



Buker Building Study

Concept Design Alternatives
New London, NH



Board of Selectmen Presentation

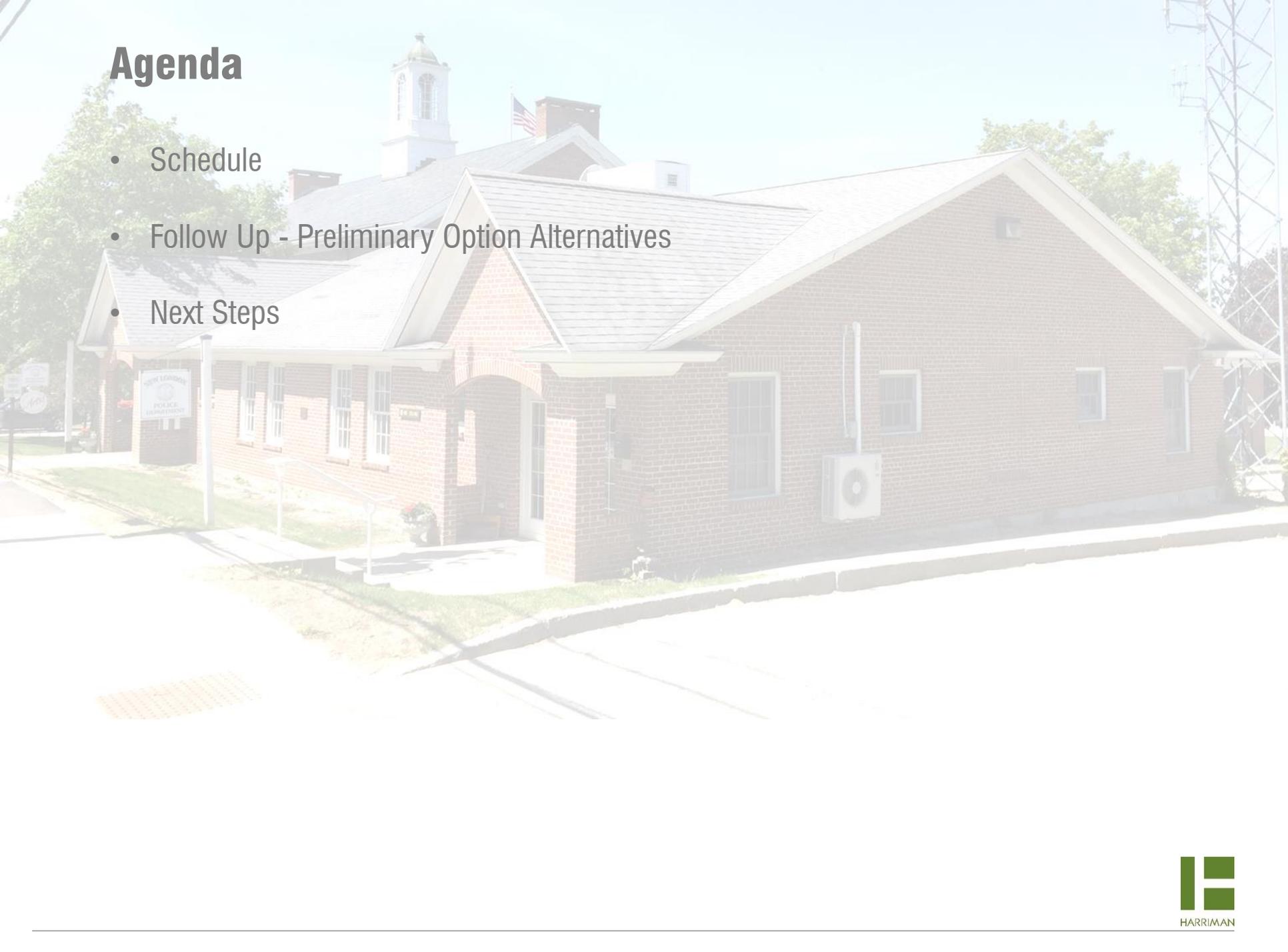
01 October 2018



HARRIMAN

Agenda

- Schedule
- Follow Up - Preliminary Option Alternatives
- Next Steps



Schedule

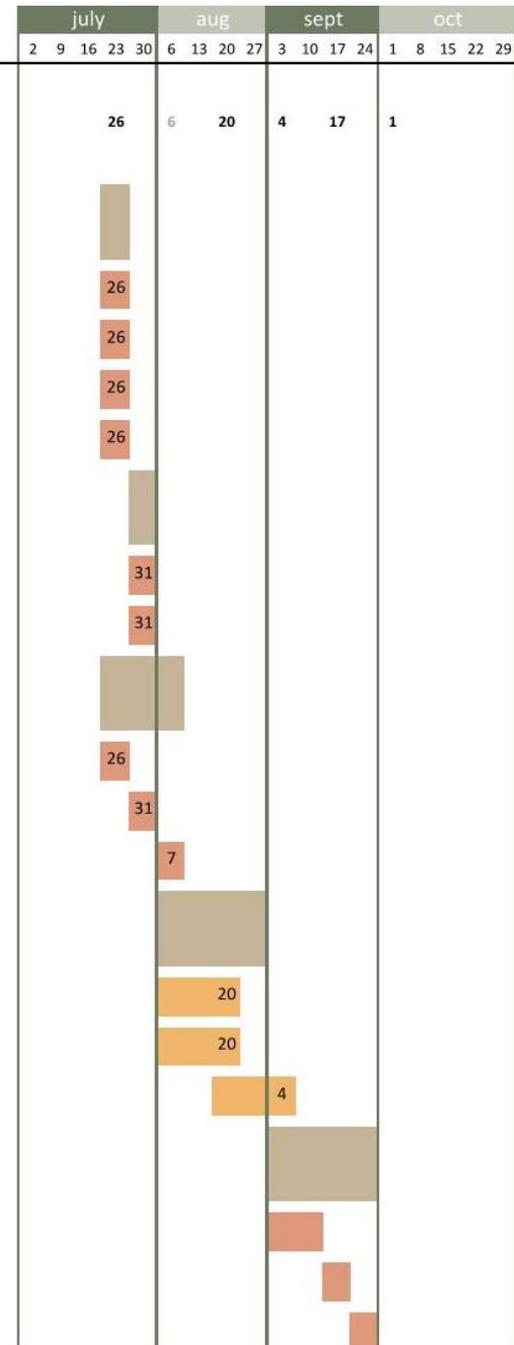
- ✓ Pre-kickoff walk through
- ✓ Kickoff meeting 7-26

- ✓ Draft 1 complete
 - ✓ Existing Areas
 - ✓ Space Needs

- ✓ On site assessment 7-31
- ✓ Building condition summary

- ✓ Preliminary blocking options
 - ✓ Renovation & Addition
 - ✓ Stand-alone Building
 - ✓ Connected Building

