

FORENSIC CONSULTING SERVICES REPORT

Trumbull High School Like New Renovation
Phase I & II

March 31, 2014

Forensic Consulting Services Report
Town of Trumbull, Connecticut
Trumbull High School Like New Renovation Phase I & II

I. Assignment

The Town of Trumbull (the “Town”) engaged Grant Thornton, LLP (“GT”) to provide special forensic audit services in connection with the Trumbull High School Like New Renovation (Phase I & II) which took place from May 2008 to the present. In September 2013, the forensic audit contract was later transferred from GT to Sansiveri, Kimball & Co., L.L.P. (“SK & Co.”). The reason for the transfer of the audit to a new firm was that the lead auditor had left the firm of GT and moved to the firm of SK & Co., another CPA firm. GT and the Town agreed to transfer the forensic audit work to SK & Co. SK & Co. accepted the work under same terms and conditions as GT had agreed to. All references in this report will be that the work was performed by SK & Co., however any work performed prior to September 2013 would have actually been performed by GT.

Although this engagement specifically referenced Trumbull High School Like New Renovation Phase I & II, there may be portions of the work and references in this report that deal with other phases of the renovation project.

SK & Co. has subcontracted Pan American Consulting Services, LLC (“PAC”) for the construction expertise required for this engagement. References made in the report to SK/PAC are referring to the collaborative work done in this assignment by both SK & Co. and PAC.

The services that SK/PAC was engaged to perform are as follows:

- Gather relevant information to initially determine the scope of work and other resource needs which included:
 - Meeting with designated Town officials to obtain an understanding of the issues surrounding the renovation.
 - Obtain and analyze allegations, claims, concerns or complaints.
 - Assessment of risks and red flags indicative of improper activity
 - Identifying, locating and determining the accessibility of evidence (e.g. documents, records, reports, and data) potentially relevant to the investigation.
 - Evaluate the size, complexity and time period to be investigated and analyzed
 - Consult with the Town to develop preliminary investigation scope, reporting process, and work plan.
 - Develop preliminary hypothesis of issues that occurred during the Trumbull High School Like New Renovation (Phase I & II)

- Substantiate preliminary hypothesis developed by SK & Co. which included:
 - Identifying and interviewing individuals with project knowledge
 - Recovering and producing relevant evidence.

- Reviewing selected evidence and data.
 - Analysis of key areas, transactions and/or time periods
 - On site investigation of Trumbull High School (“THS”)
 - Evaluation of findings
 - Validate hypothesis and plan further investigative procedures.
- Investigation and analysis of validated hypothesis which included:
 - Focusing investigative procedures towards specific individuals, companies, transactions, or groups of accounts that have been assessed as having a significant impact on the project.
 - Produce findings supported by facts, evidence, and professional experience.
- Communicate the findings and results of our work which includes:
 - Delivering our findings from our investigation verbally to the First Selectman.
 - Preparing our findings and results in a written report.
 - Recommendations to the Town of appropriate actions to prevent future abnormal activities.

II. Background

Trumbull High School Like New Renovation Phase I & II

Trumbull High School was built in 1971 and has served the community for over 40 years as the Town’s only high school facility. Prior to May 2008, the growing enrollment of Trumbull High School had led this 332,250 square foot facility to be unable to meet the classroom and laboratories needs of the student population. In addition, the infrastructure of Trumbull High School has not been significantly renovated in the 36+ years of operation and the facility was in dire need of modernization and updating.

In 2003, the Town commissioned a feasibility study from Silver Petrucelli & Associates, Inc. (“SPA”) (Architects & Engineers). The feasibility study examined the “Renovate as New” option versus building a new high school. A final report was issued by SPA in January 2004 which was later revised, updated, amended and then recommended to the Board of Education in February 2005. This report was then submitted for Town Council Categorization Analysis in February 2007. The SPA report indicated that new construction would exceed \$131 million while a “Renovate As New” project would cost the town approximately \$55 million after state reimbursements.

In May 2007, it was proposed that Trumbull High School be renovated as recognized by Connecticut General Statute 10-282 (18). Section 10-282 (18) defines “Renovations” as “a school building project to totally refurbish an existing building (a) which results in the renovated facility taking on a useful life comparable to that of a new facility and which will cost less than building a new facility as determined by the department, provided the school district may submit a feasibility study and cost analysis of the project prepared by an independent licensed architect to the department prior to final plan approval, (b) which was not renovated in accordance with this subdivision during the twenty-year period ending on the date of application, and, (c) of which not less than seventy-five percent of the facility to be renovated is at least

thirty years old.”

This proposal would expand Trumbull High School by an estimated 38,637 square feet to meet the needs of the growing student population and the diverse curricula that is offered and required of the students. The Educational Specifications (“Ed Specs”) for this project anticipate that this expanded and renovated facility would be able to serve 2,200 students.

From May 2007 through June 2008, the Building Committee (“BC”) proceeded with the process of selecting various professionals to be involved with the project including Architects, Construction Manager and Owner’s Construction Representative. The Town’s purchasing department had some involvement with this process.

Phase I of the project dealt with the building of an auditorium and natatorium. Programming meetings for Phase I started in June 2008 with the Board of Education (“BoE”) and the Town Council (“TC”) approving the Phase I plans in March 2009. The Auditorium was expedited for summer 2009 construction. The natatorium was later removed from the project.

The total project cost for Phase I and Phase II as per the State Submission in February 2009 was \$73,671,120 which included \$64,500,000 of Construction Costs and \$9,171,120 of Owner’s “Soft” costs. See Exhibit A.

Phase II of the project dealt with renovations to the existing building with the exception of renovations to create a new boiler room and ancillary mechanical/electrical rooms which was included in the Phase I work. The BoE and the Council approved the Phase II plans in October 2009.

The total project cost for Phase I and Phase II as per the State Submission in October 2009 was \$73,672,000 which included \$62,645,257 of Construction Costs and \$11,026,743 of Owner’s “Soft” costs. See Exhibit B.

There were five phases to the project with an original estimated completion date of August 2012.

Forensic Audit

In February 2013, the current administration of the town sought proposals for Special Forensic Audit Services of the Trumbull High School Like New Renovation Phase I & II. During a Pre-proposal conference, the town officials present had identified some of the items that they hoped the forensic audit would look into and address. These items would include:

- Town Procurement policies
- Bid award process
- Use of multiple construction professionals
- Governance
- Delineation of responsibilities amongst the various parties involved
- Review of the owner’s contingency funds

- Review of certain perceived design issues, including a number of project add-ons
- Project Schedule and completion date
- Contract values exceeded without proper approvals

III. Procedures Performed

In February 2013, during the proposal process prior to being selected and engaged to perform the forensic audit, SK/PAC performed a preliminary walk through of the high school facility in order to gain a better understanding of some of the perceived issues with respect to the project.

In August 2013, after being selected and engaged to perform the forensic audit, SK/PAC met with certain Town officials and employees to:

- Obtain an understanding of the issues surrounding the renovation
- Obtain and analyze allegations, claims, concerns or complaints
- Make an assessment of risks and red flags indicative of improper activity
- Identify and determine the accessibility of certain evidence (e.g. documents, records, reports, and data) potentially relevant to the investigation
- Evaluate the size, complexity and time period to be investigated and analyzed
- Develop a preliminary investigation scope, reporting process, and work plan.

The Town officials and employees that SK/PAC met with in August 2013 were:

- Timothy Herbst, First Selectman
- John Marsillio, Director of Public Works
- James Henderson, Financial/Accounting Controls Analyst

A second walk through of the facility occurred in August 2013. After the second walk through and initial interviews with town officials and employees, SK/PAC requested a number of documents from the Town. The general categories of documents were related to:

- The BC - agendas, minutes, etc.
- RFQ's and RFP's for Architectural and Engineering ("A&E"), Owner's Construction Representative ("OCR"), Construction Manager ("CM")
- Scoring and Award for A&E, OCR, CM
- Contracts for A&E (and their sub-consultants), OCR, CM
- Bid packages for subcontractors
- Trade Contractor Scope Sheets and Awards
- Change Orders and Tracking
- Building Committee Progress Reports and Presentation Materials
- Design Documents
- Value Management Logs
- Punch Lists

See Exhibit C for a list of documents received and reviewed.

In November 2013, after two walkthroughs of the facility had been completed and the requested documents had been received and reviewed, SK/PAC had formed preliminary hypothesis of issues that might have occurred during the high school renovation project. SK/PAC then identified individuals with project knowledge and scheduled interviews with these identified individuals during early January 2014. The purpose of these interviews was to validate or invalidate the preliminary hypothesis of what might have occurred during the project. SK/PAC also performed a third walk through of the high school in January 2014.

The individuals that SK/PAC met with and interviewed were:

- Brian Holmes, P.E., LEEP AP, Assistant Vice President, O&G Industries, Inc. (served as Project Executive)
- Stephen Burgess, AIA, Senior Associate, JCJ Architecture (served as Project Manager)
- Scott Celella, Principal, JCJ Architecture (served as Principal in Charge)
- James Murphy, Director of Risk Management, JCJ Architecture
- Alfonso F. Barbarotta, President/CEO, AFB Management (OCR)
- Robert Chimini, Purchasing Agent, Town of Trumbull
- Steven Kennedy, Director of School Facilities, Trumbull Public Schools
- Lucinda Timpanelli, Principal C House, Trumbull Public Schools, Member of the BC
- James Nugent, Esq., Chair of BC
- Jeffrey Donofrio, Esq., Attorney for BC, Ciulla & Donofrio, LLP
- Kathleen Bivona, Member of the BC
- Doug Doyle, Member of the BC
- Mark Ronnow, Member of BC
- Arthur Lemay, Member of BC

SK/PAC has asked Frank Zaino, P.E. (who had been hired by AFB Construction) to meet with them, but Mr. Zaino indicated that his report spoke for itself and would be available to answers specific questions on his report.

SK/PAC also had some interaction with Maria Pires, Director of Finance for the Town.

IV. Findings and Recommendations

There are risks associated with complex, multimillion dollar municipal construction projects. These projects require that the municipality devote adequate resources for proper oversight of such projects. In addition, it is important that the municipality invest in management safeguards and full-time professional management for such projects.

The purpose of this forensic audit was not to assess the quality of the design, nor to evaluate the

construction manager's performance nor to conduct a detailed financial audit of the project but rather to examine how some problems might have been prevented and how future municipal construction and renovation efforts can be better managed and controlled.

Our findings and recommendations are addressed below. The comments have been divided into the following sections:

1. Expectations
2. Responsibilities
3. Communications
4. Pre-Construction Process
5. Procurement & Legal
6. Building Committee
7. Design Issues
8. Construction Issues
9. Project Costs
10. Project Schedule

Expectations

This project concept started in 2003 when the Town commissioned a feasibility study from SPA. SPA's draft report was issued in November 2003, their final report was issued in January 2004, a revised updated and recommended report was issued February 2005 and the TC categorization analysis was done in February 2007. The time frame here suggests that there were clearly a number of discussions, iterations and considerations made in deciding how to proceed on this project. In this long time frame (almost four years) a number of discussions had taken place and a number of concepts had been explored. During this time frame, certain individuals remained constant in this decision making process and other individuals had "come and gone". With any project of this magnitude, any changes in individuals involved causes gaps in communication, transference of knowledge and differences in expectations.

It was clear to SK/PAC during our work that different constituents had very different expectations of what a "Renovate as New" project would entail and what they could expect during construction and at the completion of the project. An example of one of these expectations "gaps" would be that certain constituents believed that there would be little to no effect on day-to-day operations of running a school. This is an unrealistic expectation. Some of those constituents that had those expectations were not "in the trenches" at the schools every day.

There were expectations by other groups that believed that "Renovate as New" meant that once renovations were complete, the facility would look like a brand new facility. Again, this is an unrealistic expectation in that "Renovate as New" is defined by the Connecticut Statutes as an existing school facility that is totally refurbished which results in a renovated facility that takes on the useful life comparable to that of a new facility – not one that looks like a new facility. For example, if a building component cannot provide adequate or proper service for the next 20 years, it must be replaced otherwise, it does not need to be replaced and cannot be replaced under the rules for state reimbursement. Of course, items not

meeting those criteria can be replaced at the option of the Town who would then bear the entire cost of those replacements without any reimbursement from the state.

The BC was actively involved in this project with meetings as frequently as every two weeks. After the interviews with BC members, their expectations appeared to be more realistic than other constituent groups.

A “Renovate as New” project for a 50+ year old building is a significant project. There are a significant number of upgrades which need to be addressed to meet the “Renovate as New” requirements of the State and the Bureau of School Facilities (“BSF”). The disruption and costs associated with a project of this nature, often lead to a new facility being built, as it is often less expensive to do so, even considering the costs of temporary space. For this project, the Town investigated the options and it was decided to pursue the “renovate as new” renovation in an occupied facility. This was a tremendous undertaking that would test the patience of all involved.

Renovation projects in occupied buildings bring a level of disruption which must be expected. It appeared to us after interviewing some key individuals involved in the project, that the expectation of many working and teaching in the school was that the environment they were used to on a daily basis to educate the students would not be compromised during the construction process. This was not a reasonable expectation, and appears to have been a driver in a number of complaints (from end users as well as from the construction professionals and trade contractors) related to this project.

Many projects of this nature utilize “swing space” either on site (separated from construction area) or off-site to accommodate a portion of the student population during the construction process. It appears this option was reviewed and deemed not a viable solution. A fairly “ambitious” decision was made to proceed without having a swing space for portions of the population at an alternative site. It was decided that the former Auditorium space could be constructed as classroom space in an early phase to provide the required swing space during the renovation of the other portions of the school. This decision, while obviously less expensive than off-site alternatives, came with some fairly major risks and associated problems.

The risks commonly associated with a renovation of an occupied facility include safety concerns, health concerns and interruptions to power, heating systems, life safety systems, etc. The safety risk is obviously the greatest risk as society values the safety of our children as one of our biggest concerns. Health risks are a concern if proper separation, air quality and protection measures are not followed during the construction process. Lastly, whenever there is work being performed on the plant facilities of an operating building, you risk unexpected temporary outages. These outages not only create significant disruptions, but can also become significant safety hazards. Health and safety have not become a primary focus of this investigation, as there is a potential for these major issues in a construction project of this magnitude and nature.

The problem most often associated with construction within or around an occupied school is the disruption to the school operations and potential for disruption to the educational process. Another problem is the additional scheduling and relocations required by school operations and administration

which have a significant impact on the administration, staffing and students. Changes in daily routines can have a significant impact on the ability to teach and learn. This problem is considerable and nearly impossible to avoid in a “Renovate as New” project. There was clearly a breakdown in the communication of this probability and associated expectations (if there truly was an expectation that there would be minimal disruption to the day to day activities). The professionals entered this extremely difficult project with the expectation that they would be given the access needed to construct the project during reasonable times. We received feedback during the interviews that indicated that the end user was not always willing to provide reasonable access. This expectation of reasonable access was warranted and the lack of access caused legitimate scheduling issues and cost impact to the project.

During the entire time span of this project, there was turnover with a number of parties to this project – a new administration entered during this project, new members of the TC, new members of the BC, etc. These changes clearly caused gaps and losses in knowledge transference and therefore caused delays. A municipality being a political environment with different branches of government does not always function as the business world does. Often times this lack of knowledge and sometimes lack of cooperation causes processes to suffer and breakdowns to occur. Any “hiccup” in a project of this magnitude can cause delays in decision making and schedule delays which impact a number of people from the trade contractors, to school personnel, to students, etc. These delays can lead to project overruns.

