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Report  
Project Labor Agreement  
Benefits Analysis

**Rochester Joint Schools Construction Board  
Rochester Schools Modernization Program  
Rochester, New York**

January, 2012

**Seeler Engineering, P.C.**

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# Section 1

## Executive Summary

### 1.1 Background

Project Labor Agreements, which have been utilized in the private sector for many years, are a recognized tool for assisting in cost effective and timely completion of major construction projects. They serve these objectives by providing uniform working conditions, cost savings, stable labor environment, and comprehensive protection against work disruptions arising out of labor disputes.

A Project Labor Agreement (“PLA”) is a labor contract limited to the construction of a specific project. Unlike a typical labor agreement, a PLA does not bind a contractor wherever it works for a specific period of time; rather, it only applies to the contractor's work on a particular project and only for the duration of that project. All parties involved in the construction project, unions and contractors, are required to be signatories to the PLA. The PLA supersedes any pre-existing labor agreements. A typical PLA provides for standardized work practices, hours, holidays, and grievance/arbitration procedures and promotes overall labor-management harmony for the duration of the project. A PLA prohibits strikes, lock-outs, work stoppages and/or any other disruption of work for any reason. PLAs provide a tool for addressing the special needs of a unique construction project in a single, comprehensive manner, particularly among union contractors. They become a substitute for local area labor agreements that generally are written for routine types of work and are not always easily adapted to special projects.

A PLA is typically a pre-hire agreement, which means it is negotiated prior to construction and hiring. Construction industry pre-hire agreements are expressly authorized by the National Labor Relations Act. See 29 USC § 158(f).

In March of 1993, the U.S. Supreme Court held that a governmental entity, when it is acting in its proprietary capacity as owner or manager of property and is participating in the construction industry market place much as a private employer, can utilize a project labor agreement without running afoul of federal law. On March 28, 1996 the New York Court of Appeals approved, under State Law, the use of PLAs on publicly owned projects. In that case, which involved the repair and refurbishing of the Tappan Zee Bridge, the Court emphasized the need for the PLA to foster one or both of the dual purposes underlying the States various competitive bidding laws: (1) protecting the public fisc and (2) avoiding favoritism, fraud or corruption. See *New York State Chapter Inc. v. New York State Thruway Auth.*, 88 N.Y.2d 56, 643 N.Y.S.2d 480 (1996). The importance of potential cost savings to the public through the use of a PLA was emphasized by the Courts rejection of a PLA in a companion case, involving the Roswell Park Cancer Institute in Buffalo. There, in the absence of sufficient evidence that the Dormitory Authority approved the use of the PLA as a cost saving device, the use of a PLA was struck down by the Court.

Some commentators have argued that Tappan Zee only authorized PLAs in extremely limited and exceptional circumstances, arguing that the decision does little to authorize their use on the more typical public construction project. Based on both the language of Tappan Zee and subsequent decisions applying Tappan Zee, this seems an unduly narrow view. In fact, most post-Tappan Zee PLA requirements have been judicially accepted. Tappan Zee recognized two distinct categories of cost savings that can justify

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use of a PLA. The first is direct labor-saving costs obtained by negotiating specific provisions as part of the PLA. The second is indirect cost savings, which can be derived from PLA provisions that enhance construction coordination, protect an asset's revenue stream, or perhaps even avoid fines or some other financial penalty attributable to construction delay.

PLAs have a long history in both public and private construction in the United States, dating back 60 years or more. See Perritt, *Keeping the Government Out of the Way: Project Labor Agreements Under the Supreme Courts Boston Harbor Decision*, 12 *The Labor Lawyer* 69 (1996). The Grand Coulee Dam, the Shasta Dam, Disney World, the TransAlaska Pipeline, Boston's Central Artery and Harbor Clean Up Projects, the Tappan Zee Bridge Refurbishing Project, the Onondaga County Resource Recovery Agency Resource Recovery Facility, Cape Kennedy Space Center, the O'Rorke Bridge (Rochester, NY), the Joint Schools Construction Board Project in Buffalo, the Monroe County Water Authority Eastside Water Supply Project, and the Allegany County Courthouse Project are just some of the projects which have been, or are being, constructed under a PLA. It is worth note that PLAs have been used successfully in the Rochester area for several recent projects including the Monroe County Crime Lab Project and the MCWA Eastside Water Supply Project.

Although not new to construction, PLAs have received considerable attention in recent years as a result of the Supreme Court's Boston Harbor decision. *Building & Construction Trades Council v. Associated Builders & Contractors*, 507 U.S. 218, 230 (1993) ("Boston Harbor"). The Boston Harbor PLA was challenged in *Building & Construction Trades Council v. Associated Builders & Contractors*, ("Boston Harbor") on federal preemption grounds, on the theory that by requiring successful bidders to agree to the PLA, the public owner, the Massachusetts Water Resources Authority ("MWRA"), was dictating their labor relations policies.

Although the U.S. District Court rejected the plaintiff's preemption argument, an en banc First Circuit reversed. It found that, by requiring bidders to accept the PLA, the MWRA had "pervasively intruded" into the collective bargaining process of project contractors, in violation of the doctrine established by the Supreme Court's 1976 decision in *International Ass'n Machinists & Aerospace Workers v. Wisconsin Employment Relations Commission*. 427 U.S. 132 (1976). The doctrine prohibits states from regulating activities that Congress intended to be left unregulated under federal labor policy.

In reversing the First Circuit, the Supreme Court held that a public entity, when acting in its proprietary, as opposed to regulatory, capacity is entitled under federal labor law to take advantage of the same NLRA provisions that allow a private project owner to reap the benefits of a project labor agreement. After tracing the congressional history of Section 8(e) and (f) of the NLRA, the Court concluded that the very reasons that led to the adoption of these statutory provisions were no less implicated on publicly owned projects than on privately owned projects. Thus, so long as a public entity's decision to require a PLA is a proprietary decision and not the exercise of its regulatory powers, federal labor law and preemption principles pose no barriers.

The legal scrutiny given to PLAs has led to the recognition of the benefits that PLAs can bring to construction projects. John Koskinen, the Deputy Director for Management of the Office of Management and Budget, testified before the Senate Committee on Labor and Human Resources in April of 1997 and spoke of the long, successful history of PLAs in containing construction costs and assisting in the timely completion of major construction projects, in both the public and private sector (a copy of his testimony is attached at Appendix A).

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Recognizing the ability of PLAs to “achieve economy and efficiency in Federal construction projects,” President Barack Obama issued an Executive Order to all Executive Departments and Agencies on February 6, 2009 encouraging consideration of PLAs on Federal projects (a copy is attached as Appendix B). Also aware of the potential benefits PLAs can bring to public construction projects, Governor Pataki issued Executive Order No. 49 in 1997 requiring New York State agencies to establish guidelines for the consideration of PLAs on State projects, recognizing that it is now clear that PLAs are one of many tools which may be used by management and labor and which may, under certain circumstances, assist in achieving the goals [of timely completion of public construction projects...while at the same time limiting the costs of such projects] (a copy of this Executive Order is attached at Appendix C). According to a recent report issued by the United States General Accounting Office, the Governors of Nevada, New Jersey and Washington have issued similar Executive Orders, as have the Mayors of Boston and Philadelphia.

John Dunlop, a noted labor economist and Harvard University Professor (Emeritus), commented on the value of a PLA in the now completed, multibillion dollar Boston Harbor Clean Up Project. Dr. Dunlop’s comments were made in connection with the consideration of a PLA on a major Southern Nevada Water Authority project (a copy of Dr. Dunlop’s statement is attached at Appendix D). A report from the Manager of ICF Kaiser, the administrator of the Boston Harbor PLA, included in Dr. Dunlop’s statement clearly credits that project’s PLA with helping bring the project in under budget and ahead of schedule, and completing approximately 20,000,000 craft hours without any time lost due to labor disputes. Since the issuance of the Kaiser report, greater than 25,000,000 craft hours have been expended on the project. Some 300 disputes were resolved in 12 years of project documentation without delay or disruption.

Savings from PLAs have also been recognized in court cases approving the use of PLAs on public construction projects in New York, e.g., the Tappan Zee case (approximately \$6 million in estimated savings) and *Albany Specialties, Inc. v. County of Orange*, 240 A.D. 2d 739 (2d Dept. 1997) (\$2.1 million in savings). However, a New York court has struck down a PLA where anticipated cost savings were not documented at the time of approval. See *Empire State Chapter of Associated Builders and Contractors, Inc. v. City of Oswego*, 239 A.D. 2d 875 (4th Dept. 1997).

Although opponents of PLAs have claimed that such a requirement precludes open shop, or non-union, contractors from bidding, the courts have soundly rejected that claim as a legal matter, and experience on a number of projects indicates that PLAs do not, in fact, have such an effect. For example, the above referenced statement of Dr. Dunlop indicates that there was significant work secured by non-union contractors on the Boston Harbor project, with, as of October of 1996, approximately 102 out of a total of 257 subcontractors classified as open shops despite Boston being a market in which approximately 75% of major construction is performed on a union basis. In addition, at the time of the decision by the Superior Court in Massachusetts approving the use of a PLA on a second, multi-billion dollar project in Boston, the Central Artery Project, dozens of non-union contractors had bid on and/or received project contracts. See *Utility Contractors Association of New England, Inc. v. Commissioners of the Massachusetts Department of Public Works*, Civil Action No. 90-3035 Decision at p. 11 (1996). See also *Associated Builders and Contractors, Inc. v. Metropolitan Water District of Southern California*, 1997 WL 768936 (Cal. App. 2 Dist. 1997) where a major construction project in California that required a PLA utilized non-union contractors for 75% of the project.

The Rochester Joint Schools Construction Board’s (“RJSCB”) Rochester Schools Modernization Program (the “Project”) is in the final stages of procurement for the design and construction of Phase 1. Phase I

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legislation authorizes projects for up to thirteen schools along with a District Wide Technology Improvement Project. The current program includes upgrades and additions for twelve schools in the Rochester City School District (the “District”), along with District wide technology improvements. Construction costs for Phase 1 of The Project are estimated to be \$244.9 million.

The RJSCB’s enabling legislation authorizes it to use a PLA. To investigate the benefits of a PLA, the RJSCB has engaged Seeler Engineering, P.C., an independent consultant experienced in the development and implementation of PLAs, to conduct a thorough analysis of the costs/benefits of a PLA. Concurrent with this study the RJSCB has conducted negotiations for a PLA. Negotiations are completed although no agreement has yet been accepted by the RJSCB. The terms and conditions of the tentative agreement served as the basis of this report. The results of this independent study will serve as the basis for the final decision of whether or not to enter into the proposed PLA with the Rochester Building and Construction Trades Council.

Seeler Engineering, P.C. conducted this study by addressing whether a PLA covering The Project would:

- 1) provide economic savings and complete the best work at the lowest price in the construction process through, among other things, uniformity in work rules and practices; mechanisms for improved productivity, safety, and efficiency; and timely completion of the construction; and
- 2) prevent favoritism, fraud and corruption by ensuring access to the benefits of the PLA to all successful bidders (including open-shop contractors), as well as guaranteeing that all successful bidders are permitted to utilize a portion of their regular work force on The Project.

The RJSCB asked Seeler Engineering, P.C. to determine the most economical way to proceed with timely construction, with the least disruption to the public. It also asked Seeler Engineering, P.C. to consider the impact of delay, the possibility of cost savings advantages, and any local history of labor unrest.

What follows is a study designed to assist the RJSCB in determining whether to enter into the proposed PLA. The report summarizes Seeler Engineering, P.C.’s investigation of factors relating to the appropriateness of incorporating a PLA into the proposed Project.

### **1.2 RJSCB Rochester Schools Modernization Program**

This study analyzes The Project, which comprises the first phase of a multi-phase program and encompasses improvements for up to thirteen district educational buildings along with a district wide technology upgrade project. The RJSCB has initially assessed twelve buildings and established planning level programming, including varying levels of:

- Alterations and renovations,
- Additions to address space adequacy, and
- Site modifications.

The RJSCB’s enabling legislation is similar in many aspects to the legislation allowing the City of Buffalo and the City of Syracuse to proceed with their respective comprehensive capital renovation



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programs. It creates the RJSCB and allows for the formation of a public/private partnership to deliver the \$325 million project with no additional tax levy.

In order for the District to continue its public service mission, it is critical to have a timely and successful completion of The Project. During the extended construction period, the District's vitally important public service activities must continue without interference or delay. The Project must be kept on schedule to prevent interference with planned school and community activities. School building projects will be continuing concurrently with regular school operations through the use of careful scheduling of work and relocation of educational activities into flex space. Any disputes or work stoppages on this project will, in all likelihood, spill over to interrupt and interfere with other aspects of school operations. The work contemplated under this project is geared to the opening of the school year, and the schedule must remain intact in order that these deadlines are met.

Therefore, it is essential that the construction work be done in an efficient and economical manner in order to secure optimum productivity and to eliminate any delays in the work.

### **1.3 The Proposed PLA**

An agreement has been reached on the terms and conditions of a PLA although the agreement has not been accepted. As such, our assessment, contained in this report, is based upon our understanding of the agreed upon terms and conditions.

### **1.4 Our Study**

Seeler Engineering, P.C. has developed a comparative analysis of the existing twenty-three area collective bargaining agreements for eighteen labor craft unions that would govern construction on the Project in the absence of a PLA. The intent of the review was to identify areas for improvement through the proposed PLA that could reduce the Project's total labor cost.

This study includes an assessment of the economic and non-economic benefits of the proposed PLA. Given the nature and size of this Project, and the make-up of the market, even in the absence of a PLA we would expect, on a dollar basis, approximately 75 percent of the successful project bidders to be unionized contractors covered by one or more of the twenty-three agreements referenced above. The percentage will vary by contract.

### **1.5 Summary**

Implementation of the proposed PLA would result in savings ranging from \$5,668,948 to \$6,311,203 or approximately 5.4 to 6.0 percent of the projected cost of labor for the Project (estimated at \$105,615,000). Using a PLA would offer several other benefits that are not easily translated into dollar savings, but are significant to the completion of a project. These benefits include: avoiding the costly delays of potential strikes and other disruptions arising from work disputes, permitting wide flexibility in work scheduling and shift times thereby increasing productivity, ensuring a reliable source of skilled and experienced labor, enhancing opportunities for minority and women workforce participation through enhanced recruitment and training programs, and avoiding favoritism by ensuring availability of the benefits of the PLA to all successful bidders regardless of union/non-union status or the status of their employees. Given current economic conditions, the labor market is considered volatile. A PLA would, therefore, result in

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obtaining the best work at the lowest possible price, prevent favoritism, fraud and corruption, and eliminate the impact of delay as a result of labor unrest.

For these reasons, Seeler Engineering, P.C. recommends the use of the proposed PLA for the Project.

## **Section 2**

# **Project Description**

### **2.1 Scope**

The Rochester City School District consists of a number of Elementary, Middle and High School buildings around the City. The RJSCB's Facility Modernization Program is a comprehensive capital improvement program for the District. The Project, the first phase of a multi-phase plan, calls for repairs, maintenance, alterations, reconstruction, and additions to address "space adequacy" at up to thirteen District buildings and a project to enhance technology systems District-wide. The extent of the improvements to each building space will vary, but in general may contain asbestos abatement, replacement of interior finishes, lighting improvements, upgrades to communications and IT systems, HVAC improvements, interior space demolition and modification, and improvements to the building envelope for classrooms, athletic facilities, auditorium, administrative, and lunch room areas. The projects are to be completed while maintaining school operations in an uninterrupted and safe manner.

### **2.2 Schedule**

The Rochester Schools Modernization Program is divided into multiple Phases with only the first phase authorized. This Phase extends from 2012 to 2015. A preliminary construction schedule is included as Appendix E and shows the individual projects included in Phase 1. All construction work is to be completed by the end of July 2015 (37 months).

Several key factors enter into the schedule for construction activities. First, schools must remain in full operation from September through June and the District and its contractors must remain in compliance with Part 155 of the Regulations of the Commissioner of Education. Certain construction activities can only be completed after the completion of the school day, during summer recess and/or with temporary relocation of certain activities. Construction of "Swing" space first is a key component in any schedule of activities. Modifications, improvements or changes to mechanical systems must typically be done during summer months. Lastly, certain site (athletic fields) work is constrained by weather and use considerations. The need for effective schedule management is therefore a critical element of The Project.

The thirty-seven month scheduled construction period, while not lavish, is reasonable and allows construction to proceed in a relatively benign manner with four summer seasons for construction as long as effective progress of interdependent work is maintained. So long as The Project does not incur significant delays, this construction timeframe should provide sufficient time to complete construction activities without the use of expedited construction techniques that would result in a premium charge to The Project.

### 2.3 Construction Costs

The RJSCB, the RJSCB’s Program Manager and the District prepared a project estimate for the Rochester Schools Modernization Program, a copy of which is included in Appendix F. The individual projects are listed below by phase. Total project costs including professional services, as well as construction, is projected to be \$325 million in 2011 dollars. Total construction cost is estimated at \$244.9 million. The estimated cost for each project is presented below:

| <u>Contract/School Name</u>                           | <u>Construction Cost</u> |
|---|--------------------------|
| John Williams School No. 5                            | \$17,730,000             |
| James P. B. Duffy School No. 12                       | \$15,650,000             |
| Enrico Fermi School No. 17                            | \$19,183,794             |
| Henry Hudson School No. 28                            | \$17,457,189             |
| Helen Barrett Montgomery School No. 50                | \$17,442,549             |
| World of Inquiry School No. 58                        | \$36,240,961             |
| Charlotte High School                                 | \$20,094,850             |
| Franklin Educational Campus                           | \$7,600,000              |
| Thomas Jefferson High School                          | \$20,960,000             |
| James Monroe High School                              | \$23,500,000             |
| East High School                                      | \$19,840,000             |
| Edison Educational Campus                             | \$22,200,000             |
| District Wide Technology Program                      | \$7,020,000              |
| <b><u>Construction Cost Total</u> = \$244,919,343</b> |                          |

## **Section 3**

### **Estimate of Craft Labor Needs**

#### **3.1 Craft Labor Breakdown**

In connection with The Project, eighteen craft labor unions (with twenty-three craft labor union collective bargaining agreements) would represent the construction industry as signators to the PLA. Of this number, fifteen craft labor unions (with fifteen of the agreements) would likely have actual involvement in the work planned for The Project. A listing of the unions is presented on Table 1.

Table 2 includes work area labor breakdowns for The Project. This analysis estimates that approximately 2,357,310 craft labor hours will be required to complete construction work for The Project. Demand for craft labor will be immediate upon execution of the construction contracts. Given the nature and the size of The Project and the make-up of the market, even in the absence of a PLA, we would expect on a dollar basis approximately 75% of the successful project bidders to be unionized contractors covered by one or more of the craft labor agreements. For a project of this size we would not expect to see a significant number of new bidders from outside the area. Those that are from outside the area could create the potential for greater union participation because of the need to access large local workforces instead of incurring large workforce mobilization costs.

#### **3.2 Projected Labor Costs**

Utilizing applicable journeyman wage and benefit rates, we projected labor costs for The Project. The projected craft labor cost for The Project is estimated at \$105,615,189 or 43 percent of the anticipated construction cost, with the actual percentage varying on individual components from 20 to 60 percent.

## **Section 4**

# **Summary of Existing Agreements**

### **4.1 Existing Agreements**

Seeler Engineering, P.C. has developed a comparative analysis of fifteen of the twenty-three craft unions and fifteen applicable collective bargaining agreements. Based upon the current scope of The Project, three crafts; Millwrights, Piledrivers and Teamsters would not have involvement in The Project. Further it is anticipated that the work planned would be subject to Building Rate Agreements only. Work subject to Heavy and Highway agreements is not anticipated. Significant aspects of each agreement are summarized on Table 3. Elevator workers participate in PLAs, however, because of the nature of the agreement, they are subject only to general conditions. The intent of the review was to identify areas of improvement achieved through the proposed PLA which could potentially result in a reduction of the labor cost for The Project. A brief synopsis of the terms of the existing agreements is presented below.

#### **4.1.1 Contract Duration/Expiration Date**

Contract durations range from two to five years, with the majority of the agreements being five years in duration. Five of the agreements (Bricklayers, Electrical Workers, Iron Workers, Operating Engineers and Painters) are set to expire just prior to the anticipated construction start date. Seven agreements are set to expire during the construction period.

#### **4.1.2 Regular Work Hours/Regular Work Day**

Regular work hours/work day are not consistent between agreements. Although all of the agreements standardize on a 5 day, 40 hour work week, some crafts allow 4 ten hour days as an alternative with consent of the union. The majority of the agreements set normal work hours from 8 a.m. to noon and 12:30 p.m. to 4:30 p.m. with an unpaid one-half hour for lunch. Several unions do not state specific start and quitting times, but state that the hours must be consecutive with a ½ hour lunch. Other unions specifically state that the starting and quitting times may be changed, but require notification to or mutual agreement of the union.

#### **4.1.3 Guaranteed Pay**

All of the union agreements except the Bricklayers, Carpenters, Insulators and Ironworkers require two or more hours pay for reporting in. Iron workers require \$30 per hour for the first two hours if the employee shows up and no work is provided due to weather or other means not controlled by the employer. The detailed requirements vary. Some of the agreements limit the obligation to non-weather related conditions. Some require the pay regardless. Still others require additional compensation if weather conditions permit work, but no work is provided. The Operating Engineers essentially guarantee a minimum of three full days of pay once the work day starts regardless of the hours actually worked. In some instances these guaranties can be as much as 40 hours. Most of the unions allow Saturdays as a make-up day for weather related delays at straight time.

#### **4.1.4 Shift Work**

The agreements vary widely. Shift differentials range from 10 to 17.5 percent premium for second shift to 15 to 31.4 percent premium for third shift. In addition, many agreements shorten the hours

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worked for second and third shift (7.5 hours for second shift and 7 hours for the third shift) but require 8 hours of pay. Glaziers and Roofers do not address second and third shifts. The Painters require second and third shift compensation at base pay plus \$2 per hour.

### **4.1.5 Overtime**

Most agreements provide for time-and-one-half for overtime for weekdays and Saturdays. For Sundays and holidays two-times base salary is typical. Painters allow Sunday work at time-and-one-half.

### **4.1.6 Holidays**

All unions are standardized on 6 holidays: Christmas, New Years, Thanksgiving, Labor Day, Memorial Day and Independence Day. For all unions, holidays are unpaid if not worked.

### **4.1.7 Apprentice Ratios**

The ratios vary and change with the number of Journeymen at the site. For example, many unions allow the first Apprentice with the first Journeyman. While one Apprentice usually is allowed initially, once staffing grows beyond a small labor force the following ratios have been established:

| <u>Journeyman/Apprentice Ratio</u> | <u>Number of Agreements</u> |
|------------------------------------|-----------------------------|
| 1/1                                | 2                           |
| 2/1                                | 1                           |
| 3/1                                | 7                           |
| 4/1                                | 2                           |
| 5/1                                | 0                           |
| 6/1                                | 0                           |
| 3/2                                | 1                           |

### **4.1.8 Off-Site Fabrication**

Off-site fabrication rules vary from agreement to agreement. Some do not address the issue at all. For example, electricians define certain work elements and require them to be union. Plumbers require off-site work “under the control” of the contractor to be union. Several other crafts have similar language which could restrict flexibility in the use and selection of off-site fabricators.

### **4.1.9 Mileage and Parking**

Some of the unions require payment for parking in downtown areas. Rules also vary for mileage. Most agreements do not require payment of mileage within Monroe County if the worker reports directly to the job-site. Compensation for parking ranges from \$0 to \$7 per day, while travel ranges from \$0.00 to \$0.51 per mile.

#### **4.1.10 Management Rights**

Most of the existing agreements do not contain a “Management’s Rights” clause. This means that they lack clear statements of the rights of management giving the contractor the assistance and/or flexibility required for necessary control and management of The Project work, including control of the level of staffing and control/selection of key personnel such as the foreman including the consideration that the foreman be provided by Contractor.

## **4.2 Labor Unrest**

We reviewed the general labor climate in the Rochester area over the last ten years. Our review revealed a mixed picture. Nationwide, labor activism is on the rise. This unrest is evidenced nationally by the Chicago Laborers Strike in June of 2006, which stopped the construction of an over \$1 Billion project and the most recent walkout of 400 unionized Cement Truck Drivers in New York City. The unrest is evidenced locally by recent organizing activities in the service industries in upstate New York, by the Bricklayers in Rochester, threatened job actions in the manufacturing sector, and recent demonstrations at the MCC campus related to a proposed housing project. As recently as February of 2010, IAM Local 1555 employees went on strike for twenty-two (22) weeks in Westfield, New York, Chautauqua County. A strike, just recently settled, by Mott’s employees at the Williamson, New York facility is now the longest in the Company’s history lasting five months. The Rochester area trades are known to have a very strong and comprehensive organizing program and are known to take a strong position when advocating for local union involvement in project work.

As demands on skilled labor increase, availability will decrease, making access to skilled workers through hiring halls and certified apprenticeship programs even more valuable, thus giving the union worker greater strength at the bargaining table. This, in turn, increases the potential for confrontation in local bargaining and labor disruption as local area bargaining agreements go through the negotiation process. Other large projects planned for the Rochester area such as the Midtown Redevelopment Project, RGRTA Transportation Center, and new Federal and State stimulus projects could place significant demands on available labor.

While the majority of public works projects contain a Force Majeure clause excluding labor disputes from penalty provisions, a work stoppage, nonetheless, would mean additional cost for The Project. The time and expense added to a bid to protect against the uncertainties of an unstable labor force (e.g., added coordination costs, acceleration of schedules, standby costs during job actions, costs to cover liquidated damages) are real. Additionally, claims for standby costs for multiple contractors working on a site in a interdependent manner, plus material cost increases over time, can have a significant impact on projects. Job actions of any nature therefore become a critical factor in cost-effective timely project completion.

The 52-county Upstate New York region’s non-seasonally adjusted unemployment rate stood at 7.0 percent in October 2011, down from 7.2 percent in August 2011. New York State’s seasonally adjusted unemployment rate was 7.9 percent in October 2011, down from 8.3 percent in October 2010.

Given the current economic and unemployment conditions, we view the labor market as volatile. The high unemployment rate and reduced spending on capital projects would suggest that a large labor pool from both inside and outside the region is available and willing to work, although organizing activities are expected to increase and the frequency of job actions are expected to increase over the issue of keeping employment local.



## **Section 5**

### **Economic Considerations**

#### **5.1 General**

We conducted an analysis of potential cost savings for The Project utilizing the projected labor craft hours, wage rates currently in effect and contract provisions included in the proposed PLA. See below a discussion of the cost impacts of the individual contract provisions as proposed, including detailed calculations in Appendix G.

#### **5.2 No Strike Protection for Contract Duration**

The proposed PLA would apply to all construction contracts bid and awarded for The Project. It would prohibit strikes and lock-outs or other job actions for the duration of the agreement. This would avoid the potential for work stoppages resulting from wage and benefit negotiation at the end of each craft's local area agreement, thus ensuring uninterrupted project completion. Costs associated with a project shutdown would include owner/engineer oversight time and expense, standby time for equipment and extended interim financing charges. The cost of owner/engineering oversight alone approximates \$18,000 to \$25,000 per month (\$900/day to \$1300/day). Cost for keeping swing space available is projected to be from \$100,000 - \$250,000 per month.

#### **5.3 Regular Work Hours/Regular Work Day**

The proposed PLA would provide for flexibility in the regular work day start time. This would allow the contractor the flexibility to set uniform start times for all trades. The start time for the first shift can be varied within a three hour window between 6 a.m. and 9 a.m. More significantly, the proposed PLA will allow for Special Shifts, with prior notice. These provisions give the contractor flexibility to schedule the workday to maximize productivity without paying one or more crafts persons needlessly and more easily managing additional costs for overtime and shift differentials. Flexible hour schedules to accommodate seasonal daylight and late start in winter to accommodate snow plowing, etc. also will enhance productivity

It is estimated that a productivity gain of 1 hour per worker per week during critical coordination periods would be realized for common work day and flexible shift start times. The savings are estimated at \$223,793.

#### **5.4 Overtime**

Based upon the most likely staffing scenario, we anticipate the use of overtime. Up to 20 percent of the labor effort could be in overtime hours depending upon the implementation of other provisions of the proposed PLA. Overtime could result from unusual conditions caused by work in and around existing facilities that must remain in service at all times. The proposed PLA standardizes on time and one half for overtime on weekdays and Saturdays. We do not anticipate work conditions that would trigger overtime at a rate greater than 1.5 times base, so this provision alone does not yield any savings.

## **5.5 Second/Third Shift**

The proposed PLA would eliminate shift differentials. The Project contemplates a very small percent of the work activities to require work on a second shift or third shift. By eliminating shift differentials and using the flexible start times discussed above, The Project could eliminate the premium normally incurred for labor associated with these activities. Based upon project execution currently anticipated this provision would result in no significant project savings. Nevertheless, the PLA should include such a provision in the event The Project changes.

## **5.6 Four Ten Hour Days**

The proposed PLA would provide for flexibility in the regular work week by allowing a contractor to use a 4 - 10 hour day schedule or a regular day, 8 hours per 5 day schedule. Further, the contractors may set start times between the hours of 6 a.m. and 9 a.m. and use special shift start and finish times to fit the needs of the assignment. This would give the contractor flexibility to schedule the workday to maximize productivity and eliminate the setup and breakdown time for one work day each week. Flexible hour schedules could accommodate for seasonal daylight, and after hours work, which would enhance productivity. Savings are estimated to be approximately one hour per week per person. The maximum savings results from implementation of a 4 day, 10 hour schedule for 9 months of the construction schedule. We anticipate that this provision would be exercised during the summer months and include June, July, and August, three months during the summer of 2012, three months during the summer of 2013, and three months during the summer of 2014. The estimated maximum savings is projected to be \$642,255.

## **5.7 Industry Fund Payments**

PLA provisions would limit the workers' pay to base wages and fringe benefit payments as published in the prevailing wage schedules. This in turn would avoid collectively bargained payments, such as Industry Promotion Funds, which are in excess of those required by/for public works projects. The local agreements provide for a payment ranging from \$0/hr up to a maximum of \$2.09/hr for these added costs. The elimination of these payments under a PLA would, therefore, save approximately \$843,600.

## **5.8 Apprentice Ratio/Apprentice Program Participation**

The proposed PLA terms agree to apprentice ratios set by the New York State Department of Labor. This translates to apprentice ratios of 3 to 1 or better. By moving several of the crafts to this ratio, a reduction in labor cost would be realized. It is estimated that this modification could result in a cost savings of \$249,882.

The proposed PLA also provides access to a qualified pool of apprentices for non-union contractors not otherwise available. This provision would allow for non-union contractors (who do not have state approved apprentice programs) to obtain qualified apprentices, through the referral process, to lower overall crew labor cost. Based upon the size and schedule of The Project, we anticipate that apprentices would be utilized. By providing access to contractors who would not otherwise be able to take advantage of apprentices, the proposed PLA results in an estimated savings of \$1,376,565.

## **5.9 Guaranteed Pay**

The proposed PLA would eliminate guaranteed pay in its entirety and replace it with a travel allowance equivalent to one hour's pay was evaluated. Standardizing on this provision for The Project results in a small savings given the anticipated work and schedule. Such a provision is, however, valued in the event of a change in the scope of the work or work circumstances. The estimated savings based upon The Project currently anticipated is projected to be \$6,049.

## **5.10 Mileage and Parking**

The proposed PLA would eliminate mileage and parking reimbursements in its entirety. The estimated saving is projected to be \$258,645.

## **5.11 Off-site Fabrication**

The proposed PLA will remove restrictions on off-site work. The Project would be limited only by restrictions imposed by New York State law and, therefore, provide additional flexibility to utilize off-site fabrication involving mostly sheet metal, electrical, pipefitting, ironwork and carpentry. The estimated savings is projected to be \$307,536.

## **5.12 Minority and Female Referrals**

The Project has established minority and female workforce participation goals of 20% and 6.9% respectively. To support these very aggressive goals each contractor will contribute \$0.15 per trade for each craft hour worked to Rochester Careers in Construction, Inc. a non-profit 501(c)(3) corporation. The goal of this non-profit is to recruit and equip minority and women candidates with the skills needed to enter apprentice programs in the construction trades. Once these individuals are entered into the apprentice program these individuals can be made available for work on The Project through the "Direct Entry" procedure or NYS Department of Labor waiver. This feature of the proposed PLA adds \$352,247 to the cost of The Project.

## **5.13 Management Rights/Jurisdictional Requirements**

Management can realize distinct efficiencies by controlling the level of staffing, the scheduling of staffing, and the selection and employment of a Foreman as Contractor's staff. For large projects or complex projects with high labor loadings, savings of two percent of the labor costs from these clearly established management rights are typically realized. For smaller projects or less complex projects with moderate schedules and less intense labor loadings, these advantages are reduced to 0.5 percent.

Further adjustments can be made to small projects when considering the effect of jurisdictional restrictions. In an open shop environment, workers would be allowed to perform the work of more than one trade over the work day. While prevailing wage requirements would dictate that they must be compensated for the work of each trade in accordance with the applicable schedule in effect for that trade, they would still be allowed to perform the differing tasks. Union agreements and, by their nature, PLAs would restrict the work of the governing trade, thereby prohibiting crossover to take place. The crossover of individual workers from one trade activity to another in a single days work is more frequent on smaller, less intense projects. This practice also occurs more frequently in the general building construction trades than in other crafts.

## **PLA Benefits Analysis – RJSCB Rochester Schools Modernization Program**

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Giving the contractor(s) the ability to control various aspects of The Project could optimize shared savings. We anticipate a 1.5 percent cost reduction for this item. Savings are projected to be \$2,755,125.

### **5.14 Summary**

The application of the proposed PLA would result in projected, quantifiable savings ranging from \$5,668,948 to \$6,311,203, or approximately 5.4 to 6.0 percent of labor costs.

## **Section 6**

### **Additional Considerations**

We believe that the RJSCB could enjoy several additional benefits from the use of a PLA. These are difficult to precisely quantify in dollars at this time, but would nonetheless be significant factors in the overall success of The Project.

#### **6.1 Labor Stability**

The RJSCB anticipates that Project construction will occur over 37 months. During the life of The Project, renewal of seven local labor contracts will occur. Of the seven renewals, two agreements renew during the spring of 2013, four will take place during the spring of 2014 right in the middle of the construction schedule, and one agreement renews during the spring of 2015. Should there be any significant disruption during these contract renewals (traditionally, these have been the periods of most intense labor unrest), The Project could be significantly disrupted and the objective of making the site available for the end of July 2015 would be jeopardized. While the cost of any disruption cannot be precisely quantified, the impact is clear. For projects with multiple prime contracts (e.g., general, electrical, HVAC, plumbing) work disruptions can result in claims of delay by other contractors working on the site who are dependent upon the performance of the contractor subject to the action. Other costs may include items associated with standby time and price increases for materials and equipment. Further, project administrative costs such as additional costs for architectural/engineering oversight and interim project financing would be incurred. At a minimum, an estimated \$18,000 to \$25,000/month in project administration and engineering oversight costs would be expected. The RJSCB, the District and the community at large would greatly benefit from assuring that the improvements can move forward without disruption.

#### **6.2 The Burdens of Management**

The RJSCB faces a significant challenge in assembling a management team and structure that can ensure the timely completion of this multi-component project while maintaining quality assurance, ongoing operations and community relations. The management rights provided by the proposed PLA would allow The Project management team to establish clear work rules for the program (as reserved by a PLA). The insertion of no strike/binding arbitration procedures offered by the proposed PLA would provide value in successful management of such a construction project. Many of the proposed construction components are dependent on each other, requiring that construction activities be closely coordinated. The proposed PLA can provide added work schedule flexibility to aggressively manage the critical interfaces.

#### **6.3 The “Tag Along Provision”**

Key provisions of any Project Labor Agreement include the “Union Recognition and Employment” provisions, specifically the Union Referral requirement. Commonly referred to as the “Tag Along” requirement, this provision governs the process of bringing craft workers to The Project. All craft workers are required to pass through the job referral systems and hiring halls established by the unions. The “Tag Along” provision specifically allows a contractor who is not signatory to a collective bargaining agreement to bring his own core employees to The Project. The number of core employees brought to the job are limited by the agreement on the basis of a percentage of the workforce on The Project. PLAs in

## **PLA Benefits Analysis – RJSCB Rochester Schools Modernization Program**

use in upstate and western New York have commonly established “Tag Along” requirements of from 25 percent to 50 percent. The proposed PLA for this project would agree to a 25 percent Tag Along, a very favorable requirement. Further, the proposed PLA recognizes the unique needs of those subcontractors participating in approved minority, women, disadvantaged, and small business plans for this project by allowing additional flexibility in tag along requirements. Arguments have been made that such provisions detract from the productivity of a contractor because the capabilities of the individuals that come to work on the site are unknown to the contractor. Arguments have also been made that such provisions allow contractors to effectively staff more projects at any given time by allowing known staff to be distributed across more projects with access to skilled labor to fill in the peak demands. No single argument carries more weight than another. Striking an effective balance in the core employee provisions is, therefore, important to an effective PLA.

### **6.4 Public Debate**

A Project Labor Agreement is a unique project management tool that is sometimes misunderstood and sometimes considered controversial. As such, the decision making process required for implementation of such an agreement is sometimes surrounded by the strong opinions and emotions that are associated with the general debate about the value and efficiency of union versus non-union labor. Opponents of PLAs have claimed that implementation of a PLA adds to the cost of a project by driving away bidders or limiting competition by precluding open-shop contractors. Our recommended form of agreement clearly allows for an open bidding environment for both union and open shop contractors. Furthermore, experience on a number of projects indicates that PLAs do not have such a limiting effect. In fact, the courts have rejected such claims as a legal matter. Nonetheless, such debate still occurs.

### **6.5 Enhanced Minority Recruiting & Training Programs**

The proposed PLA will assist in advancing minority/women recruitment and training goals for The Project by combining formal and comprehensive pre-apprentice programs designed to deliver first year apprentices prepared to make a construction trade a career, with apprentice demands for The Project. Goals and objectives for minority and women workforce participation have been developed which incorporate this significant feature in the context of DOL approved apprentice programs not otherwise available to non-union contractors who do not have approved programs.

## **Section 7**

# **Conclusions and Recommendations**

Based upon the size and scope of The Project, the proposed schedule and the anticipated mix of craft labor, we conclude that using the proposed PLA will provide the RJSCB with substantial economic benefit. Specifically, the proposed PLA addresses the RJSCB’s interest in obtaining the best work at the lowest price.

Non-economic benefits would also be available through the use of a PLA. These include:

- 1) avoiding the costly delays of potential strikes, slowdowns, walkouts, picketing and other disruptions arising from work disputes and promoting labor harmony and peace for the duration of The Project;
- 2) standardizing the terms and conditions governing the employment of labor on The Project;
- 3) permitting wide flexibility in work scheduling and shift hours and times, thereby increasing productivity;
- 4) providing comprehensive and standardized mechanisms for the settlement of work disputes, including those relating to jurisdiction;
- 5) ensuring a reliable source of skilled and experienced labor;
- 6) providing for a long-term minority and women recruiting and training program;
- 7) reducing direct labor costs; and
- 8) avoiding favoritism, fraud and/or corruption by ensuring availability of the benefits of the PLA to all successful bidders regardless of union/non-union status or the status of their employees.

The proposed PLA would promote a number of RJSCB’s interests and is consistent with the objectives of measurably protecting the public fiscally and avoiding favoritism, fraud and/or corruption.

Application of the proposed PLA is, therefore, recommended for RJSCB Rochester Schools Modernization Program.

## *Tables*



*Table 1*

**Table 1**  
**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Labor Unions Representing the Construction Industry  
In Monroe County

| <u>Name</u>                       | <u>Local No.</u> |
|-----------------------------------|------------------|
| Boilermakers                      | 7                |
| Bricklayers (Building and H&H)    | 3                |
| Carpenters (Building and H&H)     | 85               |
| Electricians                      | 86               |
| Elevator Workers                  | 27               |
| Glazers                           | 677              |
| Heat & Frost Insulators           | 26               |
| Iron Workers                      | 33               |
| Laborers (Building and H&H)       | 435              |
| Millwrights                       | 1163             |
| Operating Eng. (Building and H&H) | 832              |
| Painters                          | 4                |
| Pile Drivers                      | 289              |
| Plumbers/Steamfitters             | 13               |
| Roofers                           | 22               |
| Sheet Metal Workers               | 46               |
| Sprinkler Fitters                 | 669              |
| Teamsters (Building and H&H)      | 118              |

*Table 2*

**Table 2**  
**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Work area Labor Hours And Cost Breakdown

| Craft                   | Labor \$ per Craft   | Journeyman Rate \$/hr (incl. Benefits) | Estimated Total Hours per Craft |
|-------------------------|----------------------|--|---------------------------------|
| Boilermakers            | \$209,412            | \$52.19                                | 4,012                           |
| Bricklayers (Bldg.)     | \$11,399,220         | \$44.63                                | 255,416                         |
| Carpenters (Bldg.)      | \$14,394,113         | \$38.91                                | 369,934                         |
| Electricians            | \$20,499,735         | \$53.10                                | 386,059                         |
| Elevator Workers        | \$135,355            | \$63.41                                | 2,135                           |
| Glazers                 | \$2,532,324          | \$39.45                                | 64,191                          |
| Heat & Frost Insulators | \$1,675,142          | \$43.77                                | 38,271                          |
| Iron Workers            | \$1,574,663          | \$46.96                                | 33,532                          |
| Laborers (Bldg.)        | \$11,341,852         | \$37.47                                | 302,692                         |
| Operating Eng. (Bldg.)  | \$2,503,820          | \$48.69                                | 51,424                          |
| Painters                | \$4,452,544          | \$39.26                                | 113,412                         |
| Plumbers/Steamfitters   | \$16,412,421         | \$50.54                                | 324,741                         |
| Roofers                 | \$6,298,294          | \$40.77                                | 154,484                         |
| Sheet Metal Workers     | \$10,271,223         | \$48.97                                | 209,745                         |
| Sprinkler Fitters       | \$1,915,070          | \$50.05                                | 38,263                          |
| <b>Totals</b>           | <b>\$105,615,189</b> |  | <b>2,348,310</b>                |

*Table 3*

**Table 3**  
**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Summary of Key Agreement Provisions

| AGREEMENT PROVISIONS                     | Boiler Makers   | Bricklayers - Bldg   | Carpenters - Bldg  | Electricians  | Glaziers   | Heat & Frost Insulators  | Ironworkers  | Laborers - Bldg   |
|--|---|--|--|---|--|--|--|---|
|  | Local 7   | Local 3  | Local 85   | Local 86  | Local 677  | Local 26   | Local 33   | Local 435   |
| Expiration Date                          | 9/30/2009   | 4/30/2012  | 4/30/2011  | 5/27/2012   | 4/30/2014  | 5/31/2013  | 4/30/2012  | 4/30/2014   |
| Contract Duration                        | 3 years   | 5 years  | 5 years  | 4 years   | 5 years  | 2 years  | 3 years  | 5 years   |
| <b>Working Hours</b>                     |   |  |  |   |  |  |  |   |
| A. Regular Work Hours                    | 40 Mon-Fri  | 40 Mon-Fri<br>4-10's   | 40 Mon-Fri   | 40 Mon-Fri<br>4-10's  | 40 Mon-Fri<br>4-10's   | 40 Mon-Fri<br>Saturday and Sundays can be work days through mutual agreement on project  | 40 Mon-Fri   | 40 Mon-Fri  |
| B. Regular Work Day                      | 8 hours between<br>8:00 AM - 4:30 PM  | 8 hours between<br>6:00AM - 4:30PM<br>Saturday Make up Day   | 8 hours<br>6-8am start time<br>Saturday Make up Day                                      | 8 hours between<br>7:00AM - 3:30PM  | 8 hours  | 8 hours between<br>7:00AM - 5:00PM   | 8 hours  | 8 hours<br>Saturday Makeup Day  |
| C. Report In Pay /<br>Guaranteed Minimum | 2 hours if employee shows up and no work is provided due to weather or other means not controllable by the Employer.<br>4 hours if employee shows up and work is not provided.<br>2 Hours | 1 hour paid if employee shows up and no work is provided due to weather or other means not controlled by the Employer for 2 hours. | Not Addressed  | 2 hours show up pay, 4 hours if work is started and then stopped due to weather or other means not controlled by the Employer | 2 hours if employee shows up and no work is provided due to weather or other means not controllable by the Employer. | Not Addressed  | \$30 per hour for first 2 hours. If work starts regular wage replaces.   | 2 hours show up pay, 4 hours if work is started and then stopped due to weather or other means not controlled by the Employer |
| D. Shift Work                            | <b>2nd Shift:</b> 7 1/2 for 8 hrs pay<br><b>3rd Shift:</b> 7 for 8 hrs pay  | <b>2nd Shift:</b> 7.5 hrs for 8 hrs pay<br><b>3rd Shift:</b> 7hrs for 8 hrs pay  | <b>2nd Shift:</b> 7.5 hrs for 8 hrs pay<br><b>3rd Shift:</b> 7hrs for 8 hrs pay          | <b>2nd Shift:</b> 17.3% X Base<br><b>3rd Shift:</b> 31.4% X Base<br>Both for 8 hrs worked                                     | Not Addressed  | <b>2nd Shift:</b> 15% X Base<br><b>3rd Shift:</b> 15% X Base<br>Both for 8 hrs worked    | <b>2nd Shift:</b> 7.5 hrs for 8 hrs pay<br><b>3rd Shift:</b> 7hrs for 8 hrs pay<br><br><b>-or-</b><br><b>2nd Shift:</b> 10% X Base (8hrs)<br><b>3rd Shift:</b> 15% X Base (8hrs) | <b>2nd Shift:</b> 7.5 for 8 hrs pay<br><b>3rd Shift:</b> 7 for 8 hrs pay  |
| E. Overtime                              | 1 1/2 X Base Mon-Sat.<br>2 X Base Sundays, Holidays and Firday or a holiday weekend   | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday   | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday   | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday  | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday   | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday   | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday   | 1.5 X Base Mon - Sat<br>2 X Base Sun & Holiday  |
| F. Holidays                              | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving<br>Presidents Day<br>Veterans Day  | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving   | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving                                      | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving                             | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving   | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving                                      |
| G. Apprentice Ratios                     |   | Not addressed  | 2 Journeymen to<br>1 Apprentice  | 3 Journeymen to<br>2 Apprentice   | 1 Journeymen to<br>1 Apprentice  | 3 Journeymen to<br>1 Apprentice  | 4 Journeymen to<br>1 Apprentice  | 3 Journeymen to<br>1 Apprentice   |
| H. Travel Reimbursement                  |   | \$0.51 per mile driven during the work day   | compensated for parking after the first initial day of work                              | Shop to job, job to job, job to shop reimbursement at IRS rates (\$0.51/mile)   | \$0.38 per mile per man  | Paid parking to a maximum of \$7 a day in the city.                                      | Not Addressed  | Not Addressed   |

**Table 3**  
**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Summary of Key Agreement Provisions

| AGREEMENT PROVISIONS                     | Operating Engineers - Bldg   | Painters   | Plumbers/Steamfitters  | Roofers  | Sheetmetal Workers   | Sprinkler Fitters   |
|--|--|--|--|--|--|---|
|  | Local 832  | Local 4  | Local 13   | Local 22   | Local 46   | Local 669   |
| Expiration Date                          | 4/30/2012  | 4/30/2012  | 4/30/2015  | 6/1/2014   | 5/4/2014   | 3/31/2013   |
| Contract Duration                        | 2 years  | 5 years  | 4 years  | 4 years  | 5 years  | 3   |
| <b>Working Hours</b>                     |  |  |  |  |  |   |
| A. Regular Work Hours                    | 40 Mon-Fri   | 40 Mon-Fri   | 40 Mon-Fri   | 40 Mon-Fri   | 40 Mon-Fri<br>4-10's   | 40 Mon-Fri<br>4-10's  |
| B. Regular Work Day                      | 8 hours<br>7:00AM Start Time<br>Saturday Makeup Day  | 8 hours<br>Saturday & Sunday Makeup Day  | 8 hours between<br>6:00AM - 5:00PM   | 8 hours between<br>Saturday makeup day   | 8 hours between<br>6:00 AM - 5:30 PM   | 8 hours between<br>6:00 AM - 6:00 PM  |
| C. Report In Pay /<br>Guaranteed Minimum | On a project less than 40 hrs in length<br>minimum 8 hrs pay for the week.<br><br>On a project more than 40 hrs in length<br>minimum 24 hrs pay for one week | 2 hours if employee<br>shows up and no work is<br>provided due to<br>weather or other means not<br>controllable by the Employer. | 2 hours show up pay, 4 hours<br>if work is started and then<br>stopped. 8 hours pay if over 4<br>hours are worked.<br><br>No pay if due to weather | 2 hours show up pay if<br>employee shows up and no<br>work is provided<br><br>No pay if due to weather | 2 hours if employee<br>shows up and no work is<br>provided due to<br>weather or other means not<br>controllable by the Employer. | 4 hours show up pay if<br>employee shows up and no<br>work is provided<br><br>8 hours if worked 4 in morning<br>No pay if due to weather  |
| D. Shift Work                            | <b>2nd Shift:</b> 7.5 for 8 hrs pay<br><b>3rd Shift:</b> 7 for 8 hrs pay   | <b>2nd Shift:</b> Base plus \$2<br><b>3rd Shift:</b> Base plus \$2   | <b>2nd Shift:</b> 10% X Base<br><b>3rd Shift:</b> 10% X Base<br><br>Both for 8 hrs worked  | No shift work  | <b>2nd Shift:</b> 14% X Base<br><b>3rd Shift:</b> 20% X Base<br><br>Both for 8 hrs worked  | <b>2nd Shift:</b> 15% X Base<br><b>3rd Shift:</b> 15% X Base<br><br>Both for 8 hrs worked   |
| E. Overtime                              | 1 1/2 X Base Mon - Sat<br>2 X Base Sun & Holiday   | 1 1/2 X Base Mon - Sun<br>2 X Base Holiday   | 1 1/2 X Base Mon - Sat<br>2 X Base Sun, Holiday<br>1 1/2 X Base Day After<br>Thanksgiving  | 1 1/2 X Base Mon - Sat<br>2 X Base Sun, Holiday  | 1 1/2 X Base Mon - Sat<br>2 X Base Sun, Holiday  | 1 1/2 X Base Mon - Sat<br>2 X Base Sun, Holiday   |
| F. Holidays                              | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving   | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving   | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving   | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving               | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving   | New Year's<br>Christmas<br>Memorial Day<br>Independence Day<br>Labor Day<br>Thanksgiving  |
| G. Apprentice Ratios                     | 3 Journeymen to<br>1 Apprentice  | 3 Journeymen to<br>1 Apprentice  | 4 Journeymen to<br>1 Apprentice  | Depends on the job   | 3 Journeymen to<br>1 Apprentice  |   |
| H. Travel Reimbursement                  | Not Addressed  | Not Addressed  | Not Addressed  | Parking within the inner loop<br>\$4.75 per day. Milage outside<br>jurisdiction only.                  | reimbursement for travel<br>outside of free zone is<br>\$0.51 per mile   | < 60 miles = \$0<br>60 - 80 miles = \$15/day<br>80 - 100 miles = \$25/day<br><br>> 100 miles = \$75/day +<br>\$0.40/mile and travel time up to 8<br>hours per day, per 24 hours |

## *Appendices*



## *Appendix A*

OFFICE OF MANAGEMENT AND BUDGET  
STATEMENT OF JOHN KOSKINEN  
DEPUTY DIRECTOR FOR MANAGEMENT  
BEFORE THE  
COMMITTEE ON LABOR AND HUMAN RESOURCES  
UNITED STATES SENATE

APRIL 30, 1997

Mr. Chairman and Members of the Committee:

I am pleased to testify today concerning the President's proposed Executive Order on the use of project labor agreements for federal construction projects.

Let me begin by noting that the President has not yet issued the proposed order. On April 8, 1997, the Office of Management and Budget (OMB) circulated a preliminary draft of the proposed order to federal departments and agencies for their review and comment. A revised draft is now being considered by the departments and agencies for additional comment, so that final drafting of the Executive Order has not been completed. Its terms remain subject to revision.

I do not think that it is appropriate for me to get into the intricacies of the Executive Branch's drafting process. But let me describe in general terms what the proposed Executive Order will not do. It will not require agencies to use project labor agreements. The agencies retain complete discretion. It will not suggest that project labor agreements be used where they would raise the cost of a construction project. The point of the Order is for agencies to consider whether project labor agreements promote economy and efficiency. The proposed Executive Order will not change or extend the law regarding project labor agreements. It will not shut out non-union contractors from federal construction projects. Everyone is free to bid. Finally, notwithstanding much public comment to the contrary, the proposed Executive Order will not require workers on federal construction projects to join a union.

Let me briefly discuss project labor agreements in general. A project labor agreement (PLA) is a project-specific agreement, negotiated at the outset of a construction project, between the construction owner or contractor and all of the labor unions representing the crafts that are needed for the project. The agreement covers the wages, working conditions, work rules, and dispute-resolution procedures for the duration of the project. It may also specify a source of skilled labor for the project. Most important, a project labor agreement generally guarantees that the project will be built without strikes, lock-outs, or other disruptions, which might delay completion and increase costs.

Project labor agreements have proven valuable in both the public and the private sectors. They can help ensure that projects are completed on-time and on-budget-- without accidents, delays, and unexpected costs. By fixing labor costs, specifying a source of skilled, well-trained workers, and eliminating the risk of work stoppages, project labor agreements support the success of a construction project.

In the private sector, project labor agreements have been used successfully in building such large facilities as the Trans-Alaska pipeline, Disney World, and the Saturn Corporation automobile assembly plant. State and local governments have funded many construction projects--including bridges, office complexes, transit systems, and airports--that were built under project labor agreements. Perhaps the best-known recent example of a public project involving a project labor agreement is the massive sewage-treatment system for metropolitan Boston, ordered as part of the clean-up of Boston Harbor. I understand that the Boston Harbor project is on-schedule and under-budget.

The federal government has long used project labor agreements on large construction projects, like dams, defense installations, and atomic energy facilities. Today, project labor agreements are in effect--and working well--at several Department of Energy sites, including the Savannah River Site in South Carolina, the Nevada Test Site, the Hanford Site in Washington, the Oak Ridge Site in Tennessee, and the Rocky Flats Plant in Colorado.

In light of positive experience with project labor agreements on public projects, state governors in New Jersey, New York, Nevada, and Washington have issued executive orders authorizing their use for state-funded construction, when such agreements will promote efficient, timely, and safe construction of a project.

In contrast, the federal government has not had a clear, uniform policy addressing when project labor agreements may be used on federal construction projects. President Clinton's proposed Executive Order is intended to establish such a policy. Under the policy, the federal government will be able, in appropriate circumstances where efficiency and economy will be served, to reap the same benefits that private firms and state and local governments have obtained from using project labor agreements.

The proposed Executive Order is a proper exercise of the executive function. The Federal Property Act--designed to achieve economy and efficiency in contracting--gives the President authority to prescribe policies and directives "as he shall deem necessary to effectuate" the Act. 40 U.S.C. §486(a). The federal courts have made clear that this statute gives the President broad discretion. Because they related to economy and efficiency in procurement, executive orders denying contracts to companies that violated federal wage and price guidelines, or that engaged in discrimination, have been upheld by the courts. The proposed Executive Order on project labor agreements clearly meets this test.

The proposed Executive Order will not mandate the use of project labor agreements. Instead, it would simply encourage federal departments and agencies to consider, on a case-by-case basis: (1) whether using a project labor agreement will promote the economical, efficient, timely and high quality performance of a federal construction project; and (2) whether laws applicable to the construction project preclude the use of a project labor agreement. Agencies would make these determinations according to objective, published criteria. This approach will promote more systematic decision-making by federal agencies and will facilitate oversight of their decisions.

But let me emphasize again: Federal agencies will retain discretion in each case to decide if a project labor agreement should be used on a particular construction project. The proposed Executive Order will not require that a project labor agreement be used on any individual project, much less on every project. We have taken pains to make this clear in the Order.

If a federal agency did choose to require a project labor agreement, no business would be excluded from bidding on the contract for the project. Any contractor could bid on--and win--a federal contract that required a project labor agreement, whether or not the contractor's employees were represented by a labor union. That same principle of open competition would protect subcontractors, as well. Again, we have taken pains to make this abundantly clear in the Order. Project labor agreements will be made available to all contractors and subcontractors wishing to compete for contracts and subcontracts on the project.

Subcontractors whose employees are not represented by a union nevertheless have bid successfully on construction projects covered by project labor agreements. For example, I am told that roughly one-half of the subcontractors on the Boston Harbor project and at the Energy Department's Savannah River site do not have employees who are regularly represented by a labor union.

Just as all bidders would be free to compete for contracts, so all qualified workers would be eligible for employment on projects covered by project labor agreements, whether or not they were members of a labor union. On this issue, too, the proposed Executive Order will be specific. Project labor agreements are to be made accessible to employees without discrimination on the basis of union membership or non-membership.

Certainly, it is true that some project labor agreements call for recruitment of some workers at union-administered hiring halls, a provision that helps ensure a reliable source of skilled, qualified workers. But under the National Labor Relations Act, union hiring halls must be open to all workers, union members and non-members alike. And under the same law, no worker can ever be compelled to join a union, or to pay fees for union activities that are unrelated to collective bargaining. In so-called "right-to-work" states, workers cannot be required to pay any union fees at all. All workers, of course, receive the benefits of any collective bargaining agreement that covers them, and would be governed by the agreement's no-strike and dispute-resolution procedures.

The proposed Executive Order is fully consistent with the National Labor Relations Act. In a 1993 case involving the Boston Harbor project, the Supreme Court itself has upheld a state-required project labor agreement, rejecting the claim that the National Labor Relations Act pre-empted the state's use of such an agreement. Building & Construction Trades Council v. Associated Builders & Contractors of Massachusetts, 507 U.S. 218 (1993). As the Supreme Court observed, "To the extent that a private purchaser may choose a contractor based upon the contractor's willingness to enter into a pre-hire agreement, a public entity as purchaser should be permitted to do the same." That principle supports the use of project labor agreements by federal, as well as by state, agencies. And, indeed, a federal appeals court has upheld the use of a project labor agreement at a Department of Energy facility. Phoenix Engineering, Inc. v. MK-Ferguson of Oak Ridge Co., 966 F.2d 1513 (6th Cir. 1992).

In this important respect, the proposed Executive Order on project labor agreements is easily distinguishable from the President's earlier order addressing the use of striker replacements by federal contractors. And unlike the earlier order,

the proposed order will not bar federal agencies from dealing with certain contractors. Instead, agencies are permitted to consider, case-by-case, whether a project labor agreement would promote efficiency and economy. As I have explained, all contractors will remain free to compete for contracts, including contracts that incorporate a project labor agreement requirement.

Apart from attacking the legality of the proposed Executive Order, some critics of the order suggest that project labor agreements will necessarily increase the cost of federal construction. This argument is premised on the notion that unions typically win higher wages and benefits for workers. Even accepting that premise, the fact remains that wage and benefit rates cannot be considered in isolation from the over-all cost of a project. Project labor agreements are intended to keep these costs down. Lower wages and benefits for workers in the short-term do not benefit the Government, if a project ends up costing more because of factors that project labor agreements are designed to address: like work stoppages, labor shortages, unexpected increases in labor costs, accidents, low productivity, or poor quality work. These considerations will have to be weighed by federal agencies on a project-by-project basis, just as the proposed Executive Order contemplates.

I hope that I have been able to clarify what the Administration intends to do--and what it has been careful to avoid--in connection with the proposed Executive Order. The Order will reaffirm that federal agencies may use a project labor agreement, when it serves the ends of economy and efficiency. State governments, local governments, and private firms all have found that project labor agreements, in the right circumstances, make good sense. The federal government should be able to follow their example. That is all that the proposed Executive Order is intended to permit.

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## *Appendix B*

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

February 6, 2009

EXECUTIVE ORDER

- - - - -

USE OF PROJECT LABOR AGREEMENTS FOR  
FEDERAL CONSTRUCTION PROJECTS

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Federal Property and Administrative Services Act, 40 U.S.C. 101 *et seq.*, and in order to promote the efficient administration and completion of Federal construction projects, it is hereby ordered that:

Section 1. Policy. (a) Large-scale construction projects pose special challenges to efficient and timely procurement by the Federal Government. Construction employers typically do not have a permanent workforce, which makes it difficult for them to predict labor costs when bidding on contracts and to ensure a steady supply of labor on contracts being performed. Challenges also arise due to the fact that construction projects typically involve multiple employers at a single location. A labor dispute involving one employer can delay the entire project. A lack of coordination among various employers, or uncertainty about the terms and conditions of employment of various groups of workers, can create frictions and disputes in the absence of an agreed-upon resolution mechanism. These problems threaten the efficient and timely completion of construction projects undertaken by Federal contractors. On larger projects, which are generally more complex and of longer duration, these problems tend to be more pronounced.

(b) The use of a project labor agreement may prevent these problems from developing by providing structure and stability to large-scale construction projects, thereby promoting the efficient and expeditious completion of Federal construction contracts. Accordingly, it is the policy of the Federal Government to encourage executive agencies to consider requiring the use of project labor agreements in connection with large-scale construction projects in order to promote economy and efficiency in Federal procurement.

Sec. 2. Definitions.

(a) The term "labor organization" as used in this order means a labor organization as defined in 29 U.S.C. 152(5).

(b) The term "construction" as used in this order means construction, rehabilitation, alteration, conversion, extension, repair, or improvement of buildings, highways, or other real property.

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(OVER)

(c) The term "large-scale construction project" as used in this order means a construction project where the total cost to the Federal Government is \$25 million or more.

(d) The term "executive agency" as used in this order has the same meaning as in 5 U.S.C. 105, but excludes the Government Accountability Office.

(e) The term "project labor agreement" as used in this order means a pre-hire collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project and is an agreement described in 29 U.S.C. 158(f).

Sec. 3. (a) In awarding any contract in connection with a large-scale construction project, or obligating funds pursuant to such a contract, executive agencies may, on a project-by-project basis, require the use of a project labor agreement by a contractor where use of such an agreement will (i) advance the Federal Government's interest in achieving economy and efficiency in Federal procurement, producing labor-management stability, and ensuring compliance with laws and regulations governing safety and health, equal employment opportunity, labor and employment standards, and other matters, and (ii) be consistent with law.

(b) If an executive agency determines under subsection (a) that the use of a project labor agreement will satisfy the criteria in clauses (i) and (ii) of that subsection, the agency may, if appropriate, require that every contractor or subcontractor on the project agree, for that project, to negotiate or become a party to a project labor agreement with one or more appropriate labor organizations.

Sec. 4. Any project labor agreement reached pursuant to this order shall:

(a) bind all contractors and subcontractors on the construction project through the inclusion of appropriate specifications in all relevant solicitation provisions and contract documents;

(b) allow all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are otherwise parties to collective bargaining agreements;

(c) contain guarantees against strikes, lockouts, and similar job disruptions;

(d) set forth effective, prompt, and mutually binding procedures for resolving labor disputes arising during the project labor agreement;

(e) provide other mechanisms for labor-management cooperation on matters of mutual interest and concern, including productivity, quality of work, safety, and health; and

(f) fully conform to all statutes, regulations, and Executive Orders.

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Sec. 5. This order does not require an executive agency to use a project labor agreement on any construction project, nor does it preclude the use of a project labor agreement in circumstances not covered by this order, including leasehold arrangements and projects receiving Federal financial assistance. This order also does not require contractors or subcontractors to enter into a project labor agreement with any particular labor organization.

Sec. 6. Within 120 days of the date of this order, the Federal Acquisition Regulatory Council (FAR Council), to the extent permitted by law, shall take whatever action is required to amend the Federal Acquisition Regulation to implement the provisions of this order.

Sec. 7. The Director of OMB, in consultation with the Secretary of Labor and with other officials as appropriate, shall provide the President within 180 days of this order, recommendations about whether broader use of project labor agreements, with respect to both construction projects undertaken under Federal contracts and construction projects receiving Federal financial assistance, would help to promote the economical, efficient, and timely completion of such projects.

Sec. 8. Revocation of Prior Orders, Rules, and Regulations. Executive Order 13202 of February 17, 2001, and Executive Order 13208 of April 6, 2001, are revoked. The heads of executive agencies shall, to the extent permitted by law, revoke expeditiously any orders, rules, or regulations implementing Executive Orders 13202 and 13208.

Sec. 9. Severability. If any provision of this order, or the application of such provision to any person or circumstance, is held to be invalid, the remainder of this order and the application of the provisions of such to any person or circumstance shall not be affected thereby.

Sec. 10. General. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) authority granted by law to an executive department, agency, or the head thereof; or

(ii) functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

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(OVER)



Sec. 11. Effective Date. This order shall be effective immediately and shall apply to all solicitations for contracts issued on or after the effective date of the action taken by the FAR Council under section 6 of this order.

BARACK OBAMA

THE WHITE HOUSE,  
February 6, 2009.

# # #

## *Appendix C*

3. Every State department, agency, division, board, bureau, commission and other entity over which I have executive power shall provide appropriate assistance and cooperate as necessary to enable the Council to fulfill its purposes.

/s/George E. Pataki

Executive Order No. 49

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## PROJECT LABOR AGREEMENTS

WHEREAS, it is in the best interests of the People of the State of New York to promote the timely completion of public construction projects undertaken by State agencies while at the same time limiting the costs of such projects to the greatest extent possible consistent with the law and principles of fairness and equity;

WHEREAS, the New York State Court of Appeals issued a decision in the Matter of New York State Chapter, Inc., Associated General Contractors of America, et. al. v. New York State Thruway Authority, 88 N.Y.2d 56, 666 N.E.2d 185, 643 N.Y.S.2d 480 (1996), which found that project labor agreements are "neither absolutely prohibited nor absolutely permitted in public construction contracts"; and

WHEREAS, it is now clear that project labor agreements are one of many tools which may be used by management and labor and which may, under certain circumstances, assist in achieving the goals described above;

NOW, THEREFORE, I, GEORGE E. PATAKI, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and Laws of the State of New York, do hereby order as follows:

Each State agency shall establish procedures to consider, in its proprietary capacity, the utilization of one or more project labor agreements with respect to individual public construction projects. The utilization of a project labor agreement shall be considered only where the standards established by the Court of Appeals can reasonably be expected to be met.

In reaching a determination on the use of a project labor agreement with respect to a specific project the agency shall consider whether the utilization of such an agreement is justified because it meets the interests underlying the State's competitive bidding laws of:

- (1) obtaining the best work possible at the lowest possible price; and
- (2) preventing favoritism, improvidence, fraud and corruption in the awarding of public contracts.

In considering whether to proceed with a project labor agreement, agencies should be mindful that, in the past, the courts of the State of New York have struck down any such agreement wherein a contracting entity was unable to show a proper business purpose for entering into such agreement.

No project labor agreement shall be approved by an agency unless the decision to enter into the project labor agreement has, both as its purpose and likely effect, the advancement of the interests of the State's competitive bidding statutes.

In the event that an agency enters into a project labor agreement and lets one or more contracts for work to be performed pursuant to such agreement, it shall then be forwarded to the Commissioner of Labor. Upon receipt of the project labor agreement, the Commissioner of Labor shall determine the interaction, if any, between Article 8 of the Labor law and the agreement.

/s/George E. Pataki

## *Appendix D*

DISTRICT COURT  
CLARK COUNTY, NEVADA

ASSOCIATED BUILDERS AND )  
CONTRACTORS, INC., )  
Southern Nevada Chapter, A Nevada )  
Not-For-Profit Corporation, )

Plaintiff, )

- vs. - )

ROBERT MILLER, Governor of the )  
State of Nevada; SOUTHERN NEVADA )  
WATER AUTHORITY, a Nevada )  
Political Subdivision, )

Defendants. )

CASE NO. A359730  
DEPT. NO. V  
DOCKET NO. H

STATEMENT OF JOHN T. DUNLOP



Statement of John T. Dunlop

I have held the following federal government positions involving responsibilities for resolving construction industry labor-management disputes and for wage and price stabilization programs:

1) 1943-47. Public member, appointed as the War Labor Board's representative, to the Wage Adjustment Board in the World War II period to resolve union-contractor disputes and stabilize wages and compensation in both the collective bargaining and non-union sectors of the industry.

2) 1948-49. Consultant, President's Commission on Labor Relations in the Atomic Energy Installations, appointed by William H. Davis, Chairman.

3) 1949-53. Member, Atomic Energy Labor Relations Panel, to resolve labor-management disputes at all atomic energy facilities, including construction disputes.

