



Platteville Fire Station

Community Presentation
April 20, 2023



PROJECT TEAM HERE TONIGHT:



LAURA EYSNOGLE

AIA, NCIDQ

ARCHITECT

WENDEL / FIVE BUGLES DESIGN



KYLE KRAEMER

VICE PRESIDENT

CONSTRUCTION MANAGER PRINCIPAL-IN-CHARGE

KRAEMER BROTHERS



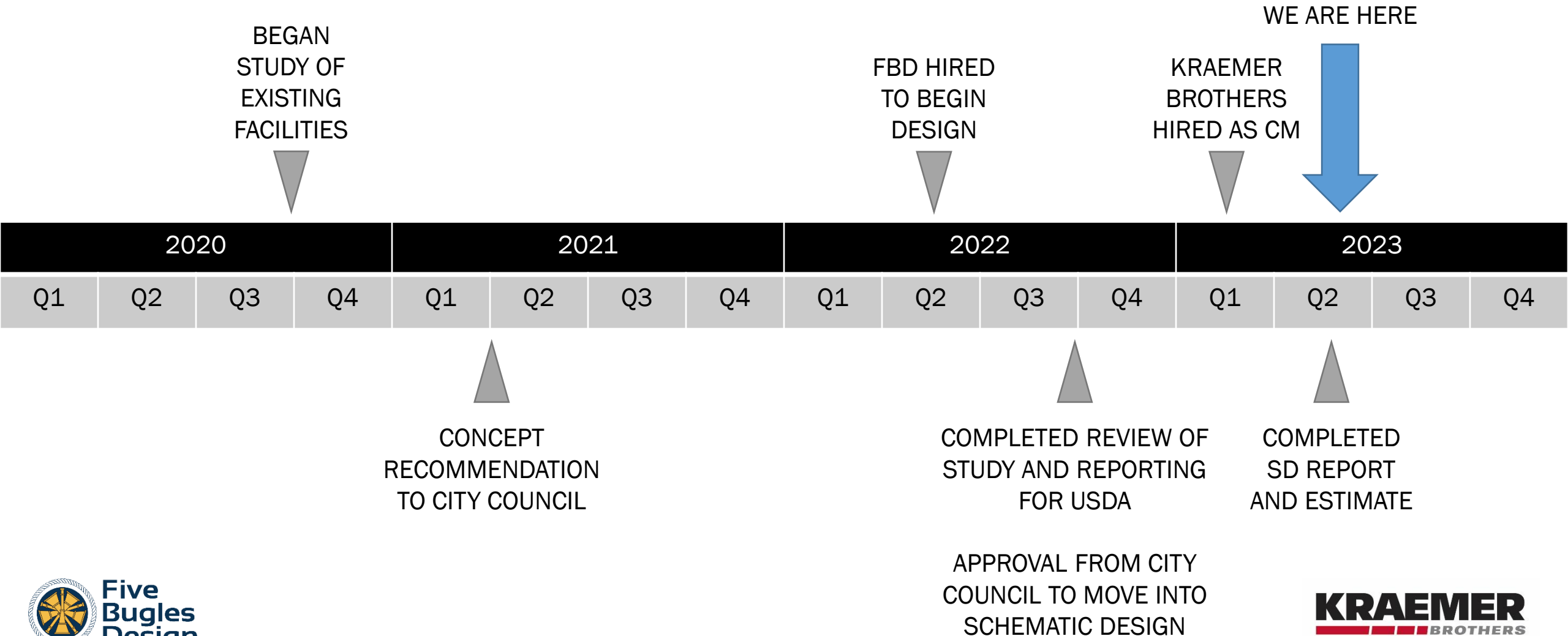
PRESENTATION OUTLINE:

- Project History
- Schematic Design
 - Site
 - Facility
 - Alternates
- Cost Estimate
 - How project costs evolve
 - Base estimate
 - Alternate estimates
 - Project scope
- What's Next
 - Potential design schedule
 - Potential construction schedule



1 Front Bay Iso
SCALE:

PROJECT HISTORY:



SCHEMATIC DESIGN:

WHAT IS SD?

WHAT IS SCHEMATIC DESIGN?

- General understanding of a project
 - Physical requirements
 - Confirm sizes & occupancies
- “Big Picture” items
 - Building envelope & structure
 - Articulate floor plan
 - Initial code review
 - General interior finishes
 - Begin to review mechanical & electrical systems
- SD level construction estimate

END DELIVERABLE: SD REPORT

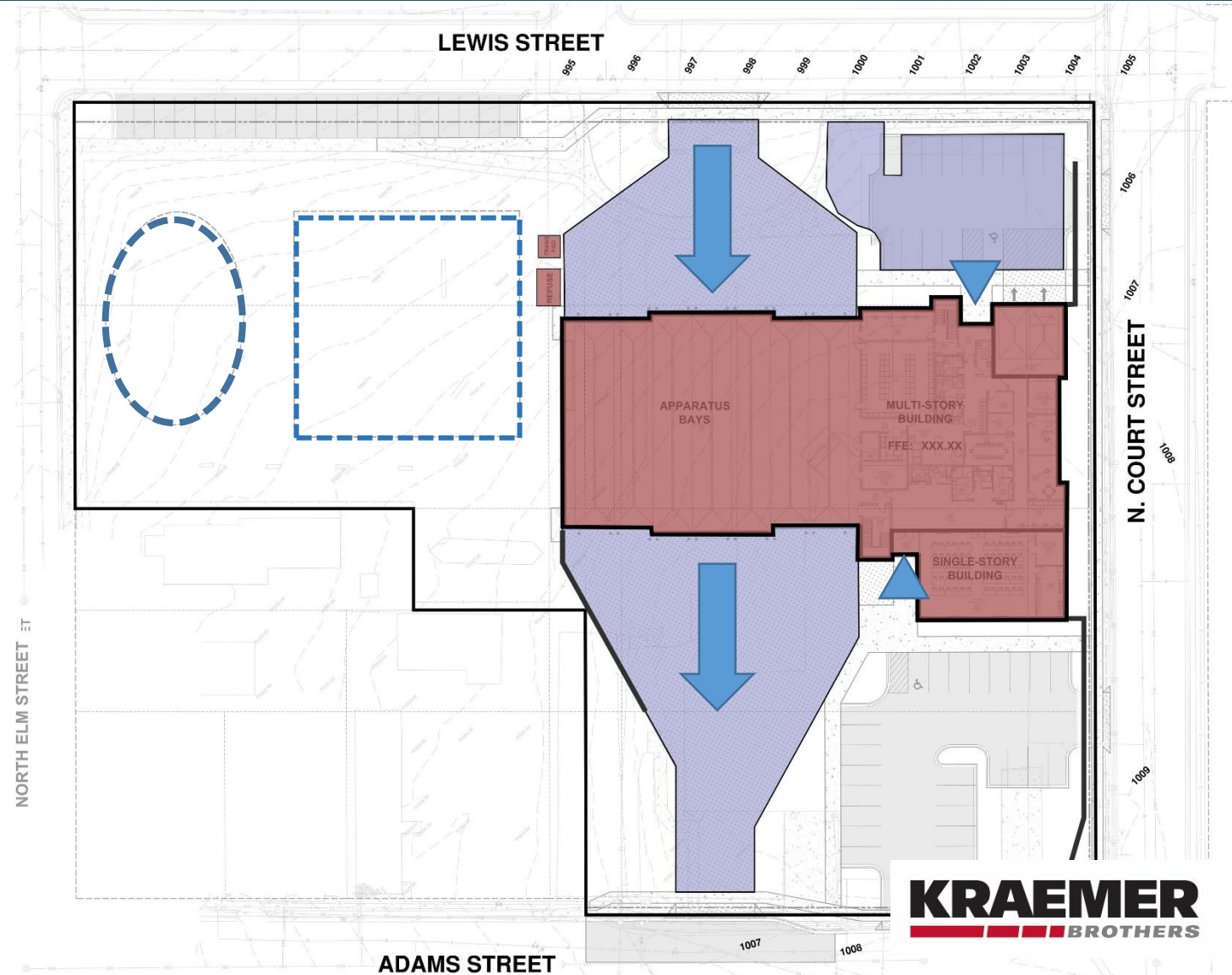
- Written Report:
 - Architecture, Mechanical, Electrical, Plumbing, and Structure
- SD Level Drawings:
 - Architecture
 - Floor plan
 - Dimension plan
 - Roof plan
 - Exterior elevations
 - Initial building sections
 - Floor finish plan
 - Mechanical zoning
 - Structure framing
 - Site plan
- SD Level Estimate

