



VILLAGE OF SCHAUMBURG

— PROGRESS THROUGH THOUGHTFUL PLANNING —

Village Hall

Needs Assessment Study

Study Methodology

Overall Planning Method



1. Determine What You Have



2. Estimate What You Need



3. Investigate Options to Get From What You Have to What You Need

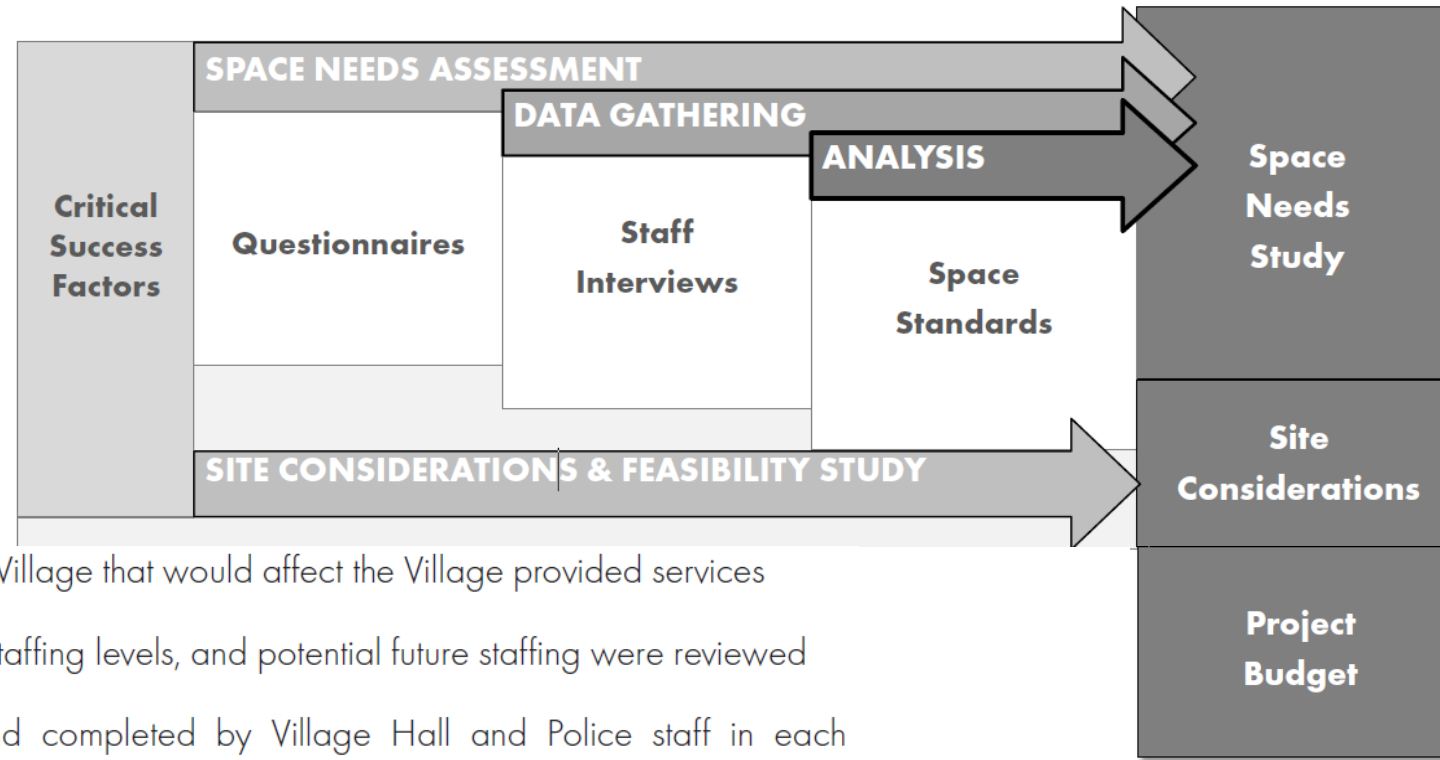


4. Select Option That Best Meets Your Goals



VILLAGE OF SCHAUMBURG
PROGRESS THROUGH THOUGHTFUL PLANNING

Needs Assessment Study



- Past, current, and future trends of the Village that would affect the Village provided services
- Documentation of past and present staffing levels, and potential future staffing were reviewed
- Questionnaires were distributed and completed by Village Hall and Police staff in each department and/or working division
- Interviews were conducted on-site with staff in each department/division. Existing conditions and current workspaces were reviewed in person with staff to listen to their concerns and better understand the demands of current Village Hall and Police operations



Needs Assessment Study



WHEELING



GLENVIEW



PALATINE

COMPARISON TO SIMILAR AREA COMMUNITIES:

The municipalities listed below were queried as to their staffing levels and village hall size. On average, their village halls have **801 SF per person**. Schaumburg's village hall currently provides **306 SF** per person. The proposed building size and future staffing level would provide **474 SF** per person:

Arlington Heights, Bolingbrook, Des Plaines, Downers Grove, Evanston, Glenview, Hoffman Estates, Lombard, Mount Prospect, Orland Park, Palatine, Skokie, and Tinley Park.



VILLAGE OF SCHAUMBURG
PROGRESS THROUGH THOUGHTFUL PLANNING

Facility Condition Need Index (FCNI)

FCNI =
$$\frac{(A) \text{ 10 Year Costs Recommended by Assessment \& Known CIP} + (B) \text{ 10 Years EPW Labor Cost (Above and Beyond Normal Maintenance)} + (C) \text{ 10 Year Costs to Construct Additional Space to Meet Space Needs}}{(D) \text{ Current Replacement Value}}$$

Building	A+B+C	D	FCNI
Atcher Municipal Center	\$30,304,112	\$22,895,400	1.32
Public Safety Building	\$42,924,616	\$45,051,600	0.95
Fire Station 54	\$8,353,498	\$11,706,975	0.70
Fire Station 52	\$1,551,193	\$4,505,025	0.34
Vehicle Maintenance Facility	\$2,472,551	\$6,171,000	0.33
Engineering & Public Works	\$3,883,425	\$15,759,700	0.24
Fire Station 51	\$710,475	\$5,770,800	0.12
Fire Station 53	\$620,392	\$6,361,425	0.10
Fire Station 55	\$198,109	\$4,078,200	0.05

- Excellent Condition (typically new construction)
- Good Condition (maintained within lifecycle)
- Fair Condition (normal renovations required)
- Below Average Condition (major renovation required)
- Poor Condition (total renovation required)
- Replacement Indicated (unless historic)



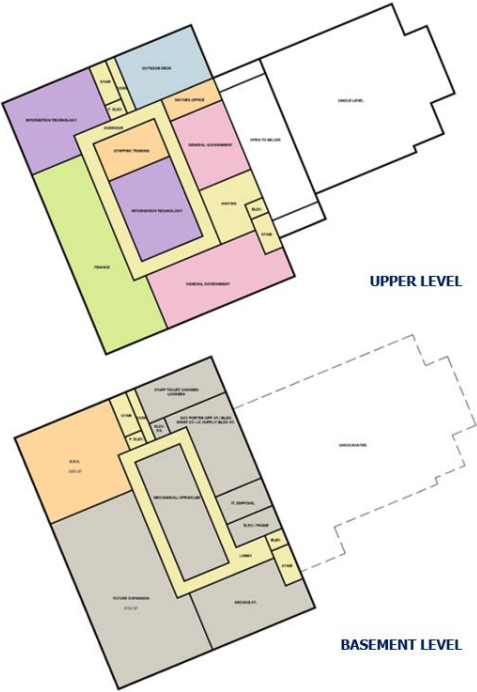
Current Village Hall Building & Site



VILLAGE OF SCHAUMBURG
PROGRESS THROUGH THOUGHTFUL PLANNING

Schematic Design

New Construction
Village Hall Existing Site (Option 1)



Estimates

OPTIONS		MID-RANGE CONSTRUCTION COST RANGE WITH ESCALATION & CONTINGENCY	MID-RANGE SOFT COSTS	TOTAL MID-RANGE PROJECT COST RANGE EXCLUDING LAND ACQUISITION
1	VILLAGE HALL: NEW FACILITY AT EXISTING LOCATION <i>Includes: Added 311 Call Center, EOC & Future Basement</i>	\$57.0M (\$800 / SF)	\$11.4M	\$68.4M



Design Development

Project Delivery Methods Reviewed

- Design Build
- Design, Bid, Build
- **Construction Manager at Risk**

Issued RFP - Reviewed Proposals, Interviewed Top Candidates, Checked References

Requested Fees based on Fixed Pricing Estimates and Timelines (in months) - Combination of Preconstruction Services and Construction Management Fee as a Percentage of a Guaranteed Maximum Price (GMP)

Eliminate Shared Savings Clauses – The CM's job is to find the most cost-effective option!



