



The Village of

# Glen Ellyn

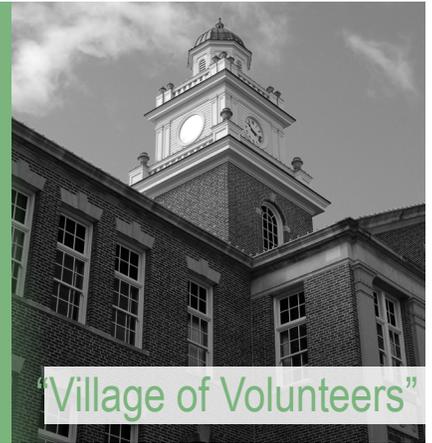
Police Department & Village Hall  
Facility Needs Assessment Study  
Updates

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“Village of Volunteers”







# The Village of Glen Ellyn

## Needs Assessment Study Updates

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# 1 EXECUTIVE SUMMARY

The Village of Glen Ellyn acknowledges that the current settings for the Police Department and Village Hall present operational and functional challenges, to the point of impacting staff security and safety in some instances. Dewberry, a national architecture and engineering firm specializing in the planning and design of Police and Village Hall facilities, was commissioned by the Village of Glen Ellyn to evaluate a range of options for addressing the current as well as the future needs for the Police and Village operations through the year 2032.

This updated study report addresses the following scope of work:

- Space Needs Analysis - assess quantity and type of space currently in use by the Police Department and Village Hall and determine projected needs to the target year 2032.
- Site Analysis - analyze the advantages/disadvantages of the existing and/or new site(s) and recommend a site layout that best meets the site parameters and needs of the users for this project.
- Preliminary Conceptual Drawings - provide block diagram drawings that depict the size and configuration for a reconfigured Village complex as well as a greenfield site for relocation of the Police Department.
- Cost Estimate - provide a preliminary cost estimate based on the size and scope of the proposed space needs analysis, addressing “construction” and “project” costs, and potential cost-saving options.

Over the past 2 years, Dewberry has explored 8 different design options with the Village of Glen Ellyn based on the results of the facility needs study and program that was developed and recently modified. **The 4 options with the most promise are being presented in this study update and are highlighted below in GREEN.**

**Option 1 series:**  
(minor renovations with NO additions.)

**Option 2 series:**  
(renovations / additions with no structured parking)

- 2A
- 2B

**Option 3 series:**  
(renovations / additions with structured parking)

- 3A
- 3B

**Option 4 series:**  
(new police building offsite with village hall renovations)

- 4A (South Park Ave site near Glenbard South)
- 4B (Panfish Park site)
- 4C (Spring Ave site)

These design concepts have been developed in response to the space, functional adjacency, and parking needs identified for each department. The site planning options explored here have tried to address the following desirable attributes:

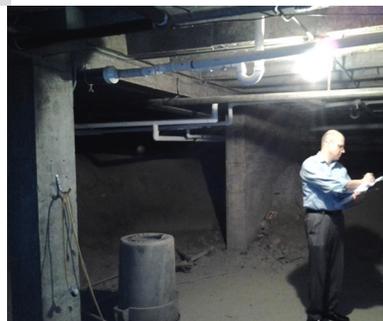
- External visibility of buildings and ease of internal campus way finding.
- Vehicular access to site and ease of circulation in and around site environs.
- Adequate and convenient parking on site.
- Compatible land use with adjacent properties.
- Capability for future expansion needs beyond 2032
- Economic impact

## Staff Growth Summary

Village Hall	Current Year Staff Positions 2012	Year 2015 Projection Staff Positions	Year 2020 Projection Staff Positions	Year 2032 Projection Staff Positions
Village Hall Public Areas	0	0	0	0
Administration (all staff)	11	11	11	11
<i>Administration (per shift)</i>	9	9	9	9
Planning and Development (all staff)	16	17	18	20
<i>Planning and Development (per shift)</i>	13	14	15	17
Finance (all staff)	18	18	18	15
<i>Finance (per shift)</i>	14	14	14	11
Facilities Management (all staff)	9	9	10	11
<i>Facilities Management (per shift)</i>	5	5	6	6
Information Technology / Media (all staff)	2	2	2	3
<i>Information Technology / Media (per shift)</i>	2	2	2	3
Village Staff Areas	0	0	0	0
<b>Total Village Hall Staff (per shift)</b>	<b>43</b>	<b>44</b>	<b>46</b>	<b>46</b>
<b>Total Village Hall Staff</b>	<b>56</b>	<b>57</b>	<b>59</b>	<b>60</b>

Police Department	Current Year Staff Positions 2012 (39 sworn)	Year 2015 Projection Staff Positions (46 total sworn)	Year 2020 Projection Staff Positions (52 total sworn)	Year 2032 Projection Staff Positions (56 total sworn)
Police Public Areas	0	0	0	0
Records (total staff)	10	10	11	12
<i>Records (on duty with supervisor)</i>	3	3	4	4
Patrol total (includes 4 patrol sgts.)	26	32	34	37
<i>Officers Per Shift (with supervisor)</i>	6	7	9	10
Investigations (with supervisor)	5	6	9	11
<i>Investigations per shift</i>	5	8	9	10
High School Liaison Officer	1	1	2	2
Police Administration	5	5	6	6
Shared Staff Area (Admin Assistant)	1	1	2	2
CSO (includes 2FT, 3PT)	2.5	4.5	5	5
Community Education Officer	1	1	1	1
Property and Evidence	1	1	1	1
Prisoner Processing	0	0	0	0
Emergency Operation Center	0	0	0	0
Police Building Support	0	0	0	0
<b>Police Staff Per Shift</b>	<b>24.5</b>	<b>30.5</b>	<b>37</b>	<b>39</b>
<b>Total Police Staff</b>	<b>51.5</b>	<b>62.5</b>	<b>71</b>	<b>76</b>

shaded areas indicate the staff "using the building every day" while on duty



## Preliminary Findings - Staff

It is important to understand the staff makeup of the Police and Village departments. The projection of growth has been estimated to year 2032. These departments and staff have been used for purposes of allocating adequate space for the future. The projection is based on historical growth over the last ten years in each department as seen in the staff growth summary chart on this page.

## Preliminary Findings - Community Growth

Limited increase is anticipated in both land area and population, as there is limited available land for development.

## Building Safety and Security

The existing building was built with a different set of code standards and parameters back in 1927. Many of the original planning guidelines and parameters, although applicable at the time, need modification to respond to today's concerns for heightened safety & security measures. For example, the lack of control points within the building allow visitors to wander into some staff areas. There is a lack of protection for the Finance Clerks from an unruly customer. Also, detainee intake, processing, & release endanger staff and public with its current arrangements. Public visitors, police officers, police civilians, arrested persons, juveniles, and in-custody prisoners should be carefully separated by design within the improved facility. Planning and design guidelines, high-quality materials, and suitable security electronics systems reflecting the leading edge thinking can and should be used to make a safe and secure facility. One example is to improve the safety and security protocol for the 3rd floor Board Room by providing more direct access from the dais to the executive session room.

## Quality of Work Environment

In the past, most police department employees spent little time inside the building. This is changing, and with this unique mixed use Civic Center facility, a large number of employees, primarily civilian support staff, spend much of their workday inside the building. Therefore, the quality of the work environment should be updated in the improved building design to enhance productivity, promote professionalism, and enable the best employees to be recruited and retained.

### **Optimize adjacencies and flow of the operational staff.**

The points of entry and the arrangement of operational space in the current facility is limited by space and the different first floor level changes due to multiple additions over the years. Adjacency & flow improvements increase with the amount of renovation work to be done. Minor renovations will have the least impact while a new facility can be custom configured to enhance the flow and function of all departments. This will optimize efficiency so the staff can do more in less time within a safe and secure professional environment.

### **Create an environment of customer service in the public areas.**

Easier way-finding, ample public service counters, and places to meet with residents are all important to communicate that the Village is fully engaged in serving the residents. For example, improving direct public access to the Planning & Development Department is a desired goal. A renovation within the Civic Center could begin to accomplish these goals.

### **Secure chain of custody of evidence.**

The demands on local law enforcement for handling, processing and storage of evidence have changed substantially since the current facility was planned. Escalating retainage criteria for evidence necessitates increased secure storage. The department currently uses space in several locations wherever available in the building for evidence to be received, processed and stored. In addition, off site storage facilities are being utilized. Schemes #3 and #4 can bring all these components of the chain of custody together in a design that optimizes security thereby facilitating cases to be solved and prosecuted. New mandates from the State and Federal levels necessitate segregation of different categories of evidence / property, as well as ancillary requirements within the settings of dedicated exhaust, work surfaces, security protocols, etc.

### **Preliminary Findings: Summary**

Both the Police Department and Village Hall currently have inadequate building area. The existing Civic Center was built in 1927 to operate as a school. Over the years it has been remodeled and retrofitted to function as a police department, village hall and community center. It does not meet current accessibility and code standards. Despite its shortcomings, the historic Civic Center building is a landmark within the community and an icon within the downtown business district. An option to demolish the entire existing structure and build a new Village Hall / Police Complex on the same site was considered but not pursued due to the iconic nature of this historic building and the overall cost.

The following two page spread contains a summary of all 4 options presented in this study update. The option highlights are compared in both a pros & cons matrix as well as a cost matrix organized into aHere is a summary of the 4 schemes presented in this report:

### **Conclusions from findings:**

To best achieve the most long term 2032 goals & improvements for both Police and Village Hall and to spend the money wisely, Dewberry strongly recommends either option 4A or 4B over Options 2A or 2B. These later two options don't provide the necessary department-wide improvements towards a safer, more secure, more operationally efficient facility the Police department needs to bring them current with the best practices for public safety and robustly position them for the next 20 years.

PROS & CONS COMPARISON MATRIX	OPTION 2A: Civic Center Site	OPTION 2B: Civic Center Site	OPTION 4B: Panfish Park Site	OPTION 4C: Spring Ave Site
<b>PARKING RELATED COMPARISONS:</b>				
Current Civic Center on site parking = 78				
Duane Street public parking spaces in front of bldg	10	10	10	10
<b>Parking spaces available for 2032 needs:</b>				
on site police vehicle spaces	29	29	29	29
on site police staff spaces	13	14	40	40
on site police public spaces	2	2	26	34
on site village vehicle spaces	7	7	7	7
on site village hall staff spaces	12	13	44	44
on site village hall public spaces	2	2	27	27
<b>TOTAL on site parking available for both police and VH:</b>	<b>65</b>	<b>67</b>	<b>173</b>	<b>181</b>
What are the sizes of the police vehicle & staff spaces?	18'x9' (tight)	18'x9' (tight)	20'x10' (preferred)	20'x10' (preferred)
Is there room on site for larger special-use vehicles?	no	no	yes	yes
<b>SITE &amp; SECURITY RELATED COMPARISONS:</b>				
Can police staff parking lot be secured with a fence & gate?	no	no	yes	yes
Is staff parking lot mixed with public parking? (not ideal)	yes	yes	no	no
Does police staff parking lot have at least 2 ways out? (a best practice for today's safest police facilities)	no	no	yes	yes
What is the police building security setback from the nearest public vehicle curb access point? (50' min is a best practice for safety.)	5' along east edge / 0' along south edge.	5' along east edge / 0' along south edge.	50' along both west & south bldg edges.	50' along both west plaza.
How far is the site from Roosevelt Rd - the highest calls for service?	1.17 miles	1.17 miles	0.19 miles	0.76 miles
<b>PROGRAM SPACE COMPARISONS:</b>				
Does this option have a firing range?	no	yes	yes	yes
Does this option keep the community gym function?	no	no	yes	yes
Does this option have an evidence vehicle processing bay? (ideal to maintain proper evidence chain of custody)	no	yes	yes	yes
Does this option have a drive through sally port? (a best practice for today's safest police facilities)	no	yes	yes	yes
How safe & direct is prisoner transport from holding to interview rooms?	<b>not bad:</b> although they're separate from investigation dept.	<b>not bad:</b> although they're separate from investigation dept.	<b>very good:</b> direct secure elevator ride 1 flr up into interview	<b>very good:</b> direct secure elevator ride 1 flr up into interview
Does this option have a dedicated community room within the police area?	no: could use EOC or other shared community rooms in bldg.	no: could use EOC or other shared community rooms in bldg.	no: could use EOC space.	no: could use EOC space.
How visible & inviting is the public entry to the police department?	<b>Very bad:</b> it's buried behind the elevator off the mid-landing.	<b>Better:</b> it has 20' exposure at the SE corner of existing bldg.	<b>Very good:</b> it faces the public entry plaza and parking.	<b>Very good:</b> it faces the public entry plaza and parking.
Does this option have any occupiable program spaces with <b>LESS</b> than 9' ceilings? (best practice for efficient lighting & work environments)	yes: 7117sf of space with barely 8' ceilings	no	no	no
<b>TEMP RELOCATION / IMPACT COMPARISONS:</b>				
Will police or village hall staff need to relocate during 16mo construction phase?	yes	yes	no	no
How much on site Civic Center parking will be available during construction?	0	0	78	78
Will there be noise or temporary utility disruptions for staff during construction?	yes	yes	no	no
Will Civic Center upper floors be handicap inaccessible (elevator replacement) for any portion of construction?	yes	no	no	no
<b>FUTURE EXPANSION POTENTIAL COMPARISONS:</b>				
How much room is there for police program space to expand beyond the 20yr feasibility needs?	<b>Very little:</b> could expand on portions of new 2nd flr roof if designed to support future floor.	<b>Very little:</b> could expand on portions of new 2nd flr roof if designed to support future floor.	<b>Quite a bit:</b> could expand E/W (especially if village buys NW residential property.)	<b>A lot:</b> could expand south or east
How much room is there for village hall program space to expand beyond the 20yr feasibility needs?	(see above)	(see above)	Can easily expand into old police spaces.	Can easily expand into old police spaces.

