

Cathedral Park Master Plan

Prepared for

City of Portland
Nick Fish, Commissioner

Portland Parks & Recreation
Zari Santner, Director

Prepared by
Mayer/Reed

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City of Portland

Nick Fish, Commissioner
 1221 SW Fourth Avenue
 Portland, Oregon 97204
 T 503.823.4151

Portland Parks & Recreation Department

Zari Santner, Director
 1120 SW Fifth Avenue #1302
 Portland, Oregon 97204
 T 503.823.5729

Portland Parks & Recreation

Kathleen (Kip) Wadden
 Senior Management Analyst
 1120 SW Fifth Avenue, Suite 1302
 Portland, Oregon 97204
 T 503.823.6152

Mayer/Reed

319 SW Washington Street, Suite 820
 Portland, Oregon 97204
 T 503.223.5953
 www.mayerreed.com

Carol Mayer-Reed, FASLA, Partner
 Teresa Chenney, Project Manager
 Ryan Carlson, Landscape Architect
 Joshua Carlson, Landscape Designer

Flowing Solutions L.L.C.

3305 SW Eightyseventh Avenue
 Portland, Oregon 97225
 T 503.297.6311
 www.flowingsolutions.com

Andrew Jansky, Principal

North Portland Neighborhood Services

2209 N Schofield Street
 Portland, Oregon 97217
 T 503.823.4099

Mary Jaron Kelley, Community Networking Specialist

Public Advisory Committee

Joe Adamski - Core Committee Member, Bicycle Activist
 North Portland Greenway

Nancy Arveson - Librarian
 St. Johns Library

Jim Barnas - Resident, Association Member
 Cathedral Park Neighborhood Association / Friends Baltimore Woods

Andrew DeVeux - Resident
 Cathedral Park Neighborhood

Page Hawley - Mother's group, Resident
 Cathedral Park Neighborhood

Frank MacMurray - Resident
 Cathedral Park Neighborhood

Barbara Quinn - Resident, Association Chair
 Cathedral Park Neigh. Association / Friends Baltimore Woods

Doug Ray - Resident, Assoc. Member
 Cathedral Park Neighborhood Association

Jeri Williams - Representative
 Native American Youth and Family Center (NAYA)

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Photographs and illustrations by Mayer/Reed or Flowing Solutions unless noted otherwise.



Cathedral Park is an urban oasis where people commune with nature in Portland. The tranquility of the park, at certain moments, is remarkable. The 23-acre park links the historic St. Johns neighborhood in North Portland to the Willamette River and is enhanced by beach and boating access. The historic St. Johns Bridge, iconic, muscular and elegant, towers above and anchors the park that received its name from the soaring gothic arches. Bridge and landscape are truly one at Cathedral Park.

Completed and dedicated in 1980, Cathedral Park offers a remarkable sequence of people-to-nature settings. Visitors' experiences range from very active areas like the boat ramp and the Jazz Festival amphitheater, to weddings under the bridge, to more passive flexible open spaces and picnic niches for families to enjoy. Walking pathways circle the park, touch the river and offer views into secluded habitat areas.

Park Vision

Cathedral Park is one of the few riverfront parks on the east side of the Willamette River and with the St. Johns Bridge, it has special historic status. It is presently well used for community-wide events and cherished by many of the individuals and families who visit. It is expected that use will increase in the next 25 years, given the strong trend of higher density housing development taking place in the adjacent neighborhood and St. Johns.

Demographics indicate that families with children are increasing in the area. Yet it is important for the park to serve the elderly community who has special needs for improved facilities and greater accessibility. In addition to these user groups, Cathedral Park will become an important bicycle destination of the future North Portland Willamette Greenway Trail extension and for the 40-Mile Loop nearby.

The vision of the master plan is to allow for increased use of the park without compromising the essential character-defining features of the river and bridge. The continued success of the park requires upgrading certain facilities and use areas, while balancing protection and improvement of natural resources and meeting the needs of future visitors.

Portland Parks & Recreation and the St. Johns community now have a master plan with thoughtful concept and management strategies that will direct future development and serve future users. The vision represents a rejuvenated landscape, one that celebrates the river and balances the needs of people with nature.

Site Improvements

Since it was first developed 28 years ago, many of the park and marine facilities have deteriorated over time. For example, the toe of the launch ramp has failed due to river currents and erosion, which limits its use at low water, as well as creating a potential safety hazard. The docks remain uneven due to an accumulation of sediment and debris during periods of low water resulting in unsafe conditions.

The Cathedral Park Jazz Festival, operating continuously since the dedication of the park, is an important tradition that has grown through the years. However, the stage is now too small and needs upgrading. The signature fabric shade structure has worn thin and is stained from use. Utilities needed for the Jazz Festival vendors are inadequate or absent altogether. One of the original restroom buildings became vandalized to the point of removal, therefore restroom services should be replaced in the upper part of the park. The park also hosts the large Pirate Festival during the late summer in the lower sections of the park.

Rather than making substantial spatial and programmatic changes to Cathedral Park, the master plan outlines a number of improvements that are compatible with the existing park. For example, some recommended improvements repair or upgrade the existing amenities for visitors. Other recommendations create unique spaces to enhance visitors' experiences and appreciation of the landmark bridge, views, natural resources and riverfront. Still other improvements provide opportunities for increased sustainability practices especially with regard to wildlife habitat and stormwater quality.

Throughout the park, many of the pathways are too narrow and cracked. Universal, barrier-free access is insufficient in the upper part of the park. Benches and picnic tables need replacing. Visitors desire play environments for young children that are compatible with

the park's special identity. Park drainage has always been a challenge, and it's difficult to navigate the park in wet months without boots. Riparian areas have not received adequate planning, maintenance and restoration. Some of the perimeter landscape plantings are overgrown and create hiding spaces that park visitors deem unsafe.

Cathedral Park today, like many places in the rest of the city, faces conflicting opinions regarding recreation opportunities and access, industrial development, neighborhood livability, and watershed protection. The master plan responds to Willamette River policy direction by proposing improvements that yield a net gain for all these competing elements in the park. For example, the magnetism of the bridge and the river can be enhanced with the development of new circulation routes, special viewpoints and promontories, while improving the native landscape and riparian corridor. Off-channel habitat is proposed for an existing cottonwood draw, which will be bolstered with diverse riparian vegetation. A new pedestrian bridge will provide views of the habitat area.

To respond to needs in other areas of the park, an existing, underutilized parking lot is replaced with native plants to create upland habitat. New pathways provide universal accessibility in the upper portion of the park. Park entrances support railroad-crossing protection. North Crawford St. is brought up to standard with sidewalks and stormwater treatment facilities. A creative and educational play environment is incorporated. The beach is kept open and the path along the waterfront is designed to protect habitat and manage human use. View corridors are improved and protected, and the amphitheater is modernized for greater flexibility of events. These improvements and others are further articulated in the pages of this master plan report.

Master Plan Process

During the spring and summer of 2008, the master plan process included opportunities for Portland Park & Recreation (PP&R) and the consultant team of Mayer/Reed and Flowing Solutions to meet with community members and stakeholders and study the park in light of the next 25 years. From the outset, the master plan participants were convened to address these key issues:

- Recreational needs of the immediate neighborhood and the larger community given its classification as a regional park
- Habitat and watershed enhancements
- Event impacts
- River access
- Internal park circulation
- Terminal 4 rail line bisecting the park
- Views of the St. Johns Bridge and the waterfront
- Boating infrastructure improvements

The Technical Advisory Committee (TAC), the Public Advisory Committee (PAC), stakeholders and public participants played an instrumental role in the master plan process. Technical advisors included representatives of the Bureau of Environmental Services, Port of Portland, Portland Office of Transportation, Cathedral Park Jazz Festival, Oregon State Marine Board and staff from PP&R. The master plan team received input from local neighbors, community members and boaters throughout the region. Continued coordination and communication between these entities and PP&R is essential to successfully implementing this master plan. These project participants, as well as PAC members, have expressed appreciation and enthusiasm for the final master plan concept.

Portland Parks & Recreation and the Cathedral Park consultant team would like to extend gratitude to these participants who participated in the master plan and supported, enriched and improved the process of keeping this park as a treasured city resource.



Portland Parks & Recreation and North Portland Neighborhood Service (NPNS), Office of Neighborhood Involvement developed the public involvement plan for the Cathedral Park Master Plan. NPNS coordinated the public involvement efforts including the following activities:

- Identifying stakeholders and recruiting members for the Public Advisory Committee (PAC)
- Undertaking outreach efforts to under-represented residents such as the elderly, disabled, Latino, Asian and Native American communities
- Collecting historical documents
- Assisting with consultants' stakeholder interviews
- Moderating PAC meetings and public discussion at open house events

The nine PAC members ranged in interest from nearby neighbors to citizens involved in trail planning and natural resources. Four PAC

meetings were held at the city's Water Pollution Control Lab adjacent to the park. Each session was well attended and open to the public. The PAC members provided a wide range of information, ideas and opinions to the design team and project staff while balancing their own perspectives with a community-wide vision. Prior to the first meeting, PAC members and community members attended a site walk to observe the existing conditions of the park and share their knowledge of the park's past and present uses.

The master plan process included two public open houses and a more formal presentation, all of which were well attended by 40-60 people. The two open houses were held at the Water Pollution Control Laboratory and the third master plan presentation was held at the St. Johns Community Center in order to reach different segments of the community. The open houses began with brief presentations by the design team and ended with informal discussions around graphic exhibits. The public was encouraged to comment verbally, use comment cards, write sticky notes on the

exhibits and discuss issues with members of the design team and project staff. Members of the PAC also attended the open houses to help answer questions and engage the public. In an expanded outreach to park visitors, the NPNS and PP&R staff attended several concerts and festivals in Cathedral Park to provide information about the master plan process, the concept alternatives; and to answer questions and solicit feedback from event attendees.

Advertisement of the open houses and solicitations of feedback were achieved through the PP&R website, distribution of comment cards, flyers and email. Email announcements were sent to project mailing lists, numerous North Portland newsletters, newspapers, and various email distribution groups. Several newspaper articles published during the master plan process described recent activities and announced future meetings. PP&R supported the process throughout with a website that explained the master plan process, displayed current plans and illustrations and allowed for comments and questions.



Kip Wadden discussed master plan ideas during the Jazz Festival 2008.



Open house presentations were well-attended.



Design team members had informal conversations with open house participants.

As an important step toward implementation of the park improvements, the Cathedral Park master plan serves several important functions including:

- Developing the cost estimate and outlining methods of funding
- Providing management direction and a park vision
- Guiding a phased approach to implementation

There is not presently a guaranteed timeline for implementation. However with a park of this size and caliber, the scale of proposed improvements is appropriate for consideration in the park bond measure envisioned for 2010.

Several other funding sources for specific components include:

- Oregon State Marine Board for marine improvements
- Partnership with other public agencies or special grants for the riparian and bank restoration
- Larger state or federal grants for specific areas of the park
- Private sponsors or local grants for smaller elements, like the play environment or the new stage at the amphitheater
- Mitigation investments arising from resolution of the Portland Harbor Superfund

The future financial, political and permitting climates will determine what approaches are feasible in the coming years.



