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December 9, 2022

VIA E-MAIL

Chair Catherine Preston Connolly
and Members of the Cambridge Planning Board
344 Broadway
Cambridge, MA 02139
sjoseph@cambrigema.gov

Re: CambridgeSide 2.0 Project – Canal Park Design Review

Dear Chair Connolly:

We are pleased to submit the enclosed design review materials for the proposed improvements to Lechmere Canal Park ("Canal Park"), which is located between the Lechmere Canal Basin and the CambridgeSide 2.0 Project (as defined herein). Construction of the Canal Park improvements is to be completed as part of the Initial Phase of the redevelopment of the CambridgeSide site in Cambridge, Massachusetts into a premier mixed-use development including a combination of residential, retail, office, laboratory and restaurant uses (the "CambridgeSide 2.0 Project"), which was approved by the Planning Board in the Special Permit Decision for PB #364 dated February 17, 2021 (as amended, the "Decision").

Over the last three years of the CambridgeSide 2.0 Project's rezoning and special permit process, we have met numerous times with City departments and staff, including Community Development Department (CDD), Traffic Parking & Transportation (TP&T), the Department of Public Works (DPW), the Water Department and the City Arborist, in order to inform the design of the CambridgeSide 2.0 Project (including the Canal Park improvements). Most recently, such meetings included informal meetings with CDD urban design staff and representatives from TP&T, DPW, the Water Department and the Commission for Persons with Disabilities to review detailed aspects of the Canal Park design, such as accessibility upgrades, plantings and surface materials. In accordance with the Decision, we also worked closely with the CambridgeSide Open Space and Retail Advisory Group to establish the framework for the proposed improvements to Canal Park. Finally, we also met with residents of nearby condominiums (e.g., Thomas Graves Landing, One First) and the East Cambridge Planning Team (ECPT) to ensure that the design was informed by community needs and desires. As demonstrated by the enclosed materials, this robust engagement process shaped the outcome of the proposed Canal Park improvements, which focus on safety, accessibility improvements and restoration.

While there was consensus amongst the various stakeholders and City departments on the vast majority of proposed improvements, there were differing views as to the preferred surface for the lower canal walkway. Over time, the existing stone dust pathway has silted over and become an irregular surface condition, resulting in areas where ponding occurs. In order to increase safety and year-round accessibility, this surface must be replaced with a durable year-round surface. We propose either (i) StaLok aggregate or (ii) bituminous concrete. We have heard from City staff that they strongly prefer bituminous concrete for durability and ease of maintenance while residents prefer StaLok aggregate for its coloration and consistency with the original design. We look forward to working with the Board to reach a decision on which replacement surface is the preferred alternative. In either case, we intend to install an improved drainage system and commit to year-round maintenance of the pathway, all as detailed in the enclosed materials.

Consistent with the Decision, and as detailed in the enclosed materials, we propose selective improvements to Canal Park with thoughtful repair and replacement in kind of existing materials, which can be summarized as follows:


- Replacing/refurbishing existing non-compliant stairs and ramps to be code-compliant where required;
- Limiting the removal of existing ground plane plant material whenever possible;
- Enhancing the site lighting to provide improved performance, visual comfort and safety;
- Updating existing non-compliant railings to be code-compliant where required while retaining the original park character;
- Providing a refreshed play area while maintaining the existing structure in an aesthetic similar to the original park design;
- Preserving and restoring, where necessary, the trees, art and structures within the park;
- Refurbishing existing furnishings and using materials, finishes and designs consistent with the original design; and
- Reconstructing the lower park walk to be a durable, drained surface, allowing for year-round accessibility for all users.

As detailed in the enclosed materials, the Canal Park improvements have been designed to be consistent with the Decision and comply with the applicable design review criteria set forth in Condition 4. As noted in the Decision, the improvements must be completed prior to issuance of a final certificate of occupancy for the 20 CambridgeSide building, which we anticipate in Q1 2024. As such, we anticipate commencement of construction in April 2023, with completion by the end of 2023. Accordingly, we respectfully request that the Planning Board schedule the Canal Park design review for the Board's earliest available meeting to review the same so that we may order materials in the very near term to remain on track with the mitigation schedule set forth in the Decision.

Thank you for your consideration of the enclosed design review materials. We look forward to presenting to the City of Cambridge Planning Board.

Very truly yours,

NEW ENGLAND DEVELOPMENT



John E. Twohig

Enclosures



CambridgeSide 2.0 Canal Park Design Review Submittal

Submitted to:
City of Cambridge

Submitted by:

**NEW ENGLAND
DEVELOPMENT**

New England Development
75 Park Plaza. Boston, MA 02116

Prepared by:



DECEMBER 2022

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Canal Park Design Review Narrative

The following narrative and attached graphic materials and reports are provided in accordance with Condition 4 of the Special Permit Decision for PB #364 (CambridgeSide 2.0) dated February 17, 2021 (as amended, the “Decision”), which addresses the design review requirements for improvements to Lechmere Canal Park pursuant to the Decision. As detailed throughout this narrative, the proposed Lechmere Canal Park improvements are designed to be consistent with the Decision, which incorporates the approved Final Development Plan for the CambridgeSide 2.0 Project.

Over the last three years of the rezoning and special permit process, the development team has met numerous times with City departments and staff, including: Community Development Department (CDD); Traffic, Parking and Transportation (TP&T); Housing Division (Housing); Department of Public Works (DPW); and the Water Department. These meetings have also included informal meetings most recently with CDD design staff to review detailed aspects of the Lechmere Canal Park. Materials presented herein reflect CDD design staff input. Additional detail regarding the development team’s coordination with other City committees, abutters and the general public is provided below in the “Process and Engagement” section of this narrative.

History of the Project

Carol R. Johnson was commissioned to design Lechmere Canal Park in 1983. According to Carol, the design and open space was to be of the highest quality, an urban open space to support large volumes of users and be a catalyst of growth for mixed-uses and vibrant activity within the neighborhood. Carol’s vision was to create a park with a colorful and lively focus. Supporting vibrancy, events and new places for people to shop, live, and work, as well as bridging a connection between the City of Cambridge and its riverfront. Our team’s objective is to refresh the park: to respond to current codes; create safe environments for users; implement new uses around the park perimeter that did not exist during the original construction of the park; and continue to provide welcoming open space for the residents of Cambridge and visitors.

It is the team’s objective to propose improvements to the park that maintain the overall aesthetic and vision of Carol R. Johnson. Carol’s original design was based on the history of East Cambridge and the cultural and ethnic diversity of its residents. She believed the incorporation of historical elements into the site was considered essential to the achievement of the original objectives of the park. The original park design program included the representation of past historic events, artifacts, illustrations and information into the fabric of the park. It was not intended, however, to replicate a uniform period setting in the details of the park because by nature of this approach, the element of change becomes negated. Instead, Carol sought to design the park strictly as a contemporary urban setting whereby images and symbols of the area’s past are a subtle recollection standing in contrast to the new setting. To carry out this approach, it was important for the design team to avoid placing historic elements on a pedestal. Instead, the diverse historic elements chosen for display would

be carefully incorporated into the spaces and surfaces proposed within the park. These elements were to be subtly integrated to “evoke a Cambridge vernacular environment” where history, materials, color, surfaces and plantings are overlaid, none of which are overstated. When describing the park vision, Carol wrote:

Lechmere Canal Park is conceived of as a traditional urban space in that it will bring together a variety of people and provide them with a variety of experiences. Shoppers coming to the new commercial center, residents of the new housing components, daily users of the proposed Lechmere transit station, and residents of East Cambridge who wish to walk to the Charles River will all mingle in the park. Their presence and the park itself should attract more people if the park space provides the richness of experience presently envisioned.

The original park design was conceived as being made up of two interrelated types of areas. First, the formal plazas and malls immediately adjacent to and associated with the commercial and residential uses offer an architecturally neutral environment for the buildings. The understanding is that pedestrian circulation, comfort, orientation, and service access were the primary determinants of these spaces. Movable tables and chairs, kiosks, newsstands and furnishing supporting adjacent activities would be abundant in these areas. Second, the public park areas and canal edges form a contrasting environment whose chief function was for play, relaxation and to be within nature and near the water. The design of the canal and seawall was intended to emphasize accessibility to the water by providing the lower level stone dust walk. Carol believed the more informal design and materials of the lower walk would contrast with the more active retail area. Benches with backs and armrests were provided to promote longer duration sitting, lighting levels had lower intensity, and its more passive nature would be reinforced by visual separation from the upper level through the grading and planting.

Process and Engagement

In accordance with the Decision, the development team worked closely with the CambridgeSide Open Space and Retail Advisory Group to establish the framework of improvements for Canal Park. The Group met four times and provided helpful feedback of proposed park improvements. During 2021 and 2022, the development team also met with the residents at Thomas Graves Landing, One First residents, East Cambridge Planning Team (ECPT), Commissions for Persons with Disabilities, Transportation and Mobility, Historical Commission, Cambridge Community Development and the City Arborist. We will continue to collaborate with DPW, Department of Conservation and Recreation (DCR) and MassDOT in the upcoming months.

The robust engagement process shaped the outcome of this proposal. There was a consistent focus on safety, accessibility improvements, and restoration. It was recognized that the park required selective improvements combined with thoughtful repair and replacement in kind of existing materials.

The most common comments that directed the design include:

- Lighting improvements should prioritize
 - » safety under the bridge and throughout the park,
 - » removal of the flood lights,
 - » restoration of the historic lighting, and
 - » seamlessly adding new lighting.

- Refresh landmarks such as
 - » the gazebo,
 - » the “Never Green Tree” sculpture, and
 - » the existing seating

Refresh walking surface by improving drainage and repairing brick and concrete paving.

Providing a new material for the lower canal walk surface that provides year-round accessibility

- Redesign the playground to
 - » address accessibility, sound and trash issues, and
 - » keep (but supplement) the existing play structure.

Add seasonal color and maintain year-round greenery.

Provide support for activities and charity events, seating with backs and prioritize pedestrians throughout the park.

Objectives

Over time, some of the elements within the park have become degraded or adjacent uses have changed. The project proposes to maintain the park’s original design intent by carefully and subtly improving areas that need repair or replacement, bringing areas up to code and responding to new uses and users. A successful metric for this improvement, as Carol would say, if you were here 20 years ago, and revisited today, you wouldn’t really be able to notice any changes. Therefore, the objectives include increased accessibility, preservation of the original design intent, improvements to the hardscape and softscape, refreshing site amenities, upgrades to lighting, restoration of art, increased connectivity and sustainability measures.

Universal Accessibility

The original Canal Park predates the Americans with Disabilities Act (ADA). Our primary objective is to ensure the park is compliant with the current codes and provides accessibility throughout the park. The park improvements will provide compliant stairs, handrails and guardrails where needed throughout the park. New railings will be designed to mimic the original design intent of the park and adhere to ADA specifications. These improvements will assist the mobility where users can access the lower canal walk from the upper park area. Additionally, a major goal of the park improvements is to regrade and reconstruct surfaces for areas that are not code compliant or have drainage issues. These improvements will ensure users will enjoy four-season accessibility to all areas of the park. Some of the improvements include:

- Replace/refurbish existing non-compliant stairs, ramps and handrails to code-compliant conditions where required.
- Replace/enhance some planter curbs/path edges with granite curbing.
- Brick paving to be salvaged and reset to create level and code compliant walkways. If new pavers are needed, the City standard brick paver and color blend will be used.
- Repair broken panels of concrete sidewalk where needed under the Land Boulevard bridge.
- Lower canal walk to be reconstructed with durable year-round surface and a new drainage system, providing ADA compliance and year-round accessibility for all users.

Preservation

The overall intent of the proposed improvements is to maintain the original park design and preserve the park character. Proposed interventions are intended to refresh and enhance Carol R. Johnson's original vision of a successful urban space. Along with the CambridgeSide Open Space and Retail Advisory Group, we have identified six areas of improvement within the park that are detailed in the accompanying Canal Park Design Review Exhibits. Improvements to these areas primarily consist of hardscape and softscape refresh, seating updates and lighting.

Hardscape

There are two primary circulation systems within the park, the upper walk and the lower canal walk. Over time, some of the brick pavers in the upper walk area have settled creating low points and non-compliant surfaces.

The original park design used brick patterning and articulation within the upper active use areas of the park. In these areas the brick pattern was changed to a different bond pattern that subtly contrasts overall field pattern. Primary pedestrian walkways maintain a continuous linear pattern reflecting this movement. At major intersections, building entries and plazas the patterning has a more intricate articulation and more formal definition. It is our intent, where required, to remove and reset the brick to create compliant walkways. If new material is needed, we will provide the same City standard brick.

The lower canal walk is currently stone dust and, over time, the material has silted over and become an irregular surface condition creating areas where ponding occurs. In order to improve safety and accessibility, and based on strong community feedback, we propose to remove the existing stone dust path material and substrate and installing a full depth replacement with a new, durable year-round surface. Additionally, to support the long-term durability of the walk, a slot drain will be constructed along the edge of the walk adjacent to the canal seawall. Surface water will be moved to this slot drain and captured below and moved to the stormwater drainage system. This drainage system along with the durable year-round surface will provide year-round accessibility for all users.

Softscape

Originally, the planting theme for the park was linked to the program objective of integrating the park and retail activities. There were two planting conventions Carol employed. The first was planting associated with the most active pedestrian areas at the time: major entries, pedestrian retail areas and plazas. These areas were designed in a more formal fashion and with trees within tree grates. The intent was to create a formal arrangement and provide a continuous canopy with spatial definition to the more architecturally defined public areas. Understory plantings were considered to provide views to the canal, solar exposure, color, texture and seasonal interest. The second planting convention was more of a strategic placement of materials. These planting materials were located in informal groupings to; soften and obscure edges of the park, provide accents of flowering trees, create screening and/or open views to specific park elements and emphasize grade changes.

Today, the park is a respite that provides a robust tree canopy within the urban setting. We are working closely with the City Arborist to monitor trees that are in poor health, in decline or candidates for replacement as part of our improvement plan. Where possible, the intent is to create more robust soil volumes for existing and proposed trees to support healthy growth in the urban environment. Understory plantings have also been evaluated based on health, lifespan, current adjacent use, and safety. Some of the materials will be removed and replaced with similar characteristics (evergreen or shrub) and others may be replaced to create a safer environment for pedestrians. The intent is to create seasonal variety and continued lushness, while staying mindful of water consumption and keeping the original design intent of the "two planting conventions."

Lighting

Proposed architectural and landscape lighting systems will create a cohesive nighttime luminous environment that will express the original intent of the park design with a welcoming and timeless elegance that is harmonious with the unique spirit of the surrounding neighborhood. This will be accomplished through the use of luminaires integrated within hardscape and landscape expressions.

The terminus of the canal is illuminated by four tall light masts that, due to their elevation and design to broadcast light across a wide area, have had the unintended consequence of creating nuisance light and glare. These masts will be removed and replaced with lighting at a lower level and more even distribution.

Art

Carol aspired that public art was one of many elements planned for, which would provide an environment that was secure, comfortable and exciting. Trees, flowers, furnishings, lights, water, paving patterns, and other landscape elements, along with public art installations, provide an integrated and curated experience for all users to enjoy. Along with the improvements of surfaces and vegetation, the project will refresh existing art

and offer new opportunities for art under the Land Boulevard bridge. The graphics which once adorned the central gazebo will be recreated and installed. Additionally, the Applicant is exploring opportunities to refresh the Never Green Tree sculpture.

Connectivity

The park is currently a conduit connecting the East Cambridge neighborhood to the riverfront. An overarching goal of the project is to preserve and enhance connectivity of all user types to the park and the park to adjacent neighborhoods. Improving uneven brick surfaces and implementing the new durable surface along the canal will provide connectivity year-round throughout the park. Additionally, stairs and ramps from the upper walking area to the lower canal walk will be reconstructed to be code compliant and will create safer connections in key areas in the park. Visual connectivity will be enhanced by pruning low branching trees, adjusting lighting levels and providing lighting and activation for safer connection under the Land Boulevard bridge to the river.

Sustainability

The sustainability improvement objectives for the park are to maintain and add to the robust urban tree canopy, provide plant materials that benefit pollinators and habitats, decrease the current water consumption, add planting areas, reduce light pollution and reuse existing materials. Additionally, improvements to the park will contribute to the health and wellness of users by creating or maintaining walking loops, areas for gathering, green space for the enjoyment of retail, office, and residential inhabitants.

Technical Standards and Public Improvement Requirements

In accordance with the Decision, the development team has met numerous times with various City Departments regarding the more technical standards and proposed public infrastructure associated with the Canal Park project. Specifically, the development team has met and had ongoing correspondence with the Conservation Commission, Department of Public Works and Transportation and Mobility.

The existing stormwater management system, which will be maintained, currently consists of areas drains, and associated pipes that discharge into the Lechmere Canal. In addition to maintaining the existing system the overall drainage of the park will be improved upon. Drainage improvements include resetting existing brick pavers to provide positive drainage, adding additional area drains to prevent puddling and replacing the existing stone dust walkway with a durable year-round surface with a perforated underdrain system that includes an integrated slot drain. The slot drain will discharge into the perforated underdrain system, and runoff generated from small storm events will fill the voids in the 8-inch layer of crushed stone below the perforated underdrain. The voids in the 8-inch layer of crushed stone provide approximately 700 cubic feet of storage where runoff will be trapped and infiltrate into the subgrade.

The project will not generate an increase in stormwater runoff or volume. In addition, the lower canal walk perforated underdrain system will promote groundwater recharge and improve upon water quality to the maximum extent practicable. The Applicant will continue to work with City Departments to coordinate utility and site improvements as the construction of the Canal Park project commences.

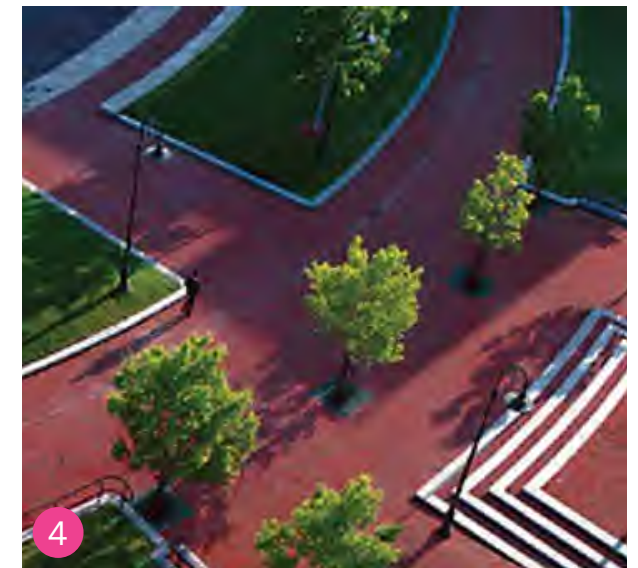
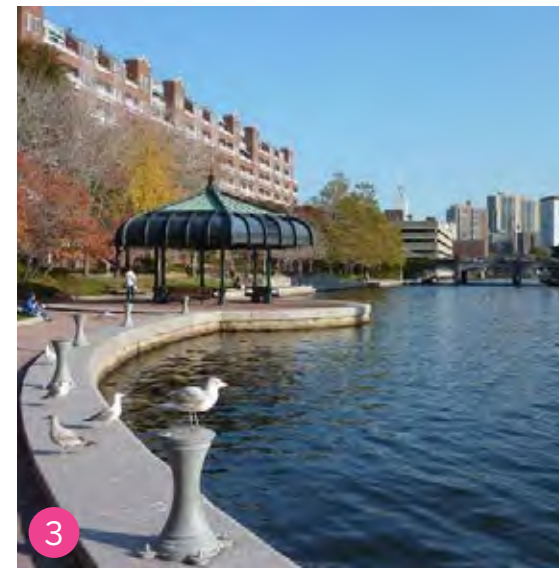
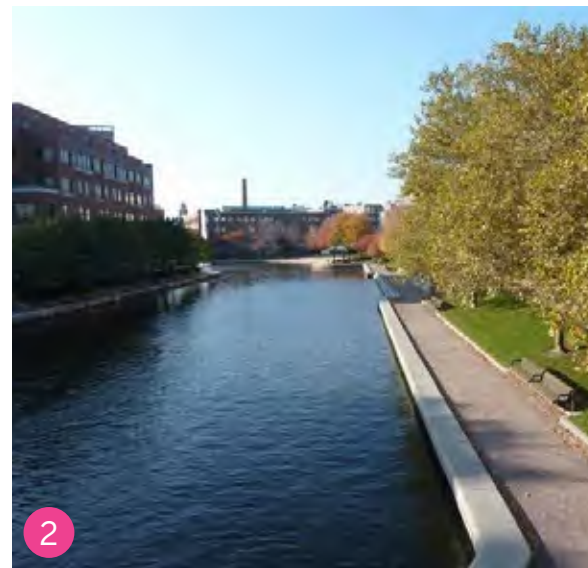
Conclusion

As detailed throughout this application and demonstrated by the graphics included within the same, the Canal Park improvements have been designed to conform to the applicable design review standards set forth in Condition 4 of the Decision, including with respect to the input from various community groups and City of Cambridge departments. Outcomes from this intensive engagement process provided design guidance of park improvements such as:

- Replacing/refurbishing existing non-compliant stairs and ramps to be code-compliant where required;
- Limiting the removal of existing ground plane plant material whenever possible;
- Enhancing the site lighting to provide improved performance, visual comfort and safety;
- Updating existing non-compliant railings to be code-compliant where required while retaining the original park character;
- Providing a refreshed play area while maintaining the existing structure in an aesthetic similar to the original park design;
- Preserving and restoring, where necessary, the trees, art and structures within the park;
- Refurbishing existing furnishings and using materials, finishes and designs consistent with the original design; and
- Reconstructing the lower park walk to be a durable, drained surface, allowing for year-round accessibility for all users.

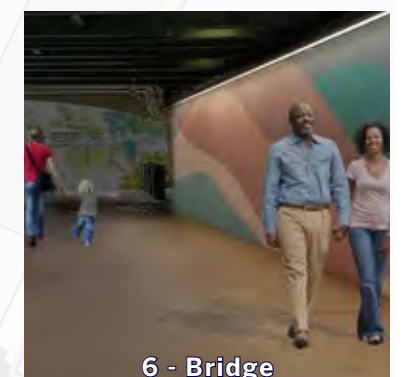
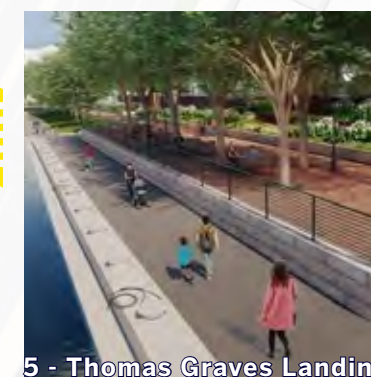
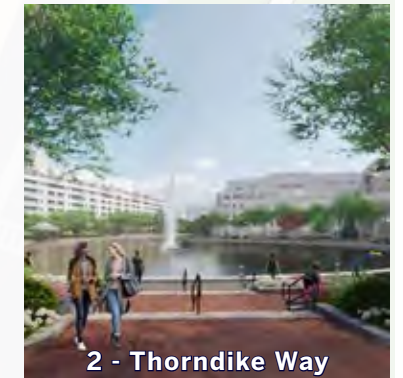
Accordingly, we respectfully request that the Planning Board find that the Canal Park improvements and design as described and shown in this application maintain the original park character consistent with the planning and design goals set forth in the Decision and grant Design Review approval for such improvements.

DESIGN REVIEW
CANAL PARK
 EXISTING CONDITIONS PHOTOS



PHOTOS FROM TCLF WEBSITE

DESIGN REVIEW CANAL PARK KEY IMPROVEMENT AREAS



0' 40' 80' 160'
SCALE: 1" = 80'



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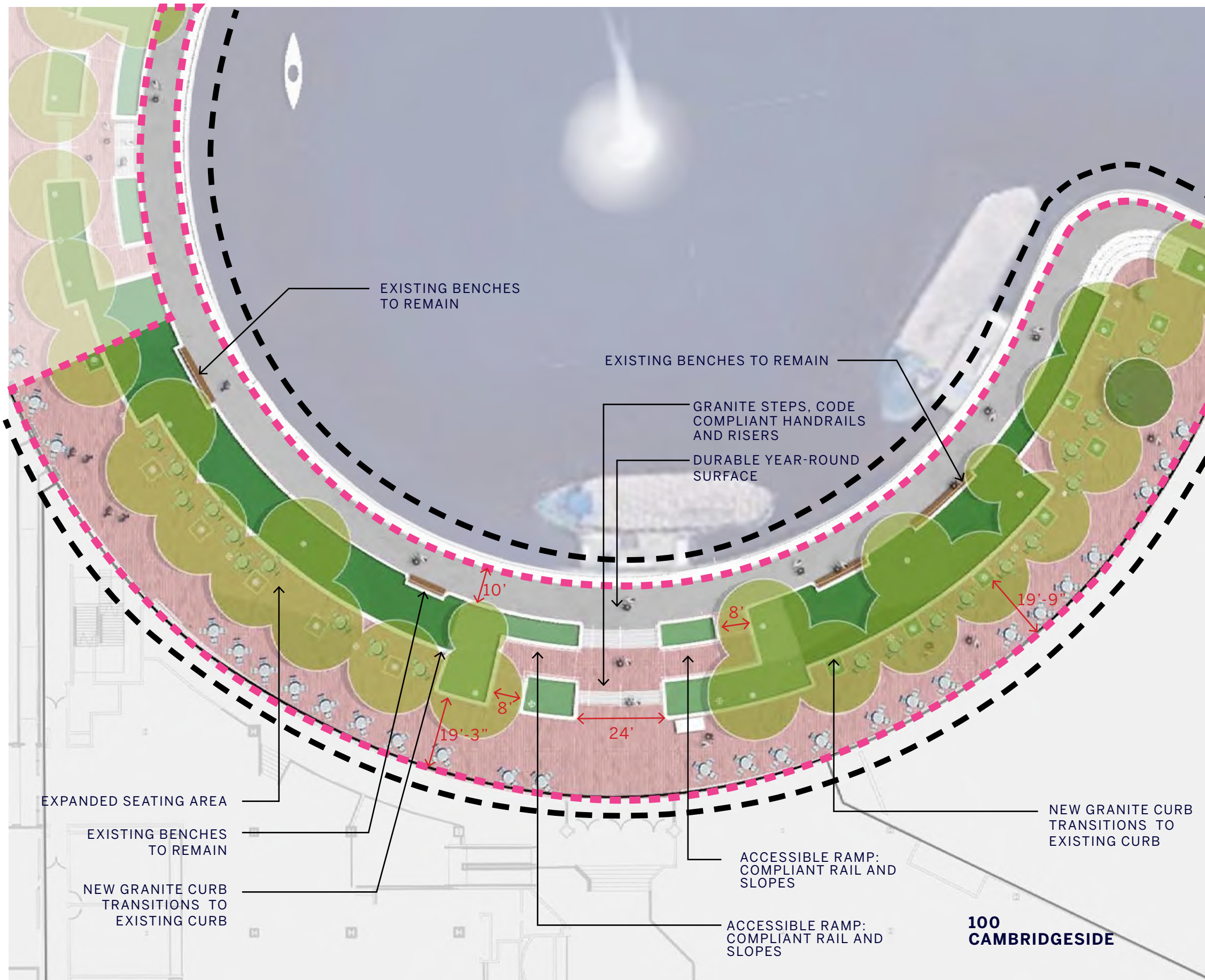


DESIGN REVIEW CANAL PARK

PROPOSED PLAN
AREA ONE: MALL EDGE

Legend

-  PROJECT SITE
-  EXISTING TREE
-  NEW TREE
-  EXISTING PLANT MATERIAL TO REMAIN (INFILL BARE SPOTS WITH NEW MATERIAL)
-  PROPOSED PLANT MATERIAL
-  BRICK WALKWAYS REFURBISHED



Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)

