

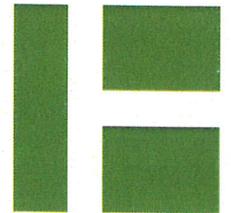
# Buker Building Study

Concept Design Alternatives  
New London, NH



## Board of Selectmen Presentation

15 October 2018



HARRIMAN

# Agenda

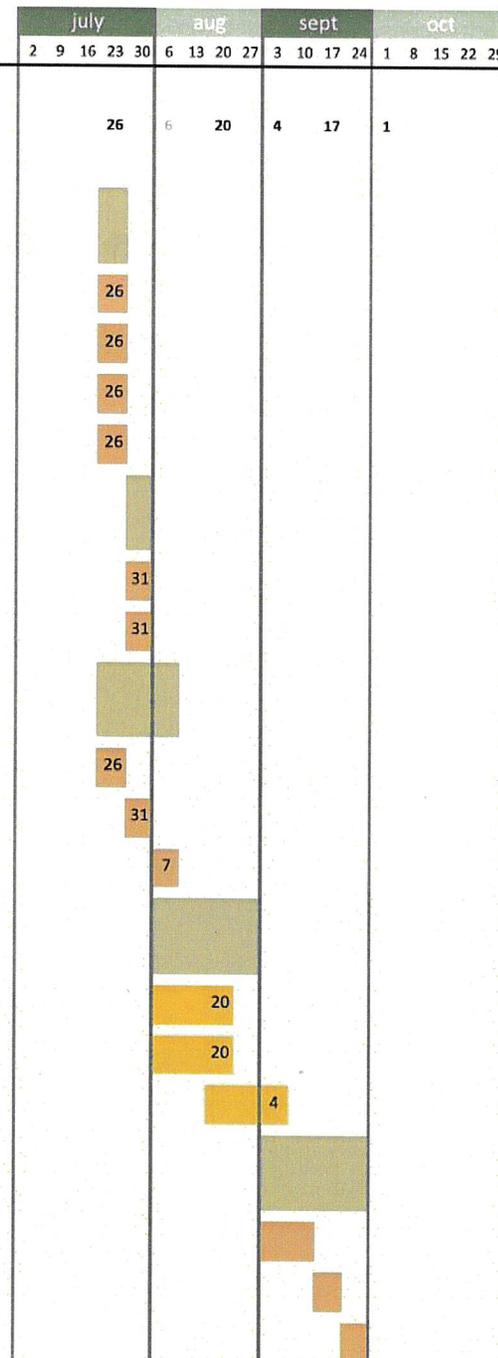
- Schedule
- Follow Up - Preliminary Option Alternatives
- Next Steps