An example of a decision that caused schedule delays and possible cost overruns was the decision to eliminate the natatorium. We believe that this was done in an effort to demonstrate fiscal responsibility. This item was pulled from the project without the benefit of seeing where the cost estimates would have come in. This item was eliminated from the project, even though the design was complete. JCJ recommended bidding this item and O&G was prepared to bid it. The removal of natatorium was a very emotionally charged event with a number of repercussions. A lot of money had been spent up until that point and the public felt that the due diligence to be able to make a sound decision had not been completed. More importantly, removing the natatorium caused a ripple effect of schedule changes due to re-design and thus missing a window of opportunity. This shifted phasing along with the project schedule and thus resulted in additional costs.

One of the issues that came up repeatedly during the interviews and during the walk-throughs of the school at the beginning of our assignment, was that the “public” (i.e., taxpayers) would have a hard time understanding what they “got for their money”. The project budget restrictions did not allow for many of the updates to the “finishes” that were desired. The budget did not allow for all of the finishes to be updated as desired, leaving a casual observer to question what was done for such a large sum of money. An example of this would be where only certain doors in a series of doors were replaced since some of those doors would not provide proper service for the next 20 years and must be replaced while other doors would function fine for the next 20 years and could not be replaced under the rules for state reimbursement. While the project addressed a number of these “non-reimbursed doors” as “additional items” after the bidding process resulted in a project that was under budget, the reduction of the project funds later in the process resulted in a number of doors being left in place.

Modern buildings tend to utilize significantly more robust Structural, Mechanical and Electrical (“MEP”)

systems to support the LEED requirements, comfort levels, and technology that is mandated and expected in the modern education environment. At least 50% of the costs for a major renovation project like this are typically spent on these “infrastructure” items that are not really “seen” by the casual observer. These items include structural updates to meet current seismic codes, Mechanical, Electrical and Plumbing (“MEP”) systems infrastructure to accommodate the additional number of toilet rooms and plumbing fixtures required by current codes, mechanical control systems to provide the comfort level and energy efficiency required to meet LEED and sustainable building practices, etc. The nature of a phased / occupied renovation project adds significant costs for General Conditions and General Requirements of a project, as there is a higher need for coordination with the end user, protection of the public and building occupants directly adjacent to the construction, and a level of inefficiency inherent with this type of project.

One factor, that seems to have a very specific impact to the public perception of this project, is that Value Management (a.k.a. Value Engineering) took place in the design process to ensure the project would be within budget and able to proceed as planned. As described earlier, a majority of the costs for a project are spent in infrastructure and code related items, so the items that are usually compromised the most during the “value engineering” process are the “finishes”. In this case, due to the timing of the decision making process, the bidding process and actual construction it appears there was favorable bidding due to the market conditions (post 2008), leaving additional funds available to put certain items that were cut from the original budget back into the project. A decision was made to reduce the project budget, rather than to recapture the level of finishes previously anticipated. This decision appears to be the driver of many of the complaints.

During the interviews, the CM indicated that they felt that the BC did not really understand the Value Management process. It is the responsibility of the Professionals engaged in the process to ensure that the BC and the end users understand the Value Management process and the impact it is going to have on the end product. It was likely an expectation of the BC that the professionals would explain the process so that the BC fully understood it. This would not have been an unreasonable expectation.

During initial interviews with Town officials, the issue of the Emergency Generator size and the inability to meet the requirements for an “Emergency Shelter” was identified as an item that needed to be investigated. This subject was reviewed in meeting minutes and discussed during the interviews. Both the Architect of Record and the BC have indicated that the inclusion of an emergency shelter was never identified in the Ed Spec and therefore never part of their “charge”. The argument from “the Town” is that the school was previously identified as a “shelter” before the renovation; therefore it was reasonable to expect that the Renovation project would have met the same standard.

During the discussions of this Emergency Shelter issue with the design team and BC members, it was indicated that the existing structure simply would not meet the FEMA guidelines for an “Emergency Shelter” due to the strict requirements placed on any structure meeting this designation. The response from the design team indicated the budget that was available for the “Renovate as New” project simply would not support the revisions to the project that would be required, such as:

- The project would have required significant structural upgrades to meet the minimum requirements for Seismic resistance
- The glazing required for an emergency shelter, which is designed to absorb impacts from flying debris would have been significantly more expensive than the budget could handle
- The Mechanical Systems and emergency Power Generation systems required simply could not be met within the budget assigned for this project

Current code requirements and Sustainable Design principles have played a major part in the significant differences in building mechanical systems utilized when original school building was constructed, versus what would be designed for a building in today's environment. Energy efficiency, comfort of end user, and health concerns have mandated a mechanical system that is significantly more robust than what would have been in place 30+ years ago. BSF requires that projects they are funding provide "LEED Silver Equivalency". In order to meet the requirements of this program, the designers are often required to design a building to be 20% to 30% more efficient than the current ASHRAE (Formerly the American Society of Heating, Refrigerating and Air Conditioning Engineers) standards. In order to meet this requirement, the building must often include very complex HVAC systems that provide a very large volume of air changes. This requires the use of high performance insulations, vapor barriers and mechanical systems to properly manage the temperature of the building and its occupants. The complexity that is inherent in these systems now require more power for the system to work as needed to meet the basic needs of the end user, but also require more power to "protect itself" in the event of a power failure. Base generator sizes have increased significantly over the years to accommodate this need. Although this "increase" in generator size is counter-intuitive to the layperson visualizing a more "efficient" building, it is very common. In this case, the increase to the generator capacity may have been seen to the layperson as something that might provide more power for a "shelter", the reality is that the generator increased as a requirement of the increased demand of the mechanical systems.

One of the "Expectations" that appears not to have been communicated effectively, was the desire for the facility to act as an "Emergency Shelter". The building Committee members that were interviewed have indicated that it was never in their "charge" and had not been written in the "Ed Spec" which was what they were charged with. There appears to have been some communications indicating that it was a requirement later in the process.

The Designer and the BC were questioned if they were told this was a requirement and they indicated that they were never given any formal indication that it was to be incorporated. JCJ indicated during the interview process that they were never "asked" to meet with the appropriate Town officials to review this during the schematic Design Phase, which is when an issue like this would typically be put on the table. It is questionable whether a designer would need to be "asked" or if this was a standard practice that would be expected of the Architect as part of their "Professional services". In the future, it is recommended that the coordination between all Town officials be mandated in preparation of the "Ed Spec" or scope of work in future construction projects.

Some of the BC members with significant construction experience indicated that they expected a much higher level of commissioning to be done. These individuals were involved in some significant

mechanical projects and had a good grasp of the process. The LEED Silver equivalency required by the BSF also requires an “enhanced Commissioning process” which will be an item that is verified during the BSF audit to ensure reimbursement. The type of project, being a phased occupied renovation, makes this process extremely difficult. The process requires that all of the systems be tested to ensure they are communicating properly and running as efficiently as designed. This is very difficult to test until all phases are complete so that all components are in place. It is also very difficult to test while a building is occupied, as there are multiple shut downs and testing of systems required. It is not uncommon for the commissioning process to take place after construction is completed during the next available vacation. This often requires additional work on the systems to make them operate at full efficiency. The expectation that this work would be done during the construction process, although a legitimate expectation, may have been a lofty one based on this type of project and the scheduling needs of the school administration. It is not uncommon for cost overruns to include additional supervision and coordination with subcontractors to address the commissioning process after the project is complete, a process which is likely required to receive full reimbursement from the BSF.

It is our recommendation, where possible, that the firm engaged to provide a feasibility study on which such major decisions are based, be the firm that is engaged to provide professional design services for the project. By identifying the direction of the project prior to the selection of the design professionals, there is an inherent lack of “ownership” of this decision. Later in the process, it is very easy for team members or professionals to point at that decision as a reason for major shortcomings. If the firm providing Professional Design Services has completed the Feasibility Study and made recommendations on a direction, it is more likely that they will stand firmly behind decisions made during the design process, and less likely to simply state their design was founded on decisions that were made prior to their involvement.

Responsibilities

SK/PAC has prepared a “Responsibility Matrix” and has attached this document as Exhibit D. This document was created by identifying the Scope of Work required by each Professional or their consultants based on the Contract that was executed and recorded for each of those professionals. The RFP documents that were issued for these professionals were also reviewed to see if there were items that had been requested during the proposal process that may not have been appropriately captured within the contract responsibilities. It appears, from our review, that the contracts have captured all of the intended Scope of Work that was outlined in the RFPs that were issued by the Town.

During interviews with the Town officials, Building Committee Members and End Users, there appeared to have been some inconsistency regarding the level of participation by the Architect (JCJ) with regard to interviews with end users and department heads. Some felt that there was a significant effort by JCJ to incorporate the requirements of the end users in the project plans. Others indicated that there were so many additional changes needed in the end, that JCJ simply must have missed items during that phase of their responsibility. This inconsistency resulted in a number of questions being asked by SK/PAC during the interview process and a request for JCJ to follow up with specifics regarding the planning and design meetings that took place. JCJ has provided a “Summary of Program Meetings” which we have included as Exhibit E. The reported meetings appear to be consistent with the meeting minutes, which were

reviewed.

There is clearly a difference of opinion as to the “result” of these meetings. SK/PAC felt that the meetings that were scheduled and took place certainly meet the intent of the pre-construction and design process that is typical for a project of this scope and magnitude. Any inefficiencies or miscommunications that may have taken place during this process are likely a result of “inexperience” with this type of process. It is difficult for a Design Team to ensure the end user fully understands the implications of the decisions and requests that are being made. There are simply too many variables to be able to fully explain during the process. Therefore, it is customary to collect information from the end users, assess the information and incorporate into the design while adhering to the many influences (code, budget, ADA, existing conditions, etc.) that dictate how the design must proceed. The solution to these issues is then presented to the end user for “sign off” so that the design can progress to the next level. We understand these “sign offs” took place. It appears, however, that the professionals, end users and BC members agree the project schedule did not allow for a detailed and thorough explanation of the design and why certain decisions were made. Many members feel they were forced to sign off on the documents hastily with insufficient time to vet any of the issues that they later discovered during the construction process.

The “design and construction process” is something that many people feel they have a grasp of, but one that most lack a reasonable understanding of. The ability to look at a set of “drawings” which are in “2D” and visualize what that will be “in real life” is one that is developed over many years. There are very few people that have the ability to do it well, even for those working within the construction industry. It is not uncommon for the layperson to see something on paper which is not what they had requested yet they will sign off on it, not realizing what they are agreeing to. They will then see it being constructed in the field and indicate it was not what they had “signed off on”. This is common in this process, and an issue that is difficult to manage. SK/PAC believes that this occurred and was a significant issue on this project.

Building Information Modeling (“BIM”) is a process that has been successfully adopted within the Design and Construction community. This process provides three dimensional (“3D”) modeling of a project. This modeling provides a huge number of benefits to a project of this magnitude and complexity. This process allows the design to progress in 3D from inception to completion. This method of design allows a much better method of engaging a “layperson” in the design process as it is much easier to visualize the end result. The graphics and renderings available with this new technology really enhance the understanding of the end user and increase the efficiency of the Design Team and Constructor. The process, when used properly, creates a tremendous cost savings on a project, as a majority of the “conflicts” that would previously be discovered in the field during construction, are found and resolved during the design process. While BIM was certainly available when this project was conceived and the contracts awarded to the professionals, it was not really considered an “industry standard” on projects of this magnitude, as it is today. Although the use of this technology was not considered industry standard at the time this project kicked off, the use of BIM would have certainly eliminated many of the design issues that occurred on this project. It is recommended that the town consider requiring the use of BIM in all future projects of such magnitude that would capture the benefits of such a system. For very small or specialized projects, the use of BIM could be a burden to the project, so this must be considered before mandating BIM.

The pre-construction process requires input and review from all constituents for a successful outcome. The traditional process for this type of project would make the CM responsible for reviewing the documents published at schematic design, design development and construction documents prior to approval to move on to the next phase. The CM traditionally reviews the documents released and provides a “constructability review” to the owner and design team to identify inconsistencies in the documents, missing information that would result in schedule delays or increased costs (change orders), inter-discipline coordination and current market influences. The addition of an OCR often adds an additional layer of protection for the owner, as they are often required to provide additional input regarding the sign-off on the document submissions. Based on our research of the contracts and associated responsibilities, it appears this project was consistent with the responsibility of the CM to provide feedback, but not with the requirement for an additional layer of review by the OCR. To our knowledge, O&G provided this service on several occasions during the process, including the BSF preparation and submission process which meets the expectations of the CM in the traditional process. It does not appear that the OCR was responsible for providing any additional reviews. We are not aware of any formal reviews prepared or submitted by the OCR for this project. Our recommendation for future projects would be to add the responsibility for additional layer of review by the OCR to the scope of work and contract for the OCR.

One objective of the Forensic Audit was to determine if all of the professionals and other constituents had met their contractual responsibilities on this project. Based on our review of the scopes of work identified in each of the professionals’ contracts and our findings through document requests and interviews, we feel that the appropriate level of services has been provided to the project by each professional. Although the specific document submissions, estimates, document reviews, value engineering, etc. may not have strictly adhered to the scope specifically as identified in the various contracts, it appears that the “quantity of work” provided in response to the changes in budgets, phases and direction were appropriate. In some cases, such as the OCR, the scope of work provided significantly exceeded the scope of work that was originally contracted for.

Communications

In a project of this magnitude, there are a number of constituents that are involved (or should have been involved). Some of these constituents would be the TC, the BC, Town officials, Town employees, construction professionals, trade contractors, BoE, school dept. administration, departments heads, teachers, students, BSF, and the list goes on. Certainly when this many parties are involved, communication becomes of utmost importance. Also, as indicated earlier, changes in individuals involved during any phase in this project causes a loss of continuity and generally incomplete knowledge transference. The fact that this project ran from initial conceptual phases in 2003 through 2013 and beyond, there certainly were a number of changes of individuals along the way including TC members, BC members, Town officials, etc. These changes and loss of continuity in certain positions exacerbated the communication issues. There were a number of instances that we noted during our work where communication amongst the various constituents could have been improved.

As noted earlier in this report, improved communication with Town officials responsible for public safety

could have eliminated or mitigated the “Emergency Shelter” issue. Had public safety officials been at key meetings early in the planning process, more fruitful discussions about the feasibility of THS becoming an Emergency Shelter could have taken place much earlier in the process. All parties would have known whether THS would or would not be slated to be qualified as an Emergency Shelter and what the implications and costs of doing so would have been. A recommendation for future projects of this magnitude would be to include all constituents in the planning process to be certain that all perspectives are considered. Although it might slow the process down at certain stages, it will hopefully eliminate issues cropping up during or at the end of a project that had not been considered throughout the project.

As noted in the *Responsibilities* section above, a Responsibility Matrix had not been prepared for this project. Preparation of such a matrix would help ensure that all parties know “who is responsible for what”. All constituents in such a large project don’t necessarily read all RFPs and contracts and don’t always know what the responsibilities of each party are.