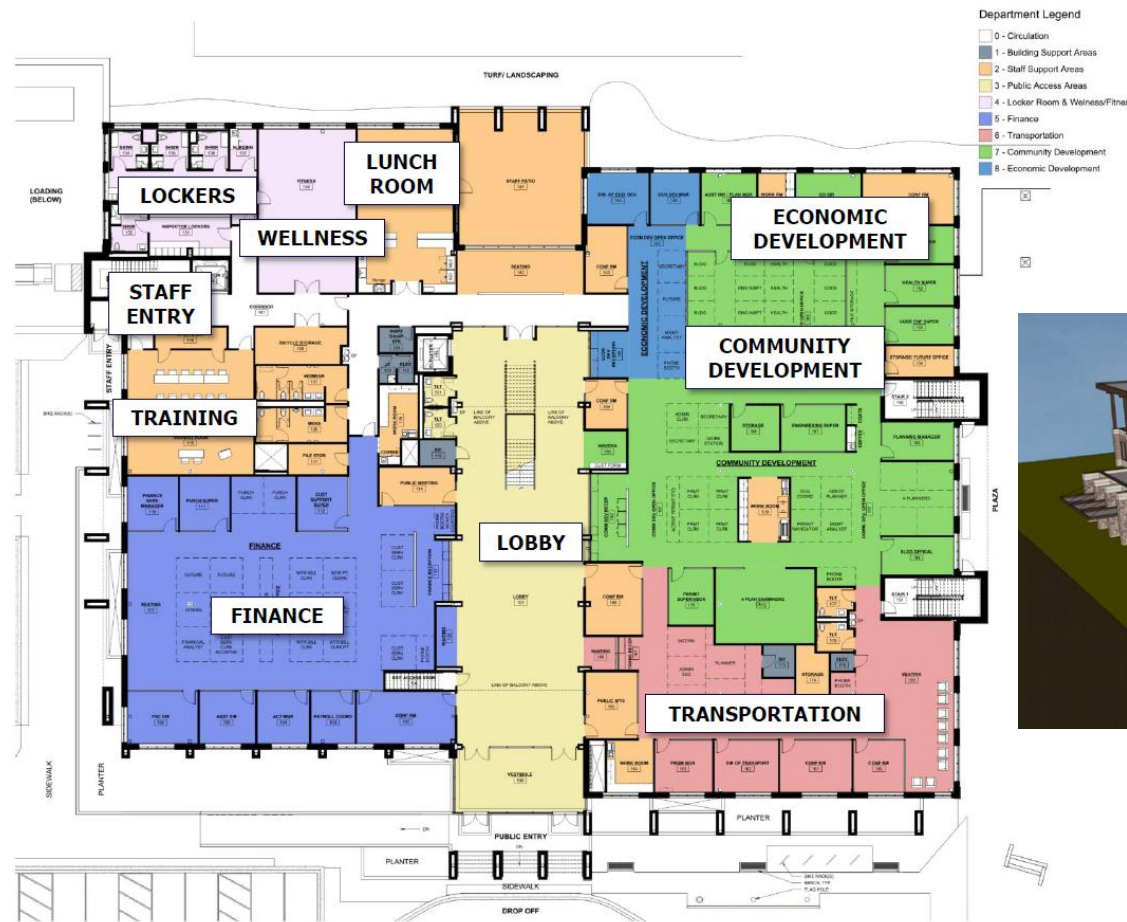
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PROGRESS THROUGH THOUGHTFUL PLANNING

Design Development

Village Hall

Ground Floor Plan

- Central Lobby – 4 Service Points
- Stairs / Elevator Leading to Board & Community Rooms
- Conference Rooms Off Lobby for Customer Service & Meetings
- Separate Staff Entrance & Staff Hub
- Finance, Transportation, Community Development, Economic Development
- Consistent Office / Workstation Sizes
- Daylight to Public & Work Areas



VILLAGE OF SCHAUMBURG
PROGRESS THROUGH THOUGHTFUL PLANNING

Construction Document Phase

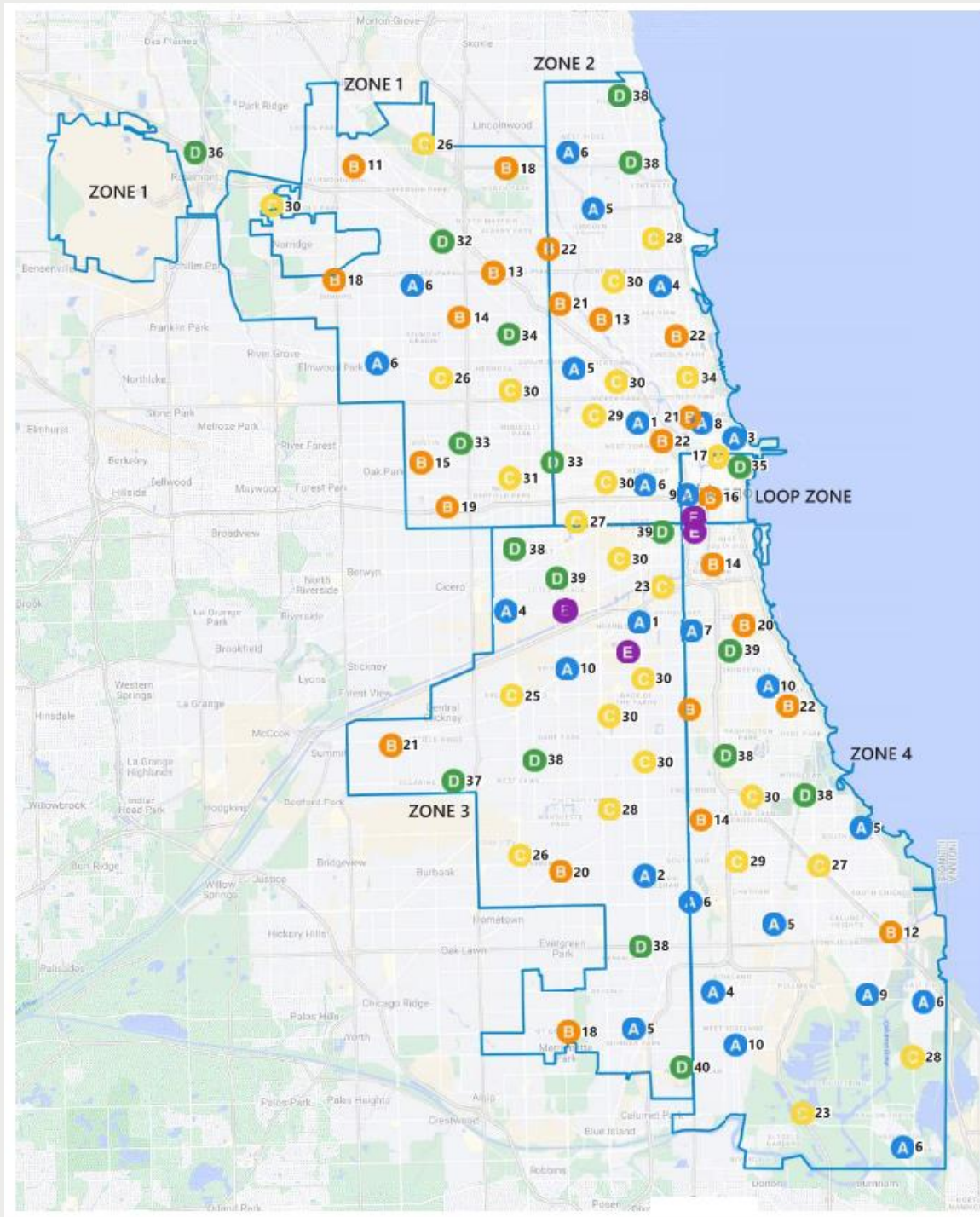
- ✓ Organize a small team of staff that all design questions and meetings will run through.
- ✓ Keep this team small to prevent overwhelming the design and construction team
- ✓ Know who has final decision. Village Manager, Mayor, Trustees, Directors, etc?
- ✓ Make decisions quickly and stick to them. Avoid changes during this phase as it will cause extra fees to add up.
- ✓ Hold architect to design schedule. If the design schedule slides, the construction schedule pushes too.
- ✓ Decide when to set the guaranteed maximum price. If it is set early, costs will be higher and include more contingencies. If it is later, it tends to be lower/more accurate and require less contingencies. It is ok to approve a GMP after all bids are received.



