

Buker Building Study

Facility Assessment, Space Needs, & Concept
Design Alternatives
New London, NH



Board of Selectmen Presentation

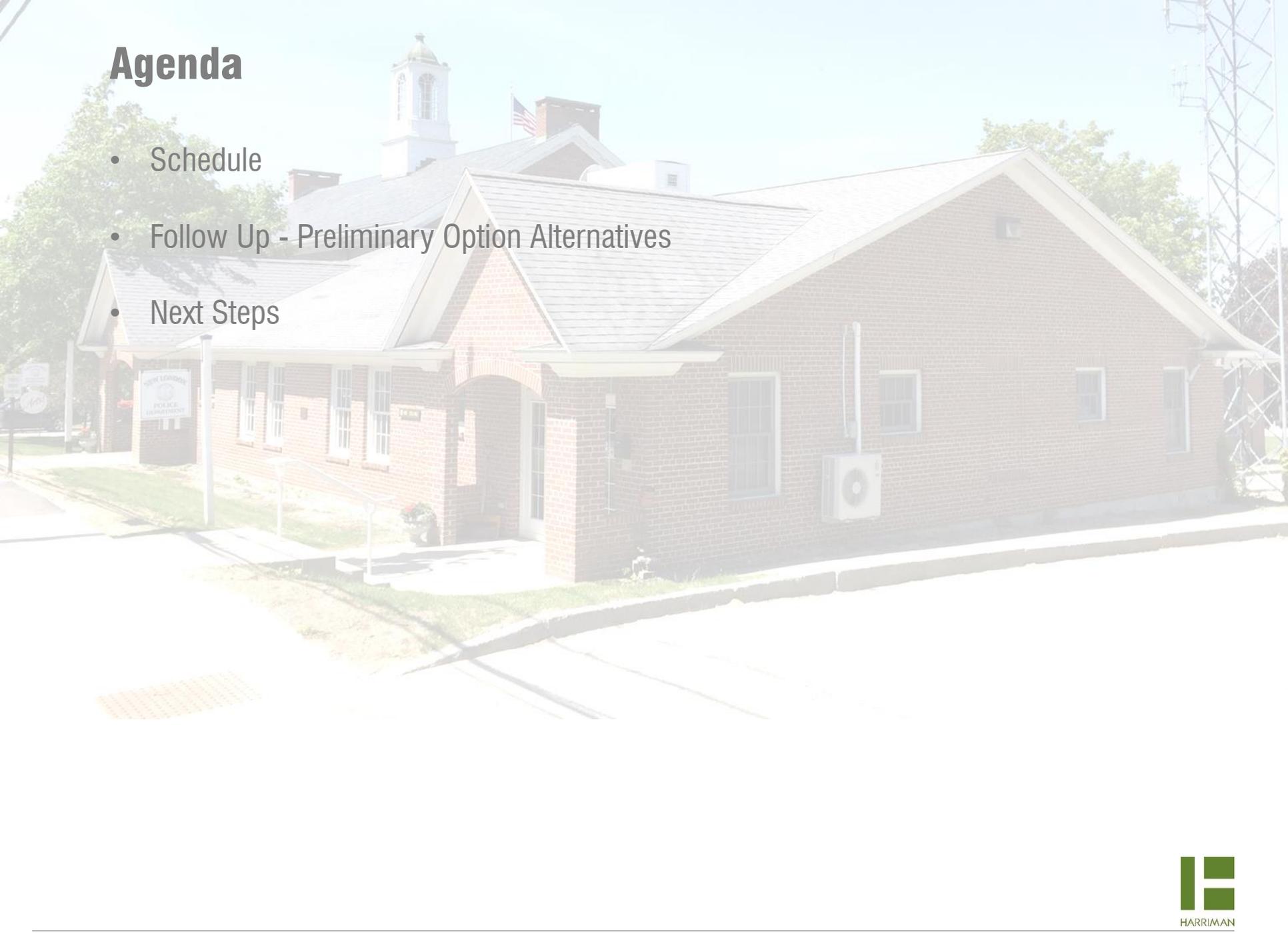
17 September 2018



HARRIMAN

Agenda

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



Schedule

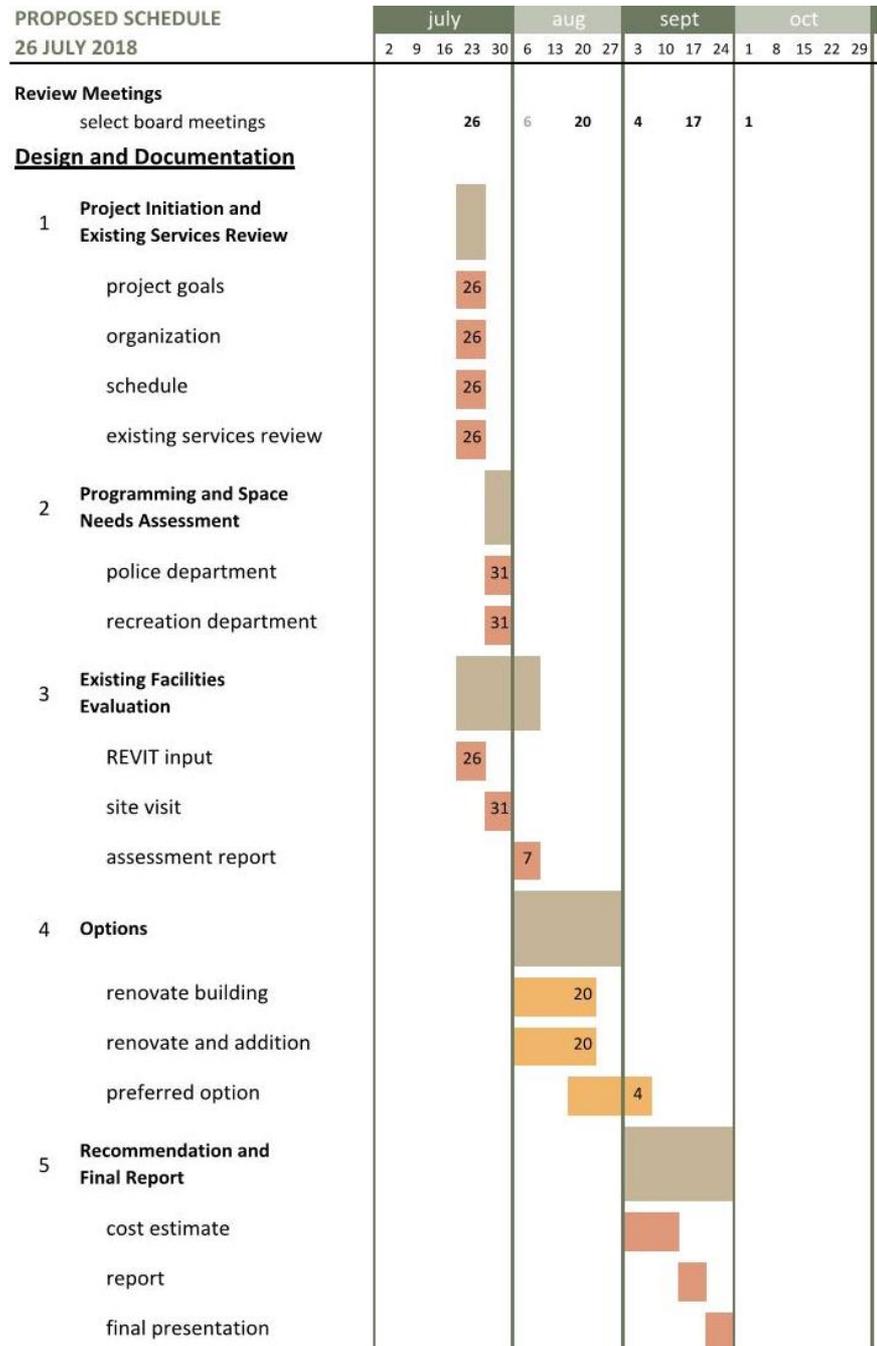
- ✓ Pre-kickoff walk through
- ✓ Kickoff meeting 7-26

- ✓ 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



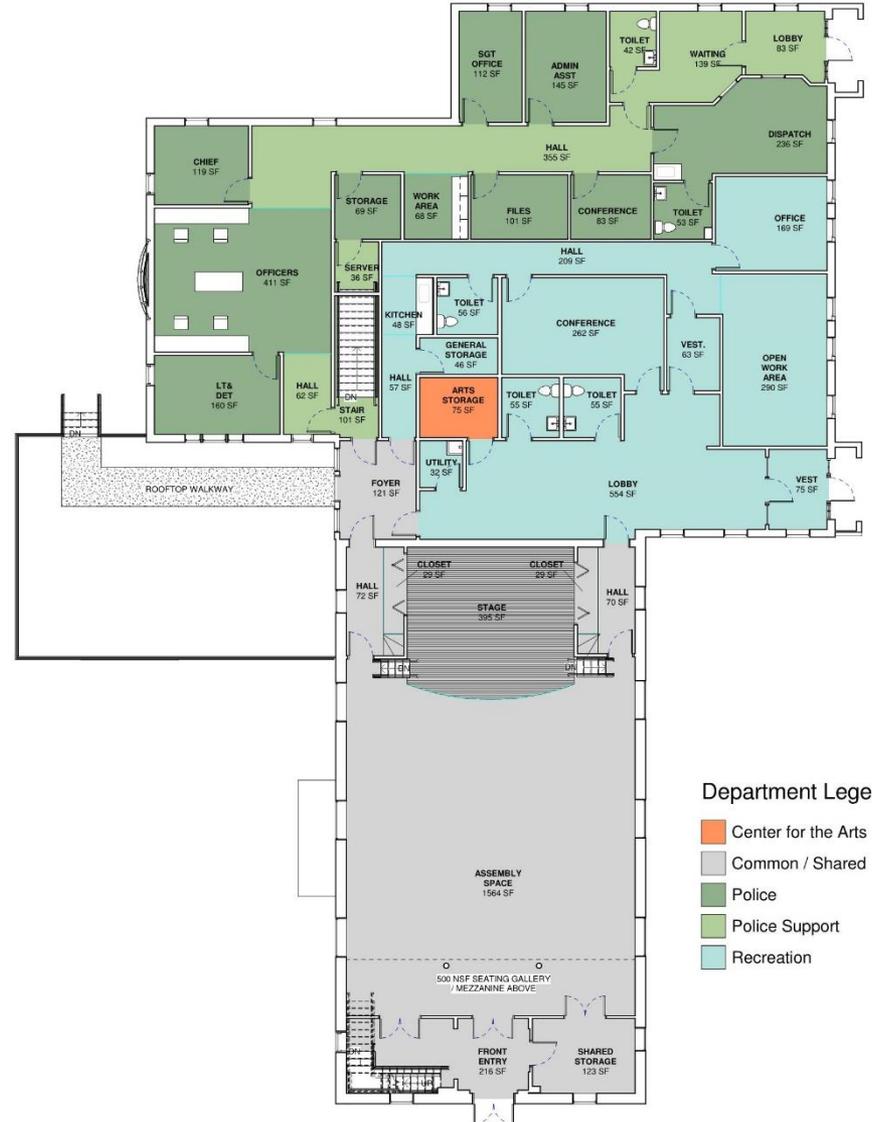
Existing Building Analysis – Recap



Existing Lower Level

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

■ Pre-Design Options Findings

- A deed restriction on the Town Green property prohibits non-public use of the land. This limits the ability to rotate the sallyport 90° per previous option 4.
- Existing floor-to-floor height (FTFH) is 9.08' (9'-1"). Design FTFH = 12'-0".
- Moving the sallyport to the opposite side of the building makes a basement and/or use of the Whipple basement difficult.
- Use of the Whipple basement requires the construction of a new circulation element to house an elevator.
- The area gained by purchasing the neighboring property is needed to support an upper level sallyport and allows the best options to work.
- Abandoning the existing Police entry is an essential step to solving building flooding issues.



