

# ADAPTIVE REUSE IN ACTION

## HEARTBEAT OF INNOVATION: ADVOCATE'S CARDIOLOGY CENTER



Advocate Health Care

Now part of  ADVOCATE HEALTH

 BOLDT

 HDR

 IMEG

 THE ROCKWELL  
GROUP

 mpc

 LEJEUNE

 Huen

 Glass  
Solutions, Inc.



# AGENDA

- Advocate's Naperville Freedom Drive Outpatient Surgery Center
- Advocate Outpatient Collaborative Team, Project Delivery, Site Acquisition
- HDR Planning Overview
- IMEG Systems, Infrastructure, BIM
- Boldt Production Planning, Modular
- Open Q&A



# ADVOCATE OUTPATIENT COLLABORATIVE

INTEGRATED PROJECT DELIVERY



ADVOCATE OUTPATIENT COLLABORATIVE

THIS JOB IS UNIQUE

ENGAGE

- 1 TAKE PRIDE
- 2 SHARE SMALL WINS
- 3 HELP US HELP YOU
- 4 HAVE MORE FUN



COLLABORATE

- 1 "INTEGRATED" WE ONLY WIN AS ONE
- 2 IMPROVEMENT IS AN INVESTMENT
- 3 ADD VALUE ADD REWARD

THE CULTURE IS DIFFERENT

## TRADE PARTNERS



# PROJECT LOCATIONS

## ILLINOIS

1. AOC Algonquin
2. AOC Naperville Freedom Drive
3. AOC Christ POB
4. AOC Crystal Lake
5. AOC Des Plaines
6. AOC Huntley
7. AOC Dreyer Naperville
8. AOC Gurnee
9. AOC Good Samaritan
10. AOC Halsted
11. AOC DP Retail Imaging
12. AOC Imani Village
13. AOC Irving Western
14. AOC Lakemoor
15. AOC Lakeview
16. AOC Lake Villa
17. AOC Lake Zurich Exp
18. AOC Libertyville
19. AOC Lincolnshire
20. AOC Webster Ave
21. AOC Lombard
22. AOC Montrose
23. AOC Mundelein
24. AOC North Broadway
25. AOC Oak Lawn
26. AOC Oak Lawn Cardio Exp
27. AOC Tinley Park Peds Sub Exp
28. AOC Park Ridge
29. AOC Pullman Park
30. AOC Randall Road
31. AOC Sequoia
32. AOC Six Corners
33. AOC South Downers Grove
34. AOC South Elgin
35. AOC South Holland
36. AOC South Sub
37. AOC Sykes
38. AOC Sykes Oncology Infusion
39. AOC Trinity
40. AOC Orland Park
41. AOC West Dundee
42. AOC Burbank
43. AOC Hoffman Estates
44. AOC Westmont
45. AOC Naperville
46. ACC Beverly

## WISCONSIN

47. AOC Delavan
48. AOC New Berlin
49. AOC Paddock Lake
50. AOC SW Waukesha



OUTPATIENT CENTERS  
COMPLETED THRU 2021



OUTPATIENT CENTERS  
COMPLETE IN 2022



OUTPATIENT CENTERS  
IN 2023 AND AFTER



# INTEGRATED PROJECT DELIVERY

An approach that integrates people, a desired culture, and a set of behaviors, with a business structure that is designed to collaboratively harness the talents and insights of the team to optimize project results, reduce waste, and bring the best value.

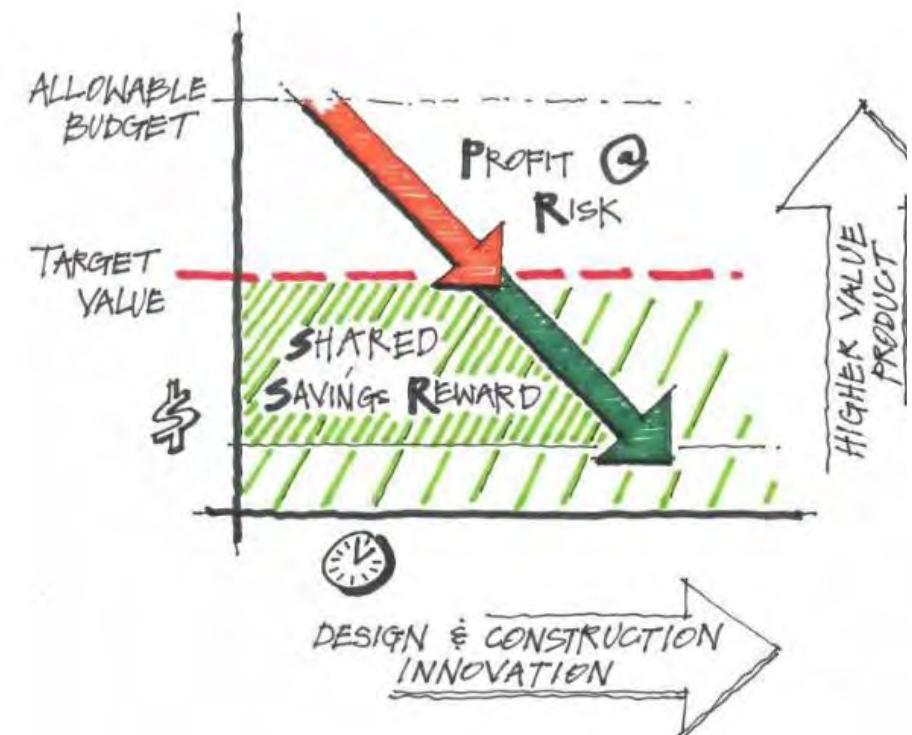
## Cost Plus / GMP

Low complexity and cost  
Small tenant infills  
Built-to-suit  
Short schedule

## IPD, Multi-Party

High complexity, >\$10M  
Large gut renovation  
New, ground-up construction  
Speed-to-market

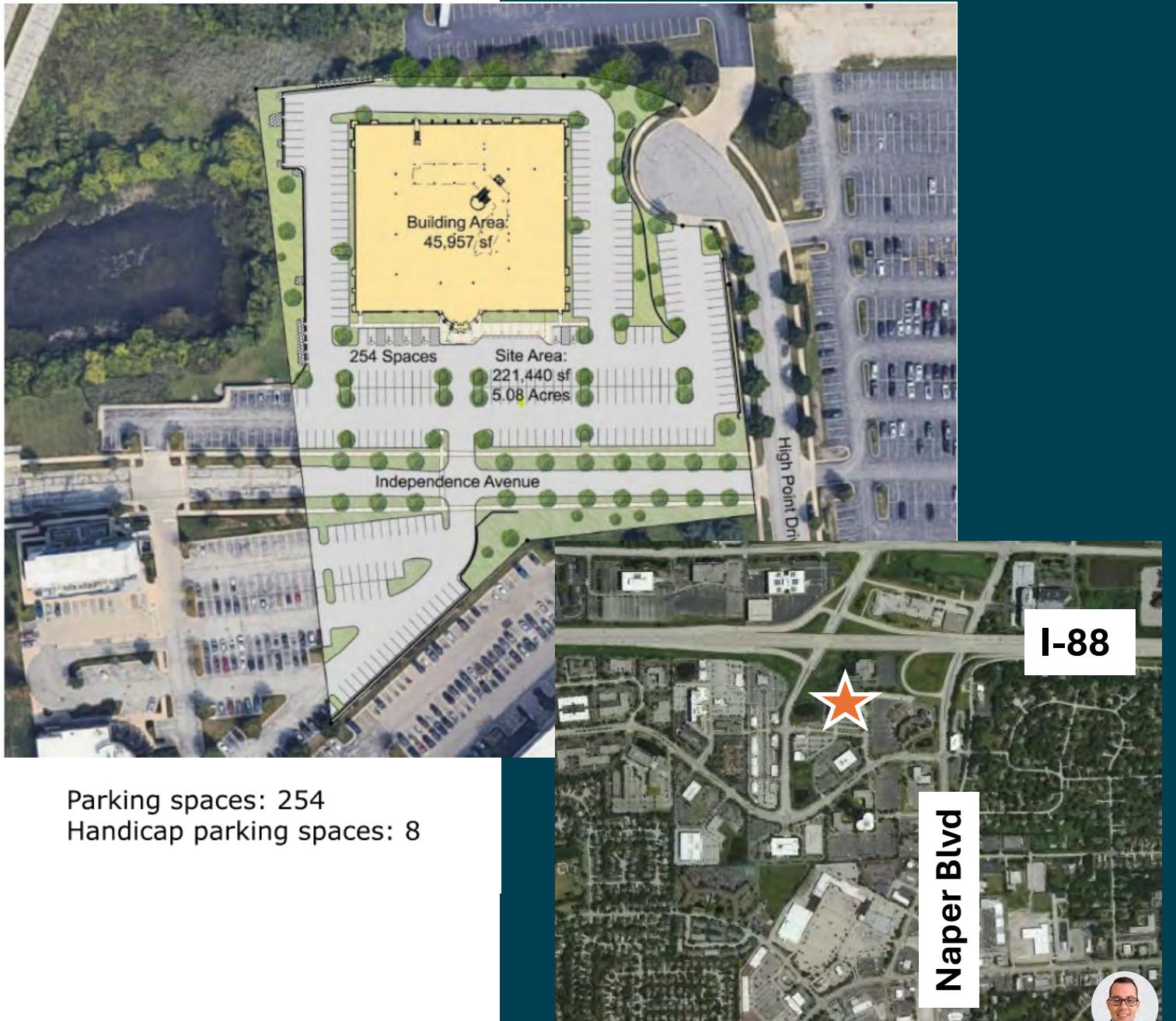
*Similar Team Experience and Delivery Expectations*