4) 1950-53. Public Member, Wage Stabilization Board appointed by President Truman. The Board dealt with wage stabilization and dispute settlement during the Korean War. It was part of my responsibility to organize and supervise the subsidiary agency, Construction Industry Stabilization Commission, with jurisdiction over compensation in both the collective bargaining and nonunion sectors of the industry.

5) 1954-57. Member, Secretary of Labor's Advisory Committee on Labor Management Relations in Atomic Energy Installations, 1954-57. Appointed by Secretary of Labor James Mitchell.

6) 1961-67. Public Member, Missile Sites Labor Commission and chairman of its construction sub-committee, appointed by President Kennedy to handle all labor-management disputes on missile and space sites as provided in Executive Order 10946.

During these years there was established a Nevada Test Site and Space Site Construction Labor Board to deal with the difficult labor-management issues, including travel pay and subsistence pay, at the test site, particularly in the transition from a construction phase to more of a production-type operation. I was in Las Vegas on a number of occasions on these issues in cooperation with the Atomic Energy Labor Management Relations Panel.

7) 1969-71. Public Member, Construction Industry Collective Bargaining Commission established by President Nixon by Executive Order 11482 to consider longer term construction industry questions including productivity and equal employment opportunities, etc.

8) 1971-74. Chairman, Construction Industry Stabilization Commission, appointed by President Nixon, to stabilize wages and compensation in the construction industry, in both the collective bargaining and non-union sectors of the industry, and to resolve union-management disputes. Executive Order 11588.

9) 1973-74. Director, Cost-of-Living Council, appointed by President Nixon, to administer all wage and price controls, including a continuation of construction industry responsibilities.



10) 1975-76. Secretary of Labor, appointed by President Ford.

11) 1979-80. Chairman, Pay Advisory Committee, appointed by President Carter, to constrain by voluntary means wage and compensation increases in all sectors, including construction, with recommendations in particular situations.

12) 1993-95. Chair, Commission on the Future of Worker-Management Relations appointed by Secretary Reich and Secretary Brown at the request of President Clinton to make recommendations in the field. Representatives of the construction industry, unions and contractor associations not involved in collective bargaining, made presentations. The Reports of the Commission treat some construction labor-management issues.

In addition, I have held the following private sector positions as a neutral arbitrator or facilitator by joint appointment of unions and contractor associations in the construction industry on a national basis.

1) 1948-57. Impartial Chairman, National Joint Board for the Settlement of Jurisdictional Disputes in the Construction Industry, to resolve disputes over work assignments. Chairman, Appeals Board, Jurisdictional Disputes, 1965-68. I mediated the creation of this board in 1947-48 with the industry and the first General Counsel of the NLRB.

2) 1959-67. Impartial Chairman, Construction Industry Joint Conference, designed to bring together regularly all the major national labor organizations and national associations of general and specialty contractors to seek to resolve common problems.

3) 1977-90. Umpire, Nuclear Power Construction Stabilization Agreement, between building trades and national contractors and utilities engaged in the construction of nuclear power plants to develop and administer a national stabilization agreement for nuclear electric generating projects.

4) 1982-92. Umpire, Arbitrator, Bricklayers and Mason Contractors Association, National Agreement, to resolve disputes over the terms of local collective bargaining agreements.

5) 1993, 1995. First and Second National Conferences on Ergonomics, Safety, and Health in Construction (Building Trade Unions, Contractor Associations and government representatives from U.S., Europe and Japan), Introduction and Final Recommendations.

In addition, I have served as arbitrator under local collective bargaining agreements in construction, including project agreements, on work jurisdiction and other issues:

- a) Alaska Pipeline Project Agreement
- b) Commonwealth Edison, Chicago, Building Trades Powerhouse Maintenance-Modification Agreement By Contract
- c) Toyota Plant Construction Project Agreement, Georgetown, Kentucky
- d) Boston Harbor Project Labor Agreement
- e) Logan International Airport Terminal Area Construction Labor Agreement

In addition, I was awarded, by organizations in the

construction industry, the Louis K. Comstock Award from the National Electrical Contractors Association, 1974; the George K. Newman Award from the Residential Construction Employers Council, 1975; and the National Housing Hall of Fame from the National Association of Home Builders, 1986.

Further, I have written extensively as a scholar on economic, labor market, dispute resolution, and industrial relations questions. Some of the major items treating construction include:

- The Wage Adjustment Board, Harvard University Press, 1950 (with Arthur D. Hill)
- Industrial Relations Systems, 1958, 1993, Harvard Business School Press. (Chapter 6 is a comparison of building and construction in 9 countries.)
- "Manpower in Construction: A Profile of the Industry and Projections to 1975", The Report of the President's Committee on Urban Housing, Technical Studies, Vol. II, 1968, pp. 239-68 (with D.Q. Mills).
- Dispute Resolution, Negotiations and Consensus Building, Auburn House Publishing Company, 1984, p. viii, Chs. 10, 11.

A one-page vita is attached.

I have been asked to discuss the use of Project Labor Agreements for public construction projects and, in particular, comment on the Project Labor Agreement developed and being applied to the Southern Nevada Water System Improvements Project

near Las Vegas, Nevada. This declaration will describe the use of such Agreements and the elements of a project that make their application most beneficial. As part of this request, I have been provided with a copy of the Declaration of Professor Herbert R. Northrup dated September 3, 1996, and other materials in Case No. A359730. I have also been asked, as a part of my discussion, to comment on these documents, including Professor Northrup's Declaration.

My declaration draws upon my experience in a variety of construction industry contexts over more than 50 years, as an economist and as an administrator of government stabilization and dispute resolution programs, and as a neutral arbitrator under construction agreements, including Project Agreements. I am not a lawyer and therefore do not attempt to address the legality of Project Agreements under any applicable laws. I do, however, offer the following comments from a public policy perspective, together with my training in labor economics and general labor-management experience.

## Project Agreements

Project agreements were developed by federal government agencies, contractors, and national unions to meet their common problems in the post-World War II era on large projects, that took some years to complete, with a large number of contractors - prime and sub-contractors - and workers in a shifting variety of crafts and specialties, and that were constructed under urgent time deadlines, often in isolated areas, with some vulnerability to shut-down or disruption. The emergence of project agreements was also associated with the changing role of general contractors who historically performed with their own direct employees the work of carpentry, operating engineers, cement masons, teamsters and laborers, and who also supervised specialty and sub-contractors, but more recently often have been replaced or transformed on large projects by construction-manager firms, that perform no construction work operations but manage and coordinate the project as a whole, supervising prime contractors, specialty contractors, and their tiers of sub-contractors, and they represent the owner's interests and constitute a unified presence for the public or private owner.

Early examples of these agreements were developed at the atomic energy facilities at Hanford, Washington for the Atomic Energy Commission and the space site for NASA at Cape Canaveral in Florida.<sup>1</sup> Private owners adopted the project agreement approach to comparably complex private projects as in the Alaska Pipeline Agreement in the early 1970s and the Nuclear Power

Construction Stabilization Agreement for various nuclear power generating plants in the late 1970s and 1980s. I was personally involved as a neutral in the administration and in some cases, as well, in the development of the above cited project agreements.

(a) One of the reasons for the project agreement, with its no-strike and no-lockout clause for the duration of the project, was to prevent otherwise perfectly legal work stoppages when the local craft collective bargaining agreements expired at various dates by their term during the duration of a project. On a project of three or four years' duration or longer, a large number of local area craft agreements could be expected to expire with possible stoppages of work on the project and in the local community. Such work stoppages, at various points in the work plan for a project interrupting the planned sequence of work, can be expensive and seriously delay completion. (A series of such legal work stoppages led to the application of the Nuclear Power Construction Stabilization Agreement to the on-going Portsmouth, N.H. nuclear project.)

(b) On large projects under strict time deadlines, with or without financial penalties, shortages of particular skills in the local area may arise, as with tunnel workers, boilermakers, specialized craft welders, etc., and resort to recruitment in a larger area or nation-wide is facilitated by the project agreement with national union and project-manager support. Moreover, a project manager is able to estimate and coordinate better the manpower requirements of separate contractors.

(c) The imprint of the national unions' signatures and the support of their national staff representatives stand for a further guarantor of compliance on a complex project with tight deadlines and on which unexpected events are not uncommon. Resort to the national levels for redress has proven to be typically far more rapid in the resolution of a wide range of disputes than resort to administrative agencies or the courts. Under the Boston Harbor Project Labor Agreement there have been 20 million man hours of construction work without any time lost through a work stoppage.<sup>2</sup>

(d) There are a number of conditions that need to be standardized among crafts and local collective agreements and nonunion contractors if efficient operations are to be achieved. Among these conditions are the standard work day, starting and ending hours, lunch periods, any break periods and how taken, shift schedules and rates, holidays and rates, standardized grievance and dispute settling procedures for the project, and standard safety instruction including drug and alcohol policy, safety committees and procedures across diverse and changing contractors. Other terms may relate to reporting places and travel arrangements on a large project. These provisions in local collective bargaining agreements often show considerable variations on some items; if applied separately to a major project they would create considerable inefficiencies. Project agreements may specify the location, or process to decide the location of stockpiles, tool sheds, etc. that provide a more

efficient project as a whole than would arise under isolated contractors and agreements. Some project agreements have provided for a common introduction to all new employees of any contractor specifying project rules and explaining the significance of the project to the region or the nation. Some project agreements, as in Article III of the SNWA Project Labor Agreement, provide for regular periodic meetings of all parties to review developments and anticipate problems. There may also need to be a procedure to reconcile differences between the project agreement and the local area craft agreements. The standardization of terms and conditions of employment among crafts is an essential condition to efficient operations that is provided by the project agreement.

(e) In some localities on some large projects there may be questions as to whether building construction, or heavy and highway or pipeline, or tunnel terms and conditions of employment apply to particular work operations; a project agreement resolves such issues, or provides procedures to resolve them.

(f) Dr. Northrup (at pp. 23-24) states that the Boston Harbor project has "not exhibited stellar safety performance" and cites a series of press and magazine reports of particular incidents. Although he recognizes that "construction is a hazardous industry," he makes no presentation of statistical data for the Boston Harbor project on any matter. Accordingly, it may be appropriate to present an overall record of the project to date from the initiation of the project agreement in May 1989.



The attached letter dated October 4, 1996, from Carl R. Tower, Manager, Industrial Relations for the Project Management firm ICF Kaiser, presents a factual and statistical report on the Boston Harbor project agreement, including data on the lost-time accident incident rate for the period August 1990 through August 1996. The Lost Time Accident Incident Rate is one-third below the BLS national data for heavy construction, 4.1 compared to 6.2, the number of lost-time injuries per 100 full-time workers. The cumulative average days lost incident rate for the project from August 1990 through August 1996 is 134.7 compared to 150.4 for heavy construction nationally. (For a discussion of Dr. Northrup's comments on safety on union and nonunion construction projects, pp. 21-22, see the Section on Safety below.)

It may be appropriate to present Carl Tower's summary of the performance of the Boston Harbor project:

- "- The Boston Harbor Project is approximately 86.7% complete.
- The Boston Harbor Project is on schedule for completion by year 2000, meeting the U.S. Federal Court mandated milestone.

The Boston Harbor Project construction workforce peaked in 1993 with approximately 2,200 craft persons - the current craft workforce is approximately 1,200.

- The effective date of the BHP - Project Labor Agreement was May 22, 1989 - during this nearly 7 1/2 years there have been approximately 20 million craft hours worked without lost time due to strike or lock-out.

- Boston Harbor Project's original projected cost was \$6.1 billion. The present estimate to completion is \$3.4 billion. (Four packages of contracts aggregating \$178.1 million were deleted from the original project design.)
- Boston Harbor Project's cumulative "Lost Time Accident Incident Rate" for the period August 1990 through August 1996 is 4.1 while the BLS composite incident rate for heavy construction is calculated to be 6.2. The Project's cumulative "Days Lost Incident Rate is 134.7 for the period while BLS composite incident rate is calculated to be 150.4. (Refer to attached BHP 10-Sep-96 Safety Report and graphs).

The BHP-Project Labor Agreement has met or exceeded all of its desired results." The project is on schedule and below budget.

This outstanding record speaks for itself.

(g) It follows from the preceding discussion of Project Agreements that not all construction projects or operations are necessarily appropriate for a project agreement. The size, duration, scope, craft and contractor composition of the project, and the problems likely to be confronted may not warrant a separate project agreement.

#### **The Issue of Free Competition**

It is elemental that every legal market is embedded in a system of public and private laws and regulations. There are no completely free and open legal markets. Consider that model bourse, the New York Stock Exchange, with its myriad of detailed private and public rules, laws and regulations. Or, review the

Las Vegas construction market for public works. Already bidders may be required to be registered contractors, to meet certain standards to be qualified bidders, to pay workers in accordance with state determined standards of wages and some other compensation elements, federal weekly overtime rules, and out-of-state bidders are required to be below local bidders by a specified amount to be awarded the contract. Many state and local construction markets for government have small business and minority set-asides. All this and more is scarcely "free and open bidding" (Northrup, p. 34). The appropriate issue is clearly not "free and open bidding" or "free competition" but rather the reasonableness and appropriateness of the rules of the market for the purposes of the particular public agency project.

The SNWA and its general manager have repeatedly made clear that "While all successful bidders must agree to work under the terms of the Project Labor Agreement, all are equally eligible to bid despite the absence of any prior collective bargaining relationship with the signatory union."<sup>3</sup> That declaration is unequivocal. The February 26, 1996 Project Labor Agreement in the fifth paragraph makes the same affirmation:

"The Unions agree that this Agreement will be made available to, and will fully apply to, any successful bidder for Project work who becomes a signatory hereto, without regard to whether that successful bidder performs work at other sites on either a union or a non-union basis, and without regard to whether employees of such bidder are or not members of any union..."<sup>4</sup>

(a) It needs to be emphasized that a contractor "without any prior collective bargaining relationship" who bids and secures a

contract on the project and is party to the Project agreement is not required to be signatory to an agreement on any other work site being performed or on any other future project.

(b) Under other project agreements, contractors without prior collective bargaining relationships have in fact bid for work and have in fact been awarded contracts and have in fact performed the work under the terms of the project agreement. The Boston Harbor Project Agreement provides experience on this matter. In response to my request, Carl R. Tower, Manager, Industrial Relations, ICF Kaiser, reported as to the prime and sub-contractors successfully bidding construction contracts under the Boston Harbor Project Labor Agreement: His letters of October 9 and October 15, 1996 report that of the 83 prime contracts let to date, 55 individual prime contractors were successful. Of these 55 contractors, 39 are contractors with previous collective bargaining agreements and 16 are reported as "open shop". These "open-shop" contractors were awarded a total of 19 prime contracts totalling approximately \$65 million. (There were 94 individual unsuccessful prime contract bidders of whom 71 operated under collective bargaining agreements and 23 were reported as "open shop".)

The successful prime contractors on a project may in turn sub-contract some portions of their work, subject to the approval of the Authority, to other contractors. Carl R. Tower reports that under the Boston Harbor Project Agreement there have been a total of 257 subcontractors and 155 of them may be characterized

as operating under collective bargaining agreements previously and 102 reported as "open shop".

Most of these contracts have been completed and others are still in process, all without labor-relations difficulty in a community often characterized as a union city. It is simply untrue that a project agreement precludes or keeps contractors without prior collective bargaining relationships from bidding for work or performing work effectively under a project agreement. The incident in Boston of violence against an "open-shop" contractor cited by Dr. Northrup, p. 20 note 25, did not take place under a project agreement.

(c) What is true of the Boston Harbor Project Agreement already appears to be true of the Southern Nevada Water Authority Project Labor Agreement. In response to my question, I am informed that as of October 1, 1996, of the seven contracts awarded, three have gone to contractors without prior collective bargaining relationships and four have been awarded to contractors with prior collective bargaining relationships. Further, 36 contractors have bid on these seven contracts, 16 of which had no prior collective bargaining relationship and 20 had a prior collective bargaining relationship. The assertion that a project agreement precludes competition from contractors without prior collective bargaining relationships - on the standardized conditions of the project agreement - cannot be sustained in Las Vegas.

(d) The Project Labor agreement dated February 26, 1996 in

Article II, Section 2 specifically excludes from the scope of the agreement the following: "(a) Work of non-manual employees, including but not limited to, superintendents, supervisors, staff engineers, inspectors, quality control and quality assurance personnel, timekeepers, mail carriers, clerks, office workers, including messengers, guards, safety personnel, emergency medical and first aid technicians and other professional, engineering, administrative, supervisory and management employees."

(Also see pars. (b) through (j).)

The contractor without prior collective bargaining relationships thus is enabled to maintain intact its full managerial and supervisory staff appropriate to the specific contract performance, and in addition on this project there is the provision for the hiring in each craft of seven additional regular or key employees (staggered with seven from hiring halls). This arrangement resembles that made by contractors traveling to perform a contract on a project away from the ordinary area of operations intra-or-inter state in that only supervision and key or core workers are transported with expenses of travel and subsistence.

(e) A review of the February 26, 1996 Project Labor Agreement, the projected course of construction over the next three years, including the "spread-out construction effort which is driven by completion targets that are essential to the delivery of water to areas in the metropolitan Las Vegas region", and features of the Las Vegas Labor Market (see next Section)

have led me to be supportive of the analysis in the March 4, 1996 Report of Parsons Constructors, Inc. (Exh. 8-1). The items listed and others in the Project Agreement that will benefit the project and the public are real factors in labor costs - the standardization of overtime rates at 1 1/2 times the straight time rate of pay; the protection from costly or adverse conditions in local agreements as applied to the project; the greatest possible use of a local workforce with the systematic recruitment outside the area if necessary; the provisions for supervisory and core employees of nonunion contractors; the elimination of seniority as applied to employees working on the project; the provisions for enforcement of the no-strike provisions, prevailing wage rate determinations that apply despite higher wages or benefits in local area agreements; and other standardization of diverse provisions of local area agreements. (pp. 5-6).

The simple fact is that it is not possible rigorously to compare aggregate costs on a project with this form of a project agreement with costs on the same designed project with an unspecified mixture of contractors and policies. The experience under other project labor agreements, such as the Boston Harbor project, can be instructive. But the "spread-out construction effort," with stringent time deadlines, the interfaces of disparate contractors and their sub-contractors, and the consequences of uncoordinated labor, safety, hiring policies and possible disruptions in a specific setting create uncertainties

for an owner that only experienced managers responsible for the timely completion of a project have the responsibility to appraise. In my experience the decision and the approved project agreement, of the Southern Nevada Water Authority is reasonable and in the public interest under all the circumstances and should be respected.

#### **Las Vegas Labor Market**

The Las Vegas metropolitan area had a population of 1.076 million in 1994. Between 1969 and 1994, Las Vegas population grew by 262 percent while the U.S. added 29 percent more people. The Commerce Department projects that Las Vegas will lead the nation in population growth over the period 1993-2005, 40.5 percent compared to 11.8 percent.<sup>5</sup>

Between 1992 and 1995 Las Vegas' employment grew by 27.6 percent, the highest performance of any metropolitan area. The area's economy depends on its hotel and casino business and its associated recreational industries, which have historically accounted for over a third of the employment base. The rapid growth of the hotel industry has created a rapid expansion in construction both for hotels and casinos and for housing for the in-migrants.

The distribution of employment for June 1996 among sectors of the Las Vegas economy is presented in the following tabulation:<sup>6</sup>



|                                     |                |
|-------------------------------------|----------------|
| Construction                        | 58.1 thousand  |
| Mining                              | 2.1            |
| Manufacturing                       | 21.5           |
| Transportation and Public Utilities | 29.6           |
| Wholesale and Retail Trade          | 120.3          |
| Finance, Insurance, Real Estate     | 28.5           |
| Services                            | 272.8          |
| Government                          | <u>57.3</u>    |
| Employees on non-farm payrolls      | 590.2 thousand |

Construction constituted 9.8 percent of all employees in Las Vegas on non-farm payrolls in June 1996, almost twice the relative importance of construction in total employment of the country as a whole which was 5.7 percent.

Since 1983 the Las Vegas construction workforce has grown from 11,800 to 58,100 in June 1996.<sup>7</sup> Over three-quarters of the construction work is performed for private owners; state and local government accounts for twenty percent, while federal government work is only 2 percent of the market.

Large-scale hotel building rebounded in 1995 to \$1.4 billion, the largest hotel volume in the country. (F.W. Dodge and Commerce Department data.) The market is as strong in 1996. The population and employment growth has also created a residential construction boom.

Virtually all the major hotel and casino construction work, particularly along the strip in Las Vegas, is reported to be built under collective bargaining agreements.<sup>8</sup> The National Joint Heavy and Highway Construction Committee reports in a national survey by states for the years 1990-94 that 78 percent of heavy and highway construction work in Nevada was bid under

collective bargaining agreements with 22 percent nonunion. Data for 1995 appear to be in the same magnitude. Unions are virtually absent, however, from residential construction.

In the Las Vegas rapidly expanding construction market there is little basis for concern that the SNWA Project Agreement would deprive contractors not signatory to collective bargaining agreements of significant market opportunities even if they elect not to bid on contracts which they are clearly entitled to do. Moreover, the significant degree of wage and benefit standards determined by collective bargaining in the heavy and highway and hotel construction branches of the construction industry suggest that the Project Agreement may help to stabilize labor costs in a period of rapid employment growth. If the Project Agreement were the only work under collective bargained standards there might be concern over adverse effects on the level of costs in the area.

#### **Safety**

Dr. Northrup cited (pp. 22-23) a report by Charles Culver, and presents bar charts (Figure 4) for the years 1985-93, to support the conclusion for the construction industry that "fatality rates for nonunion contractors' employees were significantly lower than those of unionized contractors for each of the nine year studied."<sup>9</sup> The study was never issued or endorsed by OSHA for which Charles Culver worked for a period and wrote the paper as an ex-employee.

The publication is seriously flawed in its statistical methods. The number of fatalities in construction in a year is

the number reported investigated by OSHA, not the number of fatalities. This figure of reported investigations of fatalities for union and nonunion workplaces provides a numerator for a fatality rate that is then divided by a denominator consisting of estimates of the nonunion and union workforce, in 100,000 units. The denominator estimates of union and nonunion workforces are also seriously flawed.

(a) Fatal Accidents

On October 1, 1993 the Bureau of Labor Statistics released its Census of Fatal Occupational Injuries. As the Monthly Labor Review, October 1994 reports (p. 23), "Although BLS had been measuring workplace safety since 1912, the 1992 national census was a 'quantum leap' in accuracy." This BLS report stated that in 1992 and 1993 there were a total of 6,217 and 6,271 fatal occupational injuries in aggregate and 919 and 924 respectively in construction. A measure of the reliability of the Culver report is that it uses only 582 and 502 fatalities in 1992 and 1993 in construction. (For 1994 BLS reports 1,028 fatalities and in 1995 1,048 fatalities in construction, USDL 96-315, August 8, 1996).<sup>10</sup> These BLS data do not indicate whether or not the workplace was covered by a collective bargaining agreement. The distribution of fatalities between union and nonunion workplaces is open to question when the data used by Culver only reports 63 percent in 1992 and 54 percent of all construction fatalities in 1993. In no sense were the OSHA inspection reports a random sample. (See point (c) below.)

(b) Estimates of union and nonunion workforces

Even if reliable data were available for fatalities by union and nonunion workplaces in construction, the methods used by Culver to calculate fatality rates are seriously flawed as to the average annual number of workers employed in union and nonunion workplaces. The CPS (Current Population Survey) reports data for "union affiliation of employed wage and salary workers" by industry and also reports the numbers represented by unions, typically a larger number. Unions are required to represent all workers in a workplace governed by a collective agreement whether or not they are union members, and the same compensation and work rules, including safety rules, are required to apply to all employees covered by an agreement whether or not members of the union. Culver uses the number for "union members" rather than those "represented by unions". Further, union contractors employ many employees who are outside bargaining units, such as clerical workers and draftsmen. Culver's methods count these persons for the nonunion denominator, diluting the fatality rates for the nonunion sector and increasing the rates for the union sector.

(c) OSHA inspections

OSHA inspections have been demonstrated to respond at a higher rate to requests and complaints in workplaces governed by collective agreements compared to inspection rates at workplaces with no requests for inspections. It is understandable that workers with representation, and their stewards and officers, are more likely to seek inspections than workers without

representation. Professor David Weil has extensively studied OSHA inspections. "Unions dramatically increase the chance of being inspected in the construction industry. For the smallest construction sites, unions increase inspection probabilities slightly, with a 17 percent probability for union establishments versus 13 percent for nonunion sites. The difference grows with establishment size, increasing finally to a 40 percent chance of inspection for large union construction establishments versus only 12 percent probability for nonunion sites of the same size."<sup>11</sup> Professor Weil reports that this union-nonunion OSHA inspection differential for 1985 persists in an analysis of inspection activity from 1987 through 1993. This contradicts Culver's source, (p. 6), a 1985-1992 study that "did not indicate any disproportionate concentration of inspections on particular types of contractors, i.e. nonunion or union."

The Culver report simply does not pass professional statistical standards or peer review.

#### Concluding Observations

The decision by a private owner or a government agency to utilize a project agreement with a construction management firm to procure construction of a large spread-out project with tight time deadlines, requiring a variety of contractors and a large workforce over a prolonged period depends on a number of considerations - inhouse management, engineering, and contracting experience, local availability of labor including critical skills, the scope and duration of the project, the critical-path

schedule for completion, the location of the project, the vulnerability of the project to interruptions by virtue of isolation or difficulty of access, etc. This is a managerial decision that needs to be carefully undertaken, and if so, respected.

At p. 16, Dr. Northrup states: "Thus, the decision to direct the imposition of a project agreement by a governmental body is always a political one, not an economic one...". This is a perversion of the decision-making process in governments, non-profit organizations and private business. There are ordinarily a variety of considerations and choices that enter into decisions by all organizations. Governments, these days particularly, are concerned with the economical use of scarce resources, quality, time of completion, fairness and compliance with statutes that define public purposes.

On construction projects with the size, duration, complexity, vulnerability, and time constraints that utilize project management firms and project agreements a congruent labor policy has proven, in my experience, to make a contribution to efficient performance and cost effectiveness. I recall the difficulties in the 1960s of conflicted contracting policies on the Space Center work at Cape Canaveral with electrical contractors and their employees of two persuasions trying to perform work in the same manhole and other points of interface. These difficulties led to the early development of a project agreement.

There are many reasons for a managerial decision to choose a project agreement on a large project lasting years - standardization of hours, shifts, reporting points, holidays, labor supply, etc. cited earlier. A project agreement may not be appropriate for all construction projects. But the purpose is not to keep contractors without collective bargaining relationships from bidding and performing work as Dr. Northrup sees it.

The fact is that contractors without collective bargaining relationships do bid and perform work under project agreements. They enhance competitive performance on standardized conditions. The Boston Harbor Project Labor Agreement demonstrates this fact and the Southern Nevada Water Authority Project Labor Agreement already provides further support for this view. The argument that project agreements are adopted to keep contractors without prior collective agreements off of such projects fails.

The notion that "Boston Harbor type-contracts provide little or no concessions to the taxpayers" or (p. 15) "undoubtedly enhances costs to taxpayers" (p. 34) cannot be accepted. The record of the Boston Harbor Project Agreement, set forth above by Carl Tower is persuasive of public benefits and effective operations - a project of 20 million work hours without a work stoppage, on schedule and budget, and a cumulative lost time incident rate of accidents one-third below the heavy construction rate for the country.

The decision to use the project agreement to perform

construction of the type designed by the SNWA in the period 1996-99 appears to be a reasonable business decision that sets reasonable standards and assures appropriate competition among qualified bidders without regard to their prior collective bargaining relationships.



## NOTES

1. In 1966, Dr. Herbert R. Northrup wrote against the use of executive authority in the resolution of disputes between labor unions and the contractors managing for the government the operations, referring to the activities of the government appointed labor-management bodies as "extralegal". Compulsory Arbitration and Government Interventions in Labor Disputes, An Analysis of Experience, Labor Policy Association, Washington, D.C., 1966, pp. 130-135 and note 31, p. 139. "We may thus conclude that, in balance, the promotion of industrial peace was limited, union power enhanced, and collective bargaining discouraged." (p. 137).

2. Dr. Northrup states, at p. 16, "The success of the Boston area construction trade unions in winning union-only project agreements, for the Boston Harbor and for other major work..." Actually, the initiative for the Boston Harbor Agreement did not come from the local building trades unions; the Boston Building Trades Council originally opposed the project agreement. The initiative came from the state government authority (MWRA) and the managing contractor.

3. Southern Nevada Water Authority, Board of Directors Agenda Item, March 21, 1996, GMIR No. 10, (Agenda Item 12, Exhibit F).

4. Southern Nevada Water Authority, SNWS Improvements, Project Labor Agreement, February 26, 1996, Exh. A., p. 2.

5. U.S. Department of Commerce, 'Bureau of Economic Analysis, Local Area Personal Income, 1969-92, Washington, D.C., September 1994; U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, June, 1996.

6. U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, August, 1996.

7. U.S. Department of Labor, Bureau of Labor Statistics, State and Area Establishment Survey, Employment and Earnings.

8. See, Affidavit of John E. Jeffrey, Secretary-Treasurer of the Southern Nevada Building and Construction Trades Council, p. 3. The affidavit also reports that the Nevada Test Site work "has been all-union for the last 40 years and is performed under the terms of a PLA (project labor agreement)..."

9. Herbert R. Northrup, Declaration, p. 23. See, Charles Culver, Comparison of Nonunion and Union Contractors' Construction Fatalities, published by the National Center for Construction Education and Research, May 1995.

10. Also, see, U.S. Department of Labor, Bureau of Labor Statistics, Fatal Workplace Injuries in 1993: A Collection of Data and Analysis, Report 891, June 1995; Fatal Workplace Injuries in 1994: A Collection of Data and Analysis, Report 908, July 1996.

11. David Weil, "Building Safety: The Role of Construction Unions in the Enforcement of OSHA", Journal of Labor Research, 1992, vol. 13, no. 1, p. 127 and Table 2.

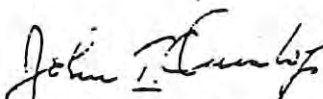
HARVARD UNIVERSITY

JOHN T. DUNLOP  
*Lamont University Professor, Emeritus*

208 LITTAUER CENTER  
CAMBRIDGE, MASSACHUSETTS 02138

October 28, 1996

I declare under penalty of perjury under the laws of the State of Nevada that the foregoing 28 pages are true and correct based on my own knowledge and to the best of my knowledge and belief.

  
John T. Dunlop

September 1996

John T. Dunlop

Lamont University Professor, Emeritus  
Harvard University

John T. Dunlop is the Lamont University Professor, Emeritus at Harvard University. He was Chairman of the Department of Economics, 1961-66; Dean of the Faculty of Arts and Sciences, 1969-73; Acting Director, Business and Government Center, School of Government, 1987-91; President, International Industrial Relations Association, 1973-76; President, Industrial Relations Research Association, 1960-61; Editor, *Wertheim Publications in Industrial Relations*, 1945-.

Secretary of Labor in the Ford Administration, 1975-76, Mr. Dunlop has also been Director, Cost of Living Council, 1973-74; Chairman, Construction Industry Stabilization Committee, 1971-74; Chairman, Pay Advisory Committee, 1979-80; Member, Comptroller General Consultant Panel, 1980-; Member, National Productivity Advisory Committee, 1981-84; Member, Advisory Council on Social Security, 1989-1991; Chair, Commission on the Future of Worker/Management Relations, 1993-95; arbitrator and impartial chairman of various labor-management committees; member of numerous government boards on industrial relations disputes and economic stabilization programs.

He has chaired or led a number of continuing committees including Coordinator, Labor-Management Group, 1973-; Chairman, Joint Labor-Management Committee for Municipal Police and Fire, Massachusetts, 1977-; Coordinator, Group of Six (Health Care), 1981-.

Professor Dunlop served as Chairman, National Advisory Committee, Community Programs for Affordable Health Care (The Robert Wood Johnson Foundation); he continues as Member, Foster G. McGaw Prize Committee, The Hospital Research and Educational Trust; Member, Institute of Medicine.

Director, General Telephone and Electronics Corporation, 1976-83; Director, Bird, Inc., 1984-96; Trustee, Consolidated Rail Corporation, 1976-81; Honorary Director, Textile/Clothing Technology Corporation; Member, American Academy of Arts and Sciences; Member, American Philosophical Society; Honorary Member, American Hospital Association, 1984; Honorary Life Member, National Academy of Arbitrators, 1991; National Association of Home Builders, National Housing Hall of Fame, 1986. He received the Louis K. Comstock Award, National Electrical Contractors Association, 1974; the George K. Newman Award, the Residential Construction Employers Council, October 1975; Cushing Award, Excellence in Labor Management Relations, 1978; U.S. General Accounting Office, Award for Public Service, 1979; the Labor-Management Award, Work in America Institute, 1984; and the Murray-Green-Meany Award, AFL-CIO, 1987. In 1994 he became a Distinguished Fellow of the National Academy of Human Resources. He has been awarded honorary degrees by 13 colleges or universities.

Professor Dunlop is the author of: Wage Determination Under Trade Unions, 1944, 1950; Collective Bargaining: Principles and Cases, 1949, 53; Industrial Relations Systems, 1958, 1993; Industrialism and Industrial Man, 1960 (joint author); Labor and the American Community, 1970 (with Derek C. Bok); The Lessons of Wage and Price Controls-The Food Sector, ed., 1978; Labor in the Twentieth Century, ed., 1978; Business and Public Policy, ed., 1980; Dispute Resolution, Negotiation and Consensus Building, 1984; The Management of Labor Unions, 1990.

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CMKE-19553

October 17, 1996

~~John F. Dunlop, Ph.D.~~  
Harvard University  
208 Littauer Center  
Cambridge, MA 02138 FAX (617) 495-7730

Subject: Task 205.01 Labor Relations  
Contractor Compliance, BHP-Project Labor Agreement

Dear Mr. Dunlop:

Contained is supplemental information to my October 3, 1996 letter on the above subject. The original projected cost for the Boston Harbor Project was \$6.1 billion. The revised estimate to completion is \$3.4 billion. This reduction is partially due to down-sizing the project an estimated \$178.1 million by eliminating the construction of four facilities directly related to secondary treatment.

The four deleted contract packages have been:

|        |                                      |                         |
|--------|--------------------------------------|-------------------------|
| CP-261 | Secondary Battery & Clarifier "D"    | \$88.1 million          |
| CP-330 | Residuals Treatment Facility Phase 2 |                         |
|        | Secondary Treatment "C&D"            | \$74.2 million          |
| CP-242 | Disinfection Facility                | \$13.2 million          |
| CP-131 | Primary Screening Facilities         | \$ 2.6 million          |
|        | <b>Total</b>                         | <b>\$ 178.1 million</b> |

Please advise if I can be of any additional assistance.

Very truly yours,



Carl R. Tower  
Manager, Industrial Relations

CRT/pdc

cc: K. Willis, CM  
Carl Uehlein, Morgan, Lewis & Bokius FAX (202) 467-7176  
Brad Coupe, Morgan, Lewis & Bokius FAX (212) 309-6273  
Document Control



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CMKE-19502

October 15, 1996

John T. Dunlop, Ph.D.  
Harvard University  
208 Littauer Center  
Cambridge, MA 02138 FAX (617) 495-7730

Subject: Task 205.01 Labor Relations  
Breakdown of "Union" and "Open-Shop" Contractors involved  
in the Boston Harbor Project - Supplement

Dear Mr. Dunlop:

This is to supplement my October 9, 1996 letter on the above subject. This deals with subcontractors employed on the Boston Harbor Project under its Project Labor Agreement.

Our tabulations indicate that of **257** individual subcontractors reviewed:

155 are considered "Union" contractors, 102 are reportedly "Open Shop."

Please advise if I can be of further assistance.

Very truly yours,

Carl R. Tower  
Manager, Industrial Relations

CRT/pdc

cc: K. Willis, CM  
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CMKE-19485

October 9, 1996

John T. Dunlop, Ph.D.  
Harvard University  
208 Littauer Center  
Cambridge, MA 02138 FAX (617) 495-7730

Subject: Task 205.01 Labor Relations  
Breakdown of "Union" and "Open-Shop" Contractors Involved  
in the Boston Harbor Project

Dear Mr. Dunlop:

Per your request, we have accumulated information pertaining to contractors that have been awarded Boston Harbor Project construction prime contracts and those that were the unsuccessful bidders. All bidding was subject to the terms and conditions of the BHP-Project Labor Agreement. All contract awards binds the contractor to the Agreement

Our tabulations of 83 prime contracts to-date indicate:

- of 55 Individual Prime Contractors: 39 are considered "Union" contractors, 16 are reportedly "Open-Shop."
- of 94 Individual unsuccessful Prime Contract Bidders: 71 are considered "Union" contractors, 23 are reportedly "Open-Shop."

Open-shop contractors have always been free to bid BHP contracts. Open-shop contractors have won 19 Prime Contract awards totalling approximately \$65 million.

Please advise if I can be of further assistance.

Very truly yours,

Carl R. Tower  
Manager, Industrial Relations

CRT/pdc

cc: K. Willis, CM  
Brad Coupe, Morgan, Lewis & Bokius FAX (212) 309-6273

# ⇒ ICF KAISER

ICF Kaiser Engineers Massachusetts, Inc.  
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CMKE-19411

October 4, 1996

John F. Dunlop, Ph.D.  
Harvard University  
208 Littauer Center  
Cambridge, MA 02138 FAX (617) 495-7730

Subject: Task 205.01 Labor Relations  
Contractor Compliance - BHP - Project Labor Agreement

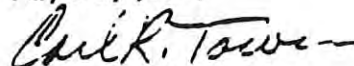
Dear Mr. Dunlop:

This is in follow-up to your October 1, 1996 telephone request for updated information on results experienced under the Boston Harbor Project Labor Agreement (PLA). In my capacity as Manager of Industrial Relations, I administer the PLA on behalf of Construction Manager (CM) and monitor contractor compliance.

- The Boston Harbor Project is approximately 86.7% complete.
- The Boston Harbor Project is on schedule for completion by year 2000, meeting the U.S. Federal Court mandated milestone.
- The Boston Harbor Project construction workforce peaked in 1993 with approximately 2,200 craft persons - the current craft workforce is approximately 1,200.
- The effective date of the BHP- Project Labor Agreement was May 22, 1989 - during this nearly 7½ years there have been approximately 20 million craft hours worked without lost time due to strike or lock-out.
- Boston Harbor Project's original projected cost was \$6.1 billion. The present estimate to completion is \$3.4 billion.
- Boston Harbor Project's cumulative "Lost Time Accident Incident Rate" for the period August 1990 through August 1996 is 4.1 while the BLS composite incident rate for heavy construction is calculated to be 6.2. The Project's cumulative "Days Lost Incident Rate is 134.7 for the period while BLS composite incident rate is calculated to be 150.4 (Refer to attached BHP 10-Sep-96 Safety Report and graphs).

The BHP-Project Labor Agreement has met or exceeded all of its desired results. Please advise if I can provide any further information.

Very truly yours,



Carl R. Tower  
Manager, Industrial Relations

CRT/pdc

cc: K. Willis, CM  
Brad Coupe, Morgan, Lewis & Bokius FAX (212) 309-6273



## *Appendix E*

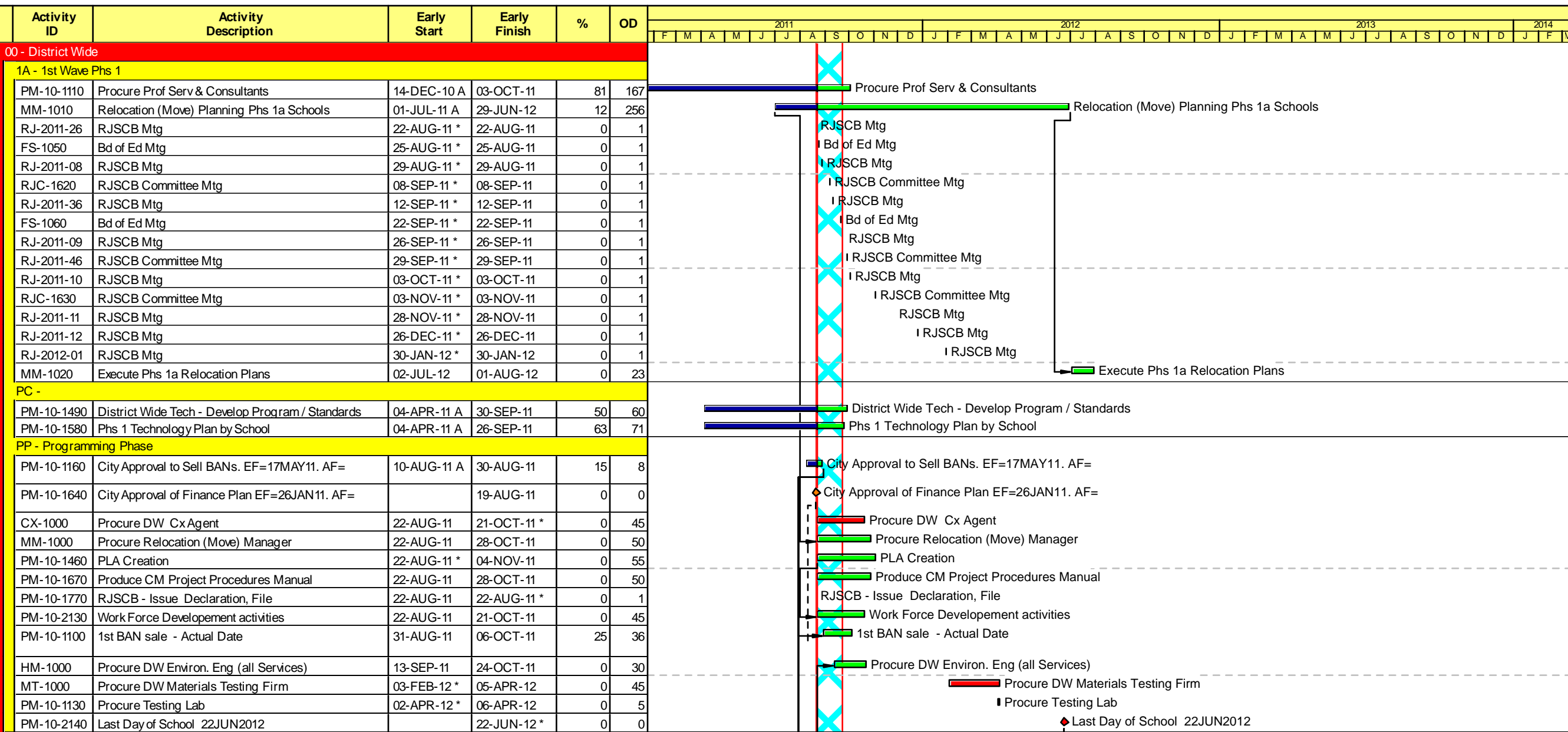


# SureTrak Project Manager RCSD - Master Plan Schedule

Report: Update turnaround

Layout: Classic Gantt

Filter: Activities underway or with no progress



**05 - # 5 Williams**

|                |                        |                           |           |      |          |         |          |
|----------------|------------------------|---------------------------|-----------|------|----------|---------|----------|
| Early bar      | Critical point         | Data date                 | 22-AUG-11 | Date | Revision | Checked | Approved |
| Progress bar   | Summary point          | Start date                | 01-FEB-11 |      |          |         |          |
| Critical bar   | Start milestone point  | Finish date               | 01-JUN-16 |      |          |         |          |
| Summary bar    | Finish milestone point | Must finish date          | 31-AUG-16 |      |          |         |          |
| Progress point |                        | Target finish date        |           |      |          |         |          |
|                |                        | © Primavera Systems, Inc. |           |      |          |         |          |

# SureTrak Project Manager RCSD - Master Plan Schedule

Report: Update turnaround

Layout: Classic Gantt

Filter: Activities underway or with no progress

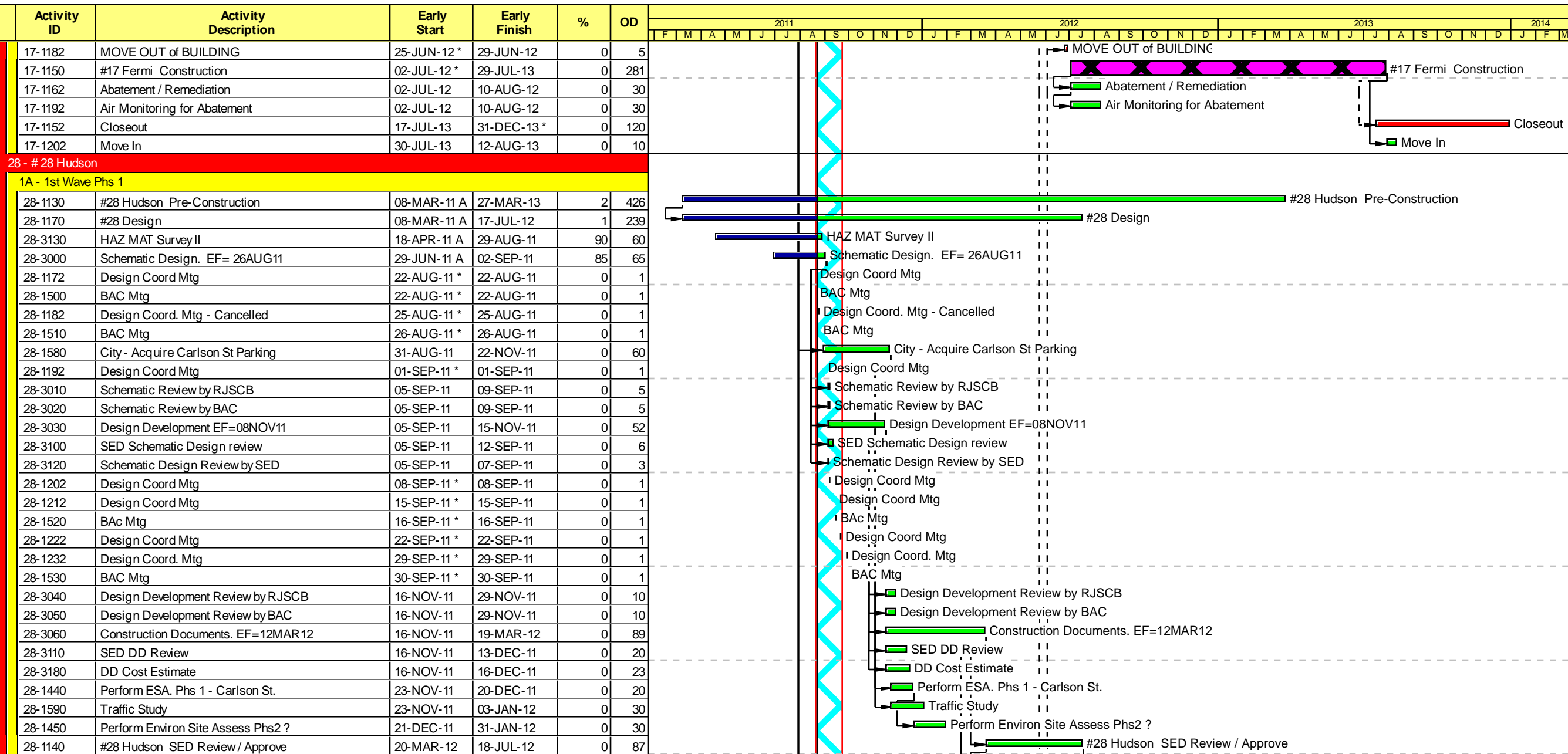
| Activity ID                | Activity Description                     | Early Start | Early Finish | % | OD  | 2011                                       |   |   |   |   |   |   |   |   |   |   |   | 2012 |   |   |   |   |   |   |   |   |   |   |   | 2013 |   |   |   |   |   |   |   |   |   |   |   | 2014 |   |  |  |  |  |  |  |  |  |  |  |
|----------------------------|--|-------------|--------------|---|-----|--|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|--|--|--|--|--|--|--|--|--|--|
|                            |  |             |              |   |     | F  | M | A | M | J | J | A | S | O | N | D | J | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M |  |  |  |  |  |  |  |  |  |  |
| <b>1B - 2nd Wave Phs 1</b> |  |             |              |   |     |  |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-2990                    | Notice to Schools to form BAC            | 20-SEP-11 * | 03-OCT-11    | 0 | 10  | ■ Notice to Schools to form BAC            |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-1131                    | Hand Off Mtg w Selected A/E              | 27-OCT-11   | 31-OCT-11    | 0 | 3   | ■ Hand Off Mtg w Selected A/E              |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-1130                    | # 5 Williams 1b Pre-Construction         | 01-NOV-11 * | 06-FEB-13    | 0 | 332 | ■ # 5 Williams 1b Pre-Construction         |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-1161                    | Program Verification                     | 01-NOV-11   | 12-DEC-11    | 0 | 30  | ■ Program Verification                     |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3000                    | Schematic Design                         | 01-NOV-11 * | 06-FEB-12    | 0 | 70  | ■ Schematic Design                         |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3010                    | Schematic Review by RJSCB                | 07-FEB-12   | 13-FEB-12    | 0 | 5   | ■ Schematic Review by RJSCB                |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3020                    | Schematic Review by BAC                  | 07-FEB-12   | 13-FEB-12    | 0 | 5   | ■ Schematic Review by BAC                  |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3030                    | Design Development                       | 07-FEB-12   | 14-MAY-12    | 0 | 70  | ■ Design Development                       |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3040                    | Design Development Review by RJSCB       | 15-MAY-12   | 15-MAY-12    | 0 | 1   | ■ Design Development Review by RJSCB       |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3050                    | Design Development Review by BAC         | 15-MAY-12   | 15-MAY-12    | 0 | 1   | ■ Design Development Review by BAC         |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3060                    | Construction Documents                   | 15-MAY-12   | 06-NOV-12    | 0 | 126 | ■ Construction Documents                   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3900                    | Pre-Reno Survey/Sample                   | 02-JUL-12 * | 27-JUL-12    | 0 | 20  | ■ Pre-Reno Survey/Sample                   |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3910                    | Pre-Reno Air Monitoring                  | 02-JUL-12   | 27-JUL-12    | 0 | 20  | ■ Pre-Reno Air Monitoring                  |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3100                    | HAZ MAT Design                           | 30-JUL-12   | 19-OCT-12    | 0 | 60  | ■ HAZ MAT Design                           |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3070                    | Const Doc Review by RJSCB                | 07-NOV-12   | 09-NOV-12    | 0 | 3   | ■ Const Doc Review by RJSCB                |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-3080                    | Const Doc Review by BAC                  | 07-NOV-12   | 09-NOV-12    | 0 | 3   | ■ Const Doc Review by BAC                  |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-1140                    | # 5 Williams SED Review / Approve        | 29-NOV-12   | 15-MAR-13 *  | 0 | 77  | ■ # 5 Williams SED Review / Approve        |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-2150                    | IDC - Review Con Docs                    | 29-NOV-12   | 31-DEC-12    | 0 | 23  | ■ IDC - Review Con Docs                    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-2151                    | Incorporate IDC Comments                 | 01-JAN-13   | 31-JAN-13    | 0 | 23  | ■ Incorporate IDC Comments                 |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-2152                    | Send IDC rev docs to SED                 | 01-FEB-13   | 05-FEB-13    | 0 | 3   | ■ Send IDC rev docs to SED                 |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-1145                    | # 5 Bid and Award Construction Contracts | 18-MAR-13   | 10-MAY-13    | 0 | 40  | ■ # 5 Bid and Award Construction Contracts |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |
| 05-1150                    | # 5 Williams Construction                | 28-JUN-13 * | 28-JUL-14    | 0 | 282 | ■ # 5 Williams Construction                |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |  |  |  |  |  |  |  |  |  |  |

|                            |                                    |             |           |   |     |                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|------------------------------------|-------------|-----------|---|-----|--------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>12 - # 12 Duffy</b>     |                                    |             |           |   |     |                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>1B - 2nd Wave Phs 1</b> |                                    |             |           |   |     |                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-2990                    | Notice to Schools to form BAC      | 20-SEP-11 * | 03-OCT-11 | 0 | 10  | ■ Notice to Schools to form BAC      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-1131                    | Hand Off Mtg w Selected A/E        | 27-OCT-11   | 31-OCT-11 | 0 | 3   | ■ Hand Off Mtg w Selected A/E        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-1130                    | #12 Pre-Construction               | 01-NOV-11   | 29-APR-13 | 0 | 390 | ■ #12 Pre-Construction               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-1160                    | #12 Kickoff MTG w A/E              | 01-NOV-11   | 01-NOV-11 | 0 | 1   | ■ #12 Kickoff MTG w A/E              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-1161                    | Program Verification               | 01-NOV-11   | 12-DEC-11 | 0 | 30  | ■ Program Verification               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3000                    | Schematic Design                   | 01-NOV-11 * | 06-FEB-12 | 0 | 70  | ■ Schematic Design                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3090                    | # 12 Design                        | 20-DEC-11   | 15-OCT-12 | 0 | 215 | ■ # 12 Design                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3010                    | Schematic Review by RJSCB          | 07-FEB-12   | 13-FEB-12 | 0 | 5   | ■ Schematic Review by RJSCB          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3020                    | Schematic Review by BAC            | 07-FEB-12   | 13-FEB-12 | 0 | 5   | ■ Schematic Review by BAC            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3030                    | Design Development                 | 07-FEB-12   | 11-JUN-12 | 0 | 90  | ■ Design Development                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3040                    | Design Development Review by RJSCB | 12-JUN-12   | 12-JUN-12 | 0 | 1   | ■ Design Development Review by RJSCB |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3050                    | Design Development Review by BAC   | 12-JUN-12   | 12-JUN-12 | 0 | 1   | ■ Design Development Review by BAC   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-3060                    | Construction Documents             | 12-JUN-12   | 15-OCT-12 | 0 | 90  | ■ Construction Documents             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|                           |                          |                    |           |      |          |         |          |
|---------------------------|--------------------------|--------------------|-----------|------|----------|---------|----------|
| ■ Early bar               | ▲ Critical point         | Data date          | 22-AUG-11 | Date | Revision | Checked | Approved |
| ■ Progress bar            | ■ Summary point          | Start date         | 01-FEB-11 |      |          |         |          |
| ■ Critical bar            | ◆ Start milestone point  | Finish date        | 01-JUN-16 |      |          |         |          |
| ■ Summary bar             | ◆ Finish milestone point | Must finish date   | 31-AUG-16 |      |          |         |          |
| ▲ Progress point          |                          | Target finish date |           |      |          |         |          |
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## SureTrak Project Manager RCSD - Master Plan Schedule



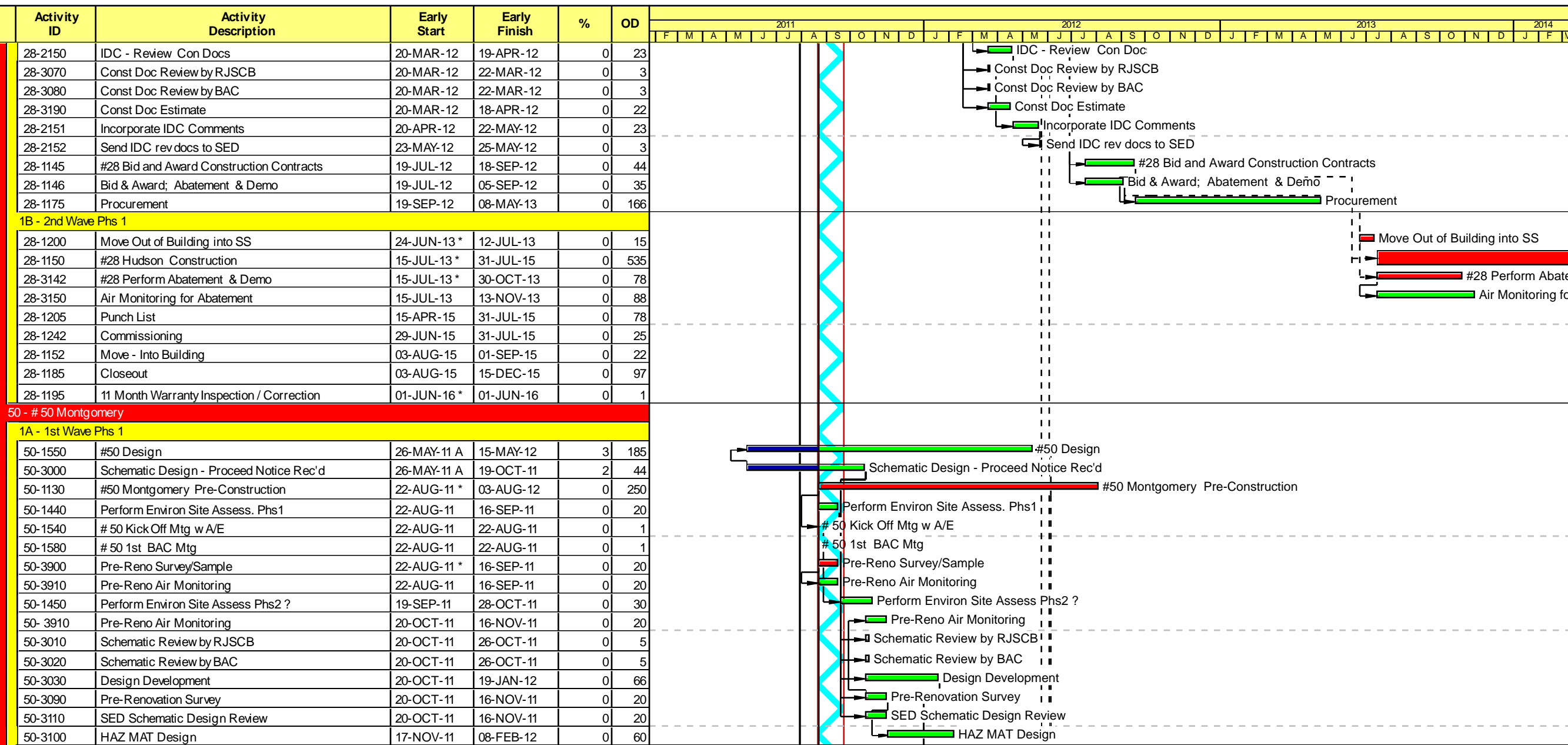
|                           |                |  |                        |                    |           |  |      |          |         |          |
|---------------------------|----------------|--|------------------------|--------------------|-----------|--|------|----------|---------|----------|
|                           | Early bar      |  | Critical point         | Data date          | 22-AUG-11 |  | Date | Revision | Checked | Approved |
|                           | Progress bar   |  | Summary point          | Start date         | 01-FEB-11 |  |      |          |         |          |
|                           | Critical bar   |  | Start milestone point  | Finish date        | 01-JUN-16 |  |      |          |         |          |
|                           | Summary bar    |  | Finish milestone point | Must finish date   | 31-AUG-16 |  |      |          |         |          |
|                           | Progress point |  |                        | Target finish date |           |  |      |          |         |          |
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# SureTrak Project Manager RCSD - Master Plan Schedule

Report: Update turnaround

Layout: Classic Gantt

Filter: Activities underway or with no progress



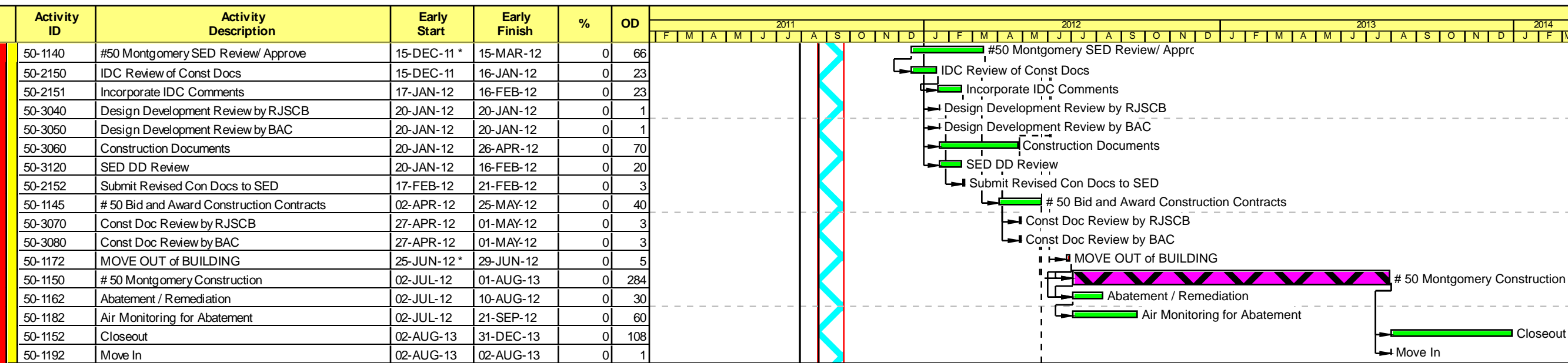
|                           |                        |                    |           |      |          |         |          |
|---------------------------|------------------------|--------------------|-----------|------|----------|---------|----------|
| Early bar                 | Critical point         | Data date          | 22-AUG-11 | Date | Revision | Checked | Approved |
| Progress bar              | Summary point          | Start date         | 01-FEB-11 |      |          |         |          |
| Critical bar              | Start milestone point  | Finish date        | 01-JUN-16 |      |          |         |          |
| Summary bar               | Finish milestone point | Must finish date   | 31-AUG-16 |      |          |         |          |
| Progress point            |                        | Target finish date |           |      |          |         |          |
| © Primavera Systems, Inc. |                        |                    |           |      |          |         |          |

# SureTrak Project Manager RCSD - Master Plan Schedule

Report: Update turnaround

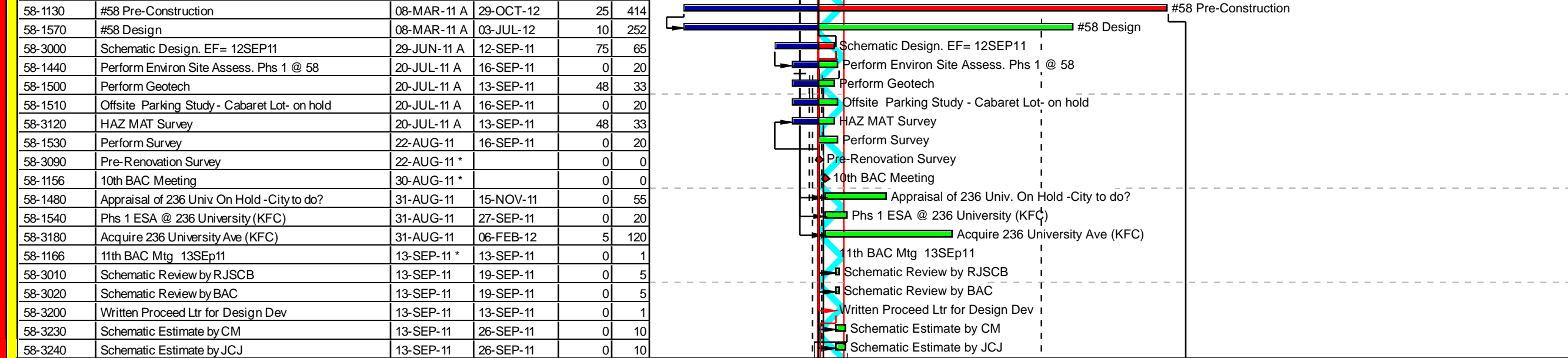
Layout: Classic Gantt

Filter: Activities underway or with no progress



58 - # 58 World of Inquiry

1A - 1st Wave Phs 1



|                           |                |  |                        |                    |           |
|---------------------------|----------------|--|------------------------|--------------------|-----------|
|                           | Early bar      |  | Critical point         | Data date          | 22-AUG-11 |
|                           | Progress bar   |  | Summary point          | Start date         | 01-FEB-11 |
|                           | Critical bar   |  | Start milestone point  | Finish date        | 01-JUN-16 |
|                           | Summary bar    |  | Finish milestone point | Must finish date   | 31-AUG-16 |
|                           | Progress point |  |                        | Target finish date |           |
| © Primavera Systems, Inc. |                |  |                        |                    |           |

| Date | Revision | Checked | Approved |
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# SureTrak Project Manager RCSD - Master Plan Schedule

