# Town of Bristol, CT

## **Space Needs Analysis Report (Partial)**

## **Bristol Municipal Buildings**

April 2012





Drummey Rosane Anderson, Inc. 225 Oakland Road, Suite 205 South Windsor, CT 06074 860-644-8300 | www.draws.com

## Space Needs Analysis Bristol Municipal Buildings

## **Police Department**

131 North Main

Total 1<sup>st</sup> Floor Building Area: 23790 SF plus 2150 SF on Second Floor

Current Use: Ist Floor houses Police Department Basement Parking Garage

Original Construction Year: 1978

Previous studies reviewed for this building:

None.

Drawings used for Study:

PDF's of Alteration Drawings 1999

## **Current Facility**

Building Condition (Refer to Appendix 'A', Condition Survey)

The Police Department occupies the first floor of the building and a portion of the second floor. They also use the basement parking garage.

The building was altered in 1999 and had to comply with ADA, Building and Fire Codes at that time. In the tours of the building no noticeable violations were seen.

## Fire and Code Deficiencies

The building appears to be code compliant. 42 inch high guard rails have not been provided on stairs.

## ADA Deficiencies

The building appears to be ADA compliant except for items listed in the MEP Survey and the following:

Handrails on stairs do not meet ADA design criteria. Nosings on stairs project

slightly and could cause a tripping hazard. Elevator to Basement garage does not meet the dimensional requirements.

## **Hazardous Materials**

None noted.

Mechanical, Electrical, Plumbing and other services. (Refer to Appendix 'B', MEP Survey)

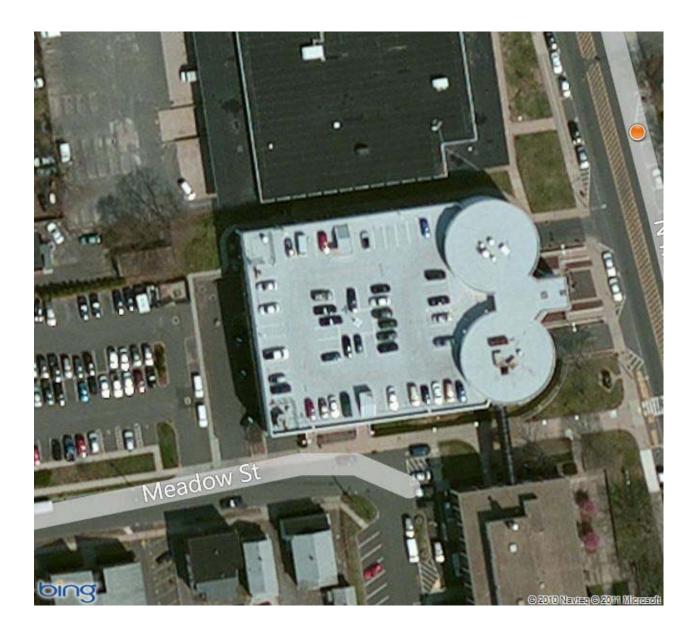


## **Structural Systems**

The concrete framed building appears to be structurally sound.

## Available Parking

There are 45 available parking spaces on the basement level. Parking is also available on the third level; 57 spaces and on the forth level; 62 spaces although currently many of these are reserved for City Hall.



## **Use Recommendations**

Uses:

We can only recommend that the building continue to be used for the Police Department if additional space can be obtained by relocating the second floor Superior Court. The building for Police use is in a good location with its own parking garage for Police vehicles. The space is very cramped and in much need of expansion.

- a. The facility is ideally suited to continue use as a Police Department. Expansion space is however, required with no simple solution to this.
- b. If the Courts were moved out of the building (see Bingham) this would provide a substantial area for expansion. In fact considerably more space than required for the police. It would be necessary to develop a combination of compatible uses for the space (see Courts).
- c. For security reasons, parking areas in the building should be controlled access for designated individuals in City Hall. Public should not be allowed to park in this building.
- d. It would also be possible to create a second and third floor link between the police department building and City Hall but this would not provide adequate expansion space. The court area would need to be reconfigured to expand into the new addition in the front of the building to achieve contiguous space for the second floor police areas. City hall would then be able to expand on the third floor. The first floor could be open to the elements or enclosed to provide



a dignified entrance to City Hall. This open area could have multiple uses; kiosk; display space; manned help desk etc.

Interior Conditions Survey

Rm #	Name	Floor	Rating	Walls	Rating	Ceiling	Rating	Notes
100	Supervisor Office	Carpet	1	VWC	1	2x2 SAP	1	
101	Communication	Carpet	3	VWC	1	2x2 SAP	3	
102	Storage	VCT 12x12	2	Ptd GWB	1	Concrete	1	
103	Toilet	1x1 Mosaic	2	4x4 CT Wainscot	1	2x2 SAP	1	
				Ptd GWB	2			
104	Kitchen	Rubber	1	VWC	1	2x2 SAP	1	
106	Ammunition	VCT 12x12	2	Ptd CMU	1	2x2 SAP	1	
107	Armorer	VCT 12x12	2	Ptd CMU	1	2x2 SAP	1	
108	Male Cells	Ероху	1	Ptd GWB	2	2x2 SAP	1	
						Ptd Steel	1	
109	Female Cells	Ероху	1	Ptd GWB	2	2x2 SAP	1	
						Ptd Steel	1	
110	Custodian	Ероху	1	Ptd CMU	1	Concrete	1	
111	Booking	Ероху	1	Ptd CMU	2	2x2 SAP	2	
112	Intox	Ероху	1	Ptd CMU	1	2x2 SAP	1	
113	Interview	Ероху	1	Ptd CMU	1	2x2 SAP	1	
				Ptd GWB	2			
114	Holding Room	Ероху	1	Ptd CMU/GWB	2	2x2 SAP	1	
116	Decon	Ероху	1	Ptd CMU	2	Ptd GWB	1	
117	Union Office	VCT 12x12	2	Ptd CMU/GWB	2	2x2 SAP	2	
118	Prisoner Transfer	Concrete	2	Ptd CMU	2	Concrete	1	
119	Emergency Response	Rubber	2	Ptd GWB	2	2x2 SAP	2	
120	Schedule Lieutenant	Carpet	2	VWC	1	2x2 SAP	1	
121	Electrical	VCT 12x12	2	Ptd CMU	1	Concrete	1	
122	Lounge	Rubber	1	Ptd GWB	2	2x2 SAP	2	
124	Interview	Rubber	1	Ptd GWB	2	2x2 SAP	1	
125	Juvenile Holding	Rubber	1	Ptd GWB	1	2x2 SAP	1	
126	Corridor	Rubber	1	Ptd GWB	1	2x2 SAP	1	
127	Polygraph	Rubber	1	Ptd GWB	1	2x2 SAP	1	
129	Office	Rubber	1	Ptd GWB	1	2x2 SAP	1	
130	Office	Rubber	1	Ptd GWB	1	2x2 SAP	2	

Interior Conditions Survey

Rm #	Name	Floor	Rating	Walls	Rating	Ceiling	Rating	Notes
131	Office	Rubber	1	Ptd GWB	1	2x2 SAP	1	
132	Interview	Rubber	1	Ptd GWB	2	2x2 SAP	1	
133	Copier	Rubber	1	Ptd GWB	2	2x2 SAP	2	
135	Office	Rubber	1	Ptd GWB	2	2x2 SAP	1	
137	Office	Carpet	1	VWC	1	2x2 SAP	1	
139	Detective	Carpet	2	Ptd GWB	1	2x2 SAP	1	
142	Office	Carpet	1	VWC	1	2x2 SAP	1	
143	Electrical	VCT 12x12	2	Ptd CMU/Concrete	1	Concrete	1	
144	School Resource	Carpet	1	VWC	1	2x2 SAP	2	
145	Community Relations	Carpet	1	VWC	1	2x2 SAP	1	
146	Office	Carpet	1	VWC	1	2x2 SAP	1	
148	Main Desk	Rubber	2	Ptd GWB	2	2x2 SAP	2	
149	Break Room	Rubber	1	VWC	2	2x2 SAP	1	
150	Records	Carpet	1	VWC	1	2x2 SAP	1	
153	Records Lieutenant	Carpet	1	VWC	1	2x2 SAP	1	
154	Corridor	Rubber	2	Ptd GWB	2	Ptd GWB	1	
155	Identification	Rubber	2	Ptd GWB	2	2x2 SAP	2	
156	Evidence Processing	Rubber	1	Ptd GWB	2	2x2 SAP	1	
157	Evidence	VCT 12x12	3	Ptd GWB	2	2x2 SAP	1	
158	Report Room	Rubber	2	Ptd GWB	2	2x2 SAP	1	
159	Squad Room	Rubber	2	Ptd GWB	2	2x2 SAP	2	
160	Shift Lieutenant	Carpet	3	VWC	1	2x2 SAP	1	
161	Shift Sergeant	Carpet	3	VWC	1	2x2 SAP	1	
162	Women's Locker	Rubber	1	Ptd GWB	2	2x2 SAP	1	
163	Women's Lavatory	1x1 Mosaic	1	4x4 CT Wainscot	1	Ptd GWB	1	
				Ptd GWB	1			
165	Janitor's Closet	1x1 Mosaic	1	Ptd GWB	1	Concrete	1	
166	Men's Lavatory	1x1 Mosaic	1	4x4 CT Wainscot	1	Ptd GWB		
				Ptd GWB	1			
167	Storage	VCT 12x12	2	Ptd GWB	1	Concrete	1	

Interior Conditions Survey

Rm #	Name	Floor	Rating	Walls	Rating	Ceiling	Rating	Notes
168	Shower	1x1 Mosaic	2	4x4 CT	1	Ptd GWB		
169	Men's Lockers	Rubber	2	Ptd GWB	2	2x2 SAP	1	
170	Traffic Lieutenant	Carpet	1	VWC	1	2x2 SAP	1	
171	Training	Carpet	1	VWC	3	2x2 SAP	1	
171A	Storage	Rubber	2	Ptd GWB	2	2x2 SAP	1	
172	Closet	Carpet	1	Ptd GWB	1	2x2 SAP	3	
173	Traffic	Carpet	1	VWC	1	2x2 SAP	1	
175	Police Technology	Carpet	1	VWC	1	2x2 SAP	1	
176	Storage	VCT 12x12	2	Ptd GWB	2	2x2 SAP	1	
176A	Custodian	1x1 Mosaic	1	Ptd GWB	1	Concrete	1	
177	Toilet	1x1 Mosaic	1	4x4 CT Wainscot	1	2x2 SAP	1	
				Ptd GWB	1			
178	Men's Room	1x1 Mosaic	1	4x4 CT Wainscot	1	2x2 SAP	1	
				Ptd GWB	2			
179	Women's Room	1x1 Mosaic	1	4x4 CT Wainscot	1	2x2 SAP	1	
				Ptd GWB	2			
	Lobby	СТ	1	Ptd GWB w/Reglets	2	2x2 SAP	1	
185	Electrical	VCT 12x12	2	Ptd CMU/Concrete	2	Concrete	1	
186	Operation Commander	Carpet	1	VWC	3	2x2 SAP	1	
	Admin Assistant	Carpet	1	VWC	1	2x2 SAP	1	
188	Admin Commander	Carpet	1	VWC	1	2x2 SAP	1	
189	Closet	Carpet	1	Ptd GWB	2	2x2 SAP	1	
190	Closet	Carpet	2	VWC	1	2x2 SAP	1	
191	Reception	Carpet	1	VWC	1	2x2 SAP	1	
192	Conference	Carpet	1	VWC	1	2x2 SAP	1	
193	Closet	Carpet	1	Ptd GWB	1	2x2 SAP	1	
194	Closet	Carpet	1	Ptd GWB	1	2x2 SAP	1	
195	Chief	Carpet	1	VWC	1	2x2 SAP	2	
196	Men	1x1 Mosaic	2	4x4 CT Wainscot	1	2x2 SAP	1	
				Ptd GWB	2			

## POLICE DEPARTMENT

Interior Conditions Survey

Rm #	Name	Floor	Rating	Walls	Rating	Ceiling	Rating	Notes
197	Women	1x1 Mosaic	2	4x4 CT Wainscot	1	2x2 SAP	1	
				Ptd GWB	2			
198	Toilet	1x1 Mosaic	2	4x4 CT	1	2x2 SAP	1	
200	Corridor	Rubber	2	Ptd GWB	2	2x2 SAP	1	
						Ptd GWB	1	
201	Photo Lab	Rubber	1	Ptd GWB	2	2x2 SAP	1	
201A	Storage	Rubber	1	Ptd CMU/GWB	1	2x2 SAP	1	
202	Electrical	VCT 12x12	2	Ptd CMU/GWB	1	Concrete	1	
203	Stair	Terrazzo	1	Brick	1	Ptd GWB	2	
205	Corridor	Rubber	2	Ptd GWB	2	2x2 SAP	1	
						Ptd GWB	1	
205A	Vestibule	Rubber	2	Ptd GWB	2	2x2 SAP	1	
						Ptd GWB	1	
		lice Spaces o	on Secon	d Floor (Court Floor)				
201	Narcotics	Recently Renovated						
203	Union	Carpet	1	VWC	1	2x2		
204	Hall	12x12 VCT	2	CMU/VWC	1	2x2	1	
205	Lobby	12x12 VCT	2	Ptd CMU	2	2x2	1	
206	Interview	12x12 VCT		Ptd GWB/CMU	1	2x2	1	
207	Police Training	Carpet	1	VWC	1	2x2	1	

## <u>Mechanical and Electrical Systems</u> <u>Existing Conditions Narrative</u>

## Police Headquarters and Court Facility Bristol, Connecticut

November 1, 2011

Prepared By <u>Consulting Engineering Services, Inc.</u> 811 Middle Street, Middletown, Connecticut 06457 CES Project No. 2011127.00

## APPLICABLE CODES AND STANDARDS

The mechanical, electrical, plumbing, and fire protection systems will be reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

- A. 2005 Connecticut State Building Code
- B. 2005 Connecticut State Fire Safety Code
- C. 2003 International Building Code(IBC)
- D. 2003 International Plumbing Code
- E. 2003 International Energy Conservation Code
- F. NFPA, All applicable code sections, Latest Version
- G. ASHRAE 90.1

## PLUMBING NARRATIVE

### PLUMBING UTILITIES

- 1. Domestic Water:
  - a. <u>Existing Domestic Water Service:</u> The existing building is currently served by a 4 inch domestic water service. The domestic water service equipment includes a 2 inch water meter, pressure reducing valve, and isolation valves. This water service currently serves all of the building's domestic water needs and has adequate pressure. The water distribution system is original to the building.



