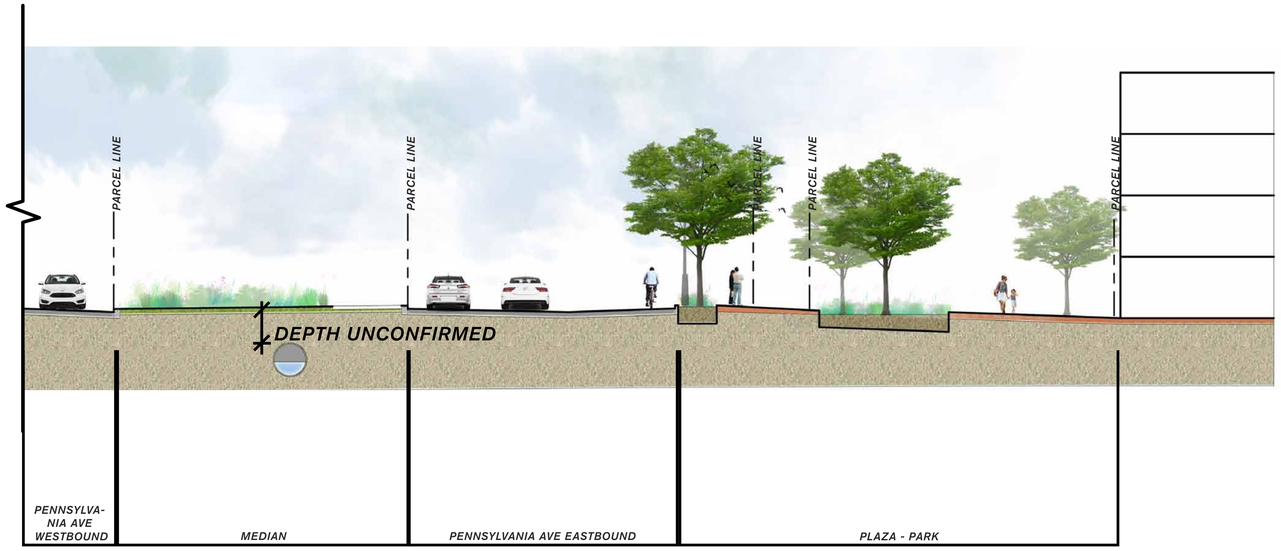

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REFINED MASTER PLAN
Sections: East C

NARRATIVE

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KEY PLAN

N.T.S.

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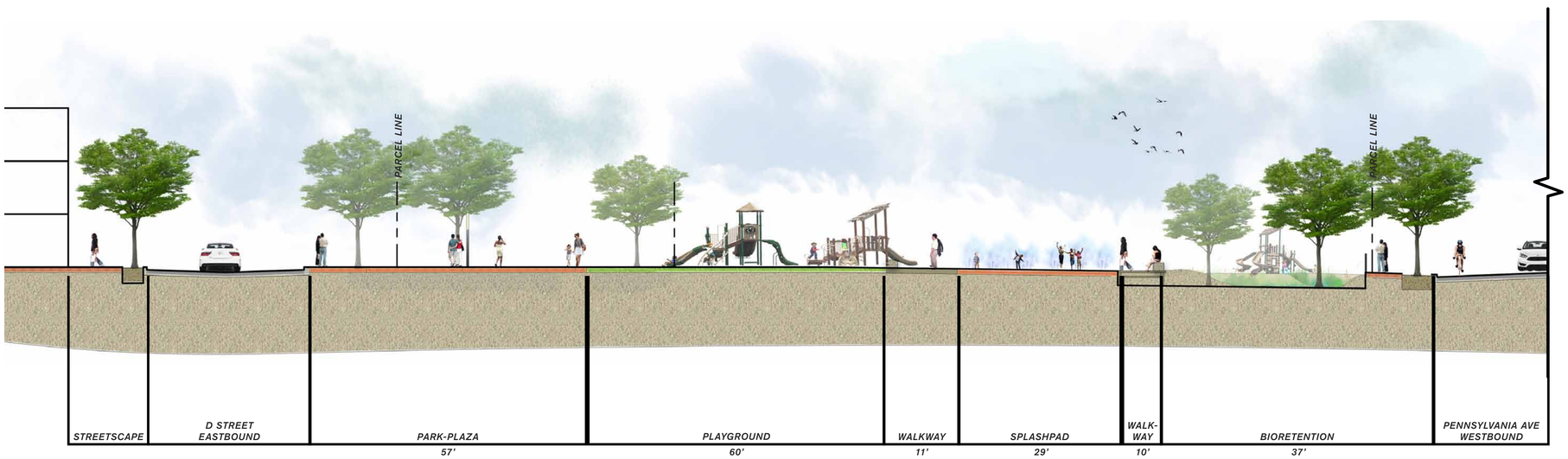

