

## ARBORETUM

*Continuous Urban Ecosystems (CUE)*

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# CHARRETTE PROCESS AND PRINCIPLES

## PRINCIPLES

### Layers

Design spaces for multiple simultaneous uses including various modes of transportation, commercial activity, storm water management, habitat connections and community space

### Mixing

- Mix size, types and functions of housing, green space, street design, and transportation
- Meet needs of diverse cultural and economic groups, children, the elderly

### Green Connections

- Incorporate green space into everyday journeys
- Integrate ecological functions into the street grid

### Equalized Access

- Increase open spaces in under served areas
- Create green connections to large open spaces

### Community Building

- Blur of public and private boundaries
- Promote community ownership of open space
- Adapt open space to fit unique community needs

### Honoring Historic Fabric

- Maintain Olmsted legacy
- Preserve historic neighborhood districts while adapting historic structures to meet current needs.

### Unique Elements

#### Wetlands

Return low-lying flood prone areas to their natural state as wetlands to address the predicted additional precipitation. Wetlands also act as a crucial element of the natural drainage system and provide essential habitat. The Parkway storm water management system will take advantage of grade and feed into wetlands.

#### Historic Residential Area

Build off the legacy of the historic Olmsted plan and maintain the area surrounding Volunteer Park by designating as a preservation district. However, to accommodate future density and land value, increased incentives will be provided so that historic structures can be adapted to serve as multi-family housing.



# 100 YEAR PLAN

## Legend

### TRANSPORTATION

- DEDICATED BIKE COORIDOR
- GREEN STREETS
- MASS TRANSIT
- ON-STREET BIKE COORIDOR
- OFF-STREET TRAIL
- STREET CAR

### COMMUNITY

- PLAYGROUND
- ACTIVE PARK
- CEMETARY
- FARMERS MARKET
- GOLF COURSE
- PLAYFIELD
- PASSIVE PARK
- TRAILS
- URBAN AGRICULTURE
- URBAN AG/FARMERS MARKET

### WATER/DRAINAGE

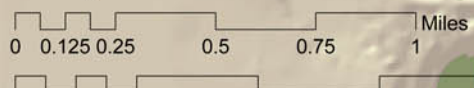
- DAYLIGHTED STREAM
- GREEN ROOFS
- RAIN GARDENS
- WETLANDS

### URBAN

- COMMUNITY NODE
- NEW URBAN VILLAGE
- URBAN COORIDOR

### HABITAT

- BACKYARD WILDLIFE SANCTUARY
- GEOLOGICAL MITIGATION ZONE
- HABITAT COORIDORS
- LAKE RIPARIAN AREAS
- STREAM RIPARIAN AREAS





# TRANSFORMING STREETS INTO PRODUCTIVE SPACE

The width of city streets and the bordering public domain and sidewalk space is under utilized. By rethinking the street layout, a much more productive, layered, and valuable open space can be created.

## Street-side Permaculture

- Open public space adjacent to street to community agriculture plots to significantly increase the value of community open space
- Promote community building through stewardship and care for plots
- Educate youth and adults alike
- Enhance food production



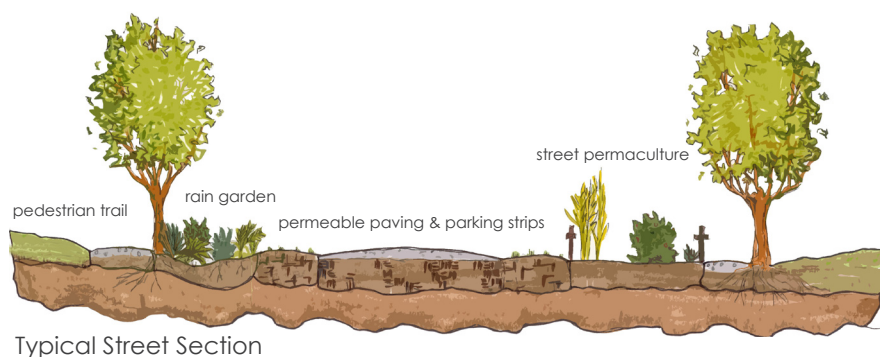
## Green Streetscape

- Shift street design toward a green street model and thereby gain a higher value on the streetscape.
- Encourage slower and safer vehicular traffic through neighborhoods
- Create a dedicated pedestrian thoroughfare
- Soften and enliven streetscape
- Provide habitat
- Create open/green spaces



