

FDA Headquarters

Atlanta, GA

The Story of a Successful Adaptive Reuse of a US Army Base into a Thriving Laboratory Facility Through Design-Build Delivery

Presented by:

Nancie Constandse, AIA, DBIA, LEED AP BD+C
and

Danny McGrail, PE, LEED AP



Today's Presenters



Nancie Constandse, AIA, DBIA, LEED AP BD+C
Office Director & Life Science Studio Lead
HKS, Inc.



Danny McGrail, PE, LEED AP
Science & Technology Practice Director
Project Director
Henderson Engineers

Learning objectives:

- Understand the opportunities in reducing embodied carbon through building reuse.
- Identify opportunities in applying intermediate floors for adaptive reuse.
- Understand the Purpose of the FDA Atlanta Laboratory
- Examine the Architectural and Mechanical Innovations









Challenges for Redevelopment:



1

The Master Plan for the site was still in process.

2

Access was challenging for multiple neighbors on the site.

3

Budget and changing priorities during COVID.



The Success

1

The project enjoyed early success due to the efforts of the development team.

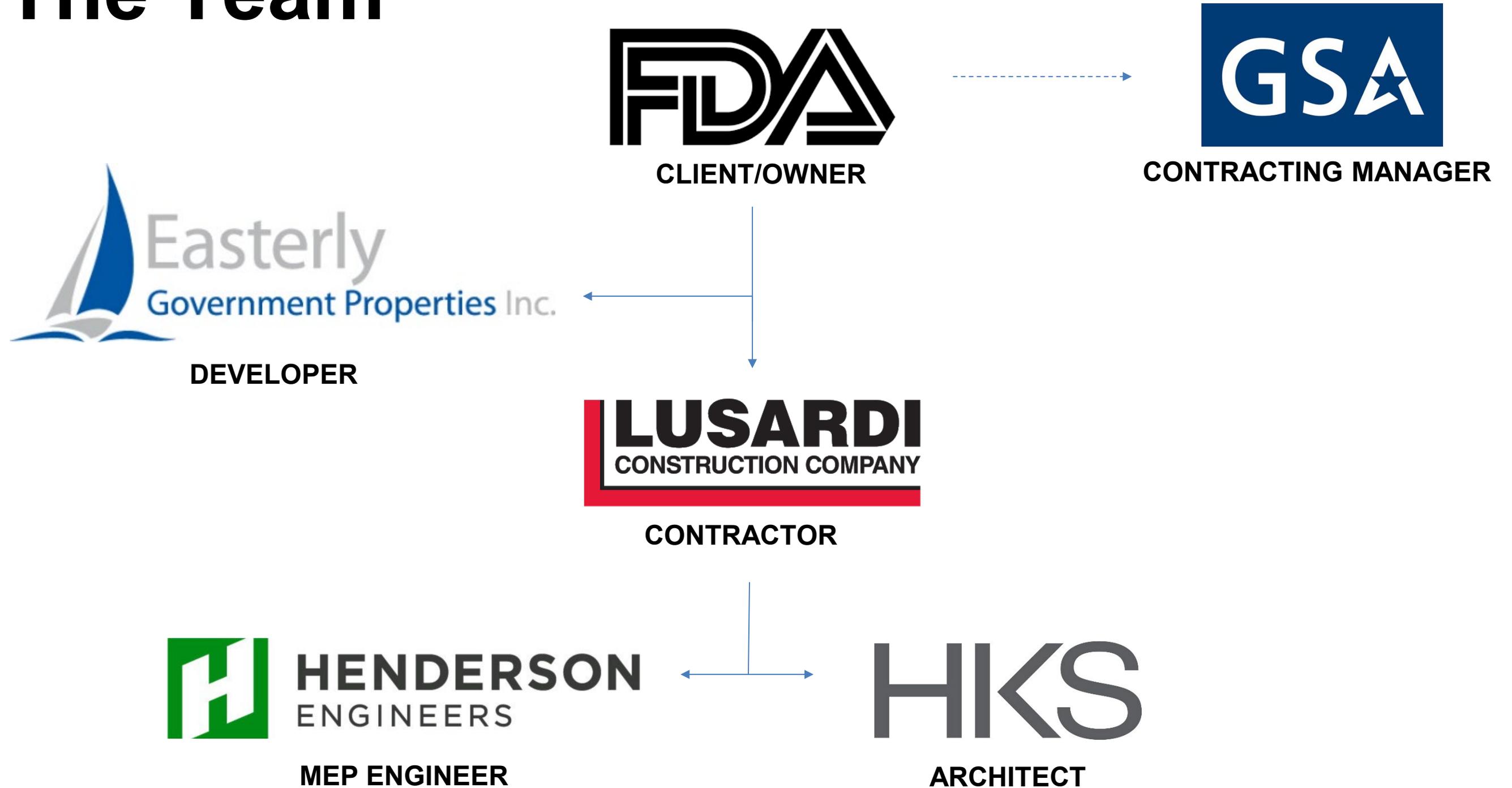
2

Fort McPherson is now growing and has become the new headquarters for the FDA, providing hundreds of jobs. 

3

Another successful partnership with Easterly and Lusardi, Henderson, and HKS.