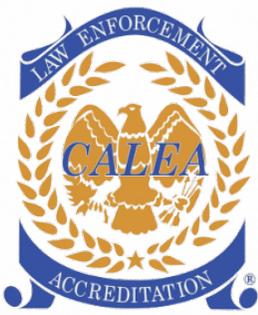
COST COMPARISON MATRIX		OPTION 2A: Civic Center Site	OPTION 2B: Civic Center Site	OPTION 4B: Panfish Park Site	OPTION 4C: Spring Ave Site	PHASED OPTION* (with 4B or 4C)
		(full implementation)	(full implementation)	(full implementation)	(full implementation)	(new offsite police station + minor civic center renovation -ph1)
CURRENT overall SF size: police, village hall, community spaces (does not include attic)		44,988	44,988	44,988	44,988	44,988
NEW overall SF size: police, village hall, community center spaces		<b>61,128</b>	<b>65,353</b>	<b>81,988</b>	<b>81,988</b>	<b>81,988</b>
Civic Center (R0 = no interior renovation)		13,641	13,769	22,455	22,455	40,494
Civic Center (R1 = light interior renovation)		4,494	4,350	4,494	4,494	4,494
Civic Center (R2 = heavy interior renovation)		20,781	9,927	18,039	18,039	0
Civic Center (exterior bldg improvements - window repair, masonry repair, roof work, painting, etc)		limited	limited	limited	limited	limited
Mezzanine level addition inside gym		5,039	0	0	0	0
New above grade construction (not including range sf)		14,857	28,463	28,156	32,600	28,156
New below grade construction (not including range sf)		0	4,444	4,444	0	4,444
New firing range raw space costs (\$150/sf for basement; \$175/sf for 1st flr)		0	4,400	4,400	4,400	4,400
New firing range equipment related costs		LS	LS	LS	LS	LS
Existing elevator modifications: \$110K for elev, \$70K for shaft modification; \$20K for MEP; \$20K for markups)		existing replaced	existing to remain	existing to remain	existing to remain	existing to remain
Existing building-site demolition areas		3,756	16,942	3,000	40,000	3,000
Site work: includes excavation, grading, utilities, fencing, landscaping, exterior signage, exterior lighting, new pavement & walks						
<b>Estimated Construction raw costs:</b>		\$350,000	\$350,000	\$1,150,000	\$1,150,000	\$1,150,000
Escalation to mid-point of construction (mid 2015) - modest market growth at 2% per year x 1.5yrs		<b>\$9,707,422</b>	<b>\$11,799,196</b>	<b>\$13,069,970</b>	<b>\$13,840,370</b>	<b>\$10,314,120</b>
Design contingency		3%	5%	3%	3%	3%
Construction contingency		5%	5%	3%	3%	3%
<b>Estimated Construction Costs:</b>		<b>\$10,969,387</b>	<b>\$13,333,091</b>	<b>\$14,246,267</b>	<b>\$15,086,003</b>	<b>\$11,242,391</b>
<b>Other Project costs: (soft costs)</b>						
site acquisition costs		none	none	none	probably - \$ not known yet	none
temp relocation cost / disruption during construction		yes - \$ not known yet	yes - \$ not known yet	none	none	none
Furniture, Furnishings & Equipment, AV/Telecommunications / Security, new phone system, building signage, consultant fees, surveys, geotechnical/soil borings, construction testing, fundamental building commissioning (budgeted 23% of construction cost)						
<b>Estimated TOTAL Project Costs:</b>		<b>\$13,492,346</b>	<b>\$16,399,703</b>	<b>\$17,522,909</b>	<b>\$18,555,784</b>	<b>\$13,828,141</b>

R0 = No interior renovation category: This category consists of spaces that will remain exactly as is.  
R1 = Light interior renovation category: This category consists of freshening up spaces with limited architectural changes. Assume new wall & and hard ceiling paint throughout. Assume new flooring. Assume very minor light fixture and diffuser changes, minor power and data modifications, and minor HVAC modifications above ceilings.  
R2 = Heavy interior renovation category: This category consists of substantial reconfiguration of spaces. Include demolition of existing partitions and finishes. Assume new STC 45 metal stud/GWB partitions, carpet tile, new grid & ceiling tile, new fixtures and diffusers, modifications to power and data distribution, modifications to ductwork.  
PHASED OPTION\*: This option allows phasing in the feasibility study recommended improvements for the village hall program portion. This first phase assumes only minor renovation (R1) to allow planning /development and finance to move down to the first floor in the simplest manner. The remaining \$3.7M in recommended Village Hall program improvements / expansions could happen in later phases.

# Building Planning Criteria

## Local and Federal Regulations used:

Part of the building planning criteria Dewberry develops come from a multitude of national, state, and regional planning and design guides - some of which are shown below. Dewberry develops space needs, adjacencies, and options that also takes cues from national trends and creative solutions other communities are implementing.

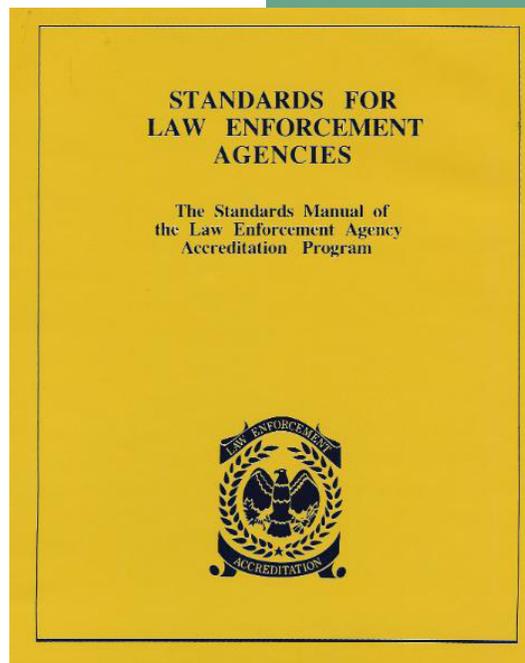
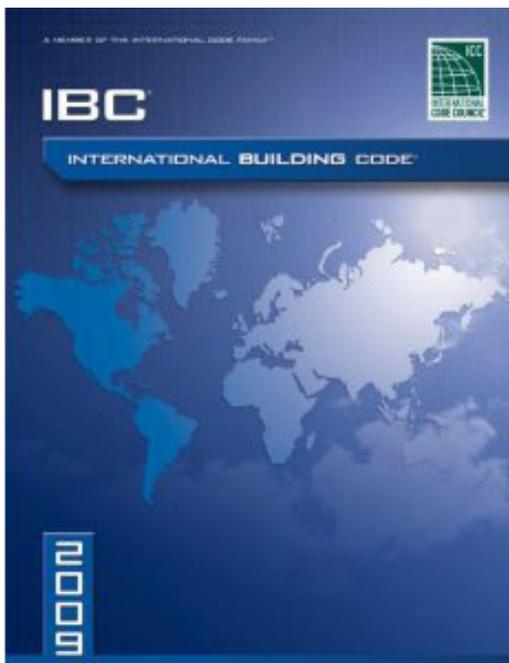
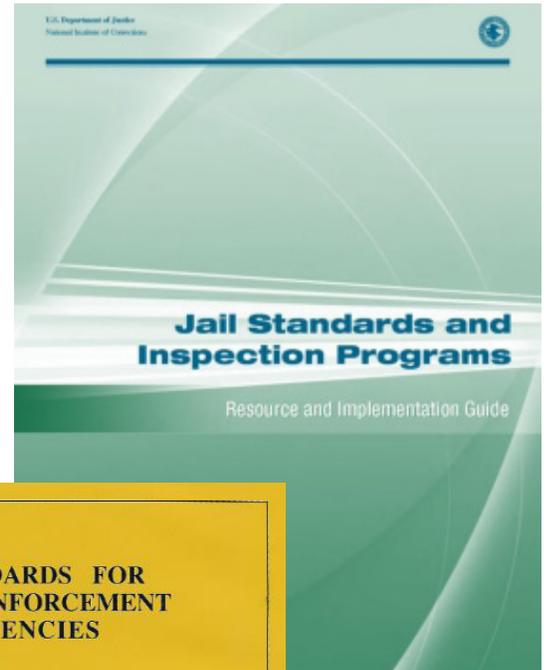
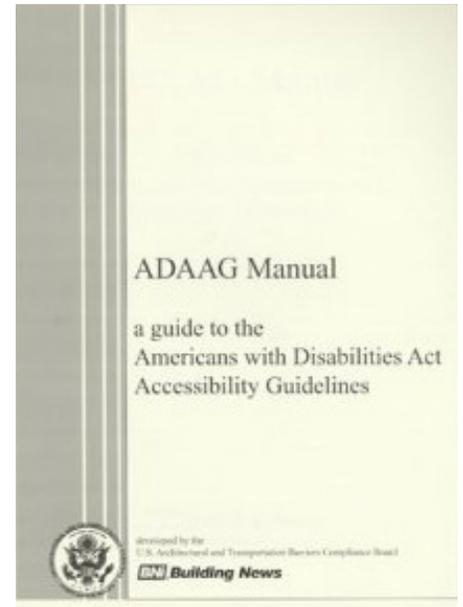


**PLANNING, DESIGNING AND  
CONSTRUCTING POLICE  
FACILITIES**

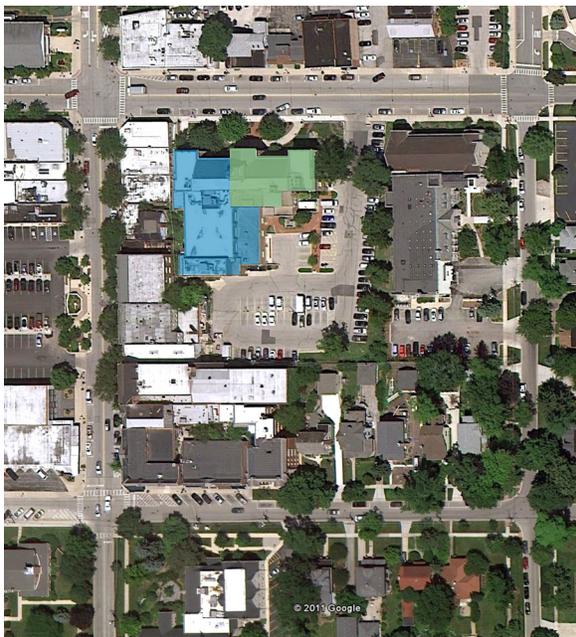


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## 2 EXISTING FACILITIES



Municipal Campus

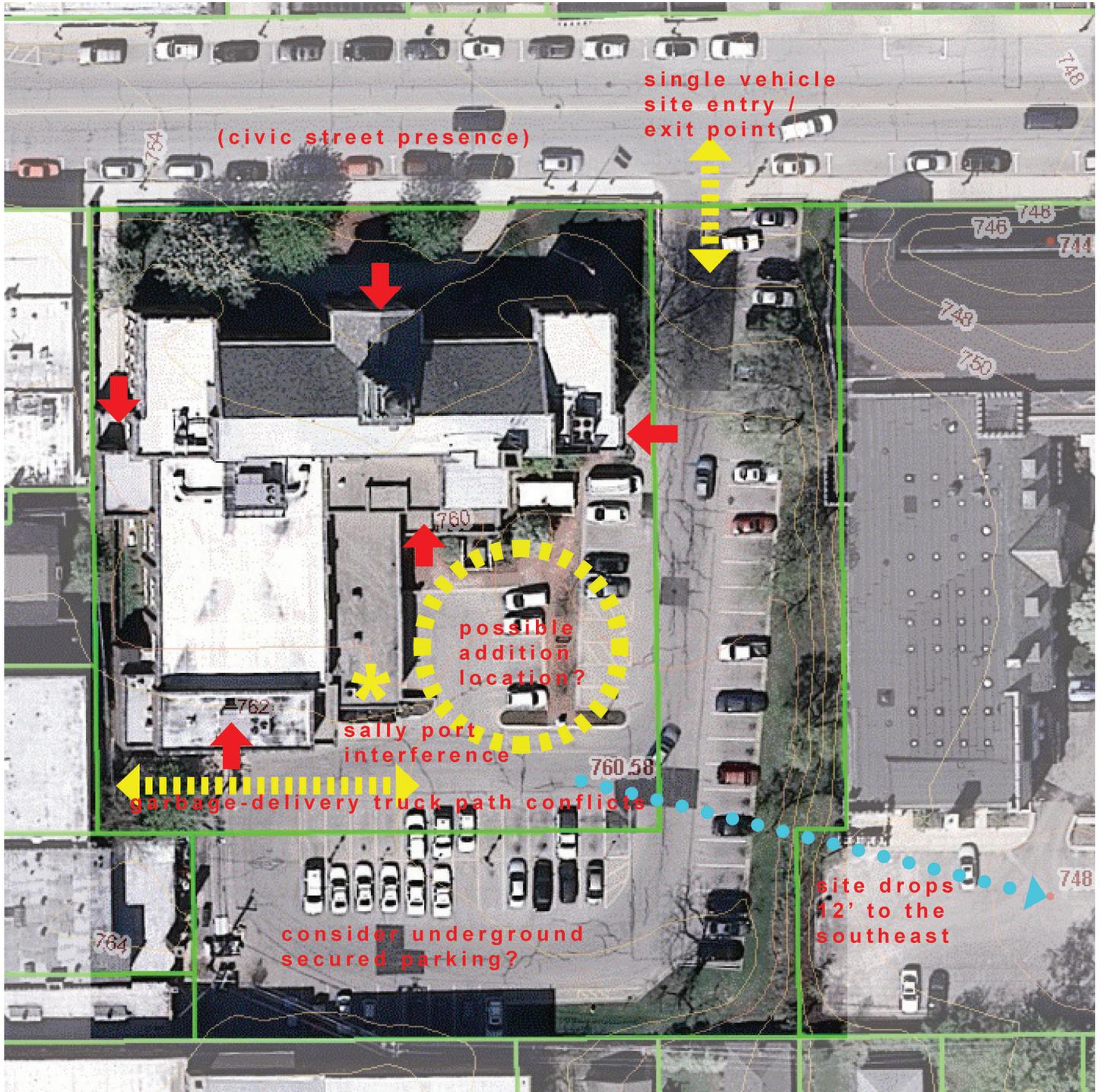
■ Police Department

■ Village Hall

This section of the report takes a detailed look at the Village Hall and Police Facility, currently occupied and in use. The space allocated to each department has been measured and is indicated in the drawings and tabulations of this section of the report. The floor plan and site plan drawings in this section of the report have been developed, color-coded and reviewed by Village staff for the purpose of assessing current space allocations. This information can then be used in comparing current and future space needs with current space in use.

It may also be determined from the assessment and drawings of the existing buildings that certain adjacencies between departments are beneficial and others are not. These “lessons learned” from the existing buildings regarding adjacencies have been applied to the planning process and are represented in the conceptual diagrams. It is important to point out that there is a significant shortage of space in the existing building for both staff work areas and storage in both village hall and police functions.

# Existing Site Conditions



- **Total On-site Surface Parking Spaces =** 78
  - unsecured spaces for Police vehicles: 21
  - unsecured spaces for Village vehicles: 7
  - unsecured spaces for staff vehicles: 47
  - spaces for retail vehicle: 1
  - spaces for public / visitors: 2\*

\* (Most visitors currently park on Duane Street between Main and Forest. There are now 22 spaces on the south side of Duane and 14 spaces on the north side of Duane for a total of 36 public parking spaces shared with other nearby businesses.)



parking lot drops off about 12' to the east

## Site Analysis Issues to Consider:

- Expansion potential: tight site
- Site circulation: one way in and out; non-separated vehicle access for public, staff, and deliveries
- Existing site conditions: sallyport and dumpster conflicts; Entrance to sallyport is difficult to maneuver and is also compromised with ice / snow conditions.
- Parking needs
- Existing underground infrastructure: effects on expansion
- Geography and drainage: public safety concern
- Inclement weather conditions create a hazard for vehicles and pedestrians on steep slope of driveway
- Solar orientation and natural day lighting
- Efficient and effective delivery of Village services
- Improved way-finding and accessibility to citizens: is site and building ADA compliant?
- Best practices for site / building security protocol: ideal setbacks and secured Police parking
- Lack of setbacks creates an uncomfortable proximity of Police work settings, sensitive materials, witnesses, and undercover officers to neighboring apartments and buildings
- Civic presence within community



Sally port deficiencies: ramp is too steep, vehicle access difficult in bad weather, and backing out site lines are bad with site walls



Hardware store delivery lane conflicts with staff entrance



Parking lot entrance ramp too steep: safety hazard



Trash pick-up area conflicts with sally port entrance

## Existing Facility: space utilization

- Existing 3 story Civic Center gross SF = 44,988.
- Village Hall program spaces (including its percentage of support spaces) occupy 37% of total building.
- Police Department program spaces (including its percentage of support spaces) occupy 33% of total building.
- Shared community spaces (including its percentage of support spaces) occupy 30% of total building.
- “support space” areas include general building stairs, elevator, corridors, storage, and mechanical/electrical/plumbing spaces.