SCHEMATIC DESIGN:

SITE

SITE:

- Response to south
- Return from north
- Public
 - Parking
 - Entry
- Responder
 - Parking
 - Entry
- On-site water retention
- Future area for training



SCHEMATIC DESIGN:

OVERALL

OVERALL:

- 32,525 SF facility
- Two-stories
 - Alternate for basement

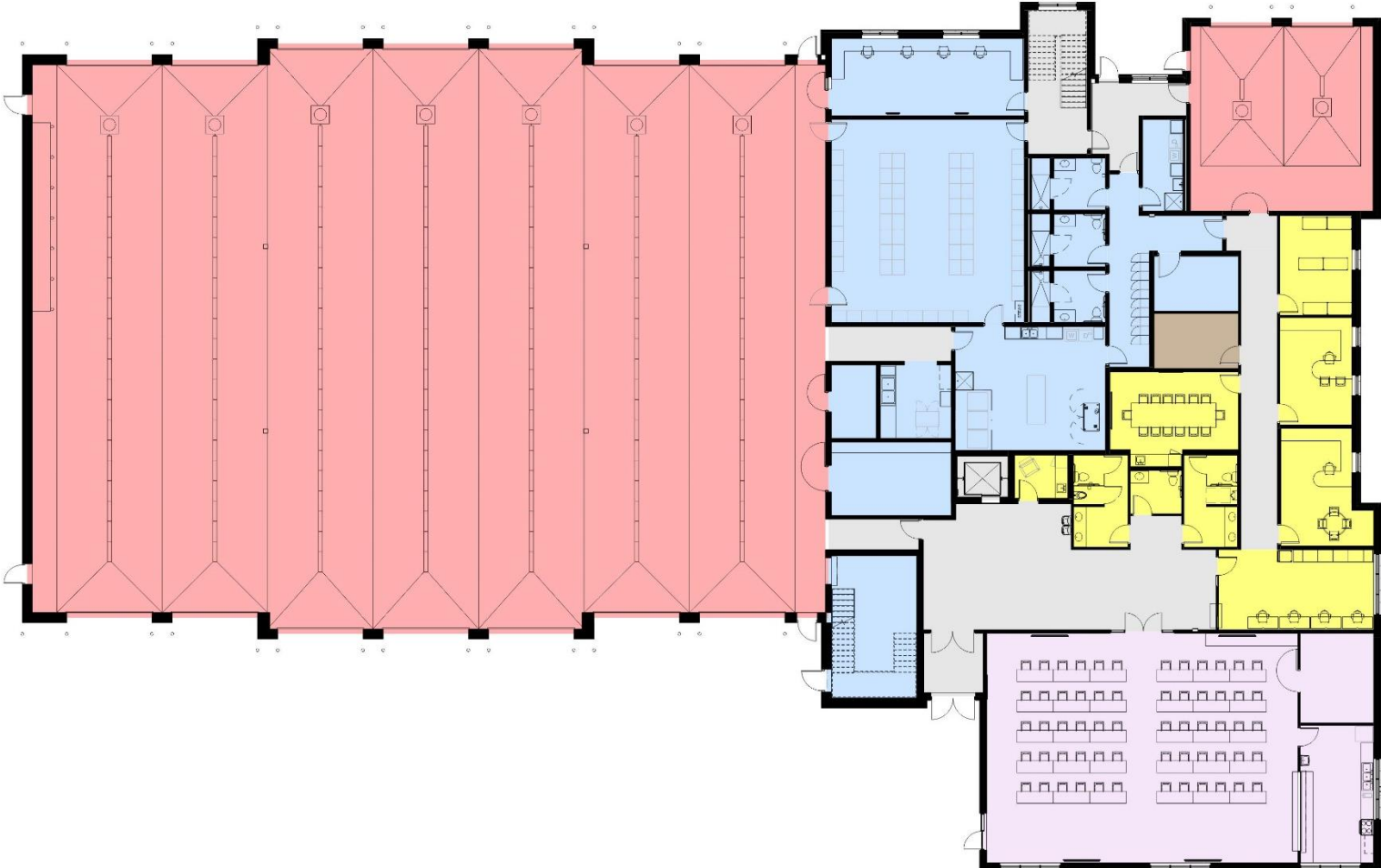


SCHEMATIC DESIGN:

OVERALL

FIRST FLOOR:

- ADMINISTRATION
- APPARATUS BAYS
- APPARATUS SUPPORT
- CIRCULATION
- MECHANICAL
- STAFF SUPPORT
- TRAINING

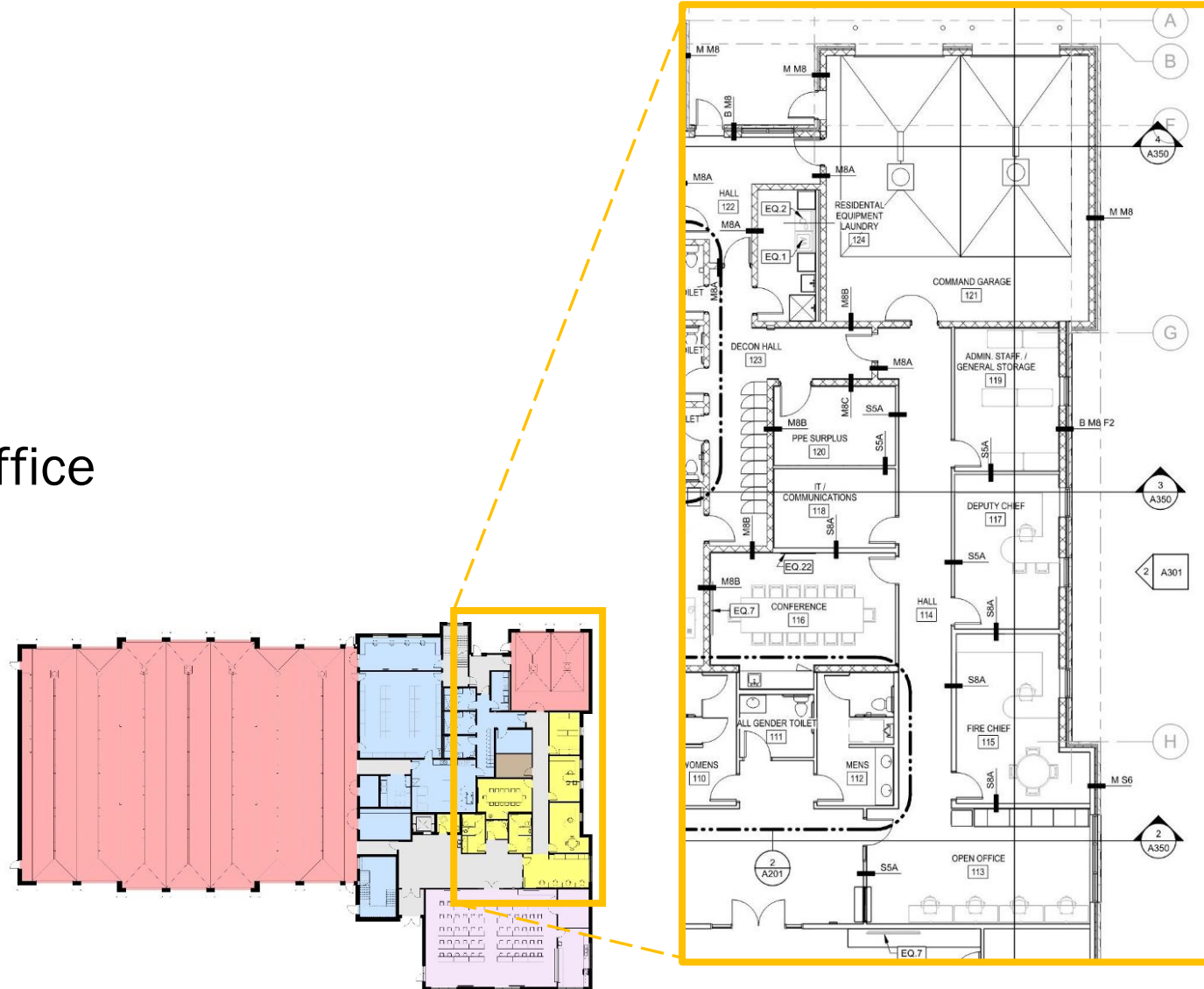


SCHEMATIC DESIGN:

OVERALL

FIRST FLOOR:

- Administration:
 - Open office
 - Work room
 - Two private offices
 - Storage / Future office
 - Conference room
 - IT
 - PPE storage
 - Command garage

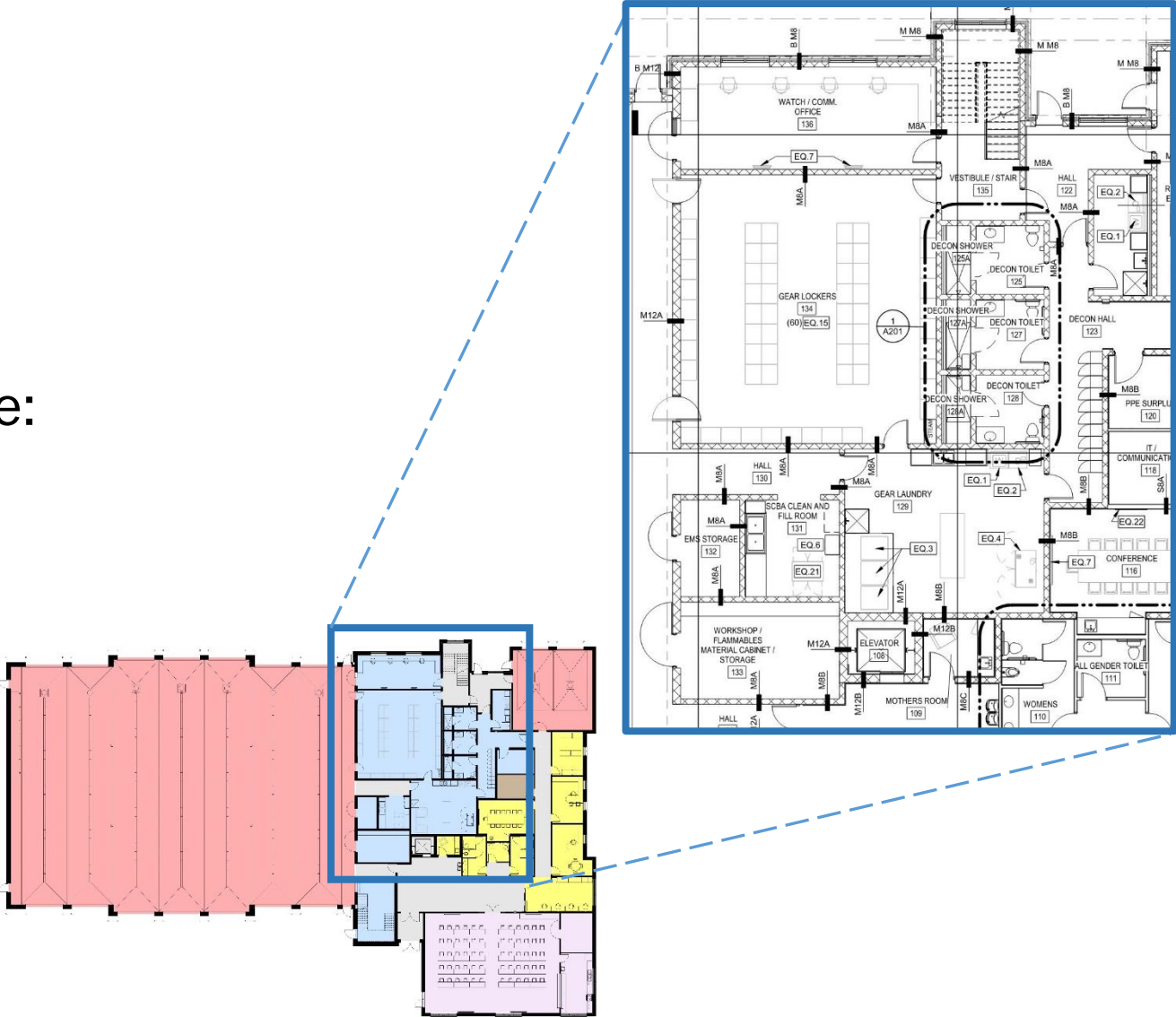


SCHEMATIC DESIGN:

OVERALL

FIRST FLOOR:

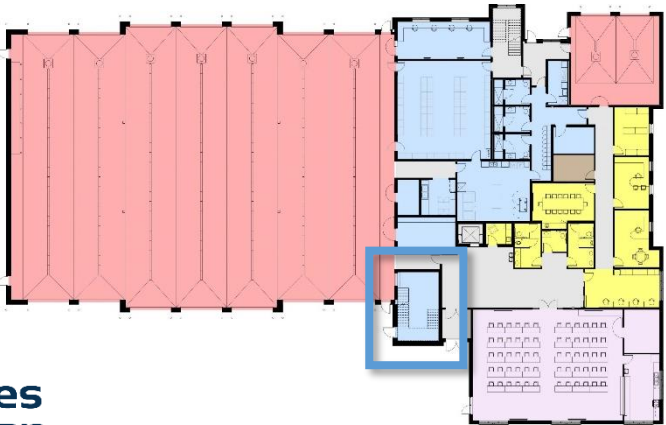
- Apparatus Support :
 - Watch Room
 - PPE Lockers
 - Decontamination Suite:
 - SCBA Clean/Fill
 - Gear Laundry
 - Toilet / showers
 - Residential Laundry
- Workshop



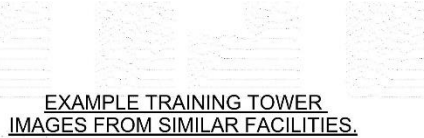
SCHEMATIC DESIGN: OVERALL

FIRST FLOOR:

- Training:
 - Low frequency, high incident situations
 - Repelling
 - Chargeable standpipe
 - Confined space training



TRAINING TOWER ISO VIEW



EXAMPLE TRAINING TOWER IMAGES FROM SIMILAR FACILITIES.



EXTERIOR RAPPILING CAPABILITIES



UPPER PLATFORM: HOSE DRYING, STANDPIPE, ROOF ACCESS



BUILDING MASSING / EXTERIOR TRAINING CAPABILITIES



OVERALL VIEW OF TRAINING TOWER STAIR FROM ABOVE



UPPER PLATFORM: HOSE DRYING, INTERIOR RAPPILING, STANDPIPE, OPERABLE TRAINING WINDOW



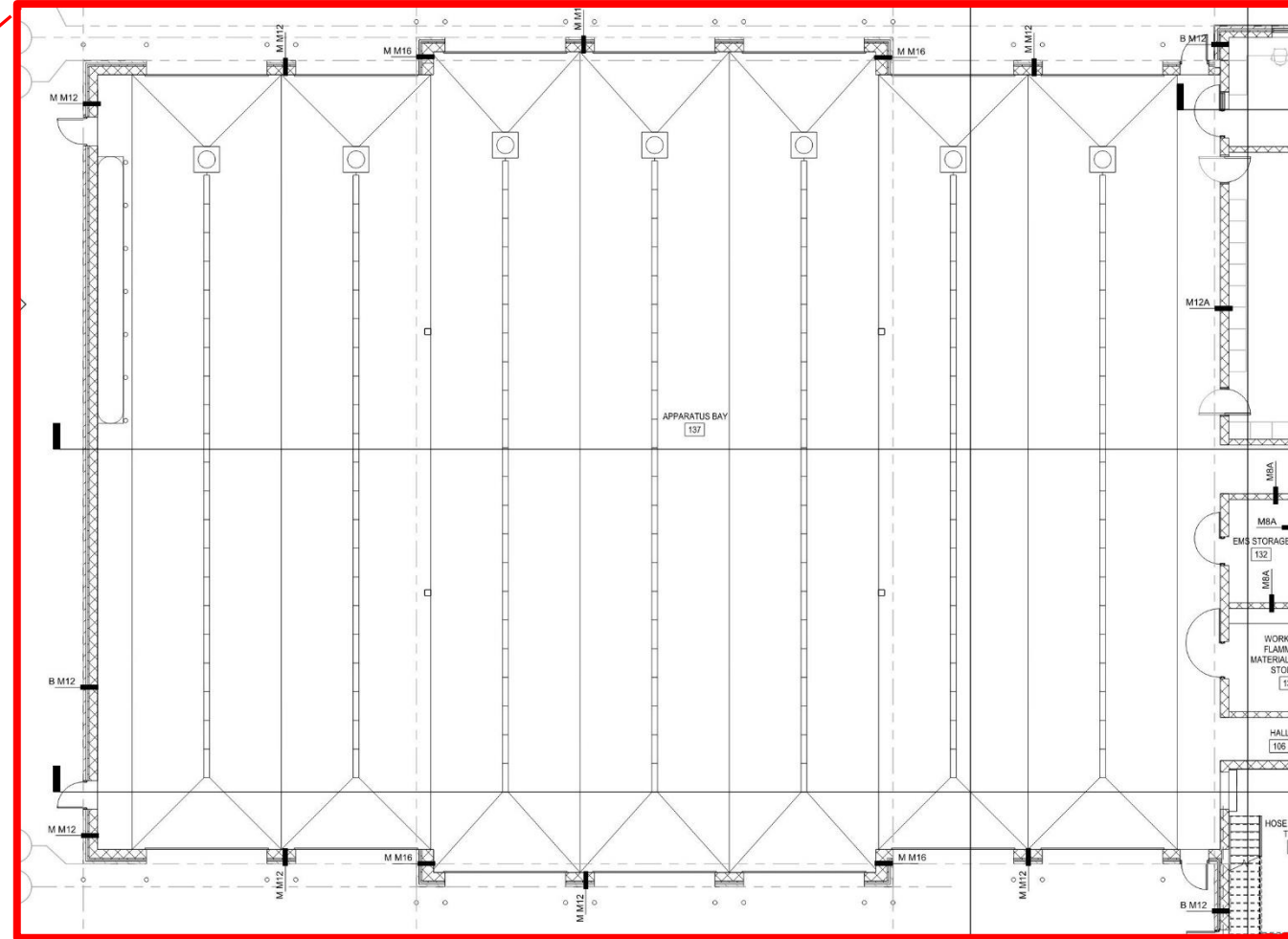
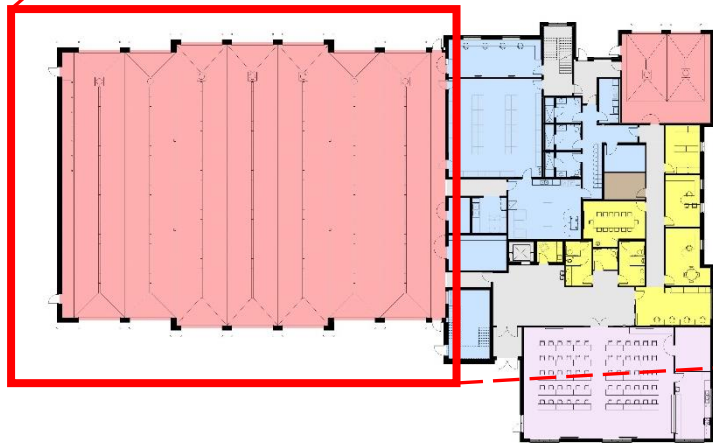
FIRST FLOOR OF TRAINING TOWER, REMOVABLE GRATE FOR CONFINED SPACE TRAINING



