CITY OF BLOOMINGTON

714 Rogers Street - Feasibility Study

BLOOMINGTON POLICE DEPARTMENT


714
South Rogers

Contents

01 Purpose and Intended Use of This Report

This report documents a preliminary feasibility evaluation of converting an existing building in Bloomington, Indiana into a police facility, within the context of the Hopewell planned development. The report is intended to support near-term decision-making by:

- Documenting field observations and study assumptions used to develop concept-level options.
- Confirming whether the police program can fit within the building at a departmental area level (study-level validation).
- Identifying critical risks and unknowns that materially affect viability, cost, and constructability (structural, geotechnical, stormwater, road dependencies).
- Presenting three primary concepts for building and site configuration and defining a framework for comparing them.
- Establishing an action plan and decision gates for moving from concept evaluation into refined programming, concept refinement, and cost validation.

This report is not a full programming effort and does not represent final room-by-room layouts, detailed engineering design, or as-built verification. Diagrammatic plans were developed to support study-level area validation and option testing. Preferred adjacencies may improve operational efficiency, but they are not expected to drive major cost differences at this stage compared to the critical-path viability items identified herein.

02 Project Approach and Methodology

2.1 Field Observations and Site Walkthroughs

The project team completed site observations with architects, structural engineers, and civil engineers. Observations included two exterior walkthroughs and an interior tour to understand building configuration, site circulation, grading, and feasibility constraints affecting police operations (public/secure separation, access control, sally port feasibility, parking, and constructability).

Civil engineers also brought contextual knowledge from work on adjacent properties, supporting assessment of grading, stormwater constraints, and likely subsurface conditions in the area.

2.2 Diagrammatic Plans and Usable Area Validation

Rough field measurements were used to develop diagrammatic floor plans. These plans are not as-built documents. They are study-level diagrams intended to establish a reasonable understanding of usable area, structural organization, and planning modules. They support test-fitting and allow the program to be evaluated mathematically at a departmental area level.

2.3 Program Verification (Departmental Areas)

The team reviewed the prior programming study and available construction documentation developed for the Showers building to understand the original program intent and how program quantities translated into departmental gross square footage. A comparison tool was developed to align those quantities with departmental area allocations.

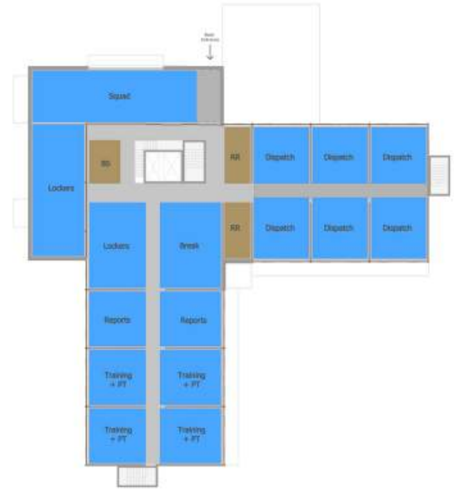
The team then coordinated with the Police Chief to review departments and confirm key needs versus wants, and to incorporate program changes (including dispatch relocation and sally port requirements sized for a BearCat, patrol vehicles, and potentially a van). This effort is best characterized as program verification at a departmental area level, not full programming or final departmental layout design.

Program Components	Programmed Net ASF	Grossing Factor	Programmed DGSF	As Designed DGSF	Delta	Recommend	Basis of Design	Comments
Clerk + Records	3,252	1.30	4,228	2,274	(1,954)	2,300	Shower's Building Layout	Program split between programming and design
Intake	463	1.25	579	-	(579)	600	Original Program	
Reports	240	1.25	300	1,014	714	1,000	Shower's Building Layout	
Sally Port	1,080	1.25	1,350	-	(1,350)	1,350	Original Program	Size for a BearCat and two patrol vehicles
E.O.C.	-	0.00	-	567	567	1,200	N/A	Increasing the scale of the EOC to include a larger gathering and command area
MEP	-	0.00	-	-	-	2,300	N/A	Specific to new building
Admin	-	0.00	-	4,157	4,157	4,000	Shower's Building Layout	
Social Work	-	1.30	-	1,088	1,088	1,200	Shower's Building Layout	Program split between programming and design
Collab./Breakroom	920	1.25	1,150	211	(939)	400	Shower's Building Layout	Program split between programming and design
Detectives	4,456	1.30	5,793	5,943	150	6,000	Shower's Building Layout	
Dispatch	-	0.00	-	-	-	2,900	County Dispatch Layout	Referencing existing location
Evidence	2,424	1.30	3,151	2,626	(525)	2,600	Shower's Building Layout	
Lockers + Showers	965	1.25	1,206	1,390	184	1,400	Shower's Building Layout	
RTCC	-	1.30	-	-	-	1,500	Lafayette Police Department	Referencing comparable project space
Support + Storage	1,236	1.25	1,545	303	(1,242)	300	Shower's Building Layout	Program split between programming and design
Uniform	1,528	1.25	1,910	1,299	(611)	1,300	Shower's Building Layout	
Interview	520	1.30	676	894	218	900	Shower's Building Layout	
Training + PT	1,200	1.25	1,500	1,942	442	2,000	Shower's Building Layout	
Wellness + Fitness	-	1.25	-	2,619	2,619	-	Shower's Building Layout	
IT	500	1.25	625	419	(206)	450	Shower's Building Layout	
Building Support	-	1.30	-	-	-	200	N/A	Specific to new building*
Restrooms	-	1.30	-	-	-	1,700	N/A	Specific to new building*
Shell Space	-	1.25	-	3,880	3,880	-	N/A	Specific to new building*
						35,600		

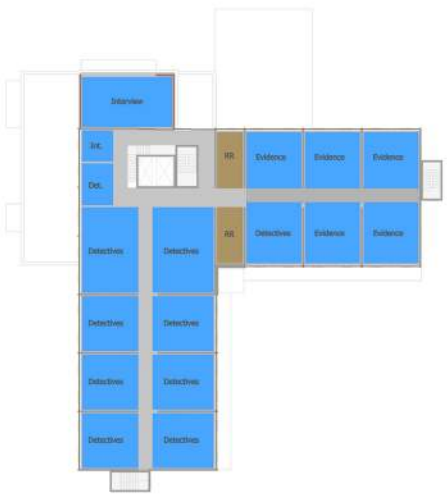
**This number represents space allocated to police specific functions rather than general building functions.*

2.3 Program Verification (Departmental Areas)

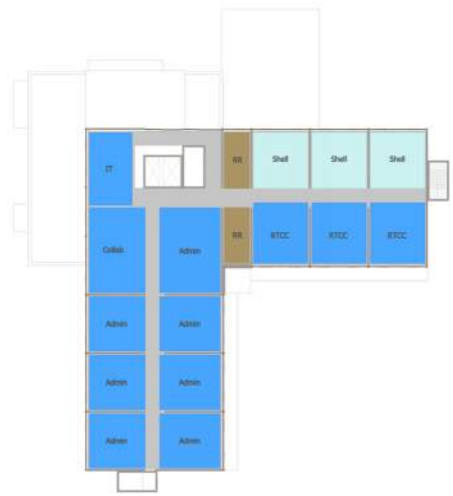
First Floor



Second Floor



Third Floor



Fourth Floor

2.4 Hopewell PUD Coordination (Planning Dependencies)

Because the project site interfaces directly with the Hopewell planned development, the team coordinated with the Hopewell PUD planning effort, including evaluation of PUD section revisions needed to allow a public safety building within the district.

2.5 Study Scope vs Follow-Up Validation

The intent of this phase was to identify concept-level viability and critical path risks. This study did not include selective demolition, rebar scanning, coring, or geotechnical borings. These follow-on investigations are recommended as near-term next steps to validate structural capacity, confirm subsurface conditions (including bedrock depth), and reduce cost and schedule uncertainty before selecting one or two concepts for refinement.

03 Site and Context Analysis

3.1 Existing Site Conditions and History

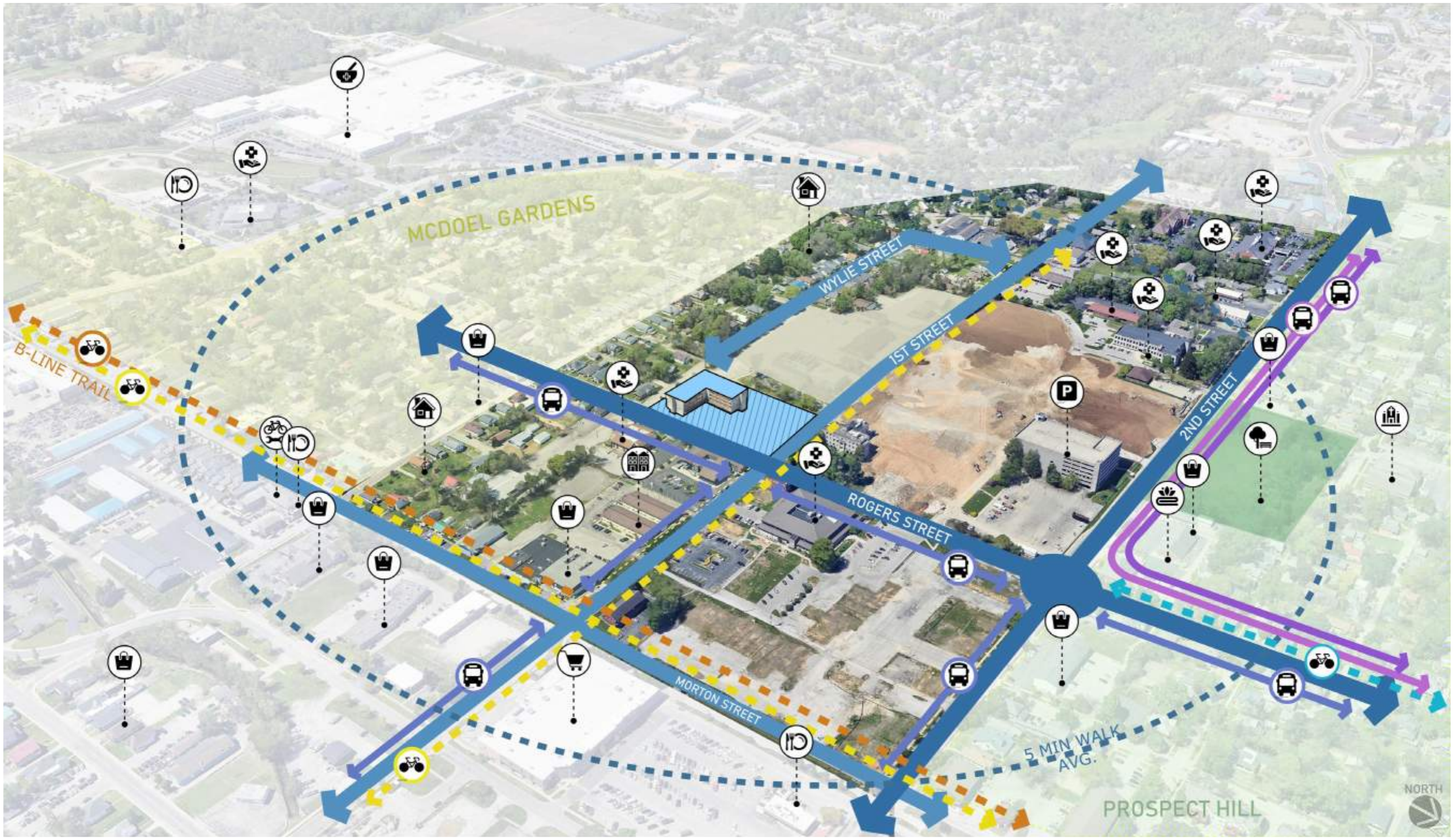
The subject site is a former IU Health hospital property that has been cleared and demolished. The remaining site exhibits significant grade change, creating both planning opportunities and constructability constraints. Grade conditions, combined with regional precedent for shallow bedrock, elevate the importance of geotechnical confirmation for excavation-dependent features.