### Existing Facility Analysis: 44,988 BGSF

	Village Hall Components (net sf)	square feet
1.1	Village Hall Public Areas	3,938
1.2	Administration	1,882
1.3	Planning and Development	1,853
1.4	Finance	1,523
1.5	Facilities Management	296
1.6	Information Technology	595
1.7	Village Staff Areas	624
<b>Net square feet (NSF) totals</b>		<b>10,711</b>
<b>Dept Gross Square Feet (DGSF) Multiplier</b>		1.20
<b>Dept Gross Square Feet (DGSF)</b>		<b>12,853</b>
<b>Building Gross Square Feet (BGSF) Multiplier</b>		1.28
<b>Building Gross Square Feet (BGSF) - Village Hall Portion</b>		<b>16,466</b>

	Other Components in Civic Center (net sf)	square feet
1.8	Shared Community Spaces / Meeting Rooms	4,278
1.9	Gymnasium	4,907
<b>Net square feet (NSF) totals</b>		<b>9,185</b>
<b>Dept Gross Square Feet (DGSF) Multiplier</b>		1.15
<b>Dept Gross Square Feet (DGSF)</b>		<b>10,563</b>
<b>Building Gross Square Feet (BGSF) Multiplier</b>		1.28
<b>Building Gross Square Feet (BGSF) - Shared Portion</b>		<b>13,532</b>

	Police Department Components (net sf)	square feet
2.1	Police Public Areas	511
2.2	Records	717
2.3	Patrol	1,060
2.4	Investigations	803
2.5	Police Administration	1,216
2.6	Property and Evidence	529
2.7	Prisoner Processing	1,811
2.8	Police Shared Staff Area	3,023
2.9	Emergency Operation Center	0
2.10	Police Building Support	0
<b>Net square feet (NSF) totals</b>		<b>9,670</b>
<b>Dept Gross Square Feet (DGSF) Multiplier</b>		1.21
<b>Dept Gross Square Feet (DGSF)</b>		<b>11,701</b>
<b>Building Gross Square Feet (BGSF) Multiplier</b>		1.28
<b>Building Gross Square Feet (BGSF) - Police Portion</b>		<b>14,990</b>

### General deficiencies:

- The first floor west side has 3 different level changes that are not handicap accessible.
- The building also has various restroom conditions that do not meet ADA codes.
- Poor wayfinding for the public. All visitors are funneled to just one lobby.
- Public can freely access and roam many corridors impacting security control.
- Insufficient storage for all departments within the building.

### Police related deficiencies:

- Police operations dealing with three different level changes on their main level.
- Blind spot for 24/7 communications post from front entrance and vestibule.
- Lack of quality interview rooms directly off the Public Lobby
- Prisoner/DUI processing potential liability and safety risk.
- Poor evidence intake/processing area. Sallyport is doubling as evidence intake.
- Insufficient Police locker accommodations.
- Lack of private / controlled Police staff break area (shared with the Clayton room).
- Emergency Operations Center operations less than desired.
- Ventilation problems in evidence / property storage settings.
- Acoustical impacts throughout the building from the gymnasium that affect quality of interviews, roll call, and other functions.
- Challenges to maintain chain-of-custody protocol for evidence.
- Little flexibility to adapt to changing technology and security needs.
- Sallyport entry open to public view, cars, and direct access.
- Delivery vehicles compromise police operations and response.
- Deliveries/flow of supplies, munitions, arms, etc. difficult with multi-level situation.
- Testing/processing for DUI is a challenge and unsafe for staff.

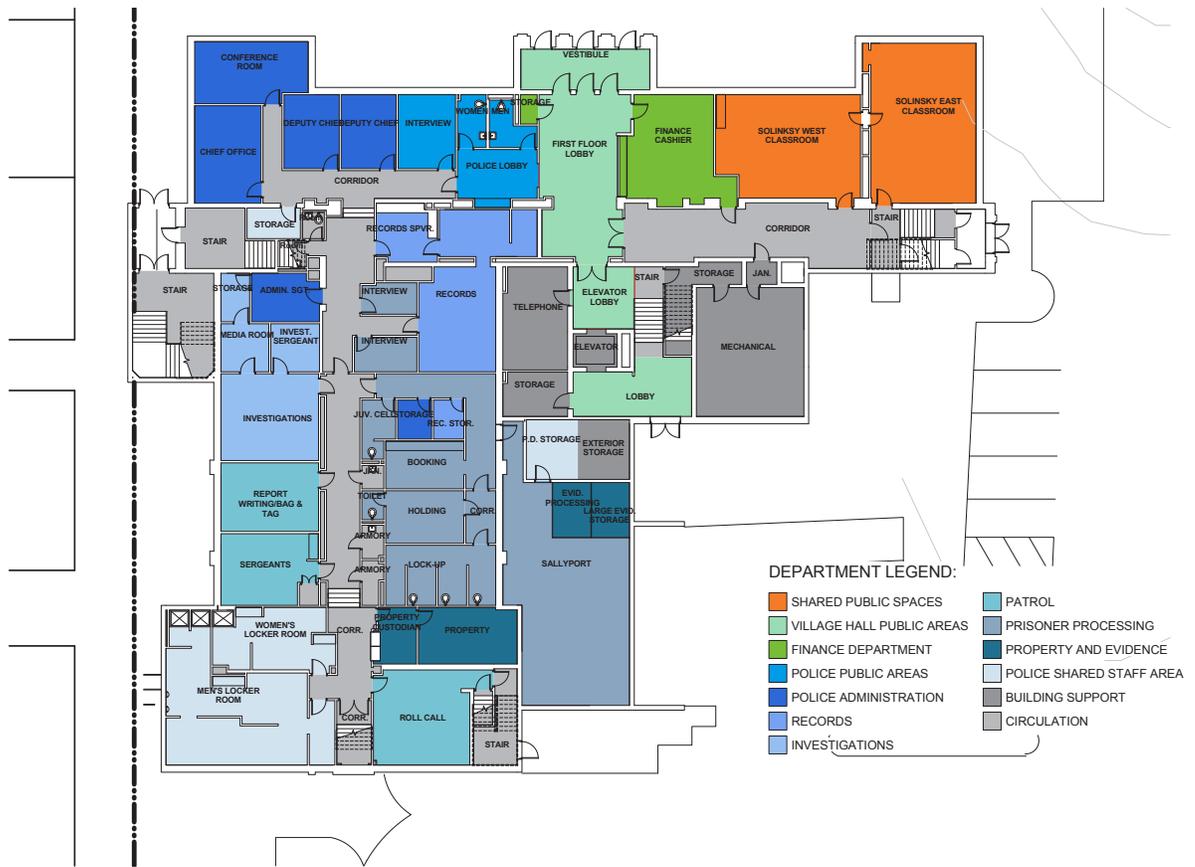
### Village Hall related deficiencies:

- Lack of protection/security for cashiers office.
- Finance Department is not together and separated on two floors.
- The public route to get to the Planning and Development Department should not have to go through the Administration Department.
- The Planning Department is undersized for the flow of work and storage needs.
- The Administration Department is also undersized, squeezed into small spaces, and compartmentalized.
- The Facilities & Multimedia offices are remote & separated from the rest of the department by being on the third floor.
- The flow of the Village Board room on the third floor is less than ideal in terms of controlling after hours access and security to the building.
- The current Village Board room also lacks direct secured exit routes for staff in case of an emergency.



# Existing Facility Utilization

Color coded plans by department

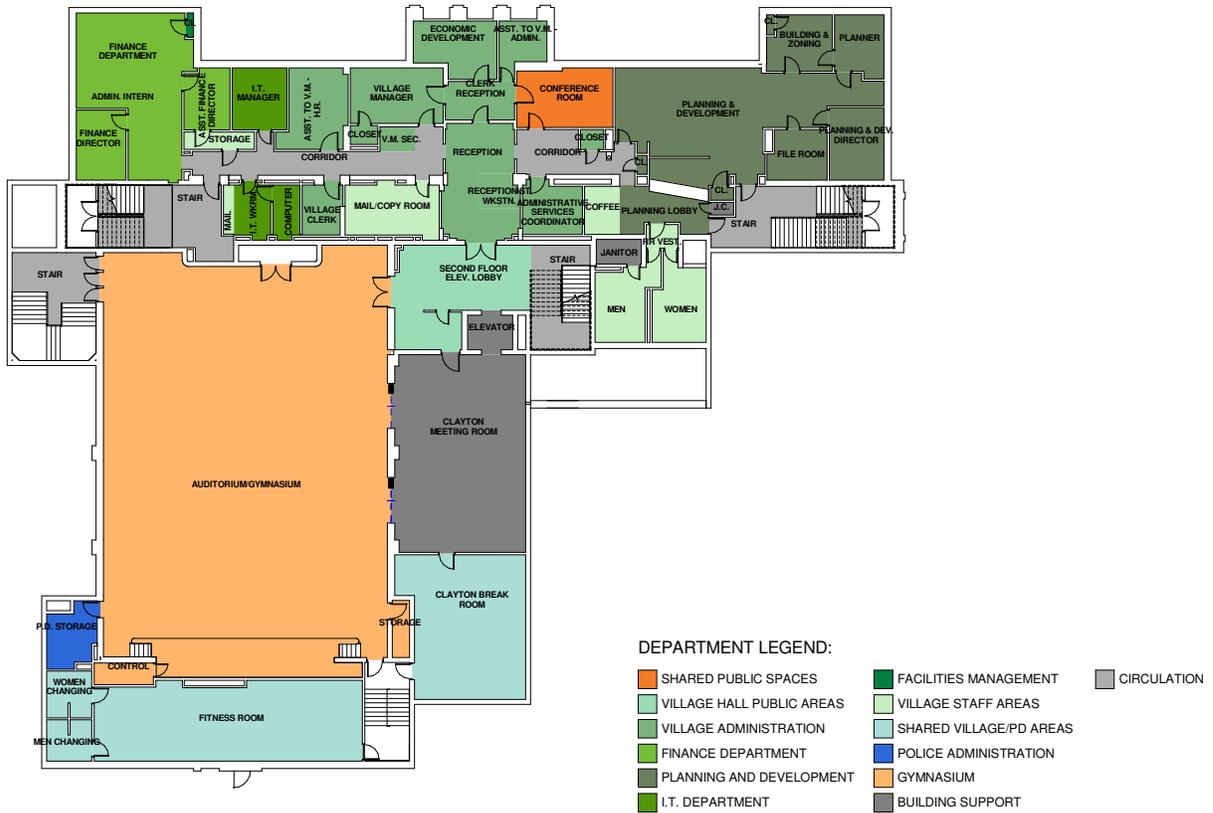


Level:  
1.0

0' ——— 40'

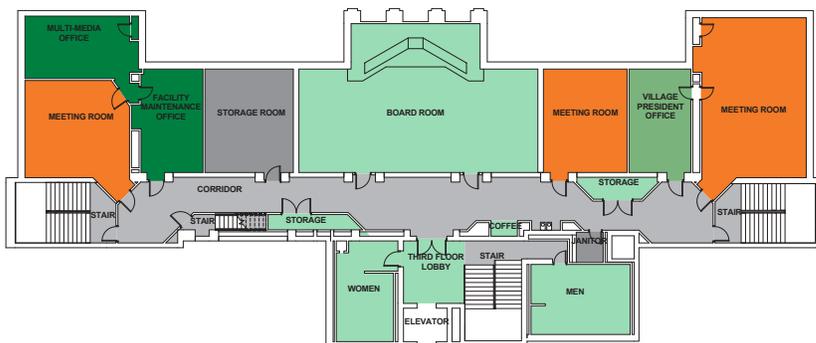
# Existing Facility Utilization

Color coded plans by department



Level:

2.0



Level:

3.0





# 3 FACILITY SPACE NEEDS ANALYSIS Updates

The original space needs study and program developed in 2012 was further vetted in the fall of 2013 by all village staff with the goal of trying to reduce program SF. The following summary page of both police and village spaces show the results of this effort.

Some technical terms are used in this section which call for description.

**Net Square Feet (NSF)** –This term refers to the space of a room that may be measured from the inside face of the walls of that room. The amount of Net Square Feet allocated for a space is driven by the functions the room is intended to serve.

**Department Gross Square Feet (DGSF)**– This amount of space includes certain spaces in addition to NSF to account for the wall thicknesses and internal walkways between rooms or workstations within a department. This is arrived at by applying a multiplier appropriate to the Net Square Feet of rooms within a department. The multiplier will vary depending on the types of spaces being considered.

**Building Gross Square Feet (BGSF)**- This amount of space will encompass the total amount of space needed to build the building. It includes space in addition to the DGSF not directly attributable to any particular department. This includes spaces like main corridors serving multiple departments, stairways, space for HVAC, electrical and plumbing distribution throughout the building and the thickness of the exterior walls. This is the building area that the cost estimate is based on.

## Nearby Municipality population, staff size, building size matrix

The following charts provide benchmark data from other communities to help highlight and identify common trends, similarities, and differences between communities. The charts are organized by community size. The building size data shown for each community assumes the entire building unless otherwise noted.

\* The s.f. sizes shown for Glen Ellyn Police & Village Hall portions include an equal percentage of common corridors, and mechanical/electrical/plumbing support spaces. The shared gym and public meeting rooms are not included in these numbers.

### Police Facility Benchmark Matrix

Community	Facility Type	Facility Type	Community Population	Year Completed	Building Size (Police portion)	Police Staff sworn/civilian	Indoor Firing Range
Darien, IL	New Building	Police	22,086	1995	23,000 s.f.	35/8	NO
Lisle, IL	New Building	Police	22,390	2000	38,660 s.f.	43/17	YES
Roselle, IL	New Building/Add.	Police	22,763	1970/2005	29,000 s.f.	33/11	NO
Westmont, IL	New Building	Police	24,685	2004	41,422 s.f.	40/5	YES
West Chicago, IL	Union Pacific	Police	27,086	Occupied 1992	14,812 s.f.*	48/10	NO
<b>Glen Ellyn, IL</b>	<b>Existing</b>	<b>Combined</b>	<b>27,450</b>	<b>1927</b>	<b>14,990 s.f.</b>	<b>43/8</b>	<b>NO</b>
Woodridge, IL	New Building	Police	32,971	1986	22,000 s.f.	52/15	NO
St. Charles, IL	New Building/Add.	Police	32,974	1985/2001		52/23	NO
Glendale Heights, IL	New Add/Renovation	Village Hall, Police	34,208	2012	40,000s.f. (police)	54/25 (total bldg allow 98)	YES
Addison, IL	Add./Renovation	Police	36,942	2000	30,000 s.f.	66/50	YES
Lombard, IL	New Building	Police	43,165	1973	23,000 s.f.	68/26	YES
Dekalb, IL	New Building	Police	43,862	2013	38,500 s.f.	57/17	Add alt.
Wheaton, IL	New Building	Police	52,894	1990	42,000 s.f.	65/35	YES

\* currently exploring a new facility

### Village Hall Benchmark Matrix

Community	Facility Type	Facility Type	Community Population	Year Completed	Building Size (village hall portions)	Staff Size	
Darien, IL	New Building	Village Hall	22,086	1980	# of remodels	8.5	
Lisle, IL	New Building	Village Hall	22,390	2003	36,400 s.f. Includes 16,000 s.f. rentable space	35	
Roselle, IL	New Building	Village Hall	22,763	1997	17,500 s.f.	17	
Westmont, IL	New Building	Village Hall	24,685	2000	22,931 s.f.	25	
West Chicago, IL	Existing Building	Village Hall	27,086	Occupied 1978	16,387 s.f.	30	
<b>Glen Ellyn, IL</b>	<b>Existing</b>	<b>Combined</b>	<b>27,450</b>	<b>1927</b>	<b>16,466 s.f.</b>	<b>58</b>	
Woodridge, IL	New Building	Village Hall	32,971	1998	27,530 s.f.	30	
Addison, IL	New Building	Village Hall	36,942	1998	52,000 s.f.	84	
Lombard, IL	New Building	Village Hall	43,165	1973	27,830 s.f.		
Wheaton, IL	Exist. Historical Building	Village Hall	52,894	Reno 1995	40,000 s.f.	33	

The following Space Needs Summary Chart compares the existing component sizes with the recommended component sizes for the year 2032 based on all the factors that went into this study. Therefore, this report suggests that an appropriate Village Hall size for Glen Ellyn should be over double it's current size or about 27,000sf. Likewise, an appropriate Police Department size for Glen Ellyn should be over 3-1/2 times it's current size or about 43,500sf.