# PROJECT LOCATION

NAPERVILLE, IL

- Existing Building (Old LA Fitness)
- Reuse and renovate existing building



# EXISTING EXTERIOR



SOUTH



EAST



NORTH



WEST





# PLANNING/ DESIGN

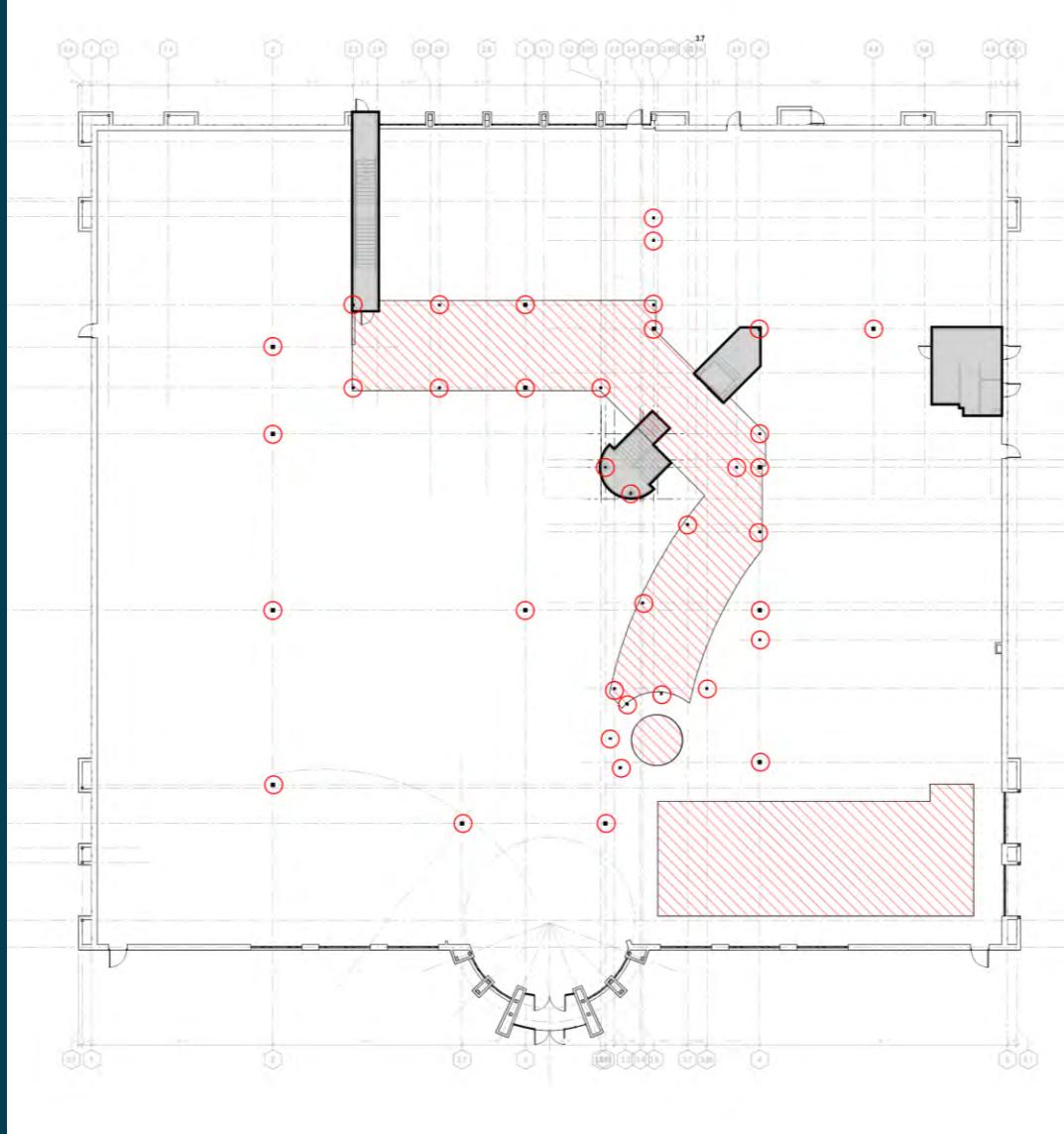
## CARDIOLOGY PROGRAM

- Clinics
- ASC with Outpatient Cath
- Imaging
- Future Expansion

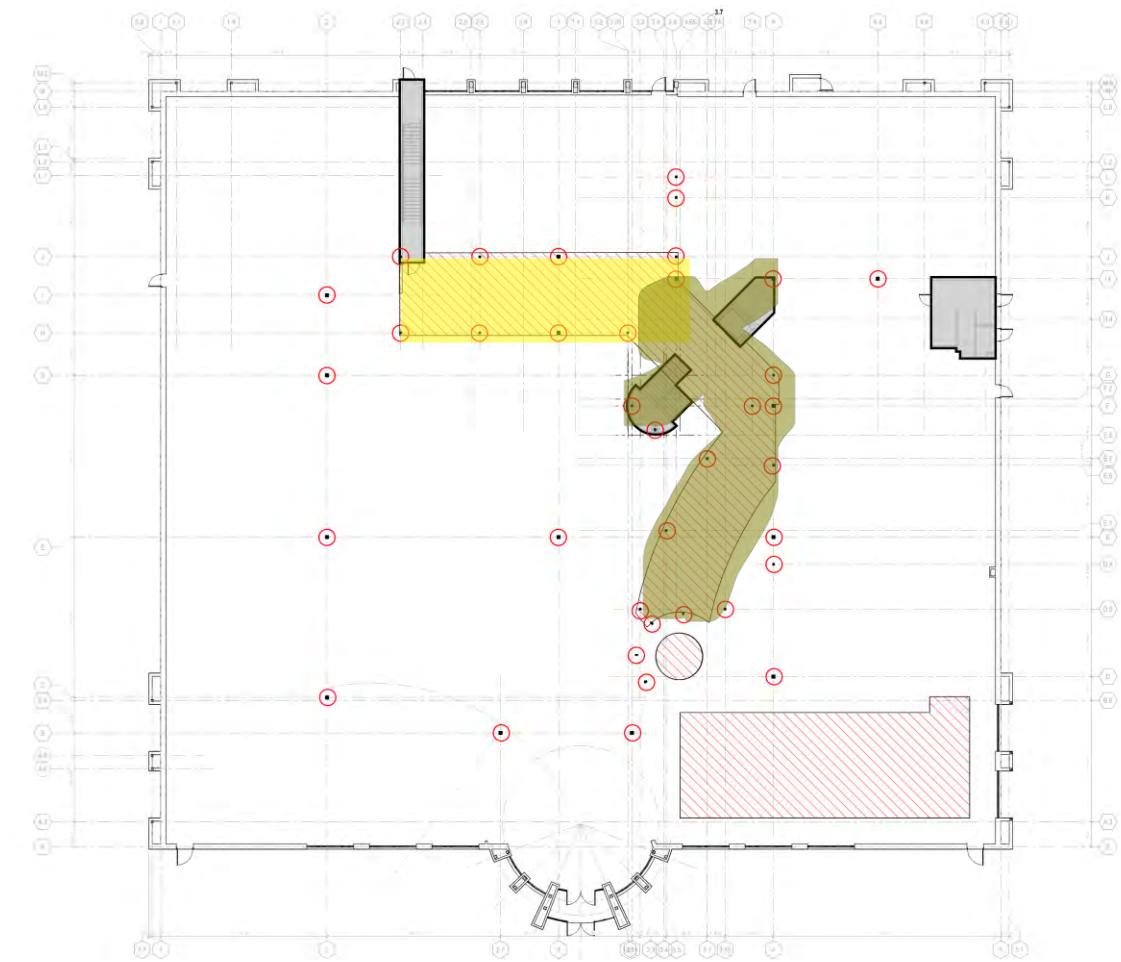


# DEPARTMENT PLANNING – KEY DECISIONS

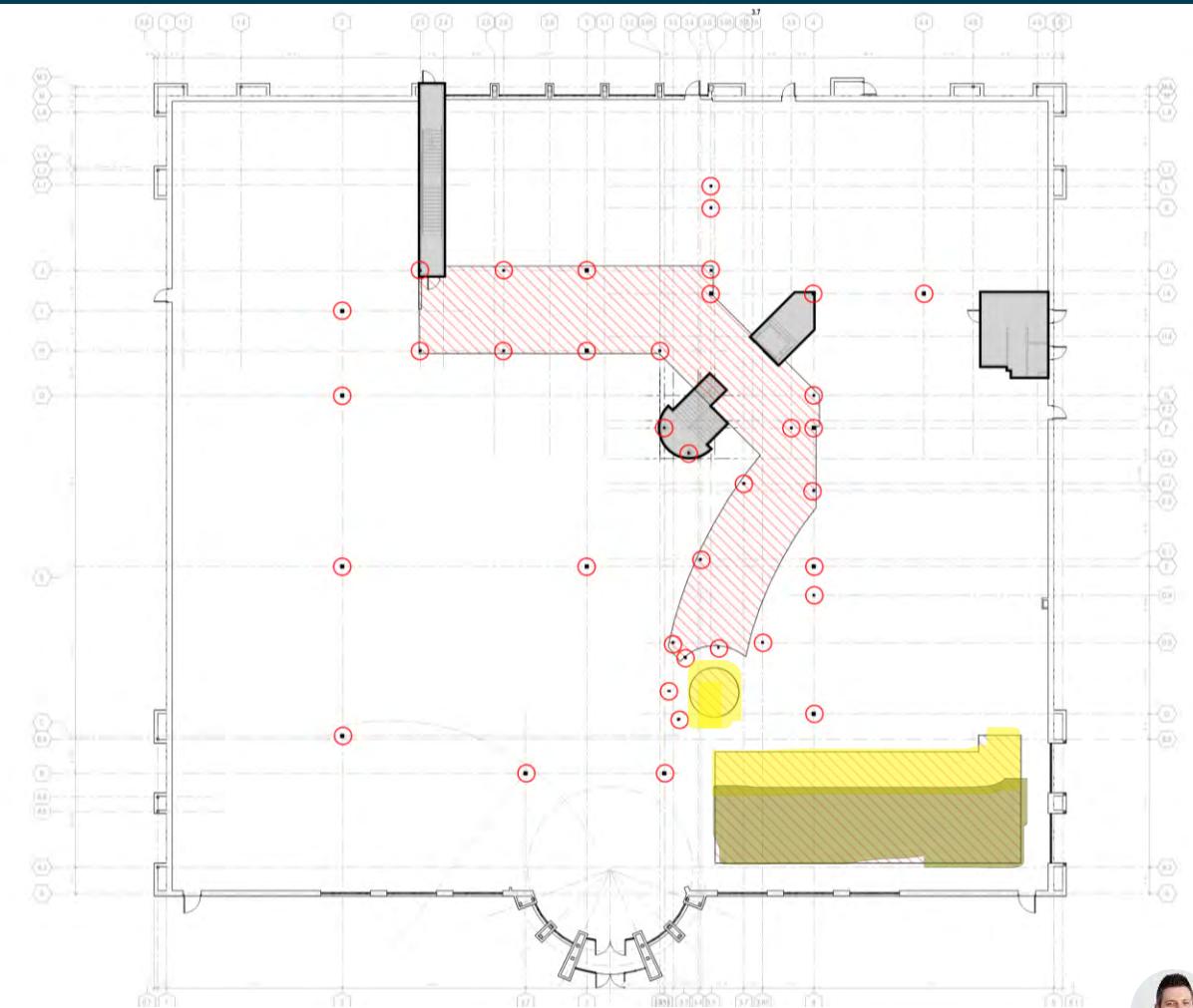
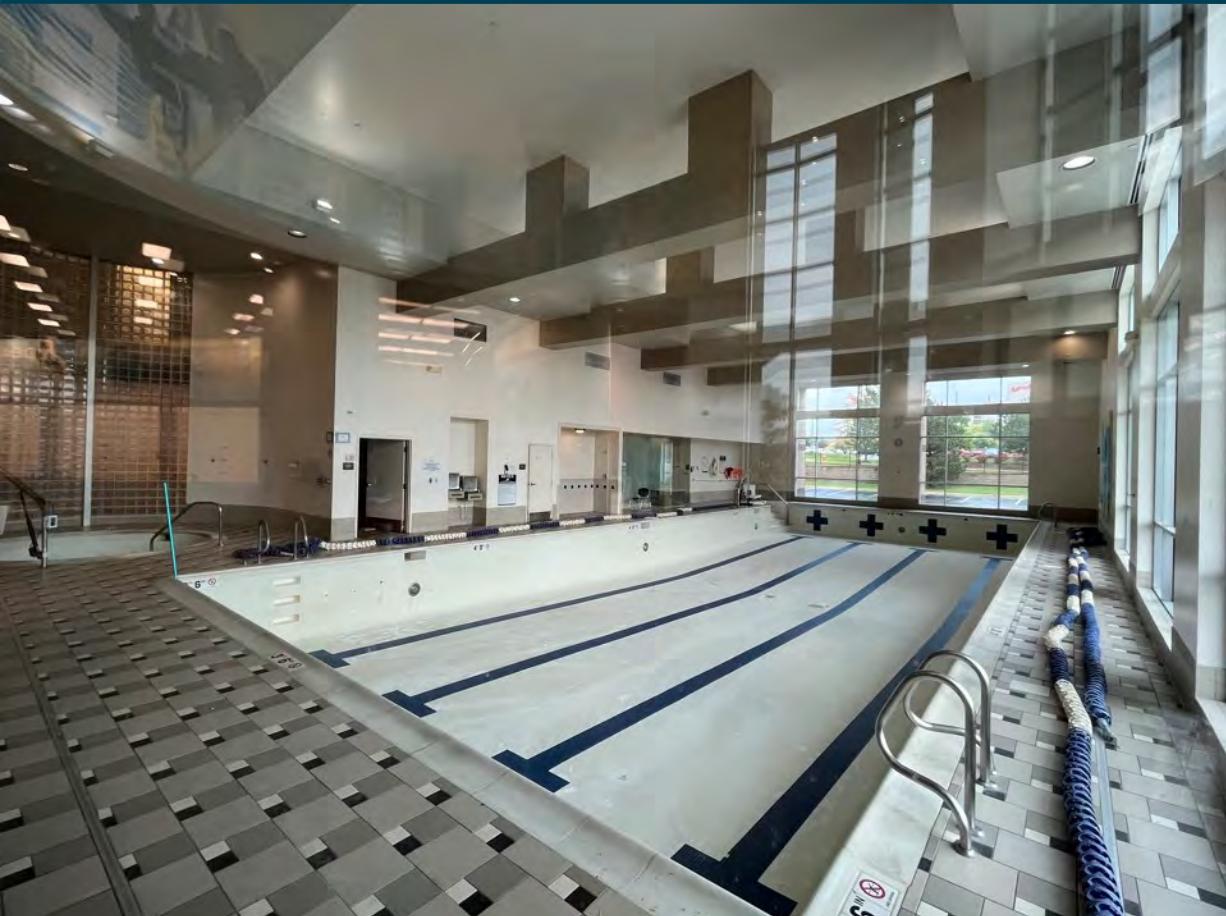
- Maximizing Patient Care Space
- Flexibility
- Future Proofing
- Incorporate Pre-fab



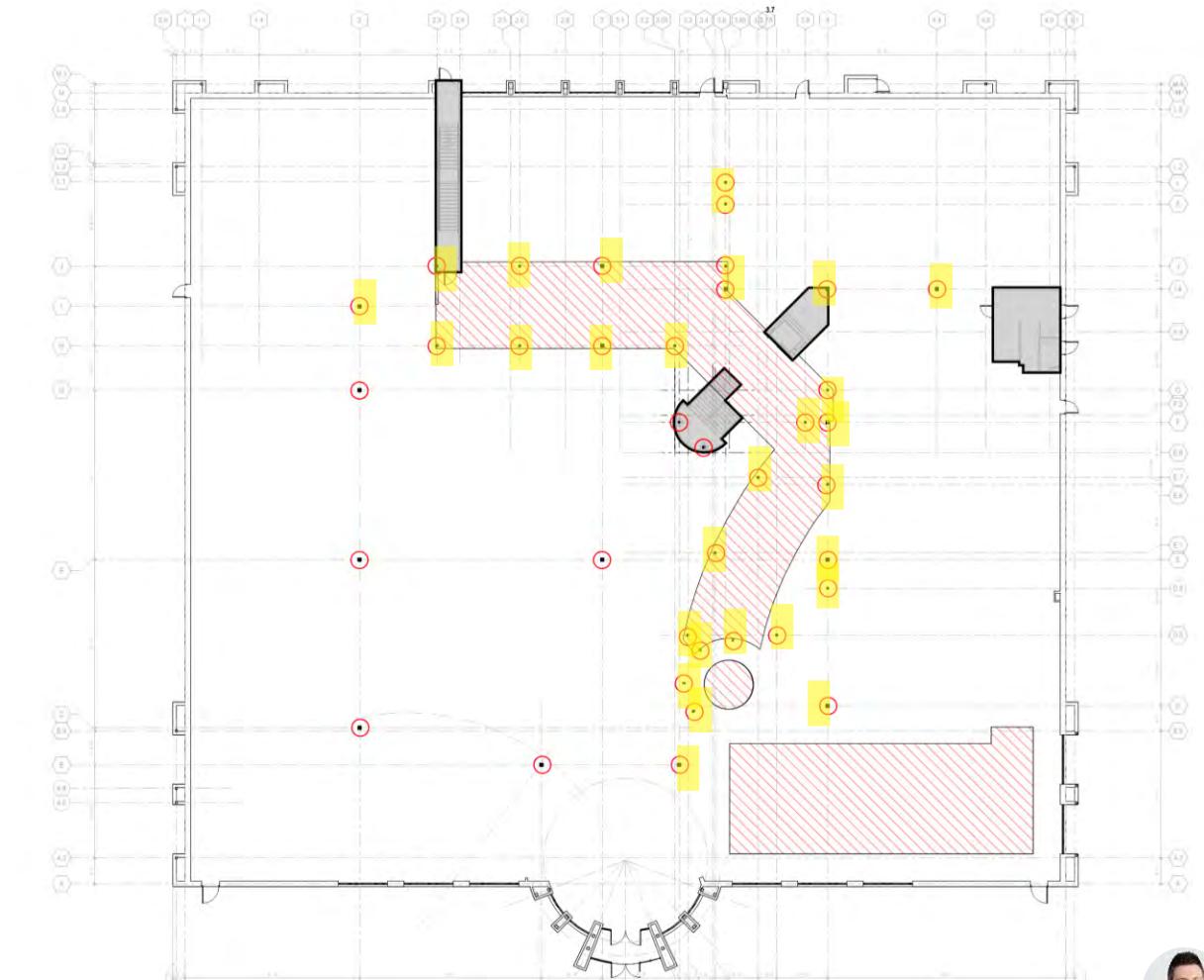
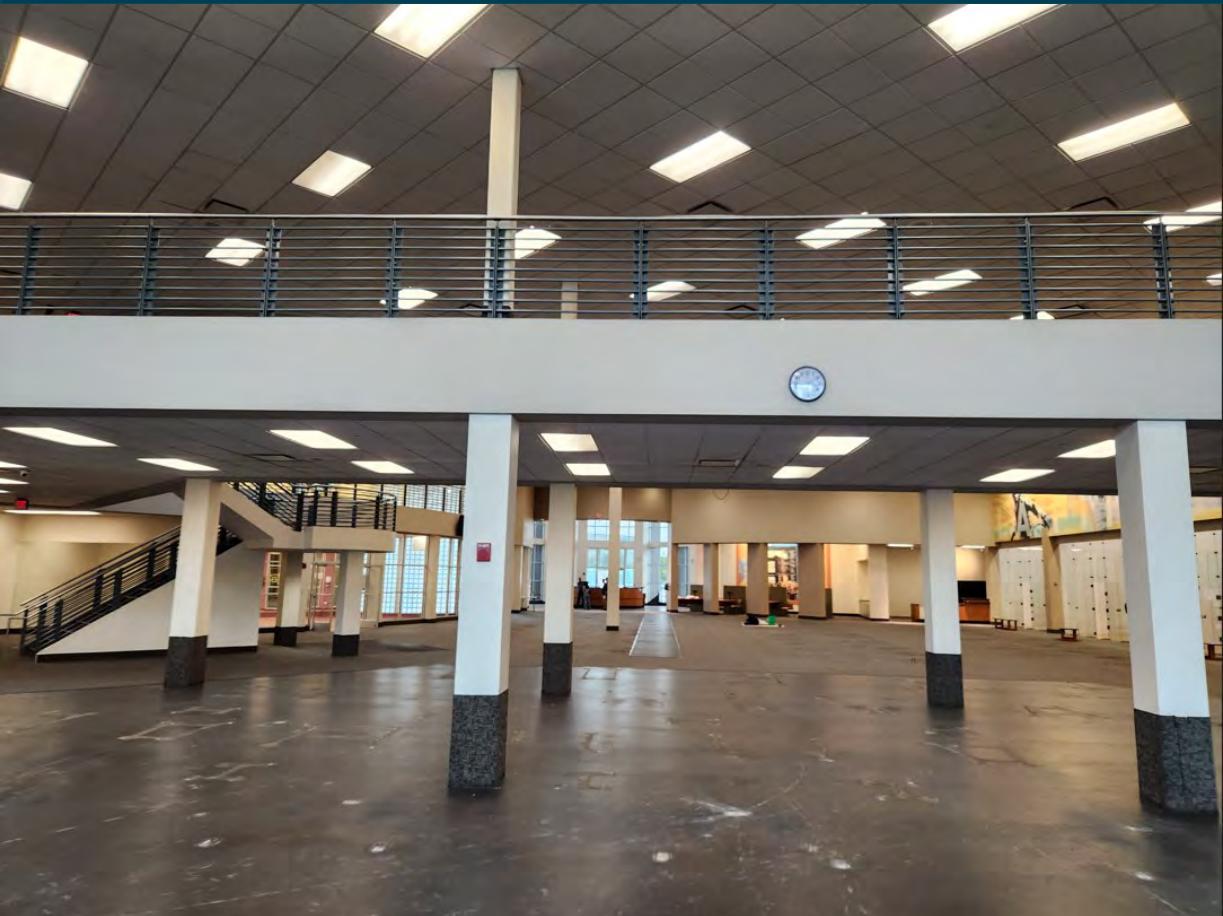
# EXISTING CONSTRAINTS