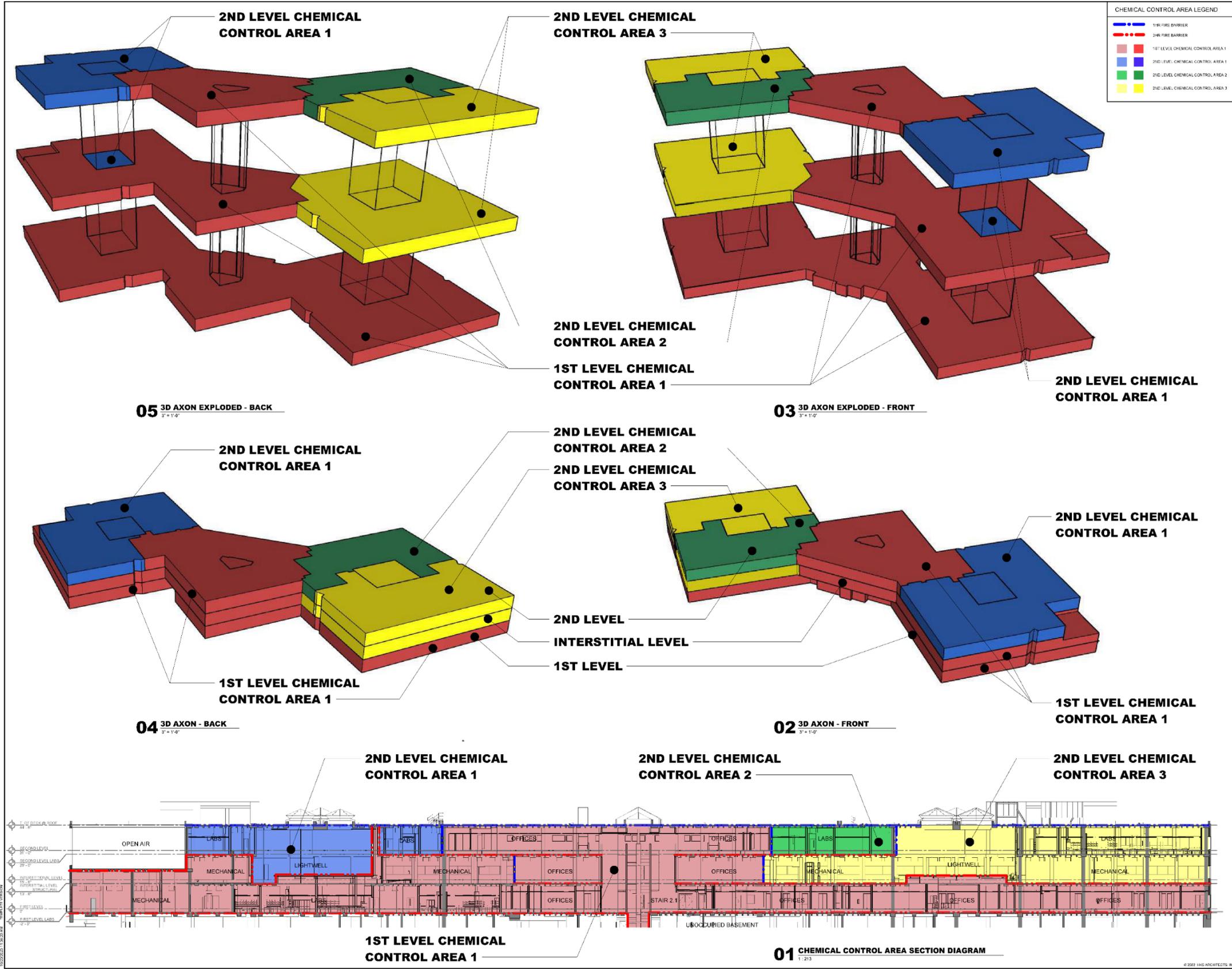
The Team



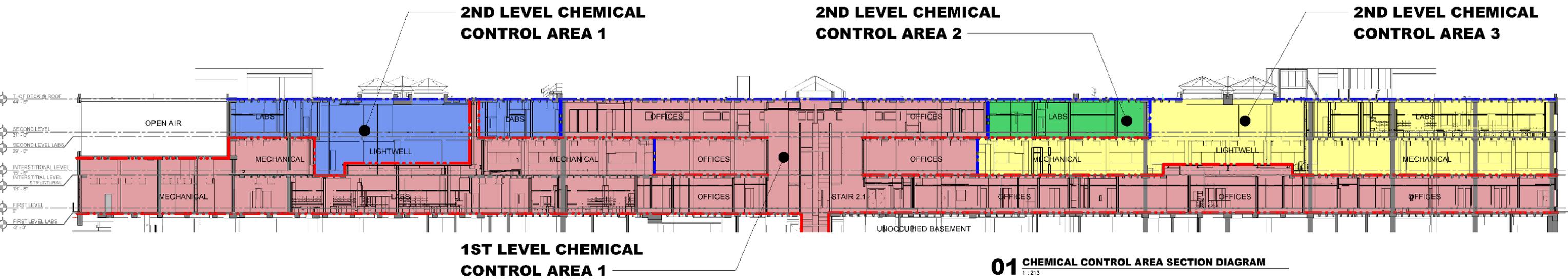
Program Overview

