AI Lease Abstraction for State & Local Government

NASFA Mid Year Virtual Meeting

eCIFM® Solutions Inc.

Introductions

Ivaylo (Ivo) Lazarov
Associate Director, Systems Administration,
Bureau of Asset Management, Cook County

16+ years leading change and technology innovation across the public and private sectors. In eight years with Cook County, he has delivered strategic technology initiatives with broad cross-functional impact and now leads the County's IBM TRIRIGA implementation.

Aman Singh
Director of Product, eCIFM Solutions, Inc

8+ years experience building B2B and B2C software. He focuses on building new products in the PropTech and IWMS spaces

Previously, he ran the New Products team and the Growth Product team at Glassdoor. Before that, he built B2B marketing attribution software. He started his career in management consulting at Deloitte.

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Cook County and the Bureau of Asset Management

5.1M
residents served

#2
most populous U.S. county

134
municipalities

59%
of Illinois' population

Bureau of Asset Management

Delivers clean, safe, secure, sustainable, and accessible public facilities through routine maintenance, capital construction, and the efficient use of real estate — providing essential public spaces equitably, collaboratively, and sustainably.

- **Capital Planning & Policy**
- **Facilities Management**
- **Real Estate Management**

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eCIFM Solutions Inc. Overview

Facilities & Asset Management Expertise

- 26 years focused on Asset Management, Integrated Workplace Management Solutions (IWMS), Connected Portfolio Intelligence Platforms (CPIP)
- Thousands of successful projects
- Developed numerous custom Value Add solutions
- 26 years of IP Development (Mobile Applications, AI Products, AI Solutions)

Partnerships

- Gold Level IBM Business Partner
- Platinum Eptura Partner
- Platinum JCI/FM Systems Partner
- ServiceNow Partner
- Haltian Smart Building/IoT Sensors Partner
- MRI Partner

Certifications & Awards

- Women's Business Enterprise National Council (WBENC)
- Verdantix Green Quadrant Specialist (2023) & Challenger (2021)
- IBM (C&SI) Business Partner Awards
- TRIRIGA World Awards – 2023, 2024, 2025
- NCTRCA Certified

Corporate Facts

Established in 2000

Global presence – Over 90 Employees worldwide

Executive Leadership Members each bring 30+ years of experience

Customers in every major industry

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The Challenge

Lease abstraction at scale

Cook County needed structured lease data for its IWMS implementation.

Leases came in different formats and from multiple sources

42

real estate leases

209

license agreements

The goal: load reliable data into Cook County's IWMS system of record.

The Opportunity

Extract.
Abstract.
Reference.

eCIFM and Cook County leveraged AI:

to abstract leases from different sources & formats

to standardize them in the County's lease management system.

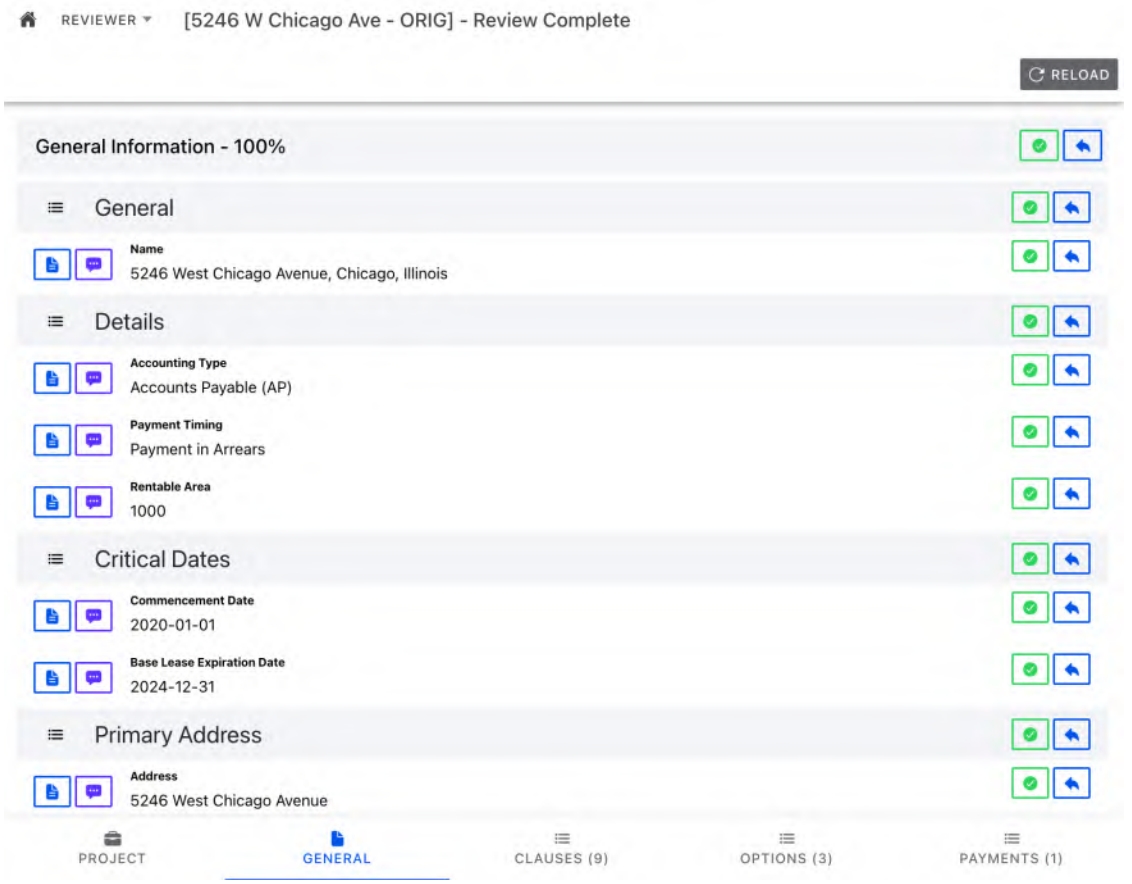
Lease-focused extraction, built for review

01 Upload leases and amendments

02 GPT-4o prompts grouped by lease feature

03 Legal-team tuning and human review

04 Export approved data to the system of record



The Outcome

250+

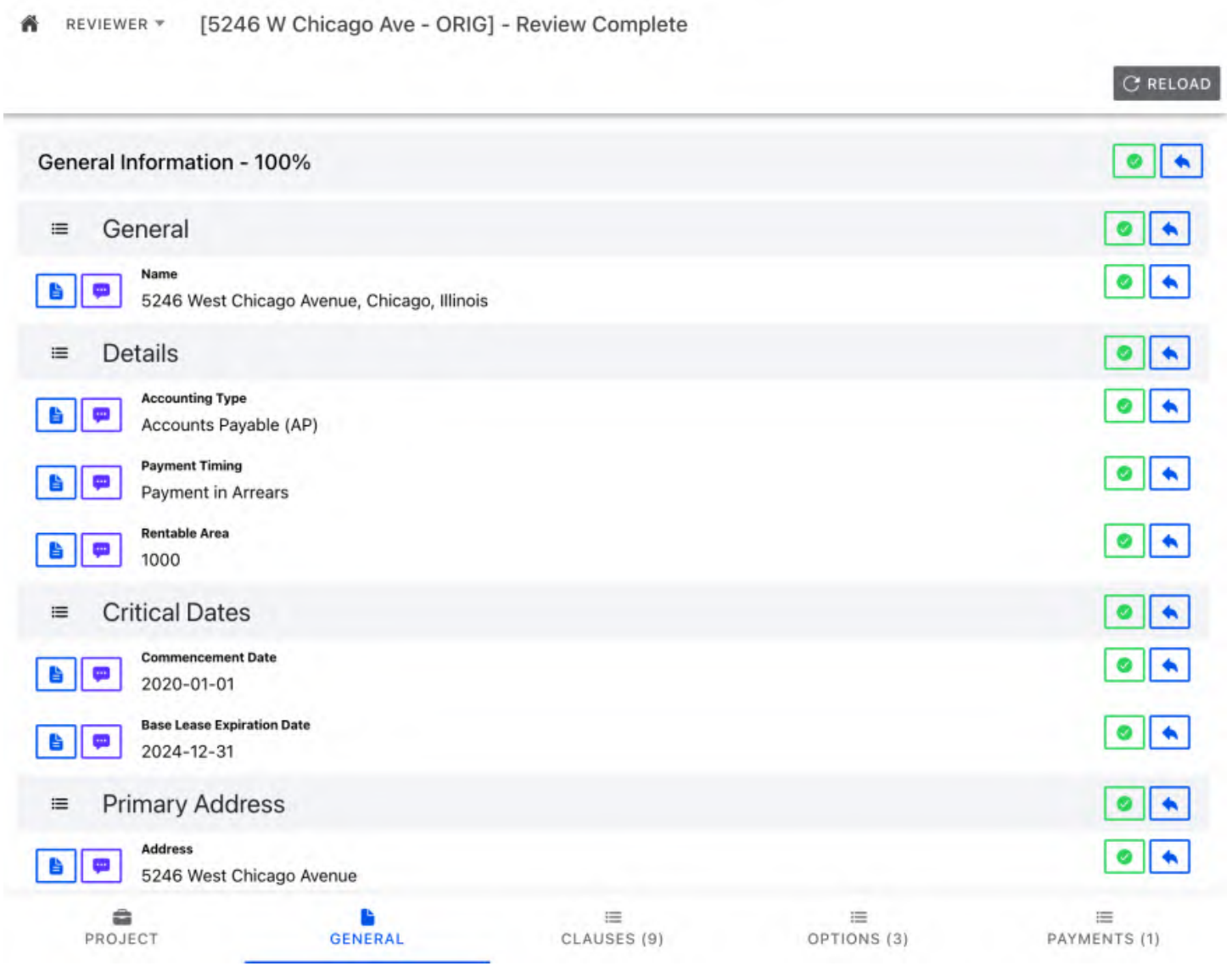
real estate leases and license agreements abstracted

480

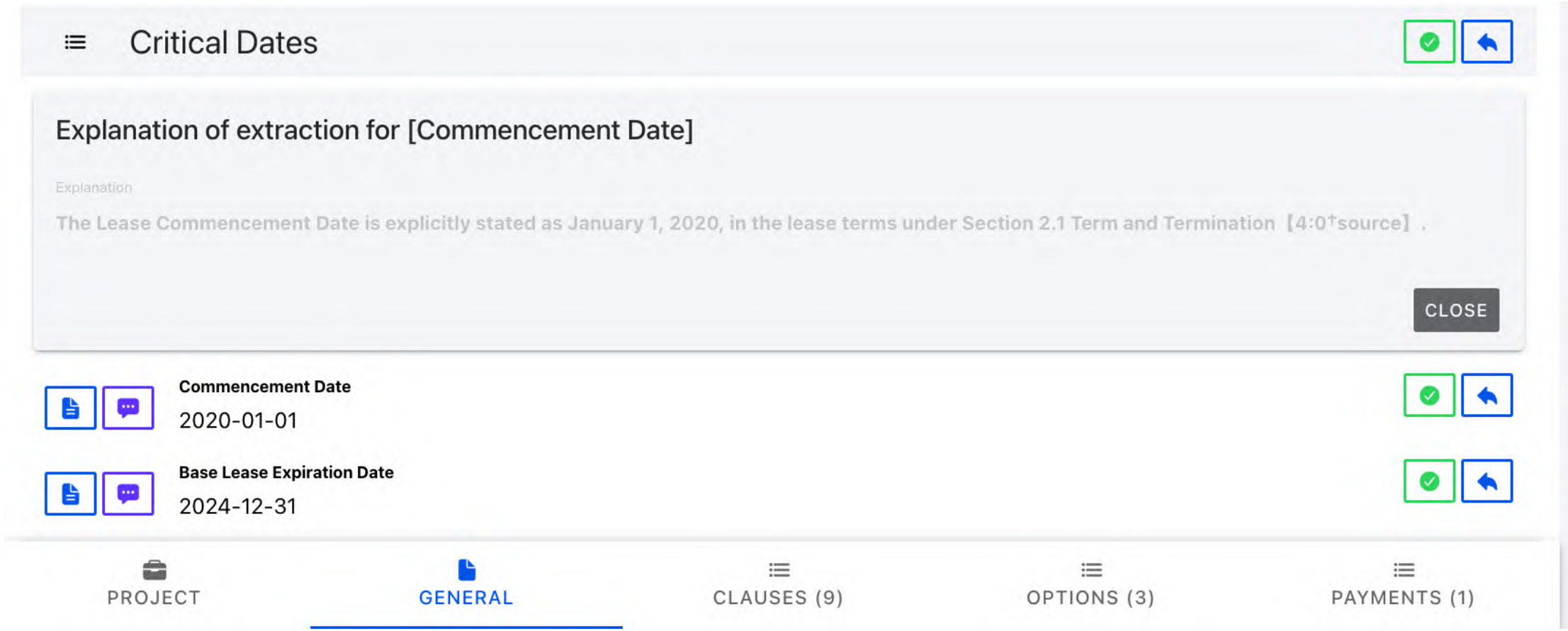
Estimated hours of manual review saved

Lease abstractions were added to Cook County's System of Record (e.g., TRIRIGA) for accurate Lease Accounting from Day One