3.2 Hopewell Development Status and Unknowns

The adjacent Hopewell development is conceptually laid out for PUD approval; however, detailed engineering is not complete. As a result, road spot elevations, finalized roadway geometry, and district stormwater calculations are not yet available. This study approximates these factors as needed for concept exploration, but the report recommends that the City advance engineering of these items in parallel with the public safety project.

3.3 Adjacencies and Community Interface

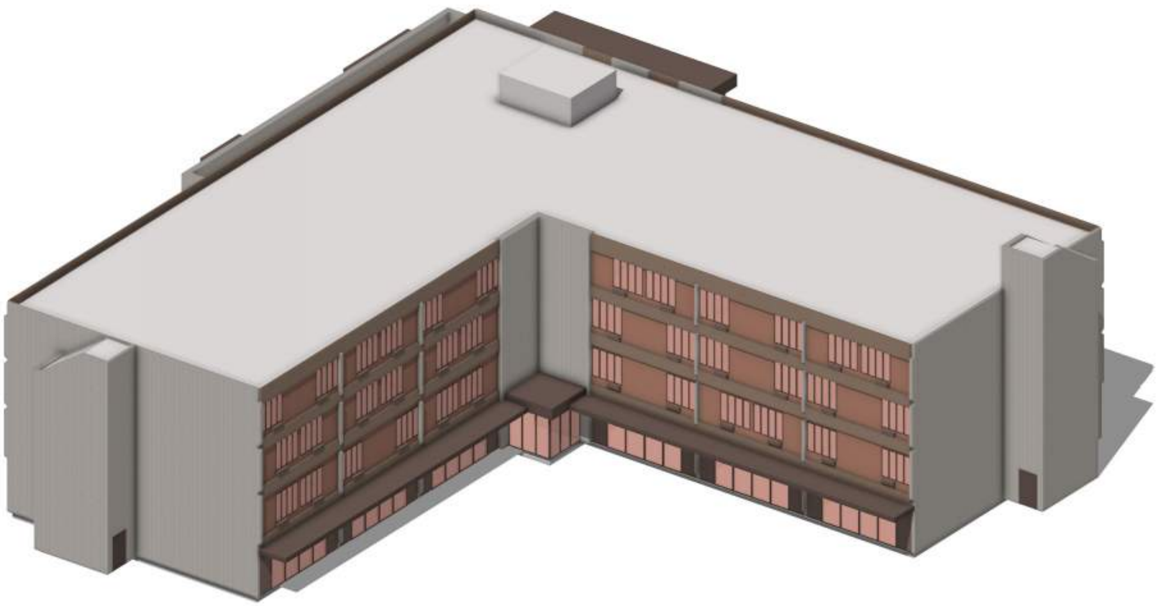
Hopewell planning anticipates residential uses directly adjacent to the police facility. This adjacency introduces constraints related to public interface, security posture, and parking management. The project should anticipate a constrained on-site parking supply and the likely need to rely on street parking and/or nearby structured parking to support public-facing functions.


MCDOEL GARDENS
B-LINE TRAIL
WYLIE STREET
1ST STREET
ROGERS STREET
2ND STREET
MORTON STREET
5 MIN WALK AVG.
PROSPECT HILL
NORTH

04 Existing Building Evaluation

4.1 Baseline Renovation Approach (Full Interior Gut)

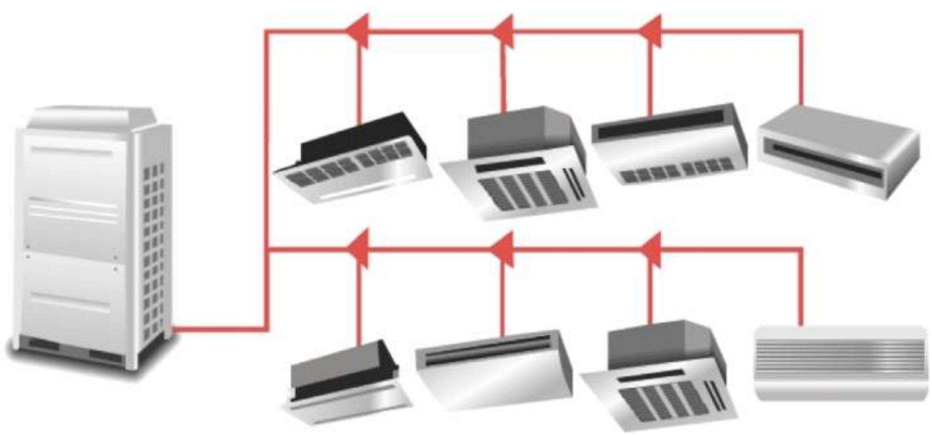
The existing building has a history of vandalism, water damage, and extensive mold remediation. Damage included compromised stormwater and/or water lines and removal or destruction of electrical and mechanical components. Based on observations, the reuse concepts assume demolition of essentially all interior construction and building systems down to the structural frame (a full gut), with new MEP systems and interior construction to be provided.

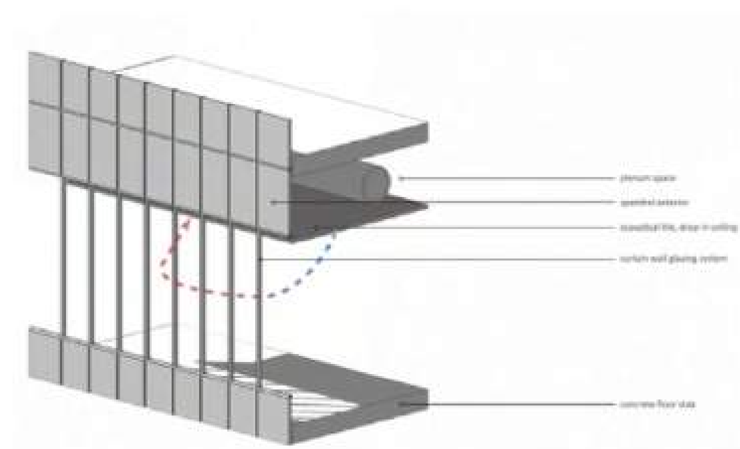


4.2 Floor-to-Floor Clearance Constraints and MEP Implications

A primary building constraint is low floor-to-floor clearance. The underside-of-deck height is closer to hotel room clearances than typical modern public safety facilities. This affects mechanical system selection, distribution strategy, chase sizes, and achievable ceiling heights.

To preserve clearance and reduce overhead ductwork, the team anticipates evaluating a VRF (variable refrigerant flow) approach rather than a heavy air-based VAV system. This strategy can reduce duct sizes and plenum depth, with focused attention on outside air intake, ventilation, and code-required fresh air delivery.

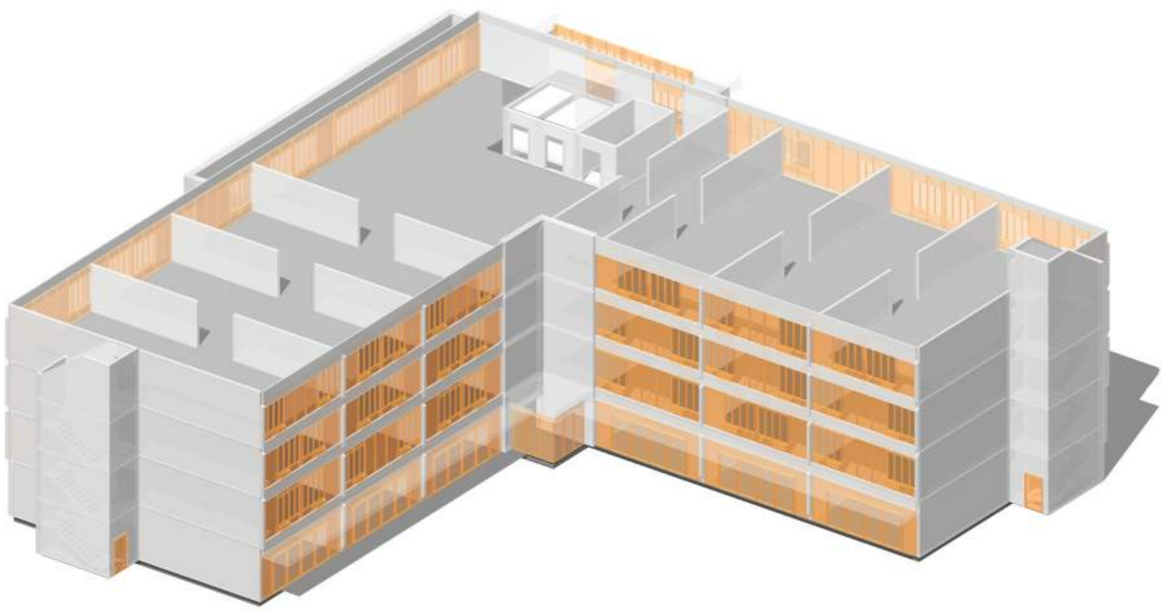




4.3 Exterior Envelope Condition, Re-Cladding, and Energy Performance

The existing exterior envelope appears to include older infill panel systems and glazing that are unlikely to meet current energy code requirements for insulation and thermal performance. Reuse concepts therefore assume removal of existing cladding and glazing and installation of a new high-performing envelope and glazing system with higher R-values and improved air and water control.

