

# ESPLANADE **Briefing Meeting 1**

- Introduction & Planning Process
- Site Context & Access
- Zoning
- Urban Design Principles
- Development Plan
- Building Plots
- Building Design Guidelines

### Introduction

### Project Background

#### **Esplanade Master Development Plan**

Esplanade will restore an underutilized/brownfield site into an inclusive part of the Manchester-Chateau community, with a world-class character that fosters healthy, active, and sustainable living and reconnects the community to the riverfront. Establishing a true mixed-use destination at the southern end of Chateau will both serve as a catalyst for continued growth along the Ohio River and strengthen the urban networks among the adjacent neighborhoods.

The Esplanade Master Development Plan is an illustrative document informing the City of Pittsburgh, community stakeholders and prospective tenants of the intended development to occur on the site, so that necessary permits can be issued for site grading and infrastructure work. Following approval of this Master Development Plan, a Project Development Plan will be submitted for more detailed review of each building.

This Plan is the culmination of nearly six years of effort and collaboration with the Manchester neighborhood, the City of Pittsburgh, and local stakeholders, and reflects the design evolution that occurred through the community process and adoption of the Riverfront Zoning Districts.

The project will be developed in two or more phases. The initial phase will consist of the Ferris wheel building (P1), the apartment building (P2), the Current retail pavilion (P3), and the public parking garage(P4). Future phase(s) consist of an office or residential tower above P4 (P4a), an entertainment/parking/hotel building (P5), a condominium tower (P6) and an additional apartment building (P7).

The building heights proposed in this plan reflect the anticipated Performance points that will be achieved using the current Point system. It should be noted, however, that the proposed heights of several future-phase buildings are shown lower than what was presented to the community and the URA in order to remain compliant with the Points system.

Since Riverfront Zoning (RIV) was introduced, the Performance Points system has undergone several modifications to content, interpretation, and application, and from ongoing discussions with City Planning staff, is likely to continue to evolve. Such evolution may result in additional Performance Points becoming available to future phases of this project. Should additional points become available, the Developer intends to submit for Amended Master Plan Approval for those buildings. Of course, any such changes would be done in continued collaboration with the neighborhood and other stakeholders.



# **Planning Process**

### Summary

#### **Community Participation**

Piatt Companies has met regularly over several years, and continues to do so, with local residents, community groups, and adjacent property and business owners to gather feedback on the development plan, and to participate in larger round-table discussions organized around goals of the community.

The stakeholder groups include:

- Manchester Citizen Corporation
- Manchester Bidwell Corporation
- Riverlife
- River's Casino
- Northside Leadership Conference
- Pittsburgh Steelers & Pittsburgh Pirates
- Sports and Exhibition Authority
- Carnegie Science Center
- National Aviary
- Pittsburgh Zoo & Aquarium
- Bike Pittsburgh
- Pittsburgh Regional Transport (PRT/PAT)
- Allegheny General Hospital

In addition, concurrently with this process, both the Manchester-Chateau neighborhood plan and the Manchester Re-United Trid Study were developed, including extensive community input.



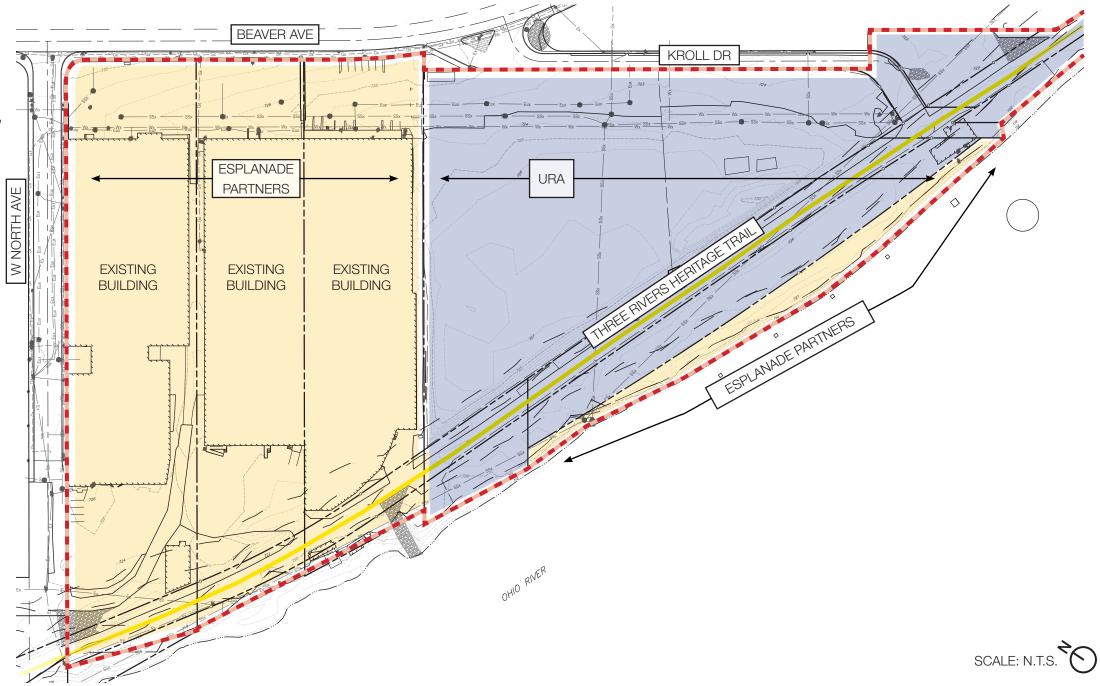
### Survey

Six existing buildings that are in various states of disrepair will be demolished as part of the site preparation.

The Three Rivers Heritage Trail follows the historic path of the railroad through this property, placing it well inboard of the river and therefore limiting its views of the river while simultaneously encouraging conflict with users of the space on either side. The trail will be reconstructed and enhanced closer to the riverbank as part of site development.

Much of the site is within the FEMA AE Zone Designation, and is therefore subject to inundation during the 100 year flood. Accordingly, site contours will be adjusted to properly locate the buildings at least two feet above the 100-year flood elevation. However, the existing roadway network and the top-of-bank of the river must be maintained. The riverbank itself is stable, but has succumbed to invasive vegetation. This vegetation will be removed and replaced with native species as part of site development and landscaping.

Electric, gas, water, sewer, and communications utility infrastructure serving surrounding areas of the City were left in place when Beaver Avenue was relocated in the 1960's. This aging infrastructure will be replaced and relocated as part of the site preparation process, ensuring that the overall network is not negatively impacted and remains in continuous operation.



#### Chateau

#### **Existing Conditions & Site Constraints**

Located in what is now the Chateau neighborhood of Pittsburgh, this prominent waterfront site sits near the confluence of Pittsburgh's three rivers and is uniquely positioned between the historic neighborhood of Manchester, industrial heavy Chateau, and the large scale North Shore entertainment district.

The location is well suited to become both the connection and transition between these disparate uses. It has a long history of industrial uses that limited the public's access to the Ohio River for recreational use. Re-establishing this connection to the waterfront is of critical importance to engage the development on its entire perimeter and spur future growth in the area.

Currently home to brownfields, several industrial properties, and the Three Rivers Heritage Trail, there are several challenges that present themselves at this location. In addition to the access limitations that have been previously discussed, the triangular shape of the site and its location near the transition of the street grid, coupled with the presence of the former CSX rail corridor places significant constraints around efficient and optimized site and building layouts.