- Biology
- Chemistry
- Tobacco
- Nutrition

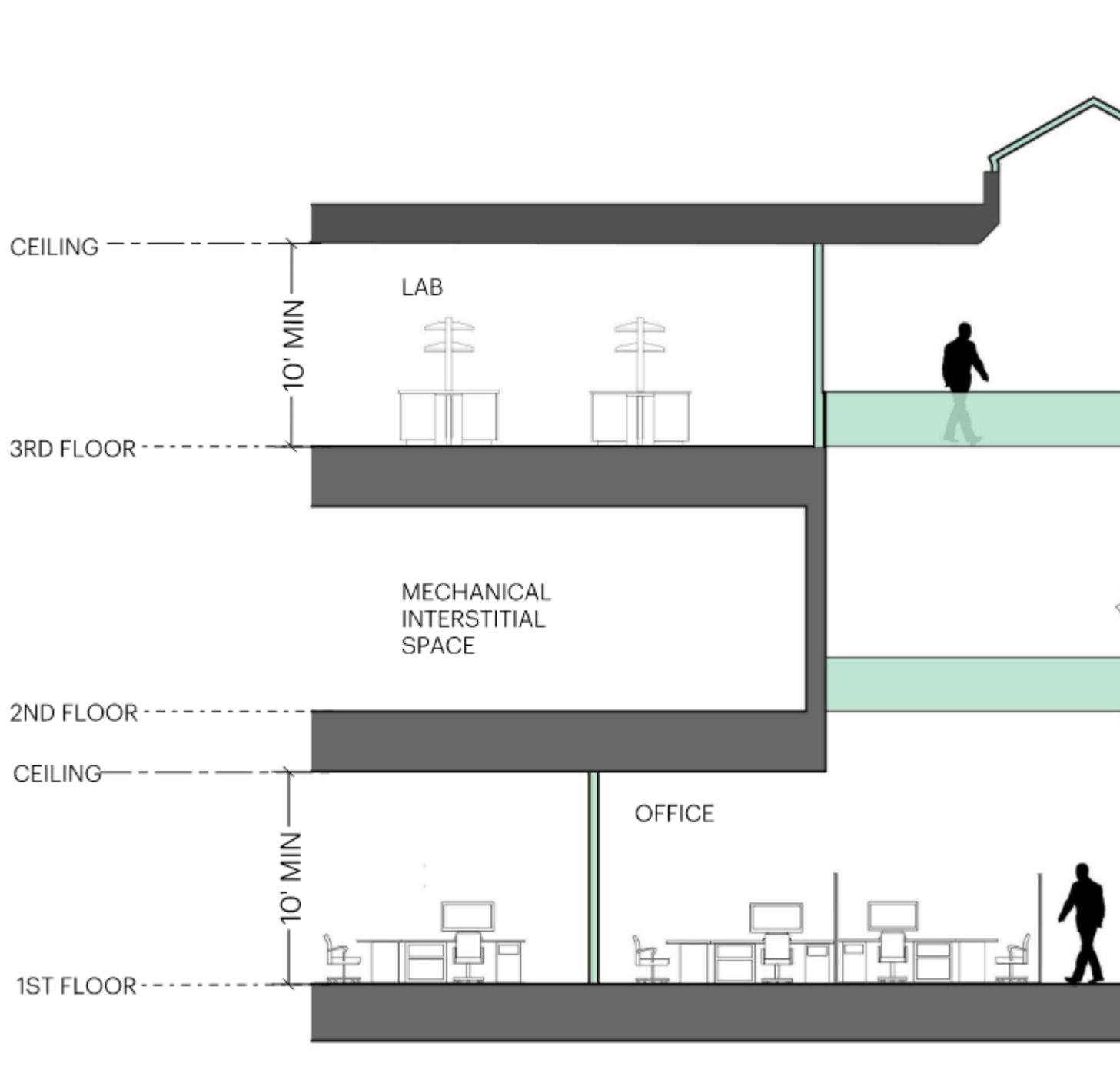




