



**TOWN OF MILTON**

**JOINT TOWN-SCHOOL**

**CONSOLIDATED FACILITIES**

**STUDY & RECOMMENDATIONS**

Joseph R. Piantedosi  
December 30, 2009

## **Introduction**

In September 2009, the Town of Milton retained my services to assist them in formulating a draft plan for a Town/School consolidated facilities function. The scope of services included:

- Meetings with key Town & School officials
- Two days touring all Town & School facilities
- Meetings with the Consolidated Facilities Exploratory Committee
- Review and evaluate facilities related documentation: budgets and expenditures, collective bargaining agreements, job descriptions, staffing assignments, service contracts and other related documents.
- A written report (attached) which highlights my findings and observations and also identifies critical items that need to be resolved in order to establish a joint Town & School facilities organization. The report also includes recommendations for developing a long-range capital plan and building evaluations, addresses the pros and cons of in-house vs. outsourcing of services, and outlines a draft joint facilities organizational structure.

The findings and recommendations in this report are not the result of an exhaustive analysis of Milton's facilities and are not to be construed as legal advice, which should be obtained prior to implementing a joint facilities organization.

I want to thank the following Town & School officials who assisted me during this study: Kevin Mearn -Town Administrator; Mary Gormley – Superintendent of Schools; Matt Gillis – School Business Manager; Bill Ritchie – School Facilities Director; Joe Lynch – Public Works Director; and Paul Hurley – Assistant Public Works Director.

Joseph R. Piantedosi

***School Facilities Tour and Evaluation, October 29, 2009***

On October 29<sup>th</sup>, the Schools Facilities Director, which will hereinafter be referred to as FD, accompanied me on a tour of all the Milton School buildings. The School Business Manager joined us for part of the tour. We toured the six school buildings to give me a general idea of the overall condition and layout of the buildings, along with the types of systems and equipment that need to be maintained. I also spent time with the FD reviewing details of his operation including regulatory issues, budget and expenditures, outside contracts, preventive maintenance, staffing assignments, job descriptions and staffing issues.

Overall, the school buildings are in good condition considering their age and minimal maintenance resources since the major renovations and new construction were completed. Presently the FD is responsible for maintaining 680,000 square feet of school buildings with no office support staff, one unlicensed general maintenance person, one licensed HVAC technician and himself. The 26 custodians assigned to him perform primarily cleaning duties. The FD and his two maintenance staff members take care of all school building maintenance, school grounds, including shared duties plowing school parking areas, and maintain several play fields. He FD also manages the school telephone systems, utility tracking and maintains and issues all keys.

***Summary of my observations:***

1. There are a number of major capital related items that need to be addressed within the next three years. These include old EDPM (rubber membrane) roofing systems that are at the end of their useful life spans. The FD pointed out several areas that may need immediate repairs due to improper installation and the presence of standing water.
2. There are five different energy management systems serving the six school buildings. This is a serious issue that needs to be corrected as soon as possible. Besides the higher cost of supporting five different software/control systems, it would be almost impossible for the existing staff to fully master all five systems in order to obtain peak efficiency and the required reporting needs to provide early warning of equipment failures. One centralized system could provide early warning of a building freeze problem due to an equipment malfunction. Additionally, while the overall cost of utilities (electricity & natural gas) per square foot appears to be good compared to the towns surveyed by the Consolidated Facilities Exploratory Committee (CFEC), there is room for improvement. As an example, the square foot cost in Milton schools is \$1.875. Andover, which has older buildings, is under \$1.40 square foot. The Town needs to standardize with one software and control system. This will require a vote of the School Committee and Selectmen at some point to approve one proprietary system to avoid issues with the bid laws in the future. I will provide samples of how to accomplish this.
3. Preventive Maintenance/Work Order System – Due to the lack of resources, no formal system is being used, however the FD has a license for “School Dude” web-based software, which is an excellent system. The one HVAC technician spends most of his time changing filters and responding to problems. During our tour, while on the high school roof, we heard a noisy exhaust fan with a failing drive belt.