# Facility Space Needs Analysis

## Space Needs Summary

	Village Hall Component	Current Year 2014		Proposed Year 2032			
		Staff Positions 2012	Building Gross Square Feet	Staff Positions 2032	Department Gross Square Feet	Net to Gross Ratio	Building Gross Square Feet
1.1	Village Hall Public Areas	0	4,726	0	4,571	1.15	5,257
1.2	Administration	11	2,258	11	3,101	1.20	3,721
1.3	Planning and Development	14	2,224	16	3,139	1.20	3,767
1.4	Finance	18	1,828	13	2,326	1.20	2,791
1.5	Facilities Management	9	355	11	1,507	1.20	1,808
1.6	Information Technology / Media	2	714	3	1,288	1.20	1,546
1.7	Village Staff Areas	0	749	0	2,094	1.20	2,513
<b>Totals</b>		<b>54</b>	<b>12,853</b>	<b>54</b>	<b>18,025</b>		
<b>Dept. Gross to Building Gross Factor</b>			<b>1.20</b>				
<b>Building Gross Square Feet total</b>			<b>15,424</b>				<b>21,402</b>

	Other Components in Civic Center	Current Year 2014		Proposed Year 2032			
		Staff Positions 2012	Building Gross Square Feet	Staff Positions 2032	Department Gross Square Feet	Net to Gross Ratio	Building Gross Square Feet
1.8	Shared Community Spaces / Meeting Rooms*	0	4,920	0	2,213	1.15	2,545
1.9	Gymnasium	0	5,643	0	5,643	1.00	5,643
1.10	Building Support (mep & storage spaces)	0	2,385	0	2,368	1.15	2,723
1.11	Leasable space to future tenants						
<b>Totals</b>		<b>0</b>	<b>12,948</b>	<b>0</b>	<b>10,224</b>		
<b>Dept. Gross to Building Gross Factor</b>			<b>1.00</b>				
<b>Building Gross Square Feet total</b>			<b>12,948</b>				<b>10,911</b>

\*Current meeting room spaces deemed excessive; will be reduced by 2032 with space allocations going to other departments

	Police Department Component	Current Year 2014		Proposed Year 2032			
		Staff Positions 2012	Building Gross Square Feet	Staff Positions 2032	Department Gross Square Feet	Net to Gross Ratio	Building Gross Square Feet
2.1	Police Public Areas	0	511	0	1,886	1.15	2,169
2.2	Records	10	717	10	1,389	1.20	1,667
2.3	Patrol (26/37), CSO(2.5/5), Community Education Officer(1/1), HS Liason Officer(1/2)	29.5	1,060	45.0	2,063	1.20	2,476
2.4	Investigations	5	803	13	3,082	1.20	3,698
2.5	Police Administration	5	1,216	6	2,544	1.20	3,053
2.6	Property and Evidence	1	529	1	2,956	1.15	3,399
2.7	Prisoner Processing	0	1,811	0	4,544	1.25	5,680
2.8	Police Shared Staff Area	1	3,023	2	4,689	1.15	5,392
2.9	Emergency Operation Center	0	0	0	1,826	1.15	2,100
2.10	Police Building Support	0	0	0	2,618	1.15	3,011
2.11	Firing Range	0	0	0	3,833	1.15	4,407
<b>Totals</b>		<b>51.5</b>	<b>9,670</b>	<b>77.0</b>	<b>31,429</b>		
<b>Dept. Gross to Building Gross Factor</b>			<b>1.21</b>				
<b>Building Gross Square Feet total</b>			<b>14,066</b>				<b>37,052</b>

	Village Hall/Police Department Combined	Current Year 2014		Proposed Year 2032			
		Staff Positions 2012	Building Gross Square Feet	Staff Positions 2032	Department Gross Square Feet	Net to Gross Ratio	Building Gross Square Feet
<b>Totals</b>		<b>106</b>	<b>42,437</b>	<b>131</b>	<b>59,678</b>		<b>69,365</b>
<b>Existing Dept. Gross to Building Gross Factor</b>			<b>1.06</b>				<b>1.00</b>
<b>Existing Building Gross Square Feet</b>			<b>44,988</b>				<b>69,365</b>
			<b>current</b>				<b>proposed</b>

# PARKING NEEDS



One of the greatest challenges of the Civic Center site is the lack of adequate on site parking for both staff and the public. In fact during business hours, quite often there are no on-site spaces available for the public.

Municipal Buildings commonly have a high need for parking. At Village Hall it is necessary to accommodate the large number of employees, large public meetings like Village Board, and Plan Commission, and the continual flow of residents utilizing services and conducting business. At the Police Department it is necessary to accommodate employee vehicles as well as numerous Police vehicles and the visitors accessing the building for a wide variety of services offered by the Police Department.

The analysis in the section is intended to clearly define the quantity of parking needed. The table further defines the quantity of parking needed by each division of each department. This is important because it enables project planners and designers to recognize and appropriately allocate the right quantities of the correct type of parking in the best location to achieve a smoothly operating vehicle traffic flow to and from the site.

The Needs Assessment and Project Costs for schemes 3A & 3B reflect a 2 level parking structure for the existing site. The lower level would be underground while the upper level would be at roughly the same elevation as the existing lot. While the current facility and operations do not have this amenity, there are compelling arguments for a heated and ventilated garage.

- Garages have proven to improve efficiency of the Patrol officers during severe winter conditions. The vehicles are kept warm and protected from the elements, allowing an officer to immediately remobilize to the streets, versus wasting shift time scraping windows, warming up engines, etc.
- Protection of Village assets. Not only is the vehicle an asset, but more importantly the equipment and hardware on board are vital to officers performing their duties. More and more technology is being loaded into the vehicles to provide the officers accurate and up-to-date intel on their patrol routes and at the scene of the calls. On-board terminals, gear, and software are sensitive to extreme heat and cold conditions and their maintenance or replacement impacts annual operating budgets. Without protection from the elements the life cycle and replacement will be accelerated for this equipment.
- Special use vehicles such as crime scene, SWAT, etc. are expensive investments for the Village and Police Department. Expediting their mobilization for an event becomes paramount, and similar to the patrol vehicles, protection of the vehicles and the on-board equipment is a priority. Protocol necessitates that the high-tech equipment on board is ready to respond, and the equipment is very sensitive to hot and cold environments.
- On the Civic Center site, a lower level garage would also provide visual screening & protection of officers and staff from all the apartments units surrounding this site.

# Parking Needs

## Combined Village Hall / Police Parking:

	2012 (during business hrs at any given time)				2032 (during business hrs at any given time)			
	Village Vehicles	Employee Vehicles	Visitor Vehicles*	Total Vehicles	Village Vehicles	Employee Vehicles	Visitor Vehicles*	Total Vehicles
<b>Combined Parking Space NEEDS:</b>	<b>28</b>	<b>63</b>	<b>23</b>	<b>114</b>	<b>36</b>	<b>82</b>	<b>49</b>	<b>167</b>
<b>Current on-site parking Spaces:</b>	<b>28</b>	<b>50</b>	<b>0*</b>	<b>78</b>				

\* Note: Visitors can currently park on Duane Street in either 30min or 3hr parking spaces between Main St & Forest Ave. There are now 22 spaces on the south side of Duane and 14 spaces on the north side of Duane for a total of 36 spaces shared with other nearby businesses. Forest Ave also has free street parking. The 2009 Downtown Strategic Plan also identified a future parking garage near the intersection of Duane & Forest to help with the parking shortage in this area.

## Police Department Parking Needs:

	Police Department Components	2012 (during day shift at any given time)				2032 (during day shift at any given time)			
		Village Vehicles	Employee Vehicles	Visitor Vehicles*	Total Vehicles	Village Vehicles	Employee Vehicles	Visitor Vehicles	Total Vehicles
2.1	Police Public Lobby								
2.2	Records		3	1			4	2	
2.3	Patrol(6/10) [includes CSO(2.5/5) & Community Education Officer(1/1)]	13	10			19	16		
2.4	Investigations (includes HS Liason officer)	4	6			5	11		
	SWAT Van/Special Use	1				1			
2.5	Police Administration	3	5	1		4	6	1	
2.6	Property and Evidence		1				1		
2.7	Prisoner Processing / Bond Out		0	1			0	1	
2.8	Shared Staff Area		0				0		
2.9	Emergency Operations Center / training		0	0			0	25	
2.10	Police Building Support		0				0		
	<b>Police Parking Spaces needs:</b>	<b>21</b>	<b>25</b>	<b>3</b>	<b>49</b>	<b>29</b>	<b>38</b>	<b>29</b>	<b>96</b>

\* Note: Currently visitor parking is shared between Police & Village Hall. Police visitor parking is expected to increase in the future if a dedicated EOC / training room is built that would bring outside agencies to the P.D.

## Village Hall Parking Needs:

	Village Hall Components	2012 (during business hrs at any given time)				2032 (during business hrs at any given time)			
		Village Vehicles	Employee Vehicles	Visitor Vehicles*	Total Vehicles	Village Vehicles	Employee Vehicles	Visitor Vehicles*	Total Vehicles
1.1	Village Hall Public Areas (includes board rm / executive session)			1				1	
1.2	Administration	2	11	1		2	12	1	
1.3	Planning and Development (inspection)	5	14	2		5	14	2	
1.4	Finance		10	2			14	2	
1.5	Facilities Management		1	0			2	0	
1.6	Information Technology/Media		2	0			2	0	
1.7	Village Staff Areas			0				0	
1.8	Shared Public Spaces / Meeting Rooms			8				8	
1.9	Gymnasium			6				6	
1.10	Building Support								
	<b>Village Hall Parking Space needs:</b>	<b>7</b>	<b>38</b>	<b>20</b>	<b>65</b>	<b>7</b>	<b>44</b>	<b>20</b>	<b>71</b>

\* Note: Visitor Vehicle quantities are an estimate. With all the different village hall and community meeting / gym schedules each day, it's difficult to quantify an average visitor parking need in this case. Increased after hours public parking demands for board meetings or other events appear to be supported for a couple reasons. A large percentage of the on-site staff spaces are available after hours, street parking is available, and some citizens walk or use mass transit.



# 4

## SITE EVALUATIONS/ DESIGN CONCEPT DIAGRAM UPDATES

Over the past 2 years, Dewberry has explored 8 different design options with the Village of Glen Ellyn based on the results of the facility needs study and program that was developed and recently modified. The 4 options with the most promise are being presented in this study update and are highlighted below in GREEN.

### Option 1 series:

(minor renovations with NO additions.)

### Option 2 series:

(renovations / additions with no structured parking)

- 2A
- 2B

### Option 3 series:

(renovations / additions with structured parking)

- 3A
- 3B

### Option 4 series:

(new police building offsite with village hall renovations)

- 4A (South Park Ave site near Glenbard South)
- 4B (Panfish Park site)
- 4C (Spring Ave site)

These design concepts have been developed in response to the space, functional adjacency, and parking needs identified for each department. The site planning options explored here have tried to address the following desirable attributes:

- External visibility of buildings and ease of internal campus way finding.
- Vehicular access to site and ease of circulation in and around site environs.
- Adequate and convenient parking on site.
- Compatible land use with adjacent properties.
- Capability for future expansion needs beyond 2032
- Economic impact

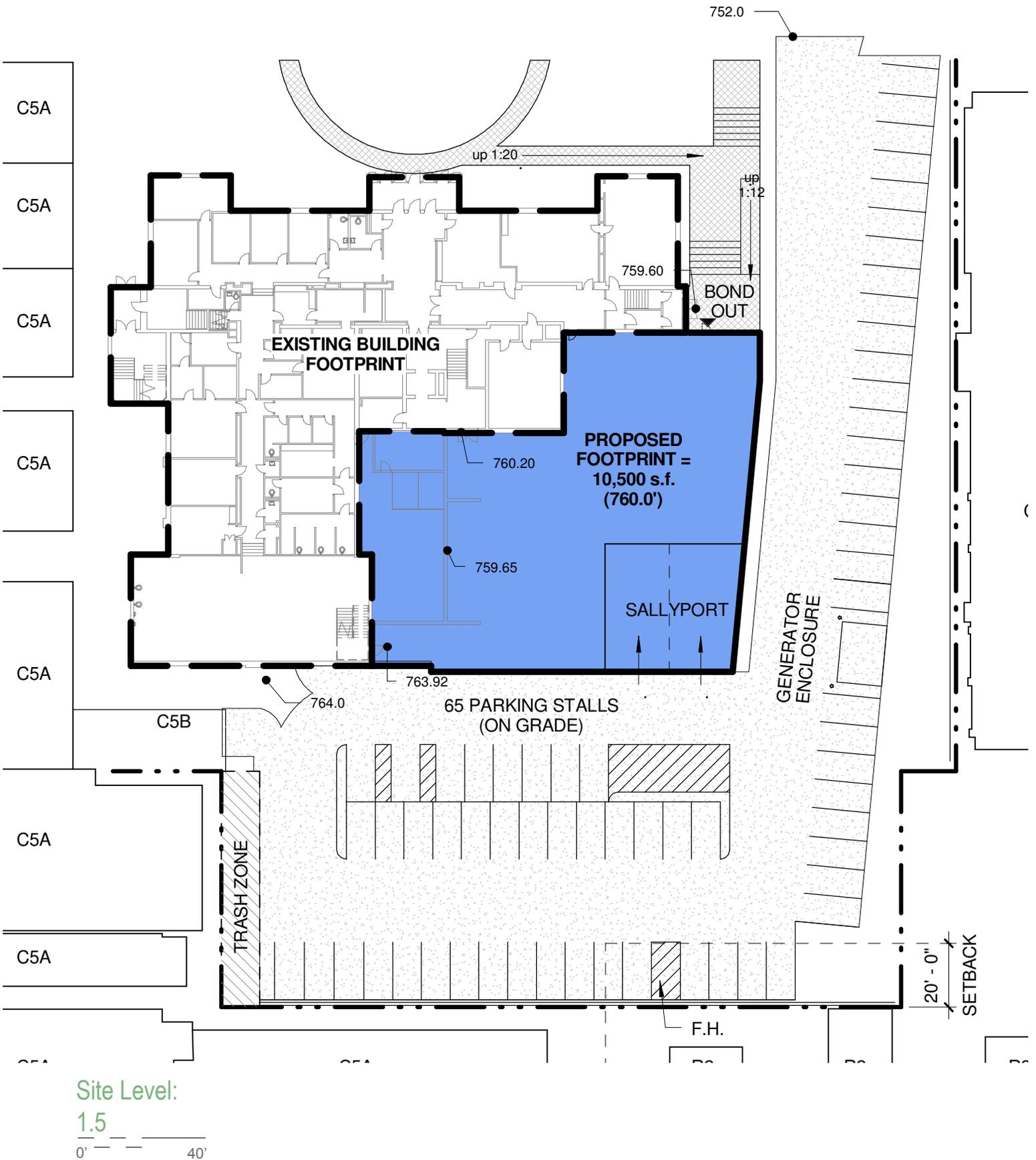
### Key Critical Success Factors:

1. To maximize efficient use and adjacencies for all department spaces.
2. To develop an enhanced security planning strategy for both Police and Village Hall spaces.
3. To improve the public/private separation of spaces.
4. To improve flow and circulation through different departments.