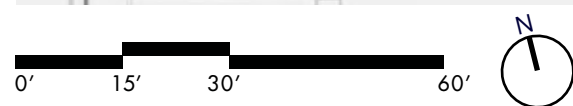
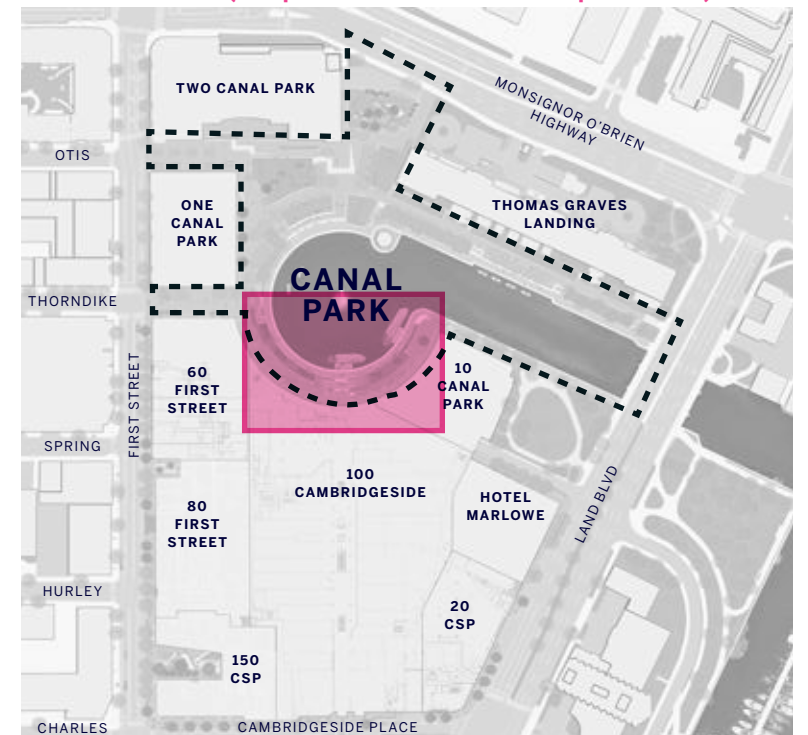


Exhibit 3

DESIGN REVIEW

CANAL PARK

EXISTING CONDITIONS PLAN

AREA ONE: MALL EDGE

Legend

-  PROJECT SITE
-  ADDED SOFTSCAPE AREA
-  ADDED HARDSCAPE AREA

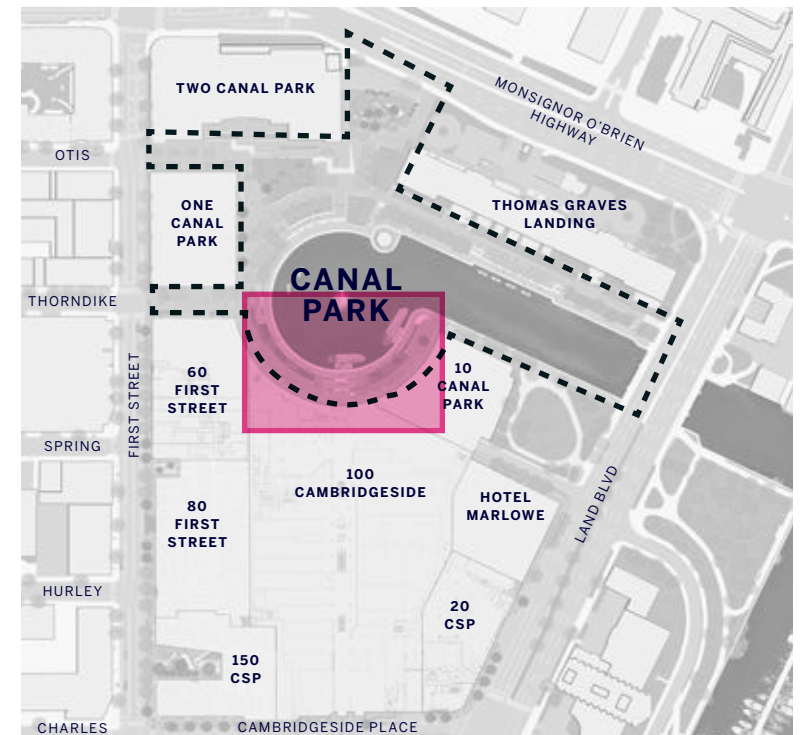
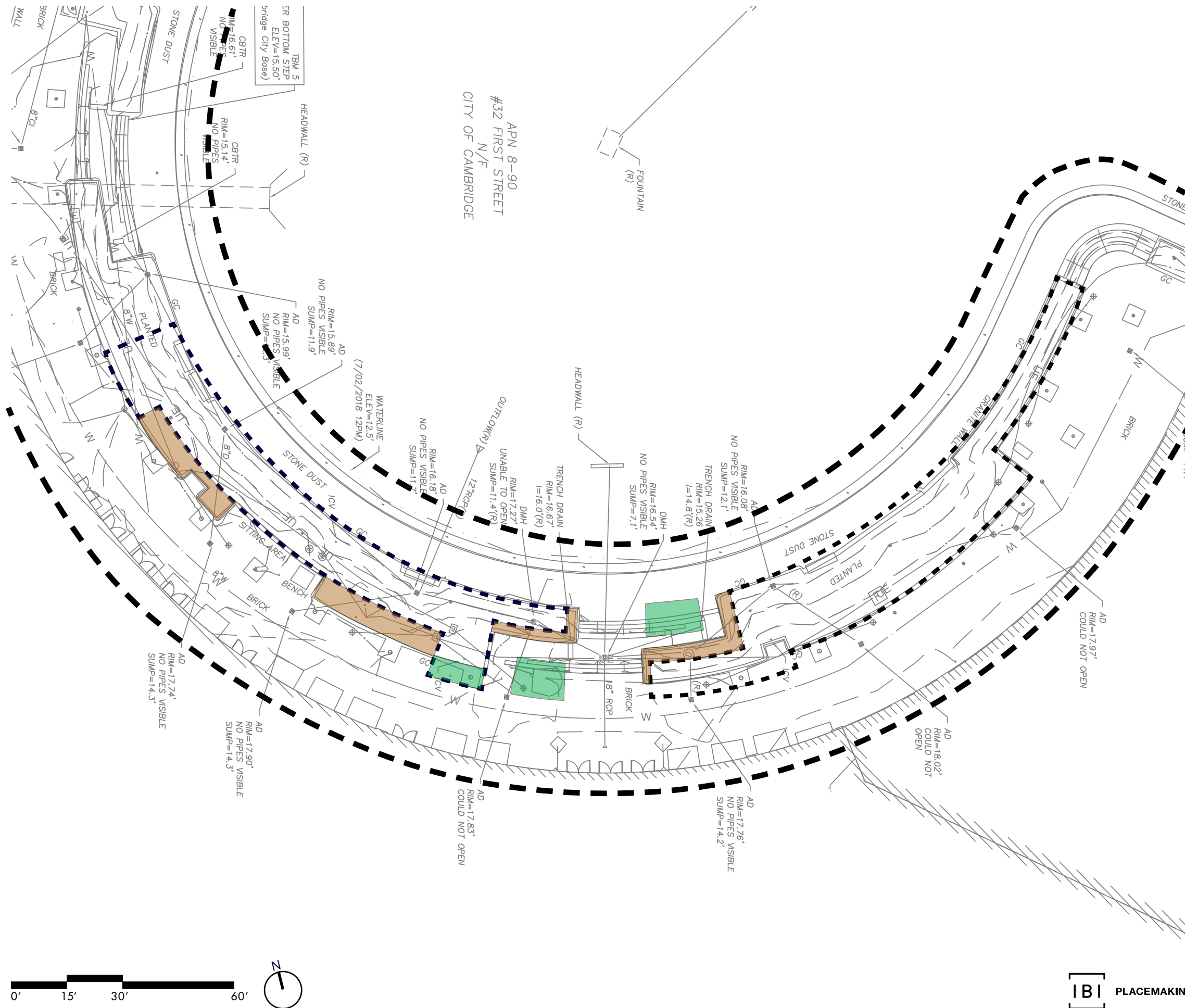


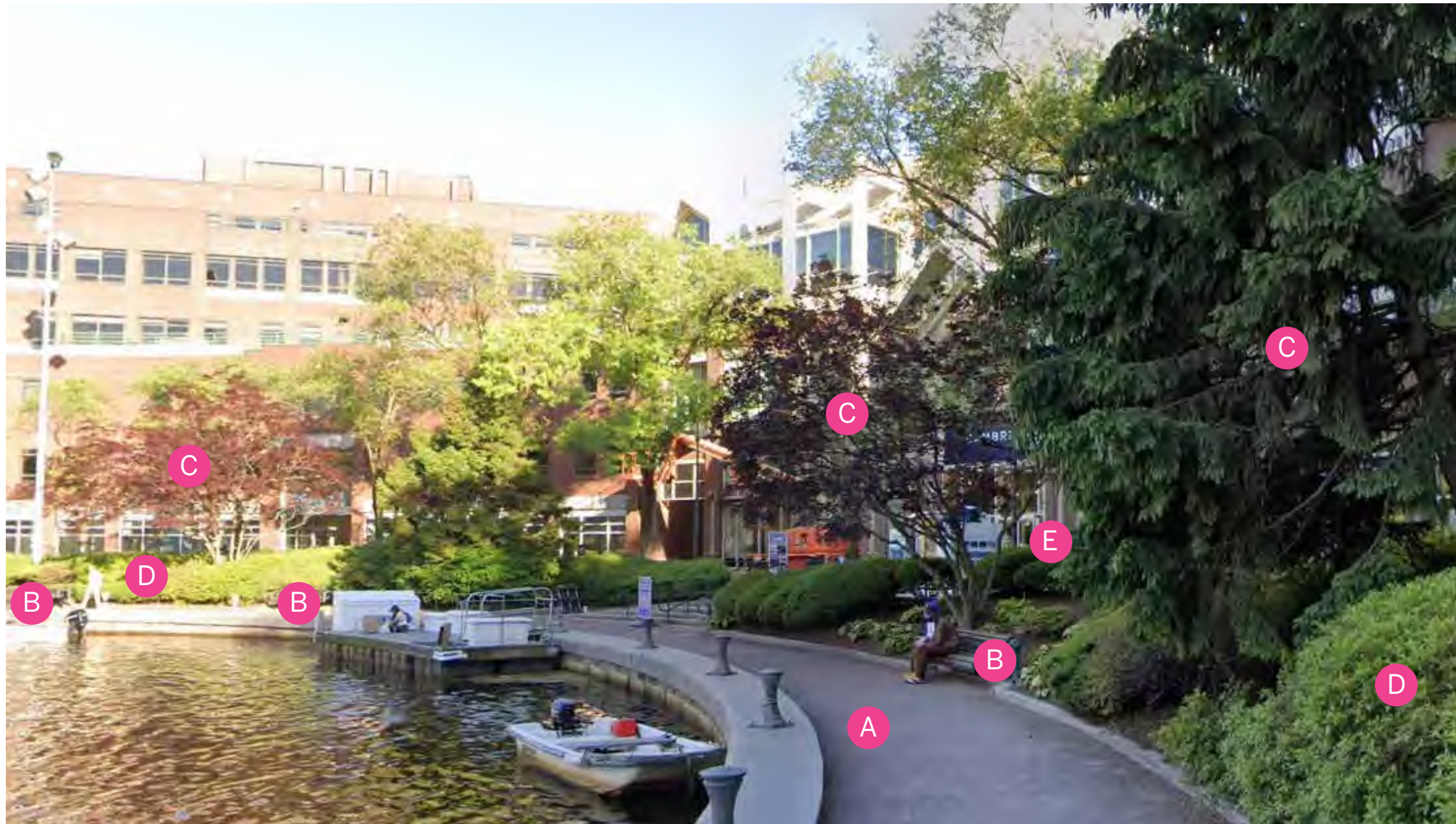
Exhibit 4

DESIGN REVIEW

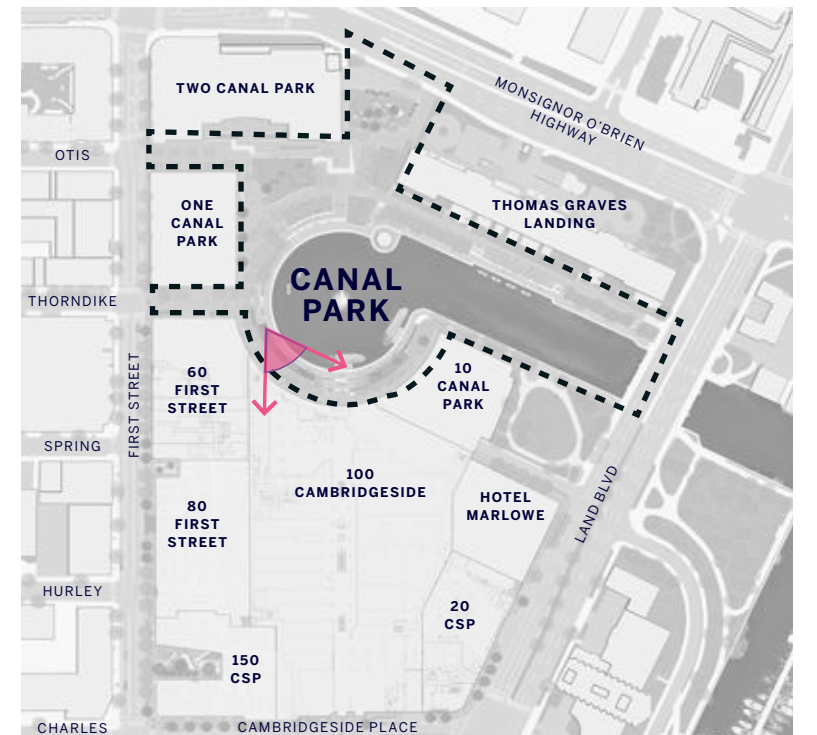
CANAL PARK

EXISTING CONDITIONS

AREA ONE: MALL EDGE



- A** EXISTING STONE DUST PATH
- B** EXISTING BENCHES WITH BACKS TO REMAIN (5 TOTAL IN THIS IMPROVEMENT AREA)
- C** EXISTING TREES TO REMAIN (TYPICAL)
- D** EXISTING UNDERSTORY PLANTING TO BE RETAINED WHERE POSSIBLE, AND SUPPLEMENTED WITH NEW PLANTING
- E** EXISTING UPPER SEATING AREA



DESIGN REVIEW

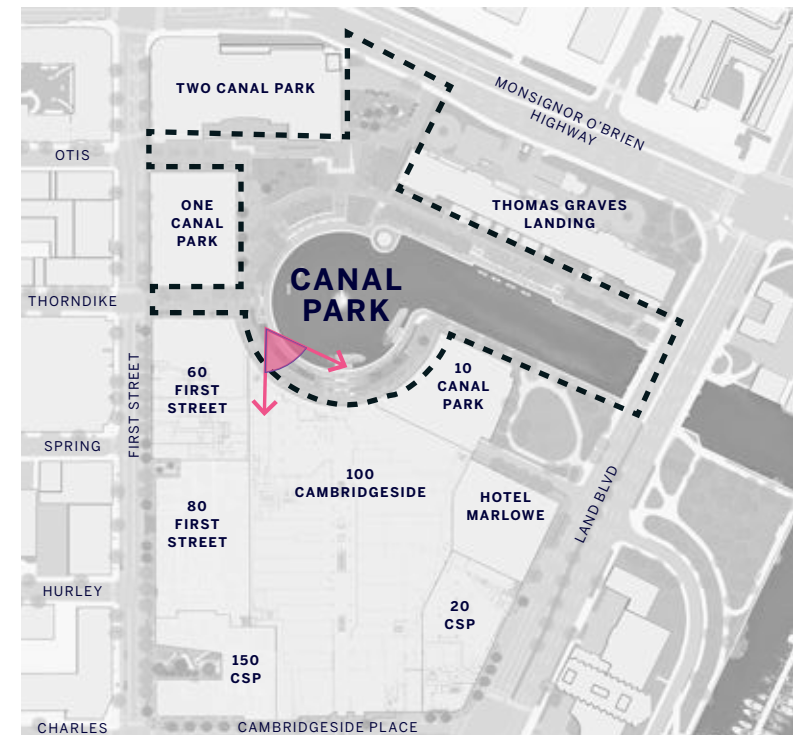
CANAL PARK

PROPOSED IMPROVEMENTS

AREA ONE: MALL EDGE



- A** DURABLE YEAR-ROUND SURFACE WITH DRAINAGE
- B** EXISTING BENCHES TO REMAIN (5 TOTAL) REFURBISHED
- C** EXISTING TREES TO REMAIN (TYPICAL)
- D** EXISTING UNDERSTOREY PLANTING TO BE RETAINED WHERE POSSIBLE, AND SUPPLEMENTED WITH NEW PLANTING
- E** EXPANDED UPPER SEATING AREA









DESIGN REVIEW

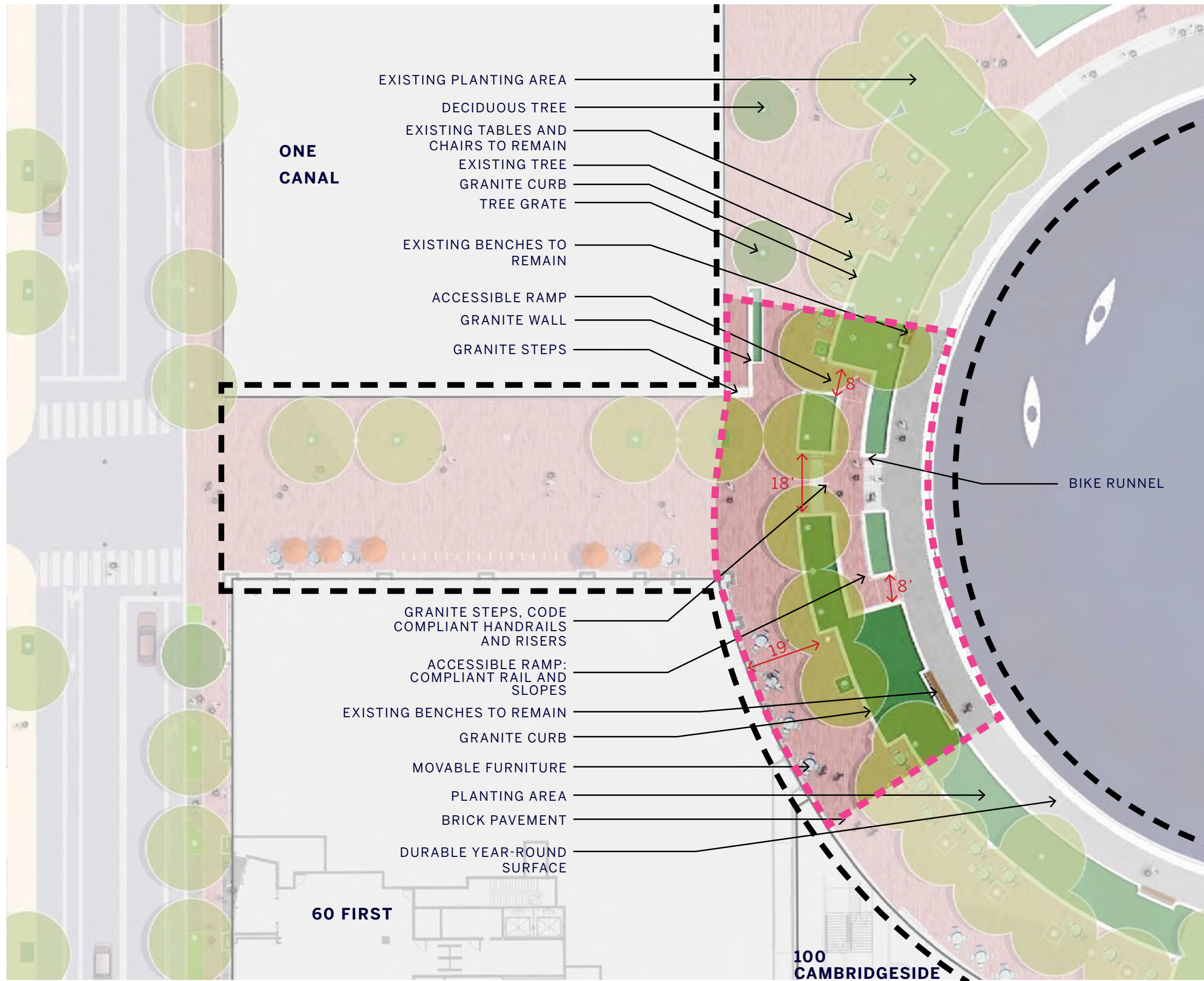
CANAL PARK

PROPOSED PLAN

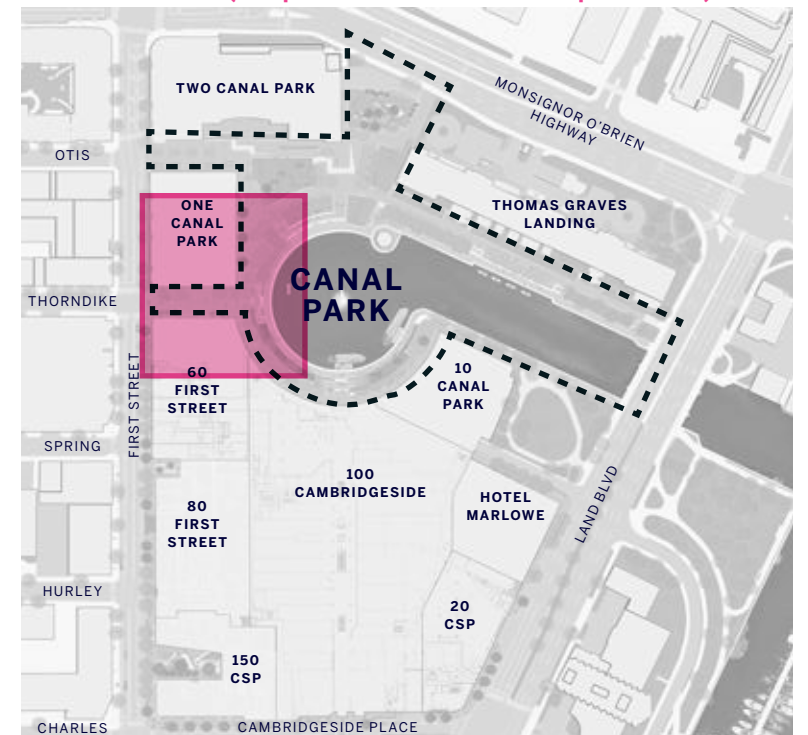
AREA TWO: THORNDIKE WAY

Legend

-  PROJECT SITE
-  EXISTING TREE
-  NEW TREE
-  EXISTING PLANT MATERIAL TO REMAIN (INFILL BARE SPOTS WITH NEW MATERIAL)
-  PROPOSED PLANT MATERIAL
-  BRICK WALKWAYS REFURBISHED



Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)



DESIGN REVIEW

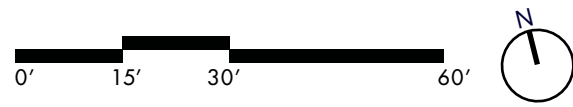
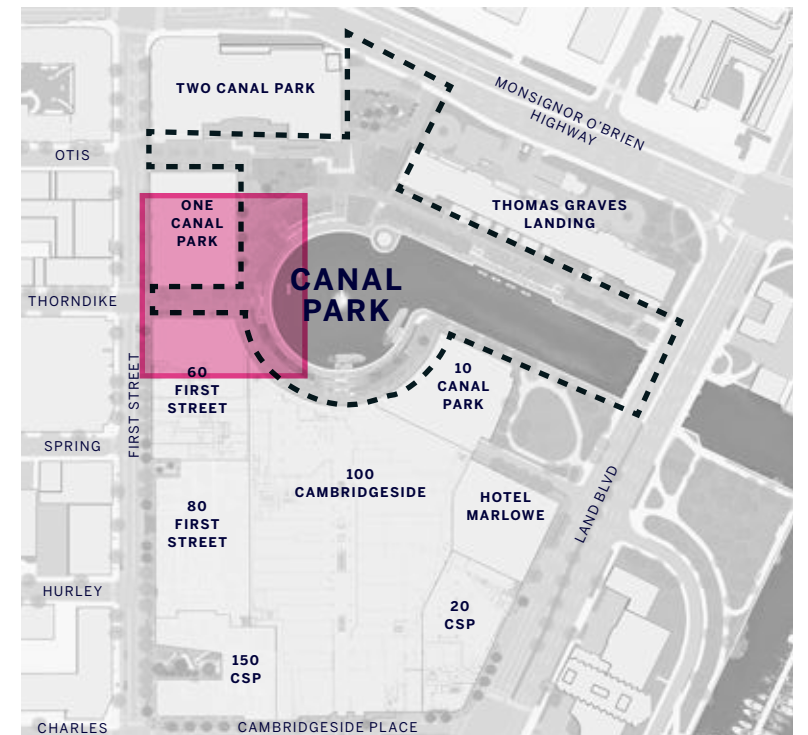
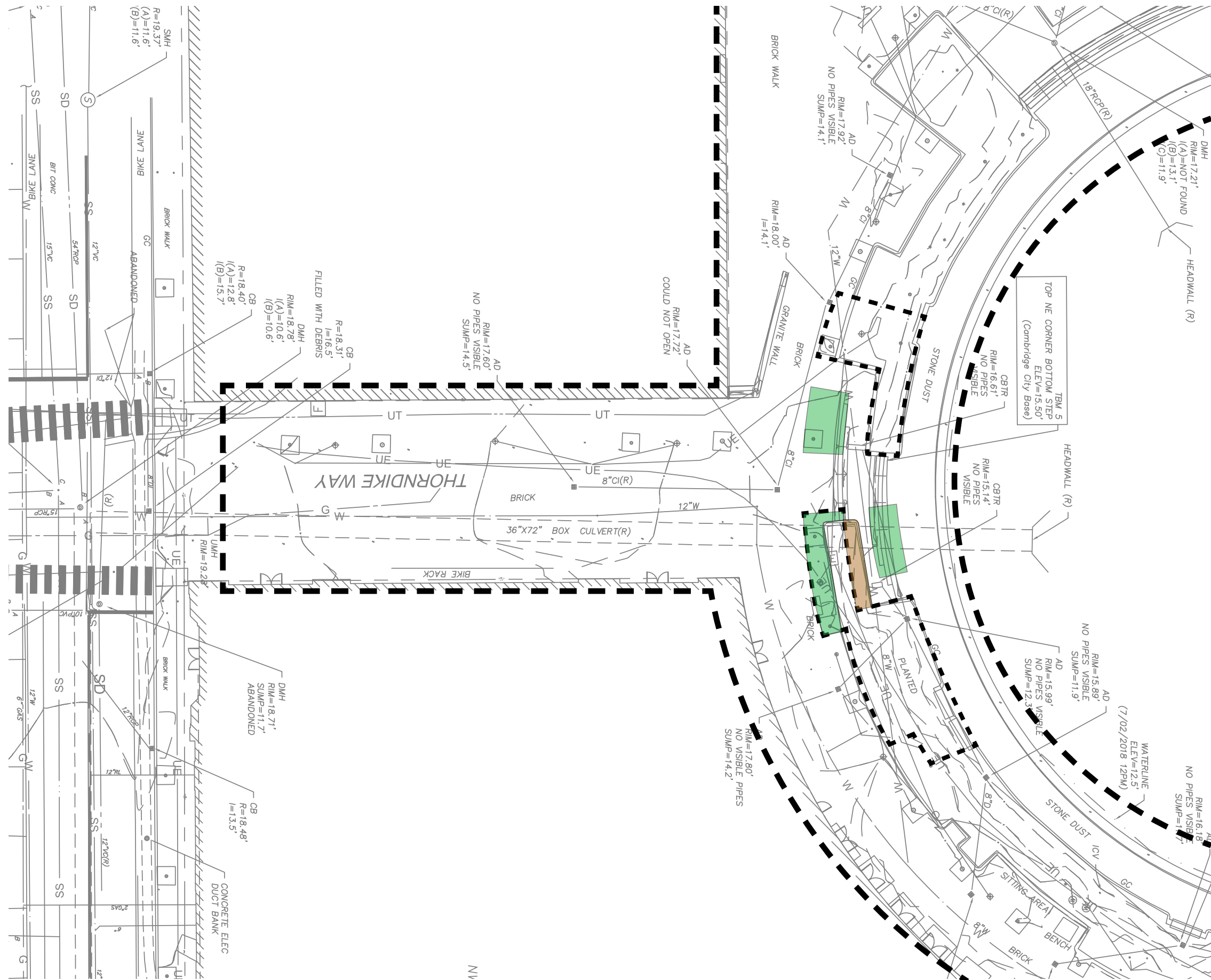
CANAL PARK