- 2. Natural Gas:
  - a. There is no natural gas service to the building.
- 3. Sanitary:
  - a. The sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the building. The piping material above grade is primarily cast iron. The plumbing fixtures drain to buried sanitary waste piping to the buildings exterior and to the municipal sewer system. In the lower level of the Police building, sewage ejector pumps are installed to pump the waste into the municipal sewer system. These pumps are in poor condition.





- 4. Storm:
  - a. The storm piping is primarily cast iron and drains to the municipal storm water system. Some of the original piping has been replaced with PVC piping. There are no secondary roof drains or strainers on the existing roof drains. Domed strainers should be added to the roof drains to keep debris out of the storm water system.







b. There are no reports of problems with the storm water piping below grade.

## PLUMBING FIXTURES AND SPECIALTIES

- 1. Existing plumbing fixtures are as follows:
  - Water closets are floor or wall mounted; flush valve, vitreous china. Some of the fixtures have been replaced with water conserving fixtures with sensor operated flush valves. The fixtures range from original to the facility in fair condition to new in very good condition. The original fixtures are non-water conserving type and non-ADA compliant.



• Urinals are wall hung, vitreous china, with flush valves. The fixtures are original to the facility in fair condition, non-water conserving type and non-ADA compliant.



• Lavatories are wall hung vitreous china. Some of the fixtures have been replaced with water conserving fixtures with sensor operated faucets. The original fixtures have two lever handle faucets. The fixtures range from original to the facility in fair condition to new in very good condition. The original fixtures are non-water conserving type and the faucets and drains are non-ADA compliant.







• Drinking fountains are wall mounted stainless steel units in good condition. The amount these units protrude into the path of travel should be reviewed for compliance with current ADA requirements.



• In the Police Headquarters, there is a single shower located in the lower level training room, up a small flight of stairs. This shower is a fiberglass unit and in good condition. The location of this shower is not ADA accessible.





• Stainless steel sink with two lever gooseneck type faucet is present in a work/break room. This sink is ADA compliant and in good condition.



• Janitor sinks are floor mounted cast stone units with two lever faucets or pedestal mounted fiberglass units with two lever faucets. There is no vacuum breaker present at these sinks. The sinks are in fair to good condition.





## DOMESTIC HOT WATER SYSTEMS

1. The existing domestic hot water system includes a Ruud Model ES120-36-G electric hot water heater. This equipment is in very good condition.



2. A local instantaneous electric water heater has been installed below a sink in a break room in the Police Department. This equipment is in good condition.



3. There are oil/water separators located in the parking garage. (1) is located above grade and one is located in the floor of the lower level. This equipment is original to the facility and in poor condition.





4. There is an air compressor system consisting of a vertical air compressor, piping and outlets located in a maintenance area serving the Police Department. This equipment is in fair condition.



### FIRE PROTECTION NARRATIVE

## FIRE PROTECTION SERVICE

1. The building is served by a 6" fire protection service fed from a fire main in North Main Street. This fire service includes a shut-off valve and Watts Model 774 double check valve. The buildings are protected throughout with a full sprinkler system. There are also standpipes located in the stairs. This backflow preventer equipment has been recently installed and is in good condition. The remainder of the piping and most of the sprinkler heads are original to the building. The sprinkler heads and fire protection piping in the Police Headquarters was modified during the last renovation.





**MECHANICAL SYSTEMS:** 

1. The existing building is heated by (2) H.B. Smith 350 Mills, 13-section oil fired steam boilers with Power Flame Model C30-04HBS-10-14 oil burners. There is a separate oil fired boiler that serves the cell block area. It is a Weil McClain Series 78, Model 478 hot water boiler with a Carlin Model 201 CRD-w oil burner. The H.B. Smith boilers, burners, and breeching are original to the building and in poor condition. The Weil McClain equipment is newer and in good condition.







2. The heating plant also includes a condensate receiver, boiler feed system, hot water heat exchanger, condensate receivers, and hot water pumps. All of this equipment is original to the facility and poor condition.









3. The present heating system also includes cabinet unit heaters, and ceiling mounted unit heaters and steam coils in the air handling equipment. This equipment is original to the building and in poor condition.





4. The air conditioning system consists of a Trane Series R Centravac chiller, Model RTHB150FMCOONW0000UNN3LF2LF00QU chiller installed in 1996. This chiller is shared between the two buildings. The chiller is in good condition. There is a cooling tower mounted on the roof of the parking facility that is in very poor condition. This piece of equipment has significant corrosion problems and the maintenance staff has made many attempts to repair this sump which has allowed this unit to operate.















5. The air handling equipment is Trane Climate Changer units that serve as heating and air conditioning units or air conditioning units only. There are also large exhaust/return air fans. This equipment is located in mechanical rooms within the buildings and are original to the facility and in poor condition.









6. The steam and chilled water piping consists of iron supply and return piping. This piping is original to the facility and the steam condensate piping is more than likely in poor condition. There are a number of areas where the pipe insulation has been damaged and should be repaired.







7. The roof mounted equipment consists of exhaust fans, condensing units, etc. This equipment is original to the building and in poor condition.



8. The existing temperature control system consists of a pneumatic system by Johnson Controls. This includes an air compressor, air dryer, control panels and pneumatic tubing. Some of the control valves have been replaced as needed. The remainder of the equipment is original to the building and in poor condition.









## **ELECTRICAL NARRATIVE**

## **EXISTING SYSTEMS**

 The building is served by a single electrical service rated 1600amperes, 480Y/277volts, 3-phase, 4-wire. This service equipment consists of a 1600amp main disconnect switch, distribution sections and metering per utility company requirements. The service equipment is original to the building and is in fair condition. In addition, the current electrical room access does not meet the current code requirements for egress from the room.





2. There are a number of electrical panels located throughout the facility. Some of these panels are original to the facility and some have been replaced with new. There are a number of panelboards located in storage rooms that have material stored in front of them which is a code violation. In addition, there is one panelboard that has had a significant water leak above it. The conduit, boxes, and panel are showing signs of corrosion. The condition of the panelboards ranges from poor to good.







3. The building is served by a Cummings Model 080FDR5057A8W, 410kW, 613kVA diesel generator. The generator is located in the main electrical room. The transfer switch is located in the main electrical switchboard. There is a separate day tank (fuel tank) that pumps fuel oil from the exterior underground tank to feed the emergency generator. To meet current codes, (2) separate automatic transfer switches would be required to separate life safety from other loads in the building. This generator and associated equipment is original to the facility and in good condition.





4. In the Main Electrical Room there is a series of (91) wet-cell batteries that serve as back-up power to emergency lighting and other pieces of equipment between when normal utility power is lost and the emergency generator starts. It is controlled by a Dual

Lite Model 120-120-S-791 charger. There is also a number of Dual Lite control panels located throughout the building. Some of these control panels are inaccessible because of items stored in frontof them. This equipment is original to the facility and in fair condition. To satisfy current codes, this equipment is required to be in a separate room with adequate ventilation, etc.





5. The lighting throughout the facility consists of recessed parabolic fixtures, recessed center basket fluorescent fixtures, and recessed mounted acrylic lensed fluorescent fixtures in the office areas, etc. Other fixtures include industrial fluorescent fixtures, wrap around acrylic lensed fixtures, and other miscellaneous fixtures throughout the building. Most of the lighting has been upgraded to newer T8 technology, however, there are other fixtures using older T12 technology or incandescent lamps. The lighting ranges from very good to poor condition.













6. The fire alarm system is manufactured by Fire Lite, Model Sensiscan 2000 or Simplex. The system includes control panels, manual pull stations, horn-strobes, and some smoke detectors. This system is in fair condition and portions are non-ADA compliant. Additional audio visual devices should be added to the building as well as upgrading to an addressable ADA-compliant system.



7. The emergency lighting is provided by a Dual Lite Inverter System that includes the inverter, batteries, ceiling mounted remote heads and controls. Although this system is operational, it is in poor condition. Additional lighting fixtures are required to meet current requirements for emergency lighting.







8. The exit signs consist of fluorescent exit signs with batteries. This equipment is in fair condition. Additional exit signs are required to meet current requirements for exit signs.





- 9. Miscellaneous Electrical Equipment:
  - a. There is a lightning protection system installed at the facility. It appears that during recent roof work, some of the lightning protection system was disconnected. This should be repaired to maintain the integrity and operation of the system.



b. There is a site lighting system on the top level of the parking garage. This lighting system serves the parking areas only and includes pole and wall mounted fixtures. This equipment is in fair condition.





## **MEP SYSTEMS CONCLUSION**

In general with the exception of the recently renovated areas of the police department and some if the electrical panel boards, all of the other systems are 25+ years old and have met their useful life expectancy. The system components are very inefficient. We recommend that most of the systems be replaced with new.

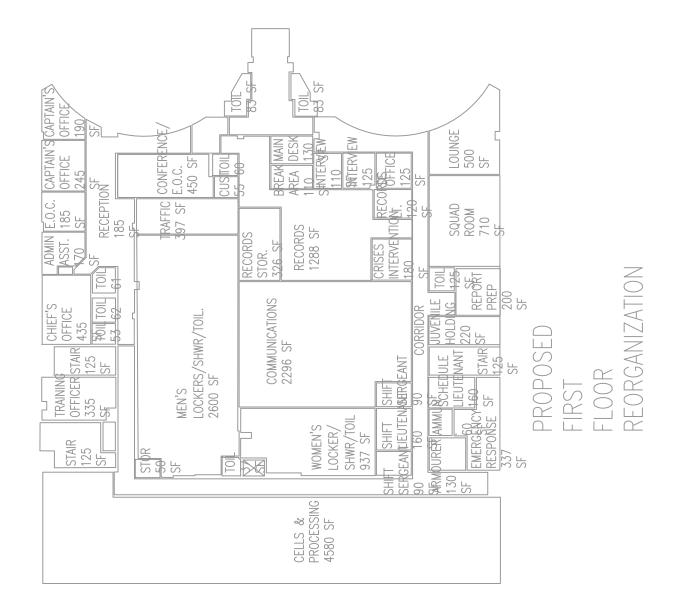
#### **Police Department**

Existing Net Useable Area

POLICE DEPARTMENT BREAKDOWN	Current Space SF	Floor	Proposed SF	Comments
Communications	1090	1		Add 3 people + another supervisor
Men's Cells		1		Modernize, add 4 cells
Suicide Watch Cell			100	
Amunition Storage		1	60	
Armourer Women's Cells		1 1	130	Modernize, add 2 cells
Booking		1		Add 2 stations
Intoxication Room		1	70	
Interview		1	80	
Holding	110	1	110	
Storage	60	1	60	
Decontamination	35	1	35	
Union Office		1	75	
Prisoner Transfer		1		Drive through desired
Emergency Response Team		1	265	
Schedule Lieutenant		1	155	
Lounge		1	500	
Juvenile Holding	110	1 1	108	More protective
Observation Interview	108 155	1	108	
Interview		1		Added Interview room
Polygraph Testing		1	90	
Cyber Crime		1	185	
Computer Equipment		1	90	
Detective Sgt.	100	1	100	
Detective Sgt.	0		100	Added Detective Sgt office
Interview	90	1	90	
Office	115	1	115	
Detective Squad Room	1120	1	1720	Added 10 detective stations
Detective Lieutenant		1	200	
Office	125	1	125	
Interview		1	110	
Main Desk Front Lobby		1 1	130	Includes public toilets
Lobby Interview Rooms		1		Includes public toilets Two interview rooms at lobby
Records		1		Question, no additional space?
Records Break Area		1	110	
Record's Lieutenant		1	120	
Records Storage		1	320	
Crises Intervention Office	180	1	180	
Evidence	1300	1	1900	Added 600 sf for evidence
Report Preparation	150	1	150	
Squad Room		1		Capacity for 25
Shift Lieutenant		1	160	
Shift Sergeant		1	90	
Shift Sergeant		1		Added Shift Sgt office
Women's Locker/Shower/Toilet Room		1		Add toilets, wider lockers; need test
Men's Locker/Shower/Toilet Room		1 1		Add toilet, wider lockers; need test
Training Officer Traffic Office		1	290 170	
Traffic Lieutenant		1	112	
Captain's Office		1	220	
Captain's Office		1	190	
Conference Room		1	420	20 seats capacity
E.O.C.	185	1	360	emergency operations; 8 people, co
Reception	354	1	354	
Administrative Assistant	170	1	170	
Chief's Office		1	435	
Deputy Chief's Office				Office for deputy chief
Evidence Drying	335	1	335	
Narcotics Detectives	317	2		Needed on same floor as rest of det
Union Office		2	218	
Interview Training Classroom		2 2	173 1470	Need public access, first floor prefer
TOTAL 2ND FLOOR:		2	1470	need public access, first floor prefet
IGTAL ZND FLOOR:	Current Space SF		Proposed SF	
TOTAL NET USEABLE SF			25571	72%
COMMON AREAS & WALLS	7448		9929	28%
	1			
TOTAL GROSS SF	27300		35500	100%

desired ve ew room ve Sgt office ective stations toilets rooms at lobby additional space? or evidence gt office der lockers; need test layout ler lockers; need test layout ity perations; 8 people, computers uty chief me floor as rest of detectives ccess, first floor preferred 72% 28% 100%