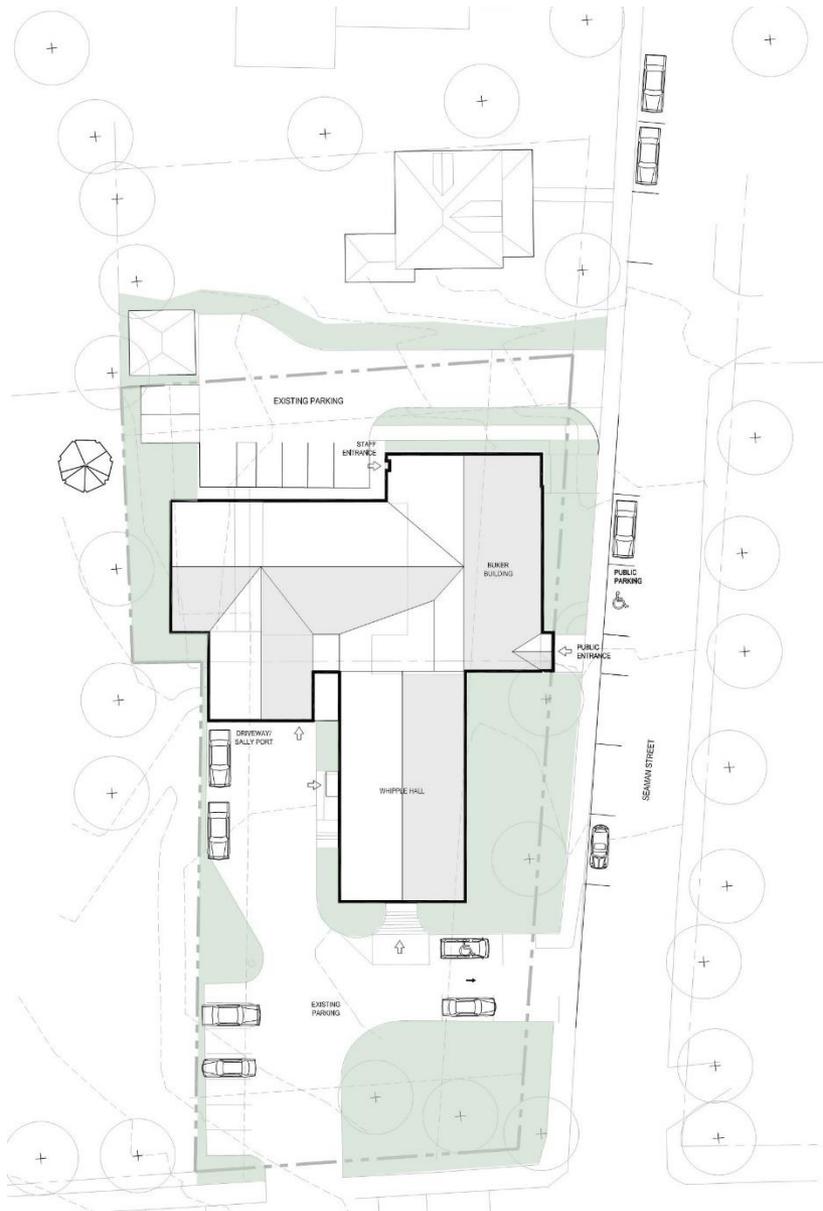
Options

- 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

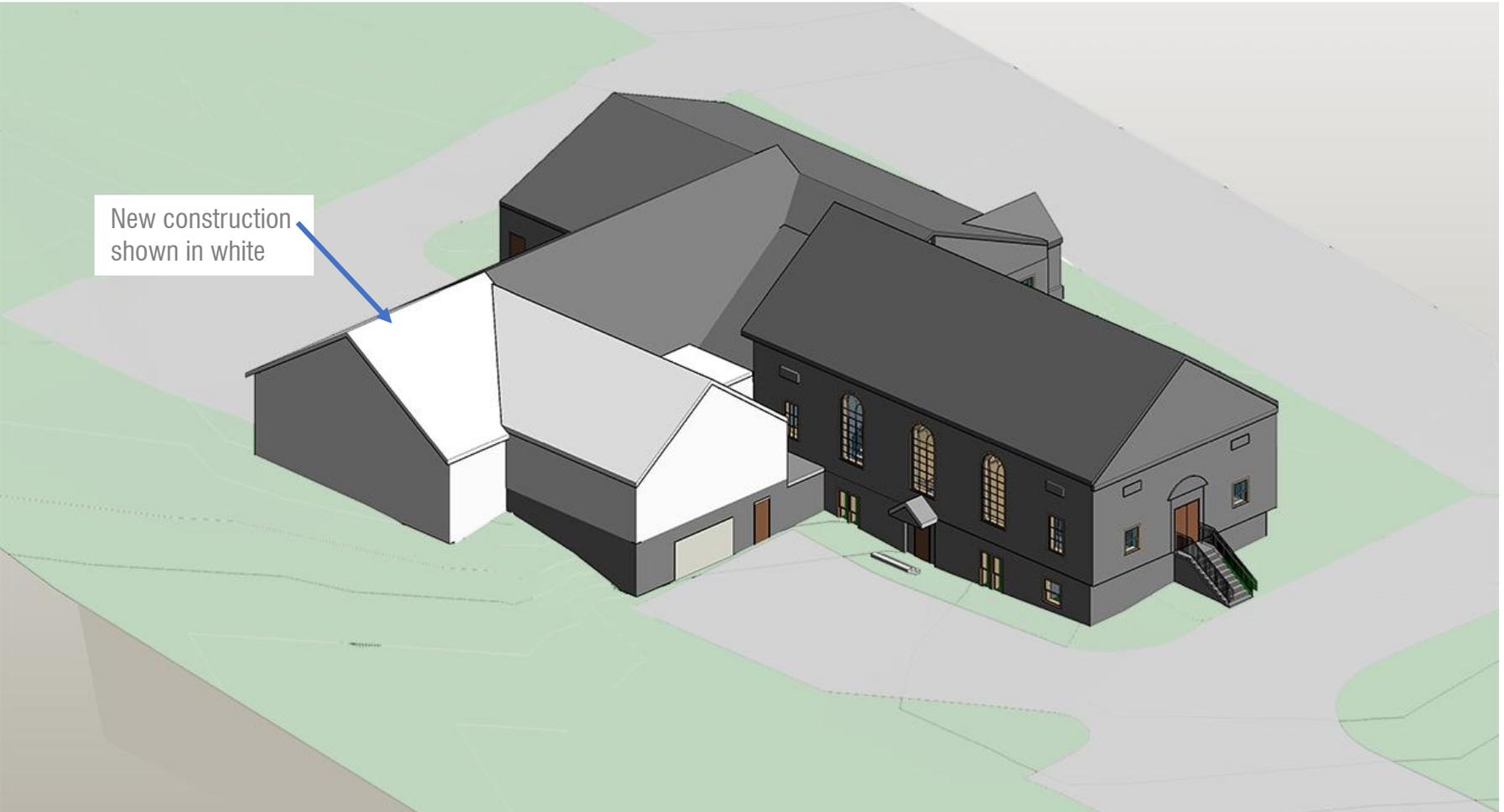
Options

- 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

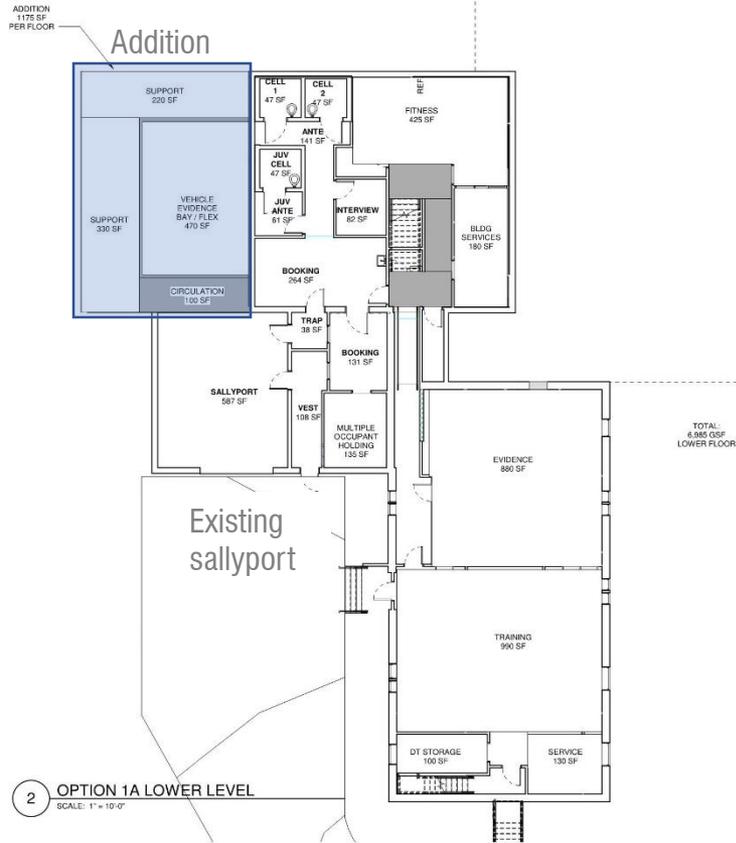
Option 1A: Police Only Renovation/Addition