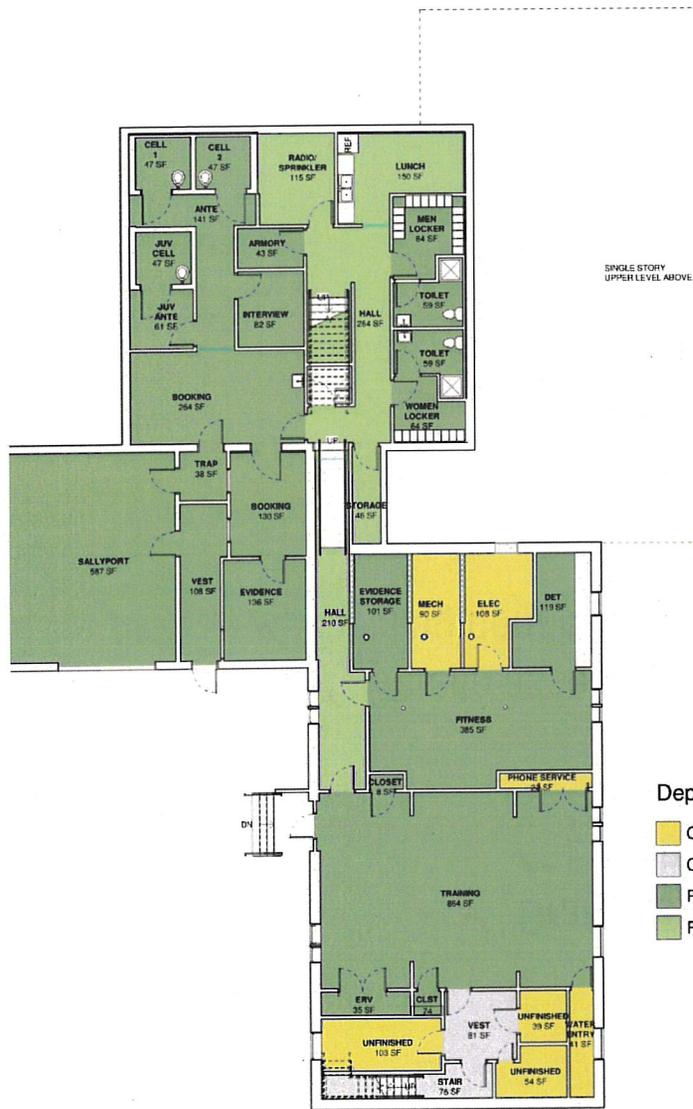
# Schedule

- ✓ 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



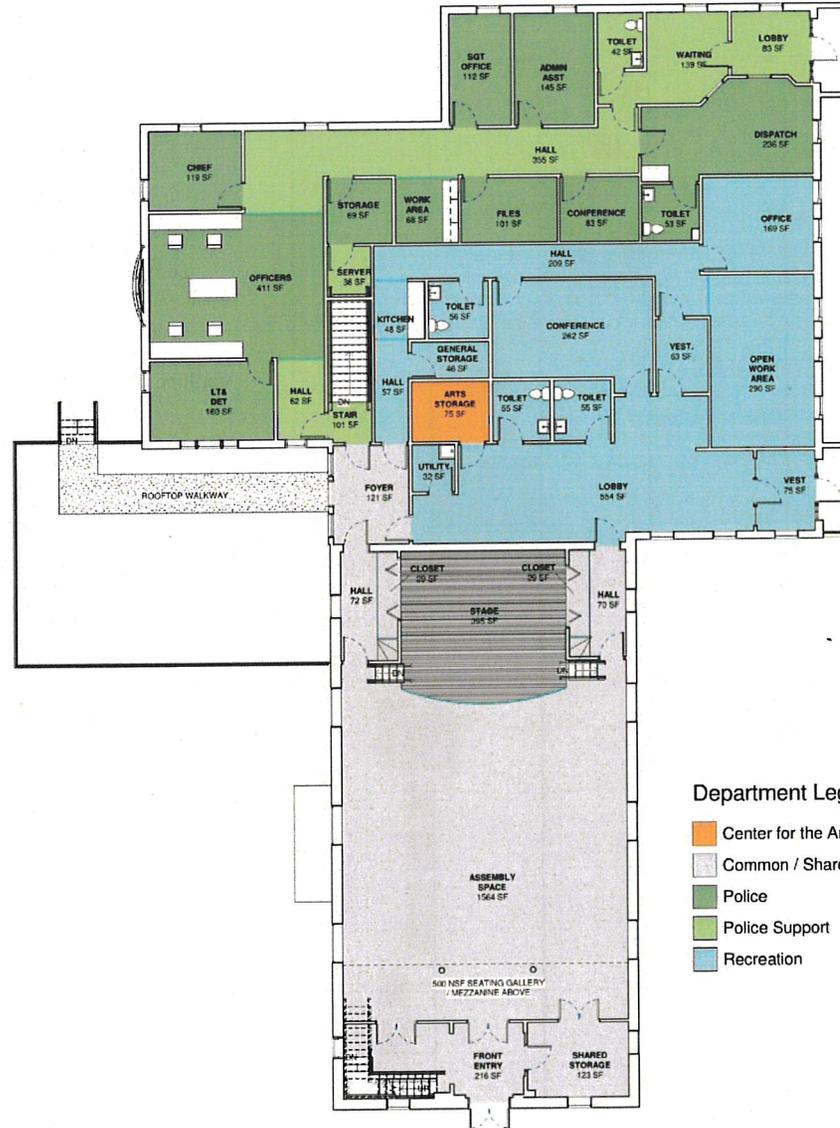
# Existing Building Analysis – Recap



Existing Lower Level

SINGLE STORY UPPER LEVEL ABOVE

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



Existing Upper Level

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

## 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~~~~

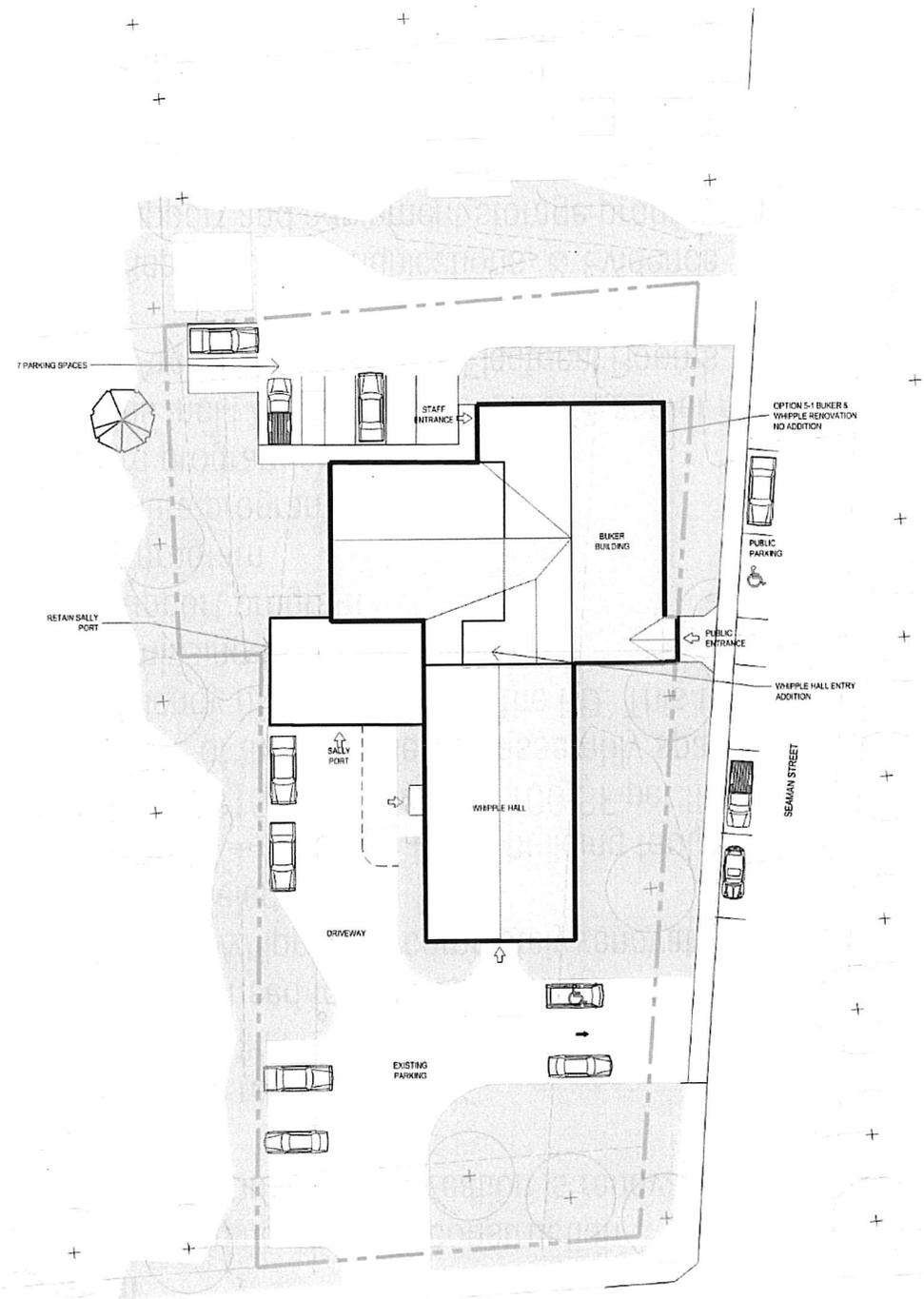
# Current Options Matrix

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

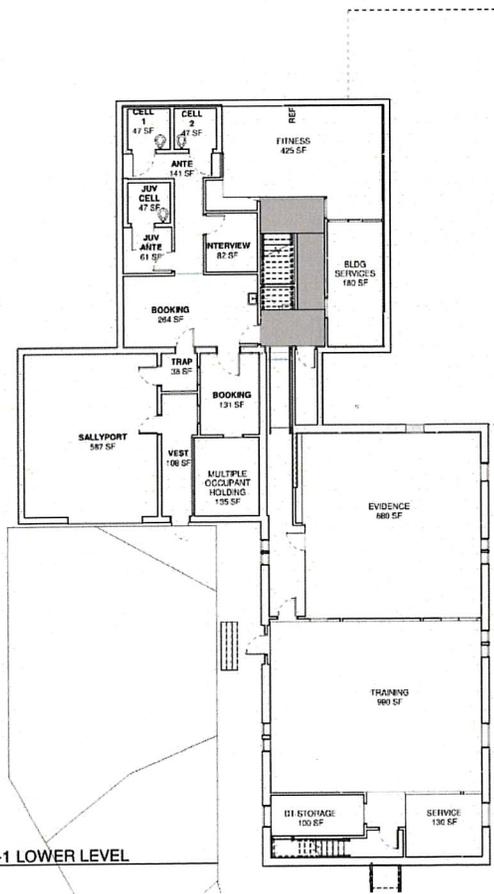
# Option 5-1: Renovation Only



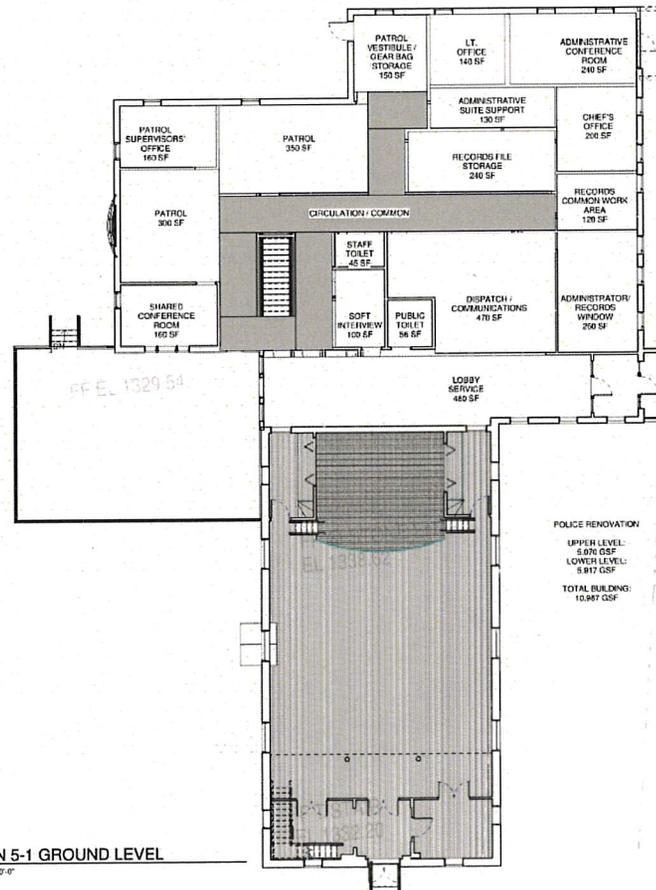
**Option 5-1: Renovation Only**



# Option 5-1: Renovation Only



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