# Option 2A:

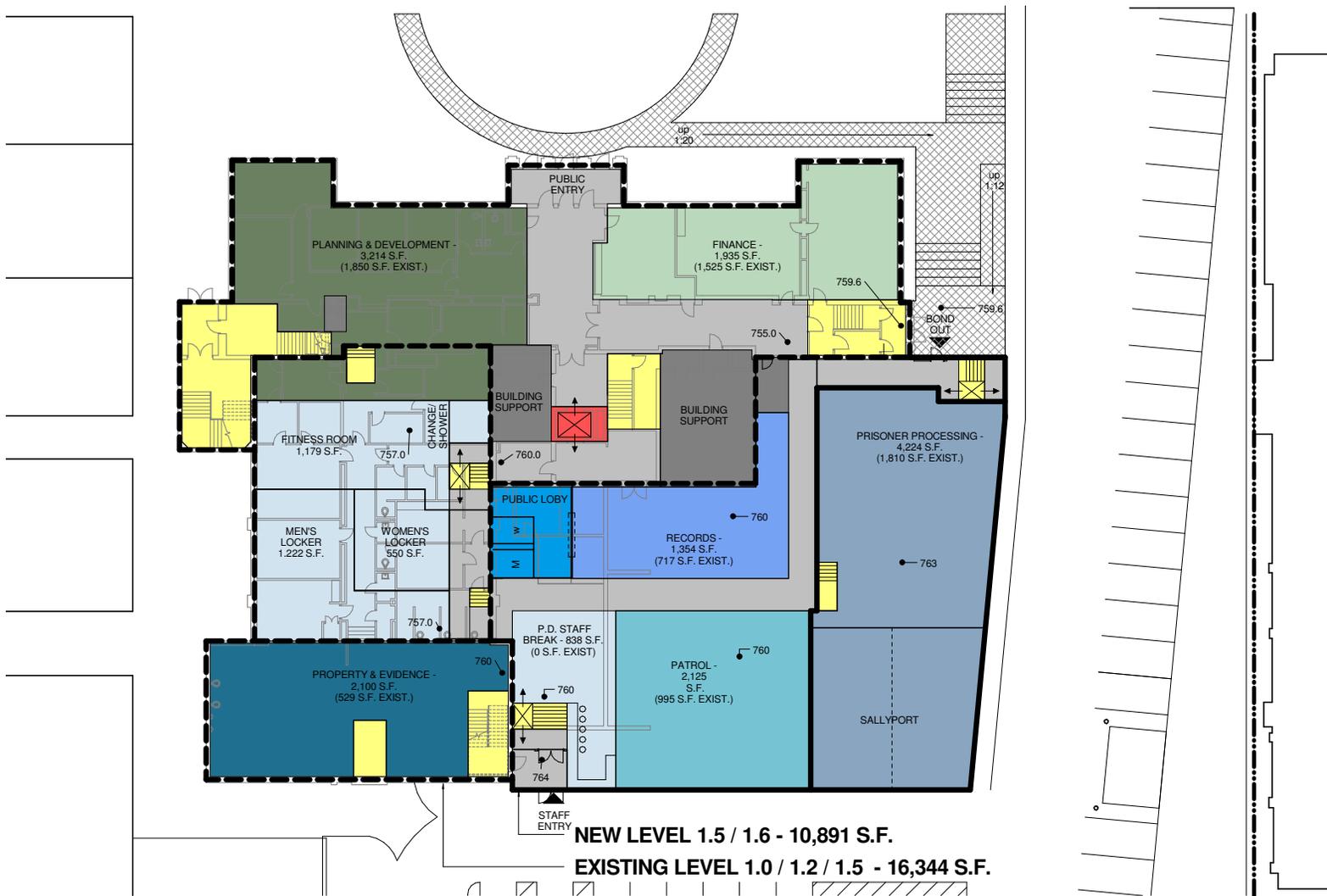
Option 2A (Civic Center Site) consists of a two story addition to the southeast corner of the building housing some new police spaces such as prisoner processing, patrol, records, and a new sallyport. The gym would get filled in with enlarged police & community functions and a new 3rd floor mezzanine. Village Hall improvement highlights include a unified Finance Department on the first floor as well the shifting of the Planning & Development Department to the first floor. See pros / cons & cost comparison matrix for more details.

Option 2A: 61,128sf total: 19,896sf (new) & 25,275sf (renovated)

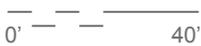


# Site Evaluation/Design Concept Diagrams

Option 2A: 61,128sf total: 19,896sf (new) & 25,275sf (renovated)



Level:  
1.0/1.5

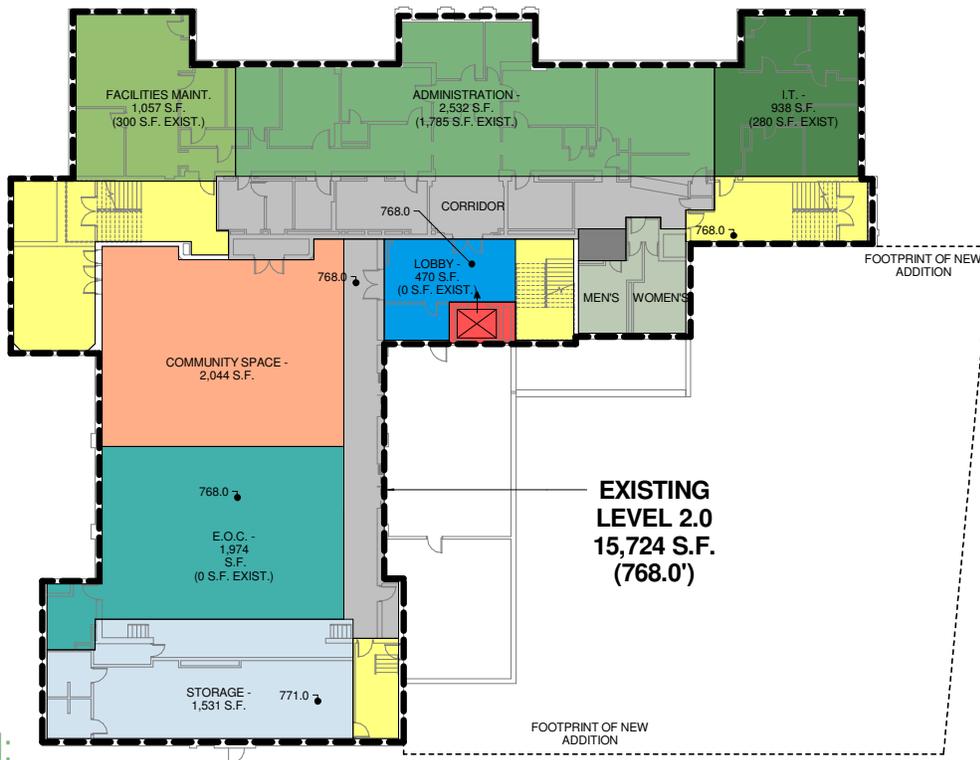


# Site Evaluation/Design Concept Diagrams

## Option 2A: 61,128sf total: 19,896sf (new) & 25,275sf (renovated)

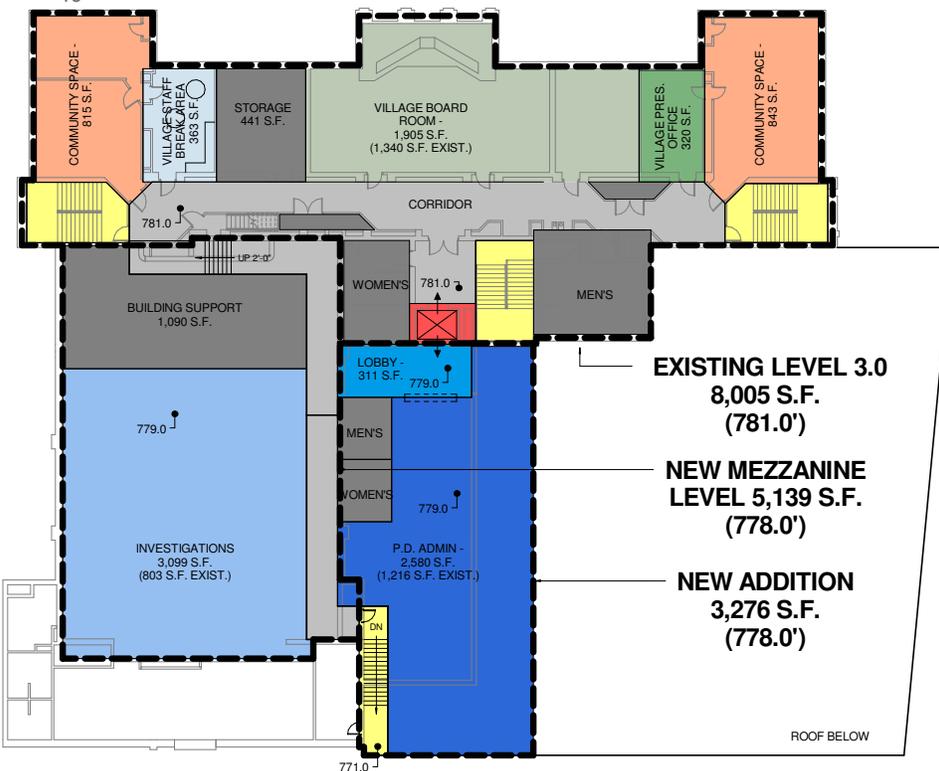
### BUILDING USES:

- SHARED PUBLIC SPACES
- VILLAGE HALL PUBLIC AREAS
- VILLAGE ADMINISTRATION
- FINANCE DEPARTMENT
- PLANNING AND DEVELOPMENT
- I.T. DEPARTMENT
- FACILITIES MANAGEMENT
- VILLAGE STAFF AREAS
- SHARED VILLAGE/PD AREAS
- POLICE PUBLIC AREAS
- POLICE ADMINISTRATION
- RECORDS
- INVESTIGATIONS
- PATROL
- PRISONER PROCESSING
- PROPERTY AND EVIDENCE
- POLICE SHARED STAFF AREA
- GYMNASIUM
- BUILDING SUPPORT
- CIRCULATION



Level:  
2.0

0' 40'

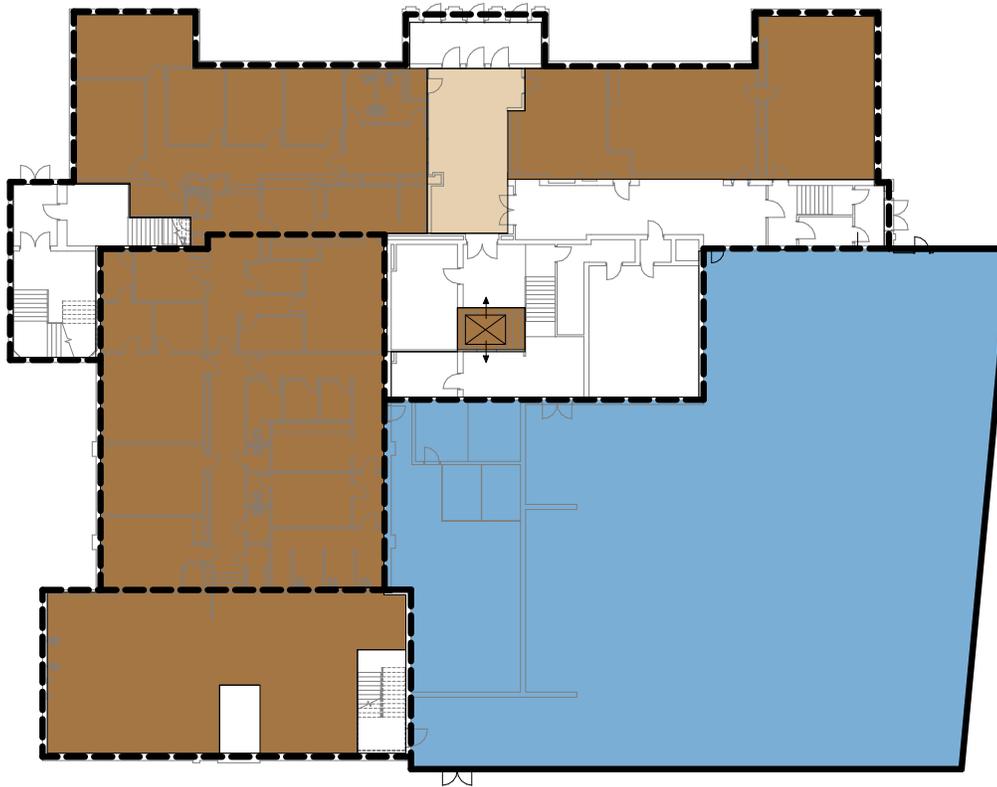


Level:  
3.0/new mazzanine

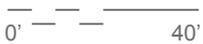
0' 40'

Option 2A: 61,128sf total: 19,896sf (new) & 25,275sf (renovated)

- HEAVY RENOVATION = 10,921 SF**
- LIGHT RENOVATION = 587 SF**
- NO RENOVATION = 4,350 SF**
- NEW CONSTRUCTION = 10,925**