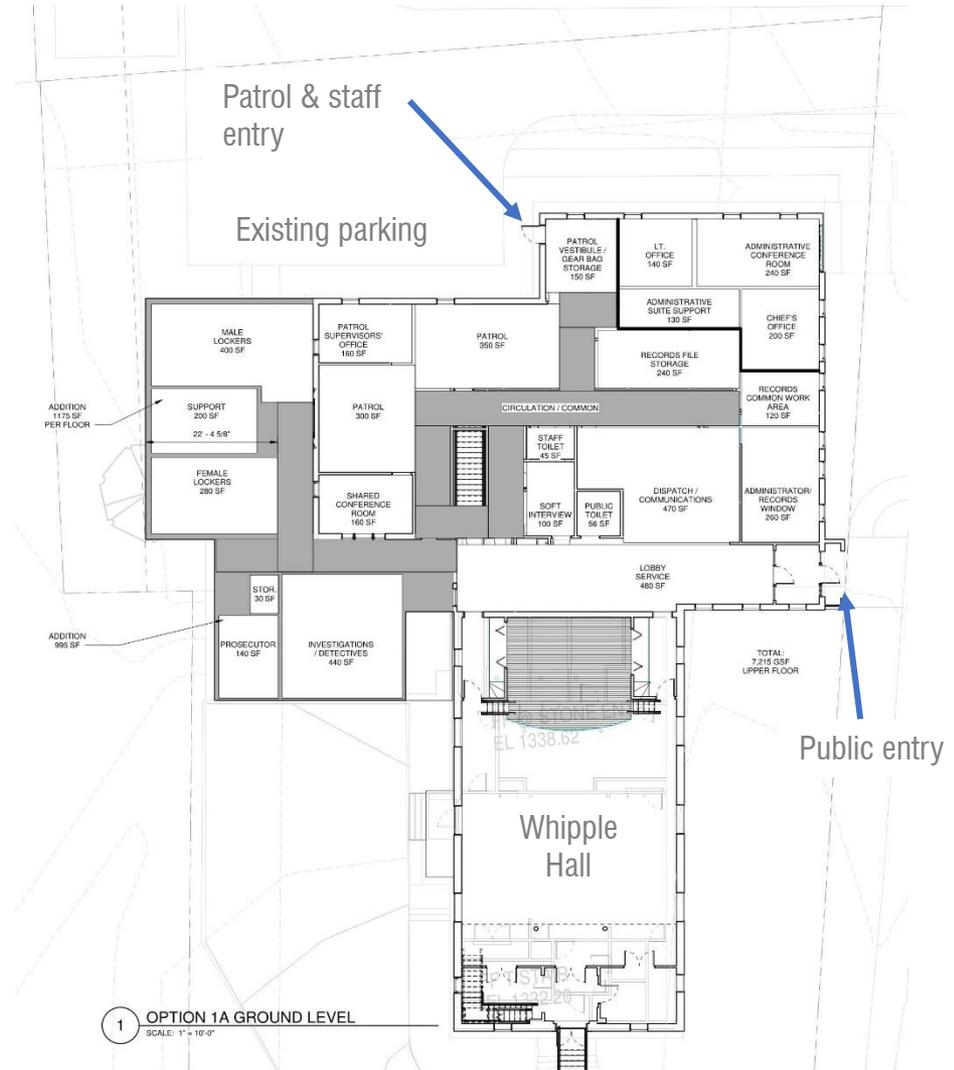
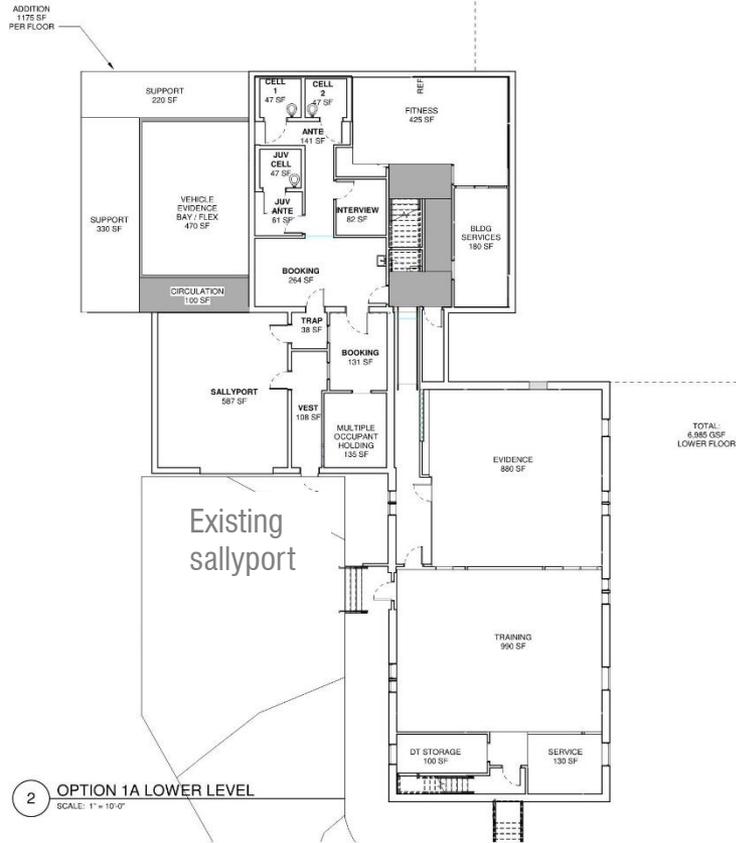
Option 1A: Police Only Renovation/Addition



Option 1A: Police Only Renovation/Addition



Option 1A: Police Only Renovation/Addition



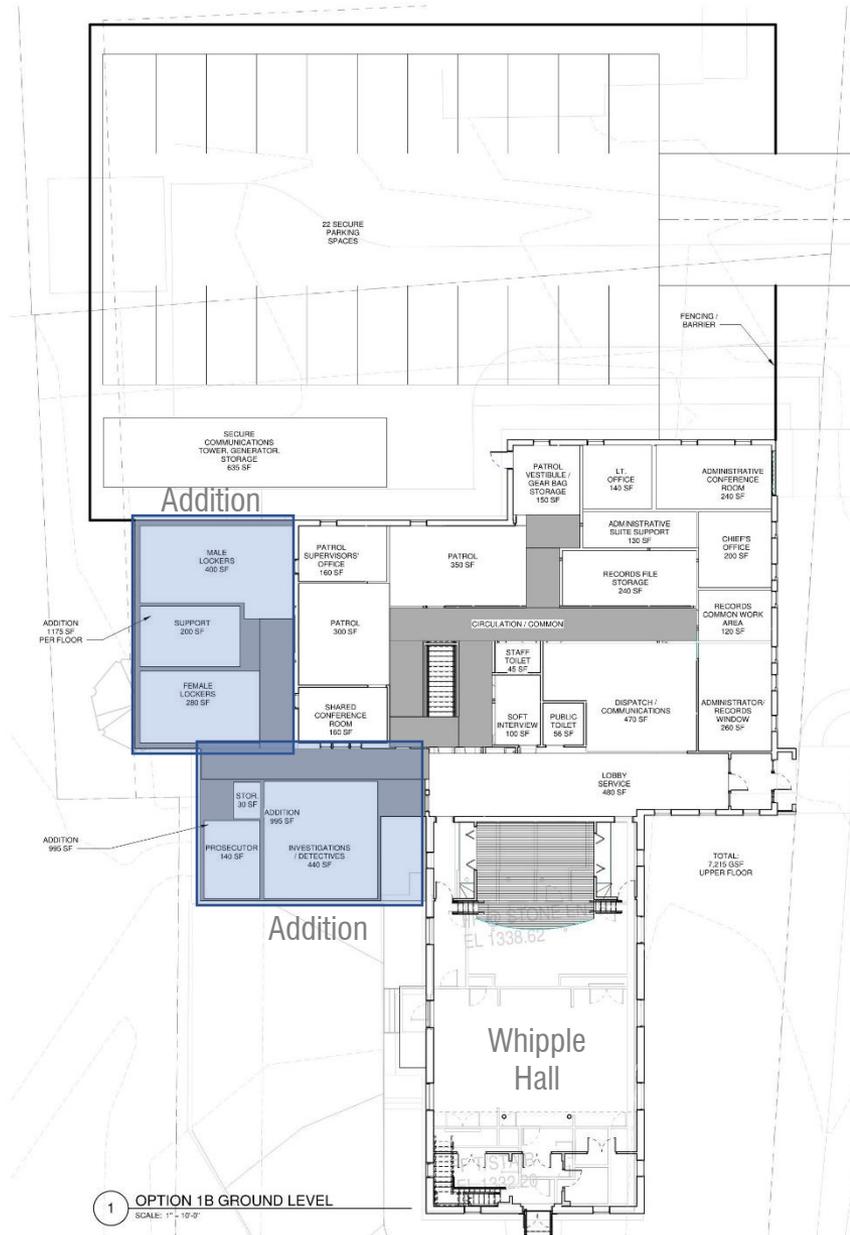
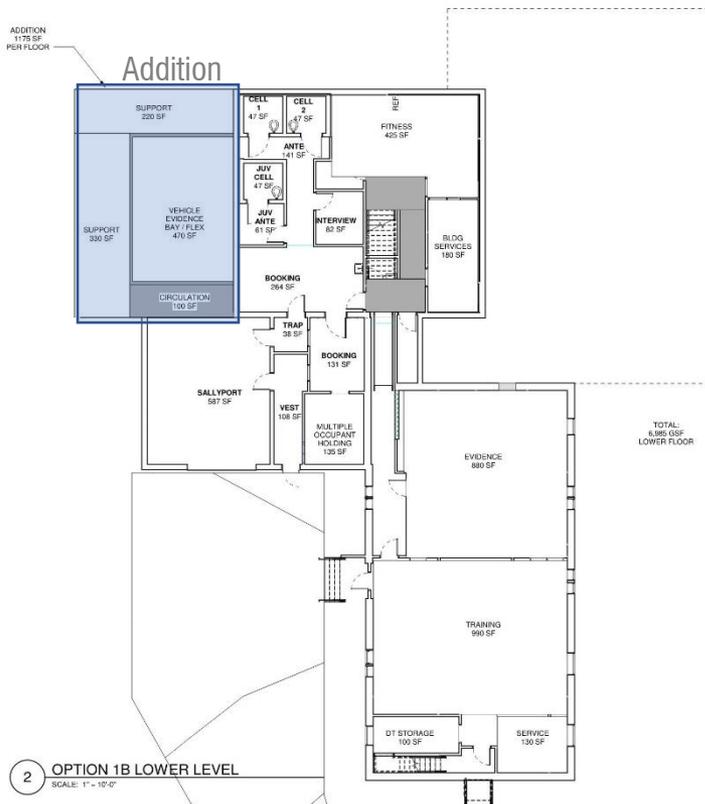
Option 1B: Police Only Renovation/Addition & site expansion



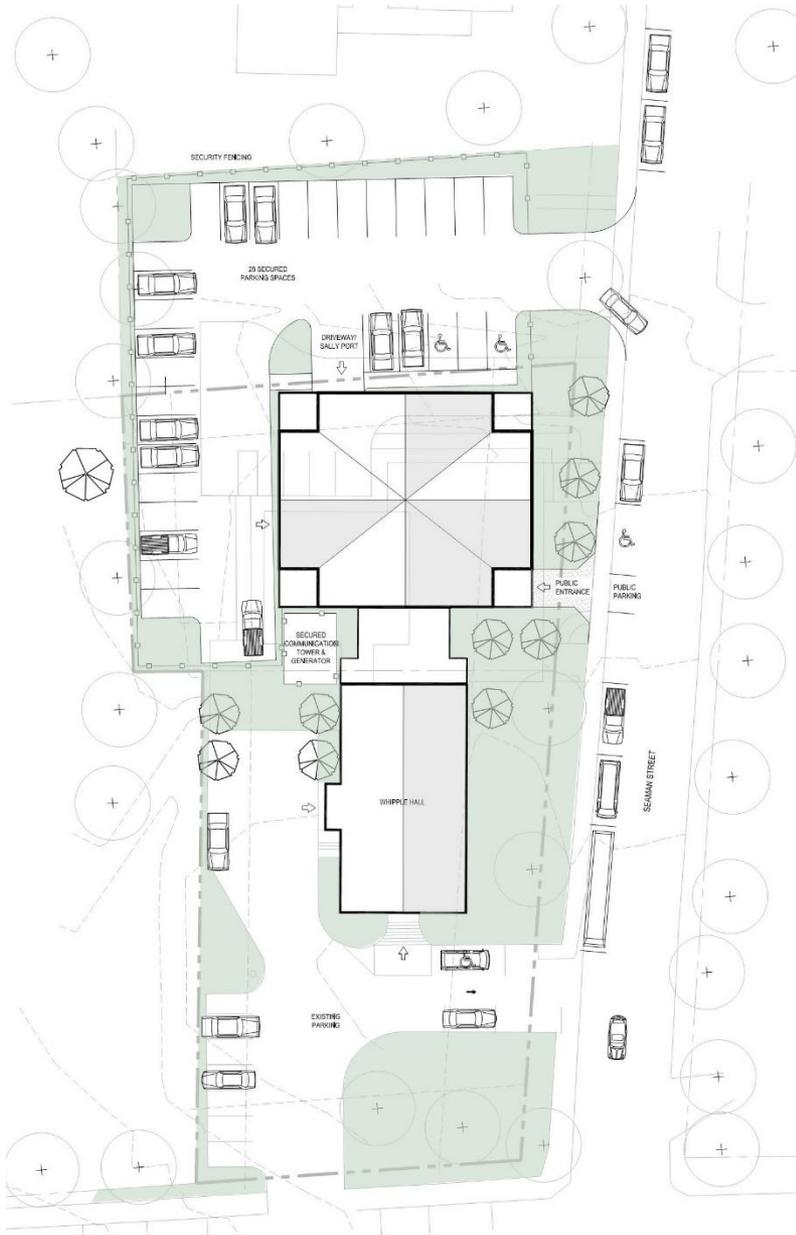
■ Option 1B: Police Only Renovation/Addition & site expansion