The vision for Cathedral Park master plan is to, “*Establish a signature park for the next quarter century that promotes a sense of community; enhances open space and celebrates the vitality of this unique waterfront park.*”

Guiding Principles

At the beginning of the master planning process, a series of guiding principles was developed:

- Embrace the existing relationship between the St. Johns Bridge, Willamette River and park by establishing and protecting scenic view corridors to the waterfront.
- Build a system of safe and universally accessible pathways to link and strengthen the connection between different areas of the park including selected areas along the waterfront.
- Maintain and enhance the large contiguous open lawns and beachfront access and provide necessary amenities to support a diverse range of passive recreational opportunities and modestly sized programmed events.
- Bring existing dock facilities up to current standards to provide access for light watercraft, motor boats, transient boat access and fishing.
- Provide ample, safe connections through the park for pedestrians and bicyclists to the water’s edge and to the Willamette Greenway Trail.
- Protect and enhance natural resources along the river and nearby upland habitat areas
- Use high-quality enduring building materials and plantings that help to minimize maintenance and respect the historic bridge architecture.
- Integrate green street strategies where right-of-way improvements are required and incorporate adaptable parking areas to accommodate fluctuations in park attendance.
- Gracefully incorporate the park’s history and local ecology into discovery areas useable by children.
- Improve wayfinding and signage to help visitors locate the park and navigate within all areas of the park.

The Cathedral Park Master Plan provides a framework for sustainable development strategies. These strive to address a broad spectrum of sustainability goals including watershed health, stormwater treatment, threatened and endangered species, flood management, green building, alternative transportation, energy conservation, carbon footprint reduction, sensitive recreation and community event management. This section provides an overview of these recommendations while the chapters ahead will discuss the strategies in greater detail.

Management and Education

- Develop an adaptive vegetation and visual access management plan.
- Integrate the park's history and ecology with discovery play areas and interpretive signs.

Wildlife Habitat

- Re-grade the riverbank at draw to create off-channel habitat.
- Plant native riparian vegetation along riverbank.
- Place and provide for natural accumulation of large woody debris on riverbank.
- Connect the park's forest canopy to Baltimore Woods with new upland plantings.
- Focus pedestrian improvements and vegetation management strategies to limit impact to habitat areas.
- Discourage feral cat habitation.
- Locate stage and event space away from riparian and upland habitat.

Human Health

- Provide light watercraft launch to support Willamette River Water Trail.
- Increase the number of loop pathways to encourage walking for health.
- Enhance universal access of pathways and parking facilities.
- Improve bicycle and pedestrian connections to Willamette Greenway Trail and 40-Mile Loop.
- Retain the open beach for public access and enjoyment.

Water Pollution Control and Flood Control

- Maintain existing floodplain and re-grade riverbank at draw to increase seasonal flooding.
- Remove the existing asphalt parking lot next to the bridge anchor house.
- Use porous asphalt for waterfront pathways.
- Provide water quality swales and infiltration basins at streets and with parking lot improvements.

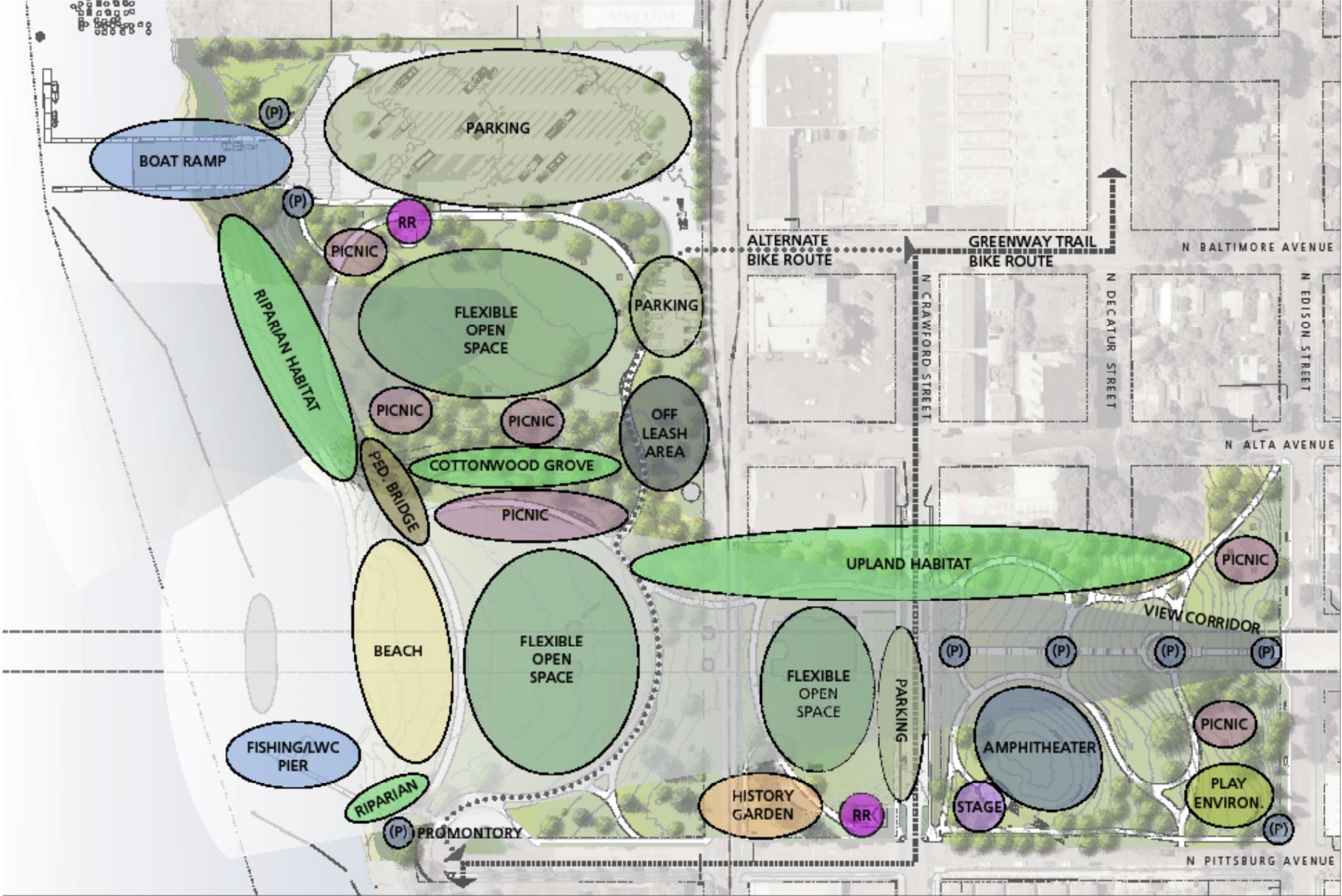
Resource Conservation

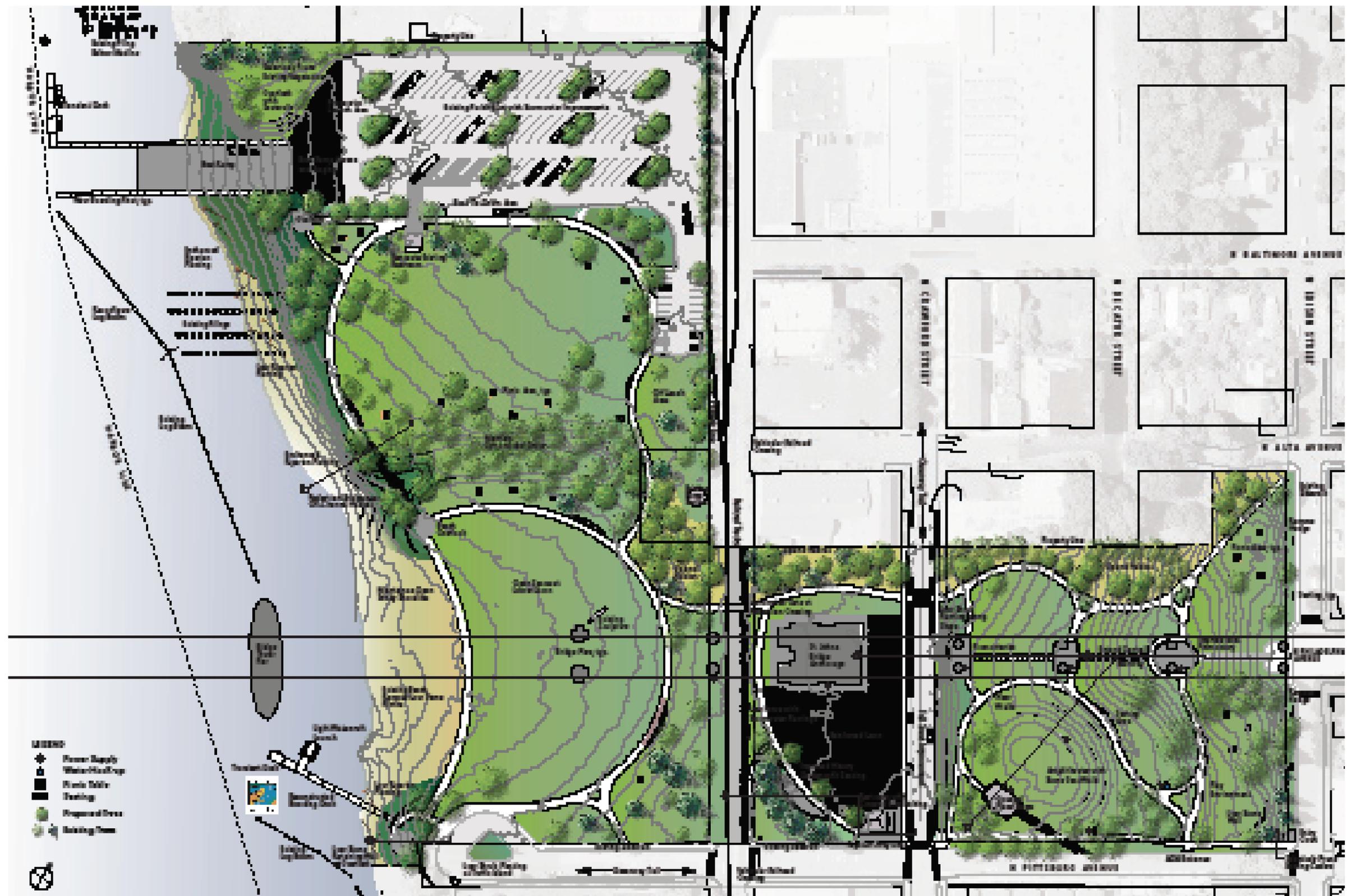
- Retrofit existing light fixtures and install new light fixtures with energy-saving luminaries.
- Reduce irrigation and fertilize use with native and native-adapted plantings, and improve soil health.
- Incorporate durable and reusable materials such as stone and sand set pavers to reduce material waste.
- Build new restroom building with natural daylighting and water-saving fixtures.
- Update existing restroom with water-saving fixtures and energy-efficient lighting.



Cathedral Park is located beneath the St. Johns Bridge on the Willamette River

MASTER PLAN PROGRAMMING DIAGRAM





ACCESS and CIRCULATION

Wayfinding

Cathedral Park is located beneath the St. Johns Bridge, a community landmark, yet very few signs direct visitors to the park. Therefore, street signs located at major intersections in downtown St. Johns and at the east bridgehead are proposed to help visitors find their way to the park and the boating facilities. It is also important to clarify the location of the parking lot at the terminus of N. Baltimore Ave.

Entrance signage is lacking at Cathedral Park at two key locations. The wood entrance sign at the corner of N. Pittsburg Ave. and N. Edison St. is deteriorating and difficult to see. In the master plan an entry court, with a new entry sign, is proposed to make this corner welcoming and safe. The second key location is the park entry at the terminus of N. Baltimore Ave. Here, the sign is also deteriorating. Careful management of shrubs and trees and a new sign is recommended.

Existing signage along the waterfront has evolved over time, resulting in a confusing mixture of messages, styles, sizes and content. A wayfinding program will incorporate city park standard sign types and reorganize the information in order to provide clarity and reduce visual clutter at this important scenic resource.

Waterfront signage should also be developed in concert with the park as a destination point for the North Portland Willamette River Greenway Trail, 40-Mile Loop, and Willamette River Water Trail.