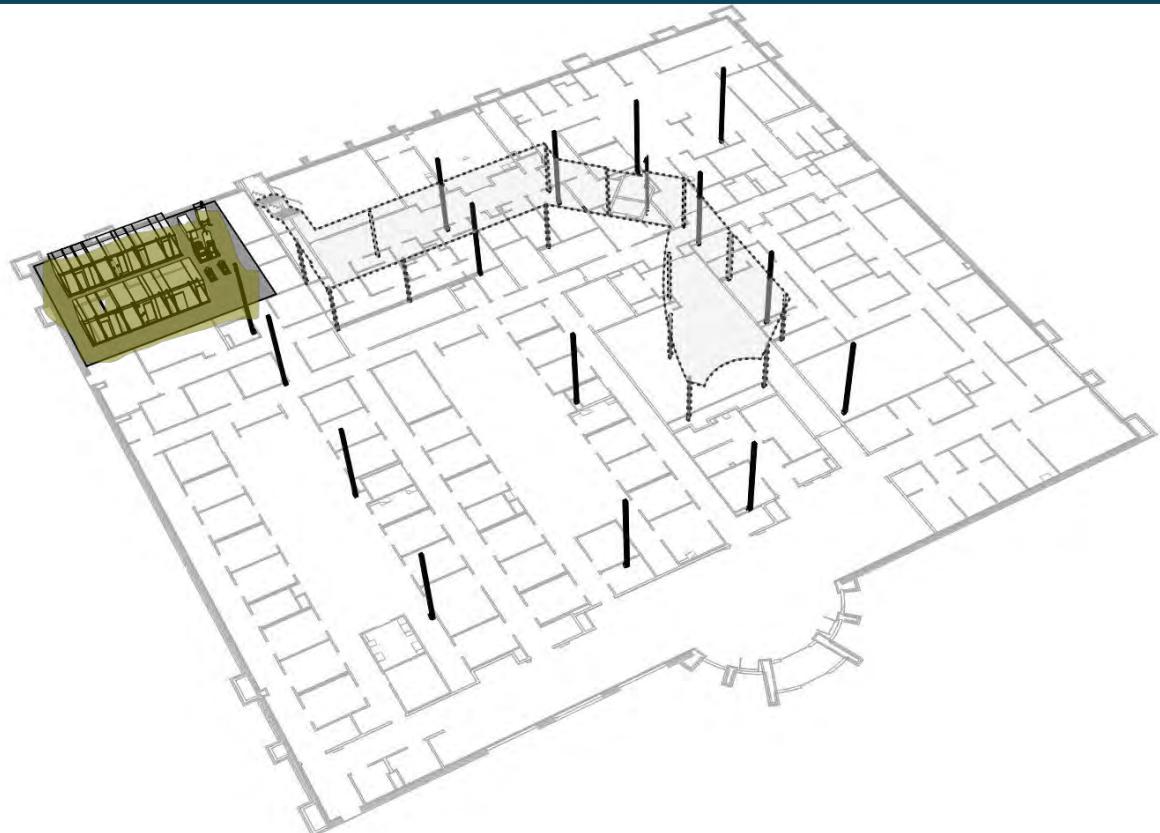
# EXISTING CONSTRAINTS



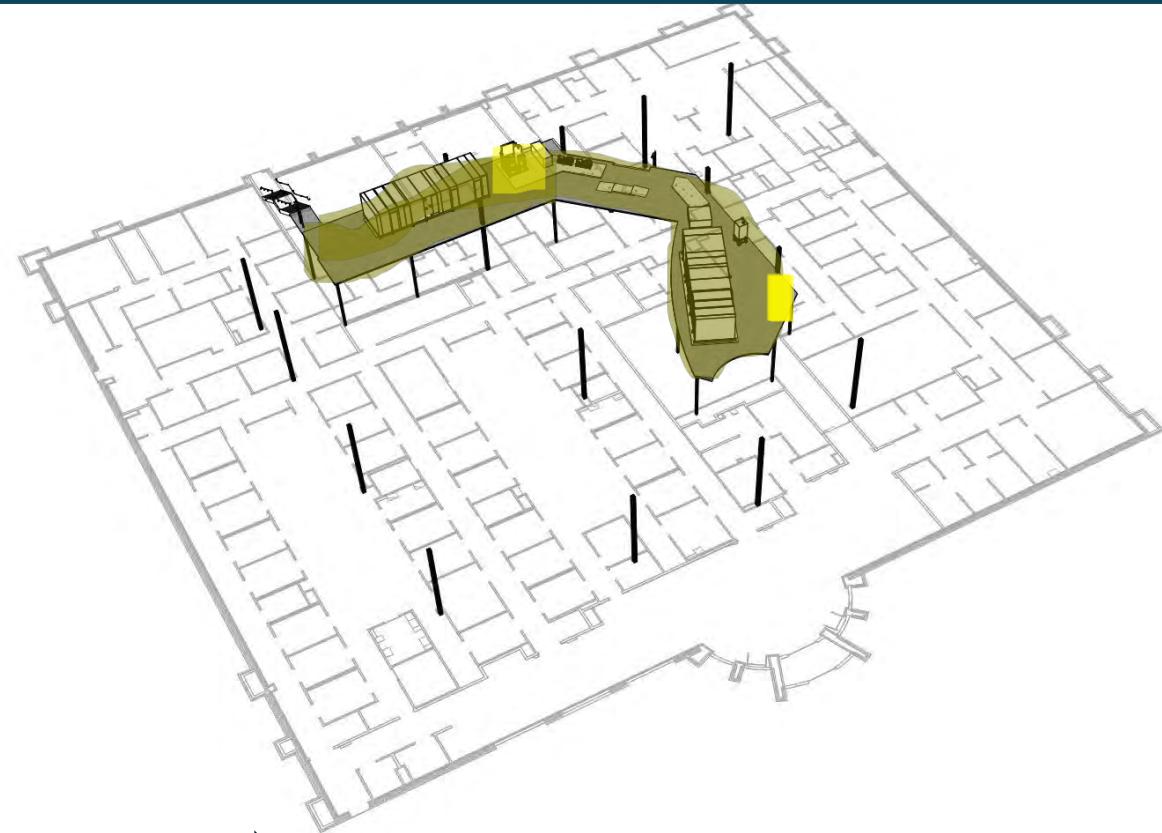
# EXISTING CONSTRAINTS



# UTILIZATION OF EXISTING MEZZANINE



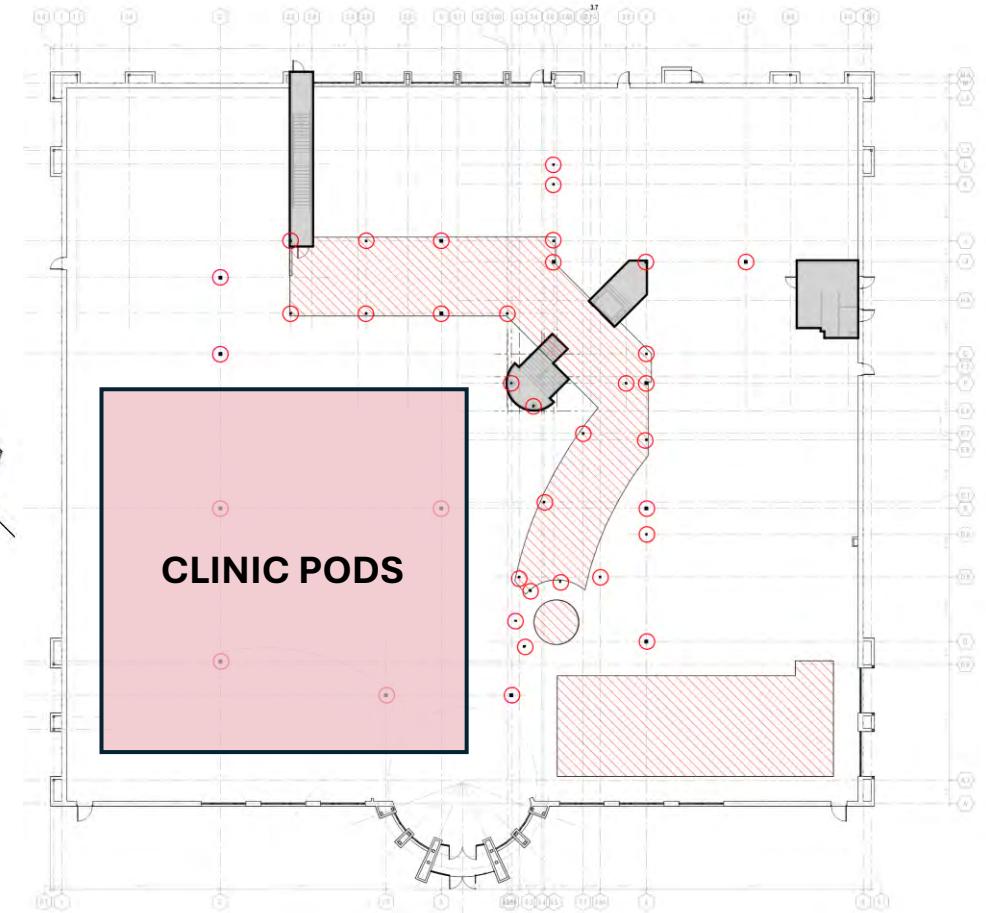
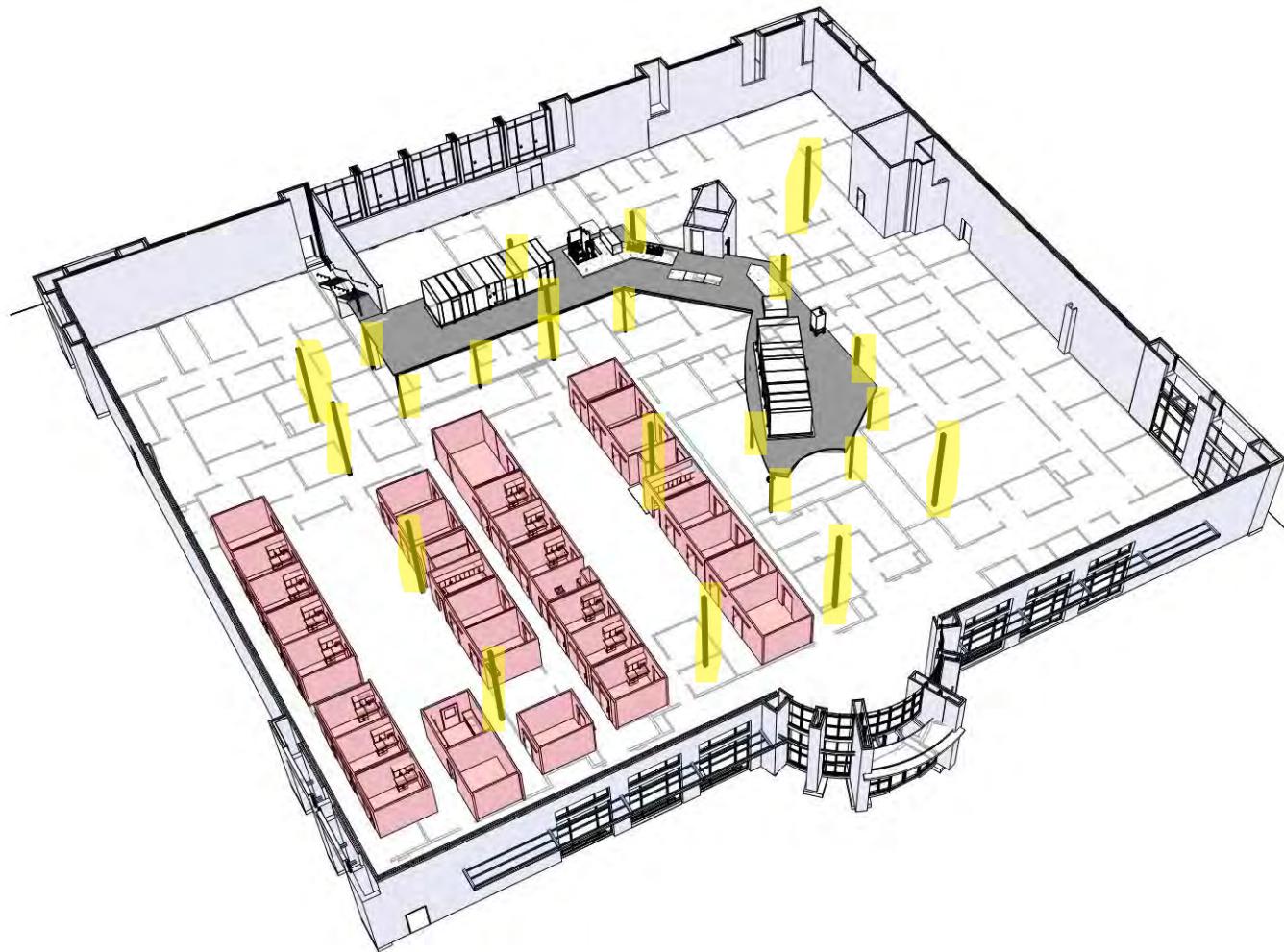
Ground Floor Mechanical Rooms



