



Analysis of the Town of Bow Police and Fire Facilities

including recommendations for repair and replacement

Prepared by:

Sheerr McCrystal Palson Architecture, Inc.
(603) 526-9347

Omega Structural Engineers, PLLC
(603) 938-6222

WV Engineering Associates, PA
(603)352-7007

Cobb Hill Construction, Inc.
(603) 224-8373

March 2007

Town of Bow, NH

Police & Fire Facilities Needs Assessment

ANALYSIS OF FACILITIES

by Sheerr McCrystal Palson
Architecture, Inc.

Reuse discussions: Appendix A & B

Firm Qualifications: (Appendix C)

STRUCTURAL ENGINEER REPORT

by Omega Structural Engineers, PLLC
Firm Qualifications Included

MECHANICAL, ELECTRICAL, PLUMBING

HVAC ENGINEER REPORT

by WV Engineering Associates, PA
Firm Qualifications Included

POWER POINT IMAGES

CONSTRUCTION COST ESTIMATE

by Cobb Hill Construction, Inc.
Firm qualifications included

ANALYSIS OF THE TOWN OF BOW POLICE AND FIRE FACILITIES

Table of Contents

1. <i>Contents</i>	<i>Page 1</i>
2. <i>Executive Summary</i>	<i>Page 2</i>
3. <i>General Overview and Introduction</i>	<i>Page 3</i>
4. <i>Existing Police Facility</i>	<i>Page 3</i>
○ Access and Location Issues	
○ Police Functional issues	
○ Code Compliance, Regulatory and Safety Issues	
○ Building Operations Issues	
○ Practical Corrective Measures	
○ Inherent Limitations and Lifespan	
○ Logistics of Renovation and Continued Service	
○ Opinion of Probable Cost	
5. <i>Existing Fire Facility</i>	<i>Page 9</i>
○ Access and Location issues	
○ Fire Dept. Functional issues	
○ Code Compliance, Regulatory and Safety Issues	
○ Building Operations Issues	
○ Practical Corrective Measures	
○ Inherent Limitations and Lifespan	
○ Logistics of Renovation and Continued Service	
○ Opinion of Probable Cost	
6. <i>New Combined Safety Facility</i>	<i>Page 13</i>
○ Planning Horizon/Program	
○ Location and Site Requirements	
○ Possible Approaches to Design	
■ Projected Expansion/Phasing Possibilities	
■ Common Shared Facilities	
■ Required Dedicated Areas	
■ Town Context Issues	
■ Initial Cost vs. Ongoing Cost	
○ Logistics of Construction	
7. <i>Possible Reuse of Police and Fire Station Buildings</i>	<i>Appendix A & B</i>
○ <i>Bow Dept. of Public Works : Reuse of Police Station (A)</i>	
○ <i>Bow Parks & Recreation : Reuse of Fire Station (B)</i>	
8. <i>Sheerr McCrystal Palson Architecture, Inc.</i>	<i>Appendix C</i>
○ <i>Qualification Statement & Firm History</i>	
○ <i>Resumes</i>	

Executive Summary

This report examines the current Police and Fire facilities in Bow and compares needed remedial action at each with the probable cost of new combined facility. The report assumes that work on these buildings would be properly executed to current standards and does not make allowances for what could be deferred at the Town's risk or perhaps overlooked altogether.

Neither the existing Police or Fire Departments meet current requirements for safety buildings, and if properly addressed, this would be a very costly fix. Both buildings also fall short on some basic life safety issues that would be a problem for any sort of building, though of the two, the fire station presents the more widespread, built-in and serious problems. It is perfectly understandable how these conditions evolved over many years of making do, and it is not the intention of this report to point fingers or claim that similar problems do not occur in small towns all across the state. Nonetheless, this facility is a virtual museum of ill-advised building practices. These conditions are difficult to correct, but can only continue to be ignored at the Town's peril. To put it another way, if the fire station were your car, it might still be running, but the insurance company would likely total it—the cost to restore it appears to exceed the intrinsic value.

Both facilities have functional deficiencies that reduce the effectiveness of the departments, though once more the effect is more pronounced at the fire station. Both facilities are housed in the same building with unrelated uses that present potential conflicts. The greatest challenge to the police facility may well be that it is not in a good location, either in Bow as a whole or in terms of its immediate neighbors. The net effect of these physical limitations is that both departments are fighting an uphill battle to provide effective, professional services to the Town. This effect may become more noticeable in the coming years of growth.

The preliminary construction estimates provided by Cobb Hill Construction are included under a separate tab for your review. The numbers indicate that the greater value may well be to spend somewhat more to achieve a real and long-term solution to the Town's needs rather than continuing to chase after a series of compounding problems over the years. **It is important to realize that a quick fix of the existing facilities would still likely leave some issues unaddressed, either because the defects are concealed or because they are too imbedded in the structure to change.**

General Overview and Introduction

The Town of Bow encompasses 28.2 square miles of countryside and, as of the last census, is home to nearly 8000 residents. As of this writing, there are an estimated 8200 inhabitants. The two largest population groups are school-aged children 5 to 19 years of age (2026), and those of their parents' age, 35 to 54 (2755). It's a semi-rural residential community.

The town is served by a police force of 12 full-time officers and one full-time administrator. There are an additional 5 part-time officers. Police dispatch personnel include 5 full-time and three part-time personnel. They are housed in a 1987 shared facility with the highway department and transfer station on a five acre site on Robinson Road between Interstate 93 and Route 3A on the northeastern edge of town. They have 7 vehicles, soon to be 8, stored outdoors.

The Bow Fire Department and Rescue Squad consist of six full-time officers (1 Captain, 3 Lieutenants, and 2 Firefighter/EMT's) and 40 on-call personnel. These people provide Bow 24 hour coverage, seven days per week. They occupy a combined fire station recreation center built in 1956 in the north central part of town about 2.75 miles away over the roads from the police department. They have eight on-road vehicles including two ambulances, brush truck and pickup. Dispatch is from Concord.

Due to a history of functional problems in both facilities, the Town has asked for an accounting and evaluation of the significant issues in each facility along with recommendations for practical remedies. Ultimately, this report will compare the feasibility of repair and refurbishment with the cost and difficulty of creating a new combined facility.

Existing Police Facility: Access and Location Issues

The Police Department's location is not optimal from an operational standpoint. It is some miles from the crossroads at the center of town and remote from the location of most emergency calls on the westerly side of town. Even though Interstate 93 is immediately adjacent, over the most direct roads, it is 3.2 miles to get on the highway when the need arises. The Fire Station, by contrast, is less than a mile from the onramp. The P.D. appears to have been located at Robinson Road facility primarily for the economy of building one building for two departments. Though this arrangement benefits the Department in terms of some operational costs and shared maintenance, it also presents clear conflicts by mixing less compatible uses.

Future expansion of this facility on this site, should it become desirable in the future, would be complicated; the site is hemmed in by Interstate 93 to the west and the somewhat steep down slope to the east, ownership issues notwithstanding. Expansion to the north toward Vaughn road might be possible. This suggests relocating the school bus lot to the back/north side of the facility, and expanding police facilities to the south toward Robinson Road.

Site access for emergency vehicles is shared with Highway Department trucks, citizens using the recycling facility, and school bus parking as well as the occasional visitors with Police business. It is clearly preferable to provide dedicated street access for emergency vehicles where possible.

