09.28.15 UNIVERSITY OF WASHINGTON ARCHITECTURAL COMMISSION

1. DESIGN NARRATIVE + CONCEPT
2. AC COMMENTS FROM 6/29
3. SITE DESIGN
4. EXTERIOR DESIGN
5. INTERIOR DESIGN
1. DESIGN NARRATIVE + CONCEPTS
Guiding Principles

LIFE SCIENCES

SCIENCE IS A GATEWAY

CONNECTIONS

ENGAGEMENTS
Science is a Gateway to Knowledge
Ecotone + Edges + Intersections
Biodiversity + Habitat + Wildlife Corridors & Nodes
Ecotone = Natural + Technological
2. AC COMMENTS FROM 6/29
6/29/2015 ARCHITECTURAL COMMITTEE MEETING COMMENTS

• The loading dock should be pulled back from the existing meander path.

• Vertical louvers are appropriate on the south façade, but careful investigation is needed on the effect of depth and spacing of the louvers on the quality of interior light during the day. The perforated fins should create a pleasant, dappled lighting effect.

• The wooden screen of the north façade should be thicker, in order to feel more solid.

• Understand the long-range weathering of the proposed treated composite wood cladding material.

• Reexamine the Burke Gilman Trail edge. A planted buffer would be desirable. The trail width might be reduced along the greenhouses to provide room for modulation or the gravel path might be removed for the length of the site.
3. SITE DESIGN
Watering Holes, Nodes, and Wildlife Corridors
Mosses/Bryophytes

Ferns/Pterodphyta

Seeds/Gymnosperms

Flowers/Angiosperms
Selected Primitive Plant Palette

Gunnera tinctoria or manicata (giant rhubarb)

Helwingia chinensis

Illicium henryi (henry anise tree)

Ruscus hypoglossum (mouse thorn)

Schisandra rubriflora (magnolia vine)

Aristolochia kaempferi (dutchman’s pipe)

Magnolia sieboldii (oyama magolia)

Tetracentron sinense

Wollemia nobilis (wollemi pine)
Porch Plant Massing Sections

EAST-WEST SECTION
Site Walls // A & B Typologies

A Wall: Habitat wall (retaining)
Cast in place concrete

B Wall: Social wall (seating & steps)
Pre-cast concrete
Site Walls // A & B Typologies

A Wall // Reference Images

B Wall // Reference Images
Site Paving

- PIP Concrete paving
- Pre-cast Concrete unit paving
Site Walls & Paving

A Wall - Habitat wall (retaining)  
Water + Wall Texture

B Wall - Social wall (seating, steps)  
Vertical Slab

University of Washington Life Sciences Building
Site Walls

University of Washington Life Sciences Building

A Wall - Habitat wall (retaining)  Water + Wall Texture

B Wall - Social wall (seating)  Vertical Slab
insects & animals are attracted to water

water collection from building storm water run-off and RO/DI lab reject water

runnel along top of wall

water seepage along reveals

small pool collects before overflow

vegetation collects overflow

15”

varies

A-Wall Habitat // Water System & Fibonacci Sequence

University of Washington Life Sciences Building

GUSTAFSON GUTHRIE NICHOL

PERKINS+WILL
Looking north toward West Plaza from Burke-Gilman Trail
Interior Stair from L1 to B1, looking out on West Plaza
Greenhouse / Burke-Gilman Trail // Continuous Planter Wall

University of Washington Life Sciences Building

GUSTAFSON GUTHRIE NICHOL

PERKINS+WILL
4. EXTERIOR DESIGN
SOUTH ELEVATION

Exterior Design & Detailing
Solar Shading Strategies

Vertical

Horizontal

Diagonal

Exterior Design & Detailing

SOUTH ELEVATION

Summer Solstice

Equinox

Winter Solstice

38°
SOUTH ELEVATION

3D AXONOMETRIC

SOUTH ENLARGED ELEVATION

SOUTH WALL SECTION

Exterior Design & Detailing
FIN PERFORATION STUDY

Exterior Design & Detailing
Changes Since Schematic Design // Cost Reconciliation

SCHEMATIC DESIGN

CURRENT

1. Delete Parklex stainless steel framing system at conference rooms
2. Revise Exterior Elevation at NW Corner from 100% Curtain Wall System to 50% Curtain Wall / 50% Parklex System
Changes Since Schematic Design
North Facade Exterior Details
HIDDEN FASTENING SYSTEM WITH HANGER SYSTEM
EAST ELEVATION

SCHEMATIC DESIGN

CURRENT
Exterior Design
1. Floor-to-floor height reduction by 1’ in level 2-5
2. Reduce Novum area for West Façade by 30%
Changes since Schematic Design
Communicating Stairs Opening and Ventilation Diagram
ELLiptical Shaped Glulam beam and Steel brackets supported to main columns.

Stainless Steel support rods for stairs.

KING POST

Button-Head Rotules and Plate-Spider

Tension Rod TR16

SolarBan 70 Structural Point Supported Glazing System

Tube Steel structure with intumescent paint.
Character of West Communicating Stairs

1. Landscape concrete walls establish connection from outside to inside
2. Wood screen on Basement 1 stairs carried through from exterior headhouse wall
3. Biology related feature wall on core using donated timber
5. INTERIOR DESIGN
CONCEPT DIAGRAM

Level 1
ECOTONE DIAGRAM - NATURE

Level 1
ECOTONE DIAGRAM - TECHNOLOGY
Enhanced Connections to Campus
Ecotone = Engagements
Science is a Gateway
North Elevation & Typical Lab Support Plan
The ventilated facade consists of creating a “moving air chamber” between the panels and their next cladding element.

Moving air diffuses water vapor from the inside to the outside, and facilitates the transpiration of the facade, preventing condensation from forming behind the panels.

Moving air provides greater protection from the elements, because it prevents rain water from infiltrating inside the building structure.

The load-bearing structure is insulated from the exterior structure, eliminating heat bridges. In this manner, temperature fluctuations are reduced in the interior cladding, which leads to energy savings.