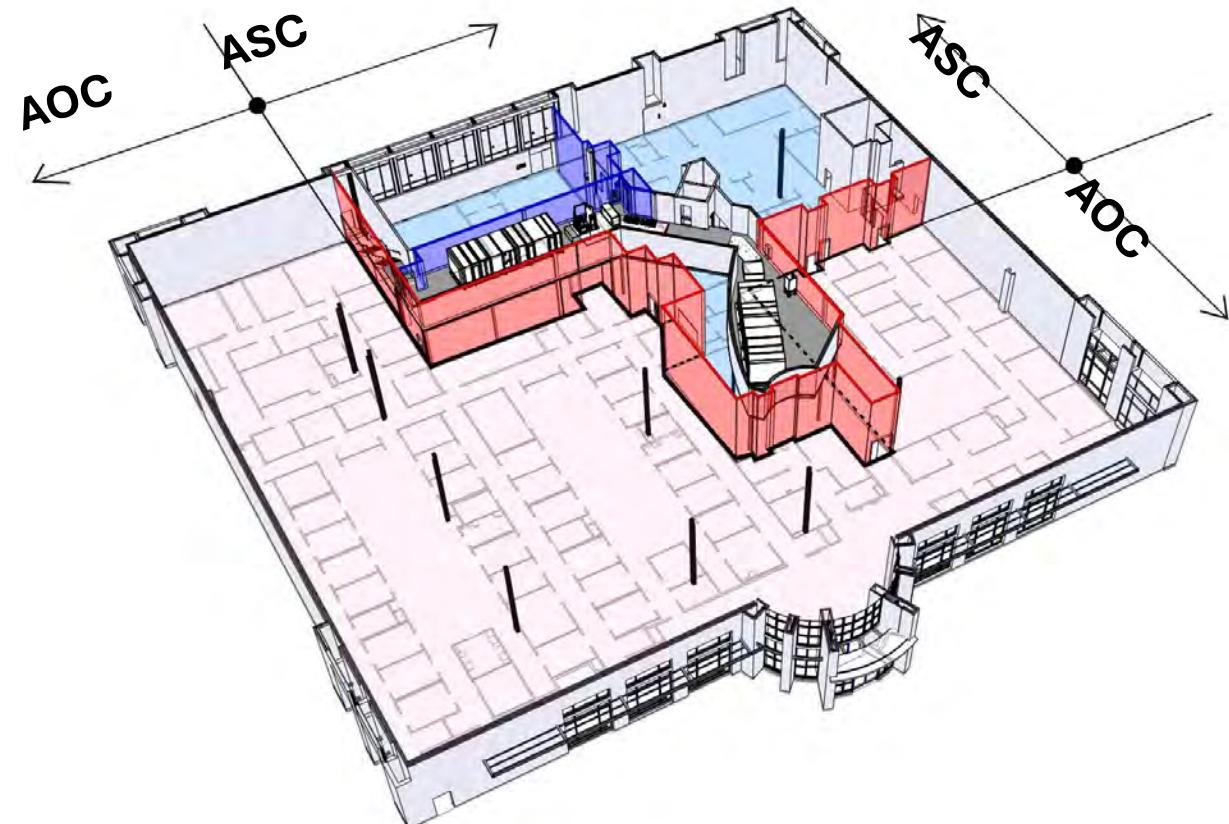
Mechanical Mezzanine  
~3,000 SF

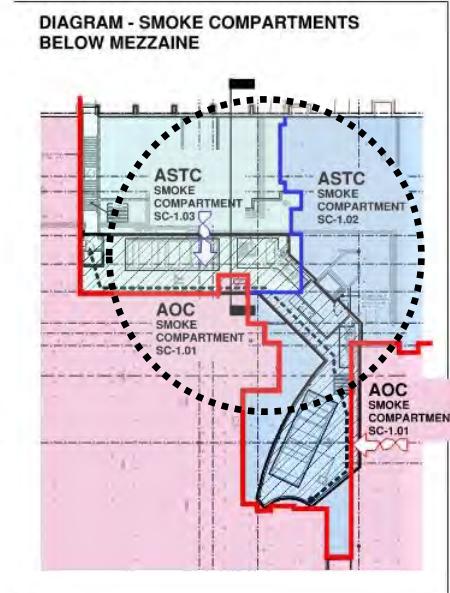
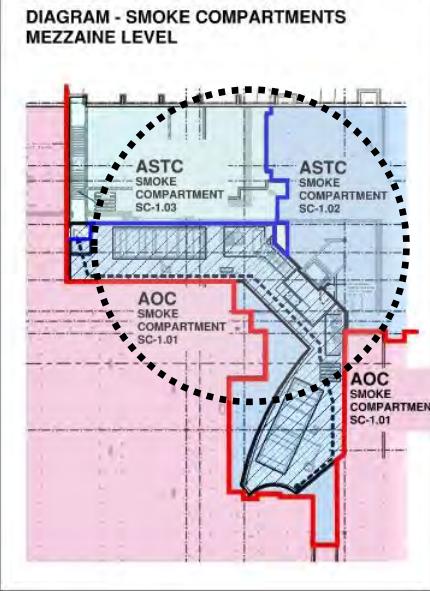
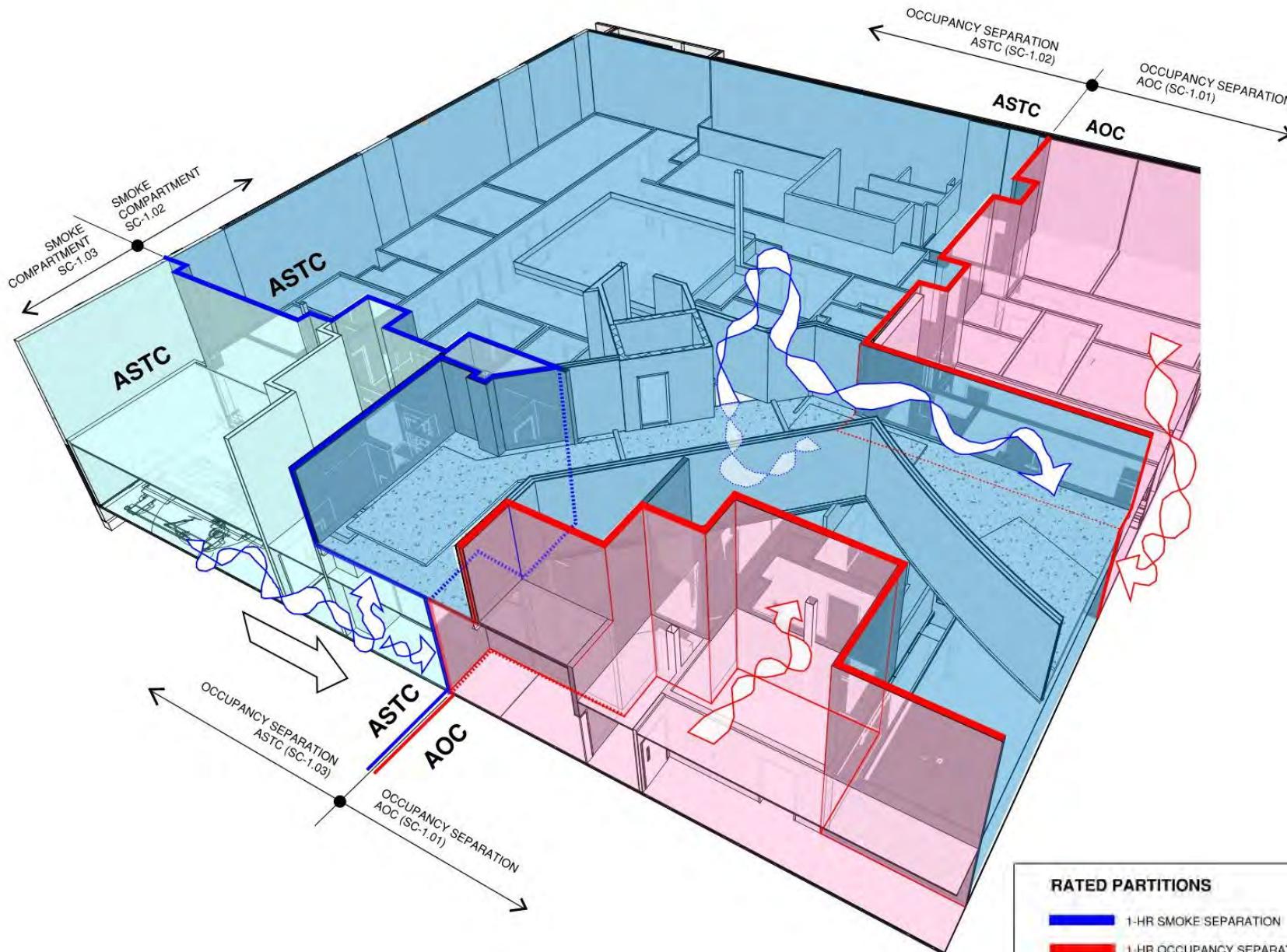


# DEPARTMENT PLANNING – ZONING



# ASC / AOC SEPARATION





# WAS USING THE MEZZANINE A GOOD DECISION?



## ADVANTAGES

- Provided for additional revenue-generating space on the main floor
- (\$) Cost savings by avoiding new structural framing at the roof deck to support the RTUS