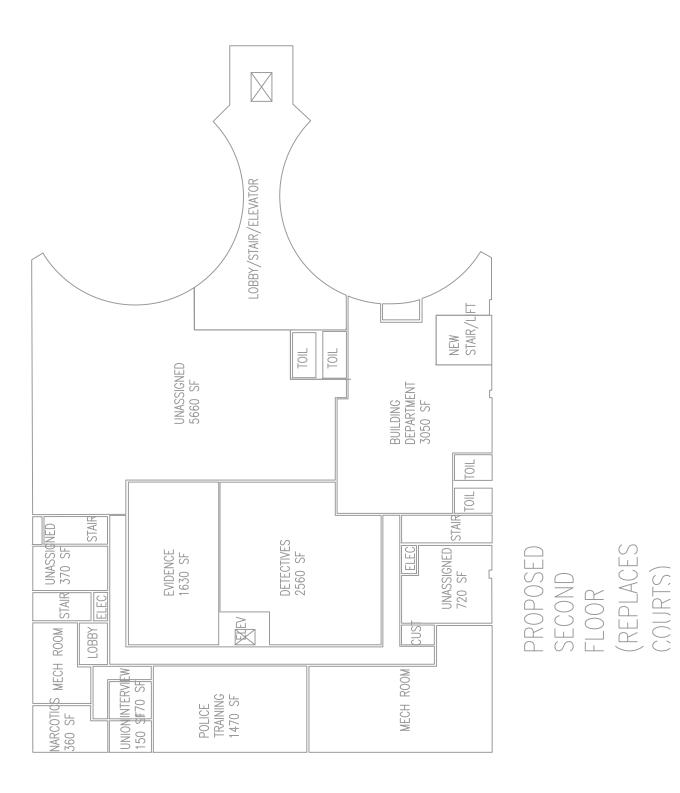
8200 Net Increase





Scale: 1⁄<sub>32</sub>"=1'-0" Job No.: 11010 Drawn By: Date: DD/MM/YY

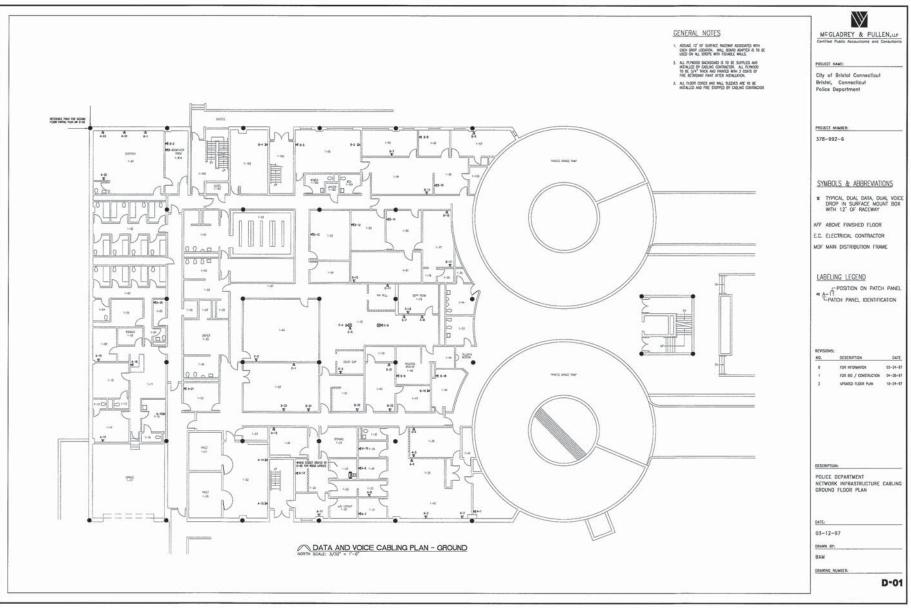




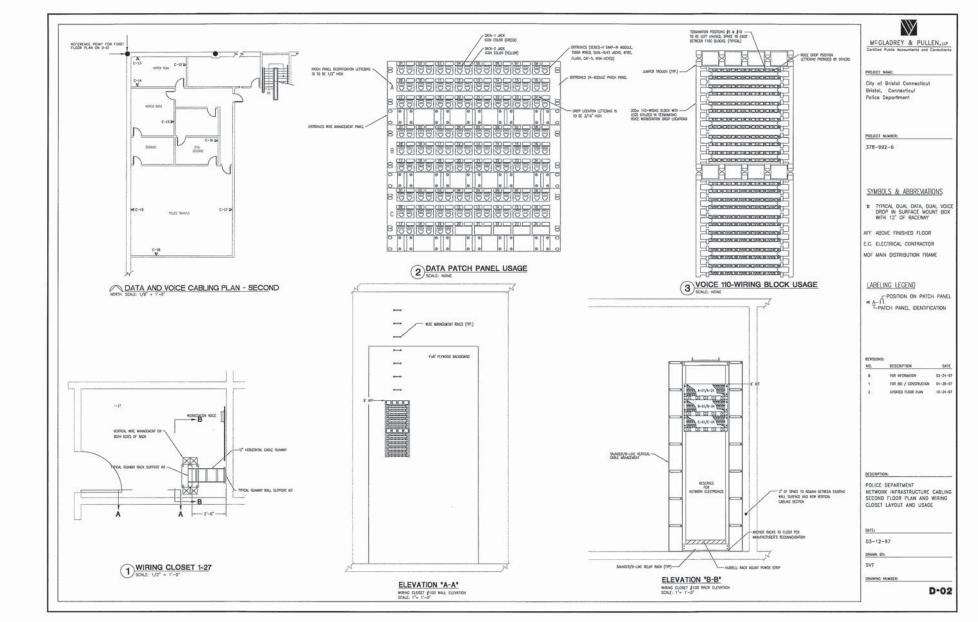
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Bristol Police Department Proposed Scale: 1/32"=1'-0" Job No.: 11010 Drawn By: Date: 11-1-11

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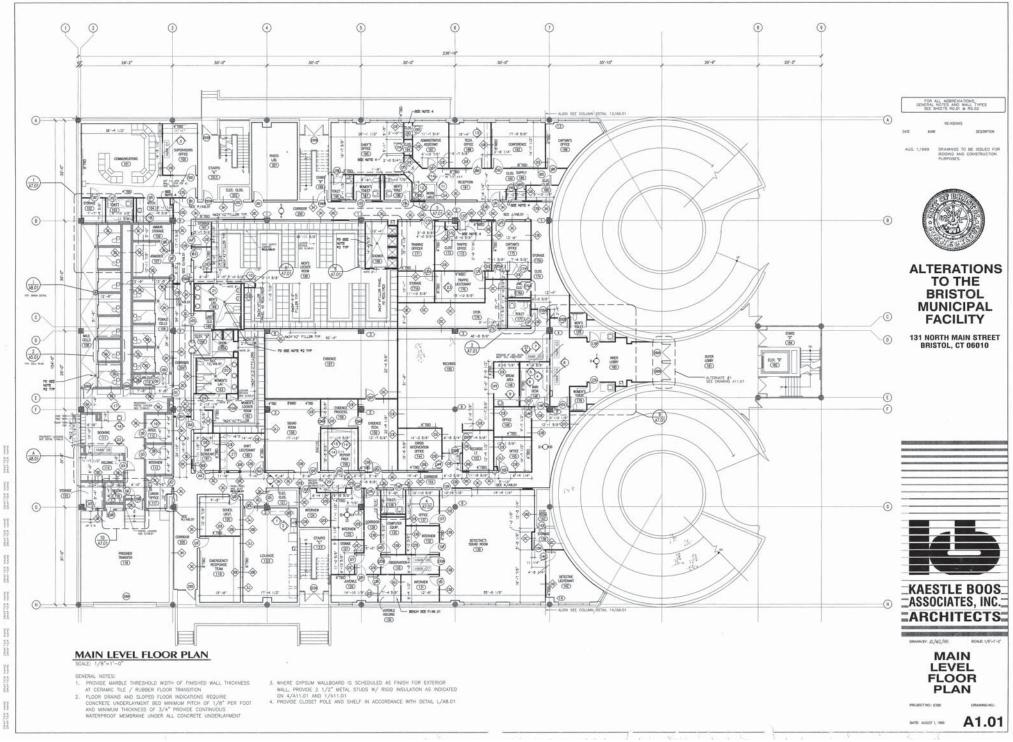


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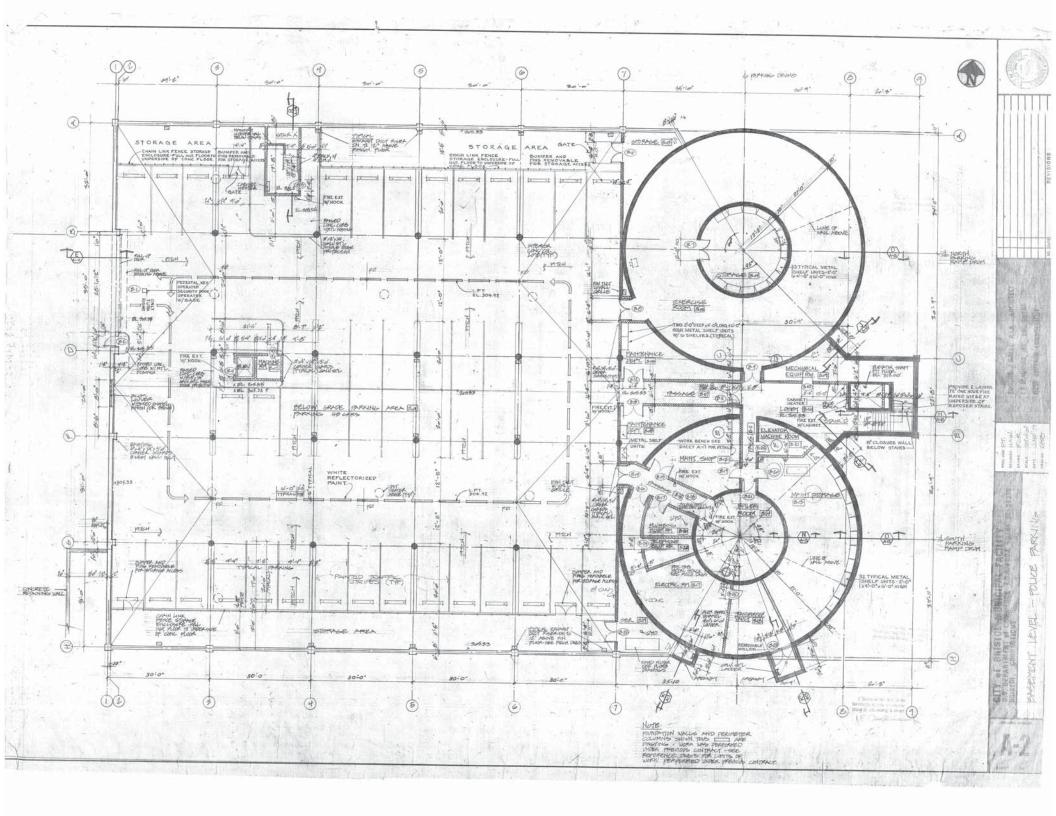