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

POLICE RENOVATION  
UPPER LEVEL:  
5,676 GSF  
LOWER LEVEL:  
5,917 GSF  
TOTAL BUILDING:  
10,987 GSF



## Current Options for Police only program

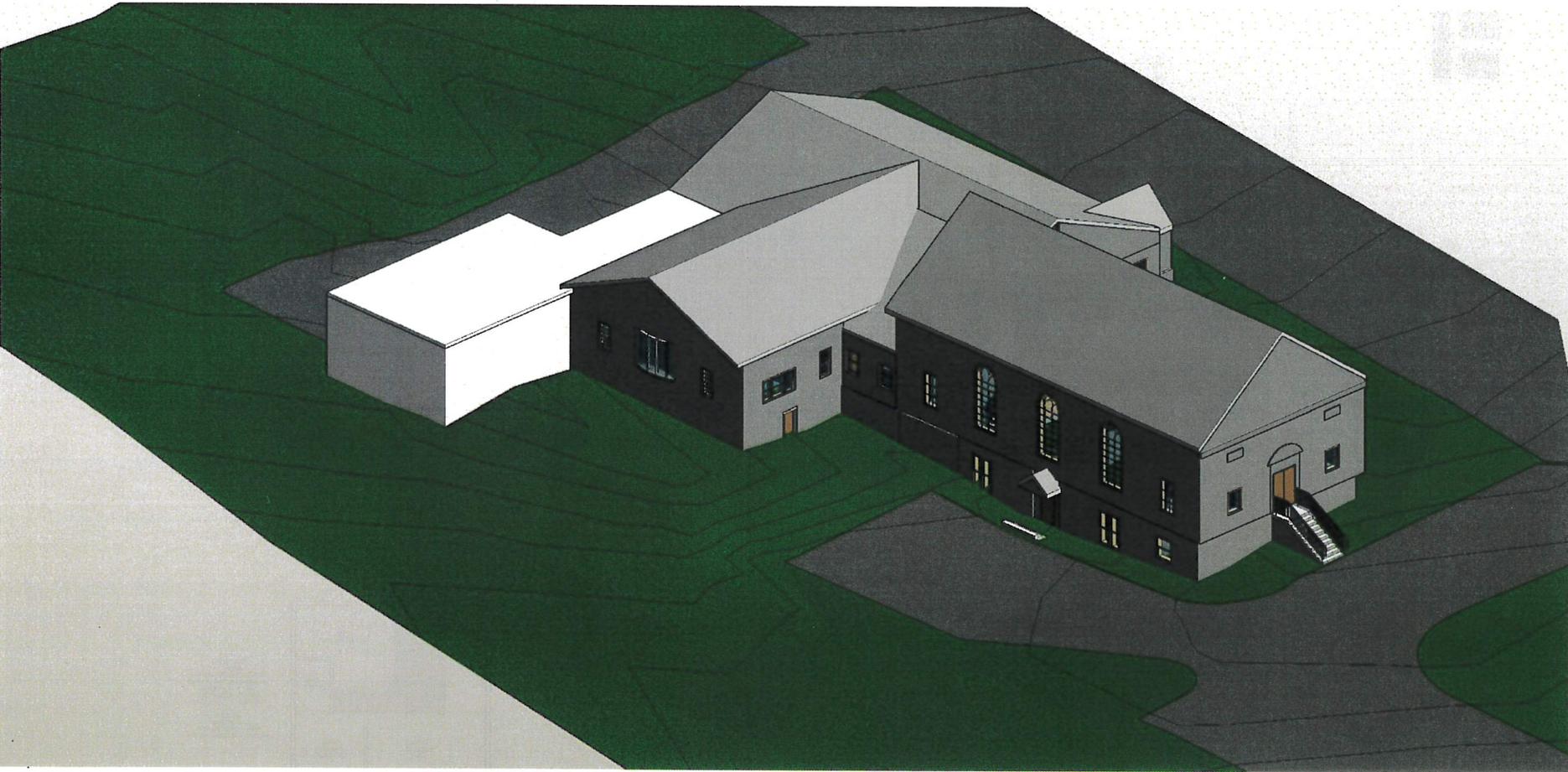
- **5-2: Renovation with minor addition: 11,399 GSF Total**
  - Renovate Buker and Whipple with 1,535 GSF of new construction
    - Phase 1: Current area in Buker occupied by Recreation is renovated, New construction is built, PD moves into area currently occupied by Recreation and new construction area
    - 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

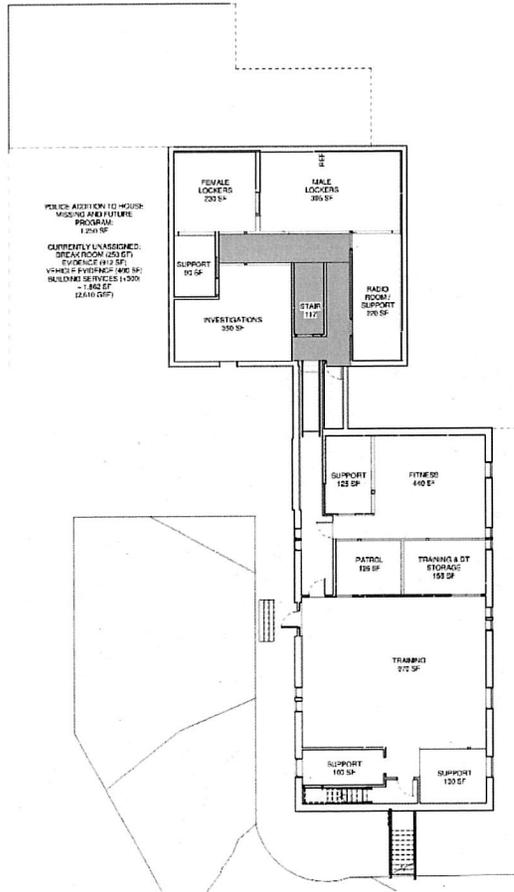




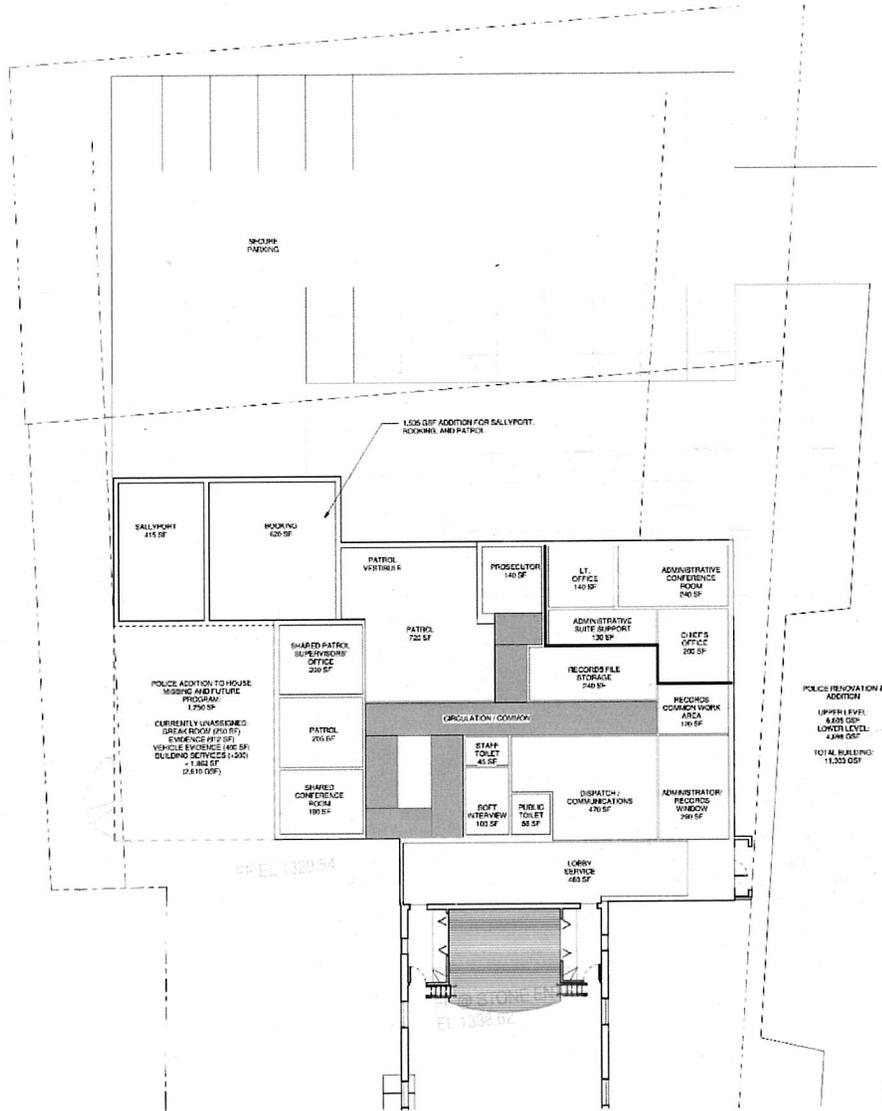
# Option 5-2: Renovation with minor addition