PROPOSED SCHEDULE 26 JULY 2018



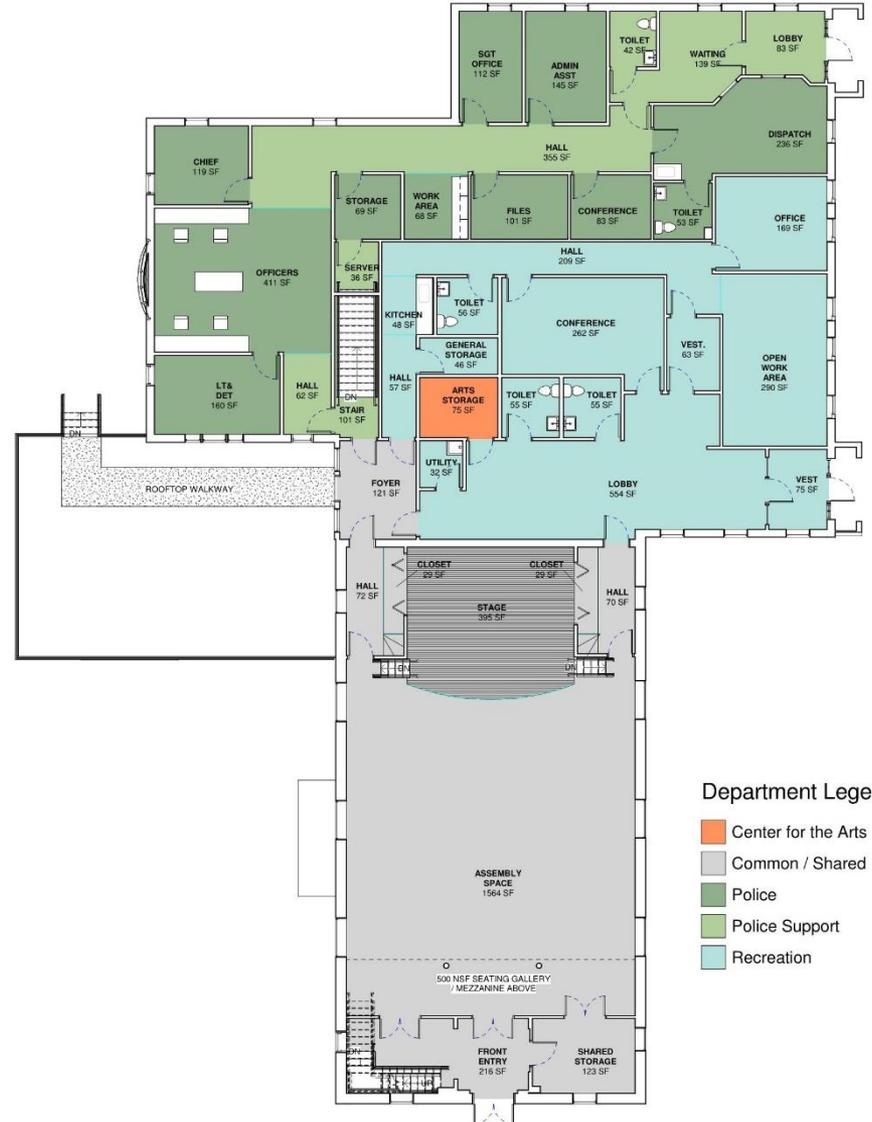
Existing Building Analysis – Recap



Department Legend

- Common / Building Services
- Common / Shared
- Police
- Police Support

Existing Lower Level



Department Legend

- Center for the Arts
- Common / Shared
- Police
- Police Support
- Recreation

Existing Upper Level

Options (as modified by the BOS after September 17): no Rec

- ~~1A: Renovate with minor additions: Police only~~
 - ~~Recreation Department not included~~
 - ~~Main level of Whipple Hall remains public use~~
 - ~~Development is contained to existing property~~
- 1B: Renovate with minor additions: Police only
 - Recreation Department not included
 - Main level of Whipple Hall remains public use
 - Development extends neighboring property to provide secure parking
- ~~2A: Three story addition~~
 - ~~Recreation in Whipple Hall and connector addition~~
 - ~~Police in a new, connected 3 story facility~~
 - ~~Development extends neighboring property to provide secure parking~~
- ~~2B: Three story addition with basement~~
 - ~~Recreation in Whipple Hall with small connector addition~~
 - ~~Police in a new, connected 3 story facility~~
 - ~~Development stays within existing property~~
- ~~3: Two story stand-alone facility~~
 - ~~Recreation in addition. Connected to Whipple Hall~~
 - ~~Police in a new stand-alone 2 story facility~~
 - ~~Development extends neighboring property to provide secure parking~~
- ~~4: Renovate with major 2 story additions: Police and Recreation~~
 - ~~Recreation in Whipple Hall and front of Buker~~
 - ~~Police to utilize remaining Buker Building plus connected addition~~
 - ~~Development extends neighboring property to provide secure parking~~

Current Options Matrix

OPTION	MASSING	DESCRIPTION	CONSTRUCTION COST	PROJECT COST	FACTORS		
5-1		Renovation Only					
		Renovation	10,987 GSF			SITE EXPANSION	<input type="checkbox"/>
		New Construction	0 GSF			MEETS SPACE NEEDS (78%)	<input type="checkbox"/>
		Total Option Area:	10,987 GSF	\$3,506,620	\$4,883,977	RELOCATE SALLYPORT	<input type="checkbox"/>
		Total Area Required:	13,252 GSF				
Program Deficiency	2,210 NSF						
Total Building Area on Site	13,787 GSF						
5-2		Renovation with Minor Addition					
		Renovation	9,864 GSF			SITE EXPANSION	<input checked="" type="checkbox"/>
		New Construction	1,535 GSF			MEETS SPACE NEEDS (81%)	<input type="checkbox"/>
		Total Option Area:	11,399 GSF	\$4,065,390	\$5,614,162	RELOCATE SALLYPORT	<input checked="" type="checkbox"/>
		Total Area Required:	13,252 GSF				
Program Deficiency	1,854 NSF						
Total Building Area on Site	14,199 GSF						
5-3		Renovation/Addition					
		Renovation	10,987 GSF			SITE EXPANSION	<input checked="" type="checkbox"/>
		New Construction	1,535 GSF			MEETS SPACE NEEDS (97%)	<input checked="" type="checkbox"/>
		Total Option Area:	13,899 GSF	\$5,002,890	\$6,839,260	RELOCATE SALLYPORT	<input checked="" type="checkbox"/>
		Total Area Required:	13,252 GSF				
Program Deficiency	314 NSF						
Total Building Area on Site	16,699 GSF						
1B		Renovation/Addition					
		Renovation	9,864 GSF			SITE EXPANSION	<input checked="" type="checkbox"/>
		New Construction	4,035 GSF			MEETS SPACE NEEDS (99%)	<input checked="" type="checkbox"/>
		Total Option Area:	14,332 GSF	\$5,279,655	\$7,200,929	RELOCATE SALLYPORT	<input type="checkbox"/>
		Total Area Required:	13,252 GSF				
Program Deficiency	54 NSF						
Total Building Area on Site	17,132 GSF						
6		Stand-Alone Police Station with New Whipple Entry					
		New Construction Police	13,252 GSF			SITE EXPANSION	<input checked="" type="checkbox"/>
		New Construction Entry	585 GSF			MEETS SPACE NEEDS (100%)	<input checked="" type="checkbox"/>
		Total Option Area:	13,837 GSF	\$6,620,980	\$8,953,735	RELOCATE SALLYPORT	<input checked="" type="checkbox"/>
		Total Area Required:	13,252 GSF				
Program Deficiency	0 NSF						
Total Building Area on Site	19,437 GSF						

Current Options for Police only program

- **5-1: Renovation only: 10,987 GSF Total**
 - Renovate Buker and Whipple without adding any new construction
 - Phase 1: Current area in Buker occupied by Recreation is renovated, PD moves into that area
 - Phase 2: Remaining PD in Buker is renovated
 - Phase 3: Lower level of Whipple Hall is renovated
 - Existing sallyport remains to prevent the need for new construction
 - 100% of Buker and entire lower level of Whipple are completely renovated with new HVAC, electrical, and hardened building elements
 - HVAC moves out of attic requiring +/- 200 SF in the building footprint
 - Renovation requires an elevator: (\$150,000 and +/- 100 SF per floor)
 - 10,987 GSF are renovated. 2,800 GSF of the Whipple Hall assembly space is not touched
 - Option yields an overall space deficiency of 2,210 NSF for the PD. This translates to the following essential program items missing from the building:
 - 198 NSF of Administrative support program
 - 138 NSF of Training support program
 - 344 NSF of Investigations (entire program area)
 - 140 NSF of Prosecutor (entire program area)
 - 838 NSF of Common Facilities incl.: break room, lockers, & server room
 - 416 NSF of Support/Service Areas: Mechanical & Electrical Rooms, Janitor, General Storage
 - 94 NSF in other categories: Records, Communications, & Evidence
 - Functional space for Patrol support and equipment storage program