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



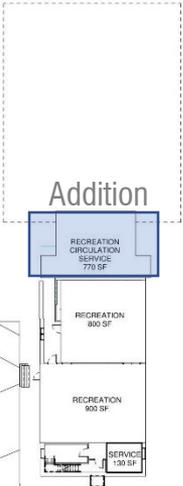
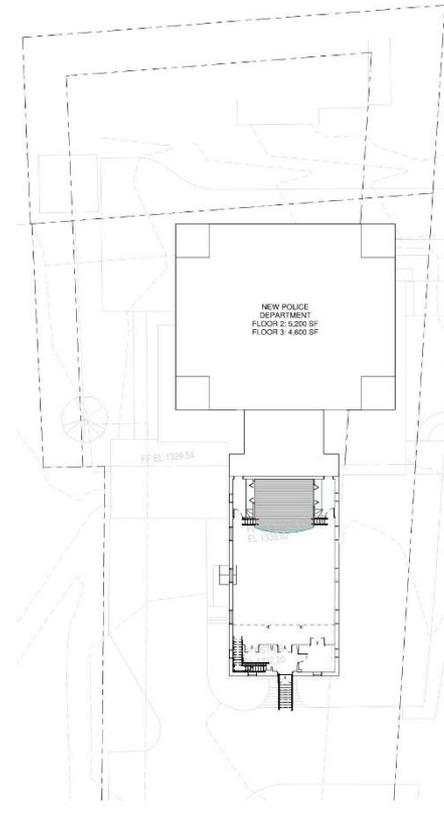
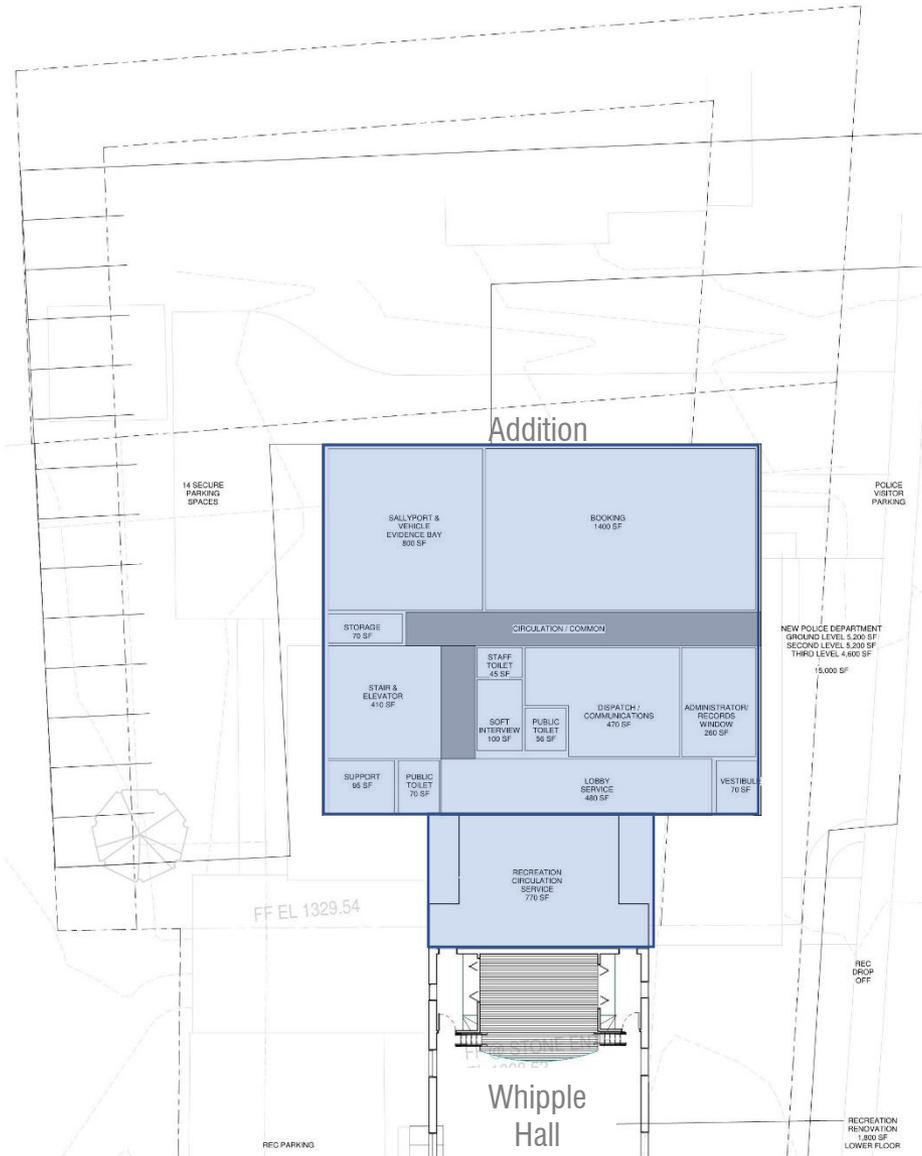
Option 2A: 3 Story Addition



■ Option 2A: 3 Story Addition



Option 2A (Lower): 3 Story Addition

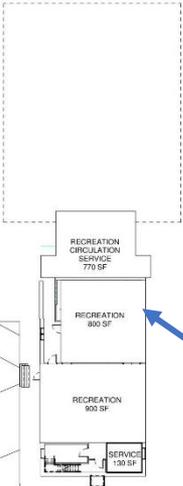
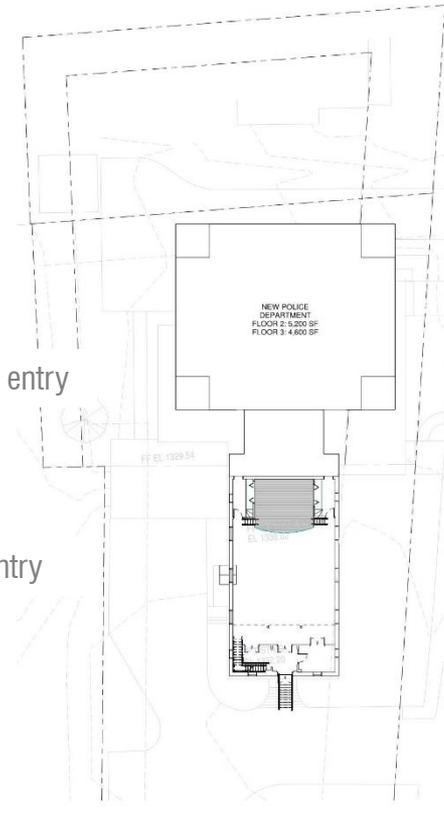
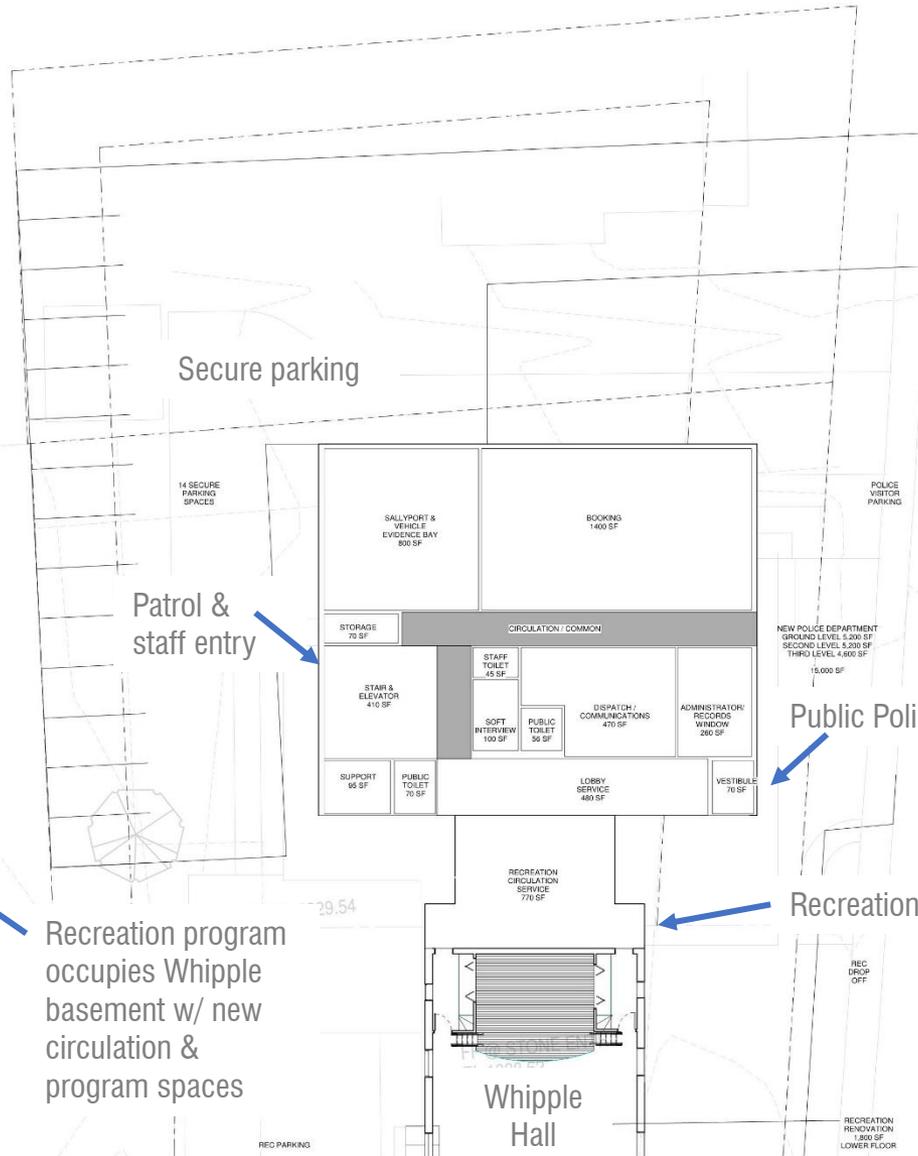


1 OPTION 2 LOWER LEVEL
SCALE: 1" = 20'-0"

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

2 OPTION 2 THIRD LEVEL
SCALE: 1" = 20'-0"

Option 2A (Lower): 3 Story Addition



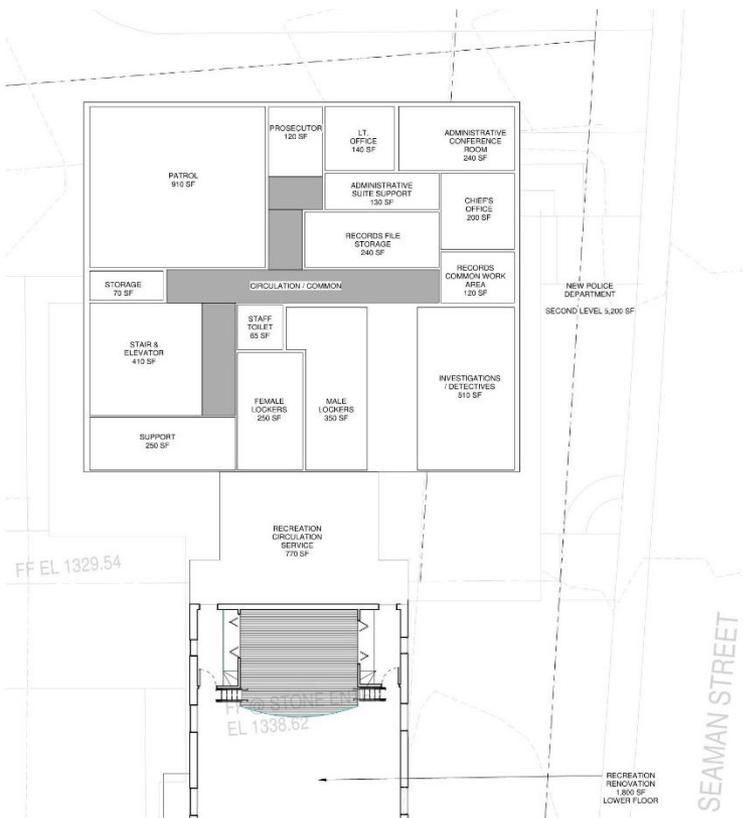
Recreation program occupies Whipple basement w/ new circulation & program spaces