Interpretive Signage

Interpretive signage and other graphic communication should be integrated into the design of the promontories along the riverfront. This is especially important for the off-channel habitat in the cottonwood draw. Interpretive signage can also trace the history of the park and Willamette River as an industrial, recreational and natural resource.

View Points and Visual Access

The most spectacular views are available from the upper park across to the Willamette River. Photographers, in particular, favor the gothic arches beneath the bridge as seen from N. Edison St. In order to protect and embrace the relationship between the park, the St. Johns Bridge and Willamette River, the master plan suggests establishing a scenic view corridor around the bridge to the riverfront.

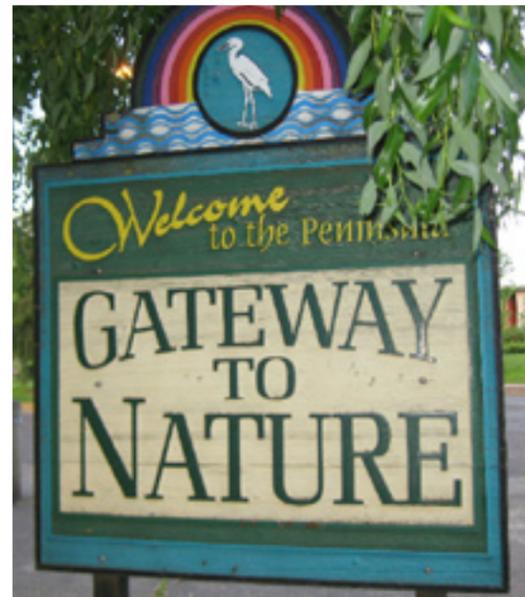
The security of visitors requires visual access throughout the park, particularly for police officers and the community to observe

activities in the park from the surrounding streets. Careful vegetation management will reduce potential hiding places for transients, feral cats and illicit behaviors. The following summarizes the view enhancements, lighting and proposed vegetation management that will enhance views and improve visual access for safety:

- Extend the central walkway from N. Edison St. and align two promontories underneath the bridge.
- Improve park lighting underneath the bridge, at the existing upper promontories and central stair. Retrofit existing light fixtures and install new light fixtures with energy-saving luminaires.
- Improve the view of the bridge anchorage by removing the existing willow tree between the bridge piers above N. Crawford St. Replant additional trees to mitigate tree loss.
- Maintain the views from the north lawn to the river.
- In the bridge view corridor, maintain visual and physical access to the water.
- Replace the existing evergreen hedge and selectively prune vegetation along N. Edison St. and replant with low shrubs and groundcovers.



Existing signage at north boat ramp and dock



Existing signage at south entry to greenway trail



Existing signage at upper park at N. Edison St. and N. Pittsburg Ave.

- Selectively manage vegetation of dense cedar trees at the corner of N. Pittsburg Ave. and N. Edison St.
- Selectively manage vegetation on the north and south sides of the boat ramp and along the perimeter of the boat ramp parking lot. Limb up trees north of the boat ramp and replant native groundcover in place of feral cathouses.

Walking and Biking Pathways

Pathways connect all the major open spaces in Cathedral Park. The master plan builds upon this existing system to create safe and universally accessible pathways, where allowed by topography, to link and strengthen the connection between different areas of the park, including selected areas along the waterfront and upper park. Specifically, the following improvements are proposed:

- Provide new 10-foot pathways and widen existing pathways to 10 feet to accommodate maintenance vehicles and pedestrians.
- Provide loop pathways in the upper park and better access to the middle part of the park.
- Provide a new paved waterfront pathway and widen the

existing waterfront pathway to accommodate both bicycle and pedestrian use. Repave waterfront path at waterfront lawn with porous paving.

- Build a pedestrian bridge over the off-channel habitat at the cottonwood draw.

Universal Access

At the time of the original Cathedral Park design, there were no national standards for universal access. With the current Americans with Disabilities Act (ADA) standards, it is essential to optimize and enhance access for all visitors including the following improvements:

- Provide pathways in the upper park to each destination point with gradients below 5% without ramps and handrails.
- Build a new accessible restroom.
- Upgrade parking and pathway entries.
- Replace and improve signage.

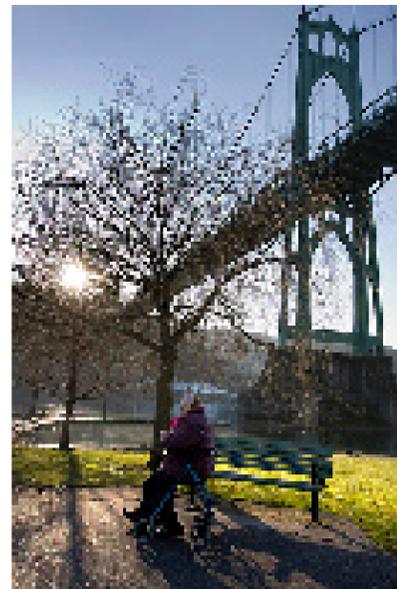
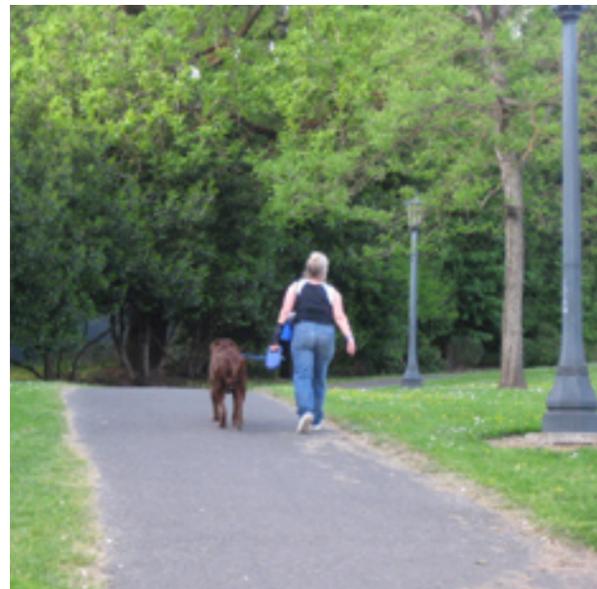
North Portland Willamette Greenway Trail/40-Mile Loop

There are wonderful opportunities for Cathedral Park to provide

connections and facilities to support the North Portland Willamette Greenway Trail, which will extend from downtown Portland to Kelley Point Park. The proposed extension follows N. Pittsburg Ave. and N. Crawford St. as shown on the illustrative master plan. Designating a street route benefits bicycle commuters by giving them the fastest route. It also benefits pedestrians by separating them from the busy bicycle commute traffic. Cyclists that are more leisurely will find alternative routes through Cathedral Park on pathways that are shared with pedestrians. For example, the proposed 12-foot wide waterfront pathway will provide a scenic connection with a view of the river and will likely be popular with pedestrians and cyclists alike.

Vehicle Circulation & Parking

Currently, non-boating visitors park their vehicles on the surrounding streets, including N. Pennsylvania Ave., N. Edison St., N. Pittsburg Ave., N. Crawford St. and in the parking lot at the terminus of N. Baltimore Ave. Visitors infrequently use the existing parking lot south of Peninsula Iron Works because it is hidden, lacks signage and is sometimes used for storage of private commercial materials. Along the unimproved N. Crawford St. at the existing off-leash area, a gravel surfaced area serves some parking needs. This existing



parking meets or exceeds the normal daily demand. However, during events and busy boating weekends, the street parking and parking lots are at capacity.

To improve parking conditions and to provide a more responsible use of parkland, the following changes are recommended:

- Maintain the size, primary parking configuration and stormwater treatment facilities of the existing boat ramp parking lot. However, provide landscape enhancements as well as new asphalt surfacing and striping. Additional stormwater treatment facilities will be installed as needed.
- Improve N. Crawford St. to meet current transportation standards including parallel parking, sidewalks and stormwater treatment facilities.
- Create a reinforced lawn area in the middle part of the park to support new event opportunities and to provide overflow parking only during times of heavy use by programmed events.
- Partner with nearby public agencies and local businesses to use existing parking lots for event parking.
- Maintain N. Pittsburg Ave. and the turn-around for short-term parking and drop-off.
- Remove the small, underutilized parking lot south of Peninsula Iron Works and replace it with native upland plants to create habitat connectivity.
- Maintain the existing parking lot along the railroad tracks at the N. Baltimore St. entrance.

Railroad Crossings

Prior to the commencement of the master plan, the Port of Portland, and the Cathedral Park and St. Johns neighborhood associations worked together to plan a “whistle-free zone” where the trains will not be required to blow their whistle at night when approaching unprotected crossings. The Port anticipates that railroad traffic will increase in the future. Because of this likely future condition, the design team examined a number of potential under- and overcrossings in an attempt to separate park visitors from trains. However, all of



Existing pedestrian railroad crossing within park

the overcrossing structures with lengthy ramps for ADA access had negative visual impacts in the scenic corridor of the historic bridge. The undercrossing tunnels and associated ramps made ADA accessibility difficult and limited habitat potential of the cottonwood draw.

Therefore, to accomplish the goals of the future whistle-free zone, three on-grade automatic gated railroad crossings with lights and warning bells are recommended at Cathedral Park. Of the three crossings, two are vehicular crossings at N. Pittsburg and N. Baltimore Avenues. One is for pedestrians only, located just northwest of the bridge anchorage. This pedestrian crossing is essential to the visitors’ well-being and safety to avoid dead-ends in the circulation routes.

To reinforce safety at the gated railroad crossings and to support the Whistle Free zone concept, a low fence located in a landscape swale is proposed along the east side of the railroad track to deter pedestrians from crossing at undesignated areas. The fencing is only proposed on the east side of the tracks next to an activity area. It is not deemed necessary on the west side since the spatial separation of tracks from pathways does not encourage crossings.

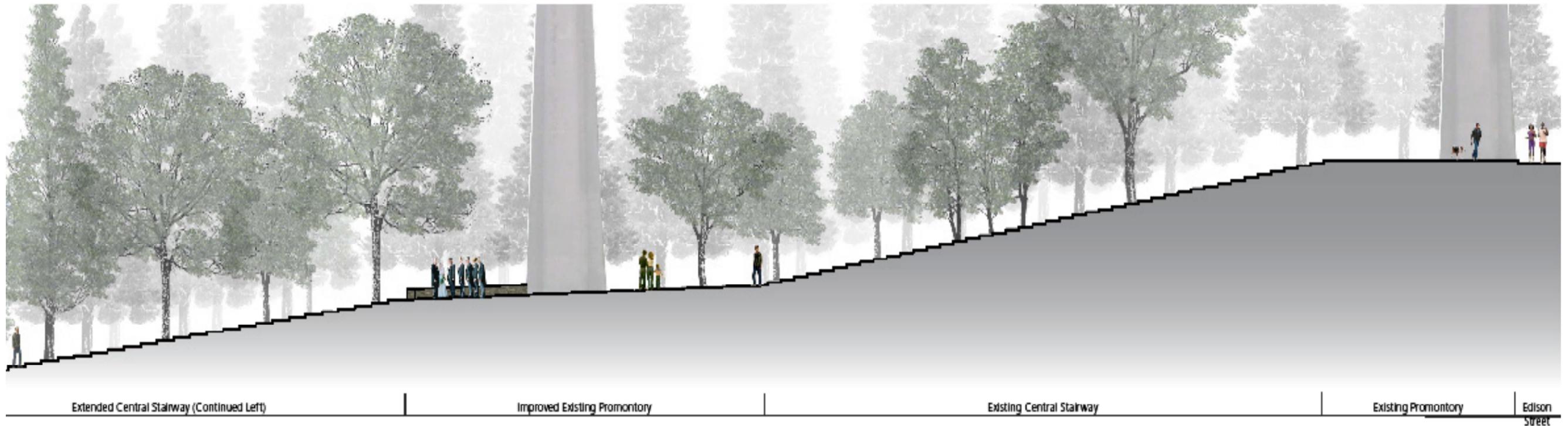


Proposed upgrade for pedestrian railroad crossing within park





Cross-section 'A' along N. Crawford St. to proposed lower stair improvements



Cross-section 'B' along proposed middle to upper stair improvements and promontories

WATERFRONT ACCESS and BOATING FACILITIES

North Boat Ramp, Transient Dock & Parking

The boat ramp at Cathedral is primarily used for fishing and recreation by small boats under 22 feet. The existing boat ramp and parking facilities currently function well. At peak use several times a year, boaters could use additional parking. However, a majority of the time the parking is adequate, so the illustrative master plan does not show additional parking. In an effort to “green” the parking lot and to manage stormwater successfully, additional planting islands and trees have been added to the current parking lot configuration. This has resulted in a loss of several boat parking spaces.