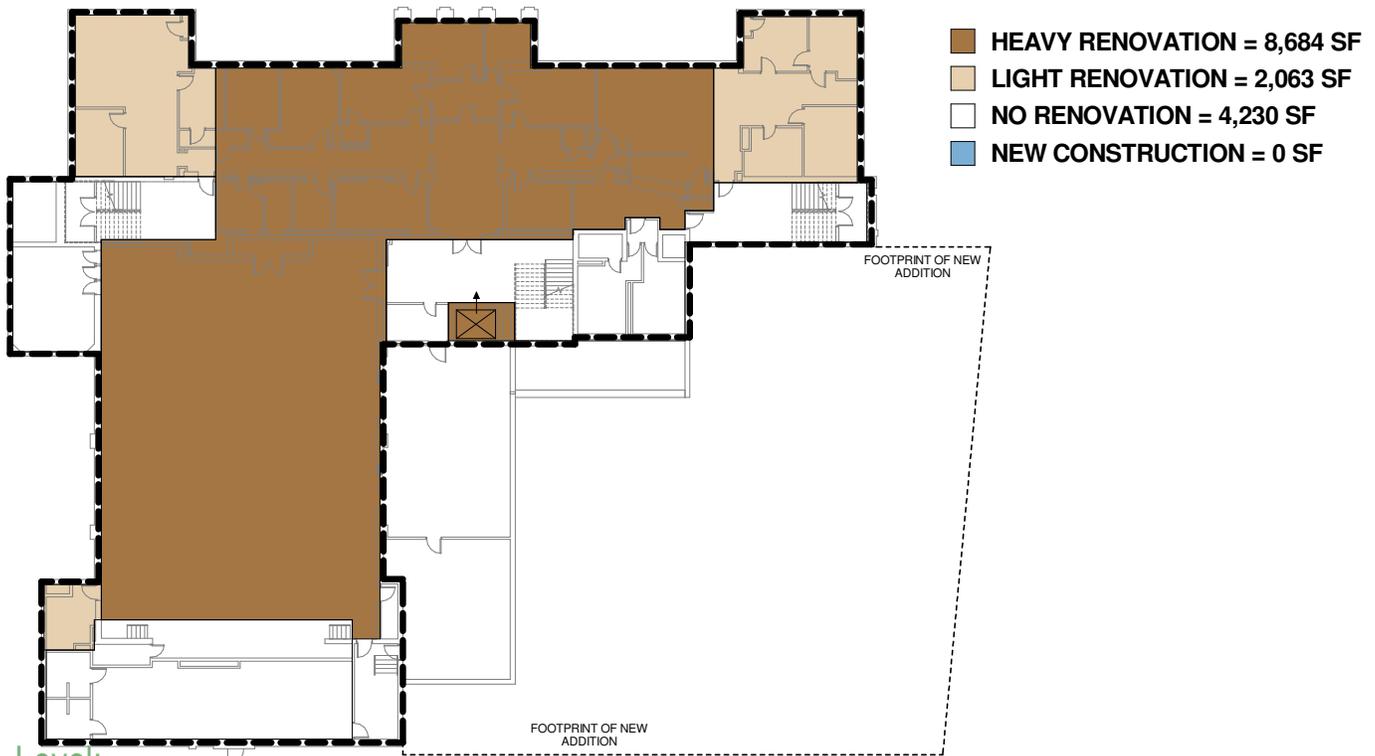


Level:  
1.0/1.5



# Site Evaluation/Design Concept Diagrams

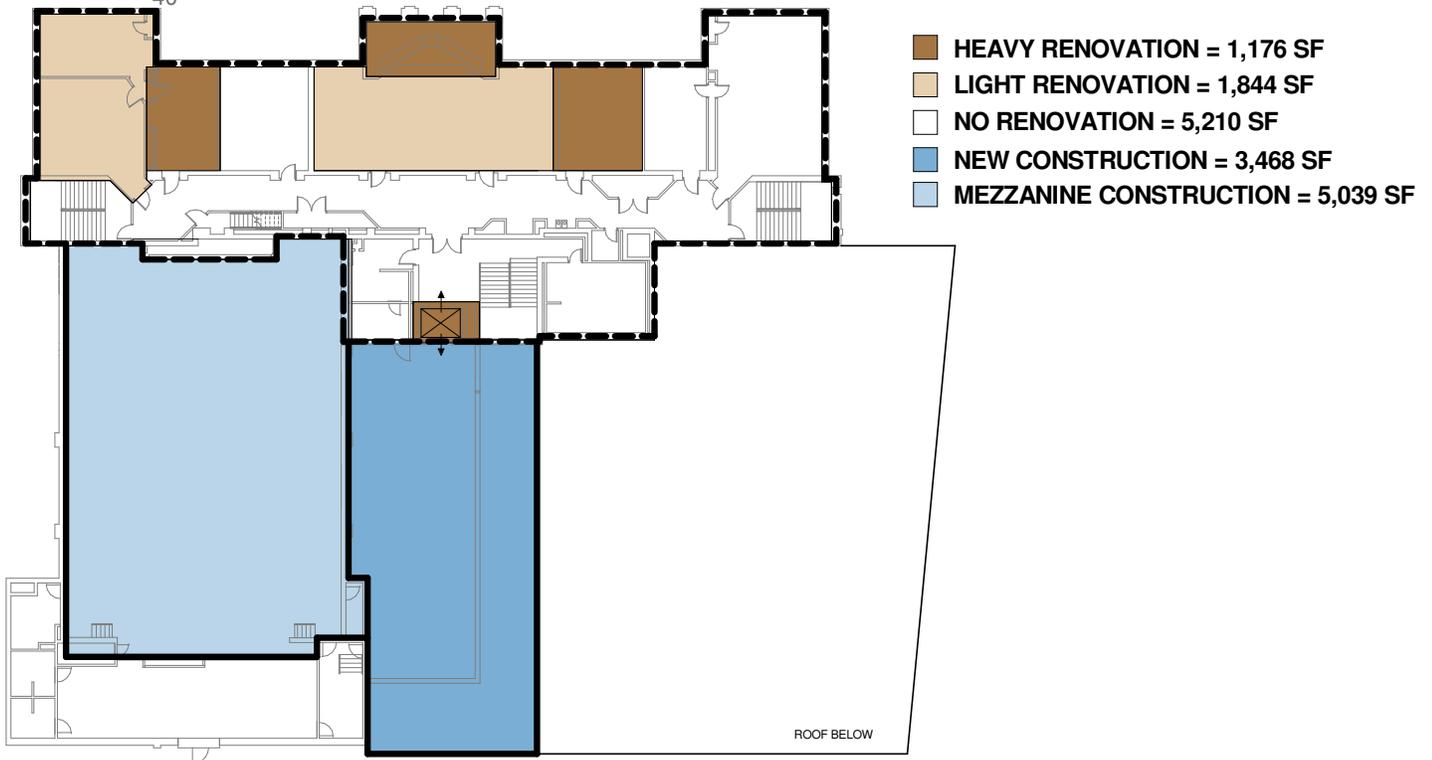
Option 2A: 61,128sf total: 19,896sf (new) & 25,275sf (renovated)



Level:

2.0

0' 40'



Level:

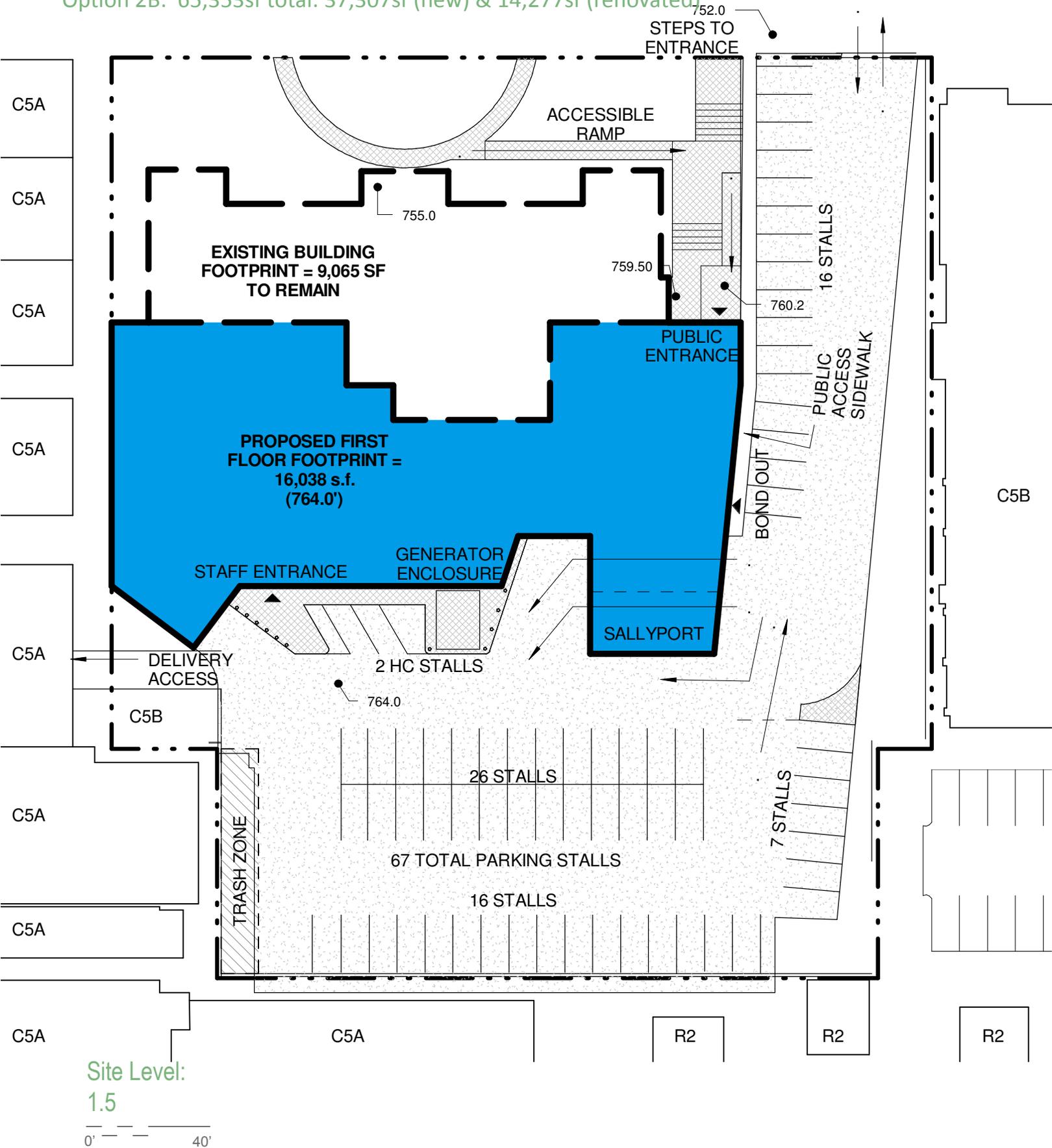
3.0/new mezzanine

0' 40'

# Option 2B:

Option 2B (Civic Center site) demolishes the 1940's gymnasium volume as well as the 1970's Clayton addition (16,942sf total). In it's place, is a new 2 story + basement addition containing mostly police functions. This addition corrects all the handicap inaccessible levels from the existing conditions. However, there are still many site issues that are not able to be solved in this option. See pros / cons & cost comparison matrix for more details.

Option 2B: 65,353sf total: 37,307sf (new) & 14,277sf (renovated)





# Site Evaluation/Design Concept Diagrams

Option 2B: 65,353sf total: 37,307sf (new) & 14,277sf (renovated)



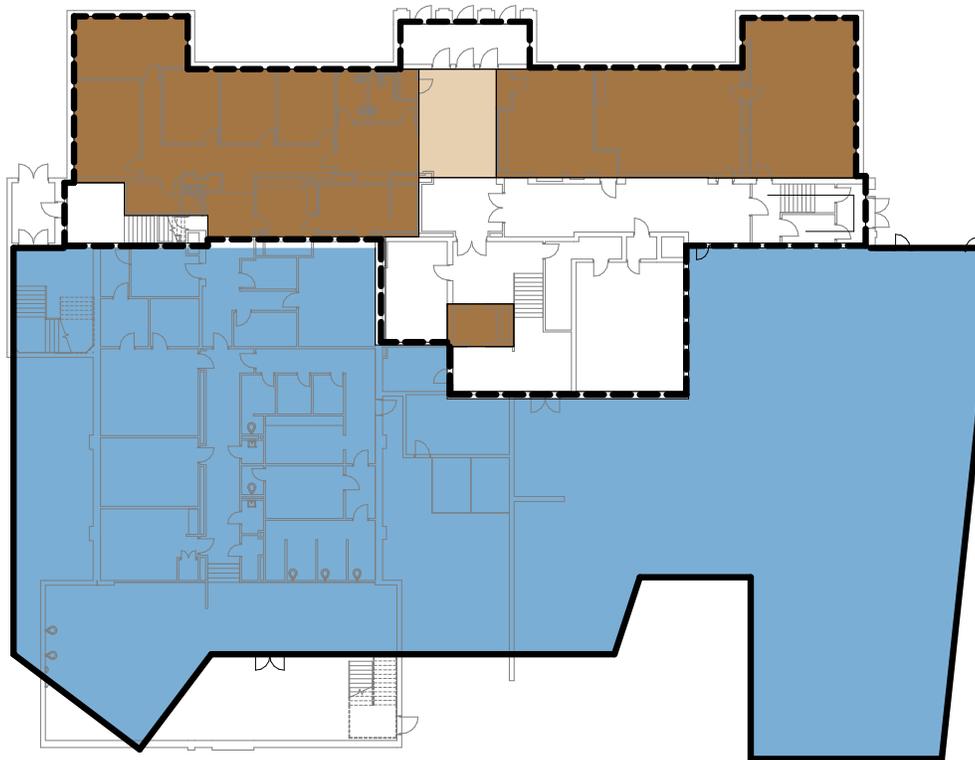
## BUILDING USES:

- SHARED PUBLIC SPACES
- VILLAGE HALL PUBLIC AREAS
- VILLAGE ADMINISTRATION
- FINANCE DEPARTMENT
- PLANNING AND DEVELOPMENT
- I.T. DEPARTMENT
- FACILITIES MANAGEMENT
- VILLAGE STAFF AREAS
- SHARED VILLAGE/PD AREAS
- POLICE PUBLIC AREAS
- POLICE ADMINISTRATION
- RECORDS
- INVESTIGATIONS
- PATROL
- PRISONER PROCESSING
- PROPERTY AND EVIDENCE
- POLICE SHARED STAFF AREA
- GYMNASIUM
- BUILDING SUPPORT
- CIRCULATION

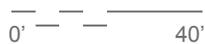


Option 2B: 65,353sf total: 37,307sf (new) & 14,277sf (renovated)