Chateau









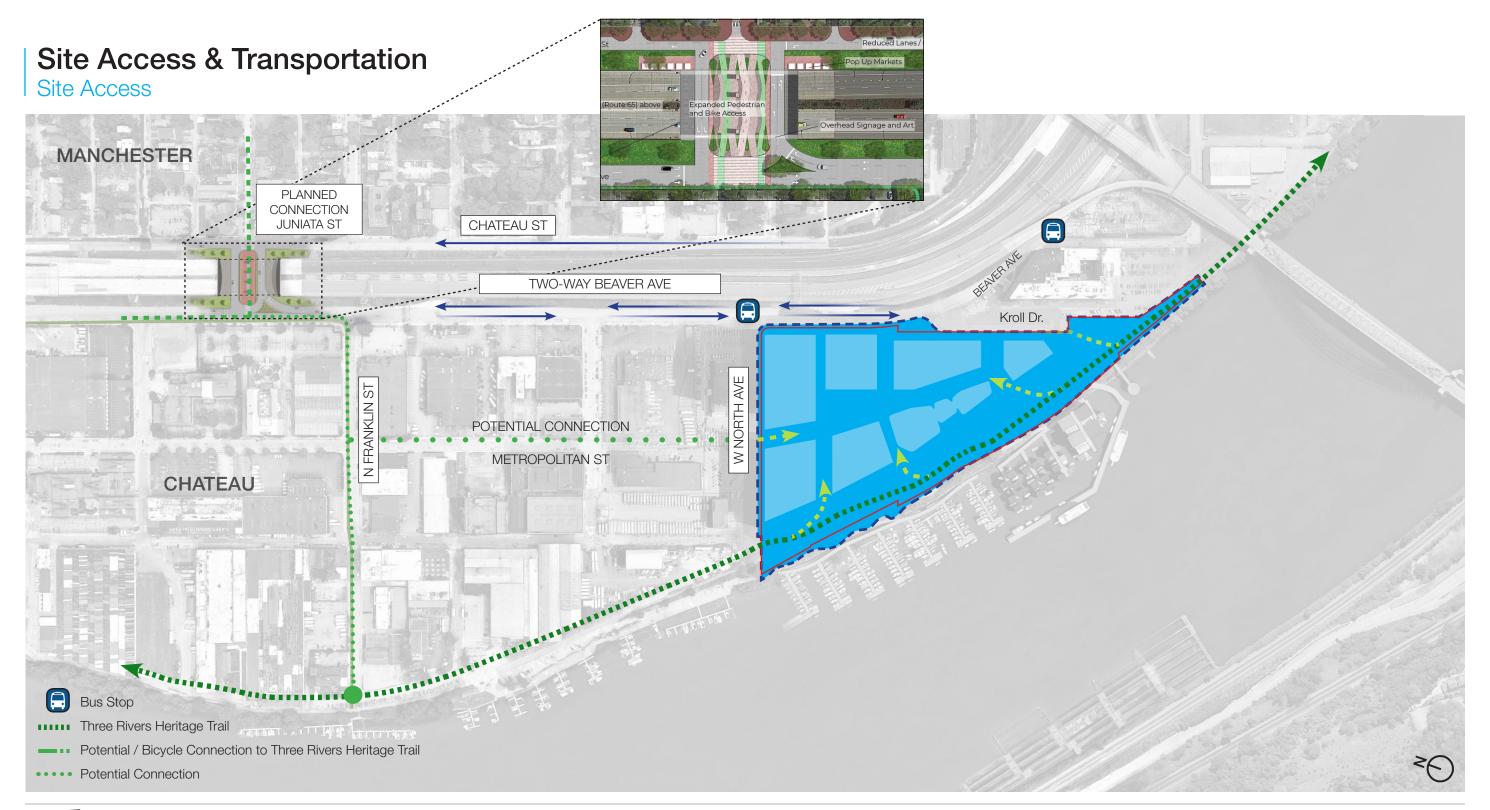










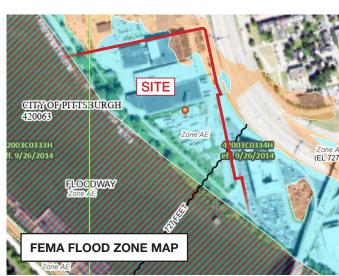


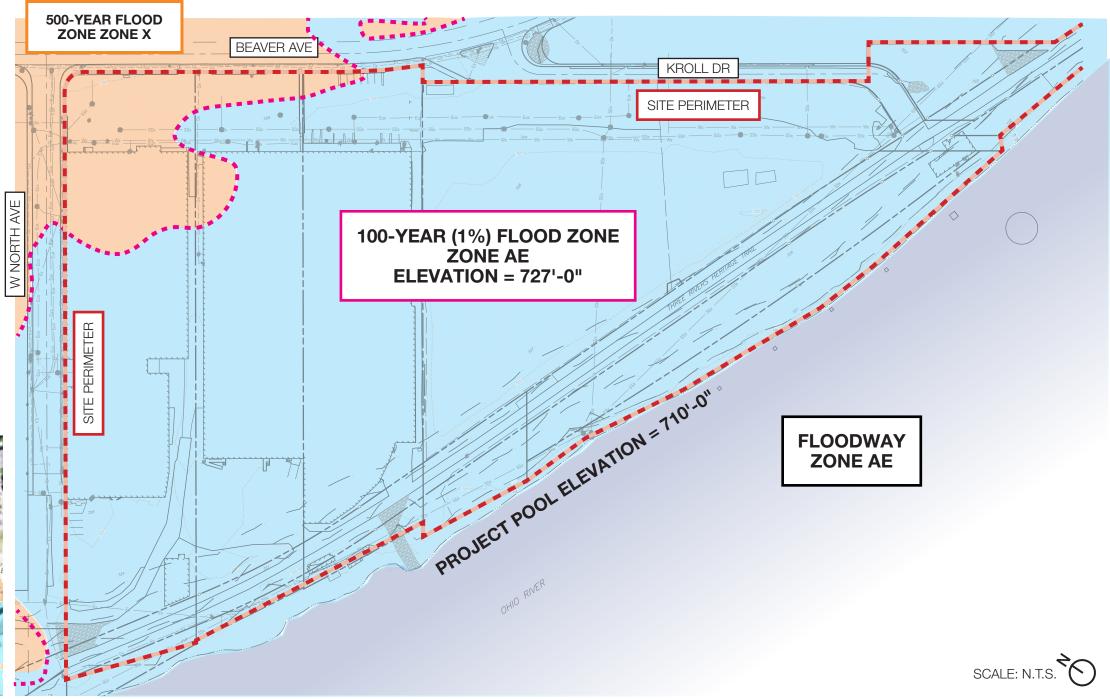
### Floodplain

### Flood Hazard Overlay

The project pool elevation is at 710'-0". The majority of the development site is located within the 100-year (1% annual chance) floodplain, which is at an elevation of 727'-0".

The City of Pittsburgh requires all new construction to be floodproofed or at minimum 18" above the base flood elevation. Residential buildings must be elevated at the Regulatory Flood Elevation. The first floor elevations of the buildings at the Esplanade development all start at an elevation of 729'-0". Some service and garage entrances are lowered due to their existing adjacent street elevations. The City of Pittsburgh's Flood Plain Overlay does not regulate the areas mapped within the 500-year (2% annual chance) floodplain.







### Setbacks

Zoning: Industrial Mixed-Use (RIV-IMU)

#### Setbacks

The project pool elevation is 710'-0" from which all setbacks are measured from.

Riverfront (RIV) Zoning establishes a 125'-0" riparian zone offset from the project pool elevation where no development is permitted. Exemptions include water-dependent and enhanced facilities or uses, as well as accessory uses that are open space amenities. The riparian buffer zone may be reduced to 95'-0" with certain development bonus point provisions.

Water and trail oriented amenities proposed to be located within the riparian zone offset are trail kiosks. The P3 Special Public Retail building will use one Riverfront Performance Point to set into this zone to maximize engagement with the trail and proposed riverfront amphitheater.

Landscape within the riparian buffer must consist primarily of species that are native or naturalized to the region.



# **Urban Design Principles**

### Summary

#### **Design Intent & Goals**

- Create a world-class mixed-used destination that fosters community, opportunity, and growth
- Provide positive impact to the surrounding neighborhood, creating opportunities, strengthening the connection and accessibility between the development, Ohio River, and surrounding neighborhoods.
- Respect the character and history of Chateau and Manchester through thoughtful building and public realm design.
- Create publicly accessible open space that reconnects with the riverfront.
- Offer both community-based and destination-based retail and f&b to create a balanced and active streetscape where the pedestrian is the priority.
- Respond to the number of site challenges, including the location among disparate uses at the curve in the river and street grid, the triangular shape, access limitations and the elevated SR-65 highway, the rail/trail corridor, and the floodplain and elevation constraints with considerate and creative solutions.



### **Building Plot Plans**

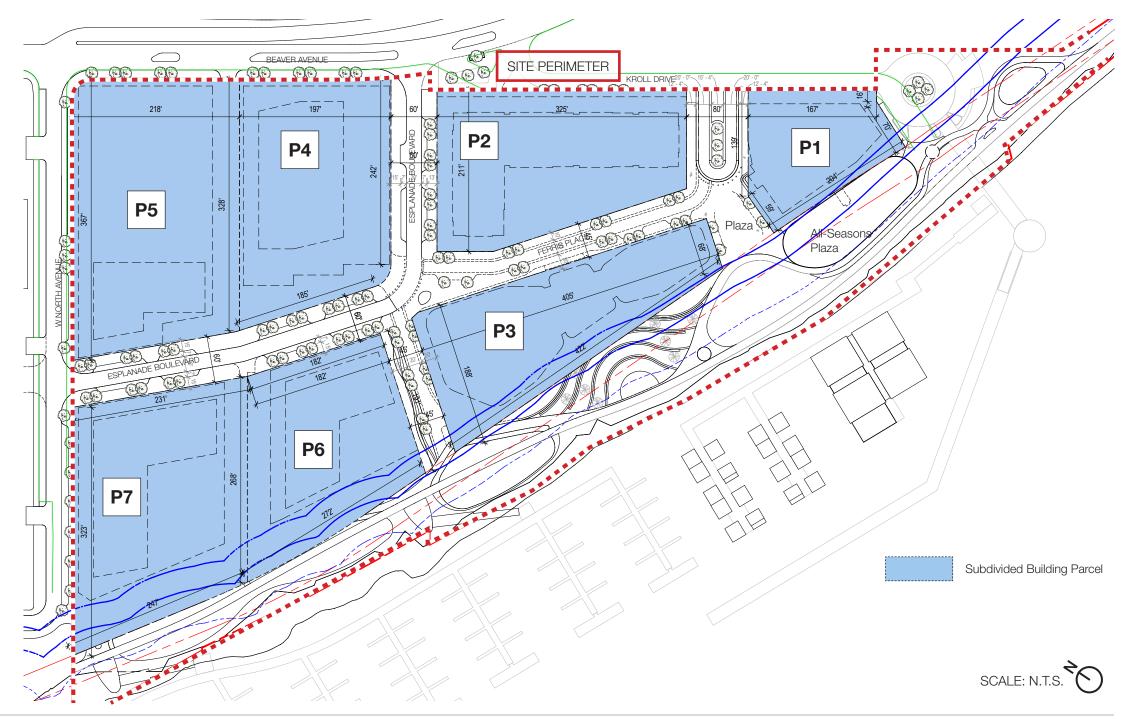
#### Site Parcels

The layout illustrates the parcel extents, perimeters, and areas at the Esplanade development.

The final parcel plans will closely resemble this layout; however, parcel perimeters and areas may potentially vary and adjust as the project continues to develop and responds to both building-specific and potential tenant requirements.

Building facades will follow the Street Build-To Zone requirements of section 905.04.E.4, locating buildings within 10' of the developed property lines when abutting streets. The plaza shown on the P4 plot, which is designed to coordinate with the P5 Hotel/Entertainment alongside the P4 retail, sets back beyond this line. P3 may also set back further in the final design to accommodate exterior space activations.

Exceptions to the Build-to-Zone requested in this document may be approved by Planning Commission.



### **Building Stepbacks**

The layout illustrates proposed building footprints and tower stepbacks as required by section 905.04.E.3. Towers exceeding 85' are shown in blue at right.

Part C.1 of this section requires height bonuses for the parcels exceeding 60 feet; these are addressed on a plot-by-plot basis in this document.