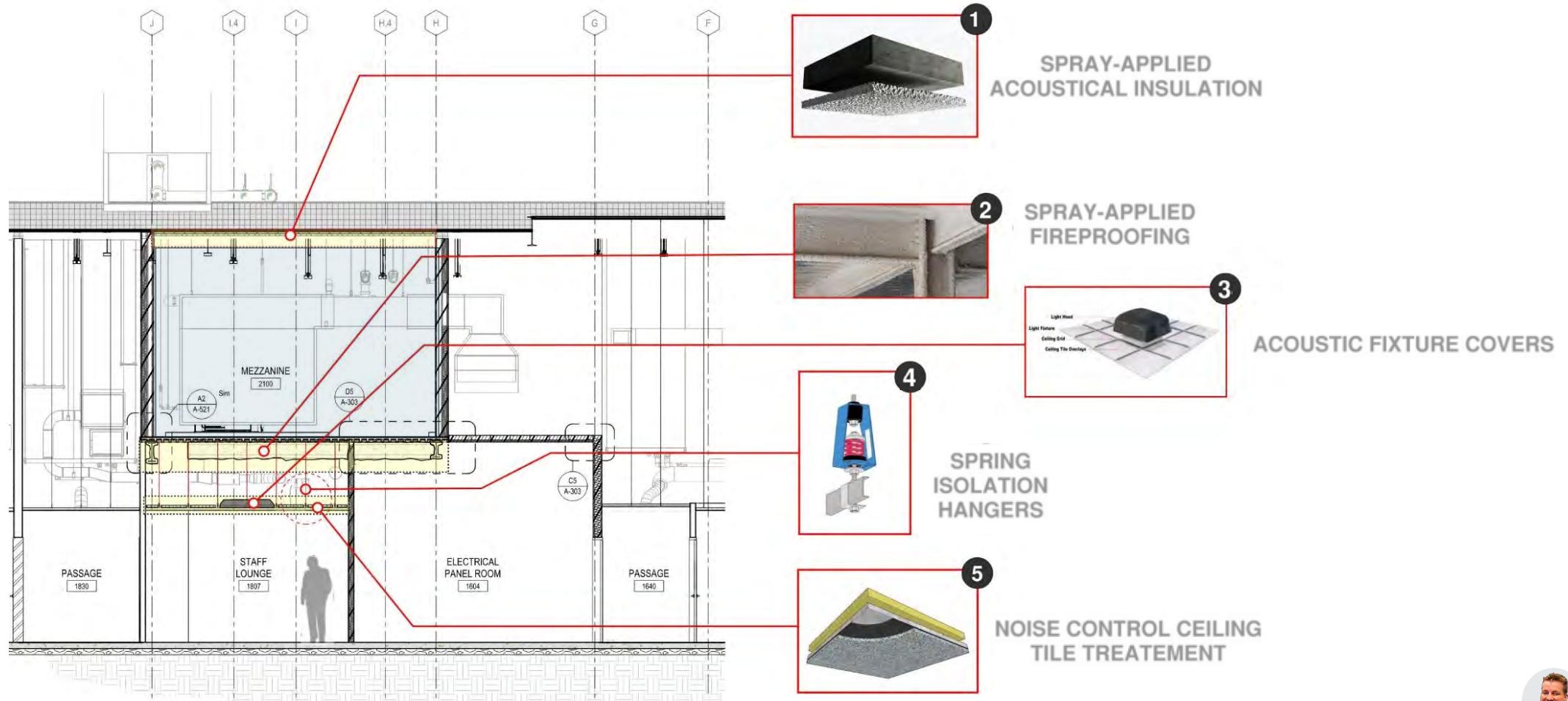


## DISADVANTAGES

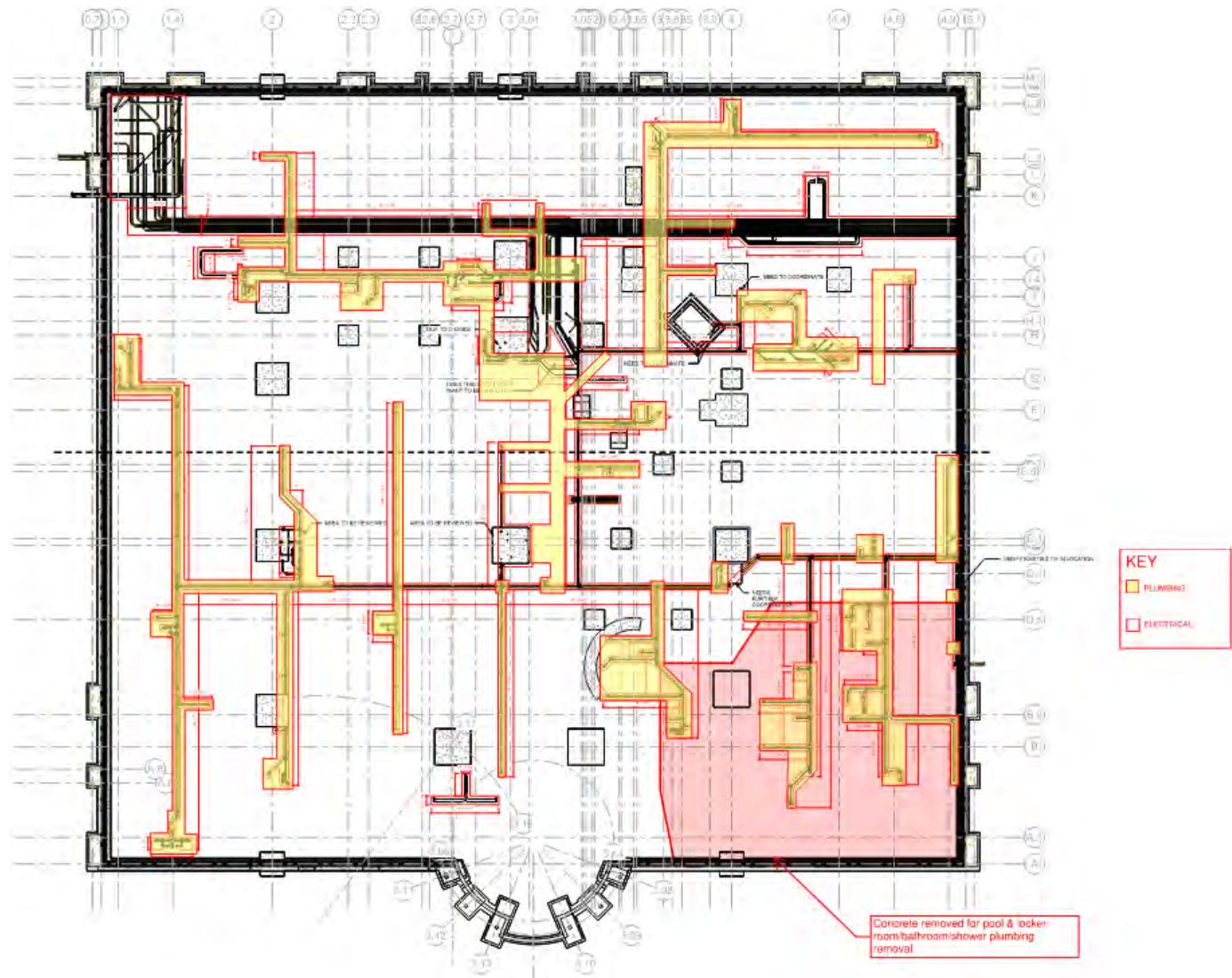
- Columns supporting the mezzanine remained, impacting layouts
- Maintaining occupancy and smoke separations where walls engage with mezzanine structure
- (\$) Noise impact of AHUs and mechanical equipment required additional acoustic solutions, adding additional costs



# COST IMPACTS - MEZZANINE UTILIZATION



# PLUMBING & ELECTRICAL UG OVERLAY



# BIM (Building Information Modeling)

## WEEKLY BIM WORKFLOW

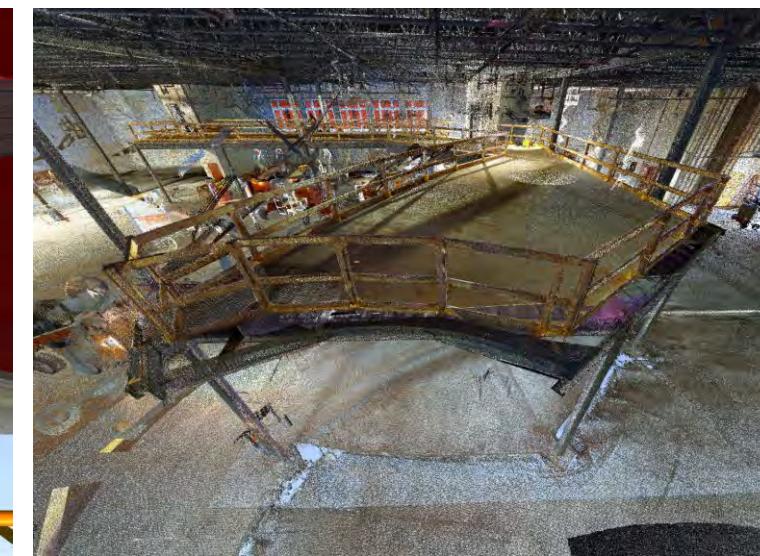
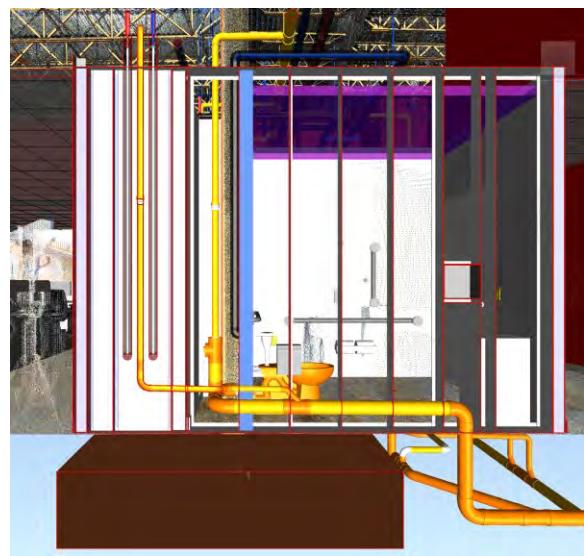
- Schedule/drawing updates from OAC meetings
- Model updates from design and trade partners
- Clash detection throughout the week
- Trade coordination meeting
- Next steps assigned to team members



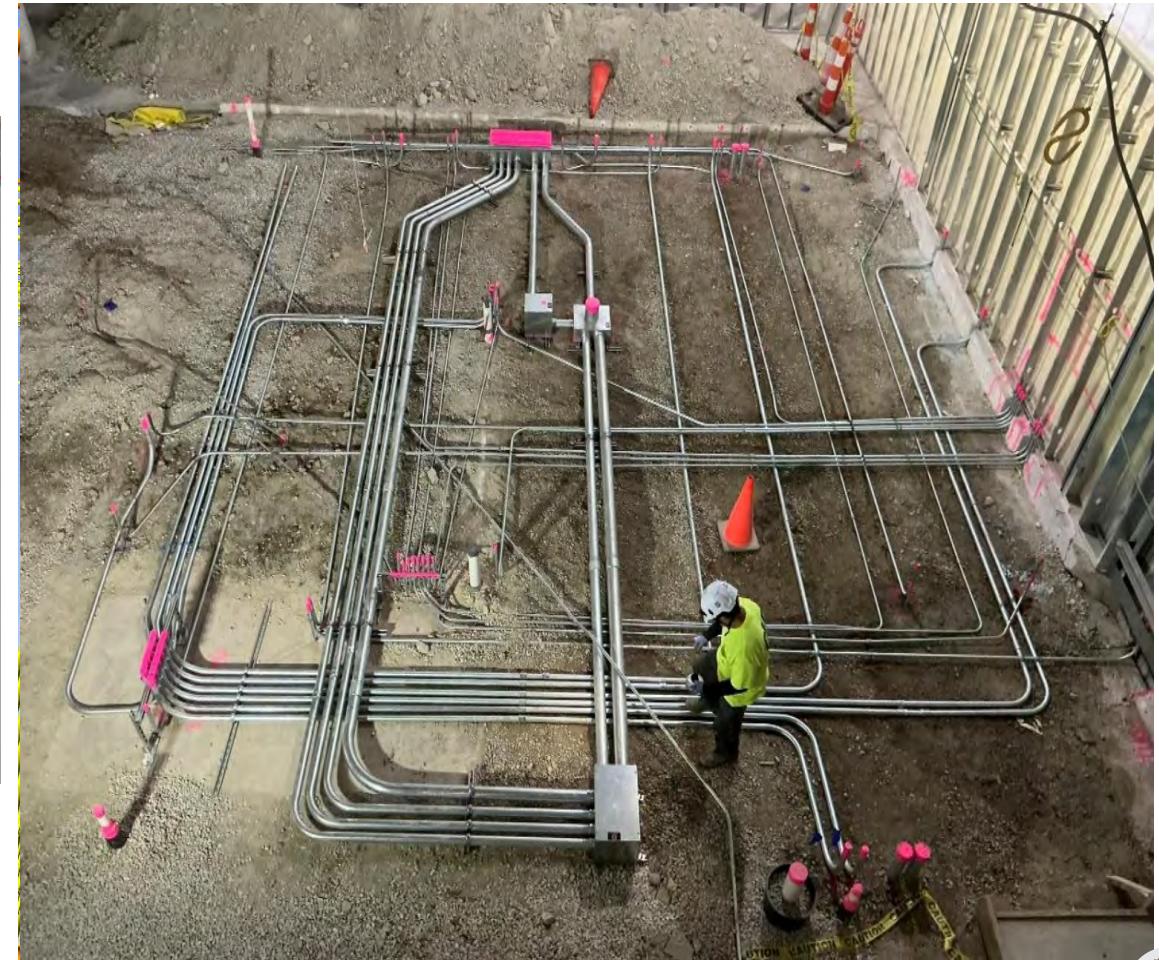
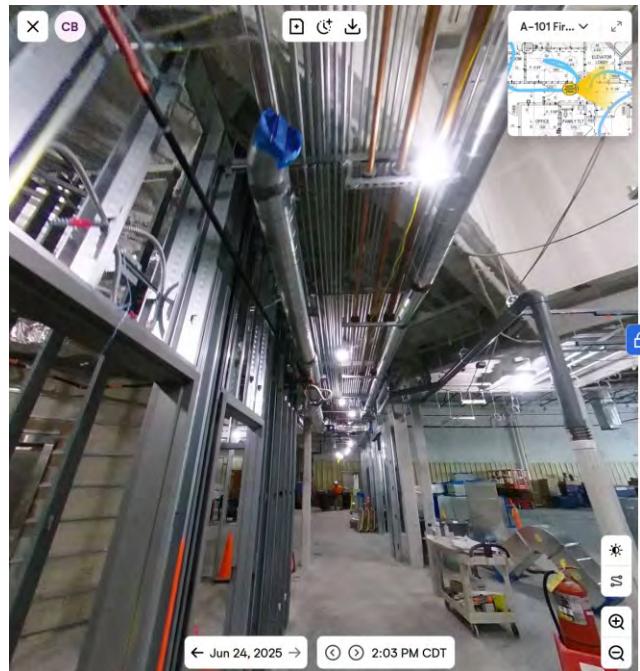
<https://tcard.leantransitionsolutions.com/gemba-walk>



