CONTEXT

INSTITUTIONAL STUDY AREA

BELL | LOEW | LUOMA | ONO | SHINTAKU
Site Introductions

Senior Housing

GOALS
- Two functional purposes – storm water management and interaction between people and the site.
- To restore wildlife
- To use recycled materials
- To improve community activity through gardening or hanging out

CONCEPT
This design provides not only access through nature strips but also interaction between people who live in front of them, particularly people in senior housing. It makes use of the existing scheme; such as color and texture.

Magnolia Library

GOALS
- Restore existing landscape with original intentions of designer (Richard Haag & Associates)
- Emphasize the architectural quality of the building
- Use a plant palette of only native species and those originally planned for
- Create functioning ecological systems to clean stormwater, while maintaining a pleasing aesthetic appearance
- Enhance pedestrian experience of the Magnolia Library
- Improve and increase existing wildlife habitat
Blaine K-8 School

Blaine Elementary is a K-8 school with roughly 350 students. This bleak and unmarked concrete patch along 34th is the main pedestrian access to the school and a well-used drop off/pick-up point for students.

GOALS
- Increase pedestrian safety at crosswalks
- Strengthen presence of school at street’s edge
- Provide amenities for waiting students and passing pedestrians
- Improve connections with surrounding environment
- Enhance the site’s function as an entrance and meeting point
- Reduce polluted run-off/Increase infiltration
- Accommodate flexible circulation
- Increase diversity of streetscape

Magnolia Community Center

Magnolia Community Center has a wide array of programs and special events from pre-school children to seniors. This community center is a perfect place to meet the community.

GOALS
- To build community for all ages and encourage community involvement that integrates multiple generations.
- To provide science education opportunities
- To improve connections from the sidewalk to the school entrance
- To increase public outdoor activities through a community garden
- To engender a sense of welcome to those entering the Community Center and School.

Magnolia Park

Magnolia Park is an outdoor community space for people of all ages and should feel welcoming to everyone.

GOALS
- Create a sense of entry to the tennis courts and playground
- Reduce street runoff in parking strip
- Improve pedestrian experience along 34th and to the park
- Improve public safety along 34th and when accessing the park
**Prototypical Elements**

- Outdoor plaza within the planting strip
- Bump outs to calm traffic while creating a time limited parking area
- Combine historical preservation principles with modern ecological values

**PLANTING PALETTE**

- Fragaria chiloensis
- Acer griseum
- Struthiopteris spicant
- Vaccinium ovatum

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**Reading Spaces**

Aaron Luoma
Moving Channels  

**STORMWATER CALCULATION**

In a 25 year storm in Seattle a total of 617 cubic feet of water can potentially be collected and cleaned on site. This is equivalent to ~2,200 2-gallon milk jugs.

**PLAN**

**PROTOTYPE**

**BIRD'S EYE**

**PROTOTYPICAL ELEMENTS**

- Curb cuts to allow water to collect from street into exposed channels with iron grate
- Develop a bike path within the large planting strip
- If space is limited, use a small, lengthy channel for stormwater infiltration and cleansing

**SECTON**

**PLANTING PALETTE**

- *Asarum caudatum*  
  WILD GINGER
- *Acer circinatum*  
  VINE MAPLE
- *Gaultheria shallon*  
  SALAL
- *Juncus patens*  
  COMMON RUSH
CONTEXT 34th Avenue W is home to Blaine School and Magnolia Community Center and Park. These central public amenities offer unique opportunities to simultaneously address ecological function, infrastructure design, and community building.
Currents moderate plan

A_ School Plaza
   Seating
   Recycled Concrete Pavers
   Science Lighting
   Weather Sculpture

B_ Bioswale

C_ Corner Extension

D_ Community Garden

E_ Phytoremediation

F_ Gateway Paths

G_ Trellis Lighting

H_ Stairs To Park

BEFORE CURB BULB-OUT

AFTER CURB BULB-OUT
Currents
Blaine K-8 School

ENTRY PLAZA SECTION

ENTRY PLAZA PLAN

corner extension

weather devices/sculptures

seating/raised planting beds

recycled concrete pavers

recycled concrete pavers

weather devices/sculptures
Currents
Magnolia Community Center

PROTOTYPE A
PLAN VIEW

PROTOTYPE B
PLAN VIEW

solar panel
cistern
filtration
community
garden

community
garden

white gravel w/
phytoremediation

crushed glass

corner extension

mayu shintaku
A. School Plaza
   Seating
   Recycled Concrete Pavers
   Science Lighting
   Weather Sculpture