# Option 5-2: Renovation with minor addition



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

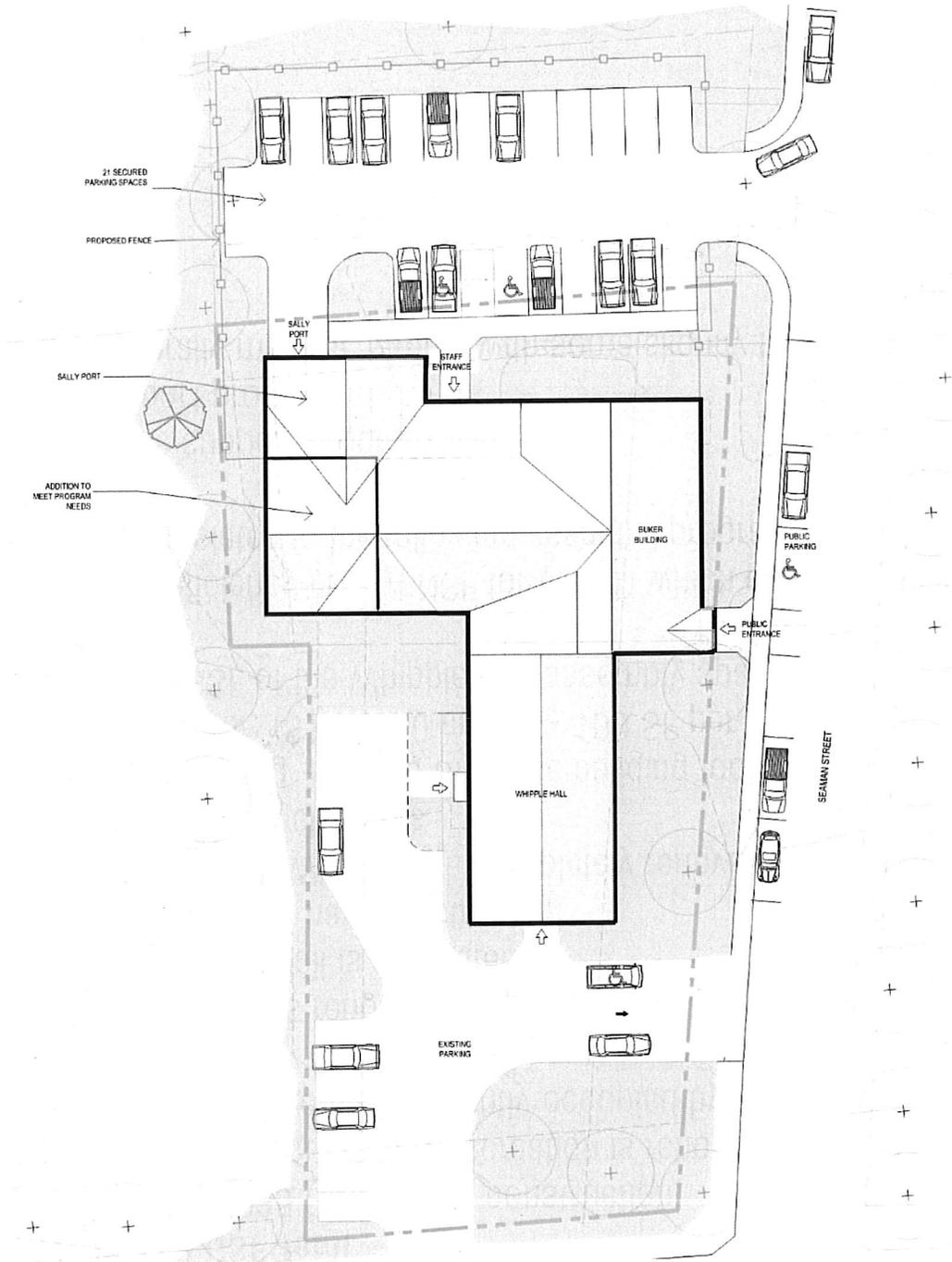


1 OPTION 5-2 UPPER LEVEL  
SCALE: 1" = 10'-0"

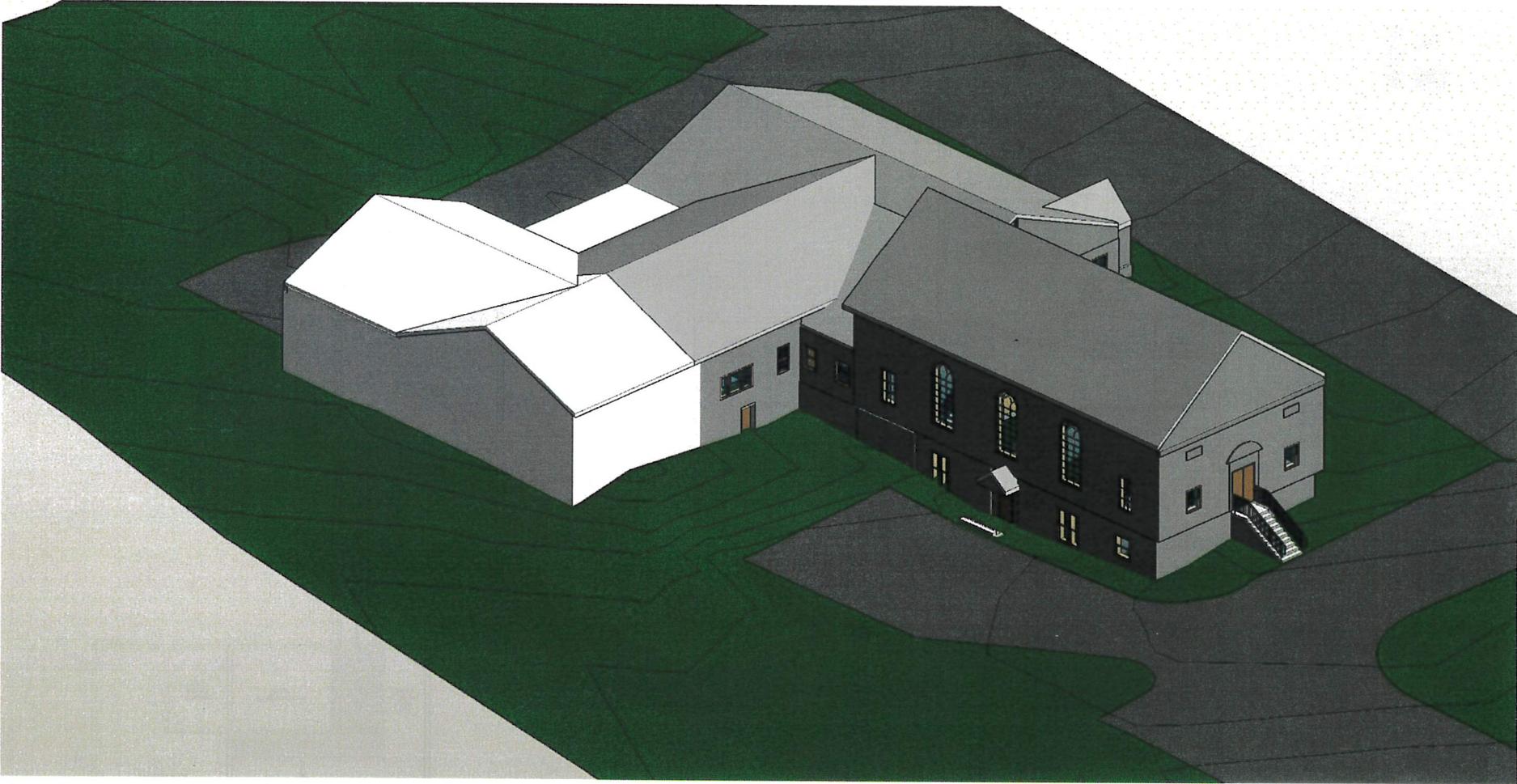
## Current Options for Police only program

- **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.