EXISTING CONDITIONS PLAN

AREA TWO: THORNDIKE WAY

Legend

-  PROJECT SITE
-  ADDED SOFTSCAPE AREA
-  ADDED HARDSCAPE AREA



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Exhibit 8

DESIGN REVIEW

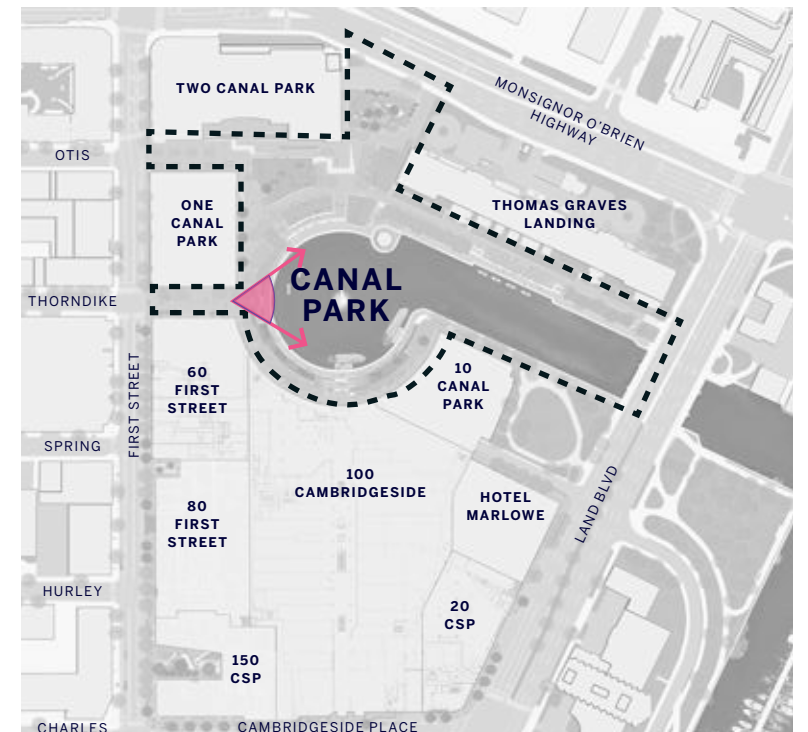
CANAL PARK

EXISTING CONDITIONS

AREA TWO: THORNDIKE WAY



- A** EXISTING RAMP (NON-COMPLIANT)
- B** EXISTING STEPS
- C** EXISTING RAILS (NON-COMPLIANT)
- D** EXISTING BRICK WALKWAYS
- E** EXISTING STONE DUST PATH
- F** EXISTING TREES TO REMAIN (TYPICAL)
- G** EXISTING MAST LIGHTING



DESIGN REVIEW

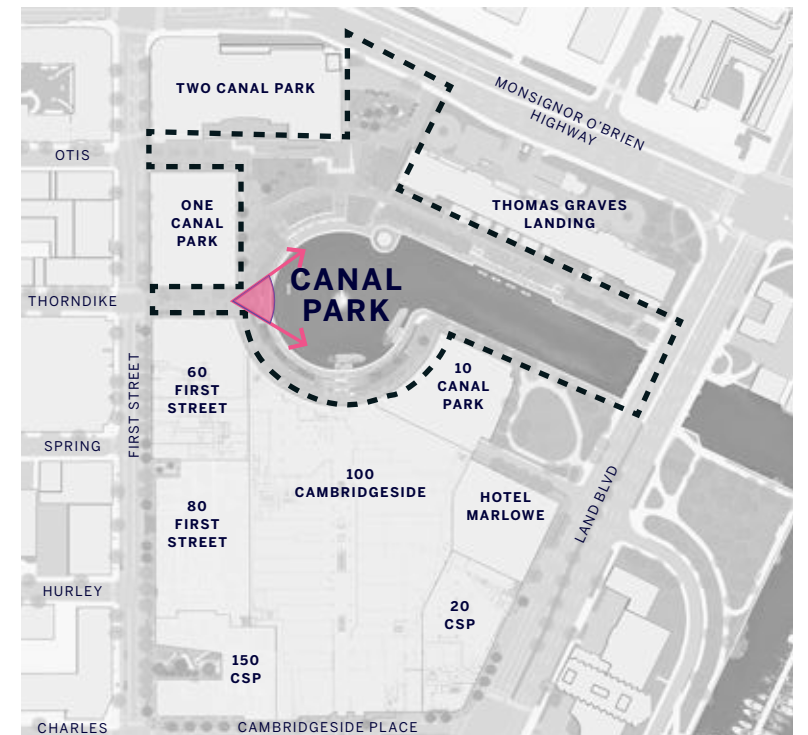
CANAL PARK

PROPOSED IMPROVEMENTS

AREA TWO: THORNDIKE WAY



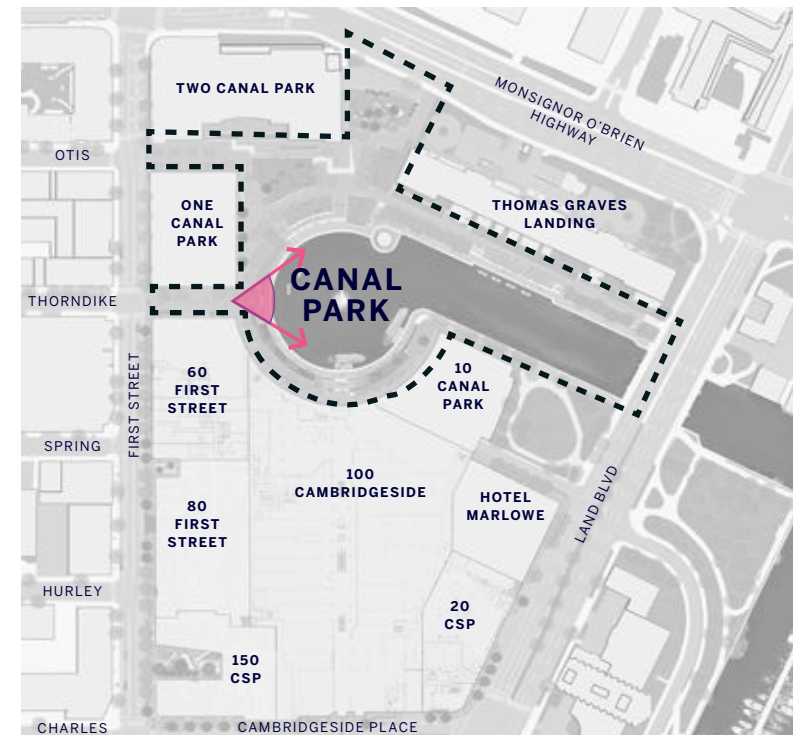
- A** ACCESSIBLE RAMP: COMPLIANT RAIL AND RAMP SECTIONS
- B** GRANITE STEPS, CODE COMPLIANT HANDRAILS AND RISERS
- C** HANDRAILS
- D** BRICK WALKWAYS REFURBISHED
- E** DURABLE YEAR-ROUND SURFACE
- F** EXISTING TREES TO REMAIN (TYPICAL)



DESIGN REVIEW
CANAL PARK
 PROPOSED IMPROVEMENTS
 AREA TWO: THORNDIKE WAY
 (EVENING)



- A** HANDRAILS
- B** TREE MOON LIGHTING
- C** FOUNTAIN LIGHTING (REFURBISHED)
- D** REFURBISHED GAZEBO LIGHTING





DESIGN REVIEW

CANAL PARK

PROPOSED PLAN

AREA THREE: GREAT LAWN

Legend

- PROJECT SITE
- EXISTING TREE
- NEW TREE
- BRICK WALKWAYS REFURBISHED

Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)

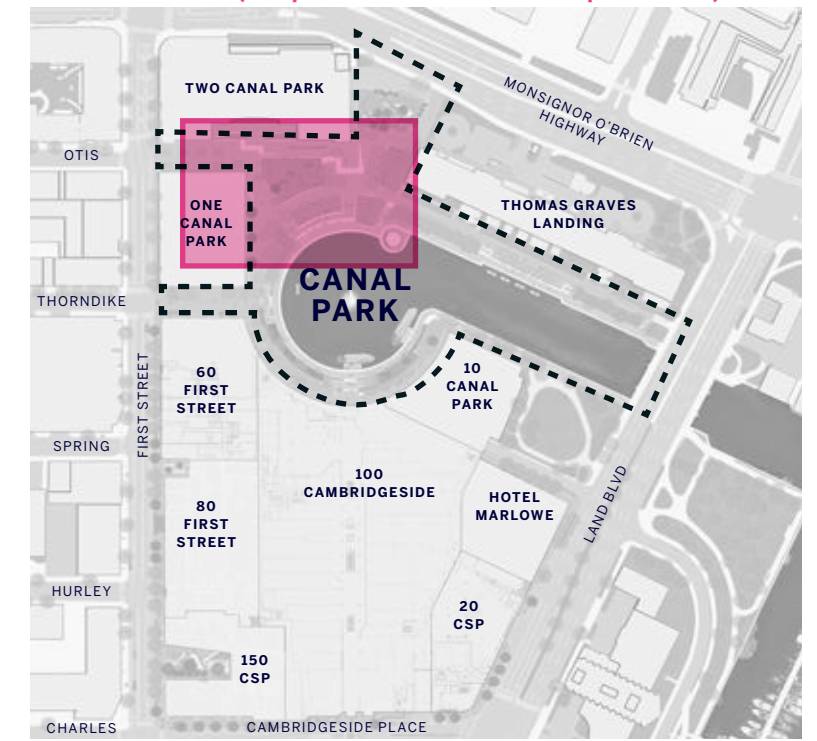


Exhibit 12

DESIGN REVIEW
CANAL PARK
 EXISTING CONDITIONS PLAN
 AREA THREE: GREAT LAWN

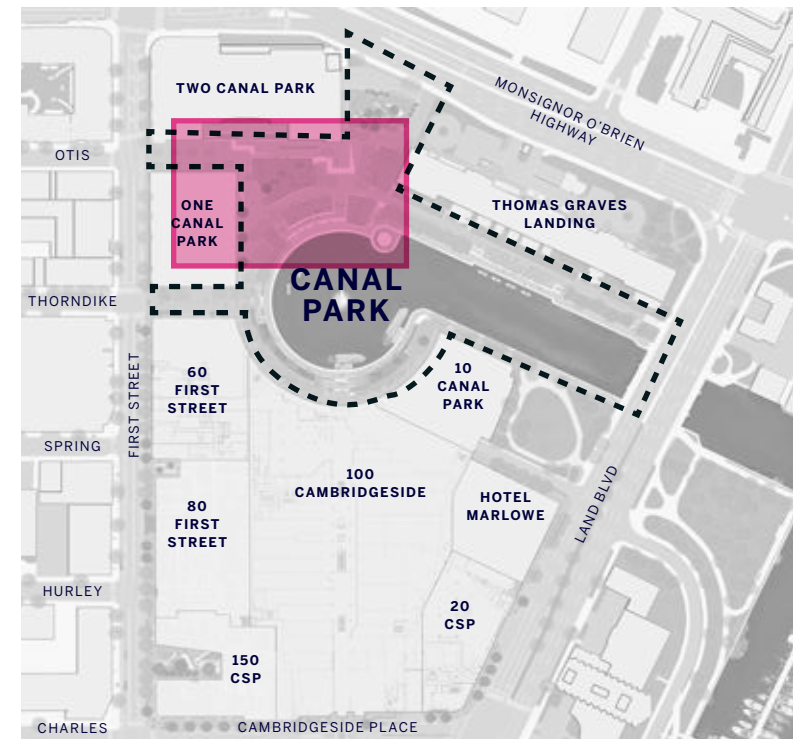
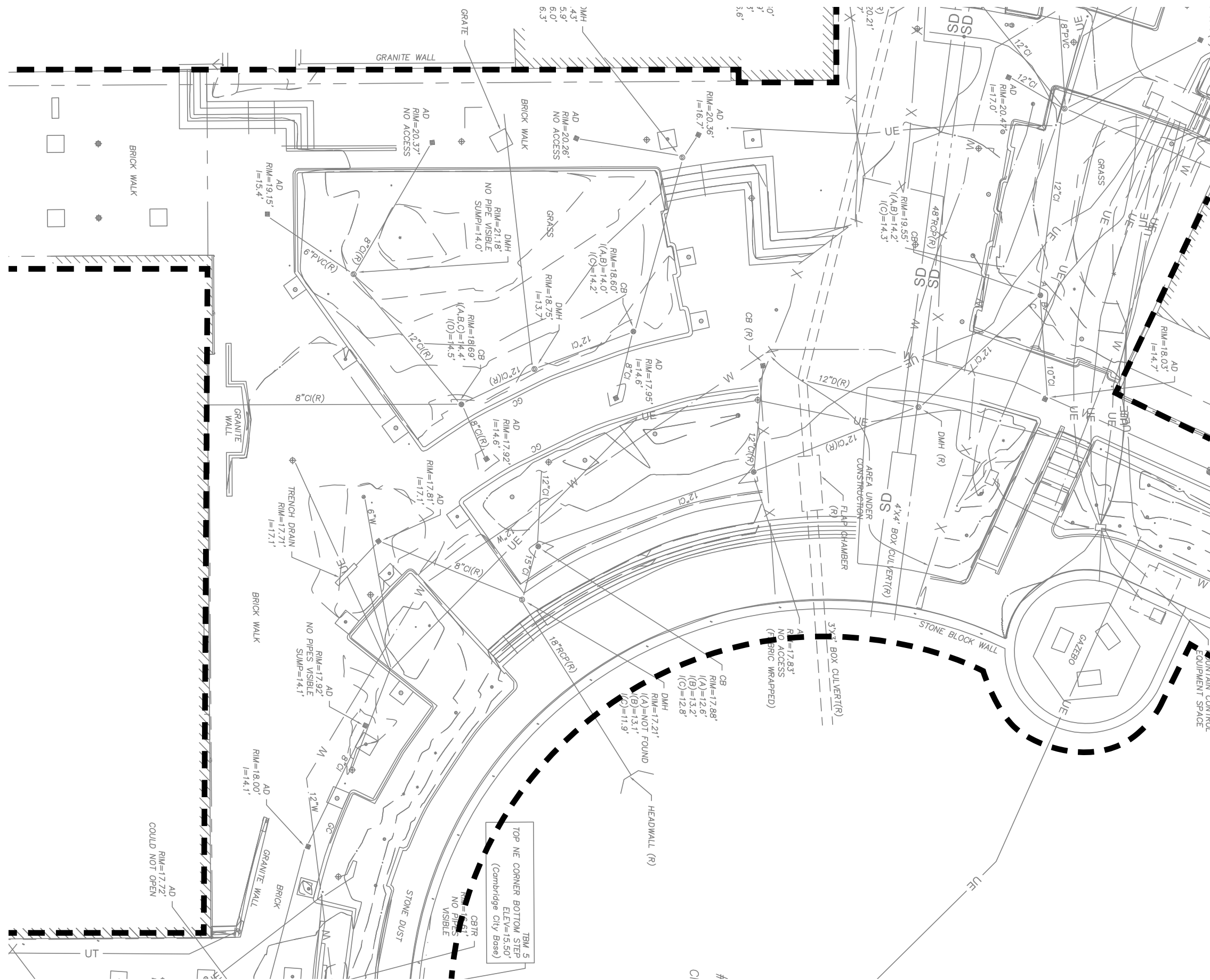


Exhibit 13

DESIGN REVIEW

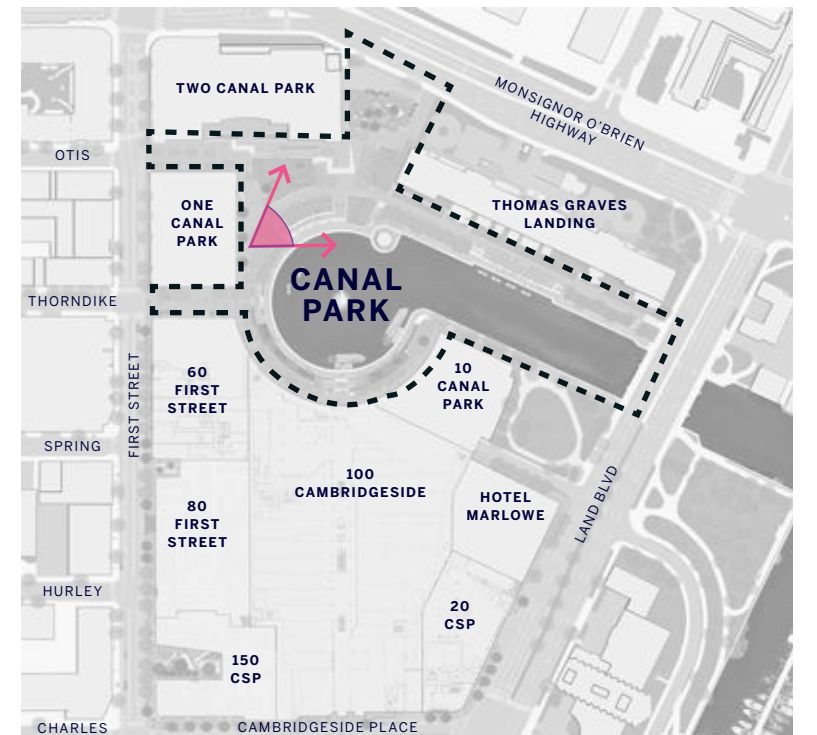
CANAL PARK

EXISTING CONDITIONS

AREA THREE: GREAT LAWN



- A** EXISTING BRICK WALKWAYS
- B** EXISTING GRANITE CURB
- C** EXISTING MOUNDED GREAT LAWN
- D** EXISTING BENCHES TO REMAIN(2 TOTAL) REFURBISHED
- E** EXISTING PARK LIGHT TO BE REFURBISHED
- F** EXISTING TREE TO REMAIN (TYPICAL)
- G** EXISTING SCULPTURE TO REMAIN



DESIGN REVIEW

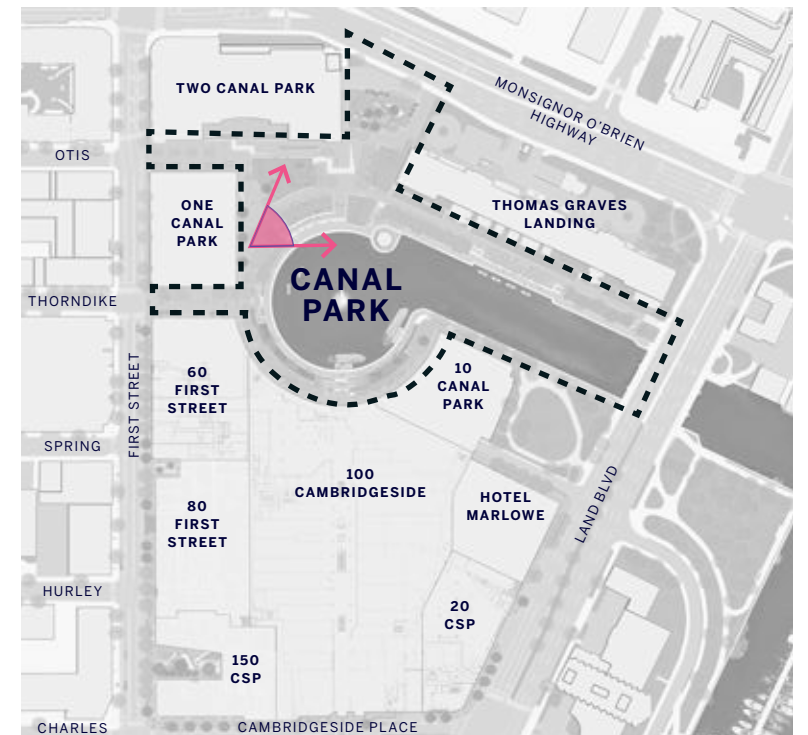
CANAL PARK

PROPOSED IMPROVEMENTS

AREA THREE: GREAT LAWN



- A** EXISTING BIKE RACK
- B** LAWN (REGRADED TO PROVIDE MORE USE OPPORTUNITIES)
- C** BRICK WALKWAYS REFURBISHED (WHERE NECESSARY)



Gazebo

- Restore with original **color** and **graphics**
- Provide new **lighting** that will **enhance** without detracting from the **original design**
- The gazebo will be cleaned, repainted, and updated LED lighting

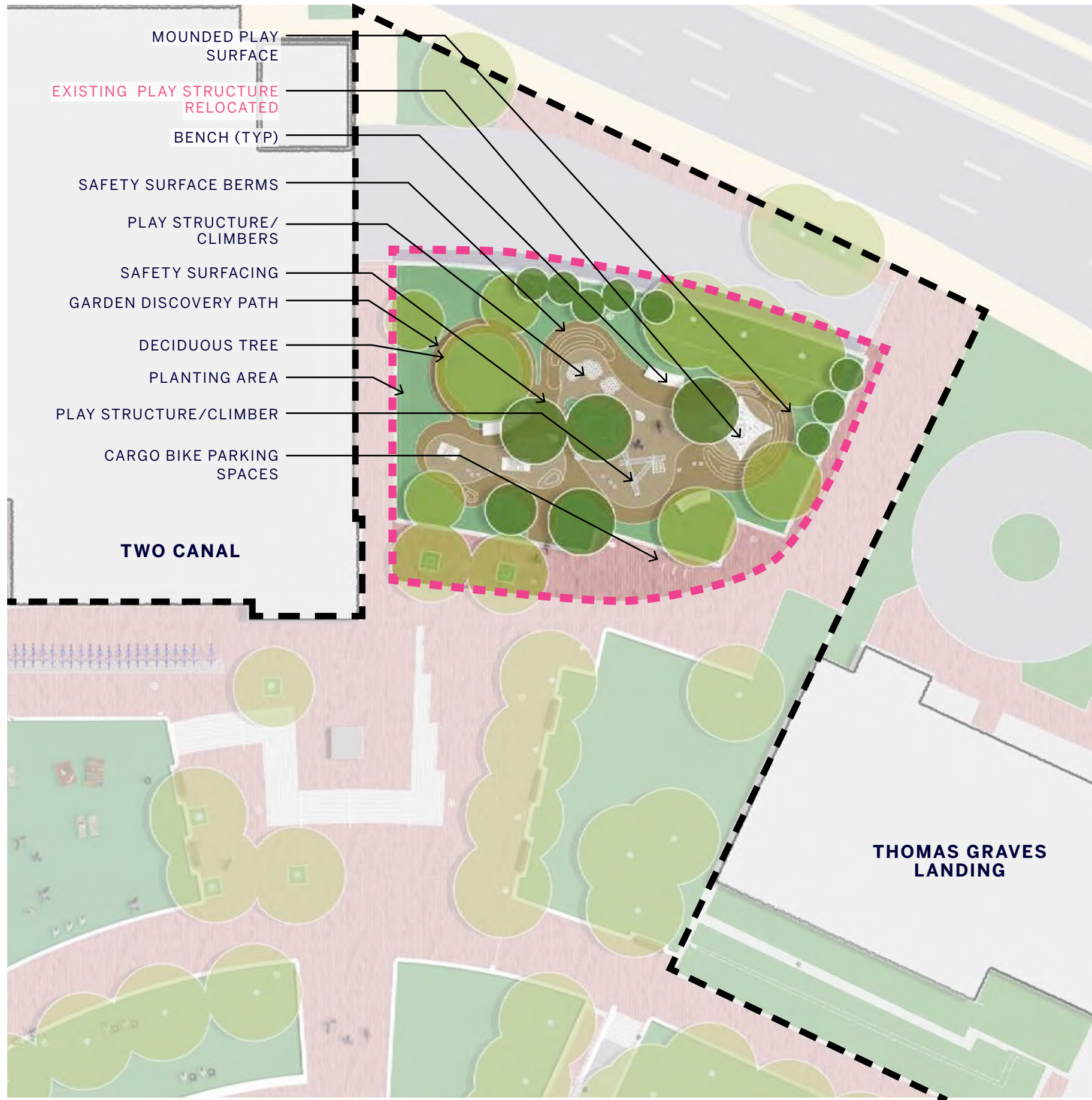


Art

Opportunities:

- Refresh the **Never Green Tree** sculpture located near the Great Lawn
- **Under the bridge** along Lechmere Canal
- Improve **fountain lighting**





DESIGN REVIEW

CANAL PARK

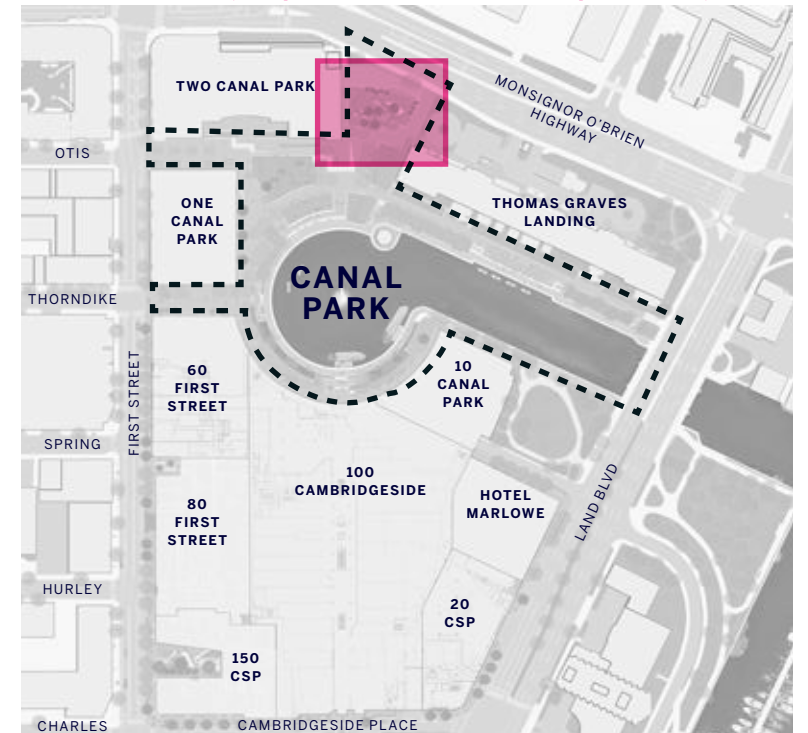
PROPOSED PLAN

AREA FOUR: PLAY AREA

Legend

- PROJECT SITE
- EXISTING TREE
- NEW TREE
- BRICK WALKWAYS REFURBISHED
- SAFETY SURFACING NEW

Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)