SCHEMATIC DESIGN: OVERALL

FIRST FLOOR:

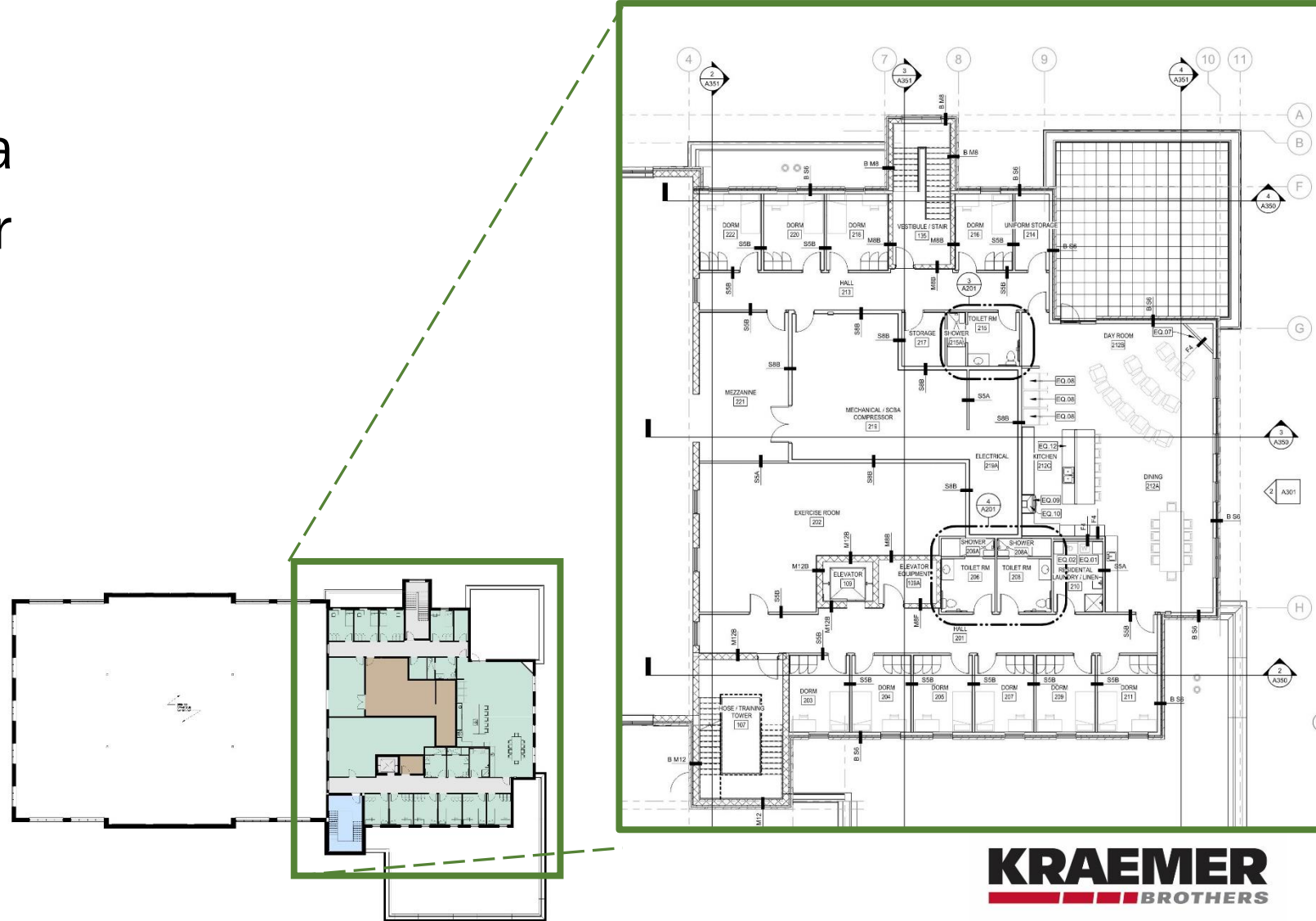
- Apparatus Bays :
 - Seven drive-through apparatus bays



SCHEMATIC DESIGN: OVERALL

SECOND FLOOR:

- Base bid as a shelled area
- Alternate to finish 2nd floor includes:
 - 10 individual dorms
 - Toilet/showers
 - Kitchen
 - Dining
 - Day Room
 - Exercise
 - Mechanical