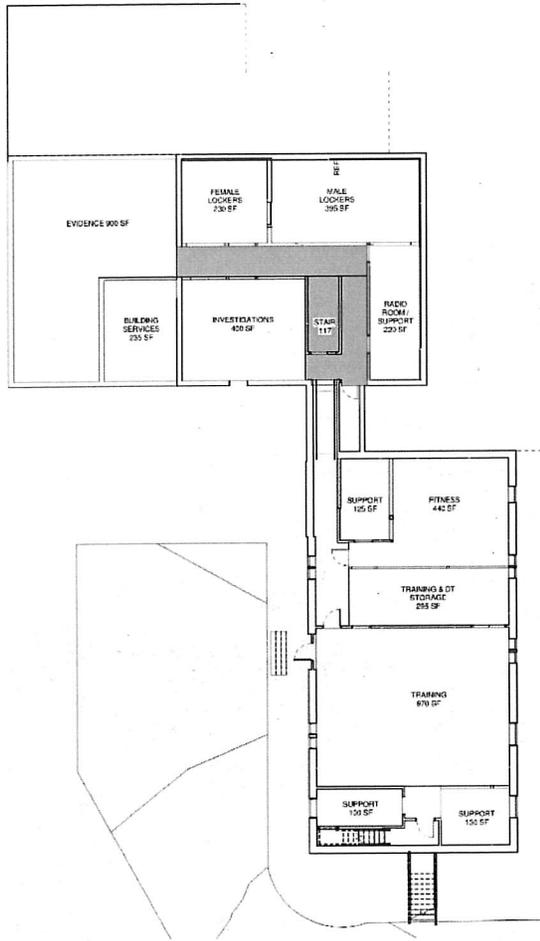
# Option 5-3: Renovation and addition



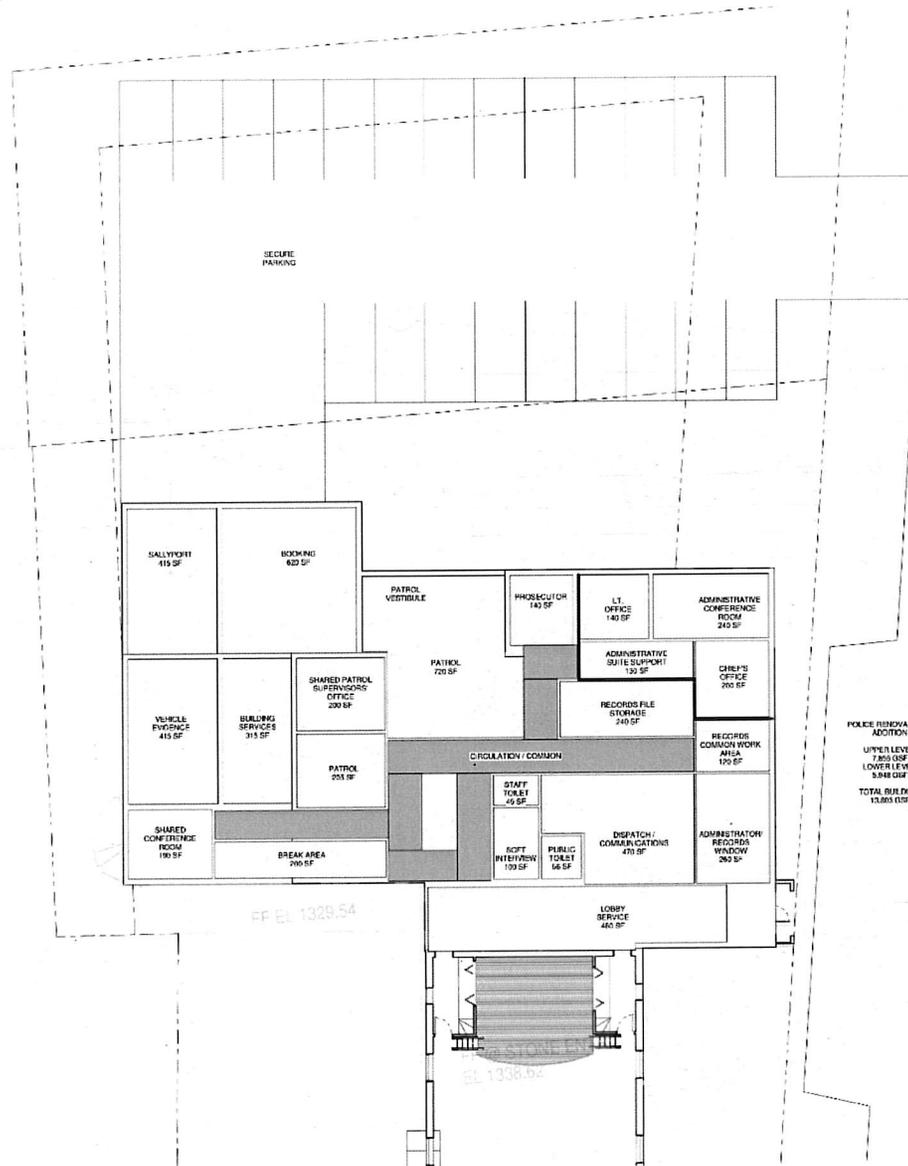
## Option 5-3: Renovation and addition



# 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"

POLICE RENOVATION & ADDITION  
UPPER LEVEL: 7,800 GSF  
LOWER LEVEL: 3,948 GSF  
TOTAL BUILDING: 11,748 GSF