# LASER SCANNING

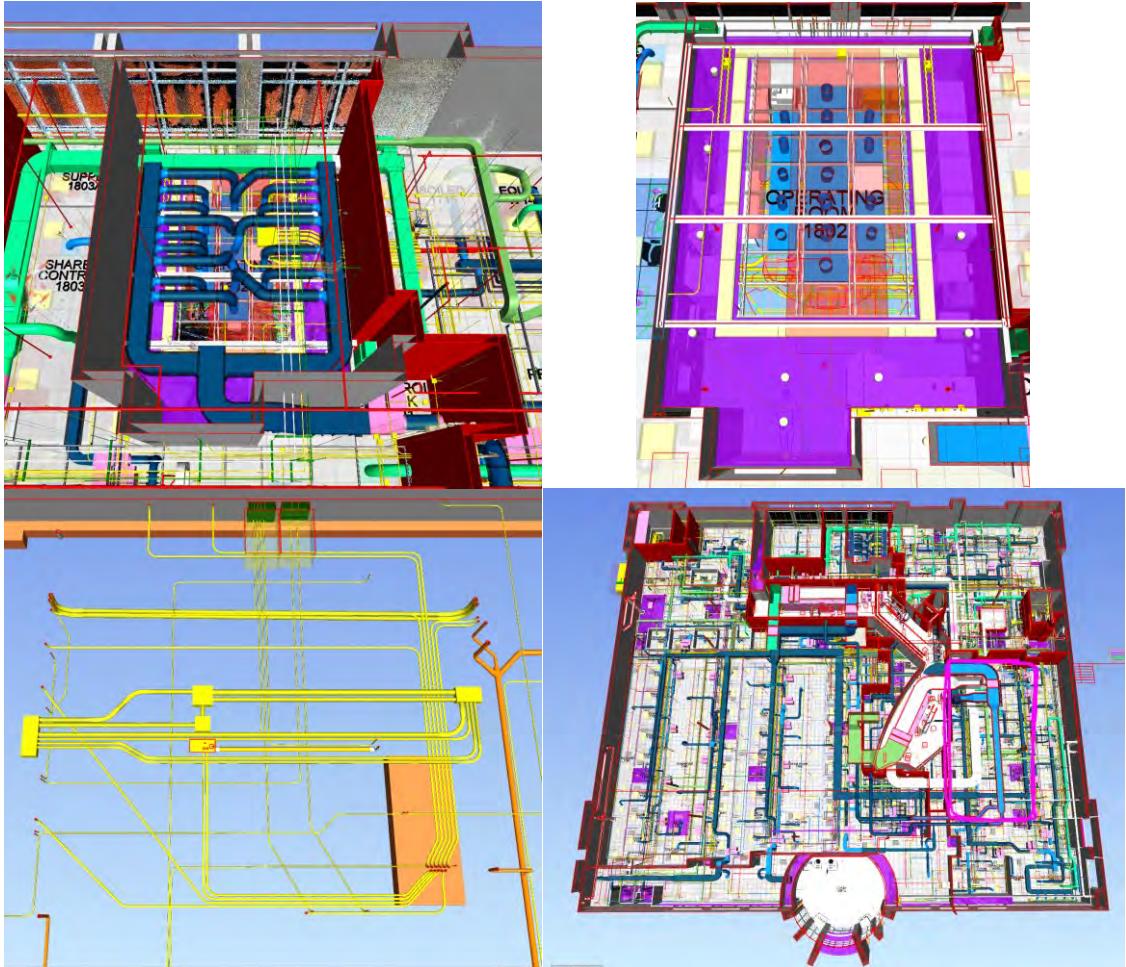


# TRADE COORDINATION

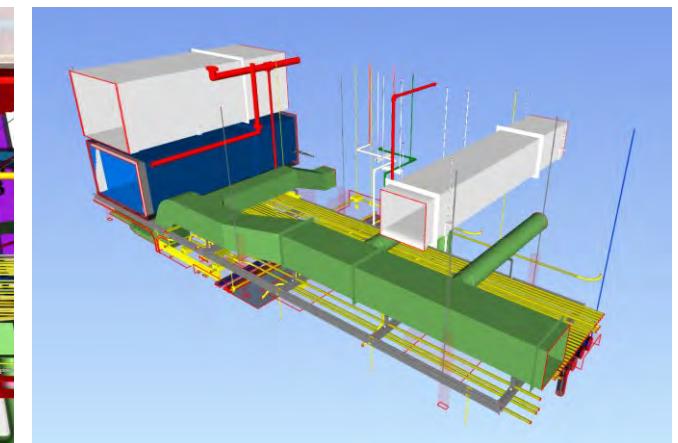
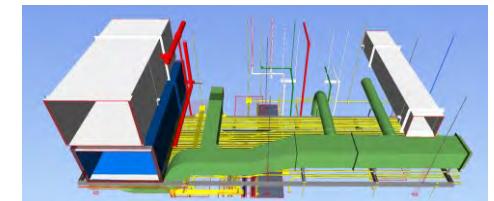
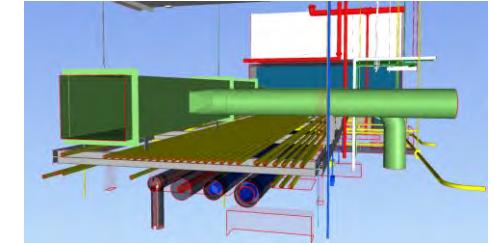
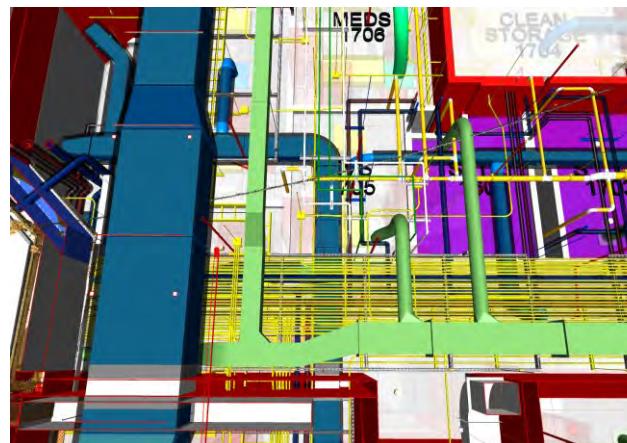
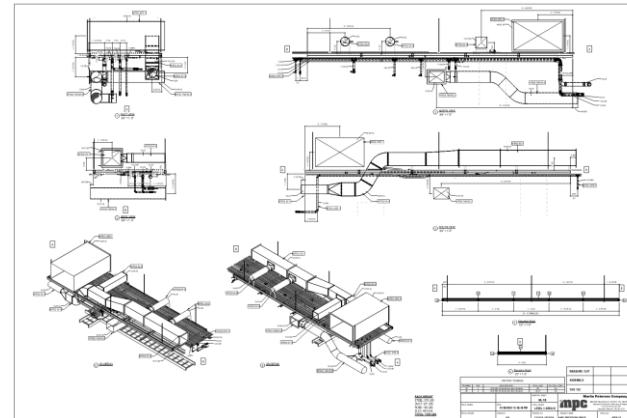
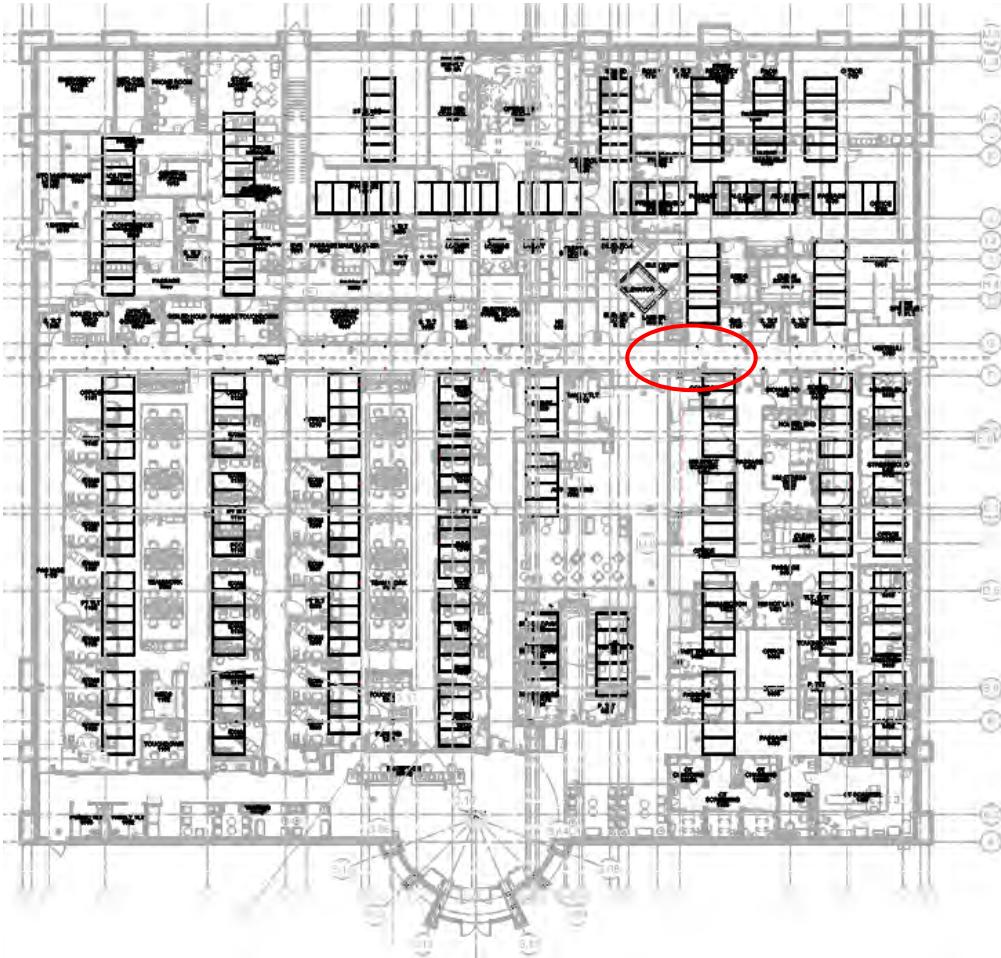


# GO-BACK AREAS

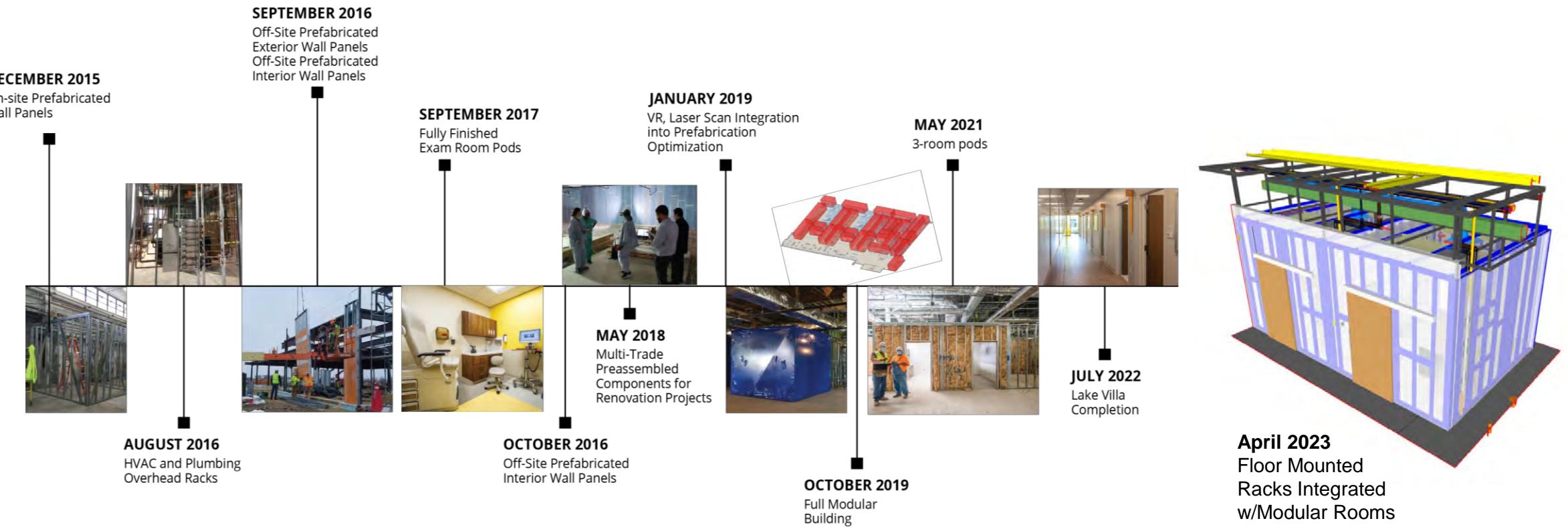
- **Operating Room**
  - Vendors
    - Siemens
    - Stryker
- **CT Scanner**
- **Nuc Med To X-ray Room Change**