Vocabulary is also an important part of such a project. There are many terms and acronyms that are unique to the construction industry and school construction projects in particular. Those constituents that may not have construction backgrounds should have resources made available to them assist them in fully understanding the standard meaning of terms being used. Also, some of the more commonly used terms can have different definitions or include or exclude certain items. There should be clarity on how all terms are defined. As example of this are contingencies. In construction projects, there can be a number of different contingencies including, design and estimating contingency, escalation contingency, construction management contingency, owner’s contingency, etc. It is imperative that all parties know which categories of contingencies are applicable to a particular project and what types of items those contingencies cover. In this particular project, the owner’s contingency was defined or calculated differently as the project progressed. See a more detailed discussion of this item under *Pre-construction Process* below.

A project of this magnitude in an occupied building needs better communication amongst the various constituents as to what activities are scheduled in the building each hour of each day during the project. This includes both the day-to-day school operations as well as the ongoing construction activities. Although there was a sense that these communications mechanisms were in place and functioning effectively, this was not the case early on in the project. An example is that a basketball game was scheduled for a day and time that the abatement process was to take place. The Town should consider appointing a single individual to function as a scheduler to work with the construction professionals and school officials and school personnel to coordinate ALL activities scheduled to take place at the building each day.

Communications at higher levels also could have been improved. The mechanism to link the BoE and the BC did not always work effectively. Also, the mechanism to link the BC and the TC did not always work effectively. It appeared that common members sat on both the BC and the TC however, the TC was often “in the dark” with respect to many of the issues with design and construction. The town should attempt to determine why these common positions were not always able to effectively communicate with between each committee leaving gaps in information. These information gaps often caused tension and adversarial relationships between the BC and the TC.

In reviewing the BC meeting minutes from 2004 through 2013, it was noted that generally the superintendent of schools, the THS principal and /or the school business manager did not regularly attend the BC meetings. The “Ed Specs” belonged to the school department and thus the school department should have been represented at all BC meeting by at least one of these school officials. It was noted that the principal of one of the houses was represented on the BC and was very actively involved, but we believe that one of the three individuals should have also been at all BC meetings. The Town should consider having Town engineers attending the BC meetings. Their expertise could also prove invaluable. We recommend that going forward that any constituent group that has a vested interest in the project should be represented at all BC meetings.

Again, due to the magnitude of this project certain high level officials should be communicating on a periodic basis. Periodic meetings should have occurred amongst the First Selectman, BC Chair, select TC representatives and the OCR at some given frequency and at certain key points in the project. This would foster communication and allow for any party to inquire about any points of interest to them and keep the lines of communication open.

There also should have been periodic meetings (perhaps weekly) amongst individuals who work at a more detailed level than the First Selectman, BC and TC. Individuals such as the superintendent, finance director, purchasing agent, select BC members, health dept. representative and the fire marshal. These meeting need not be lengthy, but should occur on a regular basis to resolve any issues that arise on a more detailed level. Minutes should be kept of all meetings held.

Although the BC was a diverse group with representation from a number of constituent groups, all of the BC members did not have background in construction. For those members not from a construction background, there should have been some educational sessions at the beginning of such a large complex project to outline how the process typically works including BSF reimbursement, selection of professionals, the design process, project scheduling, project costs (including the various categories discussed above), etc. Although it is obvious that these “non-construction” BC committee members now have this “construction” education, had they obtained it much earlier in the process, they could have contributed in different ways and alleviated a significant learning curve which could have helped the project tremendously.

The attorney hired by the BC, Attorney Donofrio, had a significant amount of expertise in school construction projects. The BC attorney had been actively involved in the project at the outset but was changed to “on call” status at some point early in the project. A Town attorney was used to perform some of the functions that had been provided by the BC attorney. SK/PAC believes that the BC attorney should have been more actively involved throughout the project and had he done so, certain issues might have been averted and some cost savings might have been realized. Some towns involve an attorney with Attorney Donofrio’s school construction experience throughout the project, especially large complex projects such as the THS “Renovate as New” project.

Preconstruction Process

During the forensic audit there were several attempts to identify who was responsible for the “Master Budget”. This is a living document that tracks the overall budget including direct construction costs, indirect construction costs, soft costs, town costs, etc. and is an all-encompassing budget tracking document. This document is usually formatted very early in the process and is published periodically in a consistent format. We have not been provided a document that meets this description, nor have we heard any mention of such a document in our interviews.

Traditionally, this document will be prepared by the Owner, OCR and Architect and will be tracked throughout the pre-construction and construction process to ensure all items are being considered. This document typically identifies any costs for items that may be purchased outside of the construction contract such as Food Service Equipment, Theater & Stage Equipment, Special Gym Equipment or Sporting Equipment, Vocational or Agricultural Education equipment, Bleachers or Special event seating, Signage packages, etc. These may be services or packages that the School wishes to keep outside of the traditional “construction costs”. Building, Furniture, Fixtures & Equipment (“FF&E”), Technology and Soft costs (including Tech-ed equipment, Tele Data, Library systems, A/V Equipment, etc.) are also tracked with this document. Owner costs related to the project including Legal Fees, Bond Costs, Costs of Issuance, Contracts Administration costs, etc. are also tracked with this report. One very important item that is usually tracked fairly carefully on this document is the status of the Owners Contingency and the CM contingency.

Typically, this Master Budget is maintained by the Owner or OCR and is updated whenever there is an update to the Direct or Indirect Construction Costs. There was no indication that this document existed, or was published with any consistency, during the pre-construction or construction phases of the project. The Finance Department of the Town was able to provide total project costs, but that format is purely an accounting format done by vendor, not by the project cost categories compared to the project budget.

Reports were provided to the Building Committee on a monthly basis. These reports were prepared by O&G (CM) and AFB (OCR) and presented to the building Committee. These reports appeared to change format frequently. This could have been by request, or simply to focus on the items that were being discussed at the upcoming BC meeting. The inconsistency of the reporting made the project information and costs difficult to follow when reviewing the information in chronological order. One item that seemed to change significantly in the methodology of reporting, was the reporting of Contingency funds for the project.

During review of the project cost reports it was clear there was a change in the reporting of the Contingency dollars. This change in reporting appears to have coincided with the revisions to the bond amount. Interview responses also appear to indicate there was a change in methodology for reporting the contingency during the project. We would recommend the Town implement a more specific policy on how to calculate Contingency, identify a specific reporting mechanism for the contingency value, and enforce this requirement on future projects to avoid confusion and to ensure Contingency funds are being spent in a consistent manner.

As noted in Exhibit F (Cost Summary Reports for six different dates in 2011), up until July 27, 2011, the owner's contingency remaining was reflected as a number on the periodic Cost Summary Reports prepared by O&G. As of January 10, 2011, the remaining owner's contingency was \$2,031,542 and by July 27, 2011 it was \$1,097,220. Starting in September 2011, the format of the Cost Summary Reports changed whereby the Current Owner Contingency number was a calculated value of the difference between the projected GMP (Guaranteed Maximum Price) plus the Owners Costs to date subtracted from the Current Bonding Release - see Exhibit G (Cost Summary Reports for five different dates in 2011 and 2012). As of the September 27, 2011 Cost Summary Report, the Current Owner Contingency amount had **increased** to \$3,104,979 from the value of \$1,097,220 from two months prior. It is unclear to SK/PAC how these reports were compiled and how this value could have actually increased. It is recommended that all parties have a document that outlines exactly what types of items certain categories (including contingencies) are defined and calculated.

A recommendation for future projects is to mandate the use of a "Value Management" or "Value Engineering" Log. This log is typically in Excel format and is structured to be updated at each phase of the design process. The Value Management ("VM") items are separated into Categories (Site, Envelope, Finishes, MEP systems, etc). All items put forward for discussion during the duration of the project are identified on the Log and are tracked throughout the project. The item values are identified and broken down into columns which represent pending, accepted or declined. This log can be a valuable tool for organizing the VM opportunities that are available while clearly tracking the decisions that are made by the Team. A notes column allows a brief note to indicate when or why a decision was made to accept, decline, or hold on each item. This tool can be invaluable when properly maintained. When properly distributed as updated, it is difficult for participants to claim they were not aware of or did not understand the value management options that were on the table. It also allows the Team to revisit the items at later stages if needed.

A fairly common practice during the pre-construction effort is a "page turning" session at the completion of each design phase. This page turning session usually coordinates the BC members, facilities members and end users. The meetings are typically scheduled at the end of each design phase and are scheduled to ensure the end user understands the current documents and all the changes / updates that were required. This page turning session is usually followed by the "sign off" on the document set followed by the authorization to move forward on the next level of design.

Based on our discussions with the interviewees, it does not appear these page turning sessions were an integral part of the project. We understand they happened at the "ad hoc" committee meetings with the Department heads during the initial stages of the process, but there was a general feeling that the documents were "signed off on" without follow up meetings. It is our recommendation that for any future projects that the Town mandate page turning sessions with the BC prior to sign-off for the next stage of design. If agreed by all parties that a page turning session is not required or not allowed due to time restrictions, this should be noted and memorialized in the "sign-off" at each level of design documentation.

Procurement & Legal

The BC was responsible for contract administration for the professionals (O&G, JCJ and AFB), not for the trade contractors (O&G performed that function). This function should have been performed by the Town purchasing department. The Town purchasing department is structured and better equipped to handle this function.

The BC was told by O&G that O&G was not responsible for the soft costs and that the Town was responsible for monitoring and controlling this aspect of the project. O&G included these amounts in their monthly report to the building committee, but admitted that they were not the responsible party for controlling and monitoring these costs. The Finance department from the Town should have been involved and responsible for this aspect of the project. A finance officer from the Town should have attended the BC meetings to review these costs with the BC.

Because the BC was performing the contract administration for the professionals and also performing the control and monitoring of the soft costs (even though O&G was reporting on them), the BC may have been involved in more administration and “minutia” than necessary. Due to how the interaction of these functions were taking place between the BC and the Purchasing and Finance departments, there was some communication issues that occurred. For example, certain purchase orders were exceeded and issued for improper amounts. This was all later corrected and revised quotes were later obtained, but it was clear that some of this administration did not follow Town purchasing and finance policies. In any event, it was clear however that the BC fully knew what costs they were approving at each meeting and clearly approved these costs. The Town purchasing department and Finance department did not feel that they had the right to usurp the BC on these decisions. On future projects, we recommend that the Town use their personnel (purchasing dept., finance dept., etc.) to assist the BC in discharging their duties.

The procurement process spelled out in Statute 10-287 should have been followed for all bids, including the OCR. It is not clear if the procurement process in the Statute was followed to the “letter of the law” for the OCR although it was clear from our review of the minutes that all invoices for the OCR were approved by the BC.

AFB, possibly in their capacity as facilities manager for the BoE and/or possibly in their role as Clerk of the Works, was in attendance at the May 21, 2008 BC meeting where the OCR bids were discussed – see Exhibit H. AFB was one of the bidders for the OCR work (the low bidder). AFB reviewed the three OCR proposals in detail with the BC. It is highly unusual that a bidder for services, while serving in a different capacity, review their own company’s proposal along with the two other proposals. The other two bidders were not present at this meeting. It is unclear as to whether they were invited or excluded. In the future, any bidders for services should either all be invited when their bids are discussed or all be excused from a meeting when their bids are discussed, but having only one bidder present appears to provide an advantage to that bidder.

Attorney Donofrio provided the Town with a QBS (Quality Based Selection) analysis tool to use to select and award professional services. It should be noted that bid scoring took place for the CM services and the A&E services. Attorney Donofrio recommended that this process be followed for the OCR selection,

but there is no record that this process was completed for the OCR services award.

Based on documentation that was provided to us, it is clear that AFB had presented a proposal and associated qualifications to the Former First Selectman, Mr. Raymond Baldwin, in an effort to secure a role as “Clerk of the Works” for the project. There was correspondence between AFB and Mr. Baldwin identifying the approach and qualifications for AFB on such a project. We understand that the Town then requested a recommendation from Mr. Donofrio to determine if the procurement of Professional Services for the position of “OCR” needed to be done in the formal manner that had recently been recommended and completed by Mr. Donofrio for A&E and CM Services. Mr. Donofrio indicated in an interview with us that he recommended that the same process be carried out for OCR services and this recommendation is supported by BC minutes.

It is clear that after this recommendation that Mr. Donofrio assisted the Town in preparing a Bid Specification for use in procuring OCR services. It is also clear that Mr. Baldwin provided an annotated response to a draft of the RFQ for OCR services. It appears from these hand written annotations that Mr. Baldwin had suggested revising the points rating system based on contradicting information further on in the document, essentially making a correction.

SK/PAC reviewed email correspondence between Mr. Chimini, Town Purchasing Agent, Mr. Nugent, the BC Chairman, Ms. Heim, the Finance Director and Mr. Daniel Schopick, Town Attorney which discussed the process for opening and analyzing OCR proposal packages. It was decided that the price proposals would be opened by the Purchasing Department and pricing would be provided to the BC on a Standard Bid Tabulation Spreadsheet, like they had done with the proposals for the other Professional Services. In this correspondence, Mr. Schopick clearly questioned if the price proposals should be opened in front of the bidders. The next day, an email response was provided, indicating that Ms. Heim and Mr. Chimini had opened and summarized the price proposals. It seems this method of receipt and review of price proposals for Professional services was consistent during the procurement of services for this project. It is also clear that these procedures were carried out before the Town had updated the requirements for Procurement in its Town Charter revisions in November 2011 and it clearly defeats the intent or purpose of any QBS procurement process.

SK/PAC was provided with partial copies of the three proposals submitted by the participants in the process. The documents provided include the Bid proposal Form “F” and proposal cover letter provided by Strategic Building Solutions, Inc. (not annotated), the Bid proposal Form “F” and Services Fee proposal breakdown provided by Pinnacle One (not annotated) and the full 52 page proposal package provided by AFB (annotated).

It is clear that AFB’s proposal was reviewed and marked up with hand written notes. These notes highlight projects within the proposal, but do not indicate if these notations are identifying positive or negative response to the items. One of the projects highlighted was for the \$59M Code Renovations to Stamford High School. In the Staffing Plan section of AFB’s proposal, it is clear that these handwritten notes identify some additional information suggested for the description of the role of Project Supervisor and Office Manager. Later in the AFB proposal, there are handwritten annotations identifying the Designers that were associated with the projects which AFB lists for references. Further in the proposal

there are annotations that appear to indicate that an Errors & Omissions Insurance certificate has not been included in the proposal, but that a General Liability certificate has been included. It is possible these annotations were made in preparation for an interview or meeting with others to further vet the proposal.

The resulting discussions, analysis or process utilized in the decision to award the OCR contract to AFB do not appear to have been accurately recorded in the BC minutes or elsewhere and no documentation has been provided in response to SK/PAC's request for this information. It is clear, however, through our interviews, questioning and responses that the BC felt that they thoroughly vetted the OCR proposals, understood the discrepancies in hours and dollars amongst the bidders, and decided that it was in the Town's best interest to award the contract to AFB. Mr. Donofrio participated in discussions, analyzed hours provided in the proposals, and indicated that he would not disqualify AFB based on their response.

Building Committee

As noted above in the **Communications** section, it appears that the BC had a membership of individuals with diverse backgrounds representing a number of different groups and constituents. The question had been raised as to whether enough BC members had a construction related background. While such a composition would be ideal, it might not provide for differing viewpoints needed in such a committee. SK/PAC believes that perhaps there should have been a bit more representation on the BC committee from members with background in construction and/or engineering. Also, the BC members that did not have backgrounds in construction or the trades probably should have been given more assistance early in the process to help them understand the processes and challenges inherent in such a project. Again, as noted above in the **Communications** section, these members did ultimately get this help but it was more akin to "On-the-job" training.