The Interstitial Floor

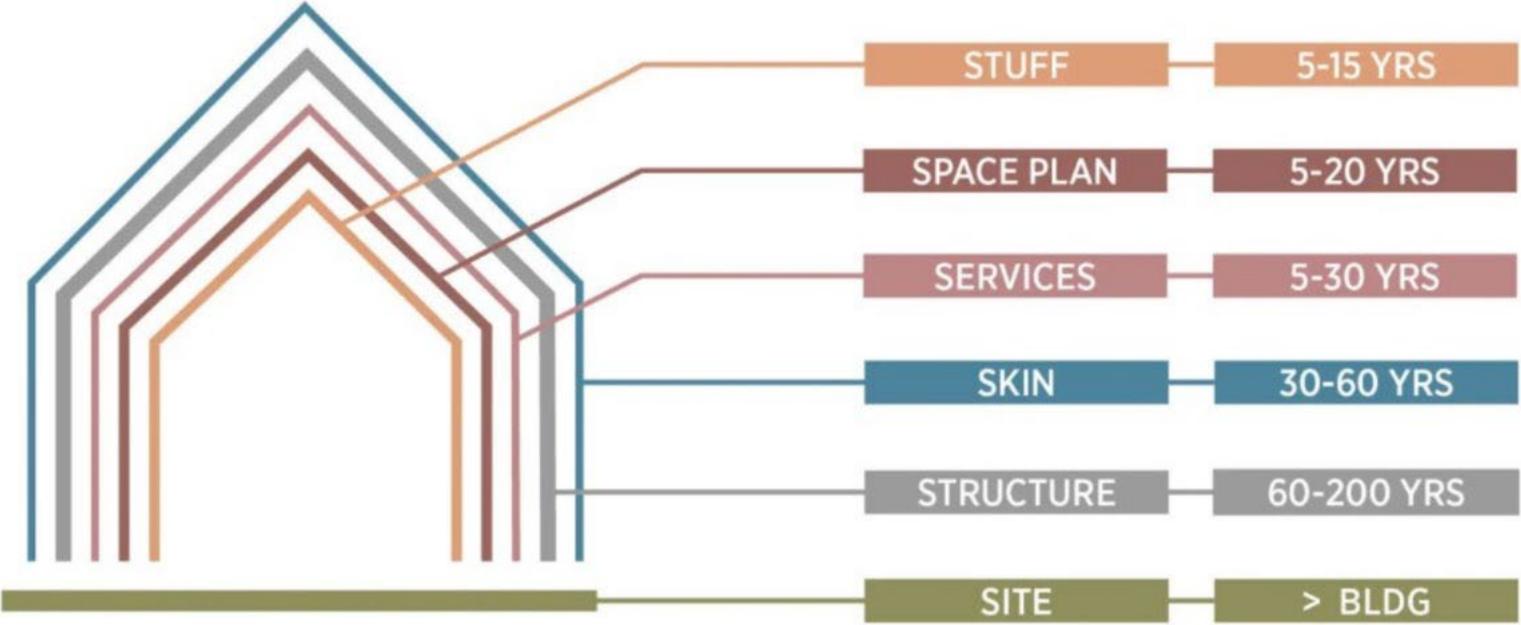


The Interstitial Floor

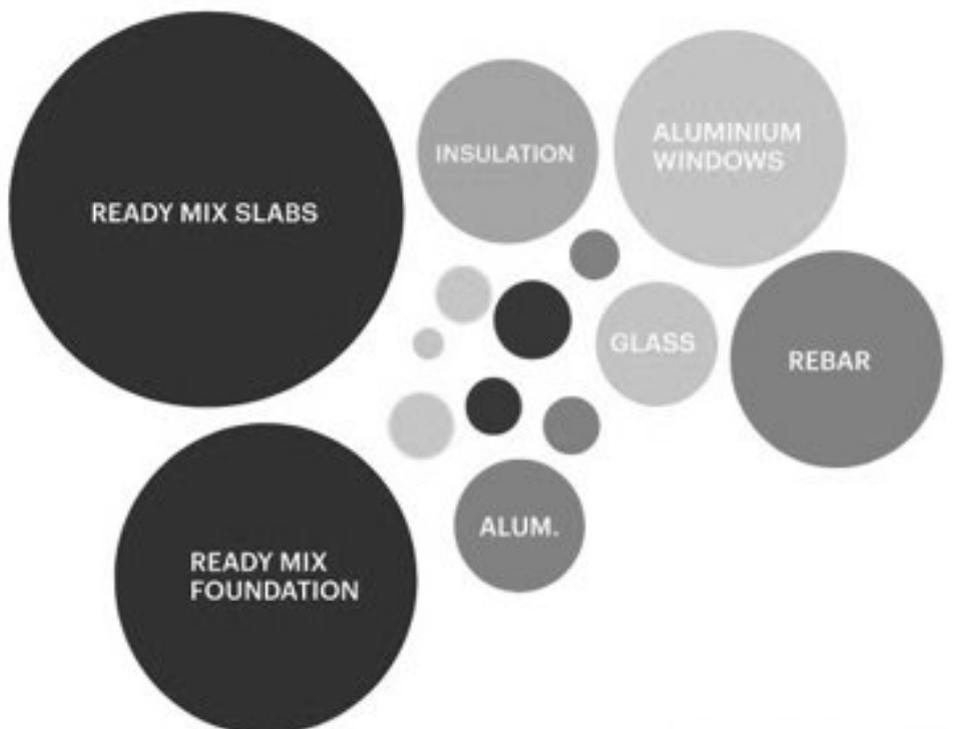