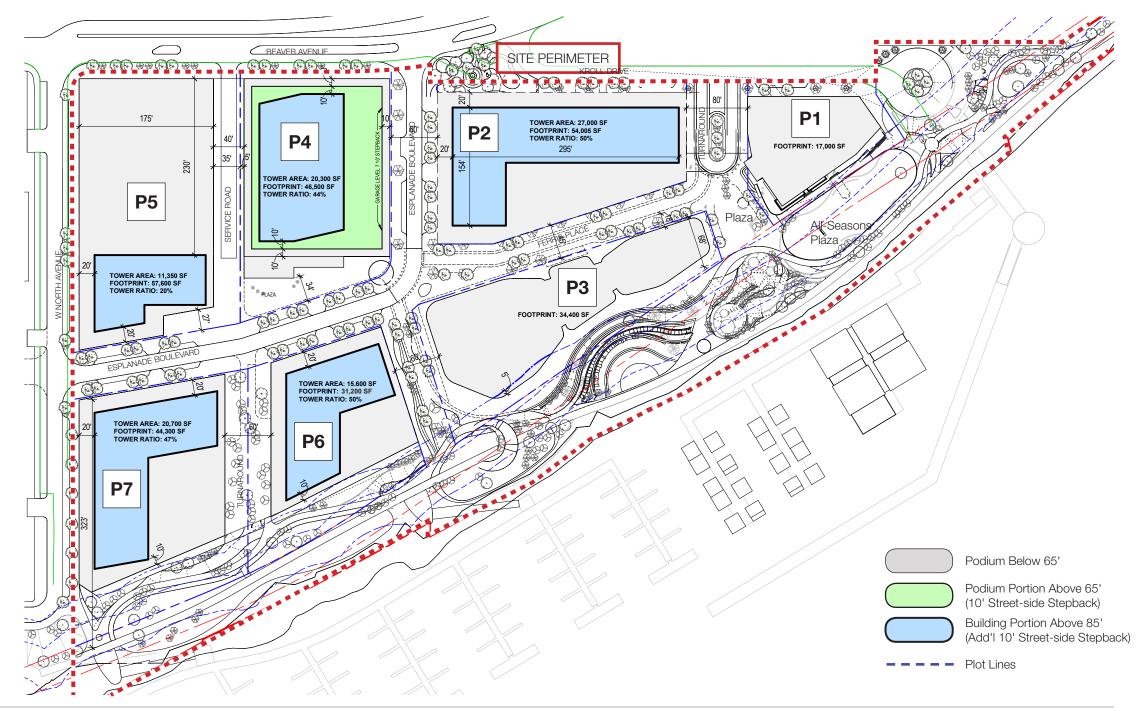
Part C.2.b sets maximum building footprints for buildings exceeding 85' at 65,000 sf. Proposed footprint areas conforming to this requirement are noted at right.

Part C.2.b.i requires that cumulative tower footprints not exceed 50% of the base building footprint. Proposed tower areas and ratios conforming to this requirement are noted at right.

Part C.2.c.i sets a street-side stepback of 10' for structures over 65 feet. A portion of the P4 podium exceeds 65', and sets back to meet this requirement. This is marked in green at right.

Part C.2.c.ii.B requires an additional 10' front and street-side stepback for towers above 85'. Towers marked in blue at right are shown with their stepbacks of 20' from all public streets.

Part C.2.d requires a shadow study for buildings over 85'. This is provided on the following page.



### **Development Plan** Height & Proposed Design

#### Massing

RIV Zoning defines maximum building heights from a base of 60', plus additional height from performance points up to a maximum of 250'.

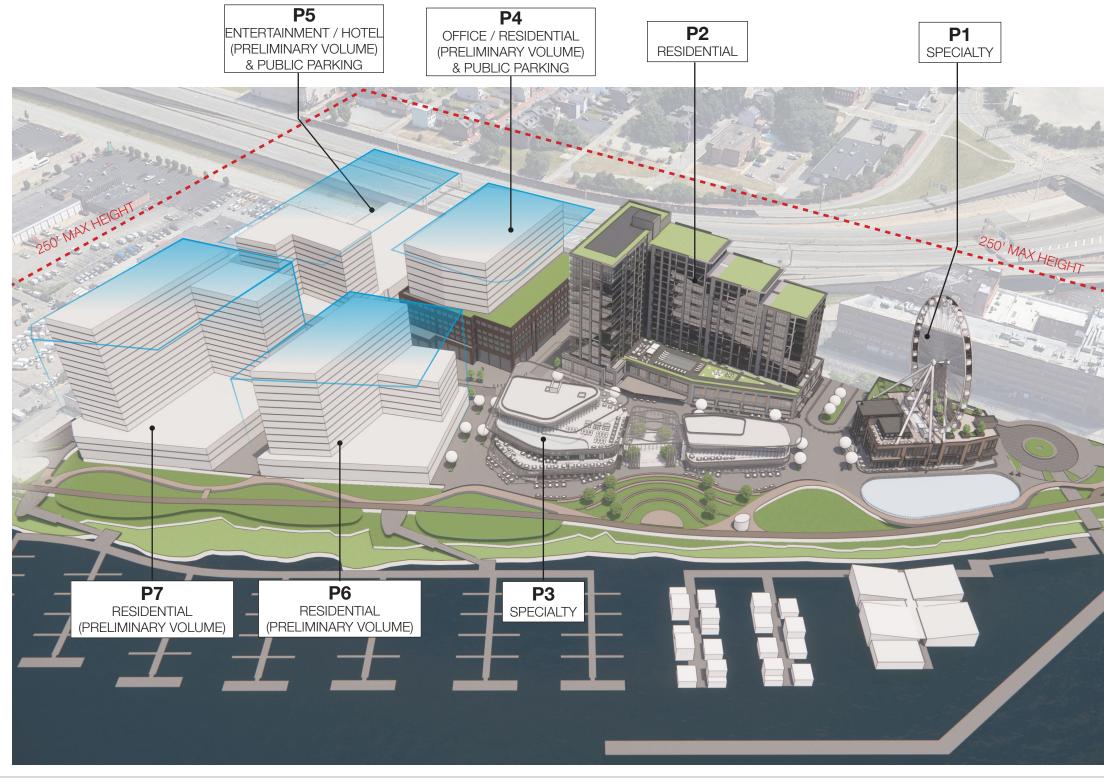
The massing design for this project prioritizes river views and public open space. Buildings along the outside of the project step up toward the corner of North Avenue and Beaver Avenue, creating more river views and maintaining openness along Ferris Place, the tabled pedestrian-first street at the core of the site. This strategy also opens views to and from the Ferris Wheel building, P1, while reducing the impact along the river trails.

The design recognizes that there is no "back door" to the Esplanade; each side must be treated as the front. All building facades are intended to meet the RIV district Design Standards and Building Materials Standards of section 905.04.G.4, or Alternative Design Standard Compliance of section 905.04.G.1. The requirement for facade articulation every 50' is intended to be followed, excepting the service road between P4 and P5.

It anticipates a change to Route 65 from an elevated highway to an active boulevard.



Maximum Height Volume based on Achieved Bonus Points



### **Buildings & Uses Summary**

### **Program Summary**

The Esplanade Master Development Plan Summary is intended to give both the City of Pittsburgh and potential tenants an understanding of the master plan and intended building massing and layout.

Final development plans will be submitted as individual Project Development Plans that are further developed and adapted to meet tenant needs and market viability, as well as potential revisions to the Performance Points system, and will demonstrate compliance with the RIV zoning requirements.

The Master Plan anticipates a variety of uses for the Esplanade development, including, but not limited to:

- Residential Apartments
- Retail & Kiosks
- Food & Beverage
- Grocery / Fresh Foods
- Observation Wheel
- Parks & Recreation Space
- Winter Garden
- Marina
- Residential Condominiums
- Hotel & Entertainment
- Office
- Parking



### Parcel 1

#### Proposed Building Program:

Ferris Wheel and Visitor Program Riverfront Activity Rentals Trail Restrooms Trail & Plaza Oriented Retail Restaurant

Adjacent all-seasons plaza supports summer fountains, winter skating, and other public activities accessible from inside The Esplanade and from the river trail.

#### **Proposed Building Area:**

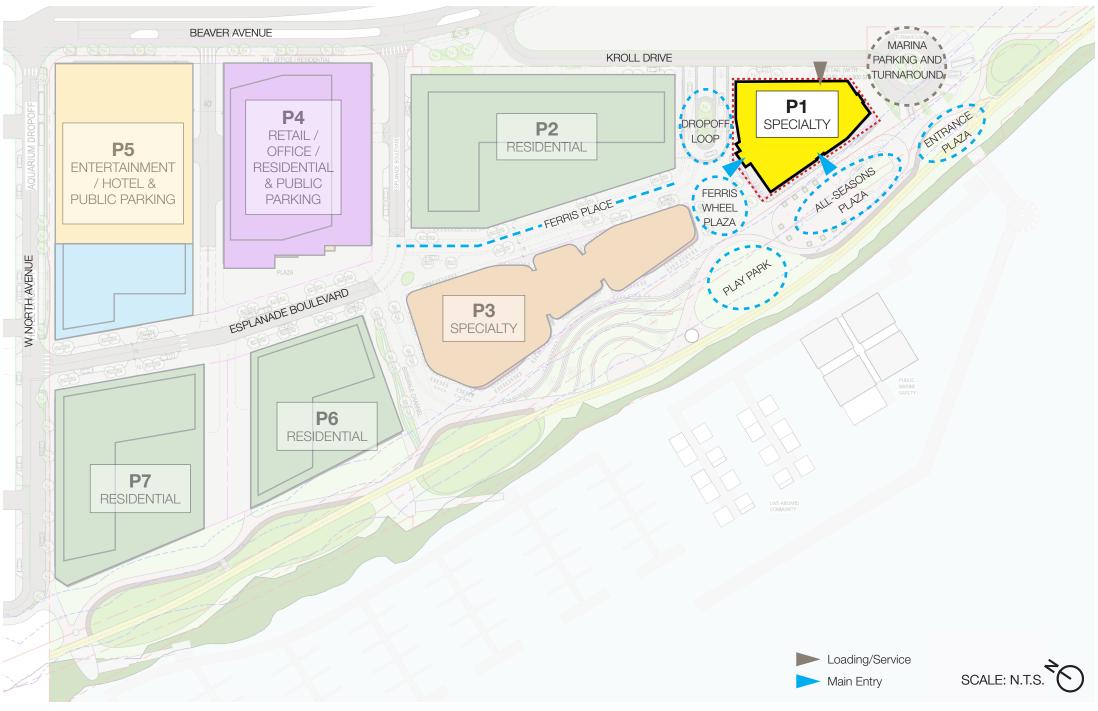
32,595 gsf Parking not proposed for this parcel.