Sample Lease Abstraction

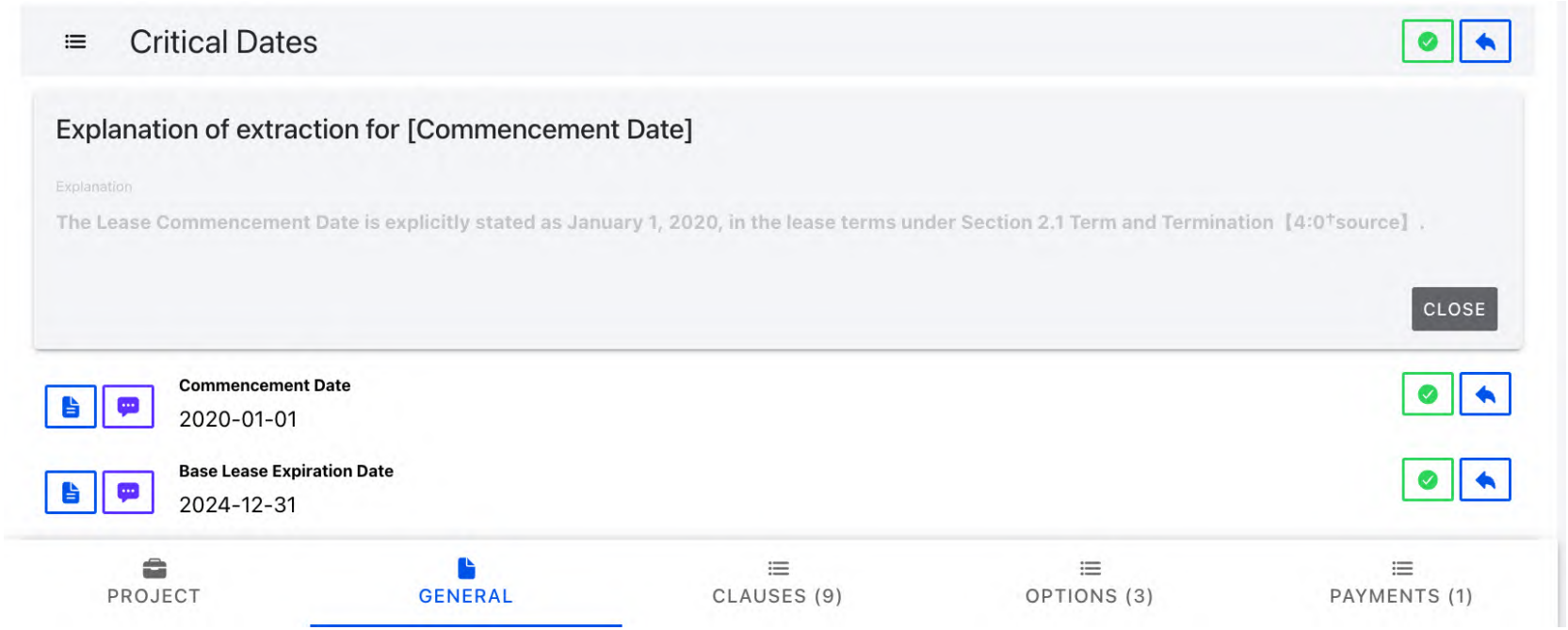


Extraction Rationale



Including Rationale is important to building Trust in any AI system / process

Sample Lease Field Abstraction



FIELD

Commencement Date

EXTRACTED VALUE

2020-01-01

CITED SOURCE

Section 2.1: Term and Termination

APPROVAL GATE

Only reviewed data moves into the system of record.

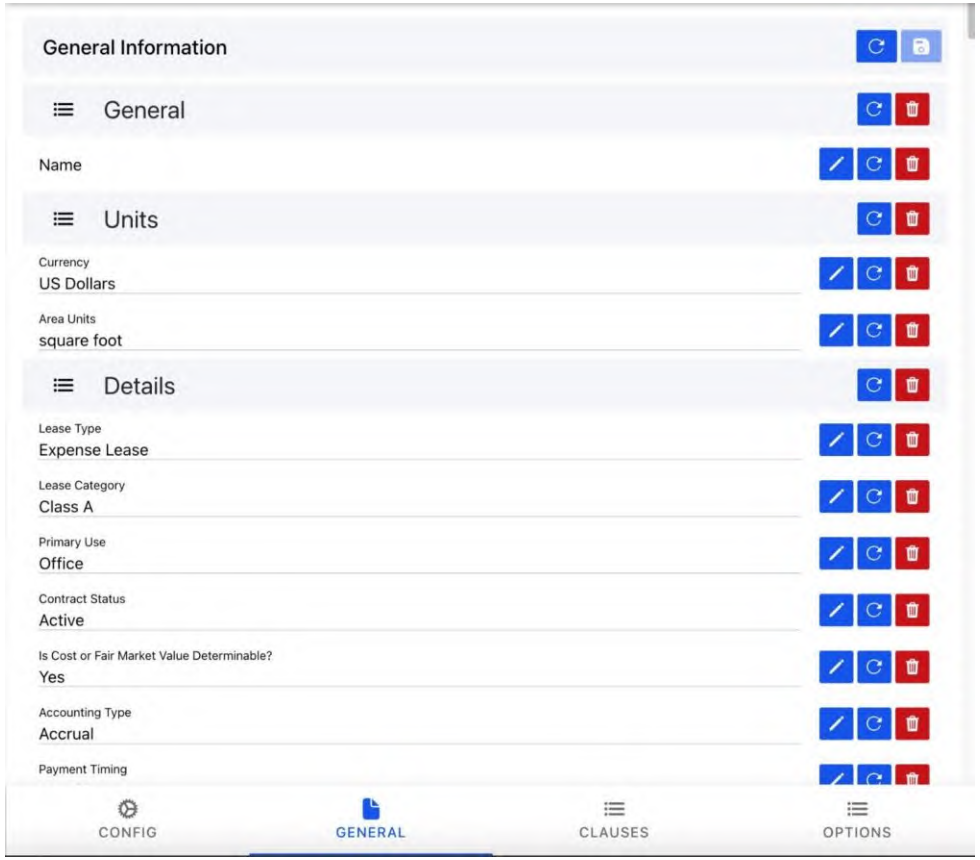
Lease Data Journey

Real Estate Leases

Asset Leases

License Agreements

Abstraction Tool



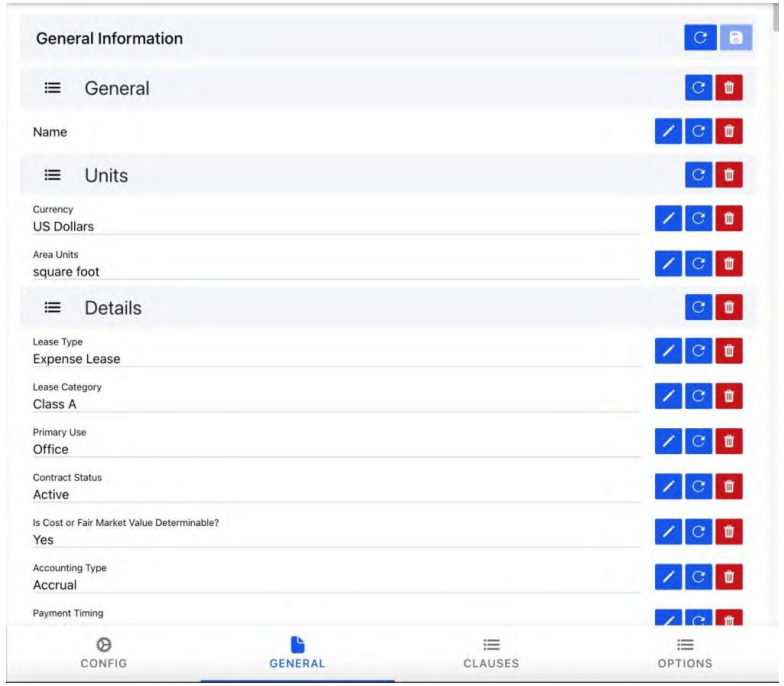
Lease Management System of Record

Human-in-the-Loop Approach

Real Estate Leases

Asset Leases

License Agreements



Lease Management System of Record

Human Checkpoint

Human Testing & Review

Human Approval

Lessons Learned

01 Inventory takes longer than extraction

42 leases and 209 license agreements arrived from scattered sources and formats. Inventory took longer than the AI extraction itself.

02 Every deployment needs custom tuning

Prompt groupings were mapped to lease features and reviewed by legal experts. Even so, each deployment still needed its own round of custom tuning.

03 Approval gates earn trust, not the model

Human checkpoints, testing, and review preceded every transfer to the system of record. Stakeholders trusted the result because of that gate, not the model alone.

04 Extraction is only half the job

Approved abstracts needed to feed lease accounting in the system of record and power an AI assistant for ad hoc questions. Designing that output schema for both uses from day one avoided rework later.

Questions & Discussion

Ivaylo (Ivo) Lazarov — Cook County, Bureau of Asset Management - ivaylo.lazarov@cookcountyil.gov

Aman Singh — eCIFM Solutions – aman.singh@ecifm.com

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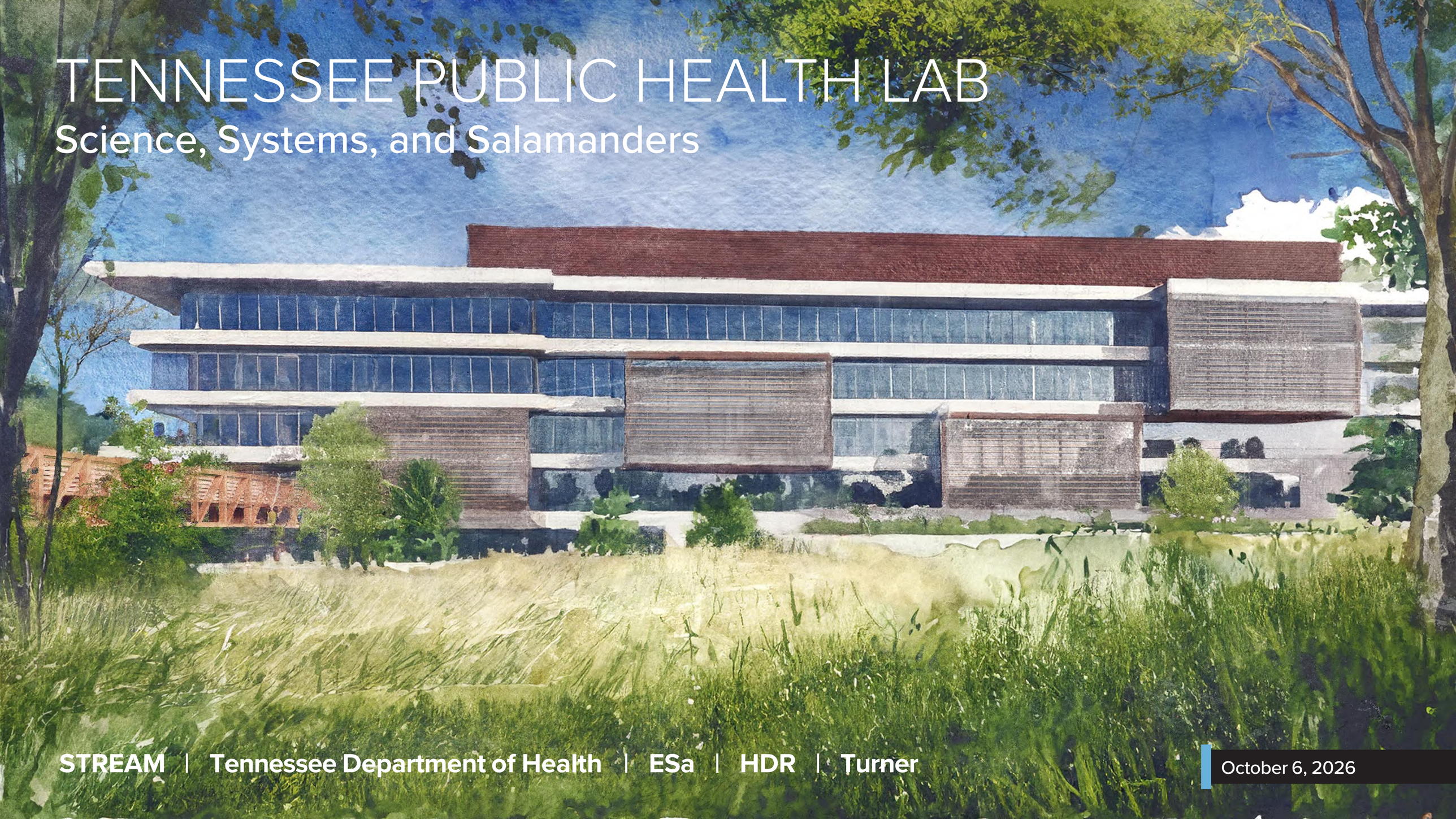
TENNESSEE PUBLIC HEALTH LAB

Science, Systems, and Salamanders



STREAM | **Tennessee Department of Health** | **ESa** | **HDR** | **Turner**

October 6, 2026

Agenda

- Overview
- Lab Services
- State Procedures
- Design
- Construction
- Discussion

Presenters

Wendell Brown
Principal
Architect of Record

Kim Terry
Director of Facilities
Tennessee Department of Health

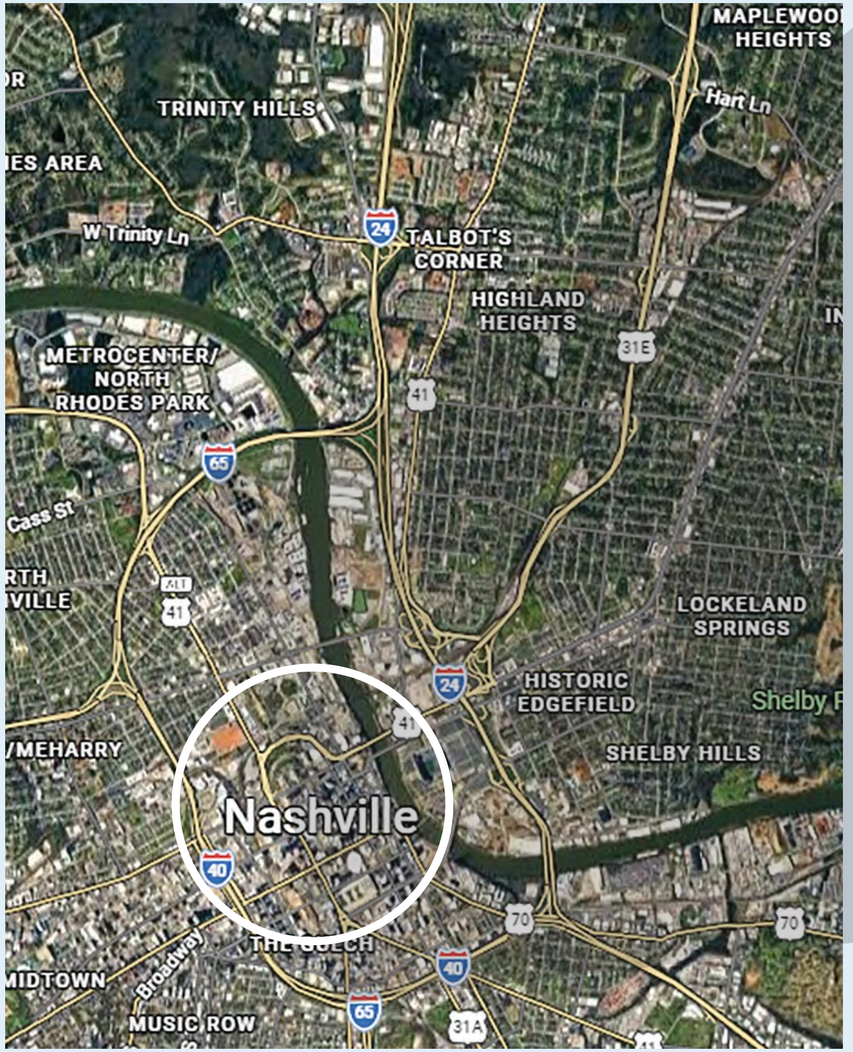
Tim Shelton
Project Manager
STREAM (State of Tennessee Real Estate Asset Management)