The ramp and associated facilities are past their useful life and need replacement. Improvements should meet current Oregon State Marine Board (OSMB) standards for in-water facilities. At the same time, effort will be made to design a “fish-friendly” replacement facility.

Recommended marine improvements include:

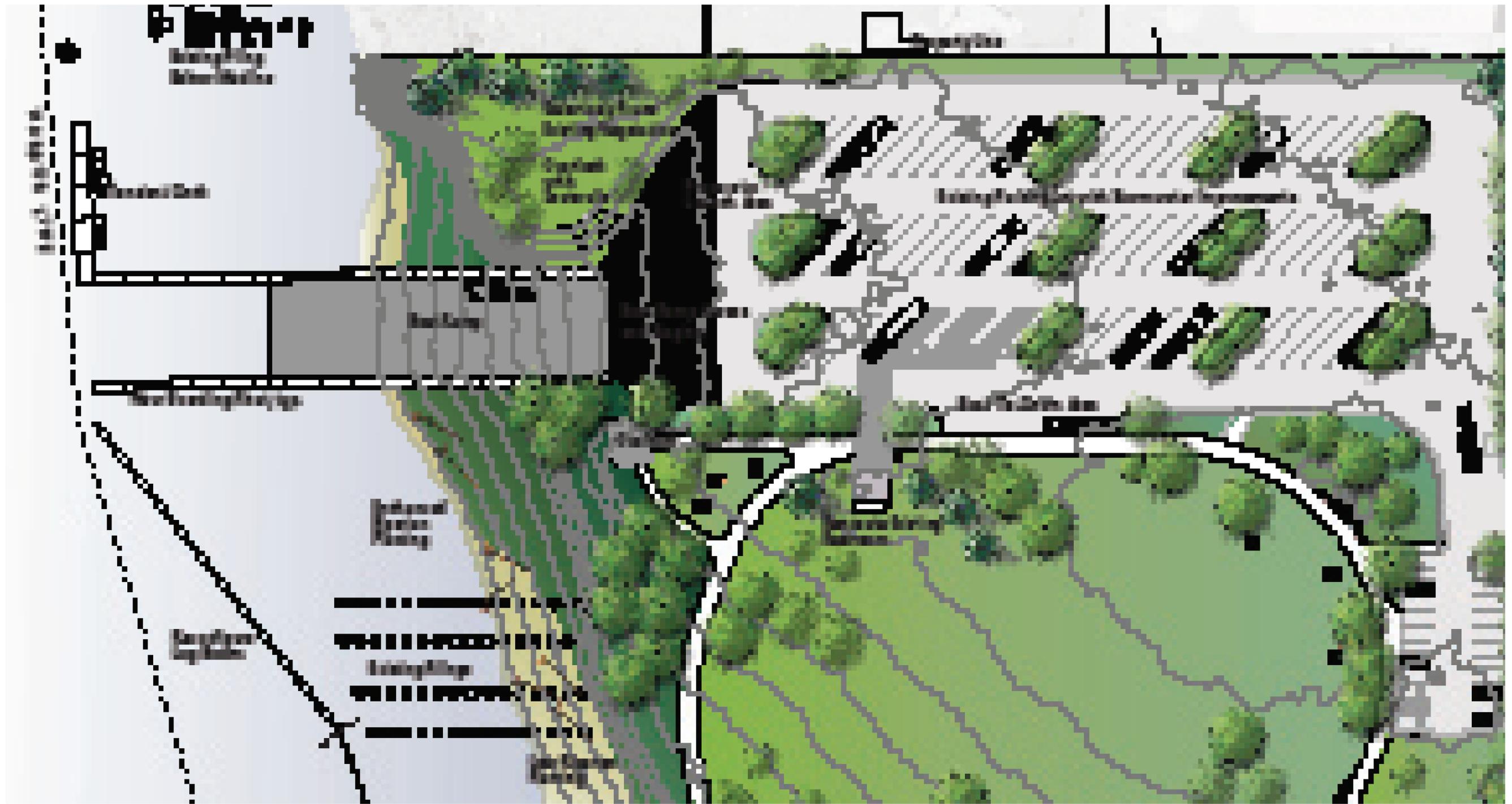
- Move the existing transient tie-up further from shore, but within the harbor line to allow use of both sides.
- Use modern materials such as grating on the floats to minimize shading of the water and impacts on fish.
- Replace and extend the existing boarding floats with lower floats to allow better access for ramp users and to provide additional tie-up space for boaters.
- Provide a pump-out and dump station for transient boaters to pump out holding tanks and help protect river water quality.
- Provide a new designated tie-down area at the south edge of the existing parking lot.
- Mark the tie-down and prepare-to-launch areas to better organize the boat launch and retrieval process.
- Extend and texture the boat ramp with a “V” groove surface to enhance traction and safety.
- Improve the condition of the existing restroom.
- Flank the boat ramp with stone promontories to provide safe waiting space for families while boats are being launched.



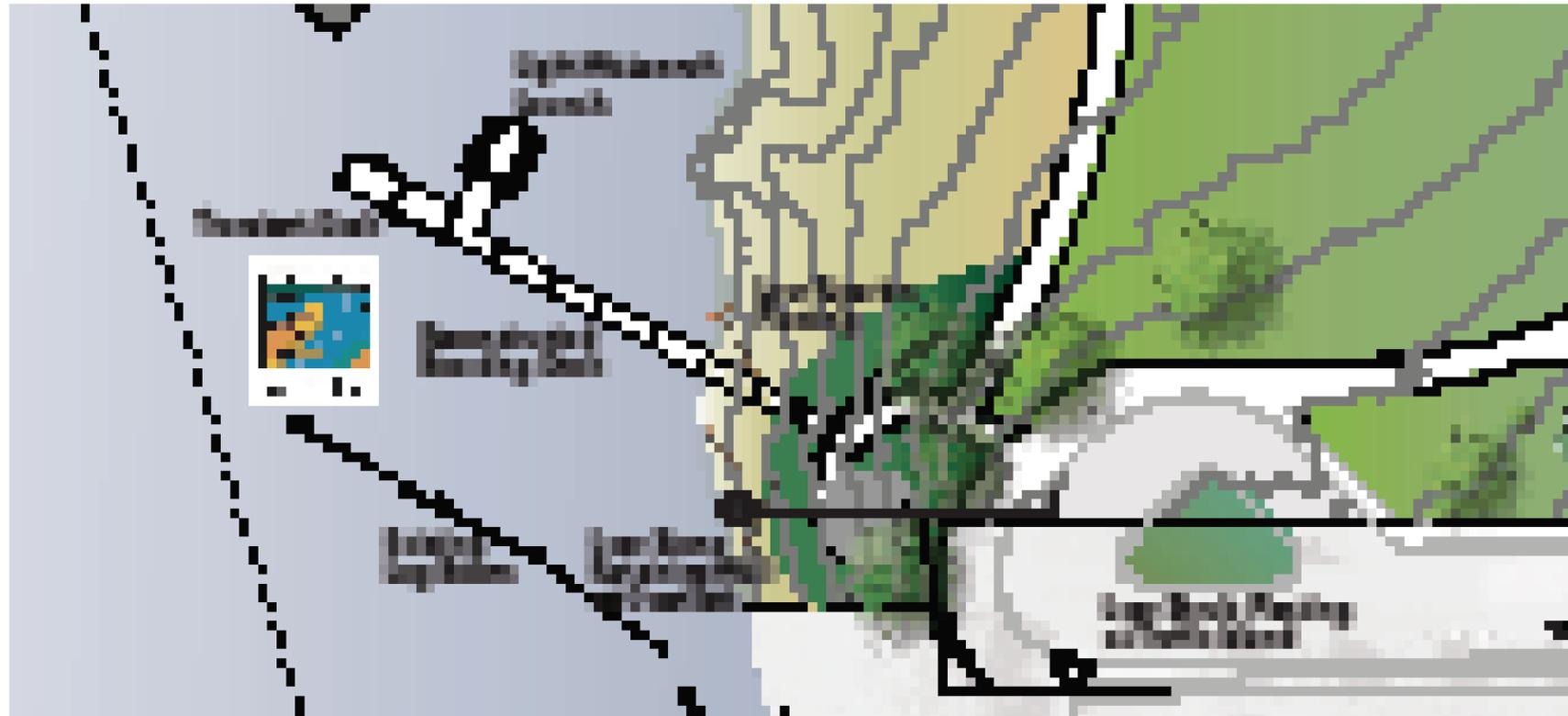
Existing north boat ramp and dock do not meet current standards.



Existing north boat ramp and dock and transient dock on right are in need of improvement.



Enlarged plan at proposed boat ramp and existing parking lot improvements



Recommendations for an improved transient and light watercraft dock, promontory and beachfront riparian planting at the terminus of N. Pittsburg Ave.

South Transient Dock and Light Watercraft Launch and Fishing Pier with Promontory

Cathedral Park is a key access point in North Portland for Willamette River Water Trail users. The master plan recommends separating light watercraft and fishing activities from the motorized boat facilities in the park. Future replacement of the fishing dock will reduce the dock footprint and modernize with materials that lessen impacts to fish. A replacement dock will serve as a light watercraft launch boat tie-up and a fishing dock. The replacement dock will be near the proposed restroom east of the railroad tracks. Parking for car-top watercraft will be on-street. Those users arriving with trailers may elect to use the north boat ramp. Improvements for the south waterfront end of the park include:

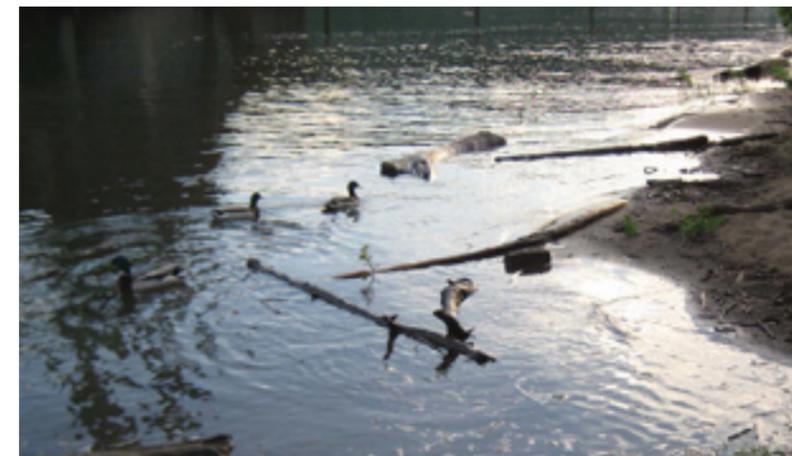
- Restore the riverbank through bioengineering methods to promote improved riparian habitat.
- Replace the fishing dock with a multi-function facility that is usable from both sides with no fence preventing access to watercraft. This includes a small low-freeboard attached to the main dock that allows water launch and retrieval without the need to run aground on the beach.
- Construct a stone promontory at the N. Pittsburg Ave. terminus to focus pedestrian use and provide views of the river toward downtown. This will be a universally accessible river viewpoint.