Planning for future of Chicago's 101 Fire Stations: From Vision to Reality



8:30 A.M. – 9:30 A.M. | June 5, 2025





Small, Single Bay
1880s - 1930s



Small/Moderate Size
Single or Double Bay
1920s - 1950s



Large, Multi-Bay
Commonly Split Level
1960s - 1980s



Multi-Bay with More Modern
Amenities
2000s



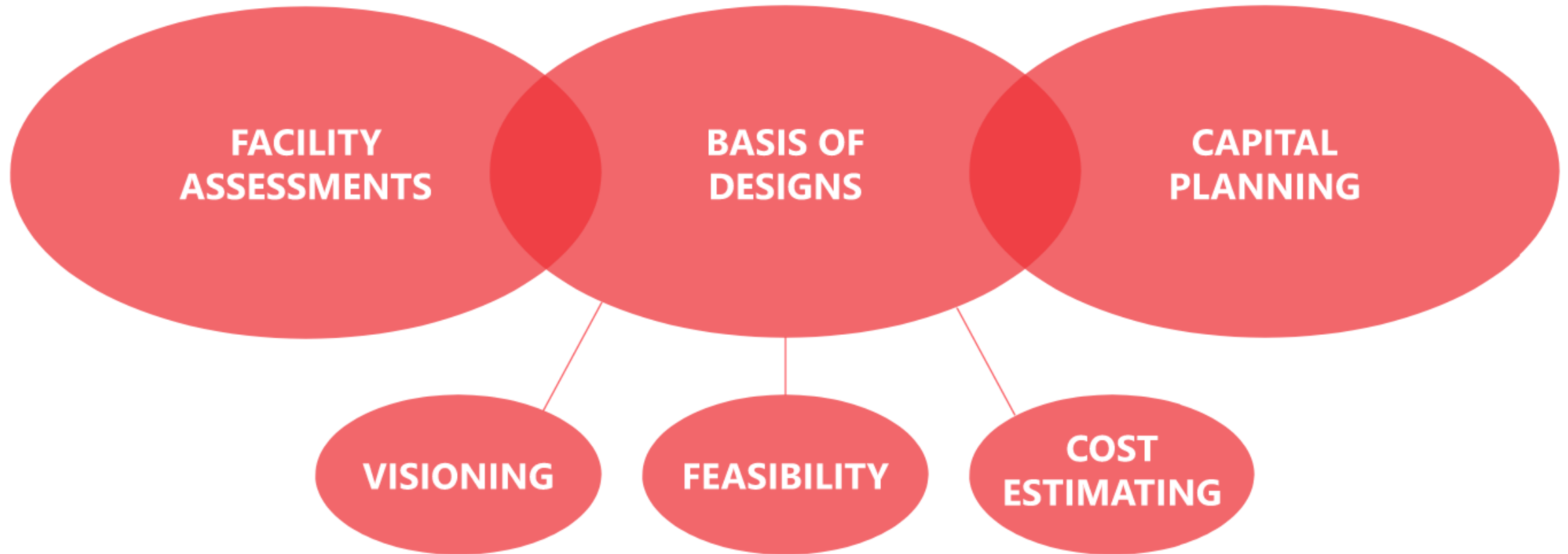
Rethinking the Approach to Capital Improvement Planning

- Revolving Door of Building System Replacements
 - Consistency
 - Permanent Solutions
 - Forward thinking design
 - Beyond equipment efficiency – Envelope/Enclosure
- Stations designed for another time
 - Vehicles
 - Full-Time Staffing
 - Operations
 - Safety/Health/Wellness
 - Equipment Storage
- Investing in the CFD's Legacy and Honored Houses

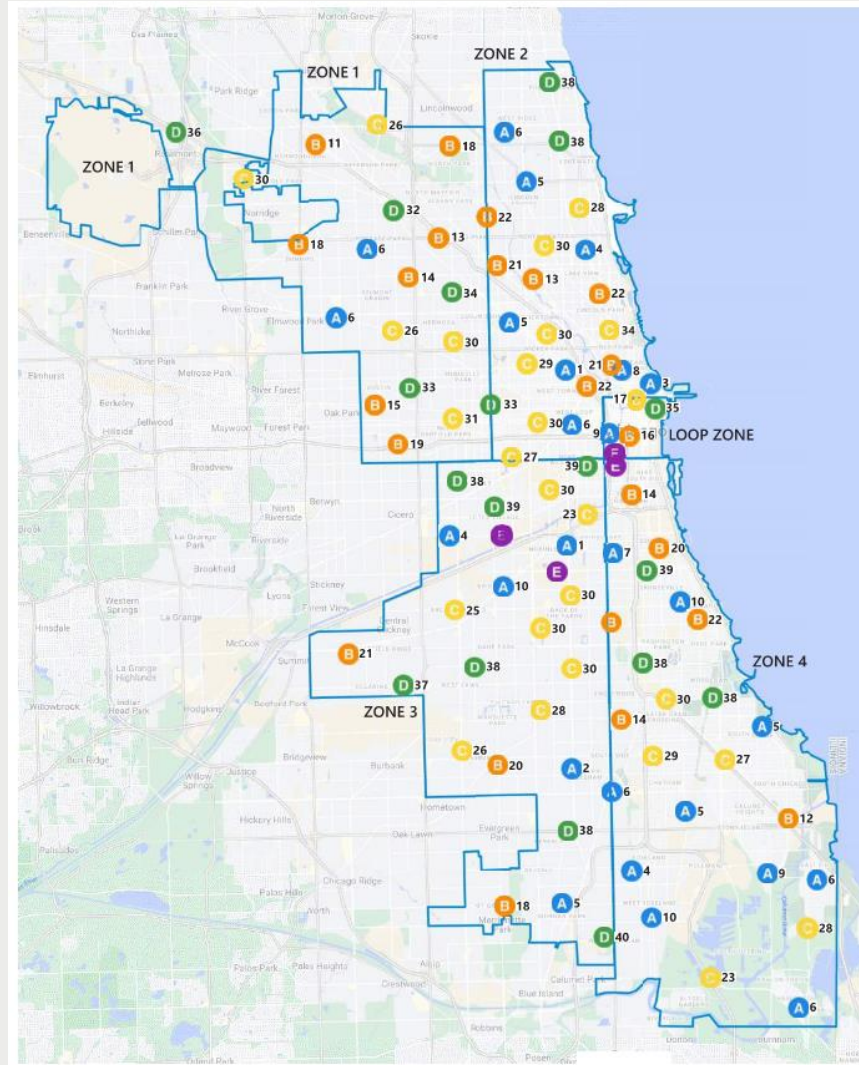
Where do we start?



Understanding the Scope



Understanding the Building Inventory



GROUP A

YEARS: 1880-1929

TOTALS:

CATEGORIES: 10	
SQUARE FOOTAGE: 181,829	SF
TOTAL BUILDINGS: 26	SF / BUILDING: 6,993

GROUP B

YEARS: 1930-1966

TOTALS:

CATEGORIES: 12	
SQUARE FOOTAGE: 253,798	SF
TOTAL BUILDINGS: 24	SF / BUILDING: 10,575

GROUP C

YEARS: 1964-1980

TOTALS:

CATEGORIES: 9	
SQUARE FOOTAGE: 295,637	SF
TOTAL BUILDINGS: 26	SF / BUILDING: 11,371

GROUP D

YEARS: 1981-PRESENT

TOTALS:

CATEGORIES: 9	
SQUARE FOOTAGE: 355,172	SF
TOTAL BUILDINGS: 18	SF / BUILDING: 19,732

TOTAL SF OF GROUPS: 1,086,436 SF

GROUP E - NO CATEGORY

TOTALS:

SQUARE FOOTAGE: 206,225	SF
TOTAL BUILDINGS: 7	SF / BUILDING: 29,461

OVERALL TOTAL BUILDINGS: 101
OVERALL TOTAL SF: 1,292,661 SF

Start with a Strategy



**Kickoff &
Information
Gathering**



**Visioning &
Stakeholder
Engagement**



**Facility
Condition
Assessment**



Create
Design
Guidelines



Basis
Of
Designs



Prioritizing
&
Capital Planning



Compile
Final
Deliverables

2 Months

2 Months

8 Months

2 Months 8 Months

3 Months 1 Month

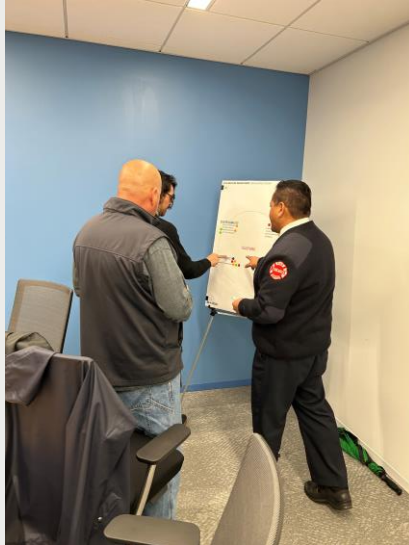
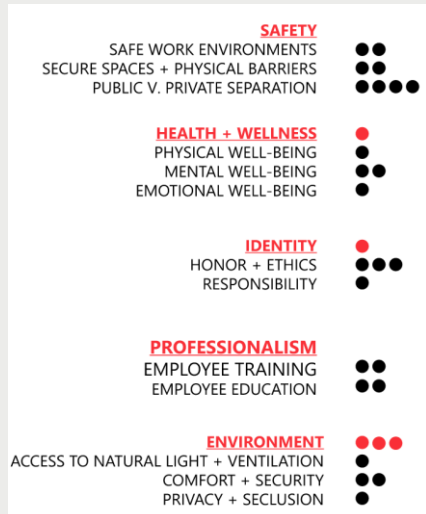
Building the Dream Team

Bringing the Right Team Together

- Clear Main Owner Contact
- Department Representation
 - Professional Insights
 - Operational Insights
 - Logistics
- User Group Input
 - Identifying Interviewees
- Public & Elected Liaisons



Finding Project Vision



All CFD Fire Stations are to:

- 1.) Provide clean, safe, secure, and inclusive work environments that support:
 - Physical Health
 - Mental Health
 - Social Health
 - Emotional Health
- 2.) Implement strategic long term solutions in lieu of short term fixes to provide:
 - Modern Infrastructure
 - Forward-Thinking Systems
 - Sustainable Practices
- 3.) Utilize Industry proven systems and materials that are:
 - Efficient
 - Durable
 - Low-Maintenance
- 4.) Implement consistent space planning approaches for:
 - Day-To-Day Operations
 - Storage
 - Emergency Routes
 - Decontamination
 - Spatial Separation
- 5.) Provide fiscally responsible facilities that support the CFD's dedication to:
 - exemplary emergency services
 - community engagement
 - public education
- 6.) Comply with industry standards and code requirements through:
 - National Fire Protection Association (NFPA)
 - Illinois Energy Code
 - Chicago Building Code
 - ADA (Americans with Disabilities Act)
 - OSHA (Occupational Safety and Health Administration)

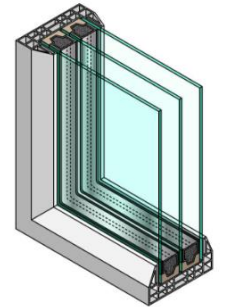
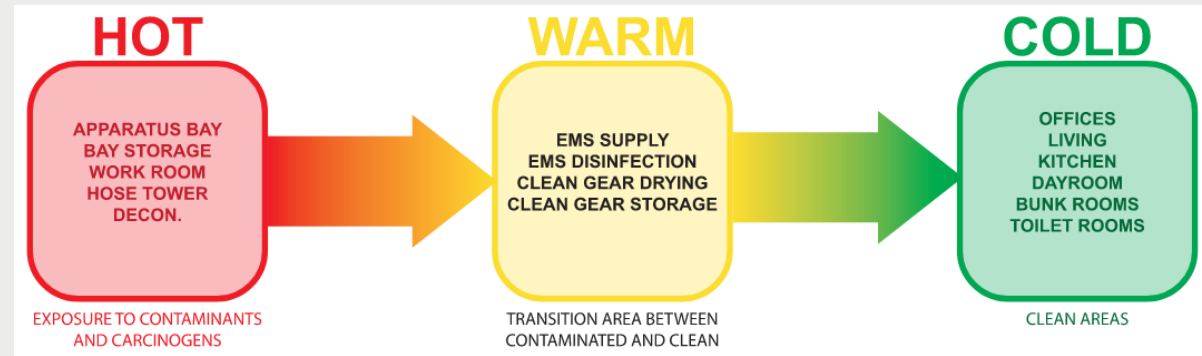
DESIGN PRINCIPLES



Defining the Requirements

Understanding the Parameters

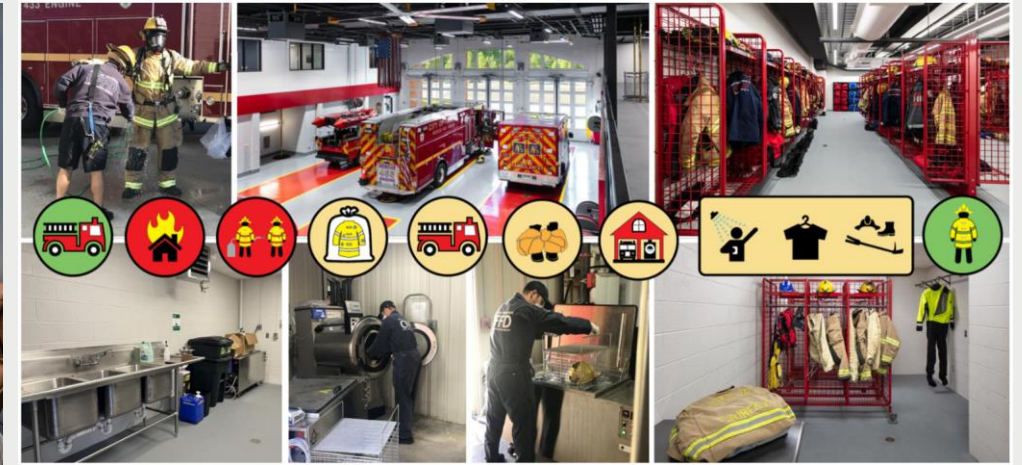
- Code Requirements
- Accessibility
- Facility Type Standards/Best Practices
 - Bunk Rooms
 - Health/Wellness Spaces
 - Decontamination
 - Toilet/Locker Rooms
- City/Department Standards
 - Operations (Space Needs)
 - Building/Communication Systems
 - Materials



Thinking Beyond Current Needs

Planning for the Future

- Operations
- Systems
- Maintenance
- Community needs
- Sustainability
- Health & Wellness
- ADAPABILITY!!!



ENERGY / OPERATIONAL CARBON REDUCTION:
REDUCING THE EMISSIONS FROM A BUILDING'S ENERGY CONSUMPTION

NET ZERO (ENERGY, WASTE OR WATER) :
ENERGY USED = ENERGY PRODUCED (ON-SITE OR OFF-SITE THROUGH COMMUNITY SOLAR OR RENEWABLE ENERGY CREDITS)

EMBODIED CARBON REDUCTION:
REDUCING THE CO₂ EMISSIONS IN MATERIALS BY LOOKING AT THE FULL LIFE CYCLE OF PRODUCTS - MANUFACTURING, TRANSPORTATION, INSTALLATION & END OF LIFE

WELLNESS:
IMPROVING ALL ASPECTS THAT AFFECT HUMAN HEALTH - AIR & WATER QUALITY, NOURISHMENT, LIGHT, MOVEMENT AND MENTAL HEALTH

Facility Condition Assessments

4-STEP PROCESS:

- 1. LEARN:** Understand key information about building assets from building operators.
- 2. AUDIT:** Evaluate facility conditions and capture data.
- 3. ANALYZE:** Piece together the condition picture of that building – industry standards + engineering knowledge.
- 4. REVEAL:** Provide a meaningful tool or pathway to understand the data.