1 OPTION 2 LOWER LEVEL
SCALE: 1" = 20'-0"

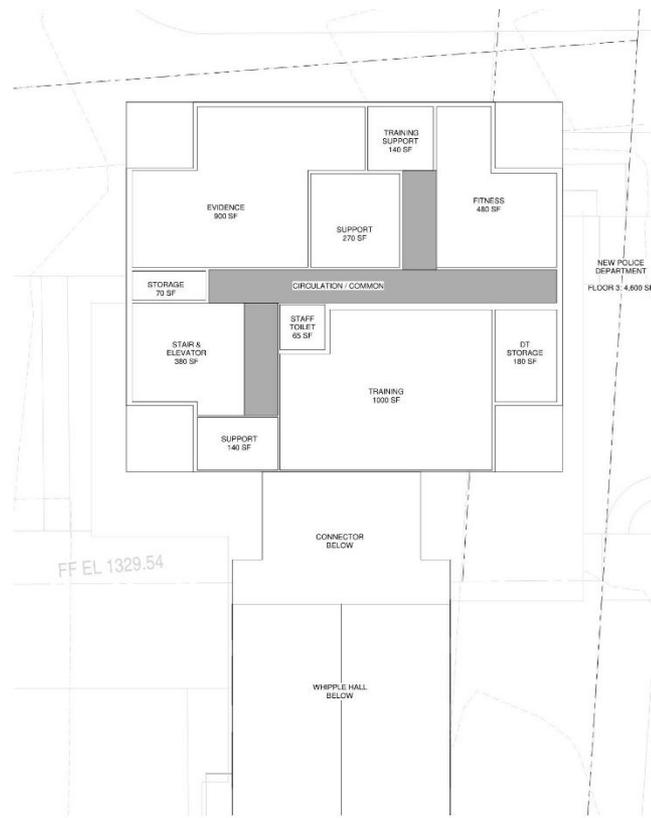
3 OPTION 2 GROUND LEVEL-DEPT
SCALE: 1" = 10'-0"

2 OPTION 2 THIRD LEVEL
SCALE: 1" = 20'-0"

Option 2A (Upper): 3 Story Addition

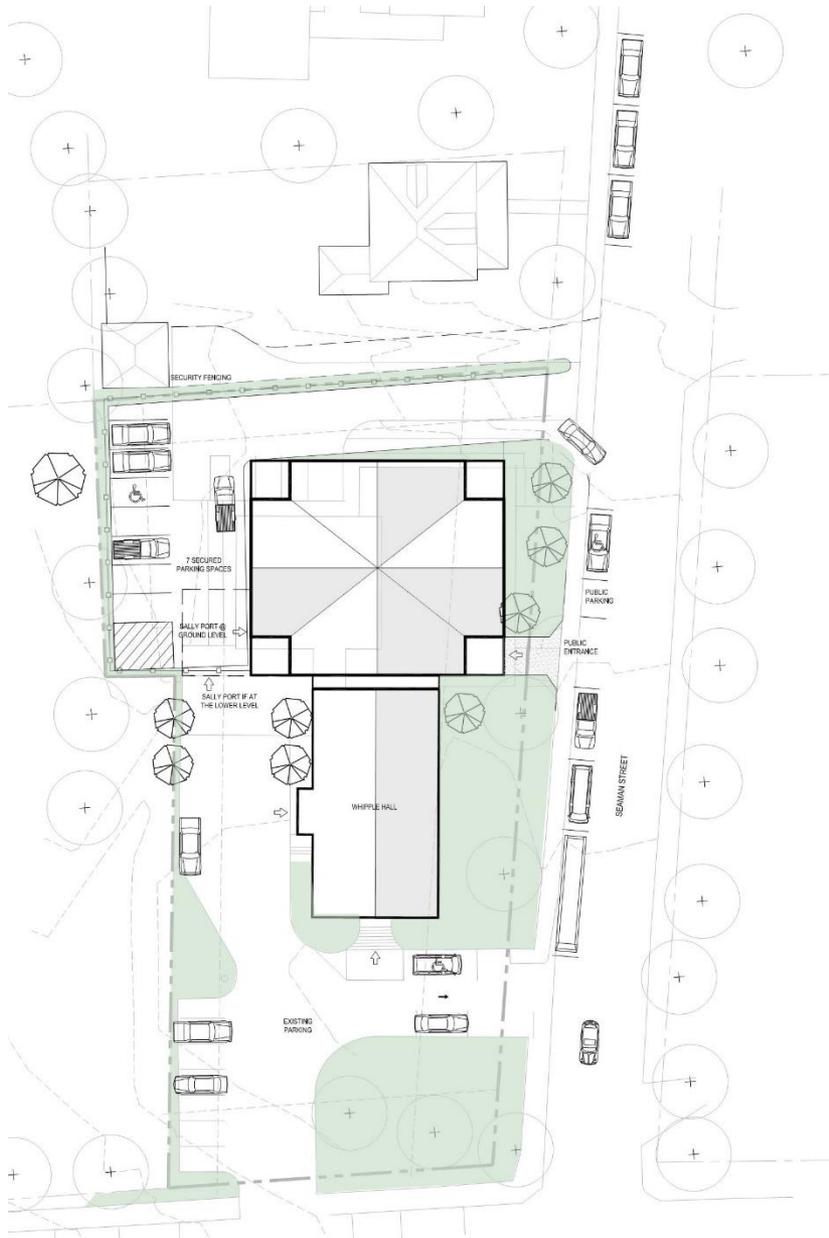


1 OPTION 2 SECOND LEVEL-DEPT
SCALE: 1" = 10'-0"



2 OPTION 2 THIRD LEVEL-DEPT
SCALE: 1" = 10'-0"

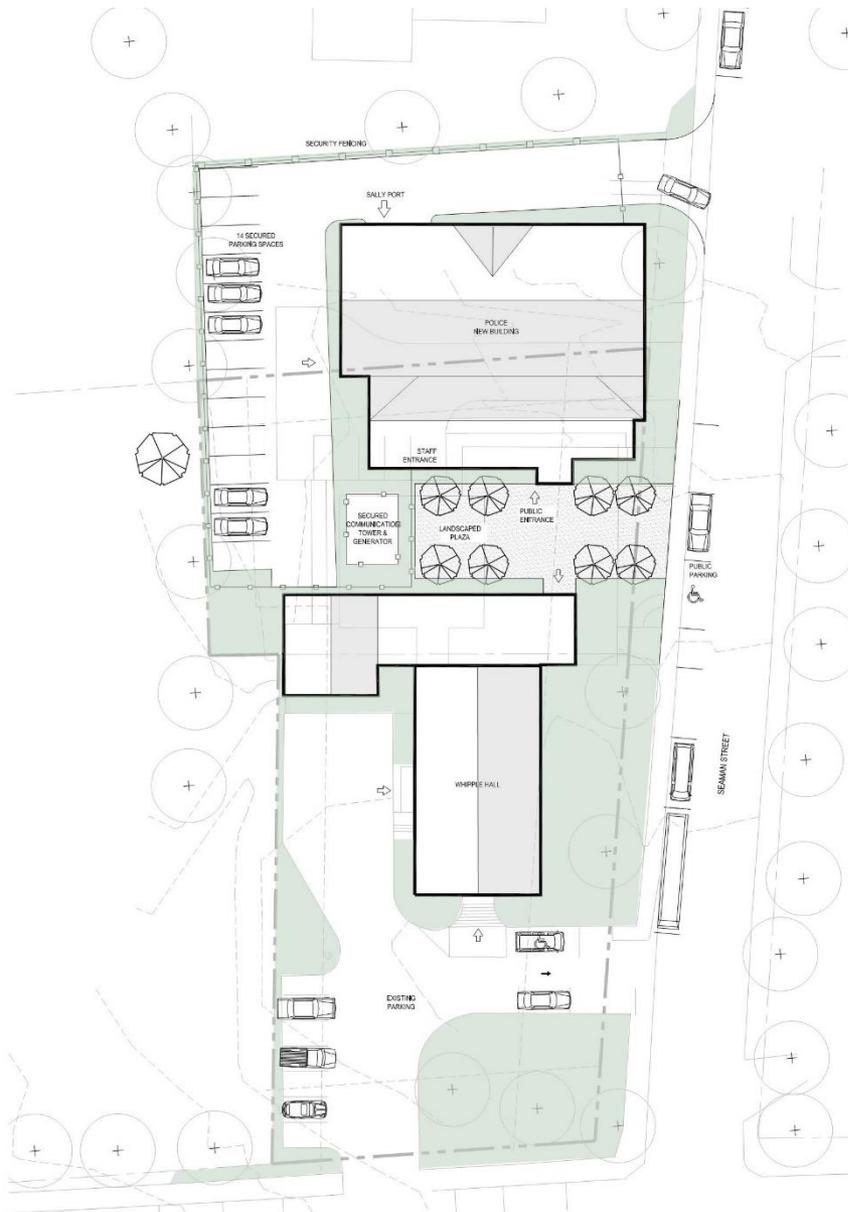
Option 2B: 3 Story Addition (with Basement)