Existing pedestrian ramp links to existing fishing dock at the foot of N. Pittsburg Ave.



Existing south transient dock at N. Pittsburg Ave. - as viewed up pedestrian ramp toward entrance on shore.

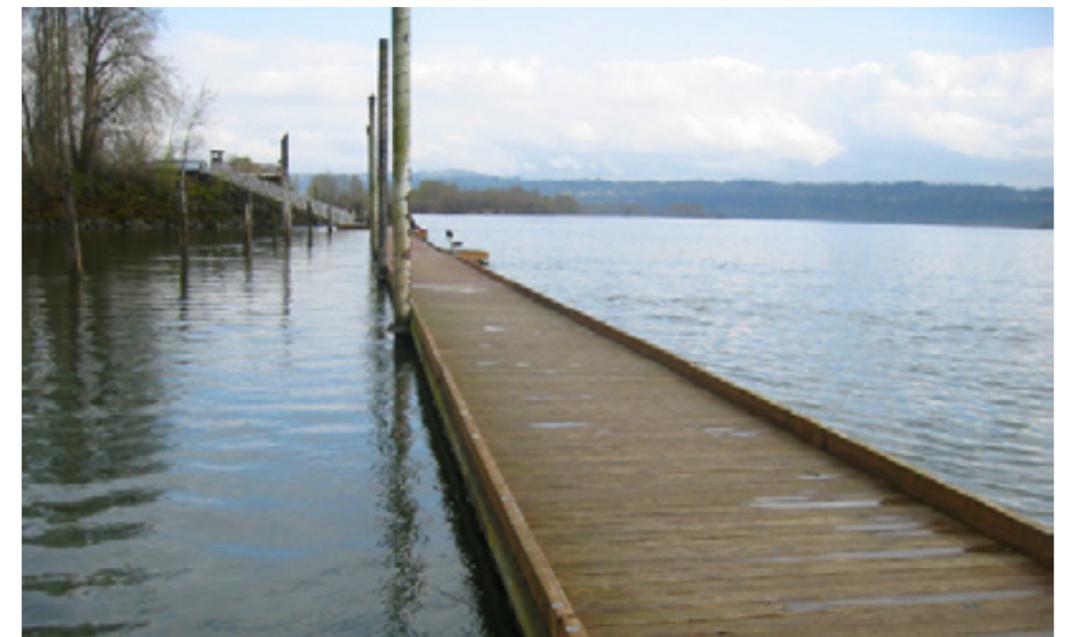




Example of an improved dock and textured ramp facilities at Skamania, WA.



Example of a new pedestrian ramp for light watercraft access at Steamboat Landing, Camas, WA.



Example of a new light watercraft access at Steamboat Landing, Camas, WA.



An aerial view from St. Johns Bridge shows the cottonwood draw at dusk.

The improvements proposed for Cathedral Park seek a balance between the needs of people and nature. There are places within this urban park where activities and natural resources should be integrated and places where they should be separate. Cathedral Park should also serve regional ecological goals by supporting the Willamette River riparian corridor as well as establishing vegetative connectivity to the nearby Baltimore Woods. These enhancements will improve both the park visitor experience and create opportunities for wildlife. For the different areas of the park discussed in the following paragraphs, it is important that an adaptive vegetation and access management plan be established in order to:

- Use native and native adaptive species to create the age distribution, spatial pattern and structure that allows native wildlife to fulfill their lifecycle needs.
- Inhibit invasive plant species, weeds and littering.
- Encourage more sustainable landscape management techniques and turf maintenance. Particularly, reduce irrigation and fertilize use through native and native-adapted plantings and improved soil.
- Enhance visitor safety and deter illicit behaviors through vegetation management.
- Provide an appropriately maintained landscape that unifies Cathedral Park.
- Designate specific improvements such as pathway or promontories that attract pedestrian use so that people don't impact the more sensitive habitat areas.
- Respect the historic Memorial Trees program of the park.

The Cottonwood Draw

The cottonwood draw near the boat ramp, now a dry swale, is thought to be a remaining fragment of a former creek that once connected to the Willamette River along what is now the N. Alta Street right-of-way. This river confluence may have once been a fishing site for the Nemelquier tribe of Native Americans since a longhouse was built nearby. However, as urban development and industry grew, the creek was piped. It now outflows into the

Willamette River via a culvert with an invert elevation that is too deep to daylight.

Maintaining the stately cottonwood grove is a critical aspect of the master plan in order to bolster riparian function. An adaptive vegetation management plan for the cottonwood draw should be followed to balance park use with wildlife opportunities. The existing cottonwood trees need care and replanting new cottonwood trees will be necessary to sustain the grove through time. The cottonwoods need to be protected from being shaded by evergreen trees. The understory plants must be carefully selected in order to establish appropriate native riparian vegetation, without creating thickets of vegetation that reduce safety in the park.



The cottonwood draw in springtime



Plan at the cottonwood draw and recommended off-channel habitat improvements



Cross-section 'C' at off-channel habitat improvements and pedestrian bridge connecting into the cottonwood draw

Upland Habitat

The ecology along the northeast perimeter of Cathedral Park will be substantially improved. It is recommended that upland trees and shrubs be established to link the river and cottonwood draw to the remnant woodland at the upper northeast corner of the park and to Baltimore Woods, a nearby special habitat area consisting of native oak and maple trees north of the park. The new upland vegetation will provide habitat for wildlife native to Willamette Valley oak woodland and oak savanna. This includes species such as Acorn Woodpeckers, Lewis' Woodpecker, migratory songbirds, Grey Squirrels, Brown Bats, butterflies, dragonflies and others that utilize these proposed landscape types. Removal of an existing parking lot north of the anchorage will be necessary to accomplish this important wildlife enhancement goal.

Currently, the upper northeast corner of the park is an expanse of lawn backed by a few cedar trees. Part of the area will be established with native trees and shrubs. The off site adjacent

property is a weedy thicket and a remnant of woodland containing a large Oregon White Oak. This tree is an important building block for the upland habitat and should be protected. In areas where screening of adjacent buildings and structures is not necessary, vegetation that is not associated with Willamette Valley oak woodland or oak savanna vegetation should be managed.

In addition, swales that use vegetation to clean stormwater will be located in several places in the park. A shallow swale with control weirs located along the north side of the upper park can transport water down the slope without causing erosion and link to the cottonwood draw. Swales will be located on the east side of the railroad tracks and the improvements to N. Crawford St. can also include small stormwater planters treat runoff from the street.



Example: Vegetated stormwater treatment swales at The Rain Garden, Portland, OR



Plan at recommended upland habitat improvements along property line of middle and upper park boundaries

Willamette Riverfront and Beach

Public access to the Willamette River has been a hallmark of Cathedral Park since its conception. People are naturally drawn to the river's magnetic qualities and it remains one of the defining features of the park. Achieving the balance of human use and habitat is especially critical at the riverfront.

The existing riverbank ranges from a shallow, sloping sandy or gravelly beach to a moderately sloping rock and gravel over the remainder of the park. Some areas of the riverbank are compromised with underwater hazards, including creosote-coated cut-off pilings from earlier industrial docks on the northern section of the shoreline. Invasive species have established a vegetative stronghold in places. Overall, the entire riverfront is rather ill-defined in terms of designating what areas are intended for people to use and what areas are best adapted for wildlife.

To enhance and protect habitat, the physical separation of human

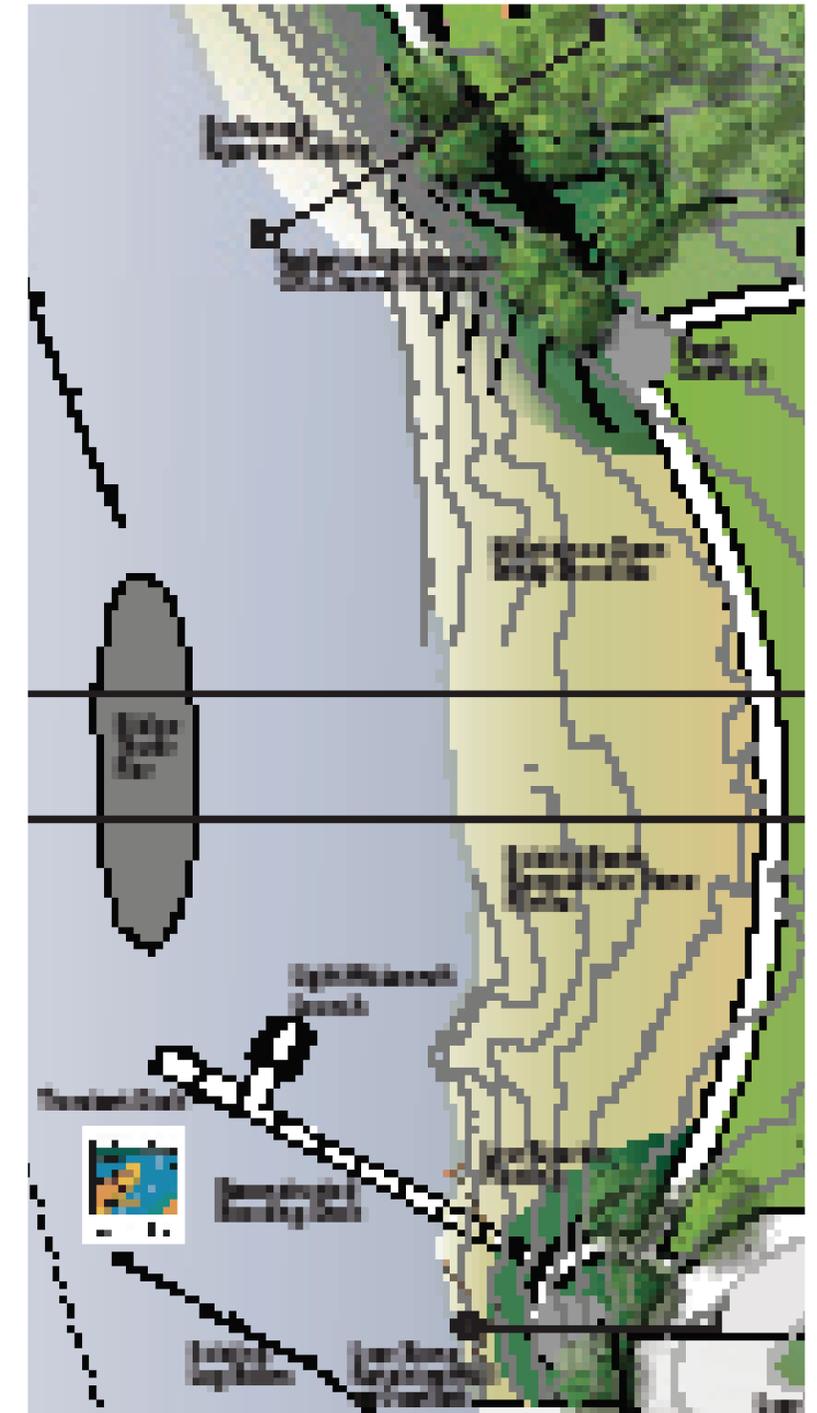
use and natural areas along the banks is recommended along the waterfront. Visitors' activities will be concentrated at the boat ramp, the beach and several promontories where they can view the river without impacting the wildlife areas.



Example: Restored creek in Wilsonville, OR



A balance of access to the Willamette River and habitat restoration at the cottonwood draw is key to meeting the goals of the master plan.