#### Proposed Building Stories / Height: 3 Stories (52'-0") & Observation Wheel

RIV Bonus Points Required: None **RIV Bonus Points Achieved:** 8

Parcel 1 is planned as a destination bookend for the site opposite the Aquarium and Hotel. A two-story podium with rooftop amenity space supports an observation wheel with incredible views of Pittsburgh. Restaurant and Retail as well as support and loading spaces also support the adjacent plaza and trail.





Parcel 2 - Apartments

### **Building Summary**

#### **Proposed Building Program:**

Residential Tower Retail Parking

### Proposed Building Area:

517,230 gsf

#### Proposed Building Stories / Height:

19 Stories (200'-0")

#### Estimated Units & Parking:

408 Apartments / 304 Spaces

**RIV Bonus Points Required: 14 RIV Bonus Points Achieved: 14** 

Parcel 2 is planned as a residential apartment tower containing market rate and affordable units over a podium of retail. The massing steps down toward the observation wheel (P1) to set up views and amenity spaces toward downtown Pittsburgh.





Parcel 3 - "The Current"

#### **Building Summary**

#### Proposed Building Program:

Gateway Atrium to Riverfront Amphitheater Food Emporium and Restaurant Venues Retail

#### **Proposed Building Area:**

64,256 gsf Parking not proposed for this parcel.

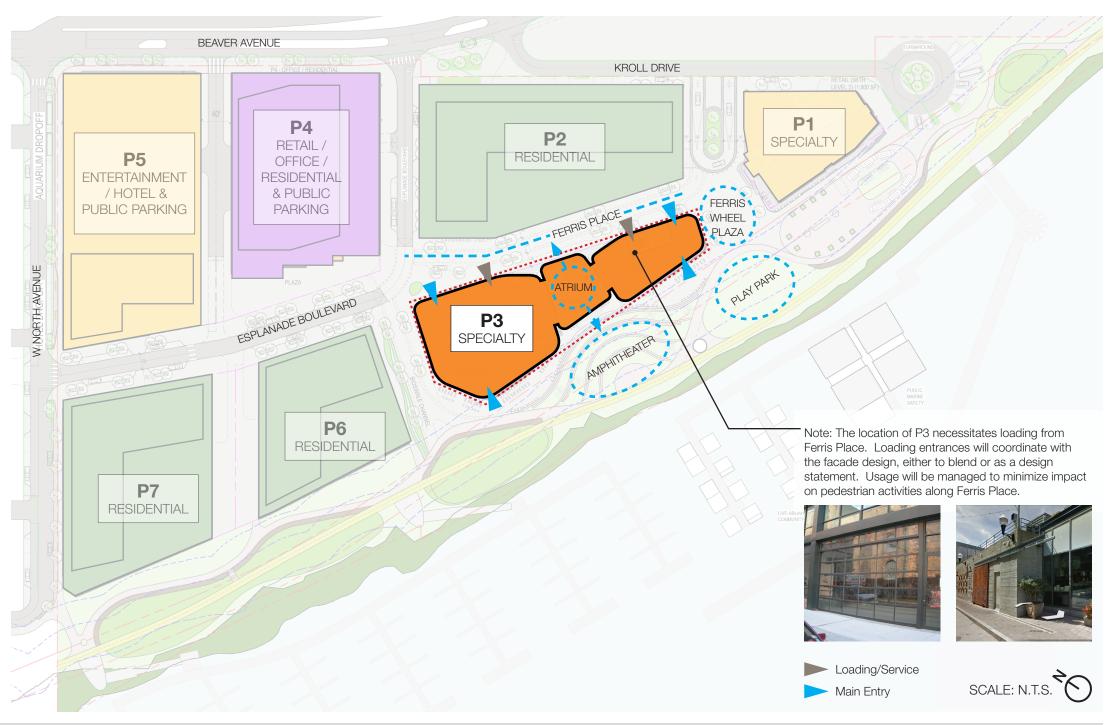
#### **Proposed Building Stories / Height:** 3 Stories (54'-0")

RIV Bonus Points Required: 1 for 10' reduction of 125' Riparian Setback **RIV Bonus Points Achieved:** 8

Parcel 3 is planned as a Food & Beverage destination and event venue. A central all-seasons atrium connects a riverfront amphitheater and adjacent trails through to the project's market street.

Build-To Note: P3 may set back beyond the 10' build-to line required by section 905.04.E.4.





### Parcel 4

#### **Building Summary**

#### **Proposed Building Program:**

Phase 1:

Site Parking and Retail

Phase 2:

Overbuild Office or Residential

### Proposed Building Area:

468,885 gsf

### **Proposed Building Stories / Height:**

13 Stories (157'-0")

#### **Estimated Office & Parking:**

193,375 sf Total Office / 651 Spaces

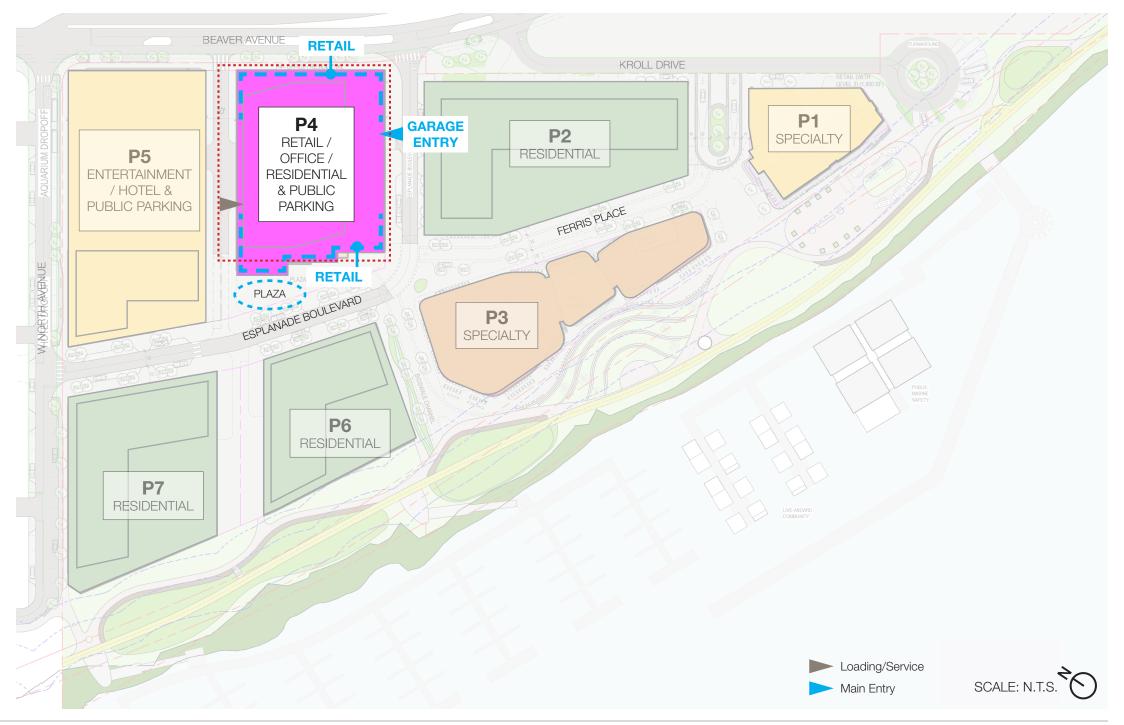
**RIV Bonus Points Required: 10 RIV Bonus Points Achieved: 10** 

Parcel 4 is planned in two phases.

Phase 1 builds the podium, containing retail and a parking garage sized to support visitor and event parking for other areas of the site build during this phase.

Phase 2 implements the planned overbuild of an office or residential tower.

Build-To Note: The plaza shown on the P4 plot is designed to coordinate with the P5 Hotel and Entertainment alongside the P4 retail. It requires a setback beyond the 10' build-to requirements of section 905.04.E.4.



Parcel 5

#### **Building Summary**

#### **Proposed Building Program:**

Entertainment **Hotel Tower** 

#### **Proposed Building Area:**

Entertainment: 120,690 gsf

Hotel: 184,630 gsf

#### Proposed Building Stories / Height:

P5a: 3 Stories (60'-0") P5b: 13 Stories (160')

#### **Estimated Units & Parking:**

280 Hotel Keys / Parking TBD

**RIV Bonus Points Required: 10 RIV Bonus Points Achieved: 10** 

Parcel 5 is planned as two parts:

P5a: Destination entertainment attraction, positioned opposite the wheel building P1 P5b: Hotel with amenity floors coordinating with the entertainment destination.



Parcel 6

### **Building Summary**

**Proposed Building Program:** 

Residential Tower Retail

**Proposed Building Area:** 

224,366 gsf

Proposed Building Stories / Height:

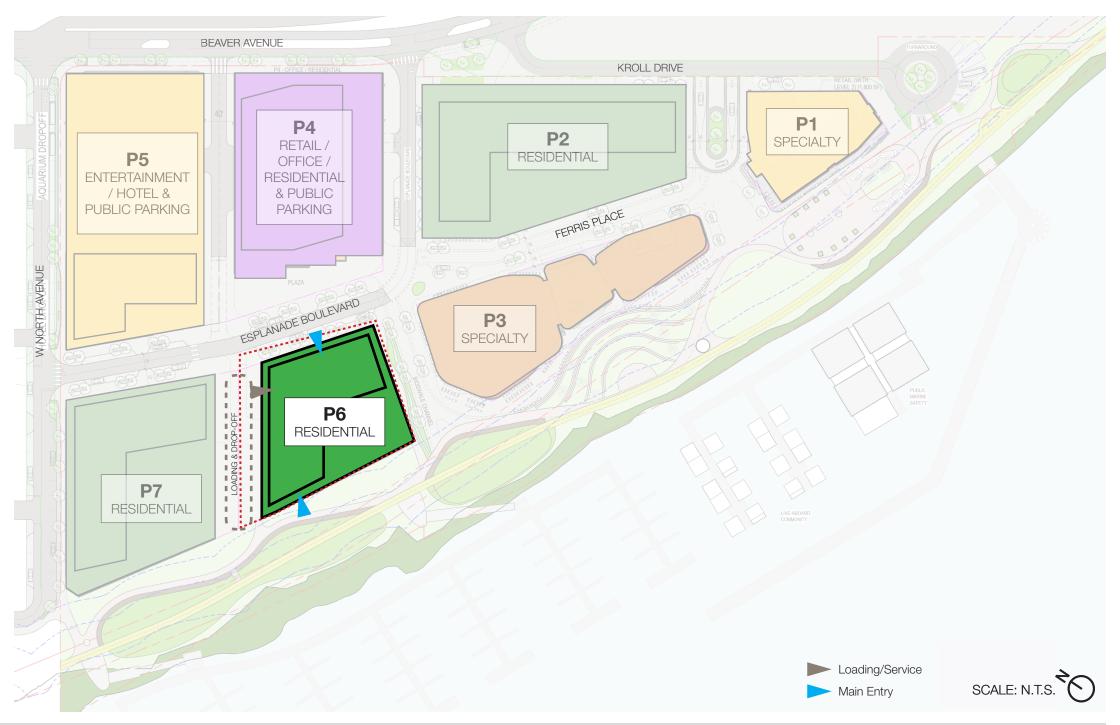
14 Stories (160'-0")

Estimated Units & Parking:

126 Condos / 143 Spaces

**RIV Bonus Points Required:** 10 **RIV Bonus Points Achieved: 10** 

Parcel 6 is planned as a centerpiece condo tower.