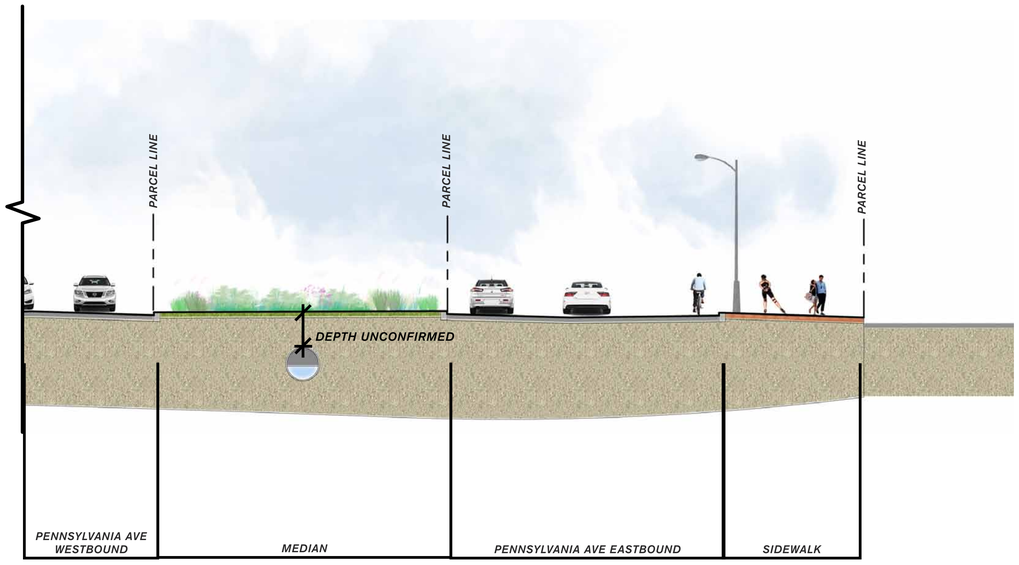

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REFINED MASTER PLAN
Sections: East D

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KEY PLAN

N.T.S.