Also as noted above in the **Communications** section, it appears that a number of "guests" that perhaps should have been invited to certain BC meetings might not have been invited (e.g., public safety, health, fire marshal, etc.). The Town should include these important constituents in the BC meetings where appropriate. They do not necessarily need to attend every BC meeting, but certainly should be involved in the planning phases and at certain critical key junctures.

It is our understanding that the BC had to be comprised of members of an equal number from each political party. This requirement, if such a requirement exists, might have hampered getting the right expertise and constituencies represented on the BC committee.

The BC was very conscious of and often discussed State requirements (BSF requirements) as they related to reimbursement. We believe that they had a good grasp of and focus on this aspect of the project to be able to provide the best product at the lowest possible cost to the Town.

Design Issues

It is our understanding that JCJ was given existing building documents, often referred to as "as-builts", to use as a baseline to survey the existing structure and to transfer information to new documents. There were several comments made during the interview process that would lead us to believe a thorough investigation of existing conditions was not completed. There were indications that there was work specified on the Construction Documents that had not considered certain modifications that had taken

place in the school since the last set of as-built documents had been published. It appears that this lack of investigation of existing conditions caused some delays in the project. While these coordination issues are common in a renovation project, they are typically limited to “unforeseen conditions” that cannot be seen without exploratory demolition.

An example of an “unforeseen condition” would be the existing structural beam that was found which required modification to the design and associated ceiling heights in the classroom area. This beam, while identified as an unforeseen condition, would have likely been identified through exploratory demolition, prior to design. It is our understanding that the design team was not given access to the school for exploratory demolition, rather only for a survey of conditions that could be seen by simply walking through the occupied school. This limitation along with a compressed design schedule appears to have created a few instances where there were “surprises” during the construction process. The number of surprises and the resulting delays and cost impact are not unreasonable considering the limitations placed on the design team and the magnitude and complexity of this project.

Typically, during the pre-construction process, there are milestones that are identified for the design team that require approval and sign-off prior to the design team proceeding to the next level. This process is typical for this type of project and is specifically addressed in sections of the A&E contract. Excerpts from the contract with JCJ include:

- Section 2.2.4 states “Based on the program, schedule and construction budget requirements selected by the Owner, the **Architect shall prepare for approval by the Owner, Schematic Design Documents** consisting of drawings and other documents illustrating the scale and relationship of Project components”.
- Section 2.3 Design Development Phase - **Upon receipt of the Owner's written acceptance of the Schematic Design Phase**, the Architect shall: 2.3.1 Based on the approved Schematic Design Documents and any adjustments authorized by the Owner in the program, schedule or construction budget, **the Architect shall prepare, for approval by the Owner, Design Development Documents** consisting of drawings and other documents to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate.
- Section 2.4 Construction Documents Phase - **Upon receipt of Owner's written acceptance of the Design Development Documents** presented in the Design Development Phase and **direction to proceed with the Construction Documents** Phase: 2.4.1 Based upon the approved Design Development Documents and any further adjustments in the scope or quality of the Project or in the construction budget authorized by the Owner, the Architect shall prepare, for approval by the Owner, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements for the construction of the Project including drawings, technical specifications and necessary bidding information supplementing the Construction Manager's documentation and incorporating and submitting those documents for approval by Owner.

An issue that was addressed in several interview responses was the feeling that there was not a reasonable process or timeframe for the end user to “sign off” on design and construction documents. There seemed to be a lack of consistency of the expectations from the BC members and end users regarding the review

and sign-off process. Based on a majority of the responses that we received, the consensus is that the Design Process was rushed and did not provide adequate time for the normal process to take place. While several interviewees believed that there was a lack of a reasonable amount of time to review and sign off on design and construction documents, others felt that the amount of time was reasonable based on the time restrictions placed on the project due to the requirement for BSF approval (and their related process / timeframes) and the construction phasing that was required for an occupied renovation (and the need to begin the summer work).

JCJ was questioned about this issue during their interview and indicated that they had reviewed each level of documentation and received a proper sign-off for each document submission based on the project schedule that was prepared. JCJ provided copies of the pre-construction schedules for Phase I and Phase II which clearly identify an overlap or “compressed schedule” for the documentation process. The schedule clearly identified a pre-construction process that would not allow for the traditional sign-offs at each level of document completion that one would expect on a project that did not have the same schedule constraints. It is our understanding that these documents were presented to the BC for review. We feel the sign off process, although compressed due to the schedule, was appropriate due to the circumstances.

A major complaint about the Design Team by the Building Committee was the change in staffing throughout the project. The Project started with Jack Butkus as the Team Leader for JCJ and was switched to Steve Burgess. Steve Burgess remained with the project through completion. The changing of personnel is not uncommon and is sometimes unavoidable during a project of this duration. It can, however be a detriment to the project due to the loss of information one possesses that is likely lost during the transition. The complaint seemed to have the most validity as it related to the FF&E Team which had a different group of personnel assigned. It is our understanding that the transitions that took place during this period were likely due to the market conditions that existed at this time within the design community. These poor market conditions required a significant reduction in workforce at many firms and it is our understanding that JCJ, like other firms in its industry, suffered a significant staffing reduction during this period. It seems the changes in personnel for this scope of work had a significant impact on the coordination and communication during this process. Since this process is late in the project, it is often a process that is fresh in the memory of those involved in this process.

The design team clearly participated in a significant number of meetings as part of their engagement during the pre-construction and construction process. During the pre-construction process, they attended the appropriate BC meetings and Ad Hoc (sub-committee) meetings that would be expected during this phase of work. During the construction process, it was clear that the design team attended the weekly jobsite meetings on a consistent basis. It was noted by several interviewees, however, that their technology consultant was often absent at those meetings, often at critical times when the design team played a significant role in the decisions being made at that time. These absences from these meetings caused a number of issues and delays.

There were several comments about the poor performance of the auditorium HVAC system. There are claims that the single zone HVAC system did not anticipate the stage lighting heat gains. This situation created uncomfortable conditions for the audience while adjusting for the heat loads on stage. The design team has indicated that the single zone system was presented in the original design due to the extremely low budget identified for the project. JCJ indicated this design was presented to the end user and was

signed off on. It is our opinion that this item could be considered a design flaw, unless the possible shortcoming was clearly identified as a system that might have some shortcomings due to the budget constraints. The end user cannot be expected to identify these issues during a review period and should have been clearly informed of the possible shortcomings, if the budget was truly the driver. Often, when dealing with budget constraints, there would be some discussion and a “decision” made with the end user if there was any concern about the design and its performance.

During our work, we heard a lot of negative comments regarding the performance of the design team. The design team had to deal with a significant number of constraints and difficult conditions for this project. The compressed schedule accompanied by a very significant phased and occupied renovation project, along with a moving target with respect to the budget and final scope of work, created an extremely difficult project for a design team to manage. Based on the work that we performed in this assignment, it appears that the design team performed their duties and met their responsibilities as would be expected for a professional in their role on a project of this nature.

Construction Issues

There were several areas noted during the interviews related to the construction phase of the project. First was that O&G was cognizant of their schedule and deadlines but did not always consider other work that needed to be done before a project deadline. An example of this would be a completion date before the first day of school, but not allowing time for moving furniture back into classrooms. We would recommend that a Critical Path Analysis tool like a PERT chart be used. It is imperative that this tool incorporate all aspects of the project (like moving furniture back into classrooms), not just the construction aspect. Although a tool of this nature may have been used, it appears that it was not used effectively. We would also recommend that a BC member be assigned that understands this tool, and is able to communicate its outputs and coordinate effectively with the end user. The ability for the end user to understand the finite detail of the construction may have significantly reduced the number of complaints received on this project.

The second item of note that was raised during the interviews was that the project manager from O&G should have walked the job more. It was felt that he spent most of his time in the trailer and lost touch with what was happening on the job.

The third item of note is that O&G could improve in training the on-site facilities personnel in the use of the systems, especially the new highly technical MEP systems. The school facilities personnel had to take the initiative on this and create a spreadsheet to track and catalogue the various warranties and training on many of these systems. It is recommended that the facilities personnel participate in creating the “requirements” for professional services on future projects. The specific language provided by these individuals should be included in future RFPs and an appropriate method of coordination with these individuals should be considered in future scopes of work.

It was also noted throughout the interviews that there were unreasonable expectations on the part of the school administration, educators and end users about disruptions occurring in the school arising from the construction. These unreasonable expectations caused a host of issues during construction as noted above.

Project costs

The decision to move forward with a “Renovate as New” project was solidified after a feasibility study done by SPA. This study was completed prior to the engagement of professional services for the project. All parties adopted the “Renovate as New” approach and moved forward with that approach. SK/PAC briefly reviewed of the presentation and back-up materials provided by SPA during the initial feasibility study. It is our belief that the comparison estimate for new construction was valid at the time of the estimate, considering the market conditions at that time. Having the benefit of hindsight knowing the impact that the 2008 recession had on a project like this, it is possible that a different decision might have been made using more current updated cost data from a recessionary period.

One cost that increased significantly from what was initially budgeted was the OCR services. The BC relied heavily on the OCR for a scope of work that significantly exceeded that which was provided in their original proposal. Their original proposal was based on the RFP for OCR services. The proposal was vetted and awarded based on the understanding of what would be needed at the time of award. Some of the delays in starting the design, coordination with BSF, and significant scope and phasing modifications throughout the project had a significant impact on the additional work that was required by the OCR. Nearly all project team members interviewed indicated that AFB, in the role of OCR, provided a tremendous benefit to the project and feel that if it were not for them, the project would have surely failed. AFB clearly invested a large number of hours above what was expected as part of the original RFP. They appear to have kept the BC up to speed on why the additional hours were needed and the BC continuously approved the additional hours and associated costs.

The Exposed Ductwork on the roof has added a significant amount of cost to the project. This nontraditional solution to HVAC distribution appears to be the result of some previous value engineering when the building was constructed many years ago. It is our understanding that the building height was reduced as a cost savings measure when the building was originally constructed. Many years ago, the HVAC systems were much simpler and smaller. Current codes and comfort expectations have significantly increased the size of the HVAC systems and more room is required above the ceilings for ductwork distribution. Due to the building height reduction and the limited space available above the ceilings, it was determined that the ductwork would need to be placed exposed on the roof of the building.

This method of ductwork distribution is very rare and is not something that is readily utilized in the Northeast. Extreme weather conditions encountered in the area make it difficult to properly insulate the systems from the elements. The addition of the ductwork to the roof also adds a significant detriment to roof access and the ability to deal with roof leaks.

The system was designed initially with a more robust insulation wrap. When bids came in for the HVAC system, the team was notified that there was an opportunity for some significant cost savings if they changed the insulation system. The design team reexamined the system and came up with a less expensive duct wrap system which consisted of Ventureclad over Batt insulation. This change resulted in a significant reduction in the bid values for this trade of approximately \$1 million dollars. Unfortunately, it was later found that Ventureclad did not recommend the use of their product over Batt insulation. The poor installation practices along with the improper design resulted in a condition that needed to be rectified by removal and replacement with a rigid insulation product. This issue had a significant impact

to the project. It required tremendous effort to resolve the issue and resulted in numerous additional costs and schedule delays.

The difficulty in implementing this type of system properly was clearly seen in the insulation and duct-wrap issue, which caused the project a significant cost in project delays, shifting phases and logistics. Failures associated with this system required additional 3rd party investigation, provided by Frank Zaino, P. E. which added costs to the project and project schedule delays. We understand that the Fire Marshal also required a significant number of access ladders and platforms to allow reasonable firefighter and apparatus access to different areas of the roof. These were unanticipated costs and also impacted the project late in the game.

It is our understanding that there has been a settlement on the additional costs associated with the HVAC duct wrap design and that the owner has been reimbursed for these costs.

There were a couple of instances where a lack of communication with Town officials during the design process resulted in some additional costs late in the project. The Police Chief required a communications system within the school for police use and the Fire Marshal required additional access ladders and platforms to accommodate firefighters and inspections and testing of the smoke detectors in the exposed ductwork at the roof. Adding these costs late in the game caused distress with the Building Committee as they were items that should have been budgeted for. It is usually more expensive to accommodate these types of systems later in the process. The budget was subsequently strained to accommodate them. This is another example of having the proper “guests” invited to the BC meetings during planning and during other critical phases of the project. It is recommended that meetings with these officials be mandated as part of the early design process at the schematic level so that the required items are incorporated in the design early and can be fully integrated into the design and budget, not seen later as an “additional cost”.

One of the costs that appeared to be excessive and likely unforeseen by the Town, was the cost for increased overtime and cleaning services by the on-site janitorial staff. We received feedback that O&G did not have a good handle on the dust protection and IAQ (Indoor Air Quality) plan early in the project, but that they later resolved a majority of the issues as they continued working on the project. The Town was not anticipating the need to add significant cleaning services to supplement the services provided by the CM during the construction process. The compressed schedule and “mad dash” to complete phases in order to open school on time, appears to have put a significant burden on the Town operated janitorial services. In the future, it is recommended the Town consider carrying some additional funds in the owners’ costs to provide for some additional services.

There were some adjustments made to the project approach which certainly reduced project costs as well. One of these items was the decision to utilize the Town facilities department to provide the grading and paving for the project, rather than utilizing one of the contractors who provided pricing during the bidding phase. Removing this scope from the project and doing the work directly within the Town saved a significant amount of money. We understand this change did not create a significant burden to the Town based on discussions with several of the interviewees. It should be noted however that the method used by the Town for performing these grading and paving services were not the same methods suggested by the engineers on the team. Had the Town used the same methods called for in the specs, there may not have been such a substantial cost savings to the project. This decision has also eliminated any

responsibility by the design team if there are failures of those pavement systems in the future.

Project schedule

A renovation project in an occupied space requires a significant amount of coordination and scheduling to be successful. This project, in particular, was extremely complex in its phasing and scheduling requirements. The Town had limited options for temporary on-site or off-site swing space, so the project needed to be carefully phased to allow for educational operations to continue while construction took place.

The typical process for school construction is to maximize the work done during summers and vacations so that the invasive work can be scaled back during the school year. In a renovation project, it is common that there will be abatement of asbestos or other hazardous materials required as part of the process. Since this work cannot take place while school is in session, it is usually done only during breaks. This project included asbestos abatement as part of the scope of work.

More recent weather trends have certainly made it more difficult to manage a project like this, typically adding some significant costs and schedule coordination to the project. The additional snow days that have been typical recently, have required schools to extend further into the summer break and often start school earlier in the season at the end of the summer break. Schools are often forced to reduce the lengths of the spring or winter breaks as well to make up for the snow days they lose during the school year.

It was not atypical for a phased renovation project of this magnitude and complexity to suffer some fairly significant setbacks in the schedule and associated costs. Unforeseen conditions uncovered in the existing construction required some re-design and schedule changes to accommodate. With the extremely compact construction window allowed in these projects, it is often necessary to push off work to a later time and shift phases in order to accommodate. This shifting of construction phases is often difficult to implement and requires a high level of flexibility with the end user. A good number of the interviews identified a lack of flexibility and expectations that the end users would not be burdened by the construction process. This position and lack of flexibility appears to have added a significant level of effort to keep the project on schedule when changes were required.