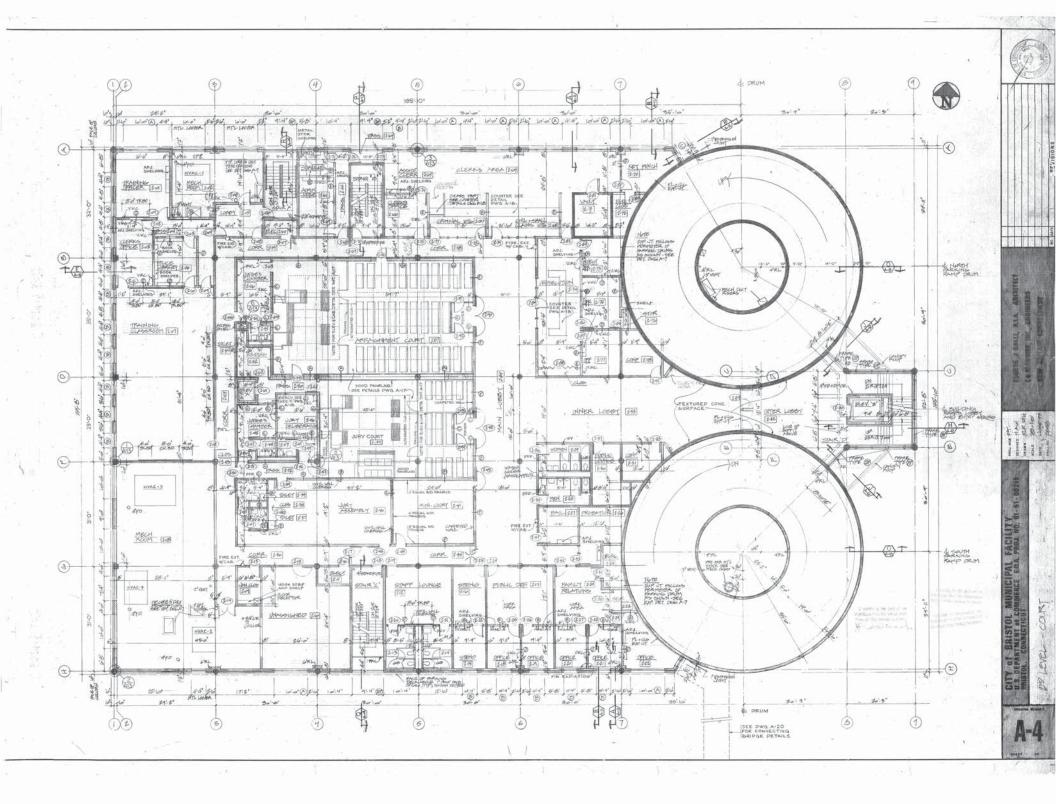
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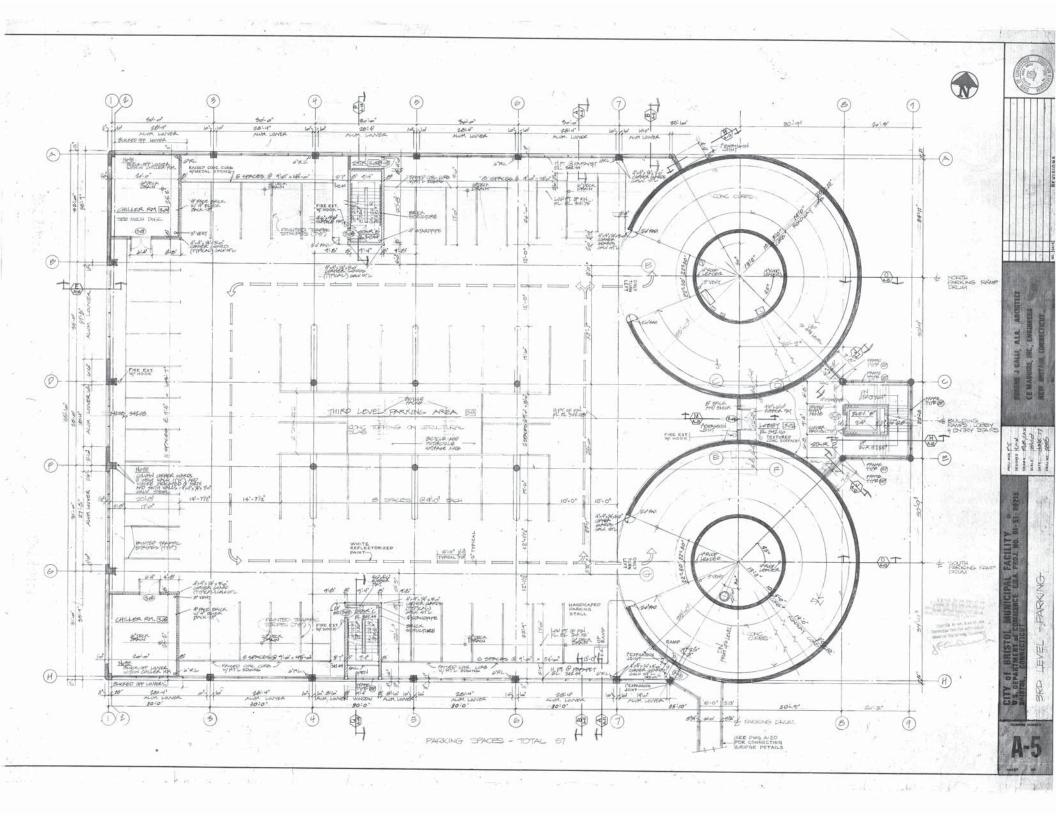
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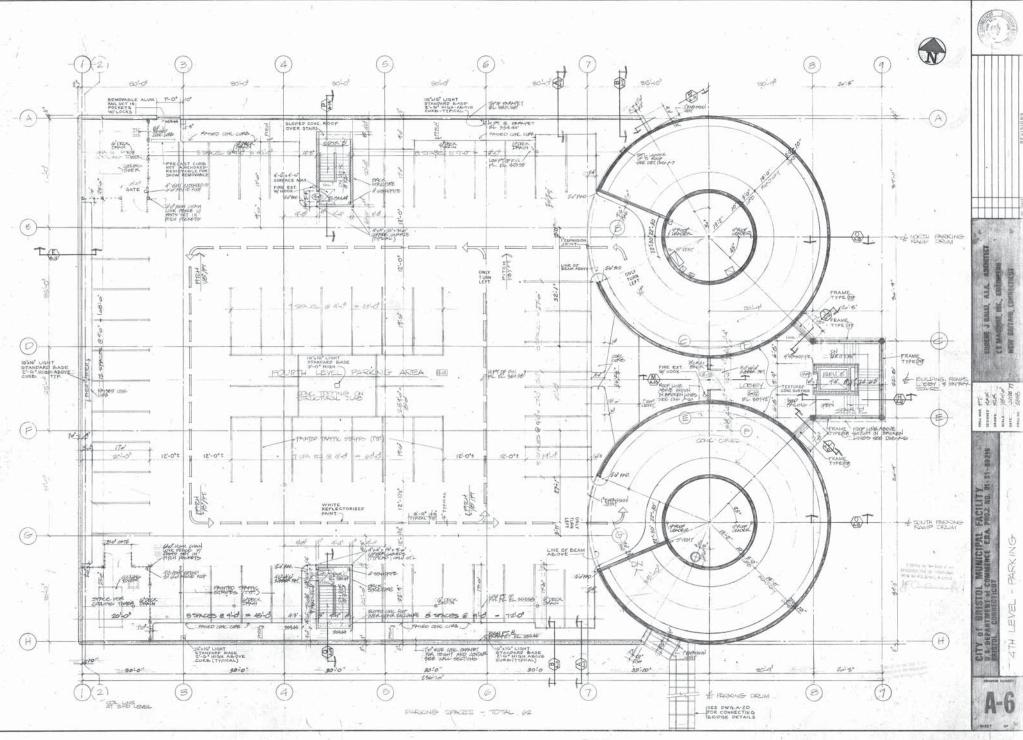


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# Space Needs Analysis Bristol Municipal Buildings

# Fire Department Headquarters

Total Building Area:10,196 SFNet Useable Area:8,078 SF

Current Use: Fire Dept. HQ.

Original Construction Year: 1960's Additions (years): None Number of Floors: Two



Previous studies reviewed for this building:

Feasibility Study for Renovations 2004.

Drawings used for Study:

PDF's of Infrastructure Cabling Drawings 1997

## **Current Facility**

Building Condition (Refer to Appendix 'A', Condition Survey)

Exterior Building Envelope



Roof: The roof is a dead-level, mechanically fastened E.P.D.M. system approximately 15 years old. Rainwater ponds on the surface of the roof. The roof should be modified to reduce the amount of ponding and provide positive drainage to the roof drains. If building modifications occur it is recommended that a white roof be installed to reduce energy load.



Roof access is by a permanent ladder in one of the stairs. An extension railing should be provided to the ladder and a guardrail added to the roof hatch.

Exterior walls: Typically non-bearing brick veneer over concrete masonry unit back-up wall. Insulation exists in the wall cavity. On the upper level the brick veneer is carried by a continuous steel shelf angle.

It appears that in the past, the roof has leaked into the walls causing efflorescence on the interior (noticeable in stair



enclosures) and severe rusting of the shelf angle. There has also been extensive damage to the

brick including cracking, spalling and shifting. There is a strong possibility that wall ties in the wall may have corroded and failed. Some limited re-pointing and brick replacement has occurred. Also, as evidenced on the interior, there are vertical cracks at some locations where perpendicular walls intersect the exterior wall indicating that the wall is separating from the building.

Windows: Windows are showing signs of seal failure which is likely to continue throughout the other windows of the building. Windows in the stair enclosures are only single glazed and should be replaced.

#### Site

Site paving is badly cracked and should receive crack sealant as a minimum. A section of concrete sidewalk has settled and should be replaced.

#### **Interior Finishes**

A detailed condition report for the interior finishes is included in the Appendices.

In general the finishes are in good condition but there are some areas of concern. In particular the toilet rooms and showers are constructed with brick. We consider this to be an unsanitary condition as it is very difficult to clean and is porous in nature. Evidence also exists, on the underside of the second floor in the apparatus room that the showers have been leaking.



Elevator: None Provided.

#### **Fire and Code Deficiencies**

Use Group: Mixed Use, R2 Residential, B Business, S2 Storage. Construction Type: Type IIB Building within area and height limitations. Required Fire separation between uses: Two Hours (Minimal maintenance of vehicles) There is no fire sprinkler system in the building.

The floor between the apparatus room and second floor has exposed steel that needs to have a a hour fire rating A fire sprinkler system is recommended for the

2 hour fire rating. A fire sprinkler system is recommended for the building.

Existing stairs are narrow and only have one handrail. Adding a second handrail will reduce the stairs, between handrails, to a little over 3'-0" which is acceptable only when the second floor occupant load is less than





50 people. The code occupancy is in excess of 50 people. The exterior exit route to North Main Street has an excessively high step that should be replaced with a ramp.

The concrete pad at the exit to the south stair is cracked and needs replacement to a pad with a ramp.

#### **ADA Deficiencies**



Ramped access to the building is provided on the north end of the building. The entrance door is labeled "Authorized Personnel Only" and should be changed to be the primary public access.

Stairs are not of sufficient width to be accessible and only have handrails on one side.

Second floor toilet rooms and showers are not accessible and need to be replaced. First floor toilet rooms are accessible but require modifications such as adding the swing up railing. Drinking fountain is not accessible.

Kitchen sink is not ADA compliant.

Door knob sets need to be replaced with levers.

#### **Hazardous Materials**

Pipe elbows in the boiler room may contain asbestos.

Mechanical, Electrical, Plumbing and other services. (Refer to Appendix 'B', Mechanical and Electrical Systems, Existing Conditions Narrative).

In general with the exception of the domestic hot water system, emergency generator, and vehicle exhaust system, the systems are 25+ years old and have met their useful life expectancy. The system components are very inefficient. The ventilation system does not meet current code requirements. We recommend that most of the systems be replaced with new.

#### **Structural Systems**

Roof Structure:	Tectum Decking on steel bulb-tees supported by structural steel framing.
Second Floor Structure	:: Reinforced, cast-in-place concrete floor slab supported by structural steel framing.
First Floor:	Concrete slab-on-grade construction. Significant shrinkage cracks occur in the apparatus bays.
Structural Frame:	Structural steel. Steel Beams in the east and west walls and columns at overhead doors are encased in concrete.
Condition:	The concrete encasement of second floor perimeter beams is failing. Cracks and spalls exist which need to be repaired. It is unknown if the

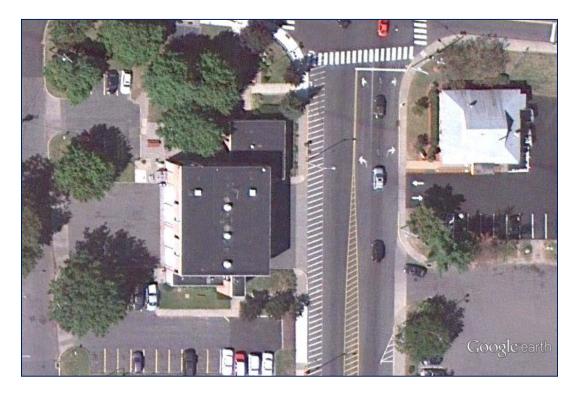




steel shelf angle carrying the second floor brick is secured only to the concrete of if it has direct connection to the steel beam. Shrinkage cracks exist between the floor drains of the apparatus room.