Although extensive demolition may appear counter to sustainability goals at first glance, a modern high-performance envelope is expected to materially improve long-term energy efficiency, reduce operational carbon, and increase occupant comfort over the life of the facility.



Lightweight Cladding Materials

4.4 Daylighting and Views Opportunity

The building depth is approximately 65 feet. Re-cladding provides an opportunity to strategically increase window area and improve daylight penetration into interior spaces, subject to orientation and security constraints. Improved daylighting and access to views support occupant wellness and may contribute to sustainability and certification goals (for example, LEED daylight and views credits where pursued).

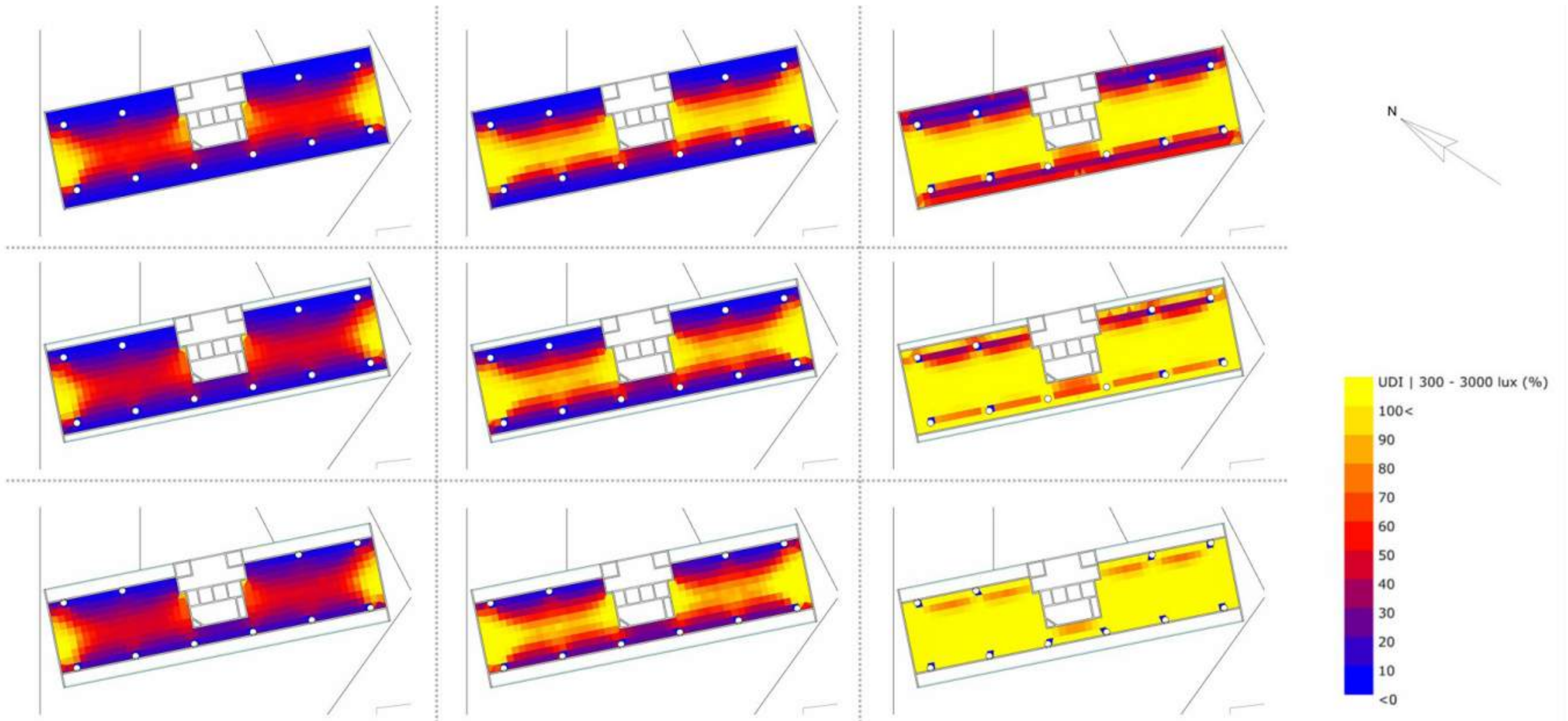


Image from Project Stasio, IBPSA-USA

4.5 Mechanical Space and Generator Considerations

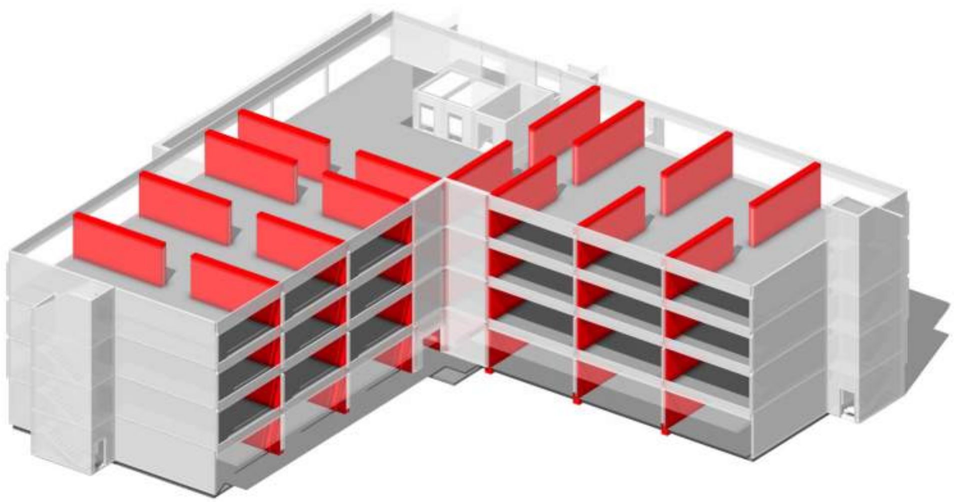
The team anticipates locating primary mechanical space on the ground level adjacent to the existing outdoor mechanical yard, leveraging existing site organization where feasible. VRF outdoor units are anticipated to be roof-mounted, subject to structural capacity verification.

The facility will require an emergency backup generator. The team will evaluate whether the existing generator pad and/or location can be reused or adapted as part of the reuse concepts.

05 Programming and Operational Planning (Study-Level)

5.1 Structural Modularity and Department Fit

The building appears to be organized by precast concrete load bearing walls that function as load-bearing and/or shear walls, creating a modular planning pattern. A typical module is approximately 500 square feet. Many police departments and functional groupings do not fit neatly within this module, which affects how departments can be arranged and how circulation and security must be managed.



5.2 Circulation, Floor Security, and Access Control

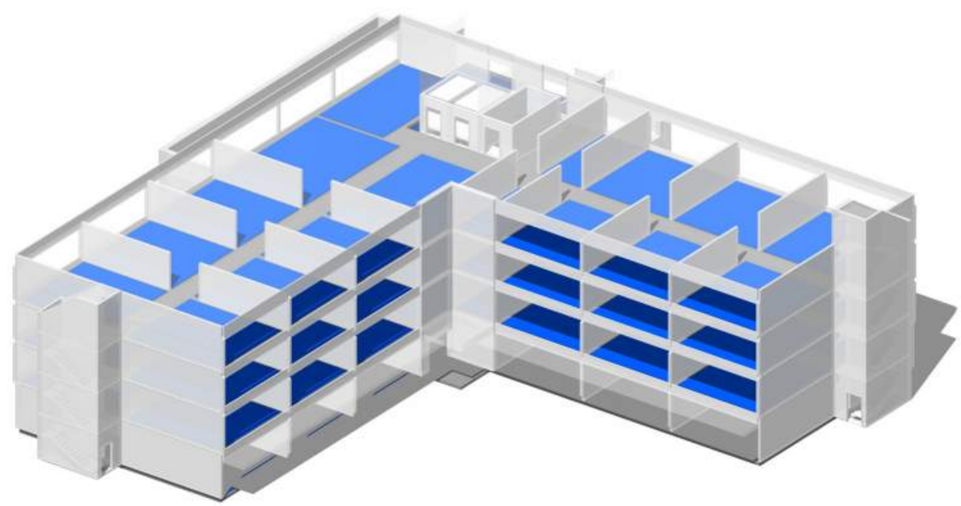
Given the likely reliance on a double-loaded central corridor and limited ability to duplicate circulation, the reuse concepts anticipate that entire floors may need to be secured. One anticipated strategy is to allow public access at a controlled level and restrict elevator access so that Levels 2, 3, and 4 are dedicated to authorized personnel only. This approach reduces the number of badge-controlled transitions required and supports controlled access across departments.

The central corridor may serve as the primary movement spine between departmental areas. This can create operational tradeoffs such as splitting team seating and meeting functions (for example, detectives seated in multiple areas with shared access to a war room or conference space).

5.3 Large Clear-Span Areas and Multi-Use Functions (EOC/Community Room)

Where the building provides larger uninterrupted volumes (for example, areas not directly under a central tower condition), these zones should be preserved for functions that benefit from large clear spans and high utility. A recommended approach is a joint EOC and community room concept that can operate as a community meeting space under normal conditions and convert to an emergency operations center during events.

This combined space may include an EOC command zone, a small kitchenette, storage for tables/chairs, adjacent AV storage, and support areas. Placement is anticipated on the first or second floor depending on the selected concept and public access strategy.



