

From Need to Succeed:

Leveraging State and Federal Programs to Overcome Brownfield Redevelopment Obstacles

Kerry Conner, P.G., EIT
Senior Geologist
Terracon Consultants, Inc.

Maureen Phair
Executive Director
Arvada Urban
Renewal Authority

Brian Williams
Senior Staff Geologist
Terracon Consultants, Inc.

*Jared Geissler, P.E., MBA,
PMP, CHMM*
Environmental Depart.
Manager
Terracon Consultants, Inc.



Agenda

- IIF Moment
- Factors to Consider When Choosing a Path: *VCUP*
- Case Study Sites
 - Project History & Regulatory Framework
 - Assessment Work
 - VCUP Submittal & Remedial Goal
 - Lessons Learned
- Questions



IIF | Safety

Incident and Injury Free

"Everyone goes home safe, every day."



Photo by Jens Lefie on Unsplash

Factors to Consider When Choosing a Path

Schedule
Available Funding
Stakeholders



Voluntary Cleanup Program



VCUP provides
a *regulatory structure* for
planning and executing
site characterization and cleanup



Case Study #1

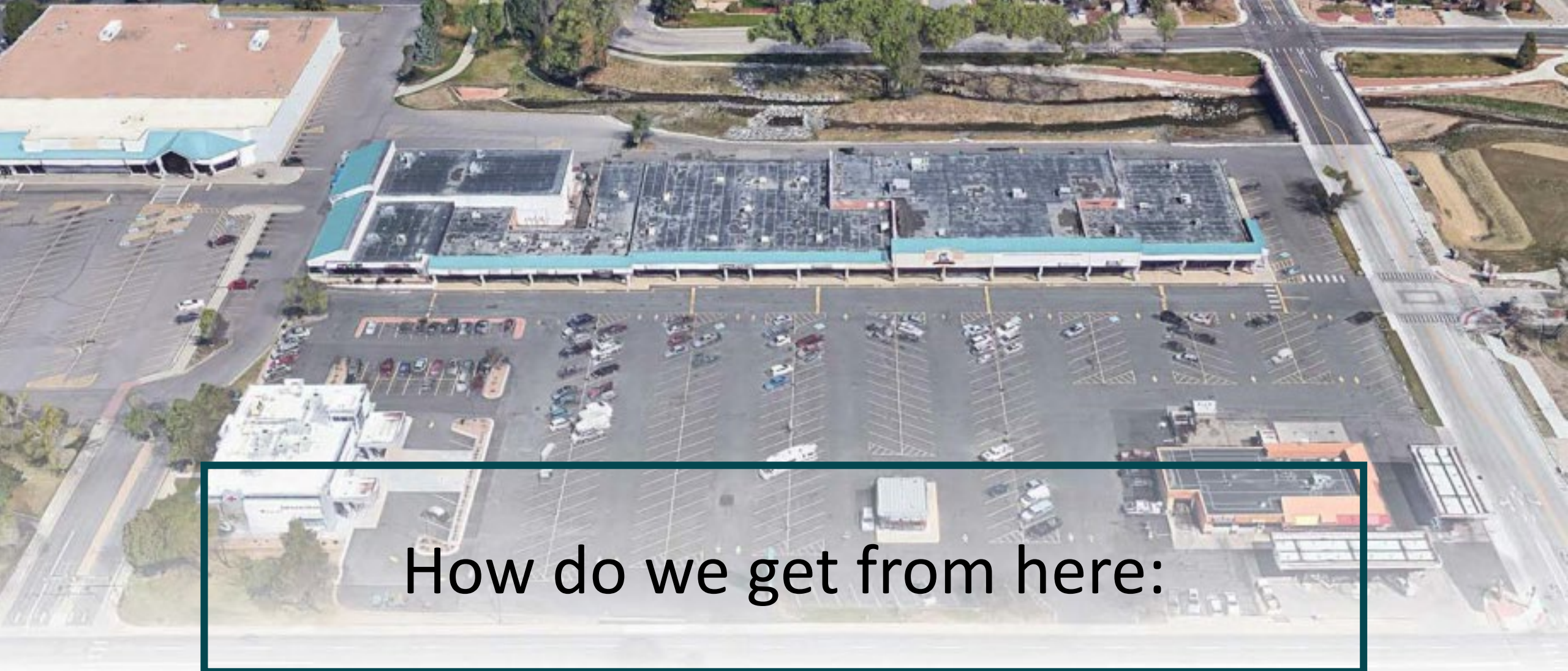
Redeveloping One Strip Center



Maureen Phair
AURA



Brian Williams
Terracon



How do we get from here:



... to here?