#### **Available Parking**

There are currently 27 parking spaces for the building on site with on street parking available. Redesigning the parking would result in 32 spaces. If an expansion occurs on the site the number could be 29 but this assumes the expansion will include an extra bay for fire equipment current located outside.



## **Use Recommendations**

#### 1. Fire Department HQ

a. The current building is undersized for the needs of the Fire Department and parking is tight.

### **OPTION FD 1**

A scheme has been developed that expands upon the 2004 study by adding an additional apparatus bay. The site is able to handle the expansion with a slight increase in the parking.

#### **OPTION FD 2**

If the maintenance portion of the building could be relocated off-site it would provide an additional bay for vehicles permitting an expansion similar to that indicated in the 2004 study but with a revised site layout to increase parking.

OPTION FD 3 Another option would be to relocate the building to the site of the Bingham School. In order to accomplish this, the school would need to be totally demolished. The school site is adequate for the needs of an expanded facility with plenty of parking. Within this option it would also be possible to construct a vehicle maintenance building to the rear of the site (possibly a metal building) reducing the size of the new main building.

### 2. Sell Building

- a. It has been reported that a local developer has expressed some interest in purchasing the current facility. If this was done then an entirely new facility would need to be constructed. (See Bingham School site option above).
- b. Lease the building for retail (first floor) and office space (second floor). Upgrades including an elevator will be required.

### FIRE DEPARTMENT HEADQUARTERS

Interiors Conditions Survey

Rating : 1 = Good; 2 = Needs Refinished; 3 = Replace

Rm #	Name	Floor	Rating	Walls	Rating	Ceiling	Rating	Notes
101	Apparatus Room	Concrete	1	Brick	1	Concrete Deck		Some leaks from 2nd level
				GWB	2	Steel Beam		Some rusting on steel beam
								Asbestos hanging from pipes
								Some pipe leaks at ceiling
102	Repair Bay							
103	Storage	Concrete	2	Brick	1	Tectum	2	
104	Shop Area	Concrete	2	Brick	1	Tectum	2	
106	Boiler Room	Concrete	2	CMU	2	Concrete	2	
						Steel	2	
	Stair (#1)	Concrete	2	Brick*	1	Ptd GWB	2	* Efflorescence on brick
107	Equipment	Ptd Concrete	1	Brick	1	Concrete Deck	1	
						Steel	1	
108	Toilet	VCT	3	Brick	1	2x4 SAP	1	
				GWB	1			
109	Oil	Concrete	2	Ptd CMU	2	2x4 SAP	3	
110	Office	Carpet	1	Ptd CMU	1	2x2 SAP	1	Some stained panels
111	Office	Carpet	1	Ptd CMU	1	2x2 SAP	1	Window trim missing
								Stained ceiling panels
112	Fire Marshall Offices	Carpet	1	Ptd CMU	1	2x2 SAP	1	Refinish radiator
				Ptd GWB	1			
113	Waiting							
114	Fire Marshall Storage	Carpet	1	Ptd CMU	1	2x2 SAP	1	
115	Computer Room	Concrete	1	Ptd CMU	2	Tectum	2	Cracked CM in wall
116	Chief	Carpet	1	Ptd CMU	1	2x2 SAP	1	
117	Admin	Carpet	1	Ptd CMU	1	2x2 SAP	1	
118	Hall	Norament	1	Brick	1	2x2 SAP	1	
119	Hall	Norament	1	Brick	1		Ì	
				GWB	1			
201	Dorm	VCT	1	Ptd CMU	1	2x4 SAP	3	
				Brick	1			
202	Locker	VCT	2	Brick	1	2x4 SAP	2	

### FIRE DEPARTMENT HEADQUARTERS

Interiors Conditions Survey

Rating : 1 = Good; 2 = Needs Refinished; 3 = Replace

Rm #	Name	Floor	Rating	Walls	Rating	Ceiling	Rating	Notes
203	Toilet	VCT	2	Brick	2	2x4 SAP	2	Replace Brick Shower
204	Meeting	VCT	1	Brick	1	2x4 SAP	1	Black grid
				Ptd CMU	2			
205	Day Room	VCT	1	Brick		2x4 SAP	2	Sagging/discolored ceiling panels
				Ptd CMU	1			
206	Hall	VCT	1	Ptd CMU	2	2x4 SAP	1	
				Brick				
207	Kitchen	СТ	1	Ptd CMU	1	2x4 SAP	1	Black grid
				Ptd GWB	1			
208	Office toilet	VCT	1	Brick		2x4 SAP	3	Brick in shower & toilet
								Ceiling leaks
								Shower doesn't drain
								Unsanitary
209	Offices	VCT	1	Ptd CMU	1	2x4 SAP	2	Outside wall separating
210	Offices	VCT	1	Ptd CMU	1	2x4 SAP	2	Outside wall separating
211	Offices	VCT	1	Ptd CMU	1	2x4 SAP	2	Outside wall separating
212	Slide Pole	VCT	1	Ptd CMU	2	2x4 SAP	3	
				Ptd GWB	2			
	Stair (#2)	Ptd Concrete	2	Brick*		2x4 SAP	2	*Efflorescence on outside walls
						Ptd GWB	1	
								GENERAL:
								Windows: Seals failing.
								Second Floor exterior wall failing. See photos.
								Floor drains in Apparatus Room constantly
								plugged.



# <u>Mechanical and Electrical Systems</u> <u>Existing Conditions Narrative</u>

Fire Headquarters Bristol, Connecticut

November1, 2011

Prepared By <u>Consulting Engineering Services, Inc.</u> 811 Middle Street, Middletown, Connecticut 06457 CES Project No. 2011127.00

### APPLICABLE CODES AND STANDARDS

The mechanical, electrical, plumbing, and fire protection systems will be reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

- A. 2005 Connecticut State Building Code
- B. 2005 Connecticut State Fire Safety Code
- C. 2003 International Building Code(IBC)
- D. 2003 International Plumbing Code
- E. 2003 International Energy Conservation Code
- F. NFPA, All applicable code sections, Latest Version
- G. ASHRAE 90.1

#### PLUMBING NARRATIVE

#### PLUMBING UTILITIES

- 1. Domestic Water:
  - a. <u>Existing Domestic Water Service</u>: The existing building is currently served by a 2 inch domestic water service. The domestic water service equipment includes a 1 ½ inch water meter, pressure reducing valve, and isolation valves. This water service currently serves all of the building's domestic water needs and has adequate pressure. The water distribution system is original to the building.



- 2. Natural Gas:
  - a. <u>Existing Natural Gas Service:</u> There is currently no natural gas service to the building.
- 3. Sanitary:
  - a. <u>Existing Sanitary Service:</u> The sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the building. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping to the buildings exterior and to the municipal sewer system.
- 4. Storm:

- a. The storm piping is primarily cast iron and drains to the municipal storm water system. There are no secondary roof drains.
- b. There are areas of the storm water system where the piping has been replaced with PVC. Further investigation should be done to determine the exact cause of the failure.



c. There are no reports of problems with the storm water piping below grade.

### PLUMBING FIXTURES AND SPECIALTIES

- 1. Existing plumbing fixtures are as follows:
  - Water closets are floor or wall mounted; flush valve, vitreous china. These fixtures are non-water conserving type in fair condition. Most of these fixtures are non-ADA compliant.





• Urinals are wall hung, vitreous china, with flush valves. These are non-water conserving type and in fair condition.



• Lavatories are wall hung vitreous china. Faucets are a combination of single lever handle and two lever handle faucets. The lavatories are in fair condition. The faucets and drains are non-ADA compliant.



• Drinking fountains are floor mounted steel units, non-ADA compliant and in fair condition.



• A stainless steel sink with two lever gooseneck type faucet and spray hose has recently been added to the kitchen. This sink is non-ADA compliant and in good condition.



• Janitor sinks are wall mounted cast iron units with two lever faucets. There is no vacuum breaker present at these sinks. The sinks are original to the building and in poor condition.



• The showers are constructed of brick with terrazzo type bases. The showers have single lever operators. These showers are non-ADA compliant and in poor condition.





### DOMESTIC HOT WATER SYSTEMS

1. The existing domestic hot water system includes a Triangle Phase III indirect water heater which is fed from the existing boiler. The system also includes an A.O. Smith Model ECT 80-200 electric water heater. This equipment is in fair to good condition.





### FIRE PROTECTION NARRATIVE

### FIRE PROTECTION SERVICE

1. There is no fire protection system (sprinklers) currently at the building.

#### **MECHANICAL SYSTEMS:**

#### **EXISTING SYSTEMS**

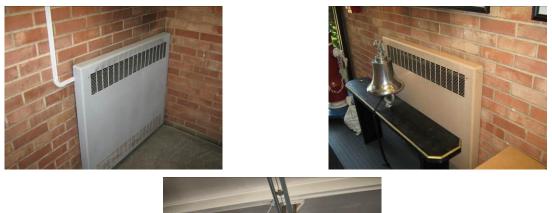
1. The existing building is heated by a single H.B. Smith oil fired hot water boiler. The oil burner is a Carlin Model 702 CRD. The boiler is in fair condition. The oil burner is in good condition.



2. There are (3) zones for the heating hot water. Three (3) in-line circulator pumps push water to the three zones. These hot water pumps are in poor condition.



3. The present heating system also includes hot water cabinet unit heaters and baseboard radiators in the occupied areas of the building. Ceiling mounted fan powered unit heaters are located in the apparatus bays.





4. There are ceiling mounted fan coil units with supply air ductwork, ceiling mounted supply air diffusers, a single return, and remote condensing units for air conditioning. There are complaints from the occupants because of poor air distribution from these units. This equipment is in poor condition.

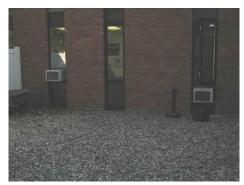




- 5. Toilet exhaust fans are located on the roof. This equipment is in poor condition.
- 6. The apparatus bays include a vehicle exhaust removal system manufactured by Plymovent. This includes flexible air hoses connected to the apparatus, support rails for the flexible hose, exhaust ductwork, fans and controls. This equipment is in good condition.



7. Window type air conditioning units have been added to supplement the overhead distribution system.



8. There are (2) separate fuel oil tanks on site. (1) 8000 gallon tank and (1) 4500 tank. The age and condition of these tanks is unknown.

### ELECTRICAL NARRATIVE

### **EXISTING SYSTEMS**

 The building is served by a single electrical service rated 400amperes, 208Y/120volts, 3-phase, 4-wire. This service equipment consists of a 400amp main disconnect switch, panelboards and metering per utility company requirements. The service equipment is original to the building and is in fair condition.





2. There are a number of electrical panels located throughout the facility. These panelboards are original to the facility. The condition of these panelboards is fair. The majority of the panelboards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.



3. The lighting throughout the facility consists primarily of recessed mounted acrylic lensed fluorescent fixtures in the occupied spaces and industrial fluorescent fixtures in the apparatus bays and storage areas. There are other miscellaneous fixtures spotted throughout the building. Most of the lighting is older T12 technology and should be upgraded. There are other fixtures using incandescent lamps that are in poor condition that should be replaced. There are also other fixtures that are damaged that should be replaced. The lighting ranges from poor to fair condition.





4. Site lighting is limited and consists of building mounted flood lights. These fixtures are not energy efficient and are in poor condition.





5. The fire alarm system is manufactured by Simplex, Model 4004. The system includes manual pull stations, horn strobes, and ceiling mounted smoke or heat detectors. This system is in good condition. The coverage if smoke detectors and other devices appear to be inadequate. Additional devices, such as horn/strobe units, are required to comply with current ADA requirements.





7. The emergency lighting is provided by the emergency generator. This emergency generator serves the entire facility. The emergency generator consists of an external generator manufactured by Cummins/Onan, weatherproof enclosure, base mounted fuel tank, and 400amp automatic transfer switch. This equipment is in very good condition.