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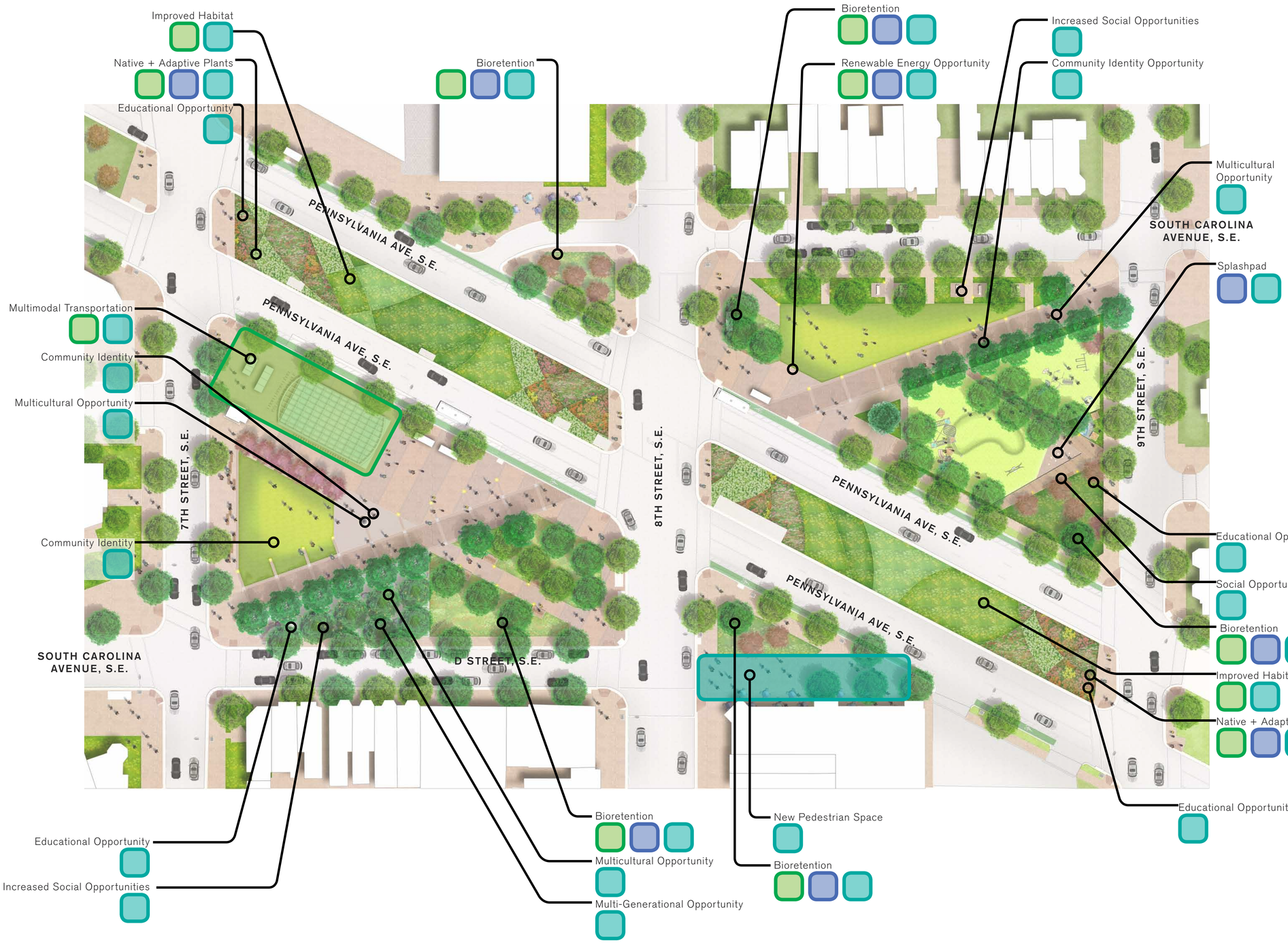
REFINED MASTER PLAN
Sustainability + Resiliency



NARRATIVE

Three key District initiatives regarding sustainability and resiliency provided guidance for design decisions at the master plan level. These initiatives are Sustainable DC, Climate Ready DC and Resilient DC, and together with a number of other documents, will continue to inform the design process through implementation.

SUSTAINABLE DC

- Bioretention prevents flooding and combined sewer overflow and improves water quality
- Improved Habitat boosts ecosystem health and adds flora and pollinator diversity
- Native + Adaptive Plants require less water and maintenance resources and provide better habitat
- Renewable Energy Opportunity with solar fixtures
- Multimodal Transportation options maximize mobility under all conditions, for all users

CLIMATE READY DC

- Bioretention prevents flooding and combined sewer overflow and improves water quality
- Native + Adaptive Plants require less water and maintenance resources and provide better habitat
- Renewable Energy Opportunity with solar fixtures
- Increased Social Opportunities strengthen community ties and improve civic engagement

RESILIENT DC

- Bioretention prevents flooding and combined sewer overflow and improves water quality
- Multimodal Transportation options maximize mobility under all conditions, for all users
- Water Feature provides cooling for visitors in extreme heat
- New Pedestrian Space improves connectivity and opportunities or social interactions
- Native + Adaptive Plants require less water and maintenance resources and provide better habitat
- Renewable Energy Opportunity with solar fixtures
- Increased Social Opportunities strengthen community ties and improve civic engagement
- Educational Opportunity through interpretive signage and Library connection
- Multicultural Opportunities in art and interactive elements along with Library programming
- Multi-Generational Opportunities in site furniture and playground equipment selections, and potential Library programming
- Community Identity through art and interactive elements along with Library programming