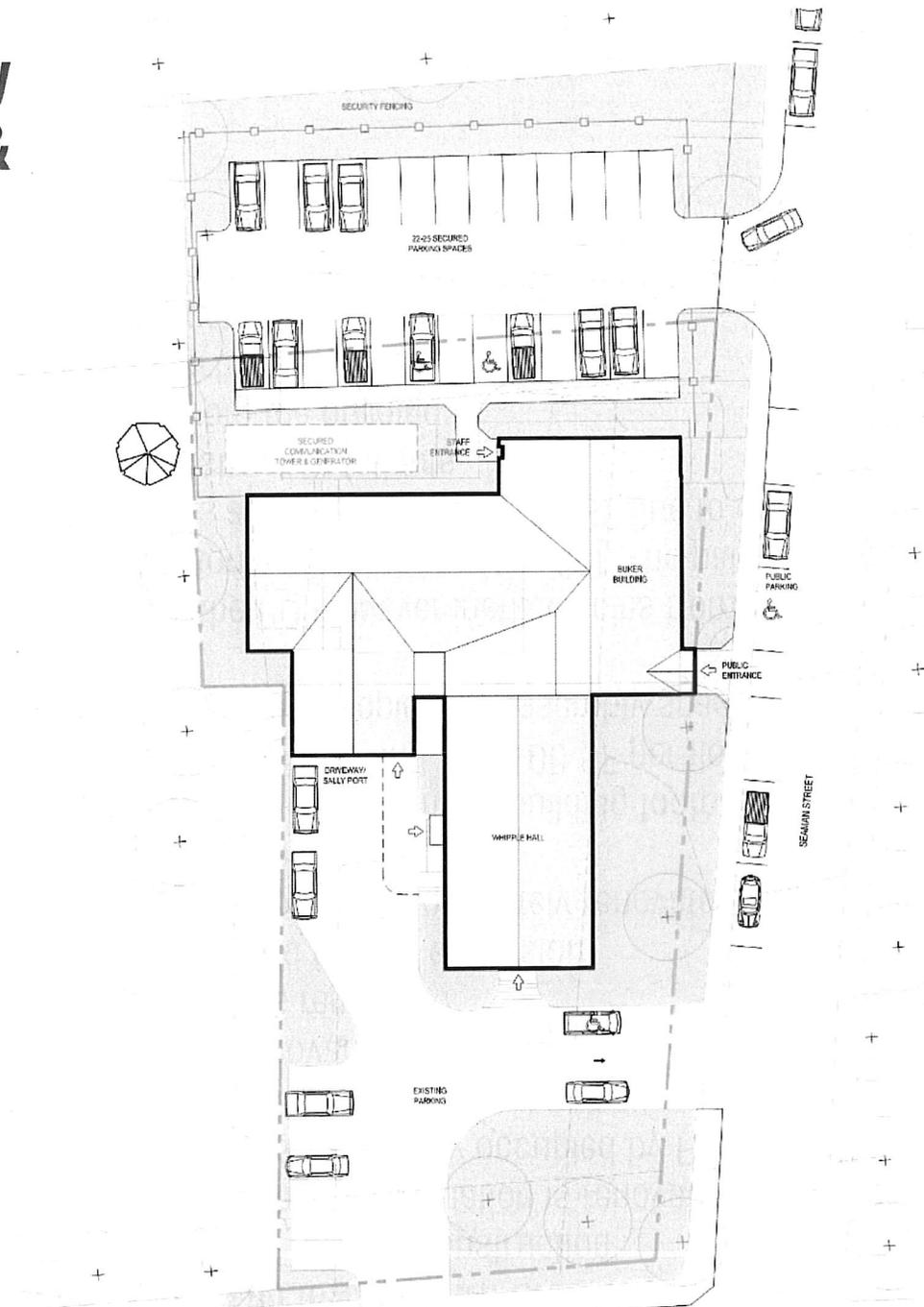
SEAMLESS



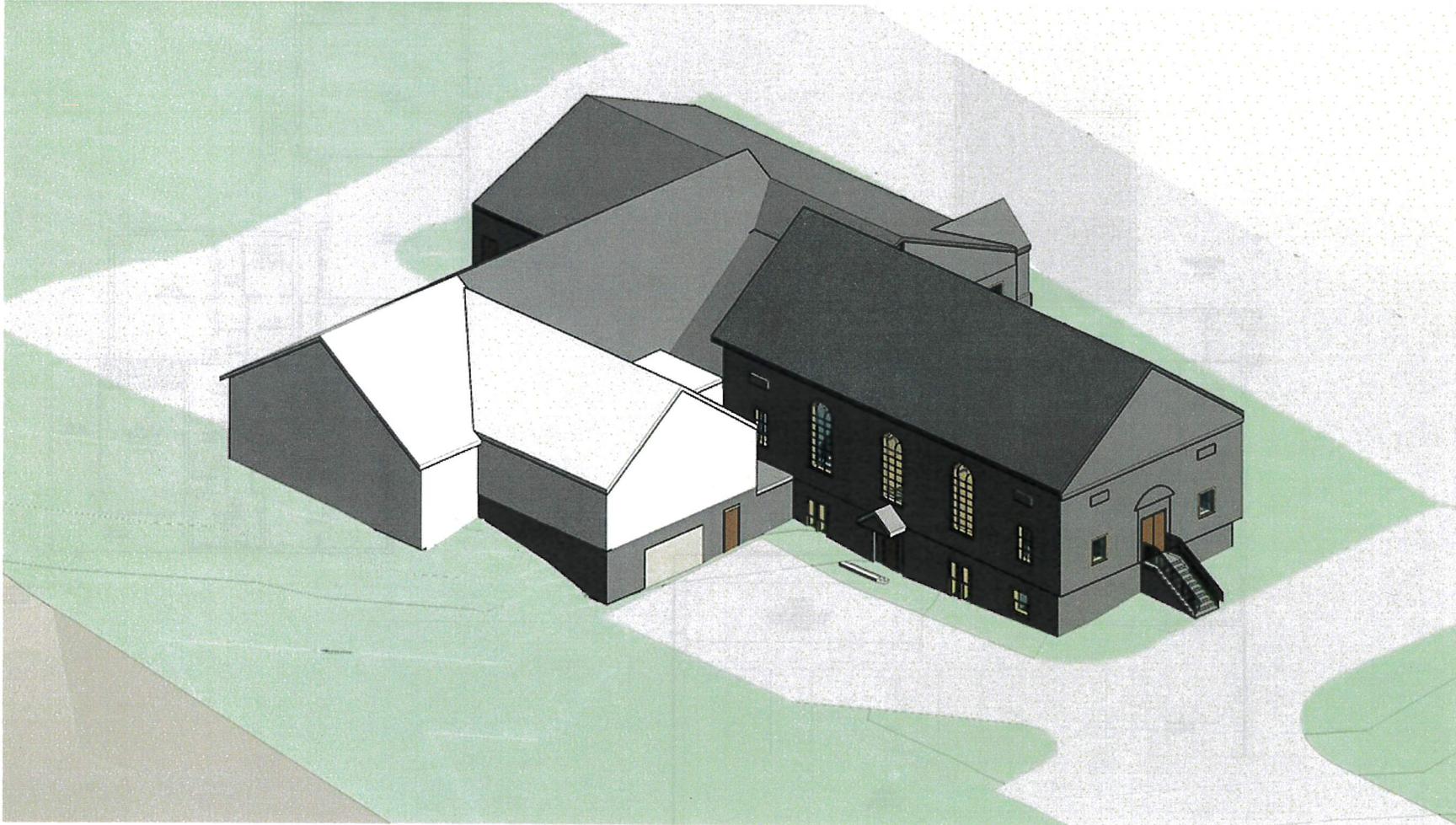
## Previous Option for Police only program

- **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

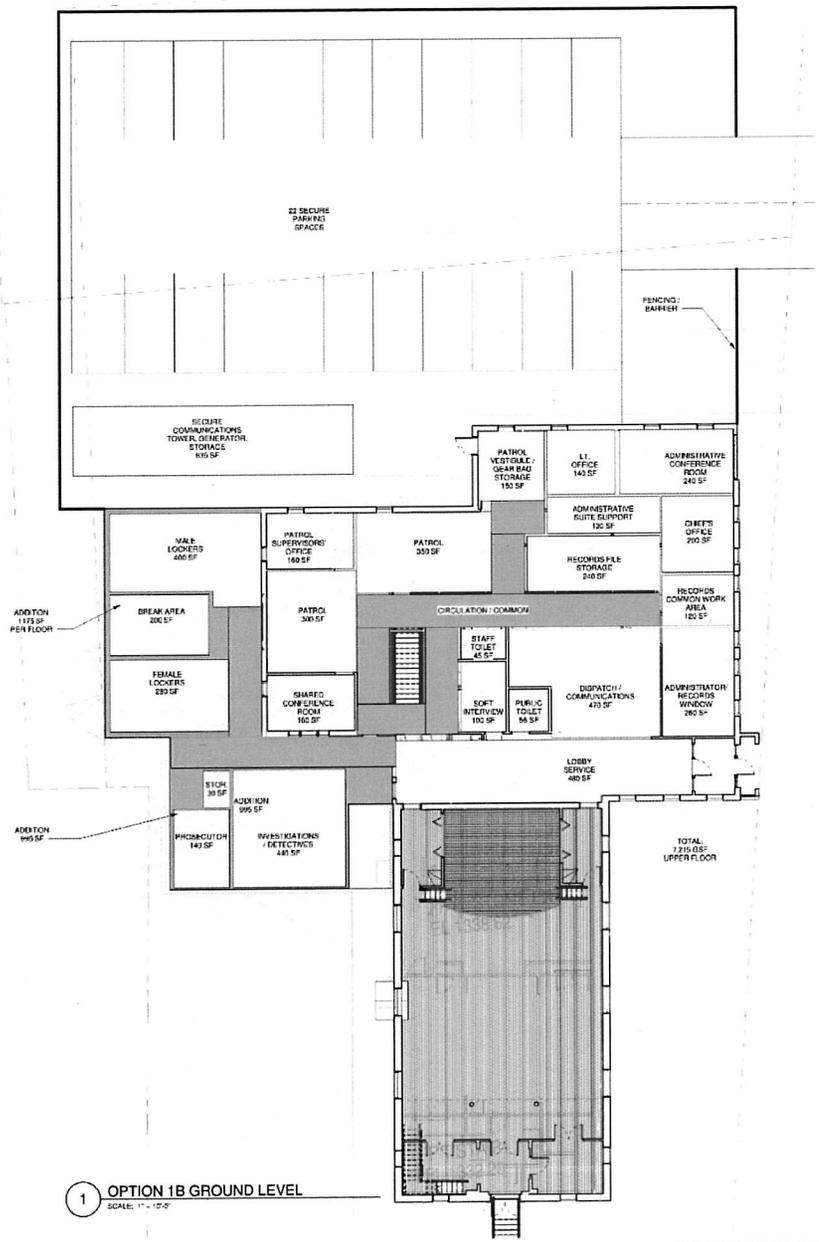
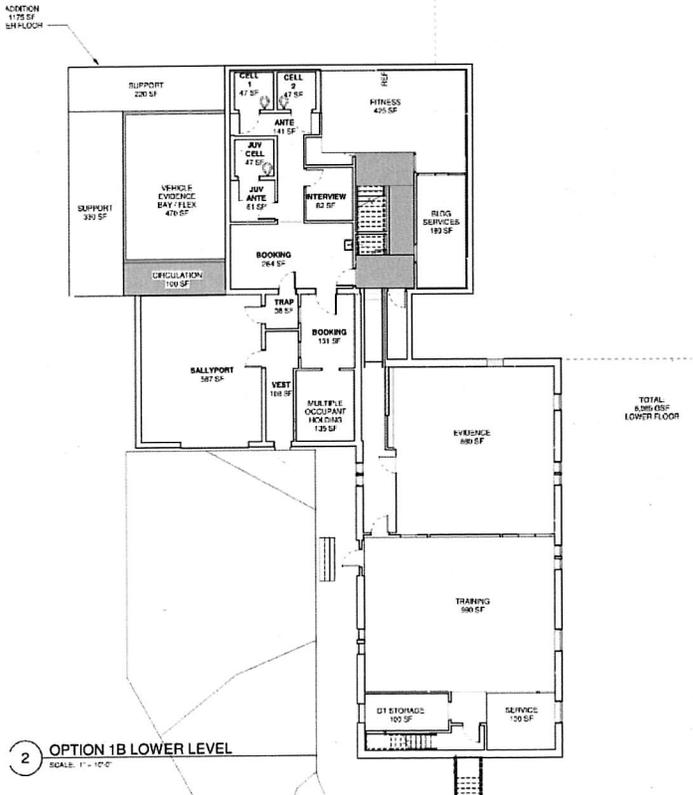
# Option 1B: Police Only Renovation/Addition & site expansion