8. The exit signs consist of fluorescent exit signs, some including batteries. This equipment is in fair condition.

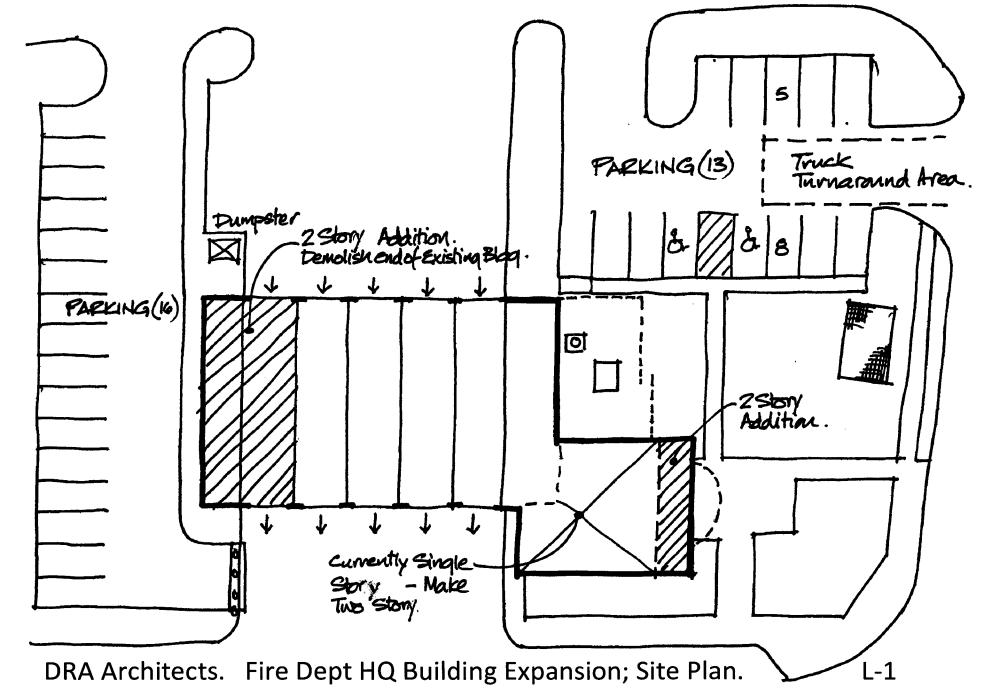


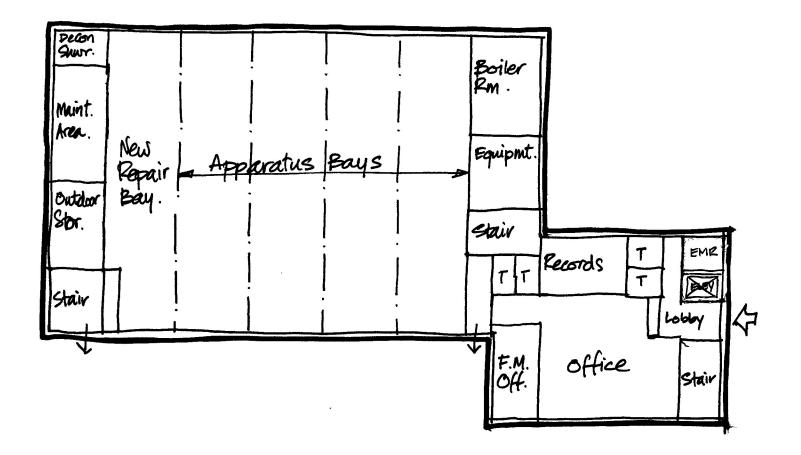
### **MEP SYSTEMS CONCLUSION**

In general with the exception of the domestic hot water system, emergency generator, and vehicle exhaust system, the systems are 25+ years old and have met their useful life expectancy. The system components are very inefficient. The ventilation system does not meet current code requirements. We recommend that most of the systems be replaced with new.

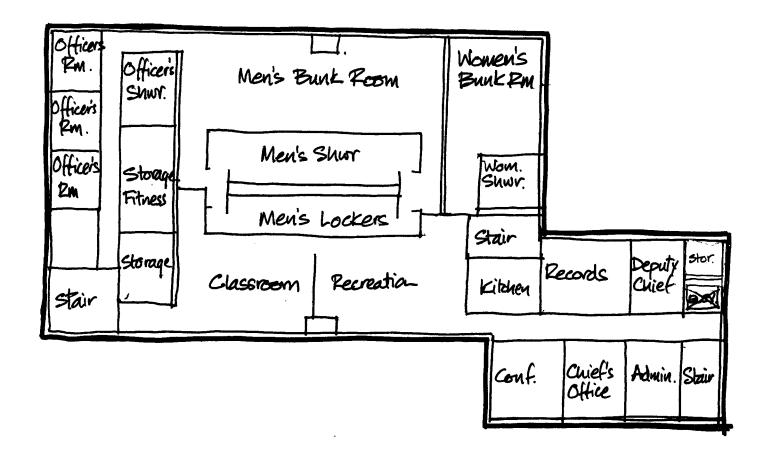
## Space Summary- Bristol Fire Department Head Quarters

FIRE DEPARTMENT BREAKDOWN	EXISTING		OPTION FD 1	
	Current Space SF	Floor	Proposed SF	Floor
	·		·	
Chief's Office	230	1	255	2
Administration	140	1	184	2
Fire Marshal's Office	90	1	147	1
General office	370	1	490	1
Copier	95	1	0	
Computer Room	45	1	0	
Break Room	70	1	0	
Toilet	80	1	102	1
Equipment	200	1	395	1
Apparatus Room	2454	1	3338	1
Repair Bay	809	1	883	1
Maintenance	200	1	203	1
Classroom	500	2	500	2
Recreation Area	550	2	550	2
Kitchen		2	235	2
Men's Toilet/Showers	290	2	290	2
Men's Lockers	280	2	280	2
Dormitory	1035	2	1035	2
Officer 1	115	2	120	2
Officer 2	100	2	120	2
Officer 3		2	120	2
Officers Toilet		2	168	2
Closet	20	2	0	
New Required Spaces:				
Clean Room			123	1
Outdoor Storage			146	1
Shop Area			203	1
1st Floor Records Room			200	
Women's Dormitory			342	2
Women's Toilet/Shower Room			203	2
Deputy Chief			178	2
Conference Room			240	2
2nd Floor Records Room			287	2
Fitness Room			380	2
Storage			137	2
Storage			143	2
TOTAL NET SF		<b>0</b> 4 5 1	11997	
COMMON AREAS & WALLS	2118	21%	3083	20%
TOTAL BUILDING AREA SF	10196		15080	

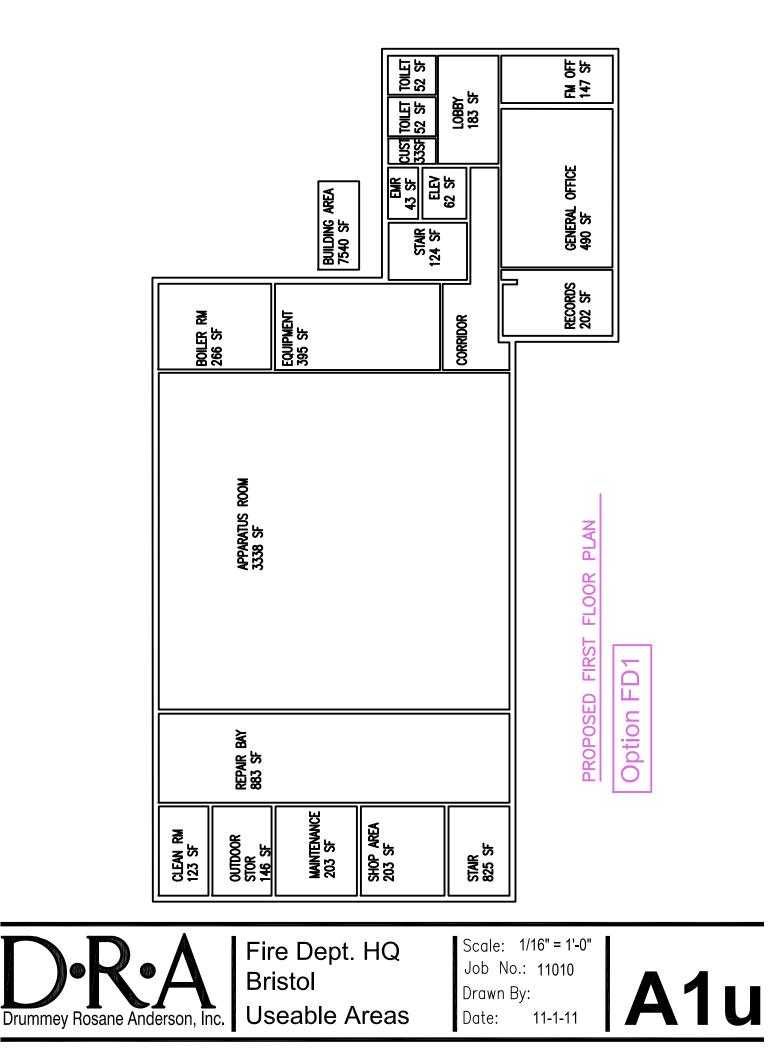


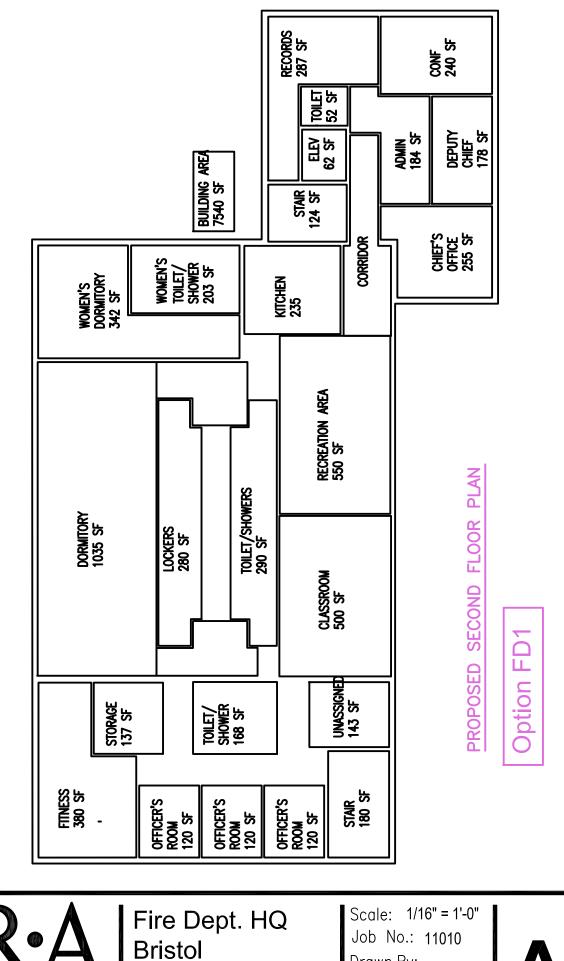


DRA Architects. Fire Department HQ Renovations; First Floor



DRA Architects. Fire Department HQ Renovations; Second Floor.



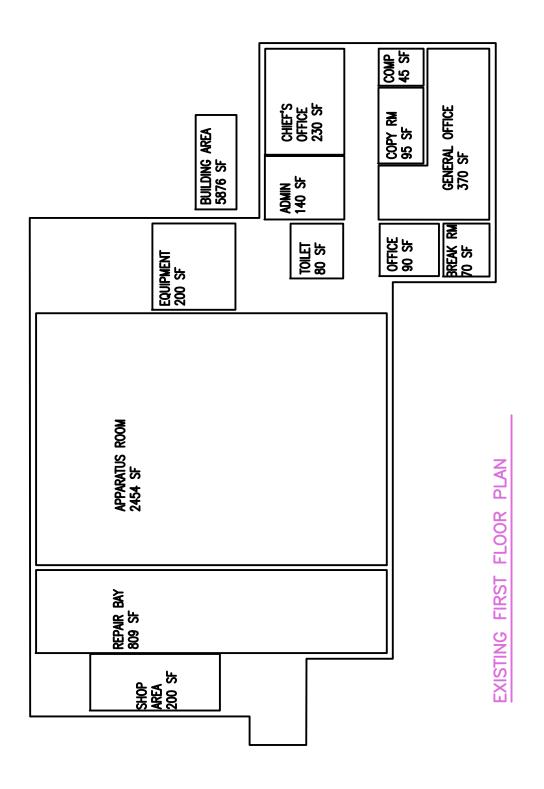


**Useable Areas** 

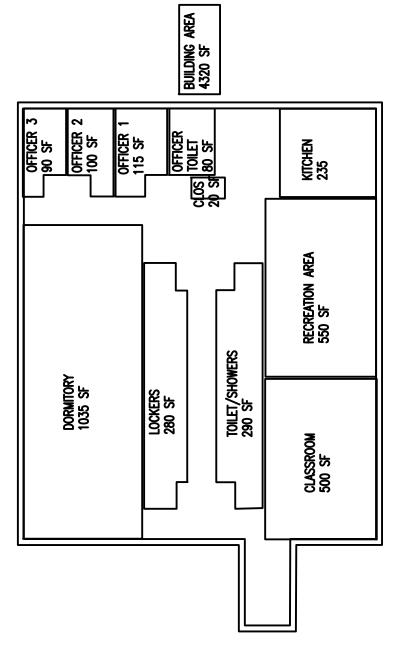
Drummey Rosane Anderson, Inc.