Former Arvada Square Retail Center

Built
1963

75k SF

7 Acres

2
Outbuildings



Former Arvada Square Retail Center

19

Tenants

Asbestos

Flood Plain

**Dry Cleaning
Contamination**

Obstacles to Redevelopment

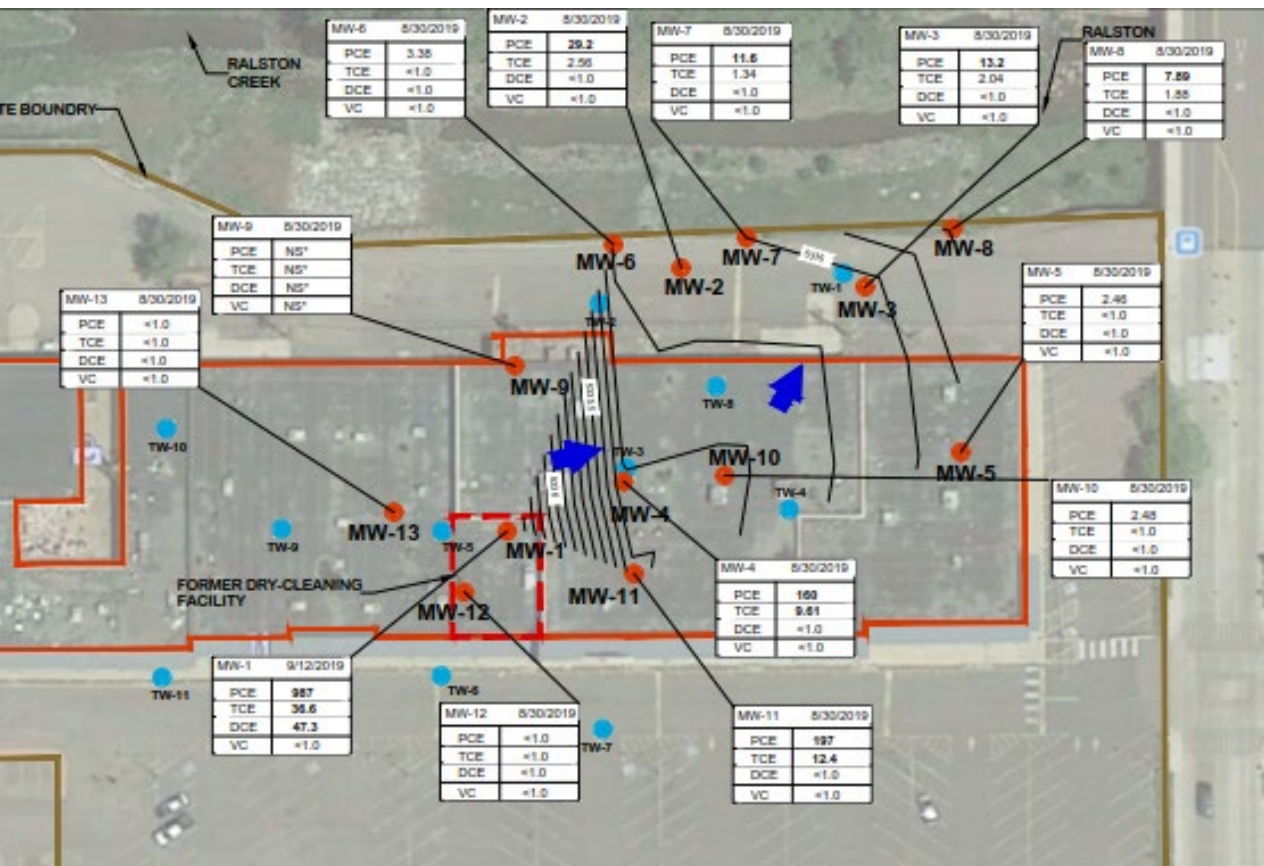
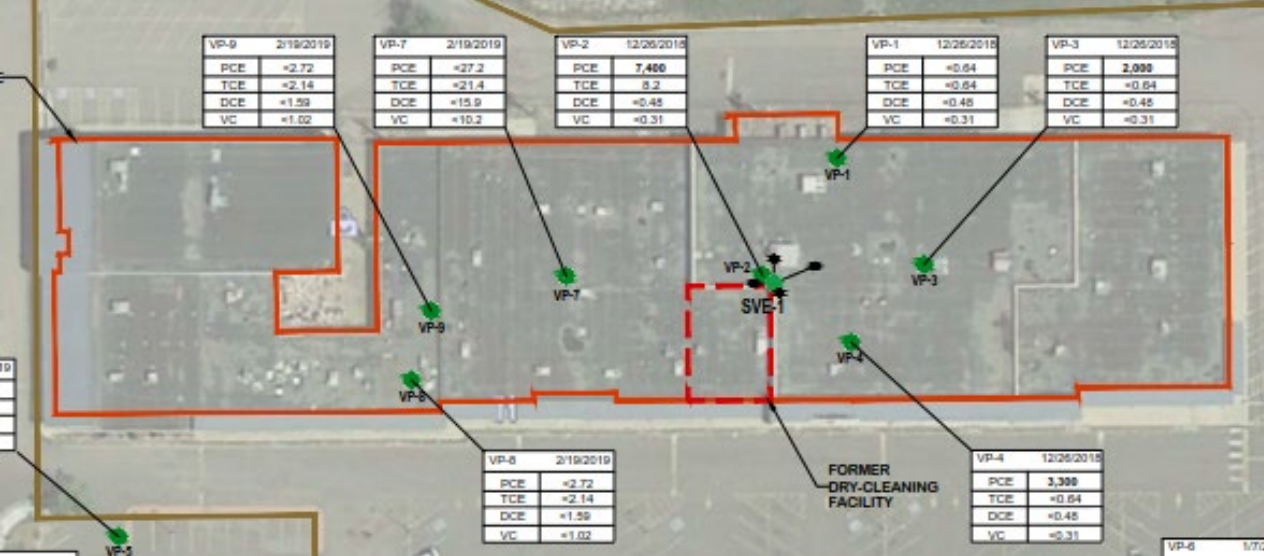
Steps to Redevelopment from the Owner's Perspective