David Alder
Principal
Lab Planner and Designer

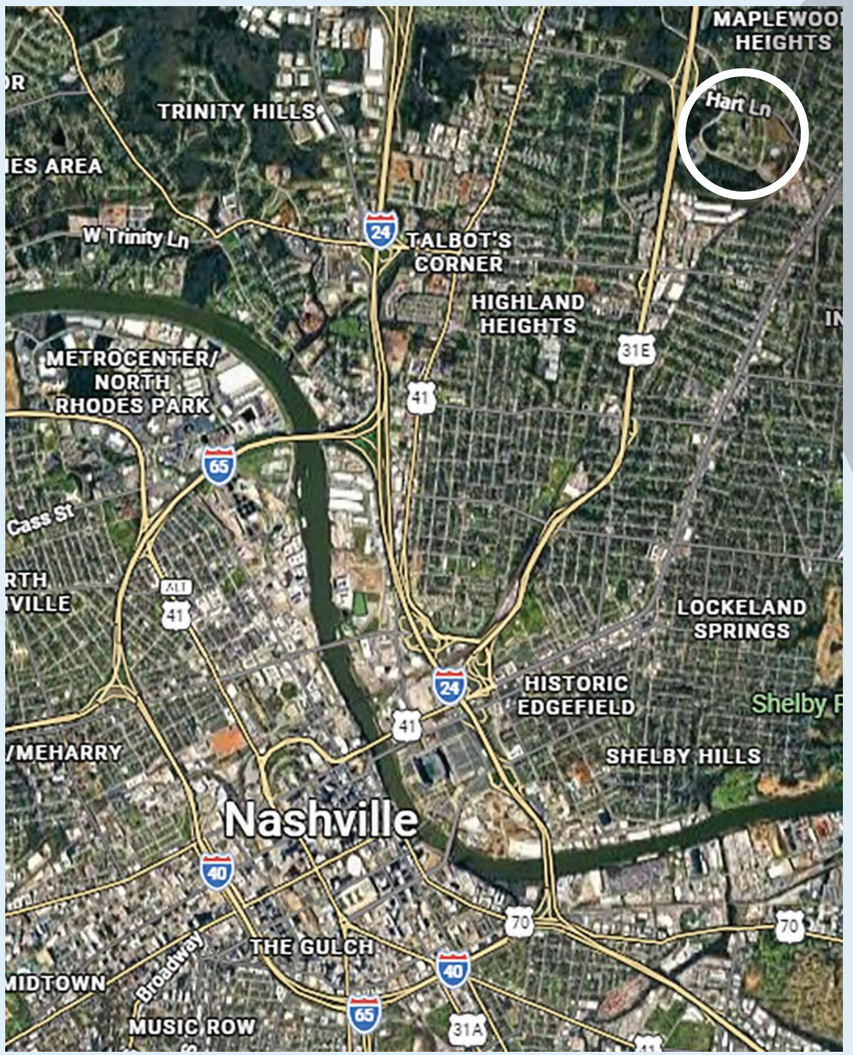
Lance Larkin
Project Manager
Contractor

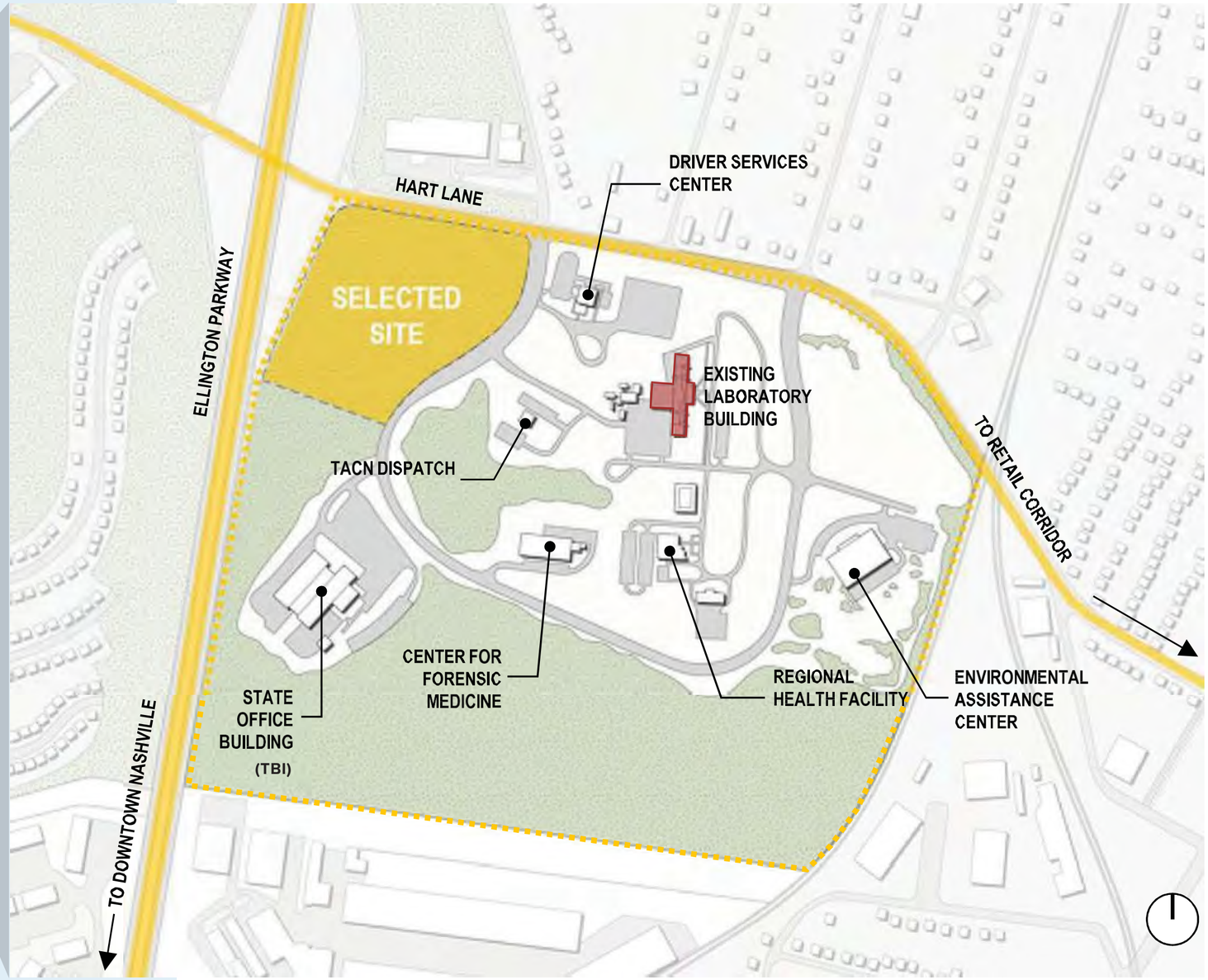
The key to our success is our **teamwork** and **collaboration** among all agencies and companies.

Surrounding Area



Existing Campus Plan





Overview

- 181,639 GSF; 5 floors
- Construction $176,832,783
- $973 sf
- ARPA funding: $200 million
- Design start: February 2023
- GMP: April 2024
- State Approval: January 2024
- Mobilization August 2024
- Substantial Completion: November 2026

RS Gass State Lab Replacement Facility

Teamwork

- Partnership working with a unified goal

Design Process

Launch
- Capture the Vision
- Listening to Client's Needs

Program Confirmation
- Review for space performance and efficiency
- Test fit space list
- Gap analysis workshop
- Benchmark budget alignment

Schematic Design
- Blocking and stacking documents
- Site dynamics
- Design options
- Exterior Imagery
- Review sample/material flows

Construction Management Selection

Design Development
- Refinement
- BIM 360 consultant integration
- Interior finishes and renderings
- Stakeholder reviews
- Fixed equipment coordination

SBC
EDP

Construction Documents
- Refinement
- Details: casework, door schedule, security
- Clash detection
- QM reviews
- ERP (Early Release Package)
- Bid strategies

Bidding
- Review and assist
- Concurrent permitting

Construction Administration
- Observation
- OAC meetings
- Communication: shop drawings; submittals, RFIs
- Commissioning

Occupancy
- FFE move-in
- Ribbon cutting
- Sustainable commissioning
- Post Occupancy Evaluation
- Select agent certification

LAB SERVICES

Statement of Need

Tennessee State Laboratory

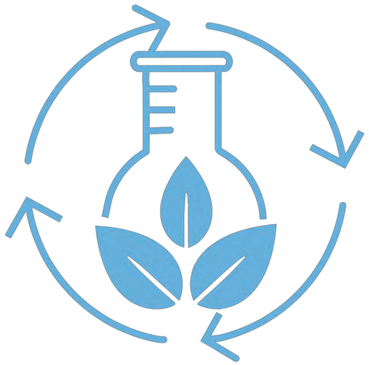
The Laboratory is currently located in the original Tuberculosis hospital built in 1950. This building was converted into a 120,000sf State Lab in the 1980's with currently a staff of approximately 150 employees. The lab provides many essential testing services for the citizens of Tennessee. These tests include but are not limited to tests such as Medical Biology, Molecular Biology, Environmental Microbiology, Aquatic testing, and Newborn Screening. In addition, the Lab houses the State Emergency Preparedness Laboratory for front ling testing of biological agents as well as an insectary where mosquito and tick vector-borne diseases studies are performed.

The new Lab development and design project was a 4-5-year process with several onsite and web meetings with Lab leadership, Lab technicians, design and engineering staff.

This design process included a trip to the Alabama State Laboratory. Even though the Alabama Lab is considerably smaller than the Tennessee Lab. This trip was very instrumental in the design process, reinforcing the benefit of open concept Lab, educational, and meeting spaces.

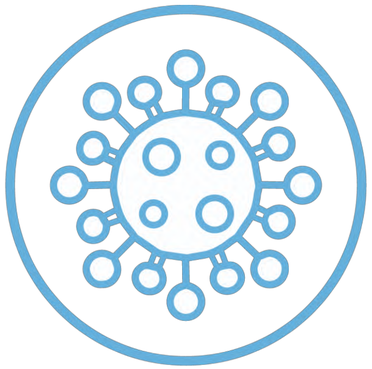
The new State of Tennessee Laboratory is a state-of-the-art, 5 story, 181,000 sf facility that will employee 180+ lab staff. With the design emphasis on lab workflow, this new building will provide the citizens of Tennessee with a more efficient testing process, better turnaround time, enhanced surge capacity, and cost-effective operation.