A2u Drawn By: 11-1-11

Date:

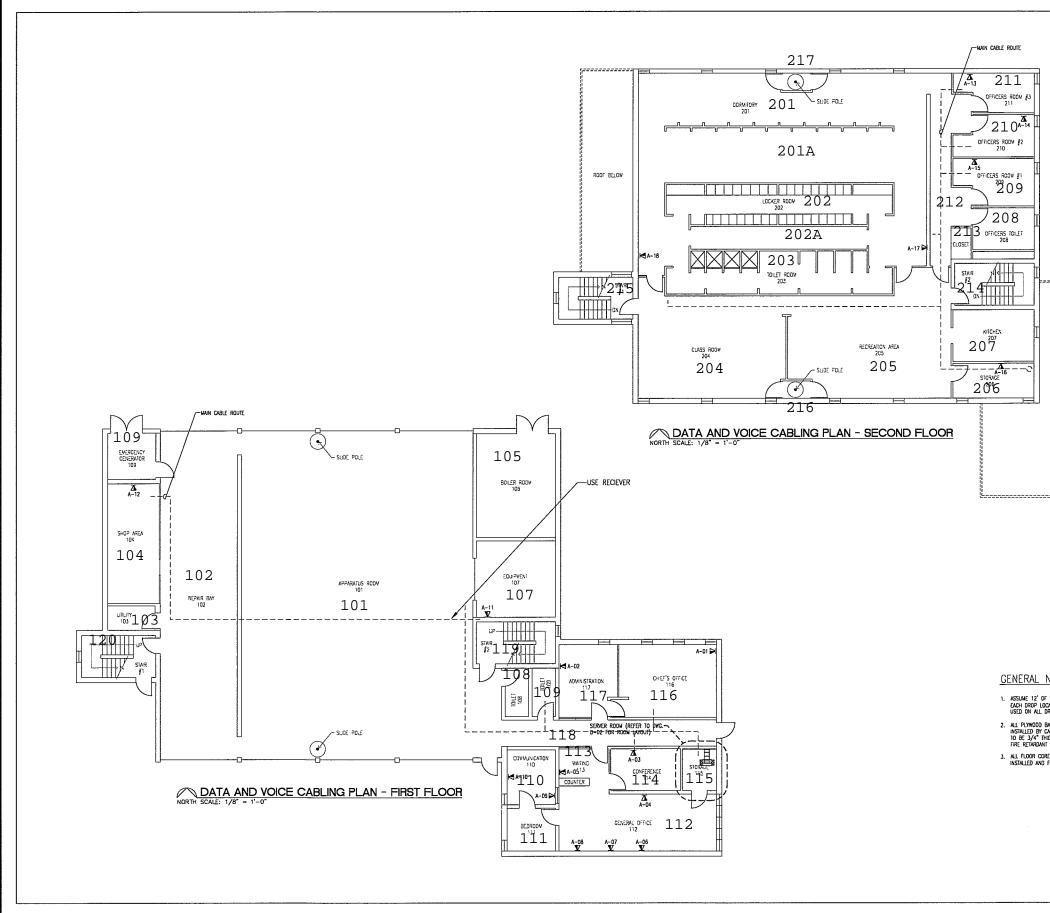












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	MCGLADREY & PULLEN, LLP Certified Public Accountants and Consultants
	PROJECT NAME: City of Bristol Connecticut Bristol, Connecticut Centrol Fire Headquarters
	PROJECT NUMBER:    378-992-6    SYMBOLS & ABBREVIATIONS    STAFF" DROP LOCATION    2 DATA CABLES    1 VOICE CABLE SPLIT    PUBLIC" DROP LOCATION    2 DATA CABLES    O VOICE CABLES    INDICATES 2 PUBLIC DROPS    4 DATA CABLES    O VOICE CABLES    INDICATES 1 PUBLIC DROPS    4 DATA CABLES    O VOICE CABLES    NO 1 STAFF DROP    4 DATA CABLES    INDICATES 1 PUBLIC DROP    4 DATA CABLES    INDICATES 1 PUBLIC DROP    4 DATA CABLES    INDICATES 1 PUBLIC DROP    4 DATA CABLES    1 VOICE CABLE SPLIT    AFF ABOVE FINISHED FLOOR    E.C. ELECTRICAL CONTRACTOR    MDF MAIN DISTRIBUTION FRAME    LABELING LEGEND   POSITION ON PATCH PANEL    MA_11   PATCH PANEL IDENTIFICATION    REVISIONS:    NO.  DESCRIPTION    0  FOR INFORMATION
AL NOTES 12' of sufface raceway associated with polocition, wall board adapter is to be all drops with fishade walls. 000 backboard is to be suppled and 19' carling contractor. All peymood 4'' truck and panted with 2 carls of by carling contractor. All peymood 4'' truck and panted with 2 carls of back fire stopped by carling contractor	1  FOR BD / CONSTRUCTION  04-28-97    2  CONSTRUCTION PLAN  8-20-98    DESCRIPTION:
	D-01

#### **CITY OF BRISTOL**

#### **Building Use Study**

#### Recommendations for Building Uses.

April 12, 2012

Four potential scenarios have been identified in this study to solve the City's space needs and disposition of its buildings. Of the options presented we recommend Option D.

Option D has the highest cost but the properties that will be available for sale are the most desirable and may result in a higher demand and quicker sale. The economy is currently depressed and property is not moving so any sale may take considerable time to realize.

Our recommendations below are listed in "Work Groups" however, the work groups need not be performed in the order listed but can be re-arranged in order of preference and availability of funds.

Following the survey of buildings the two uses that were in the greatest need for expansion were the Police and Fire Departments.

The Police Department in particular is locked into a space that cannot provide expansion unless the Superior Court moved out, which appears to be unlikely. The Police Department's location is improved because of the parking garage that is used for cruisers and any relocation should take this into consideration.

The Fire Department is located on a tight site but one that can accommodate an expansion/renovation that would meet their needs. However, during construction a temporary location will be required as the work is extensive.

#### Work Group One

Demolish Bingham School.

Initially, only a metal building will be constructed that would be used as a temporary location for the Fire Department (FD) Headquarters while renovations to the FD building are undertaken. Upon completion the FD will move back to the renovated building.

A new PD facility will then be constructed with the metal building used to house police cruisers.

The current PD space will be available for lease or sale.

Memorial Boulevard School (MBS) is much beloved in the city but there does not appear to be a good opportunity to repurpose the building apart from using it for the City Hall. The sale of this building may also be difficult due to its large size, and inefficient use of space. The loss of the theater will be a negative for the city.

The City Hall function will be able to use the Auditorium and possible support the establishment of a theater group. The current City Hall would be available for sale and has the potential of accommodating many potential uses including, for example, office space and hotel space.

MBS's size will permit the inclusion of the majority of city departments in the building including Youth Services and Parks Department.

#### Work Group Two

Renovate Memorial Boulevard School to accommodate City Hall Functions.

Move City Hall to renovated MBS and sell the current City Hall building.

Move Youth Services to the renovated MBS and sell the Youth Services Building.\* Alternatively, relocate Youth Services to the Beal's Community Center.

Keep Parks Department with City Hall

The Beal's Community is well used as the City's Senior Center and should remain as such. There is a large amount of space that is not being fully utilized. Probate should be moved into the building where it can have its own separate entrance and a waiting area that is lacking in its current location. As mentioned in work group two above, Youth Services can also be accommodated in the community center.

#### Work Group Three

Move Probate into Beal's Community Center.

As an option in work group three Youth Services could also be moved to the Beal's Community Center. The space would be better than at MBS but would separate it from City Hall.

The space occupied by the Superior Court as adequate for their needs, albeit, in need of new finishes.

#### Work Group Four

Leave the Superior Court in its current location

The last building is O'Connell School where potential building uses are limited due to the configuration of the building, its location, but especially the propensity for flooding

#### Work Group Five

Demolish the main school building and re-grade area to create a public park.

Retain gymnasium building for community use.

\* \* \*

#### CITY OF BRISTOL, CONNECTICUT

#### OPTIONS MATRIX March 16, 2012

	Γ		OF	PTION A			OP	TION B			0	PTION C		0	PTION D		Cost to Mothball		
Building	Description	Extent o Scope (Building Area)	Cost/SE		Cost	Extent of Scope (Building Area)	Cost/ SF		Cost	Extent of Scope (Building Area)	Cost/ SF	Cost	Extent of Scope (Building Area)	Cost/ SF		Cost	Extent of Scope (Building Area)	Cost/ SF	Cost
City Hall	City Hall function to remain. Redefine spaces and locations within building	60,1	11	\$	17,018,000.00					60,141		\$ 17,018,000.00							
City Hall	Relocate City Hall to Memorial Boulevard School. Renovate school for new function							s	22,294,416.00							22,294,416.00			
	Auditorium Renovation					105,970		\$	2,010,000.00				105,970		\$	2,010,000.00			
Police Dept.	Renovate and expand police into court space	35,5	00	Ś	10,636,000.00	35,500		Ś	10,636,000.00										
Police Dept.	Construct new Police facility at Bingham School Site			Ŷ	10,000,000.00	55,500		¥	10,000,000,000	35,500		\$ 16,079,000.00	35,500		4	16,079,000.00			
	Metal Building Garage at Bingham School Site									20,000		\$ 2,825,000.00	20,000		\$	2,825,000.00			
Building Dept.	Relocate to court space.			Ś	757,000.00														I
Building Dept.	Include in City Hall Renovations above.																		
Building Dept.	Include in Mem. Blvd Renovations above.																		
Probate	Relocate to Senior Center building	23	10	\$	815,000.00	2310		\$	815,000.00	2310		\$ 815,000.00	2310		\$	815,000.00			
Youth Services	Relocate to Senior Center building Included in City Hall Renovations above.									5525		\$ 1,406,000.00							
	Included in City Hall relocation to Mem. Blvd. Sch.			\$	-														
Parks Dept	Include in City Hall relocation to Mem. Blvd. Sch. Relocate to City park																		
		_		\$	277,000.00							\$ 277,000.00							
Superior Court	Renovate in current location	24,290		\$	5,292,000.00					24,290		\$ 5,292,000.00			\$	5,292,000.00			
Superior Court	Relocate to Bingham School			_		16,538		\$	6,210,000.00										
Fire Dept.	Renovate & expand current building headquarters*					15,080		\$	4,384,000.00	15,080		\$ 4,384,000.00	15,080		\$	4,384,000.00			
Fire Dept.	Construct new Fire Dept HQ. Demolish Bingham School.	15,080		\$	5,353,000.00														ļ
Senior Center	No changes required.			\$	-			\$	-			\$ -			\$	-			

#### CITY OF BRISTOL, CONNECTICUT

#### OPTIONS MATRIX March 16, 2012

	OPTION A OPTION B				OPTION C				0	PTION D	Cost to Mothball						
Building	Description		Extent of Scope (Building Area)	Cost/ SF	Cost	Extent of Scope (Building Area)	Cost/ SF	Cost	Extent of Scope (Building Area)	Cost/ SF	Cost	Extent of Scope (Building Area)	Cost/ SF	Cost	Extent of Scope (Building Area)	Cost/ SF	Cost
O'Connell School	Demolish building and create neighborhood park.							\$ 1,458,000.00			\$ 1,458,000.00						
O'Connell School	Demolish classroom wing, renovate gymnasium and create neighborhood park				\$ 2,374,000.00									\$ 2.374.000.00			
O'Connell School	Mothball Building				\$ -										50,500	)	\$166,6
Memorial Blvd Sch.	Mothball Building				\$ 317,910.00						\$ 317,910.00				105,970	)	\$ 349,701.0
Bingham School	Mothball Building														50,505		\$166,66
Bingham School	Demolish				\$ 808,360.00						\$ 808,360.00			\$ 808,360.00			
					\$ 43,648,270.00			\$ 47,807,416.00			\$ 50,680,270.00			\$ 56,881,776.00			\$683,01
Excess pro	operty for sale		Youth Servi	ces		City Hall			Memorial E	Boulevard		City Hall					
			Fire Depart Memorial B			Youth Servi Bingham Pa			Youth Serv Police Depa			Police De Youth Sei					

\* Fire department to be distributed to all other fire departments during construction except for options C & D where metal building at Bingham will provide temporary HQ's.

### CITY OF BRISTOL BUILDING USE OPTIONS

						1	NEW	LOCA	TION	OR D	ISPOS	ITION					
OPTIONS Option A Option B Option C Option D DEPARTMENT/USE	СІТУ НАП			POLICE	SUPERIOR COURT	FIRE DEPARTMENT HQ	YOUTH SERVICES	SENIOR CENTER	BINGHAM SCHOOL	D'CONNEL SCHOOL	MEMORIAL BLVD SCHO	OTHER LOCATION	DEMOLISH	PORTIONS VACANT	PARTIAL DEMOLITION	NEW PARK	MOTH BALLING
CITY HALL			Π	ĪT	Ш		Í	ΠŤ		ΠŪ		ШŤ	ĪĪĪ	ΠĒ			
POLICE																	
BUILDING DEPARTMENT																	
PROBATE																	
YOUTH SERVICES																	
PARKS DEPARTMENT																	
SUPERIOR COURT																	
FIRE DEPARTMENT HQ		T	Ħ	Ħ													
SENIOR CENTER																	
BINGHAM SCHOOL																	
O'CONNEL SCHOOL			Ħ														
MEMORIAL BLVD SCHOOL									╏┼┼┼	╏╎╎┤		╏╎╎┨					

# SPACE NEEDS ANALYSIS, BRISTOL, CONNECTICUT Potential Building Uses

### GENERAL

There are a series of basic options that are available in consideration of the disposition of each of the surveyed building:

- Demolish the facility and determine a new use for the land. This would be last resort as the resource will be lost, unless there is a valuable reuse of the land.
- Mothball the building for future use. Being in a week market, and having no potential users, the idea of mothballing a facility would allow for future development of a valuable resource.
- Reuse the building for a City Use. This is ideally suited for buildings that would not be desirable for private use.
- Reuse the building for private use through a sale or lease arrangement. Desirability of building and location together with the ratio of useable floor area to building area must be strong considerations for this approach.
- Provide swing space for renovations to other buildings and then one of the above.