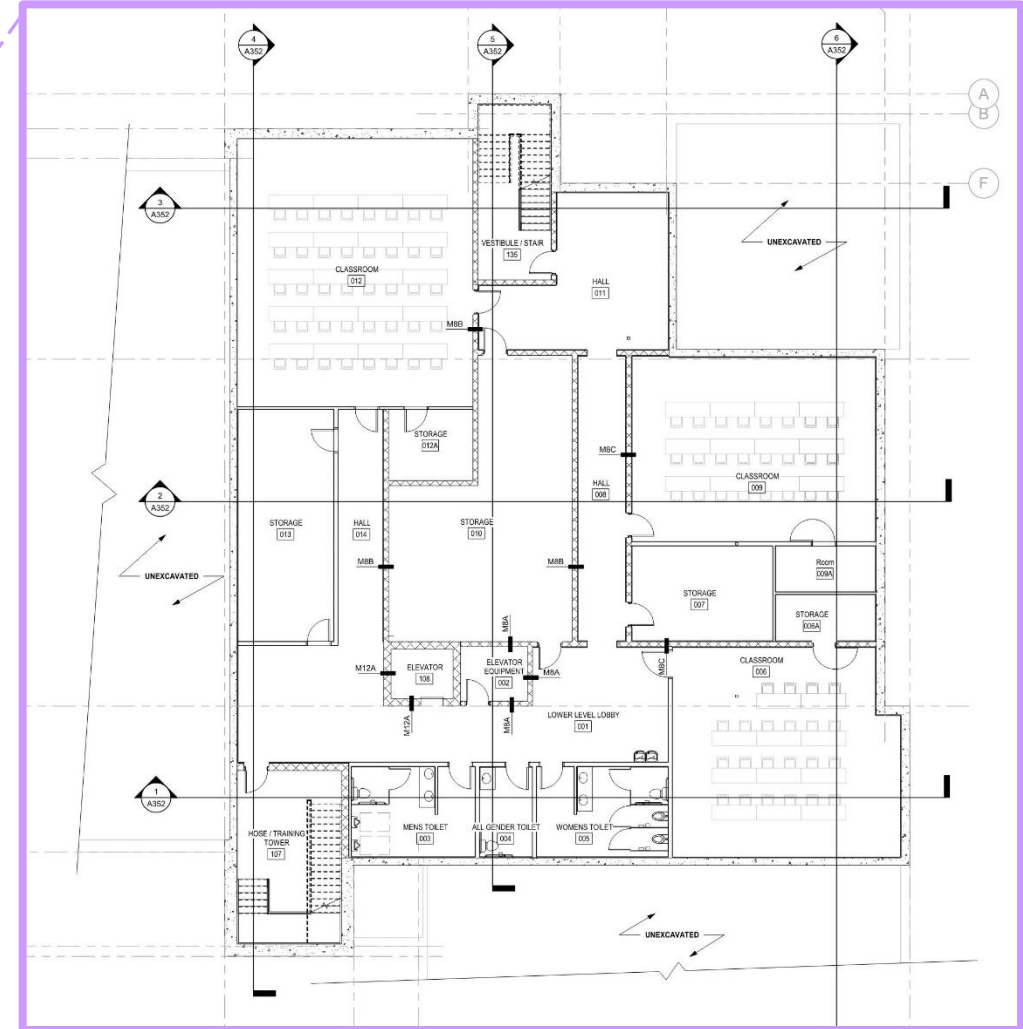
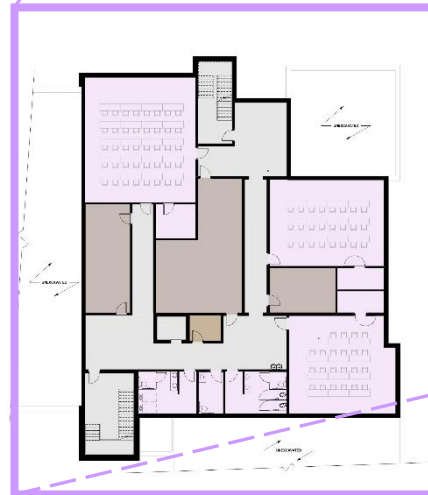


SCHEMATIC DESIGN:

OVERALL

BASEMENT ALTERNATES:

- Two alternate bids:
 - Shelled space
 - Shelled and finished spaces
- Finished alternate includes:
 - Two small classrooms
 - One large classroom
 - Storage
 - Lobby / breakout spaces
 - Toilets



CONSTRUCTION ESTIMATE:

HOW PROJECT COSTS EVOLVE:



Budget Type	Estimating Methodology	% of Total Drawings	Cost Reliability	Recommended Contingency
Concept Budget	Based on historical square foot costs	0%	1	10%
Schematic Budget	Historical component systems costs	5%	2	10%
Target Budget	Internally generated unit costs	15%	3	5%
Guaranteed Max. Price (GMP)	Detailed estimating, some subcontractor bids & input	35%	4	3-5%
Final Cost	Detailed estimating, subcontractor hard bids	100%	5	3%

CONSTRUCTION ESTIMATE:

BASE ESTIMATE:

BASE ESTIMATE - ONLY	
SITE DEVELOPMENT	\$1,525,000
GENERAL CONSTRUCTION	\$7,775,000
PLUMBING	\$605,000
FIRE PROTECTION	\$120,000
HVAC	\$1,100,000
ELECTRICAL	\$1,100,000
MISC. & EQUIPMENT	\$495,000
CONSTRUCTION FEE	\$355,000
CONSTRUCTION SUBTOTAL	\$13,120,000
CONTINGENCY 7.5%	\$1,000,000
TOTAL SD CONSTRUCTION ESTIMATE	\$14,120,000
FF&E	\$350,000
SYSTEMS & NETWORKING	\$150,000
DESIGN & ENGINEERING	\$847,000
TOTAL SD PROJECT ESTIMATE	\$15,467,000

Notes:

1. Base estimate only.
2. Does not include basement.
3. Second floor is shelled space only, no finished spaces.
4. Changes to project scope after bid opening may cause additional costs, resulting in change orders.



CONSTRUCTION ESTIMATE:

ALTERNATE ESTIMATES:

ALTERNATE ESTIMATED COSTS

ALTERNATE	ADD OR DEDUCT	CONSTRUCTION COST
UNFINISHED BASEMENT	ADD	\$1,470,000
FINISHED BASEMENT	ADD	\$500,000
FINISHED 2 ND FLOOR	ADD	\$875,000
ELIMINATE TRAINING / COMMUNITY ROOM	DEDUCT	\$335,000
SOLID INSULATED OVERHEAD DOORS VERSES GLASS DOORS	DEDUCT	TBD
DECORATIVE FLAKE EPOXY FLOOR – APPARATUS BAY	ADD	\$105,000