Testing Services

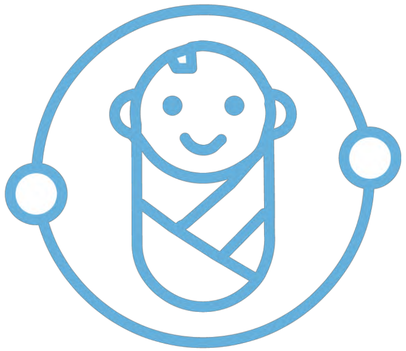


Medical & Environmental Testing

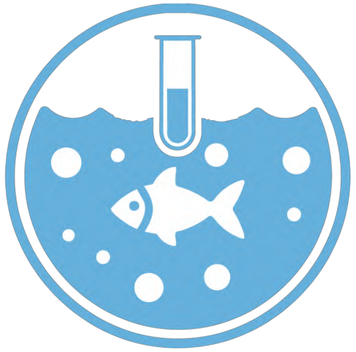
Molecular Biology



Virology



Newborn Screening



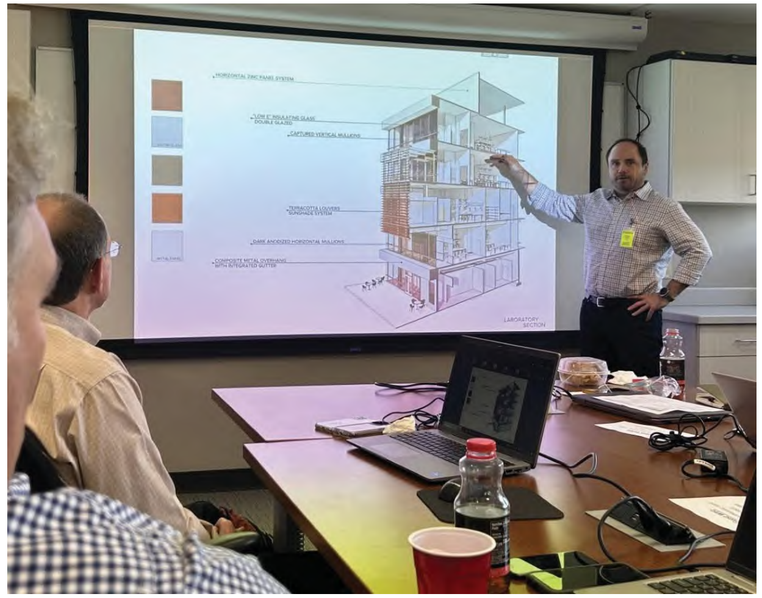
Aquatic Testing

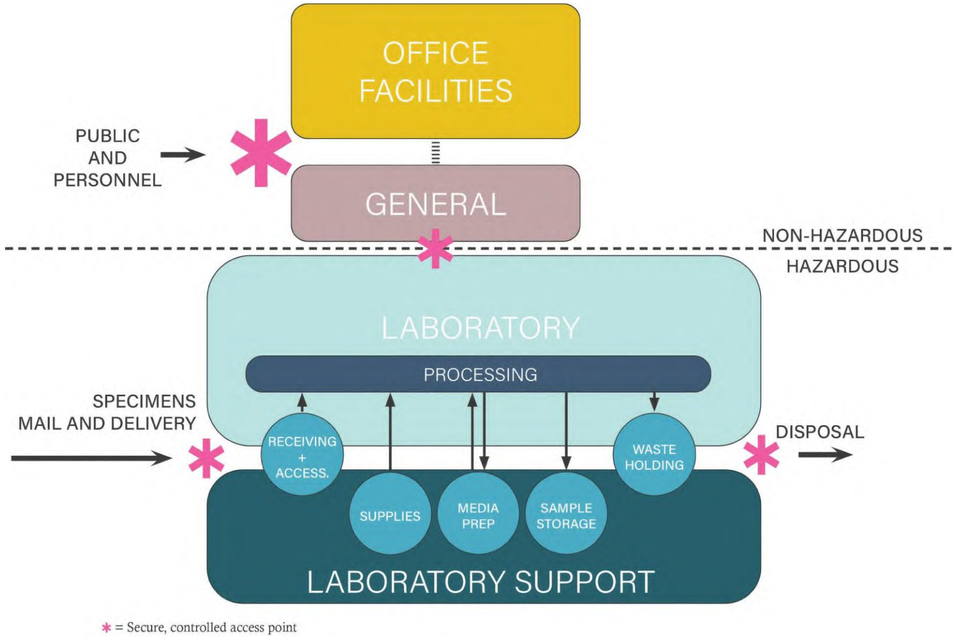
Biological Agents

Chemical Terrorism

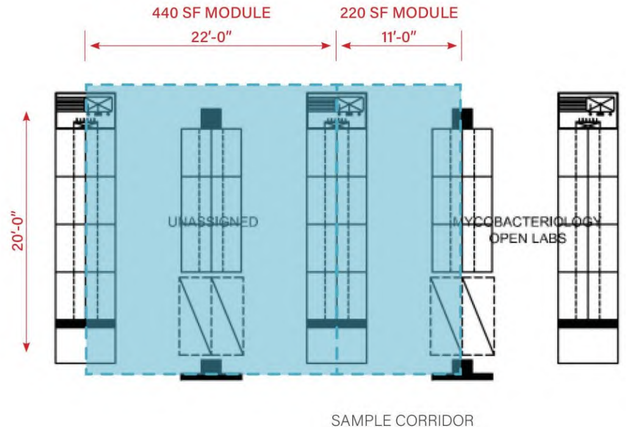
Programming

- Statement of Process
- Conclusions
- Recommendations

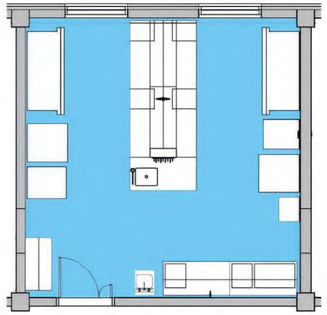




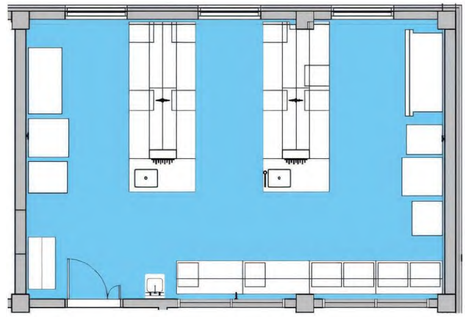
Typical Laboratory Module - Open Lab



Single Bay Laboratory



Two Bay Laboratory



Three Bay Laboratory

Benchmarking Trip

- Alabama Public Health Lab
- Program Verification Phase

STATE PROCEDURES

State Procedures

Governor
Bill Lee

We appreciate Governor Lee taking the time to visit the site and recognize the impact this future facility will have statewide.

STATE BUILDING COMMISSION

↓

OFFICE OF STATE ARCHITECT

↓

GENERAL SERVICES

↓

STREAM

↓

DEPARTMENT OF HEALTH

ARPA Funding

Project Request **SBC-1**

5 Budget

Total Project	Allocation	
$176,832,783.00	$176,832,783.00	Construction Cost
$176,832,783.00	$176,832,783.00	**BID TARGET**
$1,667,217.00	$1,667,217.00	Construction Contingency
$178,500,000.00	$178,500,000.00	**MACC**
$7,520.00	$7,520.00	Environmental Consulting
$8,835,546.00	$8,835,546.00	Design Services
$465,372.00	$465,372.00	Design Contingency
$13,000.00	$13,000.00	Consultant Services
$1,109,260.00	$1,109,260.00	Commissioning Services
$200,000.00	$200,000.00	Preconstruction Services
$1,000,000.00	$1,000,000.00	Owner Provided Equipment
$2,874,950.00	$2,874,950.00	Owner Provided Furniture & Fixtures
$2,900,000.00	$2,900,000.00	Move Management
$1,200,000.00	$1,200,000.00	IT/Phone/Network (STS)
$350,000.00	$691,817.10	Security
$2,544,352.00	$2,202,534.90	Administration and Miscellaneous
$200,000,000.00	**$200,000,000.00**	**TOTAL**

6 Funding

$0.00	State Funds
$200,000,000.00	Federal Funds
$0.00	Other Funds
$200,000,000.00	**TOTAL**