Former Arvada Square Retail Center

Environmental Obstacles (Former Drycleaner)

- Concerning levels of **PCE** detected in soil vapor, groundwater, and soil



Key to Succeed: develop a strong, aligned, project team



ARVADA URBAN RENEWAL AUTHORITY

Project Owner



Environmental Consulting
Remedial Design Team

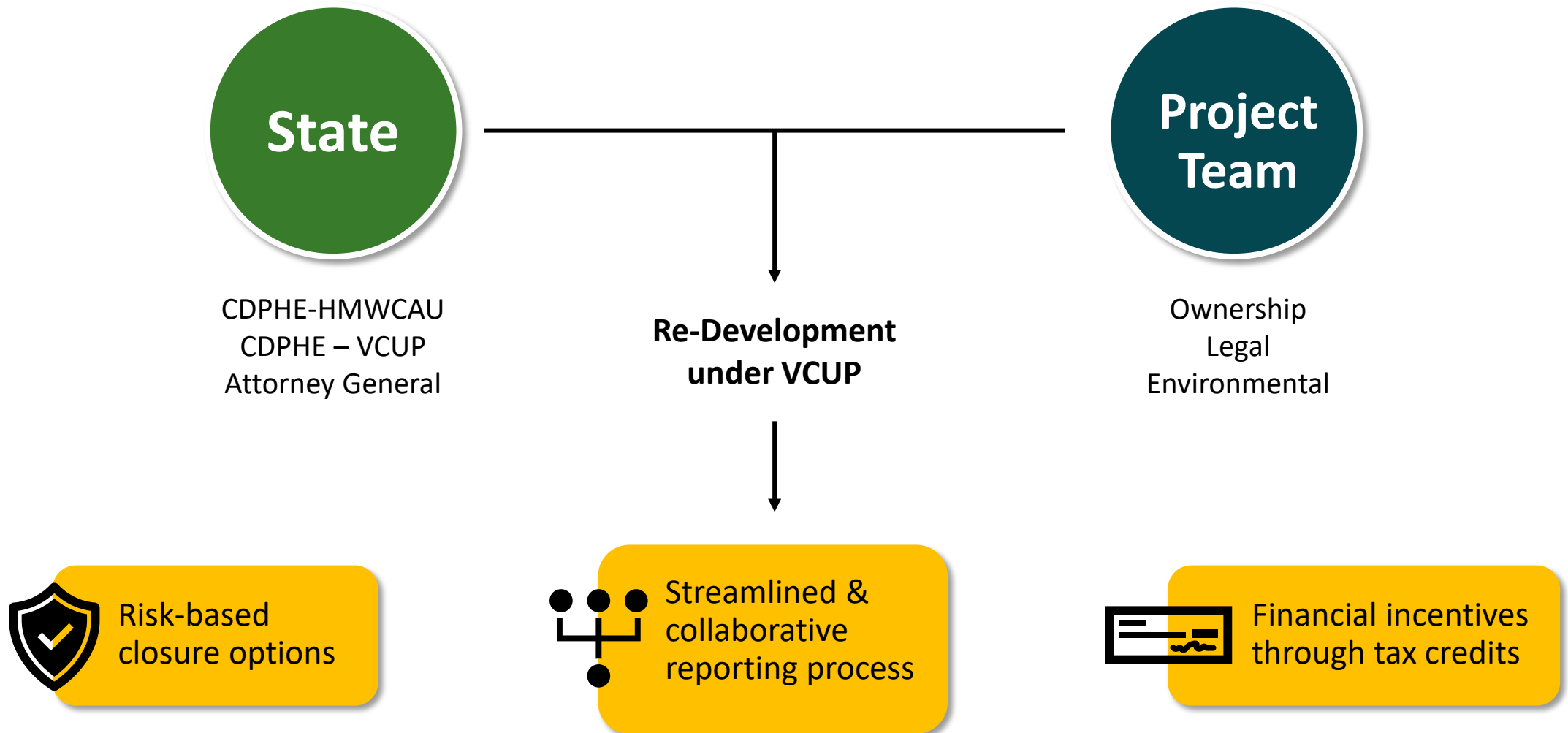