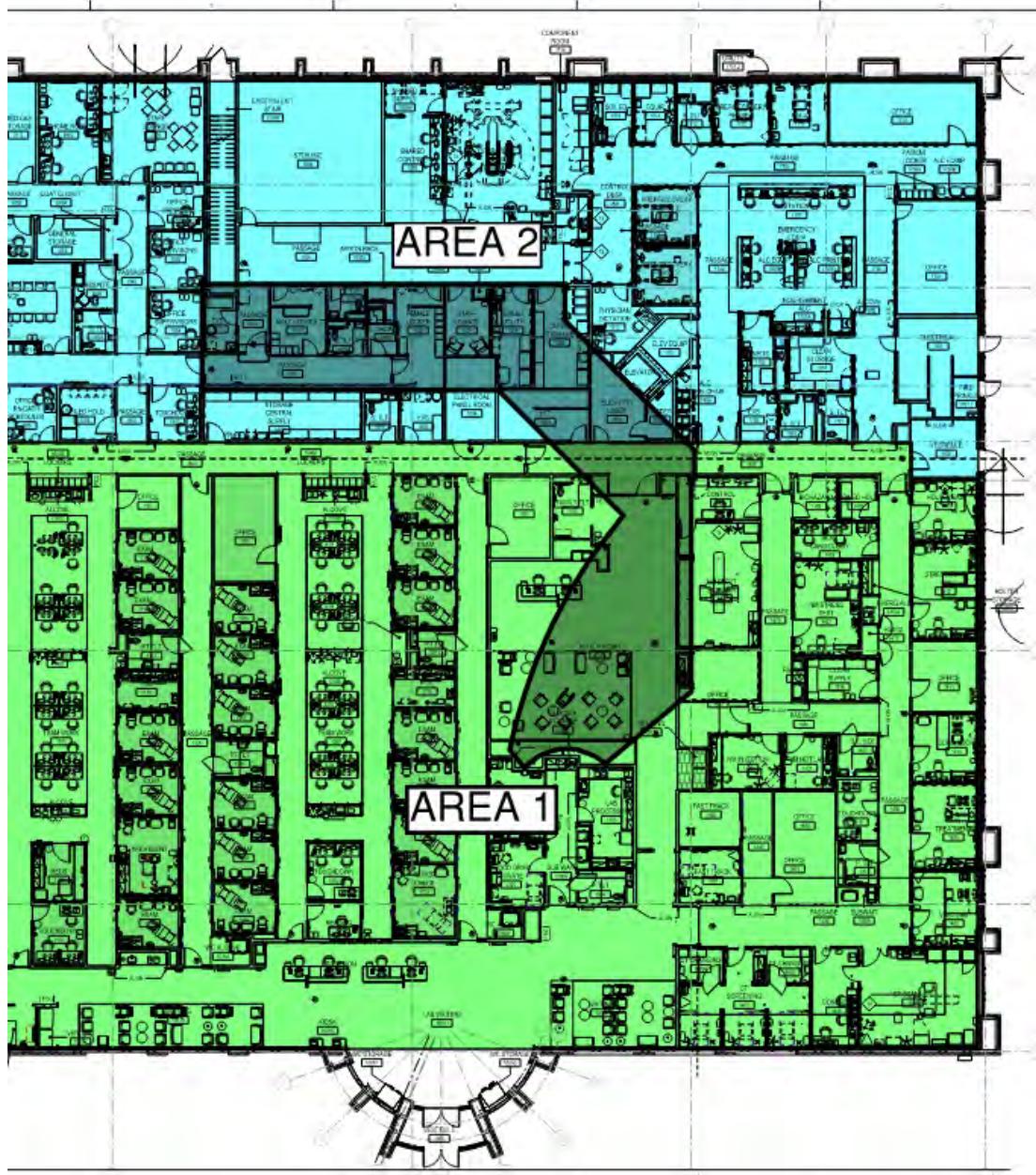
# MULTI-TRADE RACKS



# INNOVATION AND EVOLUTION OF MODULAR/PREFAB



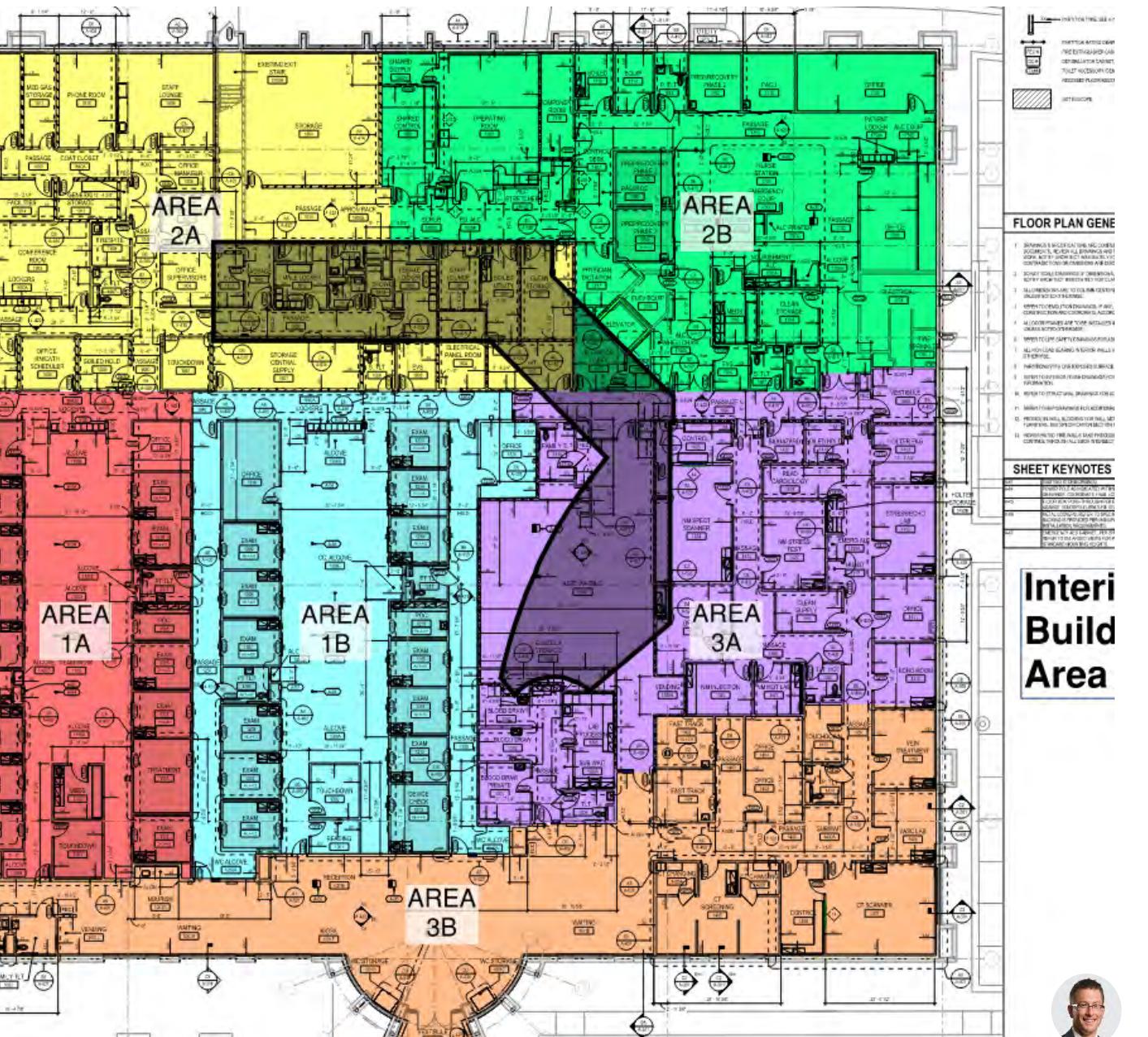
# WORK PLANNING AREAS

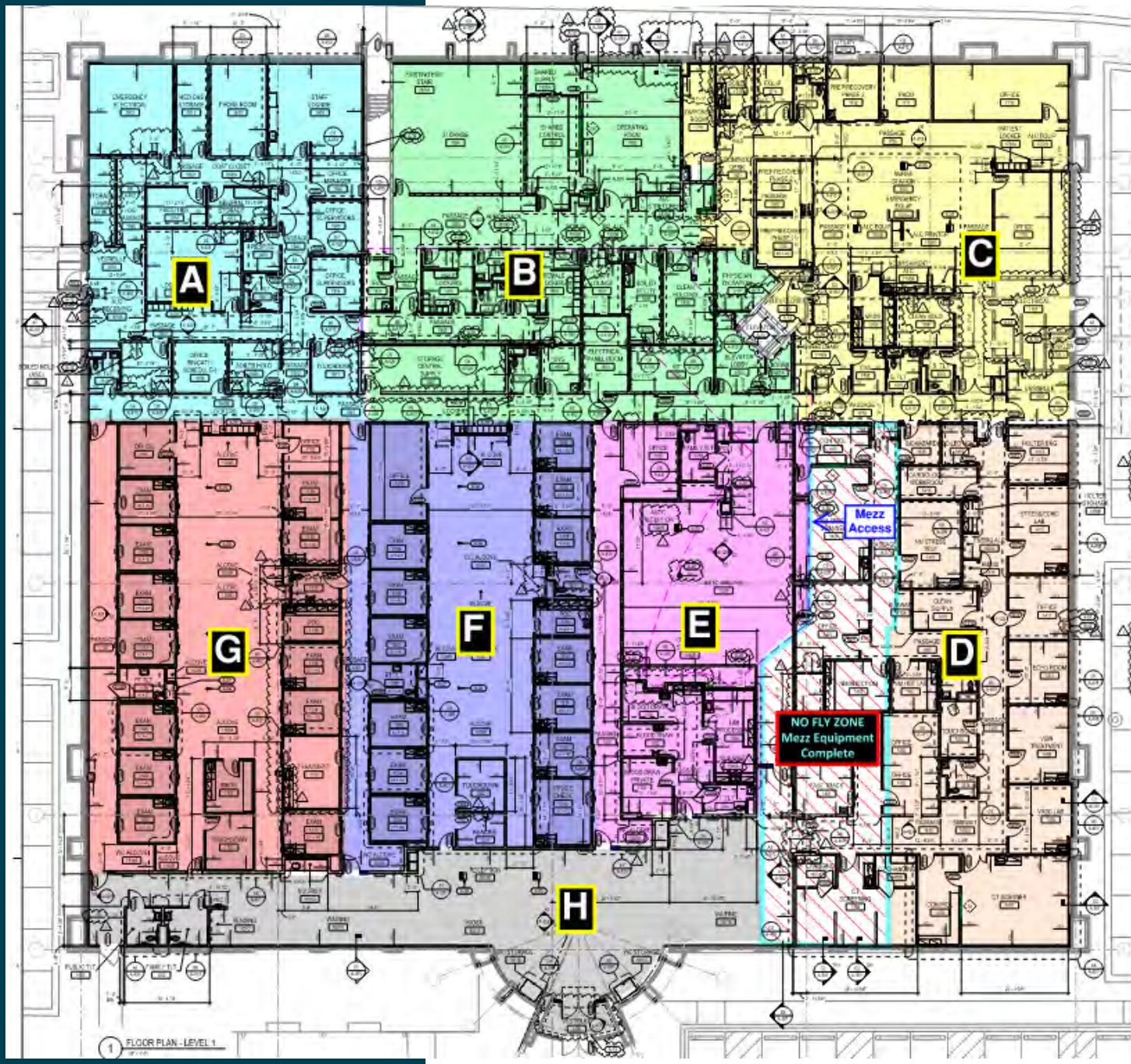


UG & OH  
Area Plan  
w/ mezz

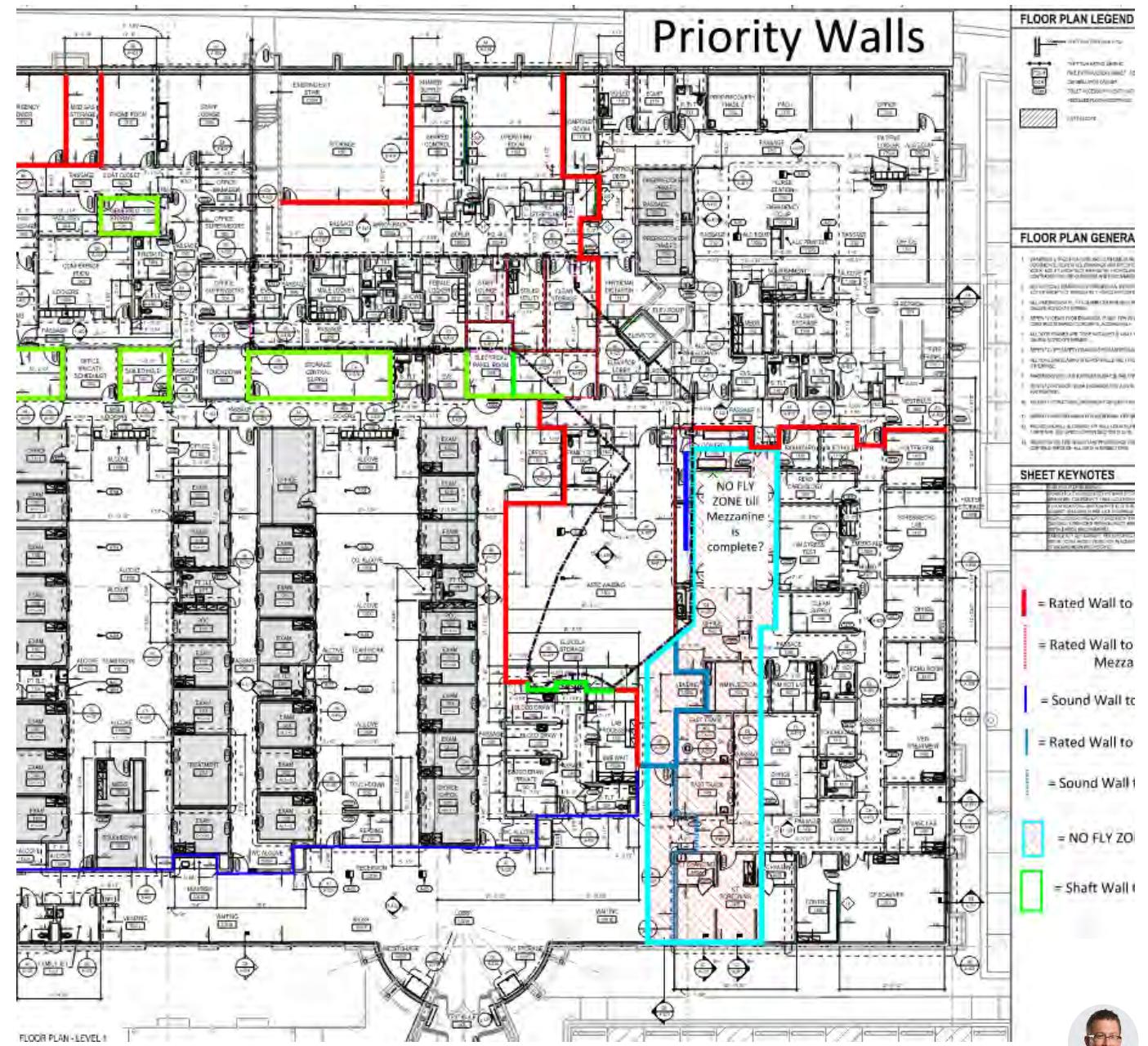


# ORIGINAL INTERIOR BUILD-OUT PHASING

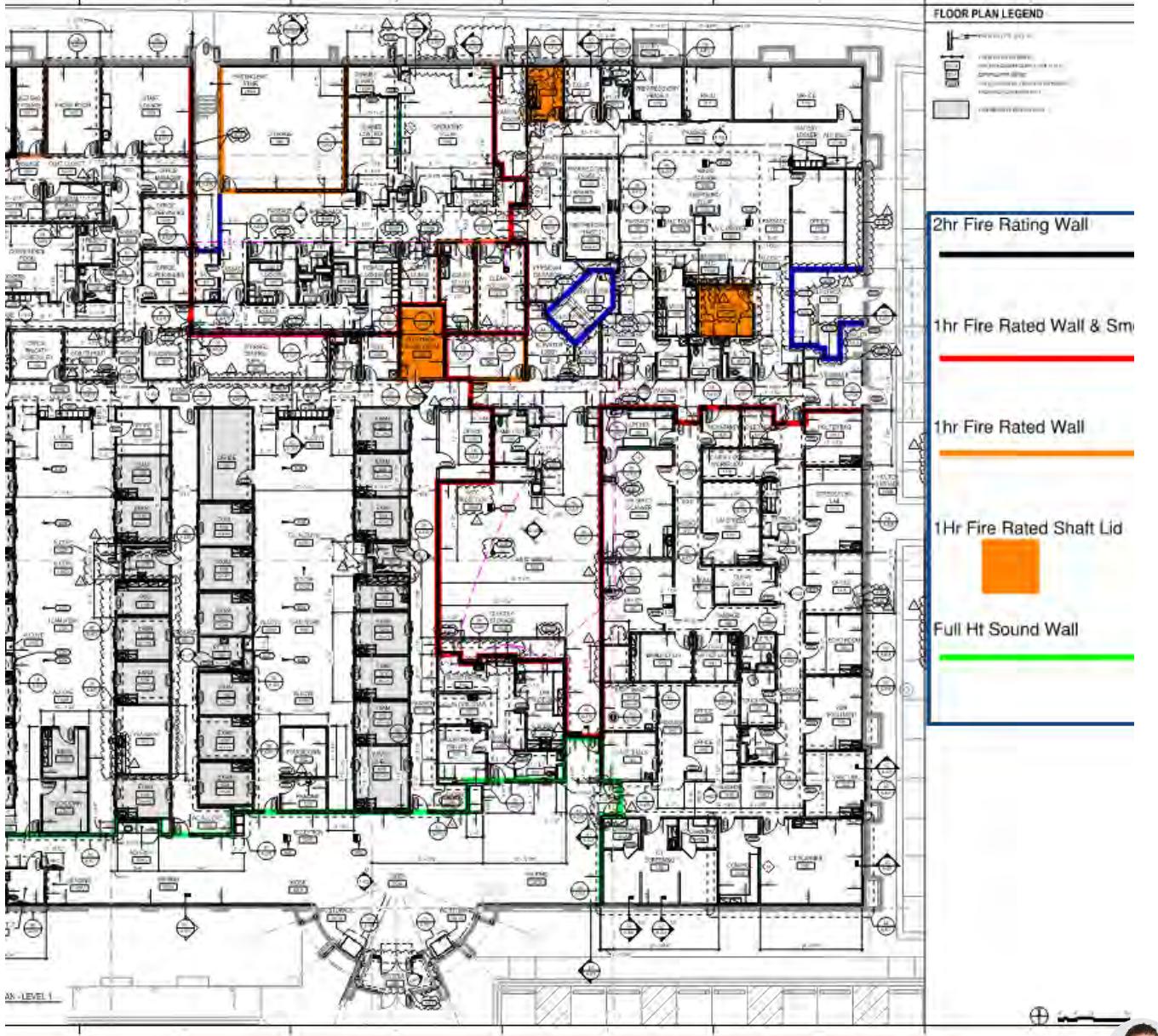




# ORIGINAL PRIORITY WALLS



# REVISED PRIORITY WALLS



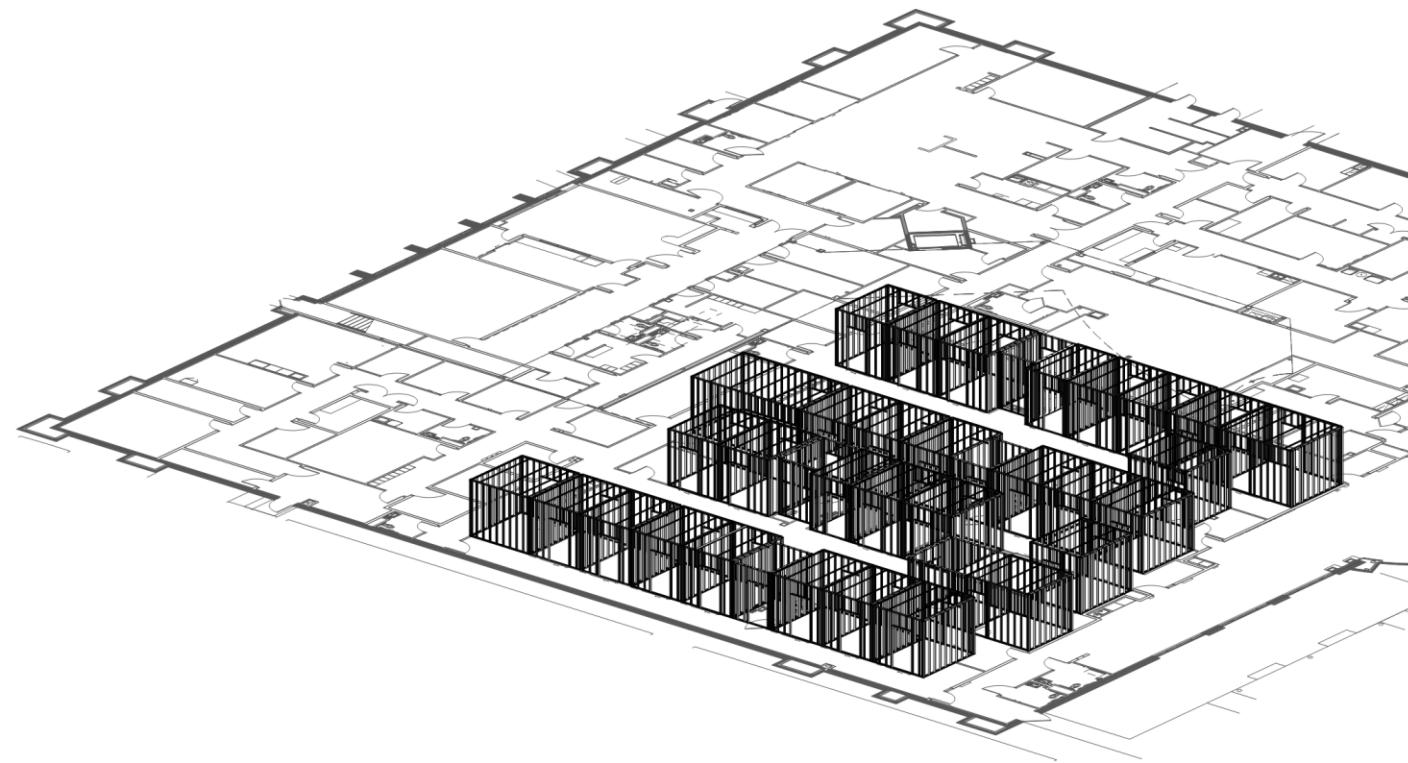
# AOC/ASTC NAPERVILLE FD MODULAR ROOMS

## INITIAL FLOOR PLAN REVIEW



# AOC/ASTC NAPERVILLE FD MODULAR ROOMS

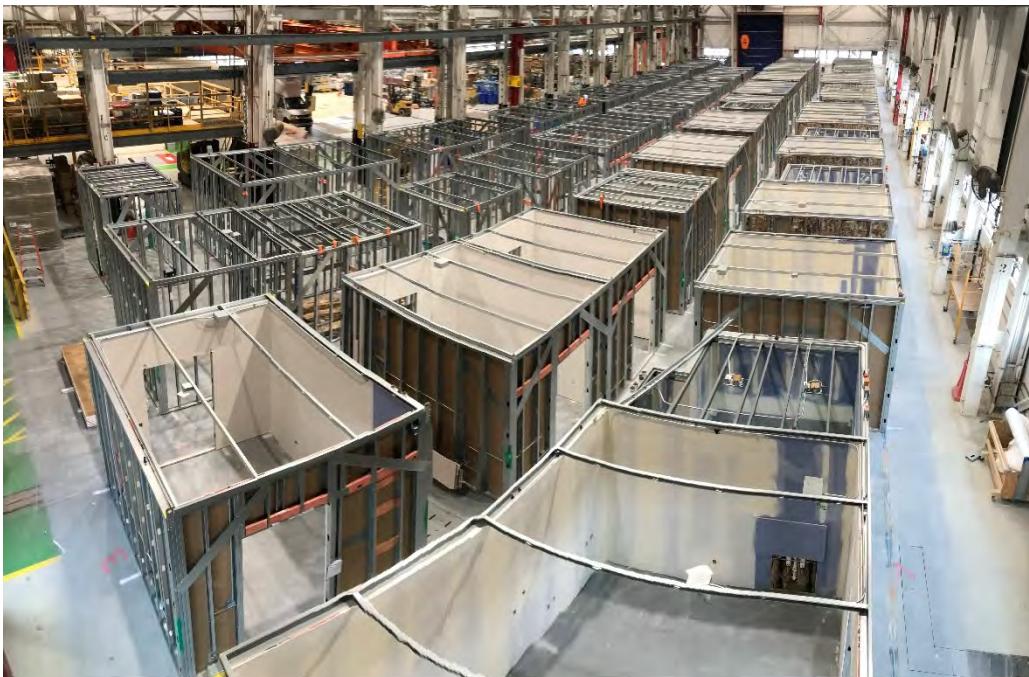
ADVOCATE AURORA HEALTH  
NAPERVILLE - POD LAYOUT



# PREFABRICATION SHOP

**LOCATED IN MONTGOMERY, IL**

- Opened in January 2021
- All Fabrication by Trade Partners
- Phased Delivery to Jobsite

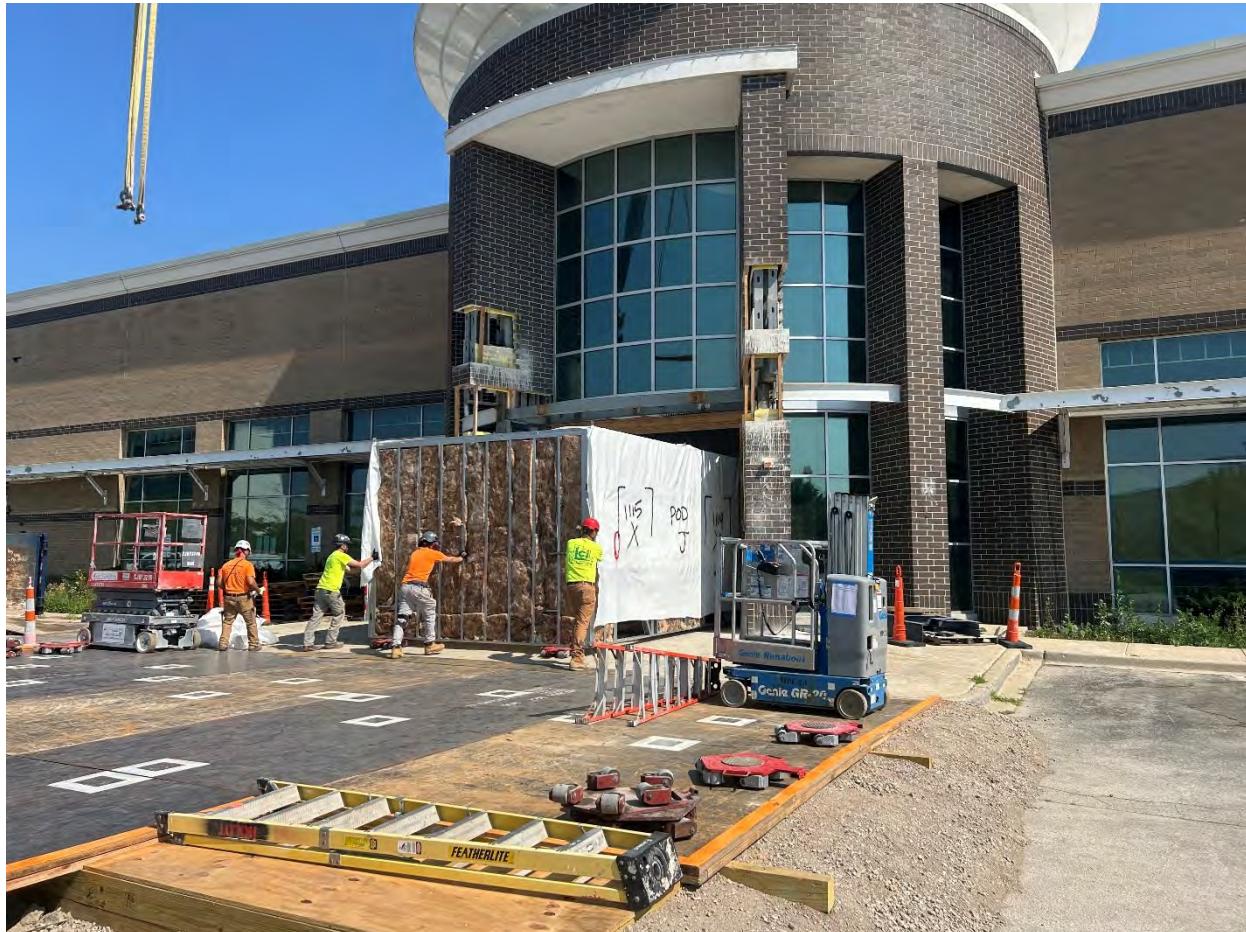


