1. DESIGN NARRATIVE + CONCEPT
2. AC COMMENTS FROM 4/28 + SD RECAP
3. SITE DESIGN
4. INTERIOR PLANNING + CONCEPTS
5. EXTERIOR DESIGN
1. DESIGN NARRATIVE + CONCEPTS
Project Goals

SCIENCE IS A GATEWAY

- State of the Art functional science building
- Recruitment & retention for Department of Biology
- Education and Research facility

CONNECT

- Connections with the Life Sciences community
- Enhanced connectivity to campus and Preservation of site
- Contribution & completion to the campus master plan

ENGAGE

- Open & collaborative labs for students and faculty
- Open & welcoming public space
- Memorable building and landscape that leads into the future

PROJECT DELIVERY

- LEED Gold minimum and 2030 Energy Challenge
- Integrative project management to meet design and program objectives
Guiding Principles

LIFE SCIENCES

SCIENCE IS A GATEWAY

CONNECTIONS

ENGAGEMENTS
Science is a Gateway to Knowledge

Science is a Gateway

ECOSYSTEMS

ORGANISMS

MOLECULES

CONNECTIONS

ENGAGEMENTS
Ecotone + Edges + Intersections
Biodiversity + Habitat + Wildlife Corridors & Nodes

SCIENCE IS A GATEWAY

CONNECTIONS

ENGAGEMENTS
Site = Corridor + Node
Ecotone = Natural + Technological
2. AC COMMENTS + SD RECAP
The modulation of the building massing, routing ADA access through the building to avoiding a switchback ramp, and the development of the passage between the Life Sciences Building and Kincaid Hall, were all seen as a very positive moves.

Coordination between the Life Sciences Building and the Burke Gilman Trail design teams has become very important, as present designs vary significantly.

The five foot clearance between the Burke Gilman Train and the greenhouses feels precarious and is untenable. Eight to ten feet would allow for comfort and safety, and perhaps a planted buffer.

The Lewis Lane passage, as shown, is very narrow, but the potential exists for a generous gesture.

Sightlines between Stevens Way and the Burke Gilman Trail should be carefully considered, so that the access between the two is evident.

Scheme 1, “Campus Wildlife Corridor,” was preferred to Scheme 2, “The Watering Hole,” however locating the entry to the building at the eighty-nine foot elevation, across from Kincaid, would preclude confusion over ADA access to the trail or bridge.

Sun shading options for exterior materials include exterior louvers (those which do not allow bird roosting) or high performance glass (which would compensate for heat transfer, but not glare.)
Updates since Schematic Design

- Greenhouse Orientation
- Building Shift 2’-6” North
- BGT + Greenhouse
4. SITE DESIGN
LANDSCAPE CONCEPT
SITE-FACADE RELATIONSHIP

Relationship with site
Views Out to South Campus

TECHNOLOGICAL
NATURAL

University of Washington Life Sciences Building | 15
WATERING HOLES, NODES, AND WILDLIFE CORRIDORS
LANDSCAPE WALLS

A - “working” wall (retaining)
B - “interactive” wall (seating, steps)
LANDSCAPE WALLS

A Wall // Reference Images

B Wall // Reference Images
LANDSCAPE - B // VERTICAL SLAB WALL
LANDSCAPE - B // HORIZONTAL STRIATION WALL
BURKE-GILMAN TRAIL + GREENHOUSE

SECTION A

SECTION B

SECTION C

SITE DESIGN
5. INTERIOR PLANNING + CONCEPTS
INTERIOR PLANNING & CONCEPTS
LEVEL 1 // OUTDOOR DECK

INTERIOR PLANNING & CONCEPTS
LEVEL 1 // ENTRY STAIRS
EXTERIOR DESIGN DRIVERS

PROGRAMMING

IDENTITY + GRAIN

UNITY + MATERIALITY

PERFORMANCE

South

West

East

North
PERFORMANCE - SOLAR ORIENTATION

Traditional Solar Shading Strategies

Vertical

Horizontal

Diagonal

Design Drivers
Ecotone = Engagements
SCHEME 2 // VERTICAL FINS PATTERN STUDY
Enhanced Connections to Campus
Ecotone = Engagements
MATERIALS LEGEND

- GL-1 SOLARBAN 70
- GL-2 SOLARBAN 70 WITH SPANDREL FLOOD COAT ON #4 SURFACE
- GL-3 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #1
- GL-4 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #2
- GL-5 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #3
- GL-6 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #4
- GL-7 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #5
- GL-8 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #6
- GL-9 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #7
- GL-10 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #8
- GL-11 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #9
- GL-12 SOLARBAN 70 TRIPLE GLAZED MESH INNER LAYER #10
- GL-13 SOLARBAN 70 DOUBLE GLAZED LOW E COATING ON 2 & 4
- GL-14 SOLARBAN 70 WITH SPANDREL FLOOD COAT ON #4 SURFACE

SECTION OPT 1

1/4" = 1'-0"

ELEVATION OPT 1

1/4" = 1'-0"

PLAN OPTION 1

1/4" = 1'-0"
OKATECH

- Reduces Solar Heat Gain
- Allows views out
- Technological metallic look
- Triple glazed IGU U-Value w/ Argon .21
- Solar Heat Gain Coefficient (SHGC): 3% - 36% dependent on angle of sun
OPTION 3

1. **SECTION OPT 3**
   
   1/4" = 1'-0"