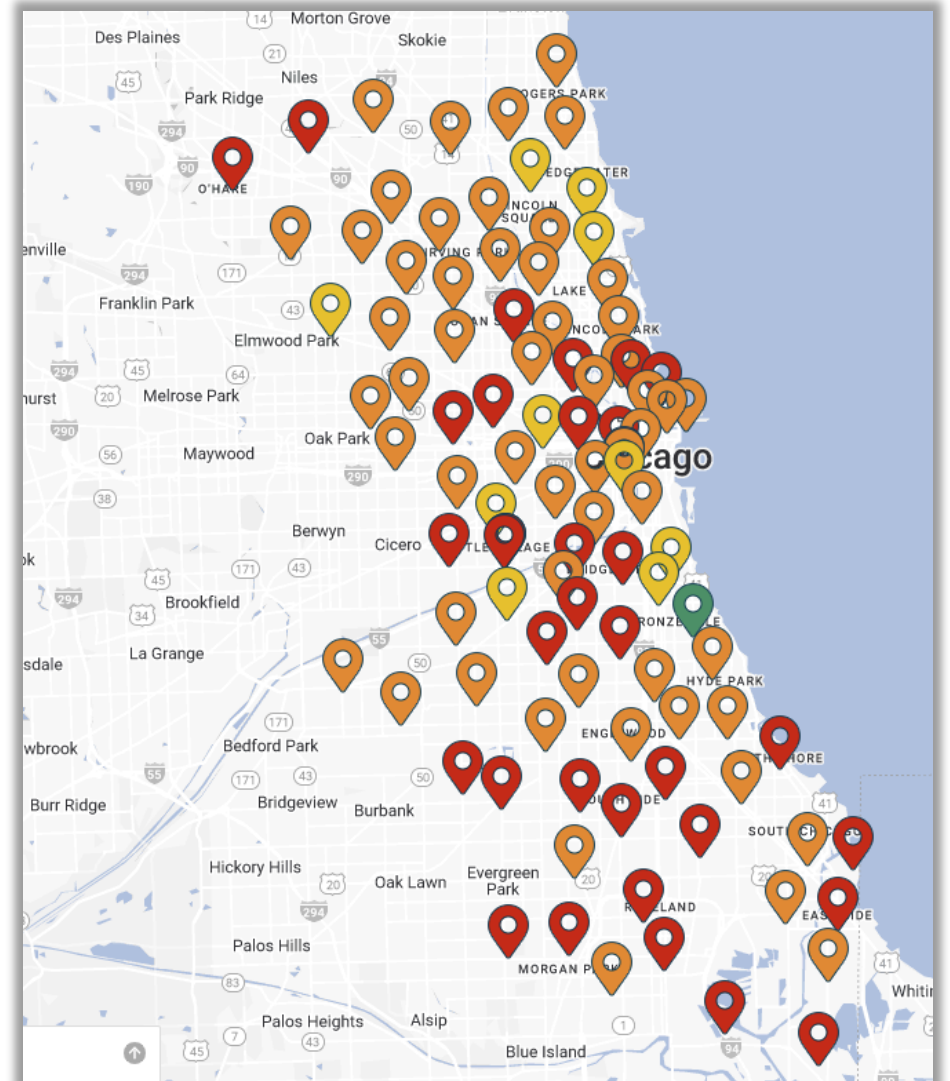


Facility condition data is the key to uncovering the condition of your assets, putting them to best use today, and planning projects and capital improvements for the future.



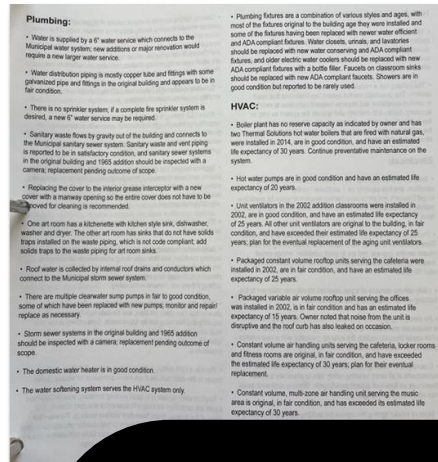
Assessment Procedures

- 8,000+ assets surveyed across 101 CFD facilities
- Assets surveyed = mechanical, electrical, plumbing, envelope, site and other building components
- Many facilities received an additional Basis of Design survey by the design team
- Photos and 360 imaging were collected to allow centralized 2FM staff to have eyes onsite
- CFD and 2FM staff members were interviewed regarding building and asset history, function and issues
- Historical documentation was reviewed to fill gaps, increase data accuracy
- Asset workbook data uploaded into Reveal™ dashboard as opposed to binder-style reports



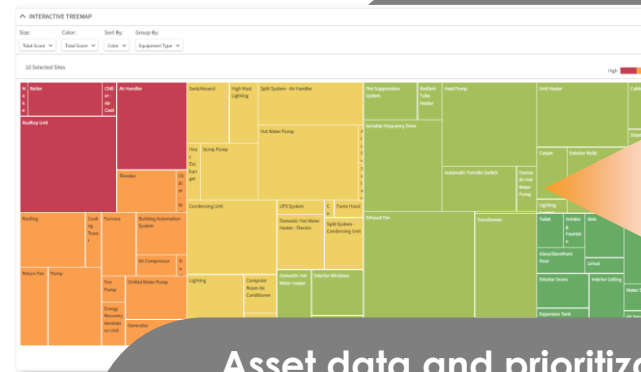
Expect More from Deliverables

Typical Deliverables



Static, technical report difficult to digest for non-facility management stakeholders

Deliverables of the Future



Asset data and prioritization scenarios presented in easily digestible visualizations, with capital plans in minutes

EQUIPMENT DETAILS

Location

Asset

Score

Chiller Air Cooled - Whole building

D3030-Cooling Generating Systems

Asset Tag: Chiller Air Cooled - Whole building

Year Installed: 1991

Industry Life Remaining: -14 yrs

Observed Life Remaining: 1 yrs

Base Asset Replacement Cost: \$293,350

Size: 125 Ton Chiller

Asset Type: Chiller - Air Cooled

Manufacturer: Trane

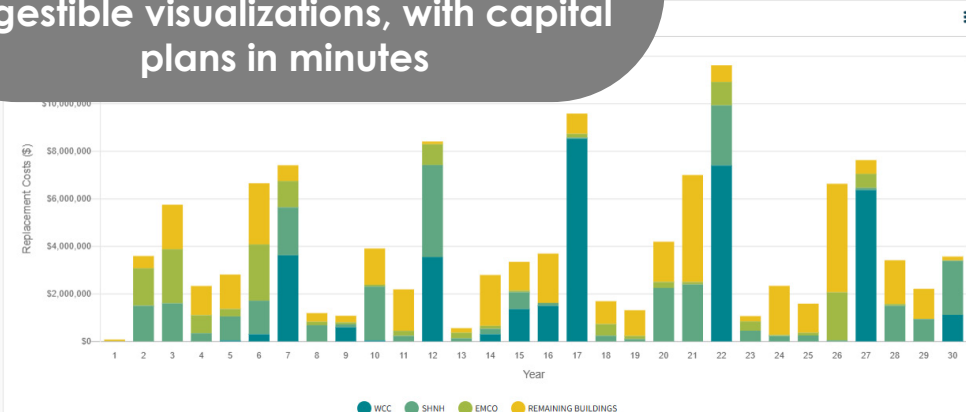
Model Number: RTAA125AYQ01A3D0BFHN

Serial Number: U04D05576

CMMS ID: YES-HVAC-CH-001

Notes:

125 Ton R22, Condenser fins numerous dents (hall like damage). Staff noted chiller trips frequently and needs to be manually reset. Control panel replaced 7 years ago, display non-functional, manufacturer states display replacement no longer available.



Benefits of FCA Data



Sustainable workflow and strategic facility planning keep asset data accurate for 10+ years.



Accurate asset data feeds maintenance and capital planning decisions with those systems refreshing asset data.



Take advantage of opportunities like energy audits and retro-commissioning to maximize investment and effort.



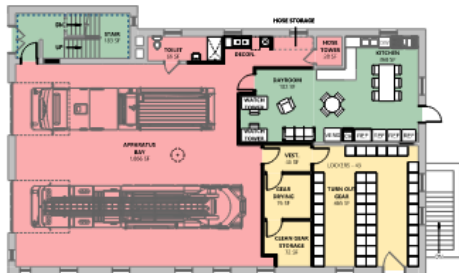
Reduce risks associated with emergency repairs, health and safety hazards, system failures and employee stress.