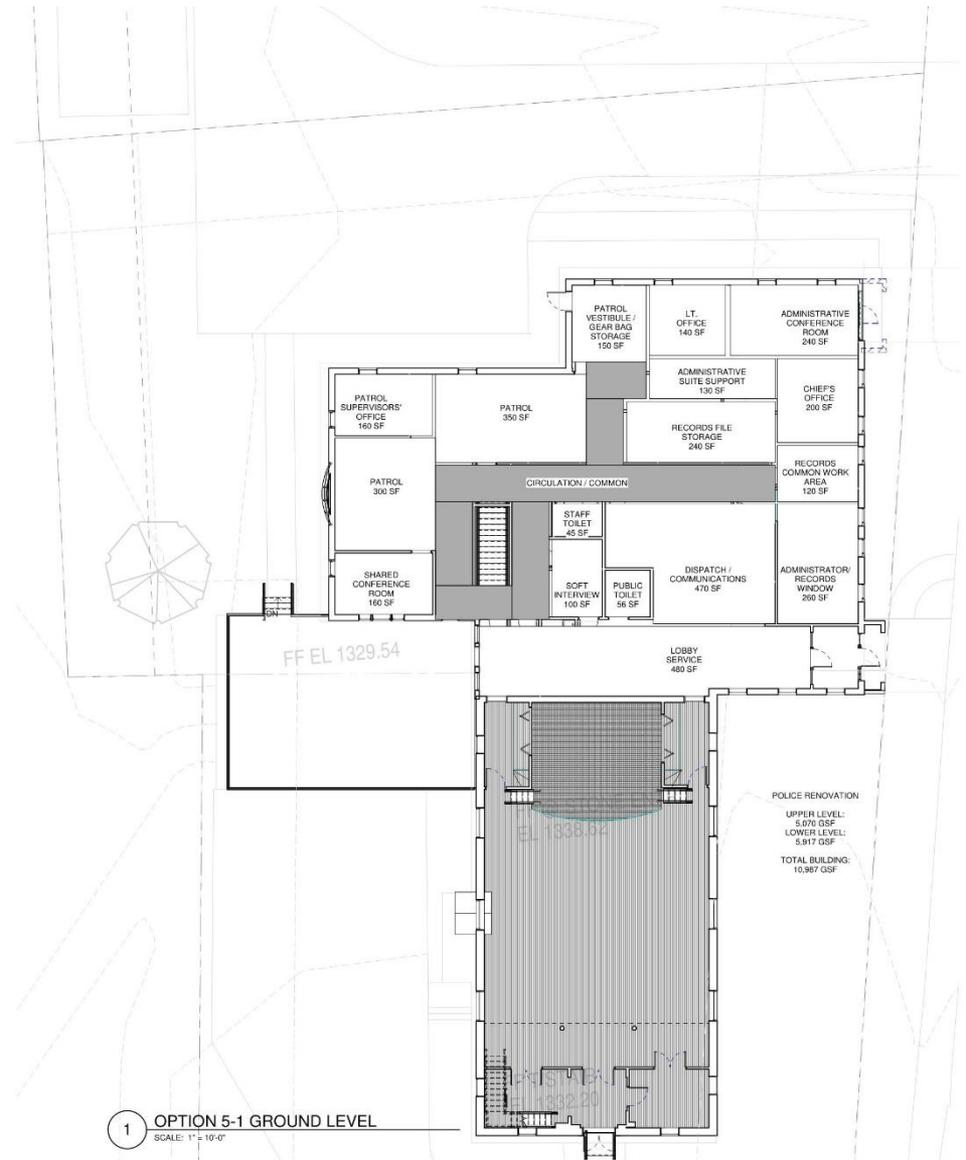
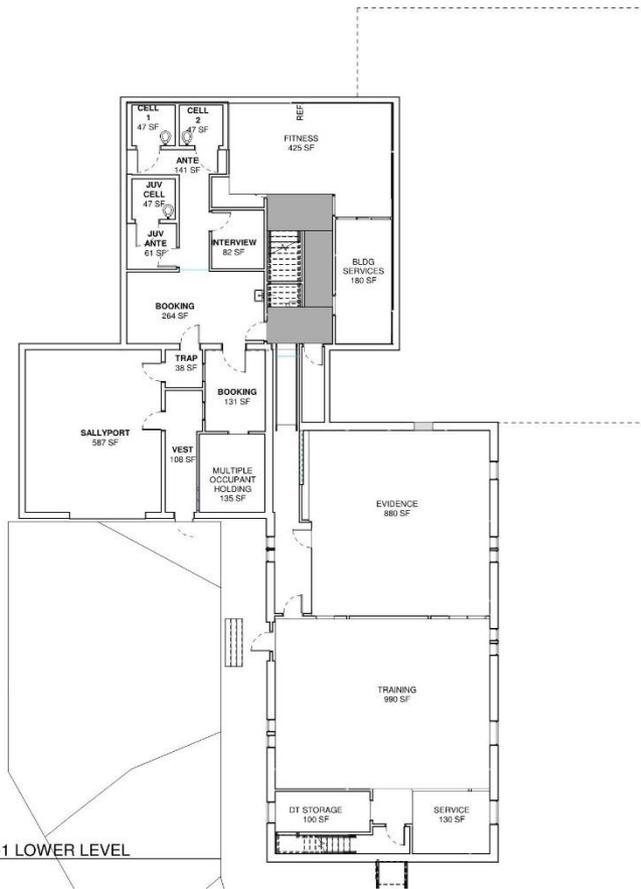
Option 5-1: Renovation Only



Option 5-1: Renovation Only



Option 5-1: Renovation Only

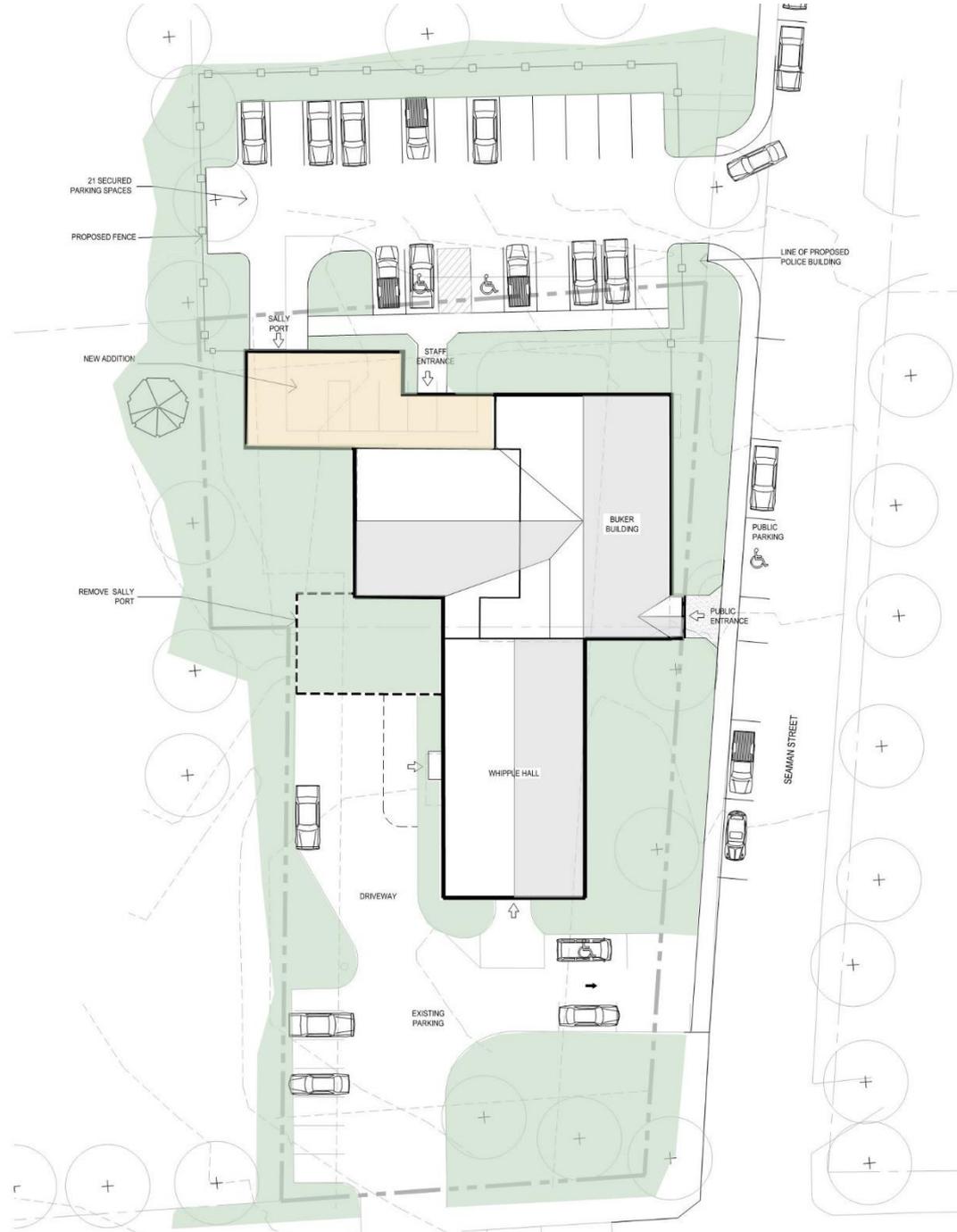


POLICE RENOVATION
 UPPER LEVEL:
 5,070 GSF
 LOWER LEVEL:
 5,917 GSF
 TOTAL BUILDING:
 10,987 GSF

Current Options for Police only program

- **5-2: Renovation with minor addition: 11,399 GSF Total**
 - Renovate Buker and Whipple with 1,535 GSF of new construction
 - Phase 1: Current area in Buker occupied by Recreation is renovated, New construction is built, PD moves into area currently occupied by Recreation and new construction area
 - Phase 2: Remaining PD in Buker is renovated
 - Phase 3: Lower level of Whipple Hall is renovated
 - Sallyport is demolished and relocated to new construction
 - 100% of Buker and entire lower level of Whipple are completely renovated with new HVAC, electrical, and hardened building elements
 - HVAC moves out of attic requiring +/- 200 SF in the building footprint
 - Renovation requires an elevator: (\$150,000 and +/- 100 SF per floor)
 - 9,864 GSF are renovated. 2,800 GSF of the Whipple Hall assembly space is not touched
 - Option yields an overall space deficiency of 1,928 NSF for the PD. This translates to the following essential program items missing from the building:
 - 198 NSF of Administrative support program
 - 346 NSF of Patrol program
 - 120 NSF of Training support program
 - 912 NSF of Evidence (entire program area)
 - 117 NSF of Common Facilities incl.: break room, lockers, & server room
 - 121 NSF of Support/Service Areas: Mechanical & Electrical, Janitor, Storage
 - Functional space for Patrol support and equipment storage program