DESIGN REVIEW
CANAL PARK
 EXISTING CONDITIONS PLAN
 AREA FOUR: PLAY AREA

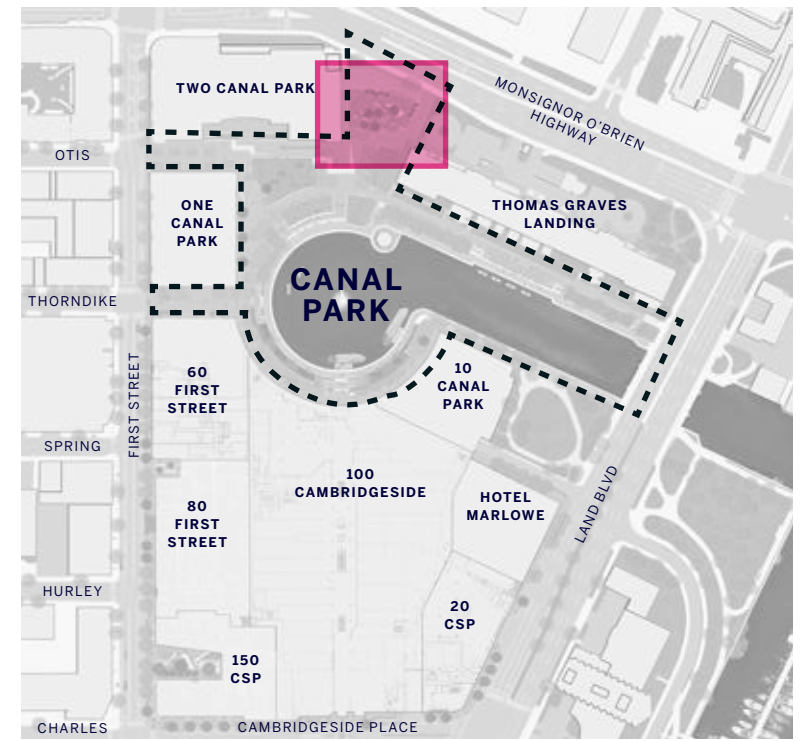
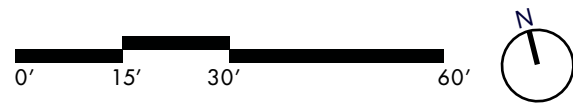
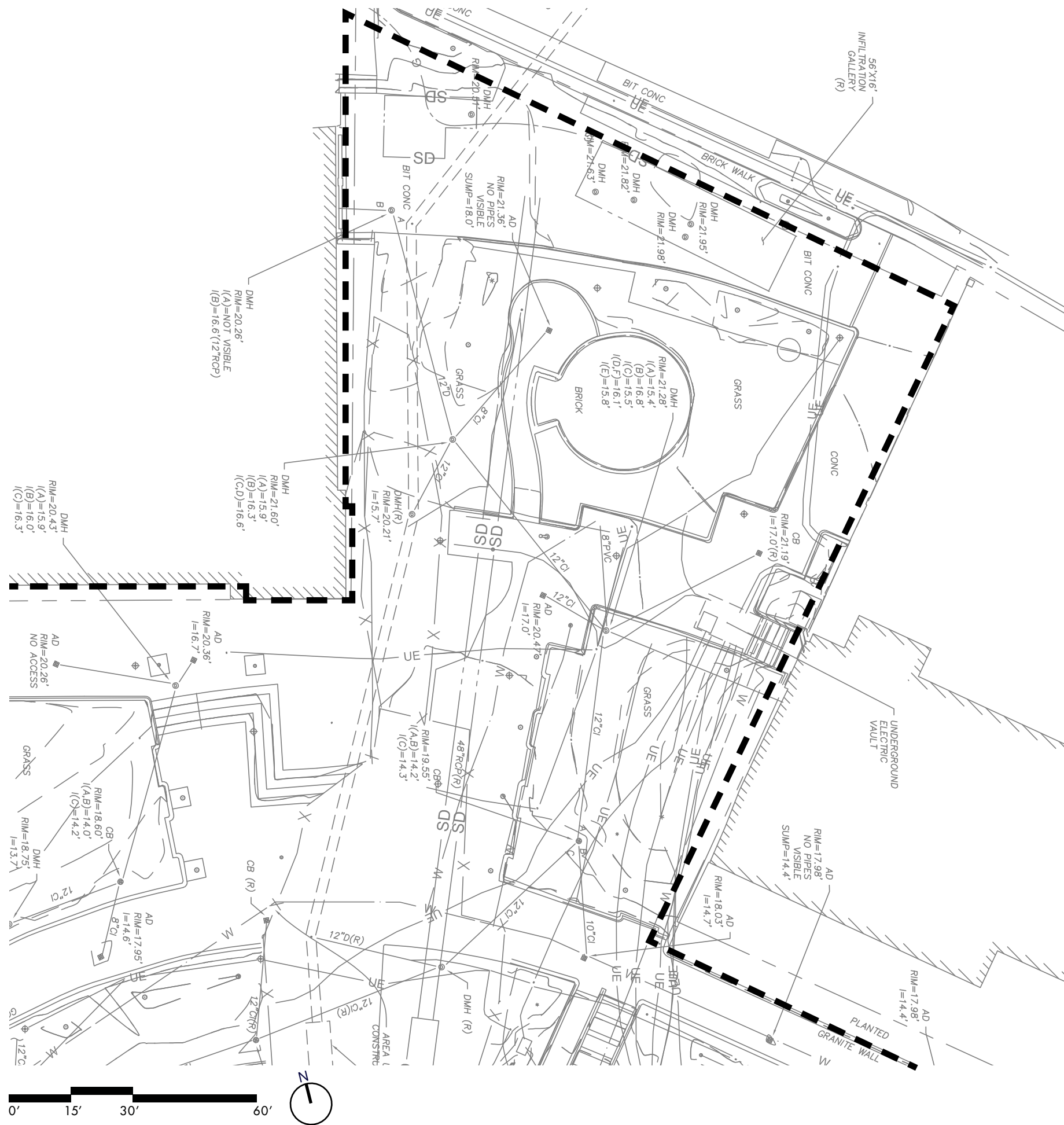


Exhibit 18

DESIGN REVIEW

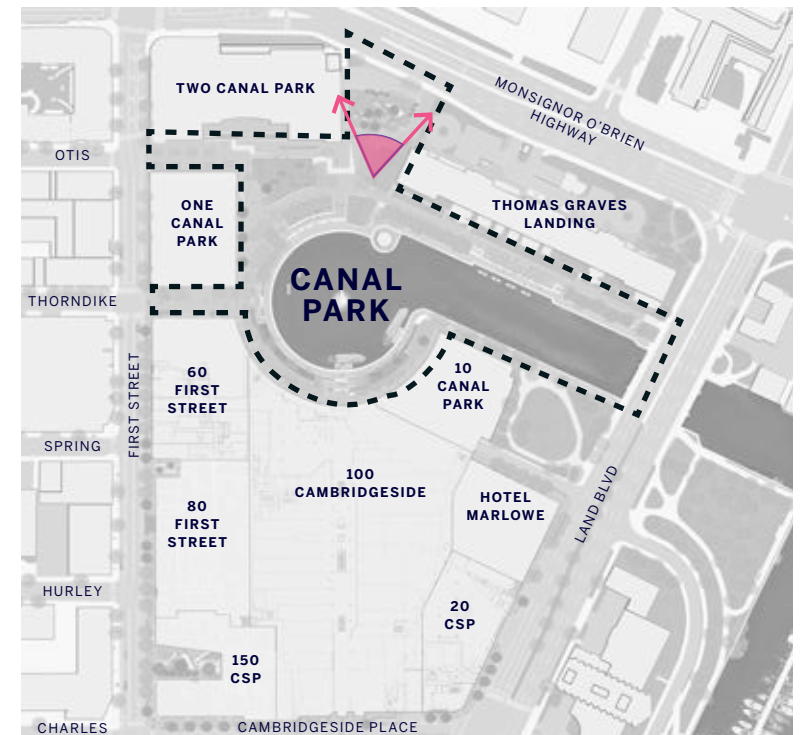
CANAL PARK

EXISTING CONDITIONS

AREA FOUR: PLAY AREA



- A** EXISTING BRICK WALKWAYS
- B** EXISTING CURB
- C** EXISTING PLAY STRUCTURE
- D** EXISTING RAILS
- E** EXISTING TREES TO REMAIN (TYPICAL)
- F** EXISTING WATER FOUNTAIN



DESIGN REVIEW

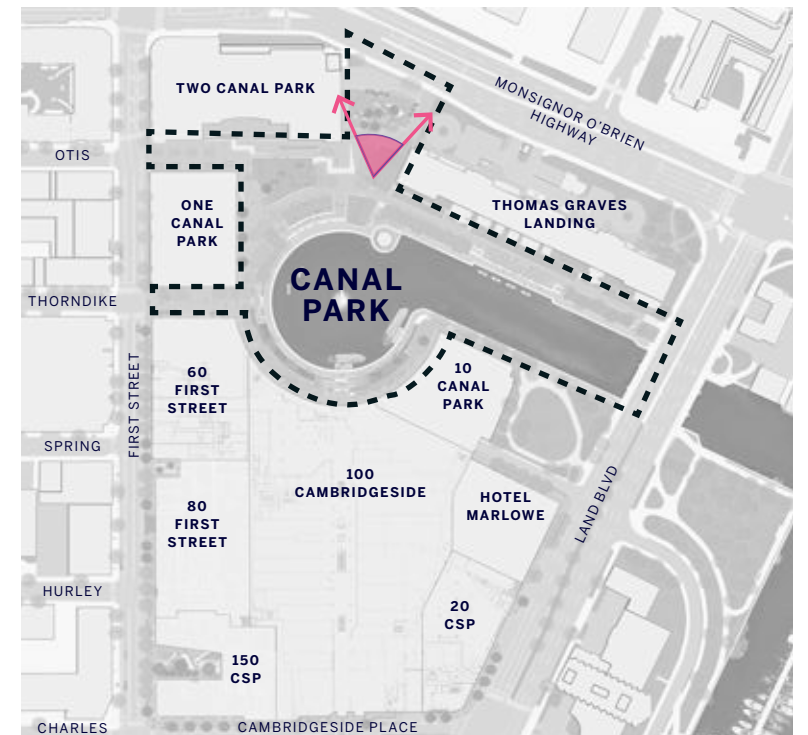
CANAL PARK

PROPOSED IMPROVEMENTS

AREA FOUR: PLAY AREA



- A** BRICK WALKWAYS REFURBISHED
- B** GRANITE CURB
- C** SAFETY SURFACE BERM
- D** EXISTING PLAY STRUCTURE RELOCATED
- E** EXISTING TREES TO REMAIN (TYPICAL)
- F** PLAY STRUCTURE/CLIMBERS
- G** PERIMETER RAILING
- H** DRINKING FOUNTAIN

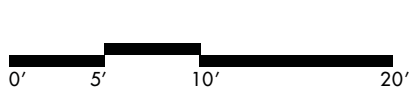


DESIGN REVIEW
CANAL PARK
 PLAY AREA - PLAY STRUCTURES



TWO CANAL

MONSIGNOR
 O'BRIEN
 HIGHWAY



TWO CANAL

MONSIGNOR
O'BRIEN
HIGHWAY

DESIGN REVIEW CANAL PARK PLAY AREA - PLAY SURFACE



Wheat



Shell

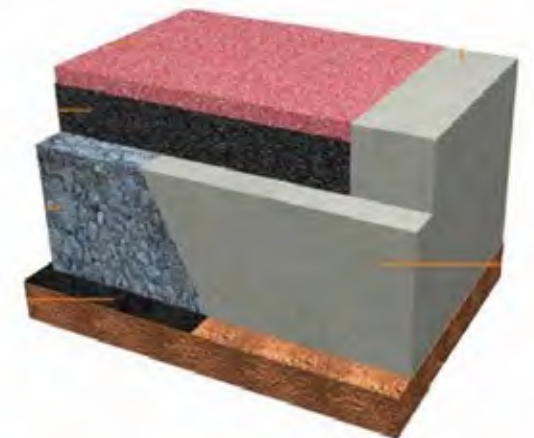
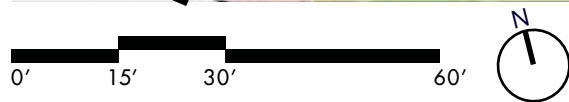
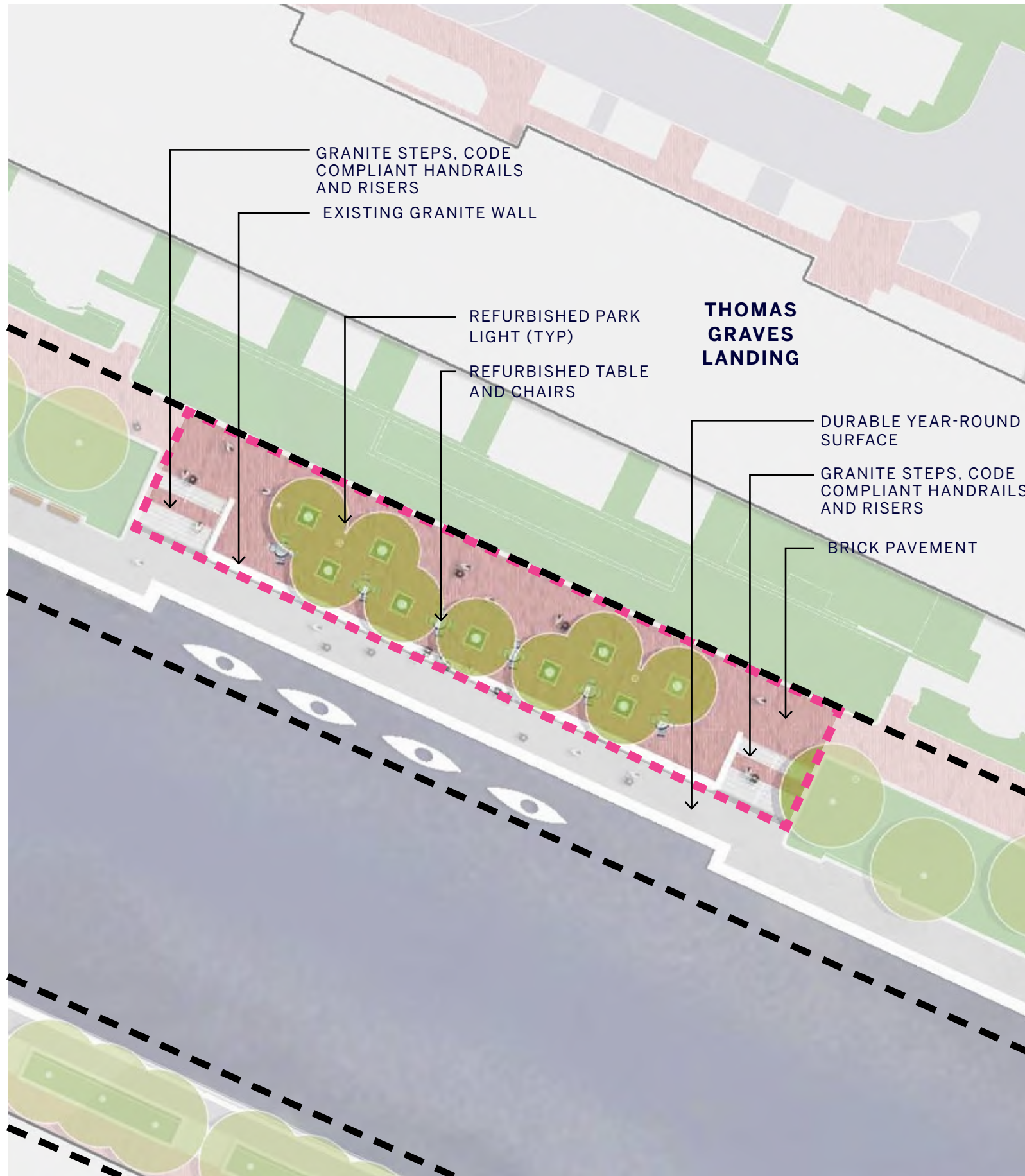


Exhibit 22







DESIGN REVIEW

CANAL PARK

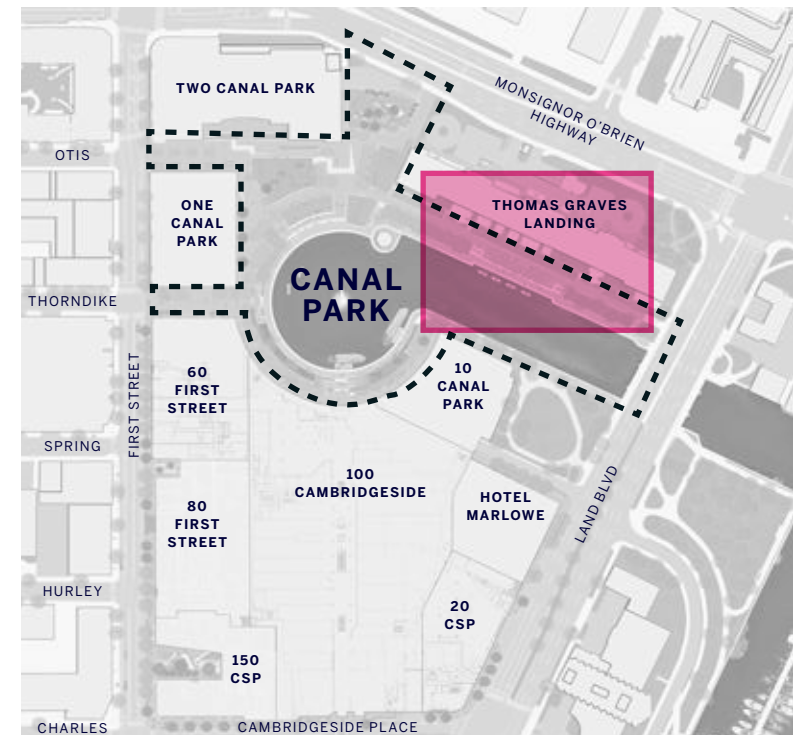
PROPOSED PLAN

AREA FIVE: THOMAS GRAVES LANDING

Legend

-  PROJECT SITE
-  EXISTING TREE
-  NEW TREE
-  BRICK WALKWAYS REFURBISHED

Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)

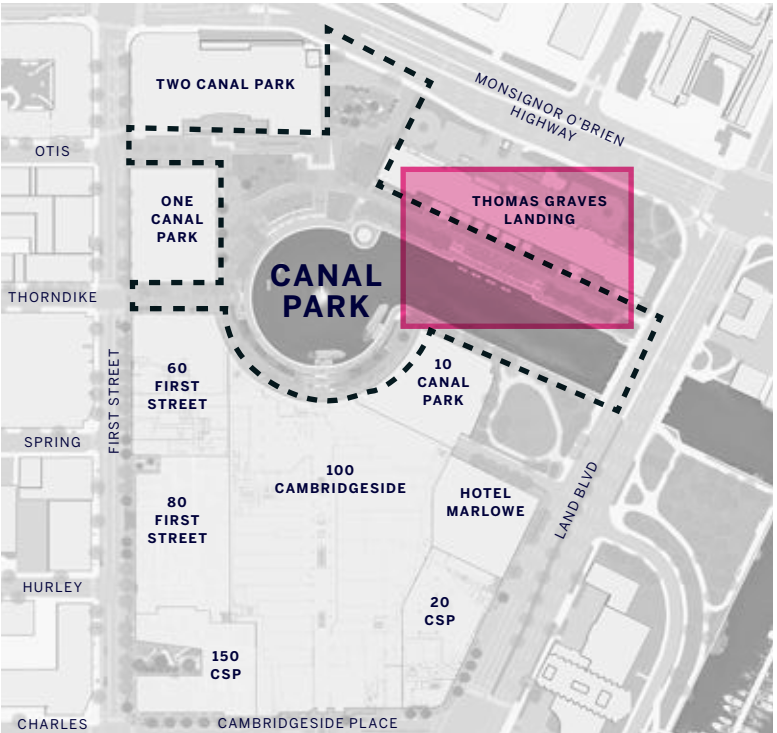
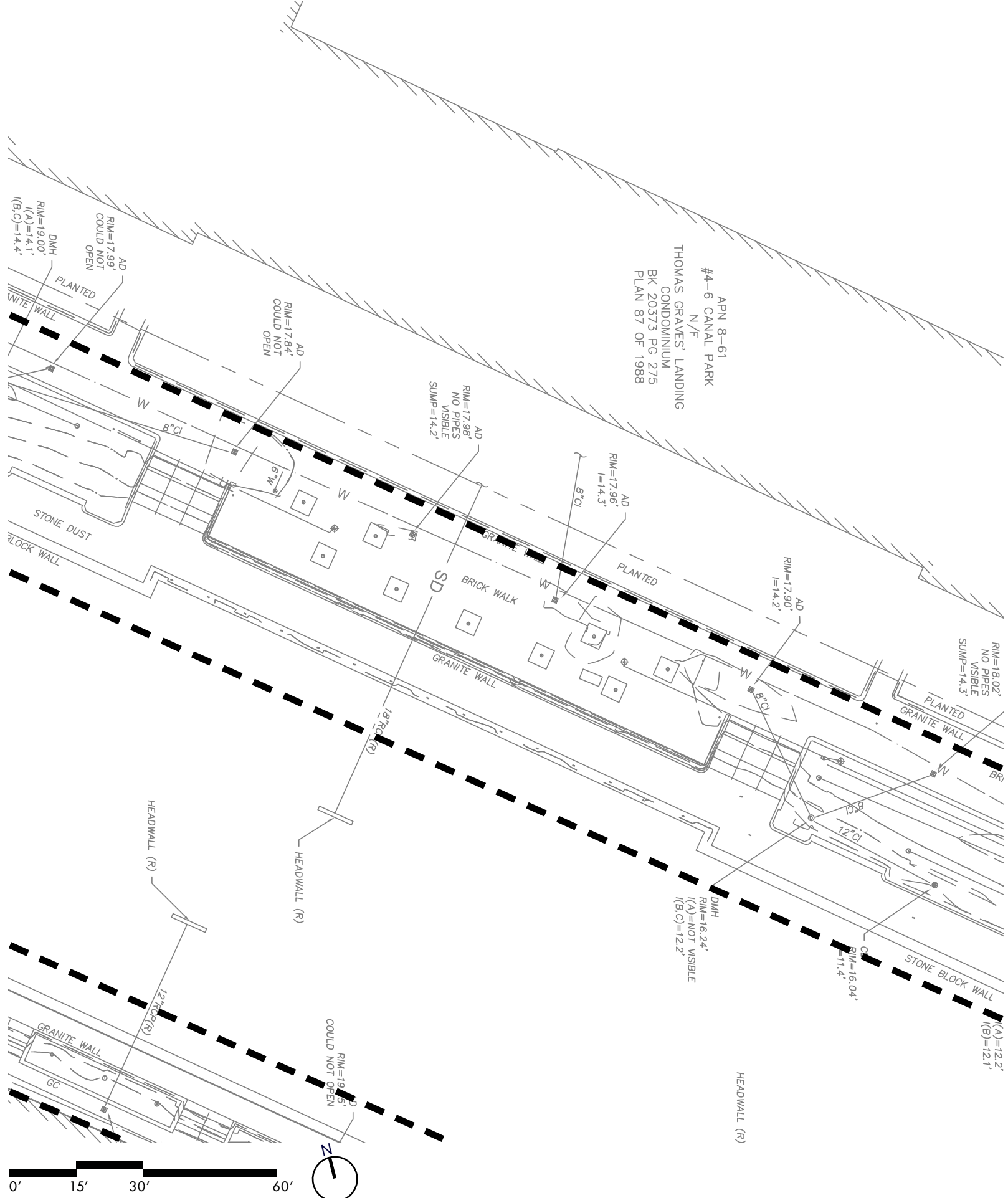


DESIGN REVIEW

CANAL PARK

EXISTING CONDITIONS PLAN

AREA FIVE: THOMAS GRAVES LANDING



NEW ENGLAND
DEVELOPMENT

ELKUS | MANFREDI
ARCHITECTS



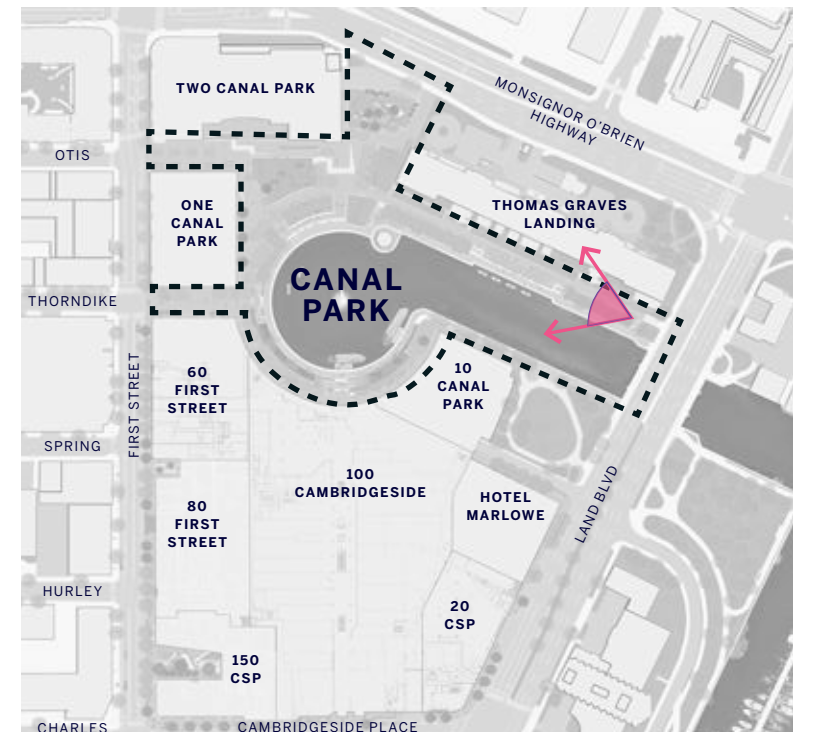
Exhibit 24

DESIGN REVIEW CANAL PARK

EXISTING CONDITIONS AREA FIVE: THOMAS GRAVES LANDING



- A** EXISTING STEPS AND HANDRAIL (NON-COMPLIANT)
- B** EXISTING GRANITE WALL TO REMAIN
- C** EXISTING BRICK WALKWAYS
- D** EXISTING STONE DUST CANAL WALKWAY
- E** EXISTING TREE TO REMAIN
- F** EXISTING MAST LIGHT
- G** EXISTING LIGHT TO REMAIN