Many of the school construction projects that take place in Connecticut simply would not exist if it were not for the State funding available for these projects. BSF was created to manage the funds that have been awarded by the State for these projects. In order to properly manage the funds, the BSF is responsible for ensuring that the School projects are designed and constructed in a manner that meets specific requirements for Code compliance, ADA compliance, etc. They are also there to ensure that municipalities are not taking advantage of the funds provided and that the funds are allocated properly within the process. The BSF has very specific guidelines that discourage frivolous spending and mismanagement of the funds.

The BSF plays a significant role during the design and pre-construction process. They require Plan Completion Tests (“PCT”) that ensure they are satisfied that the project documents are meeting the standards they require for project reimbursement. They have very specific reimbursement guidelines that must be followed in order to be eligible for reimbursement. The process is very well defined and is very specific in its policies and procedures. The project cannot be released for bidding until the BSF has

signed off on the complete set of bid documents, deeming them acceptable for construction and reimbursement under their guidelines.

The number of schools being constructed along with a recent reduction in staffing at the BSF has created a very difficult scenario. It is not uncommon to have to schedule the PCT and document review meetings several months in advance. If the project documents are not complete and the team is not prepared to meet this specific date, there is a very good possibility that the next meeting available would be 3 - 6 months out. Due to this scenario, meetings are often scheduled much earlier than would allow the design team or owner to have a good handle on the project. Any inefficiencies in the design process or communications with the owner can create a situation where there is a “mad rush” to complete the package prior to the deadline for the BSF meeting.

This scenario described for the BSF process, along with the shortened summer work periods appear to have had a significant impact to the process on this project. The typical process that requires completion, review and sign off on the specific levels of design (Schematic, Design Development, Construction Documents and GMP) appears to have been compressed very significantly on this project. All professionals appear to have done their due diligence and participated as intended in the process in order to meet the projects tight schedule and budget requirements. The design phase of the project appears to have kicked off a bit slower than anticipated, which exacerbated this issue.

This scenario has likely led to the complaints by the end user and the BC members feeling that they were not given the proper time to review and sign off on specific portions of the design. There were also a number of complaints that the BC members did not really understand the value management decisions that were made to bring the design in line with the budget prior to bidding. While this is clearly a major issue, in the end result of this project it is probable they would not have met the BSF deadlines and would have suffered significant schedule and related cost issues if they had followed a more traditional process.

Several Interviewees felt that the design process and coordination with end users were rushed. This is fairly typical of a project that must coordinate with the BSF guidelines and be constructed while occupied. Any work done in an occupied school becomes extremely schedule sensitive. Any inefficiency realized in the beginning of the process (several were cited during the interviews) will be compounded in the later stages of design in order to adhere to the strict and unforgiving BSF process.

V. Recommendation Summary

In an effort to “recap” the recommendations provided within the report, SK/PAC is identifying the recommendations in a condensed format. Many of the recommendations have been addressed in the appropriate sections in the report. This section will expand on the information provided above and for certain items will refer back to the appropriate sections to avoid redundancy.

Town Procurement Practices

Professional Design Services

It is our recommendation, where possible, that the firm engaged to provide a feasibility study which such major decisions are based on, be the firm that is engaged to provide Professional Design Services for the project. These services should be bid and contracted together.

Responsibility Matrix

A Responsibility Matrix should be prepared as a template for project procurement. Preparation of such a matrix would help ensure that all parties know “who is responsible for what”. All constituents in such a large project do not necessarily read all of the RFPs and contracts and do not always know the contracted responsibilities of each party.

Contract Templates

We would recommend that the Town prepare Template Draft Contracts for professional services on several types of projects and have them on file. It would be beneficial to utilize an experienced construction professional to assist in preparing the contract templates and their scopes of work. We would also recommend having a law firm that specializes in Construction Law review them before they are finalized. It should be noted that it makes sense to load templates with a variety of items that may not make sense for all projects, which would be eliminated if not required on a particular project. It is much easier to remove items from a template than to remember to add what “should” be included.

OCR Contract

There were several comments questioning the performance of the OCR during the Preconstruction process, most related specifically to their role in reviewing the documents at each stage and making recommendations. As can be seen in the Responsibility Matrix or by reviewing the contract for OCR services, there was a very limited scope of work required by the OCR for this project and the scope for this work was somewhat vague. We would recommend identifying the specific items that would be deemed beneficial during the Preconstruction process, and specifically incorporating those items into the OCR Contract Template. Our recommendation for future projects would be to add the responsibility for additional layer of Design Document review and feedback by the OCR to the scope of work and contract for the OCR.

The process of approving the RFP response and hiring of AFB for the OCR services has also been questioned on this project. The most significant issue that was raised was how AFB could have been hired with such a significant difference between their low bid and the bids of the next two bidders.

Another issue is the process by which interviews, or lack of interviews with all proposers, could have influenced the selection and award decision. It is recommended that these issues be addressed specifically in the Town Charter regarding the award and hiring process. Specific policies and procedures need to be outlined and strictly adhered to in the future to avoid any questionable hiring practices. In the future, any bidders for services should either all be invited to meeting where their bids are discussed or all should be excused from a meeting when their bids are discussed, but having only one bidder present (even if present in another capacity) appears to provide an advantage to that bidder.

Procurement and Selection Process

This project suffered from a “lack of process” during the initial stages of procurement of professional services. The change in State Legislation regarding the hiring of the professionals at the start of this project had an impact to the project and appears to have delayed the process significantly. The specific process for solicitation, analysis and selection of all Professional services and Contracts needs to be reviewed to ensure the process is appropriate based on the current laws and State required practices. We would recommend that the Town and any committees formed by the Town reach out to appropriately qualified professionals to provide assistance in preparing a specific Guideline / Checklist to be adopted for procurement of these services. This guideline should address the Advertisement, Solicitation, Prequalification, Analysis, and Selection process for these contracts.

As mentioned earlier in the report, SK/PAC believes that the BC attorney (Mr. Donofrio) should have been more actively involved throughout the project. We suggest the Town consider these recommendations and determine a protocol for Procurement of Legal Services and outline a way to determine the appropriate level of involvement of these services for each project prior to starting the Procurement and Preconstruction process.

It is recommended that the “facilities personnel” participate in creating the “requirements” for professional services on future projects. The specific language offered by these individuals should be considered for inclusion in future RFPs and an appropriate method of coordination with these individuals should be considered in future scopes of work.

Building Information Modeling, BIM, and its advantages have been explained in the body of this report. We would recommend that this be on a “procurement checklist” when deciding on the professionals being hired. The costs and benefits to each project should be addressed to determine if it would be appropriate for each project as the project is being set-up. As previously mentioned, the use of BIM could be a burden to the project, so this must be carefully considered before mandating BIM.

We would recommend that a specific Scheduling and Critical Path Analysis tool or program be identified as a standard for use on all town projects moving forward. It is important that the appropriate Town Staff be familiar with the program and receives the required training to take full advantage of the tool. Once a program has been determined, it should be identified in the Procurement matrix to ensure that all Contracts for professional services mandate its use and the level of reporting required.

Coordination, Communication and Recording

Continuity during Feasibility Study and Design Process

It was clear that to us that there was a “disconnect” between the Feasibility study and the rest of the Design process on this project. Traditionally, a design team and often the CM and OCR are hired prior to the feasibility study. In this case, the Feasibility study was completed and then the Design Team, CM and OCR were hired. The Feasibility study was completed by a different firm than the one hired for the project’s design, resulting in a lack of continuity. This also allows for a “lack of ownership” as the Design Team reacts to decisions that were adopted rather than “owning” the recommendations/decisions that were theirs from inception. We recommend the Design Team be assembled earlier in the process to avoid this situation in the future.

Coordination and Communication issues within the Town and between Town Officials and the Design Team were identified earlier in the report. The lack of communication between these members early in the design process appears to have led to the poor communication and follow up on the matter of the “Emergency Shelter”. Had a coordinated discussion / effort to identify this as a requirement taken place early in the process, this would not have been an issue. It is clear there were email communications regarding the desire for this during the design process. It is also clear that the Design Team made decisions not to incorporate this as a requirement based on the inability to do so within the proposed budget. It is not clear, however, if the Building Committee or the Design Team were ever given any “formal request or authorization” to incorporate this into the Design. The Building Committee and the Design professionals point to the “Ed Spec” as the basis of their “charge”. The “Ed Spec” that was attached as an exhibit to JCY’s Design Contract clearly did not identify it as a requirement of the project. No official document has been provided (for this forensic audit) by anybody having authority which would indicate a change to the project for the Design Team or the Building Committee on this matter. It is recommended that a specific method of addressing this type of change and who has authority to request such a change, be incorporated into the Town’s processes.

As previously indicated in this report, a recommendation for future projects of this magnitude would be to include all constituents in the planning process (e.g., public safety, health, fire marshal, etc.) to be certain that all perspectives are considered. Although it might slow the process down at certain stages, it will hopefully eliminate issues cropping up during or at the end of a project that had not been considered and addressed throughout the project. This coordination should be mandated in the Town’s policies.

Additionally, higher level coordination between Town officials and Chair Persons of appropriate committees during a project of this magnitude and complexity are highly recommended to alleviate the apparent lack of communication between these groups. Periodic meetings should have occurred amongst the First Selectman, BC Chair, select TC representatives and the OCR at some given frequency and at certain key points in the project. Also, as indicated earlier in the report, there also should have been periodic meetings (perhaps weekly) amongst individuals who work at a more detailed level than the First Selectman, BC and TC. Individuals such as the superintendent, finance director, purchasing agent, select BC members, health dept. representative and the fire marshal. These meeting need not be lengthy, but should occur on a regular basis to resolve any issues that arise on a more detailed level. Formal minutes should be kept of all meetings held for any groups who hold recurring meetings. We recommend that

going forward that any constituent group that has a vested interest in the project should be represented at all BC meetings.

Design Process Checklist and Sign-off Matrix

An item that triggered much criticism was the lack of coordination and recording of participation, review and sign off on different levels of documentation. It would be beneficial for the Town to prepare and manage a Matrix that identifies all of the levels of documentation which are contracted with the Design Professionals and their consultants. The matrix would identify each stage of documentation (Feasibility, Concept, Schematic, Design Development, Construction Docs, etc.) and would identify the individuals or sub-committees (referred to as “Ad-hoc Committees” on this project) responsible for ensuring that the participation, review and sign off has been completed for each segment and phase of the design process. This checklist should mandate “page turning sessions” with the BC and appropriate parties prior to sign-off for the next stage of design. If agreed by all parties that a page turning session is not required or not allowed due to time restrictions, this should be noted and memorialized in the “sign-off” at each level of design documentation. This would be a living document, held by the Town and reviewed for sign-offs prior to approval and authorization to move to the next level of design.

Value Management Log

The interviews with the BC members seemed to indicate that the Value Management process was flawed or potentially even non-existent. Discussions with the professionals, on the other hand, indicated that there was a significant Value Management process on this project. It was clear during the review of the BC minutes that Value Management played a big role in the project and had an impact on the outcome. It is the responsibility of the Professionals engaged in the process to ensure that the BC and the end users understand the Value Management process and the impact it is going to have on the end product. It was likely an expectation of the BC that the professionals would explain the process so that the BC fully understood it. The details of the VM Log are defined in the body of this report. We recommend a VM Log Template be prepared and incorporated into the Town’s standard requirements.

Project Schedule

It is clear that a phasing schedule was provided for the professionals to use as a baseline for their proposals. The phasing schedule was changed several times due to complications and delays which resulted in a significant impact to the project duration, associated costs, and disruption to the existing operations of an occupied facility. We would recommend that oversight and control of the project or phasing schedule be provided by the OCR and that this be written into their contracted scope of work. It is recommended that specific scheduling software be mandated and that this requirement be listed as a requirement for participation by all professionals and consultants.

Cost Analysis and Tracking

An item that was reviewed and discussed with most individuals that were interviewed, was the lack of an “official” Master Budget. This item and its benefits are described earlier in this report. On future projects, we recommend that the Town use their personnel (purchasing dept., finance dept., etc.) to assist the BC and the OCR in mandating, updating and recording a Master Budget and associated updates. The

Town's Finance Department needs to take on this role as their responsibility. A finance officer from the Town should have attended the BC meetings to review these costs with the BC. Town oversight of this aspect of the project would ensure that specific contract procurement and hiring practices for all Indirect and Soft cost items (not already covered within the Architect, CM or OCR's contract) are done in compliance with the Town's Charter.

A recommendation for future projects is to mandate the use of a "Value Management" or "Value Engineering" Log. Prepare and standardize a formal Value Management Log and mandate its use for each project.

Identify Commissioning Process in Phasing Plan / Schedule

The expectation that this work would be done during the construction process, although a legitimate expectation, may have been a lofty one based on this type of project and the scheduling needs of the school department administration. It is not uncommon for cost overruns to include additional supervision and coordination with subcontractors to address the commissioning process after the project is complete, a process which is likely required to receive full reimbursement from the BSF.

The Town Facilities Department encountered some additional costs for labor and materials to assist in coordination and preparation of cleaning and moving for the "first day of school" after summer and vacation closures. These times were often used for the more intense construction and renovation efforts and we understand this was a burden on the Town facilities staff and budget. In the future, it is recommended the Town consider carrying some additional funds in the owners' costs to provide for some additional services that might be required.

We appreciate the cooperation provided to us by the Town officials and employees as well as all of parties that we dealt with including all participants who agreed to participate in interviews with us.

Sincerely,

Sansiveri, Kimball + Co., L.L.P.

Sansiveri Kimball & Co., L.L.P.

Pan American Consulting Services, L.L.C.