CDPHE Voluntary
Cleanup Program



Environmental
Legal Team

Regulatory Framework – Leveraging the State VCUP



Remedial Design Investigations

Characterizing the site and developing a robust site model



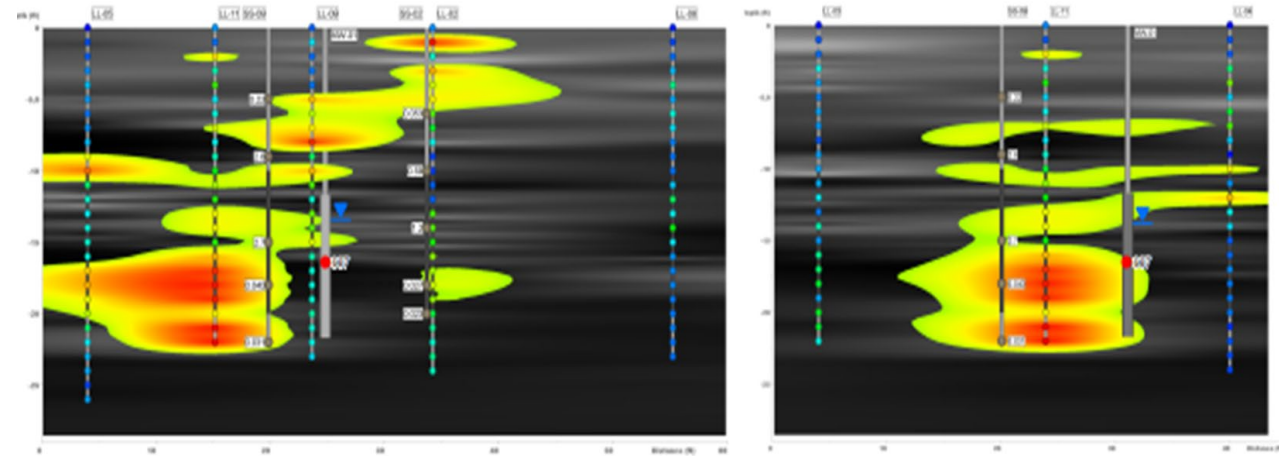
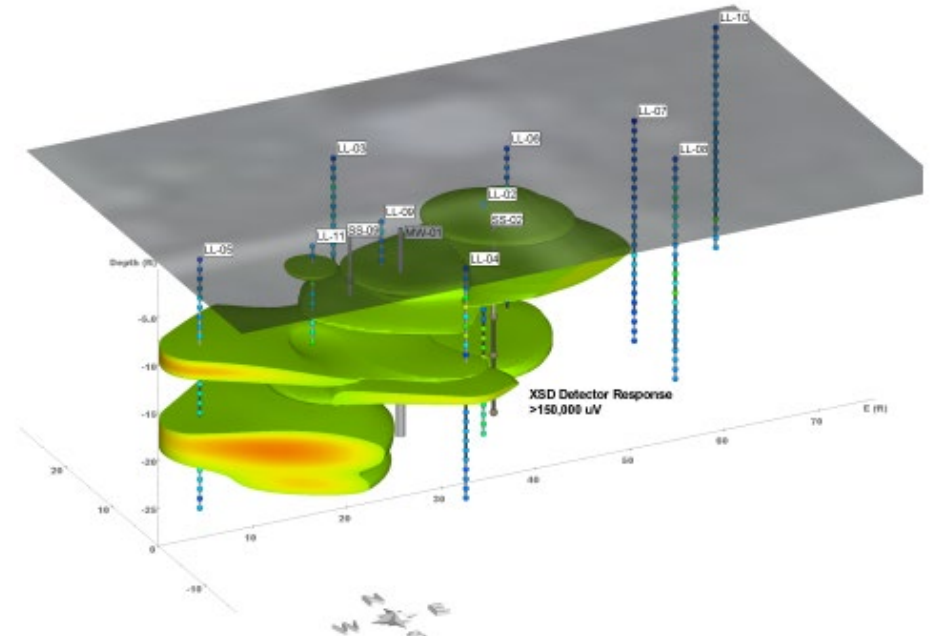
High Resolution Site Characterization (HRSC) and 3-D modeling to identify source