5.4 Evidence Storage Constraints and High-Density Storage Considerations

Evidence storage is a high-sensitivity function that benefits from consolidation in a secure, controlled zone. The modular structural pattern may challenge consolidation within a single module without creating new openings through structural walls.

High-density storage systems may be limited by low floor-to-floor clearance (reduced vertical storage volume) and by uncertain floor loading capacity. If high-density storage is pursued on upper levels, reinforcement may be required. A preliminary strategy is to prioritize evidence storage on the ground level where loading and operational access are more favorable.

One concept-level arrangement is to place intake and evidence on the ground floor (potentially in a larger-volume zone toward the back of the building), with an EOC/community function above. This relationship must be aligned with public access strategy; for example, public access to a second-floor community room is more consistent with Concept 2, while Concept 1 may favor EOC/community functions at a controlled ground level.

06 Structural Evaluation and Essential Facility Considerations

6.1 What Was Evaluated in This Study

This study includes preliminary structural observations based on walkthroughs and concept-level planning assumptions. The study did not include destructive investigation, selective demolition, rebar scanning, coring, or detailed structural analysis. Original drawings and confirmed as-built documentation were not available for review during this phase, limiting the ability to confirm member capacities and original design intent.

6.2 Essential Facility Drivers and Occupancy Uncertainty

A key decision issue is whether the building should be evaluated and upgraded to function as an essential facility. In prior local projects (for example, the Showers building), police occupancy was treated as B occupancy and some parties argued that no change in occupancy reduced the need for essential facility classification.

For this building, the original occupancy classification cannot be confirmed in this phase. At the time it was built, it functioned as a convalescence building associated with a hospital and may have been designed under a different occupancy than B.

Regardless of original classification, best practice for a facility that includes dispatch and an emergency operations center is to ensure continued functionality during disasters. For that reason, the project team recommends evaluating essential facility performance expectations (including seismic resistance and system redundancy) as a high-priority consideration. A Tier 4 essential facility goal is recommended for dispatch and EOC functions.

6.3 Structural System Discovery

Upon discovery of partial original building drawings, the design team was able to interpret that the existing building was built using precast concrete in lieu of cast in place as had been assumed through visual observations.

Based on structural design criteria used for the evaluation of precast concrete structural systems, the existing building would not be able to be retrofitted to satisfy the requirements of a tier 4 essential facility.

Suggested soil borings and shear wave velocity tests had not been completed at the time of this report, however the chances that any information derived from those borings would not change the ability for this building to be utilized.

07 Civil Engineering, Stormwater, Parking, and Geotechnical Considerations

7.1 Stormwater Management Strategies Considered in Each Concept

At a concept level, each option includes stormwater management strategies appropriate to limited site area and the anticipated detention and water quality requirements of the Hopewell district.

- Below-grade detention is anticipated across concepts due to limited surface area for above-grade facilities.
- A green roof option is identified as a potential pre-treatment and water quality enhancement strategy, subject to structural capacity.
- Rain gardens, bioswales, and landscaped islands may be used to pre-treat runoff prior to conveyance to below-grade detention (especially in terraced parking configurations).

Pre-treatment measures may reduce pollutant loading and improve water quality performance, but detention volume requirements are expected to be driven primarily by total runoff volumes from Hopewell and the site itself.

7.2 District Dependencies and Need for Hopewell Stormwater Engineering

Because Hopewell engineering is not complete, district-level stormwater flows, treatment requirements, and allocation of detention responsibility are not yet defined. The team notes that total runoff volume associated with the district will be substantial and will likely require coordinated design of detention and water quality systems for the entire development.

The police site must be pad-ready within the context of the Hopewell buildout regardless of ultimate building use. It is the team's opinion that the City should proceed with comprehensive stormwater system design for the full Hopewell development in parallel with the public safety project. Stormwater planning is a prerequisite to advancing broader Hopewell construction, and the two efforts should be coordinated rather than sequenced.

7.3 Parking Constraints and Event Management

On-site parking capacity is constrained by limited pad area, stormwater infrastructure needs, security requirements, and adjacency to planned residential uses. The concepts therefore assume reliance on a combination of on-street parking and off-site/structured parking for certain public-facing demands.

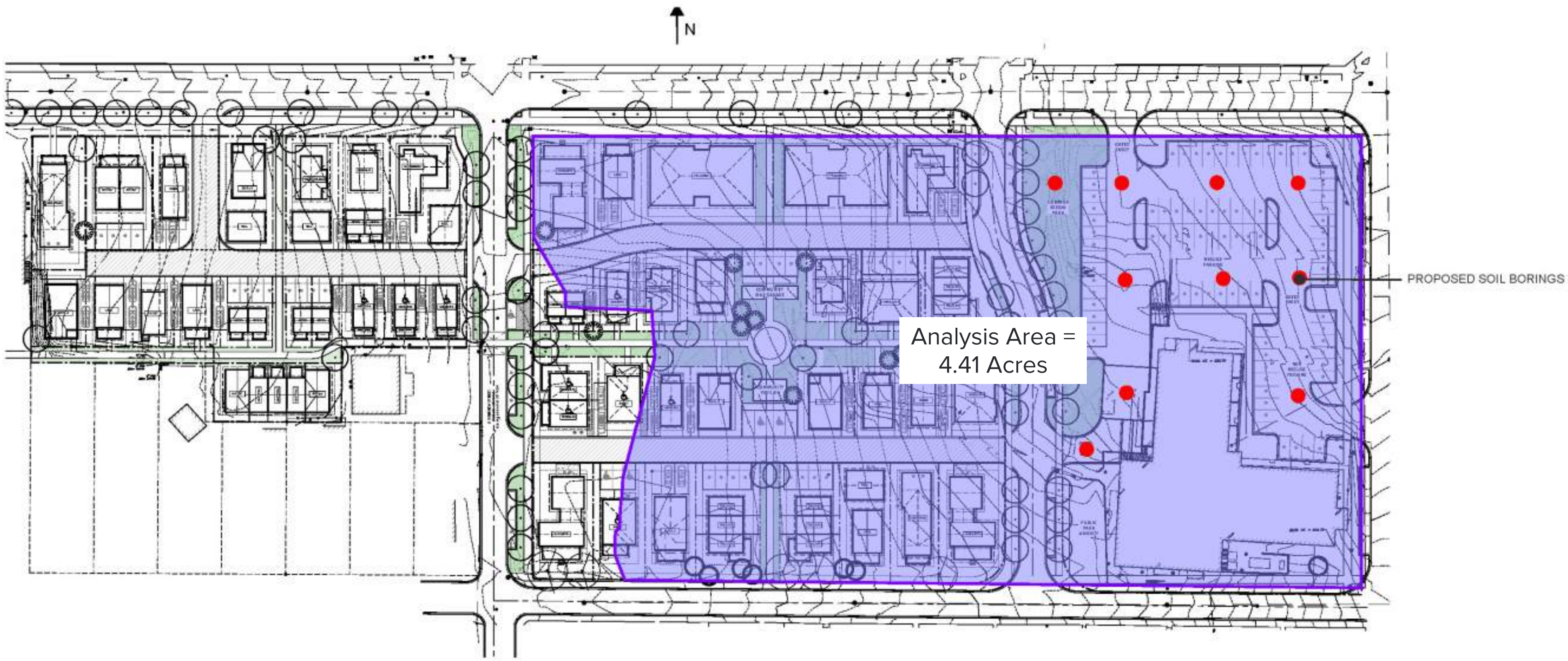
For larger public events, the team anticipates that nearby structured parking may be required, potentially supported by operational strategies such as shared parking agreements and shuttle service. The project should not assume that large volumes of public parking can be accommodated on the police parcel.

Goal is to maintain +/-90 police parking spaces in the design options. Consideration to be given to maximize secured parking, with some that could be dual purpose for "event" parking.

7.4 Selective Borings and Subsurface Confirmation (Recommended Next Steps)

Selective geotechnical borings are recommended at key locations to determine bedrock depth and soil conditions. Results will inform:

- Feasible locations and depths for below-grade detention and cisterns.
- Sally port feasibility where excavation may be required.
- Grade strategy for a new building option (Concept 3), including appropriate finished floor elevations and terraced parking design.



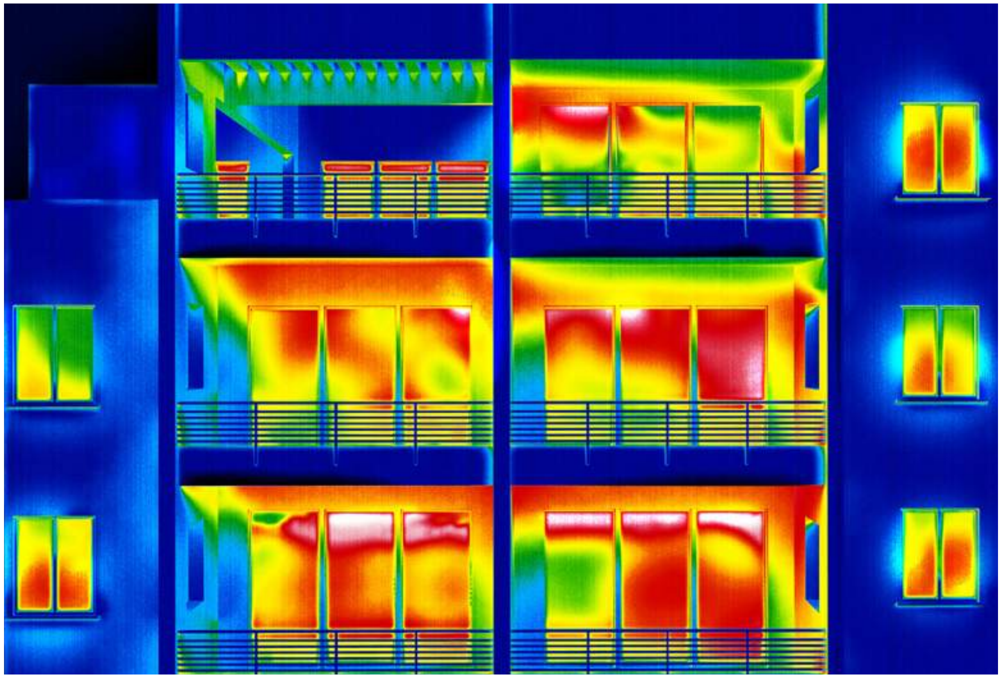
08 Sustainability and Resilience Considerations

8.1 High-Performance Envelope and Glazing

Replacement of existing cladding and glazing with a new high-R-value envelope is expected to materially improve energy performance and occupant comfort. This upgrade provides long-term operational carbon reduction benefits and supports community sustainability goals.