## Rain Gardens

- Create a rain garden buffer between pedestrian trails and residential yards as an easy and effective way to enhance open space along the street and increase its value
- Use storm water treatment and mediation
- Enhance greater infiltration
- Foster stewardship for space
- Create habitat
- Encourage extension of eco-friendly plantings into residence, blending public and private space





# RETHINKING INFRASTRUCTURE AS OPEN SPACE

Steps to create open space within infrastructure can be easily accomplished. The results can improve connectivity, create productive space, and provide many eco-friendly opportunities.

## Productive Alleyways

- Transform a currently barren alley space into a green connection can be very beneficial to community and environment.
- Use plantings and permeable surfaces to allow for infiltration and storm water management
- Create green pedestrian connections to soften and enliven space
- Improve pedestrian connectivity
- Open spaces for productive uses



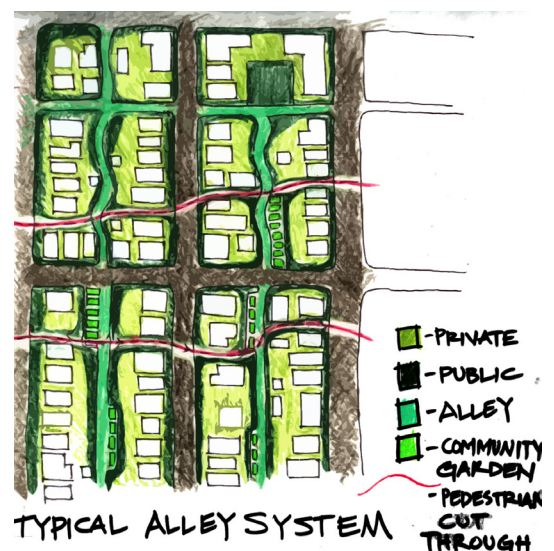
## Multi-Use Parking Lots

- Rethink parking lots, which are often very under-used, even wasted open space that serve only one purpose. Opening parking lots to a multiple of uses can greatly increase their value. Additionally, permeable paving can battle storm water and plantings can reduce the harshness of the space.
- Open parking lots for community events/markets/fairs/concerts
- Treat stormwater
- Promote active recreation through creation of sport courts, basketball hoops



## Mixed Use Development and Public Open Space

- Require development to include a mix of uses and public open space within its plans could greatly increase amount and variety of open space.
- Encourage green materials
- Treat green rooftop runoff
- Improve accessibility to public open space





# COMMUNITY NODES

## 23rd and Madison and the Public Square

### Design Elements

High density mixed use development. Large condos and apartments with residences on the top floor and commercial on the ground floor. Each building will be unique with height, color, and material variations to maintain the quality of the Capital Hill neighborhood.

### Green Roofs

All buildings will be developed standard with green roofs and solar panels.