Report: Update turnaround

Layout: Classic Gantt

Filter: Activities underway or with no progress

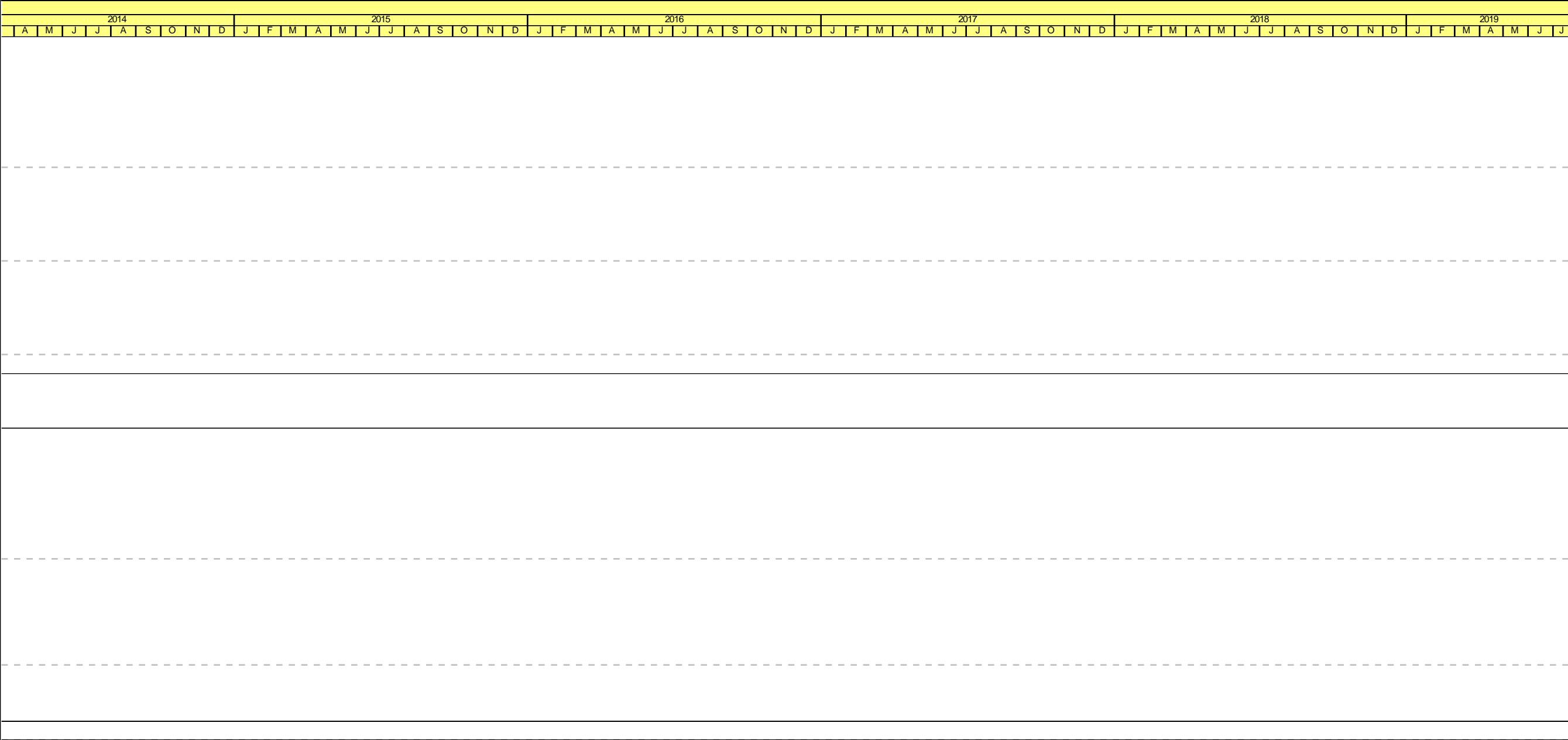
| Activity ID                           | Activity Description                        | Early Start | Early Finish | % | OD  | 2011 |   |   |   |   |   |   |   |   |   |   |   | 2012 |   |   |   |   |   |   |   |   |   |   |   | 2013 |   |   |   |   |   |   |   |   |   |   |   | 2014 |   |   |  |  |  |  |  |  |  |  |  |   |
|---------------------------------------|---|-------------|--------------|---|-----|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|--|--|--|--|--|--|--|--|--|---|
|                                       |   |             |              |   |     | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M | A |  |  |  |  |  |  |  |  |  |   |
| 95-3100                               | SED DD Review                               | 15-MAY-12   | 11-JUN-12    | 0 | 20  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | SED DD Review                               |
| 95-1140                               | Edison SED Review / Approve                 | 28-AUG-12   | 12-DEC-12    | 0 | 77  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Edison SED Review / Approve                 |
| 95-2150                               | IDC Review of Const Docs                    | 28-AUG-12   | 27-SEP-12    | 0 | 23  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | IDC Review of Const Docs                    |
| 95-3070                               | Const Doc Review by RJSCB                   | 28-AUG-12   | 30-AUG-12    | 0 | 3   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Const Doc Review by RJSCB                   |
| 95-3080                               | Const Doc Review by BAC                     | 28-AUG-12   | 30-AUG-12    | 0 | 3   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Const Doc Review by BAC                     |
| 95-2151                               | Incorporate IDC comments into Con Docs      | 28-SEP-12   | 30-OCT-12    | 0 | 23  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Incorporate IDC comments into Con Docs      |
| 95-2152                               | Submit IDC Revised Con Docs to SED          | 31-OCT-12   | 02-NOV-12    | 0 | 3   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Submit IDC Revised Con Docs to SED          |
| 95-1145                               | Edison Bid and Award Construction Contracts | 13-DEC-12   | 06-FEB-13    | 0 | 40  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Edison Bid and Award Construction Contracts |
| 95-1150                               | Edison Construction                         | 01-APR-13*  | 10-OCT-14    | 0 | 400 |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Edison Construction                         |
| <b>690 - 690 St. Paul Swing Space</b> |   |             |              |   |     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  |   |
| <b>4 - Swing Space Creation</b>       |   |             |              |   |     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  |   |
| 06-3070                               | Program 690 Space                           | 22-AUG-11   | 23-SEP-11    | 0 | 25  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Program 690 Space                           |
| 06-3000                               | 690- Design and Pre-Construction            | 26-SEP-11   | 16-FEB-12    | 0 | 104 |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | 690- Design and Pre-Construction            |
| 06-3090                               | Plan new space for current 690 Occupants    | 26-SEP-11   | 28-OCT-11    | 0 | 25  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Plan new space for current 690 Occupants    |
| 06-3010                               | 690- SS SED Review and Approve              | 17-FEB-12   | 26-APR-12    | 0 | 50  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | 690- SS SED Review and Approve              |
| 06-3100                               | Develop New Spaces for current 690 Programs | 17-FEB-12   | 26-APR-12    | 0 | 50  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Develop New Spaces for current 690 Programs |
| 06-3020                               | 690- SS Bid & Award                         | 27-APR-12   | 31-MAY-12    | 0 | 25  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | 690- SS Bid & Award                         |
| 06-3080                               | Move 690 Occupants out                      | 27-APR-12   | 31-MAY-12    | 0 | 25  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Move 690 Occupants out                      |
| 06-5040                               | 690- Materials Submittals / Procurement     | 01-JUN-12   | 20-SEP-12    | 0 | 80  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | 690- Materials Submittals / Procurement     |
| 06-3030                               | 690- SS Construction                        | 21-SEP-12   | 30-NOV-12    | 0 | 51  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | 690- SS Construction                        |
| 06-3040                               | 690- SS Fit Out                             | 05-NOV-12   | 30-NOV-12    | 0 | 20  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | 690- SS Fit Out                             |
| 06-3060                               | Charlotte Move-In                           | 03-DEC-12   | 04-JAN-13    | 0 | 25  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Charlotte Move-In                           |
| <b>DWT - Districtwide Technology</b>  |   |             |              |   |     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  |   |
| <b>1A - 1st Wave Phs 1</b>            |   |             |              |   |     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  |   |
| TK-1240                               | Phs 1a Design Development                   | 22-AUG-11   | 22-NOV-11    | 0 | 67  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1a Design Development                   |
| TK-1310                               | Review 1A DD by RCSD, RSMP & Millennium     | 23-NOV-11   | 05-DEC-11    | 0 | 9   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Review 1A DD by RCSD, RSMP & Millennium     |
| TK-1250                               | Phs 1a SED Review & Approve                 | 06-DEC-11   | 19-JAN-12    | 0 | 33  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1a SED Review & Approve                 |
| TK-1260                               | Phs1a Const Doc & Bidding Phase             | 03-FEB-12   | 06-MAR-12    | 0 | 23  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs1a Const Doc & Bidding Phase             |
| TK-1290                               | Phs 1a E-Rate Deadline (anticipated date)   |             | 16-FEB-12*   | 0 | 0   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1a E-Rate Deadline (anticipated date)   |
| TK-1270                               | Phs 1a Bid Review                           | 07-MAR-12   | 19-MAR-12    | 0 | 9   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1a Bid Review                           |
| TK-1280                               | Phs 1a Contract Negotiations & Award        | 20-MAR-12   | 05-APR-12    | 0 | 13  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1a Contract Negotiations & Award        |
| <b>1B - 2nd Wave Phs 1</b>            |   |             |              |   |     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  |   |
| TK-1330                               | Phs 1b Design Development                   | 15-MAR-12*  | 15-JUN-12    | 0 | 67  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1b Design Development                   |
| TK-1390                               | Phs 1b -Review DD. RCSD, RSMP,Mill          | 18-JUN-12   | 28-JUN-12    | 0 | 9   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1b -Review DD. RCSD, RSMP,Mill          |
| TK-1400                               | Phs 1b SED Review & Approve                 | 29-JUN-12   | 14-AUG-12    | 0 | 33  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1b SED Review & Approve                 |
| TK-1410                               | Phs 1b Const Doc & Bidding                  | 15-AUG-12   | 14-SEP-12    | 0 | 23  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1b Const Doc & Bidding                  |
| TK-1420                               | Phs 1b Bid Review                           | 17-SEP-12   | 27-SEP-12    | 0 | 9   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1b Bid Review                           |
| TK-1340                               | Phs 1b Contract Negotiations & Award        | 28-SEP-12   | 15-OCT-12    | 0 | 12  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |  |  |  |  |  |  |  |  |  | Phs 1b Contract Negotiations & Award        |

|                           |                |  |                        |                    |           |  |      |          |         |          |
|---------------------------|----------------|--|------------------------|--------------------|-----------|--|------|----------|---------|----------|
|                           | Early bar      |  | Critical point         | Data date          | 22-AUG-11 |  | Date | Revision | Checked | Approved |
|                           | Progress bar   |  | Summary point          | Start date         | 01-FEB-11 |  |      |          |         |          |
|                           | Critical bar   |  | Start milestone point  | Finish date        | 01-JUN-16 |  |      |          |         |          |
|                           | Summary bar    |  | Finish milestone point | Must finish date   | 31-AUG-16 |  |      |          |         |          |
|                           | Progress point |  |                        | Target finish date |           |  |      |          |         |          |
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# SureTrak Project Manager

## RCSD - Master Plan Schedule



|                |                        |                            |  |      |          |         |          |
|----------------|------------------------|----------------------------|--|------|----------|---------|----------|
| Early bar      | Critical point         | Data date 22-AUG-11        |  | Date | Revision | Checked | Approved |
| Progress bar   | Summary point          | Start date 01-FEB-11       |  |      |          |         |          |
| Critical bar   | Start milestone point  | Finish date 01-JUN-16      |  |      |          |         |          |
| Summary bar    | Finish milestone point | Must finish date 31-AUG-16 |  |      |          |         |          |
| Progress point |                        | Target finish date         |  |      |          |         |          |
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## *Appendix F*

**Rochester City School District**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Preliminary Cost Overview

| <u>Contract Number</u>                        | <u>Cost (\$)</u>     | <u>Comments</u>  |
|---|----------------------|--|
| <b>Enrico Fermi School No. 17</b>             | <b>\$19,183,794</b>  | Taken from Pike's estimate, construction only, no contingency        |
| <i>Classroom Addition</i>                     | \$2,282,895          |  |
| <i>Gym Addition</i>                           | \$2,420,556          |  |
| <i>Music/Café Addition</i>                    | \$3,577,226          |  |
| <i>Renovations</i>                            | \$8,715,125          |  |
| <i>Site</i>                                   | \$2,187,992          |  |
| <b>Henry Hudson School No. 28</b>             | <b>\$17,457,189</b>  | Taken from detailed cost estimate, construction only, no contingency |
| <b>Helen Barrett Montgomery School No. 50</b> | <b>\$17,442,549</b>  | Taken from Pike's estimate, construction only, no contingency        |
| <i>Addition</i>                               | \$11,336,012         |  |
| <i>Renovations</i>                            | \$5,058,014          |  |
| <i>Site</i>                                   | \$1,048,523          |  |
| <b>World of Inquiry School No. 58</b>         | <b>\$36,240,961</b>  | Taken from SOW, no details on if this includes soft costs            |
| <b>Charlotte High School</b>                  | <b>\$20,094,850</b>  | Taken from Gilbane's estimate, construction only, no contingency     |
| <b>Franklin Educational Campus</b>            | <b>\$7,600,000</b>   | Taken from SOW, no details on if this includes soft costs            |
| <b>John Williams School No. 5</b>             | <b>\$17,730,000</b>  | Taken from RFP, construction budget                                  |
| <b>James P. B. Duffy School No. 12</b>        | <b>\$15,650,000</b>  | Taken from RFP, construction budget                                  |
| <b>Thomas Jefferson High School</b>           | <b>\$20,960,000</b>  | Taken from RFP, construction budget                                  |
| <b>James Monroe High School</b>               | <b>\$23,500,000</b>  | Taken from RFP, construction budget                                  |
| <b>East High School</b>                       | <b>\$19,840,000</b>  | Taken from RFP, construction budget                                  |
| <b>Edison Educational Campus</b>              | <b>\$22,200,000</b>  | Taken from RFP, construction budget                                  |
| <b>District Wide Technology Program</b>       | <b>\$7,020,000</b>   | Taken from Tom Roger's Email (10/14/11)                              |
| <b>PROJECT TOTALS</b>                         | <b>\$244,919,343</b> |  |

Draft



Project Name: RCSD Modernization  
 Location: School #17  
 Architect: Clark Patterson Associates  
 Construction Date: 2012  
 Building Type : School  
 Square Footage: Classroom Addition 14180 sqft  
                   Gym Addition 11273 sqft  
                   Music/Café Addition 17083 sqft  
                   Renovation 78743 sqft  
                   122258 sqft

CSI BREAKDOWN

|          | SYSTEM/ASSEMBLY                | Estimate - Classroom Addition<br>9/12/2011 | Per Sq Ft<br>\$/sq ft | Estimate - Gym Addition<br>9/12/2011 | Per Sq Ft<br>\$/sq ft | Estimate - Music/Café Addition<br>9/12/2011 | Per Sq Ft<br>\$/sq ft | Estimate - Renovation<br>9/12/2011 | Per Sq Ft<br>\$/sq ft | Estimate - Total<br>9/12/2011 | Per Sq Ft<br>\$/sq ft |                |
|----------|--------------------------------|--|-----------------------|--------------------------------------|-----------------------|---|-----------------------|------------------------------------|-----------------------|-------------------------------|-----------------------|----------------|
| Div 1    | GENERAL CONDITIONS             | \$137,923                                  | \$9.70                | \$162,306                            | \$14.40               | \$230,308                                   | \$13.50               | \$376,929                          | \$4.78                | \$256,222                     | \$1,166,268           | \$9.54         |
| Div 2B   | SITWORK                        | \$14,443                                   | \$1.02                | \$36,637                             | \$3.25                | \$66,465                                    | \$3.25                | \$0                                | \$0.00                | \$1,630,166                   | \$1,935,701           | \$16.64        |
| Div 2D   | DEMOLITION                     | \$5,000                                    | \$0.35                | \$5,000                              | \$0.44                | \$5,000                                     | \$0.29                | \$260,462                          | \$3.27                | \$0                           | \$275,462             | \$2.25         |
| Div 3    | CONCRETE                       | \$181,444                                  | \$12.80               | \$144,388                            | \$12.81               | \$202,688                                   | \$11.67               | \$44,038                           | \$0.56                | \$0                           | \$872,486             | \$4.68         |
| Div 4    | MASONRY                        | \$276,087                                  | \$19.47               | \$502,796                            | \$44.80               | \$324,841                                   | \$18.04               | \$484,311                          | \$6.82                | \$0                           | \$1,668,036           | \$12.83        |
| Div 5    | METALS                         | \$20,500                                   | \$1.46                | \$172,755                            | \$15.22               | \$172,143                                   | \$10.59               | \$39,969                           | \$0.50                | \$0                           | \$405,367             | \$3.32         |
| Div 6    | WOODS & PLASTICS               | \$90,636                                   | \$6.39                | \$1,080                              | \$0.09                | \$5,800                                     | \$0.34                | \$247,265                          | \$3.10                | \$0                           | \$344,770             | \$3.52         |
| Div 7    | THERMAL & MOISTURE PROTECTION  | \$316,260                                  | \$22.30               | \$410,032                            | \$36.37               | \$478,953                                   | \$25.07               | \$711,106                          | \$8.92                | \$0                           | \$1,816,371           | \$15.67        |
| Div 8    | DOORS & WINDOWS/GLASS          | \$183,321                                  | \$12.83               | \$67,693                             | \$6.00                | \$197,260                                   | \$11.58               | \$389,302                          | \$5.01                | \$0                           | \$847,596             | \$6.93         |
| Div 9    | FINISHES                       | \$268,096                                  | \$19.40               | \$179,610                            | \$16.80               | \$283,186                                   | \$16.42               | \$1,485,159                        | \$18.82               | \$0                           | \$2,166,063           | \$17.86        |
| Div 10   | SPECIALTIES                    | \$16,902                                   | \$1.19                | \$14,300                             | \$1.27                | \$23,671                                    | \$1.36                | \$136,933                          | \$1.70                | \$0                           | \$180,706             | \$1.50         |
| Div 11   | EQUIPMENT                      | \$0  | \$0.00                | \$89,255                             | \$7.92                | \$675,000                                   | \$33.70               | \$0                                | \$0.00                | \$0                           | \$864,255             | \$7.43         |
| Div 12   | FURNISHINGS                    | \$13,428                                   | \$0.95                | \$0                                  | \$0.00                | \$4,644                                     | \$0.27                | \$112,640                          | \$1.42                | \$0                           | \$130,912             | \$1.07         |
| Div 13   | SPECIAL CONSTRUCTION           | \$0  | \$0.00                | \$0                                  | \$0.00                | \$0   | \$0.00                | \$0                                | \$0.00                | \$0                           | \$0                   | \$0.00         |
| Div 14   | CONVEYING SYSTEMS              | \$0  | \$0.00                | \$0                                  | \$0.00                | \$0   | \$0.00                | \$0                                | \$0.00                | \$0                           | \$0                   | \$0.00         |
| Div 15FP | FIRE PROTECTION                | \$0  | \$0.00                | \$32,692                             | \$2.80                | \$49,483                                    | \$2.80                | \$0                                | \$0.00                | \$0                           | \$82,175              | \$0.67         |
| Div 16P  | PLUMBING                       | \$123,973                                  | \$8.74                | \$95,556                             | \$8.74                | \$146,178                                   | \$8.74                | \$682,996                          | \$7.31                | \$0                           | \$864,707             | \$7.51         |
| Div 16H  | HVAC                           | \$433,436                                  | \$30.57               | \$295,454                            | \$26.21               | \$472,600                                   | \$27.71               | \$2,065,489                        | \$26.60               | \$0                           | \$3,267,291           | \$26.72        |
| Div 16   | ELECTRICAL                     | \$211,623                                  | \$14.94               | \$206,030                            | \$18.46               | \$366,876                                   | \$21.50               | \$1,766,293                        | \$22.40               | \$101,604                     | \$2,674,826           | \$21.86        |
|          | <b>SUBTOTAL COST</b>           | <b>\$2,292,896</b>                         | <b>\$18.00</b>        | <b>\$2,420,566</b>                   | <b>\$21.47</b>        | <b>\$3,677,220</b>                          | <b>\$20.80</b>        | <b>\$6,715,123</b>                 | <b>\$10.92</b>        | <b>\$2,167,962</b>            | <b>\$18,769,734</b>   | <b>\$15.69</b> |
|          | Design Contingency 10.00%      | \$228,280                                  | \$18.10               | \$242,066                            | \$21.47               | \$367,723                                   | \$20.96               | \$671,513                          | \$10.93               | \$218,769                     | \$1,916,379           | \$15.69        |
|          | <b>TOTAL CONSTRUCTION COST</b> | <b>\$2,521,176</b>                         | <b>\$17.77</b>        | <b>\$2,662,632</b>                   | <b>\$23.61</b>        | <b>\$4,044,943</b>                          | <b>\$23.00</b>        | <b>\$7,386,636</b>                 | <b>\$12.20</b>        | <b>\$2,406,731</b>            | <b>\$21,102,173</b>   | <b>\$17.29</b> |

RCSD Modernization

9/16/2011 11:17 AM

RCSD Modernization  
RCSD Estimate

**Project name** RCSD Modernization  
Rochester  
NY

**Labor rate table** MONROE10

**Bld date** 9/16/2011 5:00 PM

**Report format** Sorted by 'Location/CSI Div/Group phase/Phase'  
'Detail' summary

| Item                 | Description                                   | Takeoff Qty | Unit Cost  | Total      | Amount  |
|----------------------|---|-------------|------------|------------|---------|
| <b>Classroom Add</b> |   |             |            |            |         |
|                      | 01  |             |            |            |         |
| 1000.000             | <b>GENERAL REQUIREMENTS</b>                   |             |            |            |         |
| 1000.100             | <i>Division 1 Subcontractors</i>              |             |            |            |         |
| 10                   | GC Gen Conditions 8%                          | 1.00        | /sum       | 82,514.00  | 82,514  |
| 10                   | GC Fee 4%                                     | 1.00        | /sum       | 55,009.00  | 55,009  |
|                      | <i>Division 1 Subcontractors</i>              |             |            |            | 137,523 |
|                      | <b>GENERAL REQUIREMENTS</b>                   |             |            |            |         |
|                      | 01  |             | 9.70 /sqft |            | 137,523 |
|                      | 14,180.00                                     | sqft        |            |            |         |
|                      | 03  |             |            |            |         |
| 3000.000             | <b>CONCRETE</b>                               |             |            |            |         |
| 3310.120             | <i>Cassions</i>                               |             |            |            |         |
| c 30                 | Cassions 20" Dia x 15' D Conc 3000 psi        | 48.00       | cy         | 550.00 /cy | 26,400  |
|                      | <i>Cassions</i>                               |             |            |            | 26,400  |
|                      | 72.00   | Labor hours |            |            |         |
| 3310.210             | <i>Conc: Slabs On Grade</i>                   |             |            |            |         |
| c 40                 | Note 4 5" S.O.G. Conc                         | 4,444.00    | sf         | 5.00 /sf   | 22,220  |
|                      | <i>Conc: Slabs On Grade</i>                   |             |            |            | 22,220  |
| 3310.320             | <i>Conc: Fill Pan Stairs</i>                  |             |            |            |         |
| c 30                 | Fill Pan Stairs 3000 psi                      | 110.00      | sqft       | 4.50 /sqft | 495     |
|                      | <i>Conc: Fill Pan Stairs</i>                  |             |            |            | 495     |
|                      | 247.501                                       | Labor hours |            |            |         |
| 3310.360             | <i>Conc: Grade Beams</i>                      |             |            |            |         |
| c 30                 | Grade Beam Conc 3000 psi                      | 63.00       | cy         | 350.00 /cy | 22,050  |
|                      | <i>Conc: Grade Beams</i>                      |             |            |            | 22,050  |
|                      | 31.50   | Labor hours |            |            |         |
| 3310.450             | <i>Conc: Topping</i>                          |             |            |            |         |
| c 30                 | Note 9 2" Topping Conc Over Precast Plank     | 4,234.00    | sqft       | 4.00 /sqft | 16,936  |
|                      | <i>Conc: Topping</i>                          |             |            |            | 16,936  |
|                      | 1,270.201                                     | Labor hours |            |            |         |
| 3400.100             | <i>Precast Concrete</i>                       |             |            |            |         |
| 80                   | Note 10 10" Concrete Precast Roof Deck (sqft) | 2,844.00    | sf         | 14.42 /sf  | 41,010  |
| 80                   | Note 9 8" Concrete Precast Floor Deck (sqft)  | 4,234.00    | sf         | 12.36 /sf  | 52,332  |
|                      | <i>Precast Concrete</i>                       |             |            |            | 93,343  |
|                      | 353.90  | Labor hours |            |            |         |

| Item     | Description                              | Takeoff Qty   | Unit Cost   | Amount       |
|----------|--|---------------|-------------|--------------|
|          |  |               |             | <b>Total</b> |
|          | CONCRETE                                 |               |             | 181,444      |
|          | 1,975.102 Labor hours                    |               |             |              |
|          | 03                                       |               | 12.60 /sqft | 181,444      |
|          | 14,180.00 sqft                           |               |             |              |
|          | 1,975.102 Labor hours                    |               |             |              |
|          | 04                                       |               |             |              |
| <hr/>    |  |               |             |              |
| 4000.000 | MASONRY                                  |               |             |              |
| <hr/>    |  |               |             |              |
| 4210.100 | Brick: All Types                         |               |             |              |
| 10       | Note 11 Brick Veneer Type 1              | 926.00 sqft   | 28.00 /sqft | 25,928       |
| 10       | Note 12 Brick Veneer Type 2              | 2,387.00 sqft | 28.00 /sqft | 66,836       |
|          | Brick: All Types                         |               |             | 92,764       |
| 4220.100 | Conc. Block 10"                          |               |             |              |
| lw 1     | Note 11 Blk 12" CMU Back-up              | 926.00 sqft   | 20.00 /sqft | 18,520       |
| lw 1     | Note 11 Blk 12" CMU Back-up              | 2,387.00 sqft | 20.00 /sqft | 47,740       |
| lw 1     | Note 8 Blk 12" CMU Back-up @ cast Stone  | 1,078.00 sqft | 20.00 /sqft | 21,560       |
| lw 1     | Note 22 Blk 12" CMU Back-up @ cast Stone | 207.00 sqft   | 20.00 /sqft | 4,140        |
|          | Water Table                              |               |             |              |
| lw 1     | Blk 12" CMU Interior Wall                | 1,812.00 sqft | 20.00 /sqft | 32,240       |
|          | Conc. Block 10"                          |               |             | 124,200      |
|          | 538.200 Labor hours                      |               |             |              |
| 4220.110 | Conc. Block: 8"                          |               |             |              |
| rw 1     | 8" CMU Interior Wall                     | 626.00 sqft   | 16.00 /sqft | 10,048       |
|          | Conc. Block: 8"                          |               |             | 10,048       |
| 4220.130 | Conc. Block: 4"                          |               |             |              |
| rw 1     | Blk 4" CMU Interior                      | 182.00 sqft   | 12.00 /sqft | 2,184        |
|          | Conc. Block: 4"                          |               |             | 2,184        |
|          | 18.20 Labor hours                        |               |             |              |
| 4440.400 | Stone Misc.                              |               |             |              |
| 10       | Note 22 Cast Stone Water Table           | 104.00 lf     | 114.00 /lf  | 11,856       |
| 10       | Note 8 Cast Stone Band                   | 539.00 lf     | 65.00 /lf   | 35,035       |
|          | Stone Misc.                              |               |             | 46,891       |
|          | 214.333 Labor hours                      |               |             |              |
|          |  |               |             | 276,087      |
|          | MASONRY                                  |               |             |              |
|          | 770.733 Labor hours                      |               |             |              |
|          | 04                                       |               | 19.47 /sqft | 276,087      |
|          | 14,180.00 sqft                           |               |             |              |
|          | 770.733 Labor hours                      |               |             |              |
|          | 05                                       |               |             |              |
| <hr/>    |  |               |             |              |
| 5000.000 | METALS                                   |               |             |              |
| <hr/>    |  |               |             |              |
| 5120.010 | Structural: Framing                      |               |             |              |

| Item          | Description   | Takeoff Qty           | Unit Cost       | Amount                 |
|---------------|---|-----------------------|-----------------|------------------------|
| 5120.010      | <i>Structural: Framing</i><br>40 Note 25 Entry Canopy Steel Structural Framing<br>(ton) @ 25 lbs / sf<br><i>Structural: Framing</i><br>52.503 Labor hours | 1.50 ton              | 4,000.00 /ton   | 6,000<br><hr/> 6,000   |
| 5210.010      | <i>Structural: Joist K</i><br>Bar Joist<br><i>Structural: Joist K</i>   | 120.00 sqft           | 10.00 /sqft     | 1,200<br><hr/> 1,200   |
| 5310.010      | <i>Structural: Steel Deck</i><br>20 Metal Roof Deck<br><i>Structural: Steel Deck</i>  | 120.00 sf             | 2.50 /sf        | 300<br><hr/> 300       |
| 5505.010      | <i>Misc: Misc Metals</i><br>10 Misc Metals<br><i>Misc: Misc Metals</i><br>1.00 Labor hours  | 1.00 Allo             | 2,500.00 /Allo  | 2,500<br><hr/> 2,500   |
| 5510.110      | <i>Stairs: Stair Parts</i><br>10 Metal Pan Stairs & Railings<br><i>Stairs: Stair Parts</i><br>20.00 Labor hours   | 1.00 fits             | 10,500.00 /fits | 10,500<br><hr/> 10,500 |
| <b>METALS</b> |   |                       |                 | 20,500                 |
|               |   | 73.503 Labor hours    |                 |                        |
|               |   |                       | <b>05</b>       | <b>1.45 /sqft</b>      |
|               |   | <b>14,180.00 sqft</b> |                 |                        |
|               |   | 73.503 Labor hours    |                 |                        |
|               |   |                       | <b>05</b>       |                        |

6000.000 WOOD & PLASTICS

|                            |   |   |  |  |
|----------------------------|---|---|--|--|
| 6117.020                   | <i>Blocking: Misc.</i><br>Roof Blocking<br><i>Blocking: Misc.</i>   | 391.00 lnft   | 5.00 /lnft   | 1,955<br><hr/> 1,955   |
| 6410.010                   | <i>Arch Wd Wrk: Cabinets</i><br>10 Birch Base Cabinet W/ Lockable Doors @<br>Classroom<br>10 Wall Cabinet W/ Lockable Doors @ Classroom<br>101 Solid Surface Countertops @ Classroom<br>130 Cubbies (30) ea / Classroom (10 lf / Classroom)<br>130 Storage Units 24" x 3'-6" x 8' High W/ 7<br>Adjustable Shelves Lockable Doors<br>130 Storage Units 12" x 3'-6" x 8' High W/ 7<br>Adjustable Shelves Lockable Doors<br><i>Arch Wd Wrk: Cabinets</i><br>168.00 Labor hours | 84.00 lf<br>84.00 lf<br>84.00 lf<br>120.00 lf<br>24.00 ea<br>24.00 ea | 345.00 /lf<br>200.00 /lf<br>75.00 /lf<br>65.00 /lf<br>750.00 /ea<br>450.00 /ea | 28,980<br>16,800<br>6,300<br>7,800<br>18,000<br>10,800<br><hr/> 88,680 |
| <b>WOOD &amp; PLASTICS</b> |   |   |  | 90,635   |
|                            |   | 168.00 Labor hours  |  |  |

| Item     | Description                       | Takeoff Qty    | Unit Cost      | Total       | Amount  |
|----------|-----------------------------------|----------------|----------------|-------------|---------|
|          |                                   |                |                | 6,392/sqft  | 90,635  |
|          | 08                                |                |                |             |         |
|          | 14,180.00 sqft                    |                |                |             |         |
|          | 168.00 Labor hours                |                |                |             |         |
|          | 07                                |                |                |             |         |
| 7000.000 | THERMAL & MOISTURE PROT           |                |                |             |         |
| 7111.010 | Dampproofing: Vaprbarrer          |                |                |             |         |
| 20       | Poly Vapor Barrier @ SOG          | 4,444.00 sf    | 0.75 /sf       |             | 3,333   |
| 30       | Vapor Barrier @ Exterior Wall     | 4,598.00 sf    | 2.50 /sf       |             | 11,495  |
|          | Dampproofing: Vaprbarrer          |                |                |             | 14,828  |
|          | 8.68 Labor hours                  |                |                |             |         |
| 7210.040 | Insulation: Board                 |                |                |             |         |
| 70       | Expanded Polystyrene 2"           | 4,598.00 sf    | 1.85 /sf       |             | 8,506   |
|          | Insulation: Board                 |                |                |             | 8,506   |
|          | 91.96 Labor hours                 |                |                |             |         |
| 7410.010 | Metal Wall Panels                 |                |                |             |         |
| 150      | Note 1 Metal Roofing              | 358.00 sf      | 22.00 /sf      |             | 7,876   |
| 340      | Note 24 Soffit Panel Kynar Coated | 29.00 lf       | 22.00 /lf      |             | 638     |
|          | Metal Wall Panels                 |                |                |             | 8,514   |
|          | 3,580.00 Labor hours              |                |                |             |         |
| 7510.030 | Membrane: BUR Bitumen             |                |                |             |         |
| 120      | Note 2 4 Ply Bur Foot System      | 11,643.00 sqft | 24.00 /sqft    |             | 279,432 |
|          | Membrane: BUR Bitumen             |                |                |             | 279,432 |
| 7840.000 | Firestopping                      |                |                |             |         |
| ---      | Firestopping                      | 1.00 Allo      | 2,500.00 /Allo |             | 2,500   |
|          | Firestopping                      |                |                |             | 2,500   |
| 7920.010 | Sealant - Jt Filler Gaskt         |                |                |             |         |
| ---      | Joint Sealants                    | 1.00 Allo      | 2,500.00 /Allo |             | 2,500   |
|          | Sealant - Jt Filler Gaskt         |                |                |             | 2,500   |
|          | THERMAL & MOISTURE PROT           |                |                |             | 316,280 |
|          | 3,680.64 Labor hours              |                |                |             |         |
|          | 07                                |                |                | 22.31 /sqft | 316,280 |
|          | 14,180.00 sqft                    |                |                |             |         |
|          | 3,680.64 Labor hours              |                |                |             |         |
|          | 08                                |                |                |             |         |
| 8000.000 | DOORS & WINDOWS                   |                |                |             |         |
| 8100.000 | Doors: Metal With Frames          |                |                |             |         |
| 20       | New HM Frame (Single)             | 17.00 ea       | 204.782 /ea    |             | 3,481   |
| 20       | New HM Frame (Double)             | 3.00 ea        | 279.783 /ea    |             | 839     |



| Item     | Description   | Takeoff Qty | Unit Cost    | Amount  |
|----------|---|-------------|--------------|---------|
|          | <i>Doors: Metal With Frames</i>                           |             |              | 4,321   |
|          | 40.00 Labor hours   |             |              |         |
| 8210.010 | <i>Doors: Wood</i>  |             |              | 2,339   |
| b228     | 6'-0" x 7'-10" @ Corridor                                 | 3.00 ea     | 779.783 /ea  | 7,306   |
| b228     | 3'-0" x 7'-10" @ Corridor                                 | 17.00 ea    | 429.782 /ea  | 9,646   |
|          | <i>Doors: Wood</i>  |             |              |         |
|          | 40.00 Labor hours   |             |              |         |
| 8400.000 | <i>Metal-Framed Storefronts</i>                           |             |              | 13,740  |
| 10       | Note 5 Fixted Storefronts System Dual Pane Tempered Glass | 229.00 sf   | 60.00 /sf    | 49,000  |
| 60       | Aluminum Entrance Doors                                   | 14.00 ea    | 3,500.00 /ea | 62,740  |
|          | <i>Metal-Framed Storefronts</i>                           |             |              |         |
| 8510.010 | <i>Windows: Metal</i>                                     |             |              | 72,735  |
| 20       | Note 21 Aluminum Double Hung Windows Kynar Coated         | 1,119.00 sf | 65.00 /sf    | 72,735  |
|          | <i>Windows: Metal</i>                                     |             |              |         |
| 8700.000 | <i>Hardware: Finishing</i>                                |             |              | 11,810  |
| 10       | Finishing Hardware  | 23.00 ea    | 504.782 /ea  | 11,810  |
|          | <i>Hardware: Finishing</i>                                |             |              |         |
|          | 23.00 Labor hours   |             |              |         |
| 8900.010 | <i>Glazed Curtain Walls</i>                               |             |              | 22,270  |
| 10       | Note 1 Metal Framed Curtain Wall W Double Hung Windows    | 262.00 sf   | 85.00 /sf    | 22,270  |
|          | <i>Glazed Curtain Walls</i>                               |             |              |         |
|          | <b>DOORS &amp; WINDOWS</b>                                |             |              | 183,321 |
|          | 103.00 Labor hours  |             |              |         |
| 08       |   |             | 12.93 /sqft  | 183,321 |
|          | 14,180.00 sqft  |             |              |         |
|          | 103.00 Labor hours  |             |              |         |
| 09       |   |             |              |         |

9000.000 FINISHES

|          |                                |             |           |        |
|----------|--------------------------------|-------------|-----------|--------|
| 9134.010 | <i>GWB: WALL BOARD SYSTEMS</i> |             |           | 29,550 |
| 30       | GWB Cieling/Soffit             | 2,955.00 sf | 10.00 /sf | 17,024 |
| 30       | Paint GWB                      | 2,128.00 sf | 8.00 /sf  | 46,574 |
|          | <i>GWB: WALL BOARD SYSTEMS</i> |             |           |        |
| 9310.020 | <i>Tile: Mosaics</i>           |             |           | 11,032 |
| 20       | Ceramic Tile Walls             | 788.00 sf   | 14.00 /sf | 2,400  |
| 20       | Ceramic Floor Tile             | 200.00 sf   | 12.00 /sf | 38,850 |
| 20       | Porcelain Tile Walls           | 2,775.00 sf | 14.00 /sf | 62,282 |
|          | <i>Tile: Mosaics</i>           |             |           |        |
| 9400.000 | <i>Terrazzo</i>                |             |           | 69,618 |
| 10       | Precast Terrazzo               | 3,312.00 sf | 18.00 /sf | 18,250 |
| 11       | Terrazzo Cove Base             | 730.00 lf   | 25.00 /lf |        |

| Item     | Description  | Takeoff Qty   | Unit Cost                                    | Total                         |         |
|----------|--|---|--|-------------------------------|---------|
|          |  |   |  | Amount                        |         |
|          | <i>Terrazzo</i>  |   |  |                               | 77,866  |
| 9511.050 | <i>Ceiling: 2x4 Tile</i><br>10 ACT-1 2x2 Ceiling<br><i>Ceiling: 2x4 Tile</i>   | 8,334.00 sf   | 3.50 /sf                                     | 29,169                        | 29,169  |
| 9650.010 | <i>Flooring Resilient</i><br>10 Marmoleum Composition Tile<br>10 Rubber Floor Tile<br>40 Rubber Base<br><i>Flooring Resilient</i>                              | 7,970.00 sf<br>434.00 sf<br>1,432.00 lf               | 3.50 /sf<br>3.50 /sf<br>2.20 /lf             | 27,895<br>1,519<br>3,150      | 32,564  |
| 9670.010 | <i>Flooring Epoxy</i><br>10 Sealed Concrete<br><i>Flooring Epoxy</i>   | 460.00 sf   | 2.00 /sf                                     | 920                           | 920     |
| 9680.010 | <i>Flooring Carpet</i><br>6 Carpet Tile<br><i>Flooring Carpet</i>  | 9.33 sy   | 35.00 /sy                                    | 327                           | 327     |
| 9910.020 | <i>Painting: Int Detailed</i><br>5 Epoxy Paint CMU Block<br>5 Paint CMU Block<br>5 Paint Bare Ceiling<br>5 Paint GWS Partiton<br><i>Painting: Int Detailed</i> | 542.00 sf<br>13,138.00 sf<br>460.00 sf<br>4,256.00 sf | 1.00 /sf<br>1.00 /sf<br>1.00 /sf<br>1.00 /sf | 542<br>13,138<br>460<br>4,256 | 18,396  |
|          | <b>FINISHES</b>  |   |  |                               | 258,098 |
|          | 09   |   | 18.202/sqft                                  |                               | 258,098 |
|          | 14,180.00 sqft   |   |  |                               |         |
|          | 10   |   |  |                               |         |

10000.000 SPECIALTIES

|           |  |          |              |        |        |
|-----------|--|----------|--------------|--------|--------|
| 10100.010 | <i>Visual Display Boards</i><br>80 6' x 4' White Board @ Classroom<br><i>Visual Display Boards</i> | 12.00 ea | 1,000.00 /ea | 12,000 | 12,000 |
| 10430.010 | <i>Signs and Letters</i><br>30 Note 26 Exterior Dimensional Letters<br><i>Signs and Letters</i>    | 19.00 ea | 50.00 /ea    | 950    | 950    |
|           | <b>SPECIALTIES</b>   |          |              |        | 12,950 |

12000.000 FURNISHINGS

|           |  |             |            |       |       |
|-----------|--|-------------|------------|-------|-------|
| 12000.010 | <i>Floor Mats</i><br>10 Entrance Mats<br><i>Floor Mats</i> | 416.00 sqft | 9.50 /sqft | 3,952 | 3,952 |
|           | <b>FURNISHINGS</b>   |             |            |       | 3,952 |

| Item      | Description  | Takeoff Qty    | Unit Cost    | Total      | Amount |
|-----------|--|----------------|--------------|------------|--------|
|           | 10   |                |              | 1.192/sqft | 16,902 |
|           | 14,180.00 sqft                                     |                |              |            |        |
|           | 12   |                |              |            |        |
| 12000.000 | FURNISHINGS  |                |              |            |        |
| 12490.010 | Window Treatments                                  |                |              |            |        |
| 20        | Louver Blinds                                      | 1,119.00 sqft  | 12.00 /sqft  |            | 13,428 |
|           | Window Treatments                                  |                |              |            | 13,428 |
|           | FURNISHINGS  |                |              |            | 13,428 |
|           | 12   |                |              | 0.95 /sqft | 13,428 |
|           | 14,180.00 sqft                                     |                |              |            |        |
|           | 16   |                |              |            |        |
| 16010.000 | GENERAL CONDITIONS                                 |                |              |            |        |
| 16010.050 | INSURANCE & BONDS                                  |                |              |            |        |
| n         | 55 Bond, Subcontractor, avg. \$10.00 per \$1000    | 209.00 k       | 10.00 /k     |            | 2,090  |
|           | INSURANCE & BONDS                                  |                |              |            | 2,090  |
| 16010.060 | MOBILIZE/DEMOBILIZE                                |                |              |            |        |
| n         | 15 Average cost, mob-demob, large project > \$500k | 1.00 ls        | 5,000.00 /ls |            | 5,000  |
|           | MOBILIZE/DEMOBILIZE                                |                |              |            | 5,000  |
| 16010.190 | TEMPORARY UTILITIES                                |                |              |            |        |
| n         | 37 Allow, panelboards for temp power to 225A       | 1.00 ea        | 1,250.00 /ea |            | 1,250  |
| n         | 50 Allow, Temp.Power & Lights                      | 14,180.00 sqft | 0.25 /sqft   |            | 3,545  |
|           | TEMPORARY UTILITIES                                |                |              |            | 4,795  |
|           | GENERAL CONDITIONS                                 |                |              |            | 11,885 |
| 16050.000 | BASIC MATERIALS & METHODS                          |                |              |            |        |
| 16080.810 | Lightning Protection                               |                |              |            |        |
| 5         | Lightning Protection                               | 14,180.00 sqft | 0.25 /sqft   |            | 3,545  |
|           | Lightning Protection                               |                |              |            | 3,545  |
|           | BASIC MATERIALS & METHODS                          |                |              |            | 3,545  |
| 16130.000 | RACEWAY, FITTINGS & BOXES                          |                |              |            |        |
| 16132.156 | FEEDER CONDUIT/WIRE                                |                |              |            |        |
| 17        | HVAC Equipment Power                               | 14,180.00 sqft | 1.50 /sqft   |            | 21,270 |

| Item      | Description                               | Takeoff Qty | Unit Cost | Total       | Amount  |
|-----------|---|-------------|-----------|-------------|---------|
|           | <i>FEEDER CONDUIT/WIRE</i>                |             |           |             | 21,270  |
|           | <i>RACEWAY, FITTINGS &amp; BOXES</i>      |             |           |             | 21,270  |
| 16140.000 | <i>WIRING DEVICES</i>                     |             |           |             |         |
| 16140.150 | <i>RECEPTACLES, BLADE TYPE</i>            |             |           |             | 14,180  |
| n         | 5 Conduit and Wire for Electrical Power   | 14,180.00   | sqft      | 1.00 /sqft  | 26,233  |
| n         | 5 Receptacles                             | 14,180.00   | sqft      | 1.85 /sqft  | 40,413  |
|           | <i>RECEPTACLES, BLADE TYPE</i>            |             |           |             |         |
|           | 54,892.28 Labor hours                     |             |           |             | 40,413  |
|           | <i>WIRING DEVICES</i>                     |             |           |             |         |
|           | 54,892.28 Labor hours                     |             |           |             |         |
| 16510.000 | <i>LIGHTING</i>                           |             |           |             |         |
| 16510.440 | <i>Flourescent Fixtures</i>               |             |           |             | 83,810  |
| ---       | Lighting                                  | 14,180.00   | sqft      | 4.50 /sqft  | 14,180  |
| ---       | Emergency Lighting                        | 14,180.00   | sqft      | 1.00 /sqft  | 7,090   |
| ---       | Lighting Control System                   | 14,180.00   | sqft      | 0.50 /sqft  | 85,080  |
|           | <i>Flourescent Fixtures</i>               |             |           |             | 85,080  |
| 16700.000 | <i>SPECIAL SYSTEMS</i>                    |             |           |             |         |
| 16720.310 | <i>FIRE ALARM SYSTEM</i>                  |             |           |             | 35,450  |
| n         | 495 Fire Alarm System                     | 14,180.00   | sqft      | 2.50 /sqft  | 35,450  |
|           | <i>FIRE ALARM SYSTEM</i>                  |             |           |             |         |
| 16720.320 | <i>Security System</i>                    |             |           |             | 2,127   |
| n         | 5 Security System Access Control Conduits | 14,180.00   | sqft      | 0.15 /sqft  | 1,418   |
| n         | 45 CCTV System Conduits                   | 14,180.00   | sqft      | 0.10 /sqft  | 3,545   |
|           | <i>Security System</i>                    |             |           |             |         |
|           | 95,715.000 Labor hours                    |             |           |             |         |
| 16720.330 | <i>Clock/Program System</i>               |             |           |             | 3,545   |
| n         | 5 Clock System                            | 14,180.00   | sqft      | 0.25 /sqft  | 3,545   |
|           | <i>Clock/Program System</i>               |             |           |             |         |
|           | 8,508.000 Labor hours                     |             |           |             |         |
| 16720.340 | <i>SOUND/PAGING SYSTEM</i>                |             |           |             | 3,545   |
| n         | 5 PA System                               | 14,180.00   | sqft      | 0.25 /sqft  | 3,545   |
|           | <i>SOUND/PAGING SYSTEM</i>                |             |           |             |         |
| 16720.420 | <i>TELE/DATA SYSTEM</i>                   |             |           |             | 3,545   |
| n         | 5 Tele/Data/CATV Conduits                 | 14,180.00   | sqft      | 0.25 /sqft  | 3,545   |
|           | <i>TELE/DATA SYSTEM</i>                   |             |           |             |         |
|           | <i>SPECIAL SYSTEMS</i>                    |             |           |             | 49,630  |
|           | 104,223.000 Labor hours                   |             |           |             |         |
| 16        |   |             |           | 14.94 /sqft | 211,823 |

14,180.00 sqft  
158,915.260 Labor hours

| Item       | Description  | Takeoff Qty | Unit Cost           | Amount  |
|------------|--|-------------|---------------------|---------|
|            |  |             | <b>Total</b>        |         |
|            | 18   |             | 14.84 /sqft         | 211,823 |
|            | 14,180.00 sqft                                       |             |                     |         |
|            | 158,915.260 Labor hours                              |             |                     |         |
| <b>02D</b> |  |             |                     |         |
| 1730.000   | DEMOLITION   |             |                     |         |
| 1739.040   | Demo: Finishes, Walls                                |             |                     |         |
| n          | 30 Demo for Addition Tie-In                          | 1.00        | Alto 5,000.00 /Alto | 5,000   |
|            | Demo: Finishes, Walls                                |             |                     | 5,000   |
|            | 0.10 Labor hours                                     |             |                     |         |
|            | DEMOLITION   |             |                     | 5,000   |
|            | 0.10 Labor hours                                     |             |                     |         |
|            | 02D  |             | 0.353/sqft          | 5,000   |
|            | 14,180.00 sqft                                       |             |                     |         |
|            | 0.10 Labor hours                                     |             |                     |         |
| <b>02B</b> |  |             |                     |         |
| 2300.000   | EARTHWORK  |             |                     |         |
| 2317.105   | Building Excavation                                  |             |                     |         |
|            | Building Earthwork - Excav, Backfill & Subbase       | 4,444.00    | sqft 3.25 /sqft     | 14,443  |
|            | Addition   |             |                     | 14,443  |
|            | Building Excavation                                  |             |                     | 14,443  |
|            | EARTHWORK  |             |                     | 14,443  |
|            | 02B  |             | 1.02 /sqft          | 14,443  |
|            | 14,180.00 sqft                                       |             |                     |         |
| <b>15H</b> |  |             |                     |         |
| 15500.000  | HVAC   |             |                     |         |
| 15500.100  | HVAC GENERAL   |             |                     |         |
|            | 0002 Bonds and Insurances                            | 400,480.00  | lsum 0.02 /lsum     | 8,010   |
|            | 0003 Genral Conditions                               | 400,480.00  | lsum 0.08 /lsum     | 32,038  |
|            | HVAC GENERAL   |             |                     | 40,048  |
| 15617.000  | Terminal Heat/Cool Units                             |             |                     |         |
|            | 7200 Cabinet Heaters, FT radiation, Hydronic Heating | 14,180.00   | sqft 0.85 /sqft     | 12,053  |
|            | Terminal   |             |                     |         |

| Item      | Description                                    | Takeoff Qty    | Unit Cost   | Total Amount |
|-----------|--|----------------|-------------|--------------|
|           | <i>Terminal Heat/Cool Units</i>                |                |             | 12,053       |
| 15618.000 | <i>Floor Heat/Snow Melt Eq.</i>                |                |             |              |
| 1100      | Radiant Slab Heating                           | 4,144.00 sqft  | 18.00 /sqft | 78,738       |
|           | <i>Floor Heat/Snow Melt Eq.</i>                |                |             | 78,738       |
|           | 66.304 Labor hours                             |                |             |              |
| 15650.000 | <i>Air Handling Units</i>                      |                |             |              |
| 1130      | VAV AHU Systems                                | 14,180.00 each | 7.50 /each  | 106,350      |
|           | <i>Air Handling Units</i>                      |                |             | 106,350      |
|           | 340,320.000 Labor hours                        |                |             |              |
| 15730.000 | <i>Heating Water Piping</i>                    |                |             |              |
| 1103      | Heating Water Branch Piping                    | 14,180.00 sqft | 1.20 /sqft  | 17,016       |
| 1106      | Heating Water Mains Piping                     | 14,180.00 sqft | 1.20 /sqft  | 17,016       |
|           | <i>Heating Water Piping</i>                    |                |             | 34,032       |
| 15830.000 | <i>Fans</i>                                    |                |             |              |
| 2001      | Exhaust Fan Systems, duct and louver           | 14,180.00 sqft | 4.94 /sqft  | 70,049       |
|           | <i>Fans</i>                                    |                |             | 70,049       |
| 15940.000 | <i>Air Terminal Units</i>                      |                |             |              |
| 4001      | VAV Variable Air Volume HW Reheat, No Controls | 14,180.00 sqft | 2.50 /sqft  | 35,450       |
|           | <i>Air Terminal Units</i>                      |                |             | 35,450       |
| 15940.000 | <i>HVAC Inst. and Controls</i>                 |                |             |              |
| 1610      | HVAC Controls                                  | 14,180.00 sqft | 4.00 /sqft  | 56,720       |
|           | <i>HVAC Inst. and Controls</i>                 |                |             | 56,720       |
|           | <i>HVAC</i>                                    |                |             | 433,438      |
|           | 340,386.304 Labor hours                        |                |             |              |
|           | 16H  |                | 30.67 /sqft | 433,438      |
|           | 14,180.00 sqft                                 |                |             |              |
|           | 340,386.304 Labor hours                        |                |             |              |

16P

| Item      | Description                     | Takeoff Qty     | Unit Cost  | Total Amount |
|-----------|---------------------------------|-----------------|------------|--------------|
| 15200.000 | <b>PLUMBING</b>                 |                 |            |              |
| 15200.100 | <i>PLUMBING GENERAL</i>         |                 |            |              |
| GC01      | Bonds and Insurances            | 112,703.00 lsum | 0.02 /lsum | 2,254        |
| GC02      | General Conditions              | 112,703.00 lsum | 0.08 /lsum | 9,016        |
|           | <i>PLUMBING GENERAL</i>         |                 |            | 11,270       |
| 15310.000 | <i>Domestic Water Piping</i>    |                 |            |              |
| 1105      | Domestic Water Piping           | 14,180.00 sqft  | 1.75 /sqft | 24,815       |
|           | <i>Domestic Water Piping</i>    |                 |            | 24,815       |
| 15320.000 | <i>Sanitary Waste/Vent Ppg.</i> |                 |            |              |
| 5708      | Sanitary Drain Piping           | 14,180.00 sqft  | 1.50 /sqft | 21,270       |
|           | <i>Sanitary Waste/Vent Ppg.</i> |                 |            | 21,270       |
| 15330.000 | <i>Storm Drainage Piping</i>    |                 |            |              |
| 5709      | Storm Piping                    | 14,180.00 sqft  | 1.50 /sqft | 21,270       |

| Item      | Description                    | Takeoff Qty    | Unit Cost  | Total Amount |
|-----------|--------------------------------|----------------|------------|--------------|
|           | <i>Storm Drainage Piping</i>   |                |            | 21,270       |
| 15340.000 | <i>Natural Gas Piping</i>      |                |            |              |
| 3306      | Gas Piping                     | 14,180.00 sqft | 0.47 /sqft | 6,665        |
|           | <i>Natural Gas Piping</i>      |                |            | 6,665        |
| 15360.000 | <i>Fixture Rough In</i>        |                |            |              |
| 1000      | Rough In, Plumbing Fixtures    | 14,180.00 sqft | 0.77 /sqft | 10,882       |
| 9000      | Plumbing Fixture Final Hook Up | 14,180.00 sqft | 0.67 /sqft | 9,458        |
|           | <i>Fixture Rough In</i>        |                |            | 20,320       |
| 15410.000 | <i>Plumbing Fixtures</i>       |                |            |              |
| 1000      | Plumbing Fixtures              | 14,180.00 sqft | 0.56 /sqft | 8,154        |
|           | <i>Plumbing Fixtures</i>       |                |            | 8,154        |
| 15440.000 | <i>Domestic Water Heaters</i>  |                |            |              |
| 2100      | Gas Water Heater, Equipment    | 14,180.00 sqft | 0.52 /sqft | 7,374        |
| 9100      | Hot Water Storage              | 14,180.00 sqft | 0.20 /sqft | 2,836        |
|           | <i>Domestic Water Heaters</i>  |                |            | 10,210       |
|           | <b>PLUMBING</b>                |                |            | 123,973      |
|           | <b>15P</b>                     |                | 8.743/sqft | 123,973      |
|           | 14,180.00 sqft                 |                |            |              |

**Classroom Add** 160.994/sqft 2,282,895

14,180.00 sqft  
506,072.64 Labor hours

**Gym Add**

01

1000.000 GENERAL REQUIREMENTS

|          |                                  |           |                 |         |
|----------|----------------------------------|-----------|-----------------|---------|
| 1000.100 | <i>Division 1 Subcontractors</i> |           |                 |         |
| 10       | GC Gen Conditions 6%             | 1.00 lsum | 97,384.00 /lsum | 97,384  |
| 10       | GC Fee 4%                        | 1.00 lsum | 64,922.00 /lsum | 64,922  |
|          | <i>Division 1 Subcontractors</i> |           |                 | 162,306 |
|          | <b>GENERAL REQUIREMENTS</b>      |           |                 | 162,306 |
|          | <b>01</b>                        |           | 14.40 /sqft     | 162,306 |
|          | 11,273.00 sqft                   |           |                 |         |
|          | <b>03</b>                        |           |                 |         |

3000.000 CONCRETE

3310.120 *Cessions*

**THE PIKE COMPANY**

| Item   | Description   | Takeoff Qty   | Unit Cost   | Total       | Amount  |
|--|---|---|---|-------------|---|
| 3310.120<br>c 30                                 | Cassions<br>Cassions 20" Dia x 15' D Conc 3000 psi<br>Cassions<br>79.50 Labor hours   | 53.00 cy  | 550.00 /cy  |             | 29,150<br>29,150  |
| 3310.210<br>c 40                                 | Conc: Slabs On Grade<br>Note 1 6" S.O.G. Conc<br>Conc: Slabs On Grade   | 11,273.00 sf  | 6.00 /sf  |             | 67,638<br>67,638  |
| 3310.360<br>c 30                                 | Conc: Grade Beams<br>Grade Beam Conc 3000 psi<br>Conc: Grade Beams<br>68.00 Labor hours   | 136.00 cy   | 350.00 /cy  |             | 47,600<br>47,600  |
|  |   |   |   |             | 144,388   |
| CONCRETE   |   |   |   |             |   |
|  |   | 147.50 Labor hours  |   |             |   |
|  |   |   |   | 12.81 /sqft | 144,388   |
| 03   |   |   |   |             |   |
|  |   | 11,273.00 sqft  |   |             |   |
|  |   | 147.50 Labor hours  |   |             |   |
| 04   |   |   |   |             |   |
| <hr/>  |   |   |   |             |   |
| 4000.000   | MASONRY   |   |   |             |   |
| <hr/>  |   |   |   |             |   |
| 4210.100   | Brick: All Types<br>10 Note 11 Brick Veneer Type 1<br>10 Note 12 Brick Veneer Type 2<br>Brick: All Types  | 2,593.00 sqft<br>1,839.00 sqft  | 28.00 /sqft<br>28.00 /sqft  |             | 72,604<br>51,492<br>124,096                               |
| 4220.100<br>lw 1<br>lw 1<br>lw 1<br>lw 1<br>lw 1 | Conc. Block 10"<br>Note 11 Blk 12" CMU Back-up<br>Note 11 Blk 12" CMU Back-up<br>Note 8 Blk 12" CMU Back-up @ cast Stone<br>Note 22 Blk 12" CMU Back-up @ cast Stone<br>Water Table<br>Blk 12" CMU Interior Wall<br>Conc. Block 10"<br>965.47 Labor hours | 2,593.00 sqft<br>1,839.00 sqft<br>1,124.00 sqft<br>345.00 sqft<br>5,239.00 sqft | 20.00 /sqft<br>20.00 /sqft<br>20.00 /sqft<br>20.00 /sqft<br>20.00 /sqft |             | 51,860<br>36,780<br>22,480<br>6,900<br>104,780<br>222,600 |
| 4220.110<br>rw 1                                 | Conc. Block: 8"<br>8" CMU Interior Wall<br>Conc. Block: 8"  | 5,508.00 sqft   | 16.00 /sqft   |             | 88,128<br>88,128  |
| 4220.130<br>rw 1                                 | Conc. Block: 4"<br>Blk 4" CMU Interior<br>Conc. Block: 4"<br>96.00 Labor hours  | 960.00 sqft   | 12.00 /sqft   |             | 11,520<br>11,520  |
| 4440.400   | Stone Misc.<br>10 Note 22 Cast Stone Water Table<br>10 Note 8 Cast Stone Band<br>Stone Misc.<br>245.00 Labor hours  | 173.00 lf<br>562.00 lf  | 114.00 /lf<br>65.00 /lf   |             | 19,722<br>36,530<br>56,252                                |



| Item            | Description                        | Takeoff Qty  | Unit Cost          | Total Amount   |
|-----------------|------------------------------------|--------------|--------------------|----------------|
|                 | <b>MASONRY</b>                     |              |                    | <b>502,798</b> |
|                 | 1,306.47 Labor hours               |              |                    |                |
|                 | <b>04</b>                          |              | <b>44.802/sqft</b> | <b>502,798</b> |
|                 | 11,273.00 sqft                     |              |                    |                |
|                 | 1,306.47 Labor hours               |              |                    |                |
|                 | <b>08</b>                          |              |                    |                |
| <b>5000.000</b> | <b>METALS</b>                      |              |                    |                |
| <b>5310.010</b> | <i>Structural: Steel Deck</i>      |              |                    |                |
| 20              | Metal Joists/Acoustical Roof Deck  | 9,535.00 sf  | 14.00 /sf          | 133,490        |
| 20              | Metal Joists/Roof Deck             | 3,902.00 sf  | 7.50 /sf           | 29,285         |
|                 | <i>Structural: Steel Deck</i>      |              |                    | <b>162,755</b> |
| <b>5505.010</b> | <i>Misc: Misc Metals</i>           |              |                    |                |
| 10              | Misc Metals                        | 1.00 Allo    | 10,000.00 /Allo    | 10,000         |
|                 | <i>Misc: Misc Metals</i>           |              |                    | 10,000         |
|                 | 1.00 Labor hours                   |              |                    |                |
|                 | <b>METALS</b>                      |              |                    | <b>172,755</b> |
|                 | 1.00 Labor hours                   |              |                    |                |
|                 | <b>08</b>                          |              | <b>15.33 /sqft</b> | <b>172,755</b> |
|                 | 11,273.00 sqft                     |              |                    |                |
|                 | 1.00 Labor hours                   |              |                    |                |
|                 | <b>08</b>                          |              |                    |                |
| <b>6000.000</b> | <b>WOOD &amp; PLASTICS</b>         |              |                    |                |
| <b>6117.020</b> | <i>Blocking: Misc.</i>             |              |                    |                |
|                 | Roof Blocking                      | 210.00 Inft  | 5.00 /Inft         | 1,050          |
|                 | <i>Blocking: Misc.</i>             |              |                    | 1,050          |
|                 | <b>WOOD &amp; PLASTICS</b>         |              |                    | <b>1,050</b>   |
|                 | <b>08</b>                          |              | <b>0.003/sqft</b>  | <b>1,050</b>   |
|                 | 11,273.00 sqft                     |              |                    |                |
|                 | <b>07</b>                          |              |                    |                |
| <b>7000.000</b> | <b>THERMAL &amp; MOISTURE PROT</b> |              |                    |                |
| <b>7111.010</b> | <i>Dampproofing: VaprBarrier</i>   |              |                    |                |
| 20              | Poly Vapor Barler @ SOG            | 11,273.00 sf | 0.75 /sf           | 8,455          |
| 30              | Vapor Barrier @ Exterior Wall      | 5,901.00 sf  | 2.50 /sf           | 14,753         |

| Item     | Description                               | Takeoff Qty    | Unit Cost      | Amount  |
|----------|---|----------------|----------------|---------|
|          | <i>Dampproofing: Vaprbarder</i>           |                |                | 23,207  |
|          | 11.134 Labor hours                        |                |                |         |
| 7210.040 | <i>Insulation: Board</i>                  |                |                | 10,917  |
|          | 70 Expanded Polystyrene 2 "               | 5,901.00 sf    | 1.85 /sf       | 10,917  |
|          | <i>Insulation: Board</i>                  |                |                |         |
|          | 118.02 Labor hours                        |                |                |         |
| 7410.010 | <i>Metal Wall Panels</i>                  |                |                | 228,840 |
|          | 150 Note 1 Metal Roofing                  | 9,535.00 sf    | 24.00 /sf      | 228,840 |
|          | <i>Metal Wall Panels</i>                  |                |                |         |
|          | 95,350.00 Labor hours                     |                |                |         |
| 7410.050 | <i>Wall Panels</i>                        |                |                | 48,420  |
|          | 90 Note 18 3/A202 Translucent Wall System | 1,076.00 sf    | 45.00 /sf      | 48,420  |
|          | <i>Wall Panels</i>                        |                |                |         |
|          | 69.94 Labor hours                         |                |                |         |
| 7510.030 | <i>Membrane: BUR Bitumen</i>              |                |                | 93,648  |
| 120      | Note 2 4 Ply Bur Foot System              | 3,902.00 sqft  | 24.00 /sqft    | 93,648  |
|          | <i>Membrane: BUR Bitumen</i>              |                |                |         |
| 7840.000 | <i>Firestopping</i>                       |                |                | 2,500   |
|          | Firestopping                              | 1.00 Allo      | 2,500.00 /Allo | 2,500   |
|          | <i>Firestopping</i>                       |                |                |         |
| 7920.010 | <i>Sealant - Jt Filler Gaskt</i>          |                |                | 2,500   |
|          | Joint Sealants                            | 1.00 Allo      | 2,500.00 /Allo | 2,500   |
|          | <i>Sealant - Jt Filler Gaskt</i>          |                |                |         |
|          |   |                |                | 410,032 |
|          | <b>THERMAL &amp; MOISTURE PROT</b>        |                |                |         |
|          | 95,549.094 Labor hours                    |                |                |         |
|          | 07  |                | 36.373/sqft    | 410,032 |
|          |   | 11,273.00 sqft |                |         |
|          | 95,549.094 Labor hours                    |                |                |         |
|          | 08  |                |                |         |
| 8000.000 | <b>DOORS &amp; WINDOWS</b>                |                |                |         |
| 8100.000 | <i>Doors: Metal With Frames</i>           |                |                | 397     |
|          | 10 Double Hollow Metal Doors              | 1.00 ea        | 396.74 /ea     | 397     |
|          | 20 HM Frame (Single)                      | 9.00 ea        | 204.782 /ea    | 1,843   |
|          | 20 HM Frame (Oouble)                      | 4.00 ea        | 279.783 /ea    | 1,119   |
|          | 100 Note 2 Aluminum Entrance Doors        | 10.00 ea       | 3,500.00 /ea   | 35,000  |
|          | <i>Doors: Metal With Frames</i>           |                |                | 38,359  |
|          | 48.00 Labor hours                         |                |                |         |
| 8110.020 | <i>FRP Door</i>                           |                |                | 3,987   |
|          | 10 Note 19 Double FRP Doors               | 4.00 ea        | 996.74 /ea     | 3,987   |
|          | <i>FRP Door</i>                           |                |                |         |
|          | 8.00 Labor hours                          |                |                |         |
| 8210.010 | <i>Doors: Wood</i>                        |                |                | 6,447   |
| b228     | 3'-0" x 7'-0"                             | 15.00 ea       | 429.762 /ea    | 6,447   |

| Item                       | Description                        | Takeoff Qty | Unit Cost  | Amount        |
|----------------------------|------------------------------------|-------------|------------|---------------|
|                            | <i>Doors: Wood</i>                 |             |            | 6,447         |
|                            | 30.00 Labor hours                  |             |            |               |
| 8400.000                   | <i>Metal-Framed Storefronts</i>    |             |            |               |
| 10                         | Note 2 Aluminum-Framed Storefronts | 192.00 sf   | 80.00 /sf  | 11,520        |
| 80                         | Note 15 Motorized Aluminum Awnings | 164.00 lf   | 45.00 /lf  | 7,380         |
|                            | <i>Metal-Framed Storefronts</i>    |             |            | 18,900        |
| <b>DOORS &amp; WINDOWS</b> |                                    |             |            | <b>67,693</b> |
|                            | 86.00 Labor hours                  |             |            |               |
| 08                         |                                    |             | 6.01 /sqft | 67,693        |
|                            | 11,273.00 sqft                     |             |            |               |
|                            | 86.00 Labor hours                  |             |            |               |
| 09                         |                                    |             |            |               |

9000.000 FINISHES

|                 |                               |              |             |                |
|-----------------|-------------------------------|--------------|-------------|----------------|
| 9310.020        | <i>Tile: Mosaics</i>          |              |             |                |
| 20              | Ceramic Floor Tile            | 908.00 sf    | 12.00 /sf   | 10,872         |
|                 | <i>Tile: Mosaics</i>          |              |             | 10,872         |
| 9400.000        | <i>Terrazzo</i>               |              |             |                |
| 10              | Precast Terrazzo              | 1,313.00 sf  | 18.00 /sf   | 23,634         |
| 11              | Terrazzo Cove Base            | 170.00 lf    | 25.00 /lf   | 4,250          |
|                 | <i>Terrazzo</i>               |              |             | 27,884         |
| 9511.050        | <i>Ceiling: 2x4 Tile</i>      |              |             |                |
| 10              | ACT-1 2x2 Ceiling             | 3,704.00 sf  | 3.50 /sf    | 12,964         |
|                 | <i>Ceiling: 2x4 Tile</i>      |              |             | 12,964         |
| 9640.010        | <i>Flooring Wood</i>          |              |             |                |
| 10              | Wood Flooring @ Gymnasium     | 7,472.00 sf  | 14.00 /sf   | 104,608        |
|                 | <i>Flooring Wood</i>          |              |             | 104,608        |
| 9650.010        | <i>Flooring Resilient</i>     |              |             |                |
| 40              | Rubber Base                   | 551.00 lf    | 2.20 /lf    | 1,212          |
|                 | <i>Flooring Resilient</i>     |              |             | 1,212          |
| 9660.010        | <i>Flooring Carpet</i>        |              |             |                |
| 6               | Carpet Tile                   | 13.22 sy     | 35.00 /sy   | 463            |
|                 | <i>Flooring Carpet</i>        |              |             | 463            |
| 9910.020        | <i>Painting: Int Detailed</i> |              |             |                |
| 5               | Epoxy Paint CMU Block         | 1,088.00 sf  | 1.00 /sf    | 1,088          |
| 5               | Paint CMU Block               | 13,705.00 sf | 1.00 /sf    | 13,705         |
| 5               | Paint Bare Ceiling            | 8,814.00 sf  | 1.00 /sf    | 8,814          |
|                 | <i>Painting: Int Detailed</i> |              |             | 21,607         |
| <b>FINISHES</b> |                               |              |             | <b>179,610</b> |
| 09              |                               |              | 15.933/sqft | 179,610        |
|                 | 11,273.00 sqft                |              |             |                |

| Item      | Description                               | Takeoff Qty | Unit Cost    | Total Amount  |
|-----------|---|-------------|--------------|---------------|
| 10        |   |             |              |               |
| 10000.000 | <b>SPECIALTIES</b>                        |             |              |               |
| 10160.010 | <i>Toilet Compartments</i>                |             |              |               |
|           | 30 Phenolic Toilet Compartments           | 1.00 ea     | 1,000.00 /ea | 1,000         |
|           | 31 Phenolic ADA Toilet Compartments       | 2.00 ea     | 1,275.00 /ea | 2,550         |
|           | <i>Toilet Compartments</i>                |             |              | <u>3,550</u>  |
| 10500.010 | <i>Lockers</i>                            |             |              |               |
|           | 10 Gym Locker                             | 30.00 ea    | 225.00 /ea   | 6,750         |
|           | <i>Lockers</i>                            |             |              | <u>6,750</u>  |
| 10800.010 | <i>Misc Toilet/Bath Equip</i>             |             |              |               |
|           | 80 Soap Dispenser                         | 4.00 ea     | 76.50 /ea    | 302           |
|           | 82 SS Toilet Paper Dispenser- Surface Mt. | 3.00 ea     | 34.50 /ea    | 104           |
|           | 84 SS Waste Rec./Paper Towel Disp.        | 4.00 ea     | 545.00 /ea   | 2,180         |
|           | 90 Mirror                                 | 5.00 ea     | 238.00 /ea   | 1,190         |
|           | 100 Grab Bar HC                           | 4.00 ea     | 56.00 /ea    | 224           |
|           | <i>Misc Toilet/Bath Equip</i>             |             |              | <u>4,000</u>  |
|           | <b>SPECIALTIES</b>                        |             |              | <u>14,300</u> |
|           | 10  |             | 1.27 /sqft   | 14,300        |
|           | 11,273.00 sqft                            |             |              |               |

|           |  |             |              |               |
|-----------|--|-------------|--------------|---------------|
| 11        |  |             |              |               |
| 11000.000 | <b>EQUIPMENT</b>   |             |              |               |
| 11480.010 | <i>Equip: Sports/Therapeutic</i>                                     |             |              |               |
|           | 10 Note 15 Electronic Score Board                                    | 2.00 ea     | 2,500.00 /ea | 5,000         |
|           | 10 Note 14 (3) Fixed Basketball Back Boards, Over Head Supported     | 3.00 ea     | 1,500.00 /ea | 4,500         |
|           | 10 Note 14 (3) Motorized Basketball Back Boards, Over Head Supported | 3.00 ea     | 2,500.00 /ea | 7,500         |
|           | 20 Note 18 Bleachers Motorized                                       | 150.00 seat | 125.00 /seat | 18,750        |
|           | 60 Note 19 Operable Gym Partition @ Gym                              | 1,902.00 sf | 11.85 /sf    | 22,539        |
|           | 60 Note 17 Fire Rated Paired Operable Partition @ Stage              | 429.00 sf   | 42.00 /sf    | 18,018        |
|           | Gymnasium Wall Padding   | 1,992.00 sf | 6.50 /sf     | 12,948        |
|           | <i>Equip: Sports/Therapeutic</i>                                     |             |              | <u>89,255</u> |
|           | <b>EQUIPMENT</b>   |             |              | <u>89,255</u> |
|           | 11   |             | 7.92 /sqft   | 89,255        |
|           | 11,273.00 sqft   |             |              |               |