Supplemental High Density Interval Soil Sampling to define excavation area

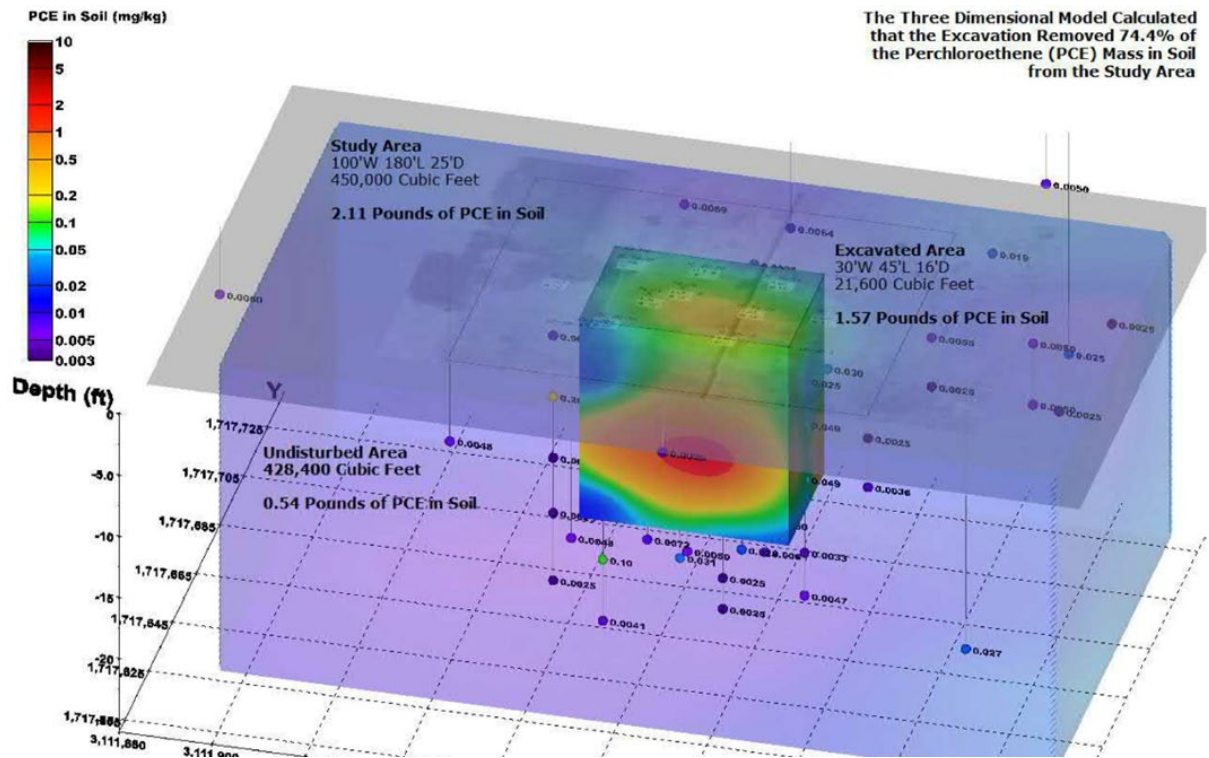


Iterative process developed in consultation with CDPHE-VCUP Program Administrator