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



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

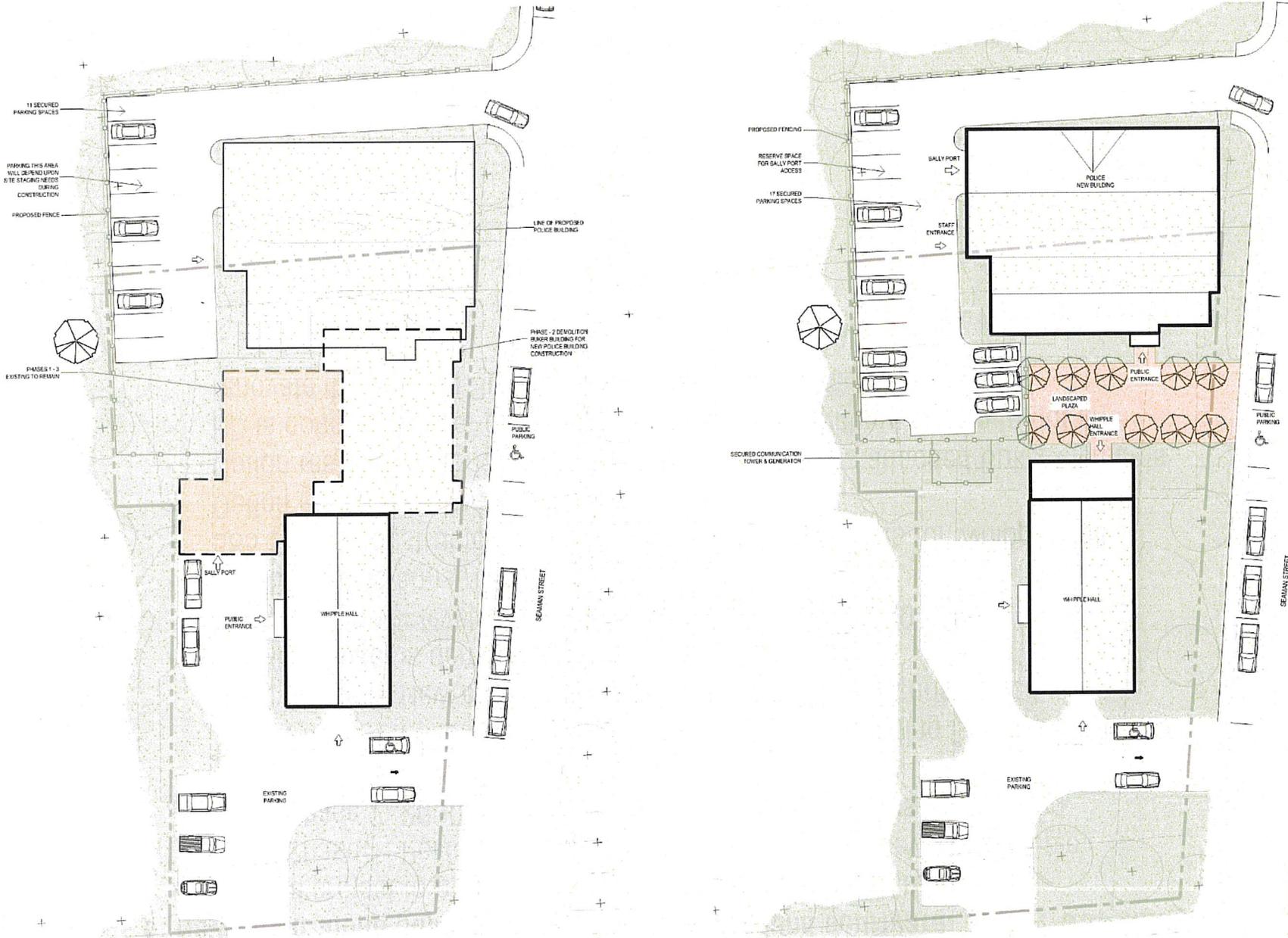




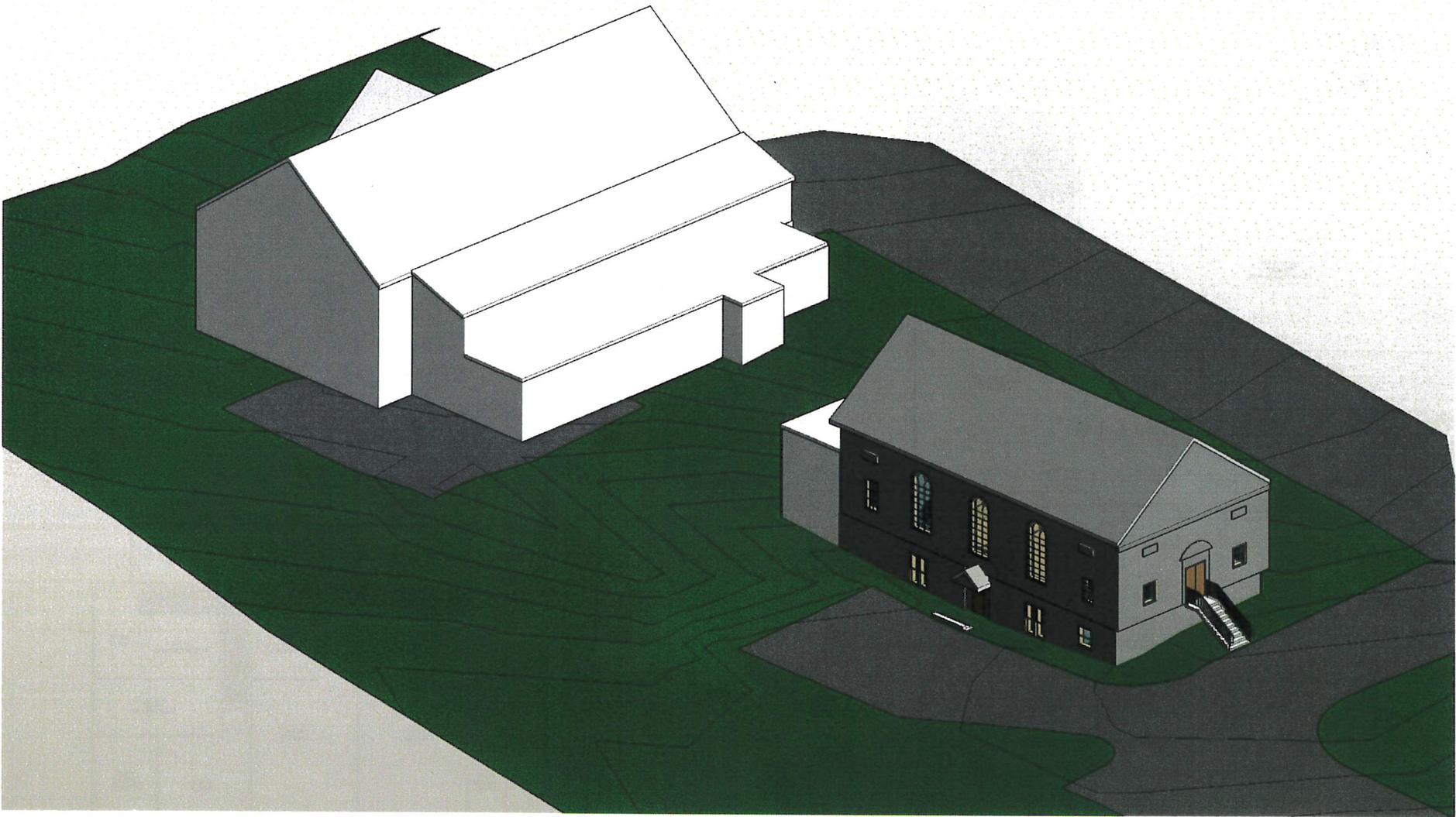
## Current Options for Police only program