Other than potential vehicular conflicts, the situation poses security problems where incoming prisoners are removed from vehicles a few feet from where the public is delivering recyclable materials on the east side of the building. Recent plans to add a sally port for indoor transfer of prisoners from cruiser to booking were a response to this issue. The practicality of this arrangement with continued public presence in the driveway and the limited turning area is debatable. The safety of all three parties in this scenario, the public, the police and the person in custody is not being adequately addressed at present. The cost of an unfortunate incident could quickly put the cost of the improvement into perspective.

In addition to a sally port, it is also desirable, if possible, to provide covered parking for police vehicles. This equipment represents a considerable investment for the town, and its serviceability should be maintained as is done with other Town vehicles. Providing at least one bay would allow maintenance work or washing on premises.

Police Functional issues

Though the department has adapted as well as it could to the building arrangement, there are other general features that reduce functionality. The two-story arrangement for a police force of this size separates the team more than is desirable or necessary. For example, the Patrol Supervisor is on another floor from the patrol room. The Bow Police Vision Statement calls for “an environment in which our employees are proud to work, it is vital that we encourage open communication, individual responsibility, cooperation and respect among the various divisions within the department.” This vision is not well supported by the facility as it is.

The public/private separation in the building, an especially important consideration for the police, is somewhat compromised by the fact that the largest meeting/training area is on the upper level in the heart of the police operational area. If outside groups are to continue to make use of this space, it should be located with direct outside access not through back-of-the-house areas. Other issues include the public access to toilets, which are all inside the station and out of the public zone.

A more significant problem is the lack of appropriate temporary holding facilities. An arrangement of cells is required for short term, not overnight, housing of people under specific conditions. Juveniles need separate accommodations from adults, and it is also sometimes necessary to separate suspects so that they cannot communicate with each other. The booking room itself is now the only holding area other than internal interview rooms, and it does not meet these requirements. Under limited staffing situations, this situation is less than secure and has resulted in problems in the past.

The lack of regulation evidence storage facilities could also prove a problem in a sensitive situation, and has been a point of contention in court proceedings. Currently evidence is stored in a small store room and in lockers across the hall. Items that do not fit are stored off-site in unsecured storage units. The preferred arrangement is to have a single secured room with capacity for a wide variety of shapes and sizes of evidence. A work station with computer and the capability of logging in the evidence should be inside the room. Access to the inside of this

room is limited to the evidence officer. Other officers should have access only to the outer side of a pass-through evidence locker that open into the secure room.

The Police and Highway Departments appear to be good neighbors, and we have heard no complaints about one getting in the way of the other. Nonetheless some of their uses are intertwined in ways that are less than desirable. For example, mezzanine storage of quantities of spare tires is separated by a drywall partition from the police records room. Of the two means of egress from this mezzanine, one passes through the records room. Highway garage functions are often adjacent and in some cases beneath the Police Department. Some police systems, such as telephone, are actually housed on the highway side. The Highway Department is a working garage and exhaust and diesel fumes commonly permeate the P.D., sometimes resulting in staff re-assignment. More isolation would be prudent.

A separate staff entrance should be added to allow officers to enter the building without engaging the public in the waiting area for a more controlled and professional operation. At present, the booking room offers the only other way into or out of the building, which presents potential problems.

Code Compliance, Regulatory and Safety Issues

This leads to the topic of features of the building that are out of compliance with current building code, police regulatory requirements or other safety considerations. It is important to remember that conditions currently at variance with the code may or may not have been so at the time of construction—this report does not attempt to make that determination. By the same token, a police station is held to a higher standard of safety and durability in the code than other public municipal buildings to assure it will continue to perform when most needed in time of a disaster or crisis.

The building is fundamentally sound, that is there was no evidence of a defect that would lead to imminent collapse. The Structural engineer found the structure to be in acceptable condition for General Occupancy (Category I), though unlikely to measure up to Category III standards as would be required for a new emergency facility. Please refer to the attached report. Of particular note is the lack of connection between the roof and some of the supporting concrete block walls that reduces lateral stability. This shortfall means that the Town should anticipate some disruption of emergency services in the event of significant hurricane or earthquake. Such a risk is difficult to quantify without a much more intensive analysis.

The remaining code issues fall mostly into the categories of life safety and exiting, ADA compliance, mechanical and electrical issues. For the purpose of this report, measured and dimensioned plans of each building were not created; the existing diagrams do not permit detailed analysis for the determination of minor or less obvious violations. Nonetheless, fundamental issues are evident and should be addressed.

The Police Department does not have a sprinkler system, a fact which imposes more stringent life safety requirements. It also lacks a functioning fire alarm system. Reviewing the building layout from a safety perspective, the feature that stands out is the lack of adequate provisions for emergency exiting. Dead end corridors of greater than 20 feet, not leading to an exit are not

permitted. This is to prevent a fire or other hazard from closing off your only path out of the building. This condition exists at both ends of the upper floor and at the eastern end of the lower floor. What may have been intended as a second means of egress from the second floor to the east passes through an intermediate room (records, not permitted) to access a stair leading down to the booking room before exiting the building. A building exit through booking, where prisoners are temporarily locked up, is a fundamental conflict between security and safety. The main floor second exit also passes through booking. It appears that a similar dead end condition was created in the front room of the highway department, probably when the corridor was sealed off (either on paper or in fact) from the Police Department. See floor plans.

The building mixes two uses from two departments. The code requires fire separation between the two distinct tenants since a problem in one space might not be noticed in the other. When you take into account vehicle maintenance in the highway department and the lack of sprinklers throughout, the party wall and the floors where one department is above the other require a three-hour fire separation. This is not present, but might be achieved by adding material to the concrete block partitions. This issue is particularly important in a police facility where some of the occupants may not be free to leave.

ADA compliance may seem a secondary concern in a police facility, but it is required and relevant when you consider that there are a range of job roles within the department and the general public uses the facility. There is more to the ADA than accessibility, but that is a big part. A two story public building without an elevator is a problem. Restrooms designated as accessible do not appear to meet all dimensional requirements. The building fire alarm system lacks appropriate strobes for the hearing impaired, as well as sufficient locations to comply. The system itself has severely limited capabilities compared to current systems as is explained in the engineer's report.

Building Operations Issues

Some building maintenance and operational issues were also evident. The front portion of the building where the police are housed is constructed of a single thickness of concrete block. This creates problems both in heat loss and water infiltration. Un-insulated 8" block has an R value of about 1.3 as opposed to 18 or more for 4" thick glass fiber. The gypsum board, where present, adds about 1.5, if an air space is present. A non-disruptive insulating solution such as exterior EIFS should be evaluated in terms of payback period.

As a result of storm water migrating through the mortar joints, paint is lifting off interior surfaces, and both mineral deposits and some organic growth can be noted. See especially the second floor locker room areas. It is likely that similar conditions in other areas are concealed behind gypsum wall board.

There is a lack of a back-up system to prevent rainwater ponding on the roof in excess of 12" in the event of a clogged roof drain system. This is a potential structural issue. Recent heavy rains have not caused a ponding problem, but there were numerous leaks including one that shorted out receptacles in booking. Sensitive electronics in the building make this fix a priority.

Rapidly-forming rust stains in plumbing fixtures indicate the need to treat the water for dissolved minerals. There is an existing water softener in the highway dept.: it is not in use and should be investigated.

The two gas-fired rooftop heating units appear to be functioning satisfactorily. The only reported issue is the proximity of the rooftop vents for the toilets and for the garage which are too close to the air intakes for the units and should be moved at least 5 feet further away, preferably more.

The telephone closet for the police station doubles as the women's restroom for the highway garage. This is not a good example of shared functions on several levels, but importantly for a police facility this room should be secured within the station. Nearby dispatch equipment should be included in consideration of a reworking of this system.