VCUP Remedial Action Plan

Leveraging State as a Stakeholder in the Process



Source Area Soil Removal

- Excavated VOC-impacted soil

Follow-up Groundwater Monitoring

- Stable or decreasing trends downgradient

Exposure Risk Mitigation

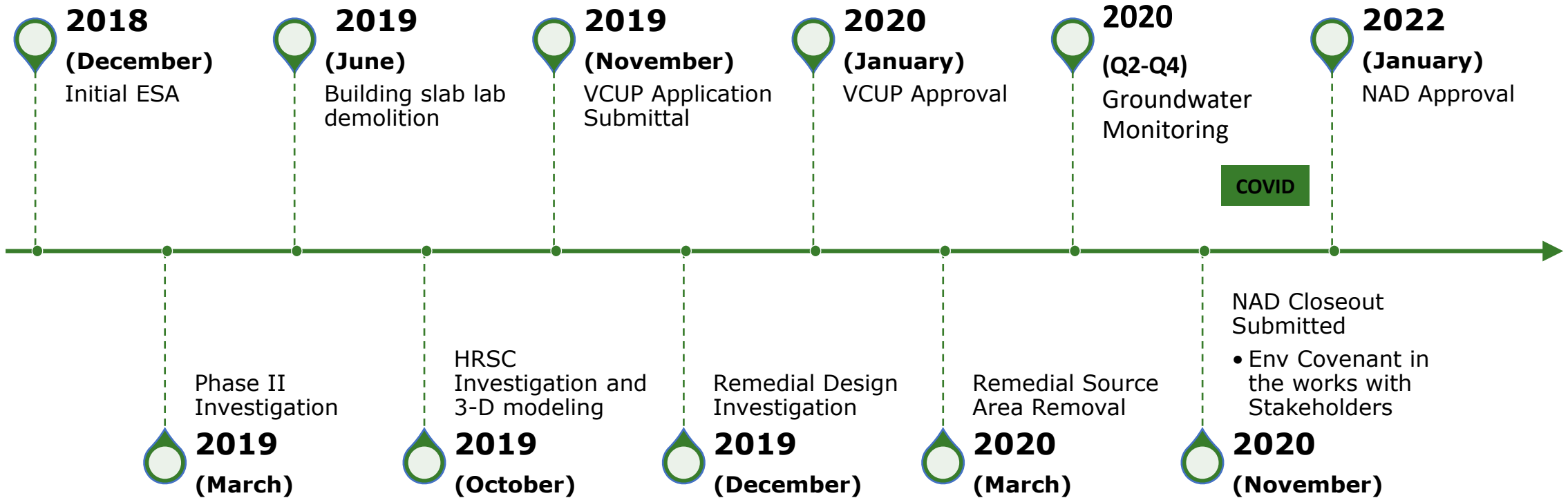
Administrative controls

- Develop Environmental Covenant

Engineered controls

- Install Vapor Barriers
- Develop Materials Management Plan

AURA Timeline



A photograph of three rock climbers ascending a steep, layered rock face. The climbers are wearing helmets, harnesses, and ropes. The rock is dark and textured with horizontal cracks. A dark teal box with the word 'Challenges' is overlaid on the top right of the image.

Challenges

- **2-year process** from application to completion
 - Lost Developer
-
- **Tax Credits**
 - AURA does not have an individual sales tax exemption ID - uses City of Arvada's. City would have to process the tax credit exchange

Lessons Learned

Engaging the **VCUP** as a **stakeholder** in project success can accelerate development scheduling

Successful use of tax credits can require **additional upfront planning** for tax-exempt entities

Align **timeline expectations** early

Build a **strong project team**

An aerial photograph showing a large retail center. The center consists of several large, rectangular buildings with flat roofs, some of which appear to be in various stages of construction or renovation. There are extensive parking lots with many cars. The surrounding area includes residential neighborhoods with houses and trees, and a major road running horizontally across the middle of the image. A dark green banner is overlaid at the top right, and a white banner with a green background is overlaid at the bottom left.