DESIGN REVIEW

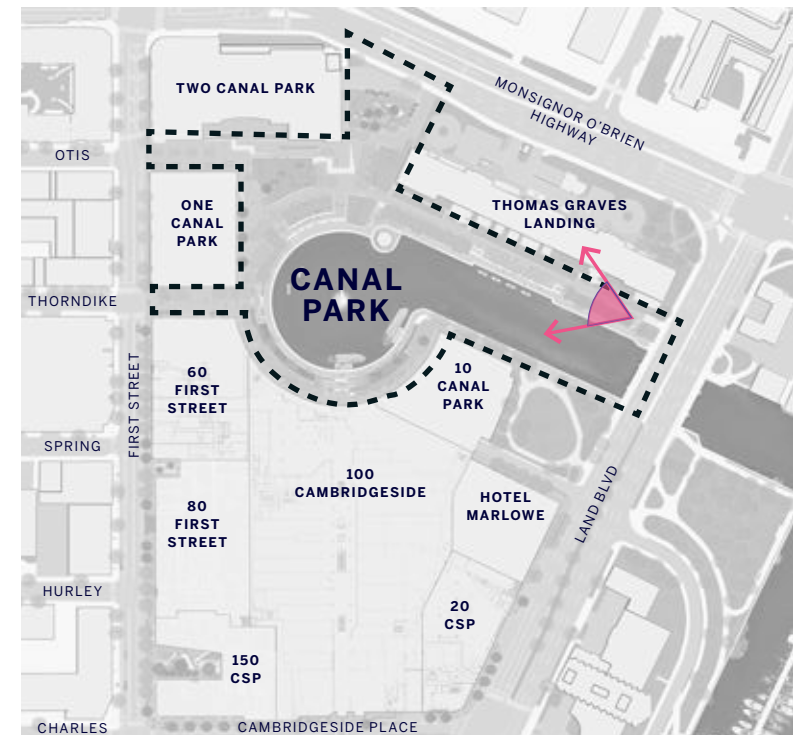
CANAL PARK

PROPOSED IMPROVEMENTS

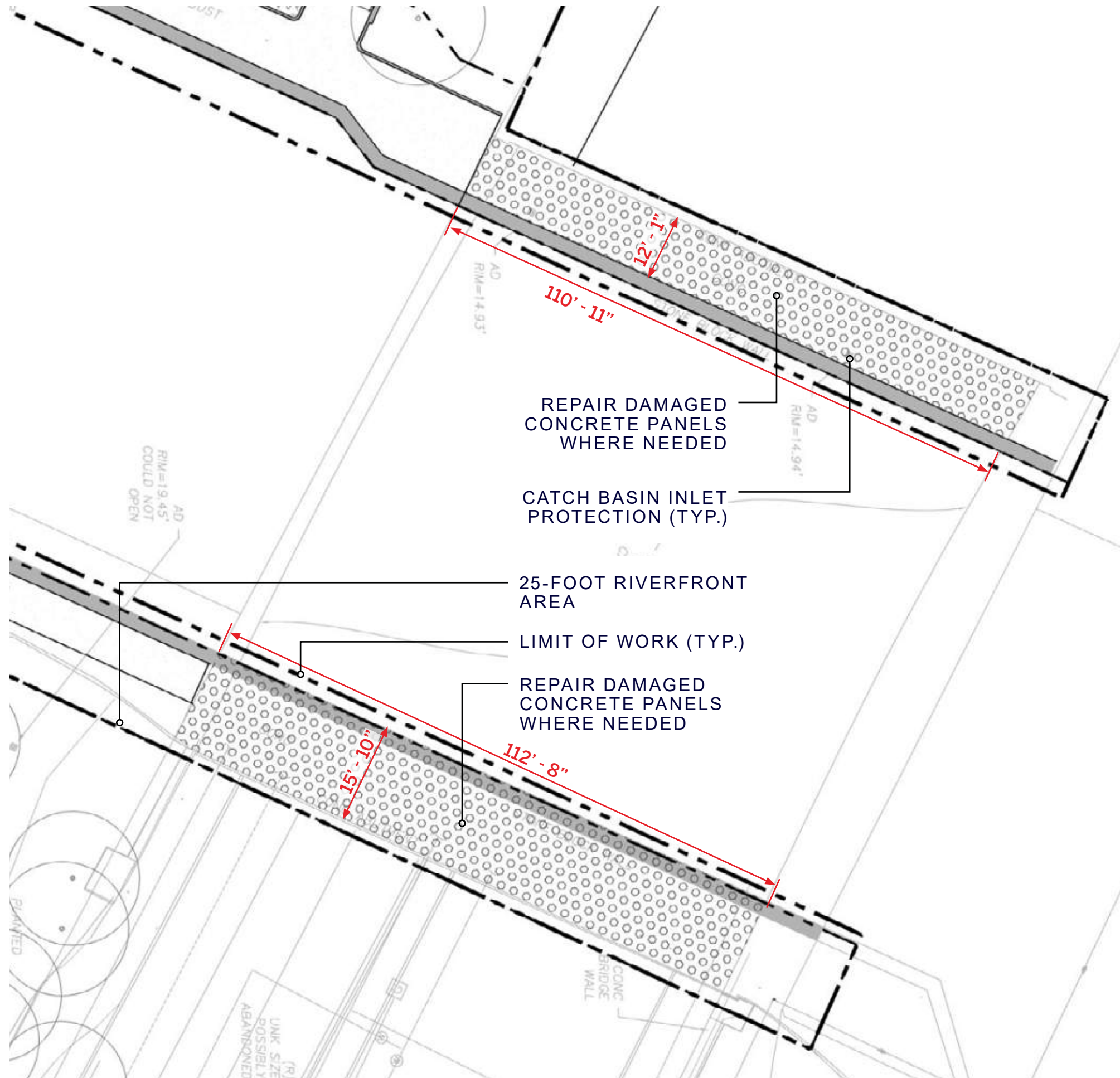
AREA FIVE: THOMAS GRAVES LANDING



- A** GRANITE STEPS, CODE COMPLIANT HANDRAILS AND RISERS
- B** EXISTING GRANITE WALL TO REMAIN
- C** REFURBISHED TABLES AND CHAIRS (FIXED, NON-MOVEABLE)
- D** BRICK WALKWAYS REFURBISHED WHERE NECESSARY
- E** DURABLE YEAR-ROUND SURFACE
- F** CODE COMPLIANT GUARDRAIL
- G** KAYAK TETHER



DESIGN REVIEW
CANAL PARK
 PROPOSED SITE PLAN
 AREA SIX: BRIDGE



NORTH BRIDGE UNDERPASS

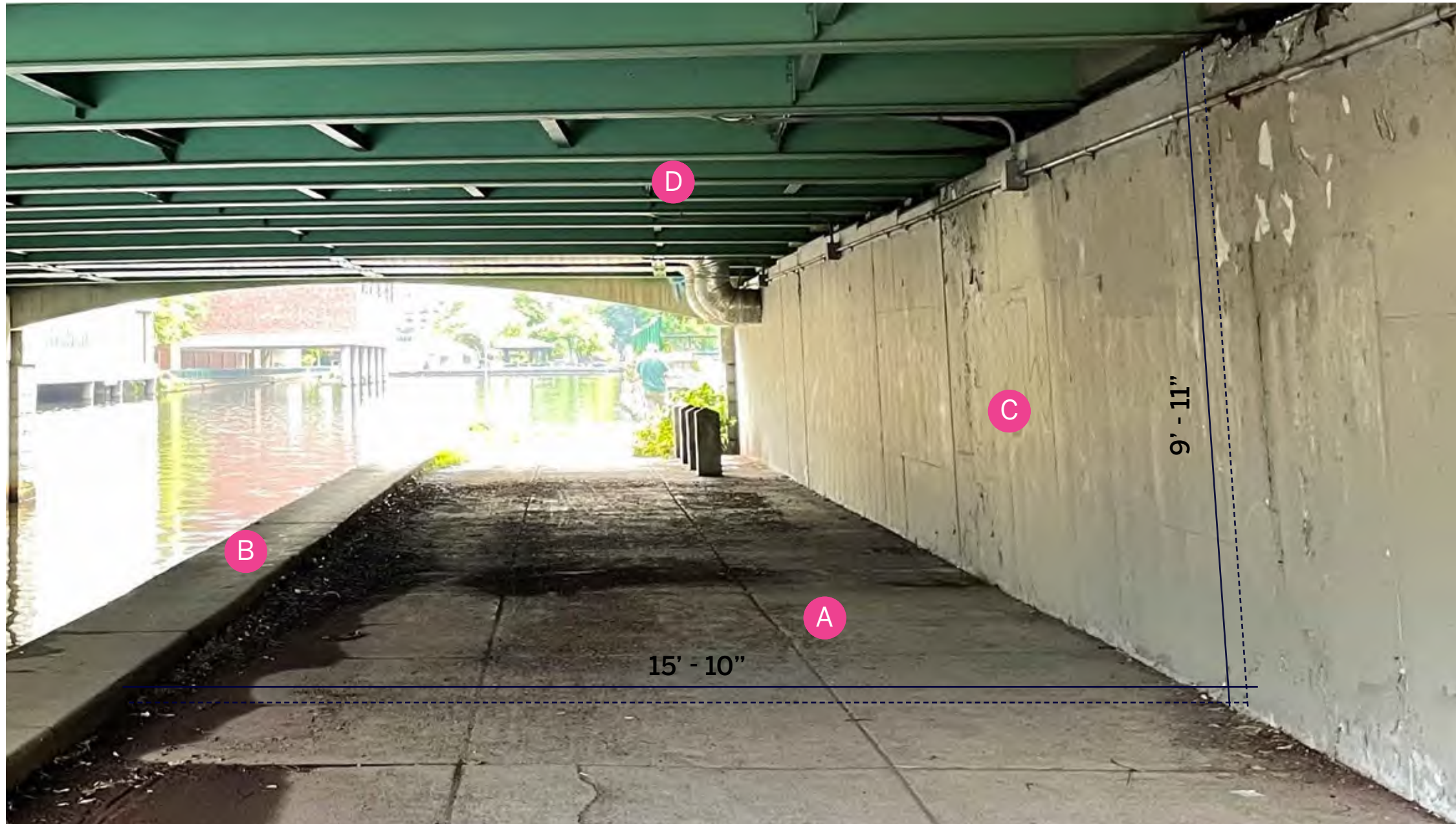


SOUTH BRIDGE UNDERPASS

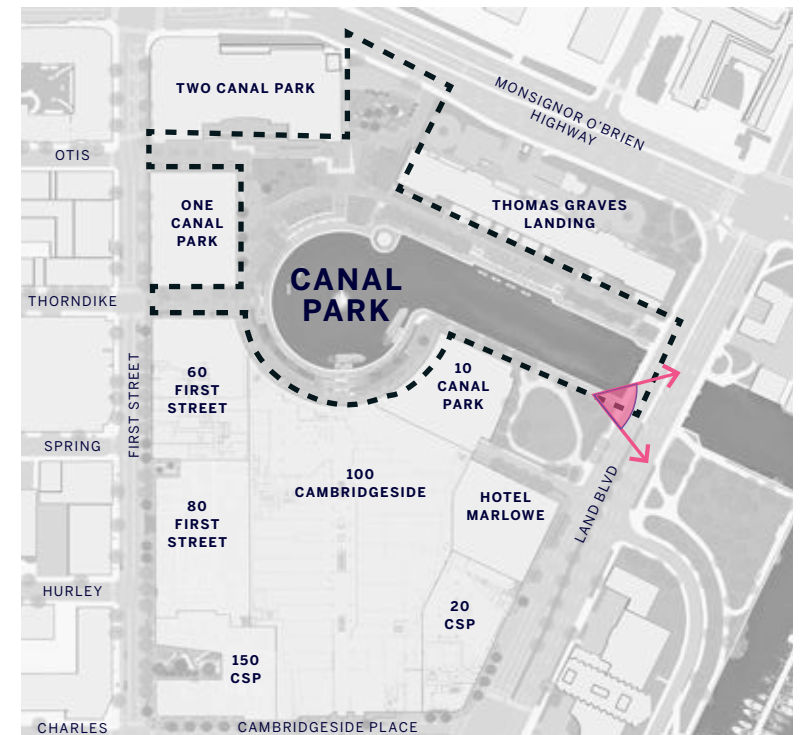


Exhibit 27

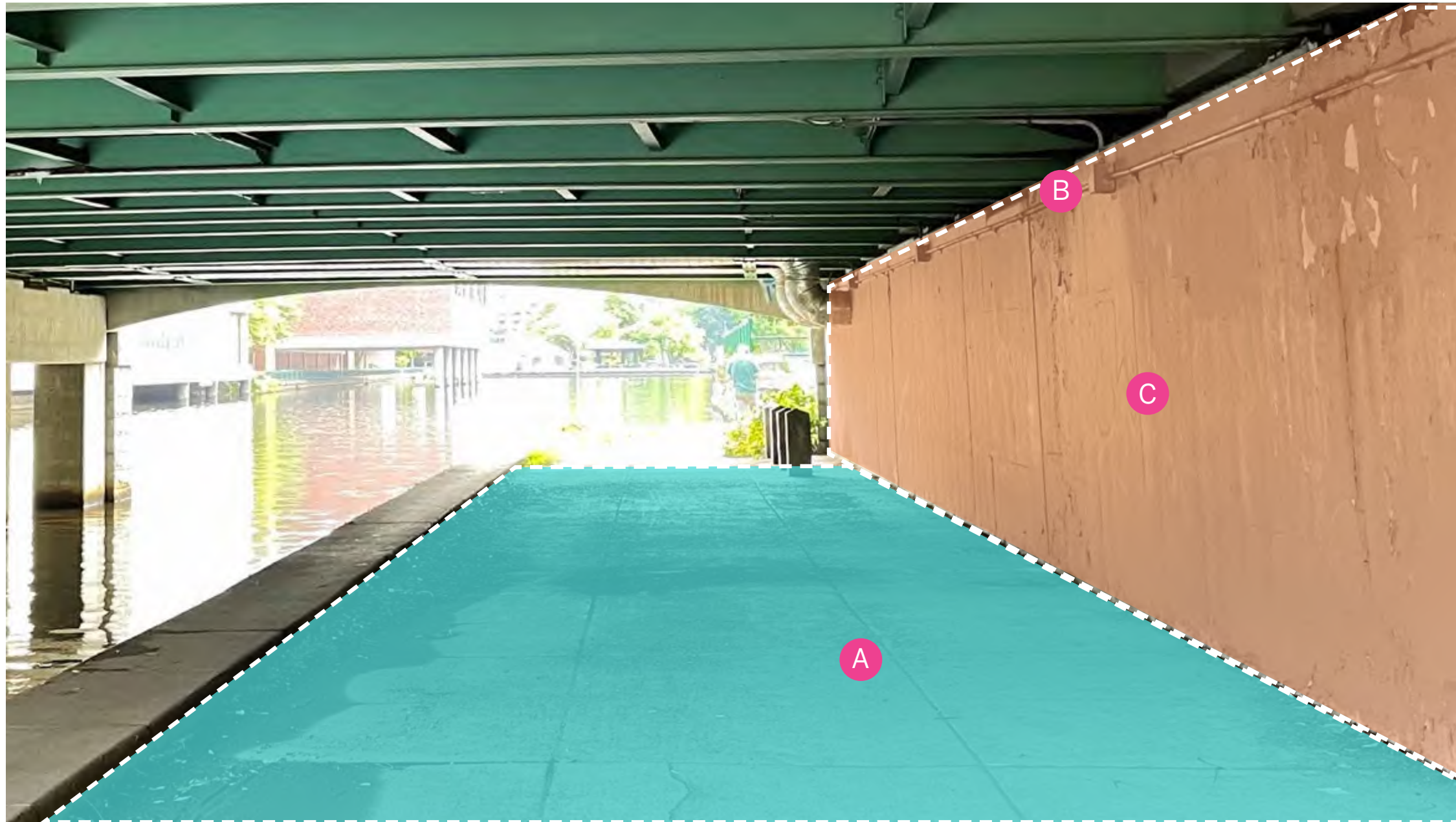
DESIGN REVIEW
CANAL PARK
 EXISTING CONDITIONS
 AREA SIX: BRIDGE -
 ONLY SOUTH BANK ILLUSTRATED



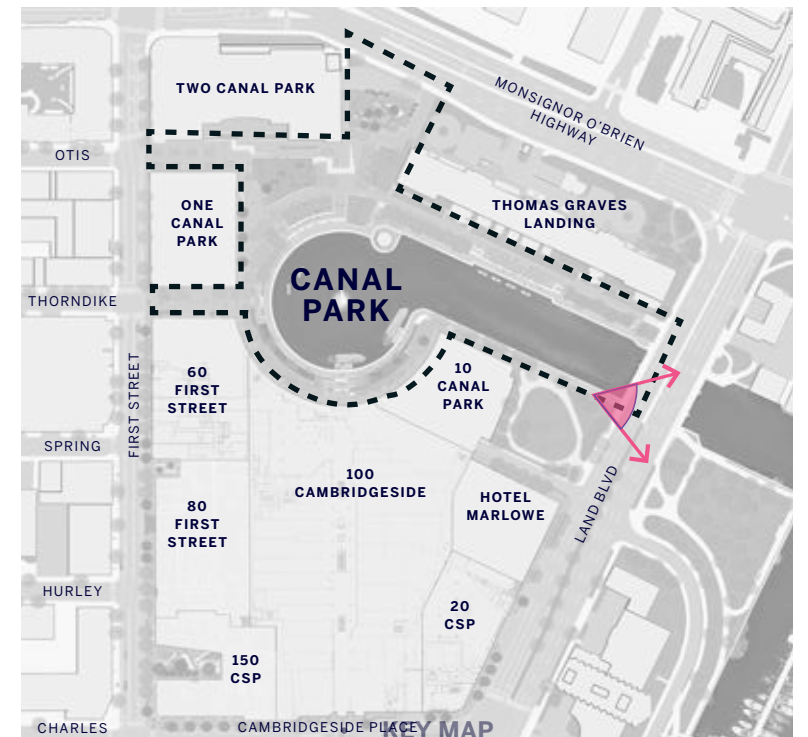
- A** EXISTING CONCRETE PAVEMENT
- B** EXISTING CANAL WALL
- C** EXISTING BRIDGE EMBANKMENT WALL
- D** EXISTING BRIDGE STEEL



DESIGN REVIEW
CANAL PARK
 PROPOSED IMPROVEMENTS
 AREA SIX: BRIDGE -
 ONLY SOUTH BANK ILLUSTRATED

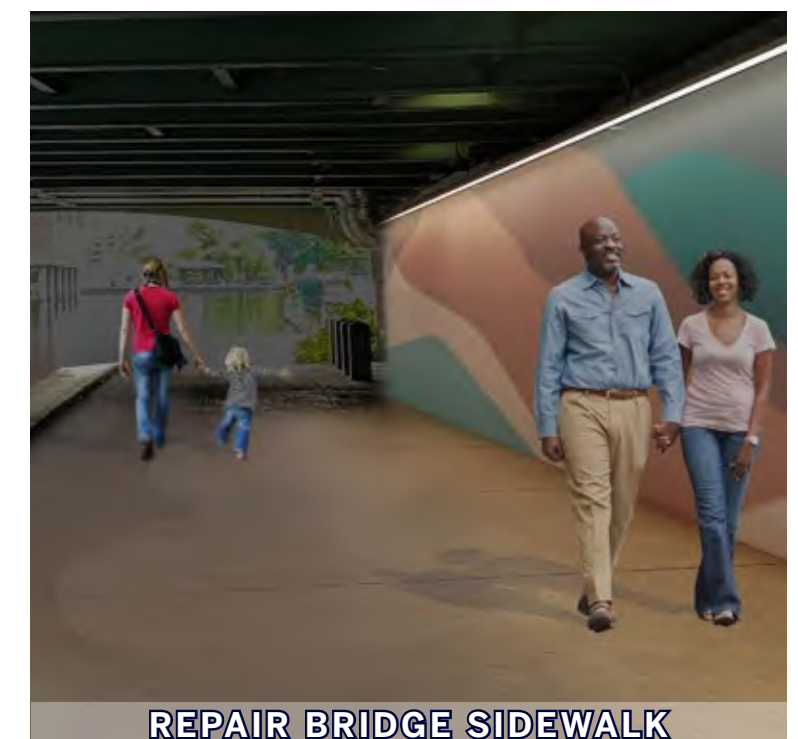
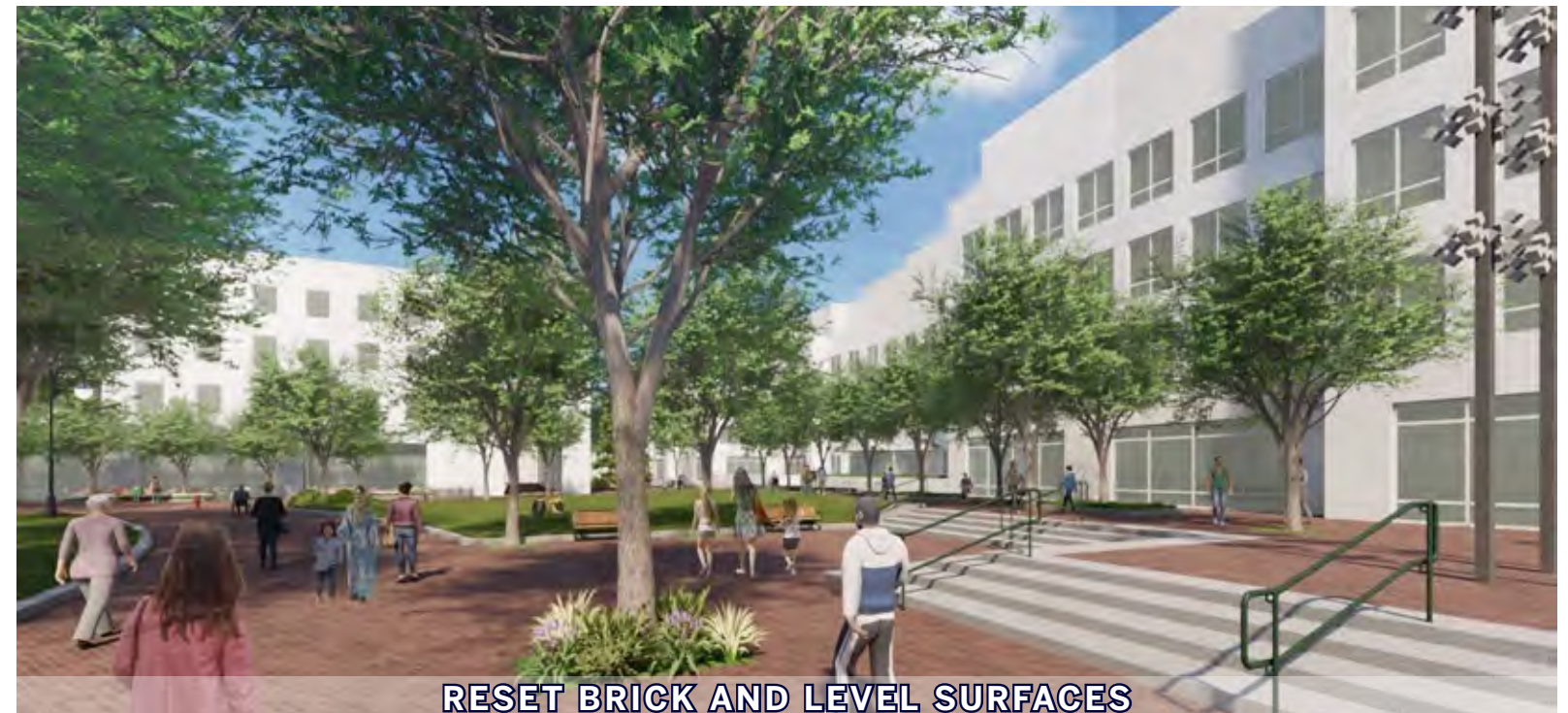


- A** CLEAN AND REPAIR/REPLACE CONCRETE
- B** NEW LIGHTING
- C** CLEAN, REPAIR, AND PREPARE TO RECEIVE PAINT OR OTHER ART TREATMENT



DESIGN REVIEW
CANAL PARK
SURFACES AND DRAINAGE
NARRATIVE

- Reset **existing brick** to reduce trip hazards
- Regrade lawn to provide a **level surface** for activities
- **Durable year-round surface**
 - • Provides 4 season use
 - Improved ADA accessibility
 - Increased durability
 - Less annual maintenance
 - Plowable
- Repair damaged **bridge sidewalk panels** where necessary

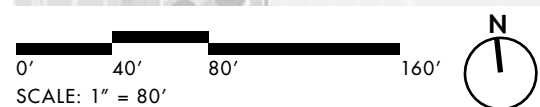
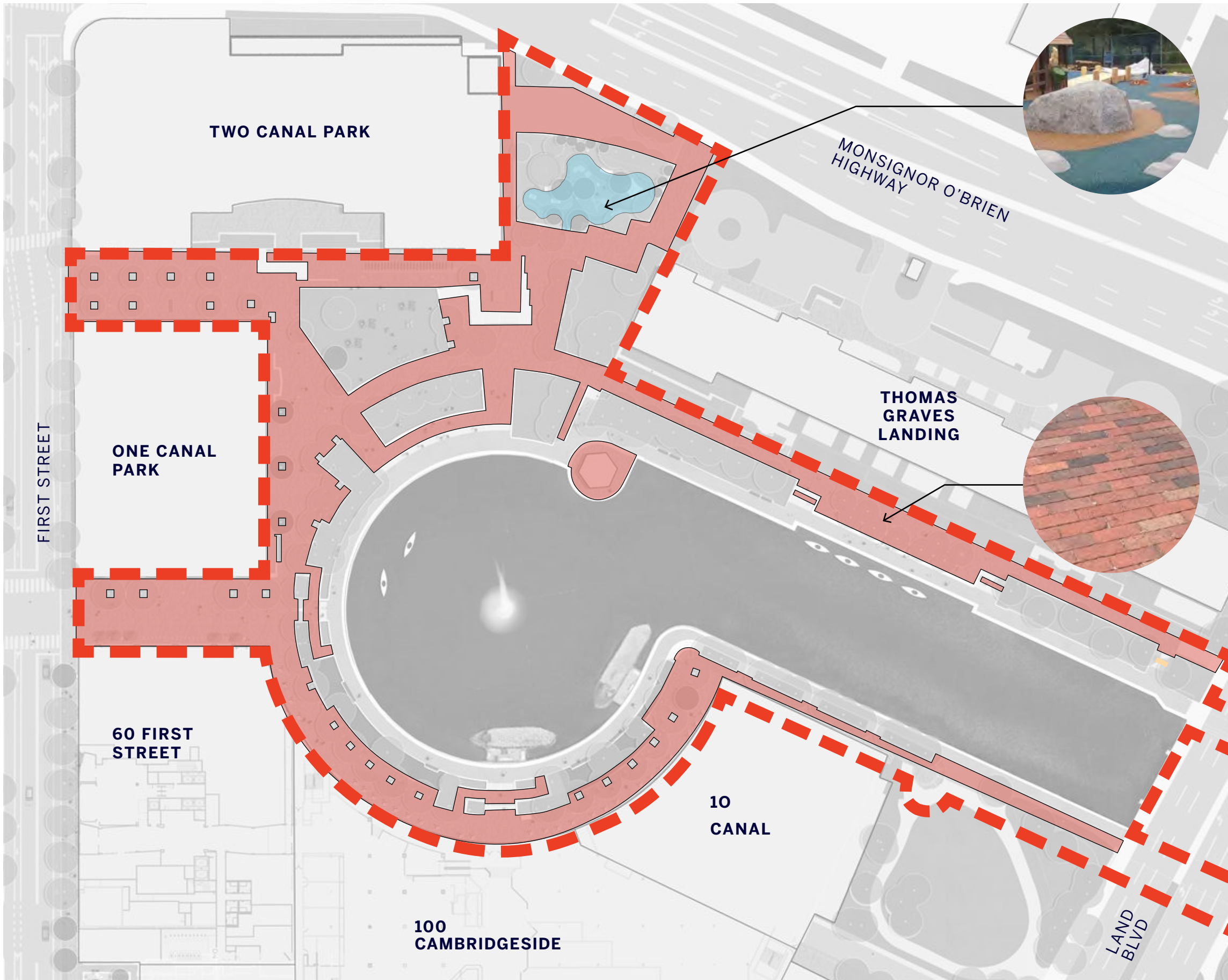


DESIGN REVIEW CANAL PARK

SURFACES
UPPER CANAL WALK

Legend

-  PROJECT SITE
-  EXISTING BRICK PAVEMENT TO BE RESET OR REFURBISH AS REQUIRED
-  SAFETY SURFACE NEW



DESIGN REVIEW

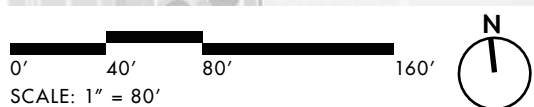
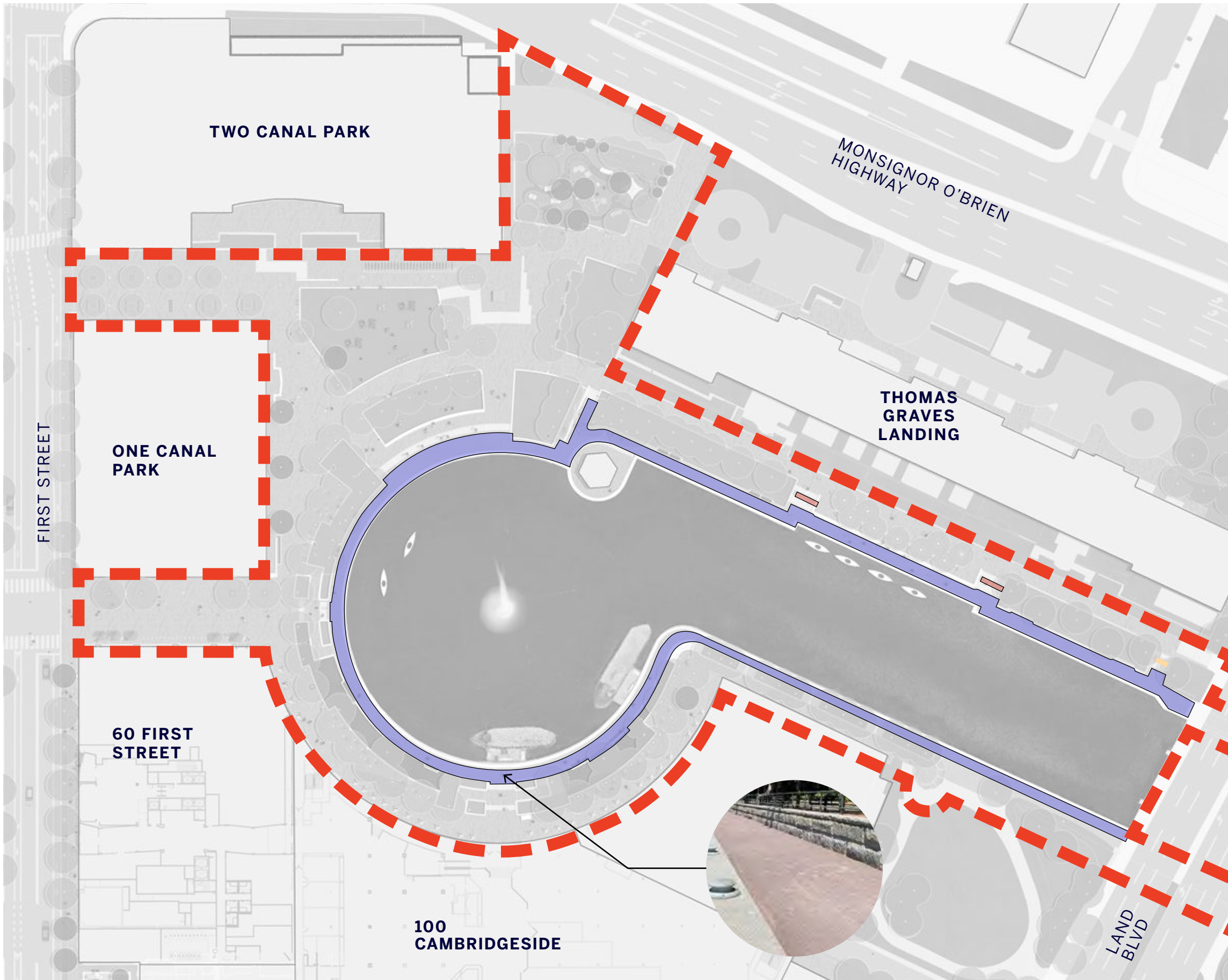
CANAL PARK