Parcel 7

### **Building Summary**

**Proposed Building Program:** 

Residential Tower Retail

**Proposed Building Area:** 

484,183 gsf

Proposed Building Height / Stories:

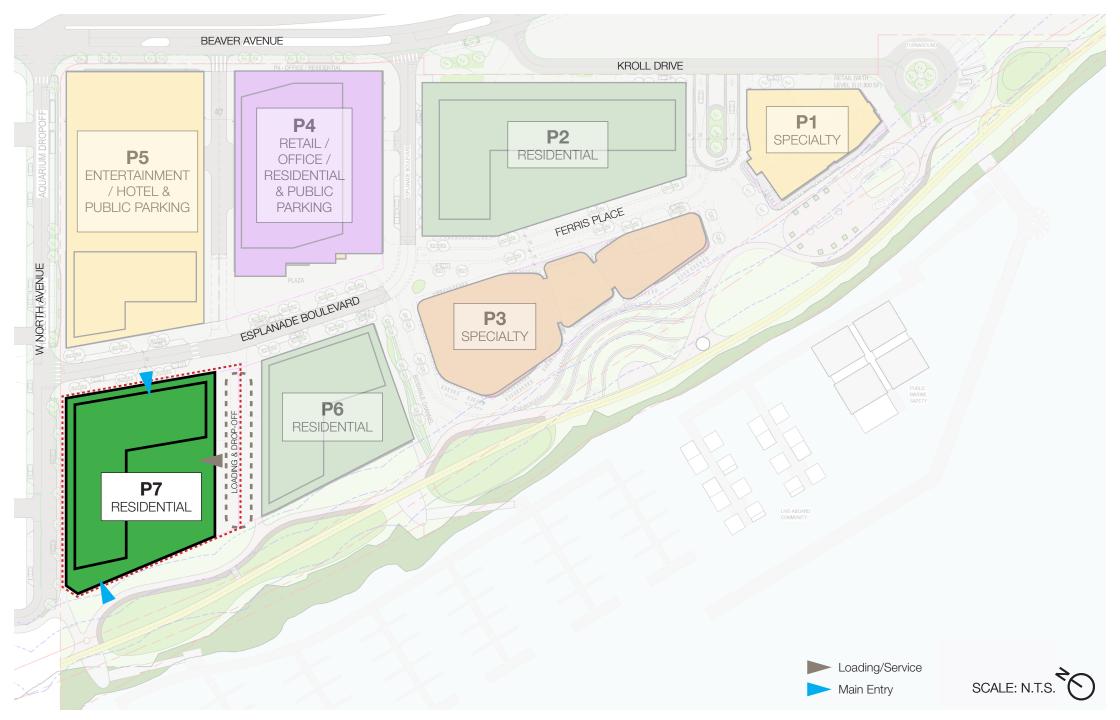
19 Stories (197'-0")

Estimated Units & Parking:

409 Apartments / 329 Spaces

**RIV Bonus Points Required:** 14 **RIV Bonus Points Achieved: 14** 

Parcel 7 is planned as a residential tower with an amenity courtyard on the podium roof.



GANGWAY, ACCESS FROM ICE DIVERTER AND TURNAROUND

### The Marina

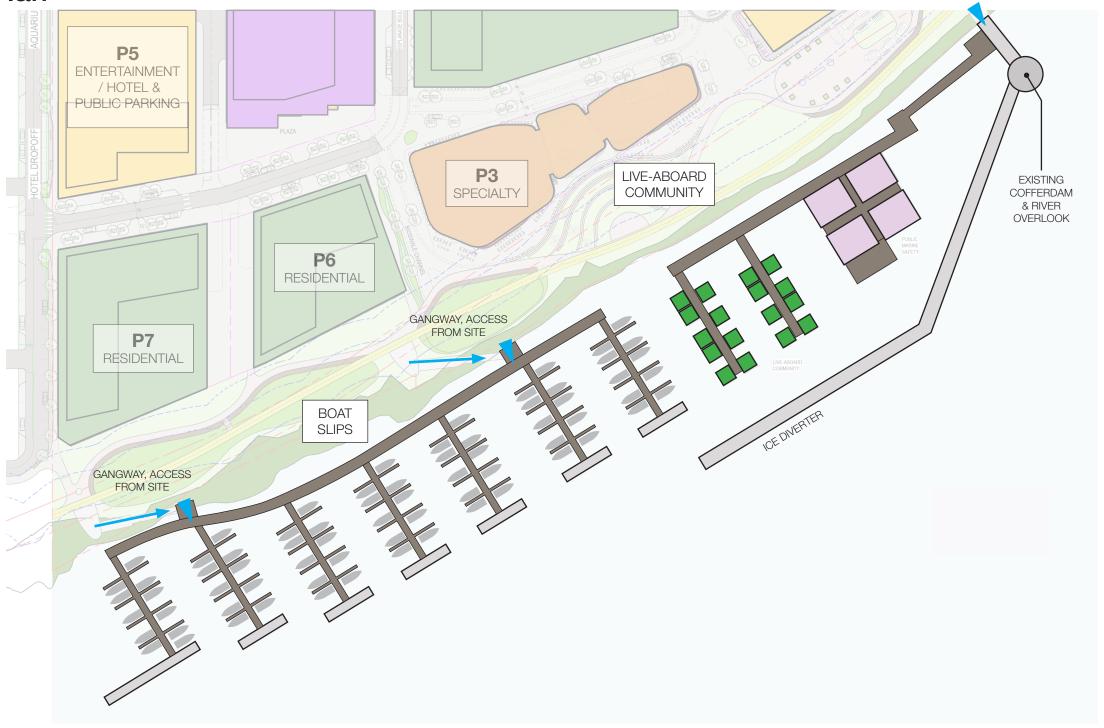
#### **Marina Summary**

#### Proposed Marina Program:

Boat Slips (112) Live-Aboard Community (17 Units) Marine Building (14,800 sf)

The Marina at the Esplanade is planned to connect to the river for sightseeing, boating, and living.

Access to the marina will be limited to designated crossing points along the riverfront bike trail to ensure the safety of pedestrians, cyclists, and boaters.



### **Urban Design & Architecture**

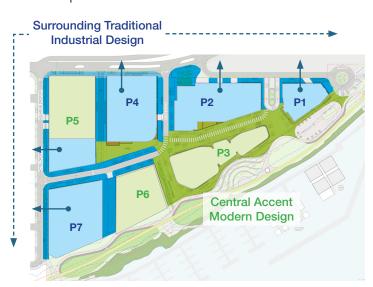
### Building Design Guidelines

#### **Contextuality & Accents**

The Esplanade is planned to visually and functionally connect with the built fabrics of Chateau and Manchester while creating a distinct internal character. To achieve this, buildings on the outside of the site employ a masonry-and-steel aesthetic which, while forward-looking in detailing, relate to the surrounding neighborhood character. This includes P1, P2, P4 and P7.

Buildings within this center of the project (P3, P5, & P6) present a more technological and modern aesthetic, becoming accents within the public plaza space they inhabit.

This page presents concepts and inspirations for P1 and P3, showing this use of 'old' and 'new' languages for two Esplanade destinations. The P5 Aguarium will follow the 'central' aesthetic.



### P1 - Wheel Building - Industrial Design Concept







#### P3 - Pavilion Building - Technological Design Concept









### **Urban Design & Architecture**

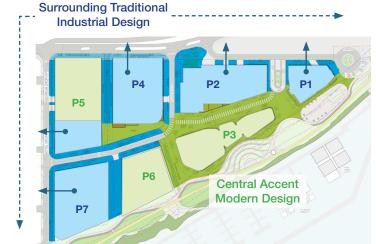
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This page presents concepts and inspirations for P2 and P6, showing how the central P6 residential tower is conceived with a contemporary language distinct in Esplanade.



### P2 - Residential Building - Industrial Design Concept





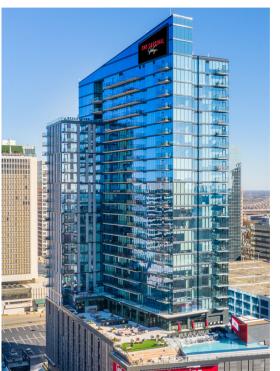






#### P6 - Residential Building - Technological Design Concept









# **Urban Design & Architecture**

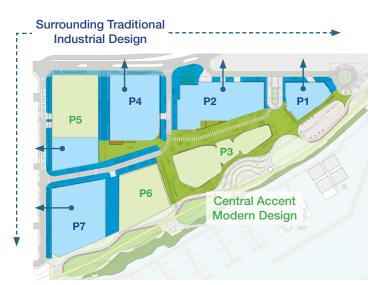
### Building Design Guidelines

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Buildings within this center of the project (P3, P5 & P6) present a more technological and modern aesthetic, becoming accents within the public plaza space they inhabit.