Electrical service is likewise shared with the highway garage; 200 amps are allocated to the police. Dispatch shares the same system without any dedicated circuits or special considerations. Residential style panel boards are present in several locations. Wiring is of several different generations, and some of it is not currently permissible due to the lack of metallic covering. The insufficient number of outlets by current standards requires the frequent use of extension cords. Outlets and switches that are in place appear to be in good condition.

Electrical distribution in PVC conduits crosses through fire rated barriers and appears to compromise the assemblies. There is an additional concern about the presence of non-plenum rated cabling within what may be the return air system. The risk is that a minor fire could release toxic gasses into the building air distribution system.

Standby generator power does not cover all areas of the police station; some lighting and equipment will be off-line in a power outage. The system that is in place has some wiring deficiencies that make it non-code compliant.

Lighting in the building is generally original and quite tired. The typical T12 fluorescent lighting fixtures found throughout are of poorer efficiency and should be replaced with electronically ballasted T8's. Low brightness lighting diffusers for computer work would be a significant improvement. Emergency lighting was found to be deficient and non-functional in some areas, and does not extend to the exterior exits as is required.

Exit signage is also deficient in type, placement and quantity.

Lighting in booking and interview areas is not vandal resistant nor is it provided with backup power.

Practical Corrective Measures

Given this laundry list of problems, we have attempted to prioritize recommended actions in terms of effectiveness, potential risks and practicality. The categories are "Most Important," "Easier Fixes" and "Requiring Eventual Attention". This is a preliminary assessment that could change once conditions in the building are thoroughly uncovered in a construction project.

Most Important:

- Seismic upgrade; attach walls to roof where required
- Building exits; provide proper access to exits possibly through new access to existing stairs and direct exiting to the exterior of the building (not through intervening spaces) (possible addition).
- Fire alarm upgrades and troubleshooting: likely replacement.
- Secure conditions for persons in custody; to include sally port, at least two separate holding cells with plumbing, visual or camera monitoring (possible addition).
- Upgrade Generator function and coverage. Include well and fuel pumps.
- Building wiring; rewire to correct plenum issues, back up wiring and provide assured and separate power to critical functions, such as dispatch. Replace residential equipment with commercial grade.
- Centralize and control telephone communications in a locked room.

Easier Fixes:

- Remove recycling area from proximity to booking entrance. No public access to sides or rear of building.
- Replace lighting fixtures with modern, efficient and more user-friendly units.
- Rebuild evidence room to allow for more secure evidence handling. (possible addition)
- Provide relief (overflow scupper) from possible roof ponding problems.
- Re-work roof vents to move them away from air intakes.
- Solve rust problem with proper water treatment.

Requiring Eventual Attention:

- Complete building accessibility by adding elevator, reworking toilet rooms or, as a compromise, moving public access spaces to the ground floor only. May require a small addition.
- Cover exterior concrete block with insulation and weather resistant stucco finish (EIFS). Recurring mold issues or added heating costs could move this up in the categories of importance.
- Provide covered area for storage and maintenance of at least one police vehicle. Could be part of sally port project.
- Next year the roof will be 20 years old and at the end of warranty and practical life-span. Re-roofing should be scheduled as part of the normal maintenance schedule.

Inherent Limitations and Lifespan

The good news is that with some (not insignificant) overhauling, the shell of the building should be serviceable for years to come. The bad news is that the shell of the building represents one quarter or less of the inherent value. The police station is dependent on intensive building systems that need a major replacement now and will need periodic upgrades in the future. Thought should be given to the future of the department and allowing spare capacity in replacement systems. The current structure with interior drywall partitions and acoustic ceiling tile does allow for the introduction of proper distribution systems.

Logistics of Renovation and Continued Service

The “most important” list would be most readily achieved with the building being vacated, given all that associated disruption, difficulty and expense. If that route were chosen, it would be logical to reach further down the list and correct more problems while everyone was out. Working around the police is also possible, but would undoubtedly take longer, cost more and compromise functions.

Opinion of Probable Cost

Please refer to the attached spreadsheet by Cobb Hill Construction.

Existing Fire Facility: Access and Location Issues

The Bow Fire Department is in a central location in town at the intersections of Knox Road and Bow Center Road. It is visible and convenient to the more developed parts of town and to highway access. It is well placed.

The chief drawbacks to its location are not so much where it is as they are to do with site limitations. The fire station shares the site and access driveways with a recreational facility. As with the police department, this was an apparent marriage of convenience, housing two needs with one building. Some features were planned to be shared by both, such as the commercial kitchen. It was in a quieter time fifty years ago when the conflicts between these two uses were probably a lot less pronounced. Emergency response and casual public use do not mix well. It would seem logical to an outside observer that one of these two uses ought to go. The proximity of the pond, which forms a boundary on the southerly side of the site, suggests that the recreational use might be a better fit. Aside from the limited benefits the department gets from the pond, its presence is a limit on future growth and expansion.

The intersection of Knox Road and Bow Center Road has been the subject of some design reconsideration, including a possible roundabout. At present, the Fire Department reports no conflict with public traffic and its emergency access needs. As of the last repaving, conduits were buried under the street to allow for future signalization, if that should be needed.

Fire Dept. Functional issues

Starting with the existing apparatus, the current building is barely able to house some of these vehicles with adequate clearance to load, unload and move safely about the station. The 10' high doors have eliminated consideration of some standard equipment. Any larger vehicles that may someday be required, such as a ladder truck, would not fit in the bays. Furthermore all bays are now back in/drive out without the option of pulling through from one side to the other. This increases the maneuvering time out front with its potential vehicular conflicts. The exhaust evacuation system in the bays is archaic and clearly need to be replaced for the health of the staff and the smooth operation of the apparatus bays.

An important feature of on-call operations is typically to provide a clearly defined area for responding firefighters and emergency medical staff to quickly park their personal vehicles and

enter the building. There is signage present to attempt this, but especially given the shared usage, this could be improved.

The apparatus bays are discontinuous. There is no direct access from the six bays in the original portion of the building to the three behind the stage or to the two in the separate garage to the east. This introduces potential problems with convenient maintenance and equipping of the vehicles as well as the need to track down personnel. At present garage door openers must be used to move from one bay to the next in the adjacent part of the building.

On the upper floor, training is in a windowless loft space that has been given over to a waiting area and casual meetings, while proper classroom training occurs in the more remote upper floor of the Charles Coffin building across the parking lot. Due to the limits of the mechanical systems, summer meetings are held in the Coffin Building which has window air conditioners, and winter meetings are held in the station proper, where heating runs continuously.

The radio and communications equipment was cited as needing a serious upgrade. First a dedicated room is needed to house this equipment, not shared with general office functions. A state grant has been obtained to purchase new base station radios. Expanded capabilities for phone/data wiring were also advised by the engineers. Please refer to the report attached.

The two air compressors for shop use and for breathable air are reported as in good shape. The compressor for breathable air which charges the Scott Air Belt packs is already schedule for replacement. The other, for station air, provides pressure to a drop at each bay and could remain or be relocated, as needed.

Each bay also has an electrical drop for the vehicles' Dynalux Battery Conditioner / Charger.

There is a functional card reader security system.

Code Compliance, Regulatory and Safety Issues

The top issues in this category are lack of sprinkler system, lack of fire alarm system (including lack of smoke detection in ductwork), lack of fire separation between fire station "garage" and assembly uses, poor dissipation/control of garage exhaust, and non-compliant wiring. Building exiting requirements are basically met on the fire station side, though the addition of some personnel doors in the overhead doors that are remote from existing exits would improve safety in the apparatus bays. This report does not assess the exiting requirements for the assembly use.