8.2 Daylighting and Views

Strategic window placement made possible by re-cladding can increase daylight access and views, subject to orientation, glare control, and security considerations. This can improve wellness and may support sustainability certification credits where pursued.

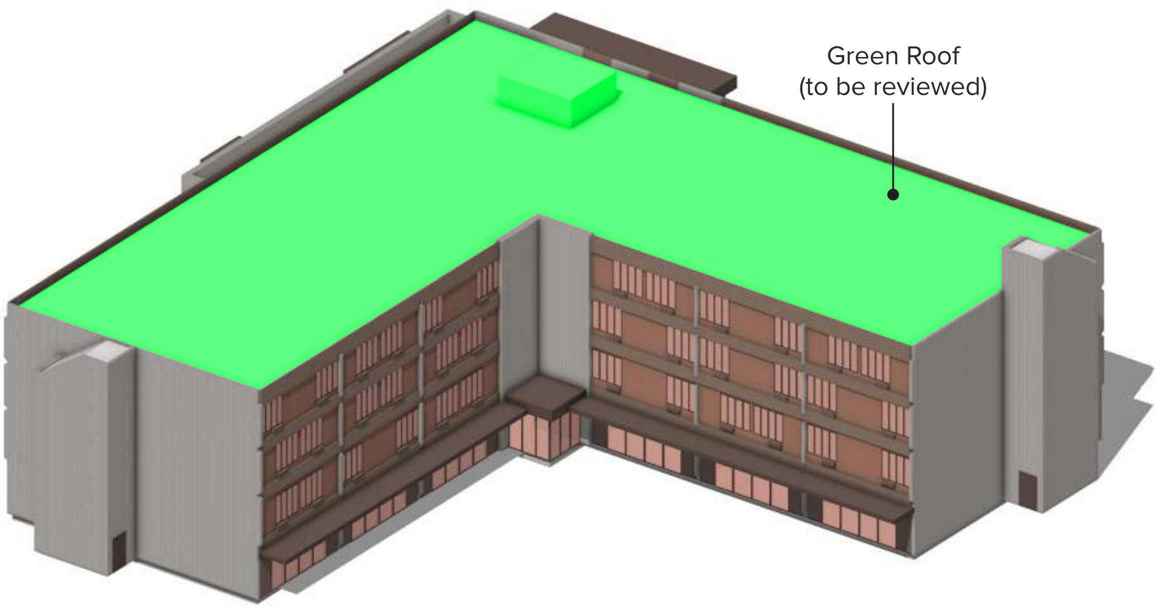


8.3 Water Efficiency and Indoor Environmental Quality

A full interior gut creates an opportunity to implement modern water-efficient fixtures (lavatories, sinks, toilets) and to specify low-VOC materials to support indoor air quality.

8.4 Stormwater Quality Enhancements (Green Roof, Rain Gardens)

Sustainability strategies considered include a green roof tray system (subject to structural capacity) to pre-treat rooftop runoff, add insulation, and improve thermal performance. In a new-build scenario leveraging terraced parking, rain gardens or bioswales within landscaped islands may provide additional pre-treatment prior to conveyance to below-grade detention.



09 Security and Defensible Perimeter Considerations

9.1 Building Hardening Strategy and Visual Exposure

The security approach emphasizes a defensible perimeter and protection of occupants without attempting to make the entire building fully bulletproof. Recommended strategies include use of bullet-resistant mesh or protection layers behind key security thresholds and selective use of bullet-resistant glazing where needed.

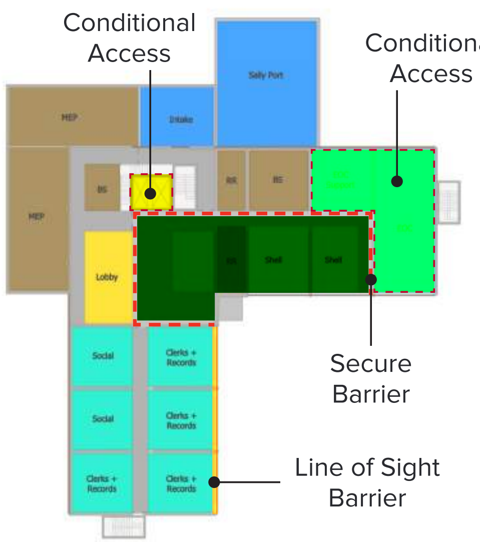
Building form and fenestration strategy should minimize direct sight lines into sensitive areas. Lower levels may require enhanced glazing protection and/or high-level glazing above approximately 5 to 6 feet where appropriate to limit visibility.

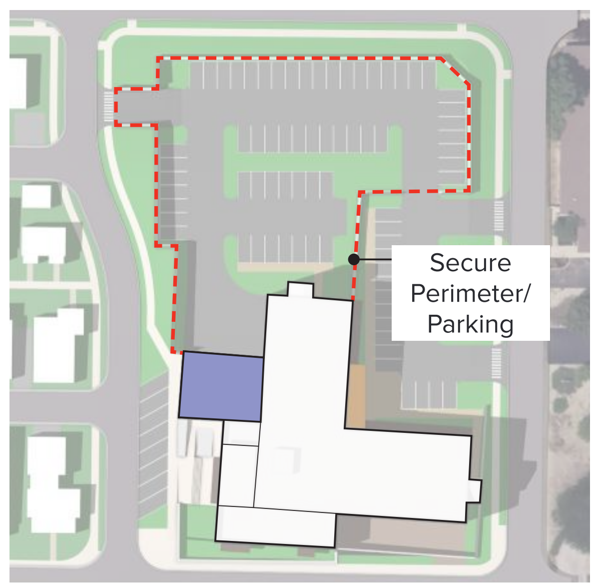
9.2 Site Security: CCTV, Fencing, Vegetation, and Vehicle Mitigation

The site security concept anticipates CCTV coverage across the site, which affects landscape planning and vegetation density to maintain clear sight lines along the defensible perimeter and into secured parking zones.

A perimeter fence is anticipated around secured areas (typically 6 to 8 feet in height). Where grade changes require retaining walls, an integrated solution may combine retaining wall systems with fencing.

Vehicle threat mitigation should be incorporated at primary entry zones, including security bollards or other measures to prevent vehicle intrusion into the main entrance and critical areas.





10 Sally Port Feasibility and Bedrock Risk

10.1 Program Drivers and Vehicle Requirements

Sally port requirements are driven by intake operations and vehicle fleet needs, including BearCat clearance, patrol vehicle access, and potential van access.

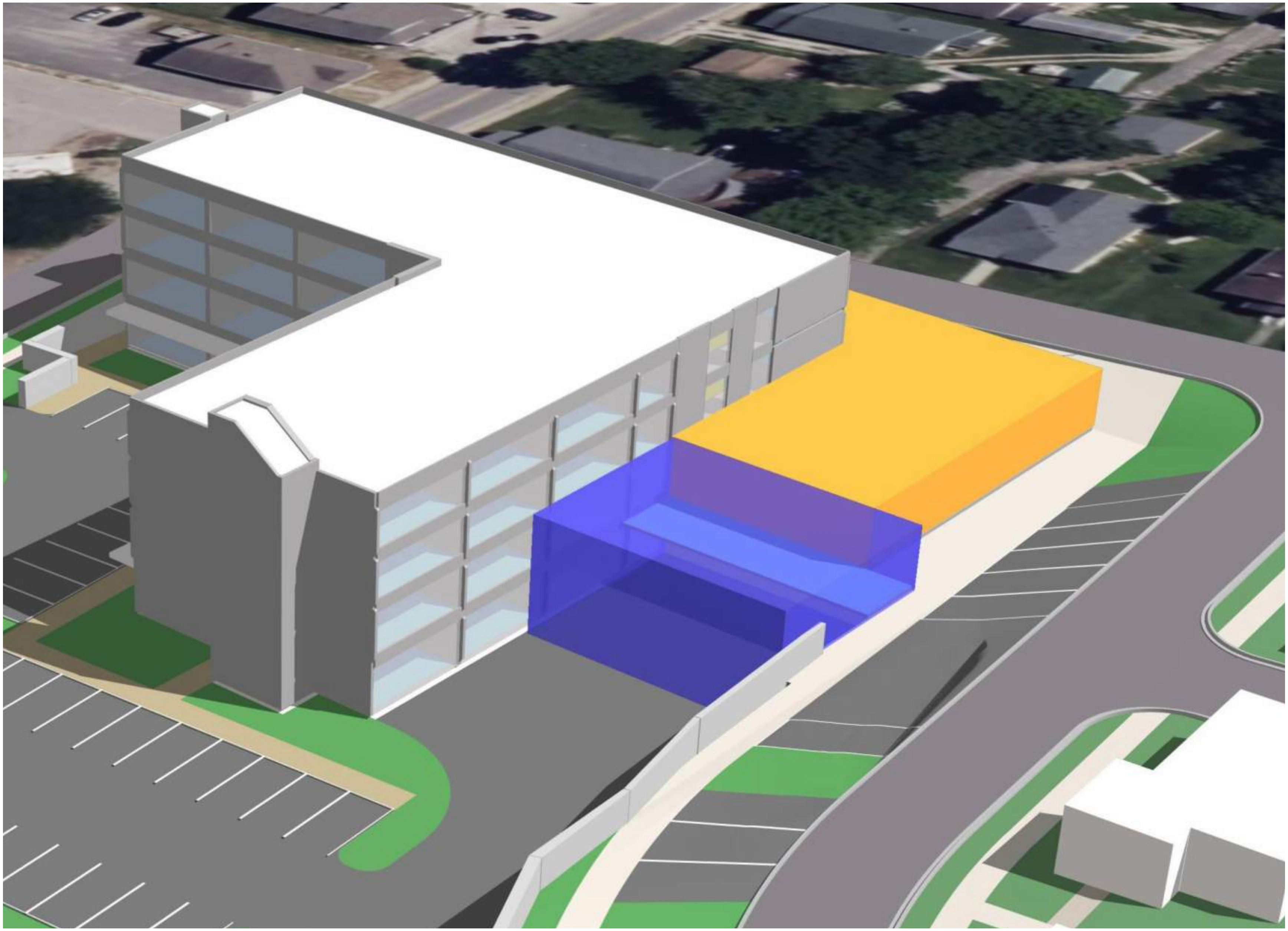
10.2 Excavation Risk and Bedrock Probability

Locating a ground-level sally port at the back/north side of the existing building may require excavation below existing grade, potentially on the order of 10 feet or more. Without borings at the proposed location, bedrock depth remains uncertain. Based on nearby projects where auger refusal has occurred at approximately 4 to 5 feet, shallow bedrock is a plausible risk that could significantly increase costs if blasting or specialty drilling is required.