## Town of Milton Joint Facilities Study & Recommendations

Problems like this will become more common without a comprehensive PM system and proper resources. Despite the lack of a work order system, the FD told me that all of his staff members have access to school computers and that he uses the school e-mail system to receive and assign work requests. A new PM system needs to be supported as soon as possible. This will reduce energy use, avoid more costly equipment failures, and improve air quality and temperature control.

4. Maintenance Shop Space – There is no designated maintenance shop space. The department needs a secure place to store tools, maintenance supplies, spare parts, and to perform fabrication work.
5. Security – Recommending updated security system.
6. Regulatory issues – The FD appears to be in compliance and responsive to key regulatory issues such as: AHERA (asbestos inspections), elevator inspections, fire extinguisher inspections and integrated pest management (IPM) registration and reporting. However, he should have administrative resources to help him manage these areas.
7. Building Custodians – As pointed out in the CFEC report, this is one of the two most expensive areas of the School Facilities budget, which is well over \$1.2 million annually with overtime (utility costs is the other).
  - The 26 member custodial staff consists of five senior custodians who work on the day shift from 6am to 3pm, three custodians who work split shifts of 9am to 6pm and 10am to 7pm, and 18 custodians who work from 2:30pm to 10:30pm.
  - Overall, the Custodians are assigned to an average of 26,154 SF per person. This ranges from a low of 21,000 SF at Tucker Elementary School to a high of 29,375 SF at the High School.
  - It's important to point out that the FY 2009 overtime was \$171,000. This is a high number, broken down as follows: Facilities rentals \$71,677; Copeland Foundation \$23,307; Athletic \$7,044; General OT \$65,740 and Building Maintenance (non-custodial) \$3,840. A large portion of the overtime costs (\$94,984) is in outside rentals.
  - Custodial assignments is a bargaining issue and should be addressed in future negotiations.
  - Civil Service is another issue that needs to be addressed.

In summary, the maintenance operation is struggling to meet the increasing demands of these buildings and needs more resources in order to start addressing all of the issues pointed out in this report and in the January 2008 CFEC (Consolidated Facilities Exploratory Committee)

## Town of Milton Joint Facilities Study & Recommendations

Report. I concur with the CFEC that the custodial operation as it presently functions is an area where productivity improvements would result in savings offsets, which in turn would help fund the maintenance program.

### ***Town Facilities Tour and Evaluation, October 30, 2009***

My tour of the Town buildings began with the Public Works yard on October 30<sup>th</sup>. This included a meeting with Public Works Director, Joe Lynch and the Assistant Director, Paul Hurley, who took me to all of the Town buildings. Paul and Joe were both very helpful. The Town Yard buildings, with the exception of the Vehicle Maintenance building, are all long past their useful life spans and are not adequate to support such a critical operation.

The three Fire Stations are very old and appear to require major repairs and renovations. We were unable to get inside of the two Fire substations, as all the units were out responding to emergency calls when we arrived. The Town Office Building and Police Facility were in much better condition; however there are maintenance issues with both that need to be addressed. I did not inspect the roofs or mechanical equipment at these facilities.

The Senior Center is relatively new and in very good condition. We also toured the new library building which, like the schools, has new and sophisticated HVAC control systems. Lastly, we toured the Town Cemetery, which has a number of small buildings including the Cemetery Superintendent's house and offices, along with various Cemetery maintenance support buildings. The Superintendent Therese Desmond-Sills, who I met with, loaned me a copy of the Cemetery Facilities Master Plan which identifies the Cemetery building needs and a master plan.

As reported in the 2008 CFEC report, the Town maintenance and custodial operations are somewhat decentralized. The Police & Fire buildings take care of their own cleaning with a separate outside cleaning person for Police only. The Police Department also has their own separate HVAC maintenance contract. This is something that should be centralized. There are practical solutions to the security issue that was brought to my attention during my tour.