- HEAVY RENOVATION = 4,681 SF
- LIGHT RENOVATION = 367 SF
- NO RENOVATION = 3,477 SF
- NEW CONSTRUCTION = 16,038 SF

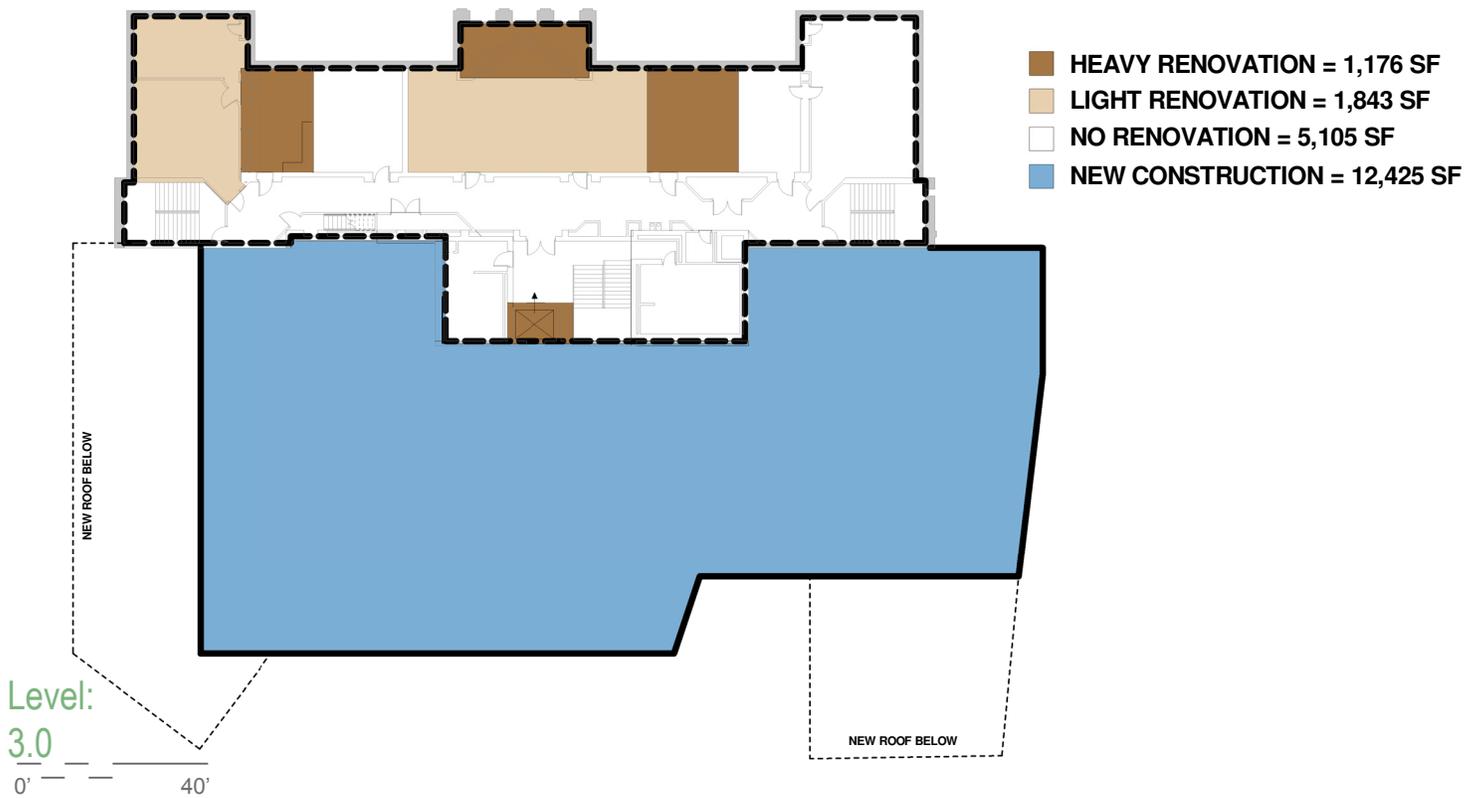
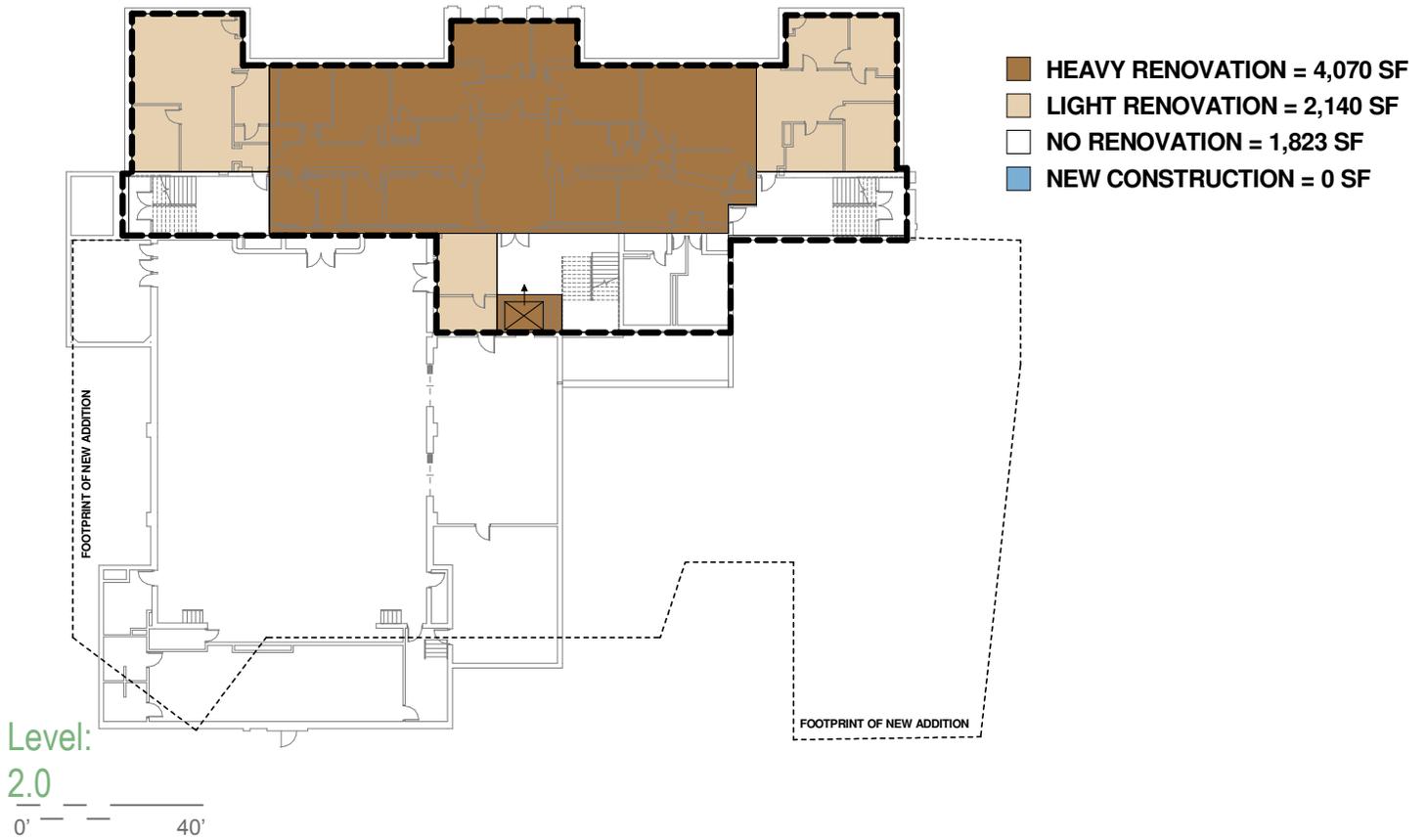


Level:  
1.0/1.5



# Site Evaluation/Design Concept Diagrams

Option 2B: 65,353sf total: 37,307sf (new) & 14,277sf (renovated)

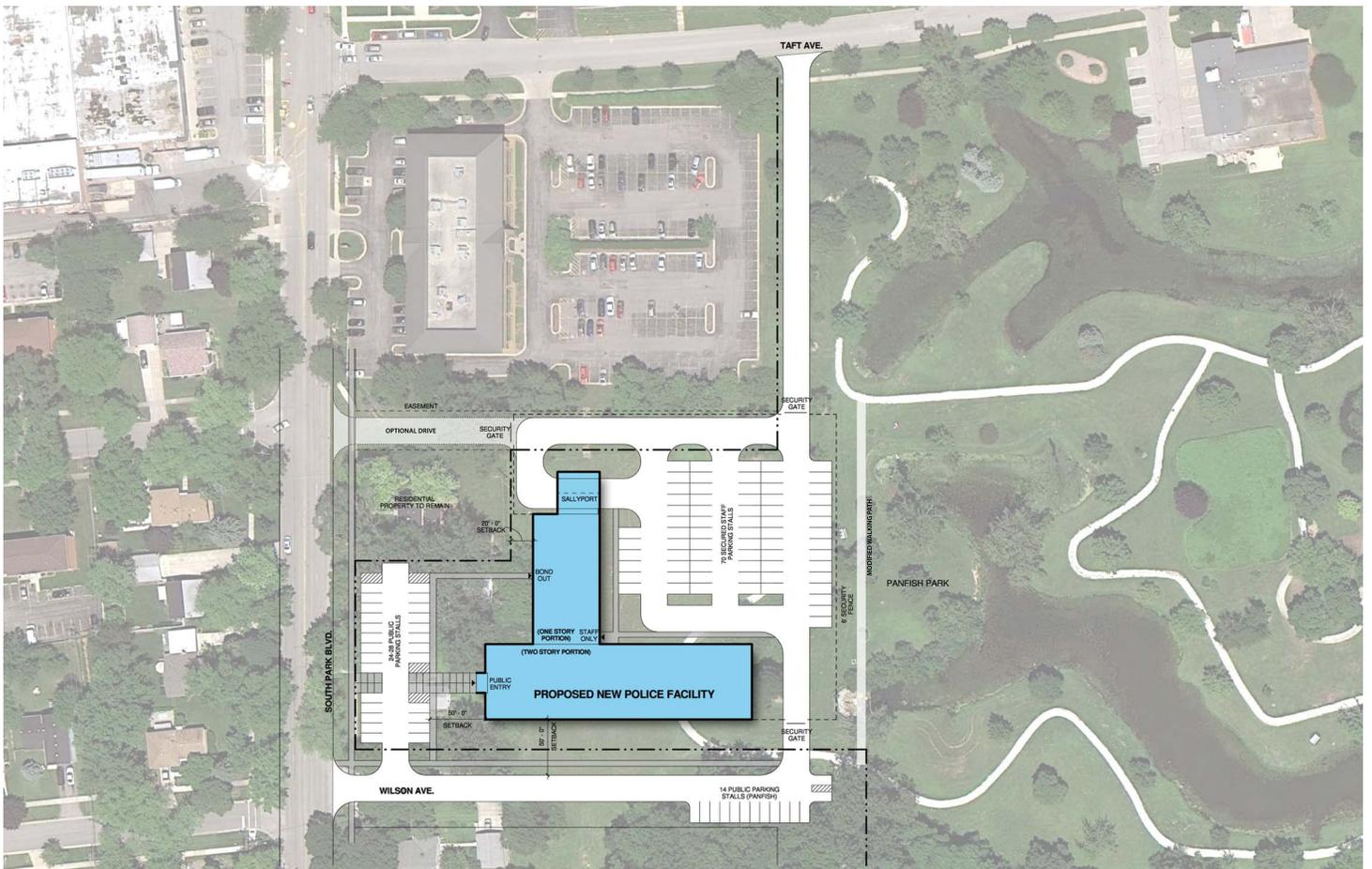


Option 4B: 81,988sf total: 37,000sf (new) & 22,533sf (renovated)

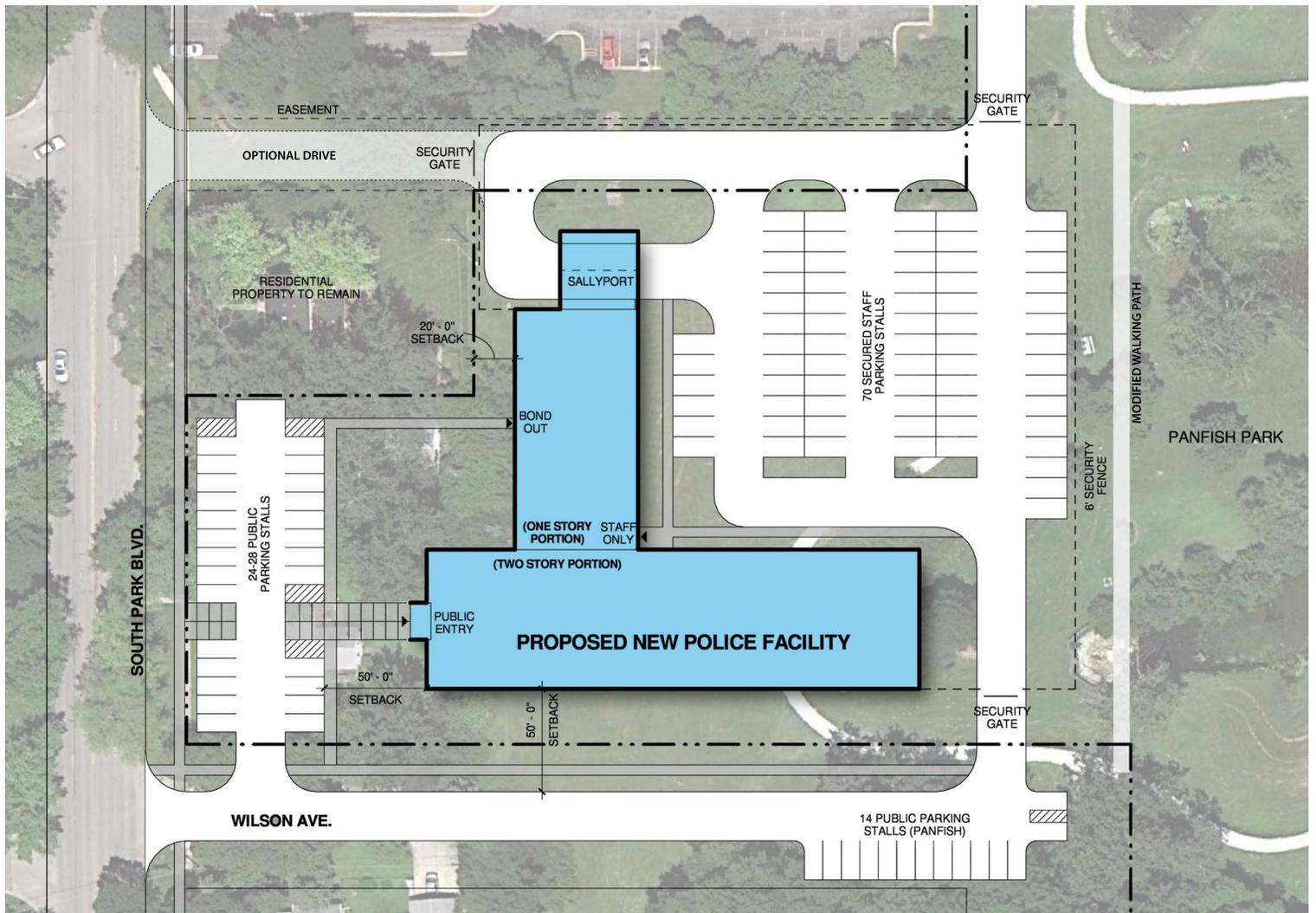


**Schemes 4B (Panfish Park site)** explores a new 2 story with basement police station on this new 3 acre site. Planning on this new site allows for some tighter efficiencies and utilization as compared to all the constraints on the existing site. A benefit to this scheme is staging. Both Police & Village Hall operations could remain uninterrupted until the Police were ready to move into their new building. Once this happens, the Village would have more flexibility in staging different areas of the Village Hall renovation within the existing building and over time if needed. The Panfish Park access drive from Wilson would be improved as would trailhead parking. Some of the western trail path would have to be modified.