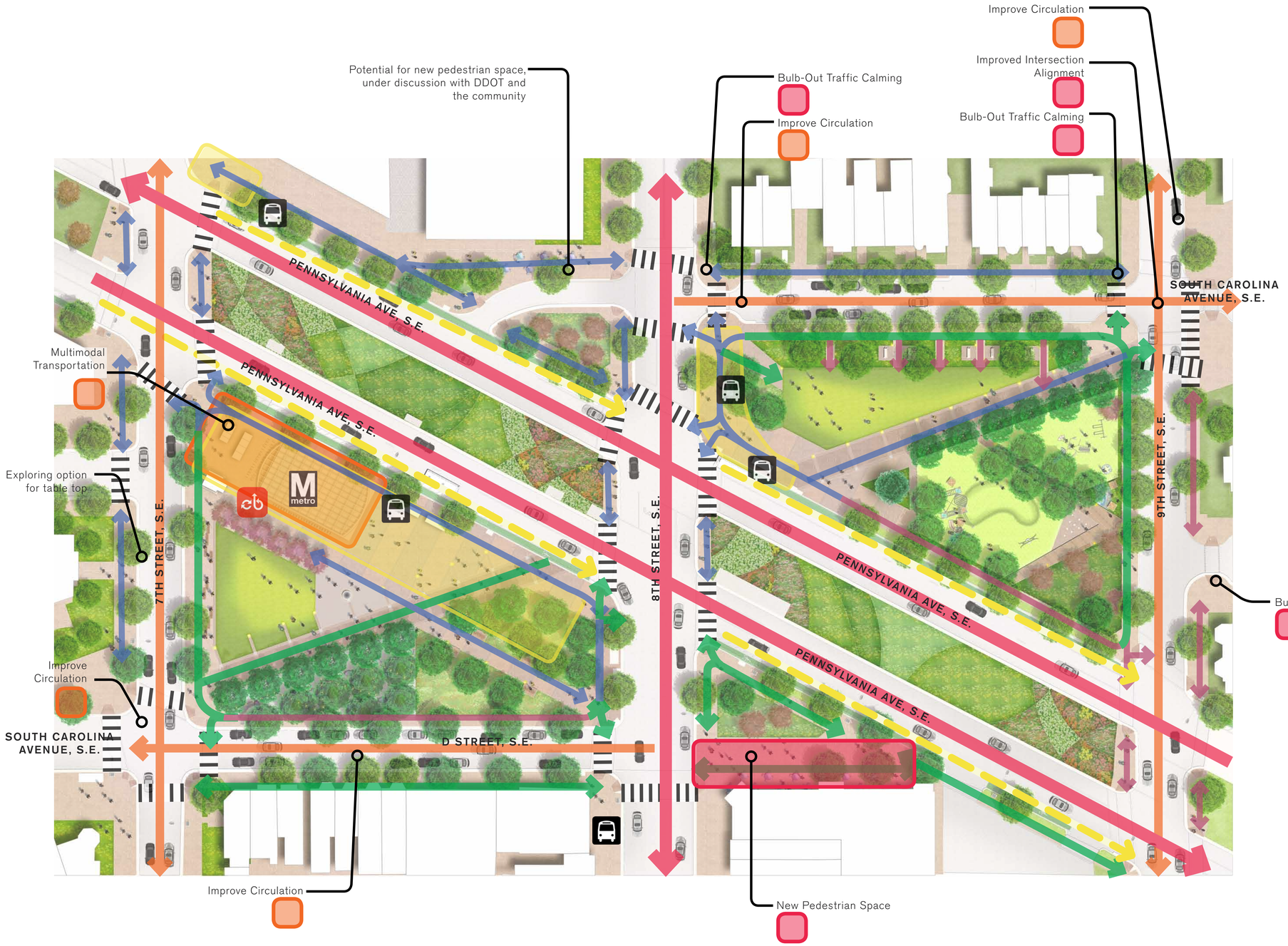
LEGEND

EXISTING TREE

PROPOSED TREE

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

REFINED MASTER PLAN
Transportation + Circulation



NARRATIVE

Site observations indicate a number of vehicular, pedestrian and cyclist circulation patterns, as well as areas of high pedestrian traffic. The metro plaza area is particularly congested, which necessitates wider pavement areas and suggests moving the Capitol Bikeshare closer to the other bike facilities. A traffic analysis is being performed and will provide additional clarity and information for vehicular, pedestrian, and bicycle, at which time this graphic will be updated.