7 Source of Available Funding

$200,000,000.00	Federal Funds (ARP)	(F)
$200,000,000.00		

State Consultants

JLL

Building Management

iNC EST. 1989

Network Cabling

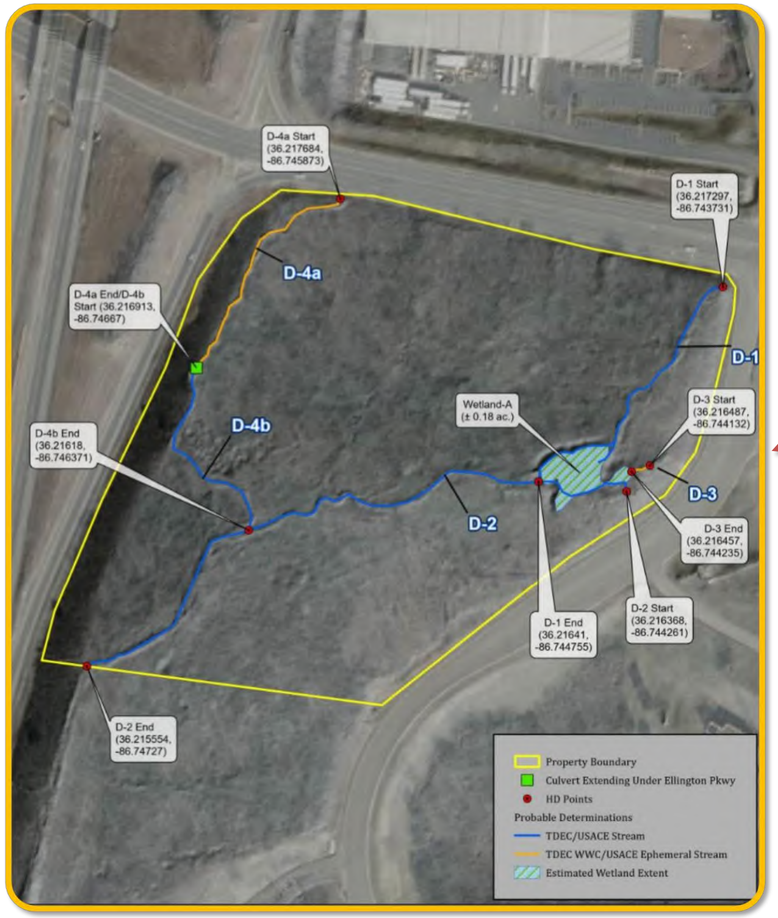
TLC ENGINEERING SOLUTIONS

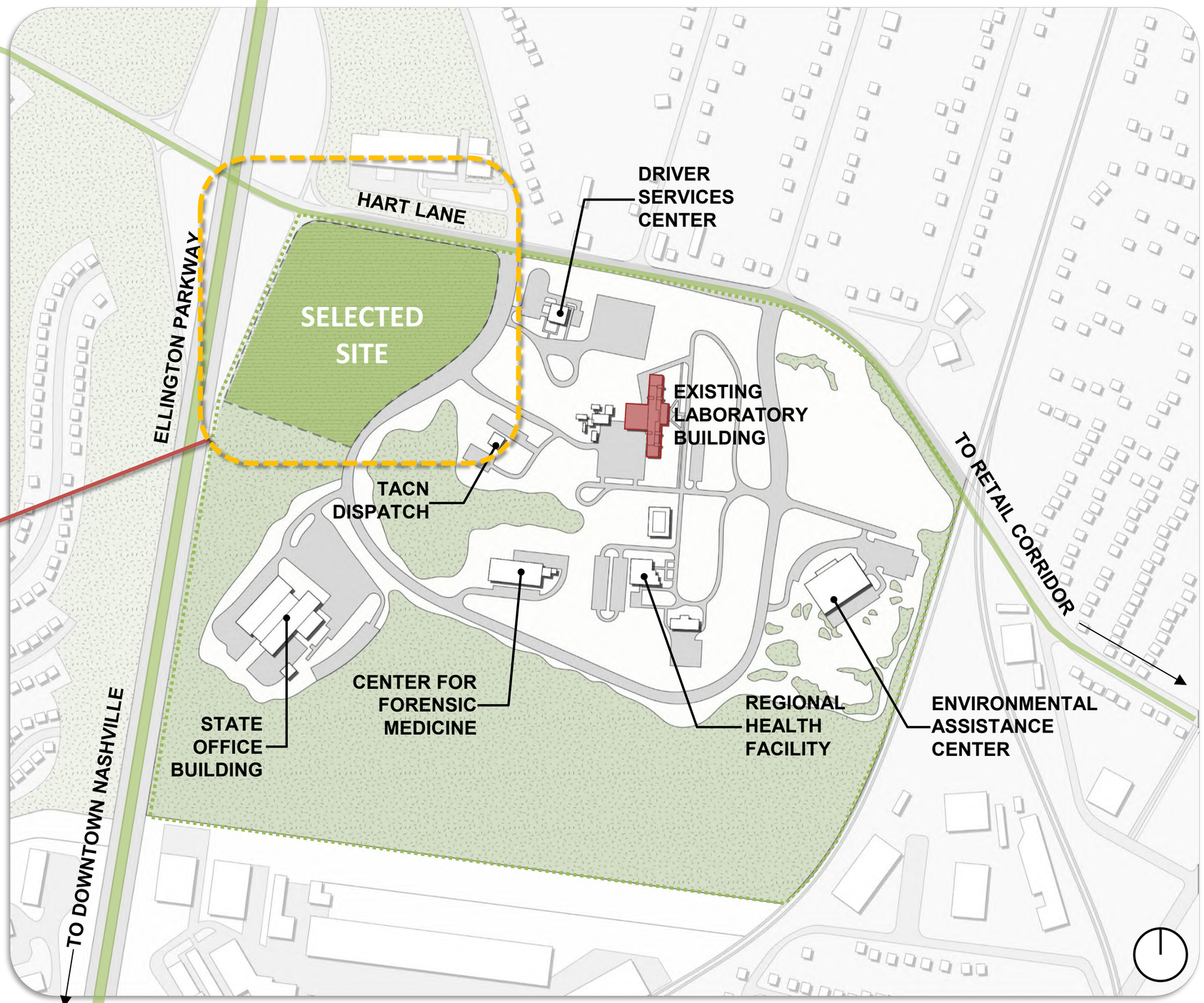
Commissioning

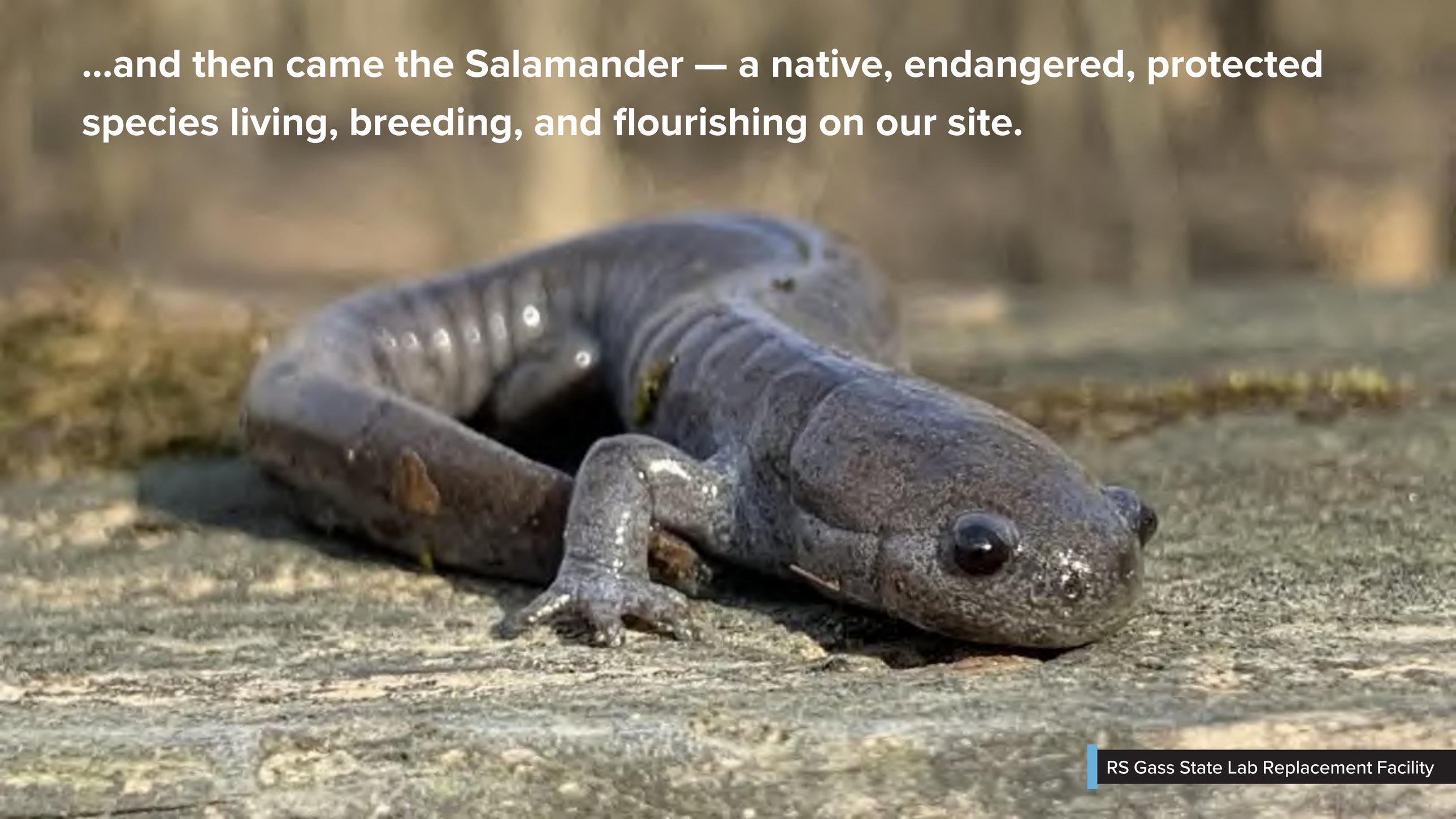
wsp

Lab Transition Consultant

DESIGN


D-4a Start (36.217684, -86.745873)
D-1 Start (36.217297, -86.743731)
D-4a
D-4a End/D-4b Start (36.216913, -86.74667)
D-1
D-4b
Wetland-A (± 0.18 ac.)
D-3 Start (36.216487, -86.744132)
D-4b End (36.21618, -86.746371)
D-3
D-2
D-3 End (36.216457, -86.744235)
D-1 End (36.21641, -86.744755)
D-2 Start (36.216368, -86.744261)
D-2 End (36.215554, -86.74727)
Property Boundary
Culvert Extending Under Ellington Pkwy
HD Points
Probable Determinations
TDEC/USACE Stream
TDEC WWC/USACE Ephemeral Stream
Estimated Wetland Extent


HART LANE
ELLINGTON PARKWAY
SELECTED SITE
DRIVER SERVICES CENTER
EXISTING LABORATORY BUILDING
TACN DISPATCH
TO RETAIL CORRIDOR
CENTER FOR FORENSIC MEDICINE
STATE OFFICE BUILDING
REGIONAL HEALTH FACILITY
ENVIRONMENTAL ASSISTANCE CENTER
TO DOWNTOWN NASHVILLE


...and then came the Salamander — a native, endangered, protected species living, breeding, and flourishing on our site.

RS Gass State Lab Replacement Facility

• Pathways
• Direction
• Long Road Ahead

• Strategy
• Long Term Plan
• Playing the long game

• New Technology
• Cutting Edge
• Sustainability

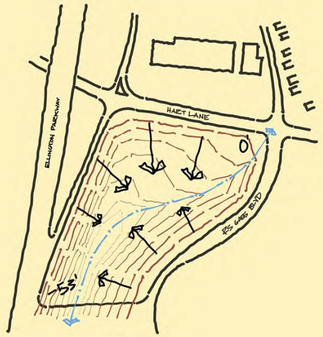
• Working Together
• Worker Bees

• Strength
• Putting Up Roots
• Support

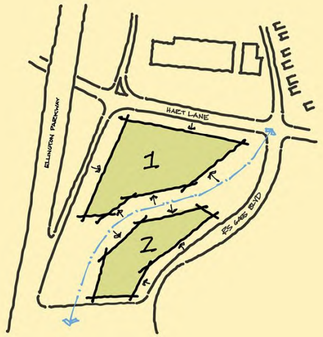
Engaging Stakeholders

Collaborative – Charettes – Consensus

The Inspiration = Transformational Objectives

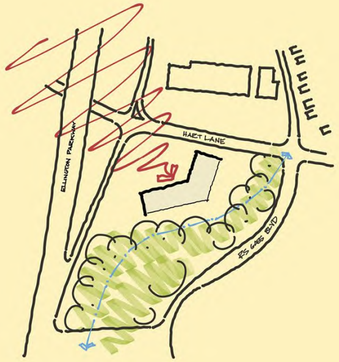


Topography

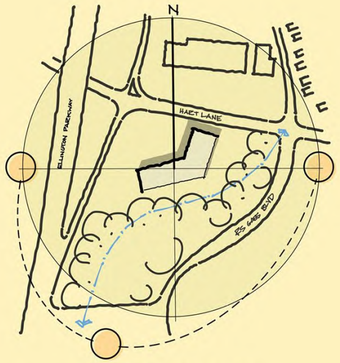


Buildable Area

Though beautiful, the site presented challenging parameters including 50 feet of elevation change, roadway setbacks, and a protected stream with associated setbacks. The site quickly reduced from over 6 buildable acres to 4.5 buildable acres and challenged the team to split the site planning in half while bridging the stream.



Site Orientation



Solar Orientation

Nestled in a heavily forested corner of the state's campus, the building takes advantage of it's natural surroundings and focuses views away from the highway and towards the dense vegetation. An east/west building orientation optimizes solar performance by utilizing the facade's horizontal banding as shading devices.

RS Gass State Lab Replacement Facility

Driving rigorous stream protection requirements is a friendly little Streamside Salamander that has called our site home for hundreds of years before we showed up. This protected species was discovered during the early stages of project planning and kick-started an environmentally conscious effort to protect this native species.

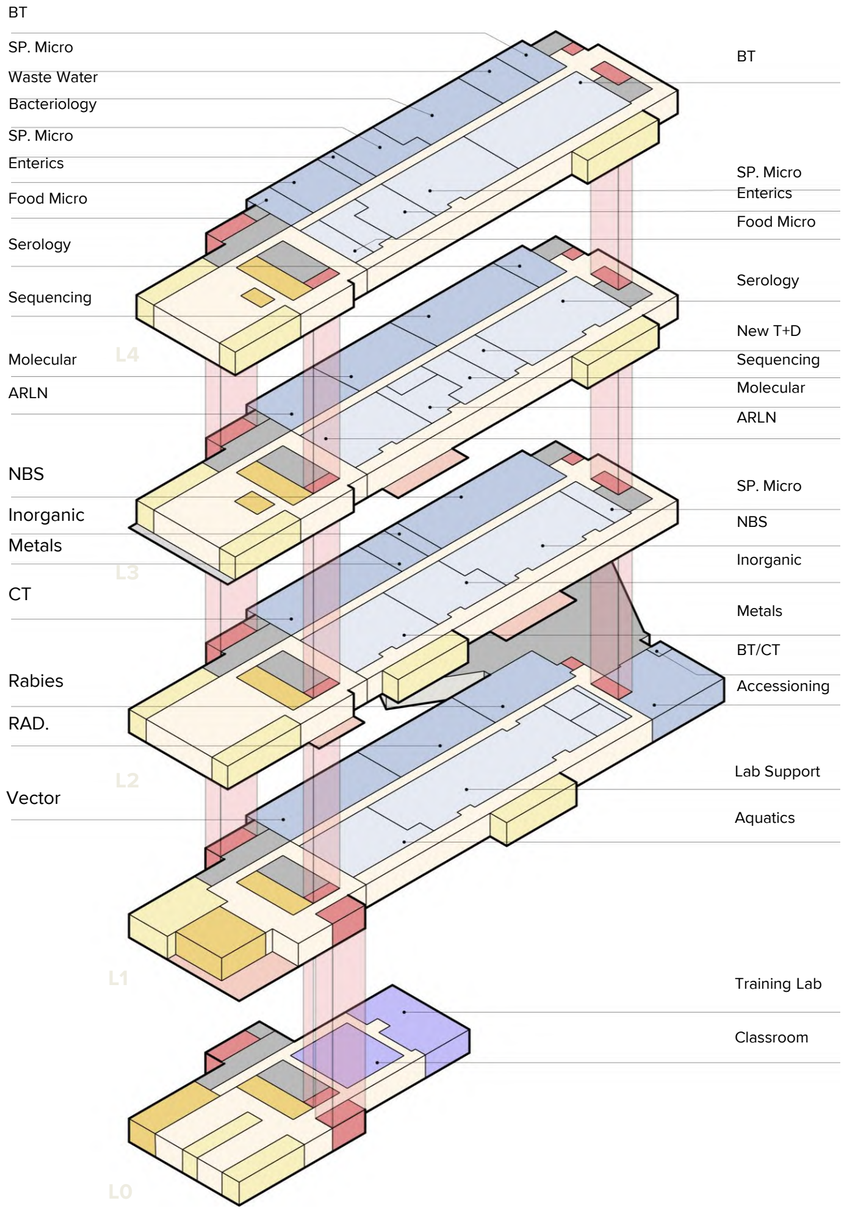
Streamside Salamander Habitat

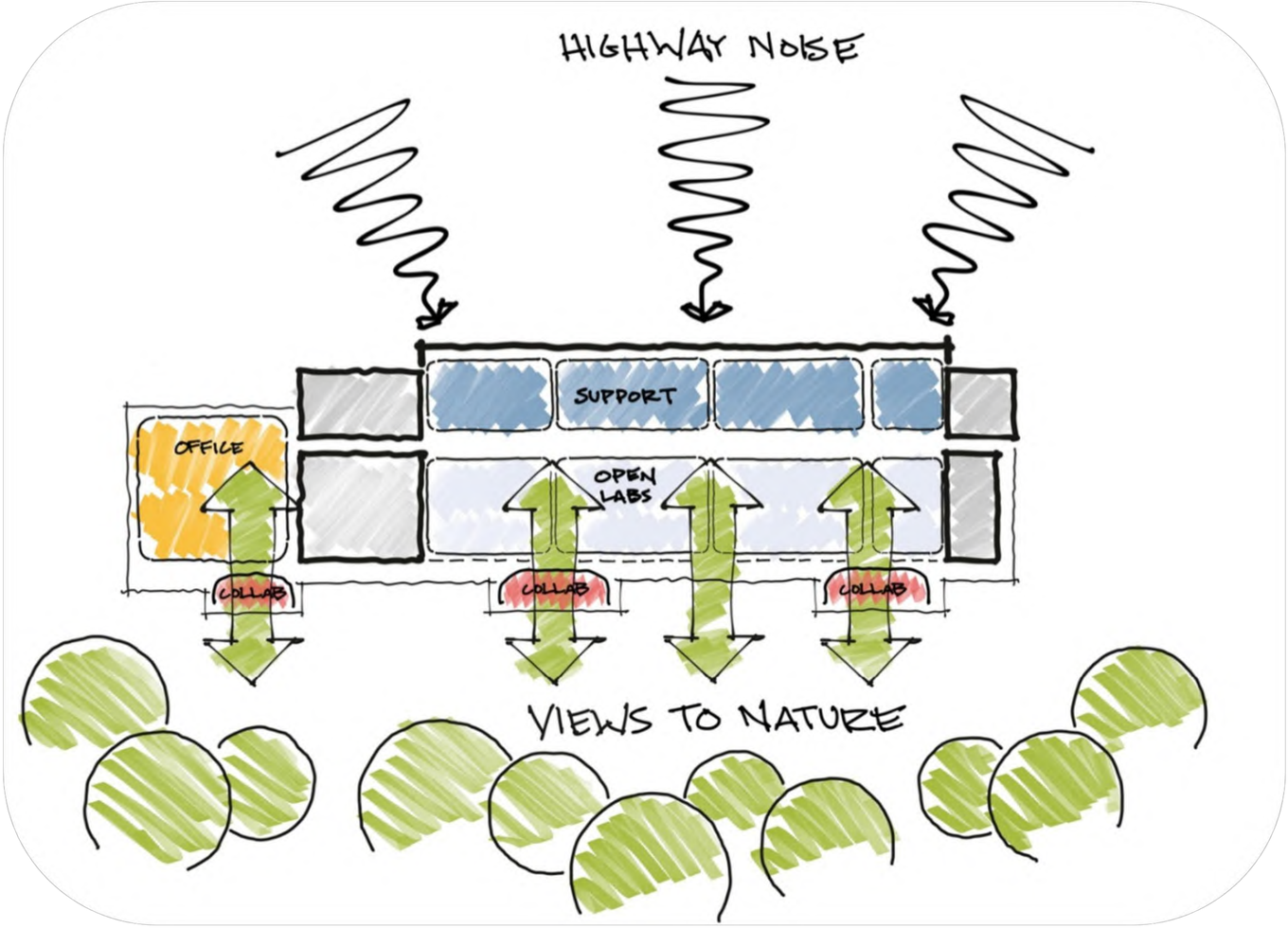
- Office
- Balcony
- Public Circulation
- Training
- Lab
- Lab Support
- Building Support
- Mechanical