Pan American Consulting Services, LLC

March 31, 2014

STATE SUBMISSION ESTIMATE

DESCRIPTION	QTY	U/M	UNIT	PHASE I	PHASE II	TOTAL PROJECT
OWNER "SOFT" COSTS - TO BE CONFIRMED BY SCHOOL						
1 LAND ACQUISITION, APPRAISALS				EXISTING	EXISTING	EXISTING
2 MISCELLANEOUS ADMINISTRATION COSTS				9,000	21,000	30,000
3 ARCH. / ENG. FEES, CONSULTANTS ALLOWANCE				895,255	2,270,614	3,165,869
A. A/E REIMBURSABLES				21,127	53,584	74,710
4 ASBESTOS CONSULTANT				-	60,000	60,000
5 SURVEYS, BORINGS, GEOTECHNICAL REPORT				25,000	25,000	50,000
6 TRAFFIC STUDY				IN A/E FEES	-	-
7 TESTING, INSPECTIONS, SPECIAL INSPECTIONS				40,000	50,000	90,000
8 PEER REVIEW				20,000	-	20,000
9 INDEPENDENT CODE COMPLIANCE REVIEW				-	-	-
10 HISTORICAL CONSULTANT		N/A		-	-	-
11 PRINTING, MAILING, ADVERTISING				10,000	40,000	50,000
12 FURNITURE, EQUIPMENT - NONE				-	1,000,000	1,000,000
13 TELEPHONE SYSTEM				-	-	-
14 TECHNOLOGY - ALLOWANCE				-	500,000	500,000
A. TECHNOLOGY CONSULTANT				IN A/E	IN A/E	-
15 SECURITY SYSTEM				-	-	-
16 BUILDER'S RISK INSURANCE				49,247	124,903	174,150
17 MOVING EXPENSES, STORAGE				-	100,000	100,000
18 LEGAL / BONDING COSTS				28,278	71,722	100,000
19 INTERIM FINANCING				415,356	1,053,459	1,468,815
20 STATE PERMIT FEE (0.16/1000 OF CONST. COST)	0.18	/K		3,283	8,327	11,610
21 COMMISSIONING				-	283,565	283,565
22 OWNERS CONTINGENCY				395,897	1,004,103	1,400,000
23 OWNERS REPRESENTATIVE				167,521	424,879	592,400
TOTAL OF OWNERS "SOFT" COSTS:				\$ 2,079,964	\$ 7,091,155	\$ 9,171,120
TOTAL PROJECT COST				\$ 20,319,494	\$ 53,351,626	\$ 73,671,120

TRUMBULL HIGH SCHOOL
72 STROBEL ROAD
TRUMBULL, CT 06611
STATE SUBMISSION ESTIMATE - PHASE 2

October 2, 2009

PROJECT SUMMARY

STATE SUBMISSION ESTIMATE - PHASE 2

DESCRIPTION	PHASE 1 STATE SUBMISSION ESTIMATE 02/25/09	PHASE 2 STATE SUBMISSION ESTIMATE 10/02/09	TOTAL PROJECT: STATE SUBMISSION ESTIMATE PHASE 1 & PHASE 2
CONSTRUCTION COSTS			
1 SITE			
A. AUDITORIUM SITEWORK (PHASE 1a)	393,628	-	393,628
B. SITEWORK (PHASE 2)	-	\$775,120	775,120
2 NEW BUILDING CONSTRUCTION			
A. NATATORIUM BUILDING (PHASE 1b)	5,000,000	-	5,000,000
B. AUDITORIUM BUILDING & BOILER ROOM (PHASE 1a)	8,045,944	-	8,045,944
C. FRONT CANOPY	-	\$153,561	153,561
D. TEAM ROOMS & PUBLIC RESTROOMS@FOOTBALL FIELD	-	540,000	540,000
3 PHASE II : RENOVATIONS & AUX. GYM	-	\$40,305,499	40,305,499
SUBTOTAL:	\$ 13,439,572	\$ 41,774,181	\$ 55,213,752
<i>NET SQUARE FOOTAGE (inside face of exterior wall)</i>			
4 STATE PERMIT FEE	1,857	9,190	11,047
5 C.M REIMBURSABLES	688,110	1,577,730	2,265,840
SUBTOTAL:	\$ 689,967	\$ 1,586,920	\$ 2,276,887
ESCALATION CONTINGENCY			
1 ESCALATION	-	708,516	708,516
2 CHANGE ORDER CONTINGENCY	IN OWNERS COST	IN OWNERS COST	-
3 GMP CONTINGENCY	456,477	2,124,135	2,580,612
SUBTOTAL:	\$ 456,477	\$ 2,832,651	\$ 3,289,128
C.M. FEES / INSURANCE / BOND			
1 PRE-CONSTRUCTION PHASE	30,000	120,000	150,000
2 CONSTRUCTION FEE	162,962	785,294	948,256
3 INSURANCE GL / PL	71,895	346,453	418,348
SUBTOTAL:	264,857	1,251,747	1,516,604
COST OF WORK: INCLUDING CONTINGENCIES	\$ 14,850,873	\$ 47,445,500	\$ 62,296,372

DESCRIPTION		PHASE 1 STATE SUBMISSION ESTIMATE 02/25/09	PHASE 2 STATE SUBMISSION ESTIMATE 10/02/09	TOTAL PROJECT: STATE SUBMISSION ESTIMATE PHASE 1 & PHASE 2
4	CM BOND	64,212	284,673	348,885
SUBTOTAL:		\$ 64,212	\$ 284,673	\$ 348,885
TOTAL - CONSTRUCTION COST		\$ 14,915,085	\$ 47,730,173	\$ 62,645,257
OWNER "SOFT" COSTS - TO BE CONFIRMED BY SCHOOL				
1	LAND ACQUISITION, APPRAISALS	-	-	-
2	ARCH. / ENG. FEES, CONSULTANTS ALLOWANCE	495,700	2,682,440	3,178,140
	A. A/E REIMBURSABLES	IN ABOVE	25,000	25,000
3	MISCELLANEOUS ADMINISTRATION COSTS	5,500	37,234	42,734
4	SURVEYS, BORINGS, GEOTECHNICAL REPORT	27,000	27,158	54,158
5	TRAFFIC STUDY	IN ITEM #2	16,770	16,770
6	PEER REVIEW	4,000	8,500	12,500
7	TESTING, INSPECTIONS, SPECIAL INSPECTIONS	15,000	70,000	85,000
8	INDEPENDENT CODE COMPLIANCE REVIEW	-	-	-
9	BID PRINTING, MAILING, ADVERTISING	10,000	35,000	45,000
10	FF&E CONSULTANT	-	IN ITEM #21	-
11	TECHNOLOGY CONSULTANT	-	IN ITEM #22	-
12	ABATEMENT CONSULTANT	8,700	60,000	68,700
13	BUILDER'S RISK INSURANCE	31,728	131,208	162,936
14	LEGAL / BONDING COSTS	10,000	40,000	50,000
15	INTERIM FINANCING	155,972	1,244,028	1,400,000
16	MOVING EXPENSES, STORAGE	20,000	80,000	100,000
17	STATE PERMIT FEE (0.22/1000 OF CONST. COST)	BY CM	BY CM	-
18	COMMISSIONING (ENHANCED) / LEED	26,047	140,953	167,000
19	OWNERS REPRESENTATIVE	92,398	500,002	592,400
20	BUILDING OFFICIAL FEES - LOCAL REVIEW	9,500	28,500	38,000
21	FURNITURE, EQUIPMENT - (PARTIAL NEW / USED)	40,000	960,000	1,000,000
22	TECHNOLOGY	40,000	475,000	515,000
23	TELEPHONE SYSTEM	-	25,000	25,000
24	SECURITY SYSTEM	-	25,000	25,000
25	ABATEMENT (ALLOWANCE)	85,000	665,000	750,000
26	OWNERS CONTINGENCY	299,198	2,374,208	2,673,406
TOTAL OF OWNERS "SOFT" COSTS:		\$ 1,375,742	\$ 9,651,000	\$ 11,026,743
TOTAL PROJECT COST		\$ 16,290,827	\$ 57,381,173	\$ 73,672,000

Trumbull High School Like New Renovation
Phase I & II
Documents Reviewed

Building Committee:

- 1 Town literature identifying the Building Committee roles and responsibilities
- 2 List of Participants and their roles – Dates of start and end of service – Qualifications / reasons for participation in Building Committee
- 3 Handbook passed out to Building Committee by JCJ Architects describing their role

RFQ's / RFP's:

- 4 Owner published RFQ and / or RFP for Architectural and Design Services (Arch & Engineering)
- 5 Owner published RFQ and / or RFP for Contracts Administrator or Owners Representative (CA)
- 6 Owner published RFQ and / or RFP for Construction Manager at Risk (CMaR)
- 7 Owner published RFQ and / or RFP for any other services associated with the Trumbull High School Renovation
- 8 RFQ and or RFP response by Architectural and Design Services (Arch & Engineering)
- 9 RFQ and or RFP response by Contracts Administrator or Owners Representative (CA)
- 10 RFQ and or RFP response by Construction Manager at Risk (CMaR)

Scoring / Award:

- 11 List of persons associated with Scoring and Award process
- 12 Town of Trumbull Scoring process – Rules set for scoring and award of contracts
- 13 Communications between any any persons associated with scoring / award process and Legal Council (employed by or hired by Town) related to the award of the Trumbull HS Renovation project
- 14 Award / Rejection letters issued by Town
- 15 Any correspondence or documents associated with Legal issues arising from Award process

Contracts:

- 16 Owner Contract (Preconstruction and Construction agreements) with JCJ Architects JV partnership
- 17 Owner contract (Preconstruction and Construction agreements) with Construction Administrator (or Owners Rep)
- 18 Owner contract (Preconstruction and Construction agreements) with Construction Manager JV Partnership

- 19 Owner contracts (Preconstruction and Construction agreements) or purchase orders for any other subcontractors or vendors hired directly by the Town for the duration of the project (Preconstruction or Construction i.e.: Geotechnical, Environmental, Etc.)
- 20 JCJ JV Partnership agreement
- 21 JCJ Consultants agreements (Structural, MEP, Civil, Environmental, Geotechnical)
- 22 AFB Subcontracts or Purchase orders for any work authorized by AFB

Trade Contractor Scope sheets and award:

- 23 Trade specific scope sheets and recommendations for award by CA (Owners Rep)

Change Orders and tracking:

- 24 Change order Request log and associated back-up presented to Town for work completed or contracted by Contracts Administrator or Owners Representative (CA)
- 25 Approved Change order log presented to Town for work completed or contracted by Contracts Administrator or Owners Representative (CA)

Building Committee Progress Reports / Presentation Materials:

- 26 Presentation materials presented to the Building Committee during the Preconstruction / Construction period by Architectural and Design Services (Arch & Engineering)
- 27 Presentation materials presented to the Building Committee during the Preconstruction / Construction period by Contracts Administrator or Owners Representative (CA)

Miscellaneous:

- 28 RFP or RFP response associated with the FF&E Package
- 29 A report from the Finance Department showing all payments made by the Town for the High School building renovation project
- 30 A list of design elements missed where the Town has received credit
- 31 Clarification email from Jeff Donofrio
- 32 All building committee minutes from 9-26-2007 through 8-14-2013
- 33 The Town Charter that was in effect at the time that this work was bid which outlines the Town's bidding requirements

Additional Documents Requested on November 26, 2013:

- 34 Schematic Document Level Estimate presented by O&G during Preconstruction process
- 35 Design Development Document Level Estimate presented by O&G during Preconstruction process
- 36 Construction Document Level Estimate presented by O&G during Preconstruction process
- 37 Value Management reports, logs or log updates issued by O&G during the pre-construction process at any level
- 38 Constructability reports provided to BC, OCR or Architect regarding review of the documents

- 39 Silver Petrucelli presented estimates in a Powerpoint as presented at March 15, 2005 Building Committee meeting
- 40 Documentation or correspondence indicating the need for the THS to be designed as an Emergency Shelter, prior to Design, bidding and award
- 41 VM list passed out by AFB at BC Meeting on 2-22-2010, including updated list identifying items that were accepted by BC
- 42 Documentation supporting BC vote to provide additional summer hours for John Barbarotta
- 43 Documents supporting the creation of and or minutes of meetings of special committee formed to deal with the issue of the THS and ability to perform as an emergency shelter
- 44 List of "Additional costs" presented at the 2-13-2013 BC meeting
- 45 Punch list update on or as close to Substantial Completion date as possible
- 46 Current punch list - most current

**Exhibit D
Responsibilities Matrix**

JCI
Consultant JCI
Consultant JCI
Consultant JCI
Consultant

JCI Architect /
Wiles- Design
Professional *Acentech -
Acoustical
Consultant * Bemis Associates
- Theater &
Sound Consultant * CCR Pvramid -
Technology
Consultant * CR3 -
Landscape
Consultant

PreConstruction & Design responsibilities

Site Planning and Lansdacpe Architecture	✓				✓
Acoustical Consulting Services	✓	✓			
Theatrical Lighting System - Auditorium	✓				
Sound Reinforcement system - Auditorium	✓		✓		
Sound Reinforcement system - Natatorium	✓		✓		
Theatrical Lighting System - Auditorium	✓		✓		
Haz Mat Consultant					
Signage & Graphics	✓				
FF&E	✓				
Special Inspections and Testing	AD				
Attendance at BC meetings	✓				
Scope review and VM meetings	✓				
Project Meetings	✓				
Town Council meetings (if requested)	✓				
Conform with BSF requirements - endeavor to maximize reimbursement	✓				
Preliminary Design Phase	✓				
Surveys	✓				
Schematic - Provide Design & Programming	✓			✓	✓
Design Development - Provide Design & Programming	✓			✓	✓
Contract Documents- Provide Design & Programming	✓				✓
Bidding - Respond to bidders questions and update RFI response via addendum	✓			✓	✓
Schematic - Cost Estimates	ICWCM				
Design Development - Cost Estimates	ICWCM				
Contract Documents-Cost Estimates	ICWCM				
Bidding - Cost Estimate - reconciliation - GMP Preparation	ICWCM				
Cashflow projections @ Schematic, DD & CD levels					
Value Management / Collaboration @ Schematic, Design Development and Constructon Documents	✓				
Detailed report provided to Owner within 30 days of document release					
Constructability review @ Schematic, Design Development and Constructon Documents					
Architect / CM to advise Owner of changes to Design required to meet budget and market conditions:	✓				
Revise documents if Bidding exceeds 5% of Budget	✓				
Revise documents as required to conform to BSF requirements	✓				
Assist in opening bids and making awards to Lowest responsible bidders	✓				
Master Project Schedule					

Legend -
AD - As Directed
ICWCM - In Collaboration With CM

**Exhibit D
Responsibilities Matrix**

<u>JCI Consultant</u>	<u>JCI Consultant</u>	<u>JCI Consultant</u>	<u>JCI Consultant</u>	<u>JCI Consultant</u>
<u>*Crabtree McGrath Associates (Food Service consultants)</u>	<u>* Drobka Scientific (Acoustical Shell Rigging)</u>	<u>* DTC Engineering (Mechanical, Plumbing, FP & Electrical)</u>	<u>* DTC Engineering (Structural)</u>	<u>* Spath Bjorklund Associates (Civil Engineering & Surveying)</u>

PreConstruction & Design responsibilities

Site Planning and Landscape Architecture					
Acoustical Consulting Services					
Theatrical Lighting System - Auditorium					
Sound Reinforcement system - Auditorium					
Sound Reinforcement system - Natatorium					
Theatrical Lighting System - Auditorium					
Haz Mat Consultant					
Signage & Graphics					
FF&E					
Special Inspections and Testing					
Attendance at BC meetings					
Scope review and VM meetings					
Project Meetings					
Town Council meetings (if requested)					
Conform with BSF requirements - endeavor to maximize reimbursement					
Preliminary Design Phase					✓
Surveys					✓
Schematic - Provide Design & Programming	✓		✓	✓	✓
Design Development - Provide Design & Programming	✓		✓	✓	✓
Contract Documents- Provide Design & Programming	✓	✓	✓	✓	✓
Bidding - Respond to bidders questions and update RFI response via addendum	✓	✓	✓	✓	✓
Schematic - Cost Estimates					
Design Development - Cost Estimates					
Contract Documents-Cost Estimates					
Bidding - Cost Estimate - reconciliation - GMP Preparation					
Cashflow projections @ Schematic, DD & CD levels					
Value Management / Collaboration @ Schematic, Design Development and Construction Documents					
Detailed report provided to Owner within 30 days of document release					
Constructability review @ Schematic, Design Development and Construction Documents					
Architect / CM to advise Owner of changes to Design required to meet budget and market conditions:					
Revise documents if Bidding exceeds 5% of Budget					
Revise documents as required to conform to BSF requirements					
Assist in opening bids and making awards to Lowest responsible bidders					
Master Project Schedule					