Former Arvada Square Retail Center

Big Picture: 68-Acres of Strip Center Blight

Former Arvada Square Retail Center



Focus from cars

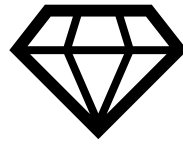


to people

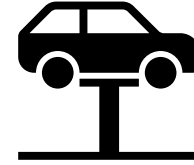




New parks,
tree-lined streetscapes,
improvements to Creek



Over \$375M
invested in Ralston
Creek Area

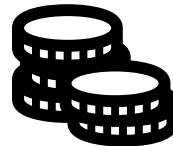


Three parking garages
-> reduced surface parking lots

Value of Work Done



756 New Households
72 for-sale homes
121 affordable apartments
563 market-rate apartments



Increased local sales and
property taxes by
\$6.5M annually



185,000 SF
new commercial space

Case Study #2

Revitalizing a District

US OLYMPIC & PARALYMPIC MUSEUM



Jared Geissler, PE
Terracon

U.S. Olympic Museum

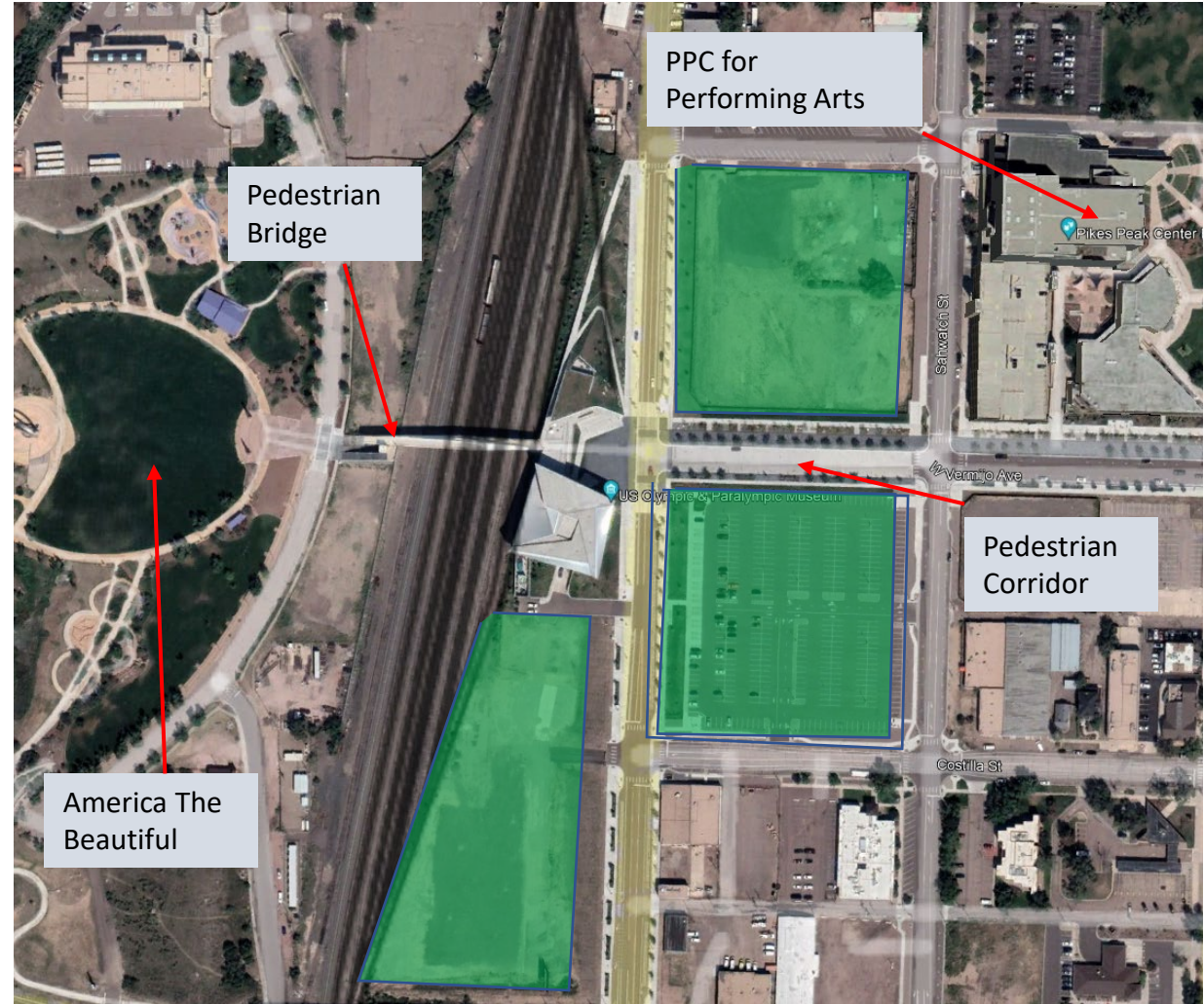
Blighted light industrial -> The City's and developer's vision for the property were *a catalyst for growth and development* in the area.