This page presents concepts and inspirations for P4, P5 and P7. P5 will be designed with a very contemporary aesthetic that relates it to P3 and P6.



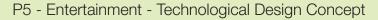
P4 & P7 - Residential Buildings - Industrial Design Concepts



















# ESPLANADE **Briefing Meeting 2**

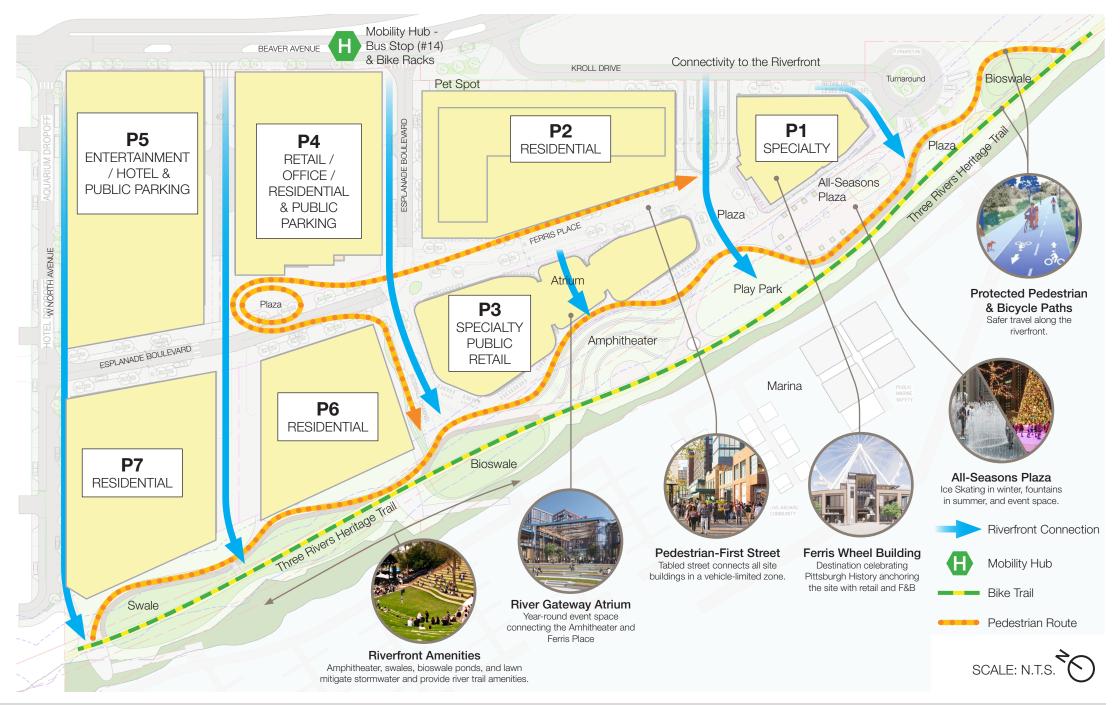
- Urban Design Principles
- Landscape
- Stormwater Management
- Site Access
- Street Sections
- Sustainability
- Riverfront Zoning Points
- Development Phasing

# **Urban Design Principles**

### Summary

#### **Design Intent & Goals**

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- Provide positive impact to the surrounding neighborhood, creating opportunities, strengthening the connection and accessibility between the development, Ohio River, and surrounding neighborhoods.
- Respect the character and history of Chateau and Manchester through thoughtful building and public realm design.
- Create publicly accessible open space that reconnects with the riverfront.
- Offer both community-based and destination-based retail and f&b to create a balanced and active streetscape where the pedestrian is the priority.
- Respond to the number of site challenges, including the location among disparate uses at the curve in the river and street grid, the triangular shape, access limitations and the elevated SR-65 highway, the rail/trail corridor, and the floodplain and elevation constraints with considerate and creative solutions.



### Landscape

### Open Space

### Public Realm & Open Space

A carefully considered open space and public realm - our streetscapes, parks, squares, sidewalks, courtyards and passages all create a welcoming sense of place for the human experience.

The public realm connects us to our city and in turn to one another. It is here in the public realm we identify with a place, to socialize, to create community, and to create a neighborhood. Esplanade's success will be rooted in the accessibility and programmatic diversity of its open space that must seamlessly integrate with the surrounding communities both near and far. These spaces, both public and private, will help stitch the development site together and host a vibrant mix of programming, leisure and recreational activities and site amenities for residents and visitors.

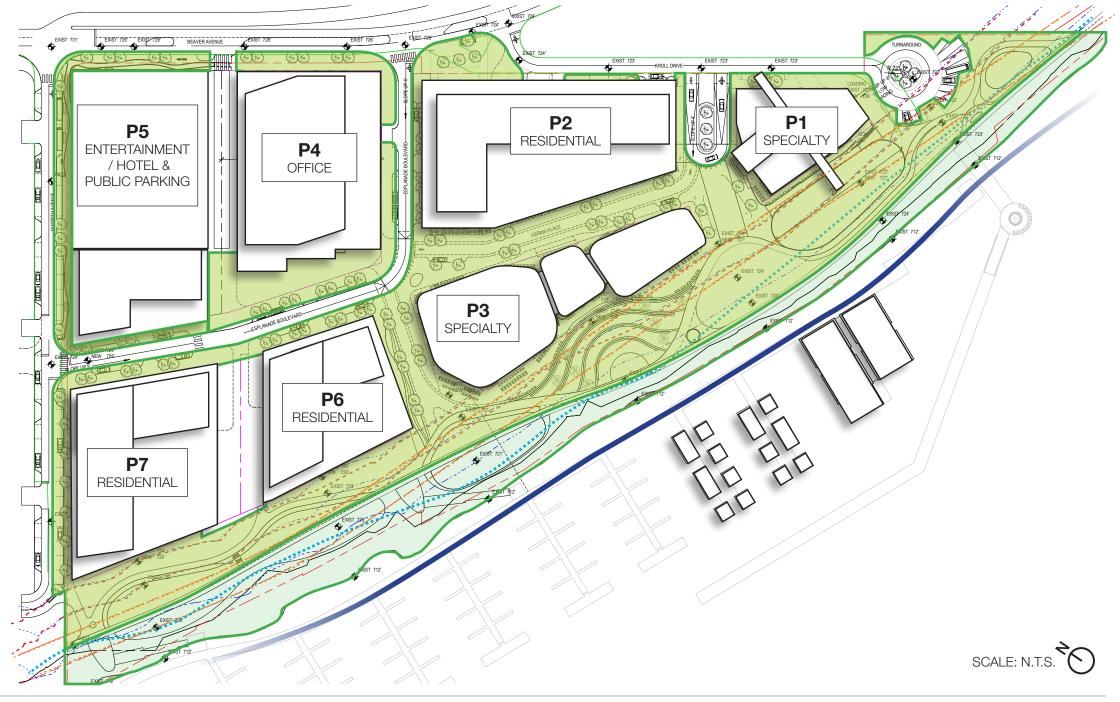
~39%

OF THE SITE IS DEDICATED TO OPEN SPACE & PUBLIC REALM (EXCLUDES ROADS)

~12%

OF THE SITE IS DEDICATED TO SLOPED RIVERFRONT LANDSCAPE

**-~1,600**' OHIO RIVER WATER FRONTAGE



# Landscape

### Site Design Guidelines

#### **Connected & Sustainable Amenities**

The Esplanade will use landscape elements to encourage pedestrian activity throughout the site, create amenities for entertainment and education, and manage natural elements and stormwater responsibly.

Elements such as swales along the river trails will be designed to both perform stormwater retention functions and provide an appealing natural environment to pass along the river trail. These will also be opportunities for educational markers describing these strategies.

The street at the center of the project, "Ferris Place" will be a tabled street prioritizing pedestrian use and paved using a mixture of permeable and pedestrian-friendly pavers. This will encourage safety while also supporting limited vehicular access. A tabled connection to the Plaza provides safe pedestrian access across the site and connecting to the garage in P4 (meant as the primary access point for all visitors).

The river trail is planned to be expanded into two parallel paths, one for safe pedestrian use and one for bicycle use.

Public site amenities such as the riverfront amphitheater, all-seasons plaza, lawn, Plaza and pet space adjacent to P2 will work together with adjacent retail and buildings to provide an amenity-dense, pedestrian-forward, neighborhood feel.







Mixture of pavers for a pedestrian-friendly and sustainable experience



Amphitheater space for local performances with permeable design









All-Seasons plaza with year-round rotation of attractions







Stormwater management as a trail amenity



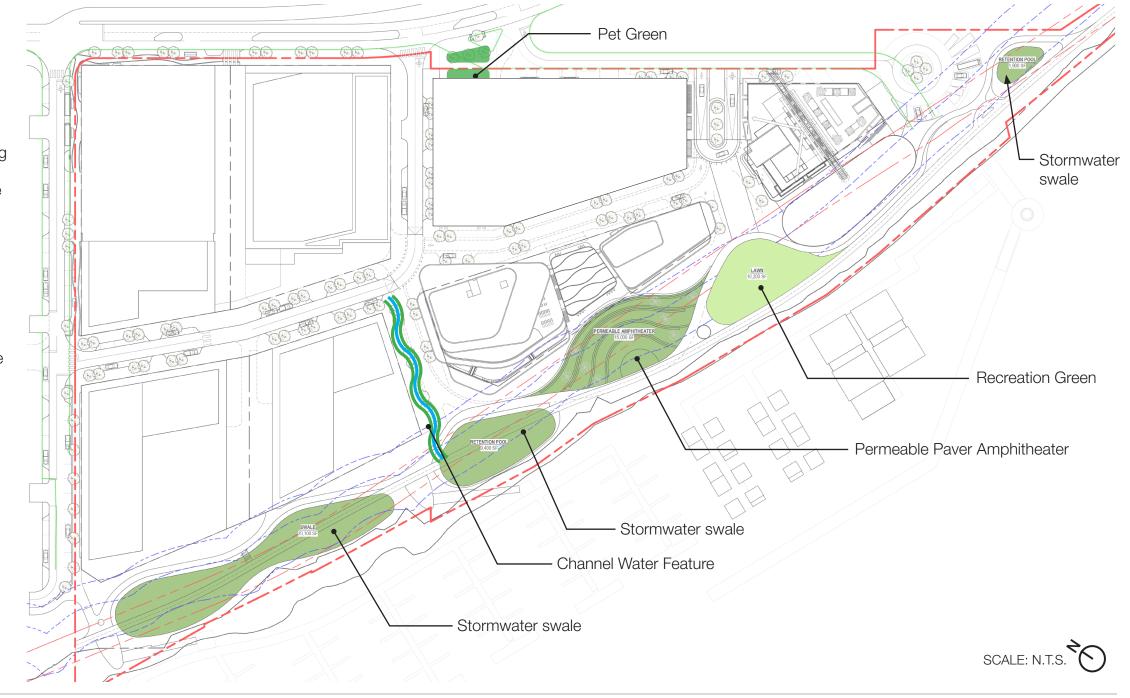


### **Stormwater Management**

Site Design

#### **Stormwater Narrative**

The Esplanade stormwater management will be integrated into the fabric of the landscape, making the retention areas not only functional but multi-faceted features that add to the user experience along the waterfront. In some instances serving as educational tools regarding the natural systems surrounding the area and in others simply to beautify the landscape. The stormwater BMP's are proposed to retain the 95th percentile runoff event, approximately 85,000 cubic feet of storage volume, in accordance with §1303.03.a.2 of the City's Stormwater Ordinance. The site has also been design to the meet the City and State requirements for volume, rate and quality of stormwater runoff. The necessary City stormwater and State NDPES permitting will be obtained for this project.