## PROJECT COMPLETED TO DATE

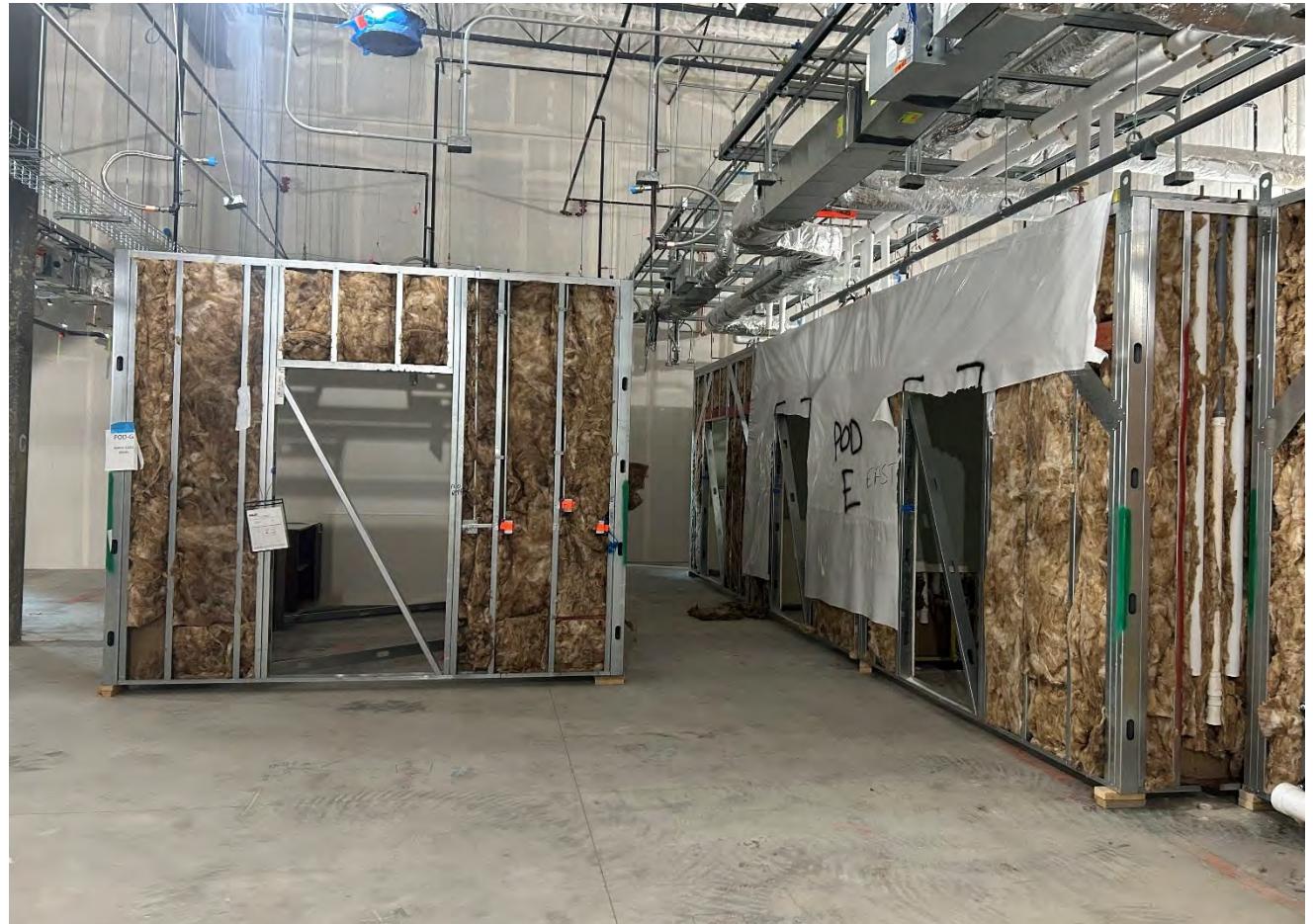
- **BURBANK**  
2-room Pods
- **WEST NAPERVILLE DREYER**  
3-room Pods
- **LAKE VILLA**  
Modular Load-bearing Rooms
- **PARK RIDGE**  
2-story Delivery
- **SIX CORNERS**  
2-story Delivery in Chicago
- **SOUTH ELGIN**  
Modular Room with Floor-Mounted Racks
- **LAKEMOOR**  
Just-in-time Delivery
- **CHICAGO WEBSTER**  
Just-in-time Delivery
- **HOFFMAN ESTATES**  
Just-in-time Delivery
- **WESTMONT**  
Just-in-time Delivery
- **NAPERVILLE FD**  
Just-in-time Delivery



# DELIVERY ON-SITE



# DELIVERY ON-SITE



# QUESTIONS?



**RYAN YOHO**  
Area Manager  
Boldt



**THADDEUS JEDRZEJAK**  
Director, Planning, Design &  
Construction, Midwest Non-  
Acute Services  
Advocate Health



**ANDREW SHAW**  
Senior Associate  
IMEG



**CHRIS MARTIN**  
Project Manager  
HDR