Embodied Carbon: Renovations

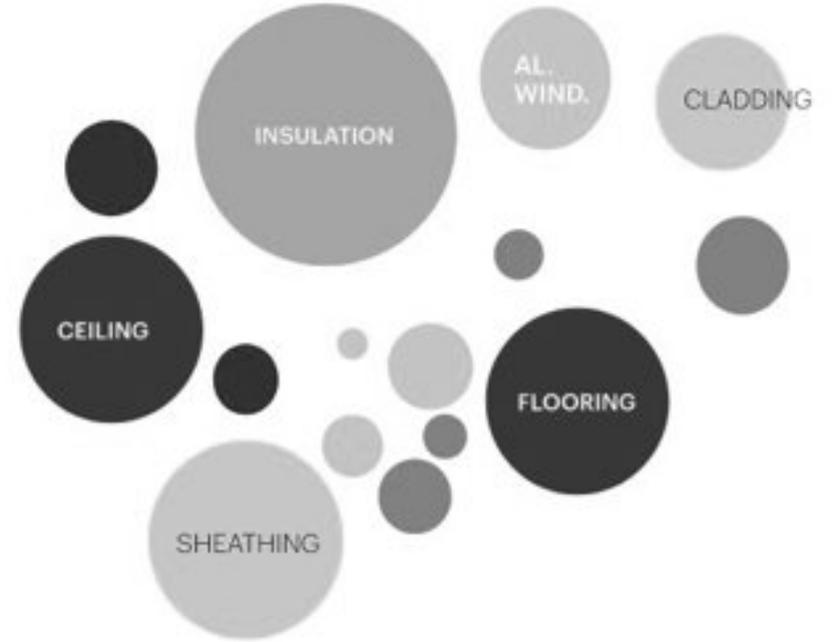
Building Layers Cycle