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| Item      | Description  | Takeoff Qty | Unit Cost | Total        | Amount |
|-----------|--|-------------|-----------|--------------|--------|
| 16010.000 | <b>GENERAL CONDITIONS</b>                          |             |           |              |        |
| 16010.050 | <b>INSURANCE &amp; BONDS</b>                       |             |           |              |        |
| n         | 55 Bond, Subcontractor, avg. \$10.00 per \$100k    | 205.00      | k         | 10.00 /k     | 2,050  |
|           | <b>INSURANCE &amp; BONDS</b>                       |             |           |              | 2,050  |
| 16010.080 | <b>MOBILIZE/DEMOLIZE</b>                           |             |           |              |        |
| n         | 15 Average cost, mob-demob, large project > \$500k | 1.00        | ls        | 5,000.00 /ls | 5,000  |
|           | <b>MOBILIZE/DEMOLIZE</b>                           |             |           |              | 5,000  |
| 16010.190 | <b>TEMPORARY UTILITIES</b>                         |             |           |              |        |
| n         | 37 Allow, panelboards for temp power to 225A       | 1.00        | ea        | 1,250.00 /ea | 1,250  |
| n         | 50 Allow, Temp.Power & Lights                      | 11,273.00   | sqft      | 0.25 /sqft   | 2,818  |
|           | <b>TEMPORARY UTILITIES</b>                         |             |           |              | 4,068  |
|           | <b>GENERAL CONDITIONS</b>                          |             |           |              | 11,118 |
| 16050.000 | <b>BASIC MATERIALS &amp; METHODS</b>               |             |           |              |        |
| 16060.810 | <b>Lightning Protection</b>                        |             |           |              |        |
|           | 5 Lightning Protection                             | 11,273.00   | sqft      | 0.25 /sqft   | 2,818  |
|           | <b>Lightning Protection</b>                        |             |           |              | 2,818  |
|           | <b>BASIC MATERIALS &amp; METHODS</b>               |             |           |              | 2,818  |
| 16130.000 | <b>RACEWAY, FITTINGS &amp; BOXES</b>               |             |           |              |        |
| 16132.156 | <b>FEEDER CONDUIT/WIRE</b>                         |             |           |              |        |
|           | 17 HVAC Equipment Power                            | 11,273.00   | sqft      | 1.50 /sqft   | 16,910 |
|           | <b>FEEDER CONDUIT/WIRE</b>                         |             |           |              | 16,910 |
|           | <b>RACEWAY, FITTINGS &amp; BOXES</b>               |             |           |              | 16,910 |
| 16140.000 | <b>WIRING DEVICES</b>                              |             |           |              |        |
| 16140.150 | <b>RECEPTACLES, BLADE TYPE</b>                     |             |           |              |        |
| n         | 5 Conduit and Wire for Electrical Power            | 11,273.00   | sqft      | 1.00 /sqft   | 11,273 |
| n         | 5 Receptacles                                      | 11,273.00   | sqft      | 1.50 /sqft   | 16,910 |
|           | <b>RECEPTACLES, BLADE TYPE</b>                     |             |           |              | 28,183 |
|           | 43,479.961 Labor hours                             |             |           |              |        |
|           | <b>WIRING DEVICES</b>                              |             |           |              | 28,183 |
|           | 43,479.961 Labor hours                             |             |           |              |        |
| 16510.000 | <b>LIGHTING</b>                                    |             |           |              |        |
| 16510.440 | <b>Flourescent Fixtures</b>                        |             |           |              |        |
| ---       | Lighting   | 11,273.00   | sqft      | 6.00 /sqft   | 67,638 |
| ---       | Emergency Lighting                                 | 11,273.00   | sqft      | 1.00 /sqft   | 11,273 |
| ---       | Lighting Control System                            | 11,273.00   | sqft      | 0.50 /sqft   | 5,637  |
|           | <b>Flourescent Fixtures</b>                        |             |           |              | 84,548 |

|                            |   |                             |             |             |  |                 |               |
|----------------------------|---|-----------------------------|-------------|-------------|--|-----------------|---------------|
| 16720.330                  |   | <i>Clock/Program System</i> |             |             |  |                 | 2,818         |
| n                          | 5 | Clock System                | 11,273.00   | sqft        |  | 0.25 /sqft      | <u>2,818</u>  |
|                            |   | <i>Clock/Program System</i> |             |             |  |                 | 2,818         |
|                            |   | 6,763.800 Labor hours       |             |             |  |                 |               |
| <b>SOUND/PAGING SYSTEM</b> |   |                             |             |             |  |                 |               |
| 16720.340                  | 5 | PA System                   | 11,273.00   | sqft        |  | 0.25 /sqft      | 2,818         |
| n                          | 5 | Gym Sound System            | 1.00        | Alto        |  | 25,000.00 /Alto | <u>25,000</u> |
| n                          |   | <b>SOUND/PAGING SYSTEM</b>  |             |             |  |                 | 27,618        |
| <b>TELE/DATA SYSTEM</b>    |   |                             |             |             |  |                 |               |
| 16720.420                  | 5 | Tele/Data/CATV Conduits     | 11,273.00   | sqft        |  | 0.25 /sqft      | <u>2,818</u>  |
| n                          |   | <b>TELE/DATA SYSTEM</b>     |             |             |  |                 | 2,818         |
|                            |   |                             |             |             |  |                 | 64,456        |
| <b>SPECIAL SYSTEMS</b>     |   |                             |             |             |  |                 |               |
|                            |   | 82,856.550 Labor hours      |             |             |  |                 |               |
|                            |   |                             |             |             |  |                 | 18            |
|                            |   |                             |             |             |  |                 | 18.464/sqft   |
|                            |   |                             |             |             |  |                 | 208,032       |
|                            |   |                             | 11,273.00   | sqft        |  |                 |               |
|                            |   |                             | 126,336.511 | Labor hours |  |                 |               |

02D

|                   |                   |                              |           |             |  |                |              |
|-------------------|-------------------|------------------------------|-----------|-------------|--|----------------|--------------|
| 1730.000          | <b>DEMOLITION</b> |                              |           |             |  |                |              |
| 1739.040          | 30                | <i>Demo: Finishes, Walls</i> |           |             |  |                | 5,000        |
| n                 |                   | Demo for Addition Tie-In     | 1.00      | Alto        |  | 5,000.00 /Alto | <u>5,000</u> |
|                   |                   | <i>Demo: Finishes, Walls</i> |           |             |  |                | 5,000        |
|                   |                   | 0.10 Labor hours             |           |             |  |                |              |
|                   |                   |                              |           |             |  |                | 5,000        |
| <b>DEMOLITION</b> |                   |                              |           |             |  |                |              |
|                   |                   | 0.10 Labor hours             |           |             |  |                |              |
|                   |                   |                              |           |             |  |                | 0.444/sqft   |
|                   |                   |                              |           |             |  |                | 5,000        |
| <b>02D</b>        |                   |                              |           |             |  |                |              |
|                   |                   |                              | 11,273.00 | sqft        |  |                |              |
|                   |                   |                              | 0.10      | Labor hours |  |                |              |

# THE PIKE COMPANY

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| Item             | Description                               | Takeoff Qty    | Unit Cost  | Total | Amount        |
|------------------|---|----------------|------------|-------|---------------|
|                  | <b>LIGHTING</b>                           |                |            |       | <b>84,548</b> |
| <b>16700.000</b> | <b>SPECIAL SYSTEMS</b>                    |                |            |       |               |
| <b>16720.310</b> | <b>FIRE ALARM SYSTEM</b>                  |                |            |       |               |
|                  | 495 Fire Alarm System                     | 11,273.00 sqft | 2.50 /sqft |       | <u>28,183</u> |
|                  | <b>FIRE ALARM SYSTEM</b>                  |                |            |       | <b>28,183</b> |
| <b>16720.320</b> | <b>Security System</b>                    |                |            |       |               |
| n                | 5 Security System Access Control Conduits | 11,273.00 sqft | 0.15 /sqft |       | <u>1,691</u>  |
| n                | 45 CCTV System Conduits                   | 11,273.00 sqft | 0.10 /sqft |       | <u>1,127</u>  |
|                  | <b>Security System</b>                    |                |            |       | <b>2,818</b>  |
|                  | 76,092.750 Labor hours                    |                |            |       |               |

| Item      | Description  | Takeoff Qty     | Unit Cost         | Total | Amount        |
|-----------|--|-----------------|-------------------|-------|---------------|
| 02S       |  |                 |                   |       |               |
| 2300.000  | <b>EARTHWORK</b>   |                 |                   |       |               |
| 2317.105  | <i>Building Excavation</i>                                     |                 |                   |       |               |
|           | Building Earthwork - Excav, Backfill & Subbase Addition        | 11,273.00 sqft  | 3.25 /sqft        |       | 36,637        |
|           | <i>Building Excavation</i>                                     |                 |                   |       | 36,637        |
|           | <b>EARTHWORK</b>   |                 |                   |       | 36,637        |
|           | <b>02S</b>   |                 | <b>3.25 /sqft</b> |       | <b>36,637</b> |
|           | <b>11,273.00 sqft</b>  |                 |                   |       |               |
| 15FP      |  |                 |                   |       |               |
| 15000.000 | <b>FIRE PROTECTION</b>   |                 |                   |       |               |
| 15011.000 | <i>Fire Protection Piping</i>                                  |                 |                   |       |               |
| n         | 3404 Wet Sprinkler System                                      | 11,273.00 sqft  | 2.90 /sqft        |       | 32,692        |
|           | <i>Fire Protection Piping</i>                                  |                 |                   |       | 32,692        |
|           | <b>FIRE PROTECTION</b>   |                 |                   |       | 32,692        |
|           | <b>15FP</b>  |                 | <b>2.90 /sqft</b> |       | <b>32,692</b> |
|           | <b>11,273.00 sqft</b>  |                 |                   |       |               |
| 19H       |  |                 |                   |       |               |
| 15500.000 | <b>HVAC</b>  |                 |                   |       |               |
| 15500.100 | <b>HVAC GENERAL</b>  |                 |                   |       |               |
|           | 0002 Bonds and Insurances                                      | 283,967.00 lsum | 0.02 /lsum        |       | 5,679         |
|           | 0003 Genral Conditions   | 283,967.00 lsum | 0.08 /lsum        |       | 22,717        |
|           | <b>HVAC GENERAL</b>  |                 |                   |       | 28,397        |
| 15617.000 | <i>Terminal Heat/Cool Units</i>                                |                 |                   |       |               |
|           | 7200 Cabinet Heaters , FT radiation, Hydronic Heating Terminal | 11,273.00 sqft  | 0.85 /sqft        |       | 9,582         |
|           | <i>Terminal Heat/Cool Units</i>                                |                 |                   |       | 9,582         |
| 15650.000 | <i>Air Handling Units</i>                                      |                 |                   |       |               |
|           | 1120 Constant Volume Reheat System                             | 11,273.00 sqft  | 11.50 /sqft       |       | 129,640       |
|           | <i>Air Handling Units</i>                                      |                 |                   |       | 129,640       |
| 15730.000 | <i>Heating Water Piping</i>                                    |                 |                   |       |               |
|           | 1103 Heating Water Branch Piping                               | 11,273.00 sqft  | 1.20 /sqft        |       | 13,528        |
|           | 1103 Heating Water Main Piping                                 | 11,273.00 sqft  | 1.20 /sqft        |       | 13,528        |



| Item      | Description                               | Takeoff Qty    | Unit Cost          | Total | Amount         |
|-----------|---|----------------|--------------------|-------|----------------|
|           | <i>Heating Water Piping</i>               |                |                    |       | <u>27,055</u>  |
| 15830.000 | <i>Fans</i>                               |                |                    |       |                |
|           | 2001 Exhaust Fan Systems, duct and louver | 11,273.00 sqft | 4.94 /sqft         |       | <u>55,689</u>  |
|           | <i>Fans</i>                               |                |                    |       | <u>55,689</u>  |
| 15940.000 | <i>HVAC Inst. and Controls</i>            |                |                    |       |                |
|           | 1610 HVAC Controls                        | 11,273.00 sqft | 4.00 /sqft         |       | <u>45,092</u>  |
|           | <i>HVAC Inst. and Controls</i>            |                |                    |       | <u>45,092</u>  |
|           | <i>HVAC</i>                               |                |                    |       | <u>295,454</u> |
|           | <b>15H</b>                                |                | <b>26.21 /sqft</b> |       | <b>295,454</b> |
|           | <b>11,273.00 sqft</b>                     |                |                    |       |                |
| 15P       |   |                |                    |       |                |
| 15200.000 | <b>PLUMBING</b>                           |                |                    |       |                |
| 15200.100 | <b>PLUMBING GENERAL</b>                   |                |                    |       |                |
|           | GC01 Bonds and Insurances                 | 89,598.00 lsum | 0.02 /lsum         |       | 1,792          |
|           | GC02 General Conditions                   | 89,598.00 lsum | 0.08 /lsum         |       | <u>7,168</u>   |
|           | <b>PLUMBING GENERAL</b>                   |                |                    |       | <u>8,960</u>   |
| 15310.000 | <i>Domestic Water Piping</i>              |                |                    |       |                |
|           | 1105 Domestic Water Piping                | 11,273.00 sqft | 1.75 /sqft         |       | <u>19,728</u>  |
|           | <i>Domestic Water Piping</i>              |                |                    |       | <u>19,728</u>  |
| 15320.000 | <i>Sanitary Waste/Vent Ppg.</i>           |                |                    |       |                |
|           | 5708 Sanitary Drain Piping                | 11,273.00 sqft | 1.50 /sqft         |       | <u>16,910</u>  |
|           | <i>Sanitary Waste/Vent Ppg.</i>           |                |                    |       | <u>16,910</u>  |
| 15330.000 | <i>Storm Drainage Piping</i>              |                |                    |       |                |
|           | 5709 Storm Piping                         | 11,273.00 sqft | 1.50 /sqft         |       | <u>16,910</u>  |
|           | <i>Storm Drainage Piping</i>              |                |                    |       | <u>16,910</u>  |
| 15340.000 | <i>Natural Gas Piping</i>                 |                |                    |       |                |
|           | 3306 Gas Piping                           | 11,273.00 sqft | 0.47 /sqft         |       | <u>5,298</u>   |
|           | <i>Natural Gas Piping</i>                 |                |                    |       | <u>5,298</u>   |
| 15360.000 | <i>Fixture Rough In</i>                   |                |                    |       |                |
|           | 1000 Rough In, Plumbing Fixtures          | 11,273.00 sqft | 0.77 /sqft         |       | 8,635          |
|           | 9000 Plumbing Fixture Final Hook Up       | 11,273.00 sqft | 0.67 /sqft         |       | <u>7,519</u>   |
|           | <i>Fixture Rough In</i>                   |                |                    |       | <u>16,154</u>  |
| 15410.000 | <i>Plumbing Fixtures</i>                  |                |                    |       |                |
|           | 1000 Plumbing Fixtures                    | 11,273.00 sqft | 0.56 /sqft         |       | <u>6,482</u>   |
|           | <i>Plumbing Fixtures</i>                  |                |                    |       | <u>6,482</u>   |
| 15440.000 | <i>Domestic Water Heaters</i>             |                |                    |       |                |
|           | 2100 Gas Water Heater, Equipment          | 11,273.00 sqft | 0.52 /sqft         |       | 5,862          |
|           | 9100 Hot Water Storage                    | 11,273.00 sqft | 0.20 /sqft         |       | <u>2,255</u>   |
|           | <i>Domestic Water Heaters</i>             |                |                    |       | <u>8,117</u>   |

| Item                  | Description                            | Takeoff Qty | Unit Cost    | Total            | Amount    |
|-----------------------|--|-------------|--------------|------------------|-----------|
| <b>PLUMBING</b>       |  |             |              |                  | 98,558    |
| 15P                   |  |             | 6.743/sqft   |                  | 98,558    |
|                       | 11,273.00 sqft                         |             |              |                  |           |
| <b>Gym Add</b>        |  |             |              |                  | 2,420,558 |
|                       | 11,273.00 sqft                         |             | 214.722/sqft |                  |           |
|                       | 223,426.672 Labor hours                |             |              |                  |           |
| <b>Music/Cafe Add</b> |  |             |              |                  |           |
|                       | 01                                     |             |              |                  |           |
| 1000.000              | <b>GENERAL REQUIREMENTS</b>            |             |              |                  |           |
| 1000.100              | <i>Division 1 Subcontractors</i>       |             |              |                  |           |
| 10                    | GC Gen Conditions 6%                   | 1.00        | lsum         | 138,185.00 /lsum | 138,185   |
| 10                    | GC Fee 4%                              | 1.00        | lsum         | 92,123.00 /lsum  | 92,123    |
|                       | <i>Division 1 Subcontractors</i>       |             |              |                  | 230,308   |
|                       | <b>GENERAL REQUIREMENTS</b>            |             |              |                  |           |
|                       | 01                                     |             | 13.50 /sqft  |                  | 230,308   |
|                       | 17,063.00 sqft                         |             |              |                  |           |
|                       | 03                                     |             |              |                  |           |
| 3000.000              | <b>CONCRETE</b>                        |             |              |                  |           |
| 3110.350              | <i>Forms: Suspended Slab</i>           |             |              |                  |           |
| 10                    | Suspended Slab @ Mezzanine             | 3,335.00    | sf           | 5.50 /sf         | 18,343    |
|                       | <i>Forms: Suspended Slab</i>           |             |              |                  | 18,343    |
|                       | 333.50 Labor hours                     |             |              |                  |           |
| 3310.120              | <i>Cassions</i>                        |             |              |                  |           |
| c 30                  | Cassions 20" Dia x 15' D Conc 3000 psi | 82.00       | cy           | 550.00 /cy       | 45,100    |
|                       | <i>Cassions</i>                        |             |              |                  | 45,100    |
|                       | 123.00 Labor hours                     |             |              |                  |           |
| 3310.210              | <i>Conc: Slabs On Grade</i>            |             |              |                  |           |
| c 40                  | Note 4 5" S.O.G. Conc                  | 17,063.00   | sf           | 5.00 /sf         | 85,315    |
|                       | <i>Conc: Slabs On Grade</i>            |             |              |                  | 85,315    |
| 3310.320              | <i>Conc: Fill Pan Stairs</i>           |             |              |                  |           |
| c 30                  | Fill Pan Stairs 3000 psi               | 220.00      | sqft         | 4.50 /sqft       | 990       |

| Item                                     | Description  | Takeoff Qty  | Total  |  |
|--|--|--|--|--|
|  |  |  | Unit Cost  | Amount                                       |
|  | Conc: Fill Pan Stairs<br>495.001 Labor hours   |  |  | 990  |
| 3310.360<br>c 30                         | Conc: Grade Beams<br>Grade Beam Conc 3000 psi<br>Conc: Grade Beams<br>75.50 Labor hours  | 151.00 cy  | 350.00 /cy   | 52,850<br>52,850                             |
| <b>CONCRETE</b>                          |  |  |  | <b>202,598</b>                               |
|  | 1,027.001 Labor hours  |  |  |  |
| <b>03</b>                                |  |  | <b>11.873/sqft</b>                                       | <b>202,598</b>                               |
|  | 17,063.00 sqft<br>1,027.001 Labor hours  |  |  |  |
| <b>04</b>                                |  |  |  |  |
| <hr/>                                    |  |  |  |  |
| 4000.000                                 | <b>MASONRY</b>   |  |  |  |
| <hr/>                                    |  |  |  |  |
| 4210.100                                 | Brick: All Types<br>10 Note 11 Brick Veneer Type 1<br>10 Note 12 Brick Veneer Type 2<br>Brick: All Types   | 2,302.00 sqft<br>437.00 sqft                               | 28.00 /sqft<br>28.00 /sqft                               | 64,456<br>12,236<br>76,692                   |
| 4220.100<br>lw 1<br>lw 1<br>lw 1<br>lw 1 | Conc. Block 10"<br>Note 11 Blk 12" CMU Back-up<br>Note 11 Blk 12" CMU Back-up<br>Note 8 Blk 12" CMU Back-up @ cast Stone<br>Note 22 Blk 12" CMU Back-up @ cast Stone<br>Water Table<br>Conc. Block 10"<br>330.81 Labor hours | 2,302.00 sqft<br>437.00 sqft<br>810.00 sqft<br>268.00 sqft | 20.00 /sqft<br>20.00 /sqft<br>20.00 /sqft<br>20.00 /sqft | 46,040<br>8,740<br>16,200<br>5,360<br>76,340 |
| 4220.110<br>rw 1                         | Conc. Block: 8"<br>8" CMU interior Wall<br>Conc. Block: 8"   | 8,138.00 sqft  | 16.00 /sqft  | 130,206<br>130,206                           |
| 4440.400                                 | Stone Misc.<br>10 Note 22 Cast Stone Water Table<br>10 Note 8 Cast Stone Band<br>Stone Misc.<br>179.87 Labor hours   | 134.00 lf<br>405.00 lf                                     | 114.00 /lf<br>65.00 /lf                                  | 15,276<br>26,325<br>41,601                   |
| <b>MASONRY</b>                           |  |  |  | <b>324,841</b>                               |
|  | 510.474 Labor hours  |  |  |  |
| <b>04</b>                                |  |  | <b>18.04 /sqft</b>                                       | <b>324,841</b>                               |
|  | 17,063.00 sqft<br>510.474 Labor hours  |  |  |  |
| <b>05</b>                                |  |  |  |  |
| <hr/>                                    |  |  |  |  |
| 5000.000                                 | <b>METALS</b>  |  |  |  |

| Item                       | Description  | Takeoff Qty                 | Total                |                             |
|----------------------------|--|-----------------------------|----------------------|-----------------------------|
|                            |  |                             | Unit Cost            | Amount                      |
| 5121.010<br>w04a           | Structural: W Shapes<br>Steel to Support Mezzanine<br>Structural: W Shapes                           | 1.00 Allo                   | 5,000.00 /Allo       | 5,000<br>5,000              |
| 5310.010                   | Structural: Steel Deck<br>10 Metal Floor Deck<br>20 Metal Joists/Roof Deck<br>Structural: Steel Deck | 3,335.00 sf<br>17,063.00 sf | 2.45 /sf<br>7.50 /sf | 8,171<br>127,973<br>136,143 |
| 5505.010                   | Misc: Misc Metals<br>10 Misc Metals<br>Misc: Misc Metals<br>1.00 Labor hours                         | 1.00 Allo                   | 10,000.00 /Allo      | 10,000<br>10,000            |
| 5510.110                   | Stairs: Stair Parts<br>10 Metal Pan Stairs & Railings<br>Stairs: Stair Parts<br>40.00 Labor hours    | 2.00 fts                    | 10,500.00 /fts       | 21,000<br>21,000            |
| <b>METALS</b>              |  |                             |                      | 172,143                     |
| 05                         | 41.00 Labor hours  |                             | 10.09 /sqft          | 172,143                     |
|                            | 17,063.00 sqft<br>41.00 Labor hours  |                             |                      |                             |
| 06                         |  |                             |                      |                             |
| <hr/>                      |  |                             |                      |                             |
| 6000.000                   | <b>WOOD &amp; PLASTICS</b>   |                             |                      |                             |
| 6117.020                   | Blocking: Misc.<br>Roof Blocking<br>Blocking: Misc.  | 740.00 lnft                 | 5.00 /lnft           | 3,700<br>3,700              |
| 6410.010                   | Arch Wd Wrk: Cabinets<br>101 Solid Surface Countertops @ Toilets<br>Arch Wd Wrk: Cabinets            | 28.00 lf                    | 75.00 /lf            | 2,100<br>2,100              |
| <b>WOOD &amp; PLASTICS</b> |  |                             |                      | 5,800                       |
| 06                         |  |                             | 0.34 /sqft           | 5,800                       |
|                            | 17,063.00 sqft   |                             |                      |                             |
| 07                         |  |                             |                      |                             |
| <hr/>                      |  |                             |                      |                             |
| 7000.000                   | <b>THERMAL &amp; MOISTURE PROT</b>   |                             |                      |                             |
| 7111.010                   | Dempproofing: VeporBarrier<br>20 Poly Vapor Barrier @ SOG<br>30 Vapor Barrier @ Exterior Wall        | 17,063.00 sf<br>3,817.00 sf | 0.75 /sf<br>2.50 /sf | 12,797<br>9,543             |



| Item     | Description  | Takeoff Qty    | Unit Cost          | Total | Amount         |
|----------|--|----------------|--------------------|-------|----------------|
|          | <i>Dampproofing: Vaprbarr</i>                          |                |                    |       | 22,340         |
|          | 7.202 Labor hours                                      |                |                    |       |                |
| 7210.040 | <i>Insulation: Board</i>                               |                |                    |       |                |
| 70       | Expanded Polystyrene 2"                                | 3,817.00 sf    | 1.85 /sf           |       | 7,061          |
|          | <i>Insulation: Board</i>                               |                |                    |       | 7,061          |
|          | 76.34 Labor hours                                      |                |                    |       |                |
| 7510.030 | <i>Membrane: BUR Bitumen</i>                           |                |                    |       |                |
| 120      | Note 2 4 Ply Bur Foot System                           | 18,523.00 sqft | 24.00 /sqft        |       | 444,552        |
|          | <i>Membrane: BUR Bitumen</i>                           |                |                    |       | 444,552        |
| 7840.000 | <i>Firestopping</i>                                    |                |                    |       |                |
| ---      | Firestopping   | 1.00 Allo      | 2,500.00 /Allo     |       | 2,500          |
|          | <i>Firestopping</i>                                    |                |                    |       | 2,500          |
| 7920.010 | <i>Sealant - Jt Filler Gaskt</i>                       |                |                    |       |                |
| ---      | Joint Sealants   | 1.00 Allo      | 2,500.00 /Allo     |       | 2,500          |
|          | <i>Sealant - Jt Filler Gaskt</i>                       |                |                    |       | 2,500          |
|          | <b>THERMAL &amp; MOISTURE PROT</b>                     |                |                    |       | 478,953        |
|          | 83.542 Labor hours                                     |                |                    |       |                |
|          | <b>07</b>  |                | <b>28.07 /sqft</b> |       | <b>478,953</b> |
|          | <b>17,063.00 sqft</b>                                  |                |                    |       |                |
|          | 83.542 Labor hours                                     |                |                    |       |                |
|          | <b>08</b>  |                |                    |       |                |
| 8000.000 | <b>DOORS &amp; WINDOWS</b>                             |                |                    |       |                |
| 8100.000 | <i>Doors: Metal With Frames</i>                        |                |                    |       |                |
| 20       | HM Frame (Single)                                      | 19.00 ea       | 204.782 /ea        |       | 3,891          |
| 20       | HM Frame (Double)                                      | 10.00 ea       | 279.782 /ea        |       | 2,798          |
| 100      | Note 2 Aluminum Entrance Doors                         | 2.00 ea        | 3,500.00 /ea       |       | 7,000          |
| 100      | Aluminum Vestibule Doors                               | 2.00 ea        | 3,500.00 /ea       |       | 7,000          |
| 100      | Aluminum Lobby Doors                                   | 4.00 ea        | 3,500.00 /ea       |       | 14,000         |
|          | <i>Doors: Metal With Frames</i>                        |                |                    |       | 34,689         |
|          | 74.00 Labor hours                                      |                |                    |       |                |
| 8210.010 | <i>Doors: Wood</i>                                     |                |                    |       |                |
| b228     | 3'-0" x 7'-0"  | 39.00 ea       | 429.782 /ea        |       | 16,762         |
|          | <i>Doors: Wood</i>                                     |                |                    |       | 16,762         |
|          | 76.00 Labor hours                                      |                |                    |       |                |
| 8400.000 | <i>Metal-Framed Storefronts</i>                        |                |                    |       |                |
| 10       | Note 2 Aluminum-Framed Storefronts                     | 290.00 sf      | 60.00 /sf          |       | 17,400         |
|          | <i>Metal-Framed Storefronts</i>                        |                |                    |       | 17,400         |
| 8510.010 | <i>Windows: Metal</i>                                  |                |                    |       |                |
| 20       | Note 9 Aluminum Awning Window                          | 387.00 sf      | 65.00 /sf          |       | 25,155         |
|          | <i>Windows: Metal</i>                                  |                |                    |       | 25,155         |
| 8900.010 | <i>Glazed Curtain Walls</i>                            |                |                    |       |                |
| 10       | Note 1 Metal Framed Curtain Wall W Double Hung Windows | 1,215.00 sf    | 85.00 /sf          |       | 103,275        |

| Item     | Description                   | Takeoff Qty  | Unit Cost   | Total | Amount  |
|----------|-------------------------------|--------------|-------------|-------|---------|
|          | <i>Glazed Curtain Walls</i>   |              |             |       | 103,275 |
|          | <b>DOORS &amp; WINDOWS</b>    |              |             |       | 197,280 |
|          | 152.00 Labor hours            |              |             |       |         |
|          | <b>08</b>                     |              | 11.862/sqft |       | 197,280 |
|          | 17,063.00 sqft                |              |             |       |         |
|          | 152.00 Labor hours            |              |             |       |         |
|          | <b>09</b>                     |              |             |       |         |
| 9000.000 | <b>FINISHES</b>               |              |             |       |         |
| 9310.020 | <i>Tile: Mosaics</i>          |              |             |       |         |
|          | 20 Ceramic Floor Tile         | 750.00 sf    | 12.00 /sf   |       | 9,000   |
|          | 20 Ceramic Tile Walls         | 2,067.00 sf  | 14.00 /sf   |       | 28,938  |
|          | 20 Porcelain Tile Base        | 289.00 lf    | 14.00 /lf   |       | 4,046   |
|          | 20 Quarry Tile Floor          | 2,163.00 sf  | 14.00 /sf   |       | 30,282  |
|          | <i>Tile: Mosaics</i>          |              |             |       | 72,266  |
| 9400.000 | <i>Terrazzo</i>               |              |             |       |         |
|          | 10 Precast Terrazzo           | 3,124.00 sf  | 18.00 /sf   |       | 56,232  |
|          | 11 Terrazzo Cove Base         | 818.00 lf    | 25.00 /lf   |       | 15,450  |
|          | <i>Terrazzo</i>               |              |             |       | 71,682  |
| 9511.050 | <i>Ceiling: 2x4 Tile</i>      |              |             |       |         |
|          | 10 ACT-1 2x2 Ceiling          | 13,814.00 sf | 3.75 /sf    |       | 51,803  |
|          | <i>Ceiling: 2x4 Tile</i>      |              |             |       | 51,803  |
| 9640.010 | <i>Flooring Wood</i>          |              |             |       |         |
|          | 10 Wood Base                  | 196.00 sf    | 14.00 /sf   |       | 2,744   |
|          | 10 Wood Flooring @ Stage      | 1,150.00 sf  | 14.00 /sf   |       | 16,100  |
|          | <i>Flooring Wood</i>          |              |             |       | 18,844  |
| 9650.010 | <i>Flooring Resilient</i>     |              |             |       |         |
|          | 10 Sheet Linoleum Floor       | 4,320.00 sf  | 3.50 /sf    |       | 15,120  |
|          | 10 Rubber Floor Tile          | 603.00 sf    | 3.50 /sf    |       | 2,111   |
|          | 40 Rubber Base                | 1,217.00 lf  | 2.20 /lf    |       | 2,677   |
|          | <i>Flooring Resilient</i>     |              |             |       | 19,908  |
| 9680.010 | <i>Flooring Carpet</i>        |              |             |       |         |
|          | 6 Carpet Tile                 | 354.78 sy    | 35.00 /sy   |       | 12,417  |
|          | <i>Flooring Carpet</i>        |              |             |       | 12,417  |
| 9910.020 | <i>Painting: Int Detailed</i> |              |             |       |         |
|          | 5 Paint CMU Block             | 16,276.00 sf | 1.00 /sf    |       | 16,276  |
|          | <i>Painting: Int Detailed</i> |              |             |       | 16,276  |
|          | <b>FINISHES</b>               |              |             |       | 263,195 |
|          | <b>09</b>                     |              | 15.43 /sqft |       | 263,195 |
|          | 17,063.00 sqft                |              |             |       |         |

| Item      | Description                               | Takeoff Qty | Unit Cost        | Total | Amount         |
|-----------|---|-------------|------------------|-------|----------------|
| 10        |   |             |                  |       |                |
| 10000.000 | <b>SPECIALTIES</b>                        |             |                  |       |                |
| 10160.010 | <i>Toilet Compartments</i>                |             |                  |       |                |
|           | 30 Phenolic Toilet Compartments           | 11.00 ea    | 1,000.00 /ea     |       | 11,000         |
|           | 31 Phenolic ADA Toilet Compartments       | 2.00 ea     | 1,275.00 /ea     |       | 2,550          |
|           | 41 Urinal Screen                          | 3.00 ea     | 725.00 /ea       |       | 2,175          |
|           | <i>Toilet Compartments</i>                |             |                  |       | <u>15,725</u>  |
| 10800.010 | <i>Misc Toilet/Bath Equip</i>             |             |                  |       |                |
|           | 80 Soap Dispenser                         | 8.00 ea     | 75.50 /ea        |       | 604            |
|           | 82 SS Toilet Paper Dispenser- Surface Mt. | 13.00 ea    | 34.50 /ea        |       | 449            |
|           | 84 SS Waste Rec./Paper Towel Disp.        | 3.00 ea     | 545.00 /ea       |       | 1,635          |
|           | 90 Mirror                                 | 8.00 ea     | 238.00 /ea       |       | 1,904          |
|           | 100 Grab Bar                              | 4.00 ea     | 56.00 /ea        |       | 224            |
|           | <i>Misc Toilet/Bath Equip</i>             |             |                  |       | <u>4,816</u>   |
|           | <b>SPECIALTIES</b>                        |             |                  |       | <u>20,541</u>  |
| 12000.000 | <b>FURNISHINGS</b>                        |             |                  |       |                |
| 12000.010 | <i>Floor Mats</i>                         |             |                  |       |                |
|           | 10 Entrance Mats                          | 319.00 sqft | 9.50 /sqft       |       | 3,031          |
|           | <i>Floor Mats</i>                         |             |                  |       | <u>3,031</u>   |
|           | <b>FURNISHINGS</b>                        |             |                  |       | <u>3,031</u>   |
|           | 10  |             | 1.381/sqft       |       | <u>23,571</u>  |
|           | 17,063.00 sqft                            |             |                  |       |                |
| 11        |   |             |                  |       |                |
| 11000.000 | <b>EQUIPMENT</b>                          |             |                  |       |                |
| 11060.010 | <i>Equip: Theater &amp; Stage</i>         |             |                  |       |                |
|           | 140 Stage Curtains                        | 1.00 ea     | 25,000.00 /ea    |       | 25,000         |
|           | New Stage Curtain & Rigging               | 1.00 Allo   | 150,000.00 /Allo |       | 150,000        |
|           | <i>Equip: Theater &amp; Stage</i>         |             |                  |       | <u>175,000</u> |
| 11400.010 | <i>Equip: Commercial Food</i>             |             |                  |       |                |
|           | Kitchen Equipment                         | 1.00 Allo   | 400,000.00 /Allo |       | 400,000        |
|           | <i>Equip: Commercial Food</i>             |             |                  |       | <u>400,000</u> |
|           | <b>EQUIPMENT</b>                          |             |                  |       | <u>575,000</u> |
|           | 11  |             | 33.70 /sqft      |       | <u>575,000</u> |
|           | 17,063.00 sqft                            |             |                  |       |                |



| Item      | Description  | Takeoff Qty    | Unit Cost       | Total | Amount |
|-----------|--|----------------|-----------------|-------|--------|
|           | 12   |                |                 |       |        |
| 12000.000 | FURNISHINGS  |                |                 |       |        |
| 12490.010 | Window Treatments                                  |                |                 |       |        |
|           | 20 Louver Blinds                                   | 387.00 sqft    | 12.00 /sqft     |       | 4,644  |
|           | Window Treatments                                  |                |                 |       | 4,644  |
|           | FURNISHINGS  |                |                 |       | 4,644  |
|           | 12   |                | 0.272/sqft      |       | 4,644  |
|           | 17,063.00 sqft                                     |                |                 |       |        |
|           | 16   |                |                 |       |        |
| 16010.000 | GENERAL CONDITIONS                                 |                |                 |       |        |
| 16010.050 | INSURANCE & BONDS                                  |                |                 |       |        |
| n         | 55 Bond, Subcontractor, avg. \$10.00 per \$1000    | 363.00 k       | 10.00 /k        |       | 3,630  |
|           | INSURANCE & BONDS                                  |                |                 |       | 3,630  |
| 16010.060 | MOBILIZE/DEMOBILIZE                                |                |                 |       |        |
| n         | 15 Average cost, mob-demob, large project > \$500k | 1.00 ls        | 5,000.00 /ls    |       | 5,000  |
|           | MOBILIZE/DEMOBILIZE                                |                |                 |       | 5,000  |
|           | GENERAL CONDITIONS                                 |                |                 |       | 8,630  |
| 16050.000 | BASIC MATERIALS & METHODS                          |                |                 |       |        |
| 16060.810 | Lightning Protection                               |                |                 |       |        |
|           | 5 Lightning Protection                             | 17,063.00 sqft | 0.25 /sqft      |       | 4,266  |
|           | Lightning Protection                               |                |                 |       | 4,266  |
|           | BASIC MATERIALS & METHODS                          |                |                 |       | 4,266  |
| 16130.000 | RACEWAY, FITTINGS & BOXES                          |                |                 |       |        |
| 16132.158 | FEEDER CONDUIT/WIRE                                |                |                 |       |        |
|           | 17 HVAC Equipment Power                            | 17,063.00 sqft | 1.50 /sqft      |       | 25,595 |
|           | 17 Kitchen Equipment Power                         | 1.00 Allo      | 10,000.00 /Allo |       | 10,000 |
|           | FEEDER CONDUIT/WIRE                                |                |                 |       | 35,595 |
|           | RACEWAY, FITTINGS & BOXES                          |                |                 |       | 35,595 |
| 16140.000 | WIRING DEVICES                                     |                |                 |       |        |
| 16140.150 | RECEPTACLES, BLADE TYPE                            |                |                 |       |        |
| n         | 5 Conduit and Wire for Electrical Power            | 17,063.00 sqft | 1.00 /sqft      |       | 17,063 |
| n         | 5 Receptacles                                      | 17,063.00 sqft | 1.85 /sqft      |       | 31,567 |

| Item      | Description                               | Takeoff Qty | Unit Cost | Total           | Amount  |
|-----------|---|-------------|-----------|-----------------|---------|
|           | <b>RECEPTACLES, BLADE TYPE</b>            |             |           |                 | 48,630  |
|           | 85,811.991 Labor hours                    |             |           |                 |         |
|           | <b>WIRING DEVICES</b>                     |             |           |                 | 48,630  |
|           | 85,811.991 Labor hours                    |             |           |                 |         |
| 16510.000 | <b>LIGHTING</b>                           |             |           |                 |         |
| 16510.440 | <b>Flourescent Fixtures</b>               |             |           |                 |         |
| ---       | Lighting                                  | 17,063.00   | sqft      | 7.00 /sqft      | 119,441 |
| ---       | Emergency Lighting                        | 17,063.00   | sqft      | 1.00 /sqft      | 17,063  |
| ---       | Lighting Control System                   | 17,063.00   | sqft      | 0.50 /sqft      | 8,532   |
| ---       | Theatrical Lighting Allowance             | 1.00        | lsum      | 40,000.00 /lsum | 40,000  |
|           | <b>Flourescent Fixtures</b>               |             |           |                 | 165,036 |
|           | <b>LIGHTING</b>                           |             |           |                 | 165,036 |
| 16700.000 | <b>SPECIAL SYSTEMS</b>                    |             |           |                 |         |
| 16720.310 | <b>FIRE ALARM SYSTEM</b>                  |             |           |                 |         |
| 495       | Fire Alarm System                         | 17,063.00   | sqft      | 2.50 /sqft      | 42,658  |
|           | <b>FIRE ALARM SYSTEM</b>                  |             |           |                 | 42,658  |
| 16720.320 | <b>Security System</b>                    |             |           |                 |         |
| n         | 5 Security System Access Control Conduits | 17,063.00   | sqft      | 0.15 /sqft      | 2,559   |
| n         | 45 CCTV System Conduits                   | 17,063.00   | sqft      | 0.10 /sqft      | 1,706   |
|           | <b>Security System</b>                    |             |           |                 | 4,266   |
|           | 115,175.250 Labor hours                   |             |           |                 |         |
| 16720.330 | <b>Clock/Program System</b>               |             |           |                 |         |
| n         | 5 Clock System                            | 17,063.00   | sqft      | 0.25 /sqft      | 4,266   |
|           | <b>Clock/Program System</b>               |             |           |                 | 4,266   |
|           | 10,237.800 Labor hours                    |             |           |                 |         |
| 16720.340 | <b>SOUND/PAGING SYSTEM</b>                |             |           |                 |         |
| n         | 5 PA System                               | 17,063.00   | sqft      | 0.25 /sqft      | 4,266   |
| n         | 5 Stage/Cafeteria Sound System            | 1.00        | Allo      | 25,000.00 /Allo | 25,000  |
|           | <b>SOUND/PAGING SYSTEM</b>                |             |           |                 | 29,266  |
| 16720.420 | <b>TELE/DATA SYSTEM</b>                   |             |           |                 |         |
| n         | 5 Tele/Data/CATV Conduits                 | 17,063.00   | sqft      | 0.25 /sqft      | 4,266   |
|           | <b>TELE/DATA SYSTEM</b>                   |             |           |                 | 4,266   |
|           | <b>SPECIAL SYSTEMS</b>                    |             |           |                 | 84,721  |
|           | 125,413.050 Labor hours                   |             |           |                 |         |
|           | <b>16</b>                                 |             |           | 21.501/sqft     | 366,876 |
|           | 17,063.00 sqft                            |             |           |                 |         |
|           | 191,225.041 Labor hours                   |             |           |                 |         |

02D

1730.000

DEMOLITION

1739.040

Demo: Finishes, Walls



| Item              | Description                  | Takeoff Qty | Unit Cost      | Total | Amount |
|-------------------|------------------------------|-------------|----------------|-------|--------|
| 1739.040          | <i>Demo: Finishes, Walls</i> |             |                |       |        |
| n                 | 30 Demo for Addition Tie-In  | 1.00 Allo   | 5,000.00 /Allo |       | 5,000  |
|                   | <i>Demo: Finishes, Walls</i> |             |                |       | 5,000  |
|                   | 0.10 Labor hours             |             |                |       |        |
| <b>DEMOLITION</b> |                              |             |                |       | 5,000  |
|                   | 0.10 Labor hours             |             |                |       |        |
| <b>02D</b>        |                              |             |                |       | 5,000  |
|                   | 17,063.00 sqft               |             | 0.293/sqft     |       |        |
|                   | 0.10 Labor hours             |             |                |       |        |

02B

| 2300.000 EARTHWORK |   |                |            |  |        |
|--------------------|---|----------------|------------|--|--------|
| 2317.105           | <i>Building Excavation</i>                              |                |            |  |        |
| ---                | Building Earthwork - Excav, Backfill & Subbase Addition | 17,063.00 sqft | 3.25 /sqft |  | 55,455 |
|                    | <i>Building Excavation</i>                              |                |            |  | 55,455 |
| <b>EARTHWORK</b>   |   |                |            |  | 55,455 |
| <b>02B</b>         |   |                |            |  | 55,455 |
|                    | 17,063.00 sqft  |                | 3.25 /sqft |  |        |

15FP

| 15000.000 FIRE PROTECTION |                               |                |            |  |        |
|---------------------------|-------------------------------|----------------|------------|--|--------|
| 15011.000                 | <i>Fire Protection Piping</i> |                |            |  |        |
| n                         | 3404 Wet Sprinkler System     | 17,063.00 sqft | 2.90 /sqft |  | 49,483 |
|                           | <i>Fire Protection Piping</i> |                |            |  | 49,483 |
| <b>FIRE PROTECTION</b>    |                               |                |            |  | 49,483 |
| <b>15FP</b>               |                               |                |            |  | 49,483 |
|                           | 17,063.00 sqft                |                | 2.90 /sqft |  |        |

15H

| 15500.000 HVAC      |                                 |                 |            |  |        |
|---------------------|---------------------------------|-----------------|------------|--|--------|
| 15500.100           | <b>HVAC GENERAL</b>             |                 |            |  |        |
|                     | 0002 Bonds and Insurances       | 437,666.00 lsum | 0.02 /lsum |  | 8,753  |
|                     | 0003 General Conditions         | 437,666.00 lsum | 0.08 /lsum |  | 35,013 |
| <b>HVAC GENERAL</b> |                                 |                 |            |  | 43,767 |
| 15617.000           | <i>Terminal Heat/Cool Units</i> |                 |            |  |        |

| Item      | Description  | Takeoff Qty                      | Unit Cost                | Total     |                              |
|-----------|--|----------------------------------|--------------------------|-----------|------------------------------|
|           |  |                                  |                          | Unit Cost | Amount                       |
| 15617.000 | <i>Terminal Heat/Cool Units</i><br>7200 Cabinet Heaters , FT radiation, Hydronic Heating Terminal<br><i>Terminal Heat/Cool Units</i>                       | 17,063.00 sqft                   | 0.85 /sqft               |           | 14,504                       |
|           |  |                                  |                          |           | 14,504                       |
| 15650.000 | <i>Air Handling Units</i><br>1120 Gas Fired Make-up Air Systems<br>1130 VAV AHU Systems<br><i>Air Handling Units</i><br>409,512.000 Labor hours            | 17,063.00 sqft<br>17,063.00 each | 2.63 /sqft<br>7.50 /each |           | 44,876<br>127,973<br>172,848 |
| 15730.000 | <i>Heating Water Piping</i><br>1103 Heating Water Branch Piping<br>1103 Heating Water Mains Piping<br><i>Heating Water Piping</i><br>8,190.240 Labor hours | 17,063.00 sqft<br>17,063.00 sqft | 1.20 /sqft<br>1.20 /sqft |           | 20,476<br>20,476<br>40,951   |
| 15830.000 | <i>Fans</i><br>2001 Exhaust Fan Systems, duct and louver<br><i>Fans</i>  | 17,063.00 sqft                   | 4.94 /sqft               |           | 84,291<br>84,291             |
| 15840.000 | <i>Air Terminal Units</i><br>4001 VAV Variable Air Volume HW Reheat, No Controls<br><i>Air Terminal Units</i><br>51,189.000 Labor hours                    | 17,063.00 sqft                   | 2.50 /sqft               |           | 42,658<br>42,658             |
| 15850.000 | <i>Air Outlets &amp; Inlets</i><br>5100 Roof Combustion Air Systems<br><i>Air Outlets &amp; Inlets</i><br>8,531.50 Labor hours                             | 17,063.00 sqft                   | 0.33 /sqft               |           | 5,631<br>5,631               |
| 15940.000 | <i>HVAC Inst. and Controls</i><br>1610 HVAC Controls<br><i>HVAC Inst. and Controls</i>   | 17,063.00 sqft                   | 4.00 /sqft               |           | 68,252<br>68,252             |
|           | <i>HVAC</i><br>477,422.740 Labor hours   |                                  |                          |           | 472,901                      |
|           | 16H  |                                  | 27.72 /sqft              |           | 472,901                      |
|           | 17,063.00 sqft<br>477,422.740 Labor hours  |                                  |                          |           |                              |

16P

15200.000

PLUMBING

15200.100

PLUMBING GENERAL

GC01

Bonds and Insurances

135,617.00 lsum

0.02 /lsum

2,712

GC02

General Conditions

135,617.00 lsum

0.08 /lsum

10,849

PLUMBING GENERAL

13,562

15310.000

Domestic Water Piping

1105 Domestic Water Piping

17,063.00 sqft

1.75 /sqft

29,860

| Item      | Description                         | Takeoff Qty    | Unit Cost    | Total | Amount           |
|-----------|-------------------------------------|----------------|--------------|-------|------------------|
|           | <i>Domestic Water Piping</i>        |                |              |       | <u>29,860</u>    |
| 15320.000 | <i>Sanitary Waste/Vent Ppg.</i>     |                |              |       |                  |
|           | 5708 Sanitary Drain Piping          | 17,063.00 sqft | 1.50 /sqft   |       | <u>25,595</u>    |
|           | <i>Sanitary Waste/Vent Ppg.</i>     |                |              |       | <u>25,595</u>    |
| 15330.000 | <i>Storm Drainage Piping</i>        |                |              |       |                  |
|           | 5708 Storm Piping                   | 17,063.00 sqft | 1.50 /sqft   |       | <u>25,595</u>    |
|           | <i>Storm Drainage Piping</i>        |                |              |       | <u>25,595</u>    |
| 15340.000 | <i>Natural Gas Piping</i>           |                |              |       |                  |
|           | 3306 Gas Piping                     | 17,063.00 sqft | 0.47 /sqft   |       | <u>8,020</u>     |
|           | <i>Natural Gas Piping</i>           |                |              |       | <u>8,020</u>     |
| 15360.000 | <i>Fixture Rough In</i>             |                |              |       |                  |
|           | 1000 Rough In, Plumbing Fixtures    | 17,063.00 sqft | 0.77 /sqft   |       | <u>13,070</u>    |
|           | 9000 Plumbing Fixture Final Hook Up | 17,063.00 sqft | 0.87 /sqft   |       | <u>11,381</u>    |
|           | <i>Fixture Rough In</i>             |                |              |       | <u>24,451</u>    |
| 15410.000 | <i>Plumbing Fixtures</i>            |                |              |       |                  |
|           | 1000 Plumbing Fixtures              | 17,063.00 sqft | 0.56 /sqft   |       | <u>9,611</u>     |
|           | <i>Plumbing Fixtures</i>            |                |              |       | <u>9,611</u>     |
| 15440.000 | <i>Domestic Water Heaters</i>       |                |              |       |                  |
|           | 2100 Gas Water Heater, Equipment    | 17,063.00 sqft | 0.52 /sqft   |       | <u>8,873</u>     |
|           | 9100 Hot Water Storage              | 17,063.00 sqft | 0.20 /sqft   |       | <u>3,413</u>     |
|           | <i>Domestic Water Heaters</i>       |                |              |       | <u>12,285</u>    |
|           | <b>PLUMBING</b>                     |                |              |       | <u>149,178</u>   |
|           | 16P                                 |                | 8.743/sqft   |       | <u>149,178</u>   |
|           | 17,063.00 sqft                      |                |              |       |                  |
|           | <b>Music/Cafe Add</b>               |                | 209.65 /sqft |       | <u>3,577,228</u> |
|           | 17,063.00 sqft                      |                |              |       |                  |
|           | 670,461.90 Labor hours              |                |              |       |                  |

**Renovation**

|          |                                  |           |                 |  |                |
|----------|----------------------------------|-----------|-----------------|--|----------------|
| 01       |                                  |           |                 |  |                |
| 1000.000 | <b>GENERAL REQUIREMENTS</b>      |           |                 |  |                |
| 1000.100 | <i>Division 1 Subcontractors</i> |           |                 |  |                |
|          | 10 GC Gen Conditions 6%          | 1.00 /sum | 227,958.00 /sum |  | <u>227,958</u> |
|          | 10 GC Fee 4%                     | 1.00 /sum | 151,971.00 /sum |  | <u>151,971</u> |
|          | <i>Division 1 Subcontractors</i> |           |                 |  | <u>379,929</u> |
|          | <b>GENERAL REQUIREMENTS</b>      |           |                 |  | <u>379,929</u> |
| 01       |                                  |           | 4.764/sqft      |  | <u>379,929</u> |
|          | 79,743.00 sqft                   |           |                 |  |                |

| Item     | Description  | Takeoff Qty    | Unit Cost   | Total | Amount  |
|----------|--|----------------|-------------|-------|---------|
|          | 01   |                | 4.764/sqft  |       | 379,929 |
|          | 79,743.00 sqft   |                |             |       |         |
|          | 03   |                |             |       |         |
| 3000.000 | CONCRETE   |                |             |       |         |
| 3310.210 | Conc: Slabs On Grads                                       |                |             |       |         |
| c 40     | Note 11 5" S.O.G. Conc                                     | 4,907.00 sf    | 5.00 /sf    |       | 24,535  |
| c 40     | Note 11 Flowable Fill @ Former Cafeteria / Mult Purpose Rm | 4,876.00 sf    | 4.00 /sf    |       | 19,504  |
|          | Conc: Slabs On Grade                                       |                |             |       | 44,039  |
|          | CONCRETE   |                |             |       | 44,039  |
|          | 03   |                | 0.552/sqft  |       | 44,039  |
|          | 79,743.00 sqft   |                |             |       |         |
|          | 04   |                |             |       |         |
| 4000.000 | MASONRY  |                |             |       |         |
| 4210.100 | Brick: All Types   |                |             |       |         |
| 10       | Note 11 Brick Veneer Type 1                                | 95.00 sqft     | 28.00 /sqft |       | 2,660   |
|          | Brick: All Types   |                |             |       | 2,660   |
| 4220.100 | Conc. Block 10"  |                |             |       |         |
| lw 1     | Blk 12" CMU Interior Wall                                  | 6,087.00 sqft  | 16.00 /sqft |       | 109,668 |
| lw 1     | Note 8 Blk 12" CMU Back-up @ cast Stone                    | 34.00 sqft     | 18.00 /sqft |       | 612     |
| lw 1     | Note 11 Blk 12" CMU Back-up                                | 95.00 sqft     | 18.00 /sqft |       | 1,710   |
| lw 1     | Note 8 Reinforce Existing CMU Wall W/ #5 Bars @ 48" OC     | 888.00 each    | 30.00 /each |       | 26,640  |
|          | Conc. Block 10"  |                |             |       | 138,528 |
|          | 615.68 Labor hours   |                |             |       |         |
| 4220.110 | Conc. Block: 8"  |                |             |       |         |
| rw 1     | 6" CMU Interior Wall                                       | 20,491.00 sqft | 14.00 /sqft |       | 286,874 |
|          | Conc. Block: 8"  |                |             |       | 286,874 |
| 4220.130 | Conc. Block: 4"  |                |             |       |         |
| rw 1     | Blk 4" CMU Interior  | 2,127.00 sqft  | 12.00 /sqft |       | 25,524  |
|          | Conc. Block: 4"  |                |             |       | 25,524  |
|          | 212.70 Labor hours   |                |             |       |         |
| 4440.400 | Stone Misc.  |                |             |       |         |
| 10       | Note 8 Cast Stone Band                                     | 17.00 lf       | 65.00 /lf   |       | 1,105   |
| 10       | Note 11 Cast Stone Band                                    | 148.00 lf      | 65.00 /lf   |       | 9,620   |
|          | Stone Misc.  |                |             |       | 10,725  |
|          | 55.00 Labor hours  |                |             |       |         |

| Item            | Description  | Takeoff Qty | Unit Cost         | Amount         |
|-----------------|--|-------------|-------------------|----------------|
|                 |  |             |                   | <b>Total</b>   |
|                 | <b>MASONRY</b>   |             |                   | <b>484,311</b> |
|                 | 883.38 Labor hours   |             |                   |                |
|                 | <b>04</b>  |             | <b>5.823/sqft</b> | <b>484,311</b> |
|                 | 78,743.00 sqft   |             |                   |                |
|                 | 883.38 Labor hours   |             |                   |                |
|                 | <b>05</b>  |             |                   |                |
| <b>5000.000</b> | <b>METALS</b>  |             |                   |                |
| <b>5500.010</b> | Misc: Lintels  |             |                   |                |
| 10              | Steel Lintels @ Enlarged Door Openings                                     | 166.00 ea   | 240.78 /ea        | 39,969         |
|                 | Misc: Lintels  |             |                   | 39,969         |
|                 | 332.00 Labor hours   |             |                   |                |
|                 | <b>METALS</b>  |             |                   | <b>39,969</b>  |
|                 | 332.00 Labor hours   |             |                   |                |
|                 | <b>05</b>  |             | <b>0.501/sqft</b> | <b>39,969</b>  |
|                 | 79,743.00 sqft   |             |                   |                |
|                 | 332.00 Labor hours   |             |                   |                |
|                 | <b>06</b>  |             |                   |                |
| <b>6000.000</b> | <b>WOOD &amp; PLASTICS</b>   |             |                   |                |
| <b>6117.020</b> | Blocking: Misc.  |             |                   |                |
|                 | Roof Blocking 2x8  | 784.00 Inft | 5.00 /Inft        | 3,820          |
|                 | Blocking: Misc.  |             |                   | 3,820          |
| <b>6410.010</b> | Arch Wd Wrk: Cabinets  |             |                   |                |
| 10              | Circulation Desk   | 23.00 lf    | 550.00 /lf        | 12,650         |
| 10              | Library Bookshelves  | 70.00 ea    | 350.00 /ea        | 24,500         |
| 10              | Plam Sase Cabinet W/ Lockable Doors @ Classroom                            | 175.00 lf   | 345.00 /lf        | 60,375         |
| 10              | Wall Cabinet W/ Lockable Doors @ Classroom                                 | 175.00 lf   | 200.00 /lf        | 35,000         |
| 10              | Book Drop Sox  | 1.00 ea     | 1,000.00 /ea      | 1,000          |
| 101             | P-Lam Countertops  | 191.00 lf   | 45.00 /lf         | 8,595          |
| 101             | P-Lam Countertops @ Science Room   | 106.00 lf   | 45.00 /lf         | 4,770          |
| 101             | Solid Surface Countertops @ Classroom                                      | 175.00 lf   | 75.00 /lf         | 13,125         |
| 130             | Cubbies (30) ea / Classroom (10 lf / Classroom)                            | 250.00 lf   | 65.00 /lf         | 16,250         |
| 130             | Storage Units 24" x 3'-6" x 8' High W/ 7 Adjustable Shelves Lockable Doors | 50.00 ea    | 750.00 /ea        | 37,500         |
| 130             | Storage Units 12" x 3'-6" x 8' High W/ 7 Adjustable Shelves Lockable Doors | 66.00 ea    | 450.00 /ea        | 29,700         |
|                 | Arch Wd Wrk: Cabinets  |             |                   | 243,465        |
|                 | 366.00 Labor hours   |             |                   |                |
|                 | <b>WOOD &amp; PLASTICS</b>   |             |                   | <b>247,285</b> |
|                 | 366.00 Labor hours   |             |                   |                |

| Item     | Description                                 | Takeoff Qty    | Unit Cost    | Total      | Amount  |
|----------|---|----------------|--------------|------------|---------|
|          | 06  |                |              | 3.101/sqft | 247,285 |
|          | 79,743.00 sqft                              |                |              |            |         |
|          | 366.00 Labor hours                          |                |              |            |         |
|          | 07  |                |              |            |         |
| 7000.000 | THERMAL & MOISTURE PROT                     |                |              |            |         |
| 7510.030 | Membrane: BUR Bitumen                       |                |              |            |         |
| 120      | Note 7 Replace BU Coal Tar & Gravel Roof    | 27,331.00 sqft | 28.00 /sqft  |            | 710,808 |
| 120      | Remove Roof Hatch/Ladder/ Fill Opening      | 1.00 ea        | 500.00 /ea   |            | 500     |
|          | Membrane: BUR Bitumen                       |                |              |            | 711,106 |
|          | THERMAL & MOISTURE PROT                     |                |              |            | 711,106 |
|          | 07  |                |              | 8.92 /sqft | 711,106 |
|          | 79,743.00 sqft                              |                |              |            |         |
|          | 08  |                |              |            |         |
| 8000.000 | DOORS & WINDOWS                             |                |              |            |         |
| 8100.000 | Doors: Metal With Frames                    |                |              |            |         |
| 20       | HM Frame (Single)                           | 166.00 ea      | 204.782 /ea  |            | 33,994  |
| 20       | HM Frame (Double)                           | 11.00 ea       | 279.782 /ea  |            | 3,078   |
| 20       | HM Frame (Single) 3'-0" x 7'-10" @ Corridor | 95.00 ea       | 229.782 /ea  |            | 21,829  |
| 20       | HM Frame (Double) 6'-0" x 7'-10" @ Corridor | 11.00 ea       | 279.782 /ea  |            | 3,078   |
| 20       | HM Frame (Double) @ Bi-Fold Door            | 2.00 ea        | 279.76 /ea   |            | 560     |
| 100      | Note 2 Aluminum Entrance Doors              | 2.00 ea        | 3,500.00 /ea |            | 7,000   |
| 100      | Note 19 Aluminum Frame 6'-0" x 7'-0"        | 1.00 ea        | 1,000.00 /ea |            | 1,000   |
| 100      | Note 19 Aluminum Frame 6'-0" x 7'-0"        | 2.00 ea        | 1,000.00 /ea |            | 2,000   |
|          | Doors: Metal With Frames                    |                |              |            | 72,538  |
|          | 580.00 Labor hours                          |                |              |            |         |
| 8110.020 | FRP Door                                    |                |              |            |         |
| 10       | Note 19 FRP Doors                           | 2.00 ea        | 998.74 /ea   |            | 1,993   |
|          | FRP Door                                    |                |              |            | 1,993   |
|          | 4.00 Labor hours                            |                |              |            |         |
| 8210.010 | Doors: Wood                                 |                |              |            |         |
| b226     | 3'-0" x 7'-0"                               | 71.00 ea       | 429.782 /ea  |            | 30,515  |
|          | Doors: Wood                                 |                |              |            | 30,515  |
|          | 142.00 Labor hours                          |                |              |            |         |
| 8350.010 | Doors: Folding                              |                |              |            |         |
| 10       | Door Bifold                                 | 2.00 ea        | 296.37 /ea   |            | 597     |
|          | Doors: Folding                              |                |              |            | 597     |
|          | 2.00 Labor hours                            |                |              |            |         |
| 8360.010 | Doors: Overhead                             |                |              |            |         |
| 20       | Note 20 Motorized Sectional Overhead Door   | 1.00 ea        | 2,500.00 /ea |            | 2,500   |



| Item     | Description   | Takeoff Qty  | Unit Cost   | Total Amount |
|----------|---|--------------|-------------|--------------|
|          | <i>Doors: Overhead</i>                                |              |             | 2,500        |
| 8400.000 | <i>Metal-Framed Storefronts</i>                       |              |             |              |
|          | 10 Note 2 Aluminum-Framed Storefronts                 | 29.00 sf     | 60.00 /sf   | 1,740        |
|          | 10 Note 2 Aluminum-Framed Storefronts                 | 148.00 sf    | 60.00 /sf   | 8,880        |
|          | <i>Metal-Framed Storefronts</i>                       |              |             | 10,620       |
| 8700.000 | <i>Hardware: Finishing</i>                            |              |             |              |
|          | 10 Finishing Hardware                                 | 188.00 ea    | 504.762 /ea | 94,899       |
|          | <i>Hardware: Finishing</i>                            |              |             | 94,899       |
|          | 188.00 Labor hours                                    |              |             |              |
| 8900.010 | <i>Glazed Curtain Walls</i>                           |              |             |              |
|          | 10 Note 16 Metal Framed Curtain Wall                  | 308.00 sf    | 85.00 /sf   | 26,180       |
|          | 10 Note 10 Metal Framed Curtain Wall                  | 1,876.00 sf  | 85.00 /sf   | 159,460      |
|          | <i>Glazed Curtain Walls</i>                           |              |             | 185,640      |
|          | <b>DOORS &amp; WINDOWS</b>                            |              |             | 399,302      |
|          | 916.00 Labor hours                                    |              |             |              |
|          | 08  |              | 5.01 /eqft  | 399,302      |
|          | 79,743.00 eqft  |              |             |              |
|          | 916.00 Labor hours                                    |              |             |              |
|          | 09  |              |             |              |
| 9000.000 | <b>FINISHES</b>                                       |              |             |              |
| 9134.010 | <b>GWB: WALL BOARD SYSTEMS</b>                        |              |             |              |
|          | 30 GWB Ceiling/Soffit                                 | 10,470.00 sf | 10.00 /sf   | 104,700      |
|          | 30 GWB Soffit & Ceiling Clouds @ Main Office, Library | 1,118.00 sf  | 14.00 /sf   | 15,624       |
|          | <b>GWB: WALL BOARD SYSTEMS</b>                        |              |             | 120,324      |
| 9310.020 | <i>Tile: Mosaics</i>                                  |              |             |              |
|          | 20 Ceramic Tile Walls                                 | 7,317.00 sf  | 14.00 /sf   | 102,438      |
|          | 20 Ceramic Tile Base                                  | 34.00 lf     | 14.00 /lf   | 476          |
|          | 20 Ceramic Floor Tile                                 | 2,393.00 sf  | 12.00 /sf   | 28,716       |
|          | 20 Porcelain Tile Walls                               | 23,187.00 sf | 14.00 /sf   | 324,618      |
|          | 20 Ceramic Tile Walls                                 | 7,317.00 sf  | 14.00 /sf   | 102,438      |
|          | <i>Tile: Mosaics</i>                                  |              |             | 558,688      |
| 9400.000 | <i>Terrazzo</i>                                       |              |             |              |
|          | 10 Precast Terrazzo                                   | 12,487.00 sf | 18.00 /sf   | 224,766      |
|          | 11 Terrazzo Cove Base                                 | 3,004.00 lf  | 25.00 /lf   | 75,100       |
|          | <i>Terrazzo</i>                                       |              |             | 299,866      |
| 9511.050 | <i>Ceiling: 2x4 Tile</i>                              |              |             |              |
|          | 10 ACT-1 2x2 Ceiling                                  | 50,301.00 sf | 3.75 /sf    | 188,629      |
|          | 10 ACT-1 2x4 Ceiling                                  | 157.00 sf    | 3.75 /sf    | 589          |
|          | <i>Ceiling: 2x4 Tile</i>                              |              |             | 189,218      |
| 9650.010 | <i>Flooring Resilient</i>                             |              |             |              |
|          | 10 Rubber Floor Tile                                  | 2,298.00 sf  | 3.50 /sf    | 8,043        |
|          | 10 Marmoleum Composition Tile                         | 41,998.00 sf | 3.50 /sf    | 146,993      |
|          | 40 Rubber Base  | 9,480.00 lf  | 2.20 /lf    | 20,858       |

| Item     | Description                   | Takeoff Qty  | Unit Cost   | Total | Amount    |
|----------|-------------------------------|--------------|-------------|-------|-----------|
|          | <i>Flooring Resilient</i>     |              |             |       | 175,892   |
| 9870.010 | <i>Flooring Epoxy</i>         |              |             |       |           |
|          | 10 Sealed Concrete            | 4,233.00 sf  | 2.00 /sf    |       | 8,466     |
|          | <i>Flooring Epoxy</i>         |              |             |       | 8,466     |
| 9880.010 | <i>Flooring Carpet</i>        |              |             |       |           |
|          | 6 Carpet Tile                 | 698.56 sy    | 35.00 /sy   |       | 24,449    |
|          | <i>Flooring Carpet</i>        |              |             |       | 24,449    |
| 9910.020 | <i>Painting: Int Detailed</i> |              |             |       |           |
|          | 5 Paint CMU Block             | 65,938.00 sf | 1.00 /sf    |       | 65,938    |
|          | 5 Epoxy Paint CMU Block       | 2,230.00 sf  | 1.00 /sf    |       | 2,230     |
|          | 5 Paint Bare Ceiling          | 7,352.00 sf  | 1.00 /sf    |       | 7,352     |
|          | 5 Paint GWB                   | 21,152.00 sf | 1.00 /sf    |       | 21,162    |
|          | 5 Paint GWB Ceiling           | 11,586.00 sf | 1.00 /sf    |       | 11,586    |
|          | <i>Painting: Int Detailed</i> |              |             |       | 108,258   |
|          | <b>FINISHES</b>               |              |             |       | 1,485,159 |
|          | 09                            |              | 18.624/sqft |       | 1,485,159 |
|          | 79,743.00 sqft                |              |             |       |           |
|          | 10                            |              |             |       |           |