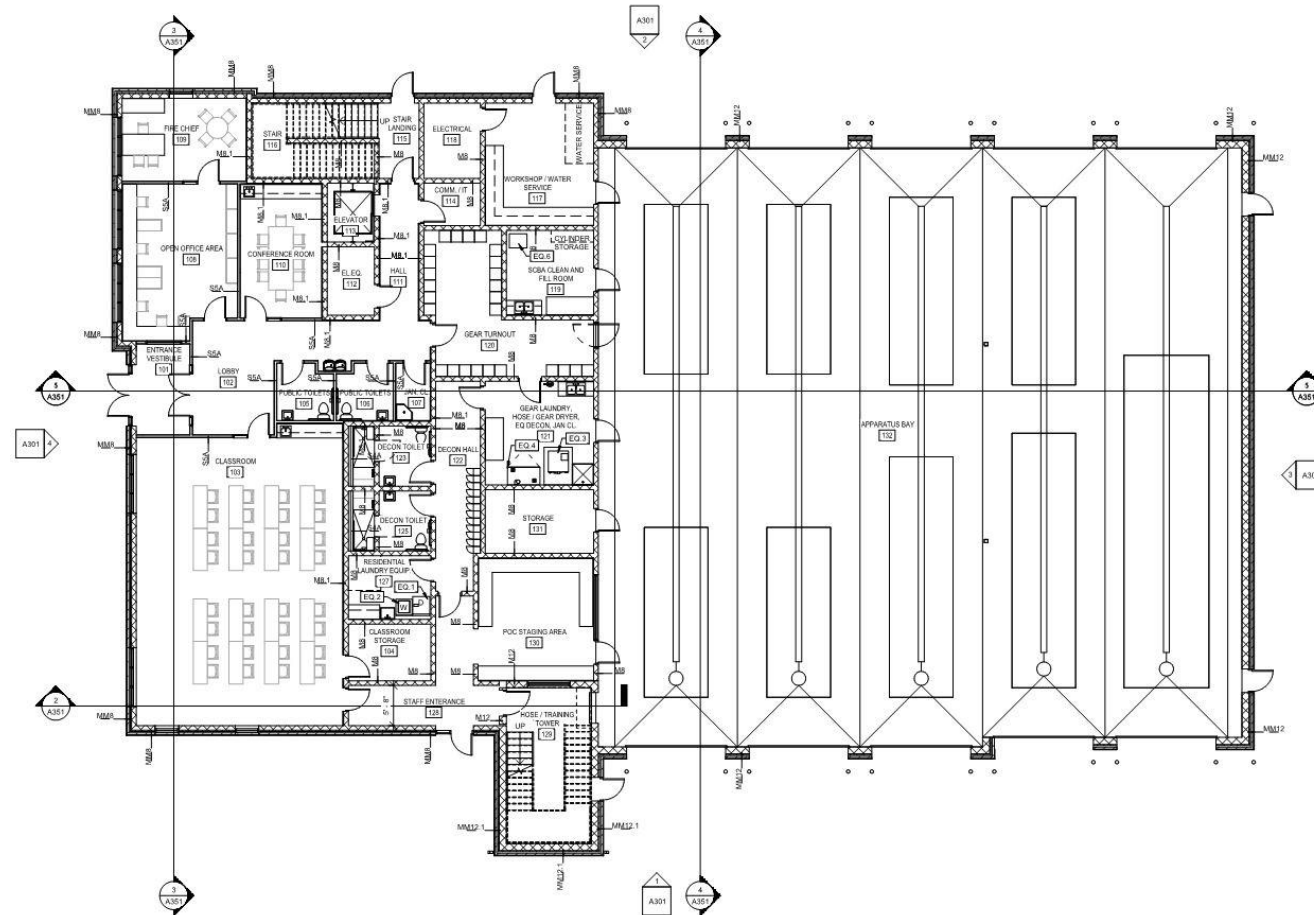
Notes:

1. Costs shown are estimates for construction costs only. Soft costs, including A/E fees and FFE will need to be added for total project estimate.
2. Alternates are intended to be designed and bid. Each bid will be reviewed at bid opening for inclusion in final project.
3. Alternate bid prices are held for 30-days after bid opening. If alternates are accepted after the 30-day period, additional costs are likely to incur.



CONSTRUCTION ESTIMATE:

CONCEPT VS FINAL DESIGN:



Suamico Fire Station

Programmed S.F. = 36,846 S.F.

Completed S.F. = 22,050 S.F.

Greenville Fire Station

Programmed S.F. = 30,000 S.F.

Completed S.F. = 24,680 S.F.

Wausau Fire Station

Programmed S.F. = 16,884 S.F.

Completed S.F. = 15,233 S.F.

Monroe (Ohio) Fire Station

Programmed S.F. = 24,388 S.F.

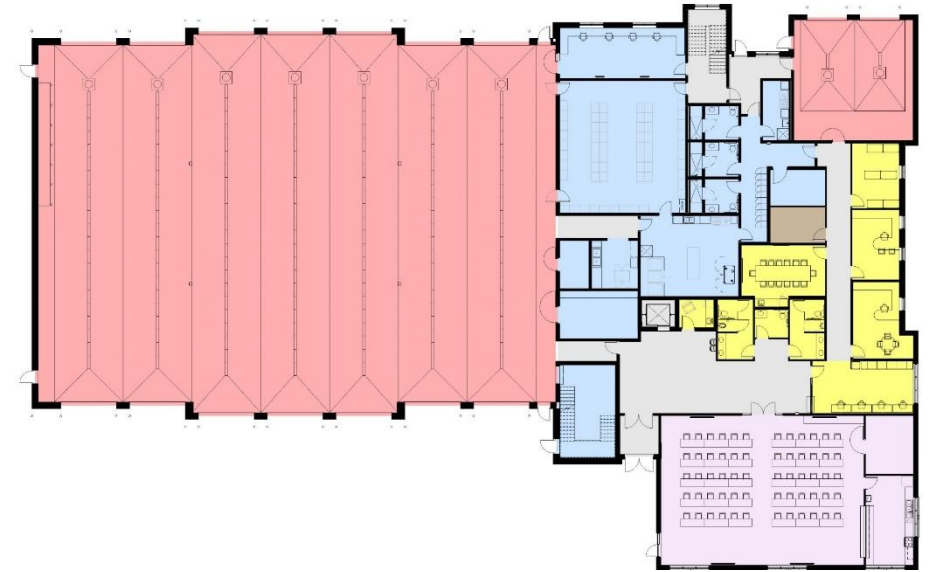
Completed S.F. = 20,100 S.F.

CONSTRUCTION ESTIMATE:

SCHEMATIC DESIGN VS FINAL DESIGN:

POST SD ESTIMATE CONSIDERATIONS:

- Confirm site plan:
 - Orientation on-site
 - Layout
- Confirm room sizes
- Confirm quantities of space types
 - Example: number of offices
- Confirm alternates



BUILDING PROGRAM + BUILDING BUDGET = MEET YOUR NEEDS

WHAT'S NEXT?:

POTENTIAL SCHEDULE

We Are Here:



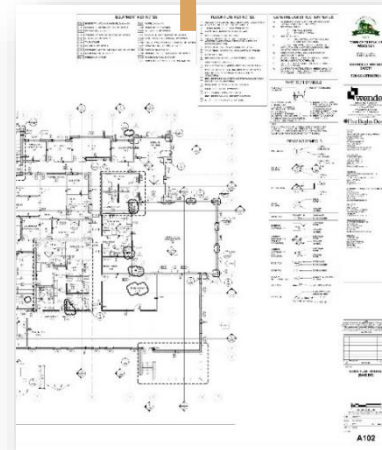
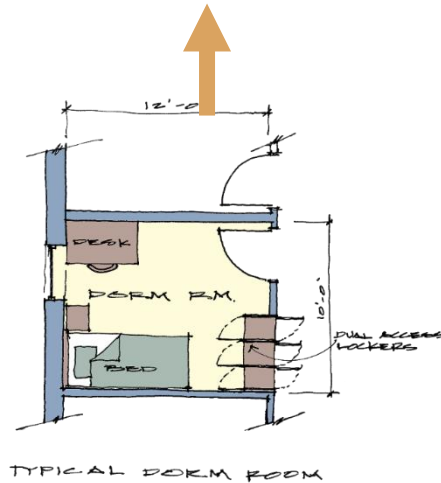
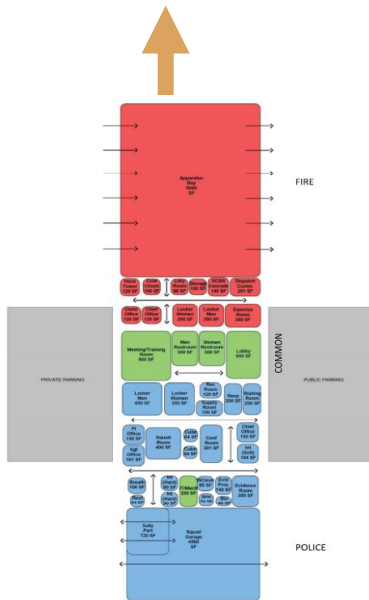
Concepts
(Estimate)