### Bio-Swales and Rain Gardens

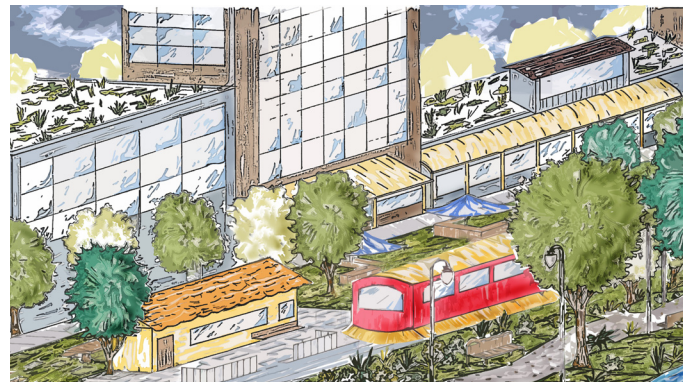
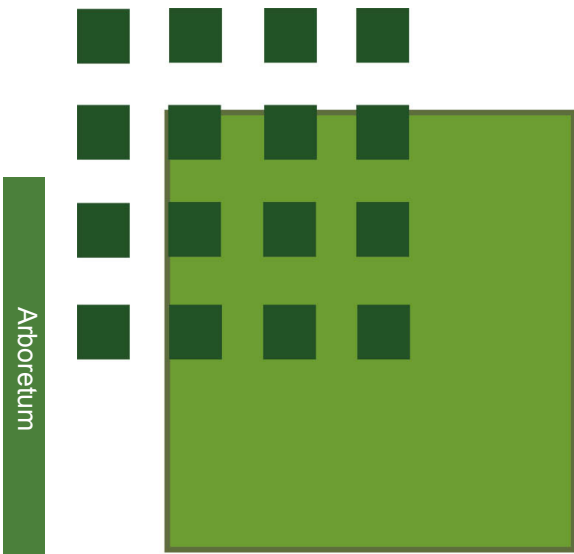
- Madison and 23rd Avenue will both have center medians with bio-swales to infiltrate storm water runoff and act as habitat corridors
- All parks and gardens either public or private will also function as rain gardens
- All paving including streets will be pervious to all the filtration of water to decrease storm water runoff

### Boulevard System

Madison and 23rd will be converted into boulevards. Madison will be closed to vehicular transportation and have a street car, dedicated bicycle lanes, and wide sidewalks. 23rd will continue to be open to personalized motor vehicles, but is designed to adapt as use changes, so as to allow for the expansion of the center bio-swales and sidewalks if transportation methods shift.



23rd and Madison Site Plan



Madison Street Car



Madison section



**Creating a vibrant and ecologically-considerate commercial and residential node**

**The Public Square**

Madison and 23rd will become much more than a traditional transportation intersection. It will be a place where layers of different activities, cultures, transportation types and ecological functions come together. The Public Square will become one of the hearts of the Capital Hill neighborhood. The main goal of this space is to create a pedestrian focused space, while providing other uses as well.

**Square Functions**

**Civic Zone**

The civic zone of the square features ample space for a variety of different activities. The space is predominantly open for this reason. There is seating and permanent art fixtures. The key feature of the site are translucent overhead structures to provide light and shelter. The art fixtures are square translucent columns which are lit with fiber optics. This is also continued in the center of the square in a grid formation. The column symbolizes the strong urban forms of the city and beckons to the public square. This space also is open for outdoor concerts, street performances and art installations.

**Passive Recreation Zone**

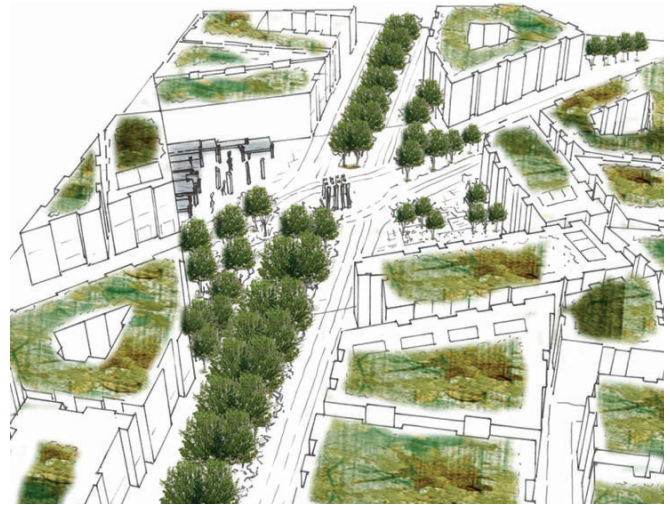
The passive recreation zone is the park feature of the site. This space also uses the strong form of square for planter boxes and water features. All of the gardens double as infiltration gardens and a portion of the water features are retention ponds.