There is no sprinkler system in the building. Presumably an un-noticed fire is less likely in the fire department, but a combination of factors makes this a notable deficiency. This building houses a shared use with the general public whose activities are not all visible from the station. Cooking facilities are present. People may be asleep in the building on occasion. Aside from the risk to life and limb, the building houses a quantity of valuable town equipment. Finally, the department needs to be a credible advocate for fire prevention measures and should be able to set the example.

A fire alarm system would be justified for all the same reasons.

Though there is a concrete block wall between the fire station and the adjacent assembly recreation space, we could not confirm that all openings were protected or sealed. This type of mixed use would require a 3-hour fire rating in current construction.

Given that the fire station is a building where people are present for extended hours, sleeping, waiting for calls and working on vehicles, the present vehicle exhaust control system represents a significant problem. As noted in the engineers' report, and confirmed by staff, it is both obsolete *and* non-functional. Current systems vary from large scale filters to quick-disconnect tail pipe connections that vent directly to the outside. Replacement would be a significant expense to put toward a building of this age and condition, and if pursued, the system should be capable of relocation.

There is non-compliant branch wiring, without required metallic protective casing, throughout both facilities. There is no easy fix for this, especially since many interior partitions are concrete block. We should anticipate a lot of surface-applied rigid conduit.

The training room on the second level of the main building is served by two adjacent stairs: one is in a block enclosure and opens into the corridor below. The other is a more recent wooden stair that connects directly to the front apparatus bay. The first stair has a door at the bottom, but none at the top; it does connect to a means of egress. The wooden stair is not a legitimate egress stair in that it does not lead to an egress path. Modification of this arrangement could result in one code-compliant stair and reclaiming the space of the other. While the room above is not a defined mezzanine, the population of the room appears to be small enough to allow this.

Once again, there was no evidence of severe structural problems with the building shell, but like the police station, the facility would likely not achieve the required Category III construction for emergency facilities that is now required. The structural engineer's chief concern was less for the survivability of the structure than for the uninterrupted use of the fire department in the event of earthquake or hurricane. Unrestrained equipment in a swaying structure is the chief problem.

The fire station has good potential for achieving some level of ADA compliance, at least in terms of the public being able to conduct business with the chief. The office is at entry level, and with the adjustment of a door threshold, the provision of a designated parking space and the updating of a toilet room, this could be accomplished.

We understand that remedial work has already taken place to make sure that floor drains in the bays do not discharge untreated into the pond.

Building Operations Issues

The basement level is prone to flooding and in fact had water pouring in over the areaway sill during our recent visit. Water exposure has damaged steel columns. Sump pumps were not all functioning. Though not perhaps a direct problem for fire department operations, this condition

represents a missed opportunity. If this space were clean and dry, the space would be much more valuable and useful. Site drainage and poor design of the exterior stairway seems to be major factors.

Storage is clearly in big demand, and the shortage has fostered some necessary but makeshift solutions, such as the “loft” over the ambulance bay. Without addressing the underlying need for storage, the symptoms will be recurring and hamper orderly operation of the station.

The electrical system is commingled with that of the recreation center and does not differentiate between day to day and critical uses for back up purposes. This should be addressed when non-compliant wiring is replaced. The existing 20 KVA generator is in need of replacement.

The heating system is old, very basic and was characterized by the engineers as “obsolete.” This affects function and operating costs. A replacement system should address the issue of heat loss when the overhead doors open during the winter.

Un-insulated block construction could be improved by the addition of exterior insulation finishing system (EIFS). Payback calculation should take into account the amount of time the doors are open in the winter.

Vehicle washing facilities are shared by fire, police and recreation, but are in close proximity to stored items.

Practical Corrective Measures

Once again, to prioritize recommended actions in terms of effectiveness, potential risks and practicality, we have divided them into categories of “Most Important,” “Easier Fixes” and “Requiring Eventual Attention”. The likelihood that a significant alteration would uncover additional deficiencies is probably greater here than at Robinson Road.

Most Important:

- Seismic upgrade; secure building mounted equipment and suspended and stored items.
- Create/confirm a fire-rated partition between the department and the recreation facility.
- Add fire alarms.
- Add sprinklers throughout.
- Replace electrical wiring in both buildings and the recreation building.
- Install an effective vehicle exhaust ventilation system.
- Separate systems that are shared with recreation, and prioritize generator back-up.
- Centralize and upgrade communications capabilities.
- New heating system—possibly overhead radiant in bays.
- Consider removing the recreation facility and annexing the space for fire department use.

Easier Fixes:

- Replace lighting fixtures with modern, efficient and more user-friendly units.
- Add communicating interior doors between the bays.
- If desired, re-work and finish upstairs training room for better classroom capabilities.

- Consider enclosing the wooden stair and exiting directly outside as well as to the front bays.

Requiring Eventual Attention:

- Adaptations for ADA compliance to chief's office, plus toilet configuration.
- Cover exterior concrete block with insulation and weather resistant stucco finish (EIFS).
- Provide outside storage structure as a stopgap measure.

Inherent Limitations and Lifespan

Though this building can have a long useful life into the future, its usefulness as a fire station is approaching the end. Summing up the needed corrective work would tell us that measures to patch it back up would not necessarily be a wise long-term investment, especially if added apparatus is anticipated.

Logistics of Renovation and Continued Service

The extent of systems replacement recommended would make continued occupancy of the building through the construction difficult and would likely compromise fire and rescue coverage to some degree. A summer project would be easier to pull off, depending on the duration.

Opinion of Probable Cost

See Cobb Hill Builders report.

New Combined Safety Facility

Planning Horizon/Program

The first step in laying out a possible combined facility will be to establish the building program, the list of spaces, we are planning for. This requires us to consider the needs as of the day the facility would open plus growth space to be included. Provisions for future phase additions should also be considered to avoid limiting siting or organizational arrangements. The real building programming exercise is more involved than what we are getting into for this report, but we can sketch the broad outlines of it to arrive at an idea of the scope of the project to compare it to the repair scenarios.

The building program would be developed for the police station and the fire station, based on their current staffing and capabilities, increased for a reasonable planning horizon—usually about twenty years out, and then refined to eliminate duplication of spaces that could now be shared between both departments. The current population of 8200 is expected to grow to 9710 in 10 years and 11,410 by 2025. For example, using the NH state average of one police officer for every 610 residents, we should expect the police force to grow to approximately 19 in the next twenty years.

A schematic of such a program follows:

	Space	Approx Size	Comments
Police Facilities			
Booking	550 s.f.		
Fingerprinting	400 s.f.		
Holding Cells (2)	100 s.f.	Isolated from each other	
Interview (2)	200 s.f.		
Camera/observation	50 s.f.	To one or both interview rms.	
Jan. Closet	36 s.f.	Handy to booking	
Evidence	500 s.f.	Pass-through locker	
Copy room/supplies	100 s.f.	Separate from fire. Confidential	
Police Dispatch	500 s.f.		
Comm. closet	150 s.f.	Tel/data	
Patrol room	240 s.f.	Work stations for 6 officers	
Detectives' work rm.	200 s.f.	3 detectives, separate room	
Prosecutor	120 s.f.	Eventually full time	
Visitor office	120 s.f.	Prosecutor or other outside	
Sergeants' office (2)	240 s.f.		
Admin assistant	180 s.f.		
Records room	200 s.f.		
Lieutenant	240 s.f.	Desk + table	
Chief	240 s.f.	Desk + table	
Uniforms/equipment	150 s.f.		
Armory/workbench	120 s.f.	Storage/maintenance of weapons	
Lockers/ Showers (2)	400 s.f.		
Break area	200 s.f.	w/ coffee sta.	
Staff toilets (2)	100 s.f.		
General Storage	200 s.f.		
Staff entrance	100 s.f.		
Sally Port	300 s.f.	Doubles as wash bay	
Garage	240 s.f.		
ATV's	120 s.f.	(sub total) 6,296s.f.	
Personal Cars		12 cars	
Fire Department			
Apparatus bay:	2 pumpers	1600 s.f.	Back-to-back 20 x 80
Apparatus bay:	2 pumper/tankers	1600 s.f.	Back-to-back
Apparatus bay:	ladder truck	1600 s.f.	Through
Apparatus bay:	2 ambulances	1200 s.f.	Back-to-back
Apparatus bay:	Ut. pick up + brush truck	1200 s.f.	Back-to-back
Apparatus bay:	Equip. trailers	800 s.f.	
Repair Bay:	Work area + command vehicle	800 s.f.	
	Wash bay	800 s.f.	Or combine in equip bay
	Chief/ Ass't Chief	240 s.f.	2 desks