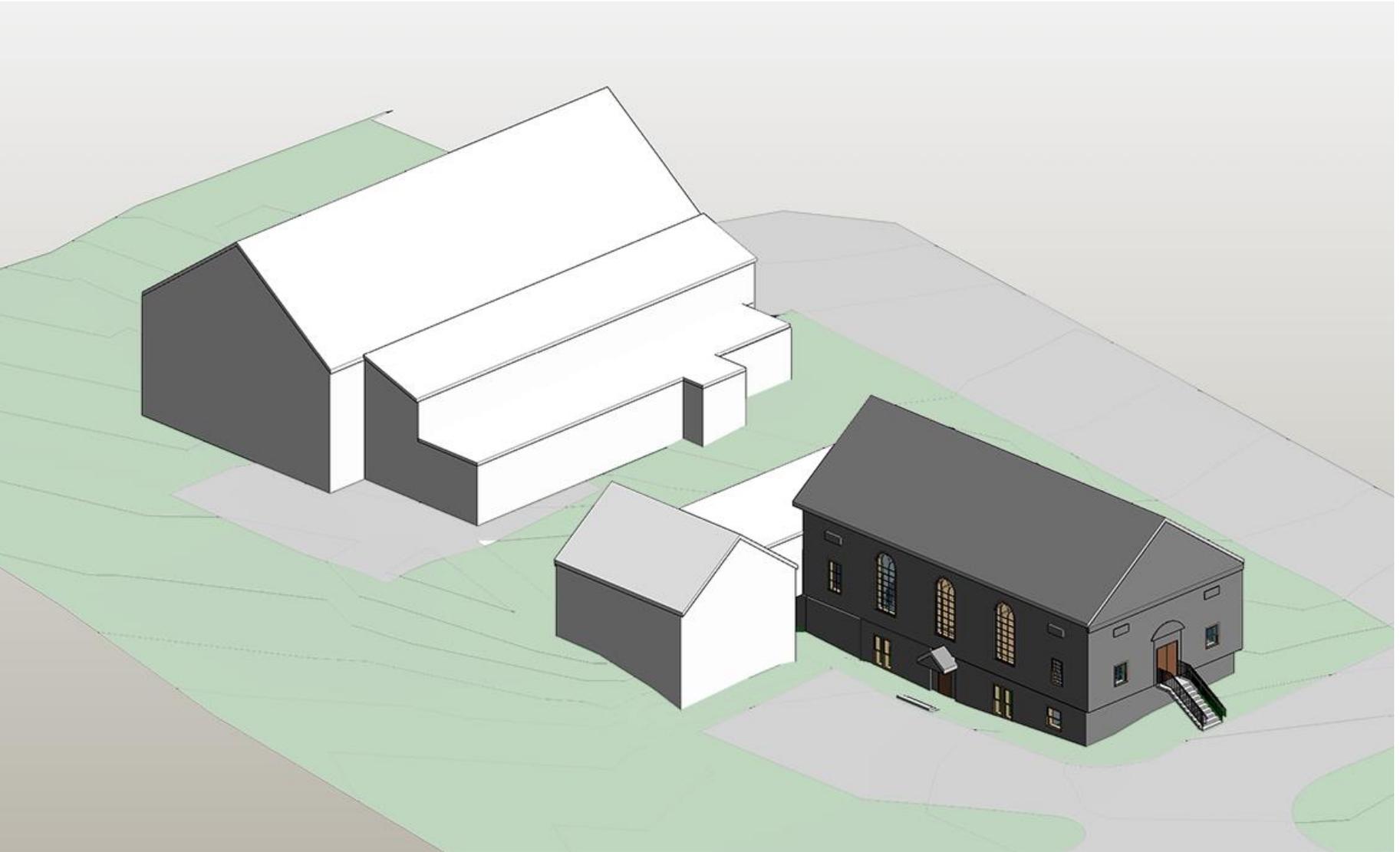
Option 2B: 3 Story Addition (with Basement)



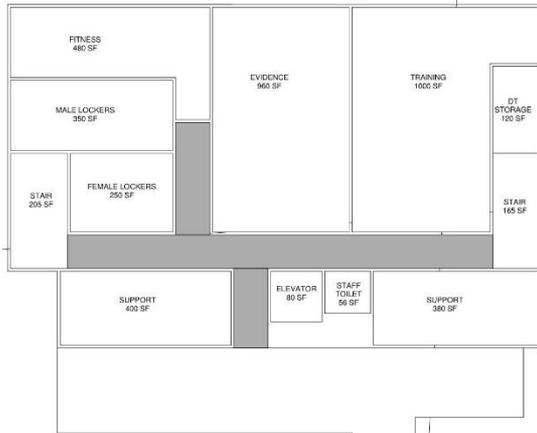
Option 3: 2 Story Stand-Alone Police Facility



Option 3: 2 Story Stand-Alone Police Facility



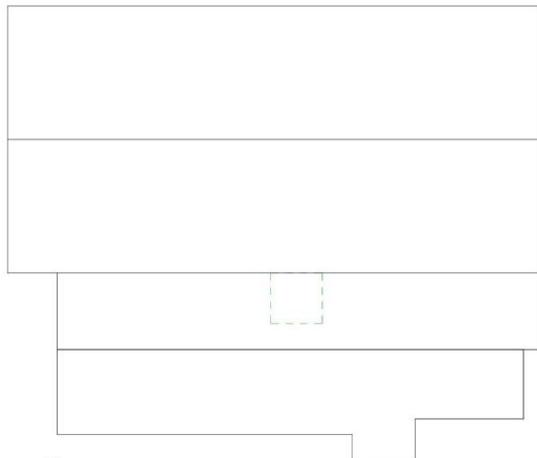
Option 3: 2 Story Stand-Alone Police Facility



1 OPTION 3C UPPER LEVEL

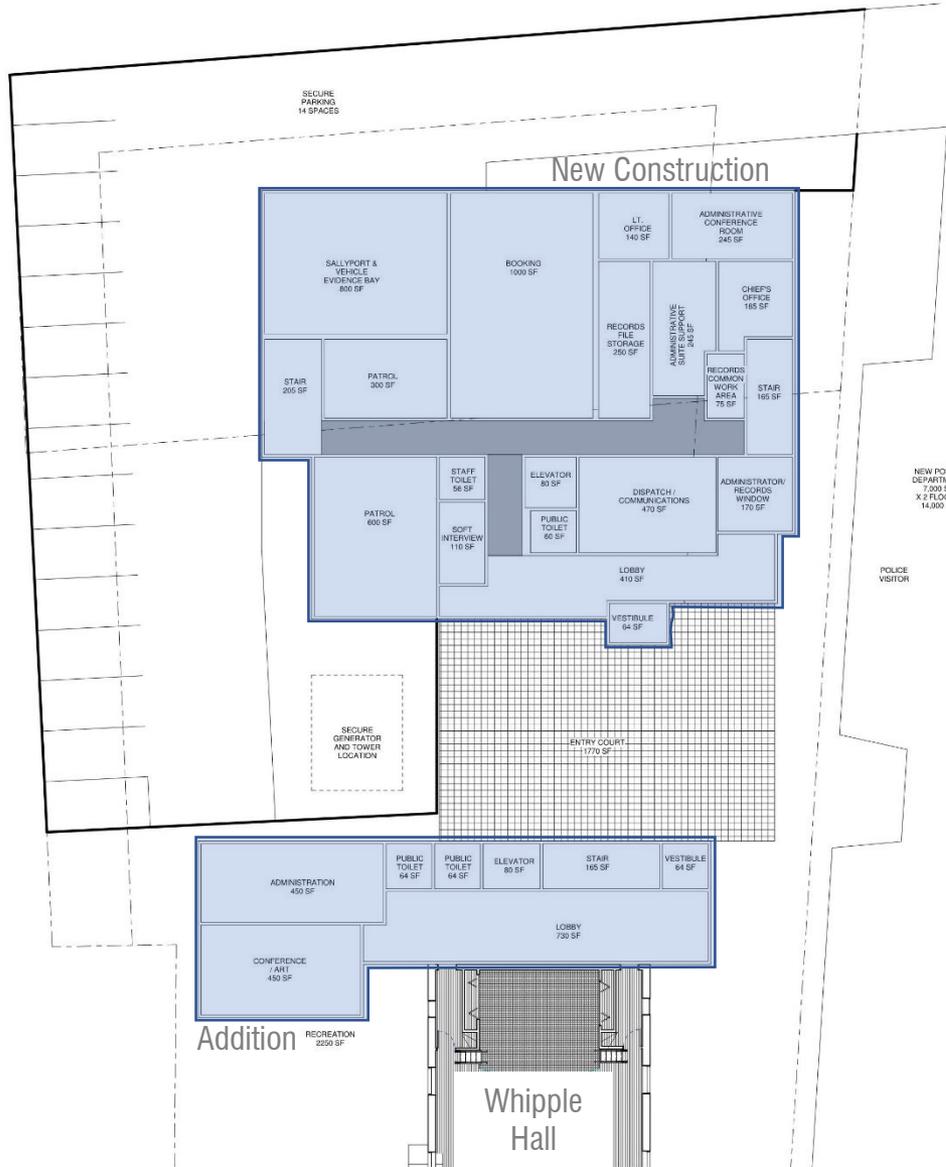
SCALE: 1" = 10'-0"

NEW POLICE DEPARTMENT UPPER LEVEL 6,610 SF



3 OPTION 3C ROOF LEVEL

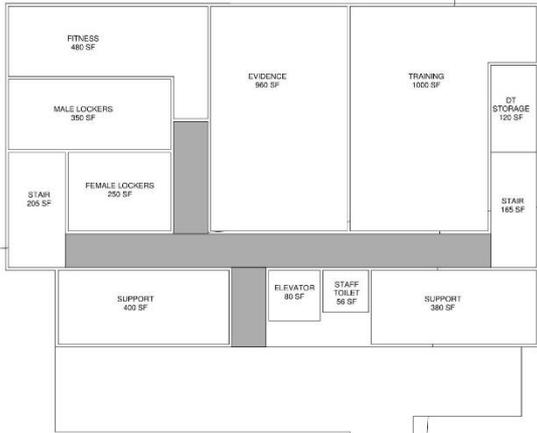
SCALE: 1" = 10'-0"



2 OPTION 3C GROUND LEVEL-1

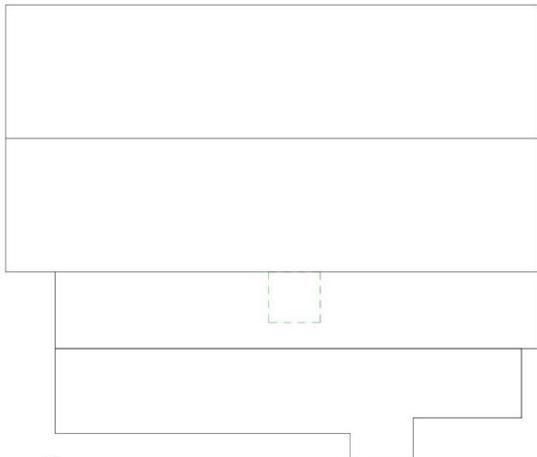
SCALE: 1" = 10'-0"

Option 3: 2 Story Stand-Alone Police Facility



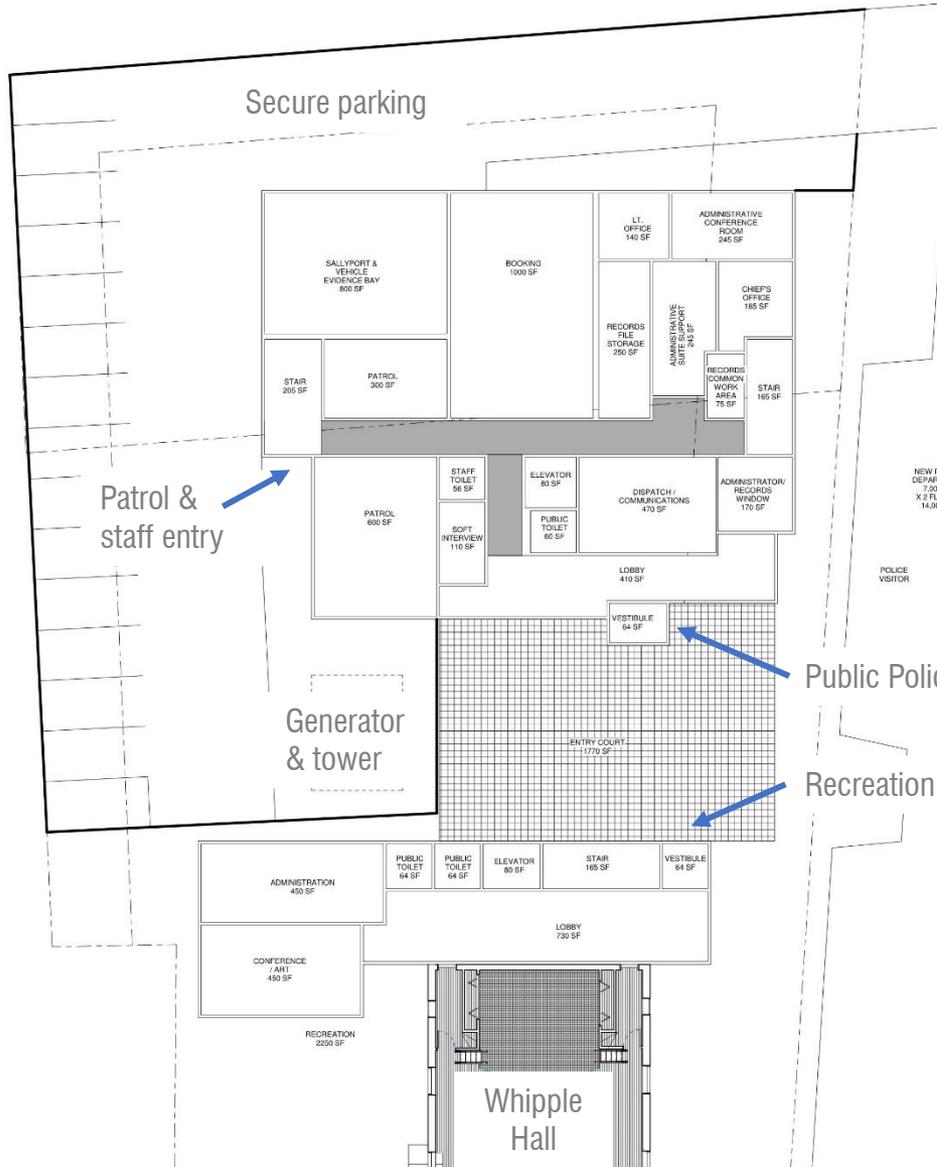
1 OPTION 3C UPPER LEVEL

SCALE: 1" = 10'-0"