### **Site Access**

### Bicycle Access & Parking

#### **Bicycle Access**

Cyclists are a primary design consideration for the landscape design of Esplanade. The landscape design along the river provides for separate pedestrian and bicycle trails, improving safety for all users. Bicycle parking is planned at key access points along the Three Rivers Heritage Trail that lead to all parts of the development site.

Streets within the site are intended as shared bicycle and automobile ways. Esplanade Boulevard is the primary vehicular route through the site, while Ferris Place is planned as a tabled street prioritizing pedestrians and cyclists over vehicles.

#### **Future-Proofing**

The current layout of Beaver Avenue does not provide for a safe cycling experience, with both limited width and off-site connections. We have designed the sidewalk along Beaver Avenue with the clearance necessary to be converted in the future to support a bike lane, while still meeting city pedestrian and planting requirements.



### **Site Access**

### Automobile Access & Parking

#### **Automobile Access**

Each residential building will contain dedicated parking for its occupants, but site visitors will be guided to parking located just off Beaver Avenue, so that vehicular traffic is discouraged within the interior of the site, which is designed to be pedestrian oriented. Interior roadways will include "tabled" portions that will permit limited drop-off, servicing, or emergency access, but are not generally a part of vehicle circulation.

#### **Trafffic Impact Study**

DOMI has received, reviewed and approved projected trip generation of the development as prepared by the project's traffic engineer, Kimley Horn Associates. DOMI staff is currently reviewing the anticipated trip distribution model.

The formal TIS report will be finalized and submitted after receipt of comments, if any.



# **Site Access**

### Loading & Service

### **Loading & Service**

Loading and Service are planned to promote the pedestrian experience as much as possible within the site. This is done by loading on side streets and away from the pedestrian heart of the site where possible.

Access to P1 is planned along Kroll Drive, near the service turnaround. Additional loading is planned for the Zamboni that services the skating rink plaza in winter.

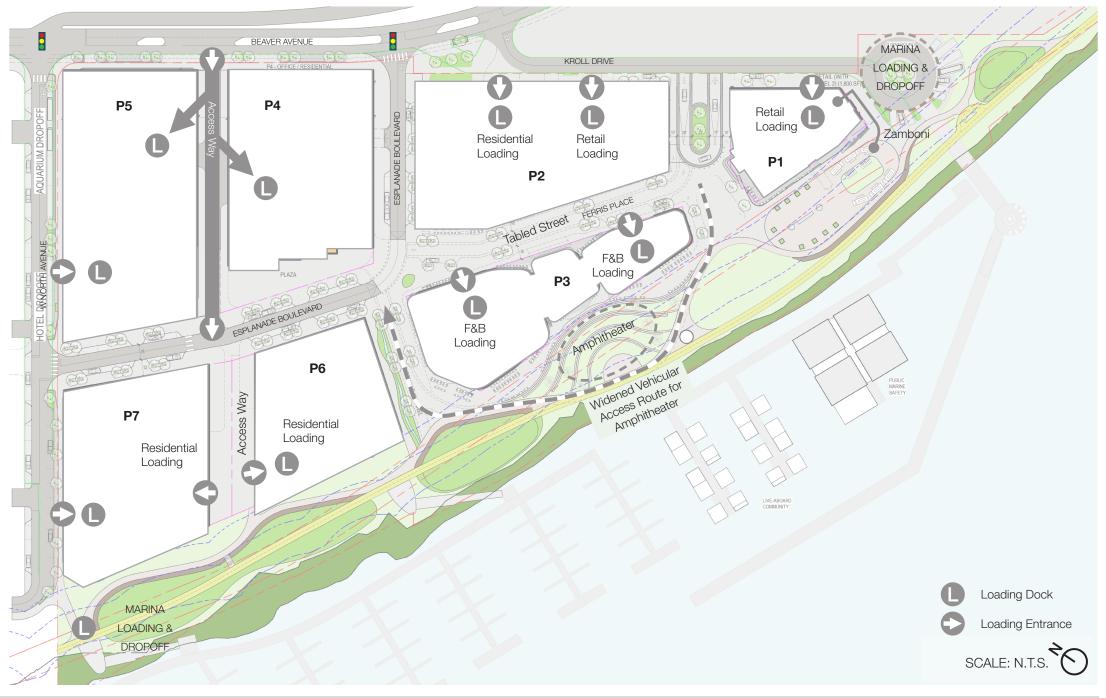
Loading for P2 is also provided along Kroll Drive, supporting both retail and residential needs.

P3 is loaded from Ferris Place.

Loading for P4 and P5 is planned from the shared access way between them. The P5 Hotel loads from W North Avenue.

P6 and P7 are both loaded from an accessway shared between them and additional loading for retail for P7 along W North Avenue.

All loading docks will be strategically designed to integrate holistically with the overall building designs and minimize their impact on the pedestrian experience.



# Site Access Sidewalks & Trails

#### Pedestrian Friendly Design

New sidewalks throughout Esplanade are planned to connect and emphasize the public space and building anchors of the project. They join with improvements to the river trail, including a parallel pedestrian path alongside the bike trail.

Specialty programs in P1 (The Wheel building), P3 (F&B Pavilion) and P5 (Entertainment) are connected by a large level area (in Green) through the middle of the project. This helps create a pedestrian-focused project center that surrounds P3. Required automobile and service access to these areas are facilitated by a pedestrian-friendly tabled street "Ferris Place" and a raised portion of "Esplanade Boulevard" further extends this connection. This allows visitors driving to the site to park in the P4 garage and then walk to the rest of the project on a level surface. Visitors coming from the Three Rivers Heritage Trail can also directly access this area to create a large pedestrianfocused district.

New sidewalks (in Blue) provide planted pedestrian ways, along with space for parallel parking and drop-offs for residential and retail locations on-site. Sidewalks along Beaver Avenue are designed with a width that can accommodate a bike lane in the future. Improvements to the river trail (Orange)

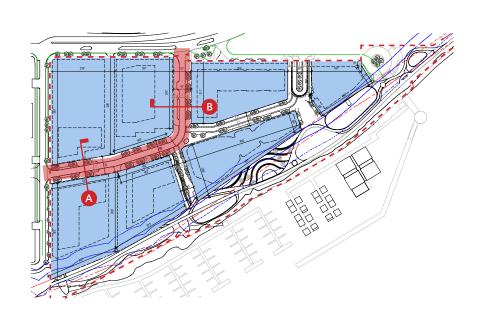


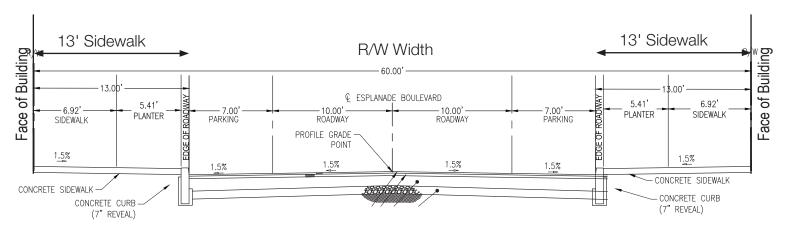
# Street Sections - Esplanade Boulevard

Street Sections

#### Sidewalk Design

Pedestrian-friendly streets are planned throughout the site. 13' wide sidewalks are maintained along Esplanade Boulevard, increasing the width beyond the required 10' wide sidewalks.





Esplanade Boulevard - Typical Street Section P2 Podium 13' Sidewalk 13' Sidewalk Building R/W Width of © ESPLANADE BOULEVARD 6.92' SIDEWALK 5.41 5.41' -- 10.00' --ROADWAY ---- 7.00° PARKING - 7.00' — PARKING PLANTER SIDEWALK PROFILE GRADE POINT 1.5% 1.5% 1.5% - CONCRETE SIDEWALK CONCRETE SIDEWALK CONCRETE CURB CONCRETE CURB (7" REVEAL) (7" REVEAL)

Esplanade Boulevard - Street Section at P2 Facade



# Sustainability

Intent

The project will implement coordinated sustainable initiatives across infrastructure. public realm and buildings for maximum effect, helping make the development a positive contributor to meeting and advancing the goals of the surrounding communities.

The designs will be considerate to local neighborhoods as well as environmental needs and concerns, as well as focus on a variety of sustainable measures, including (but not limited to) storm water management, energy and water efficiency, education, material selection, heat island effect, indoor air quality and construction waste management.

#### **Rating Systems**

Sustainable goals for this project have been developed to maximize the positive impact across many categories. The diagram at right captures the project team's conceptual aspirations early in the design process.