The maintenance of the remaining Town buildings is done by a Superintendent of Buildings, which is a Level 8 working position, who is assisted as needed by a Public Works W3 unskilled maintenance laborer. They report to the Manager of Wires and Maintenance who reports to the Public Works Director. The Town custodial needs, other than Police and Fire, are managed by this group through an outside contract which appears to be very reasonably priced for the services provided. There is an electrician on this staff who takes care of the Town fire alarm wiring system along with traffic lights. I was unable to determine what percentage of this person's time, if any, was spent in support of building maintenance.

The Cemetery and Parks & Recreation Divisions also have labor positions and report to elected boards. The Cemetery Division has eight full time working employees who are responsible for maintaining the 100 plus acre Milton Public Cemetery. The group includes two working foreman positions and six labor positions of various grades. The total payroll of \$574,387 includes the superintendent (\$77,975), Administrative Assistant (\$36,288), seasonal help (\$24,881), and overtime (\$50,000). The Park Department has three permanent full time employees which include two working foreman, one maintenance man and a seasonal laborer. Their total payroll

## Town of Milton Joint Facilities Study & Recommendations

including the director, a clerical person and overtime totals \$288,291. While I have not done a detailed evaluation of these two groups, I want to point out that many towns have integrated these work forces under the Public Works and/or Facilities Departments. As an example, the Town of Andover has a 32-acre cemetery staffed by a Working Foreman, an Equipment Operator and one Laborer, and handles anywhere from 50 to 80 burials per year, plus all of the grounds maintenance and snowplowing. The Working Foreman position also assists with lot sales and burial arrangements with funeral directors and families. These three employees also support other divisions off-site, including working with the Parks & Grounds and Forestry divisions, who maintain all Town and School properties and play fields. These divisions are responsible for the care of all Town trees, roadside mowing and the Town compost site, as well as a variety of other duties. They also assist the Public Works Department and the Parks & Grounds division with snow removal operations and provide equipment (backhoe) support to other Facilities divisions. There may be substantial cost savings that can be achieved by consolidating these two groups with Public Works. Also, Town employees who are subject to complex labor laws and collective bargaining agreements should report to senior Town management in order to promote consistent labor policies and procedures and minimize liability to the town.

### ***Facilities Capital Needs and Planning***

As stated in the CFEC 2008 report, the Town does not have a long range Capital Plan or funding in place to address all of the required building related capital needs. Both are crucial in order to address the Town and School Building needs as well as other infrastructure needs. My recommendations given the problems I observed are as follow:

#### ***Several studies should be funded as soon as possible:***

1. An engineering study and assessment should be done to design a cost effective solution for the five different school energy management systems and the new Town library. This should include detailed bid specs and a plan to add the other Town buildings to a single central system in the future. Mary Gormley indicated that there may be some funding available from the school building debt exclusion article to address this problem.  
*Budget estimate for the study only: \$15,000 to \$20,000*
2. A building assessment should be performed for all Town and School buildings to identify and prioritize major repairs and needed renovations such as roof replacements and major mechanical system upgrades. The study should include a detailed roof assessment and should also point out any equipment upgrades that would lead to improved energy efficiency. The buildings at the Town Yard that need to be replaced should only be evaluated to identify short term safety issues and repairs. (A separate study should be done to find a solution for the Town Yard).  
*Budget estimate: \$45,000 to \$50,000*
3. In order to put a formal Preventative Maintenance program in place, a separate study should be done to inventory all building equipment and systems and provide written preventive maintenance procedures for all equipment and building systems. Such

## Town of Milton Joint Facilities Study & Recommendations

procedures should comply with the equipment manufacturer's specifications and should be loaded into the existing "School Dude" software system, which is not being utilized except for utility tracking.

*Budget estimate: \$15,000 to \$25,000*

The building assessment study can be used to establish a five year Capital Plan which can be updated annually. Other capital needs can be included in the Capital Plan, such as ongoing vehicle and equipment replacements, Public Works projects, Police and Fire Department needs and technology enhancements.