RS Gass State Lab Replacement Facility

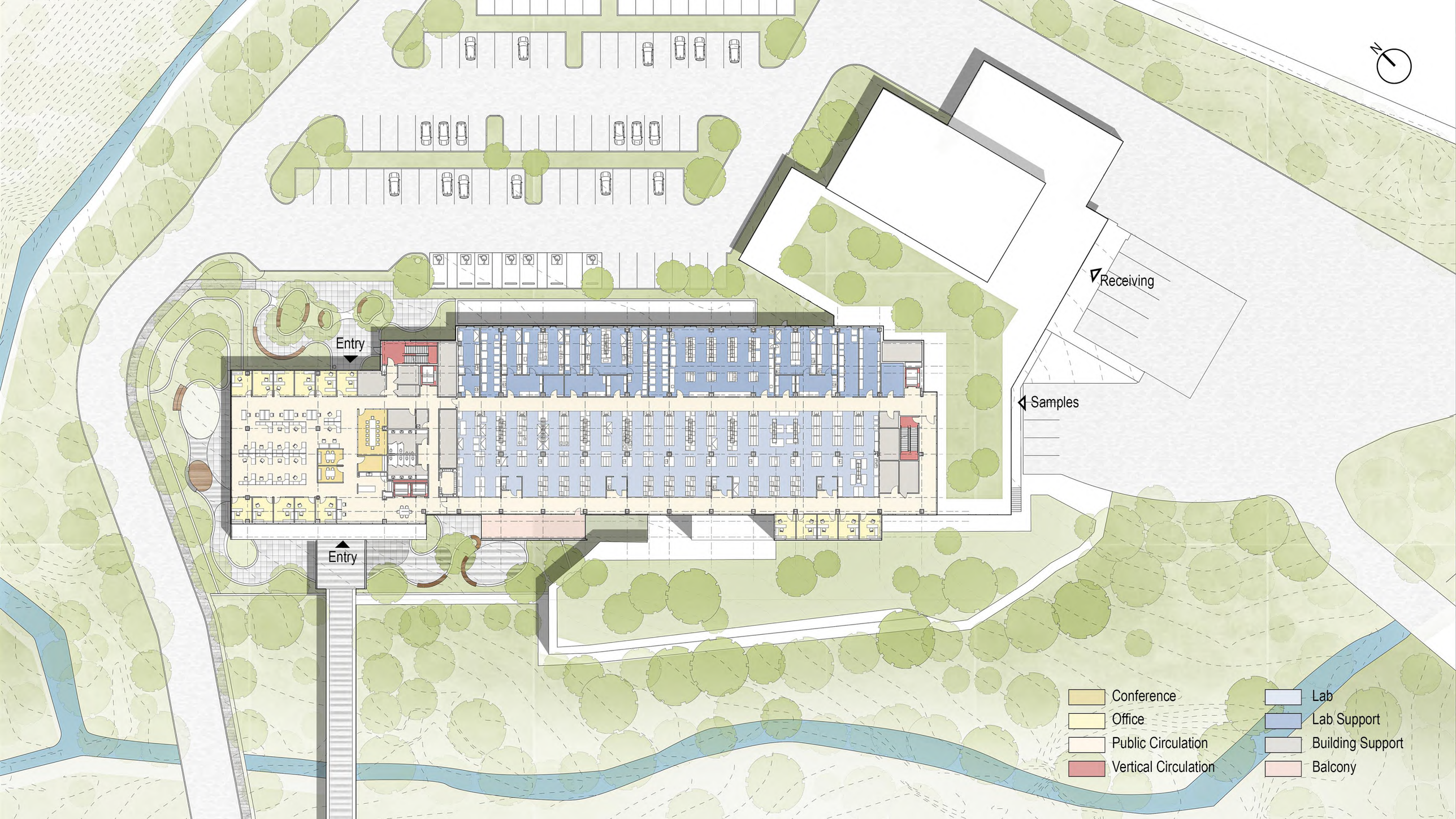
RS Gass State Lab Replacement Facility

RS Gass State Lab Replacement Facility

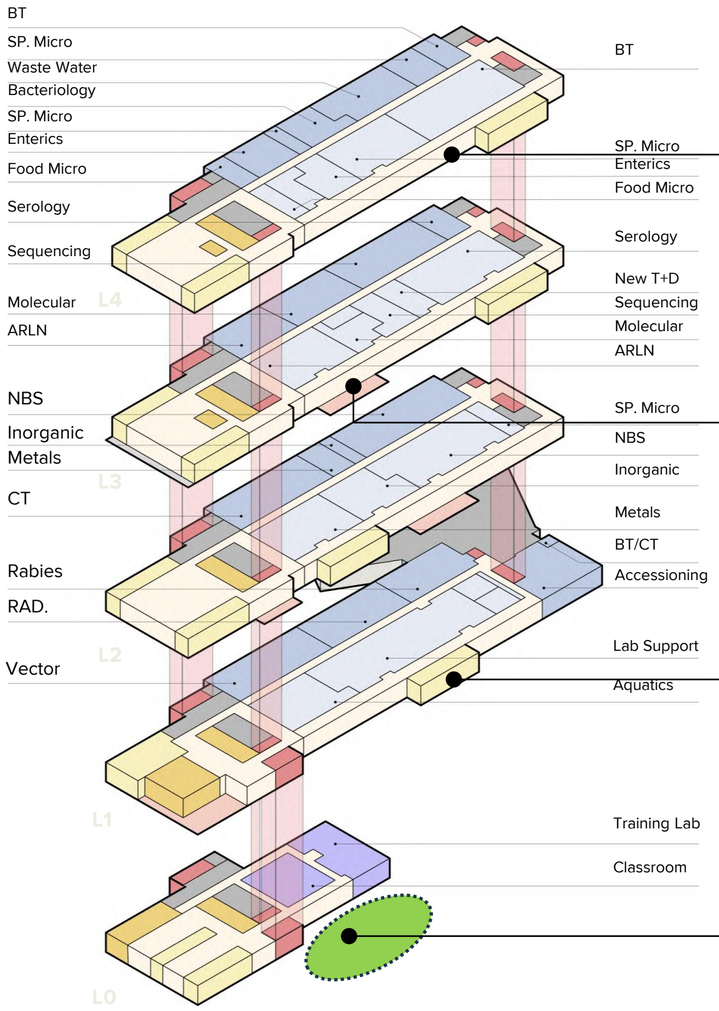

BT
SP. Micro
Waste Water
Bacteriology
SP. Micro
Enterics
Food Micro
Serology
Sequencing
Molecular
ARLN
NBS
Inorganic
Metals
CT
Rabies
RAD.
Vector
BT
SP. Micro
Enterics
Food Micro
Serology
New T+D
Sequencing
Molecular
ARLN
SP. Micro
NBS
Inorganic
Metals
BT/CT
Accessioning
Lab Support
Aquatics
Training Lab
Classroom
L4
L3
L2
L1
L0
Conference
Lab
Circulation
Vert. Circ.
Office
Lab Support
Balcony
Support


HIGHWAY NOISE
SUPPORT
OFFICE
OPEN LABS
COLLAB
COLLAB
COLLAB
VIEWS TO NATURE

RS Gass State Lab Replacement Facility


N
Receiving
Samples
Entry
Entry
Conference
Office
Public Circulation
Vertical Circulation
Lab
Lab Support
Building Support
Balcony

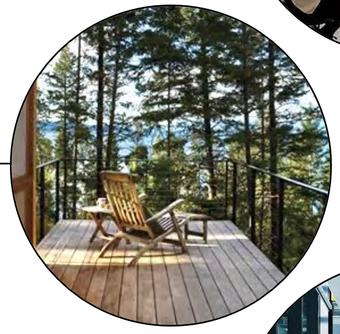
RS Gass State Lab Replacement Facility



BT
SP. Micro
Enterics
Food Micro
Serology
New T+D
Sequencing
Molecular
ARLN
SP. Micro
NBS
Inorganic
Metals
BT/CT
Accessioning
Lab Support
Aquatics
Training Lab
Classroom

Connect

Recharge



Collaborate

Think

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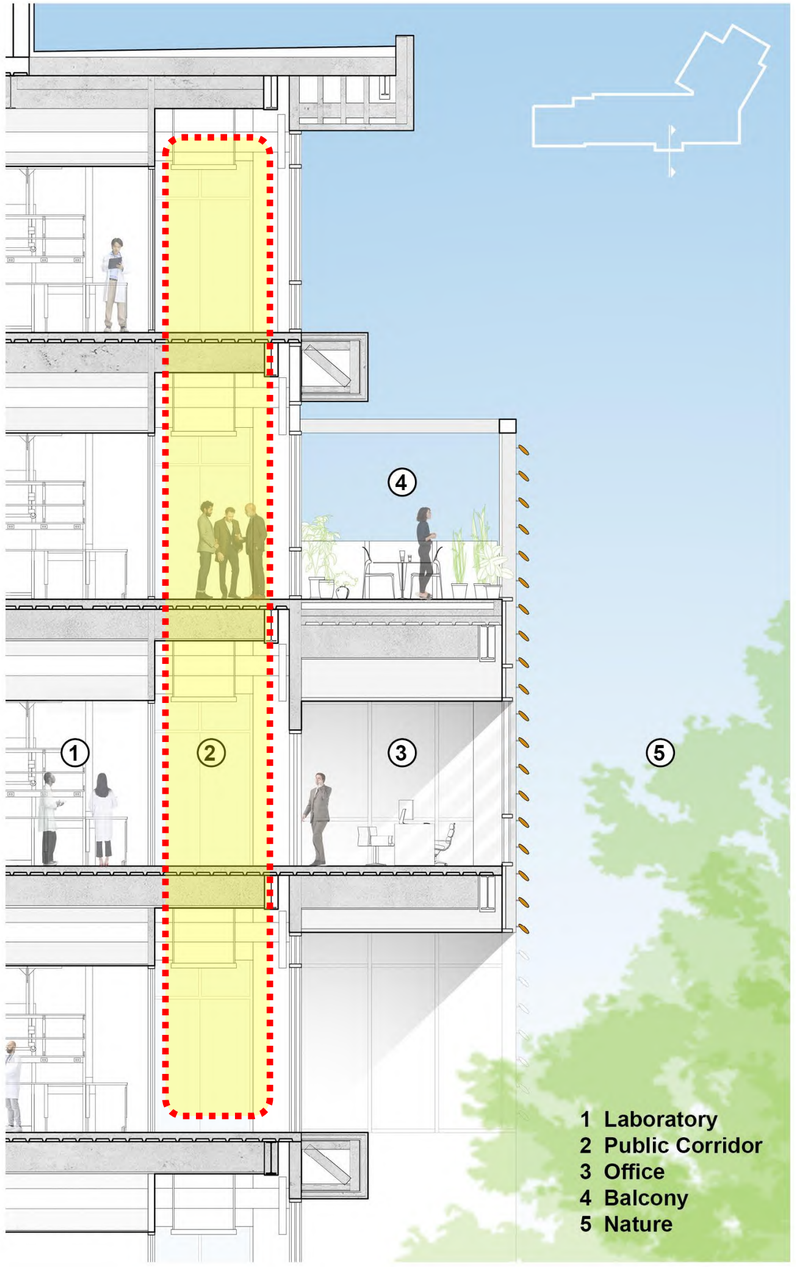

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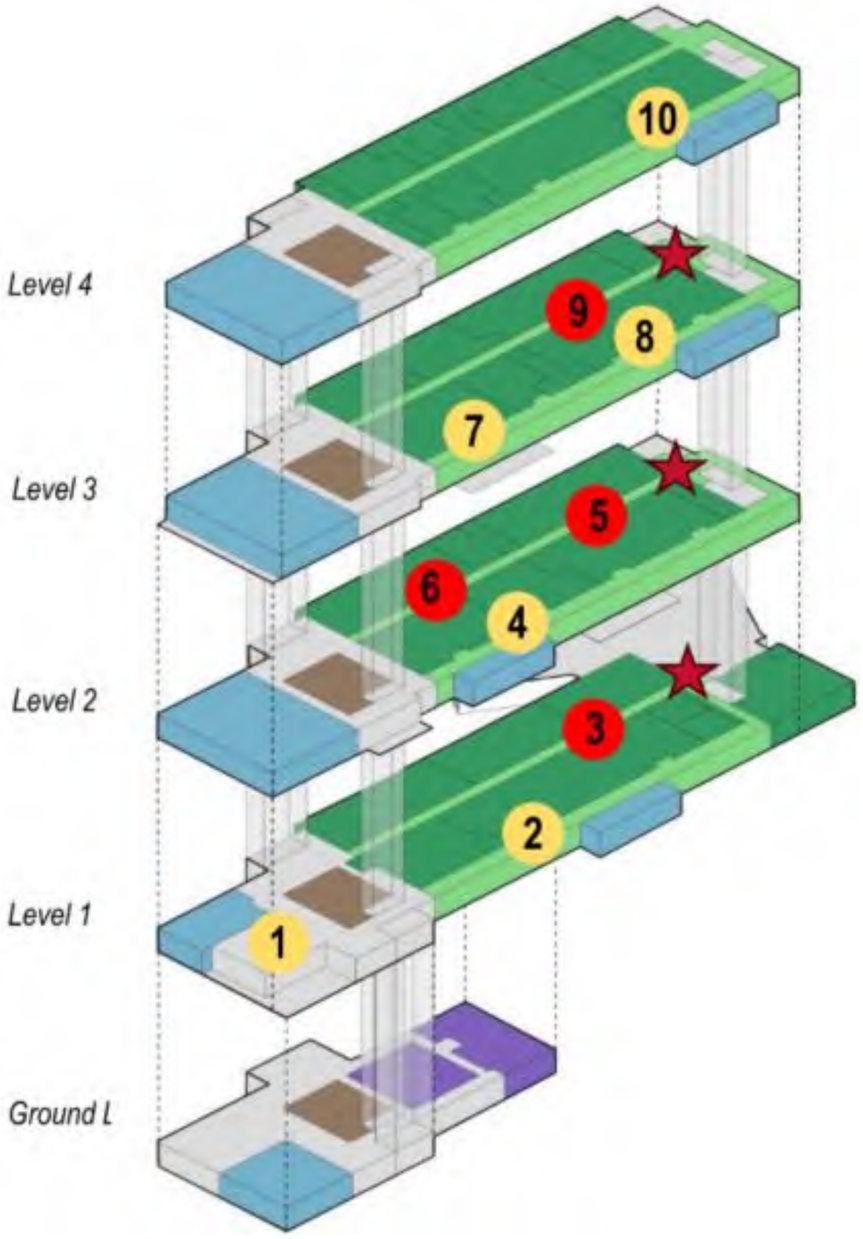