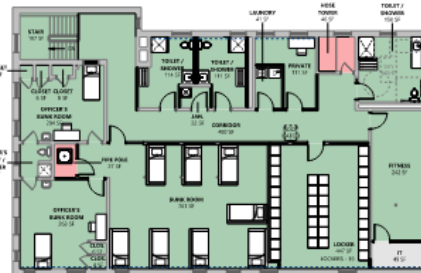
Creating Priorities

Comprehensive Decision Making

- Defined by Priorities and Vision
- Analyzing all the Data
- Stakeholder Alignment
- Balancing Programmatic needs & Condition Driven investments



EDGE PROPOSED FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



EDGE PROPOSED SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

LOCATION	A	B	NOTES
Ability to Meet Program Need	1	3	Option A building renovation has a square footage deficiency and cannot fully accommodate detox, cannot accommodate juvenile or consolidation of the crisis and 988 Call Center.
Efficiency of Staffing	1	3	Option B keeps all 24/7 operations staff together allowing for more efficient staff utilization.
a. Pharmacy Proximity	-	+	There is regular interaction between CRC / Crisis and the Pharmacy in the 111 Building
b. Integrated Care Potential	-	+	Staying on one consolidated campus allows for best access to coordinated care.
Compatibility of Operations	1	3	Option B consolidates all like operations. Option A is less desirable due to proximity to DU-COMM, Nicarico Children's Advocacy Center, Care Center.
Reuse of Available Existing Building Assets	3	2	Option A makes use of underutilized existing building asset.
Ease of Client Wayfinding	1	3	All health department functions together in one area makes client wayfinding easier.
Ease of Construction	1	2	Option A requires renovation of hardened construction which includes expensive demolition. Existing building structure is configured to accommodate this use easily.
Availability & Efficiency of Utilities	3	3	Option B requires additional stormwater detention due to displacement of existing capacity.
Parking Availability	1	2	Option A is greatly constrained and construction of new parking is costly. Option B provides greater flexibility in parking usage and overlap of activities.
Ability to Achieve Desired Look and Feel	1	3	Even with renovation Option A will have an institutional / negative feel. Option B allows for creation of a more inviting / therapeutic environment.
Jurisdictional Approval Process	2	2	Both options will require special zoning approval process.
Future Flexibility	1	2	There is no reasonable ability to expand in Option A. Option B provides options for phased construction if desired.
Project Schedule Efficiency	3	2	Option A can be completed slightly faster as existing structure and enclosure are being reused.
TOTAL	19	30	

- 1 Does not meet needs / Not desirable
- 2 Adequately meets needs / Moderate desirability
- 3 Meets full requirements / Most desirable

Capital Planning & Addressing Critical Items

1 ISSUES LOG

Construction Issues | McKinstry | Chicago Fire Department FCA | 207599-002

CHK-18-21 IDENTIFIED HIGH

Active leaks at foundation.

Source Checklist 18

Fire Engine Company 82 - Basis of Design Checklist

Asset Fire Engine Company 82

Group A

Discipline Architectural

Due Date 7/5/2024

Created By Keshia Patel

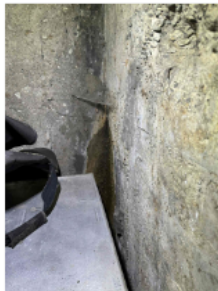
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2 REVEAL

Facility Name	Asset Type	Asset Size/Capacity	Quant	Unit of Measure	Notes/Comments	Industry Life Remaining	Observed Life Remaining (yrs)	Asset Condition (1-5)	Asset Repair or Replace
EC 82	Apparatus Bay Floor	Concrete Floor and Structure	1725	Sq SF	Noted in issues log: Numerous cracks in apparatus bay (many signs of water leak in basement). Water damage in ceiling and rusted beams and peeling paint all throughout basement. There are rusted columns in the basement, both the primary support columns and secondary support columns. Floor would need replacement to correct issues. Estimated install date.	-58	5	4	Replace

LIKE-FOR-LIKE (REPAIR / REPLACEMENT)	REPLACEMENT UPGRADES	INFRASTRUCTURE / SYSTEM-WIDE UPGRADES	CFD ITI	Unique Asset Category (BLUE highlight in Exterior and Site)	Asset Sub Type	Design Guideline Notes	
	X			Apparatus Bay Floor	Concrete Floor and Structure	Refer to Structure section for repair and replacement recommendations.	1. Use McKinstry database pricing. 2. Wight to provide pricing based on Design Guidelines 3. Use McKinstry + 10% 2. Use \$450/sf for apparatus bay floor replacement. Repairs will have to be assessed on case-by-case basis.

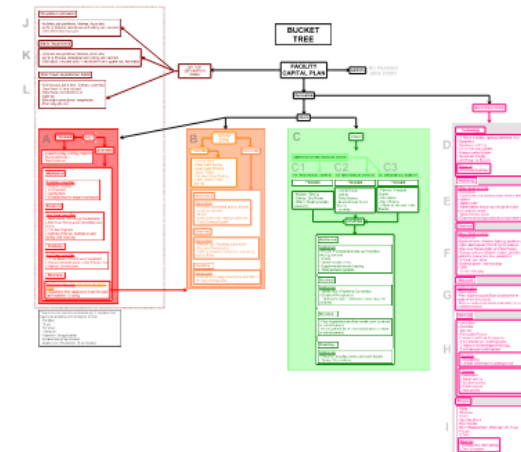
3 DESIGN GUIDELINES

Repairs Recommendations:

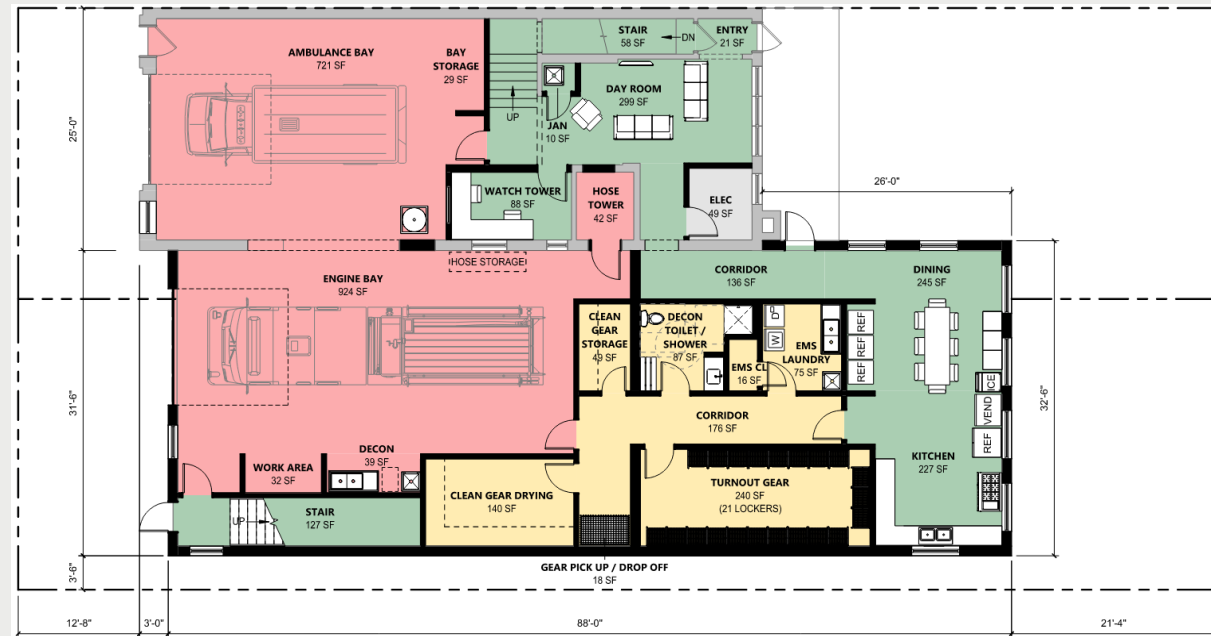
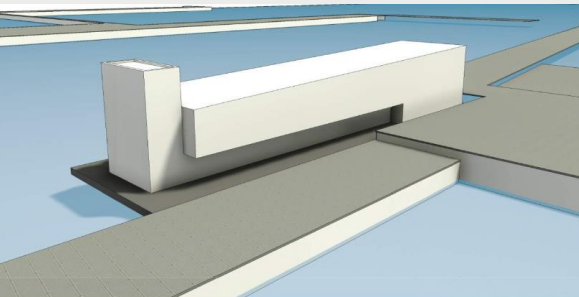
Types of Repairs and repair procedure for concrete and steel:

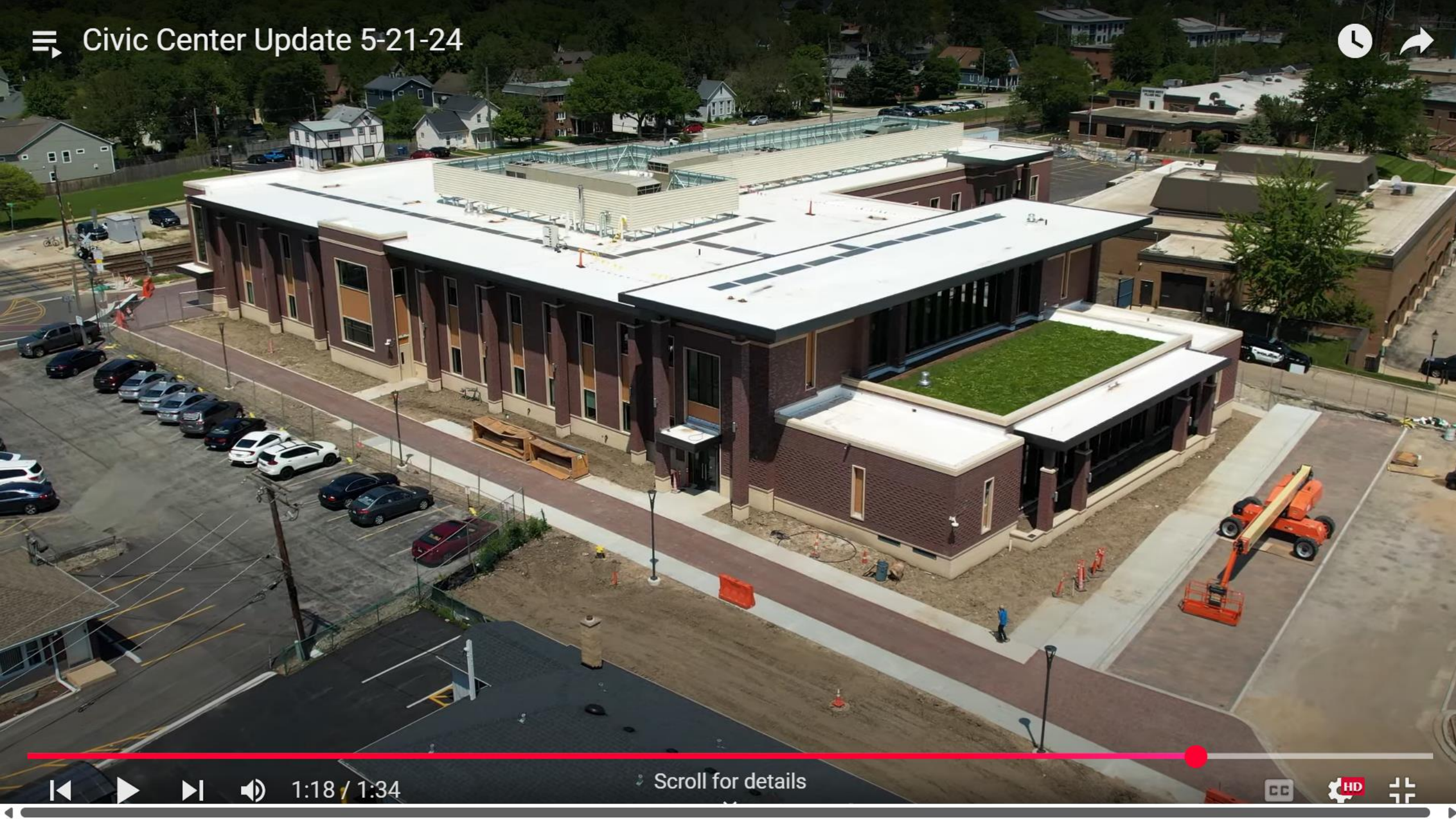
- Concrete cracks
 - Thoroughly clean all internal crack surfaces by applying pressurized air to remove loose concrete debris.
 - Apply epoxy low viscosity injection resins to fill any voids and cracks, as per manufacturer's recommendation.
 - Remove injection ports after completion of work
- Concrete spall - shallow
 - Saw cut rectangular boundary around deteriorated concrete 3" beyond spall perimeter. Saw cut only a maximum of 1/4" into the concrete surface to prevent any damage to existing reinforcement.
 - Thoroughly clean all exposed areas to remove loose concrete debris.
 - Provide appropriate repair mortar patch to rectangular boundary. Provide appropriate concrete patches for top or bottom of slab/beam application. Smooth concrete patch to match adjacent existing slab.

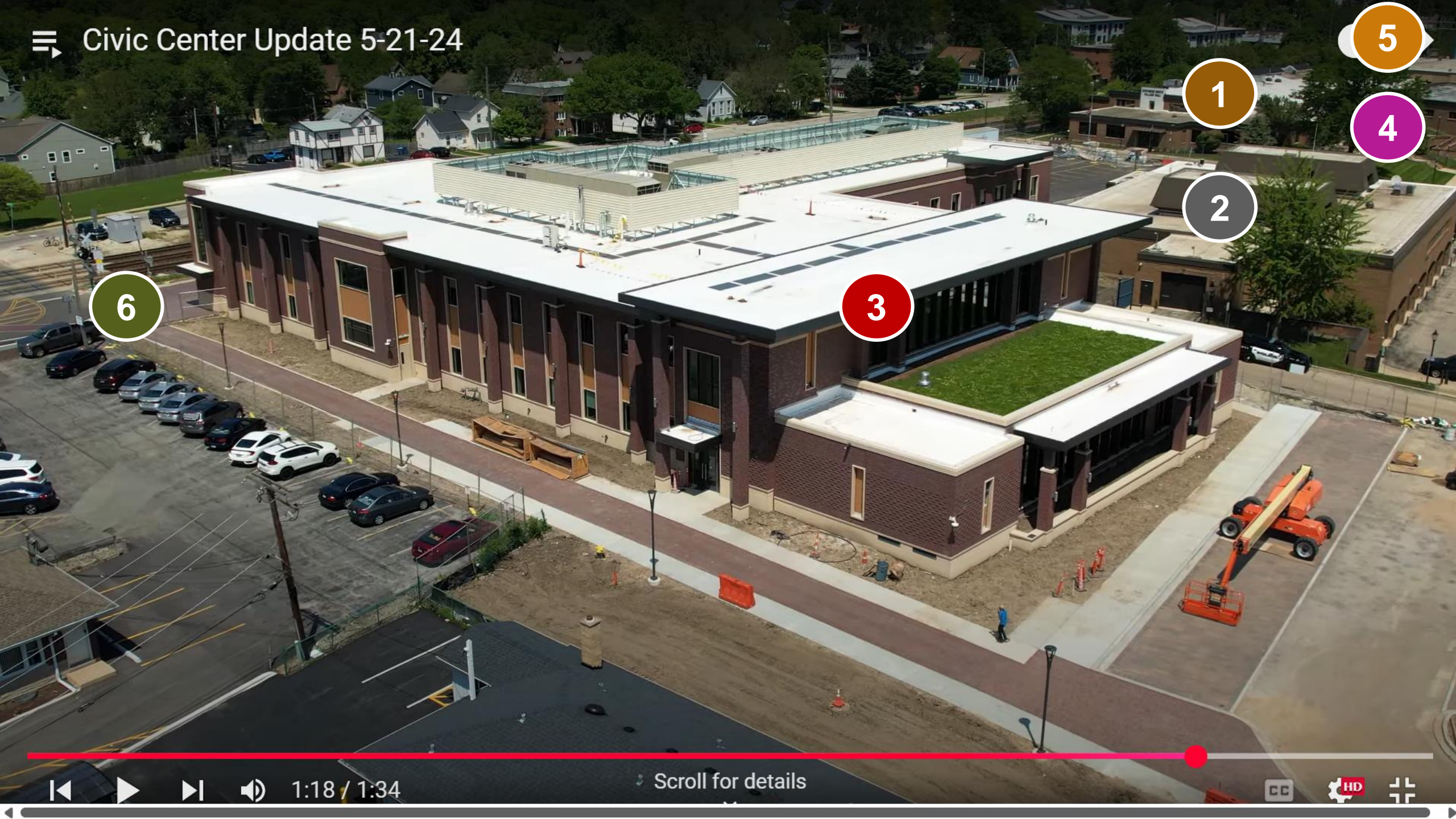
4 SEQUENCING TREE



From Vision to Reality – Next Steps









Downers Grove
Civic Center
May 2025



BUFFALO GROVE

New Public Works Facility



Infrastructure Modernization Program: Facilities

Vision Meets Strategy

Village leadership understands the long-term needs and works to leverage opportunities and minimize debt funding to achieve its facility goals.