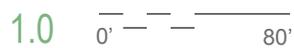
**Site Level:**  
1.0 0' 160'



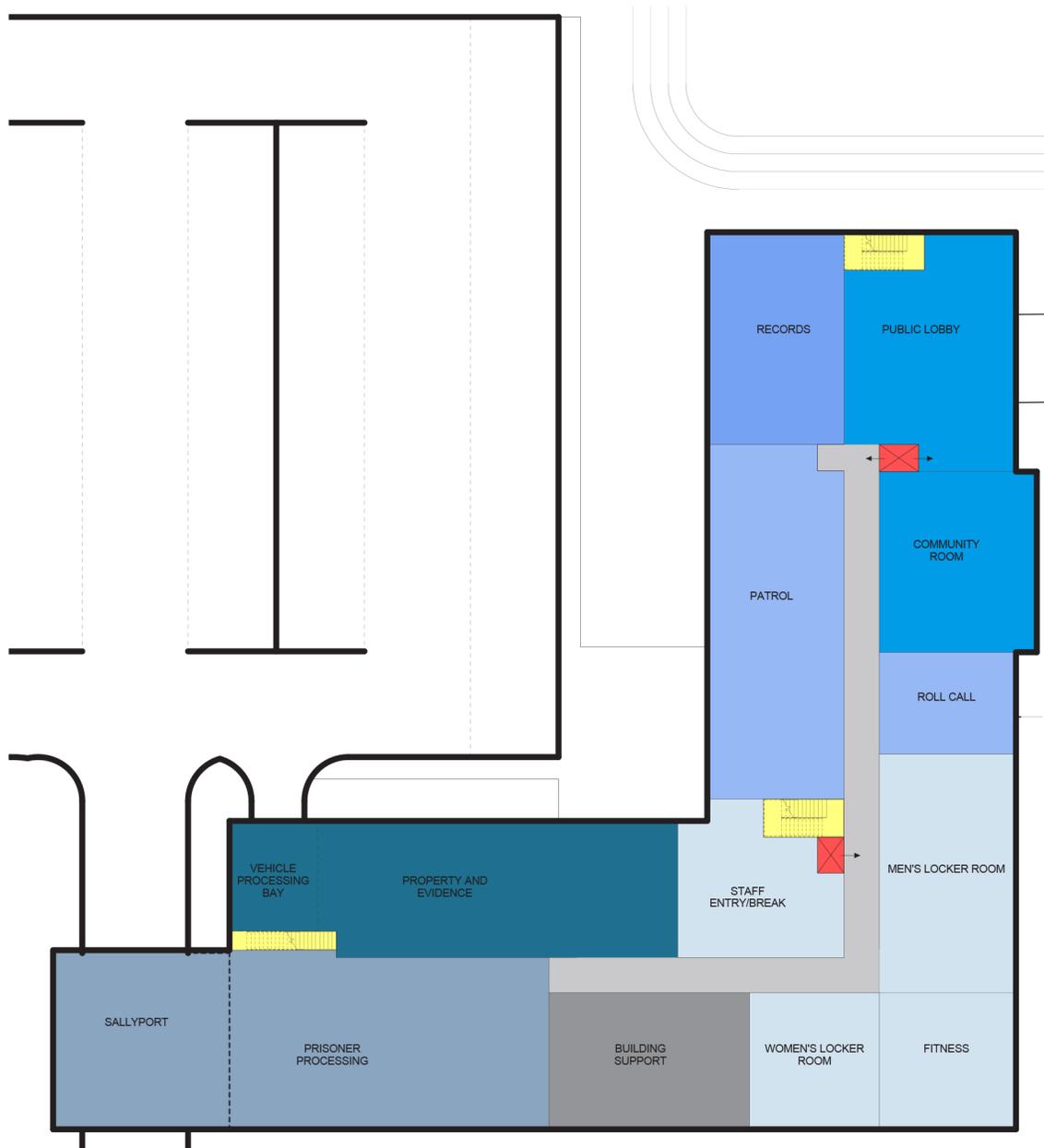
Option 4B: 81,988sf total: 37,000sf (new) & 22,533sf (renovated)



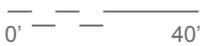
Site Level:



Option 4B: 81,988sf total: 37,000sf (new) & 22,533sf (renovated)



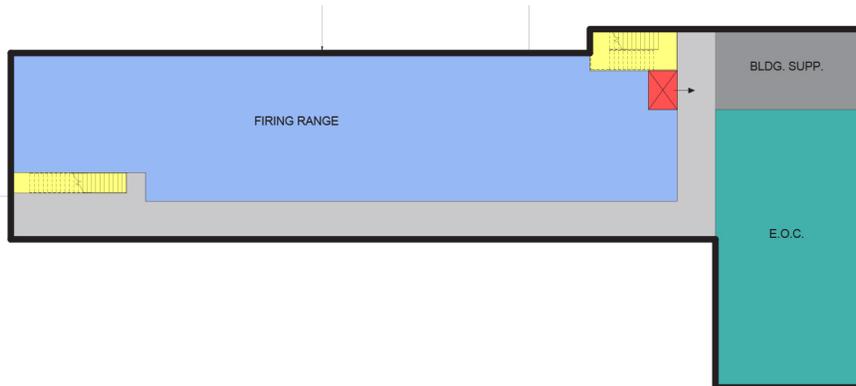
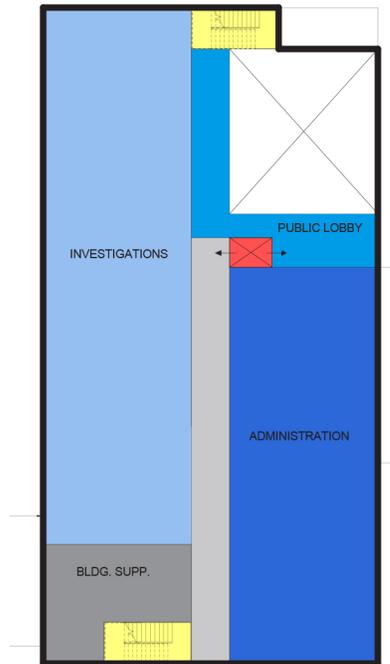
Level:  
1.0



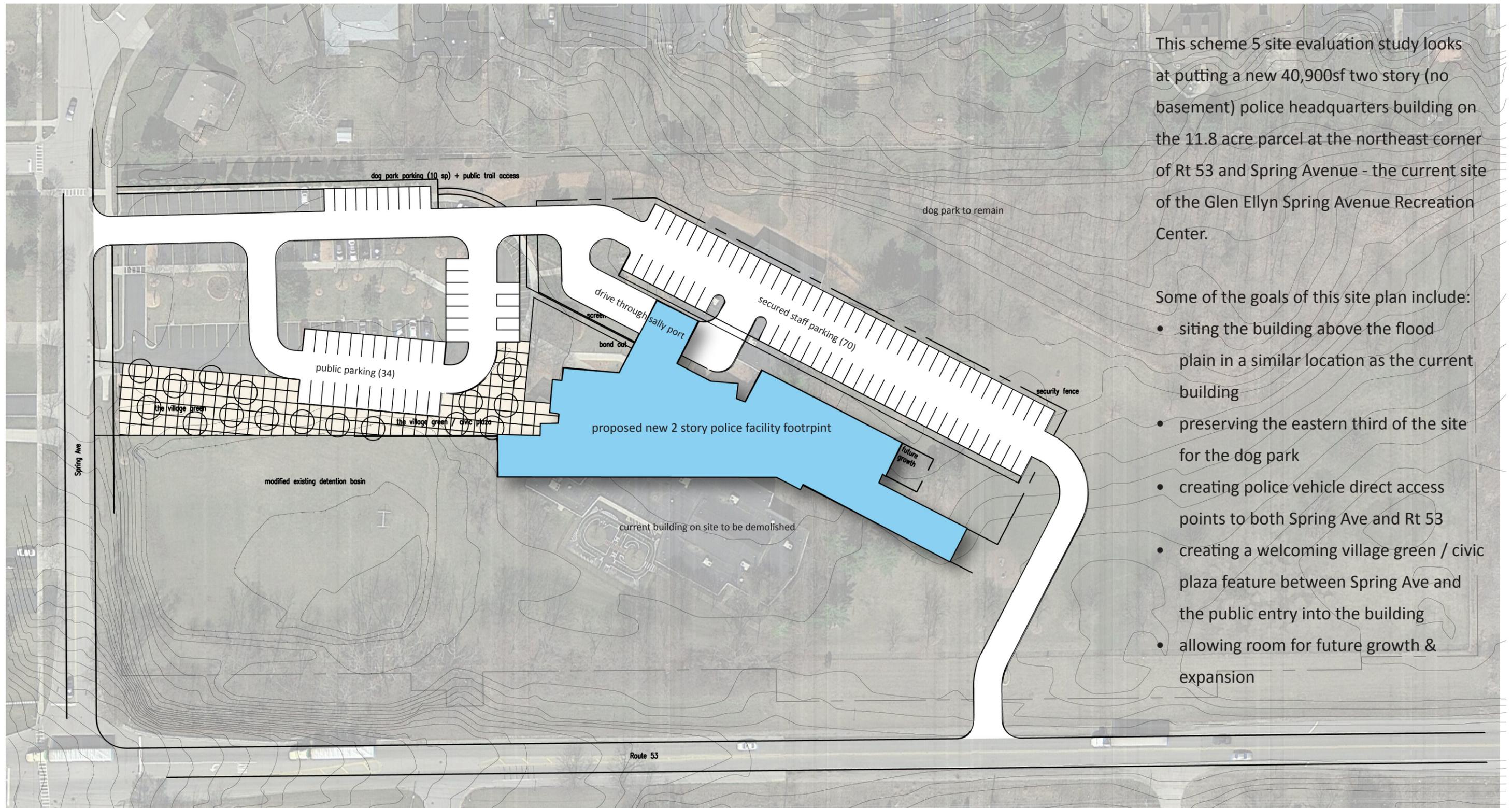
Option 4B: 81,988sf total: 37,000sf (new) & 22,533sf (renovated)

These floor plans shapes don't match the latest site plan building footprint. However, they can still be referenced as stacking diagrams to see which program spaces will go on which levels. The only program space shown on these plans that is no longer in the program is a dedicated community room. The EOC could double as a community meeting space from time to time.

Level:  
2.0  
0' 40'



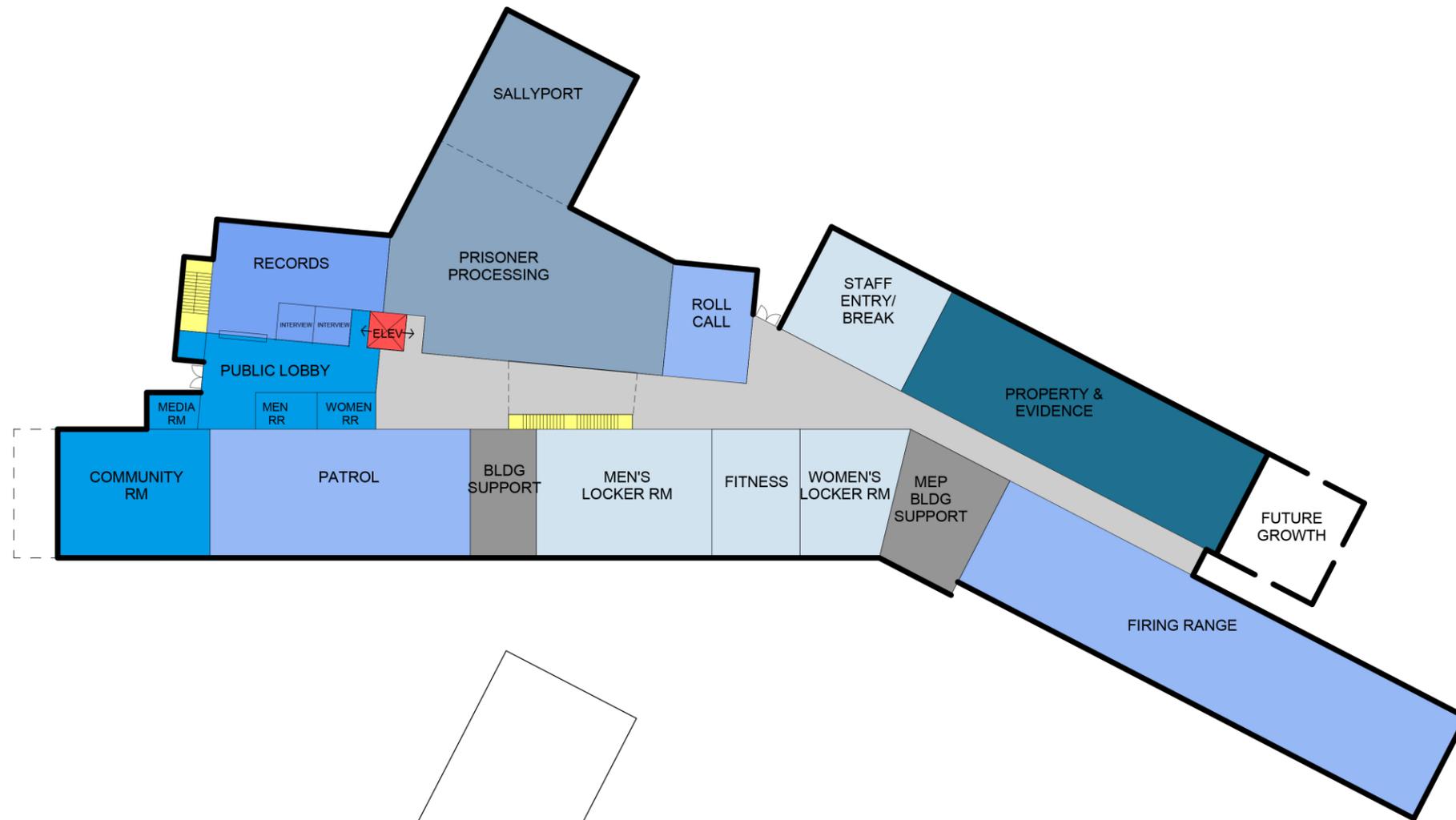
Level:  
0.0  
0' 40'



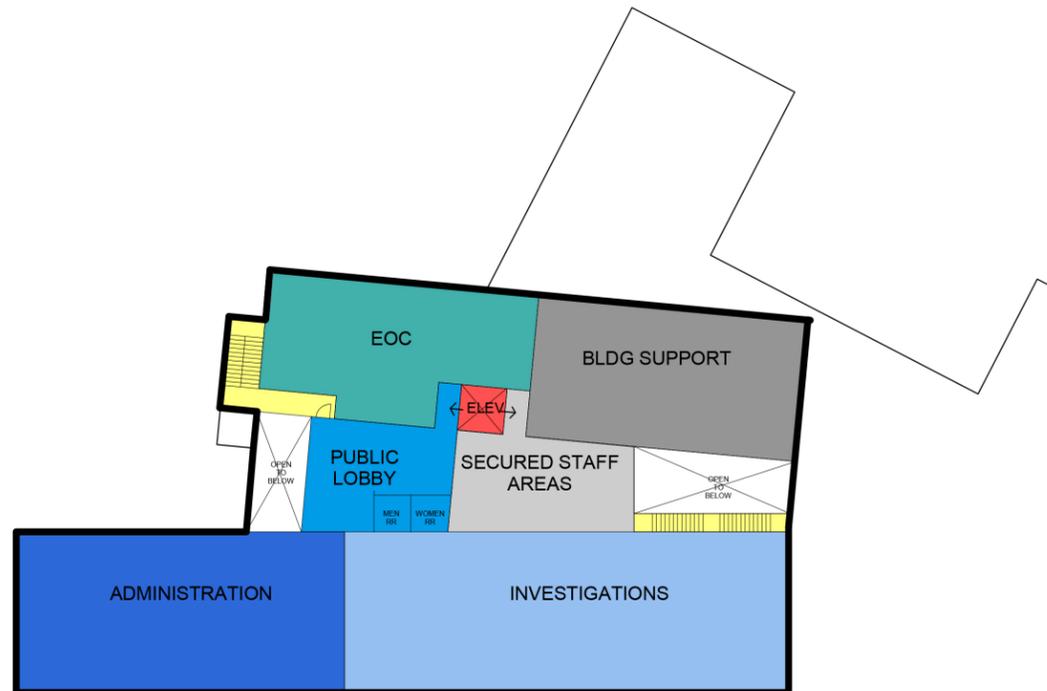
This scheme 5 site evaluation study looks at putting a new 40,900sf two story (no basement) police headquarters building on the 11.8 acre parcel at the northeast corner of Rt 53 and Spring Avenue - the current site of the Glen Ellyn Spring Avenue Recreation Center.

Some of the goals of this site plan include:

- siting the building above the flood plain in a similar location as the current building
- preserving the eastern third of the site for the dog park
- creating police vehicle direct access points to both Spring Ave and Rt 53
- creating a welcoming village green / civic plaza feature between Spring Ave and the public entry into the building
- allowing room for future growth & expansion



first floor diagram  
0' 40'



second floor diagram  
0' 40'