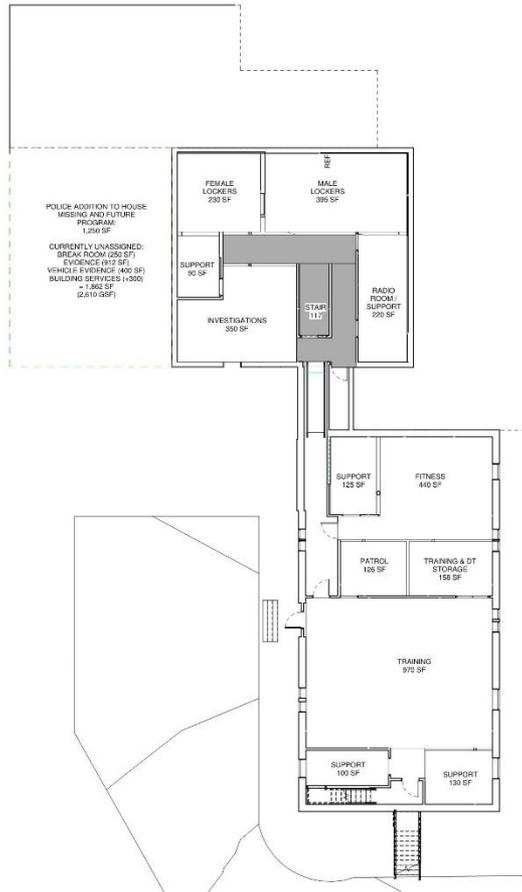
Option 5-2: Renovation with minor addition



**Option 5-2: Renovation with
minor addition**

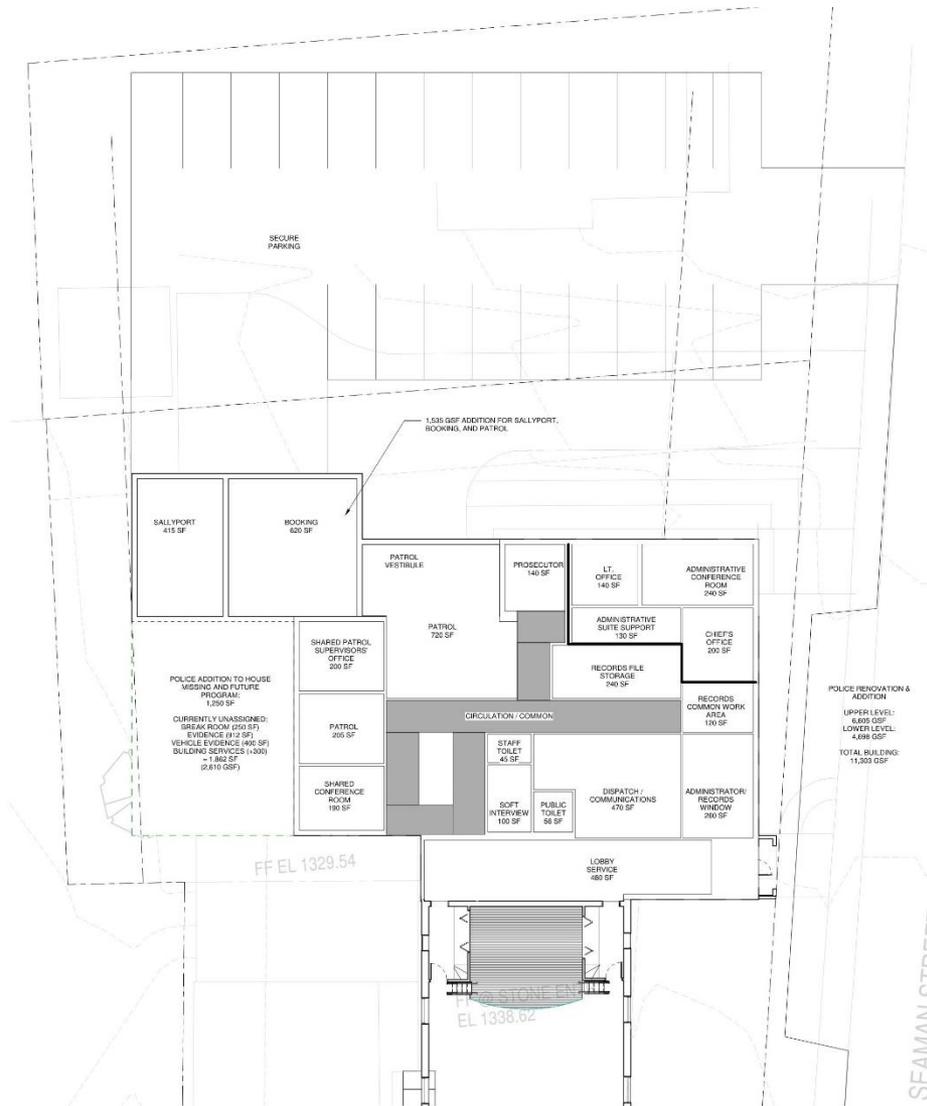


Option 5-2: Renovation with minor addition



2 OPTION 5-2 LOWER LEVEL

SCALE: 1" = 10'-0"



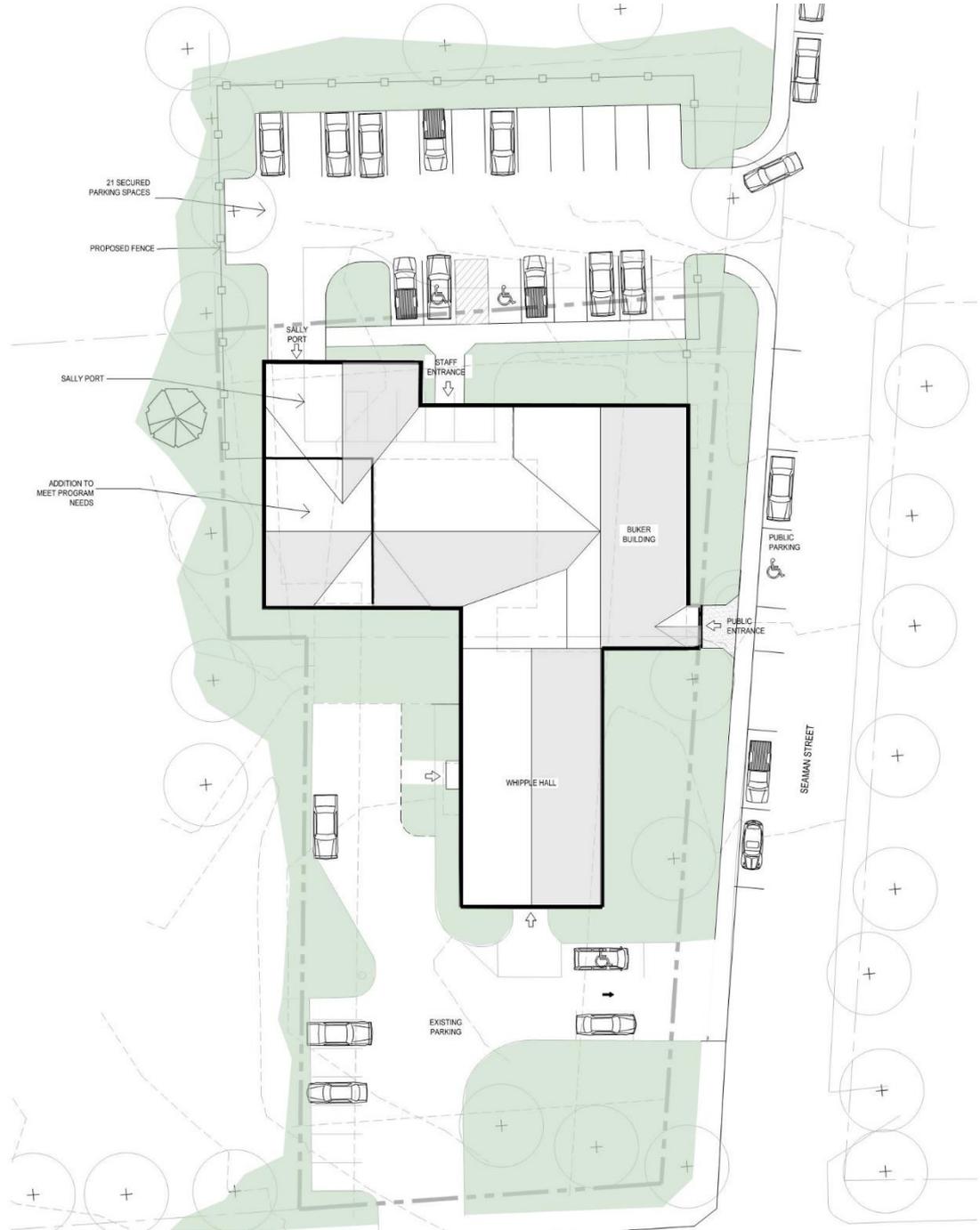
1 OPTION 5-2 UPPER LEVEL

SCALE: 1" = 10'-0"

Current Options for Police only program

- **5-3: Renovation with addition: 13,899 GSF Total**
 - Renovate Buker and Whipple with 4,035 GSF of new construction
 - Phase 1: Current area in Buker occupied by Recreation is renovated, New construction is built, PD moves into area currently occupied by Recreation and new construction areas
 - Phase 2: Remaining PD in Buker is renovated
 - Phase 3: Lower level of Whipple Hall is renovated
 - Sallyport is demolished and relocated to new construction
 - 100% of Buker and entire lower level of Whipple are completely renovated with new HVAC, electrical, and hardened building elements
 - HVAC moves out of attic requiring +/- 200 SF in the building footprint
 - Renovation requires an elevator: (\$150,000 and +/- 100 SF per floor)
 - 9,864 GSF are renovated. 2,800 GSF of the Whipple Hall assembly space is not touched
 - Option yields an overall space deficiency of 314 NSF for the PD which generally meets the overall space needs. This translates to the following essential program items missing from the building:
 - 198 NSF of Administrative support program
 - 120 NSF of Training support program
 - Most program areas generally meet SF targets with some slightly higher and some slightly lower.