10000.000 SPECIALTIES

|           |                                     |           |              |  |         |
|-----------|-------------------------------------|-----------|--------------|--|---------|
| 10100.010 | <i>Visual Display Boards</i>        |           |              |  |         |
|           | 80 8' x 4' White Board @ Classroom  | 25.00 ea  | 1,000.00 /ea |  | 25,000  |
|           | 80 8' x 4' White Board @ Science Rm | 6.00 ea   | 1,000.00 /ea |  | 6,000   |
|           | 80 4' x 4' White Board @ Science Rm | 3.00 ea   | 500.00 /ea   |  | 1,500   |
|           | 80 3' x 4' Fixed Tackboard          | 1.00 ea   | 140.40 /ea   |  | 140     |
|           | 80 Pulldown Screens @ Library       | 2.00 ea   | 1,500.00 /ea |  | 3,000   |
|           | <i>Visual Display Boards</i>        |           |              |  | 35,640  |
| 10160.010 | <i>Toilet Compartments</i>          |           |              |  |         |
|           | 30 Phenolic Toilet Compartments     | 7.00 ea   | 1,000.00 /ea |  | 7,000   |
|           | 31 Phenolic ADA Toilet Compartments | 6.00 ea   | 1,275.00 /ea |  | 7,650   |
|           | 41 Urinal Screen                    | 4.00 ea   | 725.00 /ea   |  | 2,900   |
|           | <i>Toilet Compartments</i>          |           |              |  | 17,550  |
| 10500.010 | <i>Lockers</i>                      |           |              |  |         |
|           | 10 Hall Locker                      | 192.00 ea | 275.00 /ea   |  | 52,800  |
|           | <i>Lockers</i>                      |           |              |  | 52,800  |
| 10800.010 | <i>Misc Toilet/Bath Equip</i>       |           |              |  |         |
|           | 80 Soap Dispenser                   | 36.00 ea  | 75.50 /ea    |  | 2,718   |
|           | 84 SS Waste Rec./Paper Towel Disp.  | 13.00 ea  | 545.00 /ea   |  | 7,085   |
|           | 84 SS Waste Rec./Paper Towel Disp.  | 20.00 ea  | 545.00 /ea   |  | 10,900  |
|           | 90 Mirror                           | 36.00 ea  | 238.00 /ea   |  | 8,568   |
|           | 100 Grab Bar                        | 12.00 ea  | 58.00 /ea    |  | 672     |
|           | <i>Misc Toilet/Bath Equip</i>       |           |              |  | 29,843  |
|           | <b>SPECIALTIES</b>                  |           |              |  | 135,933 |

| Item      | Description  | Takeoff Qty    | Unit Cost    | Amount  |
|-----------|--|----------------|--------------|---------|
|           |  |                | <b>Total</b> |         |
|           | 10   |                | 1.71 /sqft   | 135,933 |
|           | 79,743.00 sqft                                     |                |              |         |
|           | 12   |                |              |         |
| 12000.000 | FURNISHINGS  |                |              |         |
| 12300.010 | Manufactured Casework                              |                |              |         |
|           | 70 Science Lab Casework Wall Cabinets              | 152.00 lf      | 345.00 /lf   | 52,440  |
|           | 70 Science Lab Casework Base Cabinets              | 290.00 lf      | 200.00 /lf   | 58,000  |
|           | 70 28x36x30 Sink Unit @ Science Room               | 2.00 ea        | 1,200.00 /ea | 2,400   |
|           | Manufactured Casework                              |                |              | 112,840 |
|           | FURNISHINGS  |                |              | 112,840 |
|           | 12   |                | 1.42 /sqft   | 112,840 |
|           | 79,743.00 sqft                                     |                |              |         |
|           | 16   |                |              |         |
| 16010.000 | GENERAL CONDITIONS                                 |                |              |         |
| 16010.050 | INSURANCE & BONDS                                  |                |              |         |
| n         | 55 Bond, Subcontractor, avg. \$10.00 per \$1000    | 1,768.00 k     | 10.00 /k     | 17,680  |
|           | INSURANCE & BONDS                                  |                |              | 17,680  |
| 16010.060 | MOBILIZE/DEMOBILIZE                                |                |              |         |
| n         | 15 Average cost, mob-demob, large project > \$500k | 1.00 ls        | 5,000.00 /ls | 5,000   |
|           | MOBILIZE/DEMOBILIZE                                |                |              | 5,000   |
| 16010.190 | TEMPORARY UTILITIES                                |                |              |         |
| n         | 37 Allow, panelboards for temp power to 225A       | 1.00 ea        | 1,250.00 /ea | 1,250   |
| n         | 50 Allow, Temp.Power & Lights                      | 79,743.00 sqft | 0.25 /sqft   | 19,936  |
|           | TEMPORARY UTILITIES                                |                |              | 21,186  |
| 16020.110 | Demo Existing Electrical                           |                |              |         |
|           | 5 Electrical                                       | 79,743.00 sqft | 0.50 /sqft   | 39,872  |
|           | Demo Existing Electrical                           |                |              | 39,872  |
|           | 797.43 Labor hours                                 |                |              |         |
|           | GENERAL CONDITIONS                                 |                |              | 83,737  |
|           | 797.43 Labor hours                                 |                |              |         |
| 16050.000 | BASIC MATERIALS & METHODS                          |                |              |         |
| 16060.810 | Lightning Protection                               |                |              |         |
|           | 5 Lightning Protection                             | 79,743.00 sqft | 0.25 /sqft   | 19,936  |
|           | Lightning Protection                               |                |              | 19,936  |

| Item                                 | Description                                | Takeoff Qty | Unit Cost | Total            | Amount  |
|--------------------------------------|--|-------------|-----------|------------------|---------|
| <b>BASIC MATERIALS &amp; METHODS</b> |  |             |           |                  | 19,936  |
| 16130.000                            | <b>RACEWAY, FITTINGS &amp; BOXES</b>       |             |           |                  |         |
| 16132.156                            | <b>FEEDER CONDUIT/WIRE</b>                 |             |           |                  |         |
|                                      | 9 1200A Underground Secondary Feeder       | 100.00      | lf        | 430.79 /lf       | 43,079  |
|                                      | 9 Misc Feeders                             | 79,743.00   | sqft      | 2.00 /sqft       | 159,486 |
|                                      | 17 HVAC Equipment Power                    | 79,743.00   | sqft      | 1.50 /sqft       | 119,615 |
|                                      | 17 200A EMT Feeder                         | 4,400.00    | lf        | 36.421 /lf       | 160,254 |
|                                      | <b>FEEDER CONDUIT/WIRE</b>                 |             |           |                  | 482,433 |
|                                      | 337,152.740 Labor hours                    |             |           |                  |         |
| <b>RACEWAY, FITTINGS &amp; BOXES</b> |  |             |           |                  | 482,433 |
|                                      | 337,152.740 Labor hours                    |             |           |                  |         |
| 16140.000                            | <b>WIRING DEVICES</b>                      |             |           |                  |         |
| 16140.150                            | <b>RECEPTACLES, BLADE TYPE</b>             |             |           |                  |         |
| n                                    | 5 Conduit and Wire for Electrical Power    | 79,743.00   | sqft      | 1.00 /sqft       | 79,743  |
| n                                    | 5 Receptacles                              | 79,743.00   | sqft      | 1.85 /sqft       | 147,525 |
|                                      | <b>RECEPTACLES, BLADE TYPE</b>             |             |           |                  | 227,268 |
|                                      | 307,588.751 Labor hours                    |             |           |                  |         |
| <b>WIRING DEVICES</b>                |  |             |           |                  | 227,268 |
|                                      | 307,588.751 Labor hours                    |             |           |                  |         |
| 16400.000                            | <b>GEAR SCHEDULES</b>                      |             |           |                  |         |
| 16400.100                            | <b>PANELS BY TYPE OR DESCRIPTION</b>       |             |           |                  |         |
|                                      | 25 200/225A Panelboard                     | 22.00       | ea        | 2,659.174 /ea    | 58,502  |
|                                      | 75 200 KW Generator                        | 1.00        | lsum      | 100,000.00 /lsum | 100,000 |
|                                      | 75 Transfer Switches                       | 2.00        | each      | 5,000.00 /each   | 10,000  |
|                                      | 75 1200A Switchboard                       | 2.00        | ea        | 20,874.42 /ea    | 41,749  |
|                                      | 155 PANELBOARD 208V 3PH 4W N1 MCB 100A     | 2.00        | ea        | 133.58 /ea       | 267     |
|                                      | <b>PANELS BY TYPE OR DESCRIPTION</b>       |             |           |                  | 210,518 |
|                                      | 622.591 Labor hours                        |             |           |                  |         |
| 16400.200                            | <b>Transformers by Type or Description</b> |             |           |                  |         |
|                                      | 5 Transformer T1 - 480 x 120/208v 300 kva  | 1.00        | ea        | 3,061.40 /ea     | 3,061   |
|                                      | 10 Transformer T2 - 480 x 120/208v 45 kva  | 1.00        | ea        | 1,336.84 /ea     | 1,337   |
|                                      | 10 Transformer T2 - 480 x 120/208v 30 kva  | 1.00        | ea        | 1,136.84 /ea     | 1,137   |
|                                      | <b>Transformers by Type or Description</b> |             |           |                  | 5,535   |
|                                      | 22.00 Labor hours                          |             |           |                  |         |
| <b>GEAR SCHEDULES</b>                |  |             |           |                  | 216,053 |
|                                      | 644.591 Labor hours                        |             |           |                  |         |
| 16510.000                            | <b>LIGHTING</b>                            |             |           |                  |         |
| 16510.440                            | <b>Flourescent Fixtures</b>                |             |           |                  |         |
| ---                                  | Hallway Lighting                           | 14,988.00   | sqft      | 3.86 /sqft       | 57,854  |
| ---                                  | Classroom Lighting                         | 34,569.00   | sqft      | 8.00 /sqft       | 276,712 |
| ---                                  | Balance of Lighting                        | 29,891.00   | sqft      | 4.50 /sqft       | 133,585 |

| Item      | Description                                 | Takeoff Qty    | Unit Cost   | Total | Amount    |
|-----------|---|----------------|-------------|-------|-----------|
|           | <i>Flourescent Fixtures</i>                 |                |             |       | 468,130   |
|           | <b>LIGHTING</b>                             |                |             |       | 468,130   |
| 16700.000 | <b>SPECIAL SYSTEMS</b>                      |                |             |       |           |
| 16720.310 | <b>FIRE ALARM SYSTEM</b>                    |                |             |       |           |
| 495       | Fire Alarm System                           | 79,743.00 sqft | 2.50 /sqft  |       | 199,358   |
|           | <b>FIRE ALARM SYSTEM</b>                    |                |             |       | 199,358   |
| 16720.320 | <b>Security System</b>                      |                |             |       |           |
| n         | 5 Security System Access Control Conduits   | 79,743.00 sqft | 0.15 /sqft  |       | 11,981    |
| n         | 45 CCTV System Conduits                     | 79,743.00 sqft | 0.10 /sqft  |       | 7,974     |
|           | <b>Security System</b>                      |                |             |       | 19,936    |
|           | 538,285.250 Labor hours                     |                |             |       |           |
| 16720.330 | <b>Clock/Program System</b>                 |                |             |       |           |
| n         | 5 Clock System                              | 79,743.00 sqft | 0.25 /sqft  |       | 19,936    |
|           | <b>Clock/Program System</b>                 |                |             |       | 19,936    |
|           | 47,845.800 Labor hours                      |                |             |       |           |
| 16720.340 | <b>SOUND/PAGING SYSTEM</b>                  |                |             |       |           |
| n         | 5 PA System                                 | 79,743.00 sqft | 0.25 /sqft  |       | 19,936    |
|           | <b>SOUND/PAGING SYSTEM</b>                  |                |             |       | 19,936    |
| 16720.420 | <b>TELE/ATA SYSTEM</b>                      |                |             |       |           |
| n         | 5 Tele/Data/CATV Conduits                   | 79,743.00 sqft | 0.25 /sqft  |       | 19,936    |
|           | <b>TELE/ATA SYSTEM</b>                      |                |             |       | 19,936    |
|           | <b>SPECIAL SYSTEMS</b>                      |                |             |       | 279,101   |
|           | 588,111.050 Labor hours                     |                |             |       |           |
| 16900.000 | <b>SITE WORK &amp; MATERIALS</b>            |                |             |       |           |
| 16915.000 | <b>UNDERGROUND SERVICE CONDUIT</b>          |                |             |       |           |
| 3         | (2) 4"UNDGRD. PVC- PRIMARY SERV. w/CONCRETE | 150.00 lf      | 62.00 /lf   |       | 9,299     |
|           | <b>UNDERGROUND SERVICE CONDUIT</b>          |                |             |       | 9,299     |
|           | 93.45 Labor hours                           |                |             |       |           |
| 16930.000 | <b>Pre-cast Concrete</b>                    |                |             |       |           |
| 180       | Precast Elec Vault w/ Cover 5 X 10 X 7      | 1.00 ea        | 336.84 /ea  |       | 337       |
|           | <b>Pre-cast Concrete</b>                    |                |             |       | 337       |
|           | 6.00 Labor hours                            |                |             |       |           |
|           | <b>SITE WORK &amp; MATERIALS</b>            |                |             |       | 9,636     |
|           | 99.45 Labor hours                           |                |             |       |           |
| 16        |   |                | 22.401/sqft |       | 1,786,293 |
|           | 79,743.00 sqft                              |                |             |       |           |
|           | 1,232,374.012 Labor hours                   |                |             |       |           |

02D

| Item     | Description   | Takeoff Qty    | Unit Cost      | Amount |
|----------|---|----------------|----------------|--------|
| 1730.000 | <b>DEMOLITION</b>   |                |                |        |
| 1733.010 | <i>Demo: Concrete</i>   |                |                |        |
| 270      | Note 10 Remove Precast Concrete Panels  | 1,876.00 sf    | 10.04 /sf      | 18,830 |
| 270      | Note 13 Remove Precast Band   | 146.00 lf      | 18.28 /lf      | 2,705  |
|          | <i>Demo: Concrete</i>   |                |                | 21,535 |
|          | 434.40 Labor hours  |                |                |        |
|          | 101.20 Equipment hours  |                |                |        |
| 1734.010 | <i>Demo: Masonry</i>  |                |                |        |
| 140      | Note 16-Remove Exterior Wall (CMU /Brick)                                     | 306.00 sf      | 6.85 /sf       | 2,109  |
| 140      | Remove/ Patch CUM Raise Door Height From 6'-" to 10'-0" High @ Corridor Doors | 371.00 sf      | 39.562 /sf     | 14,678 |
| 140      | Note 15-Remove Non Load Bearing Wall  | 10,284.00 sf   | 5.492 /sf      | 56,476 |
| 140      | Note 17-Remove Portion Load Bearing Wall                                      | 879.00 sf      | 8.24 /sf       | 7,241  |
| 140      | Note 14-Remove Non Load Bearing Wall  | 282.00 sf      | 5.492 /sf      | 1,549  |
|          | <i>Demo: Masonry</i>  |                |                | 82,051 |
|          | 1,858.20 Labor hours  |                |                |        |
|          | 806.200 Equipment hours   |                |                |        |
| 1735.010 | <i>Demo: Steel</i>  |                |                |        |
| 50       | Note 9- Remove Steel Stair  | 6.00 ft        | 2,004.10 /ft   | 12,025 |
|          | <i>Demo: Steel</i>  |                |                | 12,025 |
|          | 286.00 Labor hours  |                |                |        |
|          | 6.00 Equipment hours  |                |                |        |
| 1736.050 | <i>Demo: Millwork</i>   |                |                |        |
| 130      | Note 6- Remove Wardrobe, Hardware & Acc.                                      | 47.00 ea       | 164.01 /ea     | 7,708  |
| 130      | Note 4- Remove Countertop & Acc.  | 258.00 lnft    | 8.20 /lnft     | 2,116  |
|          | <i>Demo: Millwork</i>   |                |                | 9,824  |
|          | 239.80 Labor hours  |                |                |        |
| 1736.010 | <i>Demo: Doors &amp; Windows</i>  |                |                |        |
| n        | 40 Remove Interior Door, Frame and Hardware                                   | 177.00 ea      | 113.53 /ea     | 20,084 |
| n        | 130 Note 13 Remove Aluminum Window Unit                                       | 55.00 sf       | 8.24 /sf       | 453    |
|          | <i>Demo: Doors &amp; Windows</i>  |                |                | 20,547 |
|          | 483.00 Labor hours  |                |                |        |
| 1736.050 | <i>Demo: Misc Items</i>   |                |                |        |
| 10       | Note 1- Demolish Temp Classrooms  | 11,412.00 sqft | 2.00 /sqft     | 22,824 |
| 10       | Note 16 Demo individual Toilet Room   | 3.00 ea        | 1,095.49 /ea   | 3,286  |
| 10       | Note 19- Demo Gym Equip, Wall Pads Etc  | 1.00 lsum      | 2,635.97 /lsum | 2,636  |
| 10       | Note 12- Demolish Portion of Ex Structure                                     | 1,037.00 sqft  | 5.00 /sqft     | 5,185  |
| 30       | Note 8- Remove Toilet Partitions  | 19.00 ea       | 123.01 /ea     | 2,337  |
| 30       | Note 16- Remove Lift and Surrounding Wall Construction                        | 1.00 ea        | 656.03 /ea     | 656    |
| 30       | Note 10- Remove Stage Platform & Risers                                       | 1.00 ea        | 3,280.16 /ea   | 3,280  |
| 30       | Note 3- Remove Operable Partition   | 353.00 lnft    | 16.73 /lnft    | 5,904  |
|          | <i>Demo: Misc Items</i>   |                |                | 46,109 |
|          | 1,701.903 Labor hours   |                |                |        |
|          | 12,827.00 Equipment hours   |                |                |        |
| 1739.010 | <i>Demo: Finishes, Floors</i>   |                |                |        |
| 10       | Note 5 Remove Resilient Flooring  | 48,544.00 sf   | 0.85 /sf       | 41,262 |
| 10       | Note 11 Remove Stair Floor Finish   | 2,202.00 sf    | 0.85 /sf       | 1,872  |

| Item              | Description                                      | Takeoff Qty       | Unit Cost         | Total | Amount         |
|-------------------|--|-------------------|-------------------|-------|----------------|
|                   | <i>Demo: Finishes, Floors</i>                    |                   |                   |       | 43,134         |
|                   | 1,891.533 Labor hours                            |                   |                   |       |                |
| 1739.080          | <i>Demo: Finishes, Ceilings</i>                  |                   |                   |       |                |
| 20                | Note 2- Remove ACT Ceiling                       | 50,474.00 sf      | 0.50 /sf          |       | 25,237         |
|                   | <i>Demo: Finishes, Ceilings</i>                  |                   |                   |       | 25,237         |
|                   | 504.74 Labor hours                               |                   |                   |       |                |
| <b>DEMOLITION</b> |  |                   |                   |       | <b>260,462</b> |
|                   | 7,201.38 Labor hours                             |                   |                   |       |                |
|                   | 13,540.40 Equipment hours                        |                   |                   |       |                |
|                   | <b>02D</b>                                       |                   | <b>3.27 /sqft</b> |       | <b>260,462</b> |
|                   | <b>79,743.00 sqft</b>                            |                   |                   |       |                |
|                   | 7,201.38 Labor hours                             |                   |                   |       |                |
|                   | 13,540.40 Equipment hours                        |                   |                   |       |                |
| <b>16H</b>        |  |                   |                   |       |                |
| 15500.000         | <b>HVAC</b>                                      |                   |                   |       |                |
| 15500.100         | <b>HVAC GENERAL</b>                              |                   |                   |       |                |
| 0002              | Bonds and Insurances                             | 1,946,000.00 lsum | 0.02 /lsum        |       | 38,920         |
| 0003              | General Conditions                               | 1,946,000.00 lsum | 0.08 /lsum        |       | 155,680        |
|                   | <b>HVAC GENERAL</b>                              |                   |                   |       | <b>194,600</b> |
| 15590.000         | <b>HVAC Demolition</b>                           |                   |                   |       |                |
| d001              | Demo HVAC , Renovation                           | 79,743.00 sqft    | 2.00 /sqft        |       | 159,486        |
|                   | <b>HVAC Demolition</b>                           |                   |                   |       | <b>159,486</b> |
|                   | 7,974.30 Equipment hours                         |                   |                   |       |                |
| 15610.000         | <b>Heating Boilers and Acces</b>                 |                   |                   |       |                |
| 1050              | Re-Pipe Existing Boilers                         | 79,743.00 sqft    | 1.89 /sqft        |       | 150,714        |
|                   | <b>Heating Boilers and Acces</b>                 |                   |                   |       | <b>150,714</b> |
| 15613.000         | <b>Pumps</b>                                     |                   |                   |       |                |
| 0205              | New Heating Pumps w/ VFDs                        | 4.00 each         | 4,271.00 /each    |       | 17,084         |
|                   | <b>Pumps</b>                                     |                   |                   |       | <b>17,084</b>  |
|                   | 64.00 Labor hours                                |                   |                   |       |                |
| 15617.000         | <b>Terminal Heat/Cool Units</b>                  |                   |                   |       |                |
| 2300              | Heating Only Fan Coil Unit,                      | 79,743.00 sqft    | 0.35 /sqft        |       | 27,910         |
| 7200              | Cabinet Heaters , FT radiation, Hydronic Heating | 79,743.00 sqft    | 0.85 /sqft        |       | 67,782         |
|                   | <b>Terminal</b>                                  |                   |                   |       |                |
| 8126              | Reinstall used Unit Ventilator,HW,Louver         | 79,743.00 sqft    | 0.52 /sqft        |       | 41,466         |
| 8126              | New Unit Ventilator,HW,Louver                    | 79,743.00 sqft    | 0.76 /sqft        |       | 60,805         |
|                   | <b>Terminal Heat/Cool Units</b>                  |                   |                   |       | <b>197,763</b> |
|                   | 2,551,776.00 Labor hours                         |                   |                   |       |                |
| 15618.000         | <b>Floor Heat/Snow Melt Eq.</b>                  |                   |                   |       |                |
| 1100              | Radiant Slab Heating                             | 4,144.00 sqft     | 19.00 /sqft       |       | 78,736         |
|                   | <b>Floor Heat/Snow Melt Eq.</b>                  |                   |                   |       | <b>78,736</b>  |
| 15650.000         | <b>Air Handling Units</b>                        |                   |                   |       |                |
| 1130              | VAV AHU Systems                                  | 79,743.00 each    | 5.60 /each        |       | 446,561        |

| Item      | Description                                    | Takeoff Qty    | Unit Cost          | Total | Amount           |
|-----------|--|----------------|--------------------|-------|------------------|
|           | <i>Air Handling Units</i>                      |                |                    |       | 446,561          |
|           | 1,913,832.000 Labor hours                      |                |                    |       |                  |
| 15652.000 | <i>Heat Pumps</i>                              |                |                    |       |                  |
| 1024      | DX Split Systems                               | 79,743.00 sqft | 0.30 /sqft         |       | 23,923           |
|           | <i>Heat Pumps</i>                              |                |                    |       | 23,923           |
|           | 637,944.00 Labor hours                         |                |                    |       |                  |
| 15730.000 | <i>Heating Water Piping</i>                    |                |                    |       |                  |
| 1103      | Heating Water Branch Piping                    | 79,743.00 sqft | 1.20 /sqft         |       | 95,692           |
| 1103      | Heating Water Mains Piping                     | 79,743.00 sqft | 1.20 /sqft         |       | 95,692           |
|           | <i>Heating Water Piping</i>                    |                |                    |       | 191,383          |
|           | 38,276.640 Labor hours                         |                |                    |       |                  |
| 15830.000 | <i>Fans</i>                                    |                |                    |       |                  |
| 2001      | Exhaust Fan Systems, duct and louver           | 79,743.00 sqft | 1.26 /sqft         |       | 100,476          |
|           | <i>Fans</i>                                    |                |                    |       | 100,476          |
| 15840.000 | <i>Air Terminal Units</i>                      |                |                    |       |                  |
| 4001      | VAV Variable Air Volume HW Reheat, No Controls | 79,743.00 sqft | 2.50 /sqft         |       | 199,358          |
|           | <i>Air Terminal Units</i>                      |                |                    |       | 199,358          |
| 15850.000 | <i>Air Outlets &amp; Inlets</i>                |                |                    |       |                  |
| 5100      | Roof Combustion Air Systems                    | 79,743.00 sqft | 0.33 /sqft         |       | 26,315           |
|           | <i>Air Outlets &amp; Inlets</i>                |                |                    |       | 26,315           |
|           | 39,871.50 Labor hours                          |                |                    |       |                  |
| 15940.000 | <i>HVAC Inst. and Controls</i>                 |                |                    |       |                  |
| 1610      | HVAC Controls                                  | 79,743.00 sqft | 3.50 /sqft         |       | 279,101          |
|           | <i>HVAC Inst. and Controls</i>                 |                |                    |       | 279,101          |
|           | <i>HVAC</i>                                    |                |                    |       | 2,065,499        |
|           | 5,181,764.140 Labor hours                      |                |                    |       |                  |
|           | 7,974.30 Equipment hours                       |                |                    |       |                  |
|           | <b>15H</b>                                     |                | <b>25.902/sqft</b> |       | <b>2,065,499</b> |
|           | <b>79,743.00 sqft</b>                          |                |                    |       |                  |
|           | <b>5,181,764.140 Labor hours</b>               |                |                    |       |                  |
|           | <b>7,974.30 Equipment hours</b>                |                |                    |       |                  |

16P

|           |                              |                 |            |  |         |
|-----------|------------------------------|-----------------|------------|--|---------|
| 15200.000 | <b>PLUMBING</b>              |                 |            |  |         |
| 15200.100 | <b>PLUMBING GENERAL</b>      |                 |            |  |         |
| GC01      | Bonds and Insurances         | 527,088.00 lsum | 0.02 /lsum |  | 10,541  |
| GC02      | General Conditions           | 527,088.00 lsum | 0.08 /lsum |  | 42,185  |
|           | <b>PLUMBING GENERAL</b>      |                 |            |  | 52,707  |
| 15290.000 | <i>Plumbing Demolition</i>   |                 |            |  |         |
| 3908      | Demo Plumbing Complete       | 79,743.00 sqft  | 2.50 /sqft |  | 199,358 |
|           | <i>Plumbing Demolition</i>   |                 |            |  | 199,358 |
| 15310.000 | <i>Domestic Water Piping</i> |                 |            |  |         |
| 1105      | Domestic Water Piping        | 79,743.00 sqft  | 1.00 /sqft |  | 79,743  |



| Item      | Description                         | Takeoff Qty    | Unit Cost           | Total | Amount           |
|-----------|-------------------------------------|----------------|---------------------|-------|------------------|
|           | <i>Domestic Water Piping</i>        |                |                     |       | 79,743           |
| 15320.000 | <i>Sanitary Waste/Vent Ppg.</i>     |                |                     |       |                  |
|           | 5708 Sanitary Drain Piping          | 79,743.00 sqft | 0.88 /sqft          |       | 70,174           |
|           | <i>Sanitary Waste/Vent Ppg.</i>     |                |                     |       | 70,174           |
| 15340.000 | <i>Natural Gas Piping</i>           |                |                     |       |                  |
|           | 3306 Gas Piping                     | 79,743.00 sqft | 0.24 /sqft          |       | 19,138           |
|           | <i>Natural Gas Piping</i>           |                |                     |       | 19,138           |
|           | 30,302.34 Labor hours               |                |                     |       |                  |
| 15360.000 | <i>Fixture Rough In</i>             |                |                     |       |                  |
|           | 1000 Rough In, Plumbing Fixtures    | 79,743.00 sqft | 0.48 /sqft          |       | 38,277           |
|           | 9000 Plumbing Fixture Final Hook Up | 79,743.00 sqft | 0.77 /sqft          |       | 61,402           |
|           | <i>Fixture Rough In</i>             |                |                     |       | 99,679           |
| 15410.000 | <i>Plumbing Fixtures</i>            |                |                     |       |                  |
|           | 1000 Plumbing Fixtures              | 79,743.00 sqft | 0.78 /sqft          |       | 62,200           |
|           | <i>Plumbing Fixtures</i>            |                |                     |       | 62,200           |
|           | <b>PLUMBING</b>                     |                |                     |       | <b>582,998</b>   |
|           | 30,302.34 Labor hours               |                |                     |       |                  |
|           | <b>18P</b>                          |                | <b>7.311/sqft</b>   |       | <b>582,998</b>   |
|           | <b>79,743.00 sqft</b>               |                |                     |       |                  |
|           | <b>30,302.34 Labor hours</b>        |                |                     |       |                  |
|           | <b>Renovation</b>                   |                | <b>109.29 /sqft</b> |       | <b>8,715,124</b> |
|           | <b>79,743.00 sqft</b>               |                |                     |       |                  |
|           | <b>6,454,139.25 Labor hours</b>     |                |                     |       |                  |
|           | <b>21,514.70 Equipment hours</b>    |                |                     |       |                  |

**Sitework**

|          |                                |           |                  |  |                |
|----------|--------------------------------|-----------|------------------|--|----------------|
|          | <b>01</b>                      |           |                  |  |                |
| 2100.000 | <b>SITWORK</b>                 |           |                  |  |                |
| 2115.000 | <i>Site General Conditions</i> |           |                  |  |                |
|          | Site GC's 6%                   | 1.00 lsum | 109,809.00 /lsum |  | 109,809        |
|          | Site Bonding & Fee 6%          | 1.00 lsum | 148,413.00 /lsum |  | 148,413        |
|          | <i>Site General Conditions</i> |           |                  |  | 256,222        |
|          | <b>SITWORK</b>                 |           |                  |  | <b>256,222</b> |
|          | <b>01</b>                      |           |                  |  | <b>256,222</b> |
|          | <b>18</b>                      |           |                  |  |                |

16130.000 RACEWAY, FITTINGS & BOXES

| Item      | Description                                     | Takeoff Qty  | Unit Cost    | Total | Amount  |
|-----------|---|--------------|--------------|-------|---------|
| 16132.155 | <b>BRANCH CIRCUIT WIRING</b>                    |              |              |       |         |
| 4         | 3/4"sch.40 pvc w/4#10 thhn                      | 2,246.00 lf  | 29.34 /lf    |       | 65,892  |
|           | <b>BRANCH CIRCUIT WIRING</b>                    |              |              |       | 65,892  |
|           | 293.552 Labor hours                             |              |              |       |         |
|           | <b>RACEWAY, FITTINGS &amp; BOXES</b>            |              |              |       | 65,892  |
|           | 293.552 Labor hours                             |              |              |       |         |
| 16500.000 | <b>FIXTURE SCHEDULES</b>                        |              |              |       |         |
| 16500.100 | <b>Fixtures by Type</b>                         |              |              |       |         |
| 250       | TYPE S10 - 24' ROADWAY LIGHT/POLE W/ 1 FIXTURE  | 6.00 ea      | 1,895.00 /ea |       | 13,560  |
| 255       | TYPE S11 - 24' ROADWAY LIGHT/POLE W/ 2 FIXTURES | 5.00 ea      | 2,760.00 /ea |       | 13,800  |
|           | <b>Fixtures by Type</b>                         |              |              |       | 27,360  |
|           | 44.000 Labor hours                              |              |              |       |         |
|           | <b>FIXTURE SCHEDULES</b>                        |              |              |       | 27,360  |
|           | 44.000 Labor hours                              |              |              |       |         |
| 16510.000 | <b>LIGHTING</b>                                 |              |              |       |         |
| 16520.300 | <b>HID Fixures [Outdoor]</b>                    |              |              |       |         |
| 470       | 100W MH 42-IN BRNZ BOLLARD                      | 9.00 ea      | 520.22 /ea   |       | 4,682   |
|           | <b>HID Fixures [Outdoor]</b>                    |              |              |       | 4,682   |
|           | 11.25 Labor hours                               |              |              |       |         |
|           | <b>LIGHTING</b>                                 |              |              |       | 4,682   |
|           | 11.25 Labor hours                               |              |              |       |         |
| 16900.000 | <b>SITE WORK &amp; MATERIALS</b>                |              |              |       |         |
| 16930.000 | <b>Pre-cast Concrete</b>                        |              |              |       |         |
| 35        | 12-IN Dia x 6-FT Precast Light Pole Base        | 13.00 ea     | 282.28 /ea   |       | 3,670   |
|           | <b>Pre-cast Concrete</b>                        |              |              |       | 3,670   |
|           | 26.00 Labor hours                               |              |              |       |         |
|           | <b>SITE WORK &amp; MATERIALS</b>                |              |              |       | 3,670   |
|           | 26.00 Labor hours                               |              |              |       |         |
|           | <b>16</b>                                       |              |              |       | 101,804 |
|           | 374.802 Labor hours                             |              |              |       |         |
| 028       |   |              |              |       |         |
| 2100.000  | <b>SITWORK</b>                                  |              |              |       |         |
| 2130.000  | <b>Maintenance &amp; Protection</b>             |              |              |       |         |
| ---       | Rd Cleaning                                     | 40.00 days   | 361.62 /days |       | 15,265  |
| ---       | 8' temp fence                                   | 2,584.00 lft | 16.00 /lft   |       | 41,344  |

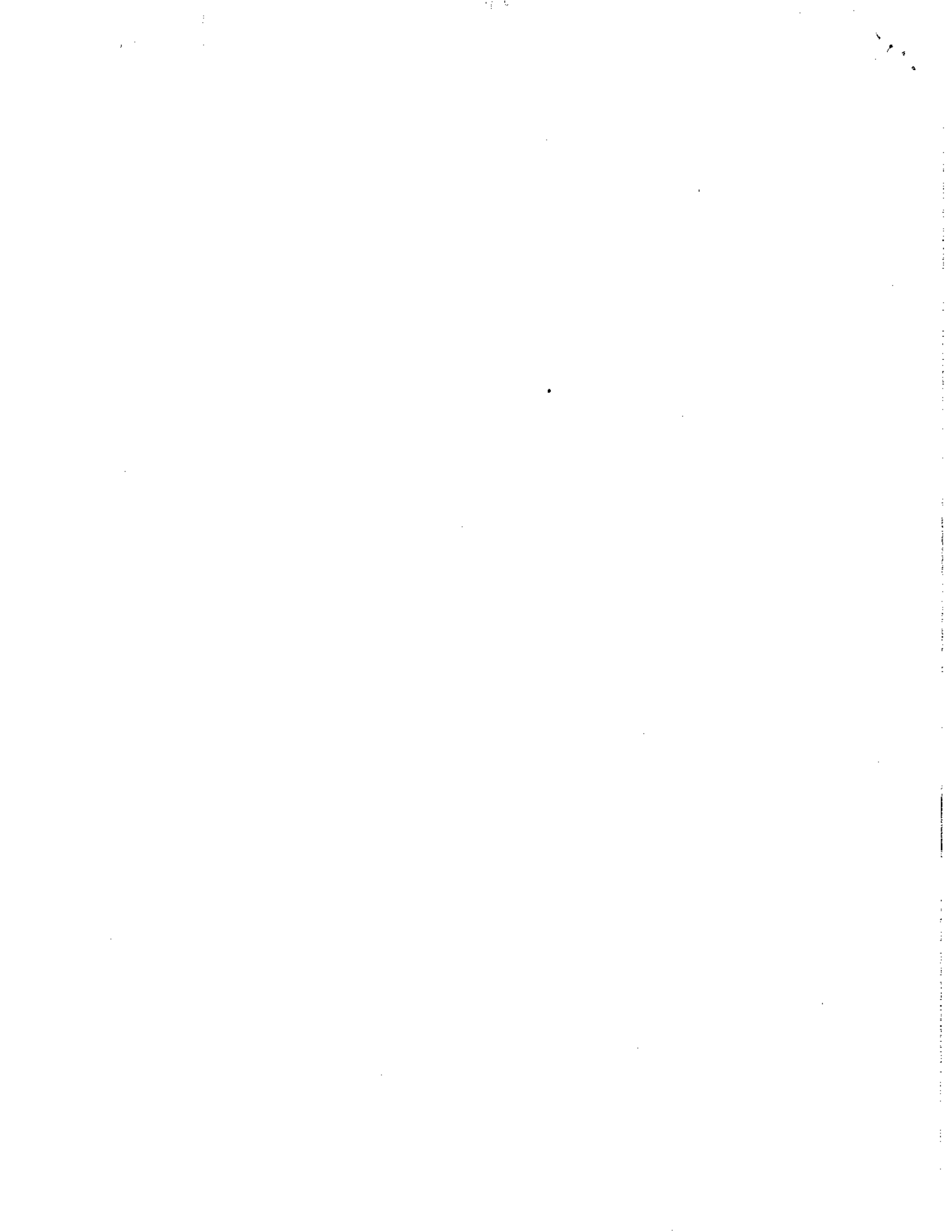
| Item     | Description                         | Takeoff Qty    | Unit Cost        | Total | Amount         |
|----------|-------------------------------------|----------------|------------------|-------|----------------|
|          | <i>Maintenance &amp; Protection</i> |                |                  |       | <u>56,609</u>  |
|          | 180.00 Labor hours                  |                |                  |       |                |
|          | 180.00 Equipment hours              |                |                  |       |                |
| 2200.000 | <b>SITE DEMO</b>                    |                |                  |       |                |
| 19       | Rem Baseball Backstop               | 120.00 lf      | 12.00 /lf        |       | 1,440          |
| 19       | Rem CL Fence                        | 2,024.00 lf    | 3.50 /lf         |       | 7,084          |
| 19       | Rem Granite Curb                    | 2,289.00 lf    | 7.50 /lf         |       | 17,168         |
| 19       | Rem Playground Structure            | 4.00 ea        | 600.00 /ea       |       | 2,400          |
| ---      | Rem Trees lg                        | 23.00 ea       | 750.00 /ea       |       | 17,250         |
| ---      | Rem Conc Pavement                   | 28,459.00 sqft | 0.85 /sqft       |       | 24,190         |
| ---      | Rem Drain Inlet                     | 6.00 ea        | 200.00 /ea       |       | 1,200          |
| ---      | Rem Misc sm (flagpole, sign)        | 2.00 ea        | 200.00 /ea       |       | 400            |
|          | <b>SITE DEMO</b>                    |                |                  |       | <u>71,132</u>  |
|          | 44.37 Labor hours                   |                |                  |       |                |
|          | 44.37 Equipment hours               |                |                  |       |                |
|          | <b>SITWORK</b>                      |                |                  |       | <u>127,740</u> |
|          | 204.37 Labor hours                  |                |                  |       |                |
|          | 204.37 Equipment hours              |                |                  |       |                |
| 2300.000 | <b>EARTHWORK</b>                    |                |                  |       |                |
| 2316.201 | <i>Site Exc- Earth</i>              |                |                  |       |                |
| 10       | Site Earthwork                      | 5.30 acre      | 55,000.00 /acre  |       | <u>291,500</u> |
|          | <i>Site Exc- Earth</i>              |                |                  |       | <u>291,500</u> |
|          | 0.295 Labor hours                   |                |                  |       |                |
|          | 0.295 Equipment hours               |                |                  |       |                |
| 2370.150 | <i>Temp Erosion Control</i>         |                |                  |       |                |
| ---      | Temp Erosion Control                | 1.00 lsum      | 15,000.00 /lsum  |       | <u>15,000</u>  |
|          | <i>Temp Erosion Control</i>         |                |                  |       | <u>15,000</u>  |
|          | <b>EARTHWORK</b>                    |                |                  |       | <u>306,500</u> |
|          | 0.295 Labor hours                   |                |                  |       |                |
|          | 0.295 Equipment hours               |                |                  |       |                |
| 2530.000 | <b>SANITARY</b>                     |                |                  |       |                |
| 2531.101 | <i>Sewer- DI Pipe Push On</i>       |                |                  |       |                |
| ---      | Sanitary - Allowance                | 1.00 Allo      | 35,000.00 /Allo  |       | <u>35,000</u>  |
|          | <i>Sewer- DI Pipe Push On</i>       |                |                  |       | <u>35,000</u>  |
|          | <b>SANITARY</b>                     |                |                  |       | <u>35,000</u>  |
| 2630.000 | <b>STORM DRAINAGE</b>               |                |                  |       |                |
| 2630.004 | <i>Storm Structures</i>             |                |                  |       |                |
| ---      | Storm- Allowance                    | 1.00 Allo      | 225,000.00 /Allo |       | <u>225,000</u> |
|          | <i>Storm Structures</i>             |                |                  |       | <u>225,000</u> |
|          | <b>STORM DRAINAGE</b>               |                |                  |       | <u>225,000</u> |
| 2700.000 | <b>PAVEMENTS &amp; SURFACES</b>     |                |                  |       |                |
| 2740.120 | <i>Asphalt Paving - SY</i>          |                |                  |       |                |

| Item     | Description  | Takeoff Qty    | Unit Cost      | Total | Amount  |
|----------|--|----------------|----------------|-------|---------|
| 2740.120 | Asphalt Paving - SY<br>Asphalt Pavement                                | 73,480.00 sqft | 4.25 /sqft     |       | 312,205 |
|          | Asphalt Paving - SY  |                |                |       | 312,205 |
| 2750.100 | Concrete Paving<br>Conc Walk   | 32,485.00 sqft | 6.55 /sqft     |       | 212,777 |
|          | 18" Wide Concrete Mow Strip<br>Concrete Paving                         | 721.00 sqft    | 4.50 /sqft     |       | 3,245   |
|          |  |                |                |       | 216,021 |
| 2760.100 | Pavement Marking<br>4 Pavement Markings                                | 1.00 lsum      | 5,000.00 /lsum |       | 5,000   |
|          | Pavement Marking   |                |                |       | 5,000   |
| 2770.110 | Curbs<br>Granite Curb  | 3,643.00 lnft  | 35.00 /lnft    |       | 127,505 |
|          | Curbs  |                |                |       | 127,505 |
| 2780.100 | Site Pavers<br>20 Pavers Brick Grouted                                 | 937.00 sf      | 3.15 /sf       |       | 2,952   |
|          | Site Pavers<br>78.083 Labor hours                                      |                |                |       | 2,952   |
| 2790.110 | Athletic Surfaces<br>100 Artificial Turf (Micro Play Field)            | 17,212.00 sf   | 5.00 /sf       |       | 88,060  |
|          | Athletic Surfaces  |                |                |       | 88,060  |
|          | <b>PAVEMENTS &amp; SURFACES</b><br>78.083 Labor hours                  |                |                |       | 749,743 |
| 2800.000 | <b>SITE IMPROVEMENTS</b>   |                |                |       |         |
| 2810.000 | Site Amenities<br>Traffic Signs  | 1.00 Allo      | 5,000.00 /Allo |       | 5,000   |
|          | Site Amenities   |                |                |       | 5,000   |
| 2820.006 | Chain Link Fence<br>2 8' Decorative Metal Fence w/ concrete mow strip  | 1,574.00 lf    | 70.00 /lf      |       | 110,180 |
|          | 4 8' Fence Man Gate  | 6.00 ea        | 1,000.00 /ea   |       | 6,000   |
|          | Chain Link Fence   |                |                |       | 116,180 |
| 2870.100 | Ext Benches & Planters<br>40 6' Metal Benches                          | 8.00 ea        | 600.00 /ea     |       | 6,400   |
|          | 40 Metal Picnic Table  | 4.00 ea        | 1,200.00 /ea   |       | 4,800   |
|          | Ext Benches & Planters<br>12.00 Labor hours<br>12.00 Equipment hours   |                |                |       | 11,200  |
| 2880.200 | Playground Equipment<br>Playground Surface                             | 12,623.00 sqft | 10.00 /sqft    |       | 126,230 |
|          | Playground Equipment   | 1.00 ls        | 40,000.00 /ls  |       | 40,000  |
|          | Playground Equipment   |                |                |       | 166,230 |
|          | <b>SITE IMPROVEMENTS</b><br>12.00 Labor hours<br>12.00 Equipment hours |                |                |       | 298,610 |
| 2900.000 | <b>LANDSCAPE</b>   |                |                |       |         |

| Item      | Description  | Takeoff Qty                    | Unit Cost                                | Amount                           |
|-----------|--|--------------------------------|--|----------------------------------|
| 2910.100  | <i>Soil Preparation</i><br>100 Planting Bed Preparation<br><i>Soil Preparation</i>   | 72.33 cy                       | 8.00 /cy                                 | 579<br>579                       |
| 2920.110  | <i>Lawns &amp; Grasses</i><br>10 Restore Lawn - Topsoil & Seed<br><i>Lawns &amp; Grasses</i>   | 57,984.00 sf                   | 0.37 /sf                                 | 21,454<br>21,454                 |
| 2933.100  | <i>Shrubs &amp; Hedges</i><br>10 Shrubs - Standard Species<br><i>Shrubs &amp; Hedges</i>   | 243.00 ea                      | 40.00 /ea                                | 9,720<br>9,720                   |
| 2933.200  | <i>Trees</i><br>10 Trees - Small<br>500 Trees - Shade<br>Additional Plantings Allowance<br><i>Trees</i>  | 6.00 ea<br>45.00 ea<br>1.00 ls | 125.00 /ea<br>350.00 /ea<br>5,000.00 /ls | 750<br>15,750<br>5,000<br>21,500 |
|           | <b>LANDSCAPE</b>   |                                |  | <b>53,253</b>                    |
| 4000.000  | <b>MASONRY</b>   |                                |  |                                  |
| 4210.100  | <i>Brick: All Types</i><br>10 4x4 Brick Column w/Precast Cap<br>10 Brick Raised Seat Wall w/Precast Cap<br><i>Brick: All Types</i><br>3,744.00 Labor hours | 11.00 ea<br>133.00 sf          | 2,500.00 /ea<br>40.00 /sf                | 27,500<br>5,320<br>32,820        |
|           | <b>MASONRY</b><br>3,744.00 Labor hours   |                                |  | <b>32,820</b>                    |
| 10000.000 | <b>SPECIALTIES</b>   |                                |  |                                  |
| 10350.000 | <i>Flagpoles</i><br>10 Flagpole<br><i>Flagpoles</i>  | 1.00 ea                        | 1,500.00 /ea                             | 1,500<br>1,500                   |
|           | <b>SPECIALTIES</b>   |                                |  | <b>1,500</b>                     |
|           | <b>02S</b><br>4,038.75 Labor hours<br>216.665 Equipment hours  |                                |  | <b>1,830,166</b>                 |
|           | <b>Sitework</b><br>4,413.550 Labor hours<br>216.665 Equipment hours  |                                |  | <b>2,187,992</b>                 |

## Estimate Totals

| Description        | Amount     | Totals     |
|--------------------|------------|------------|
| Labor              | 425,832    |            |
| Material           | 441,985    |            |
| Subcontract        | 11,976,665 |            |
| Equipment          | 2,052,851  |            |
| Other              | 4,286,461  |            |
|                    | <hr/>      |            |
|                    | 19,183,794 | 19,183,794 |
| Design Contingency | 1,918,379  |            |
| Total              |            | 21,102,173 |



Schmitt-DESIGN Estimate  
9/15/2011

Project name Henry Hudson School 28 SD  
Estimator WM / BB / SK  
Report format Sorted by 'Area 1/CSI1/Assembly/Phrase'  
'Detail' summary

Draft



*Draft*

| Area CSI                         | Description            | Quantity | Material Amount | Sub Amount | Equip Amount | Cont Amount | Total Amount |
|----------------------------------|------------------------|----------|-----------------|------------|--------------|-------------|--------------|
| 01                               | <b>Renovations</b>     |          |                 |            |              |             |              |
|                                  | 02 Existing Conditions |          |                 |            |              |             |              |
|                                  | Demolition             |          |                 |            |              |             |              |
|                                  | Asbestos Abatement     |          |                 |            |              |             |              |
|                                  | D3090 110 1680         | 434,683  | 16,315          | 1,243,000  | 53,571       |             | 504,568      |
|                                  | 02 Existing Conditions |          |                 |            |              |             |              |
|                                  | 03 Concrete            | 434,683  | 16,315          | 1,243,000  | 53,571       |             | 1,747,568    |
|                                  | Concrete In Place      |          |                 |            |              |             |              |
|                                  | D3090 110 1680         | 15,405   | 8,673           |            | 5,005        |             | 29,083       |
|                                  | 03 Concrete            | 15,405   | 8,673           |            | 5,005        |             | 29,083       |
| 04 Masonry                       | 15,405                 | 8,673    |                 | 5,005      |              | 29,083      |              |
| Restoration                      |                        |          |                 |            |              |             |              |
| Interior CMU Partitions          |                        |          |                 |            |              |             |              |
| D3090 110 1680                   | 4,320                  | 1,350    |                 | 10,366     |              | 5,670       |              |
| 04 Masonry                       | 262,158                | 100,058  |                 | 10,366     |              | 372,582     |              |
| 05 Metals                        | 266,478                | 101,408  |                 | 10,366     |              | 378,252     |              |
| 266,478                          | 101,408                |          | 10,366          |            |              | 378,252     |              |
| Modify Existing Base Plates      |                        |          |                 |            |              |             |              |
| Structural Steel                 |                        |          |                 |            |              |             |              |
| Metal Pan Stairs                 |                        |          |                 |            |              |             |              |
| Metal Railings                   |                        |          |                 |            |              |             |              |
| Miscellaneous Metal              |                        |          |                 |            |              |             |              |
| D3090 110 1680                   | 12,480                 | 3,600    |                 | 1,200      |              | 17,280      |              |
| 05 Metals                        | 63,805                 | 82,800   |                 | 11,500     |              | 158,105     |              |
| 1,977                            | 11,740                 |          | 1,725           |            |              | 13,717      |              |
| 540                              | 1,725                  |          | 10,000          |            |              | 2,265       |              |
| 15,000                           | 10,000                 |          | 109,865         |            |              | 25,000      |              |
| 93,802                           | 109,865                |          | 12,700          |            |              | 216,367     |              |
| 93,802                           | 109,865                |          | 12,700          |            |              | 216,367     |              |
| 06 Wood & Plastics               |                        |          |                 |            |              |             |              |
| Blocking                         |                        |          |                 |            |              |             |              |
| Milwork and Casework             |                        |          |                 |            |              |             |              |
| D3090 110 1680                   | 20,000                 | 8,000    |                 |            |              | 28,000      |              |
| 06 Wood & Plastics               | 70,370                 | 265,046  |                 |            |              | 335,416     |              |
| 90,370                           | 273,046                |          |                 |            |              | 363,416     |              |
| 90,370                           | 273,046                |          |                 |            |              | 363,416     |              |
| 07 Thermal & Moisture Protection |                        |          |                 |            |              |             |              |
| Modified Bituminous Membrane     |                        |          |                 |            |              |             |              |
| Firestopping                     |                        |          |                 |            |              |             |              |
| Caulking And Sealants            |                        |          |                 |            |              |             |              |
| D3090 110 1680                   | 27,600                 | 46,000   |                 |            |              | 660,000     |              |
| 07 Thermal & Moisture Protection | 10,000                 | 5,000    |                 |            |              | 73,600      |              |
| 37,600                           | 51,000                 |          |                 |            |              | 15,000      |              |
| 37,600                           | 51,000                 |          |                 |            |              | 748,600     |              |
| 08 Openings                      |                        |          |                 |            |              |             |              |
| 37,600                           | 51,000                 |          |                 |            |              | 748,600     |              |



*Draft*

| Area CSI  | Description  | Unit   | Quantity | Material | Equipment | Other | Profit | Total   |        |
|---|--|--|----------|----------|-----------|-------|--------|---------|--------|
| 21  | Wet pipe sprinkler systems, steel, 1 floor, 47,650 SF                            |  | 112,787  | 70,935   |           |       | 5,583  | 189,305 |        |
|   | Wet pipe sprinkler systems, steel, second floor, 47,650 SF                       |  | 101,079  | 49,975   |           | 4,373 |        | 155,427 |        |
|   | Wet standpipe risers, class 1, steel, black, sch 40, 4" diam pipe, 1 floor       |  | 8,412    | 9,773    |           |       |        | 18,185  |        |
|   | Wet standpipe risers, class 1, steel, black, sch 40, 4" diam pipe, second floors |  | 3,451    | 3,372    |           |       |        | 6,824   |        |
|   | 21 Fire Suppression  |  | 244,753  | 253,583  |           | 9,956 |        | 508,292 |        |
|   | 22   | Plumbing   |          |          |           |       |        |         |        |
|   |  | Makeup Water RPZ Assembly  |          | 2,707    | 10,639    |       | 84     |         | 13,431 |
|   |  | General Plumbing Demolition 1st floor                            |          | 21,681   | 4,765     |       | 2,383  |         | 28,828 |
|   |  | General Plumbing Demolition 2nd floor                            |          | 21,681   | 4,765     |       | 2,383  |         | 28,828 |
|   |  | General Plumbing Allowances Kitchen Equipment Installations Only |          | 7,800    | 5,000     |       |        |         | 12,800 |
| Water closet, vitreous china, with flush valve, wall hung 1st floor         |  |  | 24,817   | 38,980   |           |       |        | 63,797  |        |
| Water closet, vitreous china, with flush valve, wall hung 2nd floor         |  |  | 12,744   | 20,017   |           |       |        | 32,761  |        |
| Urinal, vitreous china, stall type 1st fl                                   |  |  | 1,599    | 1,905    |           |       |        | 3,504   |        |
| Urinal, vitreous china, stall type 2nd fl                                   |  |  | 6,394    | 7,621    |           |       |        | 14,015  |        |
| Lavatory w/trim, wall hung, vitreous china, 24" x 20" 1st fl                |  |  | 27,846   | 51,156   |           |       |        | 79,003  |        |
| Lavatory w/trim, wall hung, vitreous china, 24" x 20" 2nd fl                |  |  | 18,815   | 34,565   |           |       |        | 53,380  |        |
| Kitchen sink w/trim, countertop, stainless steel, 25" x 22" single bowl 1st |  |  | 1,468    | 2,468    |           |       |        | 3,937   |        |
| Kitchen sink w/trim, countertop, stainless steel, 25" x 22" single bowl 2nd |  |  | 2,936    | 4,937    |           |       |        | 7,873   |        |
| Service sink w/trim, corner floor, 28" x 28", w/trim guard 1st fl           |  |  | 1,687    | 2,450    |           |       |        | 4,137   |        |
| Service sink w/trim, corner floor, 28" x 28", w/trim guard 2nd fl           |  |  | 1,687    | 2,450    |           |       |        | 4,137   |        |
| Shower, stall, fiberglass 1 piece, 1st fl                                   |  |  | 2,704    | 3,114    |           |       |        | 5,818   |        |
| Shower, stall, fiberglass 1 piece, 2nd fl                                   |  |  | 2,704    | 3,114    |           |       |        | 5,818   |        |
| Water cooler, electric, floor mounted, dual 1st floor                       |  |  | 2,158    | 4,914    |           |       |        | 7,071   |        |
| Water cooler, electric, floor mounted, dual 2nd floor                       |  |  | 2,158    | 4,914    |           |       |        | 7,071   |        |
| Domestic Water Distribution 1st floor                                       |  |  | 39,252   | 30,828   |           |       |        | 70,086  |        |
| Domestic Water Distribution 2nd floor                                       |  |  | 39,252   | 30,828   |           |       |        | 70,086  |        |
| Gas fired water heater, commercial, 100cf rise, 300 mbh input, 278 gph      |  |  | 9,399    | 56,260   |           |       |        | 65,659  |        |
| Sanitary Waste System & Vent 1st floor                                      |  | 14,477   | 24,005   |          | 4,250     |       | 42,732 |         |        |
| Sanitary Waste System & Vent 2nd floor                                      |  | 36,356   | 27,676   |          |           |       | 64,032 |         |        |
| Elevator Stump Pump - w/High Water Level & Oil Alert                        |  | 796  | 3,004    |          |           |       | 3,800  |         |        |
| Roof drain, CI, Storm System 2nd floor                                      |  | 13,627   | 14,975   |          |           |       | 28,602 |         |        |
| Plumbing Demolition 1st floor   |  | 4,794  |          |          |           |       | 4,794  |         |        |
| Plumbing Demolition 2nd floor   |  | 5,429  |          |          |           |       | 5,429  |         |        |
| Circulating Pump Systems - Plumbing   |  | 8,968  | 18,836   |          |           |       | 28,303 |         |        |
| 22 Plumbing   |  | 335,935  | 414,187  |          | 4,250     | 4,849 | 499    | 759,719 |        |
| 23  | Heating Ventilating & Air Conditioning   |  |          |          |           |       |        |         |        |
|   | HVAC Demolition 1st floor  |  | 62,644   |          |           |       | 3,929  | 66,573  |        |
|   | HVAC Demolition 2nd floor  |  | 62,694   |          |           |       | 3,929  | 66,623  |        |
|   | Boiler, AERCO BMK-1, SLN 1500MBH Quote from RP Feeder                            |  | 46,211   | 162,489  |           | 2,334 |        | 211,044 |        |
|   | Circulating Pump Systems, P-CT-1/2   |  | 15,179   | 24,580   |           | 1,105 |        | 41,363  |        |
|   | Circulating Pump Systems, P-CW-1/2   |  | 12,423   | 20,428   |           | 1,129 |        | 34,479  |        |

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| Area   | Description  | Quantity  | Material  | Sub Amount | Equip Amount | Other Amount | Total Amount |           |
|--|--|-----------|-----------|------------|--------------|--------------|--------------|-----------|
| 26 Electrical                                  | Circulating Pump Systems, P-HW-1/2                               | 12,423    | 20,428    |            | 1,129        | 499          | 34,479       |           |
|  | Circulating Pump Systems, P-CW-1/2/3 Secondary Pumps             | 10,970    | 15,898    |            | 114          | 748          | 27,730       |           |
|  | Circulating Pump Systems, P-HW-1/2/3/4/5 Secondary Pumps         | 18,283    | 26,497    |            | 190          | 1,247        | 46,217       |           |
|  | Chiller, centrifugal, water cooled, pkgd, STD, controls, 240 ton | 36,362    | 163,736   |            | 1,809        | 482          | 202,389      |           |
|  | AHU Central Station 1000 CFM 1st Floor                           | 31,206    | 25,500    |            | 3,000        | 3,442        | 63,148       |           |
|  | AHU Central Station 2000 CFM 1st Floor Gym                       | 27,042    | 24,215    |            | 1,500        | 1,721        | 54,479       |           |
|  | AHU Central Station 5000 CFM 1st Floor Cafe                      | 30,156    | 29,306    |            | 1,000        | 861          | 61,324       |           |
|  | AHU Central Station 1000 CFM 2nd Floor                           | 70,210    | 57,375    |            | 6,750        | 7,745        | 142,081      |           |
|  | Misc. Area's Air Distribution 1st fl Ductwork                    | 259,406   | 63,344    |            | 5,003        | 12,078       | 578,081      |           |
|  | Misc. Area's Air Distribution 2nd fl Ductwork                    | 259,406   | 63,344    |            | 5,003        | 12,078       | 578,081      |           |
|  | Variable Air Volume Mixing Boxes 1st floor                       | 123,885   | 118,289   |            |              | 18,570       | 260,744      |           |
|  | Variable Air Volume Mixing Boxes 2nd floor                       | 115,625   | 110,403   |            |              | 17,332       | 243,359      |           |
|  | Exhaust Fan System Roof  | 64,170    | 43,176    |            | 5,000        | 8,042        | 120,387      |           |
|  | Fin Tube Assembly 1st floor                                      | 46,417    | 48,450    |            |              | 4,309        | 99,176       |           |
|  | Fin Tube Assembly 2nd floor                                      | 48,860    | 51,000    |            |              | 4,536        | 104,396      |           |
|  | Spt sys-air cooled condnsn unit, Data Closets 2 per floor 1st fl | 2,702     | 3,081     |            |              |              | 5,783        |           |
|  | Spt sys-air cooled condnsn unit, Data Closets 2 per floor 2nd fl | 2,702     | 3,081     |            |              |              | 5,783        |           |
|  | Hot Water Loop 1st floor Primary & secondary                     | 30,517    | 32,579    |            |              |              | 63,096       |           |
|  | Hot Water Loop 2nd floor Primary & secondary                     | 30,517    | 32,579    |            |              |              | 63,096       |           |
|  | Chill Water Loop 1st floor                                       | 15,259    | 16,290    |            |              |              | 31,548       |           |
|  | Chill Water Loop 2nd floor                                       | 15,259    | 16,290    |            |              |              | 31,548       |           |
|  | Chill Water Loop 3rd floor                                       | 9,823     | 11,627    |            |              |              | 21,450       |           |
|  | 23 Heating Ventilating & Air Conditioning                        | 1,460,351 | 1,183,996 |            | 476,500      | 42,924       | 94,688       | 3,258,459 |
|  | 26 Electrical  |           |           |            |              |              |              |           |
|  | Building Temporary power and Lighting                            | 19,017    | 9,530     |            |              |              |              | 28,547    |
|  | Electrical Demolition  | 71,423    | 23,825    |            |              |              |              | 95,248    |
| Equipment Connections                          | 61,562   | 124,783   |           |            |              |              | 186,345      |           |
| Power Distribution Equipment                   | 9,490  | 58,000    |           |            |              |              | 67,490       |           |
| Power Distribution Feeders                     | 28,082   | 53,489    |           |            |              |              | 81,571       |           |
| Receptacles                                    | 95,271   | 95,300    |           |            |              |              | 190,571      |           |
| Lighting Control                               | 47,636   | 47,650    |           |            |              |              | 95,286       |           |
| Emergency Power Distribution                   | 7,749  | 13,886    |           |            |              |              | 21,635       |           |
| Interior Lighting Fixtures                     | 195,005  | 243,250   |           |            |              |              | 438,255      |           |
| Sound And Video Cables & Fittings (E-RATE NIC) |  |           |           |            |              |              |              |           |
| Communication (E-RATE NIC)                     |  |           |           |            |              |              |              |           |
| Television Equipment (E-Rate NIC)              |  |           |           |            |              |              |              |           |
| Public Address System (E-Rate NIC)             |  |           |           |            |              |              |              |           |
| Clock Equipments                               | 9,527  | 9,530     |           |            |              |              | 19,057       |           |
| Security                                       | 23,787   | 23,825    |           |            |              |              | 47,612       |           |
| Fire Detection and Alarms                      | 71,485   | 95,300    |           |            |              |              | 166,785      |           |



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| Description   | Material Amount | Material Amount | Sub Amount | Equip Amount | Other Amount | Total Amount |
|---|-----------------|-----------------|------------|--------------|--------------|--------------|
| D3090 110 1690  | 93,143          | 248,818         | 343,550    |              |              | 685,511      |
| 07 Thermal & Moisture Protection                                    | 93,143          | 248,818         | 343,550    |              |              | 685,511      |
| 08 Openings   |                 |                 |            |              |              |              |
| Doors, Frames, Hardware   | 14,400          | 31,250          |            |              |              | 45,650       |
| Aluminum Entrances And Storefronts                                  | 3,300           | 21,000          |            |              |              | 24,300       |
| Glazed Aluminum Curtain Walls                                       | 251,240         | 773,040         |            |              |              | 1,024,280    |
| Aluminum Windows  | 2,400           | 4,400           |            |              |              | 6,800        |
| D3090 110 1690  | 271,340         | 829,690         |            |              |              | 1,101,030    |
| 08 Openings   | 271,340         | 829,690         |            |              |              | 1,101,030    |
| 09 Finishes   |                 |                 |            |              |              |              |
| Lt Gage Metal Back-up   | 48,750          | 40,625          |            |              |              | 89,375       |
| Gypsum Board Ceilings   | 23,383          | 12,153          |            |              |              | 35,535       |
| Ceramic & Porcelain Tile  | 29,489          | 31,833          |            |              |              | 61,322       |
| Suspended Ceilings, Complete  | 26,462          | 32,508          |            |              |              | 58,970       |
| Resilient Tile Flooring   | 13,306          | 20,160          |            |              |              | 33,466       |
| Terrazzo Flooring   | 39,600          | 14,400          |            |              |              | 54,000       |
| Carpet Tile   | 304             | 1,392           |            |              |              | 1,696        |
| Painting  | 37,243          | 8,943           |            |              |              | 46,186       |
| D3090 110 1690  | 218,536         | 162,013         |            |              |              | 380,549      |
| 09 Finishes   | 218,536         | 162,013         |            |              |              | 380,549      |
| 10 Specialties  |                 |                 |            |              |              |              |
| Fixed Chalkboards   | 2,030           | 10,010          |            |              |              | 12,040       |
| Tackboards  | 760             | 2,880           |            |              |              | 3,640        |
| Toilet Compartments   | 2,000           | 7,600           |            |              |              | 9,600        |
| Toilet Accessories  | 750             | 2,500           |            |              |              | 3,250        |
| Metal Lockers   | 3,750           | 33,750          |            |              |              | 37,500       |
| D3090 110 1690  | 9,290           | 56,740          |            |              |              | 66,030       |
| 10 Specialties  | 9,290           | 56,740          |            |              |              | 66,030       |
| 11 Equipment  |                 |                 |            |              |              |              |
| Metal Unit Kitchens   | 550             | 4,500           |            |              |              | 5,050        |
| D3090 110 1690  | 550             | 4,500           |            |              |              | 5,050        |
| 11 Equipment  | 550             | 4,500           |            |              |              | 5,050        |
| 21 Fire Suppression   |                 |                 |            |              |              |              |
| Wet pipe sprinkl systems,steel, third floor,17,700 SF               | 37,546          | 18,564          |            |              | 1,625        | 57,735       |
| Wet standp risers,class i,steel,black,sch 40,4"dm pipe,third floors | 3,451           | 3,372           |            |              |              | 6,824        |
| 21 Fire Suppression   | 40,998          | 21,936          |            |              | 1,625        | 64,558       |
| 22 Plumbing   |                 |                 |            |              |              |              |

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| Item   | Quantity | Unit Price | Subcontractor | Equipment | Contractor | Other | Total Amount |
|--|----------|------------|---------------|-----------|------------|-------|--------------|
| Water closet, vitreous china, with flush valve, wall hung 3rd floor      | 7,378    | 11,589     |               |           |            |       | 18,967       |
| Urinal, vitreous china, stall type 3rd fl                                | 3,197    | 3,810      |               |           |            |       | 7,008        |
| Lavatory w/trim, wall hung, vitreous china, 24" x 20" 3rd fl             | 9,031    | 16,591     |               |           |            |       | 25,622       |
| Kitchen sink w/trim, countertop, stainless steel 25"x27" single bowl 3rd | 1,468    | 2,468      |               |           |            |       | 3,937        |
| Service sink w/trim, corner floor, 28" x 28", w/trim guard 3rd fl        | 1,687    | 2,450      |               |           |            |       | 4,137        |
| Shower, stall, fiberglass 1 piece, 3rd fl                                | 2,704    | 3,114      |               |           |            |       | 5,818        |
| Water cooler, electric, floor mounted, dual 3rd floor                    | 2,158    | 4,914      |               |           |            |       | 7,071        |
| Domestic Water Distribution 3rd floor                                    | 14,193   | 10,860     |               |           |            |       | 25,053       |
| Sanitary Waste System & Vent 3rd floor                                   | 20,364   | 16,335     |               |           |            |       | 36,699       |
| Roof drain, CI, Storm System 3rd floor                                   | 8,054    | 8,850      |               |           |            |       | 16,904       |
| 22 Plumbing  | 70,233   | 80,981     |               |           |            |       | 151,214      |
| 23 Heating Ventilating & Air Conditioning                                |          |            |               |           |            |       |              |
| AHU Central Station 1000 CFM 3rd Floor                                   | 46,807   | 38,250     |               |           |            |       | 94,721       |
| Misc. Area's Air Distribution 3rd fl Ductwork                            | 99,282   | 29,905     |               |           |            |       | 226,926      |
| Variable Air Volume Mixing Boxes 3rd floor                               | 66,070   | 63,087     |               |           | 88,500     |       | 139,061      |
| Exhaust Fan System Roof  | 22,459   | 15,111     |               |           |            | 1,750 | 42,135       |
| Fin Tube Assembly 3rd Floor  | 24,430   | 25,500     |               |           |            |       | 52,198       |
| Split sys, air cooled condnsn unit, Data Closets 2 per floor 3rd fl      | 2,702    | 3,081      |               |           |            |       | 5,783        |
| Hot Water Loop 3rd floor Primary & secondary                             | 15,259   | 16,290     |               |           |            |       | 31,548       |
| 23 Heating Ventilating & Air Conditioning                                | 277,008  | 191,225    |               |           | 88,500     | 8,109 | 592,372      |
| 26 Electrical  |          |            |               |           |            |       |              |
| Building Temporary power and Lighting                                    | 3,532    | 1,770      |               |           |            |       | 5,302        |
| Equipment Connections  | 20,632   | 34,209     |               |           |            |       | 54,841       |
| Power Distribution Equipment   | 10,465   | 24,125     |               |           |            |       | 34,590       |
| Power Distribution Feeders   | 12,480   | 21,200     |               |           |            |       | 33,680       |
| Receptacles  | 17,683   | 17,700     |               |           |            |       | 35,383       |
| Lighting Control   | 8,836    | 8,850      |               |           |            |       | 17,686       |
| Emergency Power Distribution   | 520      | 800        |               |           |            |       | 1,320        |
| Lightning Protection For Buildings                                       | 4,769    | 1,770      |               |           |            |       | 3,539        |
| Interior Lighting Fixtures   | 39,004   | 45,400     |               |           |            |       | 84,404       |
| Sound And Video Cables & Fittings (E-RATE NIC)                           |          |            |               |           |            |       |              |
| Communication (E-RATE NIC)   |          |            |               |           |            |       |              |
| Television Equipment (E-RATE NIC)  |          |            |               |           |            |       |              |
| Public Address System (E-RATE NIC)                                       |          |            |               |           |            |       |              |
| Clock Equipments   | 1,769    | 1,770      |               |           |            |       | 3,539        |
| Security   | 4,418    | 4,425      |               |           |            |       | 8,843        |
| Fire Detection and Alarms  | 13,265   | 17,700     |               |           |            |       | 30,965       |
| D3090 110 1680   | 134,374  | 179,719    |               |           |            |       | 314,093      |
| 26 Electrical  | 134,374  | 179,719    |               |           |            |       | 314,093      |
| 31 Stewwork  |          |            |               |           |            |       |              |
|  | 134,374  | 179,719    |               |           |            |       | 314,093      |