	Decontamination	120 s.f.	Shower, outside access
	F.T. Captain	240 s.f.	Desk + table
	Training Officer	120 s.f.	
	Report writing	240 s.f.	3 work areas
	Inspector/plan room	120 s.f.	
	Break area	300 s.f.	w/ coffee sta.
	Copy/supplies	100 s.f.	
	Workbench	100 s.f.	
	Comm. closet	150 s.f.	Tel/data
	Laundry room	200 s.f.	
	Staff toilets (2)	100 s.f.	
	Lockers/ Showers (2)	400 s.f.	
	General Storage	200 s.f.	(sub total) 12,230 s.f.
	Personal Cars		32 cars
Combined Facilities			
	Entry vestibule	80 s.f.	public
	Reception & waiting	400 s.f.	
	Comm. closet	100 s.f.	Tel/data
	Emergency Operations Center	400 s.f.	Emergency command capabilities
	Exercise Room	400 s.f.	
	Large mtg. Room (public)	600 s.f.	Training, adj. to kit., 40 people
	Small mtg. Room (public)	240 s.f.	Staff mtgs.
	Kitchen	200 s.f.	Access to mtg.
	Public toilets (2)	100 s.f.	
	General storage	200 s.f.	
	Mechanical room	240 s.f.	
	Electrical room	120. s.f.	
	Generator room	120 s.f.	(sub total)
	Fuel Tanks		To remain at Public Works
	Public Parking		12 cars
Sub-total		.	21,726 s.f.
	Net-to-gross factor	s.f.	Assume 80% efficiency
Total		s.f.	27,158 s.f.
	Total car parking		56 cars

Location and Site Requirements

From the table above we can see that we are looking for a site to support about 25,000 s.f. of building, plus parking for about 50 cars (@350 s.f. per car with drive lanes), plus apron and maneuvering space of about another 5,000 s.f. this comes to 47,500 s.f. or a little more than one acre of built stuff. Add to this area for drainage containment, septic field, well radius, unsuitable soils and slopes and we find that this facility would need roughly 5 acres, depending on the conditions.

The town parcel that has been previously considered, across the Knox Road from the fire station, consists of 17 acres. The front portion is steep and probably not suitable for large flat construction, but higher up between Turee View Road and Jonathan Lane it flattens out and may be feasible. Nonetheless we would recommend primary access to this emergency facility be off Knox Road or Bow Center Road and not off the quieter residential streets. See maps.

Possible Approaches to Design

The program of spaces suggests a facility with a Fire Department wing, a Police Department wing and common main entrance with support functions.

In anticipating future growth, the likely expansions would be added fire apparatus, police vehicles, and permanent staff members with their associated parking. The building layout should allow for future extension of the bays in one direction and growth of the departmental staff areas in another. Common Shared areas will probably have the least pressure for growth.

Arrangement of access roads and expensive fixed features should take possible expansion into account.

Common Shared Facilities

This is a delicate matter to resolve and is not solely dependent on apparent functional advantages of sharing. Each department has its own culture and procedures. Though they may work closely and well together today, the building has to work when successive generations of people come along. A key to this is to maintain the separation of some functions that need to be readily accessible or controlled by one party or the other while joining forces in other areas that are not mission-critical. With this in mind we are suggesting the combination of meeting and training space with support (kitchens and bathrooms) to be shared by the two departments and, as scheduled, by the public. In the non-public zone break rooms, showers, laundry, lockers and exercise room are candidates for sharing between the departments, though this scenario assumes separation.

Required Dedicated Areas

Areas that clearly cannot be shared are those with heightened security or confidentiality concerns such as holding areas or records rooms. Departmental specific equipment needs dedicated storage areas. Also important to the good neighbor policy is to provide dedicated spaces where each department can feel free to leave its stuff out for ongoing repair projects or whatever reason, without inconveniencing the other.

Town Context Issues

Another concern that may shape the design is the impact of this larger building on its neighborhood. Safety with emergency vehicles is of course the primary concern. Also important will be traffic, outdoor lighting and noise. The visual impact of the building is another driver of the design. As a public building and an important town function, there will be some who will want it to be prominent. Others will want it to be less “in-your-face” or perhaps even hidden away. The exterior appearance will also need to fit in with the character of Bow, as the citizens perceive it. These issues will affect building siting and cost of the exterior envelope.

Initial Cost vs. Ongoing Cost

Another debate that will need to take place, that cannot be resolved here, is the balance you put on initial project cost vs. ongoing maintenance, operations and upkeep. Materials and systems throughout the building will have associated costs and potential long-term savings that can and should be estimated as a natural part of the planning process. For the sake of this estimating exercise, we have assumed certain materials and systems as described in the preliminary outline specification. An example of a project that employed these standards would be the combined safety complex in Canterbury, designed by our office and recently completed by Cobb Hill Construction.

Logistics of Construction

In any event, it is clear that a new facility is the best solution to keeping continuous emergency coverage during the transition. The time spent operating out of two headquarters will be limited to the time needed to move furniture, records and supplies and to remove and reinstall salvaged equipment. A move across the street for the fire department will be easier, while the police department will likely have more back and forth. This arrangement also allows for the Town to fully complete, air out and inspect the work at the new facility before final acceptance, whereas the piecemeal approach in the existing facilities will make this much more difficult.

Finally, the Town will want to know what is to become of the empty spaces left behind. The success of any proposal will depend on a solid and well-worked out answer to this question. We did not study this question in any depth, but some possibilities have emerged. The Robinson road building could lend itself to becoming a home for Planning, Economic Development, Building Inspector and Road Agent, moving some of these out of the Town Hall basement. The Fire station space could be absorbed into the recreation department, though this would not eliminate the need for remedial work. See Appendix B.

Opinion of Probable Cost

Please refer to attached Cobb Hill Builders document for their opinion of the construction cost. It is also important to remember that *total project cost* and *construction budget* are not the same. A new project on a new site may also have added legal costs, testing expenses—even the cost of added public presentations may need to be taken into account. We have included a sample Total Project Budget for your review. I hope this all provides the background you need to address this important decision.

Bow Department of Public Works

Possible Re-use of the Police Station

October 12, 2006

In the event that the Police Department vacates the front portion of the combined police and DPW building, it is clear from discussions with Mr. Cleverly that his department could readily make use of the added space in its entirety. Or it could use some of the space and make room for other uses. From DPW's perspective there are associated functions that would also be handy to have under one roof, though the other departments and town officers may have to work through their own priorities. Bringing uniformed and non-uniformed staff who work together at one facility could be an advantage.