Funding for building related capital needs could be achieved with one or more bonded articles. It appears that Milton's non-exempt debt, as a percentage to the total operating budget, is low in comparison to other communities. This is one option to consider. However, given the current financial problems, the additional debt service which ultimately becomes part of the annual operating budget may be unaffordable. Thus, a second option may be to consider a large debt exclusion article. Looking forward, I recommend that the Town consider adopting a financial plan allocating a percentage of the total operating budget to be reserved each year for the purpose of supporting the ongoing capital needs. As an example, the Town of Andover has used 2% and funded capital budgets with free cash in the past.

### ***Joint Facilities Recommendations and Organizational Structure***

In order for a new joint facilities organization to succeed for an operation as large as the Milton Town and School Buildings, a Director and an Assistant Director position will be required. The Assistant position can function as an operations manager, similar to the Assistant Director position in the Public Works Department, with a strong focus on day to day operations. The Director and Assistant Director can share supervisory functions, project management functions which will be needed for all of the planned capital projects and a variety of other responsibilities including contract administration, utility purchasing and tracking and energy conservation. A full-time office administrative assistant will also be needed to manage the preventive maintenance and work order system. This position can also assist with regulatory record keeping, utility cost tracking and dispatch for urgent maintenance requests. Initially this position could be created by expanding an existing part-time facilities related position, such as the half-time building rental scheduling position, which can be managed by this new organization. However, the PM function will easily consume most of this person's time.

The existing maintenance staff in the schools, along with the superintendent position in Public Works, can be merged into one organization. The existing Town Maintenance Superintendent position could continue to take care of Town buildings and grounds functions, including non-licensed maintenance functions (carpentry & masonry, etc.) and Town dayshift custodial issues. He can be occasionally assisted with a public works grounds laborer and or seasonal laborer position. Contract cleaning oversight should be managed by the Assistant Director or the Director. I do not have any details on the skill level of the existing Town Superintendent position and without this information I cannot determine whether this individual has the skills to work in higher levels of responsibility. Two new trades' positions should be considered to fill a current void. The first is a licensed electrician (the highest priority) which is needed as soon as possible

## Town of Milton Joint Facilities Study & Recommendations

just to support the school buildings. The second is a licensed craftsman position with carpentry, masonry, hardware and locksmith skills. I also see a strong need for a PM mechanic to perform filter changes, replace belts, lubricate equipment, etc. This position could free up some of the HVAC technician's time and would allow him to perform higher level functions, such as maximizing energy efficiency. This decision would depend upon the skills that the Town employees have in filling the carpentry related skills above.

School Custodians – The issues pointed out in this report should be discussed with the Custodians' bargaining group. Many communities are outsourcing all or some of their custodial requirements with relatively good results and substantial cost savings. Gathering information on the cost savings that can be achieved through outsourcing will be beneficial during these negotiations with the bargaining unit. One change that should be considered for the consolidated facilities organization is second shift custodial supervision. This could be achieved by upgrading one existing custodial position to a second shift Working Foreman position, as long as Management selects a well-qualified candidate. Also, some form of team cleaning on the second shift should be considered to improve productivity.