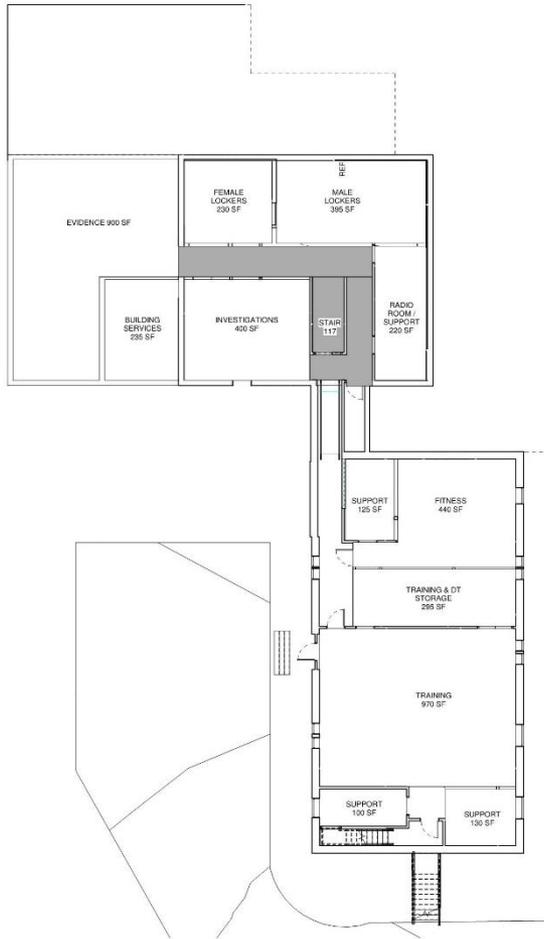
Option 5-3: Renovation and addition



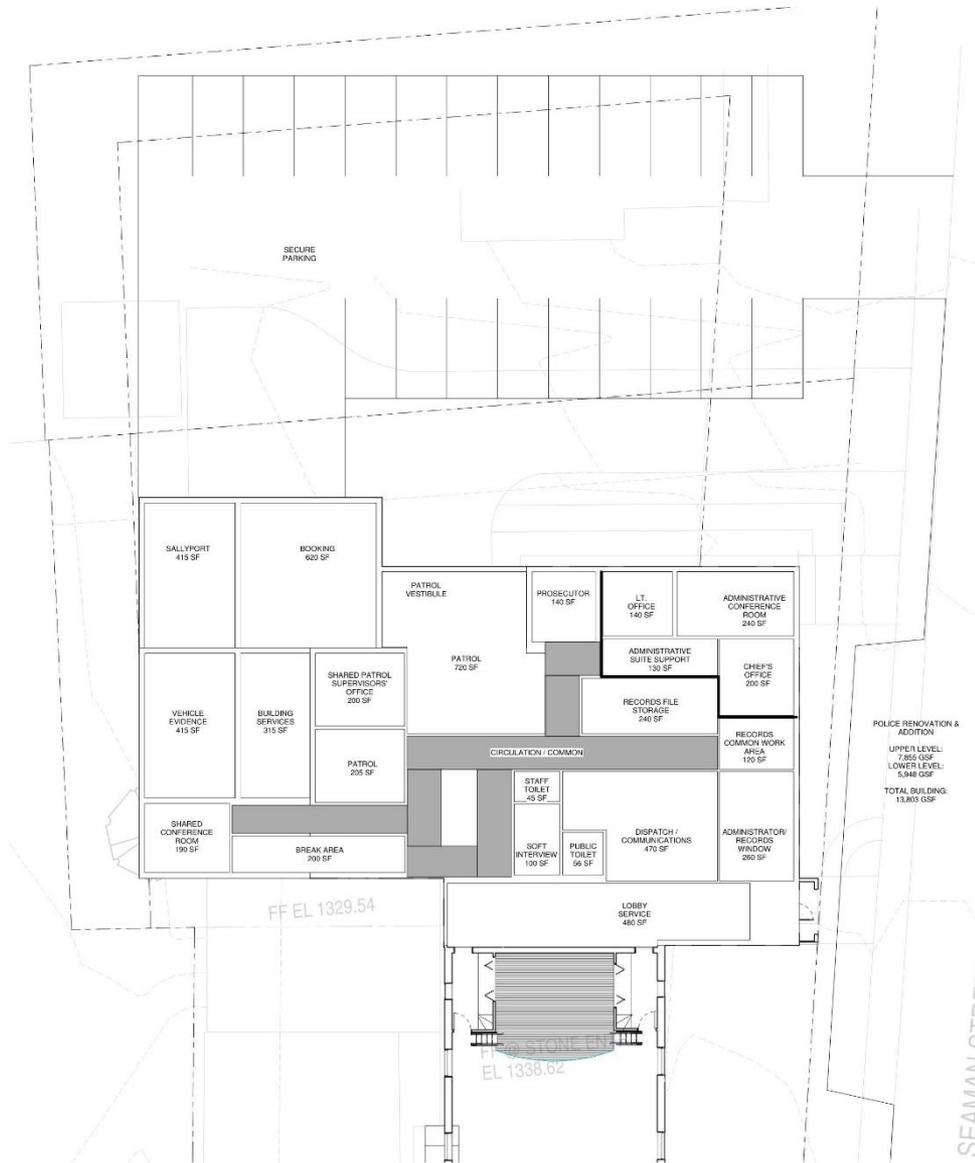
**Option 5-3: Renovation
and addition**



Option 5-3: Renovation and addition



2 OPTION 5-3 LOWER LEVEL
SCALE: 1" = 10' 0"



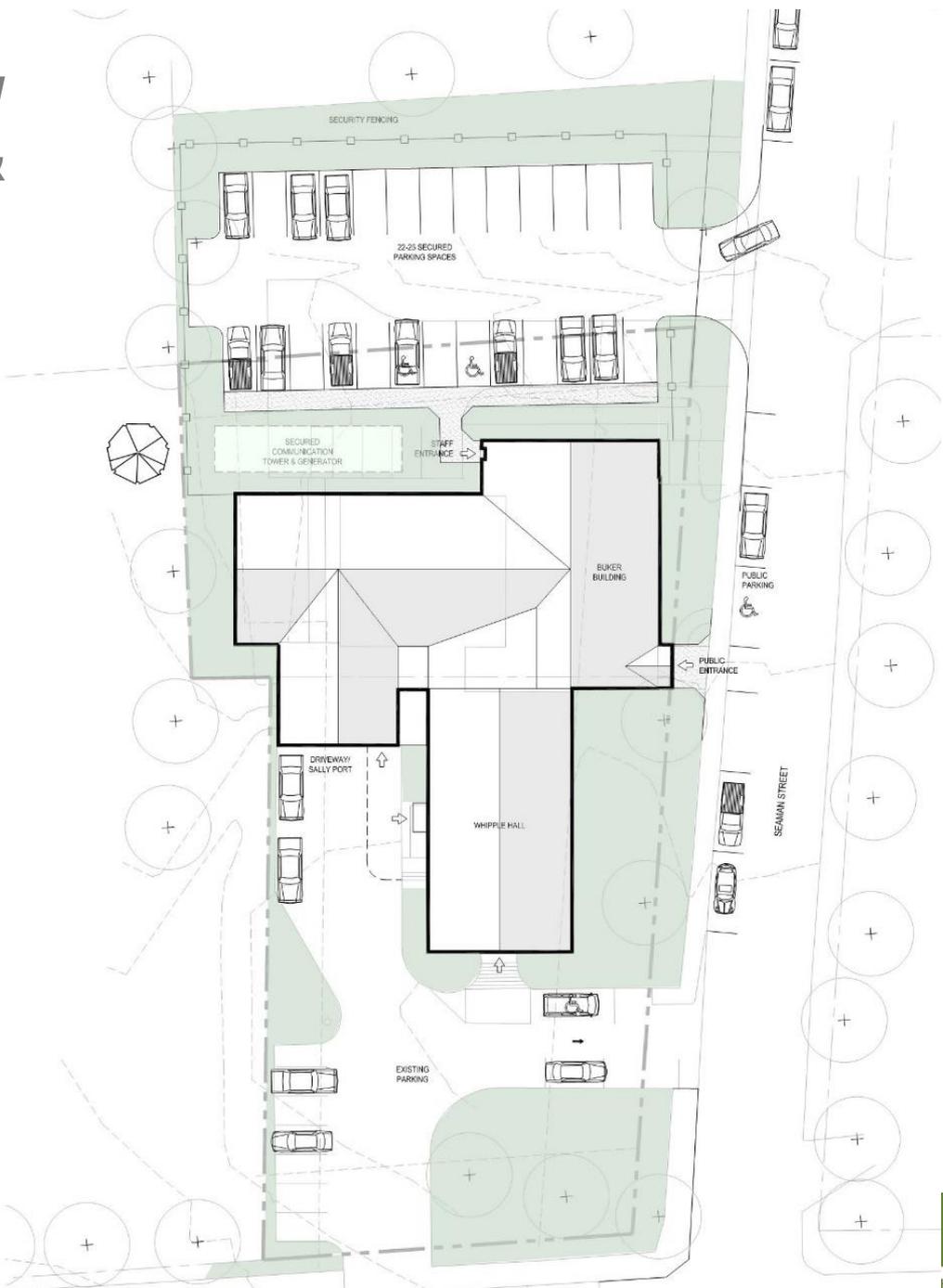
1 OPTION 5-3 UPPER LEVEL
SCALE: 1" = 10' 0"