The following is a status of potential uses for the buildings.

### MEMORIAL BOULEVARD SCHOOL

This is a large beloved building within the community with attractive facades. If a suitable use cannot be found it is highly unlikely that it would be demolished, but rather it would be moth-balled for an appropriate future use.

Possible Uses:

- 1. City Hall
  - a. The building is capable of accommodating all city departments housed within the existing City Hall plus Youth Services and still have space for future expansion. Probate could also be located in this building.
  - b. The theater space would be able to function in support of City Hall but also independently for theater and similar performance groups.
  - c. The gymnasium area would support and expand the youth center functions

### 2. Residential

 Much housing has been proposed by the Renaissance group including the construction of new units around the perimeter of the Memorial Boulevard School playing field. Rather than construct the new housing the school could be re-purposed for housing units. The theater area would remain independent for theater and similar performance groups.

### 3. Educational

a. A performing arts magnet school was explored by the Renaissance group and would not be supported at the State level due to two existing facilities located in Waterbury and Hartford.

b. There has not been an expression of interest but the theatre gymnasium and a portion of the classroom areas would be a great foundation for the development of a performing arts program for a Community College.

### 4. Sale for Commercial Use

a. The building although attractive would have a low desirability for a commercial use due to the net to gross ratio.

## O'CONNELL SCHOOL

AMS has provided a market analysis for the building (See Appendices) that has resulted in suggestions for the following uses:

Reuse Options	Market Strength	Locational Strength	Community Impact	Overall Assessment
Senior Rental Housing - Affordable	High	High	Positive	For senior Housing, O'Connell has some advantages over Bingham including stronger residential location, less traffic and better tie-in into the neighborhood. One thought is to break off auditorium from the main building and use as Recreation Center
Housing - Affordable	High	Moderate High	Depends on Target Market	While its unclear if there would be support for another affordable housing project in the city unless it was for seniors, there are a number of special needs groups in need of housing ranging from Veterans to Disabled persons. Obviously given this is city property, the city and the neighborhood would have to approve the target market.
Market Rate Rental Housing	Very Low	Low	Positive	Data is pretty conclusive that this location/market area would not support the level of rents needed to offset rehab costs without public assistance. Market rate housing is not an option – though mixed income housing might be.
Community Center	Moderate-High	Moderate	Very Positive	While conversion to a community center would likely represent the highest and best use for West End residents, it is hard to envision a scenario that does not involve the city underwriting on-going maintenance. This of course is separate from the capital funding needed to upgrade the facility to meet building code requirements. For this to happen, an organization or sponsor on the level of a Boys and Girls Club would be required.
Recreation Center	Moderate-High	High	Very Positive	One of the more intriguing scenarios for O'Connell and one that is doable due to building configuration is the creation of a community recreation center centering only on the auditorium. The city would need to maintain ownership but the costs of repair and ongoing maintenance are potentially manageable. The community in turn is able to preserve a recreation component for neighborhood use. The space can also be rented out or used by community for a range of uses including meetings, dinners, reunions, performances, ect.

### Residential

A sample layout for a rental unit in a typical classroom was developed and is included in the appendix. There is space to create a "moat" around portions of the building to lower the window sills into the basement level.

Land area is such that in addition to parking it would be possible to create gardens for growing vegetables for the residents.

The gymnasium would need to function independently of the housing, possibly being run by Youth Services. Before the water damage to the gymnasium floors there has been a high demand for renting the gymnasium space in the evenings and at weekends. There did not appear to be a high demand new construction use for the site if the classroom portion of the building was demolished. The gymnasium portion could function independently if the classroom wing was demolished.

The largest drawback to any potential use on the site is the uncertainty of continued flooding of the site.

### **BINGHAM SCHOOL**

The school's location on busy Route 6 provides a high level of visibility for the potential users. Separated from the retail district to the east, the building will need a strong identity to draws users. AMS performed the following assessment:

Reuse Options	Market Strength	Locational Strength	Community Impact	Overall Assessment
Senior Rental Housing - Affordable	High	High	Positive	Strong Option but will need public financial support
Market Rate Rental Housing	Low	Moderate	Positive	Existence of new market rate housing near downtown would be positive but more work is needed in downtown to bring this about – not a likely option at this time
Artists Housing	Moderate-High	High– though arts tenant base will need to be drawn wide area.	Positive	Artists housing is often looked as an option in areas in need of jump-start to downtown revitalization efforts. It's best undertaken by groups familiar with such housing and the type of marketing needed meet lease-up. Offers benefit of a commercial element. Needs subsidy to work. Considered a moderate re-use opt.
Medical Office Building	Low-Moderate	Moderate	Positive	As a submarket of the office market, Medical Office Buildings is the strong sector. However, the positives linked with location and possible connection with Bristol Hospital might be enough to tip this towards MOB use. Opportunity viewed as low to moderate.
Vocational –Technical School	Low-Moderate	High	Positive	This might represent a multi-tenant opportunity in which a technical school is the prime tenant. The presence of classrooms in the school makes consideration of this use an obvious candidate. The in-roads into this sector by on-line education is a red flag. On the whole, however, this is viewed as a moderate opportunity.
Art-Antiques Center	Low-Moderate	Moderate	Positive	A concept for an art-antique center that can also offer classes is more about vision than market. Typically this kind of use functions best surrounded by similar uses which can be accomplished in a single building. Other advantages include its downtown peripheral location and frontage on Route 6 (easy access). Parking should be easy as well. The one caveat is that this market has been hard hit by the recession and online trading. Thus tenant costs will need to be very reasonable in order to attract and maintain a core tenant base. However, this may make it difficult to underwrite building cost and improvements.

### In addition to the above the following options were also discussed:

### 1. Court and Legal Offices

- a. With the demands for space in both the Police Department and City Hall one option would be to relocate the Superior Court to Bingham School. The court currently leases space from the City and would be happy not to change anything.
- b. There is ample space in the school to accommodate the court but there would need to be a number of improvements made to separate detainees from the public (separate elevators, holding cell etc.).
- c. Unused floor area could be leased for legal offices or bail bondsmen.

### 2. Retail

- a. The existing wide hallways offer good circulation for patrons of the stores and would provide a mini-mall feel. For retail we suggest a themed group of stores to create a destination for the public.
- b. Deliveries to the stores would need to be handled through storage spaces on the lower level. This would also increase the actual display area on the first and second levels.
- c. Addition(s) would include an attractive entrance with elevator and an open stair serving the upper levels.

### 3. Arts and Cultural Center

- a. This approach combines both public and private users, and would be an opportunity to support and develop community groups supporting the arts.
- b. Teaching spaces for various art forms such as pottery, painting and photography would be provided.
- c. Exhibit areas would be included in the large hallways.
- d. Retail areas within the building may include framing shop, knitting supply store, jewelry maker, photography studio, arts and crafts supply etc..
- e. Rentals would probably be below market and would not generate sufficient funds to fully support the public and community uses.
- f.

### 4. Community Center

a. Central to the City the building could be developed into a Community Center for the City.

### 5. Demolition

Demolition of the building provides an opportunity for new construction to resolve the town's space needs. New construction could be considered as an option for the following buildings:

**New Fire Department Headquarters (15,000 SF)** The current Fire Department HQ site is very tight for the needs of the department. Construction a new building on the Bingham site will provide plenty of on-site parking and maneuvering space for fire trucks. There is also an opportunity to construct a free standing building to allow for maintenance of fire trucks.

- a. The site will provide adequate parking and vehicular turning space. The traffic signals on Route 6 would need relocation to avoid conflict with the apron to the street. Route 6 slopes upward to the west and this slope will need to be addressed in the slope of the apron; the building will need to be moved further back from the street for appropriate drainage and slope.
- b.

**New Police Department (35,500 SF** not including undercover parking) The Police Department has no opportunity for expansion at its current location unless the Courts are relocated. One solution would be to construct a new police department building to replace the Bingham School. Police vehicles are currently garaged so it may be desirable to create undercover parking in the new location. Having plenty of land area would allow for a drive-thru sally port.

**Public Safety Complex. (50,000 SF)** Another option would include combining Police and Fire Departments into a single Public Safety Complex resolving the space needs for both Departments.

### **CITY HALL**

### 1. City Hall

- a. If Youth Services are returned to the Building, even with Probate and Parks moving out an expansion of approximately 5,000 SF will be required.
- b. Building expansion could occur in a number of ways. If the courts were relocated an expansion could occur in that space (see Courts). If an addition connected the Police building and City Hall a third floor expansion would be possible (see Police).
- c. This is a good central location.

#### 2. Commercial

a. The building lends itself to commercial use as office space but the market is so depressed at this time this option has not been explored.

#### 3. Residential

 a. This is a solid structure and could lend itself to many uses. Residential is one of them. Its proximity the proposed Depot Square redevelopment, however, would be in competition with the proposed housing to be constructed.

### FIRE DEPARTMENT HEADQUARTERS

#### 1. Fire Department HQ

- a. The current site is small and limits the expansion of the facility to accommodate future growth. If the maintenance portion of the building could be relocated off-site it would provide an additional bay for vehicles permitting an expansion similar to that indicated in the 2004 study but with a revised site layout to increase parking.
- b. A scheme has been developed that modifies the recommended design in the 2004 study. It provides additional floor area, an additional bay and much needed additional area in spaces such as equipment storage which is currently overcrowded.

### 2. Sell Building

- a. A local developer has expressed some interest in purchasing the current facility. If this was done then a entirely new facility would need to be constructed. (See Bingham School)
- b. Lease the building for retail (first floor) and office space (second floor). Upgrades including an elevator will be required.

### **BEALS SENIOR COMMUNITY CENTER**

#### 1. Probate Court

a. Probate can easily be accommodated in the excess space within this facility.

#### 2. Senior Center

a. This is an excellent facility for the senior particularly with everything located on a single level. The building is currently being upgraded with the current use in mind. A survey of seniors was performed and resulted in a confirmation that the current location was highly preferred.

#### 3. Youth Services

- a. There is adequate spec in the center to relocate Youth Services into the north wing.
- 4. Over 55 housing

a. The recently vacated wing could be adapted for small independent housing units. The desirability would be enhanced by being contiguous with the Senior Center.

### POLICE DEPARTMENT

#### 1. Police Department

- a. The facility is ideally suited to continue use as a Police Department. Expansion space is however, required with no obvious solution to this.
- b. If the Courts were moved out of the building (see Bingham) this would provide a substantial area for expansion. In fact considerably more space than required for the police. It would be necessary to develop a combination of compatible uses for the space (see Courts)
- c. For security reasons, parking areas in the building should be controlled access for designated individuals in the City.
- d. It would also be possible to create a second and third floor link between the police department building and City Hall. The court area would need to be reconfigured to move the police areas to the front of the building to achieve contiguous space for the second floor police areas. City hall would then be able to expand on the third floor. The first floor could be open to the elements or enclosed to provide a dignified entrance to City Hall. This open area could have multiple uses; kiosk; display space; manned help desk etc.

#### 2. Office Space – Possibly legal office space.

If the Police Department was relocated to a new building (see Bingham School) this floor could be used for office space. Elevator modifications will need to occur and police would need a secure area in the basement garage to transfer inmates to the elevator and up to the Superior Court. A separate public elevator will need to be added for the new occupants of the current police space.

### SUPERIOR COURT

#### 1. Police Department Expansion

a. The facility is ideally suited to accommodate much needed additional space for the Police Department. The police department already occupies the rear of this floor. The court would need to be relocated (see Bingham School)to accommodate this change

#### 2. Building Department

- a. Additional space is needed in City Hall. One solution would be to relocate the Building Department to the area of the Court and thereby eliminate the need for a City Hall expansion. Being a code enforcement department it shares some similarities with the police department. It would also be slightly closer to the Fire Marshal's office in the Fire Department.
- b. Even with the Police Department and Building Department moving to this floor there will be still be considerable unused floor area.

#### 3. Superior Court

a. The floor of the building would remain as is; leased to the State.

### **YOUTH SERVICES**

Youth services are located in a recently renovated structure. One task we were given was to explore if the use could be returned to City Hall.

#### 1. Youth Services in City Hall

- **a.** If youth services are relocated to the current City an expansion of the building will be required.
- **b.** If City Hall is relocated to Memorial Boulevard School Youth Services can be easily accommodated.
- **c.** Current Senior Center would be sold.

#### 2. Youth Services in Beals Senior Center.

- a. There is adequate space in the senior center to accommodate the space needs.
- b. Current Senior Center would be sold.
- 3. No Change in location

\* \* \*