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| Item | Description                         | Takeoff Amount | Material Amount | Subcontract | Equip. Amount | Other Amount | Total Amount |
|------|-------------------------------------|----------------|-----------------|-------------|---------------|--------------|--------------|
| 03   | Excavation                          | 8,100          | 10,489          |             | 3,240         |              | 11,340       |
|      | Backfill, Structural                | 13,148         |                 |             | 4,691         |              | 28,328       |
|      | Hauling                             | 7,130          |                 |             | 3,410         |              | 10,540       |
|      | D3090 110 1680                      | 28,378         | 10,489          |             | 11,341        |              | 50,208       |
|      | 31 Sitework                         | 28,378         | 10,489          |             | 11,341        |              | 50,208       |
|      | 02 3rd Floor and Entry Additions    | 1,604,081      | 2,330,217       | 432,050     | 59,376        | 27,531       | 4,453,255    |
|      | 03 Sitework                         |                |                 |             |               |              |              |
|      | 26 Electrical                       |                |                 |             |               |              |              |
|      | Lighting Poles And Standards        | 5,720          | 15,200          |             |               |              | 20,920       |
|      | Pathways for Communications Systems |                |                 |             |               |              |              |
|      | Site Power Distribution             | 17,680         | 74,257          |             |               |              | 91,936       |
|      | D3090 110 1680                      | 23,400         | 89,457          |             |               |              | 112,856      |
|      | 26 Electrical                       | 23,400         | 89,457          |             |               |              | 112,856      |
|      | 31 Sitework                         |                |                 |             |               |              |              |
|      | Sitework                            |                |                 | 532,033     |               |              | 532,033      |
|      | D3090 110 1680                      |                |                 | 532,033     |               |              | 532,033      |
|      | 31 Sitework                         |                |                 | 532,033     |               |              | 532,033      |
|      | 03 Sitework                         | 23,400         | 89,457          | 532,033     |               |              | 644,889      |



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Estimate Totals

| Description                    | Amount     | Total             | Rate     | Cost Basis | Cost per Unit |
|--------------------------------|------------|-------------------|----------|------------|---------------|
| Labor                          | 6,285,916  |                   |          |            |               |
| Material                       | 7,208,016  |                   |          |            |               |
| Subcontract                    | 3,641,753  |                   |          |            |               |
| Equipment                      | 198,746    |                   |          |            |               |
| Other                          | 122,718    |                   |          |            |               |
|                                | 17,457,189 | 17,457,189        |          |            |               |
| General Conditions             | 1,510,047  |                   | 8.650 %  |            | T             |
| Contingency, Escalation 1st yr | 1,510,047  | 18,967,236        | 3.600 %  |            | T             |
| Contingency, Escalation 2nd yr | 692,821    |                   | 4.000 %  |            | T             |
|                                | 758,689    | 20,408,746        |          |            |               |
| Band                           | 1,441,510  |                   | 1.000 %  |            | T             |
|                                | 204,087    | 20,612,833        |          |            |               |
| Design Contingency             | 204,087    |                   | 15.000 % |            | T             |
| Construction Contingency       | 3,091,925  |                   | 10.000 % |            | T             |
|                                | 2,061,283  | 25,766,041        |          |            |               |
| Data/Telecom/Audio/Visual      | 5,153,208  |                   |          |            |               |
| FF&E                           |            | 25,766,041        |          |            | L             |
|                                |            |                   |          |            | C             |
| <b>Total</b>                   |            | <b>25,766,041</b> |          |            |               |

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Project name      RCSD Modernization  
                         Rochester  
                         NY

Report format      Sorted by 'Location/CSI Div/Group phase/Phase'  
                         'Detail' summary  
                         Allocate addons

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| Item            | Description                         | Takeoff Qty | Unit Cost | Total       | Amount    |
|-----------------|-------------------------------------|-------------|-----------|-------------|-----------|
| <b>Addition</b> |                                     |             |           |             |           |
|                 | 01                                  |             |           |             |           |
| 1000.000        | <b>GENERAL REQUIREMENTS</b>         |             |           |             |           |
| 1000.100        | <i>Division 1 Subcontractors</i>    |             |           |             |           |
| 10              | GC Gen Conditions 8%                | 1.00        | lsum      | 431,982.00  | 431,982   |
| 10              | GC Fee 4%                           | 1.00        | lsum      | 287,988.00  | 287,988   |
|                 | <i>Division 1 Subcontractors</i>    |             |           |             | 719,970   |
|                 | <b>GENERAL REQUIREMENTS</b>         |             |           |             |           |
|                 | 01                                  |             |           | 12.83 /sqft | 719,970   |
|                 | 56,134.00                           | sqft        |           |             |           |
|                 | 03                                  |             |           |             |           |
| 3000.000        | <b>CONCRETE</b>                     |             |           |             |           |
| 3310.140        | <i>Conc: Footings</i>               |             |           |             |           |
| c 30            | Footing Conc 3000 psi               | 501.00      | cy        | 350.00 /cy  | 175,350   |
|                 | <i>Conc: Footings</i>               |             |           |             | 175,350   |
|                 | 250.50                              | Labor hours |           |             |           |
| 3310.180        | <i>Conc: Walls</i>                  |             |           |             |           |
| c 30            | Wall Conc 3000 psi                  | 495.00      | cy        | 550.00 /cy  | 272,250   |
|                 | <i>Conc: Walls</i>                  |             |           |             | 272,250   |
|                 | 309.38                              | Labor hours |           |             |           |
| 3310.210        | <i>Conc: Slabs On Grade</i>         |             |           |             |           |
| c 40            | 5" S.O.G. Conc                      | 42,163.00   | sf        | 5.00 /sf    | 210,815   |
|                 | <i>Conc: Slabs On Grade</i>         |             |           |             | 210,815   |
| 3310.450        | <i>Conc: Topping</i>                |             |           |             |           |
| c 30            | 2" Topping Conc                     | 18,929.00   | sqft      | 4.00 /sqft  | 75,716    |
|                 | <i>Conc: Topping</i>                |             |           |             | 75,716    |
|                 | 5,878.71                            | Labor hours |           |             |           |
| 3400.100        | <i>Precast Concrete</i>             |             |           |             |           |
| 80              | 10" HC Concrete Precast Deck (sqft) | 18,929.00   | sf        | 14.42 /sf   | 272,956   |
|                 | <i>Precast Concrete</i>             |             |           |             | 272,956   |
|                 | 946.45                              | Labor hours |           |             |           |
|                 | <b>CONCRETE</b>                     |             |           |             |           |
|                 | 7,185.031                           | Labor hours |           |             | 1,007,087 |
|                 | 03                                  |             |           | 17.941/sqft | 1,007,087 |
|                 | 56,134.00                           | sqft        |           |             |           |
|                 | 7,185.031                           | Labor hours |           |             |           |

| Item                     | Description   | Takeoff Qty                     | Unit Cost                  | Total | Amount                           |
|--------------------------|---|---------------------------------|----------------------------|-------|----------------------------------|
|                          | 03  |                                 | 17.841/sqft                |       | 1,007,087                        |
|                          | 56,134.00 sqft  |                                 |                            |       |                                  |
|                          | 7,185.031 Labor hours   |                                 |                            |       |                                  |
|                          | 04  |                                 |                            |       |                                  |
| 4000.000                 | MASONRY   |                                 |                            |       |                                  |
| 4210.100                 | Brick: All Types<br>10 Brick Veneer<br>Brick: All Types   | 20,179.00 sqft                  | 28.00 /sqft                |       | 565,012<br>565,012               |
| 4220.100<br>lw 1         | Conc. Block 10"<br>Blk 12" CMU<br>Conc. Block 10"<br>973.18 Labor hours   | 11,229.00 sqft                  | 20.00 /sqft                |       | 224,580<br>224,580               |
| 4220.110<br>rw 1<br>rw 1 | Conc. Block: 8"<br>8" CMU<br>Glazed Block @ Kitchen<br>Conc. Block: 8"  | 88,032.00 sqft<br>1,887.00 sqft | 16.00 /sqft<br>29.60 /sqft |       | 1,408,512<br>49,935<br>1,458,447 |
|                          | MASONRY<br>973.18 Labor hours   |                                 |                            |       | 2,248,039                        |
|                          | 04  |                                 | 40.05 /sqft                |       | 2,248,039                        |
|                          | 56,134.00 sqft  |                                 |                            |       |                                  |
|                          | 973.18 Labor hours  |                                 |                            |       |                                  |
|                          | 05  |                                 |                            |       |                                  |
| 5000.000                 | METALS  |                                 |                            |       |                                  |
| 5310.010                 | Structural: Steel Deck<br>20 Metal Joists/Roof Deck<br>20 Metal Joists/Acoustical Roof Deck<br>Structural: Steel Deck | 35,824.00 sf<br>7,700.00 sf     | 7.50 /sf<br>14.00 /sf      |       | 267,180<br>107,800<br>374,980    |
| 5510.110                 | Stairs: Stair Parts<br>10 Metal Pan Stairs & Railings<br>Stairs: Stair Parts<br>80.00 Labor hours                     | 4.00 fts                        | 10,500.00 /fts             |       | 42,000<br>42,000                 |
| 5810.010                 | Expansion Joint<br>10 Expansion Joints<br>Expansion Joint<br>0.02 Labor hours   | 1.00 Allo                       | 25,000.00 /Allo            |       | 25,000<br>25,000                 |
|                          | METALS<br>80.02 Labor hours   |                                 |                            |       | 441,980                          |

| Item     | Description                        | Takeoff Qty   | Unit Cost       | Total      | Amount  |
|----------|------------------------------------|---------------|-----------------|------------|---------|
|          | 05                                 |               |                 | 7.874/sqft | 441,980 |
|          | 58,134.00 sqft                     |               |                 |            |         |
|          | 80.02 Labor hours                  |               |                 |            |         |
|          | 06                                 |               |                 |            |         |
| 6000.000 | WOOD & PLASTICS                    |               |                 |            |         |
| 6117.020 | Blocking: Misc.                    |               |                 |            |         |
|          | 10 Misc Blocking                   | 1.00 Allo     | 10,000.00 /Allo |            | 10,000  |
|          | Roof Blocking @ Addition           | 2,048.00 Inft | 5.00 /Inft      |            | 10,240  |
|          | Blocking: Misc.                    |               |                 |            | 20,240  |
|          | 59.99 Labor hours                  |               |                 |            |         |
| 6160.010 | Plywood: Subfloor                  |               |                 |            |         |
|          | 10 Stage Platform Framing          | 1,179.00 sf   | 8.00 /sf        |            | 9,432   |
|          | Plywood: Subfloor                  |               |                 |            | 9,432   |
|          | 53.06 Labor hours                  |               |                 |            |         |
| 6410.010 | Arch Wd Wrk: Cabinets              |               |                 |            |         |
|          | 10 Wood Base Cabinet               | 180.00 lf     | 400.00 /lf      |            | 72,000  |
|          | 10 Wardrobe Cabinet                | 8.00 ea       | 1,500.00 /ea    |            | 9,000   |
|          | 101 P-Lam Countertops              | 180.00 lf     | 45.00 /lf       |            | 8,100   |
|          | Arch Wd Wrk: Cabinets              |               |                 |            | 89,100  |
| 6454.010 | Arch Wd Wrk: Misc. Trim            |               |                 |            |         |
|          | 1 Decorative Trim/Moulding @ Stage | 135.00 lf     | 20.00 /lf       |            | 2,700   |
|          | Arch Wd Wrk: Misc. Trim            |               |                 |            | 2,700   |
|          | 13.50 Labor hours                  |               |                 |            |         |
|          | WOOD & PLASTICS                    |               |                 |            | 121,472 |
|          | 126.543 Labor hours                |               |                 |            |         |
|          | 06                                 |               |                 | 2.164/sqft | 121,472 |
|          | 58,134.00 sqft                     |               |                 |            |         |
|          | 126.543 Labor hours                |               |                 |            |         |
|          | 07                                 |               |                 |            |         |

7000.000 THERMAL & MOISTURE PROT

|          |                                  |              |          |  |        |
|----------|----------------------------------|--------------|----------|--|--------|
| 7111.010 | Dampproofing: VaprrBarrier       |              |          |  |        |
|          | 20 Poly Vapor Barrier @ SOG      | 42,163.00 sf | 0.75 /sf |  | 31,822 |
|          | 30 Vapor Barrier @ Exterior Wall | 20,179.00 sf | 2.50 /sf |  | 50,448 |
|          | Dampproofing: VaprrBarrier       |              |          |  | 82,070 |
|          | 38.074 Labor hours               |              |          |  |        |
| 7210.040 | Insulation: Board                |              |          |  |        |
|          | 70 Expanded Polystyrene 2"       | 20,179.00 sf | 1.85 /sf |  | 37,331 |

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| Item     | Description                            | Takeoff Qty    | Unit Cost       | Total | Amount  |
|----------|--|----------------|-----------------|-------|---------|
|          | <i>Insulation: Board</i>               |                |                 |       | 37,331  |
|          | 403.58 Labor hours                     |                |                 |       |         |
| 7410.010 | <i>Metal Wall Panels</i>               |                |                 |       |         |
| 340      | Architectural Metal Panels @ Pilasters | 0.00 sf        |                 |       |         |
| 7510.030 | <i>Membrane: BUR Bitumen</i>           |                |                 |       |         |
| 120      | Mod Bit 2ply Roofing                   | 42,041.00 sqft | 18.00 /sqft     |       | 758,738 |
|          | <i>Membrane: BUR Bitumen</i>           |                |                 |       | 758,738 |
| 7810.010 | <i>Fireproofing: Spray On</i>          |                |                 |       |         |
| 10       | Fireprfg Sprayd                        | 12,228.00 sf   | 3.00 /sf        |       | 36,684  |
|          | <i>Fireproofing: Spray On</i>          |                |                 |       | 36,684  |
| 7840.000 | <i>Firestopping</i>                    |                |                 |       |         |
| —        | Firestopping                           | 1.00 Allo      | 10,000.00 /Allo |       | 10,000  |
|          | <i>Firestopping</i>                    |                |                 |       | 10,000  |
| 7920.010 | <i>Sealant - Jt Filler Gask</i>        |                |                 |       |         |
| —        | Joint Sealants                         | 1.00 Allo      | 7,500.00 /Allo  |       | 7,500   |
|          | <i>Sealant - Jt Filler Gask</i>        |                |                 |       | 7,500   |
|          | <b>THERMAL &amp; MOISTURE PROT</b>     |                |                 |       | 930,323 |
|          | 441.654 Labor hours                    |                |                 |       |         |
|          | <b>07</b>                              |                | 16.573/sqft     |       | 930,323 |
|          | 86,134.00 sqft                         |                |                 |       |         |
|          | 441.654 Labor hours                    |                |                 |       |         |
|          | <b>08</b>                              |                |                 |       |         |

8000.000 DOORS & WINDOWS

|          |   |             |                 |  |         |
|----------|---|-------------|-----------------|--|---------|
| 8100.000 | <i>Doors: Metal With Frames</i>                     |             |                 |  |         |
| 20       | New HM Frame (Single)                               | 148.00 ea   | 204.762 /ea     |  | 30,308  |
| 20       | New HM Frame (Double)                               | 9.00 ea     | 329.762 /ea     |  | 2,968   |
| 20       | HM Door 3 X 7                                       | 2.00 ea     | 254.78 /ea      |  | 510     |
| 20       | HM Door 6 x 7                                       | 9.00 ea     | 304.762 /ea     |  | 2,743   |
|          | <i>Doors: Metal With Frames</i>                     |             |                 |  | 36,528  |
|          | 336.00 Labor hours                                  |             |                 |  |         |
| 8210.010 | <i>Doors: Wood</i>                                  |             |                 |  |         |
| b226     | 3 X 7   | 146.00 ea   | 428.782 /ea     |  | 62,748  |
|          | <i>Doors: Wood</i>                                  |             |                 |  | 62,748  |
|          | 292.00 Labor hours                                  |             |                 |  |         |
| 8400.000 | <i>Metal-Framed Storefronts</i>                     |             |                 |  |         |
| 10       | Aluminum-Framed Storefronts                         | 5,785.00 sf | 60.00 /sf       |  | 347,100 |
| 10       | Aluminum Operable Windows @ Gym                     | 72.00 sf    | 65.00 /sf       |  | 4,680   |
| 80       | Architectural Aluminum Awnings                      | 727.00 lf   | 45.00 /lf       |  | 32,715  |
| 80       | Canopies  | 53.00 lf    | 125.00 /lf      |  | 6,625   |
|          | <i>Metal-Framed Storefronts</i>                     |             |                 |  | 391,120 |
| 8600.000 | <i>Skylights</i>                                    |             |                 |  |         |
| 40       | Metal-Framed Skylights @ Gym, Cafeteria, Inst.Music | 1.00 Allo   | 25,000.00 /Allo |  | 25,000  |

| Item                       | Description                    | Takeoff Qty  | Unit Cost   | Total | Amount         |
|----------------------------|--------------------------------|--------------|-------------|-------|----------------|
|                            | <i>Skylights</i>               |              |             |       | 25,000         |
| 8700.000                   | <i>Hardware: Finishing</i>     |              |             |       |                |
| 10                         | Finishing Hardware             | 166.00 ea    | 504.782 /ea |       | 83,794         |
|                            | <i>Hardware: Finishing</i>     |              |             |       | 83,794         |
|                            | 166.00 Labor hours             |              |             |       |                |
| <b>DOORS &amp; WINDOWS</b> |                                |              |             |       | <b>599,190</b> |
|                            | 794.00 Labor hours             |              |             |       |                |
| 08                         |                                |              | 10.674/sqft |       | 599,190        |
|                            | 56,134.00 sqft                 |              |             |       |                |
|                            | 794.00 Labor hours             |              |             |       |                |
| 09                         |                                |              |             |       |                |
| <hr/>                      |                                |              |             |       |                |
| 9000.000                   | <b>FINISHES</b>                |              |             |       |                |
| <hr/>                      |                                |              |             |       |                |
| 9134.010                   | <b>GWB: WALL BOARD SYSTEMS</b> |              |             |       |                |
| 30                         | GWB Soffit Above Lockers       | 443.00 sf    | 10.00 /sf   |       | 4,430          |
|                            | <b>GWB: WALL BOARD SYSTEMS</b> |              |             |       | 4,430          |
| 9310.020                   | <i>Tile: Mosaics</i>           |              |             |       |                |
| 20                         | Ceramic Floor Tile             | 4,743.00 sf  | 12.00 /sf   |       | 56,916         |
| 20                         | Ceramic Tile Walls             | 7,019.00 sf  | 14.00 /sf   |       | 98,266         |
| 20                         | Ceramic Tile Base              | 592.00 lf    | 14.00 /lf   |       | 8,288          |
|                            | <i>Tile: Mosaics</i>           |              |             |       | 163,470        |
| 9400.000                   | <i>Terrazzo</i>                |              |             |       |                |
| 10                         | Precast Terrazzo               | 8,948.00 sf  | 18.00 /sf   |       | 161,064        |
| 11                         | Terrazzo Cove Base             | 2,317.00 lf  | 25.00 /lf   |       | 57,925         |
|                            | <i>Terrazzo</i>                |              |             |       | 218,989        |
| 9511.050                   | <i>Ceiling: 2x4 Tile</i>       |              |             |       |                |
| 10                         | SAT 2x4 Ceiling                | 3,630.00 sf  | 3.50 /sf    |       | 12,705         |
| 10                         | SAT 2x2 Ceiling                | 39,657.00 sf | 3.75 /sf    |       | 148,714        |
|                            | <i>Ceiling: 2x4 Tile</i>       |              |             |       | 161,419        |
| 9640.010                   | <i>Flooring Wood</i>           |              |             |       |                |
| 10                         | Wood Flooring @ Gymnasium      | 8,286.00 sf  | 14.00 /sf   |       | 116,004        |
| 10                         | Wood Flooring @ Stage          | 1,179.00 sf  | 14.00 /sf   |       | 16,506         |
|                            | <i>Flooring Wood</i>           |              |             |       | 132,510        |
| 9650.010                   | <i>Flooring Resilient</i>      |              |             |       |                |
| 10                         | Rubber Sheet Floor             | 1,922.00 sf  | 3.50 /sf    |       | 6,727          |
| 10                         | Sheet Linoleum Floor/VCT       | 21,261.00 sf | 3.50 /sf    |       | 74,414         |
| 40                         | Rubber Base                    | 5,677.00 lf  | 5.30 /lf    |       | 30,086         |
|                            | <i>Flooring Resilient</i>      |              |             |       | 111,229        |
| 9670.010                   | <i>Flooring Epoxy</i>          |              |             |       |                |
| 10                         | Paint Epoxy Flooring           | 927.00 sf    | 2.00 /sf    |       | 1,854          |
|                            | <i>Flooring Epoxy</i>          |              |             |       | 1,854          |
| 9680.010                   | <i>Flooring Carpet</i>         |              |             |       |                |
| 6                          | Carpet Tile                    | 441.00 sy    | 35.00 /sy   |       | 15,435         |

| Item      | Description                               | Takeoff Qty  | Unit Cost    | Total  |                |
|-----------|---|--------------|--------------|--------|----------------|
|           |   |              |              | Amount | Amount         |
|           | <i>Flooring Carpet</i>                    |              |              |        | 15,435         |
| 9800.000  | <i>Acoustical Treatment</i>               |              |              |        |                |
|           | 10 Sound Absorbing Panel                  | 1,660.00 sf  | 25.00 /sf    |        | 41,500         |
|           | <i>Acoustical Treatment</i>               |              |              |        | 41,500         |
| 9910.020  | <i>Painting: Int Detailed</i>             |              |              |        |                |
|           | 5 Paint Interior Partition                | 96,076.00 sf | 1.00 /sf     |        | 96,076         |
|           | <i>Painting: Int Detailed</i>             |              |              |        | 96,076         |
|           | <b>FINISHES</b>                           |              |              |        | <b>946,911</b> |
|           | 09  |              | 16.87 /sqft  |        | 946,911        |
|           | 58,134.00 sqft                            |              |              |        |                |
|           | 10  |              |              |        |                |
| 10000.000 | <b>SPECIALTIES</b>                        |              |              |        |                |
| 10160.010 | <i>Toilet Compartments</i>                |              |              |        |                |
|           | 30 Phenolic Toilet Compartments           | 6.00 ea      | 1,000.00 /ea |        | 6,000          |
|           | 31 Phenolic ADA Toilet Compartments       | 6.00 ea      | 1,275.00 /ea |        | 7,650          |
|           | 41 Urinal Screen                          | 3.00 ea      | 725.00 /ea   |        | 2,175          |
|           | <i>Toilet Compartments</i>                |              |              |        | 15,825         |
| 10260.010 | <i>Wall &amp; Corner Guards</i>           |              |              |        |                |
|           | 20 Bumper Guards                          | 116.00 lf    | 25.50 /lf    |        | 2,958          |
|           | <i>Wall &amp; Corner Guards</i>           |              |              |        | 2,958          |
| 10500.010 | <i>Lockers</i>                            |              |              |        |                |
|           | 10 Hall Locker                            | 295.00 ea    | 275.00 /ea   |        | 81,125         |
|           | 10 Gym Locker                             | 35.00 ea     | 225.00 /ea   |        | 7,875          |
|           | <i>Lockers</i>                            |              |              |        | 89,000         |
| 10600.000 | <i>Partitions</i>                         |              |              |        |                |
|           | 340 Operable Fire Rated Partition @ Stage | 810.00 sf    | 42.00 /sf    |        | 34,020         |
|           | <i>Partitions</i>                         |              |              |        | 34,020         |
| 10800.010 | <i>Misc Toilet/Bath Equip</i>             |              |              |        |                |
|           | 80 Soap Dispenser                         | 18.00 ea     | 75.50 /ea    |        | 1,359          |
|           | 82 SS Toilet Paper Dispenser- Surface Mt. | 18.00 ea     | 34.50 /ea    |        | 621            |
|           | 84 SS Waste Rec./Paper Towel Disp.        | 12.00 ea     | 545.00 /ea   |        | 6,540          |
|           | 90 Mirror                                 | 18.00 ea     | 238.00 /ea   |        | 4,284          |
|           | 100 Grab Bar                              | 24.00 ea     | 56.00 /ea    |        | 1,344          |
|           | <i>Misc Toilet/Bath Equip</i>             |              |              |        | 14,148         |
|           | <b>SPECIALTIES</b>                        |              |              |        | <b>155,951</b> |
| 12000.000 | <b>FURNISHINGS</b>                        |              |              |        |                |
| 12000.010 | <i>Floor Mats</i>                         |              |              |        |                |
|           | 10 Entrance Mats                          | 298.00 Allo  | 9.50 /Allo   |        | 2,831          |



| Item | Description        | Takeoff Qty | Unit Cost  | Total | Amount  |
|------|--------------------|-------------|------------|-------|---------|
|      | Floor Mats         |             |            |       | 2,831   |
|      | <b>FURNISHINGS</b> |             |            |       | 2,831   |
|      | 10                 |             | 2.83 /sqft |       | 168,782 |
|      | 58,134.00 sqft     |             |            |       |         |
|      | 11                 |             |            |       |         |

11000.000 EQUIPMENT

|           |                              |             |                  |  |         |
|-----------|------------------------------|-------------|------------------|--|---------|
| 11080.010 | Equip: Theater & Stage       |             |                  |  |         |
| 140       | Stage Curtains               | 1.00 ea     | 25,000.00 /ea    |  | 25,000  |
|           | New Stage Curtain & Rigging  | 1.00 Allo   | 150,000.00 /Allo |  | 150,000 |
|           | Equip: Theater & Stage       |             |                  |  | 175,000 |
| 11400.010 | Equip: Commercial Food       |             |                  |  |         |
|           | New Food Service Equipment   | 1.00 Allo   | 240,420.00 /Allo |  | 240,420 |
|           | Equip: Commercial Food       |             |                  |  | 240,420 |
| 11480.010 | Equip: Sports/Therapeutic    |             |                  |  |         |
| 10        | Basketball Backboard & Frame | 6.00 ea     | 2,500.00 /ea     |  | 15,000  |
| 20        | Bleachers                    | 270.00 seat | 125.00 /seat     |  | 33,750  |
| 60        | Gym Divider Curtain @ Gym    | 1,480.00 sf | 11.85 /sf        |  | 17,538  |
|           | Gymnasium Wall Padding       | 2,040.00 sf | 6.50 /sf         |  | 13,260  |
|           | Equip: Sports/Therapeutic    |             |                  |  | 79,548  |

EQUIPMENT

11 8.82 /sqft 494,968

58,134.00 sqft

12

12000.000 FURNISHINGS

|           |                   |               |             |  |        |
|-----------|-------------------|---------------|-------------|--|--------|
| 12490.010 | Window Treatments |               |             |  |        |
| 20        | Louver Blinds     | 4,178.00 sqft | 12.00 /sqft |  | 50,136 |
|           | Window Treatments |               |             |  | 50,136 |

FURNISHINGS

12 0.893/sqft 50,136

58,134.00 sqft

14

14000.000 CONVEYING SYSTEMS

14200.010 Elevators

**THE PIKE COMPANY**

| Item      | Description  | Takeoff Qty    | Unit Cost       | Total | Amount  |
|-----------|--|----------------|-----------------|-------|---------|
| 14200.010 | Elevators  |                |                 |       |         |
|           | 20 Elevator Automatic Elevators                    | 2.00 stop      | 28,000.00 /stop |       | 56,000  |
|           |  |                |                 |       | 56,000  |
|           | CONVEYING SYSTEMS                                  |                |                 |       | 56,000  |
|           | 14   |                | 1.00 /sqft      |       | 56,000  |
|           | 56,134.00 sqft                                     |                |                 |       |         |
|           | 16   |                |                 |       |         |
| 16010.000 | GENERAL CONDITIONS                                 |                |                 |       |         |
| 16010.060 | MOBILIZE/DEMOLIBIZE                                |                |                 |       |         |
| n         | 15 Average cost, mob-demob, large project > \$500k | 1.00 ls        | 5,000.00 /ls    |       | 5,000   |
|           | MOBILIZE/DEMOLIBIZE                                |                |                 |       | 5,000   |
| 16010.190 | TEMPORARY UTILITIES                                |                |                 |       |         |
| n         | 37 Allow, panelboards for temp power to 225A       | 2.00 ea        | 1,250.00 /ea    |       | 2,500   |
| n         | 50 Allow, Temp.Power & Lights                      | 56,134.00 sqft | 0.25 /sqft      |       | 14,034  |
|           | TEMPORARY UTILITIES                                |                |                 |       | 16,534  |
|           | GENERAL CONDITIONS                                 |                |                 |       | 21,534  |
| 16050.000 | BASIC MATERIALS & METHODS                          |                |                 |       |         |
| 16060.810 | Lightning Protection                               |                |                 |       |         |
|           | 5 Lightning Protection                             | 0.00 sqft      |                 |       |         |
|           | BASIC MATERIALS & METHODS                          |                |                 |       | 0       |
| 16130.000 | RACEWAY, FITTINGS & BOXES                          |                |                 |       |         |
| 16132.156 | FEEDER CONDUIT/WIRE                                |                |                 |       |         |
|           | 17 HVAC Equipment Power                            | 56,134.00 sqft | 1.50 /sqft      |       | 84,201  |
|           | FEEDER CONDUIT/WIRE                                |                |                 |       | 84,201  |
|           | RACEWAY, FITTINGS & BOXES                          |                |                 |       | 84,201  |
| 16140.000 | WIRING DEVICES                                     |                |                 |       |         |
| 16140.150 | RECEPTACLES, BLADE TYPE                            |                |                 |       |         |
| n         | 5 Conduit and Wire for Electrical Power            | 56,134.00 sqft | 1.00 /sqft      |       | 56,134  |
|           | RECEPTACLES, BLADE TYPE                            |                |                 |       | 56,134  |
|           | WIRING DEVICES                                     |                |                 |       | 56,134  |
| 16510.000 | LIGHTING   |                |                 |       |         |
| 16510.440 | Flourescent Fixtures                               |                |                 |       |         |
| ---       | Lighting   | 56,134.00 sqft | 4.50 /sqft      |       | 252,603 |
| ---       | Emergency Lighting                                 | 56,134.00 sqft | 1.00 /sqft      |       | 56,134  |
| ---       | Lighting Control System                            | 56,134.00 sqft | 0.50 /sqft      |       | 28,067  |

| Item      | Description                      | Takeoff Qty     | Unit Cost        | Total Amount |
|-----------|----------------------------------|-----------------|------------------|--------------|
|           | <i>Flourescent Fixtures</i>      |                 |                  | 336,804      |
|           | <b>LIGHTING</b>                  |                 |                  | 336,804      |
| 16700.000 | <b>SPECIAL SYSTEMS</b>           |                 |                  |              |
| 16720.310 | <b>FIRE ALARM SYSTEM</b>         |                 |                  |              |
| 495       | Fire Alarm System                | 56,134.00 sqft  | 2.50 /sqft       | 140,335      |
|           | <b>FIRE ALARM SYSTEM</b>         |                 |                  | 140,335      |
| 16720.320 | <b>Security System</b>           |                 |                  |              |
| n         | 5 Security System Access Control | 56,134.00 sqft  | 0.50 /sqft       | 28,067       |
| n         | 45 CCTV System                   | 561,334.00 sqft | 0.25 /sqft       | 140,334      |
|           | <b>Security System</b>           |                 |                  | 168,401      |
|           | 3,789,004.500 Labor hours        |                 |                  |              |
| 16720.340 | <b>SOUND/PAGING SYSTEM</b>       |                 |                  |              |
| n         | 5 PA System                      | 56,134.00 sqft  | 0.25 /sqft       | 14,034       |
| n         | 5 Gym/Stage Sound System         | 1.00 Allo       | 125,000.00 /Allo | 125,000      |
|           | <b>SOUND/PAGING SYSTEM</b>       |                 |                  | 139,034      |
| 16720.420 | <b>TELE/DATA SYSTEM</b>          |                 |                  |              |
| n         | 5 Tele/Data/CATV Raceways        | 56,134.00 sqft  | 2.00 /sqft       | 112,268      |
|           | <b>TELE/DATA SYSTEM</b>          |                 |                  | 112,268      |
|           | <b>SPECIAL SYSTEMS</b>           |                 |                  | 560,037      |
|           | 3,789,004.500 Labor hours        |                 |                  |              |
|           | <b>16</b>                        |                 | 18.88 /sqft      | 1,059,710    |
|           | 56,134.00 sqft                   |                 |                  |              |
|           | 3,789,004.500 Labor hours        |                 |                  |              |

028

|          |   |                |            |         |
|----------|---|----------------|------------|---------|
| 2300.000 | <b>EARTHWORK</b>  |                |            |         |
| 2317.105 | <b>Building Excavation</b>                              |                |            |         |
| —        | Building Earthwork - Excav, Backfill & Subbase Addition | 39,942.00 sqft | 3.25 /sqft | 129,812 |
| —        | Building Earthwork - Sm Additions                       | 2,728.00 sqft  | 5.50 /sqft | 15,004  |
|          | <b>Building Excavation</b>                              |                |            | 144,816 |
|          | <b>EARTHWORK</b>  |                |            | 144,816 |
|          | <b>028</b>  |                | 2.58 /sqft | 144,816 |
|          | 56,134.00 sqft  |                |            |         |

16H

16500.000 HVAC

15610.000 Heating Boilers and Acces

**THE PIKE COMPANY**

| Item      | Description               | Takeoff Qty    | Unit Cost   | Total | Amount    |
|-----------|---------------------------|----------------|-------------|-------|-----------|
| 15810.000 | Heating Boilers and Acces |                |             |       |           |
| 0201      | HVAC                      | 56,134.00 sqft | 28.00 /sqft |       | 1,571,752 |
|           | Heating Boilers and Acces |                |             |       | 1,571,752 |
|           | 1,796,288.00 Labor hours  |                |             |       |           |
| 15940.000 | HVAC Inst. and Controls   |                |             |       |           |
| 1810      | HVAC Controls             | 56,134.00 sqft | 4.00 /sqft  |       | 224,536   |
|           | HVAC Inst. and Controls   |                |             |       | 224,536   |
|           | HVAC                      |                |             |       | 1,796,288 |
|           | 1,796,288.00 Labor hours  |                |             |       |           |
|           | 18H                       |                | 32.00 /sqft |       | 1,796,288 |
|           | 56,134.00 sqft            |                |             |       |           |
|           | 1,796,288.00 Labor hours  |                |             |       |           |

15P

|           |                          |                |                     |  |                   |
|-----------|--------------------------|----------------|---------------------|--|-------------------|
| 15200.000 | PLUMBING                 |                |                     |  |                   |
| 15300.000 | PLUMBING PIPING          |                |                     |  |                   |
| 1000      | Plumbing                 | 56,134.00 sqft | 10.00 /sqft         |  | 561,340           |
|           | PLUMBING PIPING          |                |                     |  | 561,340           |
|           | 56,134.00 Labor hours    |                |                     |  |                   |
|           | PLUMBING                 |                |                     |  | 561,340           |
|           | 56,134.00 Labor hours    |                |                     |  |                   |
|           | 15P                      |                | 10.00 /sqft         |  | 561,340           |
|           | 56,134.00 sqft           |                |                     |  |                   |
|           | 56,134.00 Labor hours    |                |                     |  |                   |
|           | <b>Addition</b>          |                | <b>201.95 /sqft</b> |  | <b>11,336,012</b> |
|           | 56,134.00 sqft           |                |                     |  |                   |
|           | 5,851,026.93 Labor hours |                |                     |  |                   |

Renovation

|          |                           |           |                  |  |         |
|----------|---------------------------|-----------|------------------|--|---------|
|          | 01                        |           |                  |  |         |
| 1000.000 | GENERAL REQUIREMENTS      |           |                  |  |         |
| 1000.100 | Division 1 Subcontractors |           |                  |  |         |
| 10       | GC Gen Conditions 6%      | 1.00 lsum | 158,024.00 /lsum |  | 158,024 |
| 10       | GC Fee 4%                 | 1.00 lsum | 105,349.00 /lsum |  | 105,349 |
|          | Division 1 Subcontractors |           |                  |  | 263,373 |
|          | GENERAL REQUIREMENTS      |           |                  |  | 263,373 |

| Item     | Description   | Takeoff Qty    | Unit Cost       | Total | Amount  |
|----------|---|----------------|-----------------|-------|---------|
|          | 01  |                | 4.72 /sqft      |       | 263,373 |
|          | 55,832.00 sqft  |                |                 |       |         |
|          | 04  |                |                 |       |         |
| 4000.000 | MASONRY   |                |                 |       |         |
| 4220.110 | Conc. Block: 8"                                       |                |                 |       |         |
| rw 1     | 8" CMU  | 21,112.00 sqft | 16.00 /sqft     |       | 337,792 |
|          | Conc. Block: 8"                                       |                |                 |       | 337,792 |
|          | MASONRY   |                |                 |       | 337,792 |
|          | 04  |                | 6.06 /sqft      |       | 337,792 |
|          | 55,832.00 sqft  |                |                 |       |         |
|          | 06  |                |                 |       |         |
| 5000.000 | METALS  |                |                 |       |         |
| 5121.010 | Structural: W Shapes                                  |                |                 |       |         |
| w04a     | Strengthen Ex Structure to Accomodate Snow Drift Load | 1.00 Allo      | 50,000.00 /Allo |       | 50,000  |
| w04a     | Reinforce New Openings @ Addition Tie In              | 2.00 ea        | 15,000.00 /ea   |       | 30,000  |
|          | Structural: W Shapes                                  |                |                 |       | 80,000  |
|          | METALS  |                |                 |       | 80,000  |
|          | 05  |                | 1.433/sqft      |       | 80,000  |
|          | 55,832.00 sqft  |                |                 |       |         |
|          | 06  |                |                 |       |         |
| 6000.000 | WOOD & PLASTICS                                       |                |                 |       |         |
| 6410.010 | Arch Wd Wrk: Cabinets                                 |                |                 |       |         |
|          | 10 Plam Base Cabinet @ Nurse's Office                 | 10.00 lf       | 345.00 /lf      |       | 3,450   |
|          | 101 P-Lam Countertops @ Nurse's Office                | 10.00 lf       | 45.00 /lf       |       | 450     |
|          | 130 Custom Millwork @ Main Office                     | 12.00 lf       | 550.00 /lf      |       | 6,600   |
|          | 130 Wall Cabinet @ Nurse's Office                     | 12.00 ea       | 400.00 /ea      |       | 4,800   |
|          | 130 Custom Millwork @ Library                         | 1.00 Allo      | 10,000.00 /Allo |       | 10,000  |
|          | 130 Relocate Millwork from Exist Art Room to New      | 1.00 Allo      | 5,000.00 /Allo  |       | 5,000   |
|          | Arch Wd Wrk: Cabinets                                 |                |                 |       | 30,300  |
|          | 28.00 Labor hours                                     |                |                 |       |         |
|          | WOOD & PLASTICS                                       |                |                 |       | 30,300  |
|          | 28.00 Labor hours                                     |                |                 |       |         |

| Item     | Description                                      | Takeoff Qty    | Unit Cost    | Total | Amount    |
|----------|--|----------------|--------------|-------|-----------|
|          | 08   |                | 0.843/sqft   |       | 30,300    |
|          | 55,832.00 sqft                                   |                |              |       |           |
|          | 26.00 Labor hours                                |                |              |       |           |
|          | 07   |                |              |       |           |
| 7000.000 | <b>THERMAL &amp; MOISTURE PROT</b>               |                |              |       |           |
| 7510.030 | Membrane: BUR Bitumen                            |                |              |       |           |
| 120      | Mod Bit 2pty Roofing Including Tear Off Existing | 57,998.00 sqft | 20.00 /sqft  |       | 1,159,960 |
|          | Membrane: BUR Bitumen                            |                |              |       | 1,159,960 |
|          | <b>THERMAL &amp; MOISTURE PROT</b>               |                |              |       |           |
|          | 07   |                | 20.76 /sqft  |       | 1,159,960 |
|          | 65,832.00 sqft                                   |                |              |       |           |
|          | 08   |                |              |       |           |
| 8000.000 | <b>DOORS &amp; WINDOWS</b>                       |                |              |       |           |
| 8100.000 | Doors: Metal With Frames                         |                |              |       |           |
|          | 20 New HM Frame (Single)                         | 81.00 ea       | 204.782 /ea  |       | 16,587    |
|          | 20 HM Door 3 X 7                                 | 10.00 ea       | 254.782 /ea  |       | 2,548     |
|          | 100 Aluminum Doors                               | 12.00 ea       | 3,500.00 /ea |       | 42,000    |
|          | Doors: Metal With Frames                         |                |              |       | 81,135    |
|          | 206.00 Labor hours                               |                |              |       |           |
| 8210.010 | Doors: Wood                                      |                |              |       |           |
| b228     | 3 X 7  | 71.00 ea       | 429.782 /ea  |       | 30,515    |
|          | Doors: Wood                                      |                |              |       | 30,515    |
|          | 142.00 Labor hours                               |                |              |       |           |
| 8700.000 | Hardware: Finishing                              |                |              |       |           |
|          | 10 Finishing Hardware                            | 81.00 ea       | 504.782 /ea  |       | 40,887    |
|          | Hardware: Finishing                              |                |              |       | 40,887    |
|          | 81.00 Labor hours                                |                |              |       |           |
|          | <b>DOORS &amp; WINDOWS</b>                       |                |              |       |           |
|          | 429.00 Labor hours                               |                |              |       | 132,537   |
|          | 08   |                | 2.374/sqft   |       | 132,537   |
|          | 65,832.00 sqft                                   |                |              |       |           |
|          | 429.00 Labor hours                               |                |              |       |           |
|          | 09   |                |              |       |           |
| 9000.000 | <b>FINISHES</b>                                  |                |              |       |           |

| Item     | Description  | Takeoff Qty  | Unit Cost   | Total Amount   |
|----------|--|--------------|-------------|----------------|
| 9134.010 | <b>GWB: WALL BOARD SYSTEMS</b>                                 |              |             |                |
| 30       | GWB Soffit & Ceiling Clouds @ Main Office, Library & Cafeteria | 8,117.00 sf  | 14.00 /sf   | 113,638        |
|          | <b>GWB: WALL BOARD SYSTEMS</b>                                 |              |             | <u>113,638</u> |
| 9310.020 | <b>Tile: Mosaics</b>   |              |             |                |
| 20       | Ceramic Floor Tile   | 4,503.00 sf  | 12.00 /sf   | 54,036         |
| 20       | Ceramic Tile Walls   | 11,949.00 sf | 14.00 /sf   | 167,286        |
| 20       | Ceramic Tile Base  | 230.00 lf    | 14.00 /lf   | 3,220          |
| 20       | Ceramic Tile Backsplash @ Kindergarten & 1st Grade Rooms       | 144.00 sf    | 14.00 /sf   | 2,016          |
| 20       | Tile @ Kindergarten & 1st Grade Toilet Rooms                   | 1,660.00 sf  | 12.00 /sf   | 19,920         |
| 20       | Clean Tile & Grout @ Corridors                                 | 8,968.00 sf  | 2.00 /sf    | 17,936         |
|          | <b>Tile: Mosaics</b>   |              |             | <u>264,414</u> |
| 9400.000 | <b>Terrazzo</b>  |              |             |                |
| 10       | Precast Terrazzo @ Corridor                                    | 0.00 sf      |             |                |
| 11       | Terrazzo Cove Base @ Corridor                                  | 0.00 lf      |             |                |
| 9511.050 | <b>Ceiling: 2x4 Tile</b>                                       |              |             |                |
| 10       | SAT 2x4 Ceiling  | 2,524.00 sf  | 3.50 /sf    | 8,834          |
| 10       | SAT 2x2 Ceiling  | 35,829.00 sf | 3.75 /sf    | 134,359        |
|          | <b>Ceiling: 2x4 Tile</b>                                       |              |             | <u>143,193</u> |
| 9640.010 | <b>Flooring Wood</b>   |              |             |                |
| 10       | Wood Flooring  | 273.00 sf    | 14.00 /sf   | 3,822          |
|          | <b>Flooring Wood</b>   |              |             | <u>3,822</u>   |
| 9650.010 | <b>Flooring Resilient</b>                                      |              |             |                |
| 10       | Rubber Sheet Floor   | 783.00 sf    | 3.50 /sf    | 2,741          |
| 10       | Sheet Linoleum Floor/VCT                                       | 8,817.00 sf  | 3.50 /sf    | 30,860         |
| 10       | Sheet Linoleum Floor/VCT                                       | 1,140.00 sf  | 3.50 /sf    | 3,980          |
| 40       | Rubber Base  | 8,242.00 lf  | 5.30 /lf    | 33,083         |
|          | <b>Flooring Resilient</b>                                      |              |             | <u>70,673</u>  |
| 9670.010 | <b>Flooring Epoxy</b>  |              |             |                |
| 10       | Paint Epoxy Flooring   | 1,810.00 sf  | 2.00 /sf    | 3,620          |
|          | <b>Flooring Epoxy</b>  |              |             | <u>3,620</u>   |
| 9680.010 | <b>Flooring Carpet</b>   |              |             |                |
| 6        | Carpet Tile  | 1,488.00 sy  | 35.00 /sy   | 51,380         |
|          | <b>Flooring Carpet</b>   |              |             | <u>51,380</u>  |
| 9690.000 | <b>Flooring Restoration</b>                                    |              |             |                |
| 10       | Flooring Leveling @ Library                                    | 2,918.00 sf  | 1.00 /sf    | 2,918          |
|          | <b>Flooring Restoration</b>                                    |              |             | <u>2,918</u>   |
| 9910.020 | <b>Painting: Int Detailed</b>                                  |              |             |                |
| 5        | Paint Interior Partition                                       | 96,283.00 sf | 1.00 /sf    | 96,283         |
| 5        | Paint Millwork @ Pre-K Classroom                               | 2.00 ea      | 150.00 /ea  | 300            |
| 5        | Paint Millwork @ 4th & 5th Grade Classroom                     | 12.00 ea     | 150.00 /ea  | 1,800          |
|          | <b>Painting: Int Detailed</b>                                  |              |             | <u>98,383</u>  |
|          | <b>FINISHES</b>  |              |             | <u>752,040</u> |
| 09       |  |              | 13.47 /sqft | 752,040        |

55,832.00 sqft

| Item      | Description                               | Takeoff Qty | Unit Cost    | Total | Amount |
|-----------|---|-------------|--------------|-------|--------|
|           | 10  |             |              |       |        |
| 10000.000 | SPECIALTIES                               |             |              |       |        |
| 10180.010 | Toilet Compartments                       |             |              |       |        |
|           | 30 Phenolic Toilet Compartments           | 18.00 ea    | 1,000.00 /ea |       | 18,000 |
|           | 31 Phenolic ADA Toilet Compartments       | 7.00 ea     | 1,275.00 /ea |       | 8,925  |
|           | 41 Urinal Screen                          | 8.00 ea     | 725.00 /ea   |       | 5,800  |
|           | Toilet Compartments                       |             |              |       | 32,725 |
| 10800.010 | Misc Toilet/Bath Equip                    |             |              |       |        |
|           | 80 Soap Dispenser                         | 41.00 ea    | 75.50 /ea    |       | 3,096  |
|           | 82 SS Toilet Paper Dispenser- Surface Mt. | 38.00 ea    | 34.50 /ea    |       | 1,311  |
|           | 84 SS Waste Rec./Paper Towel Disp.        | 18.00 ea    | 545.00 /ea   |       | 9,810  |
|           | 90 Mirror                                 | 41.00 ea    | 238.00 /ea   |       | 9,758  |
|           | 100 Grab Bar                              | 48.00 ea    | 56.00 /ea    |       | 2,688  |
|           | Misc Toilet/Bath Equip                    |             |              |       | 26,663 |
|           | SPECIALTIES                               |             |              |       | 59,388 |
|           | 10  |             | 1.064/sqft   |       | 59,388 |
|           | 55,832.00 sqft                            |             |              |       |        |
|           | 12  |             |              |       |        |
| 12000.000 | FURNISHINGS                               |             |              |       |        |
| 12300.010 | Manufactured Casework                     |             |              |       |        |
|           | 40 Library Perimeter Book Shelves         | 66.00 lft   | 350.00 /lft  |       | 23,100 |
|           | Manufactured Casework                     |             |              |       | 23,100 |
|           | FURNISHINGS                               |             |              |       | 23,100 |
|           | 12  |             | 0.414/sqft   |       | 23,100 |
|           | 55,832.00 sqft                            |             |              |       |        |
|           | 13  |             |              |       |        |
| 13000.000 | SPECIAL CONSTRUCTION                      |             |              |       |        |
| 13280.010 | Demo: Asbestos Removal                    |             |              |       |        |
|           | 10 Remove Asbestos Floor Tile             | 1,512.00 sf | 8.00 /sf     |       | 9,072  |
|           | Demo: Asbestos Removal                    |             |              |       | 9,072  |
|           | SPECIAL CONSTRUCTION                      |             |              |       | 9,072  |
|           | 13  |             | 0.162/sqft   |       | 9,072  |
|           | 55,832.00 sqft                            |             |              |       |        |



| Item      | Description  | Takeoff Qty | Unit Cost | Total         | Amount  |
|-----------|--|-------------|-----------|---------------|---------|
| 16        |  |             |           |               |         |
| 16010.000 | <b>GENERAL CONDITIONS</b>                          |             |           |               |         |
| 16010.060 | <b>MOBILIZE/DEMOLIBIZE</b>                         |             |           |               |         |
| n         | 15 Average cost, mob-demob, large project > \$500k | 1.00        | ls        | 5,000.00 /ls  | 5,000   |
|           | <b>MOBILIZE/DEMOLIBIZE</b>                         |             |           |               | 5,000   |
| 16010.190 | <b>TEMPORARY UTILITIES</b>                         |             |           |               |         |
| n         | 37 Allow, panelboards for temp power to 225A       | 2.00        | ea        | 1,250.00 /ea  | 2,500   |
| n         | 50 Allow, Temp.Power & Lights                      | 55,832.00   | sqft      | 0.25 /sqft    | 13,958  |
|           | <b>TEMPORARY UTILITIES</b>                         |             |           |               | 16,458  |
| 16020.110 | <b>Demo Existing Electrical</b>                    |             |           |               |         |
|           | 5 Electrical                                       | 55,832.00   | sqft      | 0.50 /sqft    | 27,916  |
|           | <b>Demo Existing Electrical</b>                    |             |           |               | 27,916  |
|           | 558.32 Labor hours                                 |             |           |               |         |
|           | <b>GENERAL CONDITIONS</b>                          |             |           |               |         |
|           | 558.32 Labor hours                                 |             |           |               | 49,374  |
| 16050.000 | <b>BASIC MATERIALS &amp; METHODS</b>               |             |           |               |         |
| 16060.810 | <b>Lightning Protection</b>                        |             |           |               |         |
|           | 5 Lightning Protection                             | 0.00        | sqft      |               | 0       |
|           | <b>BASIC MATERIALS &amp; METHODS</b>               |             |           |               |         |
| 16130.000 | <b>RACEWAY, FITTINGS &amp; BOXES</b>               |             |           |               |         |
| 16132.156 | <b>FEEDER CONDUIT/WIRE</b>                         |             |           |               |         |
|           | 8 800A Underlab Feeder                             | 50.00       | lf        | 173.093 /lf   | 8,655   |
|           | 10 3000A Underground Secondary Feeder              | 50.00       | lf        | 500.70 /lf    | 25,035  |
|           | 17 HVAC Equipment Power                            | 55,832.00   | sqft      | 1.50 /sqft    | 83,748  |
|           | <b>FEEDER CONDUIT/WIRE</b>                         |             |           |               | 117,438 |
|           | 355.24 Labor hours                                 |             |           |               |         |
|           | <b>RACEWAY, FITTINGS &amp; BOXES</b>               |             |           |               |         |
|           | 355.24 Labor hours                                 |             |           |               | 117,438 |
| 16140.000 | <b>WIRING DEVICES</b>                              |             |           |               |         |
| 16140.150 | <b>RECEPTACLES, BLADE TYPE</b>                     |             |           |               |         |
| n         | 5 Conduit and Wire for Electrical Power            | 55,832.00   | sqft      | 1.00 /sqft    | 55,832  |
|           | <b>RECEPTACLES, BLADE TYPE</b>                     |             |           |               | 55,832  |
|           | <b>WIRING DEVICES</b>                              |             |           |               |         |
|           |  |             |           |               | 55,832  |
| 16400.000 | <b>GEAR SCHEDULES</b>                              |             |           |               |         |
| 16400.100 | <b>PANELS BY TYPE OR DESCRIPTION</b>               |             |           |               |         |
|           | 5 100A Panelboard                                  | 4.00        | ea        | 1,754.34 /ea  | 7,017   |
|           | 25 200/225A Panelboard                             | 3.00        | ea        | 2,658.173 /ea | 7,978   |

| Item      | Description                                 | Takeoff Qty    | Unit Cost          | Total Amount     |
|-----------|---|----------------|--------------------|------------------|
| 16400.100 | <b>PANELS BY TYPE OR DESCRIPTION</b>        |                |                    |                  |
| 40        | 400A Panelboard                             | 1.00 ea        | 4,372.88 /ea       | 4,373            |
| 60        | 800A Panelboard                             | 1.00 ea        | 5,730.17 /ea       | 5,730            |
| 75        | 175 KW Generator                            | 1.00 lsum      | 80,000.00 /lsum    | 80,000           |
| 75        | Transfer Switches                           | 3.00 each      | 5,000.00 /each     | 15,000           |
| 80        | 3000A Switchboard                           | 1.00 ea        | 49,145.54 /ea      | 49,146           |
|           | <b>PANELS BY TYPE OR DESCRIPTION</b>        |                |                    | <b>169,243</b>   |
|           | 284.862 Labor hours                         |                |                    |                  |
|           | <b>GEAR SCHEDULES</b>                       |                |                    | <b>169,243</b>   |
|           | 284.862 Labor hours                         |                |                    |                  |
| 16510.000 | <b>LIGHTING</b>                             |                |                    |                  |
| 16510.440 | <b>Flourescent Fixtures</b>                 |                |                    |                  |
| ---       | Lighting                                    | 55,832.00 sqft | 4.50 /sqft         | 251,244          |
| ---       | Emergency Lighting                          | 55,832.00 sqft | 1.00 /sqft         | 55,832           |
| ---       | Lighting Control System                     | 55,832.00 sqft | 0.50 /sqft         | 27,916           |
|           | <b>Flourescent Fixtures</b>                 |                |                    | <b>334,992</b>   |
|           | <b>LIGHTING</b>                             |                |                    | <b>334,992</b>   |
| 16700.000 | <b>SPECIAL SYSTEMS</b>                      |                |                    |                  |
| 16720.310 | <b>FIRE ALARM SYSTEM</b>                    |                |                    |                  |
| 495       | Fire Alarm System                           | 55,832.00 sqft | 2.50 /sqft         | 139,580          |
|           | <b>FIRE ALARM SYSTEM</b>                    |                |                    | <b>139,580</b>   |
| 16720.320 | <b>Security System</b>                      |                |                    |                  |
| n         | 5 Security System Access Control            | 55,832.00 sqft | 0.50 /sqft         | 27,916           |
| n         | 45 CCTV System                              | 55,832.00 sqft | 0.25 /sqft         | 13,958           |
|           | <b>Security System</b>                      |                |                    | <b>41,874</b>    |
|           | 378,868.000 Labor hours                     |                |                    |                  |
| 16720.340 | <b>SOUND/PAGING SYSTEM</b>                  |                |                    |                  |
| n         | 5 PA System                                 | 55,832.00 sqft | 0.25 /sqft         | 13,958           |
|           | <b>SOUND/PAGING SYSTEM</b>                  |                |                    | <b>13,958</b>    |
| 16720.420 | <b>TELE/DATA SYSTEM</b>                     |                |                    |                  |
| n         | 5 Tele/Data/CATV Raceways                   | 55,832.00 sqft | 2.00 /sqft         | 111,664          |
|           | <b>TELE/DATA SYSTEM</b>                     |                |                    | <b>111,664</b>   |
|           | <b>SPECIAL SYSTEMS</b>                      |                |                    | <b>307,078</b>   |
|           | 378,868.000 Labor hours                     |                |                    |                  |
|           | <b>16</b>                                   |                | <b>18.52 /sqft</b> | <b>1,033,955</b> |
|           | 55,832.00 sqft                              |                |                    |                  |
|           | 378,044.222 Labor hours                     |                |                    |                  |
| 02D       |   |                |                    |                  |
| 1730.000  | <b>DEMOLITION</b>                           |                |                    |                  |
| 1738.010  | <b>Demo: Doors &amp; Windows</b>            |                |                    |                  |
| n         | 40 Remove Interior Door, Frame and Hardware | 71.00 ea       | 113.53 /ea         | 8,060            |

| Item                  | Description  | Takeoff Qty    | Unit Cost   | Amount         |
|-----------------------|--|----------------|-------------|----------------|
| <b>1738.010</b>       |  |                |             |                |
|                       | <i>Demo: Doors &amp; Windows</i>                                     |                |             |                |
| n                     | 40 Remove Exterior Door, Frame and Hardware                          | 22.00 ea       | 113.53 /ea  | 2,498          |
| n                     | 130 Note 3 Remove Aluminum Window System                             | 812.00 sf      | 4.12 /sf    | 3,344          |
|                       | <i>Demo: Doors &amp; Windows</i>                                     |                |             | <u>13,902</u>  |
|                       | 329.20 Labor hours   |                |             |                |
| <b>1738.050</b>       |  |                |             |                |
|                       | <i>Demo: Misc Items</i>  |                |             |                |
|                       | 10 Note 4- Remove Ex Trailers (By Owner)                             | 0.00 ea        |             |                |
| <b>1739.010</b>       |  |                |             |                |
|                       | <i>Demo: Finishes, Floors</i>  |                |             |                |
|                       | 10 Remove Flooring   | 37,389.00 sf   | 0.85 /sf    | 31,781         |
|                       | <i>Demo: Finishes, Floors</i>  |                |             | <u>31,781</u>  |
|                       | 1,248.30 Labor hours   |                |             |                |
| <b>1739.040</b>       |  |                |             |                |
|                       | <i>Demo: Finishes, Walls</i>   |                |             |                |
| n                     | 30 Note 2- Remove Interior Partition                                 | 12,058.00 sf   | 1.50 /sf    | 18,087         |
| n                     | 30 Note 1- Remove Interior Side of Exterior Wall                     | 1,423.00 sf    | 2.25 /sf    | 3,202          |
| n                     | 30 Cut Opening & Remove Portion of Exterior Wall for Addition Tie-In | 1,000.00 sf    | 10.00 /sf   | 10,000         |
|                       | <i>Demo: Finishes, Walls</i>   |                |             | <u>31,289</u>  |
|                       | 472.80 Labor hours   |                |             |                |
| <b>1739.080</b>       |  |                |             |                |
|                       | <i>Demo: Finishes, Ceilings</i>                                      |                |             |                |
|                       | 20 Remove Ceiling  | 38,353.00 sf   | 0.50 /sf    | 19,177         |
|                       | <i>Demo: Finishes, Ceilings</i>                                      |                |             | <u>19,177</u>  |
|                       | 383.53 Labor hours   |                |             |                |
| <b>DEMOLITION</b>     |  |                |             |                |
|                       | 2,431.63 Labor hours   |                |             | <u>96,148</u>  |
| <b>02D</b>            |  |                |             |                |
|                       |  |                | 1.722/sqft  | <u>96,148</u>  |
|                       | 55,832.00 sqft   |                |             |                |
|                       | 2,431.63 Labor hours   |                |             |                |
| <b>18H</b>            |  |                |             |                |
| <hr/>                 |  |                |             |                |
| <b>15500.000 HVAC</b> |  |                |             |                |
| <hr/>                 |  |                |             |                |
| <b>15810.000</b>      |  |                |             |                |
|                       | <i>Heating Boilers and Acces</i>                                     |                |             |                |
| 0201                  | HVAC   | 55,832.00 sqft | 13.35 /sqft | 745,357        |
|                       | <i>Heating Boilers and Acces</i>                                     |                |             | <u>745,357</u> |
|                       | 1,786,824.00 Labor hours   |                |             |                |
| <b>15940.000</b>      |  |                |             |                |
|                       | <i>HVAC Inst. and Controls</i>                                       |                |             |                |
| 1810                  | HVAC Controls  | 55,832.00 sqft | 4.00 /sqft  | 223,328        |
|                       | <i>HVAC Inst. and Controls</i>                                       |                |             | <u>223,328</u> |
|                       | <b>HVAC</b>  |                |             | <u>968,685</u> |
|                       | 1,786,824.00 Labor hours   |                |             |                |
| <b>18H</b>            |  |                |             |                |
|                       |  |                | 17.35 /sqft | <u>968,685</u> |
|                       | 55,832.00 sqft   |                |             |                |
|                       | 1,786,824.00 Labor hours   |                |             |                |

| Item            | Description               | Takeoff Qty    | Unit Cost          | Total | Amount           |
|-----------------|---------------------------|----------------|--------------------|-------|------------------|
| 16P             |                           |                |                    |       |                  |
| 15200.000       | PLUMBING                  |                |                    |       |                  |
| 15300.000       | PLUMBING PIPING           |                |                    |       |                  |
| 1000            | Plumbing                  | 55,832.00 sqft | 2.00 /sqft         |       | 111,664          |
|                 | PLUMBING PIPING           |                |                    |       | 111,664          |
|                 | 55,832.00 Labor hours     |                |                    |       |                  |
|                 | PLUMBING                  |                |                    |       | 111,664          |
|                 | 55,832.00 Labor hours     |                |                    |       |                  |
| 16P             |                           |                | 2.00 /sqft         |       | 111,664          |
|                 | 55,832.00 sqft            |                |                    |       |                  |
|                 | 55,832.00 Labor hours     |                |                    |       |                  |
|                 | <b>Renovation</b>         |                | <b>90.593/sqft</b> |       | <b>5,058,014</b> |
|                 | 55,832.00 sqft            |                |                    |       |                  |
|                 | 2,223,386.852 Labor hours |                |                    |       |                  |
| <b>Sitework</b> |                           |                |                    |       |                  |
|                 | 01                        |                |                    |       |                  |
| 2100.000        | SITWORK                   |                |                    |       |                  |
| 2115.000        | Site General Conditions   |                |                    |       |                  |
| ---             | Site GC's 6%              | 1.00 lsum      | 68,000.00 /lsum    |       | 68,000           |
| ---             | Site Bonding & Fee 8%     | 1.00 lsum      | 93,000.00 /lsum    |       | 93,000           |
|                 | Site General Conditions   |                |                    |       | 181,000          |
|                 | SITWORK                   |                |                    |       | 181,000          |
|                 | 01                        |                |                    |       | 181,000          |
| 028             |                           |                |                    |       |                  |
| 2100.000        | SITWORK                   |                |                    |       |                  |
| 2120.000        | Site Allowances           |                |                    |       |                  |
| ---             | Courtyard Modifications   | 17,660.00 sqft | 2.25 /sqft         |       | 39,713           |
|                 | Site Allowances           |                |                    |       | 39,713           |
| 2130.000        | Maintenance & Protection  |                |                    |       |                  |
| ---             | Rd Cleaning               | 40.00 days     | 361.62 /days       |       | 15,265           |
| ---             | 8' temp fence             | 3,000.00 lft   | 16.00 /lft         |       | 48,000           |

| Item     | Description                         | Takeoff Qty   | Unit Cost       | Total | Amount         |
|----------|-------------------------------------|---------------|-----------------|-------|----------------|
|          | <i>Maintenance &amp; Protection</i> |               |                 |       | <u>63,265</u>  |
|          | 180.00 Labor hours                  |               |                 |       |                |
|          | 180.00 Equipment hours              |               |                 |       |                |
| 2200.000 | <b>SITE DEMO</b>                    |               |                 |       |                |
|          | 19 Sawcut Pavement                  | 500.00 lf     | 5.50 /lf        |       | 2,750          |
|          | 19 Rem Baseball Backstop            | 77.00 lf      | 12.00 /lf       |       | 924            |
|          | 19 Rem CL Fence                     | 878.00 lf     | 3.50 /lf        |       | 3,073          |
|          | 19 Rem Guiderail                    | 30.00 lf      | 10.00 /lf       |       | 300            |
|          | 19 Rem Granite Curb                 | 83.00 lf      | 7.50 /lf        |       | 623            |
|          | 19 Rem Playground Structure         | 3.00 ea       | 600.00 /ea      |       | 1,800          |
|          | Rem Trees lg                        | 2.00 ea       | 750.00 /ea      |       | 1,500          |
|          | Rem Trees sm                        | 3.00 ea       | 250.00 /ea      |       | 750            |
|          | Rem Conc Pavement                   | 9,332.00 sqft | 0.85 /sqft      |       | 7,932          |
|          | Rem Temp Classrooms & Ramp          | 4,300.00 sqft | 0.75 /sqft      |       | 3,225          |
|          | Rem Playground Surface              | 4,239.00 sqft | 0.55 /sqft      |       | 2,331          |
|          | Rem Misc Sm                         | 6.00 ea       | 200.00 /ea      |       | 1,200          |
|          | <b>SITE DEMO</b>                    |               |                 |       | <u>26,408</u>  |
|          | 15.71 Labor hours                   |               |                 |       |                |
|          | 15.71 Equipment hours               |               |                 |       |                |
|          | <b>SITWORK</b>                      |               |                 |       | <u>129,385</u> |
|          | 175.710 Labor hours                 |               |                 |       |                |
|          | 175.710 Equipment hours             |               |                 |       |                |
| 2300.000 | <b>EARTHWORK</b>                    |               |                 |       |                |
| 2316.201 | <i>Site Exc- Earth</i>              |               |                 |       |                |
|          | 10 Site Earthwork                   | 2.57 acre     | 55,000.00 /acre |       | 141,350        |
|          | 10 Site Earthwork - Alternate       | 0.33 acre     | 55,000.00 /acre |       | 18,150         |
|          | <i>Site Exc- Earth</i>              |               |                 |       | <u>159,500</u> |
|          | 0.161 Labor hours                   |               |                 |       |                |
|          | 0.161 Equipment hours               |               |                 |       |                |
| 2370.150 | <i>Temp Erosion Control</i>         |               |                 |       |                |
|          | Temp Erosion Control                | 1.00 lsum     | 15,000.00 /lsum |       | 15,000         |
|          | <i>Temp Erosion Control</i>         |               |                 |       | <u>15,000</u>  |
|          | <b>EARTHWORK</b>                    |               |                 |       | <u>174,500</u> |
|          | 0.161 Labor hours                   |               |                 |       |                |
|          | 0.161 Equipment hours               |               |                 |       |                |
| 2530.000 | <b>SANITARY</b>                     |               |                 |       |                |
| 2531.004 | <i>Manholes</i>                     |               |                 |       |                |
|          | 10 Sanitary Manhole 4'              | 2.00 ea       | 3,250.00 /ea    |       | 6,500          |
|          | 10 Connect To Exist                 | 1.00 ea       | 5,000.00 /ea    |       | 5,000          |
|          | <i>Manholes</i>                     |               |                 |       | <u>11,500</u>  |
|          | 3.00 Labor hours                    |               |                 |       |                |
|          | 3.00 Equipment hours                |               |                 |       |                |
| 2531.101 | <i>Sewer- DI Pipe Push On</i>       |               |                 |       |                |
|          | Sanitary - 8" PVC Pipe              | 180.00 lf     | 38.00 /lf       |       | 6,840          |
|          | <i>Sewer- DI Pipe Push On</i>       |               |                 |       | <u>6,840</u>   |

| Item            | Description                     | Takeoff Qty    | Unit Cost       | Amount         |
|-----------------|---------------------------------|----------------|-----------------|----------------|
|                 |                                 |                |                 | <b>Total</b>   |
| <b>SANITARY</b> |                                 |                |                 | <b>18,340</b>  |
|                 | 3.00 Labor hours                |                |                 |                |
|                 | 3.00 Equipment hours            |                |                 |                |
| <b>2830.000</b> | <b>STORM DRAINAGE</b>           |                |                 |                |
| <b>2630.004</b> | <b>Storm Structures</b>         |                |                 |                |
| ---             | Strm Cartridge Filter MH        | 1.00 ls        | 26,000.00 /ls   | 26,000         |
| ---             | Inlet                           | 5.00 ea        | 1,200.00 /ea    | 6,000          |
| ---             | Strm Doghouse Connection        | 1.00 ea        | 9,000.00 /ea    | 9,000          |
| ---             | Inlet                           | 2.00 ea        | 1,200.00 /ea    | 2,400          |
|                 | <b>Storm Structures</b>         |                |                 | <b>43,400</b>  |
| <b>2831.301</b> | <b>HDPE Storm Pipe</b>          |                |                 |                |
| ---             | 8" SICPP                        | 172.00 lf      | 26.00 /lf       | 4,472          |
| ---             | 12" SICPP                       | 496.00 lf      | 31.00 /lf       | 15,376         |
| ---             | 48" Det System                  | 302.00 lf      | 152.00 /lf      | 45,904         |
| ---             | 12" SICPP                       | 109.00 lf      | 31.00 /lf       | 3,379          |
|                 | <b>HDPE Storm Pipe</b>          |                |                 | <b>69,131</b>  |
|                 | <b>STORM DRAINAGE</b>           |                |                 | <b>112,531</b> |
| <b>2700.000</b> | <b>PAVEMENTS &amp; SURFACES</b> |                |                 |                |
| <b>2740.120</b> | <b>Asphalt Paving - SY</b>      |                |                 |                |
| ---             | Asphalt Pavement                | 16,319.00 sqft | 4.25 /sqft      | 77,856         |
| ---             | Asphalt Mill & Overlay          | 31,283.00 sqft | 1.80 /sqft      | 56,309         |
| ---             | Asphalt Pavement                | 10,854.00 sqft | 4.25 /sqft      | 46,130         |
| ---             | Asphalt Utility Repair          | 805.00 sqft    | 13.80 /sqft     | 8,349          |
|                 | <b>Asphalt Paving - SY</b>      |                |                 | <b>188,644</b> |
| <b>2750.100</b> | <b>Concrete Paving</b>          |                |                 |                |
| ---             | Conc Walk                       | 10,279.00 sqft | 6.55 /sqft      | 67,327         |
| ---             | Conc Walk                       | 552.00 sqft    | 6.55 /sqft      | 3,616          |
|                 | <b>Concrete Paving</b>          |                |                 | <b>70,943</b>  |
| <b>2760.100</b> | <b>Pavement Marking</b>         |                |                 |                |
| 4               | Pavement Markings               | 1.00 lsum      | 4,200.00 /lsum  | 4,200          |
|                 | <b>Pavement Marking</b>         |                |                 | <b>4,200</b>   |
| <b>2770.110</b> | <b>Curbs</b>                    |                |                 |                |
| ---             | Granite Curb                    | 663.00 lnft    | 35.00 /lnft     | 23,205         |
| ---             | Granite Curb                    | 453.00 lnft    | 35.00 /lnft     | 15,855         |
|                 | <b>Curbs</b>                    |                |                 | <b>39,060</b>  |
|                 | <b>PAVEMENTS &amp; SURFACES</b> |                |                 | <b>302,847</b> |
| <b>2800.000</b> | <b>SITE IMPROVEMENTS</b>        |                |                 |                |
| <b>2810.000</b> | <b>Site Amenities</b>           |                |                 |                |
| ---             | Site Amenities                  | 1.00 Allo      | 15,000.00 /Allo | 15,000         |
| ---             | Traffic Signs                   | 10.00 ea       | 350.00 /ea      | 3,500          |
|                 | <b>Site Amenities</b>           |                |                 | <b>18,500</b>  |
| <b>2820.980</b> | <b>Fencing</b>                  |                |                 |                |
| ---             | Dumpster Enclosure              | 1.00 ls        | 6,500.00 /ls    | 6,500          |

| Item     | Description                      | Takeoff Qty | Unit Cost | Total<br>Amount |
|----------|----------------------------------|-------------|-----------|-----------------|
| 2820.980 | <i>Fencing</i>                   |             |           |                 |
| ---      | 4' CL Fence                      | 470.00      | inf       | 24.00 /inf      |
|          | <i>Fencing</i>                   |             |           | 11,280          |
|          |                                  |             |           | 17,780          |
| 2880.200 | <i>Playground Equipment</i>      |             |           |                 |
| ---      | Playground Surface               | 4,274.00    | sqft      | 10.00 /sqft     |
| ---      | Playground Equipment             | 1.00        | ls        | 40,000.00 /ls   |
|          | <i>Playground Equipment</i>      |             |           | 42,740          |
|          |                                  |             |           | 40,000          |
|          |                                  |             |           | 82,740          |
|          | <b>SITE IMPROVEMENTS</b>         |             |           | 119,020         |
| 2900.000 | <b>LANDSCAPE</b>                 |             |           |                 |
| 2920.110 | <i>Lawns &amp; Grasses</i>       |             |           |                 |
| n        | 10 Restore Lawn - Topsoil & Seed | 70,000.00   | sf        | 0.37 /sf        |
|          | <i>Lawns &amp; Grasses</i>       |             |           | 25,900          |
|          |                                  |             |           | 25,900          |
| 2933.200 | <i>Trees</i>                     |             |           |                 |
| ---      | Plantings Allowance              | 1.00        | ls        | 5,000.00 /ls    |
|          | <i>Trees</i>                     |             |           | 5,000           |
|          |                                  |             |           | 5,000           |
|          | <b>LANDSCAPE</b>                 |             |           | 30,900          |
|          | <b>028</b>                       |             |           | 887,523         |
|          | 178.871 Labor hours              |             |           |                 |
|          | 178.871 Equipment hours          |             |           |                 |
|          | <b>Sitework</b>                  |             |           | 1,048,523       |
|          | 178.871 Labor hours              |             |           |                 |
|          | 178.871 Equipment hours          |             |           |                 |