Previous Option for Police only program

- **1B: Renovation with additions over sallyport and toward Town Green: 14,332 GSF Total**
 - Renovate Buker and Whipple with 3,345 GSF of new construction
 - Phase 1: Current area in Buker occupied by Recreation is renovated, New construction is built, PD moves into area currently occupied by Recreation and new construction areas
 - Phase 2: Remaining PD in Buker is renovated
 - Phase 3: Lower level of Whipple Hall is renovated
 - Existing sallyport remains to prevent the need for site expansion
 - 100% of Buker and entire lower level of Whipple are completely renovated with new HVAC, electrical, and hardened building elements
 - HVAC moves out of attic requiring +/- 200 SF in the building footprint
 - Renovation requires an elevator: (\$150,000 and +/- 100 SF per floor)
 - 10,987 GSF are renovated. 2,800 GSF of the Whipple Hall assembly space is not touched
 - Option generally meets space need for the PD however inefficiencies from renovated and addition spaces require more addition area to be constructed. The patrol (sallyport and booking) and shared program areas are over their program SF due to existing layout and poor adjacency for new construction layouts
 - The following program items missing from the building:
 - 198 NSF of Administrative support program
 - 138 NSF of Training support program
 - 608 NSF of Common Facilities



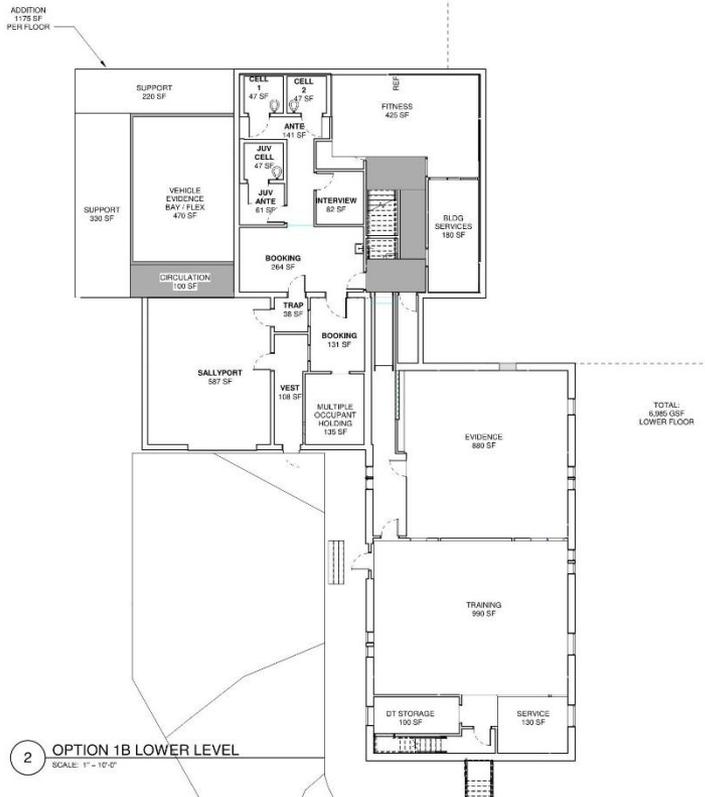
Option 1B: Police Only Renovation/Addition & site expansion



■ Option 1B: Police Only Renovation/Addition & site expansion



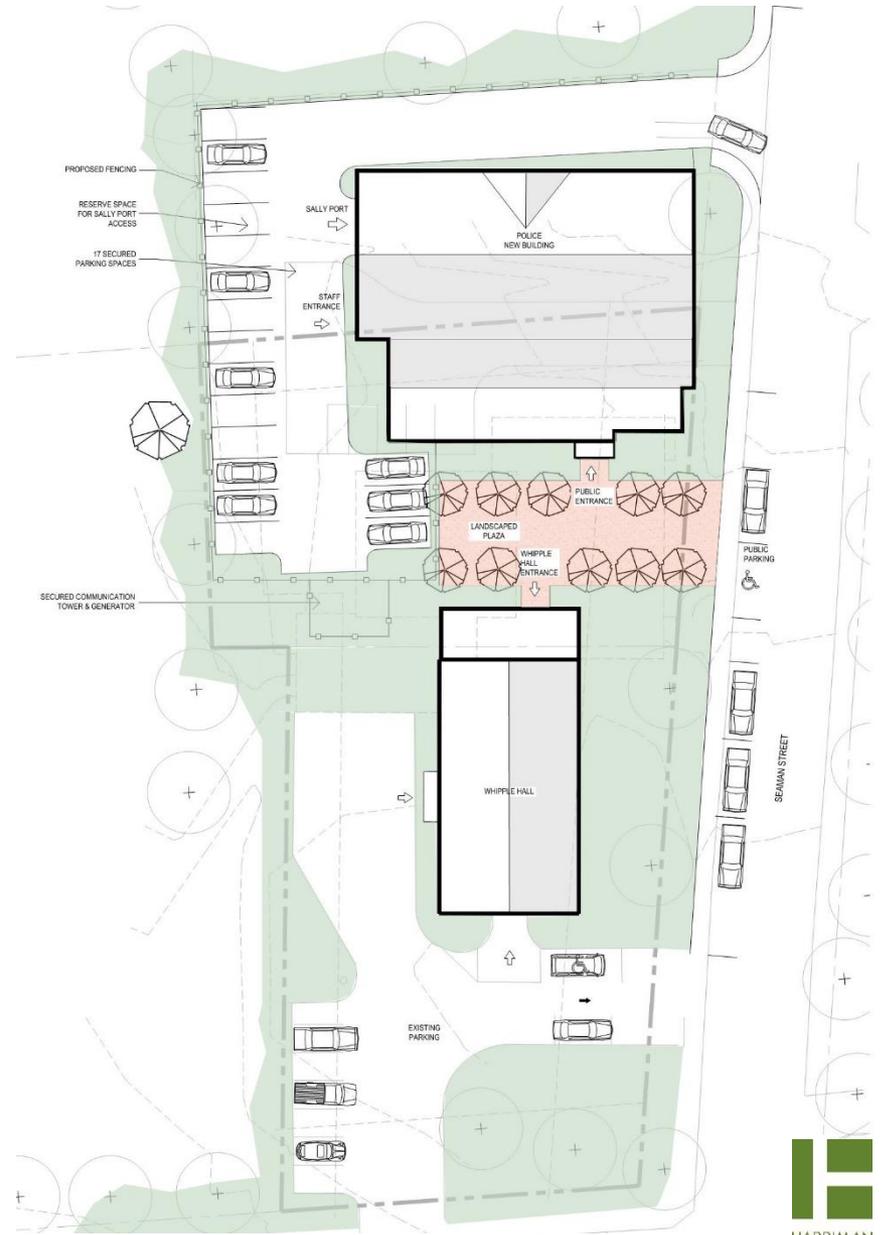
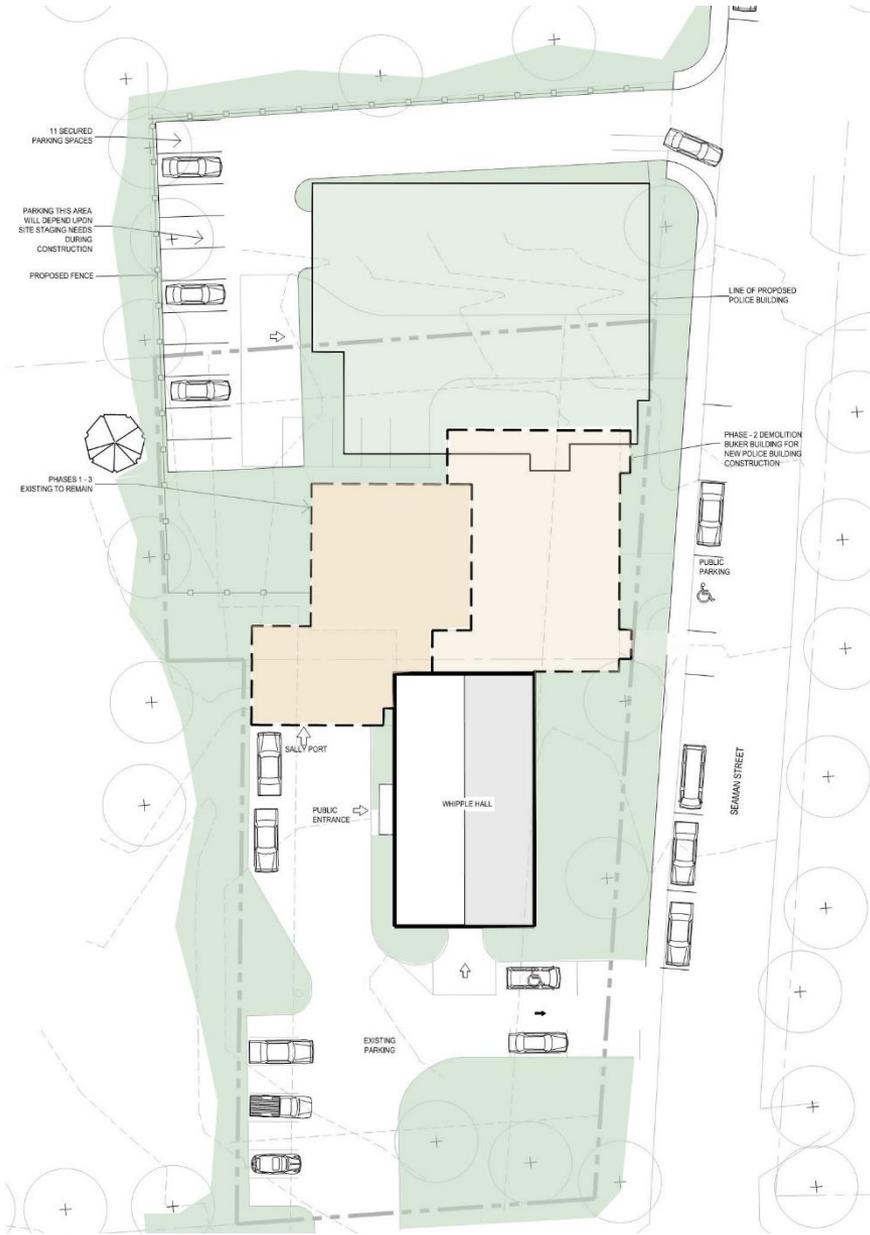
Option 1B: Police Only Renovation/Addition & site expansion