3 OPTION 3C ROOF LEVEL

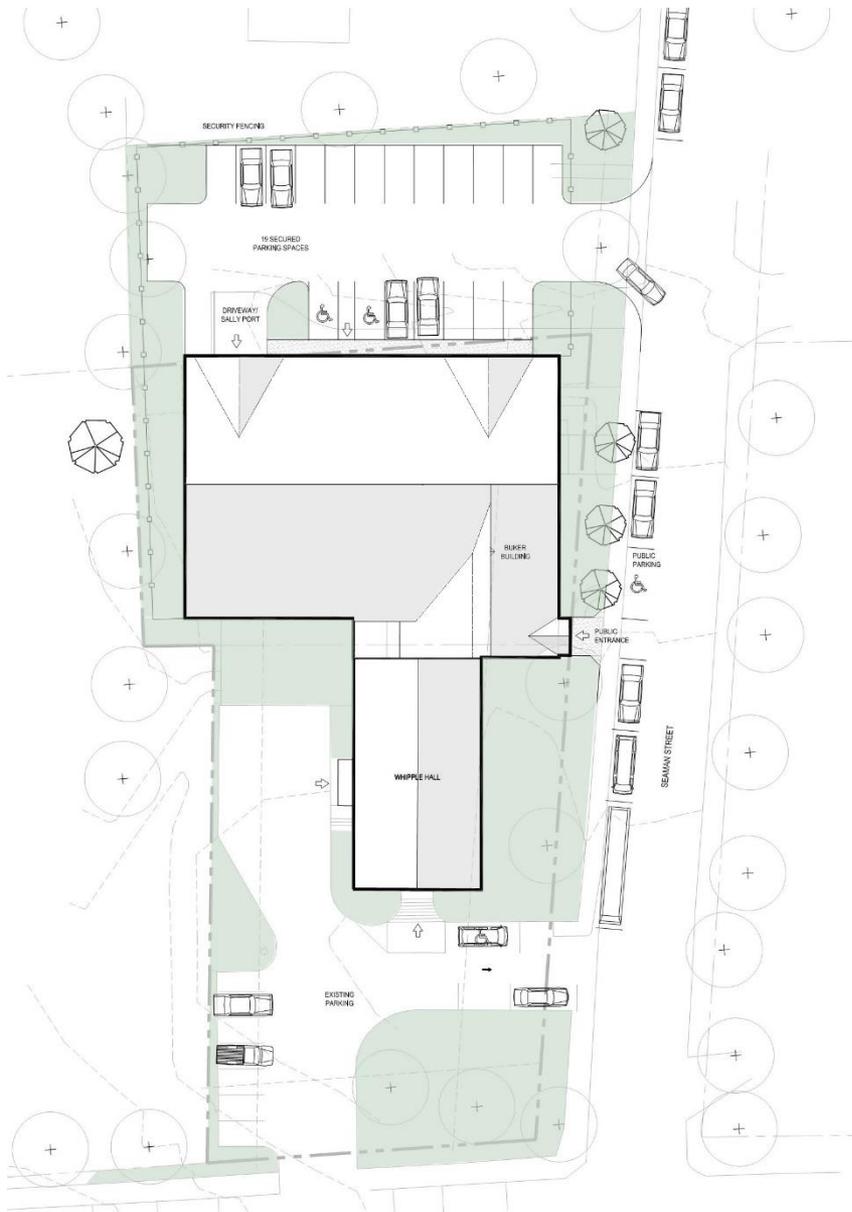
SCALE: 1" = 10'-0"



2 OPTION 3C GROUND LEVEL-1

SCALE: 1" = 10'-0"

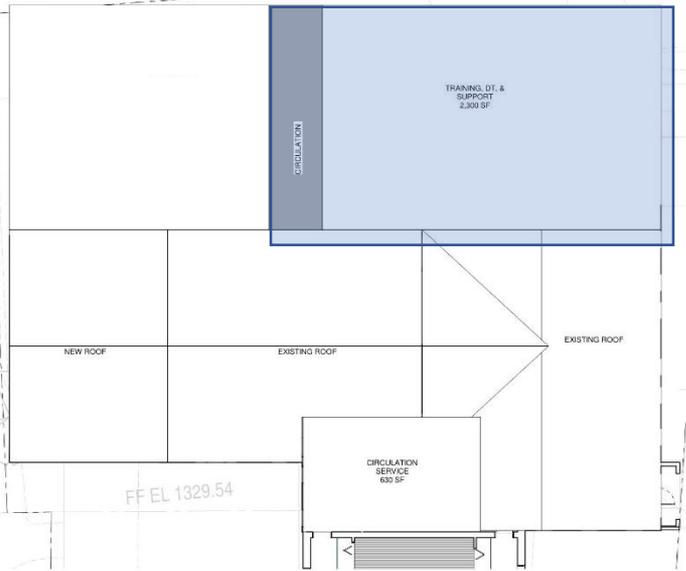
Option 4: Police & Recreation Renovation/Addition



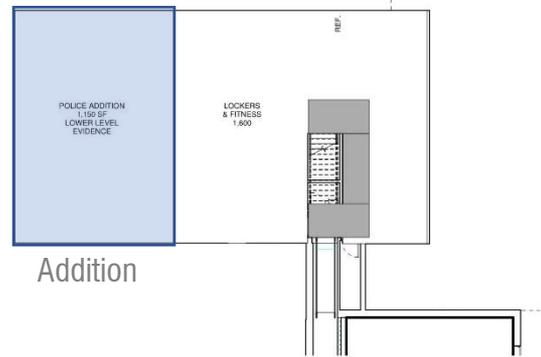
Option 4: Police & Recreation Renovation/Addition



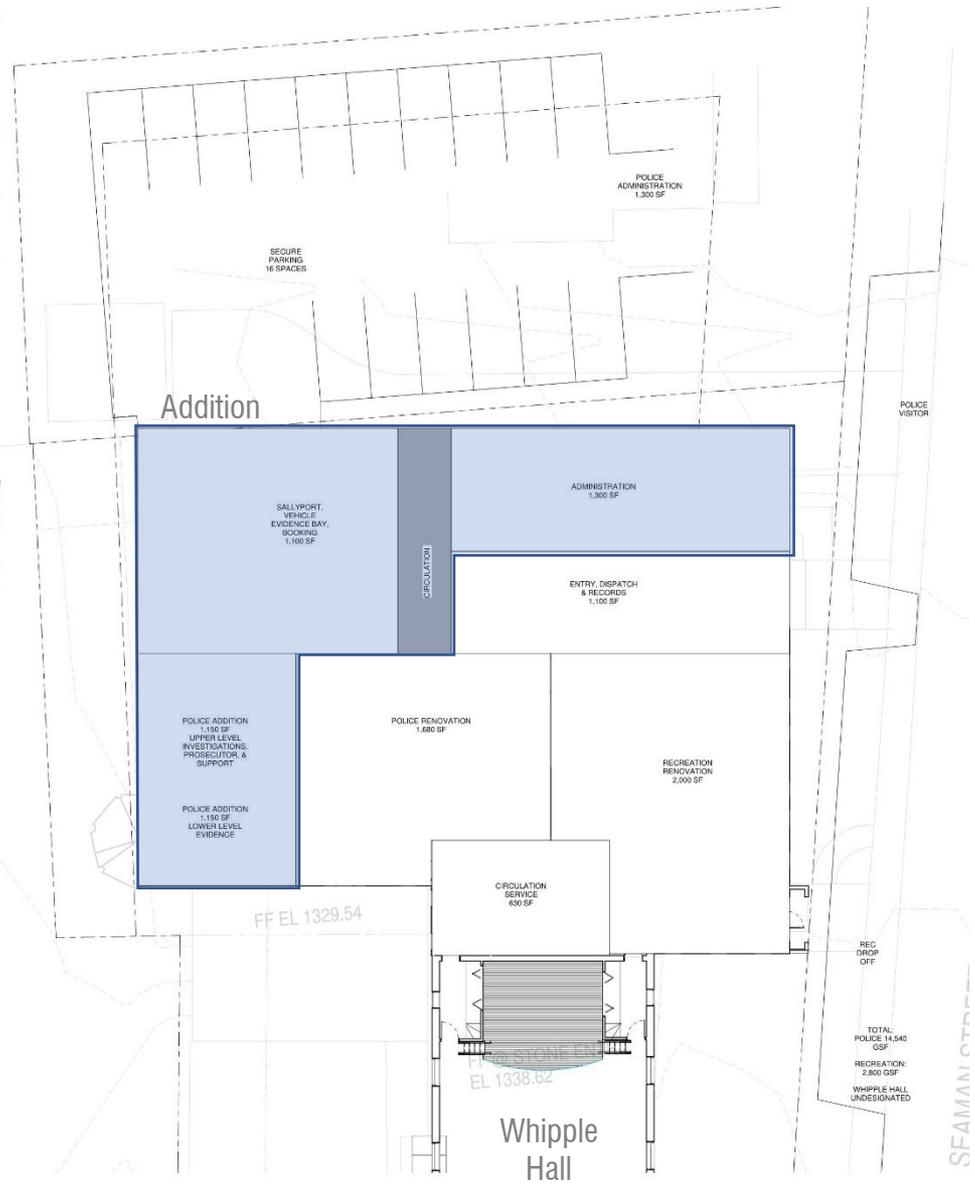
Option 4: Police & Recreation Renovation/Addition