SURFACES

Legend

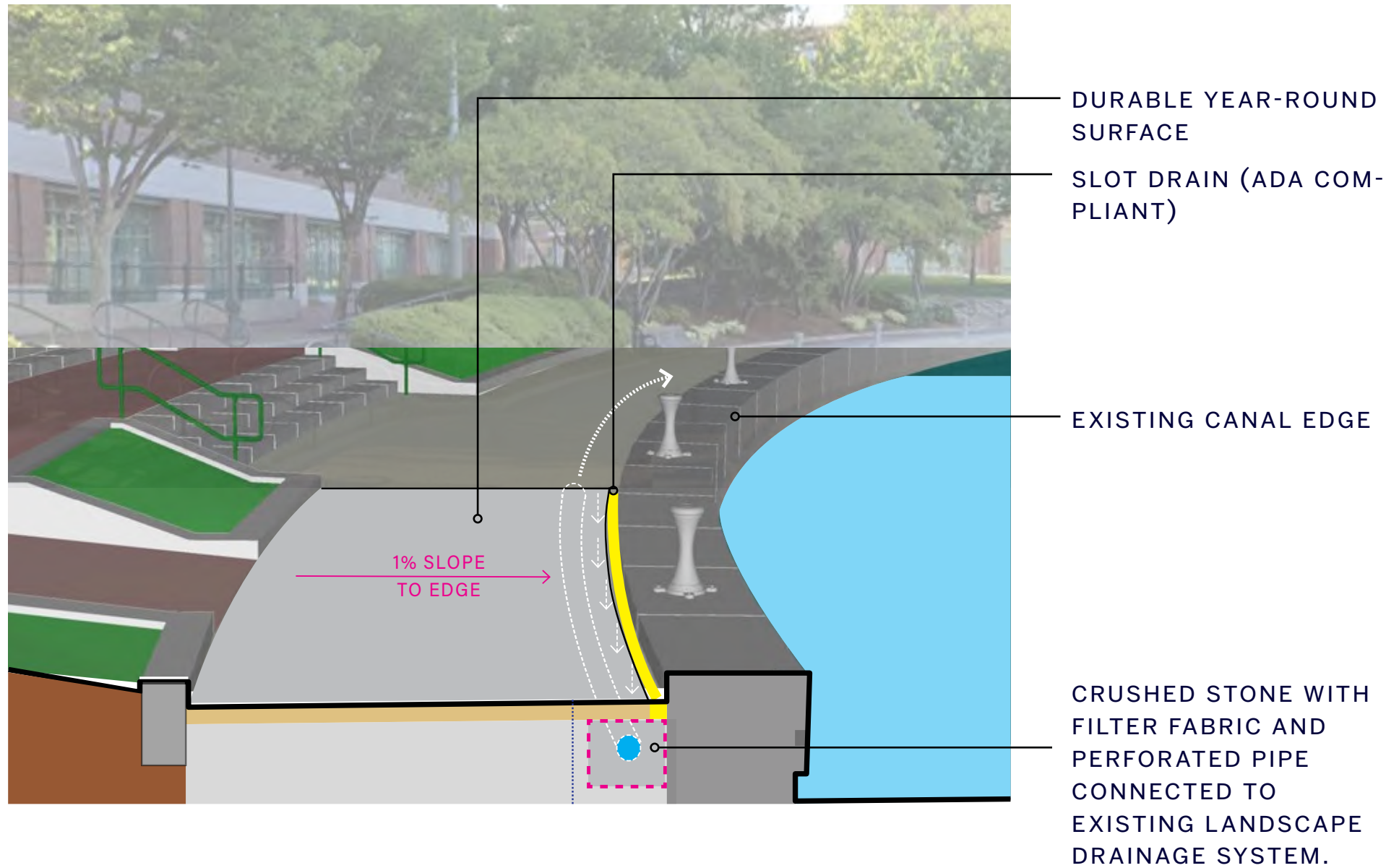
 PROJECT SITE

 EXISTING STONE DUST TO BE REPLACED WITH DURABLE YEAR-ROUND SURFACE



PROPOSED LOWER CANAL SURFACE SECTION

DESIGN REVIEW CANAL PARK SURFACES AND DRAINAGE LOWER CANAL WALK DETAILS



DESIGN REVIEW
CANAL PARK
FURNISHINGS AND FIXTURES
NARRATIVE

- Refurbish the **existing furniture, railings and lighting** where possible
- Integrate new work seamlessly into the **existing design language**
- Retain and repair **existing seating with backs**



DESIGN REVIEW

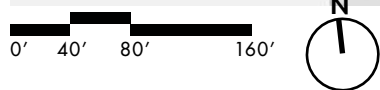
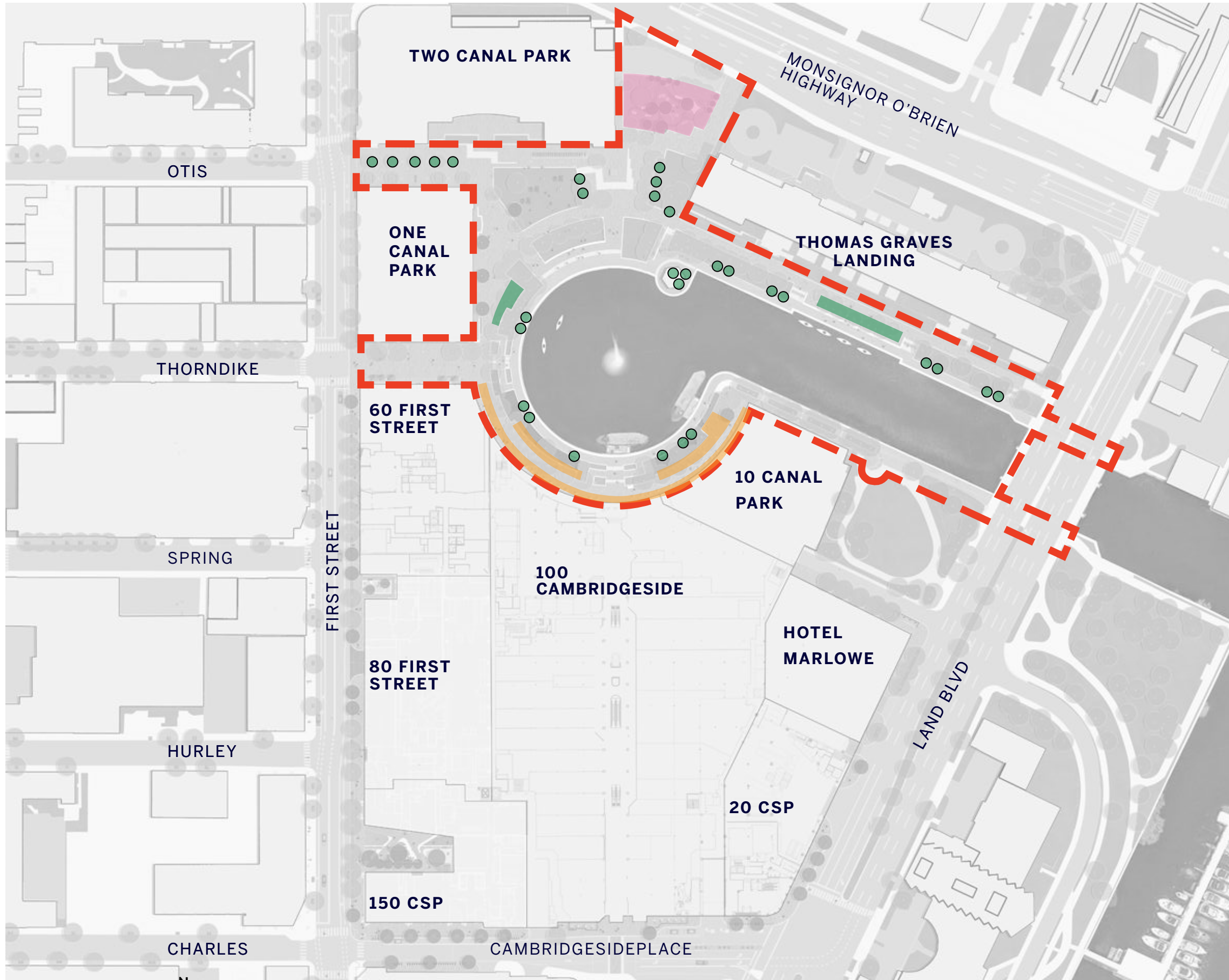
CANAL PARK

FURNISHINGS AND FIXTURES

SEATING

Legend

- PROJECT SITE
- REFURBISHED EXISTING BENCH WITH BACK
- REFURBISHED TABLES AND CHAIRS
- PROPOSED TABLES AND CHAIRS
- PROPOSED BENCHES



DESIGN REVIEW
CANAL PARK
FURNISHINGS AND FIXTURES
PROPOSED

**EXISTING FURNISHINGS TO BE
REFURBISHED**

EXISTING BENCH



WATER FOUNTAIN



TRASH RECEPTACLE



TABLES AND CHAIRS



**PROPOSED FURNISHINGS (PRIMARILY
NEAR THE MALL)**

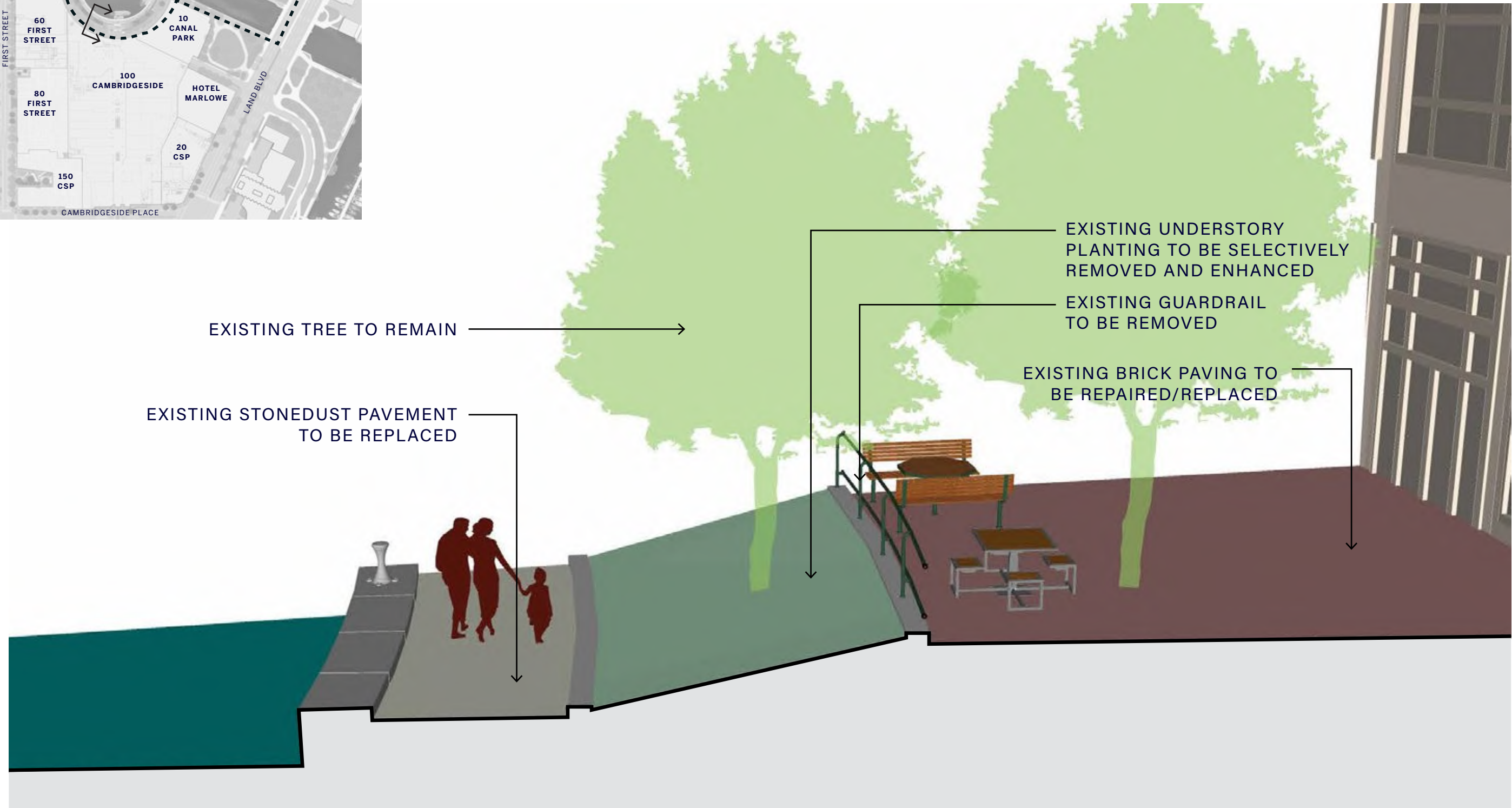
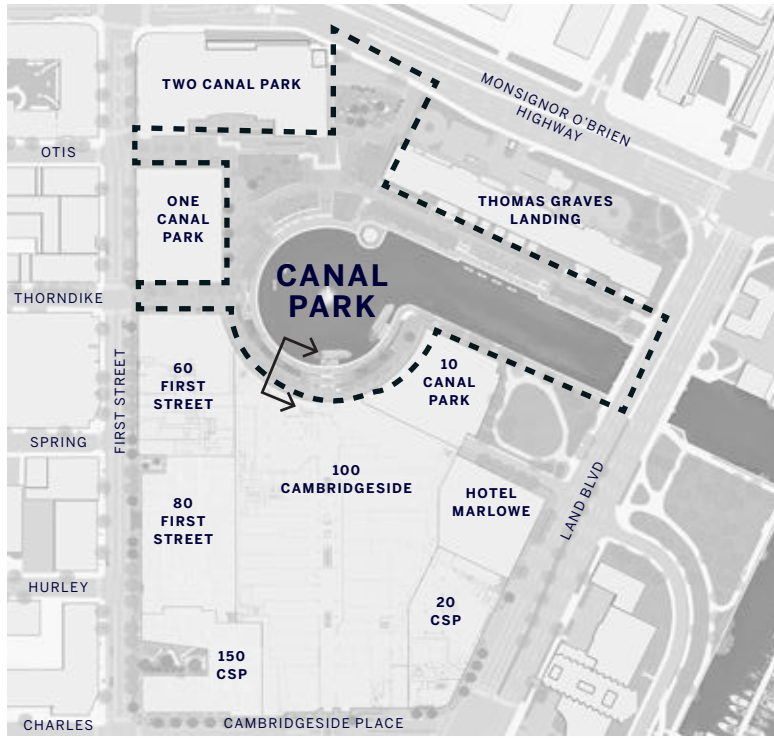
TABLE/CHAIR AT
MALL EDGE



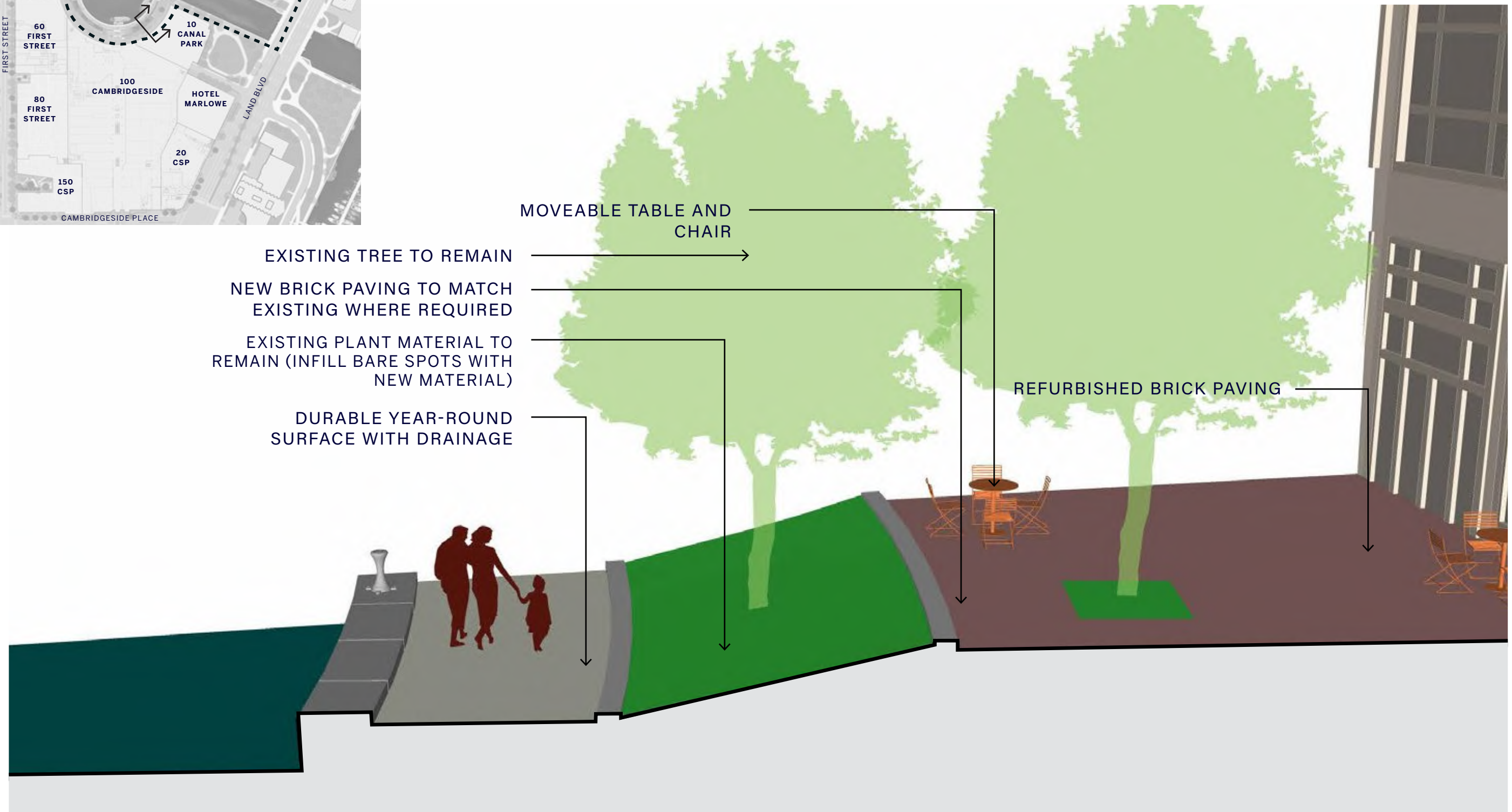
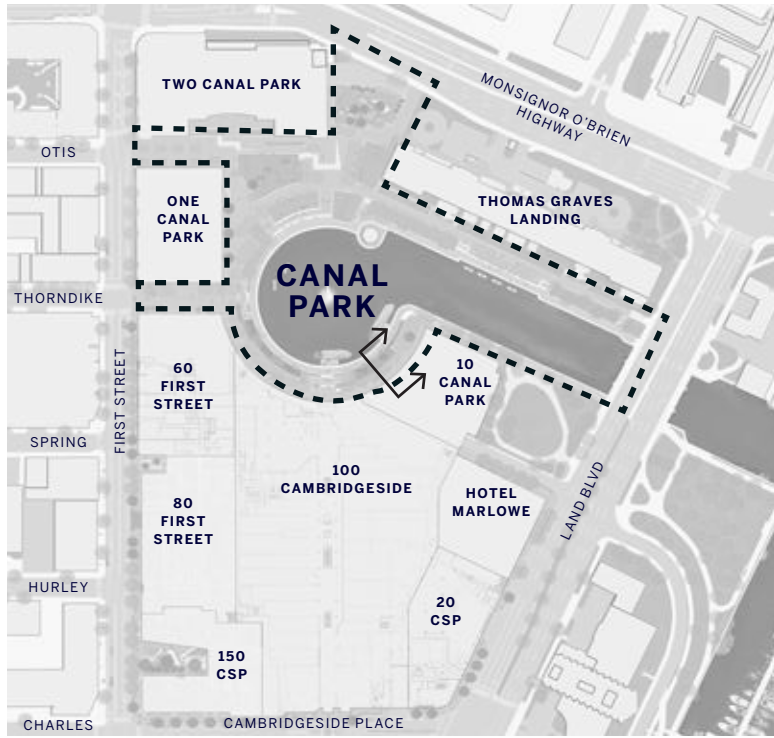
NEW HANDRAIL AND
GUARDRAILS WHERE REQUIRED



DESIGN REVIEW
CANAL PARK
 FURNISHINGS AND FIXTURES
 EXISTING SEATING AT MALL
 EDGE

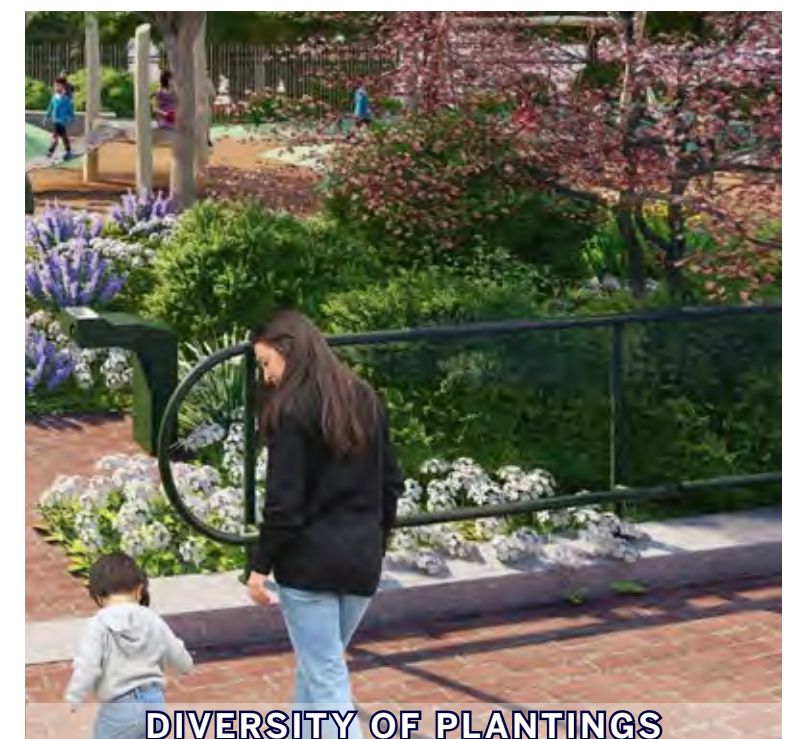
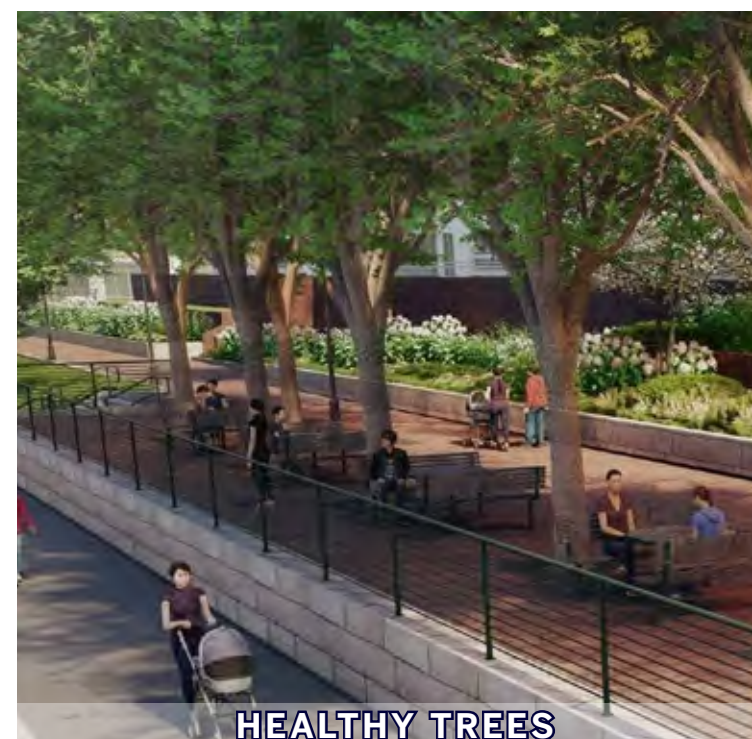


DESIGN REVIEW
CANAL PARK
 FURNISHINGS AND FIXTURES
 PROPOSED SEATING AT MALL
 EDGE



DESIGN REVIEW
CANAL PARK
LANDSCAPE
NARRATIVE

- Prune existing trees and overgrown shrubs while maintaining existing evergreen plantings
- Work with the City Arborist to replace failed trees, shrubs and other plantings
- Improve soils for the existing trees and provide pruning of trees at the Thomas Graves Landing terrace
- Introduce seasonal plantings
- Maintain a diversity of plantings, including evergreens, throughout the park