**Estimate Totals**

| Description        | Amount     | Totals     |
|--------------------|------------|------------|
| Labor              | 115,132    |            |
| Material           | 501,713    |            |
| Subcontract        | 14,624,329 |            |
| Equipment          | 1,944,942  |            |
| Other              | 256,433    |            |
|                    | <hr/>      |            |
|                    | 17,442,549 | 17,442,549 |
| Design Contingency | 872,127    |            |
| Total              |            | 18,314,676 |





**The Pike Company**  
**Estimate Breakdown**

9/12/2011

Project Name: RCSD Modernization  
 Location: School #80  
 Architect: Clark Patterson Associates  
 Construction Date: 2012  
 Building Type : School  
 Square Footage: Addition 56134 sqft  
 Renovation 55832 sqft  
 111966 sqft

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**CSI BREAKDOWN**

|         | SYSTEM/ASSEMBLY                | Estimate Addition<br>9/12/2011 | PER UNIT<br>\$/sqft | Estimate Renovation<br>9/12/2011 | PER UNIT<br>\$/sqft | Estimate Sift<br>9/12/2011 | Estimate Total<br>9/12/2011 | PER UNIT<br>\$/sqft |
|---------|--------------------------------|--------------------------------|---------------------|----------------------------------|---------------------|----------------------------|-----------------------------|---------------------|
| Div 1   | GENERAL CONDITIONS             | \$719,970                      | \$12.83             | \$283,373                        | \$4.72              | \$181,000                  | \$1,144,343                 | \$10.22             |
| Div 2B  | SITework                       | \$144,818                      | \$2.56              | \$0                              | \$0.00              | \$987,823                  | \$1,032,338                 | \$9.22              |
| Div 2D  | DEMOLITION                     | \$0                            | \$0.00              | \$96,148                         | \$1.72              | \$0                        | \$96,148                    | \$0.86              |
| Div 3   | CONCRETE                       | \$1,007,087                    | \$17.84             | \$0                              | \$0.00              | \$0                        | \$1,007,087                 | \$9.89              |
| Div 4   | MASONRY                        | \$2,248,039                    | \$40.03             | \$337,792                        | \$8.09              | \$0                        | \$2,585,831                 | \$23.09             |
| Div 5   | METALS                         | \$441,880                      | \$7.87              | \$80,000                         | \$1.43              | \$0                        | \$521,880                   | \$4.65              |
| Div 6   | WOODS & PLASTICS               | \$121,472                      | \$2.16              | \$30,300                         | \$0.64              | \$0                        | \$151,772                   | \$1.38              |
| Div 7   | THERMAL & MOISTURE PROTECTION  | \$930,323                      | \$16.87             | \$1,159,960                      | \$20.78             | \$0                        | \$2,090,283                 | \$18.87             |
| Div 8   | DOORS & WINDOWS/GLASS          | \$589,180                      | \$10.87             | \$132,537                        | \$2.37              | \$0                        | \$721,727                   | \$6.54              |
| Div 9   | FINISHES                       | \$948,811                      | \$18.87             | \$782,040                        | \$13.47             | \$0                        | \$1,699,851                 | \$15.17             |
| Div 10  | SPECIALTIES                    | \$188,782                      | \$2.83              | \$89,388                         | \$1.08              | \$0                        | \$218,170                   | \$1.95              |
| Div 11  | EQUIPMENT                      | \$494,888                      | \$8.82              | \$0                              | \$0.00              | \$0                        | \$494,888                   | \$4.42              |
| Div 12  | FURNISHINGS                    | \$80,138                       | \$0.89              | \$25,100                         | \$0.41              | \$0                        | \$73,238                    | \$0.65              |
| Div 13  | SPECIAL CONSTRUCTION           | \$0                            | \$0.00              | \$9,072                          | \$0.16              | \$0                        | \$9,072                     | \$0.08              |
| Div 14  | CONVEYING SYSTEMS              | \$58,000                       | \$1.00              | \$0                              | \$0.00              | \$0                        | \$58,000                    | \$0.50              |
| Div 15P | PLUMBING                       | \$581,340                      | \$10.00             | \$111,664                        | \$2.00              | \$0                        | \$673,004                   | \$6.01              |
| Div 15H | HVAC                           | \$1,798,288                    | \$32.00             | \$988,885                        | \$17.35             | \$0                        | \$2,787,173                 | \$24.89             |
| Div 16  | ELECTRICAL                     | \$1,888,710                    | \$18.88             | \$1,033,885                      | \$18.82             | \$0                        | \$2,922,595                 | \$26.89             |
|         | <b>SUBTOTAL COST</b>           | <b>\$11,338,012</b>            | <b>\$201.95</b>     | <b>\$5,058,014</b>               | <b>\$90.69</b>      | <b>\$1,048,823</b>         | <b>\$17,444,849</b>         | <b>\$158.73</b>     |
|         | Design Contingency 5.00%       | \$566,801                      | \$10.10             | \$252,801                        | \$4.53              | \$82,426                   | \$672,127                   | \$7.79              |
|         | <b>TOTAL CONSTRUCTION COST</b> | <b>\$11,904,813</b>            | <b>\$212.04</b>     | <b>\$5,310,815</b>               | <b>\$95.22</b>      | <b>\$1,131,249</b>         | <b>\$18,116,976</b>         | <b>\$166.52</b>     |

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WORLD OF INQUIRY SCHOOL # 58

PROJECT QUALIFICATIONS

9/12/2011

PHASE: SCHEMATIC ESTIMATE REVISION 1

BUILDING TYPE:

RESIDENTIAL  RETAIL  EDUCATIONAL

PROJECT TYPE:

NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58  
 EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD  
 LOCATION: ROCHESTER, NEW YORK 14621  
 A/E: JCJ ARCHITECTURE  
 ESTIMATOR: IAN TAYLOR  
 CM: RJSCB / GILBANE  
 PROJECT #:

The estimate excludes the following :-

- A-E Fees
  - CM Fees
  - Testing Agency Fees, Permits, etc.
  - Phasing
  - Overtime
  - Escalation
  - Construction Contingency
  - Excavation in contaminated soils
  - Abatement of hazardous materials
  - "F.F. and E." (Unless Otherwise Noted)
  - Loose technology equipment (Unless Otherwise Noted)
  - Audio / video equipment (Unless Otherwise Noted)
- NEED Night Survey + Budget*

The estimate includes the following :-

- Allowance for General Conditions ( 10% )
  - Allowance for CM Fee (TBD) ( 0% )
  - Allowance for Escalation (TBD) ( 0% )
  - Allowance for Design Contingency ( 10% )
  - Allowance for Construction Contingency (TBD) ( 0% )
- PIA \$1,156,092 = 3.65%*  
*8% (type 4.0%)*

The estimate is based on the following :-

Drawings and information prepared by JCJ Architecture.  
 Site plan as indicated on Drawing C-102 & 916 Plans

The electrical estimate is based on the following :-

- ASSUME BRANCH WIRING IN MC CABLE, HOME RUNS IN EMT
- ASSUME FIRE ALARM WIRING IN BARE TEFLON.
- INCLUDE TELECOMM CABLING
- NO MECH WORK CONTROLS
- NO SITE WORK, NO TRENCHING, CONCRETE OR BACKFILL
- LV SYSTEMS' WIRING RUN BARE IN CABLE TRAYS

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TOSCANO CLEMENTS TAYLOR

WORLD OF INQUIRY SCHOOL # 58

PROJECT SUMMARY

| PROJECT ID | PROJECT NAME                | PROJECT TYPE | PROJECT STATUS | PROJECT START DATE | PROJECT END DATE | PROJECT BUDGET | PROJECT COST | PROJECT VARIANCE | PROJECT RISK | PROJECT COMMENTS  |
|------------|-----------------------------|--------------|----------------|--------------------|------------------|----------------|--------------|------------------|--------------|---|
| 001        | World of Inquiry School #58 | Construction | Completed      | 2010-01-01         | 2010-12-31       | \$1,000,000    | \$950,000    | \$50,000         | Low          | Project completed on time and within budget.                |
| 002        | World of Inquiry School #58 | Construction | In Progress    | 2011-01-01         | 2011-12-31       | \$1,000,000    | \$800,000    | \$200,000        | Medium       | Project is currently behind schedule due to weather delays. |
| 003        | World of Inquiry School #58 | Construction | On Hold        | 2012-01-01         | 2012-12-31       | \$1,000,000    | \$0          | \$1,000,000      | High         | Project is currently on hold due to funding issues.         |

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TOSCANO CLEMENTS TAYLOR

WORLD OF INQUIRY SCHOOL # 58  
PROJECT DIVISIONAL BREAKDOWN

9/12/2011

PHASE: SCHEMATIC ESTIMATE REVISION 1  
 BUILDING TYPE:  RESIDENTIAL  RETAIL  EDUCATIONAL  
 PROJECT TYPE:  NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58  
 EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD  
 LOCATION: ROCHESTER, NEW YORK 14621  
 A/E: J/CJ ARCHITECTURE  
 CM: R/JS/CB / GILBANE

| DIVISION | DESCRIPTION                                 | ADDITIONS    |          |            | RENOVATIONS  |         |            | SITework     |          |            | TOTAL AMOUNT |
|----------|---|--------------|----------|------------|--------------|---------|------------|--------------|----------|------------|--------------|
|          |   | AMOUNT       | COST/SF  | TOTAL AREA | AMOUNT       | COST/SF | TOTAL AREA | AMOUNT       | COST/SF  | TOTAL AREA |              |
| 02000    | SITework                                    |              |          |            |              |         |            |              |          |            |              |
| 02200    | SITE PREPARATION                            | \$ 248,648   | \$ 1.65  | 150,684    | \$ 745,885   | \$ 8.43 | 87,843     | \$ 307,064   | \$ 2.47  | 124,435    | \$ 1,330,597 |
| 02300    | EARTHWORK                                   | \$ 107,992   | \$ 3.32  |            |              |         |            | \$ 81,262    | \$ 0.65  |            | \$ 189,254   |
| 02500    | UTILITIES                                   |              |          |            |              |         |            | \$ 86,725    | \$ 0.70  |            | \$ 86,725    |
| 02600    | DRAINAGE AND CONTAINMENT                    | \$ 3,576     | \$ 0.11  |            |              |         |            | \$ 101,172   | \$ 0.81  |            | \$ 104,748   |
| 02700    | BASIS, BALLASTS, PAVEMENT AND APPURTENANCES |              |          |            |              |         |            | \$ 783,642   | \$ 6.30  |            | \$ 783,642   |
| 02800    | SITE IMPROVEMENTS AND AMENITIES             |              |          |            |              |         |            | \$ 255,185   | \$ 2.05  |            | \$ 255,185   |
| 02900    | PLANTING                                    |              |          |            |              |         |            | \$ 106,917   | \$ 0.86  |            | \$ 106,917   |
|          | <b>SUB-TOTAL</b>                            | \$ 360,216   | \$ 1.08  | 150,684    | \$ 745,885   | \$ 8.43 | 87,843     | \$ 1,721,967 | \$ 13.84 | 124,435    | \$ 2,857,067 |
| 03000    | CONCRETE                                    |              |          |            |              |         |            |              |          |            |              |
| 03300    | CAST-IN-PLACE CONCRETE                      | \$ 828,242   | \$ 25.48 |            |              |         |            |              |          |            | \$ 828,242   |
|          | <b>SUB-TOTAL</b>                            | \$ 828,242   | \$ 25.48 |            |              |         |            |              |          |            | \$ 828,242   |
| 04000    | MASONRY                                     |              |          |            |              |         |            |              |          |            |              |
| 04200    | MASONRY UNITS                               | \$ 489,842   | \$ 14.45 |            |              |         |            |              |          |            | \$ 489,842   |
| 04700    | SIMULATED MASONRY                           | \$ 20,000    | \$ 0.62  |            |              |         |            |              |          |            | \$ 20,000    |
|          | <b>SUB-TOTAL</b>                            | \$ 489,842   | \$ 15.07 |            |              |         |            |              |          |            | \$ 489,842   |
| 05000    | METALS                                      |              |          |            |              |         |            |              |          |            |              |
| 05100    | STRUCTURAL STEEL                            | \$ 683,925   | \$ 27.19 |            |              |         |            |              |          |            | \$ 683,925   |
| 05300    | METAL DECK                                  | \$ 102,735   | \$ 3.16  |            |              |         |            |              |          |            | \$ 102,735   |
| 05500    | METAL FABRICATIONS                          | \$ 77,700    | \$ 2.39  |            |              |         |            |              |          |            | \$ 77,700    |
| 05700    | ORNAMENTAL METAL                            |              |          |            |              |         |            |              |          |            |              |
|          | <b>SUB-TOTAL</b>                            | \$ 1,064,360 | \$ 32.74 |            |              |         |            |              |          |            | \$ 1,064,360 |
| 06000    | WOOD AND PLASTIC                            |              |          |            |              |         |            |              |          |            |              |
| 06100    | ROUGH CARPENTRY                             | \$ 56,016    | \$ 1.72  |            |              |         |            |              |          |            | \$ 56,016    |
| 06400    | ARCHITECTURAL WOODWORK                      | \$ 51,259    | \$ 1.58  |            |              |         |            |              |          |            | \$ 51,259    |
| 06900    | WOOD AND PLASTIC RESTORATION AND CLEANING   |              |          |            |              |         |            |              |          |            |              |
|          | <b>SUB-TOTAL</b>                            | \$ 107,275   | \$ 3.30  |            |              |         |            |              |          |            | \$ 107,275   |
|          | <b>TOTAL</b>                                | \$ 2,857,067 |          | 124,435    | \$ 1,289,195 |         | 124,435    | \$ 648,288   |          | 124,435    | \$ 5,211,155 |

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TOSCANO CLEMENTS TAYLOR

WORLD OF INQUIRY SCHOOL # 58

PROJECT DIVISIONAL BREAKDOWN

9/12/2011

PHASE: SCHEMATIC ESTIMATE REVISION 1

BUILDING TYPE:  RESIDENTIAL  RETAIL  EDUCATIONAL

PROJECT TYPE:  NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58  
 EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD  
 LOCATION: ROCHESTER, NEW YORK 14621  
 A/E: JGJ ARCHITECTURE  
 CM: RUSCB/GILBAE

| DIVISION | DESCRIPTION                     | PROJECT AREA ( SF ) |           |            | RENOVATIONS |           |            | SITework |           |            |
|----------|---------------------------------|---------------------|-----------|------------|-------------|-----------|------------|----------|-----------|------------|
|          |                                 | AMOUNT              | COST / SF | TOTAL AREA | AMOUNT      | COST / SF | TOTAL AREA | AMOUNT   | COST / SF | TOTAL AREA |
| 07000    | THERMAL AND MOISTURE PROTECTION |                     |           |            |             |           |            |          |           |            |
| 07200    | THERMAL PROTECTION              | \$ 41,204           | \$ 1.27   |            |             |           |            |          |           |            |
| 07500    | MEMBRANE ROOFING                | \$ 453,740          | \$ 13.06  |            |             |           |            |          |           |            |
| 07800    | FIRE AND SMOKE PROTECTION       | \$ 32,506           | \$ 1.00   |            |             |           |            |          |           |            |
| 07900    | JOINT SEALANTS                  | \$ 16,253           | \$ 0.50   |            |             |           |            |          |           |            |
|          | <b>SUB-TOTAL</b>                | \$ 543,703          | \$ 16.73  |            |             |           |            |          |           |            |
| 08000    | DOORS AND WINDOWS               |                     |           |            |             |           |            |          |           |            |
| 08100    | DOORS AND FRAMES                | \$ 74,800           | \$ 2.28   |            |             |           |            |          |           |            |
| 08300    | SPECIALTY DOORS                 | \$ 9,752            | \$ 0.30   |            |             |           |            |          |           |            |
| 08400    | ENTRANCES AND STOREFRONTS       | \$ 637,790          | \$ 19.62  |            |             |           |            |          |           |            |
| 08500    | WINDOWS                         | \$ 122,656          | \$ 3.77   |            |             |           |            |          |           |            |
| 08800    | GLAZING                         | \$ -                | \$ -      |            |             |           |            |          |           |            |
|          | <b>SUB-TOTAL</b>                | \$ 844,798          | \$ 25.96  |            |             |           |            |          |           |            |
| 09000    | FINISHES                        |                     |           |            |             |           |            |          |           |            |
| 09200    | PLASTER AND GYPSUM BOARD        | \$ 162,306          | \$ 4.99   |            |             |           |            |          |           |            |
| 09300    | TILE                            | \$ 57,459           | \$ 1.77   |            |             |           |            |          |           |            |
| 09500    | CEILINGS                        | \$ 126,964          | \$ 3.91   |            |             |           |            |          |           |            |
| 09600    | FLOORING                        | \$ 215,543          | \$ 6.63   |            |             |           |            |          |           |            |
| 09800    | ACOUSTICAL TREATMENT            | \$ 15,000           | \$ 0.46   |            |             |           |            |          |           |            |
| 09900    | PAINTS AND COATINGS             | \$ 119,983          | \$ 3.69   |            |             |           |            |          |           |            |
|          | <b>SUB-TOTAL</b>                | \$ 697,255          | \$ 21.45  |            |             |           |            |          |           |            |
| 10000    | SPECIALTIES                     |                     |           |            |             |           |            |          |           |            |
| 10100    | VISUAL DISPLAY BOARDS           | \$ 37,382           | \$ 1.15   |            |             |           |            |          |           |            |
| 10150    | COMPARTMENTS AND CUBICLES       | \$ 35,500           | \$ 1.09   |            |             |           |            |          |           |            |
| 10200    | LOUVERS AND VENTS               | \$ 5,000            | \$ 0.15   |            |             |           |            |          |           |            |
| 10260    | WALL AND CORNER GUARDS          | \$ 5,000            | \$ 0.15   |            |             |           |            |          |           |            |
| 10350    | FLAGPOLES                       | \$ -                | \$ -      |            |             |           |            |          |           |            |
| 10400    | IDENTIFICATION DEVICES          | \$ 12,000           | \$ 0.37   |            |             |           |            |          |           |            |
| 10500    | LOCKERS                         | \$ 34,475           | \$ 1.06   |            |             |           |            |          |           |            |
| 10620    | FIRE PROTECTION SPECIALTIES     | \$ 4,200            | \$ 0.13   |            |             |           |            |          |           |            |
| 10600    | PARTITIONS                      | \$ -                | \$ -      |            |             |           |            |          |           |            |
| 10670    | STORAGE SHELVING                | \$ 32,506           | \$ 1.01   |            |             |           |            |          |           |            |
| 10800    | TOILET / BATH ACCESSORIES       | \$ 9,335            | \$ 0.29   |            |             |           |            |          |           |            |
|          | <b>SUB-TOTAL</b>                | \$ 175,398          | \$ 5.40   |            |             |           |            |          |           |            |
|          | <b>TOTAL</b>                    | \$ 2,448,951        | \$ 19.68  |            |             |           |            |          |           |            |

TOSCANO CLEMENTS TAYLOR

WORLD OF INQUIRY SCHOOL # 58

PROJECT DIVISIONAL BREAKDOWN

9/12/2011

Draft

PHASE: SCHEMATIC ESTIMATE REVISION 1

BUILDING TYPE:  RESIDENTIAL  RETAIL  EDUCATIONAL

PROJECT TYPE:  NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58

EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD

LOCATION: ROCHESTER, NEW YORK 14621

A/E: JCI ARCHITECTURE

GM: RUSCB / GILBANE

PROJECT # :

| DIVISION | DESCRIPTION                                      | PROJECT AREA (SF) |           | RENOVATIONS |           | TOTAL AREA |           | TOTAL AMOUNT | TOTAL AREA | TOTAL AMOUNT | COST / SF | COMMENTS |
|----------|--|-------------------|-----------|-------------|-----------|------------|-----------|--------------|------------|--------------|-----------|----------|
|          |  | AMOUNT            | COST / SF | AMOUNT      | COST / SF | AMOUNT     | COST / SF |              |            |              |           |          |
| 11000    | EQUIPMENT  |                   |           |             |           |            |           |              |            |              |           |          |
| 11010    | MAINTENANCE EQUIPMENT                            | \$                |           | \$          | 0.05      | \$         |           | \$           |            | \$           |           |          |
| 11050    | LIBRARY EQUIPMENT                                | \$                |           | \$          | 5,000     | \$         |           | \$           | 5,000      | \$           | 0.04      |          |
| 11130    | AUDIO-VISUAL EQUIPMENT                           | \$                | 54,500    | \$          | 374       | \$         |           | \$           | 408,500    | \$           | 3.28      |          |
| 11170    | SOLID WASTE HANDLING EQUIPMENT                   | \$                |           | \$          | 21,500    | \$         | 0.23      | \$           | 21,500     | \$           | 0.17      |          |
| 11140    | FOOD SERVICE EQUIPMENT                           | \$                |           | \$          | 400,800   | \$         | 2.36      | \$           | 400,800    | \$           | 3.22      |          |
| 11450    | RESIDENTIAL EQUIPMENT                            | \$                | 1,500     | \$          |           | \$         |           | \$           | 1,500      | \$           | 0.01      |          |
| 11480    | ATHLETIC, RECREATIONAL AND THERAPEUTIC EQUIPMENT | \$                | 219,480   | \$          | 7,500     | \$         | 0.98      | \$           | 226,980    | \$           | 1.82      |          |
| 11600    | LABORATORY EQUIPMENT                             | \$                | 68,050    | \$          | 204,150   | \$         | 2.72      | \$           | 272,200    | \$           | 2.19      |          |
|          | <b>SUB-TOTAL</b>                                 | \$                | 353,530   | \$          | 392,950   | \$         | 0.88      | \$           | 1,336,480  | \$           | 10.74     |          |
| 12000    | FURNISHINGS                                      |                   |           |             |           |            |           |              |            |              |           |          |
| 12300    | MANUFACTURED CASEWORK                            | \$                | 195,036   | \$          | 6,900     | \$         | 0.00      | \$           | 746,610    | \$           | 6.00      |          |
| 12400    | FURNISHINGS AND ACCESSORIES                      | \$                | 34,150    | \$          |           | \$         | 0.96      | \$           | 95,105     | \$           | 0.76      |          |
| 12500    | FURNITURE  | \$                | 33,500    | \$          |           | \$         | 1.03      | \$           | 33,500     | \$           | 0.27      |          |
|          | <b>SUB-TOTAL</b>                                 | \$                | 259,686   | \$          | 6,900     | \$         | 1.03      | \$           | 875,215    | \$           | 7.03      |          |
| 14000    | CONVEYING SYSTEMS                                |                   |           |             |           |            |           |              |            |              |           |          |
| 14200    | ELEVATORS  | \$                | 80,000    | \$          | 2,460     | \$         | 1.15      | \$           | 200,000    | \$           | 1.61      |          |
| 14400    | LIFTS  | \$                | 15,000    | \$          |           | \$         | 0.46      | \$           | 15,000     | \$           | 0.12      |          |
|          | <b>SUB-TOTAL</b>                                 | \$                | 95,000    | \$          | 2,460     | \$         | 1.15      | \$           | 215,000    | \$           | 1.73      |          |
| 15000    | MECHANICAL - FIRE PROTECTION                     |                   |           |             |           |            |           |              |            |              |           |          |
| 15000    | FIRE PROTECTION INSTALLATIONS                    | \$                | 224,291   | \$          |           | \$         | 0.90      | \$           | 859,190    | \$           | 6.90      |          |
|          | <b>SUB-TOTAL</b>                                 | \$                | 224,291   | \$          |           | \$         | 0.90      | \$           | 859,190    | \$           | 6.90      |          |
| 15000    | MECHANICAL - PLUMBING                            |                   |           |             |           |            |           |              |            |              |           |          |
| 15050    | BASIC MATERIALS AND METHODS                      | \$                |           | \$          | 189,306   | \$         | 2.00      | \$           | 189,306    | \$           | 1.52      |          |
| 15100    | BUILDING SERVICES PIPE                           | \$                | 120,272   | \$          | 3,700     | \$         | 3.70      | \$           | 459,073    | \$           | 3.69      |          |
| 15200    | PROCESS PIPE                                     | \$                | 48,758    | \$          | 65,620    | \$         | 0.95      | \$           | 136,379    | \$           | 1.10      |          |
| 15400    | PLUMBING FIXTURES AND EQUIPMENT                  | \$                | 105,970   | \$          | 299,376   | \$         | 3.26      | \$           | 405,346    | \$           | 3.26      |          |
| 15650    | TESTING, ADJUSTING AND BALANCING                 | \$                | 9,102     | \$          | 26,155    | \$         | 0.28      | \$           | 35,257     | \$           | 0.28      |          |
|          | <b>SUB-TOTAL</b>                                 | \$                | 284,102   | \$          | 544,268   | \$         | 0.74      | \$           | 1,225,371  | \$           | 9.85      |          |

TOSCANO CLEMENTS TAYLOR

WORLD OF INQUIRY SCHOOL # 58

PROJECT DIVISIONAL BREAKDOWN

9/12/2011

Draft

PHASE: SCHEMATIC ESTIMATE REVISION 1  
 BUILDING TYPE:  RESIDENTIAL  RETAIL  EDUCATIONAL  
 PROJECT TYPE:  NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58  
 EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD  
 LOCATION: ROCHESTER, NEW YORK 14621  
 A/E: DCJ ARCHITECTURE  
 CM: RUSOB/GILBANE  
 PROJECT #:

| DIVISION                                   | DESCRIPTION                       | ADDITIONS           |               | RENOVATIONS |           | SITEWORK |           | TOTAL AMOUNT         | TOTAL AREA   | COST / SF     | COMMENTS |
|--|-----------------------------------|---------------------|---------------|-------------|-----------|----------|-----------|----------------------|--------------|---------------|----------|
|  |                                   | AMOUNT              | COST / SF     | AMOUNT      | COST / SF | AMOUNT   | COST / SF |                      |              |               |          |
| 15000                                      | MECHANICAL - HVAC                 |                     |               |             |           |          |           |                      |              |               |          |
| 15050                                      | BASIC MATERIALS AND METHODS       | \$ 137,011          | 1.10          |             |           |          |           | \$ 137,011           |              | 1.10          |          |
| 15100                                      | BUILDING SERVICES PIPE            | \$ 1,198,424        | 9.63          |             |           |          |           | \$ 1,198,424         |              | 9.63          |          |
| 15100                                      | HVAC EQUIPMENT                    | \$ 1,583,925        | 12.73         |             |           |          |           | \$ 1,583,925         |              | 12.73         |          |
| 15700                                      | AIR DISTRIBUTION                  | \$ 1,121,546        | 9.01          |             |           |          |           | \$ 1,121,546         |              | 9.01          |          |
| 15800                                      | HVAC INSTRUMENTATION AND CONTROLS | \$ 908,625          | 7.30          |             |           |          |           | \$ 908,625           |              | 7.30          |          |
| 15900                                      | TESTING ADJUSTING AND BALANCING   | \$ 258,161          | 2.07          |             |           |          |           | \$ 258,161           |              | 2.07          |          |
|  | <b>SUB-TOTAL</b>                  | <b>\$ 5,207,692</b> | <b>40.74</b>  |             |           |          |           | <b>\$ 5,207,692</b>  |              | <b>40.74</b>  |          |
| 16000                                      | ELECTRICAL                        |                     |               |             |           |          |           |                      |              |               |          |
| 16200                                      | ELECTRICAL POWER                  | \$ 1,680,374        | 13.50         |             |           |          |           | \$ 1,680,374         |              | 13.50         |          |
| 16500                                      | LIGHTING                          | \$ 905,574          | 7.28          |             |           |          |           | \$ 905,574           |              | 7.28          |          |
| 16600                                      | SPECIAL SYSTEMS                   | \$ 1,548,279        | 12.44         |             |           |          |           | \$ 1,548,279         |              | 12.44         |          |
| 16900                                      | MISCELLANEOUS                     | \$ 323,983          | 2.60          |             |           |          |           | \$ 323,983           |              | 2.60          |          |
|  | <b>SUB-TOTAL</b>                  | <b>\$ 4,458,210</b> | <b>35.83</b>  |             |           |          |           | <b>\$ 4,458,210</b>  |              | <b>35.83</b>  |          |
| <b>TOTAL FOR CONSTRUCTION COST ( NET )</b> |                                   | <b>\$ 8,573,669</b> | <b>277.99</b> |             |           |          |           | <b>\$ 8,573,669</b>  |              | <b>277.99</b> |          |
|  |                                   |                     |               |             |           |          |           | <b>\$ 1,721,967</b>  | <b>13.84</b> |               |          |
|  |                                   |                     |               |             |           |          |           | <b>\$ 26,933,549</b> |              | <b>216.45</b> |          |

PROJECT AREA ( SF ) :  
 ADDITIONS TOTAL AREA 32,200  
 RENOVATIONS TOTAL AREA 3,120  
 SITEWORK TOTAL AREA 124,435  
 TOTAL AREA 124,435



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|  |  |                      |          |            |        |
|--|--|----------------------|----------|------------|--------|
| PHASE: SCHEMATIC ESTIMATE REVISION 1   |  | PROJECT AREA ( SF ): |          |            |        |
| BUILDING TYPE:   |  | NEW CONST.           | ADDITION | RENOVATION | TOTAL  |
| <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> RETAIL <input checked="" type="checkbox"/> EDUCATIONAL |  | 32,506               | 0        | 0          | 32,506 |

PROJECT TYPE:

NEW CONSTRUCTION     ADDITION     RENOVATION

|             |   |
|-------------|---|
| PROJECT :   | WORLD OF INQUIRY SCHOOL # 58              |
| EMPLOYER :  | ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD |
| LOCATION :  | ROCHESTER, NEW YORK 14621                 |
| A / E :     | JCJ ARCHITECTURE                          |
| CM :        | RJSCB / GILBANE                           |
| PROJECT # : |   |

| DIVISION                               | DESCRIPTION   | QUANTITY | UNIT | UNIT PRICE   | AMOUNT            |
|--|---|----------|------|--------------|-------------------|
| <b>DIVISION 2 - SITEWORK</b>           |   |          |      |              |                   |
| <b>02200 SITE PREPARATION</b>          |   |          |      |              |                   |
| <b>02220 Site Demolition</b>           |   |          |      |              |                   |
| 1                                      | Demolish existing building complete; two storey                   | 13,308   | SF   | \$ 6.00      | \$ 79,848         |
| 2                                      | Demolish existing brick chimney ( Demo Note 25 )                  | 1        | LS   | \$ 60,000.00 | \$ 60,000         |
| <b>02250 Shoring and Underpinning</b>  |   |          |      |              |                   |
| 1                                      | Underpinning existing foundations                                 | 188      | LF   | \$ 600.00    | \$ 118,800        |
|  |   |          |      |              | <b>SUB-TOTAL</b>  |
|  |   |          |      |              | <b>\$ 248,648</b> |
| <b>02300 EARTHWORK</b>                 |   |          |      |              |                   |
| <b>02315 Excavation and Fill</b>       |   |          |      |              |                   |
| 1                                      | Excavate @ slab on grade @ Lower Level ( Assumed 1' deep )        | 420      | CY   | \$ 10.00     | \$ 4,200          |
| 2                                      | Excavate @ slab on grade @ Ground Level ( Assumed 1' deep )       | 208      | CY   | \$ 10.00     | \$ 2,080          |
| 3                                      | Excavate @ column footings  | 37       | CY   | \$ 25.00     | \$ 925            |
| 4                                      | Excavate @ column footings; on line of / inside existing building | 71       | CY   | \$ 25.00     | \$ 1,775          |
| 5                                      | Excavate @ retaining / foundation wall footings                   | 1,826    | CY   | \$ 25.00     | \$ 46,650         |
| 6                                      | Excavate @ elevator pit   | 27       | CY   | \$ 25.00     | \$ 675            |
| 7                                      | Excavate @ elevator pit; inside existing building                 | 27       | CY   | \$ 25.00     | \$ 675            |
| 8                                      | Backfill  | 852      | CY   | \$ 8.00      | \$ 6,816          |
| 9                                      | Disposal  | 1,764    | CY   | \$ 16.00     | \$ 28,224         |
| 10                                     | Stone base @ grade slab @ Lower Level                             | 11,353   | SF   | \$ 1.00      | \$ 11,353         |
| 10                                     | Stone base @ grade slab @ Ground Level                            | 5,619    | SF   | \$ 1.00      | \$ 5,619          |
|  |   |          |      |              | <b>SUB-TOTAL</b>  |
|  |   |          |      |              | <b>\$ 107,992</b> |
| <b>02500 UTILITIES</b>                 |   |          |      |              |                   |
| 1                                      | SEE "SITEWORK"  |          |      |              |                   |
|  |   |          |      |              | <b>SUB-TOTAL</b>  |
|  |   |          |      |              | <b>\$ -</b>       |
| <b>02600 DRAINAGE AND CONTAINMENT</b>  |   |          |      |              |                   |
| <b>02630 Storm Drainage</b>            |   |          |      |              |                   |
| 1                                      | Perimeter foundation drain  | 288      | LF   | \$ 12.00     | \$ 3,576          |
|  |   |          |      |              | <b>SUB-TOTAL</b>  |
|  |   |          |      |              | <b>\$ 3,576</b>   |
| <b>TOTAL FOR DIVISION 2 - SITEWORK</b> |   |          |      |              | <b>\$ 360,216</b> |

| DIVISION                            | DESCRIPTION  | QUANTITY | UNIT | UNIT PRICE  | AMOUNT     |
|-------------------------------------|--|----------|------|-------------|------------|
| <b>DIVISION 3 - CONCRETE</b>        |  |          |      |             |            |
| <b>03300 CAST-IN PLACE CONCRETE</b> |  |          |      |             |            |
| <b>03310 Structural Concrete</b>    |  |          |      |             |            |
| 1                                   | Concrete @ column footings   | 37       | CY   | \$ 500.00   | \$ 18,500  |
| 2                                   | Concrete @ column footings; on line of / inside existing building  | 71       | CY   | \$ 600.00   | \$ 42,600  |
| 3                                   | Concrete @ retaining / foundation wall footings  | 605      | CY   | \$ 600.00   | \$ 302,500 |
| 4                                   | Concrete @ retaining / foundation walls  | 187      | CY   | \$ 850.00   | \$ 158,950 |
| 5                                   | Concrete @ buttresses on retaining walls   | 15       | CY   | \$ 850.00   | \$ 12,750  |
| 6                                   | Concrete @ piers   | 22       | CY   | \$ 1,000.00 | \$ 22,000  |
| 7                                   | Concrete @ piers; on line of / inside existing building  | 22       | CY   | \$ 1,100.00 | \$ 24,200  |
| 8                                   | Concrete @ elevator pit walls  | 18       | CY   | \$ 850.00   | \$ 15,300  |
| 9                                   | Concrete @ elevator pit base   | 9        | CY   | \$ 600.00   | \$ 5,400   |
| 10                                  | ( X-Coat ) Sump pits   | 2        | EA   | \$ 1,000.00 | \$ 2,000   |
| 11                                  | Concrete @ slab on grade @ Lower Level; 5" thick   | 11,353   | SF   | \$ 7.00     | \$ 79,471  |
| 12                                  | Concrete @ slab on grade @ Ground Level; 5" thick  | 5,619    | SF   | \$ 7.00     | \$ 39,333  |
| 13                                  | Concrete @ Infill @ metal deck @ Ground Level; 3 1/2" thick  | 11,391   | SF   | \$ 5.00     | \$ 56,955  |
| 14                                  | Concrete @ Infill @ metal deck @ Ground Level; inside existing building; 3 1/2" thick  | 2,498    | SF   | \$ 6.00     | \$ 14,988  |
| 15                                  | Concrete @ Infill @ metal deck @ Upper Level; 3 1/2" thick   | 5,519    | SF   | \$ 5.00     | \$ 27,595  |
| 16                                  | Concrete @ Infill @ metal stairs; from High School Dining raised level down to Lower level; 6 treads, 7 risers; including railings | 1        | FLT  | \$ 350.00   | \$ 350     |

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|                  |  |   |     |             |            |
|------------------|--|---|-----|-------------|------------|
| 17               | Concrete @ infill @ metal stairs; from Lower Level to Ground Level; 21 treads, 22 risers; including railings   | 1 | FLT | \$ 1,300.00 | \$ 1,300   |
| 18               | Concrete @ infill @ metal stairs; from Ground Level to Upper Level; 21 treads, 22 risers; including railings   | 1 | FLT | \$ 1,300.00 | \$ 1,300   |
| 19               | Concrete @ infill @ metal stairs; from first quarter space landing ( of stair from Lower Level to Ground Level ) to Staff Dining; 14 treads, 15 risers; including railings | 1 | FLT | \$ 1,000.00 | \$ 1,000   |
| 20               | Concrete @ infill @ metal stairs; from Main Lobby to Ground Level; 6 treads, 7 risers, 8' 2 3/4" wide; including railings  | 1 | FLT | \$ 750.00   | \$ 750     |
| 21               | Concrete @ infill @ metal stairs; from Main Lobby to Ground Level; 6 treads, 7 risers, 8' 11" wide; including railings   | 1 | FLT | \$ 1,000.00 | \$ 1,000   |
| <b>SUB-TOTAL</b> |  |   |     | \$          | \$ 828,242 |

**TOTAL FOR DIVISION 3 - CONCRETE** \$ 828,242

|                               |  |                 |             |                   |               |
|-------------------------------|--|-----------------|-------------|-------------------|---------------|
| <b>4 DIVISION 4 - MASONRY</b> |  |                 |             |                   |               |
| <b>04200</b>                  | <b>MASONRY UNITS</b>                             | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b> |
| <b>04210</b>                  | <b>Clay Masonry Units</b>                        |                 |             |                   |               |
| 1                             | Face brick veneer @ exterior wall @ Lower Level  | 2,592           | SF          | \$ 25.00          | \$ 64,800     |
| 2                             | Face brick veneer @ exterior wall @ Ground Level | 3,950           | SF          | \$ 25.00          | \$ 98,750     |
| 3                             | Face brick veneer @ exterior wall @ Upper Level  | 4,384           | SF          | \$ 25.00          | \$ 109,100    |
| 4                             | Face brick veneer detailing ( Allowance )        | 1               | LS          | \$ 20,000.00      | \$ 20,000     |
| <b>04220</b>                  | <b>Concrete Masonry Units</b>                    |                 |             |                   |               |
| 1                             | CMU @ back-up @ exterior wall @ Lower Level      | 2,592           | SF          | \$ 12.00          | \$ 31,104     |
| 2                             | CMU @ back-up @ exterior wall @ Ground Level     | 3,950           | SF          | \$ 12.00          | \$ 47,400     |
| 3                             | CMU @ back-up @ exterior wall @ Upper Level      | 4,384           | SF          | \$ 12.00          | \$ 52,368     |
| 4                             | ( X-Cost ) Acoustic CMU                          | 9,284           | SF          | \$ 5.00           | \$ 46,320     |
| <b>SUB-TOTAL</b>              |  |                 |             | \$                | \$ 469,842    |
| <b>04700</b>                  | <b>SIMULATED MASONRY</b>                         | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b> |
| <b>04720</b>                  | <b>Cast Stone</b>                                |                 |             |                   |               |
| 1                             | Cast stone features ( Allowance )                | 1               | LS          | \$ 20,000.00      | \$ 20,000     |
| <b>SUB-TOTAL</b>              |  |                 |             | \$                | \$ 20,000     |

**TOTAL FOR DIVISION 4 - MASONRY** \$ 469,842

|                              |   |                 |             |                   |               |
|------------------------------|---|-----------------|-------------|-------------------|---------------|
| <b>5 DIVISION 5 - METALS</b> |   |                 |             |                   |               |
| <b>05100</b>                 | <b>STRUCTURAL METAL FRAMING</b>   | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b> |
| <b>05120</b>                 | <b>Structural Steel</b>   |                 |             |                   |               |
| 1                            | Structural steel @ columns  | 31              | TONS        | \$ 3,250.00       | \$ 100,750    |
| 2                            | Structural steel @ columns; on line of / inside existing building                                       | 9               | TONS        | \$ 4,000.00       | \$ 36,000     |
| 3                            | Structural steel @ floor framing @ Ground Level   | 43              | TONS        | \$ 3,250.00       | \$ 139,750    |
| 4                            | Structural steel @ floor framing @ Ground Level; inside existing building                               | 9               | TONS        | \$ 4,000.00       | \$ 36,000     |
| 5                            | Structural steel @ floor framing @ Upper Level  | 14              | TONS        | \$ 3,250.00       | \$ 45,500     |
| 6                            | Structural steel @ roof framing @ Roof Level  | 68              | TONS        | \$ 3,250.00       | \$ 214,500    |
| 7                            | Structural steel @ roof framing @ Roof Level; over existing building                                    | 16              | TONS        | \$ 3,250.00       | \$ 52,000     |
| 8                            | Structural steel lifting beams @ elevator shafts  | 2               | EA          | \$ 1,000.00       | \$ 2,000      |
| 9                            | Reconstruct existing framing / floor support for new live load @ Ground Level; inside existing building | 5,974           | SF          | \$ 28.00          | \$ 149,350    |
| 10                           | Reconstruct existing framing / floor support for new live load @ Upper Level; inside existing building  | 1,923           | SF          | \$ 25.00          | \$ 48,075     |
| 11                           | Structural steel @ dunnage - Allowance  | 10              | TONS        | \$ 5,000.00       | \$ 50,000     |
| 12                           | Miscellaneous steel lintels, angles, brackets - Allowance   | 1               | LS          | \$ 10,000.00      | \$ 10,000     |
| <b>SUB-TOTAL</b>             |   |                 |             | \$                | \$ 893,925    |
| <b>06300</b>                 | <b>METAL DECK</b>   | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b> |
| <b>06310</b>                 | <b>Steel Deck</b>   |                 |             |                   |               |
| 1                            | Metal deck @ floor framing @ Ground Level; 1 1/2" x 20 gauge  | 9,577           | SF          | \$ 2.50           | \$ 23,943     |
| 2                            | Metal deck @ floor framing @ Ground Level; 1 1/2" x 20 gauge; inside existing building                  | 1,765           | SF          | \$ 2.50           | \$ 4,388      |
| 3                            | Metal deck @ floor framing @ Ground Level; 1 1/2" x 22 gauge  | 1,615           | SF          | \$ 2.50           | \$ 4,538      |
| 4                            | Metal deck @ floor framing @ Ground Level; 1 1/2" x 22 gauge; inside existing building                  | 743             | SF          | \$ 2.50           | \$ 1,858      |
| 5                            | Metal deck @ floor framing @ Upper Level; 1 1/2" x 22 gauge   | 5,519           | SF          | \$ 2.50           | \$ 13,798     |
| 6                            | Metal deck @ roof framing @ Roof Level; 1 1/2" x 22 gauge   | 17,463          | SF          | \$ 2.50           | \$ 43,658     |
| 7                            | Metal deck @ roof framing @ Roof Level; 1 1/2" x 22 gauge; over existing building                       | 4,222           | SF          | \$ 2.50           | \$ 10,555     |
| <b>SUB-TOTAL</b>             |   |                 |             | \$                | \$ 102,735    |

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| METAL FABRICATIONS                                  |   |          |      |                   |                     |
|---|---|----------|------|-------------------|---------------------|
| 05500   | STAIRS AND LADDERS  | QUANTITY | UNIT | UNIT PRICE        | AMOUNT              |
| 06510   | Metal stairs @ newly formed Corridor @ rear of Stage; 7 treads, 8 risers; including handrailings  | 1        | FLT  | \$ 5,000.00       | \$ 5,000            |
| 2   | Metal exterior fire escape staircase from Upper Level to grade; 23 treads, 23 risers, 1 quarter-space landing, 1 access landing; including handrailings | 1        | EA   | \$ 15,000.00      | \$ 15,000           |
| 3   | Ladders @ elevator pits   | 1        | EA   | \$ 1,000.00       | \$ 1,000            |
| 05520   | HANDRAILS AND RAILINGS  |          |      |                   |                     |
| 1   | Miscellaneous handrailings  | 1        | LS   | \$ 5,000.00       | \$ 5,000            |
| 05580   | FORMED METAL FABRICATIONS   |          |      |                   |                     |
| 1   | Canopy @ Entrance   | 226      | SF   | \$ 125.00         | \$ 28,250           |
| 2   | Column covers; decorative ( Allowance )   | 1        | LS   | \$ 10,000.00      | \$ 10,000           |
| 3   | Elevator sill plates @ Lower Level  | 1        | EA   | \$ 150.00         | \$ 150              |
| 4   | Elevator sill plates @ Ground Level   | 1        | EA   | \$ 150.00         | \$ 150              |
| 5   | Elevator sill plates @ Upper Level  | 1        | EA   | \$ 150.00         | \$ 150              |
| 6   | Bike racks ( Allowance )  | 1        | EA   | \$ 3,000.00       | \$ 3,000            |
| 7   | Miscellaneous metal fabrications  | 1        | LS   | \$ 10,000.00      | \$ 10,000           |
|   |   |          |      | SUB-TOTAL         | \$ 77,700           |
| 05700   | ORNAMENTAL METAL  |          |      |                   |                     |
| 05710   | Ornamental Stairs   |          |      |                   |                     |
| 1   | Ornamental metal stairs   |          |      | SEE "RENOVATIONS" | \$ -                |
|   |   |          |      | SUB-TOTAL         | \$ -                |
| <b>TOTAL FOR DIVISION 5 - METALS</b>                |   |          |      |                   | <b>\$ 1,064,360</b> |
| <b>DIVISION 6 - WOOD AND PLASTICS</b>               |   |          |      |                   |                     |
| <b>ROUGH CARPENTRY</b>                              |   |          |      |                   |                     |
| 06100   | Miscellaneous Carpentry   |          |      |                   |                     |
| 06105   | Platform structure @ Stage  | 940      | SF   | \$ 25.00          | \$ 23,500           |
| 2   | Miscellaneous rough carpentry   | 32,508   | GSF  | \$ 1.00           | \$ 32,508           |
|   |   |          |      | SUB-TOTAL         | \$ 56,008           |
| <b>ARCHITECTURAL WOODWORK</b>                       |   |          |      |                   |                     |
| 06400   | Wood Stairs and Railings  |          |      |                   |                     |
| 06430   | Wood stairs @ Stage; including handrail   | 2        | EA   | \$ 1,260.00       | \$ 2,520            |
| <b>Standing and Running Trim</b>                    |   |          |      |                   |                     |
| 06450   | Wood stools @ windows   | 32,508   | GSF  | \$ 0.50           | \$ 16,253           |
| 2   | Standing and running trim   | 32,508   | GSF  | \$ 1.00           | \$ 32,508           |
|   |   |          |      | SUB-TOTAL         | \$ 51,259           |
| <b>TOTAL FOR DIVISION 6 - WOOD AND PLASTICS</b>     |   |          |      |                   | <b>\$ 107,265</b>   |
| <b>DIVISION 7 - THERMAL AND MOISTURE PROTECTION</b> |   |          |      |                   |                     |
| <b>THERMAL PROTECTION</b>                           |   |          |      |                   |                     |
| 07200   | Building Insulation   |          |      |                   |                     |
| 07210   | Insulation @ exterior wall  | 10,908   | SF   | \$ 2.00           | \$ 21,812           |
| <b>Vapor Retarders</b>                              |   |          |      |                   |                     |
| 07260   | Vapor barrier @ grade slab  | 16,972   | SF   | \$ 0.50           | \$ 8,486            |
| 2   | Vapor barrier @ exterior wall   | 10,908   | SF   | \$ 1.00           | \$ 10,908           |
|   |   |          |      | SUB-TOTAL         | \$ 41,204           |

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WORLD OF INQUIRY SCHOOL # 58

PROJECT DETAILED ESTIMATE - ADDITIONS

9/12/2011

| MEMBRANE ROOFING  |   |          |      |            |                   |
|---|---|----------|------|------------|-------------------|
| 07500   | Membrane Roofing  | QUANTITY | UNIT | UNIT PRICE | AMOUNT            |
| 1   | Roofing system @ Main Roof                                      | 17,463   | SF   | \$ 20.00   | \$ 349,260        |
| 2   | Roofing system @ Roof over existing building                    | 4,222    | SF   | \$ 20.00   | \$ 84,440         |
| 3   | Roofing system @ Roof Garden                                    | 1,002    | SF   | \$ 20.00   | \$ 20,040         |
| SUB-TOTAL   |   |          |      |            | \$ 453,740        |
| FIRE AND SMOKE PROTECTION                                     |   |          |      |            |                   |
| 07800   | Applied Fireproofing  | QUANTITY | UNIT | UNIT PRICE | AMOUNT            |
| 1   | Patching @ existing spray applied fireproofing at steel framing | 32,506   | GSF  | \$ 0.50    | \$ 16,253         |
| Through-Penetration Firestop Systems                          |   |          |      |            |                   |
| 1   | Miscellaneous fire stopping                                     | 32,506   | GSF  | \$ 0.50    | \$ 16,253         |
| SUB-TOTAL   |   |          |      |            | \$ 32,506         |
| JOINT SEALERS   |   |          |      |            |                   |
| 07900   | Joint Sealants  | QUANTITY | UNIT | UNIT PRICE | AMOUNT            |
| 1   | Miscellaneous joint sealants                                    | 32,506   | GSF  | \$ 0.50    | \$ 16,253         |
| SUB-TOTAL   |   |          |      |            | \$ 16,253         |
| <b>TOTAL FOR DIVISION 7 - THERMAL AND MOISTURE PROTECTION</b> |   |          |      |            | <b>\$ 502,499</b> |

| DIVISION 8 - DOORS AND WINDOWS |  |          |       |             |            |
|--------------------------------|--|----------|-------|-------------|------------|
| 8                              | Doors and Frames   | QUANTITY | UNIT  | UNIT PRICE  | AMOUNT     |
| 1                              | Exterior doors @ Lower Level; steel; Type C; double; including frames and hardware         | 2        | PAIRS | \$ 2,000.00 | \$ 4,000   |
| 2                              | Exterior doors @ Lower Level; steel; Type D; double; including frames and hardware         | 1        | PAIRS | \$ 2,000.00 | \$ 2,000   |
| 3                              | Exterior doors @ Ground Level; steel; Type D; double; including frames and hardware        | 10       | PAIRS | \$ 2,000.00 | \$ 20,000  |
| 4                              | Exterior doors @ Upper Level; steel; Type C; single; including frames and hardware         | 1        | EA    | \$ 1,500.00 | \$ 1,500   |
| 5                              | Exterior doors @ Upper Level; steel; Type D; double; including frames and hardware         | 2        | PAIRS | \$ 2,000.00 | \$ 4,000   |
| 6                              | Interior doors @ Lower Level; wood; Type A; double; including frames and hardware          | 1        | PAIRS | \$ 2,000.00 | \$ 2,000   |
| 7                              | Interior doors @ Lower Level; hollow metal; Type A; single; including frames and hardware  | 1        | EA    | \$ 1,500.00 | \$ 1,500   |
| 8                              | (X-Cost) Fire-rating; 90 minutes   | 1        | EA    | \$ 100.00   | \$ 100     |
| 9                              | Interior doors @ Ground Level; wood; Type A; double; including frames and hardware         | 12       | PAIRS | \$ 2,000.00 | \$ 24,000  |
| 10                             | Interior doors @ Ground Level; hollow metal; Type A; single; including frames and hardware | 3        | EA    | \$ 1,500.00 | \$ 4,500   |
| 11                             | Interior doors @ Ground Level; steel; Type D; double; including frames and hardware        | 4        | PAIRS | \$ 2,000.00 | \$ 8,000   |
| 12                             | Interior doors @ Upper Lower Level; wood; Type A; single; including frames and hardware    | 2        | EA    | \$ 1,500.00 | \$ 3,000   |
| SUB-TOTAL                      |  |          |       |             | \$ 74,600  |
| SPECIALTY DOORS                |  |          |       |             |            |
| 08300                          | Access Doors and Frames  | QUANTITY | UNIT  | UNIT PRICE  | AMOUNT     |
| 1                              | Access doors and frames  | 32,506   | GSF   | \$ 0.30     | \$ 9,752   |
| SUB-TOTAL                      |  |          |       |             | \$ 9,752   |
| ENTRANCES AND STOREFRONTS      |  |          |       |             |            |
| 08400                          | Aluminum-Framed Entrances and Storefronts  | QUANTITY | UNIT  | UNIT PRICE  | AMOUNT     |
| 1                              | Storefront systems; exterior; @ Staff Dining @ Lower Level                                 | 876      | SF    | \$ 65.00    | \$ 56,940  |
| 2                              | (X-Cost) Doors; double   | 2        | PAIRS | \$ 4,000.00 | \$ 8,000   |
| 3                              | Storefront systems; exterior; @ Gymnasium @ Ground Level                                   | 252      | SF    | \$ 65.00    | \$ 16,380  |
| 4                              | (X-Cost) Doors; double   | 2        | PAIRS | \$ 4,000.00 | \$ 8,000   |
| 5                              | Storefront systems; exterior; @ Gymnasium @ Upper Level                                    | 1,936    | SF    | \$ 65.00    | \$ 125,976 |
| 6                              | Storefront systems; exterior; @ Entrance Vestibules @ Ground Level                         | 408      | SF    | \$ 65.00    | \$ 26,520  |
| 7                              | (X-Cost) Doors; double   | 4        | PAIRS | \$ 4,000.00 | \$ 16,000  |
| 8                              | Storefront systems; exterior; @ Main Lobby @ Ground Level                                  | 876      | SF    | \$ 65.00    | \$ 56,940  |
| 9                              | (X-Cost) Doors; double   | 1        | PAIRS | \$ 4,000.00 | \$ 4,000   |
| 10                             | Storefront systems; exterior; @ Main Lobby @ Upper Level                                   | 1,212    | SF    | \$ 65.00    | \$ 78,780  |
| 11                             | Storefront systems; exterior; @ New Wing @ Ground Level                                    | 708      | SF    | \$ 65.00    | \$ 46,020  |
| 12                             | Storefront systems; exterior; @ New Wing @ Upper Level                                     | 1,800    | SF    | \$ 65.00    | \$ 117,000 |
| 13                             | (X-Cost) Doors; double   | 2        | PAIRS | \$ 4,000.00 | \$ 8,000   |
| 14                             | Storefront systems; interior; @ Entrance Vestibules @ Ground Level                         | 408      | SF    | \$ 65.00    | \$ 26,520  |
| 15                             | (X-Cost) Doors; double   | 4        | PAIRS | \$ 4,000.00 | \$ 16,000  |
| 16                             | Storefront systems; interior; @ New Wing @ Ground Level                                    | 288      | SF    | \$ 65.00    | \$ 18,720  |
| 17                             | (X-Cost) Doors; double   | 2        | PAIRS | \$ 4,000.00 | \$ 8,000   |
| SUB-TOTAL                      |  |          |       |             | \$ 637,790 |

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| 08300   |  | WINDOWS   | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
|---|--|---|------------------|------|--------------|-------------------|
| 08520   |  | Aluminum and Glass Windows                                      |                  |      |              |                   |
| 1   |  | Aluminum and glass windows @ Ground Level                       | 550              | SF   | \$ 80.00     | \$ 33,000         |
| 2   |  | Aluminum and glass windows @ Upper Level                        | 500              | SF   | \$ 80.00     | \$ 30,000         |
| 08580   |  | Special Function Windows  |                  |      |              |                   |
| 1   |  | Aluminum / glass windows; interior @ Principal's Office         | 130              | SF   | \$ 55.00     | \$ 7,150          |
| 2   |  | Sidelights @ doors  | 32,508           | GSF  | \$ 1.00      | \$ 32,500         |
| 3   |  | Miscellaneous interior windows                                  | 1                | LS   | \$ 20,000.00 | \$ 20,000         |
|   |  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 122,850</b> |
| <b>TOTAL FOR DIVISION 8 - DOORS AND WINDOWS</b> |  |   |                  |      |              | <b>\$ 844,791</b> |
| 9   |  | DIVISION 9 - FINISHES   |                  |      |              |                   |
| 09200   |  | PLASTER AND GYPSUM BOARD  | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 09280   |  | Gypsum Board Assemblies   |                  |      |              |                   |
| 1   |  | Metal stud furred wall @ Ground Level; one layer GWB on furring | 284              | SF   | \$ 5.00      | \$ 1,320          |
| 2   |  | Metal stud demising partitions @ Lower Level                    | 3,450            | SF   | \$ 8.50      | \$ 29,325         |
| 3   |  | Metal stud demising partitions @ Ground Level                   | 4,956            | SF   | \$ 8.50      | \$ 42,126         |
| 4   |  | Metal stud demising partitions @ Upper Level                    | 2,298            | SF   | \$ 8.50      | \$ 19,533         |
| 5   |  | Metal double stud demising partitions @ Lower Level             | 1,898            | SF   | \$ 10.50     | \$ 19,929         |
| 6   |  | Metal stud shaft walls @ elevators @ Lower Level                | 504              | SF   | \$ 8.50      | \$ 4,284          |
| 7   |  | Metal stud shaft walls @ elevators @ Ground Level               | 504              | SF   | \$ 8.50      | \$ 4,284          |
| 8   |  | Metal stud shaft walls @ elevators @ Upper Level                | 504              | SF   | \$ 8.50      | \$ 4,284          |
| 9   |  | Metal stud shaft walls @ riser shafts @ Ground Level            | 426              | SF   | \$ 8.50      | \$ 3,621          |
| 10  |  | Metal stud shaft walls @ elevators @ Upper Level                | 426              | SF   | \$ 8.50      | \$ 3,621          |
| 11  |  | Miscellaneous metal stud walls                                  | 1                | LS   | \$ 15,000.00 | \$ 15,000         |
| 12  |  | Miscellaneous GWB soffit and bulkheads                          | 1                | LS   | \$ 15,000.00 | \$ 15,000         |
|   |  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 182,368</b> |
| 09300   |  | TILE  | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 09310   |  | Ceramic Tile  |                  |      |              |                   |
| 1   |  | Ceramic tile @ floors @ Lower Level                             | 2,592            | SF   | \$ 12.00     | \$ 31,104         |
| 2   |  | Ceramic tile @ floors @ Ground Level                            | 280              | SF   | \$ 12.00     | \$ 3,360          |
| 3   |  | Ceramic tile @ base @ Lower Level                               | 554              | LF   | \$ 12.00     | \$ 6,648          |
| 4   |  | Ceramic tile @ base @ Ground Level                              | 151              | LF   | \$ 12.00     | \$ 1,812          |
| 5   |  | Porcelain tile @ floors @ Lower Level                           | 152              | SF   | \$ 15.00     | \$ 2,280          |
| 6   |  | Porcelain tile @ floors @ Ground Level                          | 370              | SF   | \$ 15.00     | \$ 5,550          |
| 7   |  | Porcelain tile @ base @ Lower Level                             | 58               | SF   | \$ 15.00     | \$ 885            |
| 8   |  | Porcelain tile @ base @ Ground Level                            | 388              | SF   | \$ 15.00     | \$ 5,820          |
|   |  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 57,459</b>  |
| 09500   |  | CEILINGS  | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 09510   |  | Acoustical Ceilings   |                  |      |              |                   |
| 1   |  | ACT ceilings @ Lower Level; 2' x 4'                             | 4,110            | SF   | \$ 4.00      | \$ 16,440         |
| 2   |  | ACT ceilings @ Ground Level; 2' x 4'                            | 8,890            | SF   | \$ 4.00      | \$ 27,580         |
| 3   |  | ACT ceilings @ Upper Level; 2' x 4'                             | 3,491            | SF   | \$ 4.00      | \$ 13,964         |
| 09545   |  | Specialty Ceilings  |                  |      |              |                   |
| 1   |  | Suspended ceiling "clouds" @ Lower Level                        | 152              | SF   | \$ 25.00     | \$ 3,800          |
| 2   |  | Suspended ceiling "clouds" @ Ground Level                       | 2,608            | SF   | \$ 25.00     | \$ 65,200         |
|   |  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 126,984</b> |
| 09800   |  | FLOORING  | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 09820   |  | Resilient Flooring  |                  |      |              |                   |
| 1   |  | VCT @ floors @ Lower Level                                      | 1,182            | SF   | \$ 2.50      | \$ 2,955          |
| 2   |  | VCT @ floors @ Ground Level                                     | 3,495            | SF   | \$ 2.50      | \$ 8,738          |
| 3   |  | VCT @ floors @ Upper Level                                      | 3,492            | SF   | \$ 2.50      | \$ 8,730          |
| 4   |  | Linoleum @ floors @ Lower Level                                 | 184              | SF   | \$ 10.00     | \$ 1,840          |
| 5   |  | Linoleum @ floors @ Ground Level                                | 940              | SF   | \$ 10.00     | \$ 9,400          |
| 7   |  | Rubber base @ Lower Level                                       | 218              | LF   | \$ 4.00      | \$ 872            |
| 8   |  | Rubber base @ Ground Level                                      | 1,376            | LF   | \$ 4.00      | \$ 5,504          |
| 9   |  | Rubber base @ Upper Level                                       | 688              | LF   | \$ 4.00      | \$ 2,752          |
| 09840   |  | Wood Flooring   |                  |      |              |                   |
| 1   |  | Wood flooring @ Gymnasium                                       | 6,919            | SF   | \$ 22.00     | \$ 152,218        |
| 09870   |  | Fluid Applied Flooring  |                  |      |              |                   |
| 1   |  | Concrete sealer @ floors @ Lower Level                          | 3,211            | SF   | \$ 2.00      | \$ 6,422          |
| 2   |  | Concrete sealer @ floors @ Ground Level                         | 480              | SF   | \$ 2.00      | \$ 960            |
| 3   |  | Concrete sealer @ floors @ Upper Level                          | 701              | SF   | \$ 2.00      | \$ 1,402          |
| 09880   |  | Carpet  |                  |      |              |                   |
| 1   |  | Carpet @ floors @ Ground Level                                  | 2,746            | SF   | \$ 5.00      | \$ 13,730         |
|   |  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 215,543</b> |