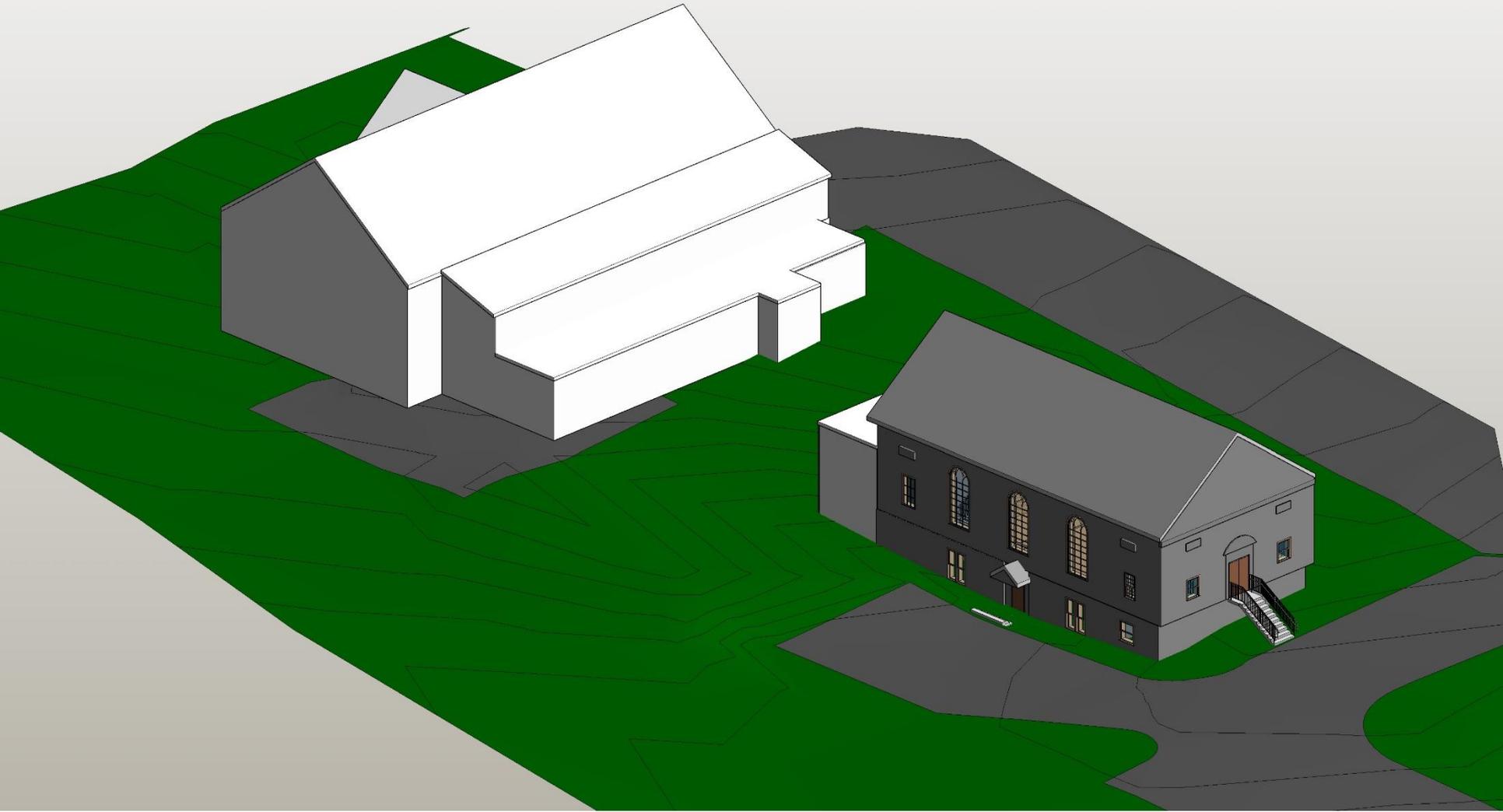
Current Options for Police only program

- **6: New stand-alone police facility, Whipple entry, and courtyard: 13,837 GSF Total**
 - Phased project to provide temporary PD during construction.
 - Phase 1: Police move into 1985 Buker and lower level of Whipple
 - Phase 2: 2000 Buker addition fronting Seaman St is demolished
 - Phase 3: New PD is constructed
 - Phase 4: Police move in and remaining Buker Building is demolished
 - Phase 5: New entry to Whipple and courtyard are constructed
 - 100% of Buker is demolished
 - Upper and lower levels of Whipple are not touched (5,600 GSF)
 - 13,252 GSF is constructed for PD
 - 585 GSF is constructed for a new entry, lobby and toilets for Whipple Hall
 - Option meets the overall space needs
 - Option restores historic Whipple Hall by removing the attached Buker elements
 - PD is constructed per current code requirements without having to gut and renovate the existing Buker building: superior long-term value