Among the possibilities mentioned were the Building Department and inspector's office, administration for cemeteries (with whom DPW works closely) and administrative space for the soon to be expanded Sewer & Water Department. Billing and record keeping could accompany the physical materials and equipment on this site.

The building could be developed for added uses in increments and need not be done over wholesale, except for life safety corrections that could be distributed around. Fixing the emergency egress paths is appreciably easier without the complications of security and keeping prisoners in. The old door that used to connect the dispatch area to the DPW side could be re-opened, for example.

Or DPW could use the entire area. Added storage is needed. Mechanics need offices and access to workstations. Work spaces would still need to be protected and isolated from garage exhaust.

The possibility of renting out the front portion to private businesses, as has occurred in the past, would be a source of income to the town and deserves some consideration.

Interior modifications, once exiting has been properly worked out could be minimal and at the tenant's expense.

In discussion with Mr. Cleverly, the question also arose about the future of the school bus area immediately in front of the building. The school buses are maintained by one mechanic who works separately from DPW and need not be located on site. If the bus operations could be relocated to the area of the high school there could be several advantages. There would be the elimination of the return trip distance to the bus mileage every day. A simple facility near the school could also provide educational opportunities. The yard space currently used to park the buses could be used to stockpile sand for the sanders.

Bow Parks and Recreation

Possible Re-use of the Fire Station

October 12, 2006

In the event that the fire department relocated to another facility, the question arises as to what the Town would do with the vacated space. One idea is to make space for the Heritage Commission to have meeting space and some kind of museum space. Another likely answer would be to expand the offerings of the parks and recreation department already on site. This would not solve the issue of separation of the department from key outdoor recreation sites, but clearly it would expand potential offerings. Though the fire station is not ideal for recreation purposes in its current layout, there is high space available for a wide range of programs. According to the Director, of chief interest would be the creation of multiple classroom style spaces in the old apparatus bays. While complementing the larger existing multi-purpose hall, these rooms could be better suited to somewhat smaller scale activities such as cards, crafts, instruction, etc. Roughly six to eight good sized activity rooms (25+ people) could be created in the existing space along with additional smaller rooms.

Another possibility that would open up would be the relocation of the child care facilities now in the Town Offices to the Recreation Center. This would have associated space requirements and dedicated outdoor play area requirements, per state regulations. It may be a more logical arrangement for both buildings.

It is important to understand that this new space is not free. Some of the same drawbacks that make the fire station unsuitable for the fire department's use would need to be corrected for expanded use by the recreation department. As a large scale assembly use, it would still be advisable to install a working fire alarm and sprinkler system. The higher structural requirements associated with emergency services would not come into play unless the town planned to use the facility as an emergency shelter. The elimination of sleeping quarters in the building would be a big step in the right direction. And there is still a large quantity of non-compliant wiring to be addressed.

Expansion of offerings and the population using the building would have associated requirements. Increased exiting capacity should be relatively easy to accomplish for the slab-on-grade building, especially if the upper level rooms are kept for storage, off-limits to the general public. Toilet facilities, somewhat marginal at present, would have to be expanded and brought in line with the code. Naturally there would be new partitions, doors, likely new windows where the overhead doors are today. Power and lighting would be new for these newly fit-up spaces.

The heating system that may be now adequate for garage spaces would need significant modification or replacement to create comfortable, usable rooms for the general population. At the same time, significant savings over the long term could be possible with a combination of system replacement and enhanced insulation. The combined

building is relatively wide and deep, which means many interior spaces will be far from a window that can open for ventilation. By the building code, this will necessitate a mechanical ventilation system to bring in fresh air. Though air conditioning is not a requirement, the Town may wish to plan the duct system to accommodate that in the future.

It may make sense to take advantage of the fire departments' departure to upgrade some of the building's interior finishes, presently painted concrete block. As mentioned, this would be an opportunity to introduce some better insulation. An earlier project to remove and replace the 1950's vinyl asbestos tile was shelved due to cost. Perhaps this would be an opportunity to do over the floors in conjunction with the rest of the construction.

There are also some furniture considerations to the Rec. Department's expansion. First, there will simply need to be more furniture to use the new spaces, whether new or used. One advantage to the new spaces is that they can have seats and tables permanently set up—they don't have to be cleared away for floor hockey, for example. This also means that more substantial and comfortable furniture could be used. On the other hand, there is also interest in putting theater type seating in the one of the larger spaces, perhaps the multi-purpose room. Somewhere in the vicinity of 250 seats is a good size for community events. This would represent an investment of \$35,000 to \$50,000 just for the seats.

The Coffin Building is already used on occasion by the Pre-K Art & Play Program. This activity could be brought over into the new space allowing other uses. Given the training room set-up with kitchen and toilet facilities on hand and the at-grade access from the rear of the building, the Coffin Building could be well suited as a community meeting space by previous arrangement. The lower level could be storage for recreation equipment, freeing up some of the over-packed space in the main building.

Outside, the parking would probably need to be retained and expanded to include the former fire department aprons since the larger facility would generate more traffic.

Architect's Qualification Statement

Date: March 2007

Submitted to: Town of Bow New Hampshire
10 Grandview Road, Bow NH 03304

Name of Project: Needs Assessment for Police and Fire Departments

1. FIRM INFORMATION

1.1. Firm Name: Sheerr McCrystal Palson Architecture, Inc. www.sheerr.com

1.2. Principal Architects: Eric Palson AIA, President epalson@sheerr.com
Registered in NH (2359), MA (6625)

Chris Lizotte AIA, NCARB, Vice President clizotte@sheerr.com
Registered in NH (2728), ME (2930), VT (2551)

1.3. Business Address: 224 Main Street, PO Box 1500, New London, NH 03257

1.4. Telephone Numbers: (603) 526-9347; Fax: (603) 526-9309

1.5. Total number of staff: 5

1.6. Length of Time in Business: 9 years

1.7. Type of Organization: Corporation Taxpayer ID number: 02-0503207

2. GENERAL STATEMENT OF QUALIFICATIONS

We are a service-oriented design firm dedicated to providing creative, high-quality design to our clients across northern New England. We strive to make the process of building or renovating as all-around satisfying as we can. Our goal is to be *indispensable* to the larger process of bringing your project to success. And we find that when the process is orderly, communication is open and free flowing and a cooperative and respectful atmosphere has been established across the entire project team we can produce superior work. And when you can rightly feel informed and in control over where the project is headed, the experience can be wholly positive and even fun!

We have gained recognition through numerous design awards and, more importantly through a loyal following of happy clients. We also work hard to produce design documents that allow builders to do their best job and we are proud of the endorsements we have received for being builder-friendly.





Sheerr McCrystal Palson

A R C H I T E C T U R E

At SMP we tailor our services to what you think is most needed. Our services include architectural design, facility programming, feasibility studies, campus master planning, interior design, and code and ADA compliance review.

We also enjoy helping to promote support for projects either through fundraising efforts or get-out-the-vote sessions. Together with our consultant team, we can also provide landscape design, civil, structural, mechanical engineering, and computer room design. If you need something, ask. If it is outside our area of expertise (or insurance) we will be quick to tell you.

3. GENERAL INFORMATION

3.1. Professional Affiliations: American Institute of Architects (AIA), National Council of Architectural Registration Boards (NCARB), New Hampshire Preservation Alliance, U.S. Green Building Council

3.2. Key Personnel: Eric Palson, Principal, President; Christopher J. Lizotte, Principal, Vice President; Anthony Mento, Designer; Diana Piotrow, Architectural Designer; Andrea D. Druke, Office Manager

3.3. Professional History: See enclosed resumes.

3.4. Professional and Civic Involvement: AIANH Past-President; Kimball Jenkins Estate Board of Trustees; Concord Community Music School Building Committee; Kearsarge/Lake Sunapee Community Center Steering Committee; Kearsarge – Lake Sunapee Housing Coalition

4. RELATED PROFESSIONAL SERVICES

4.1. See the enclosed services & capabilities sheet.



Sheerr McCrystal Palson

ARCHITECTURE INC.