A number of potential changes to the vehicular circulation are being discussed with DDOT, which has also been studying the site for transit and safety. Pending future changes include the addition of bike lanes on Pennsylvania Avenue which are shown here, the closing of D Street between 8th and Pennsylvania on the south side of the park, and directional changes to D Street between 7th and 8th, and between 8th and 9th.

Other changes considered appear to be more controversial, including the closure of D Street between 8th and Pennsylvania on the north side of the park, a table top condition in front of the Library on 7th Street, and a "scramble" signalization of 8th and Pennsylvania. Though the latter two would favor pedestrians and provide traffic calming, they may not be supproted by DDOT. These options will continue to be evaluated.

MOVEDC
- Multimodal Transportation options maximize mobility and system flexibility
- Improve circulation for buses and cars

VISION ZERO
- Improved Intersection Alignments reduce traffic accidents
- Traffic Calming measures reduce speeds and protect pedestrians
- New Pedestrian Space improves connectivity and opportunities or social interactions

LEGEND

- Eastern Market Metro Station
- Bus Stop
- Capital Bikeshare
- Primary Pedestrian Circulation
- Secondary Pedestrian Circulation
- Tertiary Pedestrian Circulation
- Pedestrian "Cow Path"
- High Volume Foot-traffic Area
- Primary Vehicular Circulation
- Secondary Vehicular Circulation
- Future DDOT Bike Lane
- Crosswalk
- Existing Tree
- Proposed Tree

15 0 15 30 60

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.

REFINED MASTER PLAN
Safety

NARRATIVE

One key District initiative regarding transportation, Vision Zero, together with the traffic analysis in the Original 2015 Master Plan, initial discussions with DDOT and guidance from Crime Prevention Through Environmental Design (CPTED) principles provided the initial guidance for design decisions at the master plan level. This information has resulted in several design moves that will provide safer conditions throughout the park and surrounding streets. First, the closure of both D Street SE "bow tie" sections expands the park area improving pedestrian connectivity and reducing risk in vehicular traffic circulation. Second, the realignment of the South Carolina Avenue SE intersections with 7th Street SE and 9th Street SE narrows the intersection reducing vehicular speed and creating a shorter crossing for pedestrians, making the intersection safer for both. Fourth, bulb-outs at key intersections provide traffic calming and improve pedestrian safety.

VISION ZERO

- **IMPROVED INTERSECTION ALIGNMENTS** reduce traffic accidents
- **TRAFFIC CALMING** measures reduce speeds and protect pedestrians
- **NEW PEDESTRIAN SPACE** improves connectivity and opportunities or social interactions

CPTED

- **CLEAR LINES OF SIGHT** allow more eyes into the park spaces discouraging negative activities and improve visibility for those in need.
- **LOW VEGETATION** contributes to clear lines of sight and eliminates potential blind corners, hiding places and dark areas.
- **IMPROVED LIGHTING** aids visibility at night for wayfinding and discouraging negative activities.
- **CLEAR WAYFINDING POINTS** help orient park visitors for clear navigation and location identification.

LEGEND

- Narrowed Intersection
- Pedestrian Light Fixtures - Low
- Pedestrian Light Fixtures - Moderate
- Ex. Street Lights
- Clear Wayfinding Point
- Low Planting Areas
- Clear Sight Lines and Areas
- Street Closure
- Existing Tree
- Proposed Tree

15 0 15 30 60

NOTE: EXHIBIT TO BE UPDATED AFTER EXISTING CONDITIONS SURVEY + INITIAL AGENCY MEETINGS ARE COMPLETED.