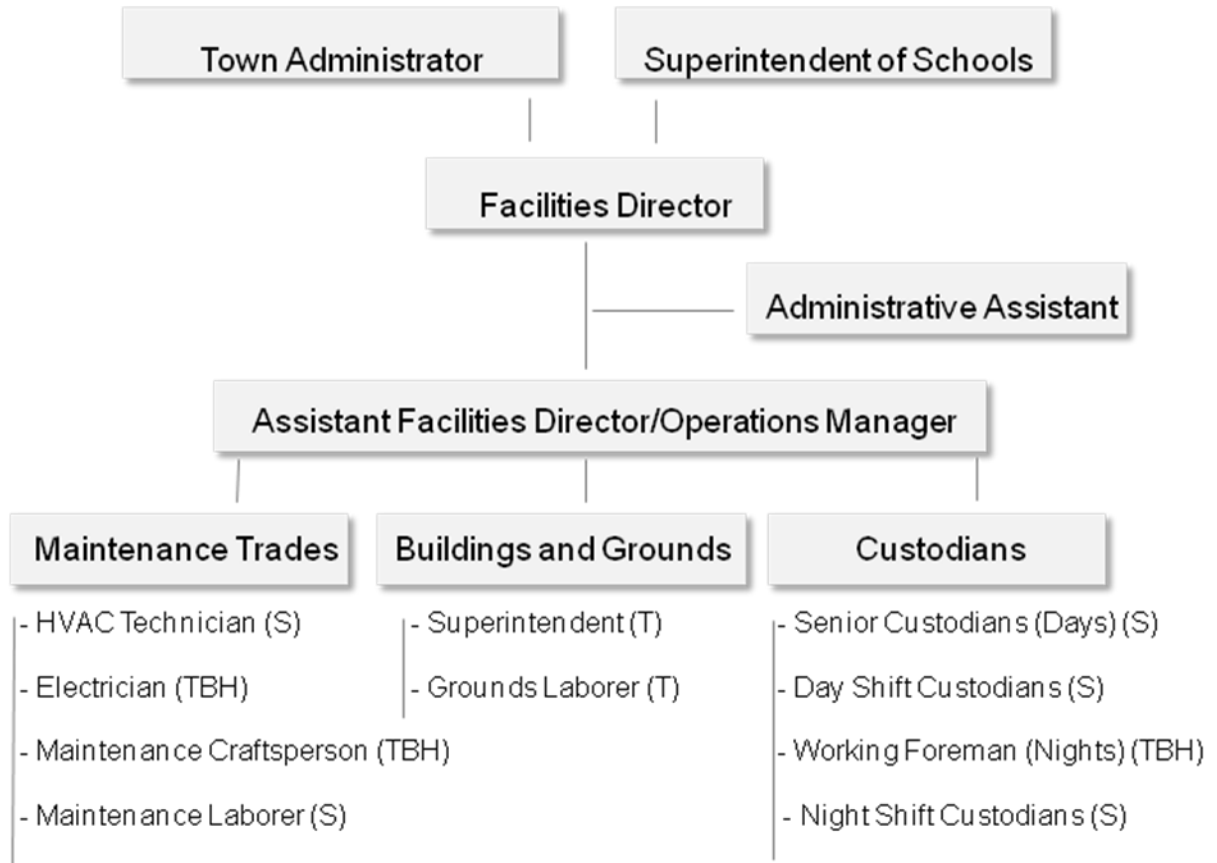
Budget Organization – The recommended budget model is to combine all of the labor and expense funds into one new Town operating department with joint reporting responsibilities to the Town Administrator and the School Superintendent. The new department budget should be a stand alone budget and not part of any other Town or School departments. I do not recommend including all of the utilities in this budget, as these are direct costs associated with their respective departments and should remain there to provide incentives to conserve energy. However, buildings such as the Town Offices and support buildings related to this function should be in this budget. The new facilities group should play a major role in tracking, controlling and purchasing all utilities. This can be done on the existing School Dude software, which would allow other departments to enter bill data into the system and view their bill history and usage.

The draft organization chart or transition plan is a concept plan that can be used to establish the new joint facilities organization. As I stated in prior meetings, the new Facilities Director should be allowed to create the long term plan to meet the overall goals of this new organization.

The organizational chart on the next page shows a dual reporting function to both the Town Administrator and School Superintendent. The reporting structure to the Assistant Director and Director positions can vary from this model.