ERIC PALSON AIA

President of Sheerr McCrystal Palson since 1998. Eric has been a registered architect since 1986, designing a wide range of commercial, institutional and residential projects. He is licensed in New Hampshire and Massachusetts. With Chris Lizotte he shares primary responsibility for each project in our office. His verbal and drawing skills can be called upon to create special presentations for groups or for fundraising. Eric was the President of NH Chapter of the American Institute of Architects in 2004.

Reach Eric directly by e-mail at epalson@sheerr.com or call 526-9347 where there is an even chance he will pick up the telephone.

EDUCATION

Massachusetts Institute of Technology, B.S.A.D. 1978;
University of California at Berkeley, M. Arch. 1980

PROFESSIONAL EXPERIENCE

SHEERR McCRYSTAL PALSON Architecture, Inc.,
New London, NH,
1995-Present

BROOK DESIGN ASSOCIATES, INC., Concord, NH, 1992-1995:
Associate, responsible for all aspects of project implementation. Most significant projects: Blue Cross/Blue Shield of NH Headquarters, Manchester, NH; Capitol Center for the Arts, Concord, NH.

BENJAMIN THOMPSON ASSOCIATES, INC., Cambridge, MA, 1985-1991:
Associate, responsible for architectural and urban planning projects. Most significant projects: Harvard University School of Continuing Education, Cambridge, MA; Royal Victoria Dock Redevelopment Masterplan, London, UK. Selected as AIA national firm of the year in 1987.

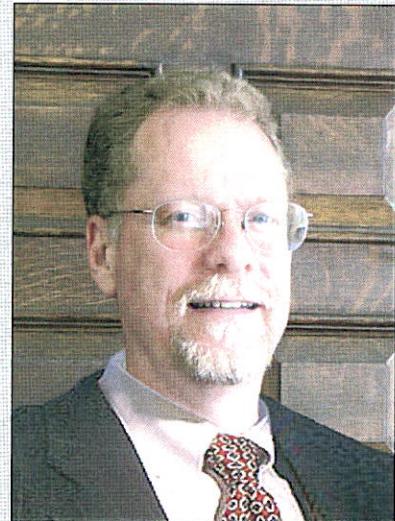
OFFICE OF TIMOTHY LAPUT, Canton, MA, 1985:
Job Captain, responsible for 180 unit condominium project in Peabody, MA.

OFFICE OF MICHAEL ROSENFIELD, Concord, MA, 1983-1985:
Job Captain, responsible for residential and small institutional design/build projects. Participated in successful application for Architectural Record House award in 1984.

THE BOSTON ARCHITECTURAL CENTER, Boston, MA 1983-1984
Design studio instructor.

UNIVERSITY OF WISCONSIN-MILWAUKEE, Milwaukee, WI, 1980-1983:
Assistant Professor in the Department of Architecture, responsible for design studio instruction and drawing courses. Director of the London Studies Program in 1983. Writer/Producer for instructional videos on the history of perspective and the future of architectural practice.

UNIVERSITY OF CALIFORNIA AT BERKELEY, Berkeley, CA, 1980;
Adjunct Professor at the College of Environmental Design, responsible for introductory design courses.



PROFESSIONAL & CIVIC ASSOCIATIONS

AMERICAN INSTITUTE OF ARCHITECTS, AIA
New Hampshire Chapter:
Past President

KIMBALL JENKINS ESTATE:
Board of Trustees

REGISTRATION:

States of:
New Hampshire (#2359)
Massachusetts (#6625)

Sheerr McCrystal Palson

A R C H I T E C T U R E I N C .

CHRISTOPHER J. LIZOTTE AIA, NCARB

Vice President: Chris Lizotte joined Sheerr McCrystal Palson in 1998 and has been Managing Architect since 2003. His background includes experience with major projects at Sheerr McCrystal Palson and previously in three other New Hampshire firms. He has been licensed since 1999 and holds licenses in Maine, New Hampshire, and Vermont. Chris became a partner in 2005.

Chris can be reached at clizotte@sheerr.com

EDUCATION

Roger Williams University, Bristol, RI., Bachelor of Architecture
(five year program with thesis), 1991

New England Institute of Technology, Warwick, RI (CAD class), 1993
New Hampshire Community College, Claremont, NH (CAD class), 1994



PROFESSIONAL EXPERIENCE

SHEERR McCRYSTAL PALSON Architecture, Inc.
1998 - 2003 Project Manager
2003 - 2005 Managing Architect
2005 - Vice President

Significant Projects:

PC Connection office headquarters, Merrimack, NH
Plaistow Public Library, Plaistow, NH
The Taylor Group office headquarters, Bedford, NH
Hall Memorial Library, Tilton / Northfield NH
St. Joseph Church, Nashua NH
Kearsarge Regional School District Kindergartens and High School
Concord Community Music School, Concord NH
St. Theresa's Church, Henniker, NH
American Red Cross, Concord Area Chapter, Concord, NH
Crown Point Cabinetry, Claremont NH
Capitol Center for the Arts, Concord, NH
New Hampshire Audubon Silk Farm Road Nature Center, Concord

BROOK DESIGN ASSOCIATES INC., Concord, NH, 1997 - 1998:

Intern Architect responsible for residential, college and educational projects.
Significant Projects: Student Lodge, Colby Sawyer College, New London, NH;
The Brook Street School, Barre, VT (adaptive reuse of turn-of-the-century
school into new child care facility).

SHERMAN GREINER HALLE LTD.

Concord, NH, 1997:

Intern Architect responsible for Shaker Road School, Concord, NH.

CHA & COMPANY, P.C.

New London, NH, 1994 - 1997:

Intern Architect responsible for residential, new and rehabilitated housing,
commercial, office and educational projects. Significant projects: New
Hampshire State Rest Areas accessibility improvements; Proctor Academy,
Shirley Hall renovation, Andover NH; New Hampshire State Library acces
sibility improvements, Concord, NH; Windsor County Court House renova
tions & addition, Woodstock, VT; New Hampshire State House & State
House Annex accessibility improvements, Concord, NH; Sigma Data Corp.
new office headquarters, New London, NH; Evans Express Mart, Warner, NH;
Avery Hill Affordable housing, Laconia, NH.

224 Main Street, PO Box 1500 New London, NH 03257
Tel 603.526.9347 Fax 603.526.9309
email sheerr@sheerr.com www.sheerr.com

PROFESSIONAL & CIVIC ASSOCIATIONS:

NATIONAL COUNCIL OF
ARCHITECTURAL REGISTRATION
BOARDS, (NCARB)
Member

AMERICAN INSTITIUTE OF
ARCHITECTS, (AIA)
Member

ROTARY CLUB of NEW LONDON, NH

KEARSARGE / LAKE SUNAPEE
HOUSING COALITION

LEARNING BY DESIGN
Shoe-Box club house
4th grade learning program

REGISTRATION:

States of:
New Hampshire (#2728)
Maine (#2930)
Vermont (#2551)
other states by reciprocity



Sheerr McCrystal Palson

A R C H I T E C T U R E

FIRM HISTORY

THE FIRM

Sheerr McCrystal Palson Architecture, Inc. specializes in high quality, one-of-a-kind commercial and institutional projects. Founded by Clinton Sheerr and Deirdre McCrystal Sheerr in 1983, the firm continues to garner national, regional, and local awards for outstanding building projects and enjoys an excellent reputation for delivering high quality design. We provide a high level of personalized service and make building projects fun!