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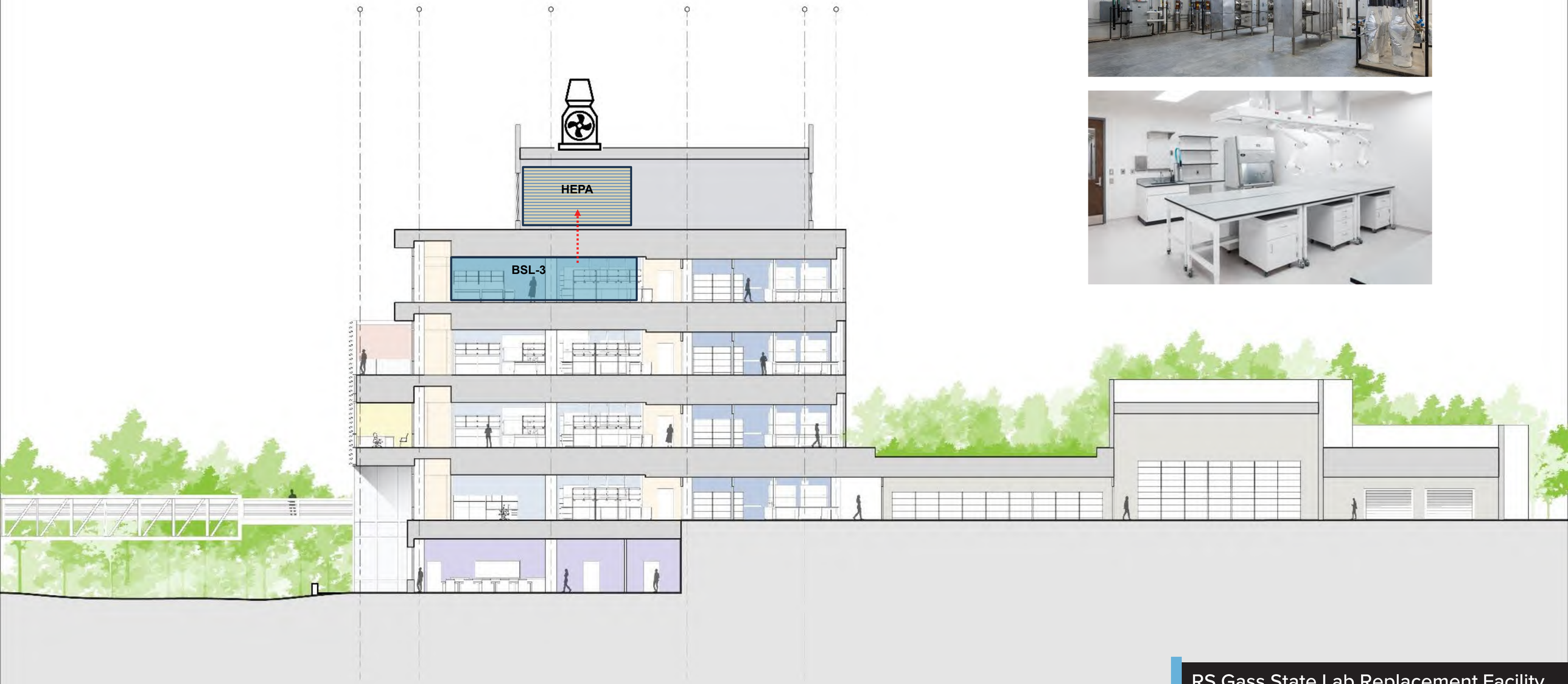
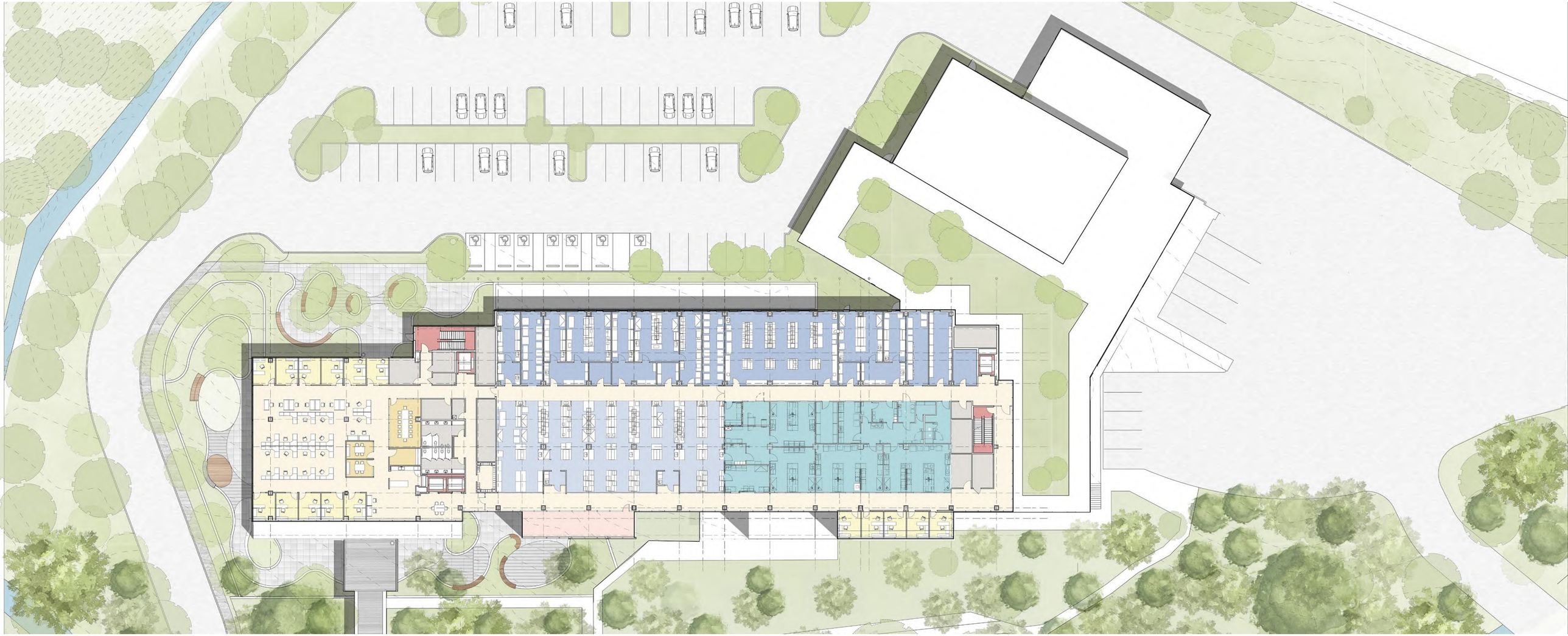
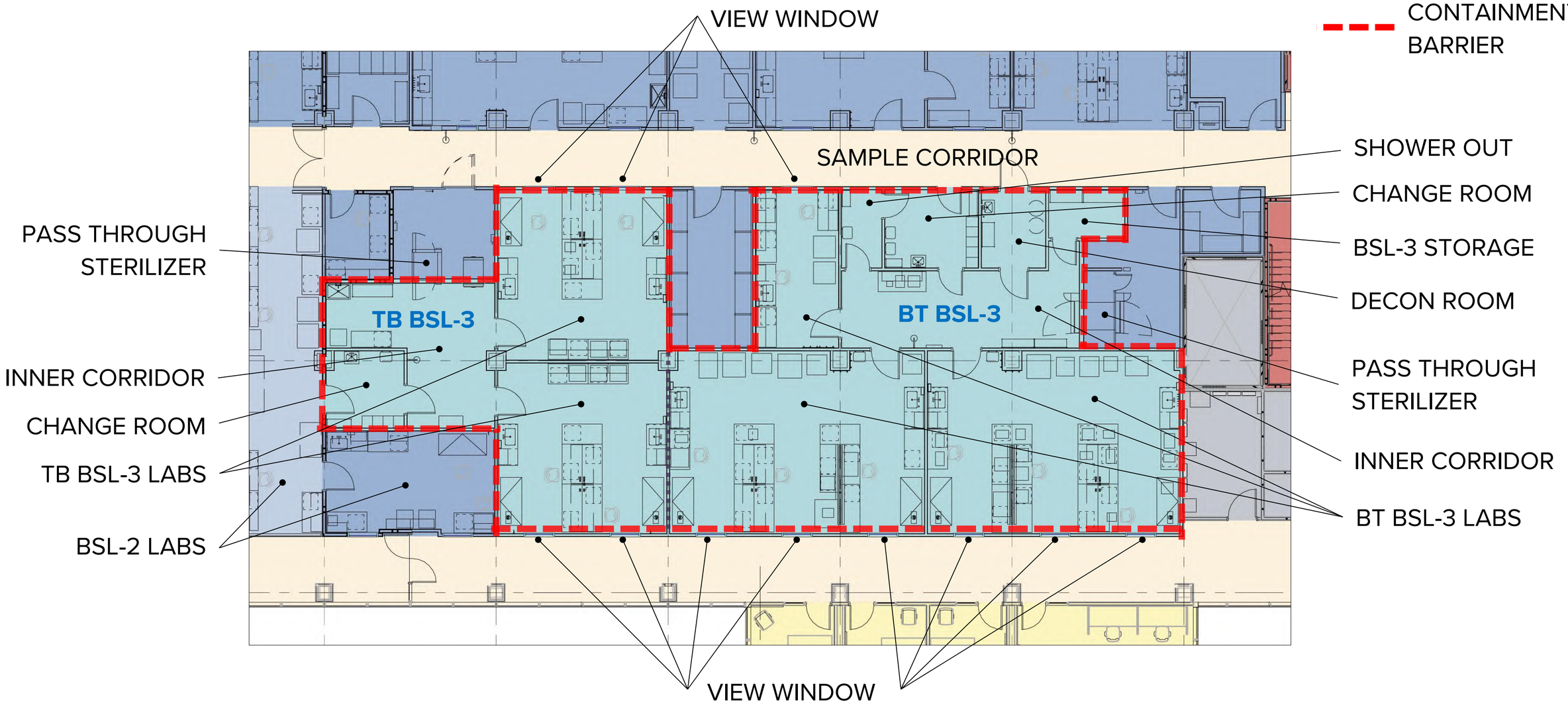
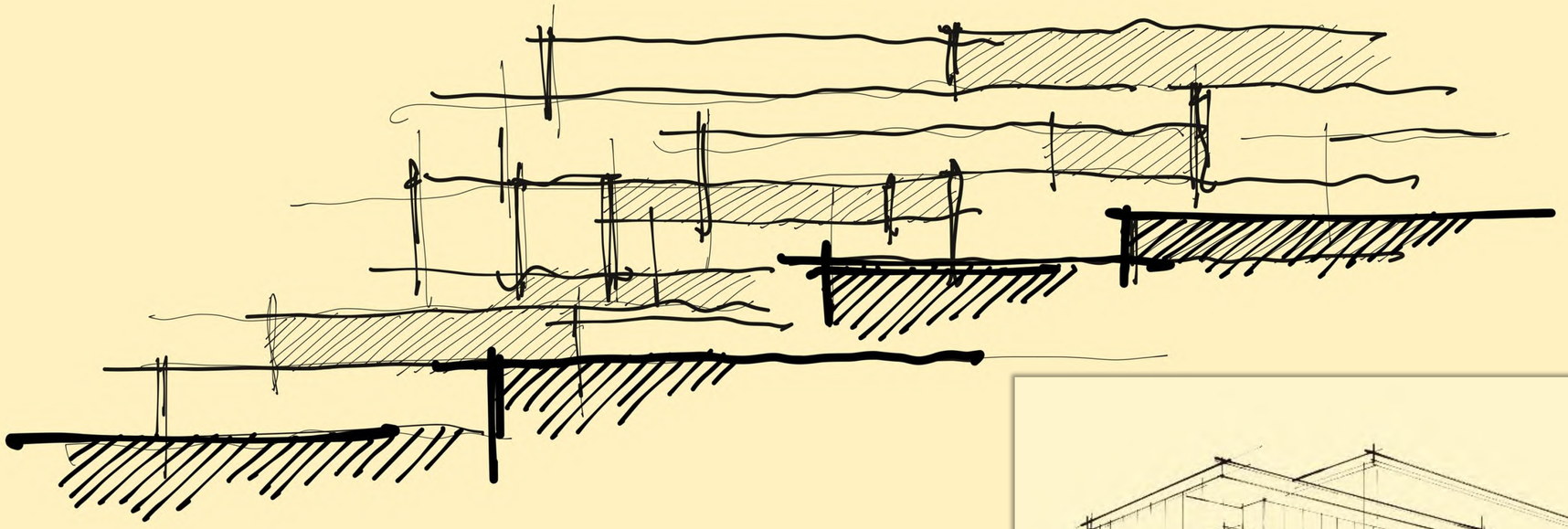