B. Median Bioswale

C. Nature Strip Bioswale

D. Community Garden
   Solar Panel
   Cistern

E. Grapevine Boardwalk

F. Gateway Paths

G. Trellis Lighting

H. Terraces

I. Bike Lane
CURRENTS Blaine K-8 School

ENTRY PLAZA SECTION

median bioswale

weather devices/sculptures

ENTRY PLAZA PLAN

seating/raised planting beds

recycled concrete pavers

median bioswale

weather devices/sculptures
Currents
Magnolia Park

TERRACE
SECTION

TERRACE PLAN

- Gateway path & light trellis
- Small swale w/ bridges
- Median bioswale
- Gateway lighting
- Stairs
- Bike lane
- Park terraces
- Gateway path & light trellis
Prototypical Elements

PLANTS
Trees, shrubs, plants and groundcover can be used to satisfy a number purposes, ranging from purely aesthetic to aiding in the filtering of stormwater runoff through phytoremediation. Vegetation along streets can provide safe corridors and habitat for animals and birds. Trees can help in sequestering carbon to reduce the greenhouse effect while also providing a canopy for shade.

WEATHER
Weather measuring/monitoring devices are an educational tool that can connect students to their environment. Data collection and analysis can be used to support math and science curriculum or website design. A variety of instruments are available, ranging from simple rainfall measuring canisters that elementary students can build to all-in-one stations that send data remotely.

RECYCLED CONCRETE
Broken recycled concrete can be used to replace the solid concrete walkway to the school and in other high traffic areas. Using recycled concrete reduces unnecessary impervious surface and energy consumption while maintaining durability. It also makes use of a readily available recycled material.
**CORNER EXTENSIONS**
A corner extension narrows the crosswalk to a more pedestrian friendly dimension (to 24’ from 40’). Polluted street water reaches the swale in the nature strip via a curb cut and submerged drain pipe.

**BIOSWALES**
Bioswales can help reduce amounts of stormwater runoff from impervious surfaces by directing them into planted beds where water can be soaked up by the soil or can be slowed down by filtering through the organic matter. Periodic curb cuts along 34th Ave allow polluted street runoff to enter the nature strip and infiltrate into the ground or be cleansed through the swale.

**SOLAR PANEL CISTERN SYSTEM**
A solar panel can help provide power for a pump irrigation system that makes use of an underground cistern to capture water from the roof of the school.

**COMMUNITY GARDENS & COMPOSTING**
Community gardens can benefit adults and children alike. Portions of the gardens can be managed by the school as an educational component for children to learn about the science of growing vegetables. Using compost from the community center, school and surrounding grounds can provide nutrients for the garden without creating additional waste.
LIGHTING & TRELLIS
Improvements for lighting at higher traffic areas is needed along 34th at the school where children are beginning the school day during the dark and near the park where trees block most of the street lighting and cause safety concerns.

Light fixtures around the plaza are inspired by our solar system. The fixtures are spaced from the central pole and sized according to dimensions of the first four planets.

A trellis over the sidewalk with vegetation or grapevines can reduce urban heat-island effects and provide an additional natural canopy and a sense of verticality.

Lighting at new proposed entry paths accessing the playground and tennis courts can be additional works of public art in a similar manner to the artistic magnolia and madrona flower posts installed in the park in 2005 while also providing a welcoming gateway for those entering the park from 34th.

TERRACES
Terraced community gardens make productive use of the space between 34th and the community center as an integral part of the Summer Farmers Market and have potential for educational use by the school children as well. Terraced slopes at the tennis courts and playground provide usable spaces for those wishing to watch the tennis players or children at the playground. Flat patches give the community a place to have a picnic and bring the park a little closer to 34th.
CONCEPT  This design is engaging year round -- from wet winters to dry summers. You can see water flowing down to the pond in winter, and when it gets dry in spring or summer you can step down to it and sit on the edge of pond. Additionally, you can see embedded colored glass into the step basin and pond as an aesthetic point of view when it's dry.

MATERIALS  
- **Recycled deck**: made of 50 percent recycled wood and 50 percent recycled plastic. The plastic, a mix of low and high-density material originated from foam plates (low) and grocery bags (high). The wood used is from waste products in the perfume, trucking and building industries. Called ChoiceDek and manufactured by Weyerhaeuser, it is guaranteed for ten years and is not affected by termites. It will grey out to look like wood in a few weeks or can be stained. It is almost impervious to moisture so it does not need to be stained or sealed, however if it is stained it will require regular maintenance like traditional wood decks

- **Colored glass**: from waste industrial glass manufacture or demolished buildings

- **Gravel paving**

PLANT COMBINATIONS  
1. Crushed glass and stone
2. Gravel paving
3. Filter fabric
4. Sandy gravel base aggregate
5. Subgrade

SECTION