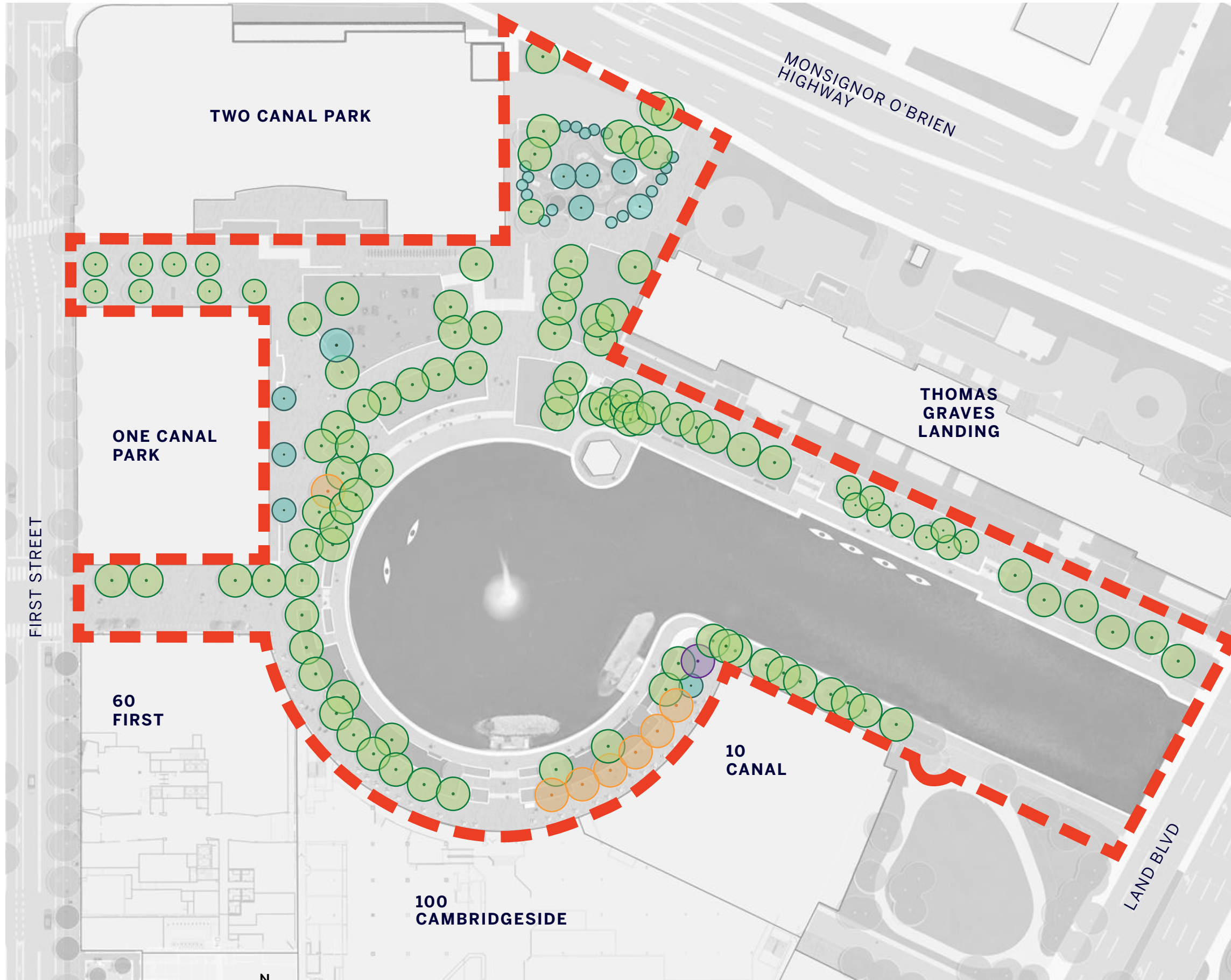


DESIGN REVIEW CANAL PARK

LANDSCAPE TREE PLAN

Legend

-  PROJECT SITE
-  NEW TREES
-  EXISTING TREES
-  EXISTING TREES TO BE REPLACED
-  EXISTING TREES TO MONITOR



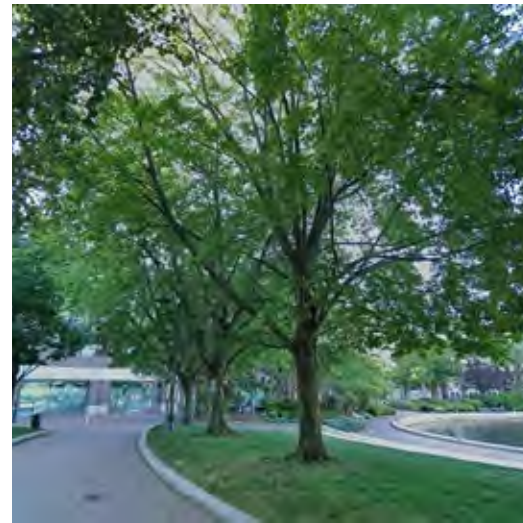
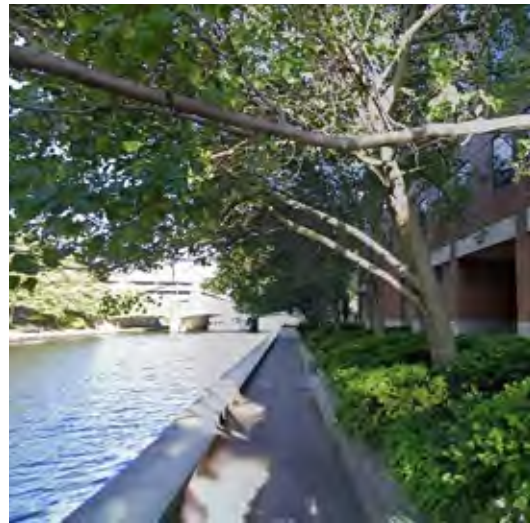
NEW ENGLAND
DEVELOPMENT

ELKUS | MANFREDI
ARCHITECTS



DESIGN REVIEW
CANAL PARK
LANDSCAPE
PROPOSED TREES

EXISTING TREES



PROPOSED TREES



EXISTING UNDERSTORY PLANTINGS



DESIGN REVIEW CANAL PARK LANDSCAPE PROPOSED UNDERSTORY PLANTING

SAMPLE OF PROPOSED PLANT MATERIALS



DESIGN REVIEW
CANAL PARK
LIGHTING
NARRATIVE




- Restore **existing historic lighting**
- Add new lighting throughout the park and under the bridge
- Remove the **flood lights** to reduce nuisance and glare
- Install lighting in the tree canopy to **even out the lighting** around the canal

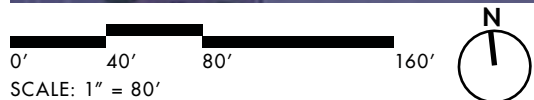
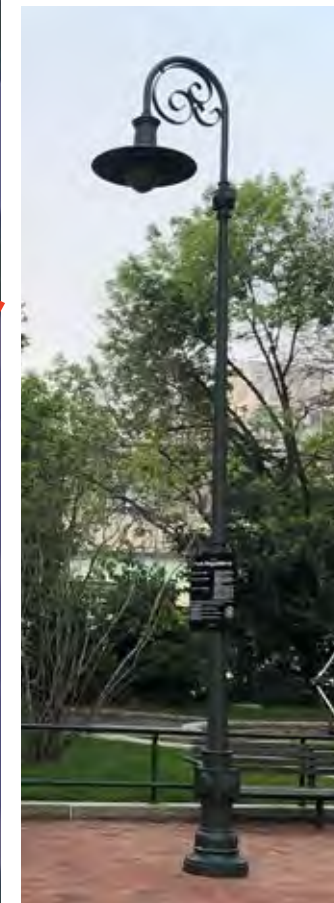
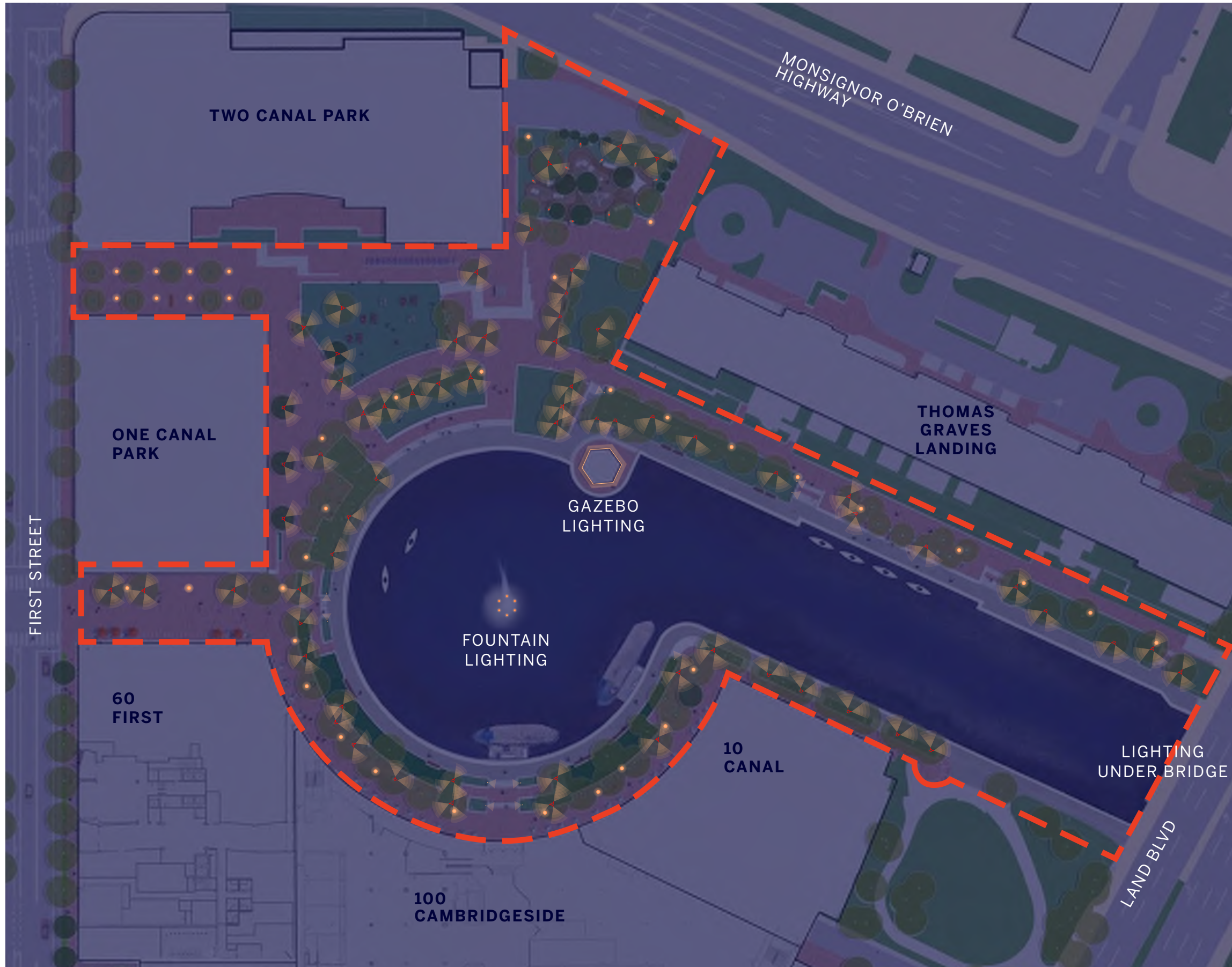


DESIGN REVIEW CANAL PARK

LIGHTING PROPOSED PLAN

Legend

-  PROJECT SITE
-  EXISTING REFURBISHED PEDESTRIAN POLE
-  TREE "MOONLIGHTING" DOWNLIGHTS IN TREE CANOPY
-  SEATING/PLANTER LIGHTING
-  BOLLARD LIGHTING AT PLAYGROUND



DESIGN REVIEW
CANAL PARK
LIGHTING
PROPOSED FIXTURES

PEDESTRIAN POLE



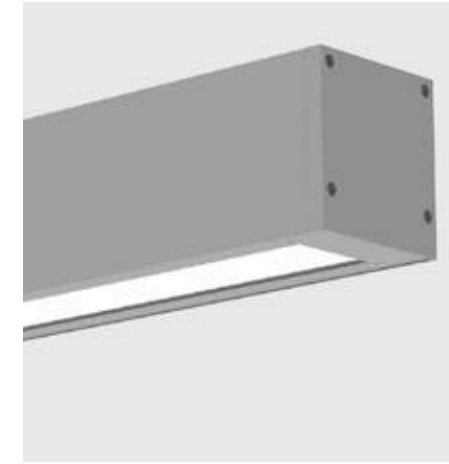
TREE MOONLIGHTING



BOLLARD



MURAL LIGHTING



FOUNTAIN LIGHTING



GAZEBO LIGHTING



DESIGN REVIEW
CANAL PARK
GRADING AND CIRCULATION
NARRATIVE

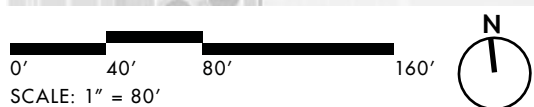
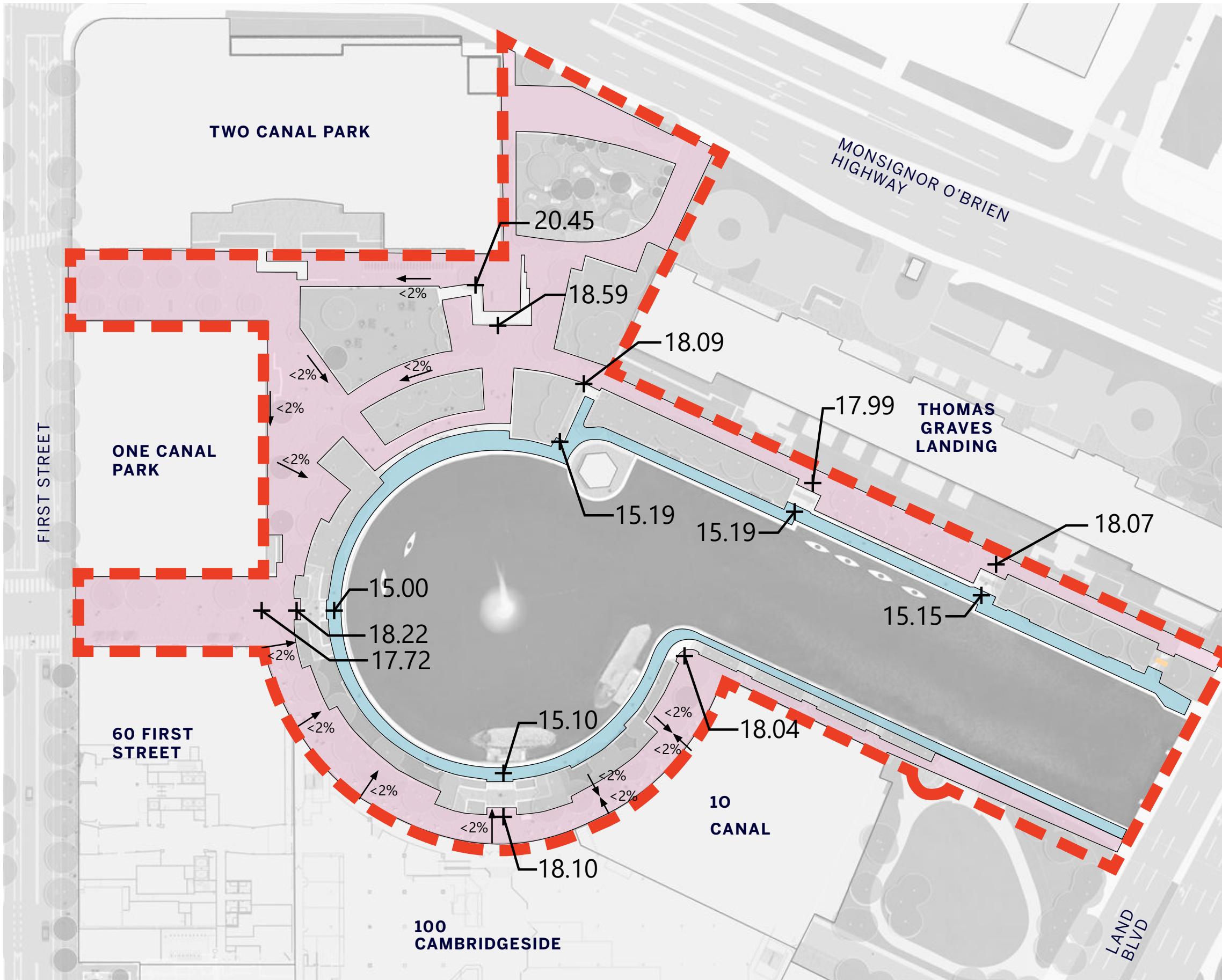
- Maintain existing seating around canal basin, **repair and refurbish** wood as needed to keep original design aesthetic
- Create **level areas** along the Canal, at the Playground and the Great Lawn to provide opportunity for activities and passive enjoyment of the park
- Rebuild ramps, railings and replace the existing stone dust path with a **durable year-round surface**



DESIGN REVIEW
CANAL PARK
 EXISTING GRADING DIAGRAM
 (EXISTING GRADES TO REMAIN)

Legend

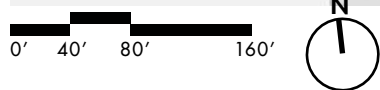
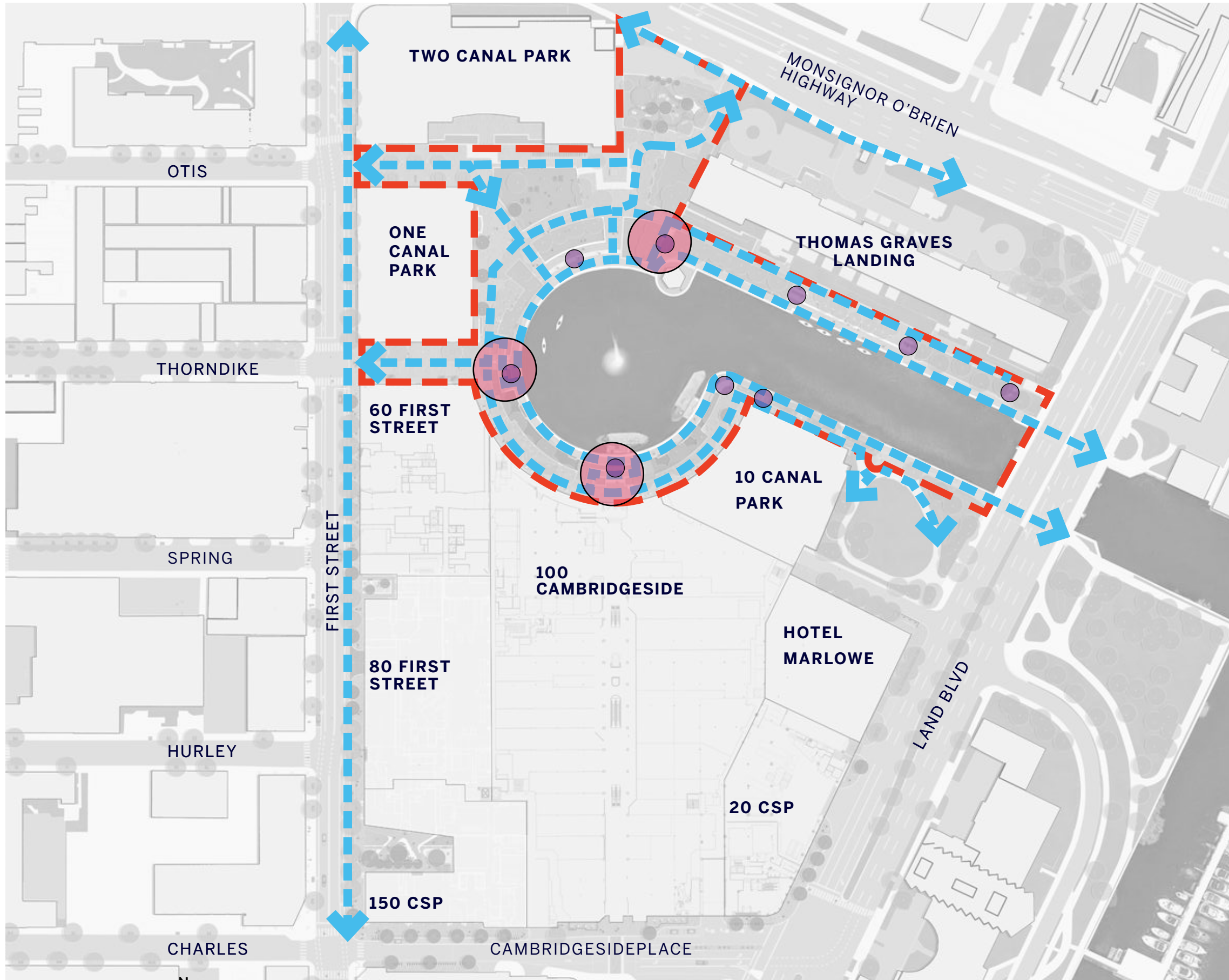
-  PROJECT SITE
-  FLAT
-  2% MAX SLOPE



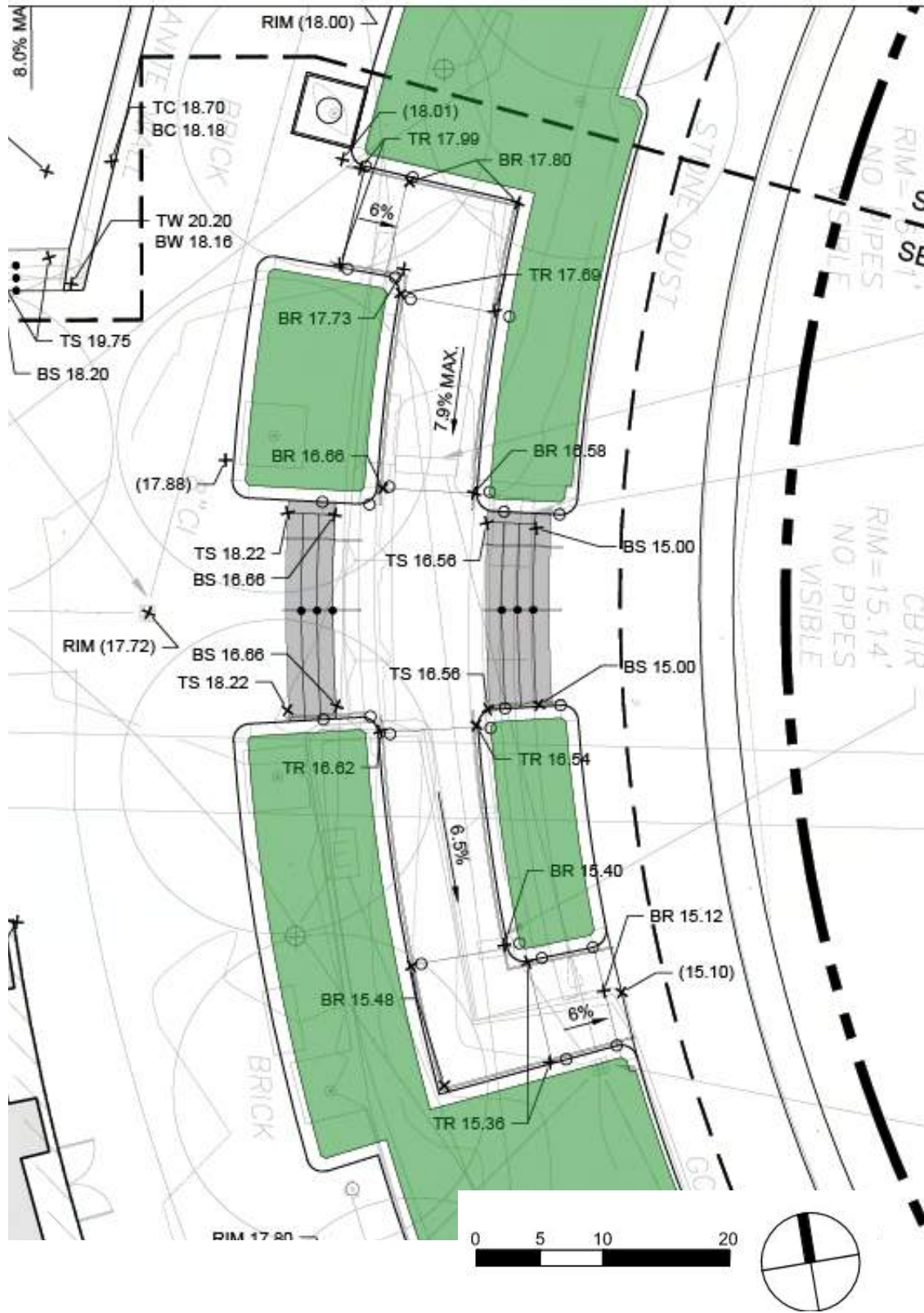
DESIGN REVIEW CANAL PARK CIRCULATION DIAGRAM

Legend

- PROJECT SITE
- ACCESSIBLE CIRCULATION
- RAMP
- STAIR

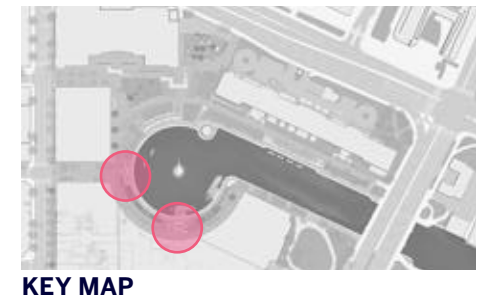


DESIGN REVIEW
CANAL PARK
 GRADING DETAIL PLANS:
 AREAS ONE AND TWO



1. MALL ACCESSIBLE RAMP AND STAIRS

2. THORNDIKE RAMP AND STAIRS



DESIGN REVIEW
CANAL PARK
 GRADING DETAIL PLANS:
 GAZEBO RAMP



3. GAZEBO STAIR AND RAMP

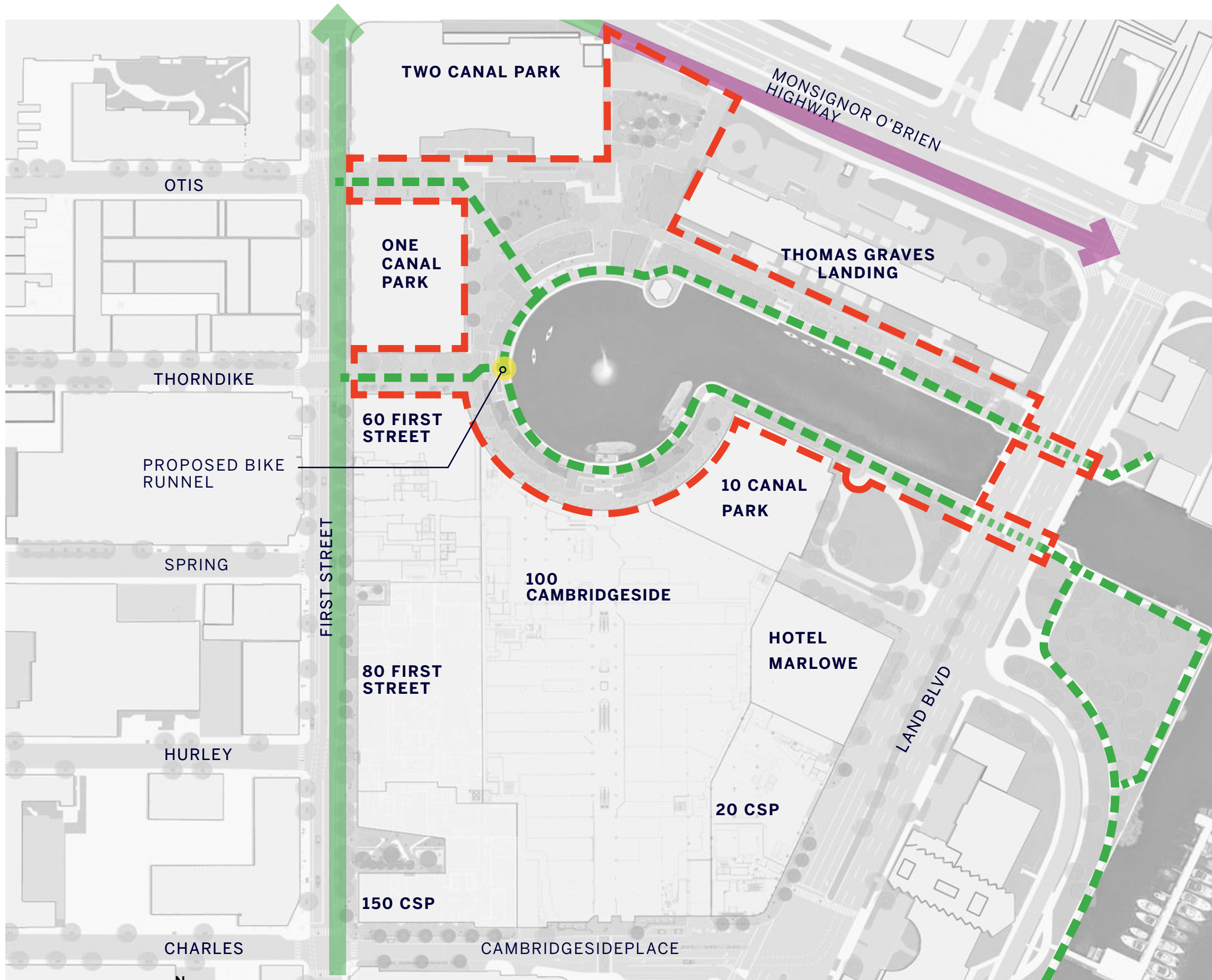


KEY MAP

DESIGN REVIEW CANAL PARK BICYCLE CIRCULATION DIAGRAM

Legend

- PROJECT SITE
- THE CAMBRIDGE BICYCLE PLAN:
"OFF-STREET PATH"
- EXISTING BIKE FACILITY
- EXISTING SEPARATED BIKE FACILITY
- BIKE RUNNEL