Initiatives which touch on these goals include: Manchester-Chateau Neighborhood Pittsburgh 2030 District Pittsburgh P4 WELL Community & Building Standard **LEED** 







Reduction. Reuse. **Efficiency** 

Engaging, Exciting, Playful, Educational

> Emphasize People & Support Community

A Place for Everyone

Incorporate History & Plan for Future

> A Unique, Active, Multi-use. Multi-dimensional Destination

Connection & Integration Incorporate & Support Nature & Wellness

#### **Economic Health**

#### **Growth & Development**

- Support community, businesses and organizations
- Eliminate redundancy
- Consider impact and additional uses

#### Experience

- Design for Pedestrians
- Create a must-visit destination

#### Community & Culture

- Integrate art, community, and culture
- Unique to Pittsburgh and Extension of Community

#### **Transportation & Mobility**

#### Design

- Strengthen connection to transportation systems and to/from the site
- Create porous site edges & Organic transportation feel
- especially for pedestrians

#### System

- Design to support multi-modal systems
- Enhance and incentivize alternative transportation
- Connect to existing infrastructure and systems for efficiency
- Support easy, safe, and universal access

#### **Energy & Carbon**

#### **Efficiency & Reduction**

- Reduce Energy through Innovative Design
- Consider Incorporation of Passive House
- Prioritize Minimizing Total Carbon Impact
- Consider Durability & Ease of Operation

#### Integration & Innovation

- Aspire to go Above and Beyond energy efficiency targets:
- Net Zero Ready
- Review Potential for Net Zero Ready Solutions at scale
- Incorporate Nature & Resources into Solutions

#### **Health & Wellness**

#### **Nature**

 Connect to and support nature through existing resources & habitat creation

Adaptive & Resilient

- Biophilic Design
- Celebrate design contrasts and integrations

#### **Tenants**

- Design for increased indoor Environmental Quality
- Ease of User Control
- Educate Tenants on Low Impact, High Quality

#### Community

- Create an active outdoor space
- Follow Universal Design principles
- Design to improve outdoor air quality & wind control

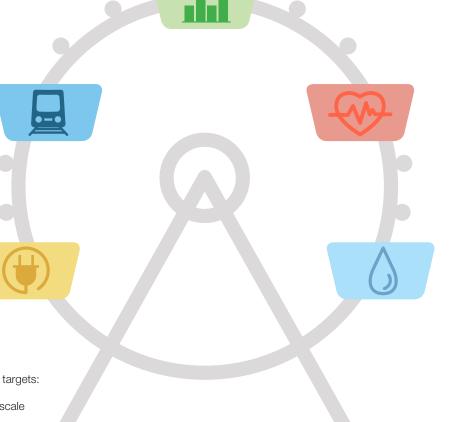
#### Water

#### **Efficiency & Reduction**

- Prioritize minimizing water consumption
- Find best scenarios to incoorporate graywater and rainwater reuse
- Consider durability & Ease of Operation

#### Integration & Innovation

- Incorporate nature & Resources into solutions
- Support natural resources through restoration and
- Design for future by considering adaptation & resiliency
- Celebrate water in creative design solutions





# Sustainability

Intent

#### Sustainable Goals

Each building and area of the site present different challenges and opportunities for sustainable design. The goals to the right describe how each is being developed to support the holistic goals of Esplanade.

Sustainability is at the forefront of design for the Esplanade project; the buildings, the site, and how they work together in holistically. The notes to the right of the page are some opportunities each building has for sustainable initiatives. These initiatives are just a sampling of some of the opportunities the team will be exploring.

In our master planning studies, we have assessed some energy use intensity baselines and targets that will be reviewed once we move to the next phases of design, and how to draw those down using our best design and development experience.

#### P5 - Hotel / **Entertainment**

- Education & Entertainment
- Didactic features to make the entertainment destination a learning tool for visitors
- Use of energy exchange systems for maximum efficiency

#### P4 - Office / Residential

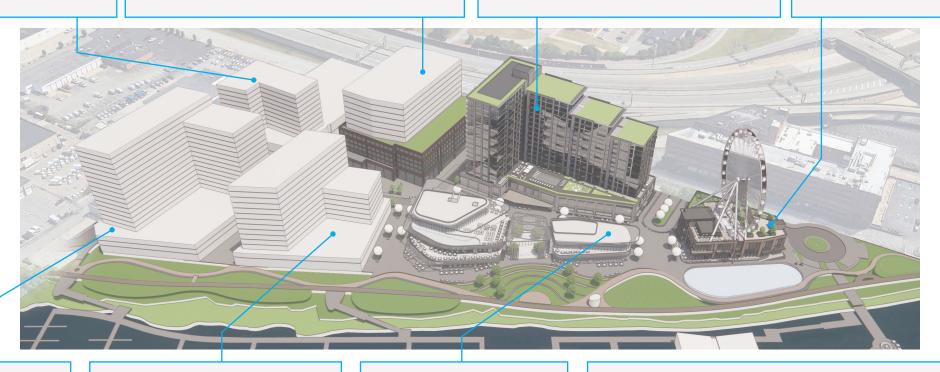
- · Grocery: Wellness-forward and increasing food accessibility
- Hotel: Making sustainable luxury attractive
- Residential: Electrification, stormwater use, connection to transit hub and site amenities
- Site parking garage encourages pedestrian use of the overall site
- Heat recovery central ventilation system for buildings to minimize energy and peak loads
- Operable windows in residences for User Control

#### P2 - Residential

- Residential: Electrification, stormwater use, wellness and business amenities. Roof terraces, balconies and operable windows. Stepped massing and layout to promote river and city views.
- Retail: Pedestrian-priority street access
- Heat recovery central ventilation system for buildings to minimize energy and peak loads
- Operable Windows in Residences for User Control

#### P1 - Wheel Building

- Destination wheel and community / history exhibit space.
- Trail restrooms and trail-oriented
- Destination year-round plaza
- Heat recovery ventilation system to minimize energy and peak loads



### Resiliency

- Design buildings for future climate (i.e. oversized cooling)
- Potential for a Shared District Energy system

#### P7 - Residential

- Residential: Electrification, stormwater use. roof amenities and operable windows. Stepped massing and layout to promote river and city views. River trail connection.
- Industry standard low flow fixtures
- Potential for infrastructure for PV & Green Roof

#### P6 - Residential

- Residential: Electrification, stormwater use, roof amenities and operable windows. Stepped massing and layout to promote river and city views. Wellness amenities and river trail connection.
- Industry standard low flow fixtures
- Potential for infrastructure for PV & Green Roof

#### P3 - F&B Pavilion

- Indoor-outdoor food & beverage experience
- Central atrium with operable
- Sub-metering scheme for tenants
- Variable Flow Exhaust Hoods to optimize efficiency based on heat and exhaust output

### Site & Landscape

- Stormwater management as an attractive feature
- Independent pedestrian and bike trails for safety
- Universal design with Ferris Place tabled to prioritize pedestrian users
- Kiosks serving trail and plaza locations

- Direct connections to the river along streets entering the site
- Easy Wayfinding, Design for Accessibility
- Use Light-Colored paving to reduce urban heat island
- More public transit routes and Bike Access
- Biodiversity & Local Plants





# **Riverfront Zoning Bonus Points**

### Summary

#### Requirements & Intent

The achieved Riverfront Zoning Bonus Points are sufficient for the MDP already presented. Some plots require all of their points, while others, typically amenity buildings, do not require any of the points they earn. Should more points become available, various improvements to the plan can be made, as presented on this page.

- P4 Office: Additional office floors would allow a reduced footprint, allowing better view corridors.
- P5 Hotel: Additional floors increase the capacity of the hotel while allowing a reduced footprint.
- P6 Condominiums: Additional floors allow the building footprint to take up less site area with the same unit count.
- P7 Apartments: The reduction in the P6 building footprint would allow P7 to create more market and affordable units with no increase in height.

Bonus Point	Category & Description	P1 - Entertainment	<b>P2</b> - Residential (Apartment)	P3 - Specialty F&B	<b>P4</b> - Office	P5 - Hotel & Entertainment	<b>P6</b> - Residential (Condominium)	P7 - Residential (Apartment)
1.a	<b>On-Site Energy Consumption -</b> New Construction: Compliance with IECC Code Section C407 or ASHRAE Standard 90.1-Appendix G	1	1	1	1	1	1	1
3.b	<b>On-Site Energy Generation:</b> At least 50% of energy use is generated from on-site renewable sources; or Connecting to distributed energy systems. <b>(Shared District-Wide)</b>	2	2	2	2	2	2	2
4.c	Affordable Housing: At least 15-19.9% of units for rent are affordable housing for persons at or below 80% AMI; or At least 15-19.9% of units for rent are affordable housing for persons at or below 60% AMI; or At least 20% or more of units for rent are affordable housing for persons at or below 80% AMI.		4					4
5.b	At least 75% of the first two (2) inches of runoff from impervious surfaces is captured and managed using Preferred Stormwater Management Technology installations; or At least 30% of the first (2) inches of runoff from impervious surfaces is captured and reused on-site.	2	2	2	2	2	2	2
7.c	Riverfront Public Access Easements, Trails and Amenities: For sites where an existing trail is present and a public easement has been made, improvement of trail to City standards as well as national standards of Manual or Uniform Traffic Control Devices (MUTCD), and that connects to existing adjacent trails when feasible. (Shared District-Wide)	1	1	1	1	1	1	1
7.e	<b>Riverfront Public Access Easements, Trails and Amenities:</b> Provision of public restrooms accessible from the public riverfront trail, open during expected hours of trail use.		2		2	2	2	2
<b>13.</b> a	Fresh Foods: The building is designed and constructed, or a renovation of a building within the District, includes a Fresh Food Market as a tenant. Note: NOT CURRENTLY AVAILABLE IN RIV- ASSUMES WILL BE IMPLEMENTED PRIOR TO MDP APPROVAL; ASSUMES SHARED DISTRICT-WIDE	2	2	2	2	2	2	2
	Total Points Achieved	8		8		10	10	
	Total Points Used	0	- '	1	10	10		
	Maximum Height above 60' RIV Baseline  Maximum Height proposed above 60' RIV Baseline		140' 140'		100' 100'		100' 100'	140' 137'
	125' Riparian Zone Reduction Proposed		140	10'	100	100	100	137

### Phasing

### Site Phasing

This drawing illustrates the plan to build the master plan in two phases:

Phase 1

Phase 2