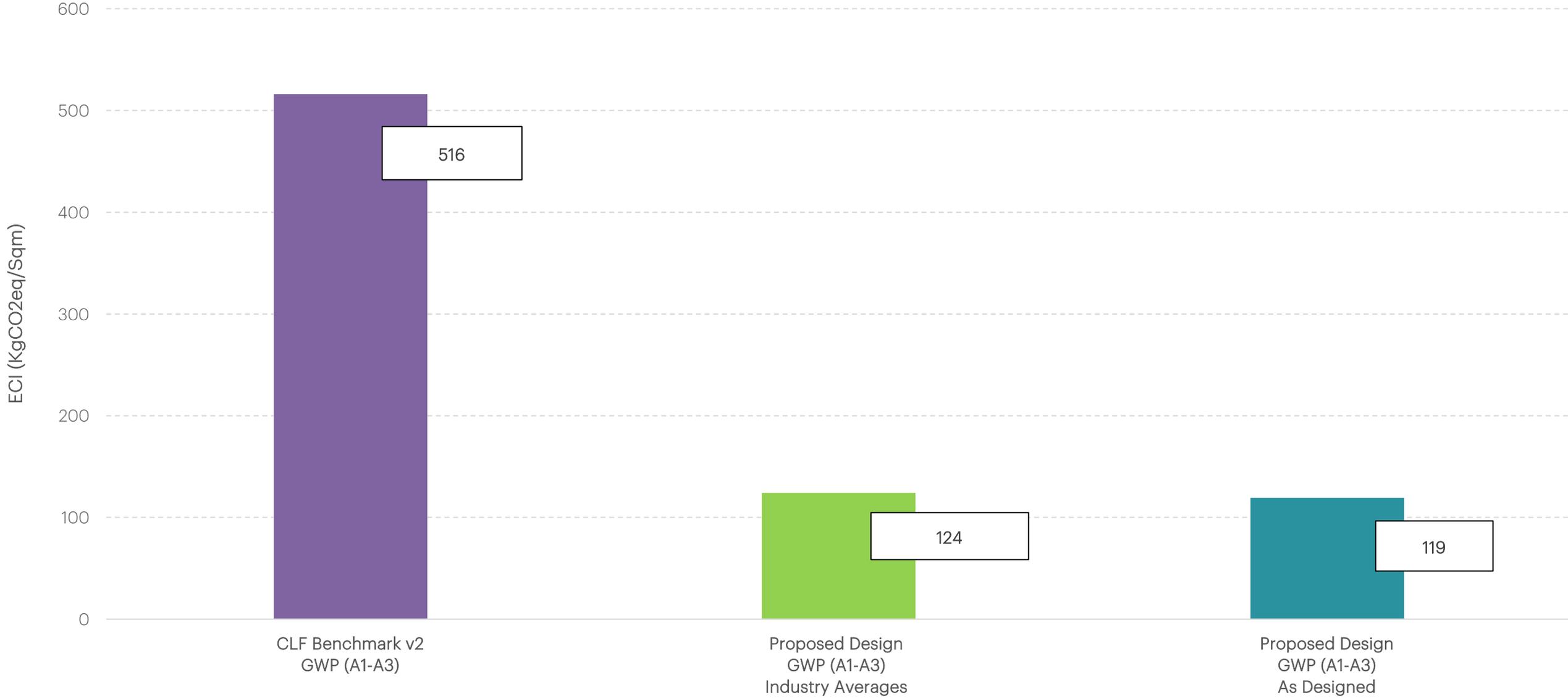
Source: Stewart Brand's 6 S's from How Buildings Learn