DESIGN REVIEW CANAL PARK BIKE PARKING PLAN

Legend

- PROJECT SITE
- PROPOSED SHORT-TERM BIKE PARKING
- EXISTING SHORT-TERM BIKE PARKING
- POTENTIAL BLUE BIKE LOCATIONS

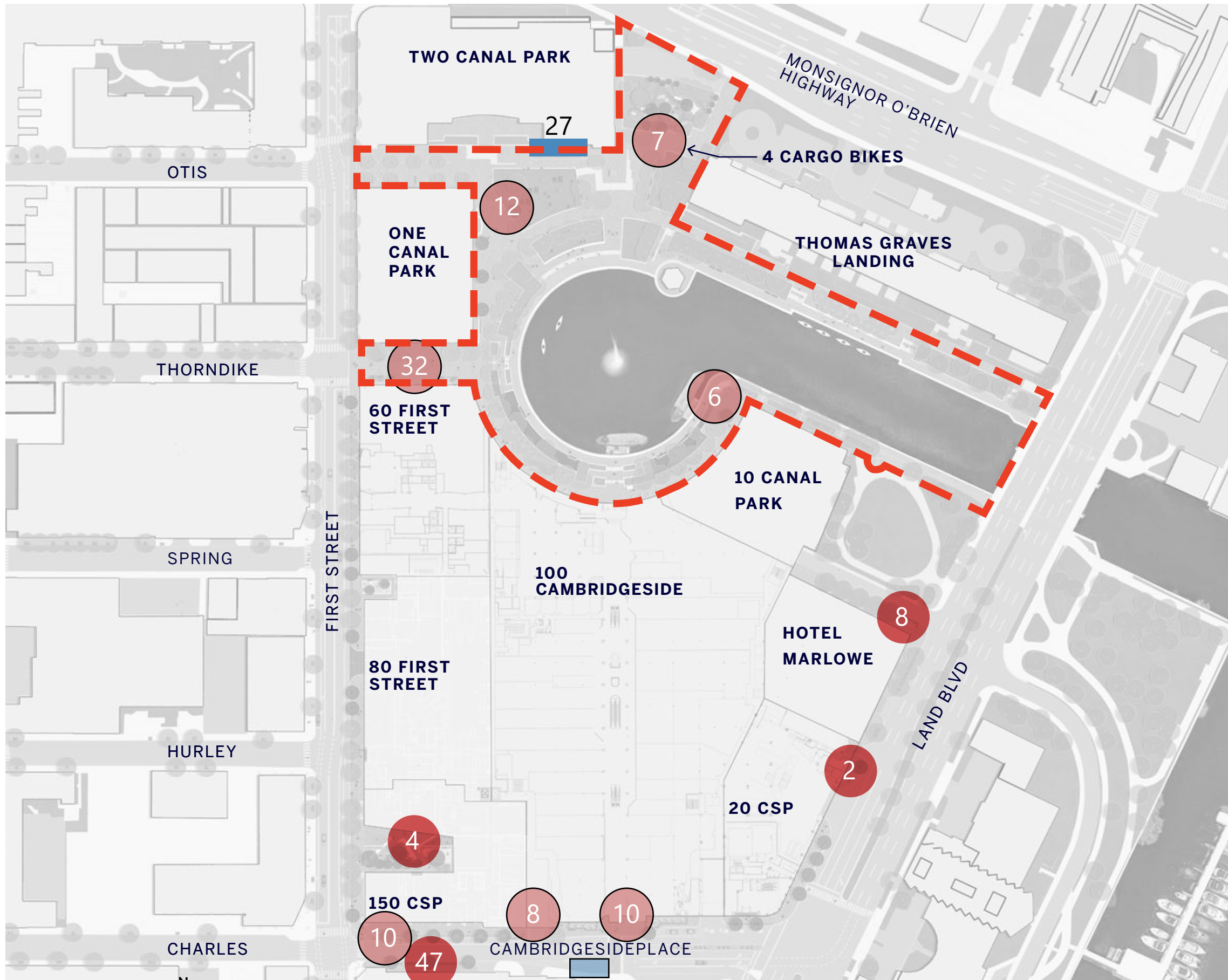
S.T. BIKE PARKING:

EXISTING = 85*
PROPOSED = 61
TOTAL = 146

BLUE BIKE PARKING:

EXISTING = 15
PROPOSED = 27
TOTAL = 42

*INCLUDING 7 RELOCATED BIKE SPACES AT PLAY AREA

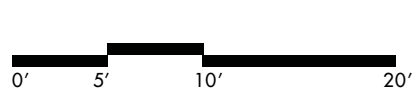
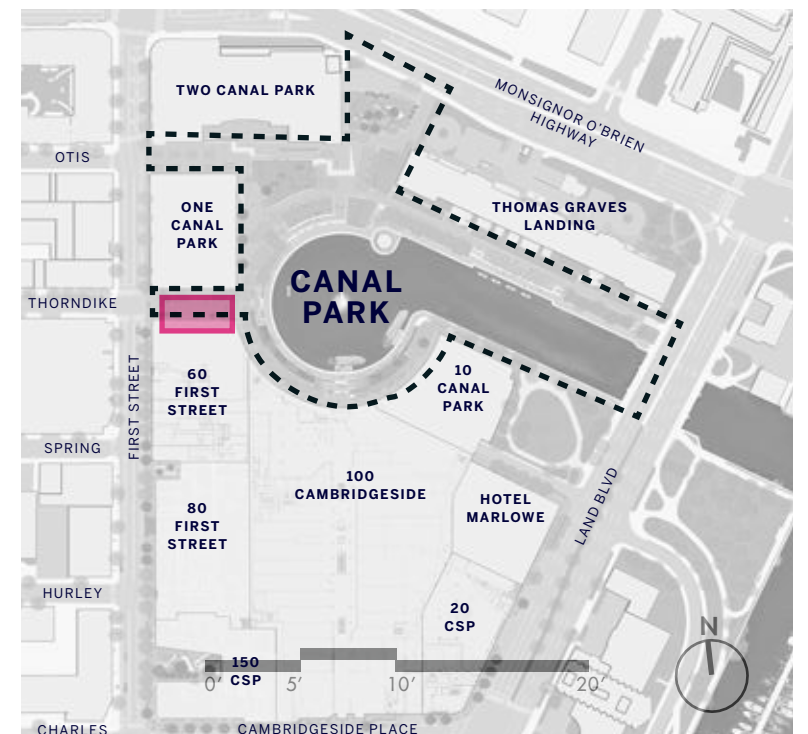
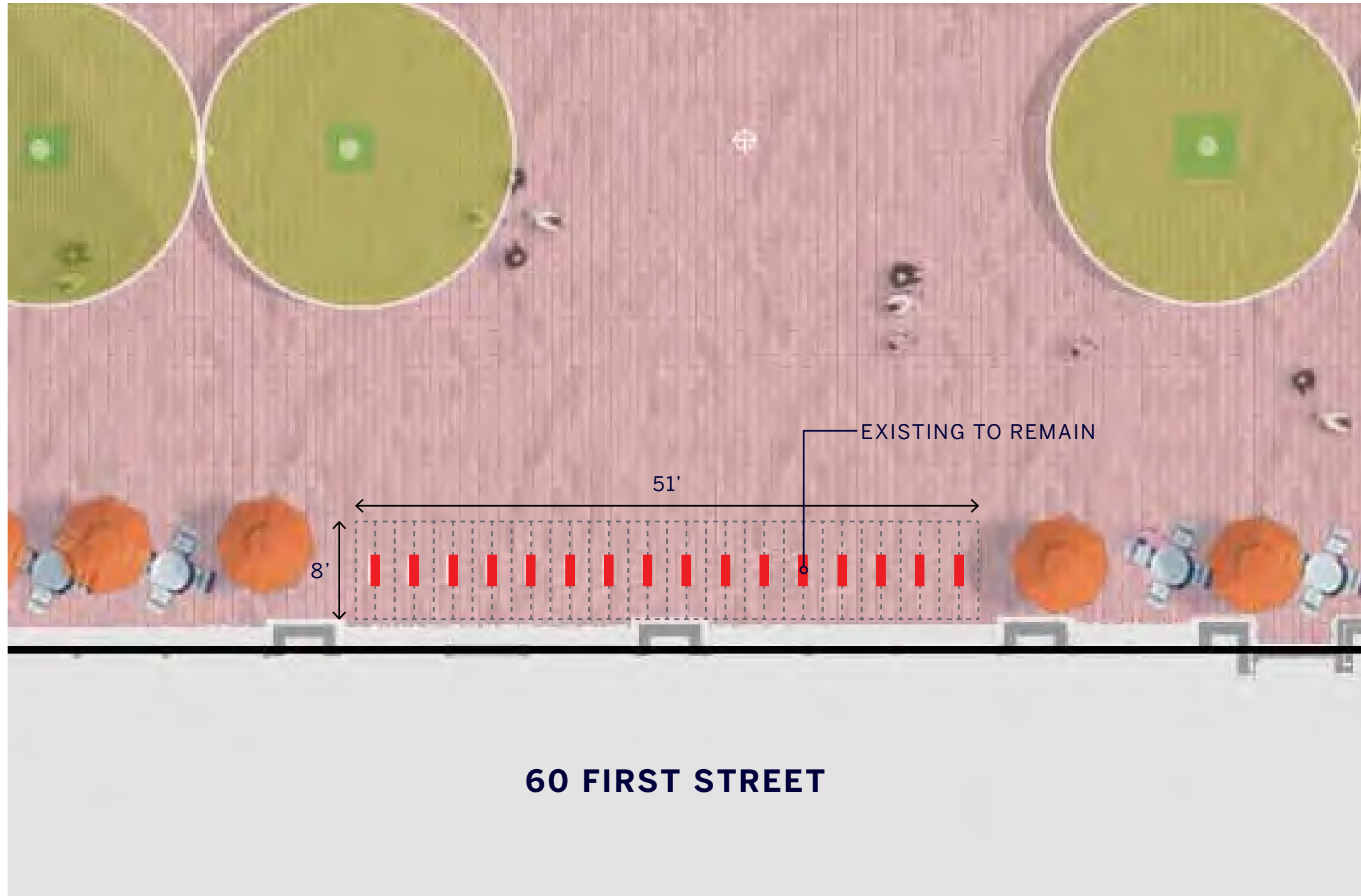


DESIGN REVIEW

CANAL PARK

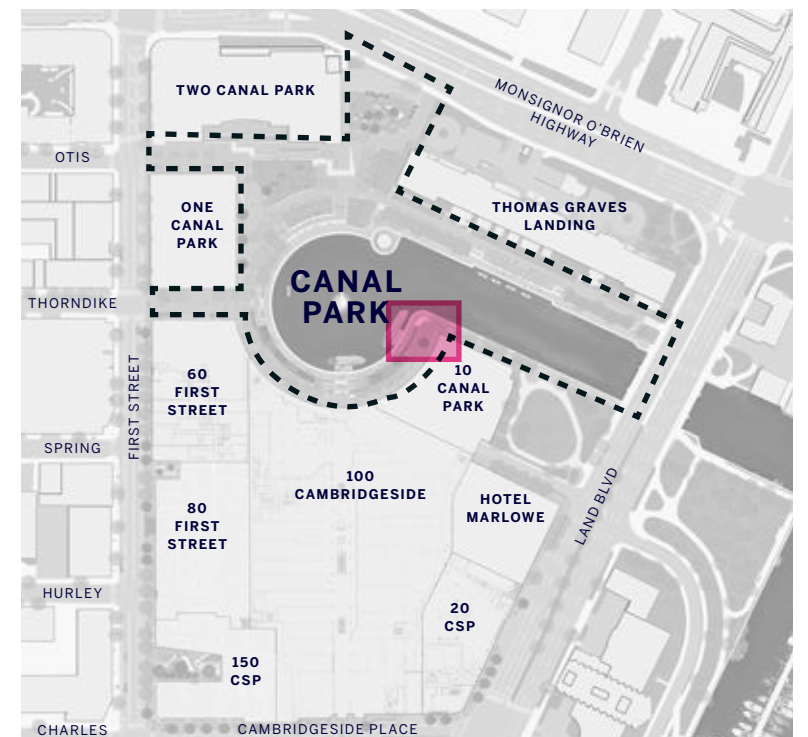
EXISTING SHORT TERM BIKE PARKING ENLARGEMENT PLANS

(32) THIRTY TWO BIKE PARKING SPACES



DESIGN REVIEW
CANAL PARK
EXISTING SHORT TERM BIKE
PARKING ENLARGEMENT PLANS

(6) SIX BIKE PARKING SPACES

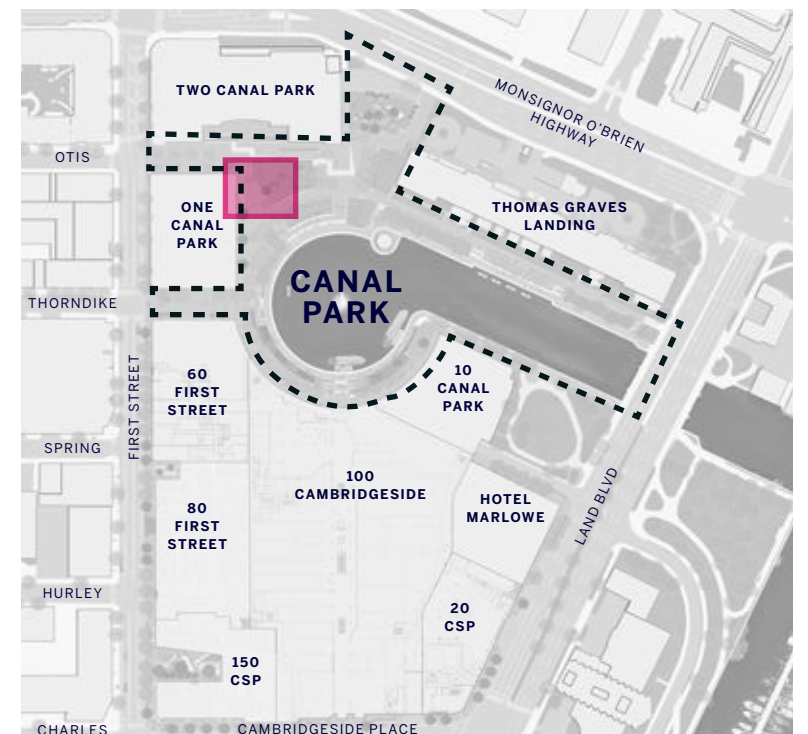
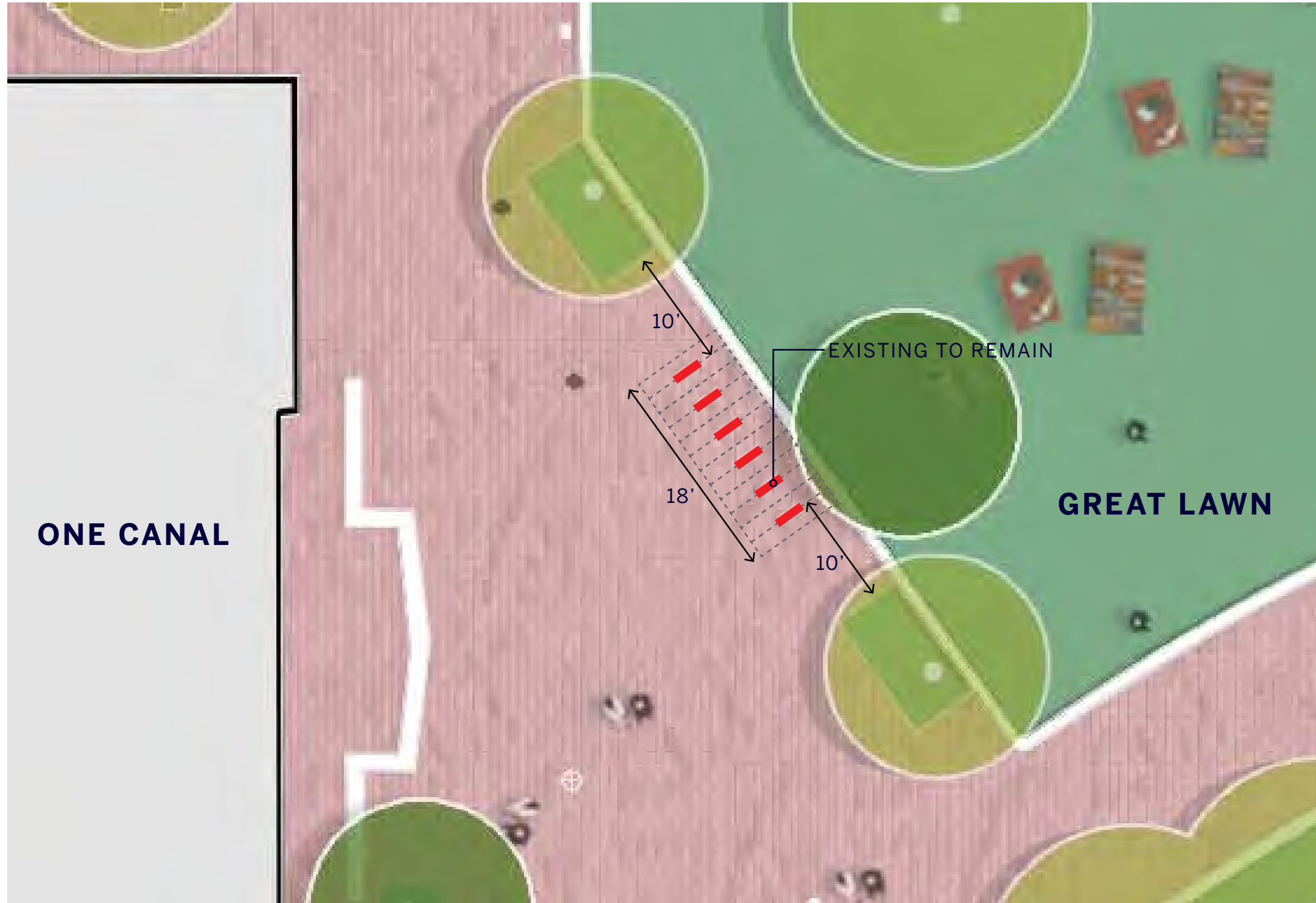


DESIGN REVIEW

CANAL PARK

EXISTING SHORT TERM BIKE PARKING ENLARGEMENT PLANS

(12) TWELVE BIKE PARKING SPACES

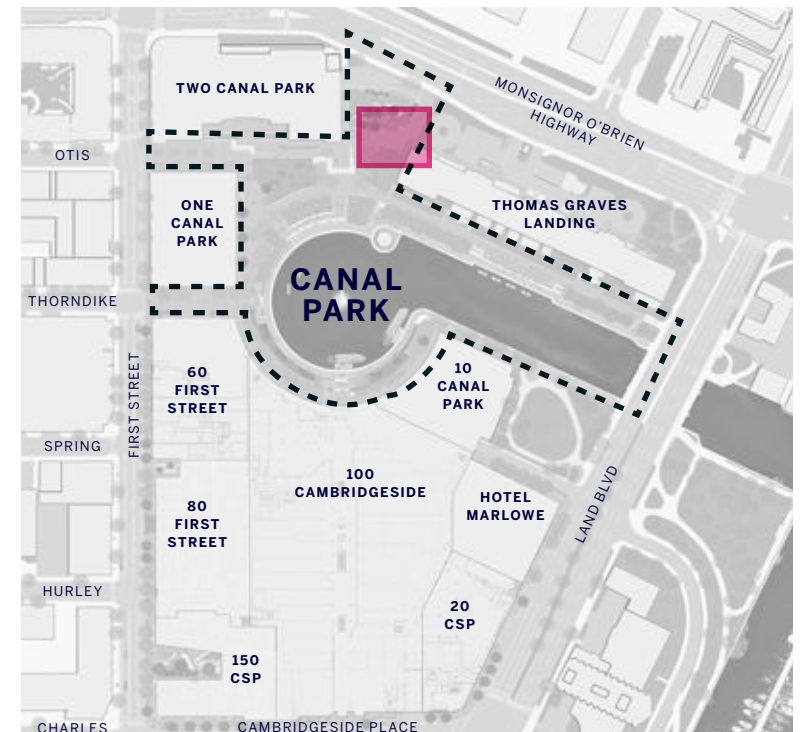
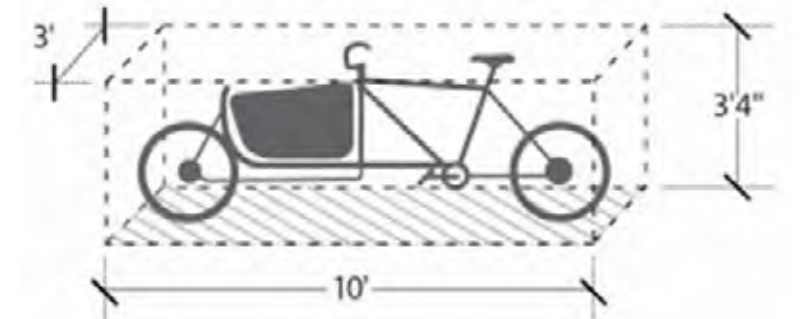


DESIGN REVIEW

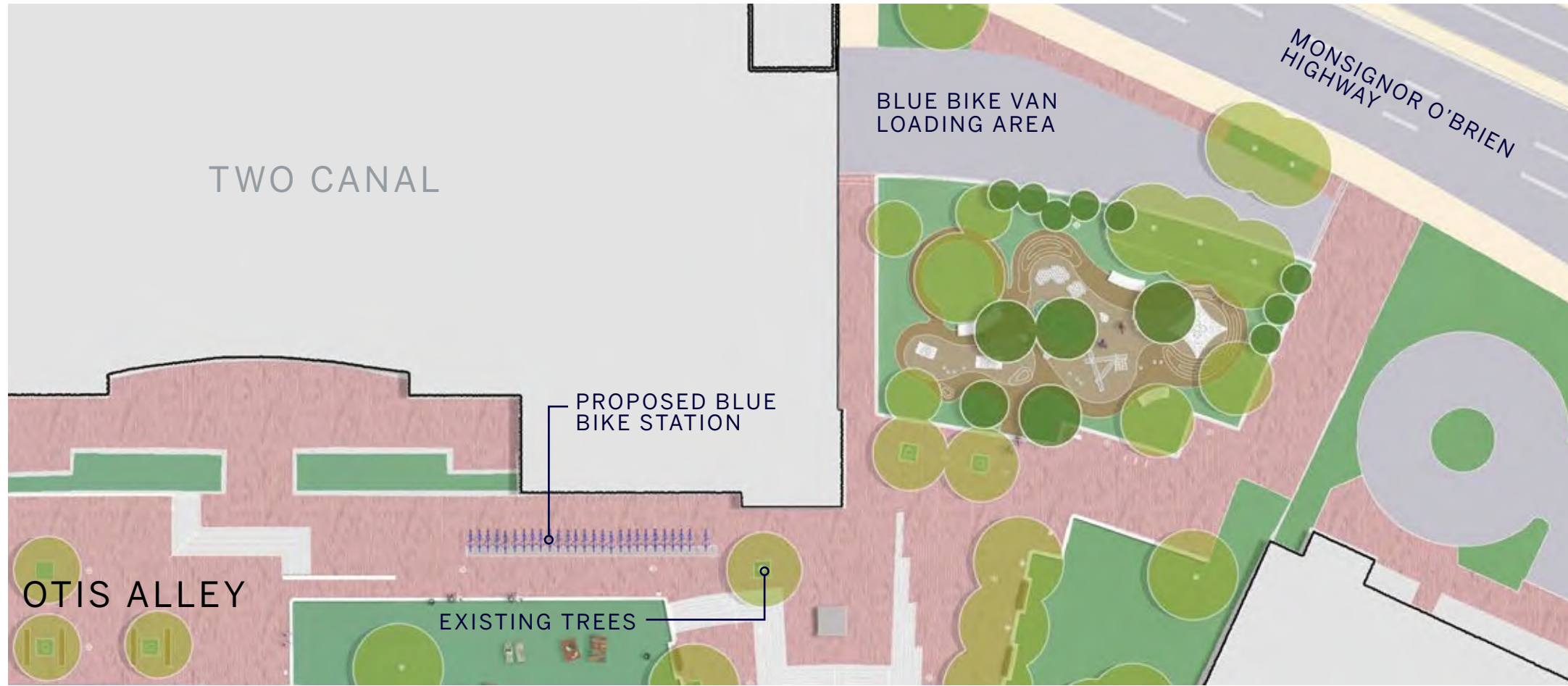
CANAL PARK

RELOCATED SHORT TERM BIKE PARKING ENLARGEMENT PLANS

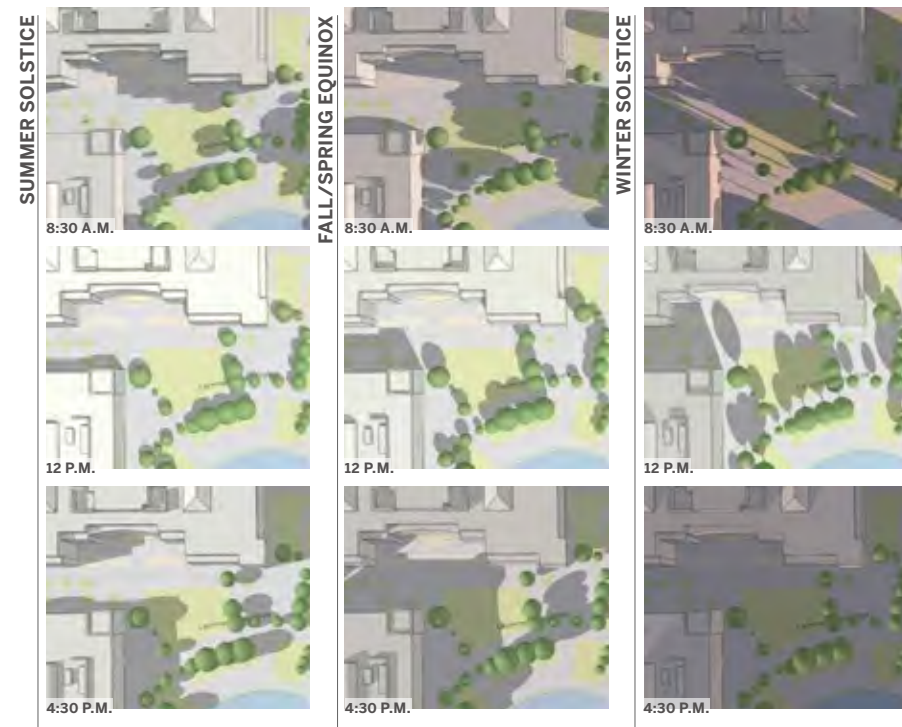
(7) SEVEN BIKE PARKING SPACES



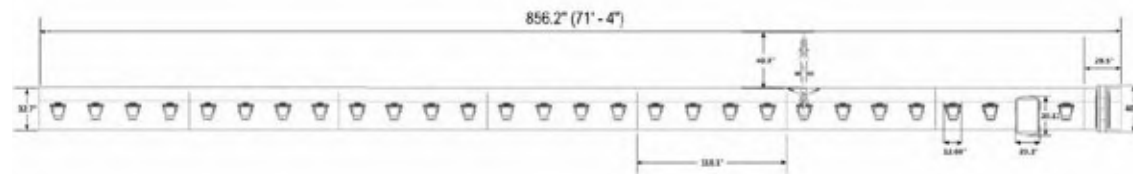
ENLARGEMENT PLAN



SOLAR STUDY



BLUE BIKE STATION



DESIGN REVIEW

CANAL PARK

BLUE BIKE STATION LOCATION AND DIAGRAM

27 BLUE BIKE DOCK STATION

GOOD VISIBLE CONNECTION AND PHYSICAL PROXIMITY TO FIRST STREET

RELOAD AND MAINTENANCE ACCESS VIA LOADING AREA OFF O'BRIEN HIGHWAY

PROVIDES ACTIVITY AND ANIMATION TO THE OTIS STREET ALLEY