Schematic
Designs
(Estimate)

Design
Development
(Estimate)

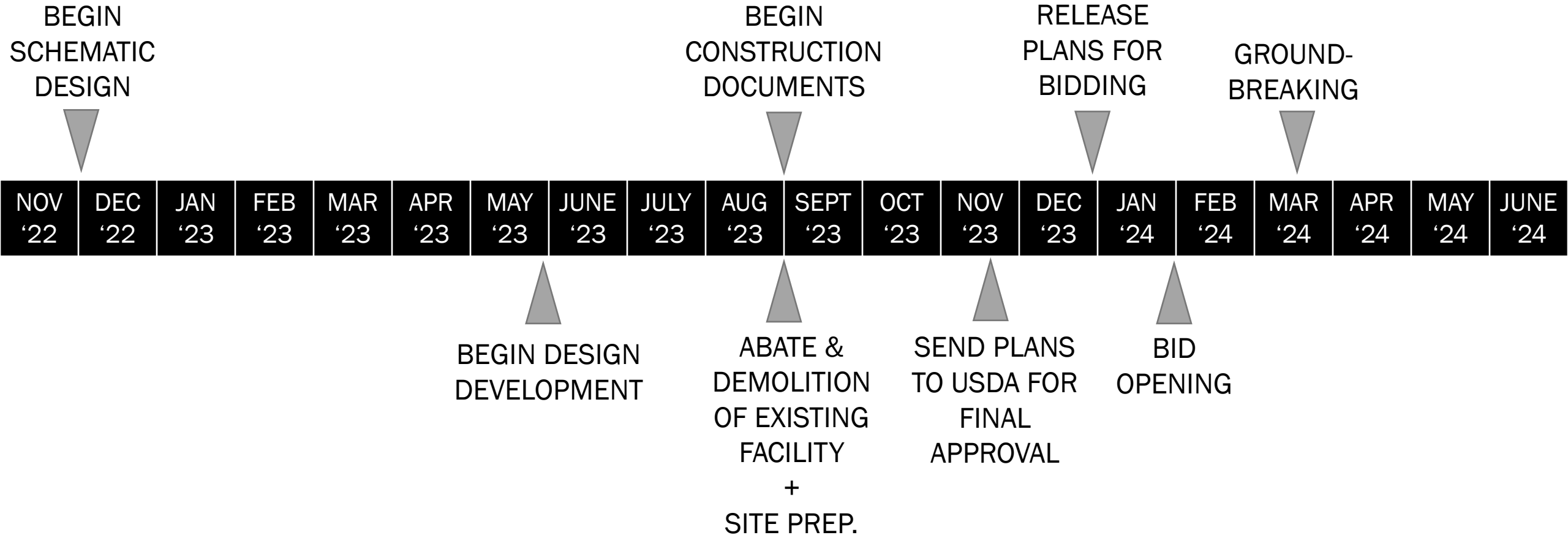
Construction
Documents
(Estimate)

Bidding
Construction
Occupancy



WHAT'S NEXT?:

POTENTIAL SCHEDULE



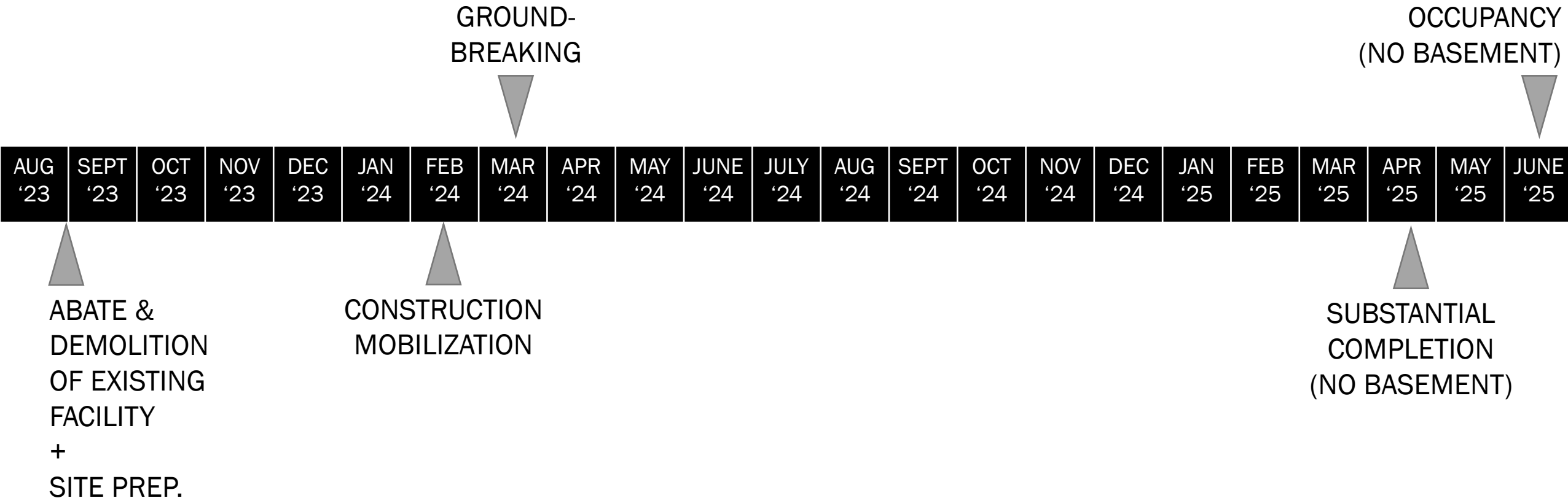
Note:

Schedule is subject to change. Schedule assumes timely approval and permission to advance to next stage of production through out project. Delays in approval will cause delay to overall schedule.



WHAT'S NEXT?:

POTENTIAL CONSTRUCTION SCHEDULE



Note:

1. Schedule is subject to change. Schedule assumes timely approval and permission to advance to next stage of production through out project. Delays in approval will cause delay to overall schedule.
2. Basement alternate will add an additional 2 months to the construction schedule.



QUESTIONS?

Thank you.





home of the award winning



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