NEW CONSTRUCTION VS RENOVATION

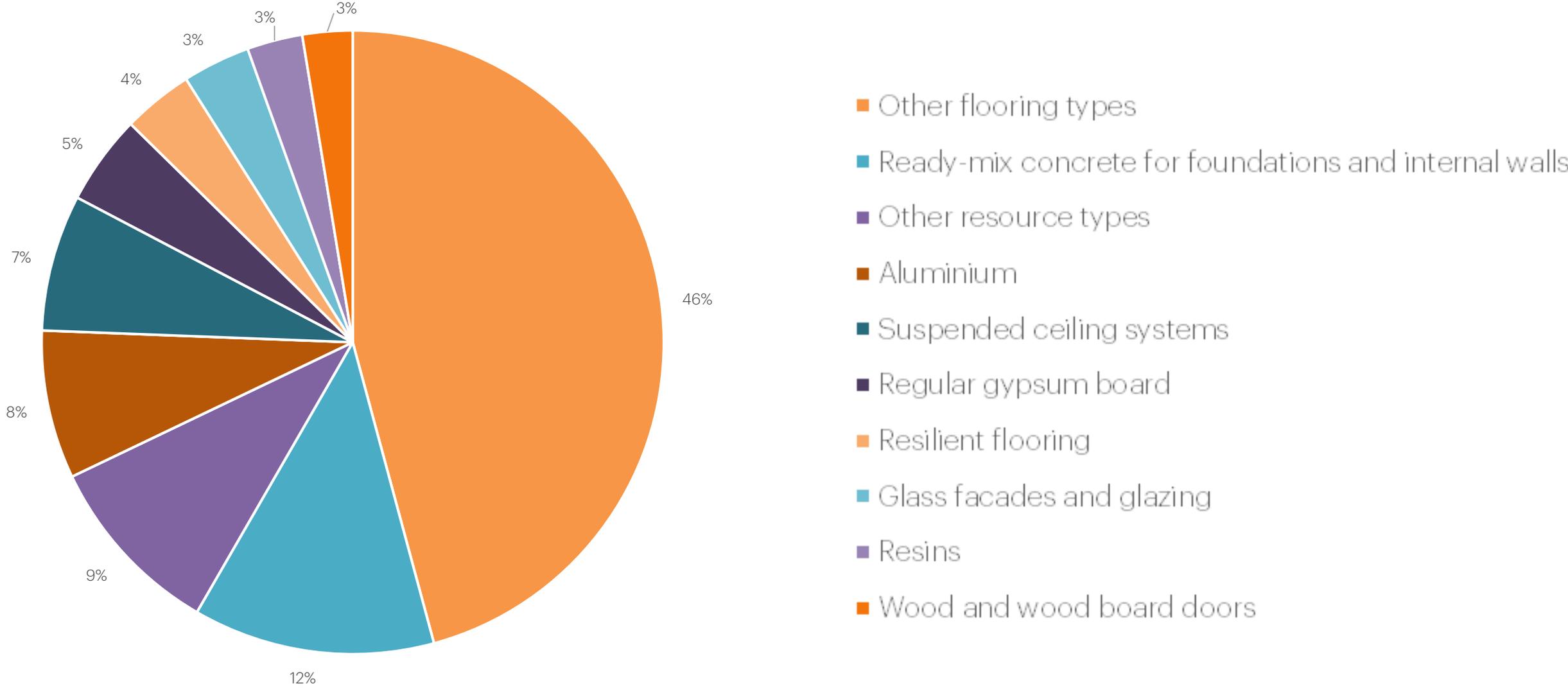


FDA Atlanta WBLCA



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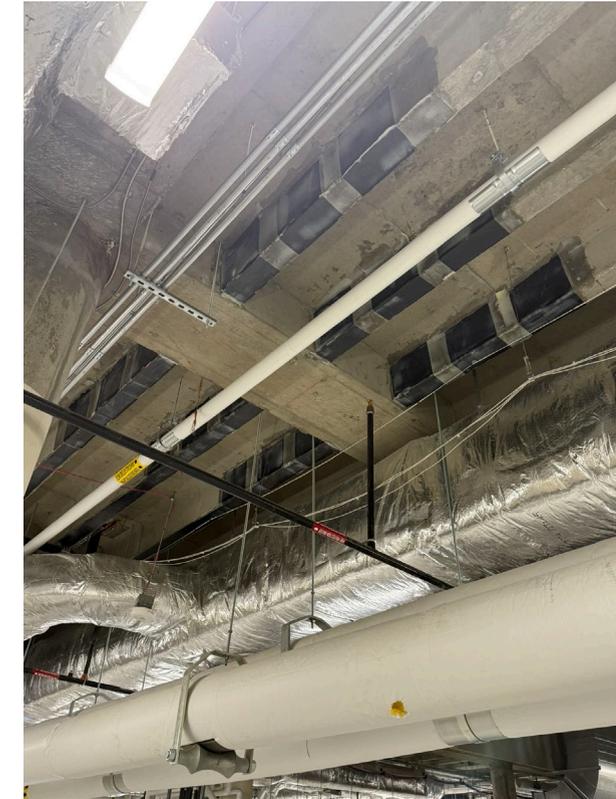
Global warming kg CO2e - Resource types