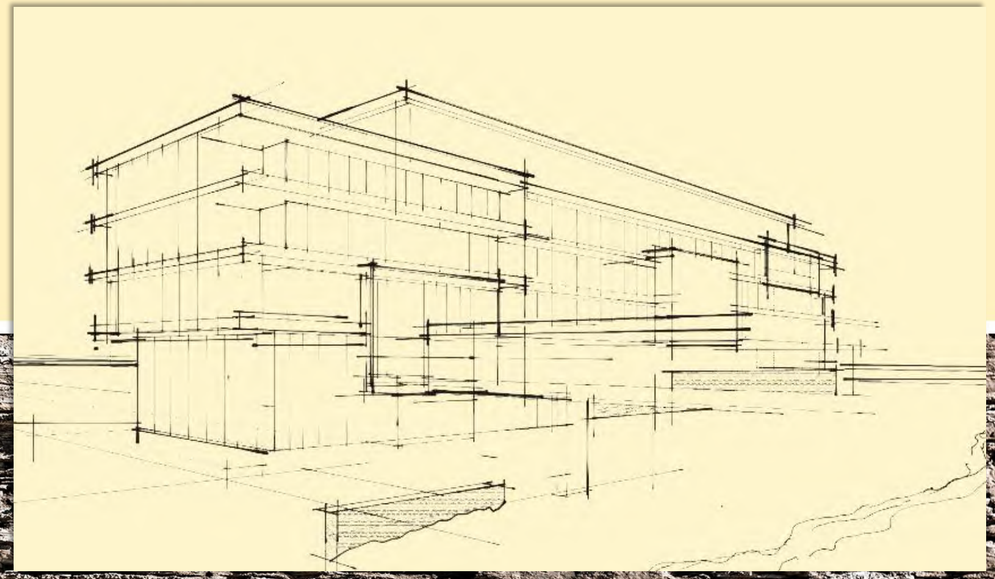
RS Gass State Lab Replacement Facility



RS Gass State Lab Replacement Facility


VIEW WINDOW
CONTAINMENT BARRIER
SAMPLE CORRIDOR
SHOWER OUT
CHANGE ROOM
BSL-3 STORAGE
DECON ROOM
PASS THROUGH STERILIZER
INNER CORRIDOR
BT BSL-3 LABS
PASS THROUGH STERILIZER
TB BSL-3
BT BSL-3
INNER CORRIDOR
CHANGE ROOM
TB BSL-3 LABS
BSL-2 LABS
VIEW WINDOW





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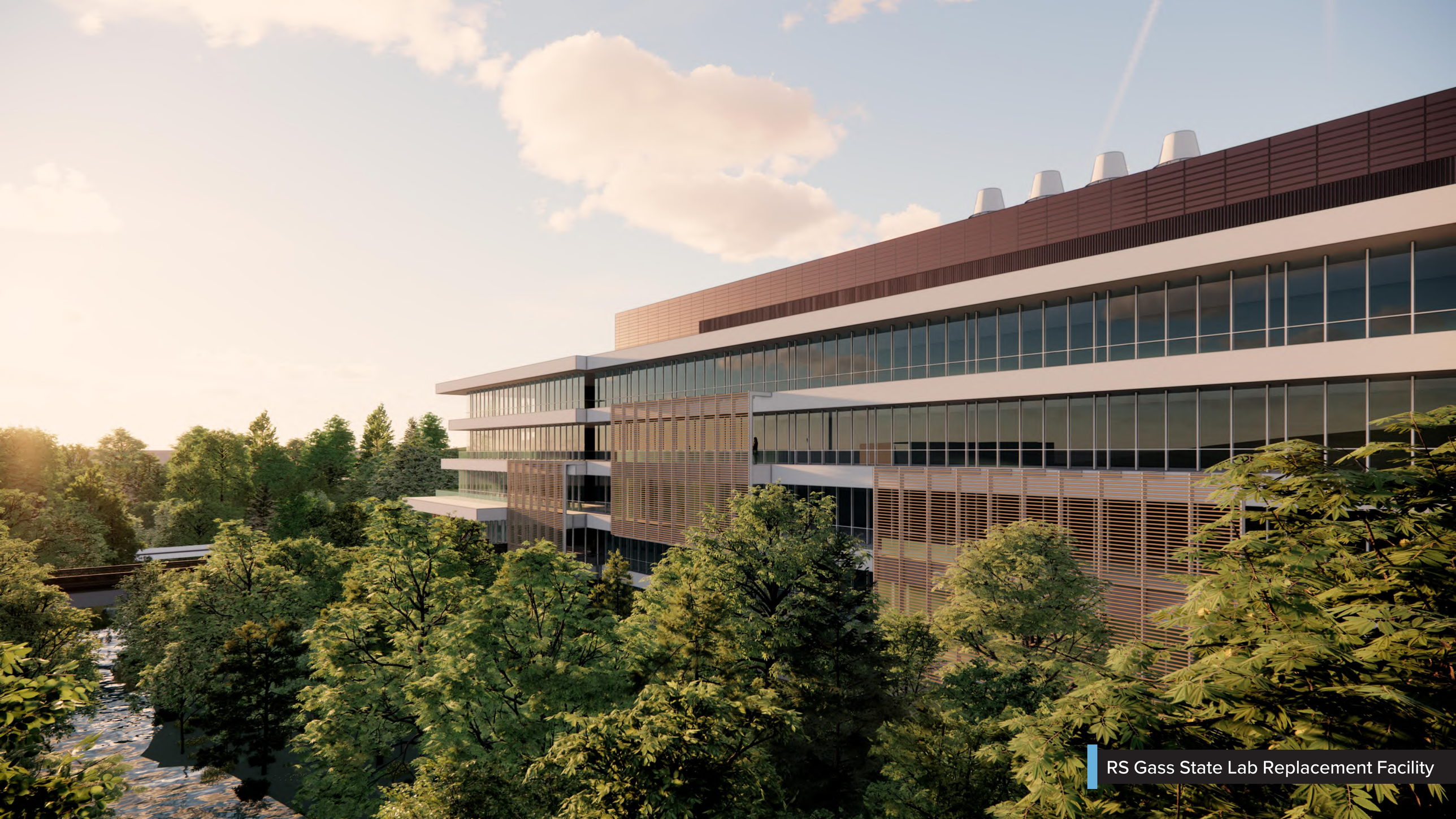

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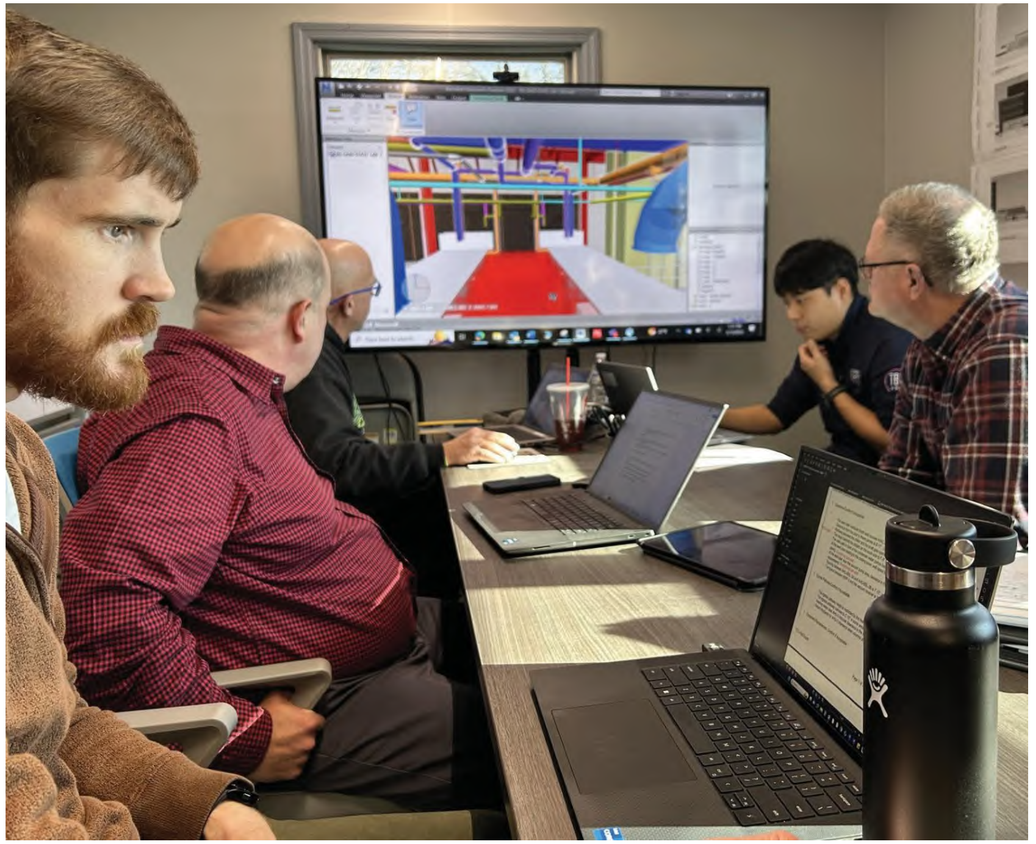
RS Gass State Lab Replacement Facility

RS Gass State Lab Replacement Facility

CONSTRUCTION

Coordination

- Importance of Pre-Construction Phase
- Sub Consultants and Design Team
- BIM Coordination



Mock-ups

- Confirming design intent
- Ease of maintenance

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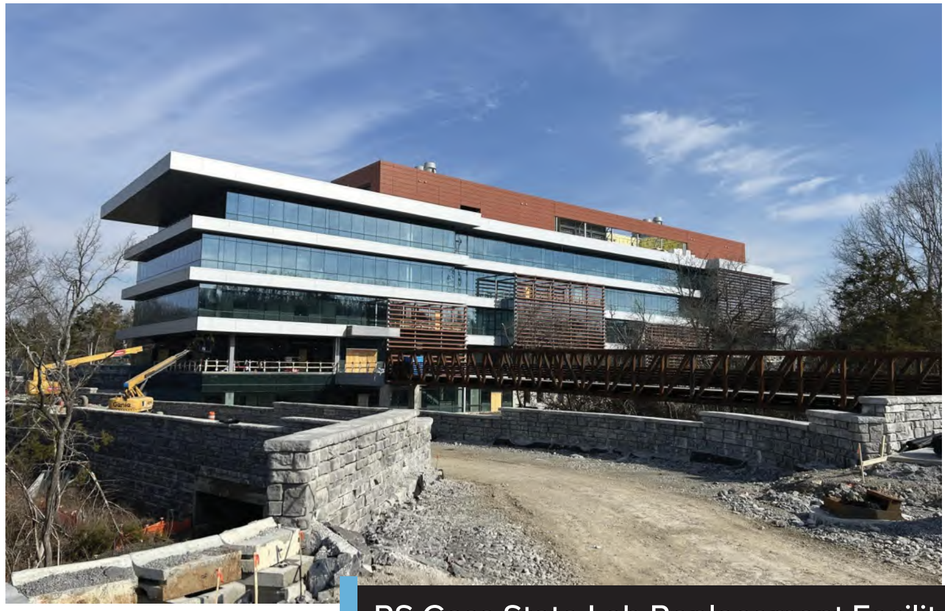
Construction

Challenges

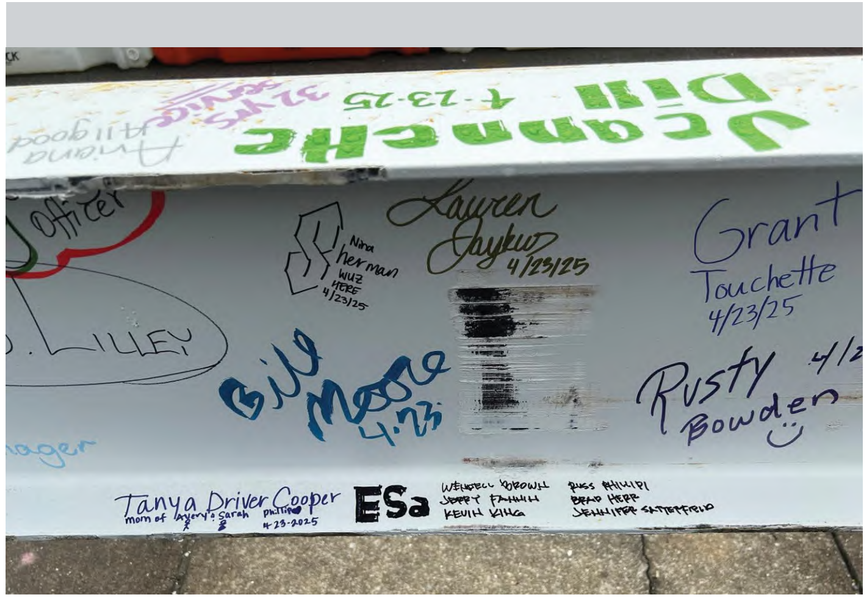
- Site: solid rock, width and timing of stream
- Time: ARPA expiration date
- Unforseen Variables
  - Tarriffs
  - War
  - Ice Storm



RS Gass State Lab Replacement Facility

Milestone Highlights

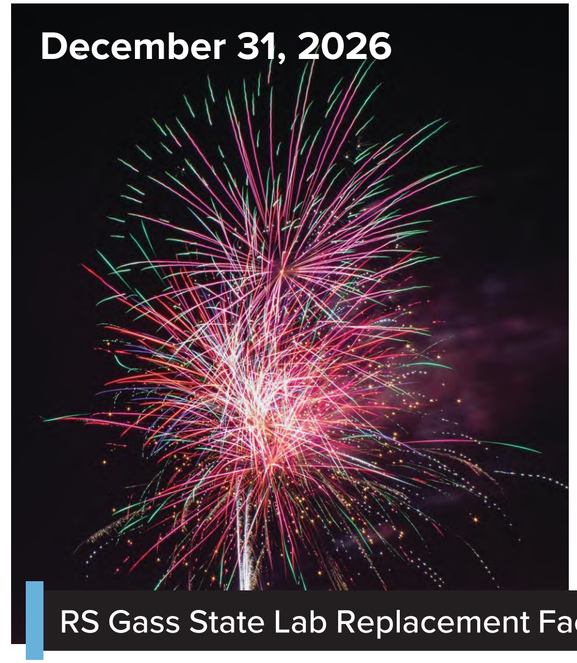
Topping-Out Ceremony



Bridge Setting

Schedule/Budget

- 7 days/week including holidays
- Hard stop **12/31/26**
- Ahead of Schedule
- Zero change orders to date
- Under budget



SUMMARY

Successful Delivery

- Ahead of Schedule
- Under Budget
- Collaborative Effort
- No Accidents

Next

Post Construction Activity:

- [ ] Move Furniture
- [ ] Commission Equipment
- [ ] Close out Documents

Lessons Learned

1. Move Management
2. Commission Equipment

Thank You!

QUESTIONS

Project Video