Plan at lower beachfront area adjacent to lower lawn and southern boat ramp



Restoration along the riverfront between the cottonwood draw and boat ramp will benefit habitat and watershed needs. Recommendations for restoring and improving this area include the following actions:

- Remove or cap the existing creosote pilings below the waterline.
- Remove all harmful material such as concrete, steel, trash and dimensional timber.
- Along the lower section of the bank, cap the existing bank material with clean sand to cover water-borne contaminants in sediments that have lodged on the bank.
- In the middle section of the bank, place a gravel/sand mix that is capable of staying in place on steeper slopes and plant with native plants.
- Maintain the existing top-of-bank that is generally stable, however make minor grade modifications to accommodate proposed riparian plants.
- Place large wood debris to provide structure for fish habitat.



Plan at waterfront natural resource area between boat ramp and the cottonwood draw

Habitat for federally listed endangered salmon species is scarce within the city limits on the Willamette River and especially in this industrial reach. With some bank excavation and re-grading at the west end of the cottonwood draw, Cathedral Park has potential to provide “off-channel habitat” where river water can enter the park during certain seasons. During seasonal high-water, the river can flow into the lower portion of the draw. Planting the off-channel with native riparian vegetation and placing large wood enhances this habitat.

A promontory and small pedestrian bridge at the off-channel habitat will offer views and excellent opportunities to engage people in the history and ecology of the park, while helping to manage human use. Interpretive signage and other graphic communication tools should be integrated into the design of the other viewpoints along the riverfront as well.

To enhance salmon habitat along the riverfront between the cottonwood draw and the boat ramp, it is recommended that natural large wood be placed to provide refuge and other functions. The wood should include anchored and non-anchored salvaged trees and root wads. This structure will collect additional smaller wood to create a more biologically complex shoreline. Another concept includes reconfiguring the existing floating debris boom to allow material to collect more naturally along the shoreline.

Cathedral Park is located within the Portland Harbor Superfund area and is subject to a high level of review and oversight by public agencies. The park is located downstream from numerous potential contamination sources that may impact the riverbank at the park. At this time, the park is not identified as an area of particular concern by DEQ or the US Environmental Protection Agency (EPA); however contaminated sediments in the river may become a topic of concern but the extent is not known.

The proposed riverbank work includes addition of sand and gravels, and removal of bank materials and pilings. These activities will require a permit from the Army Corp of Engineers and Division of State Lands and can be combined with the dock improvements. This work will trigger the need for a Level 1 sediment review. This review

will identify the risk of contamination and/or the need for additional testing. If contamination is found, a method to cap or remove the material must be developed and integrated into the restoration plan. Adequate time for resolution of these issues should be integrated into the project schedule.

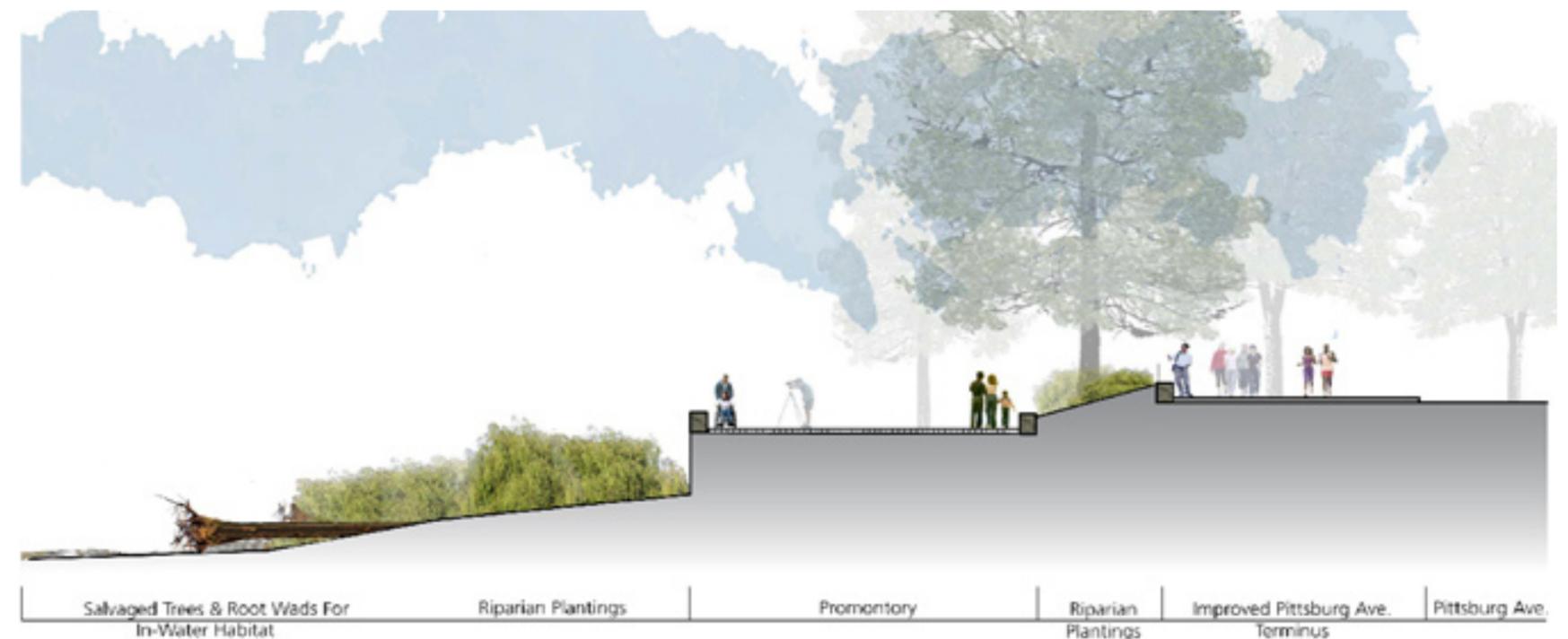
The riverbank is generally stable and some riparian vegetation has colonized over the years. However, certain areas appear to have eroded due the wave action on the bank from boat and vessel traffic, channel-forming floods and other factors. As the water flows in the Willamette River have been managed for flood control, the natural transport of gravels and sands has been reduced. Now the accretion or accumulation of beach material is typically limited to the very large but infrequent flood events. Future improvements should anticipate beach replacement of gravelly sands if erosion continues.

The existing concrete overlooks from the original park design are badly undermined because they are subjected to wave action,

erosion at certain times of year and shifting sands. These overlooks are recommended for removal. The new proposed promontories at the west end of N. Pittsburg Ave., the pedestrian bridgehead and the boat ramp will need to have foundations that avoid creating surface erosion. For example, the new promontories could be pile-founded or on-grade. Each method has advantages and permit implications, which should be explored during the design phase. Minimizing habitat impacts should be an important design consideration.



Photography by C. Bruce Forster

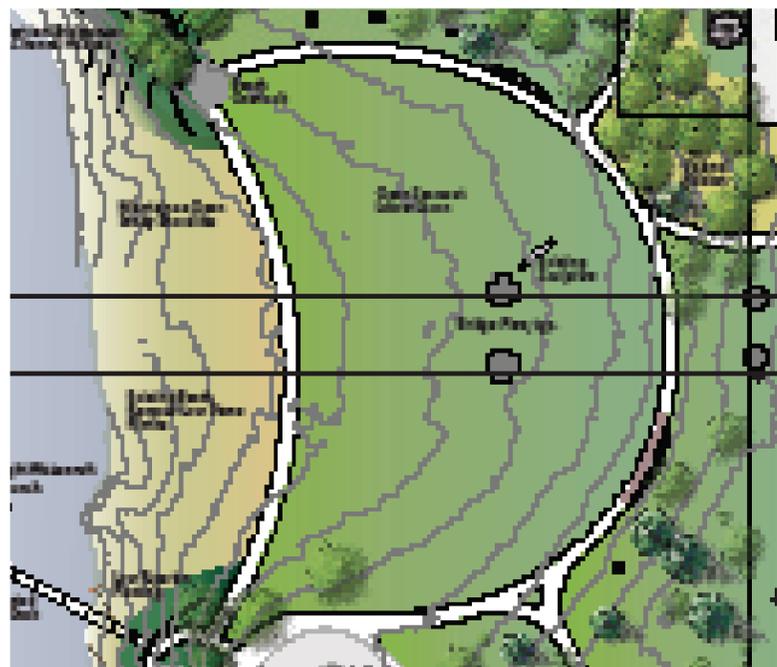


Cross-section 'D' at recommended new promontory and riparian improvements at end of N. Pittsburg Ave.

Lawns and Flexible Open Space

A defining experience of Cathedral Park is the view south from beneath the St. Johns Bridge, which is an historic architectural landmark and surely one of the most beautiful bridges in the Pacific Northwest, if not the entire west coast. The bridge views are afforded by the generous expanses of lawn and open space. Clearly, sustaining and enhancing the views of the river and the bridge are linked to the continued popularity of the park.

The broad, beautifully sloped lawn adjacent to the beach is perhaps the most well-used area of the park, allowing for a wide variety of activities including water access, picnics, informal sports, and the annual Pirate Festival. The west-facing, sunny, beach and waterfront lawn also provide spectacular views across the river to Forest Park and need to be maintained as flexible open space. Vegetation management is critical to maintaining the open views along the inside perimeter of the lawn.



Plan at lower lawn open space next to beach and riverfront access

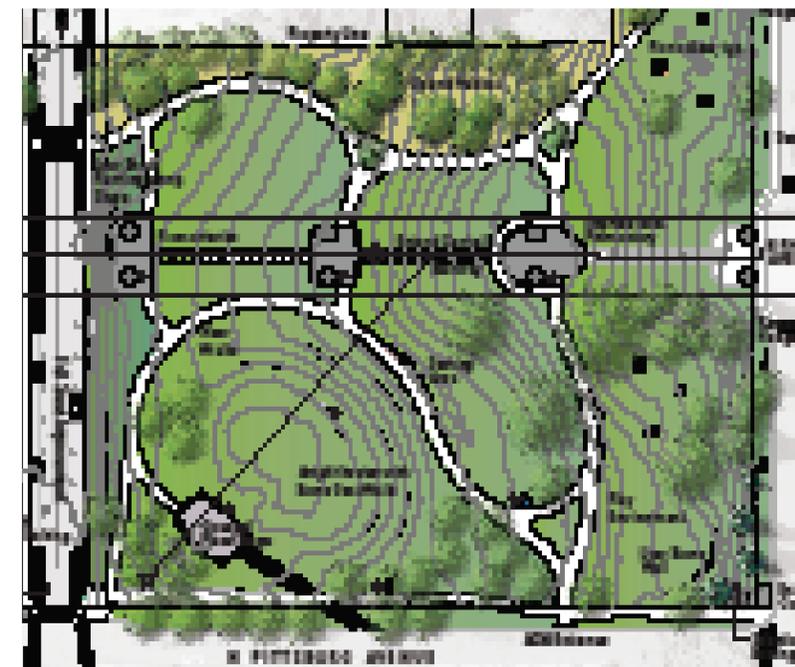


Photography by C. Bruce Forster

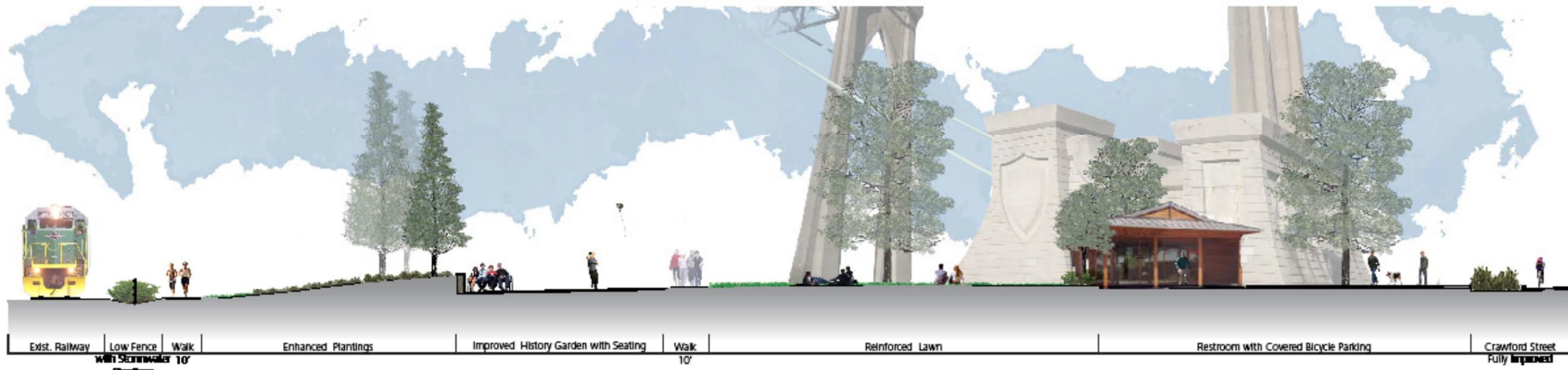
The lower lawns have been popular for many activities since the early park days of 1980.