2. **ELEVATION OPT 3**
   
   1/4" = 1'-0"

   - HIGH OPERABLE GLAZING ACROSS FROM DOORWAY
   - INTERIOR LIGHT SHELF ABOVE WORKING AREA W FLUSH MOUNTED ROLLER BLIND

3. **PLAN OPT 3**
   
   1/4" = 1'-0"

   - HORIZONTAL SUPPORT ALIGNED WITH INTERIOR LIGHT SHELF
   - VERTICAL SUNSHADE

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**MATERIALS LEGEND**

- GL-1 SOLBARAN 70
- GL-2 SOLBARAN 70 WITH SPANDREL FLOOD COAT ON #4 SURFACE
- GL-3 SOLBARAN 70 TRIPLE GLAZED MESH INNER LAYER #1
- GL-4 SOLBARAN 70 TRIPLE GLAZED MESH INNER LAYER #2
- GL-5 SOLBARAN 70 TRIPLE GLAZED MESH INNER LAYER #3
- GL-6 SOLBARAN 70 TRIPLE GLAZED MESH INNER LAYER #4
- GL-7 SOLBARAN 70 TRIPLE GLAZED MESH INNER LAYER #62
- GL-8 SOLBARAN 70 TRIPLE GLAZED SPANDREL FLOOD COAT ON #4 SURFACE
- GL-9 SOLBARAN 70 TRIPLE GLAZED SPANDREL FLOOD COAT ON #4 SURFACE
- GL-10 SOLBARAN 70 TRIPLE GLAZED MESH INNER LAYER #62
- GL-11 SOLBARAN 70 TRIPLE GLAZED SPANDREL FLOOD COAT ON #4 SURFACE
- GL-12 SOLBARAN 70 TRIPLE GLAZED LOW E COATING ON #2 & #4 (ALT. ELECTROCHROMATIC)
- GL-13 SOLBARAN 70 DOUBLE GLAZED LOW E COATING ON #4 & #6
COMPREHENSIVE CONTEXT MODEL AND DETAILED SHOEBOX GEOMETRY

MENU OF OPTIONS AND STUDY AREAS

FIN DEPTH / SPACING

LIGHT SHELF

SHADE + BLIND COMBINATIONS

CLOUD COMPUTING SIMULATION PROCESS

ITERATE OVER GEOMETRIC OPTIONS

BATCH RADIANCE SIMULATIONS ON SERVER

TEAM CONTINUES TO DEVELOP OPTIONS

SYNTHESIZE RESULTS

SOUTHWEST FACADE PERFORMANCE
SCHEMES OVERVIEW

SD BASE CASE // MOSAIC

WEST ELEVATION
SOUTH ELEVATION // OKALUX MOSAIC
EAST ELEVATION
NORTH ELEVATION // VERTICAL

SCHEME 2 // MOSAIC FRAME

WEST ELEVATION
SOUTH ELEVATION // MOSAIC FRAME
EAST ELEVATION
NORTH ELEVATION // VERTICAL

SCHEME 3 // VERTICAL FINS

WEST ELEVATION
SOUTH ELEVATION // VERTICAL FINS
EAST ELEVATION
NORTH ELEVATION // VERTICAL
SCHEMATIC DESIGN BASE CASE

WEST ELEVATION

SOUTH ELEVATION

EAST ELEVATION

NORTH ELEVATION
SD BASE CASE // MOSAIC

WEST ELEVATION

SOUTH ELEVATION // MOSAIC

EAST ELEVATION

NORTH ELEVATION // VERTICAL MOSAIC

Design Schemes
SCHEME 1 // MOSAIC FRAME

WEST ELEVATION

SOUTH ELEVATION // MOSAIC FRAME

EAST ELEVATION

NORTH ELEVATION // VERTICAL MOSAIC

Design Schemes
SCHEME 2 // VERTICAL FINS

WEST ELEVATION

SOUTH ELEVATION // VERTICAL FINS

EAST ELEVATION

NORTH ELEVATION // VERTICAL LINEAR
SOUTH ELEVATION STUDIES

SOUTH ELEVATION // OPTION 1 - MOSAIC

SOUTH ELEVATION // OPTION 2 - MOSAIC FRAMES

SOUTH ELEVATION // OPTION 3 - VERTICAL FINS

SOUTH ELEVATION // OPTION 4 - HORIZONTAL LOUVERS
Elevation Overview

- OPTION 1 - ALL OKATECH
- OPTION 2 - OKATECH WITH VISION
- OPTION 3 - VERTICAL LOUVERS
- OPTION 4 - HORIZONTAL LOUVERS
NORTH ELEVATION STUDIES

SOUTH ELEVATION // OPTION 1 - VERTICAL MOSAIC

SOUTH ELEVATION // OPTION 1 - MOASIC
SD BASE CASE // OPTION 1 - VERTICAL LINEAR

- EQUIPMENT CORRIDOR (TYP.)
- SMALL SUPPORT ROOM (TYP.)
- LARGE SUPPORT ROOM (TYP.)

North Elevation Studies - Option 1 Linear // Program Map
OPTION 2 - VERTICAL MOSAIC

LARGE SUPPORT ROOM - V1 (TYP.)

LARGE SUPPORT ROOM - V2

LARGE SUPPORT ROOM - V3

North Elevation Studies - Option 2 Vertical Mosaic // Program Map