U.S. Olympic Museum

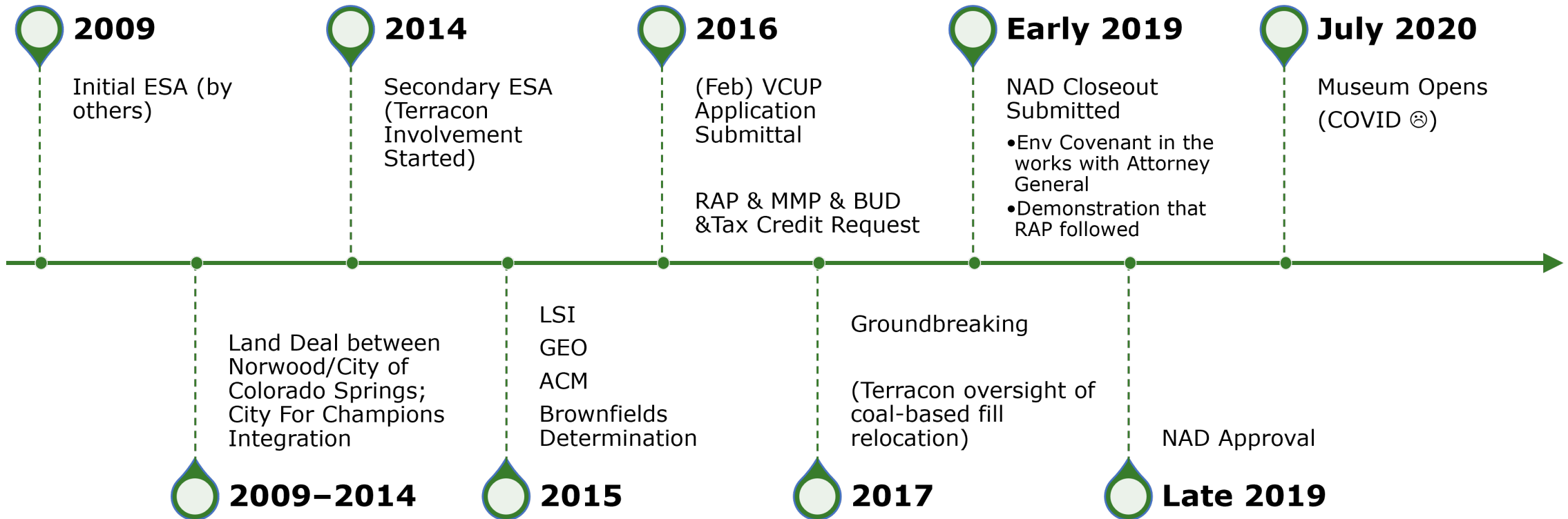


2005



2022

USOM Timeline



U.S. Olympic Museum



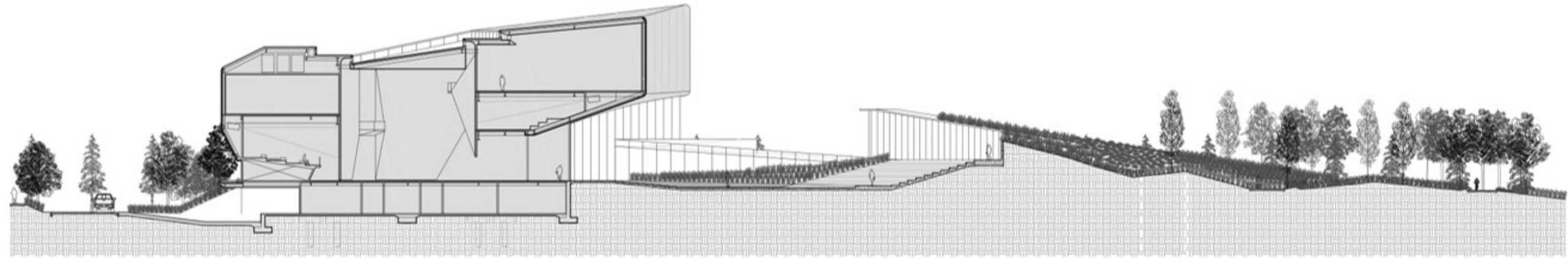
Investigation of historical property use identified *arsenic, PAHs, and coal-based fill*



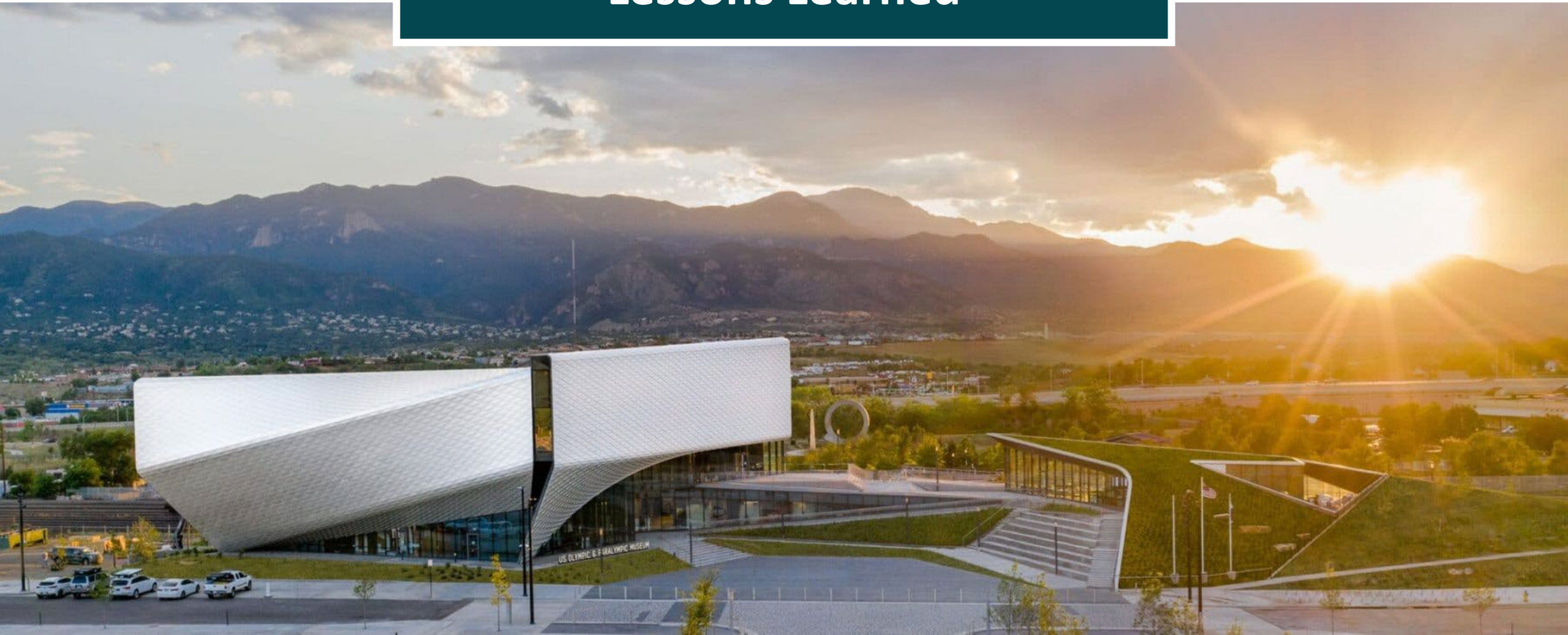
CDPHE
VCUP



U.S. Olympic Museum



Lessons Learned



Lessons Learned





Thank you!
Any Questions?



Kerry



Jared



Brian



ARVADA URBAN RENEWAL AUTHORITY



Maureen