Vision



Targets



Strategies



Delivery

Facility Planning



**Space Needs
Study**



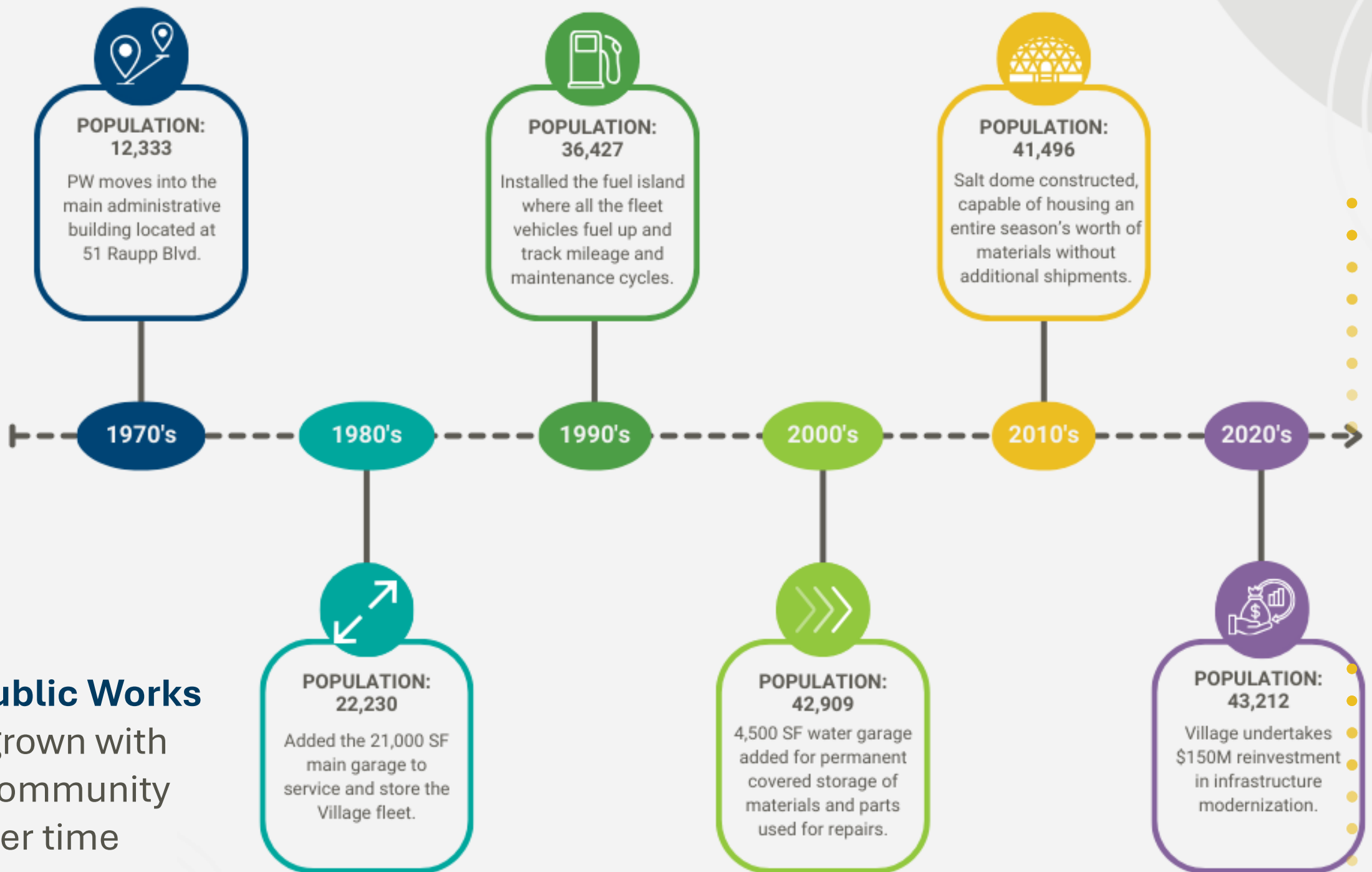
**Public Works
Facility**



**Fire
Stations**



**Municipal
Campus**

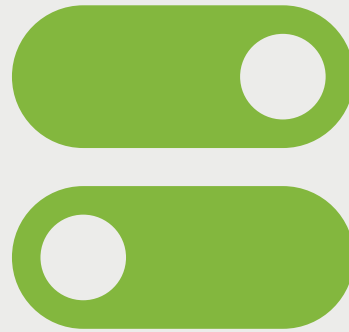


How **Public Works**
has grown with
the community
over time

The Search for a Facility Solution



**Suitable
Location**



**Must Haves vs.
Nice-to-Haves**



**Adaptive Reuse vs.
Ground-Up Build**

1650 Leider Lane



9.5-acre parcel with a 173,500 SF building



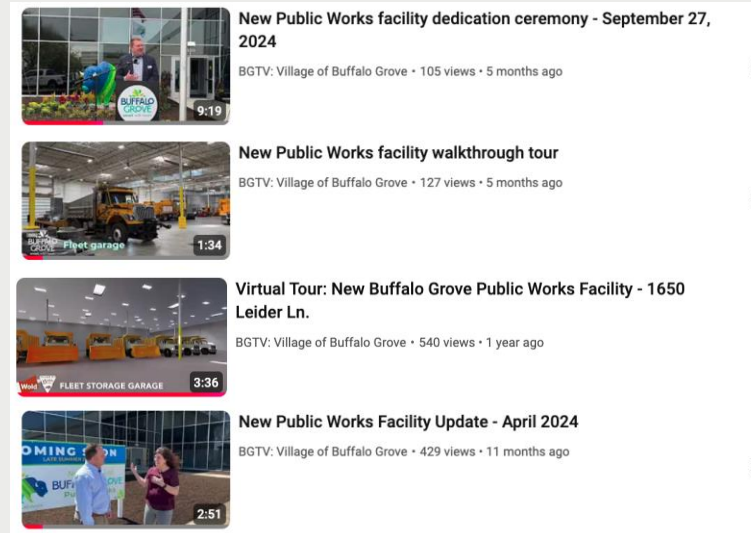
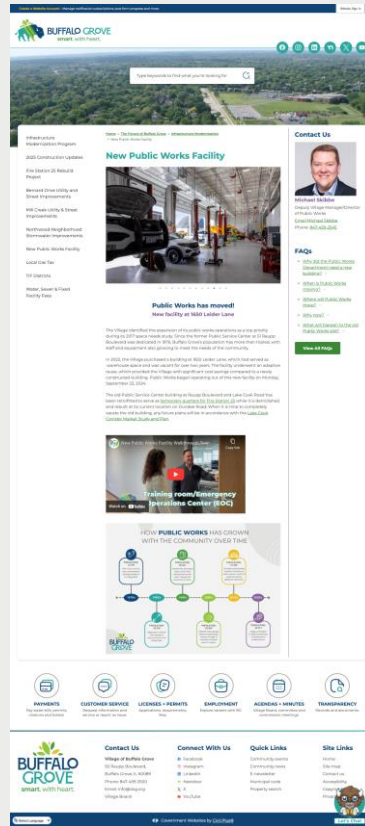
Purchased in September 2022 for \$13.4 million



Project construction completed with a guaranteed maximum price of just under \$18 million



Engaging our Community



Dedicated Webpage
with FAQs, timelines and
links to update videos.



Update videos,
virtual tours and
e-news features



Ribbon cutting, tours, employee
appreciation event, and Public
Works Open House

New Public Works Facility



Completed on time (14 months) and under budget (total cost of \$34 million)



Adaptive reuse strategy saved the Village over \$30 million when compared to the cost of ground-up new construction.



Operations began at the new facility in September 2024.



Includes 40,000 sq ft of leasable space for partner agencies.



Questions?



Dane Bragg

Village Manager

dbragg@vbg.org



BUFFALO GROVE

smart. with heart.