Legend -
AD - As Directed
ICWCM - In Collaboration With CM

**Exhibit D
Responsibilities Matrix**

JCI Consultant	JCI Consultant	JCI Consultant	JCI Consultant	JCI Consultant		
<u>* Steven Wintert Assoc (Sustainable Design Consultant)</u>	<u>* TLB Architecture LLC (Pool Design)</u>	<u>* Vanderweil Technology Services (FF&E Technology Consultant)</u>	<u>* Clarence Welti PE (Geotechnical Services)</u>	<u>Wiles Associates (Architectural Partner)</u>	<u>Owners Rep - AFB</u>	<u>O&G - CM</u>

PreConstruction & Design responsibilities

Site Planning and Landscape Architecture						
Acoustical Consulting Services						
Theatrical Lighting System - Auditorium						
Sound Reinforcement system - Auditorium						
Sound Reinforcement system - Natatorium						
Theatrical Lighting System - Auditorium						
Haz Mat Consultant						
Signage & Graphics						
FF&E						
Special Inspections and Testing						
Attendance at BC meetings						✓
Scope review and VM meetings						✓
Project Meetings						✓
Town Council meetings (if requested)						✓
Conform with BSF requirements - endeavor to maximize reimbursement						
Preliminary Design Phase	✓	✓	✓	✓	✓	
Surveys						
Schematic - Provide Design & Programming	✓	✓	✓		✓	
Design Development - Provide Design & Programming	✓	✓	✓		✓	
Contract Documents- Provide Design & Programming	✓	✓	✓		✓	
Bidding - Respond to bidders questions and update RFI response via addendum	✓	✓	✓		✓	
Schematic - Cost Estimates						✓
Design Development - Cost Estimates						✓
Contract Documents-Cost Estimates						✓
Bidding - Cost Estimate - reconciliation - GMP Preparation						✓
Cashflow projections @ Schematic, DD & CD levels						✓
Value Management / Collaboration @ Schematic, Design Development and Construction Documents						✓
Detailed report provided to Owner within 30 days of document release						✓
Constructability review @ Schematic, Design Development and Construction Documents						✓
Architect / CM to advise Owner of changes to Design required to meet budget and market conditions:						
Revise documents if Bidding exceeds 5% of Budget						
Revise documents as required to conform to BSF requirements						
Assist in opening bids and making awards to Lowest responsible bidders						
Master Project Schedule						✓

Legend -
AD - As Directed
ICWCM - In Collaboration With CM

January 14, 2014

Trumbull High School
JCJ Project No. H07046.01

Summary of Programing Meetings & Schematic Design Review Phase 1 & 2, Design Development /Construction Documents Phase 1

Phase 1- Auditorium/Natatorium

Phase 2- Existing School Renovations

June 10 & 11, 2008-Staff Programming Meetings (Meetings by Jeff Elliott, JCJ Designer)

- | | |
|---------------------------------|------------------------|
| 1. Fine Arts (Music/Auditorium) | Staff: Peter Horton |
| 2. Media Center | Staff Colin Neenan |
| 3. Athletics/Fields/Natatorium | Staff Mike Herbst |
| 4. Guidance | Staff Joann O'Connell |
| 5. English/LA | Staff Jessica Spillane |
| 6. Science | Staff Tom Edwards |

June 11, 2008- Building Committee Review of Programming Meetings

June 17, 2008 - Staff Programming Meeting (Meetings by Jeff Elliott, JCJ Designer)

- | | |
|----------------------|----------------------|
| 1. Language Arts | Staff Cindy Perusi |
| 2. Nurse | Staff Dawn Tiuy |
| 3. Special Education | Staff Maureen Mas |
| 4. Math | Staff Fran Basbagill |
| 5. Social Studies | Staff Kathy Rubano |
| 6. Audio Visual | Staff Shawn Tait |

July 9, 2008- Building Committee- Review of Program Meetings

July 16, 2008- Building Committee- Review LEED Design (Winters Associates)

August 8, 2008- Building Committee- Review MEP Design (DTC)

August 20, 2008- Staff Programming Meeting- (Meetings by Jeff Elliott, JCJ Designer)

- | | |
|---------------------|--|
| 1. Security Meeting | Staff George Deny & Bill Connolly |
| 2. Dean of Students | Staff Lucinda Timpanelli, Frank Paslov, Tony Pijar |

Summary of Programming Meetings and Schematic Design Review Phase 1 & 2, Design Development/Construction Documents Phase 1

JCJ Project No. H07046.01

January 14, 2014

Page 2

September 22, 2008- **Building Committee**- Review of Programming Meetings, Auditorium & Natatorium

October 22, 2008- **Building Committee**- Establish Ad Hoc (Members Ad Hoc: R. Iassogna-Superintendent, R. Tremaglio-Principal, L. Timpanelli-SBC, K. Bivona-SBC, S. Burgess-JCJ, J. Elliott-JCJ, G. Smolley-JCJ, A. Barbarotta-AFB, J. Barbarotta, AFB, invited as required) Reviewed Auditorium Concept Options.

November 6, 2008- **Board of Ed**- Review project design to date

November 10, 2008- **Town Council**- Review project design to date

November 17, 2008- **Ad Hoc**- (Superintendent, Principal, Timpanelli-SBC, Mary Markham-Parks & Rec, Brian Holmes-O&G, Wiles-Wiles Assoc, Smolley-JCJ, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB)- Review Natatorium

November 24, 2008- **Ad Hoc** (Superintendent, Principal, Timpanelli-SBC, M. Herbst-AD, Steve Kennedy-Facilities, Markham-P&A, Brian Holmes-O&G, Smolley-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB)- Review Athletic Facilities/Natatorium

December 8, 2008 **Ad Hoc**-(Superintendent, Principal, Timpanelli-SBC, Kennedy-Facilities Tomenello-Chorus, Horton-FA, Brian Holmes-O&G, Wiles-Wiles Assoc, Smolley-JCJ, Elliott-JCJ, Czarnecki-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB)- Review Natatorium and Auditorium

December 9, 2009 **Board of Ed**- Review Schematic Design to date.

December 12, 2008 **Building Committee**- Overview Review of Design, Final Design Approval 1/14/09 Pricing to follow.

December 15, 2008 **Ad Hoc**- (Superintendent, Principal, Timpanelli-SBC, Kennedy-Facilities, Markham, Herbst-AD, Tomenello-Chorus, Horton-FA, Brian Holmes-O&G, Wiles-Wiles Assoc, Smolley-JCJ, Elliott-JCJ, Czarnecki-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB)-Review Athletics/Auditorium/Natatorium

December 22, 2008 **Ad Hoc**- (Superintendent, Principal, Timpanelli-SBC, M. Horton-FA, Brian Holmes-O&G, Smolley-JCJ, Elliott-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB)-Review Music, Athletics, Administration, Nurse, Review Auditorium Exterior Elevations.

January 12, 2009 **Ad Hoc**-(Superintendent, Principal, Timpanelli-SBC, Herbst-AD, Mike Horton-FA, Brian Holmes-O&G, Smolley-JCJ, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB) Review Athletics/Music/Auditorium.

January 14, 2009 **Building Committee**- Review Auditorium Options and Provide Direction, Review Natatorium and Provide Direction.

January 26, 2009 **Ad Hoc**-Review(Superintendent, Principal, Timpanelli-SBC, Herbst-AD, Mike Horton-FA, Brian Holmes-O&G, Smolley-JCJ, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-

AFB) Overall Plan and Aux Gym, Review Auditorium Exterior Elevations, Finalize Auditorium and Natatorium.

February 2, 2009- **Town Council**- Review Schematics to date.

February 4, 2009 **Building Committee**- Present Overall Plans and Final Program Update (see attached PDF), Auditorium Exterior Elevations Lobby Renderings Approved, Natatorium Design, LEED Presentation, MEP Presentation.

February 17, 2009 **Ad Hoc**- (Superintendent, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB, J Hackett-Technology, Food Service) Review Technology and Food Service.

February 22, 2009- **Ad Hoc**- (Superintendent, Principal, Timpanelli-SBC, Smolley-JCJ, A. Barbarotta-AFB, Czarnecki-JCJ) Review interior finishes.

February 25, 2009 **Building Committee**- Review Budget and Project Scope. Sign off and Approval Phase 1 Plans, Specs and Cost Estimate to Proceed to State Review.

March 2, 2009- **Town Council**- Approved Phase 1.

March 3, 2009- **Board of Ed**- Approved Phase 1.

March 25, 2009 **Ad Hoc**- (Superintendent, Principal, Timpanelli-SBC, Brian Holmes-O&G, Smolley-JCJ, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB) Review Interior Finish/Family & Consumer Science/Culinary Arts.

April 20, 2009 **Ad Hoc**- (Superintendent, Principal, Timpanelli-SBC, Brian Holmes-O&G, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB) Final Plan Approved (See attached PDF).

April 21, 2009 **Auditorium Sound and Lighting Review Meeting**- User review -All comments were incorporated into the design. (Timpanelli-SBC, Brian Holmes-O&G, Elliott-JCJ, Burgess-JCJ, J. Barbarotta-AFB).

April 30 **Post Approval Ad Hoc**(Superintendent, Principal, Timpanelli-SBC, Brian Holmes-O&G, Elliott-JCJ, Burgess-JCJ, A. Barbarotta-AFB, J. Barbarotta-AFB, Mike Herbst-AD) Modification to Athletics.

All comments at meetings and Ad Hoc meetings were picked up and added to design iterations and reviewed at the subsequent meeting. No formal minutes were taken of Ad Hocs.

Phase 1 (Auditorium) was expedited for summer 2009 construction.

**Trumbull High School Renovation
Cost Summary Data
1/10/2011**

Construction Costs	
Phase 1 GMP	\$ 10,174,966
Phase 2 GMP (includes pending changes)	\$ 40,376,427
Sub-Total GMP (Revised thru 1/1/11)	\$ 50,551,393
Soft Costs	
Owners Cost	\$ 8,946,056
Owners Contingency	\$ 2,031,542
Sub-Total Owners Cost (Revised thru 1/1/11)	\$ 10,977,598
Total Project Costs (Revised thru 1/1/11)	\$ 61,528,991
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 1,455,090
Concession Stand (Allowance approved by Town Council 1/6/11)	\$ 515,955
Increase Budget for FF&E	\$ 156,000
Increase Budget for Technology - Police Communication	\$ 97,000
Sub-Total Anticipated Scope Revisions	\$ 2,224,045
Total Anticipated Project Costs	\$ 63,753,036
Project Budget as Approved by Town Council	\$ 68,672,000
Variance	\$ (4,918,964)

**Trumbull High School Renovation
Cost Summary Data
3/9/2011**

Construction Costs	
Agreed GMP	\$ 50,171,603
Approved & Pending Changes	\$ 642,823
Sub-Total GMP	\$ 50,814,426
Soft Costs	
Owners Cost	\$ 8,946,898
Owners Contingency	\$ 2,044,624
Sub-Total Owners Cost	\$ 10,991,522
Total Project Costs	\$ 61,805,948
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 1,455,090
Concession Stand - Allowance	\$ 515,955
Increase Budget for FF&E	\$ 156,000
Increase Budget for Technology - Police Communication	\$ 97,000
Sub-Total Anticipated Scope Revisions	\$ 2,224,045
Total Anticipated Project Costs	\$ 64,029,993
Project Budget as Approved by Town Council	\$ 68,672,000
Variance	\$ (4,642,007)

Progress of Work	
Work Completed To Date	\$ 21,011,221
Work Completed as Percentage of Total Cost	41.3%
Changes as Percentage of Work Completed	3.06%



Exhibit F

Trumbull High School Renovation
 Cost Summary Data
 5/25/2011

Construction Costs	5/11/2011	3/9/2011
Construction Costs at GMP	\$ 47,309,422	\$ 47,309,422
Approved Changes	\$ 442,963	\$ 297,108
Estimated & Pending Changes	\$ 625,697	\$ 345,714
Changes Taken From CM Contingency	\$ 90,981	\$ 49,980
CM Contingency Remaining	\$ 2,771,200	\$ 2,812,201
Sub-Total GMP	\$ 51,240,263	\$ 50,814,425
Soft Costs		
Owners Cost	\$ 8,948,261	\$ 8,946,898
Owners Contingency	\$ 1,617,423	\$ 2,044,624
Sub-Total Owners Cost	\$ 10,565,684	\$ 10,991,522
Total Project Costs	\$ 61,805,947	\$ 61,805,947
Anticipated Scope Revisions:		
Paving & Landscaping	\$ 2,240,287	\$ 1,455,090
Concession Stand - Allowance	\$ 515,955	\$ 515,955
Increase Budget for FF&E	\$ 176,461	\$ 156,000
Increase Budget for Technology - Police Communication	\$ 97,000	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817	\$ 97,000
LEED Registration Fees	\$ 20,000	\$ -
Additional Reimbursables per JCJ	\$ 200,000	\$ -
Sub-Total Anticipated Scope Revisions	\$ 3,377,520	\$ 2,321,045
Total Anticipated Project Costs	\$ 65,183,466	\$ 64,126,992
Project Budget as Approved by Town Council	\$ 68,672,000	\$ 68,672,000
Variance	\$ (3,488,534)	\$ (4,545,008)

Progress of Work	
Work Completed To Date	\$ 24,659,040
Work Completed as Percentage of GMP	48.1%
Changes as Percentage of Total Project Costs	1.88%



**Trumbull High School Renovation
Cost Summary Data
6/8/2011**

Construction Costs	6/8/2011
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 591,479
Estimated & Pending Changes	\$ 569,616
Changes Taken From CM Contingency	\$ 90,981
CM Contingency Remaining	\$ 2,771,200
Sub-Total GMP	\$ 51,332,698
Soft Costs	
Owners Cost	\$ 8,948,261
Owners Contingency	\$ 1,524,988
Sub-Total Owners Cost	\$ 10,473,249
Total Project Costs	\$ 61,805,947
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
LEED Registration Fees	\$ 20,000
Additional Reimbursables per JCJ	\$ 200,000
Sub-Total Anticipated Scope Revisions	\$ 3,377,520
Total Anticipated Project Costs	\$ 65,183,466
Project Budget as Approved by Town Council	\$ 64,672,000
Variance - Over / (Under)	\$ 511,466

Progress of Work	
Work Completed To Date	\$ 26,129,147
Work Completed as Percentage of GMP	50.9%
Changes as Percentage of Total Project Costs	2.03%



**Trumbull High School Renovation
Cost Summary Data
6/22/2011**

Construction Costs	6/22/2011
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 591,479
Estimated & Pending Changes	\$ 748,780
Changes Taken From CM Contingency	\$ 403,722
CM Contingency Remaining	\$ 2,458,459
Sub-Total GMP	\$ 51,511,862
Soft Costs	
Owners Cost	\$ 8,948,261
Owners Contingency	\$ 1,345,824
Sub-Total Owners Cost	\$ 10,294,085
Total Project Costs	\$ 61,805,947
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
LEED Registration Fees	\$ 20,000
Additional Reimbursables per JCJ	\$ 200,000
Possible Additional Scope Items	\$ 3,965,418
Sub-Total Anticipated Scope Revisions	\$ 7,342,938
Total Anticipated Project Costs	\$ 69,148,884
Project Budget as Approved by Town Council	\$ 64,672,000
Variance - Over / Under	4,476,884

Progress of Work	
Work Completed To Date	\$ 26,129,147
Work Completed as Percentage of GMP	50.7%
Changes as Percentage of Total Project Costs	2.82%