## Draft Organization Transition Plan Town & Schools Facilities Department



(T) Existing Town  
(S) Existing School  
(TBH) New positions

***Critical Items to Establish a New Joint Facilities Organization***

Collective Bargaining – The current Town and School employees are represented by two different collective bargaining groups: AFSME in the School Facilities and MPEA in the Town group. The School Custodians are also Civil Service Employees. Ideally, it's much easier to have one group represent all employees; however, it may be OK to have two separate bargaining groups. If two separate groups are necessary, there needs to be a separation of job classes in order for this reorganization to work. When the Town of Bedford consolidated their facilities groups, all of the Town and School maintenance and custodial positions became part of one collective bargaining group. This needs to be negotiated with each group along with the Civil Service status and will require guidance from labor counsel.

New Facilities Director – Hiring/appointing a new Facilities Director is another major step in the process. This person should be technically capable of doing the job and possess the necessary management skills to play a major role in resolving the labor and budget issues that may arise while establishing the new department structure.

Budget – Funds from all of the Town and School Departments' existing labor and expense accounts will need to be identified and transferred to the new Facilities Department Budget. The existing budgeted funds will also have to be increased to address all of the needs outlined in this report. More work is needed here to establish a transitional budget and identify existing budget line items that can be transferred.

Financial and Work Order Tracking System – A tracking system needs to be established to track all Town and School expenditures. The School Dude computerized maintenance management system (CMMS) has this capability. This can be used for the required annual reports to the State for the schools and can be viewed monthly (monthly reports can be generated) to measure where all of the direct labor and financial resources in this department are being used.

Job Descriptions – New job descriptions need to be written and approved for the three key positions: Director, Assistant Director, and Office Administrator. I will provide some samples.

Town/School Agreement – A written agreement, to be signed by the Town Administrator and the Superintendent of Schools (and subject to the approval of the School Committee and the Board of Selectmen) needs to be drafted. It should include a reorganization plan and key elements such as: performance expectations and performance evaluation, establishing priorities, funding expenditures, hiring, disciplinary issues, reporting responsibilities, location of the new department and how conflicts will be resolved.

Office/Shop Area – Space for the new department needs to be identified including an office area for the new department to accommodate the three administrative positions with additional space for files and record storage. Ideally the shop area should be close by to encourage daily communication with staff.

***Outsourcing vs. In-house labor***

As a general rule, in the higher level trade positions such as HVAC technician, electrician, plumber, etc., where there is a full time need for these services, in-house employees are more cost effective, provided there is good supervision and direction by management. Another benefit is the detailed information retained by in-house employees of the building systems that gets lost with outsourcing due to the turnover. The prevailing wage laws also make outside contracting in these areas very expensive and typically add 25% to 30% as compared to the private sector. Since the Town cannot afford to hire all of the trade positions it needs, some functions can be combined. However, assigning a lot of lower level laborer functions to high level tradesmen is not cost effective. Hiring trades persons who can perform other trades work is highly desirable.

On the lower end of the skill level are the custodial positions and some grounds laborer positions which are not subject to prevailing wages. These are areas to focus on for outside contracting cost comparisons. One approach that works well is to have a combination of in-house employees, outside contracts and seasonal employees.

In reviewing the two existing labor contracts I noted that the Town agreement with the Milton Public Employees Association allows subcontracting as long as employees hired prior to September 1, 2000 are not laid off (Article 29 page 25). I did not see a reference to this in the School AFSCME contract.

**In Conclusion**

In conclusion, I agree with the recommendation of the CFEC that a joint facilities organization would be beneficial for the Town of Milton. Most importantly there would be a single group that would be responsible for maintaining all Town and School buildings, as well as providing direction and oversight to a long term capital plan. Savings from any efficiency advancements can help offset the additional resources that will be required to accomplish these goals.

The transition from the decentralized system presently in place, to a new consolidated facilities organization will take an enormous amount of work. In order to accomplish this it's important that Milton select a leader for this group who will be capable of building this new organization from the ground up and establishing credibility with his/her customer base. To succeed, the Town & School leaders need to be solidly behind this person and support the long term objective.