**Outdoor Cafe Zone**

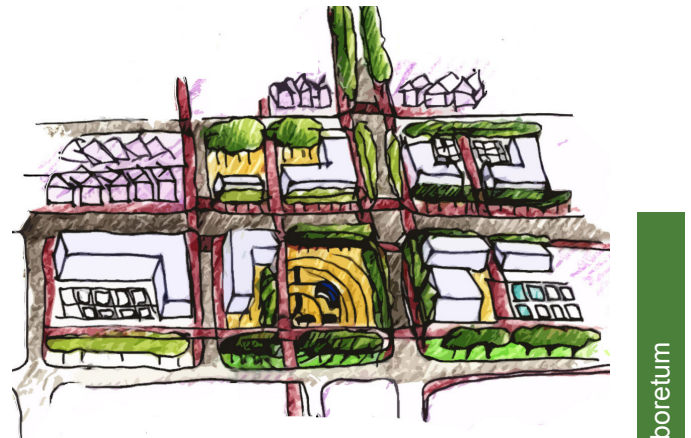
The Cafe zone is the heart of the square. It is filled with street vendors and outdoor cafes. People spill into this space while shopping and walking and take a break to rest and get a bite to eat or an espresso.



Functional diagram



Bird's eye view



Node Diagram

Arboretum



23rd Section

# CHARRETTE IMPLEMENTATION STRATEGIES

## Implementation Strategies

Building off the legacy of maintaining the historic Olmsted plan, the area surrounding Volunteer Park will be designated as a preservation district. However, to accommodate future density and land value increased, incentives will be provided so that historic structures can be adapted to serve as multi-family housing.

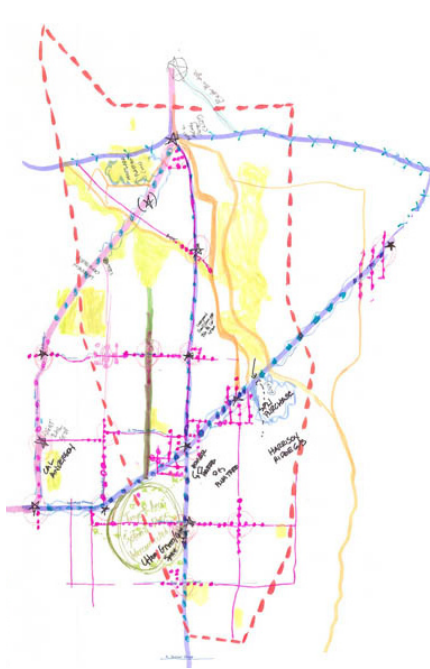
### Implementation (3 To 5 Year Priority Actions)

- Start infiltration garden program. Public education program to teach residents about storm water treatment at the lot level. Seattle Public Utilities will provide incentives for garden implementation by homeowners and condominium buildings.
- Acquire vacant lots in the Central District to begin the Urban Open Space Network. Lots can be designed as P-Patches, playground space, or pocket parks.
- Instigate natural drainage system through Seattle Public Utilities purchase of condemned houses near 30th and Thomas. This location could be used as a retention pond for storm water in the short term, but converted to model urban wetland over time.
- Buy empty lot on southwest corner of the intersection of Union and 23rd. Plan for the development of a catalyst project of a mixed-use building with active uses on the ground floor. Parking should be below grade and pedestrian connections from the surrounding neighborhood to the site should be enhanced.



Habitat and green connections

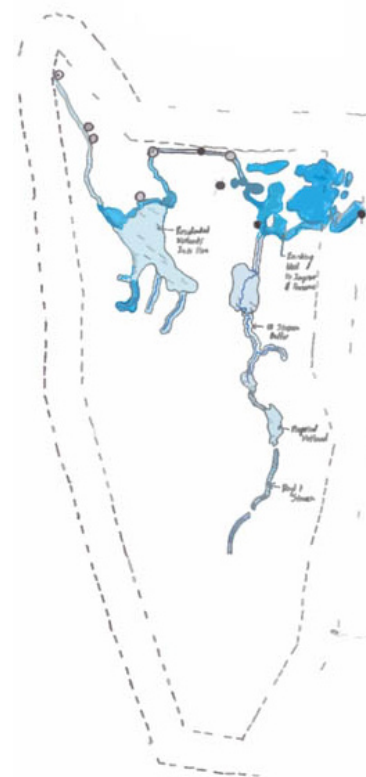
Arboretum



Circulation



Hazards



Hydrology