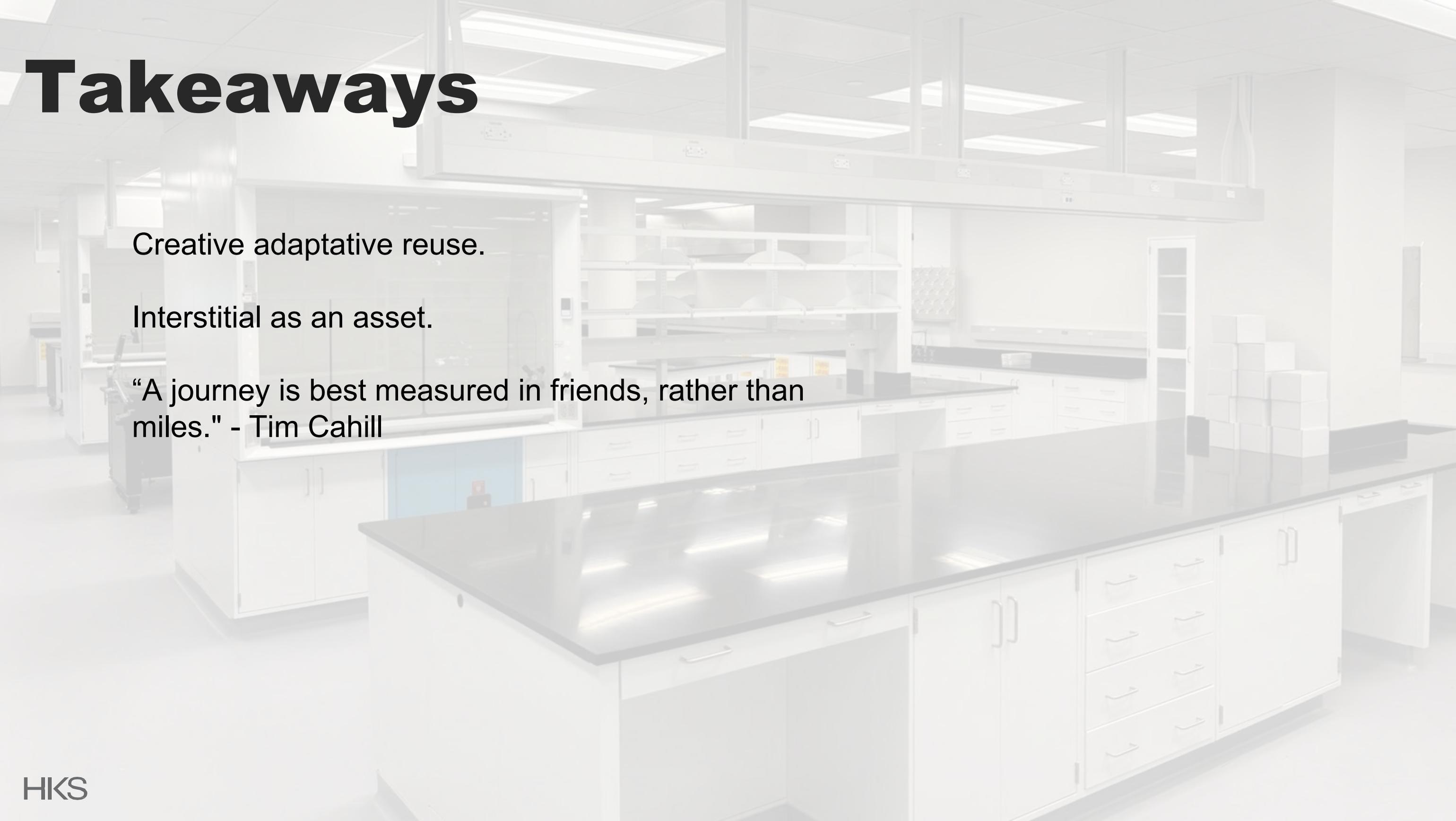
Total Baseline GWP (A1 – A3): 1,794,352
Baseline GWP (A1-A3) per Sqm: 119

Engineering Highlights

- 1200 Tons of Cooling
 - (3) 400 ton chillers.
- 15,000 MBH of Heating Water
 - (5) 3,000 MBH Boiler
- 3,600 MBH of Steam
 - (2) 70HP Boilers
 - (2) 15HP Boilers
- 135,000 CFM of Lab Exhaust
- House Utilities
 - Compressed Air
 - Vacuum
 - Purified Water
 - Nitrogen
 - Argon
- 2,500 KVA Transformers and (3) Switchgear – Mechanical, Normal, Emergency
- 75HP Fire Pump
- Minimal Structural Modifications



Takeaways



Creative adaptative reuse.

Interstitial as an asset.

“A journey is best measured in friends, rather than miles.” - Tim Cahill

Questions