THE PEOPLE

Following the passing of Clinton Sheerr in 1997, Sheerr and McCrystal was restructured into two new separate corporations. Sheerr McCrystal Palson is the commercial/institutional division owned and operated by Eric Palson, principal architect. Chris Lizotte joined the firm in 1998 and became a partner in 2005.

Eric Palson came to the firm in 1995 to manage the \$6 million Lamson Library project for Plymouth State College and the \$6 million addition and renovation of the Kearsarge Regional High School. His prior projects include the Capitol Center for the Arts in Concord, NH, Blue Cross and Blue Shield of New Hampshire in Manchester, NH, and the Division of Continuing Education for Harvard University in Cambridge, MA. He was formerly an associate with the international firm of Benjamin Thompson Associates, the architects of Faneuil Hall Marketplace in Boston.

Our staff includes architectural and interior designers, several with construction as well as design experience. The breadth and depth of this entrepreneurial experience translates into practical creative solutions that are the hallmark of our practice.

AWARD-WINNING HIGH QUALITY DESIGN

Sheerr McCrystal Palson Architecture has won sixteen design awards from the New Hampshire Chapter of the AIA in the last twenty years, most recently the 2005 Merit Award for Excellence in Design for Capitol Center for the Arts, 2000 Citation Award for PC Connection Corporate Headquarters and 1999 Honor Award for Lamson Library. The firm also received the first award ever given by the Governor's Commission for the Handicapped for making buildings accessible.

Our goal is to combine a high level of thoroughness, professionalism and design sophistication with the ability to get the most value for our clients' dollars. Sheerr McCrystal Palson is committed to buildings that fit their settings, technical excellence in their design and an inclusive team approach to overall project management. Ultimately this is what keeps our clients happy while sparing them anxiety and saving them money.

We utilize PC-based CADD system, AutoCAD 2006, enabling us to produce highly detailed contract documents quickly and accurately. We do computer generated and traditional models and colored renderings to help our clients visualize proposed buildings. We also use computer based AIA MasterSpec to insure complete and up-to-date specifications.

Sheerr McCrystal Palson
A R C H I T E C T U R E I N C.



Award Recognitions:

Canterbury Municipal Complex, Library, and Town Hall
2005 ABC Award of Excellence for Projects under \$2 Million

Kearsarge Regional High School, Second Floor addition
2005 ABC Award of Merit for Projects between \$2-\$5 Million

Farwell Block Façade, Claremont NH
2005 New Hampshire Preservation Achievement
Award Honorable Mention

Concord Community Music School
2005 Governors Award for Leadership in Arts Access

Capitol Center for the Arts
2005 AIA New Hampshire Design Awards,
Merit Award for Excellence in Architecture
2004 ABC Award of Excellence for Historical Restoration

Concord Community Music School
2002 Business in the Arts Award

South Congregational Church in Concord, NH
2002 SAM Best in Show for Commercial Projects
2002 SAM Gold Award for Commercial Renovation Projects

ManagedOps.com Corporate Headquarters
2000 ABC Award of Merit for Projects over \$2 Million

PC Connection Corporate Headquarters
2000 AIA Citation for Excellence in Architecture

Herbert H. Lamson Library at Plymouth State College
1999 AIA First Place Design Award for Projects with
Complex Programs
1998 ABC President's Award for Outstanding Project of the Year
1998 ABC Excellence Award for Projects Over \$2 Million
1998 Illumination Design Award ~ IESNA

Simon Center at New England College
1996 AIA Annual Award for Excellence in Architecture

New Hampshire Charitable Foundation
1994 AIA Annual Award for Excellence in Architecture
1994 Heritage Concord Grand Award



Everett House Professional Offices

Since our founding in 1983 we have gained recognition through numerous design awards and more importantly a loyal following of happy clients. We work hard to produce design documents that allow builders to do their best work, we are proud of the endorsements we have received for being builder-friendly. Our mission is to make the process of building or renovating as all-around satisfying as we can. Attitude (or lack thereof) is the key.





Sheerr McCrystal Palson

ARCHITECTURE INC.

SMP Services:

We try to tailor-fit a package of services to each project. We are often involved in unusual circumstances where some flexibility and creativity in how our services are provided, or paid for, can be very useful to our clients. We try to focus on the larger goal of getting your project to a successful conclusion rather than sticking to a narrow definition of what architects are supposed to do. If you ask us to do something we don't know about, we will help you find someone who does.

Capabilities:

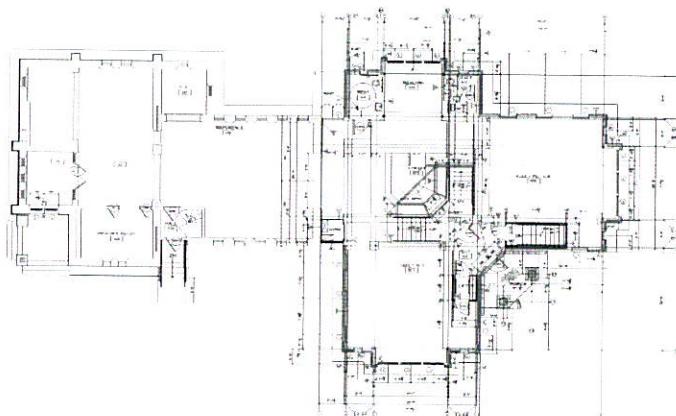
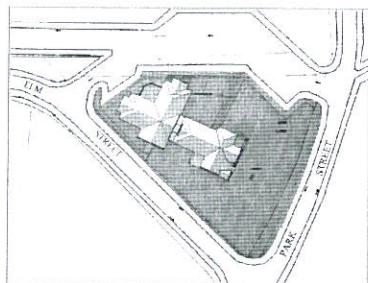
- Feasibility studies
- Code and ADA compliance assessment
- Schematic design of sites and buildings
- Campus layout and planning
- Interior design, materials, finishes, and furniture specification
- Bid phase services
- Green building design, LEED certifications
- Construction Administration
- Models, renderings, computer models, and PhotoShop presentations of proposals
- Assistance with finding and interviewing builders and construction managers
- Developing project budgets with contractor input
- Construction documents, plans, and specifications

Consultant Team:

- Acoustical design
- Exhibition design
- Site/Civil engineering
- Structural engineering
- Electrical engineering
- Specialty lighting design
- Mechanical engineering
- Landscape design
- Special documentation or certification



PROJECT DEVELOPMENT



224 Main Street, PO Box 1500 New London, NH 03257
Tel 603.526.9347 Fax 603.526.9309
email sheerr@sheerr.com www.sheerr.com

Pre Design

- Needs assessment
- Site selection
- Feasibility study
- Consultant coordination
- Budget analysis
- Contractor selection process

Schematic Design

- Conceptual drawings:
3D drawings
Study models
- Photo rendering
- Budget review
- Zoning & planning coordination
- Fund-raising presentation packages

Design Development & Construction Drawings

- Detailed Architectural drawings
- Specifications
- Consultant drawings
Civil
Structural
Mechanical
Plumbing
Electrical design
Other specialties
- Contractor / Construction manager interface
- Bid Negotiation

Construction Administration

- Coordination between owner, architect, & contractor
- Interior design
- Observation of the construction
- Clarification of details
- Shop drawings review
- Processing requisitions
- Project closeout