10.3 Alternative Sally Port Strategies

If bedrock or grading constraints limit a ground-level sally port at the back of the building, alternatives include:

- Second-level sally port approach with infill rather than deep excavation, leveraging existing exterior volume near the second-floor tower.
- Reconfiguration within the secured lot adjacent to a stair tower that provides double-door access to the first level, enabling intake adjacency.
- New-build strategy locating the sally port where site grading and structural planning can be optimized. Locating the sally port within the secured parking lot may reduce secured stall count and should be evaluated in the context of overall parking constraints and operational priorities.



11 Concepts Overview

Option 1

11.1 Concept 1: Reuse Existing Building, Rogers Street Orientation

Repurpose the existing building and maintain site circulation close to existing. Provide both public and secured parking on-site with secure fencing enclosing the secured zone. Provide a ground-level sally port on the north side of the building. Maintain public prominence to Rogers Street; the Hopewell-facing side functions primarily as secured and service access.

Option 2

Option 3

11.2 Concept 2: Reuse Existing Building, Hopewell-Oriented Entry

Repurpose the existing building while shifting the primary public entrance to the north (Hopewell-facing) side. Provide enhanced demolition/renovation to create a pedestrian-oriented entry and street presence. Emphasize public parking along the new street and reserve on-site parking primarily for secured use. Requires early coordination on road design and ADA parking along the street edge. A second-level sally port strategy may improve feasibility by reducing excavation risk.

11.3 Concept 3: Demolish and Build New, Optimize Site and Reduce Excavation Risk

Demolish the existing building and develop a new facility and site layout for efficiency, flexibility, and reduced excavation exposure, assuming bedrock may be present. Leverage sloping terrain to create terraced parking and incorporate a ramp connection between Level 1 and Level 2. Preserve optionality for structured parking that could accommodate secured parking demand and/or provide public parking support for Hopewell. This concept is included as a stewardship comparator; selection depends on resolving structural and geotechnical unknowns and integrating OPC results.

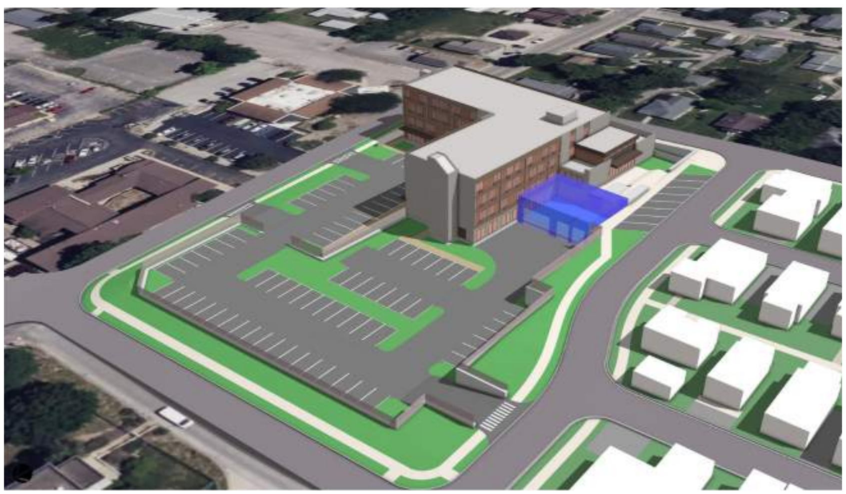
12 Concept Descriptions

12.1 Concept 1 Deep Dive - Reuse and Rogers Street Orientation

Concept 1 emphasizes maintaining the facility's primary public presence along Rogers Street while keeping site circulation and on-site parking generally aligned with existing patterns. Public parking and secured officer parking are both provided on-site, with secure fencing establishing a controlled secured zone. The sally port is contemplated at the ground level on the north side of the building, supporting intake and secure operations.

Because the existing structural system relies on load-bearing and shear walls, interior planning is expected to be module-driven, with limited penetrations through structural walls. Floor security strategy is anticipated to rely on controlled elevator access and limiting public movement beyond designated areas.

Configurable options within Concept 1 include refinement of sally port grading and geometry pending borings, floor-by-floor security and access control strategy, and the level of envelope intervention and architectural expression along Rogers Street.

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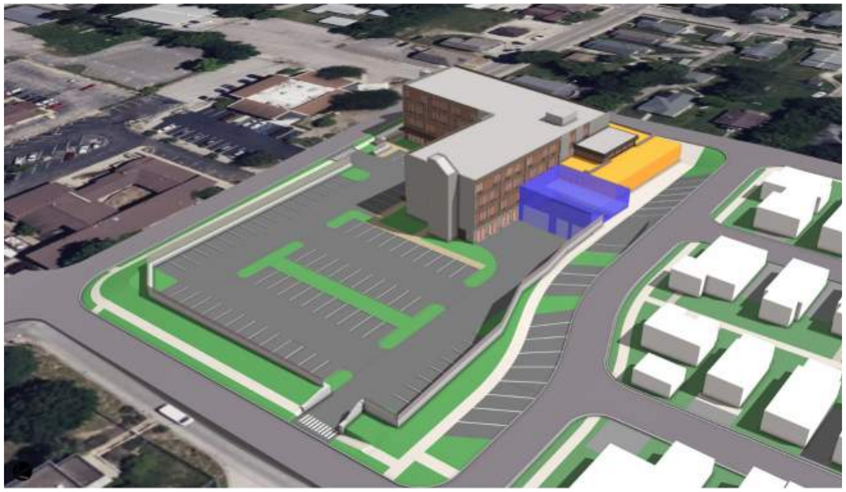
12.2 Concept 2 Deep Dive - Reuse and Hopewell-Oriented Entry

Concept 2 shifts the facility's public identity toward the Hopewell development by moving the primary entrance to the north side of the building. This approach supports a more pedestrian-oriented entry sequence and aligns the facility with the future neighborhood fabric. The concept emphasizes on-street public parking along the new roadway and reserves on-site parking largely for secured operations.

Concept 2 is dependent on early roadway design coordination, including ADA parking placement and accessible route design along the street edge. A second-level sally port option is a key variable, potentially reducing excavation risk and leveraging the exterior volume adjacent to the second-floor tower. Program placement of a community room and EOC may align naturally with a second-floor public interface, subject to access control strategy.

Configurable options within Concept 2 include the sally port elevation and location, the extent of facade reconstruction at the north entry, and the degree to which public functions are elevated to support secure separation.

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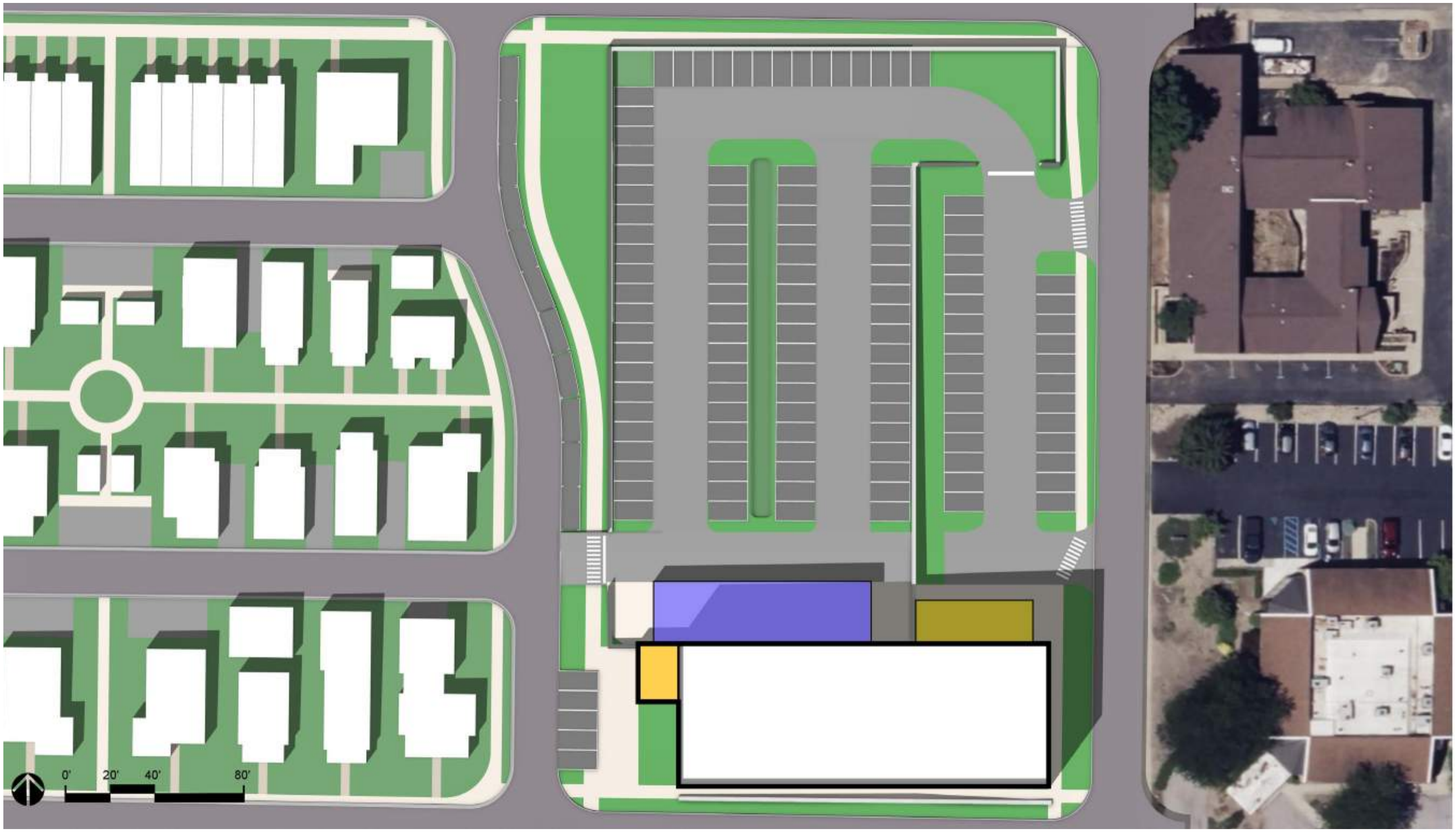
12.3 Concept 3 Deep Dive - Demolition and New Construction

Concept 3 provides a full replacement scenario intended to maximize flexibility, reduce long-term operational constraints, and better align the building structural system with modern public safety requirements. The concept assumes bedrock risk and therefore seeks to minimize deep excavation by using terraced parking strategies aligned with site topography.