The northern lawn near the boat parking is another important flexible open space in Cathedral Park that provides views across the river. But here water access is not proposed so that more riparian vegetation can be established at the river's edge. However, a view corridor can be managed over time so that visual connectivity of the use areas to the river is maintained. New picnic benches and several large shade trees are recommended here.

The lawns in the upper portions of the park are also used for a variety of park activities. Dozens of mature ornamental (non-native) trees are established in the upper and middle park, providing shade, spatial demarcation and beautification. Many of these trees east of the railroad tracks are part of the Memorial Trees program dating back to 1980. Maintaining the trees and replacing them with like species should be done with due consideration of the park's history. The park's poorly drained, compacted soils create difficult conditions to grow trees, and so careful species selection and planting is required.



Plan at upper park between N. Crawford St. and N. Edison St.



Cross-section 'F' at improved history garden and restroom facilities

PUBLIC EVENT VENUES

Throughout its history, Cathedral Park was intended to serve greater Portland, as well as local St. Johns residents. The Cathedral Park Jazz Festival has been held consistently every year since the park's dedication in 1980. The festival is one of the largest and oldest free jazz and blues events west of the Mississippi. It is held in the upper area of the park on the existing concrete stage with grass amphitheater seating for spectators. The attendance is estimated to be 2,500-3,000 people each year. In addition, other large public events, like the Portland Festival Symphony which presents classical music and the Pirate Festival, have become established traditions. Private events such as company picnics, barbeques and in particular, weddings, have also increased over time. Improvements, to N. Crawford St., restrooms and temporary parking areas and utilities can help events function more smoothly and reduce the impacts on surrounding residents.

Promontories & Bridge Anchorage

Cathedral Park is a favorite location for outdoor weddings and photography in the Portland area. In particular, the views from



Summer weddings are very popular at Cathedral Park.

the existing basalt stone promontories showcase the landmark cathedral-like arches of the St. Johns Bridge, which give the park its identity.

Park improvements will create a strong visual axis provided by the bridge, enhance the park's identity, and circulation and enliven the upper park. To fulfill the original vision to experience the bridge and retain the view corridor, the following improvements are recommended:

- Construct two new promontories at the pairs of arches, including stone seat walls and stone paving.
- Manage and thin the vegetation at lower promontory and on either side of the bridge anchorage.
- Extend stone paving around the bridge anchorage house.
- Use special lighting to enhance the architecture of the bridge.
- Locate electrical utilities in the walls at all of the promontories for use by event vendors.
- Link the promontories with barrier-free walkways that traverse the slopes of the upper park.
- Construct a new restroom at the corner of N. Pittsburgh Ave. and N. Crawford St.

Amphitheater

During the master plan process, consideration was given to the possibility of creating a main event space in another section of the park. But the current amphitheater location was found to be the most appropriate because of its location east of the railroad tracks, its capacity and size, its ability to serve multiple uses year-around and its good acoustics. In addition, the majority of the lower portion of the park is located in the floodplain, a condition that would hinder locating a permanent stage and below-ground utilities.

Improvements can be made near the existing location that will encourage the tradition of the Jazz Festival to continue in the park. These changes will update the amphitheater for today's technologies and entertainment needs.



Photography by C. Bruce Forster

Jazz festival at amphitheater during 1980 performances.

Within the amphitheater, the existing grading works well for seating on the lawn. The following improvements are proposed:

- Replace the existing stage with more space on the same level, approximately 20x40 feet in size.
- Provide a cover that is traditional in design to be compatible with the character of the bridge and more permanent to serve both as a stage cover and picnic shelter.
- Upgrade the electric utilities and walls that reverberate sound into the amphitheater.
- Construct basalt stone seat walls to match the promontories that will provide additional seating in the park.
- Extend underground utilities (water, sewer, electrical and natural gas) to locations where vendor booths and the beer garden are typically located.

Overflow Event Parking

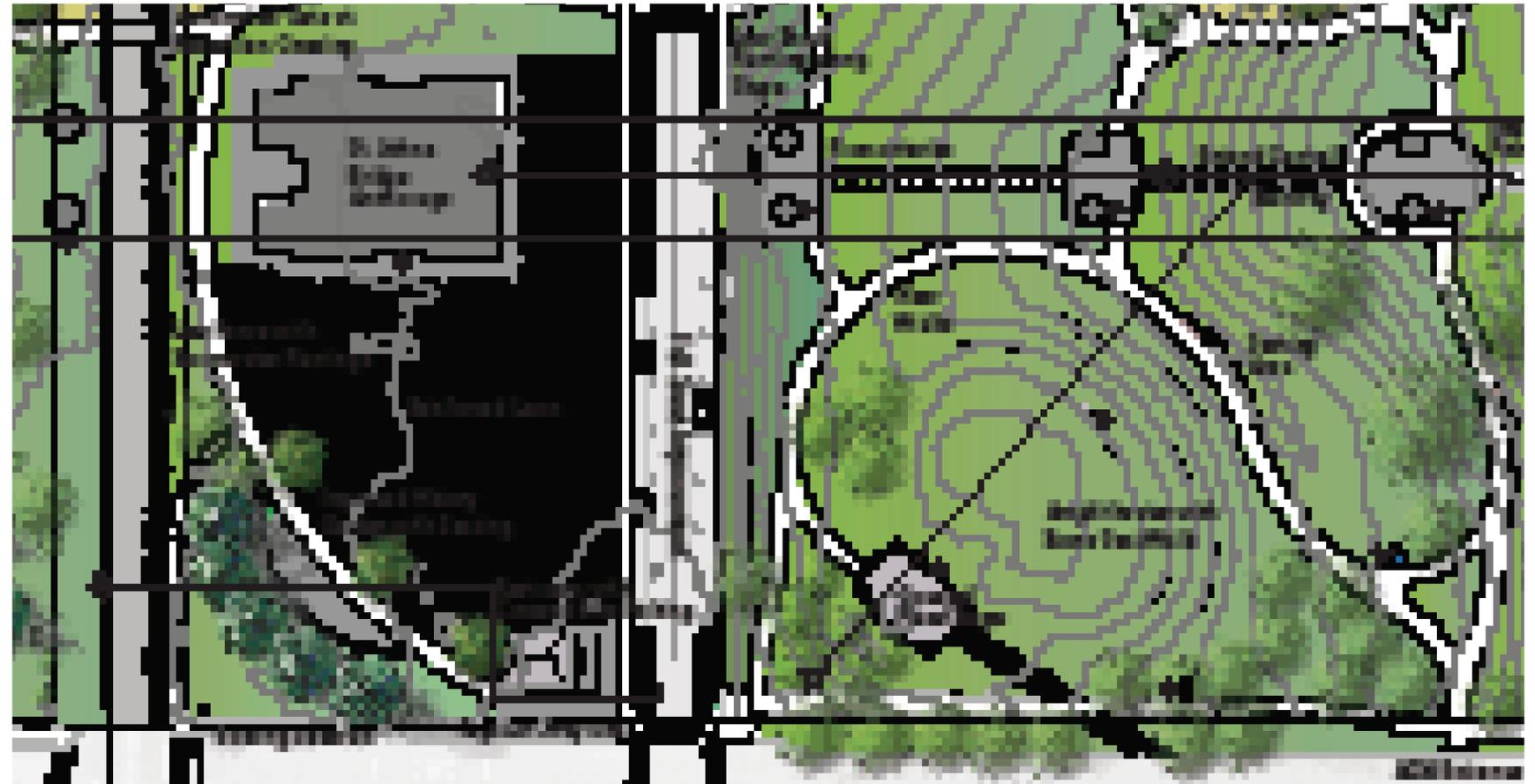
During large summer events, demand for public parking exceeds capacity and cars spill out into the surrounding neighborhood streets. With these events being held only a few days per year, parking on a daily basis does not appear to a problem.

Temporary event parking within the middle portion of the park utilizing a grass paving system can provide overflow parking for special events. This middle area of the park between the railroad and N. Crawford St. should continue to offer the qualities of flexible open space until the time that parking is needed. Event planners should coordinate with the use of the boat ramp parking as well as consider shuttles from other public and private surface parking lots in the vicinity, such as the city-owned Water Pollution Control Laboratory to the south.

Waterfront Lawn & North Lawn

Another major festival within Cathedral Park is the yearly Pirate Festival. Held in September, the Pirate Festival is a family event that includes musicians, rides, food, activities and entertainment. The Pirate Festival is located in the waterfront lawn and the north lawn and it makes use of the docks and the Willamette River with pirate ship cannon shows.

These two flexible open space areas in the park have close proximity to bathrooms, parking and views to the waterfront that make them usable event spaces. However, these spaces should be left predominantly open for public use of unplanned activities that require a large expanse of open space. Seasonal issues such as poor drainage, noise, boating and flooding should be considered when planning events.



Plan at middle area of park with recommended new restroom location and revitalized amphitheater



Cross-section 'E' through recommended covered stage area and revitalized amphitheater

OTHER PARK ACTIVITIES and the NEIGHBORHOOD SETTING

Although Cathedral Park serves the entire city and is classified as a regional park, it holds a special importance for the nearby neighborhood. Residents walk to the park from either their homes or work and desire certain local amenities.

Play Environments

With new families moving to St. Johns, play environments are an increasingly important new part of Cathedral Park. They support the guiding principle of creatively integrating the park's history and ecology with active discovery and play. One proposed location of a play environment near the upper southeast side of the park is convenient for neighbors and is also near the amphitheater. The proposed play environments are distinct from traditional playgrounds are not off-the-shelf playground equipment, but engaging, creative, hands-on places that amplify the themes of history, ecology and park identity. Play environments help to stimulate an open-ended imaginative play experience for both children and adults.

The History Garden

The history garden, over time, has become a heavily shaded and isolated place with few remaining amenities. Vegetation and berms limit views into the history garden thereby reducing its safety. Few people use the space for any considerable amount of time. The intention of the proposed seating area is to enliven the history garden and engage the adjacent lawn. Likewise, the proposed restroom, the future North Portland Willamette Greenway Trail and other facilities located nearby will help make this part of the park a more important destination. The history garden contains numerous memorial trees. Any decision that affects the memorial trees should be made with the utmost care. The history plaques are not original, poorly placed in the wall and have an outdated aesthetic. Yet, the interpretation remains a critical aspect of a revitalized history garden.