- **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

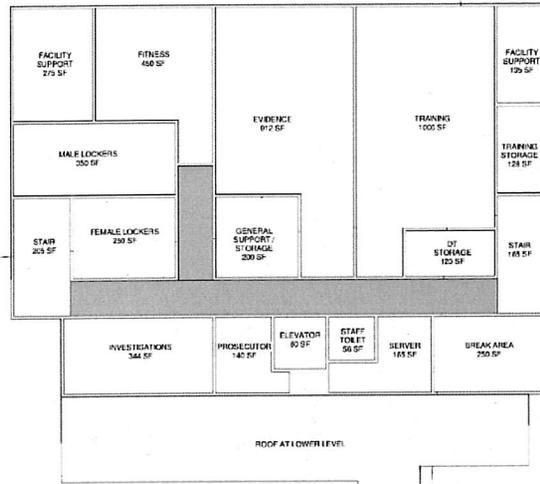
# Option 6: New Stand-alone Facility



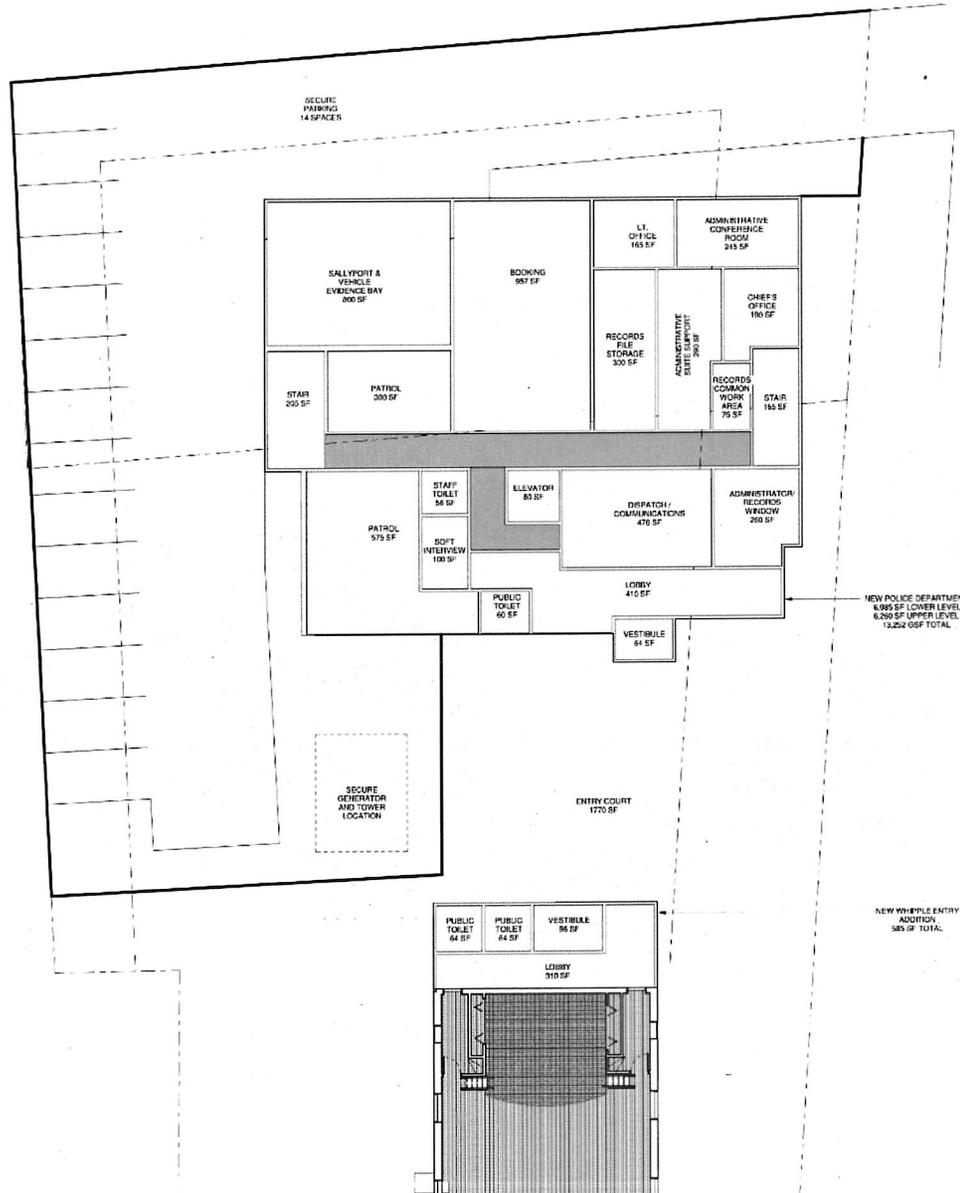
**Option 6: New Stand-alone Facility**



# Option 6: New Stand-alone Facility



1 OPTION 6 UPPER LEVEL  
SCALE: 1" = 12' 0"



2 OPTION 6 GROUND LEVEL-1  
SCALE: 1" = 12' 0"



# Space Needs Comparison: Previous Options

Description	Exist	Total Net Area Required (sf)	Option 1B	Deficiency compared to Space Need
	Current Area			
Shared Building Program (Main level of Whipple not S1.0 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:			
<b>Total Net Square Footage</b>	<b>6,796</b>	10,194	10,140	<b>-54</b>
Net to Gross Factor	1.276	1.30		
<b>Total Gross Square Footage</b>	<b>8,674</b>	13,252	14,332	



# Space Needs Comparison: New Options

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:									
<b>Total Net Square Footage</b>	<b>6,796</b>	<b>10,194</b>	<b>7,984</b>	<b>-2,210</b>	<b>8,266</b>	<b>-1,928</b>	<b>9,880</b>	<b>-314</b>	<b>10,194</b>	<b>0</b>
Net to Gross Factor	1.276	1.30								
<b>Total Gross Square Footage</b>	<b>8,674</b>	<b>13,252</b>	<b>10,987</b>		<b>11,399</b>		<b>13,899</b>		<b>13,252</b>	

# Order of Magnitude Cost Breakdown

## Existing Building Renovation without Program Adjustments (unoccupied)

	Demo	Reno	Phasing Premium	New PD	ADA Upgrades	Site
Area (GSF)	0	10,987		0	200 (Incl. in Reno)	
Cost/SF		\$220				
Construction Cost	\$0	\$2,417,140	0	\$0	\$150,000	\$150,000 <small>Land cost not included</small>
Construction Total						\$2,717,140
Administrative Cost & Reserve						\$542,571
Fees & Services						\$592,596
Grand Total						\$3,852,307

# Order of Magnitude Cost Breakdown

## Existing Building Renovation without Program Adjustments (occupied)

	Demo	Reno	Phasing Premium	New PD	ADA Upgrades	Site
Area (GSF)	0	10,987		0	200 (Incl. in Reno)	
Cost/SF		\$220				
Construction Cost	\$0	\$2,417,140	\$350,000	\$0	\$150,000	\$150,000 <small>Land cost not included</small>
Construction Total						\$3,067,140
Administrative Cost & Reserve						\$595,071
Fees & Services						\$647,466
Grand Total						\$4,309,677

# 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 <small>Land cost not included</small>
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 <small>Land cost not included</small>
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 <small>Land cost not included</small>
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 <small>Land cost not included</small>
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