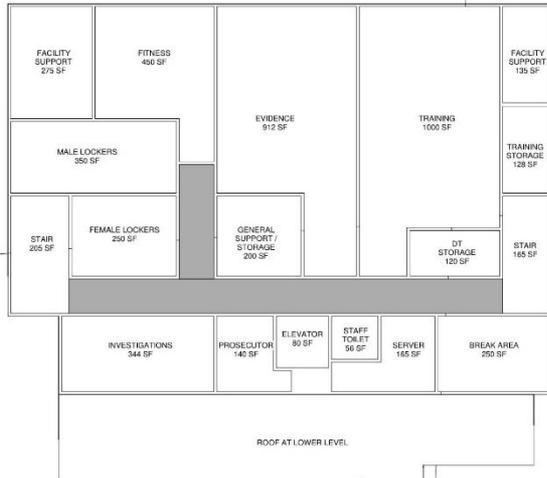
Option 6: New Stand-alone Facility



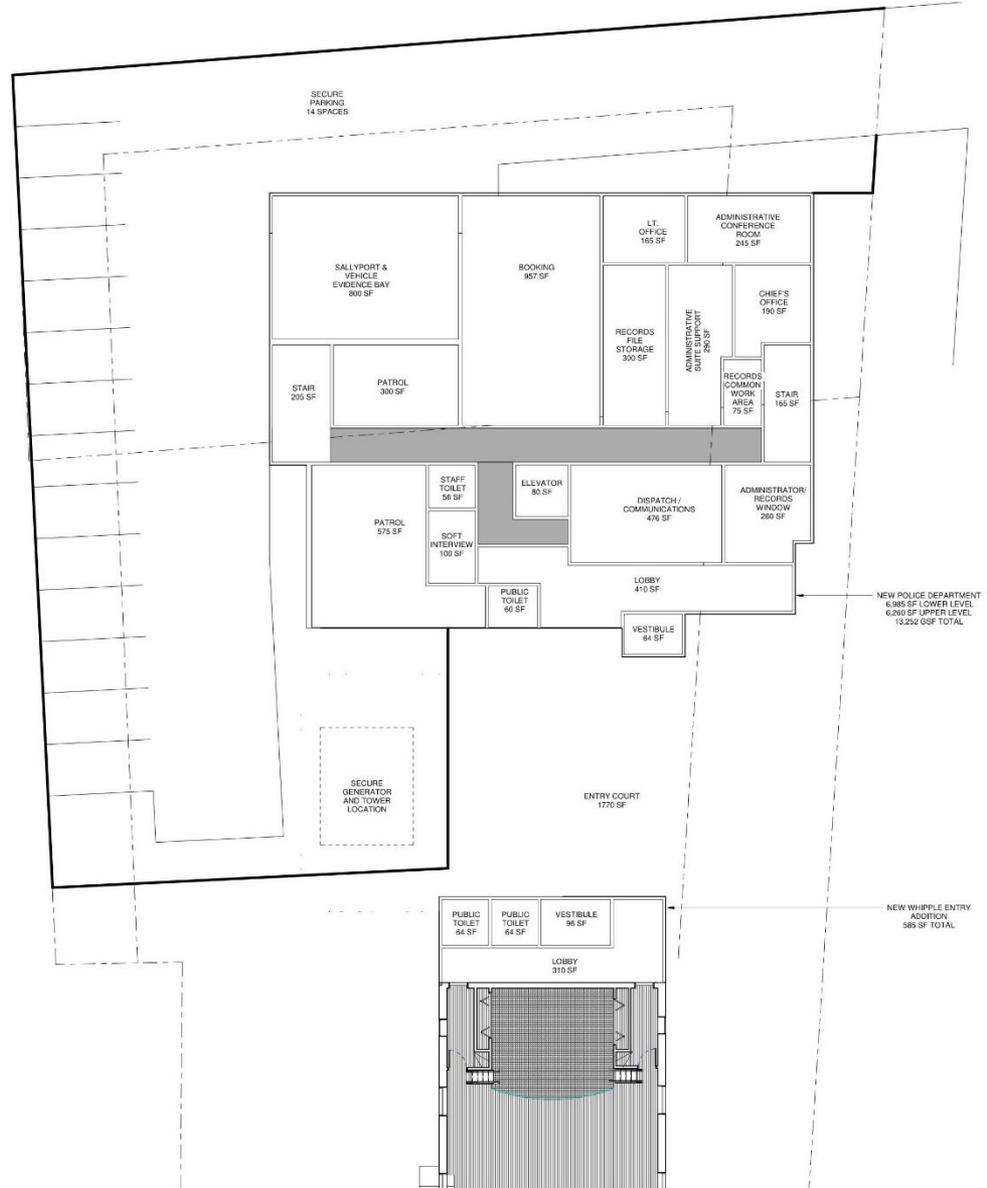
Option 6: New Stand-alone Facility



Option 6: New Stand-alone Facility



1 OPTION 6 UPPER LEVEL
SCALE: 1" = 10'-0"



2 OPTION 6 GROUND LEVEL-1
SCALE: 1" = 10'-0"

Space Needs Comparison: Previous Options

Description	Exist		Option 1B	Deficiency compared to Space Need
	Current Area	Total Net Area Required (sf)		
Shared Building Program (Main level of Whipple not included)	600	460	720	260
1.0 Administration	424	1048	850	-198
2.0 Records	215	480	480	0
3.0 Communications	289	476	470	-6
4.0 Patrol	2,003	2632	3100	468
5.0 Training	950	1128	990	-138
6.0 Investigations	0	344	440	96
7.0 Property & Evidence	237	912	880	-32
8.0 Legal - Prosecutor	0	140	140	0
9.0 Common Facilities	1,526	2174	1800	-374
10.0 Other General-Specialty Areas	230	200	210	10
11.0 Facility Support	322	200	60	-140
12.0 Police Parking - Fleet	10,400 SF = 0.24 Acre:			
Total Net Square Footage	6,796	10,194	10,140	-54
Net to Gross Factor	1.276	1.30		
Total Gross Square Footage	8,674	13,252	14,332	

Space Needs Comparison: New Options

Description

Description	Exist		Option 5-1	Deficiency compared to Space Need	Option 5-2	Deficiency compared to Space Need	Option 5-3	Deficiency compared to Space Need	Option 6	Deficiency compared to Space Need
	Current Area	Total Net Area Required (sf)								
Shared Building Program (Main level of Whipple not included)	600	460	130	-330	385	-75	385	-75	460	0
1.0 Administration	424	1048	850	-198	850	-198	850	-198	1048	0
2.0 Records	215	480	440	-40	440	-40	440	-40	480	0
3.0 Communications	289	476	470	-6	470	-6	470	-6	476	0
4.0 Patrol	2,003	2632	2648	16	2286	-346	2575	-57	2632	0
5.0 Training	950	1128	990	-138	1008	-120	1008	-120	1128	0
6.0 Investigations	0	344	0	-344	350	6	400	56	344	0
7.0 Property & Evidence	237	912	880	-32	0	-912	900	-12	912	0
8.0 Legal - Prosecutor	0	140	0	-140	140	0	140	0	140	0
9.0 Common Facilities	1,526	2174	1336	-838	2057	-117	2257	83	2174	0
10.0 Other General-Specialty Areas	230	200	180	-20	220	20	220	20	200	0
11.0 Facility Support	322	200	60	-140	60	-140	235	35	200	0
12.0 Police Parking - Fleet	10,400 SF = 0.24 Acre:									
Total Net Square Footage	6,796	10,194	7,984	-2,210	8,266	-1,928	9,880	-314	10,194	0
Net to Gross Factor	1.276	1.30								
Total Gross Square Footage	8,674	13,252	10,987		11,399		13,899		13,252	

Order of Magnitude Cost Breakdown

Option 5-1: Major renovation, no addition, no site expansion

	Demo	Reno	Phasing Premium	New PD	ADA Upgrades	Site
Area (GSF)	0	10,987		0	200 (Incl. in Reno)	
Cost/SF		\$260				
Construction Cost	\$0	\$2,856,620	\$350,000	\$0	\$150,000	\$150,000 Land cost not included
Construction Total						\$3,506,620
Administrative Cost & Reserve						\$660,993
Fees & Services						\$716,364
Grand Total						\$4,883,977

Order of Magnitude Cost Breakdown

Option 5-2: Major renovation, minor addition with site expansion

	Demo	Reno	Phasing Premium	New PD	ADA Upgrades	Site
Area (GSF)	0	9,864		1,535	200 (Incl. in Reno)	
Cost/SF		\$260		\$450		
Construction Cost	\$25,000	\$2,564,640	\$350,000	\$690,750	\$150,000	\$285,000 Land cost not included
Construction Total						\$4,065,390
Administrative Cost & Reserve						\$744,809
Fees & Services						\$803,963
Grand Total						\$5,614,162

Order of Magnitude Cost Breakdown

Option 5-3: Major renovation and addition with site expansion

	Demo	Reno	Phasing Premium	New PD	ADA Upgrades	Site
Area (GSF)	0	9,864		4,035	200 (Incl. in Reno)	
Cost/SF		\$260		\$450 / \$365		
Construction Cost	\$25,000	\$2,564,640	\$350,000	\$1,628,250	\$150,000	\$285,000 Land cost not included
Construction Total						\$5,002,890
Administrative Cost & Reserve						\$885,434
Fees & Services						\$950,937
Grand Total						\$6,839,260

Order of Magnitude Cost Breakdown

Option 1B: Major renovation and minor addition with site expansion

	Demo	Reno	Phasing Premium	New PD	ADA Upgrades	Site
Area (GSF)	0	11,828		3,345	200	
Cost/SF		\$260		\$375		
Construction Cost	\$0	\$3,075,280	\$350,000	\$1,254,375	\$150,000	\$450,000 Land cost not included
Construction Total						\$5,279,655
Administrative Cost & Reserve						\$926,948
Fees & Services						\$994,326
Grand Total						\$7,200,929

Order of Magnitude Cost Breakdown

Option 6: New stand-alone facility, Whipple entry, and courtyard with site expansion

	Demo	Reno / Phasing	New Entry to Whipple Hall	New PD New Entry	ADA Upgrades	Site
Area (GSF)	8,187	9,864	585	13,252	-	
Cost/SF	\$22.25	\$260	\$400	\$365		
Construction Cost	\$182,161	\$167,839	\$234,000	\$4,836,980	\$0	\$1,200,000 Land cost not included
Construction Total						\$6,620,980
Administrative Cost & Reserve						\$1,128,147
Fees & Services						\$1,204,608
Grand Total						\$8,953,735

Recommendations

- Options 5-3 and 6 are the only scenarios that meet the current and future operational needs of the New London Police Department.
- Entertaining anything less than Option 5-3 or 6 requires significant capital expenditure and will result in a temporary solution similar the current facility condition.
- Regardless of the desire to meet national law enforcement standards, the building needs to meet current building and life safety codes for critical facilities.
- Option 6 is the highest value and is the only scenario that:
 - Allows Whipple Hall to regain its independence as a single historic structure.
 - Creates operation separation for the police department which improves safety for users of Whipple and the PD.
 - Provides the most efficient building layout which results in officers spending more time patrolling in the community.
 - Truly provides the level of construction required to support a critical facility such as New London's dispatch which is relied upon regionally.
 - Offers a phasing plan that disrupts the police department twice rather than moving piecemeal throughout a long and complicated renovation project.

Questions