The master plan identifies the following improvements to the history garden:

- Open up the history garden by selectively managing vegetation that has created a dark, hidden area in the park.
- Remove the plant bed that separates the history garden from the existing off-leash area to allow visual access from the north side.
- Construct new stone paving and park furnishings to create an orderly, open and simple seating area that supports the history garden as an attraction worthy of contemplation.
- Transplant trees or replant trees to ensure the health of the history garden and the visitors' safety.
- Replace the plaques that describe elements of the park's history to give the growing community of St. Johns an opportunity to learn the park's rich history.
- Relocate the nearby off-leash area to allow for more diverse public use.



Example: adventure playground



Existing History Garden needs improvements and new commemorative plaques.



Example: facilities for visitors of all ages and interests

Off-leash Area

The off-leash area is currently located at south of the bridge anchorage. This location has the disadvantage of creating an unwelcoming transition space between the upper and lower park. The area is unfenced, which follows a long community-driven tradition of keeping Cathedral Park open and accessible to all users. At its current location, the off-leash dogs can be intimidating to passersby and dog waste detracts from the history garden and the historic bridge anchorage.

Many people take their dogs to the beach, but the waterfront lawns are not the best location for off-leash use due to conflicts with other visitors. There are currently no off-leash areas near the boat ramp area of the park yet boater's dogs heavily use this area. The illustrative master plan shows a relocated off-leash dog area that is convenient for both boaters and neighbors who can use the parking lot at the N. Baltimore Ave. entrance.

Picnicking

Picnicking is one of the primary social activities at Cathedral Park. However the picnic tables are in poor condition and no covered picnic space is available. As a regional destination, Cathedral Park should offer opportunities for picnicking year around. This master plan recommends the replacement of all the picnic tables and building a picnic shelter/stage in the amphitheater. The location of the picnic shelter/stage in the amphitheater is supported by proposed utility hook-ups at the stage and at the promontories. This structure benefits events, such as the Jazz Festival, weddings and larger gatherings like family reunions. The former pavilion was not successful due to its location, but this highly visible site will have easy oversight from the street.

Restrooms

The existing restroom located near the boat ramp is deteriorating and is clearly in need of renovation. It will follow ADA regulation and incorporate green building practices such as water-saving fixtures and energy-efficient lighting. Nonetheless, this bathroom is only convenient to north side of the park and there is a need for an additional restroom on the south side of the park. The new restroom is proposed at the corner of N. Crawford St. and N. Pittsburg Ave.

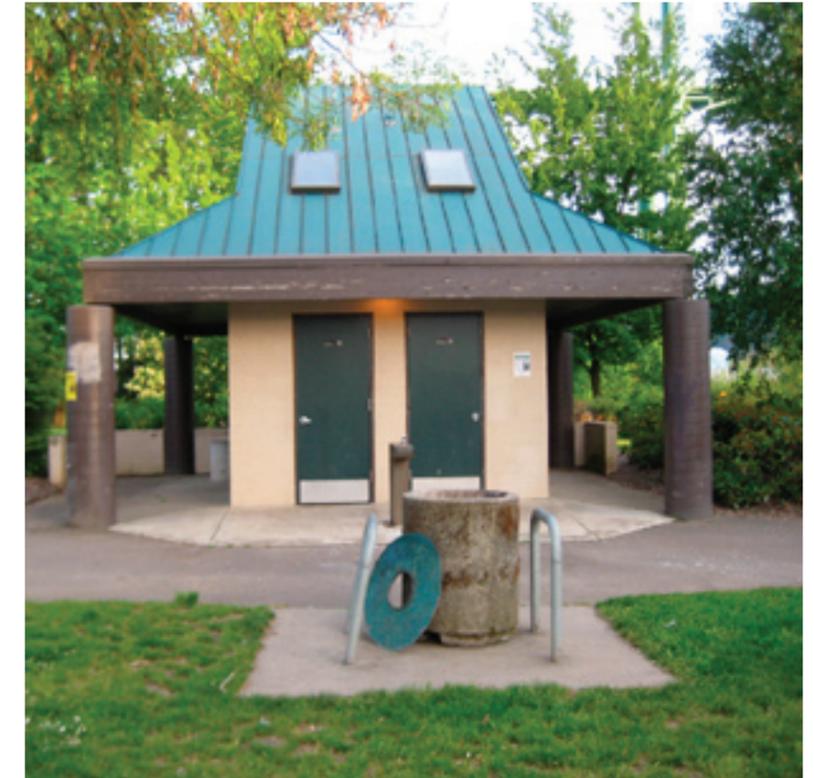


Proposed off-leash area next to existing small parking lot

This location is on the east side of the railroad tracks, convenient to the light water craft facilities and on the North Portland Willamette Greenway Trail route. The new restroom is central to the beach, riverfront and the amphitheater. The architecture should be compatible in design with the historic bridge and utilize the basalt stone used in other places of the park.

Informal Recreation

Cathedral Park is not a park designed for organized sports. The generous open spaces linked by looping paths are meant to be flexible for a wide variety of uses throughout the year including informal recreation, picnicking, relaxing, playing and other lawn game activities such as Frisbee. Since several schools and parks nearby offer opportunities for formal recreation, there is less of a need to include these activities at Cathedral Park.



Existing restroom at north parking lot next to boat ramp

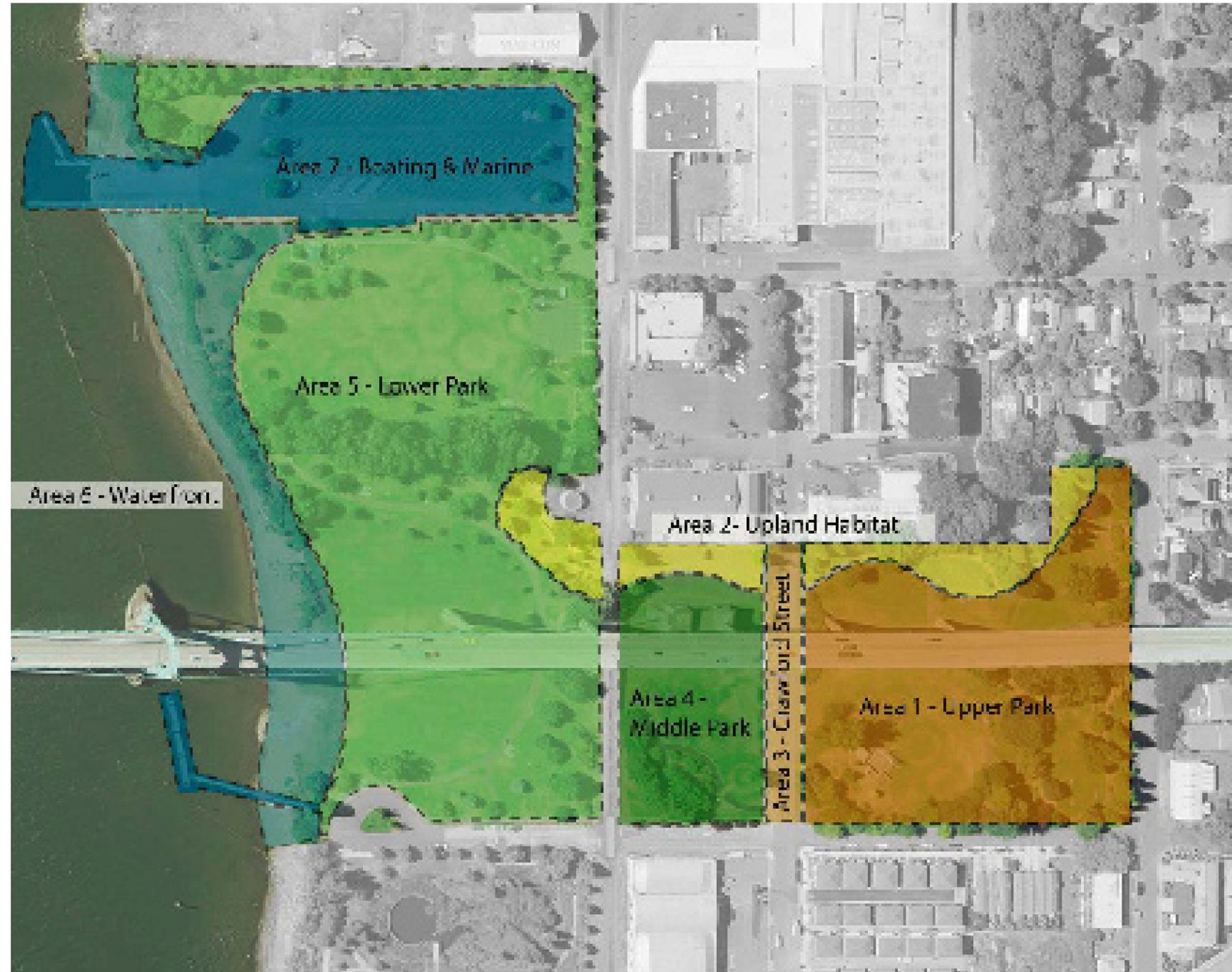
Quiet Contemplation

Cathedral Park is an inspiring place that offers ample opportunities for quiet contemplation. Therefore, opportunities for individuals and smaller gatherings to enjoy the park while enhancing safety and views are essential. Particularly, supporting the notion of quiet contemplation is important along the waterfront, the promontories, and in the upper part of the park below Edison Street. To address aspects of safety for contemplative areas, vegetation management in the park will be implemented, as suggested in more detail in the *Access and Circulation* section.

ESTIMATE OF PROBABLE COST - BY PHASE

SUMMARY OF COSTS BY AREA

| LOCATION | LOW | HIGH |
|--------------------------------|--------------------|--------------------|
| AREA 1 - UPPER PARK | \$1,463,854 | \$1,707,830 |
| AREA 2 - UPLAND HABITAT | \$193,126 | \$225,314 |
| AREA 3 - CRAWFORD STREE | \$380,540 | \$443,963 |
| AREA 4 - MIDDLE PARK | \$1,050,515 | \$1,225,601 |
| AREA 5 - LOWER PARK | \$520,680 | \$607,460 |
| AREA 6 - WATERFRONT | \$1,611,212 | \$1,879,748 |
| AREA 7 - BOATING and MARINE | \$1,872,286 | \$2,184,334 |
| TOTAL PARK IMPROVEMENTS | \$7,092,204 | \$8,274,250 |



REFERENCES

- Alta Planning + Design, August 2002
Rails-with-Trails: Lessons Learned, Literature Review, Current Practices, Conclusions - US Department of Transportation, Cambridge, MA
- Alta Planning + Design, May 2007
North Reach Greenway Trail and Viewpoints - Bureau of Planning, City of Portland, OR
- Alta Planning + Design, August 2007
Greenway Trail Alignment and Viewpoints - Bureau of Planning, City of Portland, OR
- Bureau of Planning, City of Portland. November 1987
The River Plan - North Reach, Proposed Plan, October 2008
Willamette Greenway Plan, City of Portland, OR
- Bureau of Environmental Services, City of Portland, March 2006
2005 Portland Watershed Management Plan, City of Portland OR
- Bureau of Planning, City of Portland, September 2006
Watershed Health in the North Reach, Summary of Work in Progress, City of Portland, OR
- Federal Emergency Management Agency (FEMA), October 2004
FIRM Flood Insurance Rate Map, Number 4101830060 E. National Flood Insurance Program
- George L. Green, et al. August 2003
Soil Survey of Multnomah County, Natural Resource Conservation Service (formerly Soil Conservation Service)
- LCA Town Planning and Architecture, et al. May 2004
St. Johns/Lombard Plan - Bureau of Planning, City of Portland, OR
- Parametrix, December 2007
Cathedral Park "Whistle Free Zone" Strategic Options – Final Report Port of Portland, OR
- Portland Parks & Recreation and Bureau of Planning, City of Portland, August 2006
Water Recreation Report and Recommendations Draft, City of Portland, OR