**Trumbull High School Renovation
Cost Summary Data
7/27/2011**

Construction Costs	7/27/2011
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 591,479
Estimated & Pending Changes	\$ 997,384
Est Changes Currently Taken From CM Contingency	\$ 663,261
CM Contingency Remaining	\$ 2,198,920
Sub-Total Projected GMP	\$ 51,760,466
Soft Costs	
Owners Cost	\$ 8,948,261
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
LEED Registration Fees	\$ 20,000
Owners Contingency	\$ 1,097,220
Sub-Total Owners Cost	\$ 10,466,759
Total Project Costs	\$ 62,227,225
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Increase Budget for FF&E per additional Items List	\$ 111,000
Additional Reimbursables per JCJ	\$ 200,000
Possible Additional Scope Items	\$ 2,972,277
Sub-Total Anticipated Scope Revisions	\$ 6,039,519
Total Anticipated Project Costs	\$ 68,266,743
Current Bonding Release	\$ 64,672,000
Variance - Over / Under	3,594,743



**Trumbull High School Renovation
Cost Summary Data
9/27/2011**

DRAFT

Construction Costs	
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 1,036,484
Estimated & Pending Changes	\$ 1,419,887
Add for supervisory labor	\$ 86,600
CM Contingency Remaining	\$ 2,320,489
Sub-Total Projected GMP	\$ 52,172,882
Soft Costs	
Owners Cost	\$ 8,948,261
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
Increase Budget for Technology - UPS	\$ 24,600
LEED Registration Fees	\$ 20,000
Sub-Total Owners Cost	\$ 9,394,139
Total Project Costs	\$ 61,567,021
Current Bonding Release	\$ 64,672,000
Variance = Current Owner Contingency	\$ 3,104,979
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Increase Budget for FF&E per additional Items List	\$ 111,000
Additional Reimbursables per JCJ	\$ 200,000
Possible Additional Scope Items	\$ 2,972,277
Sub-Total Anticipated Scope Revisions	\$ 6,039,519
Total Anticipated Project Costs	\$ 67,606,539
Current Bonding Release	\$ 64,672,000
Variance - Over / Under	2,934,539



**Trumbull High School Renovation
Cost Summary Data
10/12/2011**

DRAFT

Construction Costs	
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 1,036,484
Estimated & Pending Changes	\$ 2,503,319
Add for supervisory labor	\$ 86,600
CM Contingency Remaining	\$ 2,367,092
Sub-Total Projected GMP	\$ 53,302,917
Soft Costs	
Owners Cost	\$ 8,948,261
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
Increase Budget for Technology - UPS	\$ 24,600
LEED Registration Fees	\$ 20,000
Sub-Total Owners Cost	\$ 9,394,139
Total Project Costs	\$ 62,697,056
Current Bonding Release	\$ 64,672,000
Variance = Current Owner Contingency	\$ 1,974,944
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Projected Changes for Final Phases (Estimate)	\$ 350,000
Increase Budget for FF&E (Plug Number)	\$ 250,000
Additional Reimbursables per JCJ	\$ 200,000
Possible Additional Scope Items	\$ 1,672,929
Sub-Total Anticipated Scope Revisions	\$ 5,229,171
Total Anticipated Project Costs	\$ 67,926,226
Current Bonding Release	\$ 64,672,000
Variance - Over / Under	3,254,226



**Trumbull High School Renovation
Cost Summary Data
12/28/2011**

DRAFT

Construction Costs	
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 1,125,102
Estimated & Pending Changes	\$ 1,662,441
Add for supervisory labor	\$ 86,600
CM Contingency Remaining	\$ 2,725,906
Sub-Total Projected GMP	\$ 52,909,471
Soft Costs	
Owners Cost	\$ 8,948,261
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
Increase Budget for Technology - UPS	\$ 24,600
LEED Registration Fees	\$ 20,000
Sub-Total Owners Cost	\$ 9,394,139
Total Project Costs	\$ 62,303,610
Current Bonding Release	\$ 64,672,000
Variance = Current Owner Contingency	\$ 2,368,390
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Projected Changes for Final Phases (Estimate)	\$ 350,000
Increase Budget for FF&E (Budget by JCJ)	\$ 325,500
Additional Design & CA Costs per JCJ	\$ 289,960
Additional Abatement Costs (Plug Number)	\$ 100,000
Additional costs for Firesafing Existing walls (Plug Number)	\$ 200,000
Possible Additional Scope Items	\$ 1,379,450
Sub-Total Anticipated Scope Revisions	\$ 5,401,152
Total Anticipated Project Costs	\$ 67,704,762
Current Bonding Release	\$ 64,672,000
Variance - Over / (Under)	3,032,762



**Trumbull High School Renovation
Cost Summary Data
1/25/2012**

DRAFT

Construction Costs	
Construction Costs at GMP	\$ 47,309,422
Approved Changes	\$ 1,379,268
Estimated & Pending Changes	\$ 1,599,362
CM Contingency Remaining	\$ 2,725,906
Sub-Total Projected GMP	\$ 53,013,958
Soft Costs	
Owners Cost	\$ 8,948,261
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology - Police Communication	\$ 97,000
Increase Budget for Technology - Smart Boards	\$ 127,817
Increase Budget for Technology - UPS	\$ 24,600
LEED Registration Fees	\$ 20,000
Sub-Total Owners Cost	\$ 9,394,139
Total Project Costs	\$ 62,408,097
Current Bonding Release	\$ 64,672,000
Variance = Current Owner Contingency	\$ 2,263,903
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Projected Changes for Final Phases (Estimate)	\$ 350,000
Media Center Revisions	\$ 161,840
Toilet Room Revisions	\$ 132,740
Increase Budget for FF&E (Budget by JCJ)	\$ 325,500
Additional Design & CA Costs per JCJ	\$ 289,960
Additional Abatement Costs (Plug Number)	\$ 100,000
Additional costs for Firesafing Existing walls (Plug Number)	\$ 200,000
Possible Additional Scope Items	\$ 1,439,167
CM Contingency Returned to Owner - Estimated at 50%	\$ (1,362,953)
Sub-Total Anticipated Scope Revisions	\$ 4,392,495
Total Anticipated Project Costs	\$ 66,800,592
Current Bonding Release	\$ 64,672,000
Variance - Over / (Under)	2,128,592



**Trumbull High School Renovation
Cost Summary Data
3/14/2012**

DRAFT

Construction Costs	
Construction Costs at GMP	\$ 47,310,422
Approved Changes	\$ 1,574,785
Estimated & Pending Changes	\$ 1,916,079
CM Contingency Remaining	\$ 2,253,606
Sub-Total Projected GMP	\$ 53,054,892
Soft Costs	
Owners Cost	\$ 8,948,261
Increase Budget for FF&E	\$ 176,461
Increase Budget for Technology	\$ 249,417
Additional Abatement Costs (Allowance)	\$ 250,000
Additional costs for Firesafing Existing walls (Allowance)	\$ 200,000
Additional Design Costs (JCJ) - Approved	\$ 71,400
Additional Design & CA Costs (JCJ) - Pending	\$ 224,560
LEED Registration Fees	\$ 20,000
Sub-Total Owners Cost	\$ 10,140,099
Total Project Costs	\$ 63,194,991
Current Bonding Release	\$ 64,672,000
Variance = Current Owner Contingency	\$ 1,477,009
Anticipated Scope Revisions:	
Paving & Landscaping	\$ 2,240,287
Concession Stand - Allowance	\$ 515,955
Possible Additional FF&E (Budget by JCJ)	\$ 325,500
Possible Additional Scope Items	\$ 1,445,666
Replace Duct Insulation on Roof (Allowance)	\$ 500,000
Sub-Total Anticipated Scope Revisions	\$ 4,527,408
Total Anticipated Project Costs	\$ 69,199,408
Current Bonding Release	\$ 64,672,000
Variance - Over / (Under)	4,527,408

TRUMBULL HIGH SCHOOL BUILDING COMMITTEE
MINUTES
May 21, 2008

- Call to Order: The Vice-Chair, Mr. Lemay called the Trumbull High School Building Committee to order at 7:13 p.m.
- Present: Mr. Chmielewski, Mr. Doyle, Ms. Flynn, Mr. Jenkins (arrived at 7:29), Ms. King, Mr. Nugent (arrived at 7:23) and Mr. Ronnow.
- Also Present: Town Attorney, Daniel Schopick, Town Auditor, Ms. Skully, Alfonso Barbarotta of AFB Construction Management, John Barbarotta of AFB Construction Management, Attorney J. Donofrio, Jill Wiles of Wiles+Associates, Mr. J. Butkas of JCJ Architecture, Gregory Smolley of JCJ Architecture, Jeffrey Elliott of JCJ Architecture, Peter Lippman of JCJ Architecture.

Mr. Smolley distributed binders to all the the THSBC members present, the binder will be updated at each meeting, there will be an extra copy kept for any new member that is appointed to the building committee from this pont forward. This will allow for the newest member to always have past information available to them from their first day forward.

The Chair arrived at 7:23 p.m.

Mr. Smolley reviewed the THS Existing Condition presentation board and the Design Considerations presentation board with the Building Committee members.

Mr. Jenkins arrived at 7:29 p.m.

Mr. Smolley reviewed the Conceptual Budget Allocations presentation board with the Building Committee members. Sub-Committees will be very important to the project, the sub-committees should have a clear goal outlined and should have a finite time-span. The Conceptual Phasing board was reviewed with the Building Committee. Mr. Smolley explained that a "renovate-as-new" project includes many items which involve investing the project's funds into items not seen, (i.e. - MEP's - mechanical, electrical and plumbing for the building).

Ms. Wiles stated the architects and engineers had toured the building with Mr. S. Kennedy of the BoE Facilities Department. Mr. Kennedy has a wealth of information to share with the architects and will be beneficial to the project; the BoE electrician and plumber were also available during the tour. The tour of the building was incredibly helpful to the design team. Mr. Kennedy passed on 16 blue-line drawings to the architects and they will delve into the drawings in the next few weeks.

The Building Committee discussed the upcoming meeting schedule with Mr. Smolley; the next meeting date will be June 11th. The two meetings following the June 11th meeting will be substantial meetings. In July a schedule of the project's milestones will be available.

In response to a question from Mr. Lemay, Mr. Smolley stated that asbestos abatement would be an effort between the owners and the professionals it would be best handled in the summer months, July and August when school is essentially closed. Mr. Barbarotta stated that AFB has done the major asbestos abatement on THS to date.

Approval of Minutes:

Mr. Chmielewski and Ms. King moved and seconded to amend the previous meeting minutes as attached. Vote: Motion to amend was approved 7-0-1 (Flynn abstain)

Mr. Chmielewski and Mr. Ronnow moved and seconded to approve the previous meeting minutes as amended. VOTE: Motion approved 7-0-1 (Flynn abstain).

The Chair stated he had received a message from Bismark Construction that they are not ready to closeout the addition portion of the THS project. Mr. Barbarotta stated he had spoken with Mr. Reale, there are a few more items that need to be handled. Mr. Lindley has resigned from Bismark Construction.

In response to a question from the Chair, Ms. Wiles stated she had received the mechanical as-built electronic files from Bismark Construction as discussed at the last meeting. The architectural electronic files would also be incredibly helpful.

Attorney Donofrio reviewed the 3 bids received for the OCR (*Owner's Construction Representative*) as follows:

AFB Construction Management - \$592,492.00 (apparent low bidder)

Pinacle I - \$1,278,825.00

SBS - \$2,294,000.00

Attorney Donofrio stated that he had a question pertaining to the AFB bid with regard to the insurance requirement, there was to be an *errors and omissions* insurance policy in addition to the other required insurance policy. Atty. Donofrio had received the answer from AFB prior to this meeting that the errors and omissions insurance policy is included in the section that reads as not to exceed \$50,000.00. AFB does meet the range of hours anticipated for the bid. Atty. Donofrio had anticipated the bidders to average 6000 hours for the project. AFB is slightly higher on the anticipated hours at 7,314 but is definitely lower in the bid dollar amount. Atty. Donofrio did question the roles of the 4 employees AFB proposes. Mr. Barbarotta reviewed the 4 proposed positions in detail with the building committee. Mr. Barbarotta explained that the bid was kept low, AFB has always had a vested interest in Trumbull.

In response to a question from Mr. Ronnow, Mr. Barbarotta stated the Stamford project was a 6-year project with a \$2,000,000.00 fee, which entailed a 40-hour week. Atty. Donofrio explained it appears as if all 4 positions outlined in the proposal have the responsibilities divided and work as a whole. In response to Ms. Flynn, Mr. Barbarotta stated AFB as the OCR would protect the owner's funds, check the C/O's and bills. Mr. Smolley explained that outsourcing an OCR is reimbursable, AFB will represent the Town, they know their role well, and greed 6-7,000 hours is an appropriate number of hours for an OCR on this project. Mr. Smolley spoke favorably of AFB based on past experience with them on the RCA building (Regional Center for the Arts) in town. Atty. Donofrio stated many states are mandating OCR's on projects such as this one.

In response to a question from Atty. Schopick, Mr. Barbarotta clarified that AFB had starting working with the BoE and the building committee in 1986; the contract with the BoE and AFB began in 1991. The contract is to oversee plant operations, work with OSHA, get budgets approved and also work with union contracts. The contracted amount is \$40,000.00 per year. This is not a conflict but an asset to the THS Renovate-As-New project.

Mr. Lemay discussed checking the AFB references. Mr. Lemay would like the architects' references submitted for documentation, and current commitments clarified. Mr. Lemay is concerned 700 hours in the pre-construction phase is too low. Mr. Smolley stated the majority of time the OCR spends during the design phase would be at the committee/design meetings, it will be important to interact with the BoE and staff. Atty. Donofrio clarified that the OCR contract will be set as a not to exceed number. Atty. Donofrio and the Chair agreed that 20 hours per week is enough for an OCR on this project.

Mr. Doyle expressed concern that the building committee is not buying enough of the OCR's time during the design phase. There should be regular interaction with the engineers; AFB is very knowledgeable with all the day to day operations. There is always the possibility of adding T&M outside the contract. Mr. Ronnow agreed that this would be money well spent. Ms. King spoke favorably of AFB Construction Management, they have been at all of the building committee meetings to date, they have now and always have in the past had a vested interest in Trumbull. The architect has spoken very highly of AFB. AFB has a great repore with both JCJ and Wiles. Mr. Holmes spoke favorably of AFB as an OCR and the hours represented in the bid.

Mr. Chmielewski and Ms. Flynn moved and seconded to move forward to a vote on the OCR, (*Owner's Construction Representative*), apparent low bidder.
Vote: Motion approved 5-1-2 (Ronnow against) (Doyle and Lemay abstain).

Mr. Lemay stated he would like reference checks completed before the recommendation is made to the Town Council.

Ms. King stated she had gone to the RCA 's principle in charge and that she had spoken very highly of Mr. John Barbarotta of AFB and AFB's performance on their project.

Ms. Flynn and Mr. Jenkins moved and seconded to approve AFB Construction Management as the apparent Owner's Construction Representative (OCR) low bidder to Trumbull Town Council. Vote: Motion approved 5-0-3 (Ronnow, Doyle and Lemay abstain).

AFB Construction Management requested that they be included in the loop of information before their contracts are completed.

The THS Building Committee agreed by unanimous consent that the next scheduled meeting would take place on Wednesday, June 11, 2007 at 7:00 p.m. to be held at Trumbull High School.

The Trumbull High School Building Committee adjourned by unanimous consent at 8:55 p.m.

Respectfully submitted,

Margaret D. Mastroni