3 OPTION 4 SECOND LEVEL
SCALE: 1" = 10'-0"

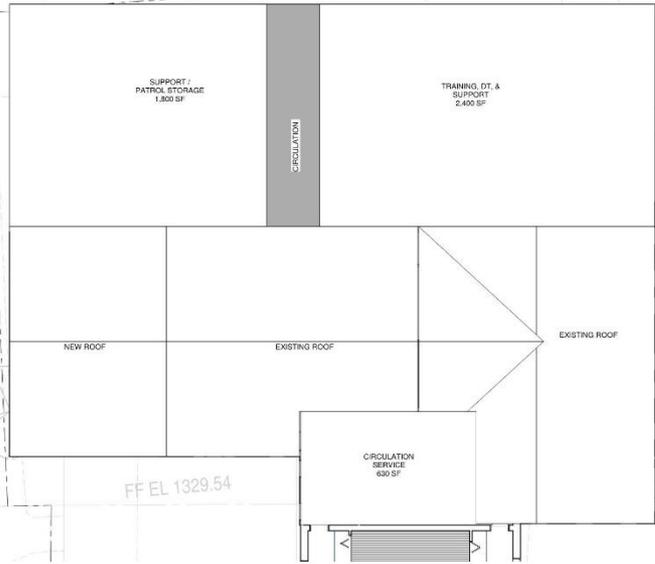


2 EXISTING LOWER LEVEL OPTIONS
SCALE: 1" = 10'-0"

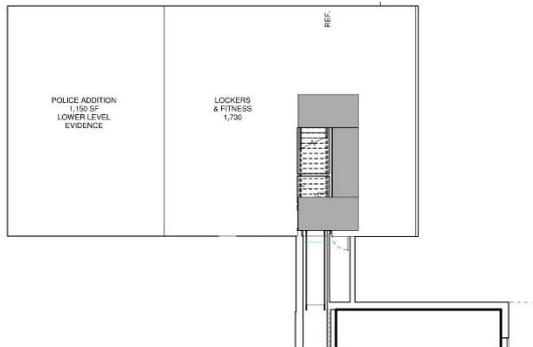


1 OPTION 4 UPPER LEVEL
SCALE: 1" = 10'-0"

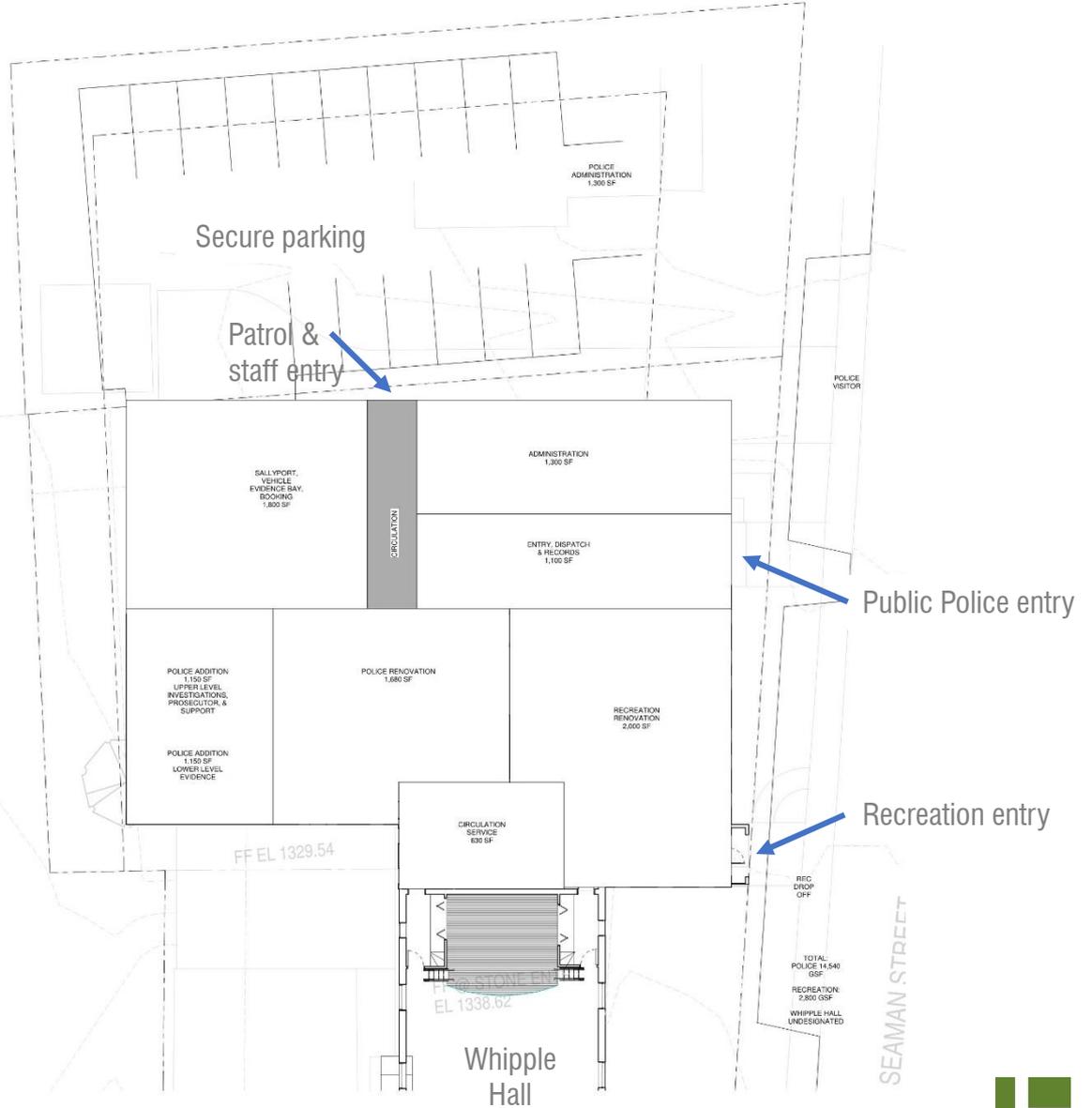
Option 4: Police & Recreation Renovation/Addition



3 OPTION 4 SECOND LEVEL
SCALE: 1" = 10'-0"



2 EXISTING LOWER LEVEL OPTIONS
SCALE: 1" = 10'-0"



1 OPTION 4 UPPER LEVEL
SCALE: 1" = 10'-0"

Space Needs Assessment – Summary *Updated 8-30-2018*

Description	Exist	2017	2022	2027	2037	Total Net Area Required (sf)	Delta Between Exist and Required Area (sf)
	Current Area	Net Area Required (sf)	Anticipated Future Area (sf)	Anticipated Future Area (sf)	Anticipated Future Area (sf)		
S1.0 Shared Building Program	3,269	3,686	0	0	0	3686	(417)
R1.0 Recreation	1,618	2,512	124	184	0	2820	(1,202)
1.0 Administration	424	948	100	0	0	1048	(624)
2.0 Records	215	420	20	40	0	480	(265)
3.0 Communications	289	412	0	64	0	476	(187)
4.0 Patrol	2,003	2,584	24	24	0	3028	(1,137)
5.0 Training	950	1,000	64	64	0	1128	(178)
6.0 Investigations	0	444	0	0	0	444	(444)
7.0 Property & Evidence	237	832	20	40	20	912	(675)
8.0 Legal - Prosecutor	0	140	0	0	0	140	(140)
9.0 Common Facilities	1,526	2,014	80	40	40	2174	(648)
10.0 Other General-Specialty Areas	230	256	0	10	0	266	(36)
11.0 Facility Support	322	60	0	0	0	60	262
R12.0 Parking - Fleet							
12.0 Parking - Fleet							
Total Net Square Footage	11,083	15,308	432	466	60	16,266	(5,183)
Net to Gross Factor	1.289	1.4	1.4	1.4	1.4	1.4	
Total Gross Square Footage	14,287	21,432	605	652	84	22,773	(8,486)

Space Needs Assessment – Deficiencies *Updated 8-30-2018*

- Overall program space need = 5,443 NSF (Net Square Feet)
- Overall total space need = **8,850 GSF** (Gross Square Feet)

- Police space need = 9,760 NSF
- Recreation space need = 3,260 NSF
- Shared space need (systems) = 417 NSF

- Current & future program target = 16,526 NSF
- Existing total program area = 11,083 NSF

- Existing Whipple Hall 1918 = 6,104 NSF (2-Story + Mezzanine)
- Existing Buker Building 1985 = 3,984 NSF (2-Story)
- Existing Buker Building 2000 = 4,199 NSF (1-Story, 2 footprints)

- Current & future building target = 23,137 GSF
- Existing total building area = 14,287 GSF

Design Options Findings

- 3 Story options break up important adjacencies and diminish operational efficiency. Although square footage is added, the function of the police department doesn't really improve.
- Use of the neighboring lot is highly recommended for providing separate and secure parking as well as a secure location for generator and communication tower.
- Renovation and addition options (1 & 4) may be lower cost but yield another series of small additions to Whipple Hall. This is not the best long-term investment.
- 2 Story stand-alone Police Department meets all needs and creates a clear entry area for both Recreation and Police uses. Separating the programs improves security for both user groups. Option 3 is our recommendation for moving forward.

Options Cost Summary

Option 1A

Construction: \$4,479,655

Total Project: \$ 6,155,512

Option 1B

Construction: \$4,779,655

Total Project: \$ 6,547,543

Option 2A

Construction: \$7,707,240

Total Project: \$10,373,229

Option 2B

Construction: \$7,489,090

Total Project: \$10,088,156

Option 3

Construction: \$8,761,840

Total Project: \$11,751,350

Option 4

Construction: \$5,712,500

Total Project: \$ 7,789,035



Option 1A: Major renovation and minor addition with no site expansion

	Demo	Reno	New PD	New Rec	Site
Area (GSF)	0	11,828	3,345	0	
Cost/SF		\$260	\$375		
Construction Cost	\$0	\$3,075,280	\$1,254,375	\$0	\$150,000
Construction Total					\$4,479,655
Administrative Cost & Reserve					\$806,948
Fees & Services					\$868,908
Grand Total					\$6,155,512



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

	Demo	Reno	New PD	New Rec	Site
Area (GSF)	0	11,828	3,345	0	
Cost/SF		\$260	\$375		
Construction Cost	\$0	\$3,075,280	\$1,254,375	\$0	\$450,000 Land cost not included
Construction Total					\$4,779,655
Administrative Cost & Reserve					\$851,948
Fees & Services					\$915,940
Grand Total					\$6,547,543



Option 2A: Connected 3 story addition w/ site expansion

	Demo	Reno	New PD	New Rec	Site
Area (GSF)	8,183	1,959	15,000	1,540	
Cost/SF		\$260	\$365	\$385	
Construction Cost	\$140,000	\$509,340	\$5,475,000	\$592,900	\$990,000 Land cost not included
Construction Total					\$7,707,240
Administrative Cost & Reserve					\$1,291,086
Fees & Services					\$1,374,903
Grand Total					\$10,373,229



Option 2B: Connected 3 story addition no site expansion

	Demo	Reno	New PD	New Rec	Site
Area (GSF)	8,183	1,959	15,000	350	
Cost/SF		\$260	\$375	\$385	
Construction Cost	\$140,000	\$509,340	\$5,625,000	\$134,750	\$1,080,000
Construction Total					\$7,489,090
Administrative Cost & Reserve					\$1,258,364
Fees & Services					\$1,340,703
Grand Total					\$10,088,156



Option 3: Stand-alone 2 story PD, Rec renovation/addition w/ site expansion

	Demo	Reno	New PD	New Rec	Site
Area (GSF)	8,183	1,959	14,000	4,500	
Cost/SF		\$260	\$365	\$375	
Construction Cost	\$140,000	\$509,340	\$5,110,000	\$1,687,500	\$1,315,000 Land cost not included
Construction Total					\$8,761,840
Administrative Cost & Reserve					\$1,449,276
Fees & Services					\$1,540,234
Grand Total					\$11,751,350



Option 4: Major renovation and addition with site expansion

	Demo	Reno	New PD	New Rec	Site
Area (GSF)	1,800	8,970	7,740	0	
Cost/SF	\$25	\$260	\$375	\$0	
Construction Cost	\$45,000	\$2,332,200	\$2,902,500	\$0	\$450,000
Construction Total					\$5,712,500
Administrative Cost & Reserve					\$994,455
Fees & Services					\$1,064,880
Grand Total					\$7,789,035

Questions