A ramp connection between levels supports circulation and offers a framework for structured parking exploration if desired. Structured parking could accommodate secured parking demand and/or provide public parking support for the broader Hopewell district. This concept also preserves potential land and/or volume for future municipal expansion or mixed-use integration depending on site planning decisions.

Configurable options include surface-only terraced parking versus structured parking, target gross area (maintain or reduce for efficiency), and phasing strategies aligned with district infrastructure planning.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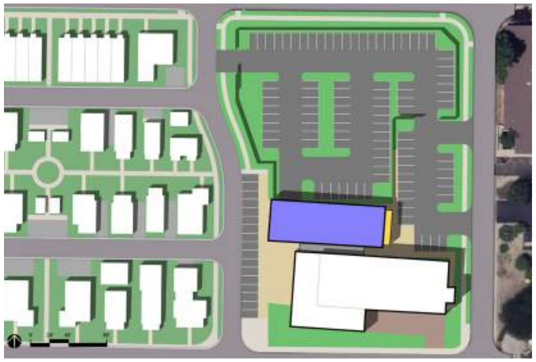
80'

12.4 Partial Demolition Option

In a final study, we were asked to determine what partial demolition of 714 Rogers would entail. These configurations aim to maximize new build for essential facility requirements, as well as site capacity for both secure and public parking. This approach acknowledges that partial demolition will require structural improvement with what remains, ensuring the existing facility maintains basic structural capacities for functional office space. Meanwhile, the new essential facility components will remain structurally independent, meeting modern public safety standards.



Option A

This option focuses on demolition of the north wing of the building to provide area for the development of the structurally isolated Level IV essential facility.

Option B

This option uses the area previously reserved for the development of the sally port to additionally be used for the essential program elements in a structurally independent addition.

Option C

This option focuses on the separation of the essential facilities into two buildings to have the potential to phase either the EOC or Dispatch as future developments. This option further decreases the amount of viable site for necessary stormwater requirements for this site.

13 Evaluation Framework

13.1 Draft Success Criteria Categories

- Operational function and security: public/secure separation, intake and sally port functionality, detainee movement, controlled access, and key adjacencies.
- Flexibility and adaptability: ability to accommodate future departmental changes, ease of reconfiguration, and expansion potential.
- Site fit and Hopewell alignment: compatibility with road network, pedestrian environment, street edge, and parking strategy integration.
- Risk and constructability: bedrock and excavation exposure, structural unknowns (including essential facility needs), and schedule risk from dependencies.
- Cost magnitude and cost certainty: relative order-of-magnitude cost (pending OPC) and degree of uncertainty tied to unknowns.

13.2 Gating Items (Decision Gates)

- Structural capacity confirmation (rebar scanning, coring, and analysis) including essential facility performance expectations.
- Geotechnical borings to confirm bedrock depth and excavation feasibility for detention and sally port locations.
- District stormwater plan and allocation clarity for Hopewell.
- Roadway design confirmation (geometry, spot elevations, ADA parking and accessible routes).

14 Opinions of Probable Cost (OPC)

A construction manager is developing opinions of probable cost for each concept. OPC results will be used to quantify the cost implications of major drivers including structural upgrades, excavation and bedrock conditions, stormwater detention requirements, envelope replacement, roof replacement, security measures, and MEP system strategy.

OPC results should be incorporated into the scoring matrix as inputs to cost magnitude and cost certainty, including documentation of assumptions and outstanding unknowns.

				New Buildings	
		Option 1	**Option 2**	**Option 3a**	**Option 3b**
Hard Costs		$35,183,573.00	$36,829,031.00	$39,381,333.00	$34,329,953.00
Round Up		$35,190,000.00	$36,830,000.00	$39,390,000.00	$34,330,000.00
Design Contingency	10%	$3,519,000.00	$3,683,000.00	$3,939,000.00	$3,433,000.00
Construction Contingency	5%	$1,759,500.00	$1,841,500.00	$1,969,500.00	$1,716,500.00
Bedrock		Unknown	Unknown	Unknown	Unknown
Structural Reinforcement		Unknown	Unknown	Unknown	Unknown
Hopewell Detention		Unknown	Unknown	Unknown	Unknown
Hard Bid Subtotal		**$40,468,500.00**	**$42,354,500.00**	**$45,298,500.00**	**$39,479,500.00**
Project Bldg SF		63,787.00	63,787.00	63,787.00	54,000.00
		$634	$664	$710	$731

15 Action Plan and Next Steps

15.1 Immediate Technical Validation

- Structural validation: rebar scanning, selective coring, and structural analysis to confirm load paths, floor loading, roof equipment support, and essential facility performance needs.
- Geotechnical borings: targeted borings at sally port and detention locations to confirm bedrock depth, excavation feasibility, and grade strategy.
- Civil engineering refinement: advance district stormwater planning for Hopewell, confirm detention volumes, water quality approach, and allocation of responsibilities.

15.2 Planning Dependencies and Coordination

- Roadway design coordination: confirm road geometry, spot elevations, sidewalks, and ADA parking placement; align police site access and public interface with roadway outcomes.
- Parking strategy coordination: define on-street parking supply, shared parking, and event strategies (including use of nearby structured parking and potential shuttles).
- Hopewell district coordination: align police site security and residential adjacency considerations with broader development planning.

15.3 Program Refinement and Concept Selection

- Proceed with detailed programming (room-by-room documentation) beyond departmental area validation, including evidence, intake, dispatch, and EOC requirements.
- Refine one or two concepts for preferred-direction development after technical validation reduces uncertainty.
- Update scoring matrix with validated information and integrate OPC results to support recommendation and transition to schematic design.

Appendix A: Structural Narrative

Introduction and Purpose

American Structurepoint visited the site to complete a walkthrough of the building on November 10, 2025. The purpose of the walkthrough was to qualitatively determine the structural system of the building through visual observation.

This report summarizes observed conditions, outlines applicable code considerations, identifies potential structural concerns, and describes additional investigation required to evaluate the building under current codes.

Building Description

The structure is a four story structure with a single below grade basement level. The general shape of the four story structure is an “L” with a single story bump out to the south and a three story bump out to the west. Grade on site slopes such that the south and east side of the building have the 1st floor partially below grade.

The structure is comprised of precast concrete hollow core planks. The plank depth is likely 8” on each floor of the structure. Cast-in-place concrete walls are used as bearing walls. They are spaced uniformly throughout the structure at approximately 24’. Typical concrete walls are approximately 6” thick.

The north and east ends of the building contain stair towers. The stairs are constructed of cast-in-place concrete walls, which may be thicker than the 6” concrete interior walls. The north stair tower projects up past the roof to allow for roof access. The elevator is located in the central “knuckle” of the building and is constructed of cast-in place concrete walls.

Steel lintels span over the corridor from wall to wall to support precast planks, typically. As only a visual observation was done, this is most likely an inverted T shape steel lintel with the precast planks resting on the flanges of the T. At some locations, particularly in the “knuckle”, concrete beams are used to span openings.

The perimeter of the building uses concrete spandrel panels to span the approximately 24’ between concrete bearing walls. The bearing walls project out less than 1’ from the face of the building to support spandrel panels.

The main L-shaped roof is ballasted and the concrete spandrel panels extend up past the roof surface approximately 16” to form a parapet.

The floor to floor height varies. On the upper three stories, from finish floor to underside of exposed precast plank is approximately 8’-8”. On the first floor, the clear height is approximately 9’-2” to bottom of precast plank.

The roof of the building bump out to the south appears to be a continuation of the precast plank floor. The roof of the building bump out to the west is comprised of open web steel joists, approximately 12” to 14” deep, with 1 ½” metal roof deck. The joists span east - west. On the west side, they are likely supported by small columns buried in the perimeter wall. Both lower roofs of the bump outs support mechanical units and ductwork.

The basement consists of cast-in-place concrete perimeter walls. There appear to be several CMU load bearing walls throughout the basement level supporting the precast plank floor above.

Some exposed rebar and rust was observed around the exterior of the building.

Building Code Interpretation and Compliance

The main concern for repurposing this building is that a change in occupancy would trigger a potential increase to Risk Category IV due to a police station being an essential facility. The current risk category the structure is designed for is unknown. Existing structural drawings are not available. Without existing drawings, it is not possible to evaluate if any of the potential causes for concern would materialize or constitute a serious concern without further and significant investigation.

The Indiana Amendments to the International Building Code in 675 IAC 12-4-12 state that alterations to structures shall not cause an existing building to become noncompliant under the provisions of the current rules for new construction. The common interpretation of this section is that a change in Risk Category requires a structural analysis to confirm the building is in compliance with the requirements of that Risk Category under the currently adopted code.

Additionally, change in occupancy could trigger a structural analysis. Section 675 IAC 12-4-11 states a building change "character or use" as to cause a different group classification unless it complies with Chapter 34 of IBC (see above as described in 675 IAC 12-4-12) or there are some exemptions for buildings built prior to 1998, but those are not likely to apply to this project.

If it can be determined that the existing structure was designed for Risk Category IV, this will significantly reduce the need for structural investigation and remediation. At this time, we have no evidence that the structure was designed as Risk Category IV.

Although not directly mentioned in the IBC or Indiana Amendments, another path to compliance is through ASCE 41 "Seismic Evaluation and Retrofit of Existing Buildings" which is referenced by the International Existing Building Code. Unlike most states, Indiana does not adopt the IEBC. Pursuing ASCE 41 may require approval by the authority having jurisdiction.

Potential Concerns

One potential concern is the increase in live load for various areas of the building. Another concern is increased wind load based on current code values. Depending on the geotechnical investigation, it is possible this structure would be required to be designed and retrofitted for increased (or even new) seismic load. If additional dead load is added to accommodate mechanical, electrical, plumbing, fire protection, or architectural fit out, that could present additional increased loading concerns. If the risk category increases, the snow and ice load demand will also increase.

There is a potential concern that the shear walls are not adequately detailed for seismic forces. This potential needs further investigation.

Seismic demand is dependent upon both geography and local soil characteristics. A geotechnical exploration, likely involving a shear wave velocity test, is required to determine the site class as well as depth to bedrock. This information will determine the seismic design category.

The table below shows possible seismic design categories based on risk category and potential site class determination. This information is necessary to identify regardless of the chosen path toward compliance. IBC Chapter 34 requires seismic design category to be determined. Additionally, ASCE 41 uses seismic design category to inform the level of seismicity. The level of seismicity triggers varying levels of seismic investigation and analysis, as well as potential for retrofit. If the site class can be set at A, this would place the building into the "very low level of seismicity" which would mean a less rigorous structural review.

Seismic Design Category (SDC) & Level of Seismicity by Site Class and Risk Category		
Site Class	**Risk Category II**	**Risk Category IV**
A	SDC A, very low	SDC A, very low
B	SDC B, low	SDC C, low
C	SCD B, low	SDC C, low
D	SCD C, moderate	SDC D, moderate

Structural Evaluation

As previously mentioned, existing structural drawings are not available. Without the existing structural drawings, a more quantitative evaluation for the purpose of comparing increased demands to current capacities of the existing structure is not possible without more intensive information gathering methods. Once the path to code compliance is identified and the required changes in loading are determined, additional structural evaluation will be required to establish structure capacity due to a lack of existing drawings. Below is a summary of additional structural evaluation options.

As noted above, geotechnical exploration to determine site class and depth to bedrock is required prior to proceeding with more extensive structural evaluation of the building.

To assess the load capacity of the precast hollow core planks the following options, or combination of options can be explored.

- Contact local precast suppliers to inquire if they provided the precast for the project. See if they can advise on the capacity of the precast planks if they manufactured them.
- Conduct local destructive testing to determine concrete strength.
- Determine thickness and thickness of a topping slab (if present) via partial, local demolition.
- Use Ground Penetrating Radar (GRP) to scan the planks and determine strand diameter, quantity and layout.
- Conduct load tests.

To assess the load capacity of the concrete walls the following would likely be required.

- Conduct local destructive testing to determine concrete strength.
- Use GRP scans to determine size, spacing and layout of reinforcing bars inside the walls.

To assess the load capacity of the metal roof deck and steel joists the following options or combination of options could be explored.

- Remove fireproofing and insulation currently on the deck and inspect for a joist tag. If a joist tag is found contact the supplier for joist capacity
- Contact local joist suppliers to inquire if they provided the joists for the project. See if they can advise on the capacity of the joists if they fabricated them.
- Measure each joist top chord, bottom chord, and web members in order to recreate analytically and evaluate the joists.
- Contact local roof deck suppliers to inquire if they provided the deck for the project. See if they can advise on the material strength of the deck.
- Measure deck gauge via either local demolition or an existing opening in the roof.
- Remove interior wall finish to expose likely steel columns and their base/support condition.

To assess the foundations the following would likely be required.

- Excavate test pits to determine size and type of foundations.
- Pressuremeter testing (PMT) could be done to determine allowable soil bearing capacity.
- Conduct local destructive testing to determine concrete strength.
- Use GRP scans to determine size, spacing and layout of reinforcing bars inside the foundations.

3D scans of the building, interior and exterior, would be helpful to determine volumetric dimensions of the concrete and spans of the framing. This is not enough to help with structural evaluation, and the items listed above would be needed in addition to a 3D scan.

Potential Strategies

If any or all of the various structural and foundation components of the building are found to be inadequate based on current demand, there are options and solutions that could be explored. Below is a bulleted list of initial concepts and ways to address inadequacies.

1. If the foundations are found to be insufficient, foundation enlargement and/or foundation ballasting could be explored.
2. If the precast planks are found to be insufficient, fiber reinforced polymer can be added to the underside of the planks to increase the load carrying capacity.
3. Additional gravity supports could be added throughout and down to the foundation level to reduce spans.
4. If concrete bearing walls are found to be inadequate for either gravity or lateral load, new walls can be cast up against a roughened surface of the existing wall, essentially increasing the wall thickness. These wall sections would be doweled to the existing wall and adequately reinforced for the needed load capacity. The new walls would need to be detailed to accept load from the existing diaphragm.

5. Detail joist reinforcement that can be welded to the existing open web steel joists if needed based on analysis results.
6. Conduct a shear wave velocity test to potentially find a more advantageous site class.
7. Explore ASCE 41 if seismic load is determined to be increased based on geotechnical investigation.

If retaining and remodeling the existing building is pursued, it is recommended that sufficient investigation, including selective demolition and scanning, be performed to evaluate the ASCE 41 Tier 1 checklist. A Tier 1 evaluation requires GPR scanning, selective demolition, and a detailed understanding of diaphragm-to-wall and wall-to-foundation connections. In addition, the site class must be determined prior to completing the Tier 1 evaluation. Without a defined site class, conservative assumptions would be required, which would likely be cost-prohibitive for the project.

Appendix B: Civil Narrative

Existing Conditions

The proposed site for the new Bloomington Police Department (BPD) Headquarters lies on the eastern third of a parcel located at the southwest corner of the intersection of W. 1st Street and S. Rogers Street. The existing topography on the site generally slopes towards the northeast corner of the parcel. There is currently no significant stormwater infrastructure on the site, however there is a newly constructed storm sewer system along W. 1st Street and at its intersection with S. Rogers Street. Any proposed stormwater features from the BPD project site are assumed to be connected to the City of Bloomington's existing storm sewer system.

Overall Development

The Bloomington Police Department Headquarters is part of the City's larger Hopewell South development. The overall Hopewell South project is bounded by W. 1st Street to the north, S. Rogers Street to the east, W. Wylie Street to the south, and S. Fairview Street to the west. A portion of the Hopewell South development extends west of S. Fairview Street, however the topography of this portion of the site sheds water to the west, and therefore this portion of the overall development is excluded from the further stormwater management discussion within this narrative due to the impracticality of routing this stormwater uphill and out of its current watershed to be managed on the BPD site. The approximate area considered in this narrative is 4.41 acres as shown in Appendix A.

Stormwater Detention

The preliminary stormwater analysis for the subject area was evaluated to comply with the City of Bloomington Utilities' Stormwater Design Manual. The site is within the Clear Creek critical watershed, and with the analysis area of 4.41 acres, the project must meet the Peak Discharge Limits for Critical Watersheds of 0.25 cfs/acres for 10-year storms and 0.45 cfs/acre for 100-year storms. This corresponds to allowable release rates of 1.10 cfs for a 10-year storm and 1.98 cfs for a 100-year storm.

The desire for the BPD project is to maximize usable space on the site, and therefore underground stormwater detention was considered for design. Although there are various types of underground detention available such as concrete vaults, plastic crates, and arch chamber systems, the product used for the preliminary design is a corrugated metal pipe (CMP) system. These types of systems are generally the most economical option for sites where there is sufficient depth to install a larger diameter system. For the BPD project, 72" diameter CMP was chosen after investigation into available storm sewer depths for connection along S. Rogers Street. A total required length of 1,779 feet of 72" CMP was determined to meet the peak discharge rates for the site, equating to approximately 50,300 cubic feet of storage volume within the storage pipes. A Preliminary Drainage Analysis Site Plan is included in Appendix B.

Stormwater Treatment

Per the City of Bloomington Utilities' Stormwater Design Manual, water quality measures are required to treat the runoff from the first 1-inch of rainfall. Fifty percent (50%) of this treatment is required to be green infrastructure (GI). If the GI requirement cannot be met, treatment must still be provided by other means, and an in-lieu fee must be paid to the City. For the purpose of this report, it was assumed that the site would need to be treated with mechanical treatment and the in-lieu fee paid.

The stormwater quality treatment volume and flow rate are largely based off the percentage of pervious/impervious cover on the developed site. Using the conceptual site plan from Appendix A, it was estimated that 2.97 acres of the 4.41 acre site would be impervious, and the remaining 1.44 acres would be pervious. This corresponds to a treatment volume of approximately 10,800 cubic feet.

However, since mechanical treatment was assumed to be needed, a treatment flow rate of 2.433 cfs was determined by evaluating the site with a 1" rainfall event. A 7' diameter mechanical treatment device was determined necessary to meet the treatment flow rate while allowing excess flows to pass through the structure. There might be an opportunity to implement green infrastructure within the residential portion of Hopewell South, which could possibly reduce the size of the mechanical treatment device necessary on the BPD Headquarters site as well as the in-lieu fee and overall detention volume.

Next Steps

The primary concern for the stormwater management system is its feasibility. The stormwater management system design has a depth of 6'. Taking into consideration the minimum cover requirements and the fact that the site's topography rises to the west, it is possible to encounter excavations up to 20' for the CMP system alone. After a discretionary review of a geotechnical report for a project on the Hopewell West site to the north, it is believed that bedrock could be as shallow as 5' below existing grade. A geotechnical investigation consisting of soil/rock borings within the proposed stormwater detention area is advised as a next step to determine the potential constructability and cost impacts if shallow bedrock is encountered on the BPD site.

As discussed in the Stormwater Treatment portion of this narrative, it was assumed that green infrastructure would not be feasible on this project. However, green roofs are becoming a popular form of GI, especially in urban environments where traditional rain gardens and treatment basins are not feasible. In order to determine whether a green roof would be a possibility for this project, further structural analysis would be necessary to determine if the existing building could support the additional loading as the result of a green roof system.