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| 10920 FIRE PROTECTION SPECIALTIES               |   | QUANTITY         | UNIT         | UNIT PRICE | AMOUNT            |
|---|---|------------------|--------------|------------|-------------------|
| 10925 Fire Protection Specialties ( Allowance ) |   | 14               | EA           | \$ 300.00  | \$ 4,200          |
| 1   | Fire extinguishers  |                  |              |            |                   |
|   |   | <b>SUB-TOTAL</b> |              |            | <b>\$ 4,200</b>   |
| 10600 PARTITIONS                                |   | QUANTITY         | UNIT         | UNIT PRICE | AMOUNT            |
| 10650 Operable Partitions                       |   |                  |              |            |                   |
| 1   | Operable partition @ Gymnasium; 24' high; motorized                 |                  | NOT REQUIRED | \$ -       | \$ -              |
| 2   | Operable partition between Gymnasium and Stage; 16' high; motorized |                  | NOT REQUIRED | \$ -       | \$ -              |
|   |   | <b>SUB-TOTAL</b> |              |            | <b>\$ -</b>       |
| 10670 STORAGE SHELVING                          |   | QUANTITY         | UNIT         | UNIT PRICE | AMOUNT            |
| 10674 Storage Shelving ( Allowance )            |   | 32,506           | GSF          | \$ 1.00    | \$ 32,506         |
| 1   | Storage shelving; metal   |                  |              |            |                   |
|   |   | <b>SUB-TOTAL</b> |              |            | <b>\$ 32,506</b>  |
| 10800 TOILET / BATH ACCESSORIES                 |   | QUANTITY         | UNIT         | UNIT PRICE | AMOUNT            |
| 10810 Toilet Accessories                        |   |                  |              |            |                   |
| 1   | Mirrors; 18" x 36"  | 15               | EA           | \$ 120.00  | \$ 1,800          |
| 2   | Liquid soap dispensers  | 16               | EA           | \$ 100.00  | \$ 1,600          |
| 3   | Paper towel dispensers  | 9                | EA           | \$ 110.00  | \$ 990            |
| 4   | Toilet tissue dispensers  | 15               | EA           | \$ 80.00   | \$ 1,200          |
| 5   | Sanitary napkin dispensers  | 2                | EA           | \$ 575.00  | \$ 1,150          |
| 6   | Sanitary napkin disposal units                                      | 7                | EA           | \$ 160.00  | \$ 1,120          |
| 7   | Grab bar sets   | 9                | EA           | \$ 175.00  | \$ 1,575          |
|   |   | <b>SUB-TOTAL</b> |              |            | <b>\$ 9,336</b>   |
| <b>TOTAL FOR DIVISION 10 - SPECIALTIES</b>      |   |                  |              |            | <b>\$ 175,398</b> |

| 11 DIVISION 11 - EQUIPMENT                             |   |                  |      |              |                   |
|--|---|------------------|------|--------------|-------------------|
| 11130 AUDIO-VISUAL EQUIPMENT                           |   | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 11130 Audio-Visual Equipment                           |   |                  |      |              |                   |
| 1  | "Smartboards"   | 6                | EA   | \$ 5,000.00  | \$ 30,000         |
| 2  | Projection screens  | 6                | EA   | \$ 6,000.00  | \$ 30,000         |
| 3  | Projector mounts  | 8                | EA   | \$ 750.00    | \$ 4,500          |
|  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 64,500</b>  |
| 11450 RESIDENTIAL EQUIPMENT                            |   | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 11450 Residential Equipment                            |   |                  |      |              |                   |
| 1  | Refrigerators @ Staff Dining Room; 34" x 30" x 24"                          | 1                | EA   | \$ 1,000.00  | \$ 1,000          |
| 2  | Microwave oven @ Staff Dining Room; 19" x 22" x 19"                         | 1                | EA   | \$ 500.00    | \$ 500            |
|  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 1,500</b>   |
| 11480 ATHLETIC, RECREATIONAL AND THERAPEUTIC EQUIPMENT |   | QUANTITY         | UNIT | UNIT PRICE   | AMOUNT            |
| 11480 Athletic, Recreational and Therapeutic Equipment |   |                  |      |              |                   |
| 1  | Wall pads @ Gymnasium; 6' high  | 1,824            | SF   | \$ 15.00     | \$ 27,360         |
| 2  | Basketball backboards @ Gymnasium; stationary type; wall-mounted            | 4                | EA   | \$ 3,500.00  | \$ 14,000         |
| 3  | Basketball backboards @ Gymnasium; glass; retractable type; ceiling-mounted | 2                | EA   | \$ 6,000.00  | \$ 12,000         |
| 4  | Basketball, volleyball and other court markings @ Gymnasium                 | 1                | LS   | \$ 7,000.00  | \$ 7,000          |
| 5  | Basketball, volleyball and other court markings @ Gymnasium                 | 1                | LS   | \$ 6,000.00  | \$ 6,000          |
| 6  | Pegboards   | 4                | EA   | \$ 500.00    | \$ 2,000          |
| 7  | Volleyball standard floor plates @ Gymnasium                                | 8                | EA   | \$ 500.00    | \$ 3,000          |
| 8  | Chin-up bars and climbing ropes ( Allowance )                               | 1                | LS   | \$ 5,000.00  | \$ 5,000          |
| 9  | Divider curtain @ Gymnasium   | 70               | LF   | \$ 240.00    | \$ 16,800         |
| 10   | Stage curtains; act curtains  | 576              | SF   | \$ 20.00     | \$ 11,520         |
| 11   | Stage curtains; proscenium valance  | 170              | SF   | \$ 20.00     | \$ 3,400          |
| 12   | Stage curtains; side cyclorama curtains                                     | 736              | SF   | \$ 20.00     | \$ 14,720         |
| 13   | Stage curtains; rear cyclorama curtains                                     | 544              | SF   | \$ 20.00     | \$ 10,880         |
| 14   | Stage curtains; border curtains   | 340              | SF   | \$ 20.00     | \$ 6,800          |
| 15   | Greenhouse and Roof Garden equipment  | 1                | LS   | \$ 80,000.00 | \$ 80,000         |
|  |   | <b>SUB-TOTAL</b> |      |              | <b>\$ 218,480</b> |

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| 15                                      |   | MECHANICAL             |      |            |                   |
|---|---|------------------------|------|------------|-------------------|
|   |   | DIVISION 15 - PLUMBING |      |            |                   |
| 15100                                   | BUILDING SERVICES PIPE                              | QUANTITY               | UNIT | UNIT PRICE | AMOUNT            |
| 15100                                   | Building Services Pipe                              |                        |      |            |                   |
| 1                                       | Building service pipes                              | 32,506                 | GSF  | \$ 3.70    | \$ 120,272        |
|   |   |                        |      | \$ -       | \$ -              |
| SUB-TOTAL                               |   |                        |      |            | \$ 120,272        |
| 15200                                   | PROCESS PIPE  | QUANTITY               | UNIT | UNIT PRICE | AMOUNT            |
| 15210                                   | Process Air and Gas Pipe                            |                        |      |            |                   |
| 1                                       | Process air and gas pipes                           | 32,506                 | GSF  | \$ 1.00    | \$ 32,506         |
| 15250                                   | Acid Waste and Vent Pipe                            |                        |      |            |                   |
| 1                                       | Acid waste and vent pipe system                     | 32,506                 | GSF  | \$ 0.50    | \$ 16,253         |
|   |   |                        |      | \$ -       | \$ -              |
| SUB-TOTAL                               |   |                        |      |            | \$ 48,759         |
| 15400                                   | PLUMBING FIXTURES AND EQUIPMENT                     | QUANTITY               | UNIT | UNIT PRICE | AMOUNT            |
| 15410                                   | Plumbing Fixtures                                   |                        |      |            |                   |
| 1                                       | Plumbing fixtures and equipment                     | 32,506                 | GSF  | \$ 3.26    | \$ 106,970        |
|   |   |                        |      | \$ -       | \$ -              |
| SUB-TOTAL                               |   |                        |      |            | \$ 106,970        |
| 15950                                   | TESTING, ADJUSTING AND BALANCING                    | QUANTITY               | UNIT | UNIT PRICE | AMOUNT            |
| 15960                                   | Testing, Adjusting and Balancing                    |                        |      |            |                   |
| 1                                       | Testing, adjusting, balancing, tags, as-built, etc. | 32,506                 | GSF  | \$ 0.28    | \$ 9,102          |
|   |   |                        |      | \$ -       | \$ -              |
| SUB-TOTAL                               |   |                        |      |            | \$ 9,102          |
| <b>TOTAL FOR DIVISION 15 - PLUMBING</b> |   |                        |      |            | <b>\$ 284,102</b> |

| 15                                  |                                  | MECHANICAL         |      |            |                     |
|-------------------------------------|----------------------------------|--------------------|------|------------|---------------------|
|                                     |                                  | DIVISION 15 - HVAC |      |            |                     |
| 15100                               | BUILDING SERVICES PIPE           | QUANTITY           | UNIT | UNIT PRICE | AMOUNT              |
| 15100                               | Building Services Pipe           |                    |      |            |                     |
| 1                                   | Building service pipes           | 32,506             | GSF  | \$ 9.83    | \$ 313,033          |
|                                     |                                  |                    |      | \$ -       | \$ -                |
| SUB-TOTAL                           |                                  |                    |      |            | \$ 313,033          |
| 15700                               | HVAC EQUIPMENT                   | QUANTITY           | UNIT | UNIT PRICE | AMOUNT              |
| 15700                               | HVAC Equipment                   |                    |      |            |                     |
| 1                                   | HVAC equipment                   | 32,506             | GSF  | \$ 12.73   | \$ 413,801          |
|                                     |                                  |                    |      | \$ -       | \$ -                |
| SUB-TOTAL                           |                                  |                    |      |            | \$ 413,801          |
| 15800                               | AIR DISTRIBUTION                 | QUANTITY           | UNIT | UNIT PRICE | AMOUNT              |
| 15800                               | Air Distribution                 |                    |      |            |                     |
| 1                                   | Air distribution                 | 32,506             | GSF  | \$ 9.01    | \$ 292,879          |
|                                     |                                  |                    |      | \$ -       | \$ -                |
| SUB-TOTAL                           |                                  |                    |      |            | \$ 292,879          |
| 15900                               | HVAC INSTRUMENTATION AND CONTROL | QUANTITY           | UNIT | UNIT PRICE | AMOUNT              |
| 15950                               | Automatic Temperature Controls   |                    |      |            |                     |
| 1                                   | Automatic temperature controls   | 32,506             | GSF  | \$ 7.30    | \$ 237,294          |
|                                     |                                  |                    |      | \$ -       | \$ -                |
| SUB-TOTAL                           |                                  |                    |      |            | \$ 237,294          |
| 15950                               | TESTING, ADJUSTING AND BALANCING | QUANTITY           | UNIT | UNIT PRICE | AMOUNT              |
| 15950                               | Testing, Adjusting and Balancing |                    |      |            |                     |
| 1                                   | Testing, etc.                    | 32,506             | GSF  | \$ 2.07    | \$ 67,287           |
|                                     |                                  |                    |      | \$ -       | \$ -                |
| SUB-TOTAL                           |                                  |                    |      |            | \$ 67,287           |
| <b>TOTAL FOR DIVISION 15 - HVAC</b> |                                  |                    |      |            | <b>\$ 1,324,294</b> |

| 16        |                                    | DIVISION 16 - ELECTRICAL |      |              |            |
|-----------|------------------------------------|--------------------------|------|--------------|------------|
| 16200     | ELECTRIC POWER                     | QUANTITY                 | UNIT | UNIT PRICE   | AMOUNT     |
| 16200     | Electrical Power                   |                          |      |              |            |
| 1         | Electric power                     | 32,506                   | GSF  | \$ 13.57     | \$ 441,108 |
|           |                                    |                          |      | \$ -         | \$ -       |
| SUB-TOTAL |                                    |                          |      |              | \$ 441,108 |
| 16500     | LIGHTING                           | QUANTITY                 | UNIT | UNIT PRICE   | AMOUNT     |
| 16510     | Interior Luminares                 |                          |      |              |            |
| 1         | Lighting                           | 32,506                   | GSF  | \$ 6.88      | \$ 217,140 |
| 2         | Theater Lighting & Control System: | 1                        | EA   | \$ 74,550.00 | \$ 74,550  |
|           |                                    |                          |      | \$ -         | \$ -       |
| SUB-TOTAL |                                    |                          |      |              | \$ 291,690 |



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| 16900                                     | SPECIAL SYSTEMS     | QUANTITY  | UNIT | UNIT PRICE | AMOUNT              |
|---|---------------------|-----------|------|------------|---------------------|
| 16900                                     | Special Systems     |           |      |            |                     |
| 1   | Special systems     | 32,506    | GSF  | \$ 12.44   | \$ 404,376          |
|   |                     |           |      | \$         | \$                  |
|   |                     | SUB-TOTAL |      |            | \$ 404,376          |
| 16900                                     | MISCELLANEOUS       | QUANTITY  | UNIT | UNIT PRICE | AMOUNT              |
| 16900                                     | Miscellaneous Items |           |      |            |                     |
| 1   | Miscellaneous items | 32,508    | GSF  | \$ 2.80    | \$ 84,518           |
|   |                     |           |      | \$         | \$                  |
|   |                     | SUB-TOTAL |      |            | \$ 84,518           |
| <b>TOTAL FOR DIVISION 16 - ELECTRICAL</b> |                     |           |      |            | <b>\$ 1,221,667</b> |

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|  |                      |          |            |        |
|--|----------------------|----------|------------|--------|
| PHASE: SCHEMATIC ESTIMATE REVISION 1   | PROJECT AREA ( SF ): |          |            |        |
| BUILDING TYPE:   | NEW CONST.           | ADDITION | RENOVATION | TOTAL  |
| <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> RETAIL <input checked="" type="checkbox"/> EDUCATIONAL | 91,929               | 0        | 0          | 91,929 |

PROJECT TYPE:

NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58  
 EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD  
 LOCATION: ROCHESTER, NEW YORK 14621  
 A/E: JCJ ARCHITECTURE  
 CM: RJSCB / GILBANE  
 PROJECT #:

| DIVISION                     | DESCRIPTION   | QUANTITY | UNIT          | UNIT PRICE  | AMOUNT     |
|------------------------------|---|----------|---------------|-------------|------------|
| <b>DIVISION 2 - SITEWORK</b> |   |          |               |             |            |
| 02200                        | <b>SITE PREPARATION</b>   |          |               |             |            |
| 02220                        | <b>Selective Demolition</b>   |          |               |             |            |
| <i>Lower Level</i>           |   |          |               |             |            |
| 1                            | Remove existing exterior walls ( Demo Note 1 )  | 1,088    | SF            | \$ 10.00    | \$ 10,880  |
| 2                            | Remove existing interior walls ( Demo Note 1 )  | 8,442    | SF            | \$ 5.00     | \$ 42,210  |
| 3                            | Remove existing exterior stairs ( Demo Note 2 )   | 70       | SF            | \$ 30.00    | \$ 2,100   |
| 4                            | Remove existing interior stairs ( Demo Note 2 )   | 393      | SF            | \$ 30.00    | \$ 11,790  |
| 5                            | Remove existing millwork; base cabinets and worktops ( Demo Note 14 )   | 282      | LF            | \$ 20.00    | \$ 5,240   |
| 6                            | Remove existing millwork; wall cabinets ( Demo Note 14 )  | 49       | LF            | \$ 20.00    | \$ 980     |
| 7                            | Remove existing millwork; closets ( Demo Note 14 )  | 32       | LF            | \$ 20.00    | \$ 640     |
| 8                            | Remove existing millwork; WC partitions and doors ( Demo Note 14 )  | 1        | EA            | \$ 150.00   | \$ 150     |
| 9                            | Remove existing exterior doors; single; including frames and hardware ( Demo Note 4 )   | 1        | EA            | \$ 125.00   | \$ 125     |
| 10                           | Remove existing exterior doors; double; including frames and hardware ( Demo Note 4 )   | 1        | PAIR          | \$ 150.00   | \$ 150     |
| 11                           | Remove existing interior doors; single; including frames and hardware ( Demo Note 4 )   | 24       | EA            | \$ 125.00   | \$ 3,000   |
| 12                           | Remove existing interior doors; double; including frames and hardware ( Demo Note 4 )   | 15       | PAIR          | \$ 160.00   | \$ 2,250   |
| 13                           | Remove existing grills and fire-shutters ( Demo Note 28 ) ( Allowance )   | 448      | SF            | \$ 10.00    | \$ 4,480   |
| 14                           | Remove existing windows ( Demo Note 20 )  | 2,931    | SF            | \$ 10.00    | \$ 29,310  |
| 15                           | Remove existing floor finishes  | 33,782   | SF            | \$ 1.50     | \$ 50,643  |
| 16                           | Remove existing lifts ( Demo Note 26 )  | 1        | EA            | \$ 2,000.00 | \$ 2,000   |
| 17                           | Remove existing plumbing fixtures; including piping ( Demo Note 12 )  |          | SEE "DIV. 15" | \$ -        | \$ -       |
| 18                           | Remove existing mechanical equipment complete ( Demo Note 13 )  |          | SEE "DIV. 15" | \$ -        | \$ -       |
| 19                           | Altering and adapting existing raised floor area in area of new Elementary / High School Dining to form new steps / bleachers | 1,560    | SF            | \$ 25.00    | \$ 39,000  |
| <i>Ground Floor Level</i>    |   |          |               |             |            |
| 1                            | Remove existing exterior walls ( Demo Note 1 )  | 1,080    | SF            | \$ 10.00    | \$ 10,800  |
| 2                            | Remove existing interior walls ( Demo Note 1 )  | 14,804   | SF            | \$ 5.00     | \$ 73,020  |
| 3                            | Remove existing floor construction  | 2,498    | SF            | \$ 26.00    | \$ 62,460  |
| 4                            | Remove existing interior stairs ( Demo Note 2 )   | 623      | SF            | \$ 30.00    | \$ 18,690  |
| 5                            | Remove existing glazed partitions ( Demo Note 14 )  | 158      | SF            | \$ 10.00    | \$ 1,580   |
| 6                            | Remove existing millwork; base cabinets and worktops ( Demo Note 14 )   | 780      | LF            | \$ 20.00    | \$ 15,600  |
| 7                            | Remove existing millwork; closets ( Demo Note 14 )  | 302      | LF            | \$ 20.00    | \$ 6,040   |
| 8                            | Remove existing millwork; WC partitions and doors ( Demo Note 14 )  | 6        | EA            | \$ 150.00   | \$ 900     |
| 9                            | Remove existing exterior doors; double; including frames and hardware ( Demo Note 4 )   | 4        | PAIR          | \$ 150.00   | \$ 600     |
| 10                           | Remove existing interior doors; single; including frames and hardware ( Demo Note 4 )   | 50       | EA            | \$ 125.00   | \$ 6,250   |
| 11                           | Remove existing interior doors; double; including frames and hardware ( Demo Note 4 )   | 13       | PAIR          | \$ 150.00   | \$ 1,950   |
| 12                           | Remove existing grills and fire-shutters ( Demo Note 28 )   |          | NONE          | \$ -        | \$ -       |
| 13                           | Remove existing windows ( Demo Note 20 )  | 5,106    | SF            | \$ 10.00    | \$ 51,060  |
| 14                           | Remove existing stained glass windows; clean and store on-site for re-installation ( Demo Note 22 )                           | 385      | SF            | \$ 25.00    | \$ 9,625   |
| 15                           | Remove existing interior windows ( Demo Note 20 )   | 179      | SF            | \$ 10.00    | \$ 1,790   |
| 16                           | Remove existing floor finishes  | 39,013   | SF            | \$ 1.50     | \$ 58,520  |
| 17                           | Remove existing ACT ceiling finishes  | 18,210   | SF            | \$ 1.25     | \$ 22,763  |
| 18                           | Remove existing plumbing fixtures; including piping ( Demo Note 12 )  |          | SEE "DIV. 15" | \$ -        | \$ -       |
| 19                           | Remove existing mechanical equipment complete ( Demo Note 13 )  |          | SEE "DIV. 15" | \$ -        | \$ -       |
| <i>Upper Level</i>           |   |          |               |             |            |
| 1                            | Remove existing interior walls ( Demo Note 1 )  | 3,338    | SF            | \$ 5.00     | \$ 16,690  |
| 2                            | Remove existing roof construction   | 4,222    | SF            | \$ 25.00    | \$ 105,550 |
| 3                            | Remove existing millwork; base cabinets and worktops ( Demo Note 14 )   | 416      | LF            | \$ 20.00    | \$ 8,320   |
| 4                            | Remove existing millwork; wall cabinets ( Demo Note 14 )  | 18       | LF            | \$ 20.00    | \$ 360     |
| 5                            | Remove existing millwork; closets ( Demo Note 14 )  | 286      | LF            | \$ 20.00    | \$ 5,720   |

PROJECT DETAILED ESTIMATE - RENOVATIONS

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|  |   |        |               |           |                   |
|--|---|--------|---------------|-----------|-------------------|
| 6                                      | Remove existing millwork; lockers ( Demo Note 14 )                                    | 13     | EA            | \$ 20.00  | \$ 260            |
| 7                                      | Remove existing interior doors; single; including frames and hardware ( Demo Note 4 ) | 3      | EA            | \$ 125.00 | \$ 375            |
| 8                                      | Remove existing interior doors; double; including frames and hardware ( Demo Note 4 ) | 1      | PAIR          | \$ 150.00 | \$ 150            |
| 9                                      | Remove existing grills and fire-shutters ( Demo Note 28 )                             |        | NONE          | \$ -      | \$ -              |
| 10                                     | Remove existing windows ( Demo Note 20 )  | 3,312  | SF            | \$ 10.00  | \$ 33,120         |
| 11                                     | Remove existing skylights   | 311    | SF            | \$ 20.00  | \$ 6,220          |
| 12                                     | Remove existing floor finishes  | 19,164 | SF            | \$ 1.50   | \$ 28,731         |
| 13                                     | Remove existing ACT ceiling finishes  | 11,003 | SF            | \$ 1.25   | \$ 13,754         |
| 14                                     | Remove existing plumbing fixtures; including piping ( Demo Note 12 )                  |        | SEE "DIV. 15" | \$ -      | \$ -              |
| 02250                                  | <b>Shoring and Underpinning</b>   |        |               |           |                   |
| 1                                      | Shoring existing floors @ Ground Level where exterior walls removed @ Lower Level     | 91     | LF            | \$ 50.00  | \$ 4,550          |
| 2                                      | Shoring existing floors @ Upper Level where exterior walls removed @ Ground Level     | 91     | LF            | \$ 50.00  | \$ 4,550          |
| <b>SUB-TOTAL</b>                       |   |        |               |           | <b>\$ 774,885</b> |
| <b>TOTAL FOR DIVISION 2 - SITEWORK</b> |   |        |               |           | <b>\$ 774,885</b> |

|  |                               |                 |             |                   |               |
|--|-------------------------------|-----------------|-------------|-------------------|---------------|
| <b>DIVISION 3 - CONCRETE</b>           |                               |                 |             |                   |               |
| 3                                      | <b>CAST-IN PLACE CONCRETE</b> | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b> |
| 03300                                  | <b>Structural Concrete</b>    |                 |             |                   |               |
| 03310                                  | Concrete                      |                 | NONE        | \$ -              | \$ -          |
| 1                                      |                               |                 |             | \$ -              | \$ -          |
| <b>SUB-TOTAL</b>                       |                               |                 |             |                   | <b>\$ -</b>   |
| <b>TOTAL FOR DIVISION 3 - CONCRETE</b> |                               |                 |             |                   | <b>\$ -</b>   |

|                                       |   |                 |             |                   |                   |
|---------------------------------------|---|-----------------|-------------|-------------------|-------------------|
| <b>DIVISION 4 - MASONRY</b>           |   |                 |             |                   |                   |
| 4                                     | <b>MASONRY UNITS</b>                                  | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>     |
| 04200                                 | <b>Concrete Masonry Units</b>                         |                 |             |                   |                   |
| 04220                                 | Concrete masonry units                                |                 | NONE        | \$ -              | \$ -              |
| 1                                     |   |                 |             | \$ -              | \$ -              |
| <b>SUB-TOTAL</b>                      |   |                 |             |                   | <b>\$ -</b>       |
| 04900                                 | <b>RESTORATION AND CLEANING</b>                       | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>     |
| 04910                                 | <b>Unit Masonry Restoration</b>                       |                 |             |                   |                   |
| 1                                     | Repointing existing face brick facades                | 24,149          | SF          | \$ 7.00           | \$ 169,043        |
| 2                                     | Repairing existing face brick facades ( Assumed 10% ) | 2,415           | SF          | \$ 50.00          | \$ 120,750        |
| 3                                     | Scaffolding for facade repairs                        | 44,174          | SF          | \$ 8.00           | \$ 353,392        |
| 04920                                 | <b>Stone Restoration</b>                              |                 |             |                   |                   |
| 1                                     | Repointing existing stone facades                     | 8,678           | SF          | \$ 5.50           | \$ 47,718         |
| 2                                     | Repairing existing stone facades ( Assumed 25% )      | 2,169           | SF          | \$ 50.00          | \$ 108,450        |
| <b>SUB-TOTAL</b>                      |   |                 |             |                   | <b>\$ 799,353</b> |
| <b>TOTAL FOR DIVISION 4 - MASONRY</b> |   |                 |             |                   | <b>\$ 799,353</b> |

|                            |  |                 |             |                   |                  |
|----------------------------|--|-----------------|-------------|-------------------|------------------|
| <b>DIVISION 5 - METALS</b> |  |                 |             |                   |                  |
| 5                          | <b>STRUCTURAL METAL FRAMING</b>  | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>    |
| 05100                      | <b>Structural Steel</b>  |                 |             |                   |                  |
| 05120                      | Structural steel @ roof framing @ Ground Level; Inside existing Courtyard            | 2               | TONS        | \$ 4,000.00       | \$ 8,000         |
| 1                          | Miscellaneous steel (lintels, angles, brackets - Allowance)                          | 1               | LS          | \$ 10,000.00      | \$ 10,000        |
| 2                          |  |                 |             | \$ -              | \$ -             |
| <b>SUB-TOTAL</b>           |  |                 |             |                   | <b>\$ 18,000</b> |
| 05300                      | <b>METAL DECK</b>  | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>    |
| 05310                      | <b>Steel Deck</b>  |                 |             |                   |                  |
| 1                          | Metal deck @ roof framing @ Ground Level; 1/2" x 22 gauge; Inside existing Courtyard | 720             | SF          | \$ 2.50           | \$ 1,800         |
| <b>SUB-TOTAL</b>           |  |                 |             |                   | <b>\$ 1,800</b>  |



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WORLD OF INQUIRY SCHOOL # 58

PROJECT DETAILED ESTIMATE - RENOVATIONS

9/12/2011

| DIVISION 8 - DOORS AND WINDOWS |  |                  |       |              |                   |
|--------------------------------|--|------------------|-------|--------------|-------------------|
| 8                              | DOORS AND FRAMES   | QUANTITY         | UNIT  | UNIT PRICE   | AMOUNT            |
| 08100                          | <b>DOORS AND FRAMES</b>  |                  |       |              |                   |
| 08100                          | <b>Doors and Frames</b>  |                  |       |              |                   |
| 1                              | Exterior doors @ Lower Level; steel; Type D; double; including frames and hardware   | 3                | PAIRS | \$ 2,000.00  | \$ 6,000          |
| 2                              | Exterior doors @ Ground Level; wood; Type A; double; including frames and hardware   | 2                | PAIRS | \$ 2,000.00  | \$ 4,000          |
| 3                              | Exterior doors @ Ground Level; steel; Type C; double; including frames and hardware  | 1                | PAIRS | \$ 2,000.00  | \$ 2,000          |
| 4                              | Exterior doors @ Ground Level; steel; Type D; double; including frames and hardware  | 3                | PAIRS | \$ 2,000.00  | \$ 6,000          |
| 5                              | (X-Cost) Fire-rating; 90 minutes   | 2                | EA    | \$ 100.00    | \$ 200            |
| 6                              | Interior doors @ Lower Level; wood; Type A; single; including frames and hardware  | 49               | EA    | \$ 1,500.00  | \$ 73,500         |
| 7                              | (X-Cost) Fire-rating; 45 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 8                              | (X-Cost) Fire-rating; 90 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 9                              | Interior doors @ Lower Level; wood; Type A; single; between existing building and new addition; including frames and hardware          | 2                | EA    | \$ 1,500.00  | \$ 3,000          |
| 10                             | Interior doors @ Lower Level; wood; Type A; double; including frames and hardware  | 6                | PAIRS | \$ 2,000.00  | \$ 12,000         |
| 11                             | (X-Cost) Fire-rating; 45 minutes   | 4                | EA    | \$ 100.00    | \$ 400            |
| 12                             | (X-Cost) Fire-rating; 90 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 13                             | Interior doors @ Lower Level; hollow metal; Type A; single; including frames and hardware  | 3                | EA    | \$ 1,500.00  | \$ 4,500          |
| 14                             | (X-Cost) Fire-rating; 90 minutes   | 2                | EA    | \$ 100.00    | \$ 200            |
| 15                             | Interior doors @ Lower Level; hollow metal; Type E; single; including frames and hardware  | 4                | EA    | \$ 1,500.00  | \$ 6,000          |
| 16                             | (X-Cost) Fire-rating; 90 minutes   | 2                | EA    | \$ 100.00    | \$ 200            |
| 17                             | Interior doors @ Lower Level; hollow metal; Type E; double; including frames and hardware  | 1                | EA    | \$ 1,250.00  | \$ 1,250          |
| 18                             | Interior doors @ Lower Level; hollow metal; Type F; double (2 x 3'); including frames and hardware                                     | 2                | EA    | \$ 2,000.00  | \$ 4,000          |
| 19                             | (X-Cost) Fire-rating; 80 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 20                             | Interior doors @ Lower Level; hollow metal; Type F; double (2 x 4'); including frames and hardware                                     | 1                | EA    | \$ 2,000.00  | \$ 2,000          |
| 21                             | Interior doors @ Ground Level; wood; Type A; single; including frames and hardware   | 34               | EA    | \$ 1,500.00  | \$ 51,000         |
| 22                             | (X-Cost) Acoustic rating   | 7                | EA    | \$ 100.00    | \$ 700            |
| 23                             | Interior doors @ Ground Level; wood; Type A; double; including frames and hardware   | 1                | PAIRS | \$ 2,000.00  | \$ 2,000          |
| 24                             | Interior doors @ Ground Level; wood; Type B; double; including frames and hardware   | 1                | PAIRS | \$ 2,000.00  | \$ 2,000          |
| 25                             | (X-Cost) Fire-rating; 45 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 26                             | Interior doors @ Ground Level; wood; Type B; double; between existing building and new addition; including frames and hardware         | 4                | PAIRS | \$ 2,000.00  | \$ 8,000          |
| 27                             | (X-Cost) Fire-rating; 90 minutes   | 4                | EA    | \$ 100.00    | \$ 400            |
| 28                             | Interior doors @ Ground Level; hollow metal; Type A; single; including frames and hardware   | 1                | EA    | \$ 1,250.00  | \$ 1,250          |
| 29                             | Interior doors @ Ground Level; hollow metal; Type E; single; including frames and hardware   | 6                | EA    | \$ 1,500.00  | \$ 9,000          |
| 30                             | Interior doors @ Ground Level; hollow metal; Type E; single; between existing building and new addition; including frames and hardware | 1                | EA    | \$ 1,500.00  | \$ 1,500          |
| 31                             | Interior doors @ Ground Level; steel; Type D; double; including frames and hardware  | 2                | PAIRS | \$ 2,000.00  | \$ 4,000          |
| 32                             | (X-Cost) Fire-rating; 80 minutes   | 2                | EA    | \$ 100.00    | \$ 200            |
| 33                             | Interior doors @ Upper Level; wood; Type A; single; including frames and hardware  | 24               | EA    | \$ 1,500.00  | \$ 36,000         |
| 34                             | Interior doors @ Upper Level; wood; Type B; double; including frames and hardware  | 4                | PAIRS | \$ 2,000.00  | \$ 8,000          |
| 35                             | (X-Cost) Fire-rating; 90 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 36                             | Interior doors @ Upper Level; wood; Type B; double; between existing building and new addition; including frames and hardware          | 1                | PAIRS | \$ 2,000.00  | \$ 2,000          |
| 37                             | (X-Cost) Fire-rating; 80 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 38                             | Interior doors @ Upper Level; hollow metal; Type E; single; including frames and hardware  | 5                | EA    | \$ 1,500.00  | \$ 7,500          |
| 39                             | (X-Cost) Fire-rating; 90 minutes   | 1                | EA    | \$ 100.00    | \$ 100            |
| 40                             | Miscellaneous non-detailed doors   | 19               | EA    | \$ 2,000.00  | \$ 38,000         |
|                                |  |                  |       | \$           | \$                |
|                                |  | <b>SUB-TOTAL</b> |       |              | <b>\$ 297,800</b> |
| 08300                          | <b>SPECIALTY DOORS</b>   |                  |       |              |                   |
| 08311                          | <b>Access Doors and Frames</b>   |                  |       |              |                   |
| 1                              | Access doors and frames  | 91,929           | GSF   | \$ 0.30      | \$ 27,579         |
| 08360                          | <b>Overhead Doors</b>  |                  |       |              |                   |
| 1                              | Roll-down shutter @ Servery; 23' 6" x 11'  | 1                | EA    | \$ 20,000.00 | \$ 20,000         |
|                                |  |                  |       | \$           | \$                |
|                                |  | <b>SUB-TOTAL</b> |       |              | <b>\$ 47,579</b>  |

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| 08500   |  | WINDOWS  | QUANTITY | UNIT | UNIT PRICE   | AMOUNT              |
|---|--|--|----------|------|--------------|---------------------|
| 08520   |  | Aluminum and Glass Windows   |          |      |              |                     |
| 1   |  | Aluminum and glass windows @ Lower Level   | 2,931    | SF   | \$ 60.00     | \$ 175,860          |
| 2   |  | Aluminum and glass windows @ Ground Level  | 5,108    | SF   | \$ 60.00     | \$ 306,360          |
| 3   |  | Aluminum and glass windows @ Upper Level   | 3,312    | SF   | \$ 60.00     | \$ 198,720          |
| 08800   |  | Special Function Windows   |          |      |              |                     |
| 1   |  | Aluminum/ glass service windows; interior @ Nurse Office   | 1        | EA   | \$ 3,000.00  | \$ 3,000            |
| 2   |  | Sidelights @ doors   | 91,929   | GSF  | \$ 1.00      | \$ 91,929           |
| 3   |  | Miscellaneous interior windows   | 1        | LS   | \$ 20,000.00 | \$ 20,000           |
|   |  | <b>SUB-TOTAL</b>   |          |      |              | <b>\$ 785,869</b>   |
| 08600   |  | GLAZING  |          |      |              |                     |
| 08690   |  | Glazing Restoration (Allowance)<br>Repair, renovation and reinstallation of existing glass windows |          | LS   | \$ 75,000.00 | \$ 75,000           |
|   |  | <b>SUB-TOTAL</b>   |          |      |              | <b>\$ 75,000</b>    |
| <b>TOTAL FOR DIVISION 8 - DOORS AND WINDOWS</b> |  |  |          |      |              | <b>\$ 1,216,048</b> |
| 9   |  | <b>DIVISION 9 - FINISHES</b>   |          |      |              |                     |
| 09200   |  | PLASTER AND GYPSUM BOARD   |          |      |              |                     |
| 09260   |  | Gypsum Board Assemblies  |          |      |              |                     |
| 1   |  | Metal stud demising partitions @ Lower Level   | 9,180    | SF   | \$ 8.50      | \$ 78,030           |
| 2   |  | Metal stud demising partitions @ Ground Level  | 5,550    | SF   | \$ 8.50      | \$ 47,175           |
| 3   |  | Metal stud demising partitions @ Upper Level   | 2,608    | SF   | \$ 8.50      | \$ 21,318           |
| 4   |  | Metal stud demising partitions @ Lower Level; in filling existing openings                         | 367      | SF   | \$ 10.50     | \$ 3,854            |
| 5   |  | Metal stud demising partitions @ Ground Level; in filling existing openings                        | 878      | SF   | \$ 10.50     | \$ 9,219            |
| 6   |  | Metal stud demising partitions @ Upper Level; in filling existing openings                         | 277      | SF   | \$ 10.50     | \$ 2,909            |
| 7   |  | Metal stud shaft walls @ elevators @ Lower Level   | 480      | SF   | \$ 8.50      | \$ 4,080            |
| 8   |  | Metal stud shaft walls @ elevators @ Ground Level  | 480      | SF   | \$ 8.50      | \$ 4,080            |
| 9   |  | Metal stud shaft walls @ elevators @ Upper Level   | 480      | SF   | \$ 8.50      | \$ 4,080            |
| 10  |  | Miscellaneous metal stud walls   | 1        | LS   | \$ 25,000.00 | \$ 25,000           |
| 11  |  | Miscellaneous GWB soffit and bulkheads   | 1        | LS   | \$ 20,000.00 | \$ 20,000           |
|   |  | <b>SUB-TOTAL</b>   |          |      |              | <b>\$ 219,744</b>   |
| 09300   |  | TILE   |          |      |              |                     |
| 09310   |  | Ceramic Tile   |          |      |              |                     |
| 1   |  | Ceramic tile @ floors @ Lower Level  | 1,023    | SF   | \$ 12.00     | \$ 12,276           |
| 2   |  | Ceramic tile @ floors @ Ground Level   | 874      | SF   | \$ 12.00     | \$ 10,488           |
| 3   |  | Ceramic tile @ floors @ Upper Level  | 827      | SF   | \$ 12.00     | \$ 9,924            |
| 4   |  | Ceramic tile @ base @ Lower Level  | 338      | LF   | \$ 12.00     | \$ 4,032            |
| 5   |  | Ceramic tile @ base @ Ground Level   | 302      | LF   | \$ 12.00     | \$ 3,624            |
| 6   |  | Ceramic tile @ base @ Upper Level  | 288      | LF   | \$ 12.00     | \$ 3,456            |
| 7   |  | Quarry tile @ floors @ Lower Level   | 933      | SF   | \$ 15.00     | \$ 13,995           |
| 8   |  | Quarry tile @ base @ Lower Level   | 215      | SF   | \$ 15.00     | \$ 3,225            |
|   |  | <b>SUB-TOTAL</b>   |          |      |              | <b>\$ 61,140</b>    |
| 09500   |  | CEILING  |          |      |              |                     |
| 09510   |  | Acoustical Ceilings  |          |      |              |                     |
| 1   |  | ACT ceilings @ Lower Level; 2' x 4'  | 20,843   | SF   | \$ 4.00      | \$ 83,372           |
| 2   |  | ACT ceilings @ Ground Level; 2' x 4'   | 28,890   | SF   | \$ 4.00      | \$ 114,760          |
| 3   |  | ACT ceilings @ Upper Level; 2' x 4'  | 17,383   | SF   | \$ 4.00      | \$ 69,532           |
| 4   |  | ACT ceilings @ Lower Level; scrubbable; 2' x 4'  | 1,596    | SF   | \$ 4.00      | \$ 6,384            |
| 09545   |  | Specialty Ceilings   |          |      |              |                     |
| 1   |  | Suspended ceiling "clouds" @ Lower Level   | 5,229    | SF   | \$ 25.00     | \$ 130,725          |
| 2   |  | Suspended ceiling "clouds" @ Ground Level  | 5,171    | SF   | \$ 25.00     | \$ 129,275          |
|   |  | <b>SUB-TOTAL</b>   |          |      |              | <b>\$ 534,048</b>   |
| 09600   |  | FLOORING   |          |      |              |                     |
| 09620   |  | Resilient Flooring   |          |      |              |                     |
| 1   |  | VCT @ floors @ Lower Level   | 22,882   | SF   | \$ 2.50      | \$ 57,205           |
| 2   |  | VCT @ floors @ Ground Level  | 23,020   | SF   | \$ 2.50      | \$ 57,550           |
| 3   |  | VCT @ floors @ Upper Level   | 15,153   | SF   | \$ 2.50      | \$ 37,883           |
| 4   |  | Linoleum @ floors @ Lower Level  | 1,753    | SF   | \$ 10.00     | \$ 17,530           |
| 5   |  | Linoleum @ floors @ Ground Level   | 559      | SF   | \$ 10.00     | \$ 5,590            |
| 6   |  | Linoleum @ floors @ Upper Level  | 1,402    | SF   | \$ 10.00     | \$ 14,020           |
| 7   |  | Rubber base @ Lower Level  | 4,991    | LF   | \$ 4.00      | \$ 19,964           |
| 8   |  | Rubber base @ Ground Level   | 5,584    | LF   | \$ 4.00      | \$ 22,256           |
| 9   |  | Rubber base @ Upper Level  | 2,973    | LF   | \$ 4.00      | \$ 11,892           |
| 09620   |  | Specialty Flooring   |          |      |              |                     |
| 1   |  | Rubber sport flooring @ Fitness Room   | 1,228    | SF   | \$ 10.00     | \$ 12,280           |
| 09670   |  | Fluid Applied Flooring   |          |      |              |                     |
| 1   |  | Concrete sealer @ floors @ Lower Level   | 504      | SF   | \$ 2.00      | \$ 1,008            |

PROJECT DETAILED ESTIMATE - RENOVATIONS

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| 09680 | Carpet                         |       |    |         |           |
|-------|--------------------------------|-------|----|---------|-----------|
| 1     | Carpet @ floors @ Lower Level  | 1,078 | SF | \$ 5.00 | \$ 5,390  |
| 2     | Carpet @ floors @ Ground Level | 8,181 | SF | \$ 5.00 | \$ 40,905 |

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| 09690                                  |  | Flooring Restoration          |      |              |                     |
|--|--|-------------------------------|------|--------------|---------------------|
| 1                                      | Preparing and patching existing floors to receive new finishes       | 91,929                        | SF   | \$ 3.00      | \$ 275,787          |
|  |  | SUB-TOTAL                     |      |              | \$ 275,787          |
| 09800                                  |  | ACOUSTICAL TREATMENT          |      |              |                     |
| 09820                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| Acoustical Insulation and Sealants     |  |                               |      |              |                     |
| 1                                      | Acoustical wall panels @ Music Room and Practice Rooms ( Allowance ) | 1,486                         | SF   | \$ 15.00     | \$ 22,290           |
| 2                                      | Acoustical wall panels @ Cafeteria ( Allowance )                     | 2,190                         | SF   | \$ 15.00     | \$ 32,850           |
|  |  | SUB-TOTAL                     |      |              | \$ 55,140           |
| 09900                                  |  | PAINTS AND COATINGS           |      |              |                     |
| 09910                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| Paints                                 |  |                               |      |              |                     |
| 1                                      | Paint @ CMU / GWB walls @ Lower Level                                | 51,788                        | SF   | \$ 1.00      | \$ 51,788           |
| 2                                      | Paint @ CMU / GWB walls @ Ground Level                               | 56,925                        | SF   | \$ 1.00      | \$ 56,925           |
| 3                                      | Paint @ CMU / GWB walls @ Upper Level                                | 27,735                        | SF   | \$ 1.00      | \$ 27,735           |
| 4                                      | Paint @ CMU / GWB walls; epoxy; @ Lower Level                        | 5,439                         | SF   | \$ 1.50      | \$ 8,159            |
| 5                                      | Paint @ CMU / GWB walls; epoxy; @ Ground Level                       | 6,218                         | SF   | \$ 1.50      | \$ 9,327            |
| 6                                      | Paint @ CMU / GWB walls; epoxy; @ Upper Level                        | 2,780                         | SF   | \$ 1.50      | \$ 4,170            |
| 7                                      | Paint @ exposed ceiling structures @ Lower Level                     | 5,733                         | SF   | \$ 2.50      | \$ 14,333           |
| 8                                      | Paint @ exposed ceiling structures @ Ground Level                    | 5,171                         | SF   | \$ 2.50      | \$ 12,928           |
| 9                                      | Paint @ doors  | 59                            | EA   | \$ 100.00    | \$ 5,900            |
| 10                                     | Paint @ door frames; single  | 129                           | EA   | \$ 55.00     | \$ 7,095            |
| 11                                     | Paint @ door frames; double  | 32                            | EA   | \$ 65.00     | \$ 2,080            |
| 12                                     | Paint @ exposed structural steel                                     | 91,929                        | GSF  | \$ 0.50      | \$ 45,965           |
| 13                                     | Paint @ exposed mechanical installations                             | 91,929                        | GSF  | \$ 0.50      | \$ 45,965           |
| 14                                     | Paint @ miscellaneous surfaces                                       | 1                             | LS   | \$ 10,000.00 | \$ 10,000           |
|  |  | SUB-TOTAL                     |      |              | \$ 302,386          |
| <b>TOTAL FOR DIVISION 9 - FINISHES</b> |  |                               |      |              | <b>\$ 1,751,697</b> |
| 10                                     |  | DIVISION 10 - SPECIALTIES     |      |              |                     |
| 10100                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| VISUAL DISPLAY BOARDS                  |  |                               |      |              |                     |
| 10115                                  |  | Markerboards ( Allowances )   |      |              |                     |
| 1                                      | Markerboards; 4' high  | 362                           | LF   | \$ 60.00     | \$ 21,739           |
| 2                                      | Chalkboards with painted Music Staff                                 | 24                            | SF   | \$ 25.00     | \$ 600              |
| 10120                                  |  | Tackboards ( Allowance )      |      |              |                     |
| 1                                      | Tackboards   | 2,176                         | SF   | \$ 20.00     | \$ 43,520           |
| 2                                      | Tackstrip; 8" wide   | 362                           | LF   | \$ 14.00     | \$ 5,072            |
| 10140                                  |  | Display Boards ( Allowances ) |      |              |                     |
| 1                                      | Displayboards  | 492                           | SF   | \$ 20.00     | \$ 9,842            |
|  |  | SUB-TOTAL                     |      |              | \$ 80,773           |
| 10150                                  |  | COMPARTMENTS AND CUBICLES     |      |              |                     |
| 10150                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| Toilet Compartments                    |  |                               |      |              |                     |
| 1                                      | Toilet compartments  | 5                             | EA   | \$ 1,000.00  | \$ 5,000            |
| 2                                      | Toilet compartments; ADA   | 3                             | EA   | \$ 1,100.00  | \$ 3,300            |
| 3                                      | Urinal modesty screens   | 1                             | EA   | \$ 250.00    | \$ 250              |
| 10160                                  |  | Cubicles                      |      |              |                     |
| 1                                      | Cubicle curtain track and curtains @ Nurse Suite                     | 19                            | LF   | \$ 75.00     | \$ 1,425            |
|  |  | SUB-TOTAL                     |      |              | \$ 9,975            |
| 10200                                  |  | LOUVERS AND VENTS             |      |              |                     |
| 10210                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| Wall louvers ( Allowance )             |  |                               |      |              |                     |
| 1                                      | Wall louvers   | 1                             | LS   | \$ 5,000.00  | \$ 5,000            |
|  |  | SUB-TOTAL                     |      |              | \$ 5,000            |
| 10260                                  |  | WALL AND CORNER GUARDS        |      |              |                     |
| 10260                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| Wall and Corner Guards ( Allowance )   |  |                               |      |              |                     |
| 1                                      | Wall protection / handrails / corner guards                          | 1                             | LS   | \$ 25,000.00 | \$ 25,000           |
|  |  | SUB-TOTAL                     |      |              | \$ 25,000           |
| 10350                                  |  | FLAGPOLES                     |      |              |                     |
| 10350                                  |  | QUANTITY                      | UNIT | UNIT PRICE   | AMOUNT              |
| Flagpoles                              |  |                               |      |              |                     |
| 1                                      | Flagpoles  | 1                             | EA   | \$ 4,000.00  | \$ 4,000            |
|  |  | SUB-TOTAL                     |      |              | \$ 4,000            |





PROJECT DETAILED ESTIMATE - RENOVATIONS

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| 11400 FOOD SERVICE EQUIPMENT                           |   |          |      |               |                   |
|--|---|----------|------|---------------|-------------------|
| 11400  | Food Service Equipment  | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Food service equipment  | 1        | LS   | \$ 400,800.00 | \$ 400,800        |
| SUB-TOTAL  |   |          |      |               | \$ 400,800        |
| 11480 ATHLETIC, RECREATIONAL AND THERAPEUTIC EQUIPMENT |   |          |      |               |                   |
| 11480  | Athletic, Recreational and Therapeutic Equipment ( Allowances ) | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Kilns and kiln carts @ Art Rooms                                | 1        | EA   | \$ 2,500.00   | \$ 2,500          |
| 2  | Kiln exhaust hoods @ Art Rooms                                  | 1        | EA   | \$ 5,000.00   | \$ 5,000          |
| SUB-TOTAL  |   |          |      |               | \$ 7,500          |
| 11600 LABORATORY EQUIPMENT                             |   |          |      |               |                   |
| 11600  | Laboratory Equipment ( Allowances )                             | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Fume hoods @ Science Rooms                                      | 3        | EA   | \$ 12,000.00  | \$ 36,000         |
| 2  | Fume hoods @ Science Rooms; portable                            | 9        | EA   | \$ 10,000.00  | \$ 90,000         |
| 3  | Mobile plant study centers @ Science Rooms                      | 8        | EA   | \$ 6,500.00   | \$ 39,000         |
| 4  | Mobile laboratory carts @ Science Rooms                         | 3        | EA   | \$ 2,000.00   | \$ 6,000          |
| 5  | Drying ovens @ Science Rooms; 26" x 23" x 25"                   | 3        | EA   | \$ 3,000.00   | \$ 9,000          |
| 6  | Sterilizers @ Science Rooms                                     | 3        | EA   | \$ 1,700.00   | \$ 5,100          |
| 7  | Explosion proof refrigerators @ Science Rooms; 32" x 34" x 70"  | 3        | EA   | \$ 4,600.00   | \$ 13,500         |
| 8  | Icemakers @ Science Rooms                                       | 3        | EA   | \$ 1,850.00   | \$ 5,550          |
| SUB-TOTAL  |   |          |      |               | \$ 204,150        |
| <b>TOTAL FOR DIVISION 11 - EQUIPMENT</b>               |   |          |      |               | <b>\$ 982,950</b> |
| 12 DIVISION 12 - FURNISHINGS                           |   |          |      |               |                   |
| 12300 MANUFACTURED CASEWORK                            |   |          |      |               |                   |
| 12300  | Wood Casework ( Allowance )                                     | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Wood casework generally   | 91,929   | GSF  | \$ 5.00       | \$ 459,645        |
| SUB-TOTAL  |   |          |      |               | \$ 459,645        |
| 1  | Science Room Casework ( Allowances )                            | 91,929   | GSF  | \$ 1.00       | \$ 91,929         |
| SUB-TOTAL  |   |          |      |               | \$ 91,929         |
| 12400 FURNISHINGS AND ACCESSORIES                      |   |          |      |               |                   |
| 12400  | Rugs and Mats   | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Entrance foot grilles   | 103      | SF   | \$ 70.00      | \$ 7,210          |
| 12480  | Window Treatments ( Allowance )                                 | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Window treatments; blinds                                       | 11,349   | SF   | \$ 5.00       | \$ 56,745         |
| SUB-TOTAL  |   |          |      |               | \$ 63,955         |
| <b>TOTAL FOR DIVISION 12 - FURNISHINGS</b>             |   |          |      |               | <b>\$ 615,529</b> |
| 14 DIVISION 14 - CONVEYING SYSTEMS                     |   |          |      |               |                   |
| 14200 ELEVATORS  |   |          |      |               |                   |
| 14200  | Hydraulic Elevators   | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| 1  | Elevators; passenger; 3 stops, 3 floors                         | 1        | EA   | \$ 120,000.00 | \$ 120,000        |
| SUB-TOTAL  |   |          |      |               | \$ 120,000        |
| <b>TOTAL FOR DIVISION 14 - CONVEYING SYSTEMS</b>       |   |          |      |               | <b>\$ 120,000</b> |
| 15 MECHANICAL  |   |          |      |               |                   |
| DIVISION 15 - FIRE PROTECTION                          |   |          |      |               |                   |
| 15300 FIRE PROTECTION INSTALLATIONS                    |   |          |      |               |                   |
| 15300  | Fire Protection Pipe  | QUANTITY | UNIT | UNIT PRICE    | AMOUNT            |
| <i>Fire Protection Demolition :-</i>                   |   |          |      |               |                   |
| 1  | Double Check Detector Assembly Demolition                       | 1        | EA   | \$ 495.00     | \$ 495            |
| 2  | Fire Department Connection Demolition                           | 1        | EA   | \$ 182.50     | \$ 183            |
| 3  | Water Motor Gang Demolition                                     | 1        | EA   | \$ 135.00     | \$ 135            |
| 4  | Medium Bore Pipe Demolition                                     | 634      | LF   | \$ 12.45      | \$ 7,893          |
| 5  | Small Bore Pipe Demolition                                      | 2,028    | LF   | \$ 6.25       | \$ 12,675         |
| 6  | Sprinkler System Demolition (No Pipe on Plans)                  | 1,996    | SF   | \$ 2.35       | \$ 4,691          |

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PROJECT DETAILED ESTIMATE - RENOVATIONS

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| <b>Service From Site :-</b>                    |   |       |    |    |            |                   |
|--|---|-------|----|----|------------|-------------------|
| 1  | 8" Ductile Iron Pipe  | 18    | LF | \$ | 33.78      | \$ 608            |
| 2  | Mechanical Joint Fittings                                       | 1     | EA | \$ | 419.85     | \$ 420            |
| 3  | Exterior Wall Sleeves   | 1     | EA | \$ | 327.80     | \$ 328            |
| 4  | Thrust Blocks   | 1     | EA | \$ | 670.00     | \$ 570            |
| 5  | Excavation, Bedding, and Backfill                               | 18    | LF | \$ | 10.00      | \$ 180            |
| 6  | Gaskets, Lubricants, Etc.                                       | 1     | LS | \$ | 42.00      | \$ 42             |
| <b>Bulk Mains and Risers :-</b>                |   |       |    |    |            |                   |
| 1  | 8" Blk Stl Pipe Sch 40 Grooved                                  | 525   | LF | \$ | 30.41      | \$ 15,963         |
| 2  | 4" Blk Stl Pipe Sch 40 Grooved                                  | 84    | LF | \$ | 19.23      | \$ 1,616          |
| 3  | 2 1/2" Blk Stl Pipe Sch 40 Grooved                              | 21    | LF | \$ | 13.71      | \$ 288            |
| 4  | 2" Blk Stl Pipe Sch 40 T&C                                      | 84    | LF | \$ | 11.35      | \$ 953            |
| 5  | Grooved Fittings  | 79    | EA | \$ | 368.26     | \$ 29,000         |
| 6  | 125# Cast Iron Fittings   | 11    | EA | \$ | 53.90      | \$ 566            |
| 7  | Hangers   | 89    | EA | \$ | 42.78      | \$ 3,818          |
| 8  | 125# Cast Iron Gate Valves                                      | 10    | EA | \$ | 914.73     | \$ 9,147          |
| 9  | 125# Cast Iron Check Valves                                     | 4     | EA | \$ | 914.73     | \$ 3,658          |
| 10   | 125# Cast Iron Alarm Check Valves                               | 1     | EA | \$ | 2,058.34   | \$ 2,058          |
| 11   | 125# Cast Iron Dry Valves w/ Compressor, Air Maintenance Device | 1     | EA | \$ | 2,134.81   | \$ 2,135          |
| 12   | Double Check Detector Assemblies                                | 1     | EA | \$ | 3,413.48   | \$ 3,413          |
| 13   | Floor Control Valve Assemblies                                  | 3     | EA | \$ | 2,491.22   | \$ 7,474          |
| 14   | Fire Hose Valves  | 9     | EA | \$ | 221.93     | \$ 1,997          |
| 15   | Diesel Fire Pump, 115 HP w/ Tank, Exhaust                       | 1     | EA | \$ | 80,022.82  | \$ 80,023         |
| 16   | Fire Pump Test Header   | 1     | EA | \$ | 4,157.70   | \$ 4,158          |
| 17   | Fire Department Connection w/ Ball Drip                         | 2     | EA | \$ | 879.10     | \$ 1,358          |
| 18   | Roof Manifold   | 1     | EA | \$ | 3,430.27   | \$ 3,430          |
| 19   | Tamper Switches   | 15    | EA | \$ | 202.97     | \$ 3,045          |
| 20   | Flow Switches   | 6     | EA | \$ | 246.32     | \$ 1,476          |
| 21   | Floor Sleeves   | 15    | EA | \$ | 56.59      | \$ 848            |
| 22   | Lubricants, Etc.  | 1     | LS | \$ | 3,100.00   | \$ 3,100          |
| <b>Sprinkler Heads and Branch Pipe :-</b>      |   |       |    |    |            |                   |
| 1  | 165 Degree Sprinkler Heads w/ Branch Piping                     | 1,171 | EA | \$ | 522.68     | \$ 612,068        |
| 2  | 165 Degree Sprinkler Heads w/ Galvanized Branch Piping          | 2     | EA | \$ | 582.68     | \$ 1,165          |
| <b>Miscellaneous Items :-</b>                  |   |       |    |    |            |                   |
| 1  | Valve Tags, Pipe Identification                                 | 1     | LS | \$ | 4,909.04   | \$ 4,908          |
| 2  | Testing and Inspections   | 1     | LS | \$ | 4,432.05   | \$ 4,432          |
| 3  | Rigging, Hoisting, and Scaffolding                              | 1     | LS | \$ | 7,522.46   | \$ 7,522          |
| 4  | Drain, Fill and Venting   | 1     | LS | \$ | 2,954.70   | \$ 2,955          |
| 5  | Seismic Restraints, and Certification                           | 1     | LS | \$ | 9,104.38   | \$ 9,104          |
| 6  | Coordination Drawings, Submittals, As Bulte, O&M's              | 1     | LS | \$ | 9,287.36   | \$ 9,287          |
| <b>DEDUCT</b>                                  |   |       |    |    |            |                   |
| <b>ALLOCATION TO NEW "ADDITION"</b>            |   |       |    |    |            |                   |
|  |   | -1    | LS | \$ | 224,281.40 | \$ (224,281)      |
| <b>SUB-TOTAL</b>                               |   |       |    |    |            | <b>\$ 634,898</b> |
| <b>TOTAL FOR DIVISION 15 - FIRE PROTECTION</b> |   |       |    |    |            | <b>\$ 634,898</b> |

| <b>15 MECHANICAL</b>          |  |                 |             |                   |               |       |
|-------------------------------|--|-----------------|-------------|-------------------|---------------|-------|
| <b>DIVISION 15 - PLUMBING</b> |  |                 |             |                   |               |       |
| <b>15050</b>                  | <b>BASIC MATERIALS AND METHODS</b>             | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b> |       |
| <b>15095</b>                  | <b>Selective Plumbing Demolition</b>           |                 |             |                   |               |       |
| 1                             | Water Closet Demolition w/ Local Piping        | 20              | EA          | \$ 100.00         | \$            | 2,000 |
| 2                             | Sink Demolition w/ Local Piping                | 9               | EA          | \$ 90.50          | \$            | 815   |
| 3                             | Lavatory Demolition w/ Local Piping            | 15              | EA          | \$ 90.50          | \$            | 1,358 |
| 4                             | Urinal Demolition w/ Local Piping              | 3               | EA          | \$ 98.26          | \$            | 296   |
| 5                             | Washing Machine Box Demolition w/ Local Piping | 1               | EA          | \$ 57.50          | \$            | 58    |
| 6                             | Wash Fountain Demolition w/ Local Piping       | 1               | EA          | \$ 180.00         | \$            | 180   |
| 7                             | Drinking Fountain Demolition w/ Local Piping   | 4               | EA          | \$ 113.00         | \$            | 452   |
| 8                             | Janitors Sink Demolition                       | 10              | EA          | \$ 115.00         | \$            | 1,150 |
| 9                             | Emergency Shower Demolition                    | 1               | EA          | \$ 98.00          | \$            | 98    |
| 10                            | 200 Gallon Hot Water Tank Demolition           | 1               | EA          | \$ 572.50         | \$            | 573   |
| 11                            | 1,000 Gallon Hot Water Tank Demolition         | 1               | EA          | \$ 1,045.00       | \$            | 1,045 |
| 12                            | Water Meter Demolition                         | 1               | EA          | \$ 310.00         | \$            | 310   |
| 13                            | Backflow Preventor Demolition                  | 1               | EA          | \$ 310.00         | \$            | 310   |
| 14                            | House Vacuum Demolition                        | 1               | EA          | \$ 775.00         | \$            | 775   |
| 15                            | Domestic Water Heater Demolition               | 2               | EA          | \$ 700.00         | \$            | 1,400 |
| 16                            | Domestic Water Booster Pump Demolition         | 1               | EA          | \$ 1,225.00       | \$            | 1,225 |
| 17                            | Decorative Fountain Demolition                 | 1               | EA          | \$ 1,150.00       | \$            | 1,150 |
| 18                            | Sump Pump Demolition                           | 1               | EA          | \$ 140.00         | \$            | 140   |
| 19                            | Vacuum Outlet Demolition                       | 128             | EA          | \$ 62.50          | \$            | 8,000 |
| 20                            | Gas Pipe in Boiler Room Demolition             | 1               | LS          | \$ 2,050.00       | \$            | 2,050 |
| 21                            | Water Pipe in Boiler Room Demolition           | 1               | LS          | \$ 2,350.00       | \$            | 2,350 |
| 22                            | Medium Bore Pipe Demolition                    | 280             | LF          | \$ 12.45          | \$            | 3,488 |

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|                        |  |                 |             |                   |                   |
|------------------------|--|-----------------|-------------|-------------------|-------------------|
| 23                     | Small Bore Pipe Demolition   | 1248            | LF          | \$ 6.25           | \$ 7,800          |
| 24                     | Large Bore Pipe Demolition Underslab                                       | 932             | LF          | \$ 20.30          | \$ 18,920         |
| 25                     | Concrete Cutting   | 798             | LF          | \$ 35.80          | \$ 28,409         |
| 26                     | Excavation   | 932             | LF          | \$ 6.20           | \$ 5,778          |
| 27                     | Sanitary Soil Stack Demolition   | 23              | EA          | \$ 1,375.00       | \$ 31,625         |
| 28                     | Sanitary Vent Stack Demolition   | 23              | EA          | \$ 918.00         | \$ 21,114         |
| 29                     | Rain Leader Demolition   | 27              | EA          | \$ 1,375.00       | \$ 37,125         |
| 30                     | Roof Drain Demolition  | 38              | EA          | \$ 248.00         | \$ 9,348          |
| <b>DEDUCT</b>          |  |                 |             |                   |                   |
| 1                      | ALLOCATION TO NEW "ADDITION"   | -1              | LS          | \$ -              | \$ -              |
| <b>SUB-TOTAL</b>       |  |                 |             |                   | <b>\$ 189,308</b> |
| <b>15100</b>           | <b>BUILDING SERVICES PIPE</b>  | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>     |
| <b>15140</b>           | <b>Domestic Water Pipe</b>   |                 |             |                   |                   |
| 1                      | Domestic Cold Water Main Piping w/ Figs, Hgrs (L Copper)                   | 420             | LF          | \$ 61.11          | \$ 25,668         |
| 2                      | Domestic Hot Water Main Piping w/ Figs, Hgrs                               | 420             | LF          | \$ 48.43          | \$ 20,339         |
| 3                      | 140 Degree Domestic Hot Water Main to Kitchen w/ Figs, Hgrs                | 360             | LF          | \$ 26.77          | \$ 9,637          |
| 4                      | Domestic Hot Water Recirculation Piping w/ Figs, Hgrs                      | 780             | LF          | \$ 17.30          | \$ 13,494         |
| 5                      | Interior Hosebibbs w/ Piping   | 10              | EA          | \$ 722.50         | \$ 7,225          |
| 6                      | Water Service from Site w/ Fittings, Etc. (Ductile Iron)                   | 1               | LS          | \$ 1,989.00       | \$ 1,989          |
| 7                      | Water Service Valves, Specialties  | 1               | LS          | \$ 10,011.75      | \$ 10,012         |
| 8                      | Domestic Hot Water Mixing Stations w/ Valving, Specialties, Local Piping   | 2               | EA          | \$ 9,107.25       | \$ 18,215         |
| 9                      | HVAC Makeup Water Valving, Specialties                                     | 2               | EA          | \$ 17.30          | \$ 35             |
| 10                     | Valving, Specialties at Booster Pump                                       | 1               | EA          | \$ 2,445.00       | \$ 2,445          |
| 11                     | Valving, Specialties at Water Heater                                       | 1               | EA          | \$ 1,786.50       | \$ 1,787          |
| 12                     | 1" Thk Fiberglass Insulation   | 1,880           | LF          | \$ 8.73           | \$ 17,276         |
| 13                     | Solder, Flux, Gas, Etc.  | 1               | LS          | \$ 2,800.00       | \$ 2,800          |
| <b>15150</b>           | <b>Sanitary Waste and Vent Pipe</b>  |                 |             |                   |                   |
| <i>Under Ground :-</i> |  |                 |             |                   |                   |
| 1                      | 6" Sv Wt Cast Iron Pipe  | 10              | LF          | \$ 37.74          | \$ 377            |
| 2                      | 6" Sv Wt Cast Iron Pipe  | 240             | LF          | \$ 37.35          | \$ 8,964          |
| 3                      | 4" Sv Wt Cast Iron Pipe  | 580             | LF          | \$ 28.02          | \$ 18,252         |
| 4                      | Sv Wt Cast Iron Fittings   | 104             | EA          | \$ 77.22          | \$ 8,011          |
| 5                      | Cleanout Deckplates  | 8               | EA          | \$ 260.98         | \$ 1,668          |
| 6                      | Trench Backfill  | 830             | LF          | \$ 7.00           | \$ 5,810          |
| 7                      | Rough Concrete Patching  | 710             | LF          | \$ 69.83          | \$ 49,437         |
| 8                      | Gaskets, Lubricants, Etc.  | 1               | LS          | \$ 825.00         | \$ 825            |
| <i>Above Ground :-</i> |  |                 |             |                   |                   |
| 1                      | Sanitary Riser Piping w/ Figs, Hgrs (NH Cast Iron)                         | 480             | LF          | \$ 35.35          | \$ 16,261         |
| 2                      | Sanitary Vent Riser w/ Figs, Hgrs  | 480             | LF          | \$ 27.97          | \$ 12,864         |
| 3                      | Pump Discharge Piping from Sump Pump w/ Figs, Hgrs (Galvanized Std Sch 40) | 84              | LF          | \$ 34.48          | \$ 2,897          |
| 4                      | Valves, Specialties at Sump Pump   | 2               | EA          | \$ 378.26         | \$ 757            |
| 5                      | No Hub Couplings, Etc.   | 1               | LS          | \$ 685.00         | \$ 685            |
| <b>15160</b>           | <b>Storm Drainage Pipe</b>   |                 |             |                   |                   |
| <i>Under Ground :-</i> |  |                 |             |                   |                   |
| 1                      | 10" Sv Wt Cast Iron Pipe   | 40              | LF          | \$ 88.88          | \$ 3,555          |
| 2                      | 8" Sv Wt Cast Iron Pipe  | 140             | LF          | \$ 53.68          | \$ 7,512          |
| 3                      | 6" Sv Wt Cast Iron Pipe  | 290             | LF          | \$ 37.74          | \$ 10,945         |
| 4                      | 6" Sv Wt Cast Iron Pipe  | 240             | LF          | \$ 37.35          | \$ 8,964          |
| 5                      | 4" Sv Wt Cast Iron Pipe  | 140             | LF          | \$ 28.02          | \$ 3,923          |
| 6                      | Sv Wt Cast Iron Fittings   | 106             | EA          | \$ 121.00         | \$ 12,856         |
| 7                      | Cleanout Deckplates  | 11              | EA          | \$ 260.98         | \$ 2,871          |
| 8                      | Trench Backfill  | 850             | LF          | \$ 7.00           | \$ 5,950          |
| 9                      | Rough Concrete Patching  | 798             | LF          | \$ 69.83          | \$ 55,425         |
| 10                     | Gaskets, Lubricants, Etc.  | 1               | LS          | \$ 1,825.00       | \$ 1,825          |
| <i>Above Ground :-</i> |  |                 |             |                   |                   |
| 1                      | Rain Leader Piping w/ Figs, Hgrs (NH Cast Iron)                            | 1,300           | LF          | \$ 35.35          | \$ 45,955         |
| 2                      | Roof Drains  | 38              | EA          | \$ 700.80         | \$ 26,630         |
| 3                      | Fiberglass Pipe Insulation   | 380             | LF          | \$ 18.12          | \$ 6,886          |
| 4                      | Roof Drain Sump Insulation   | 38              | EA          | \$ 228.10         | \$ 8,592          |
| 5                      | No Hub Couplings, Etc.   | 1               | LS          | \$ 1,780.00       | \$ 1,780          |
| <b>DEDUCT</b>          |  |                 |             |                   |                   |
| 1                      | ALLOCATION TO NEW "ADDITION"   | -1              | LS          | \$ 120,272.20     | \$ (120,272)      |
| <b>SUB-TOTAL</b>       |  |                 |             |                   | <b>\$ 338,601</b> |

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| 15200                                   | PROCESS PIPE   | QUANTITY | UNIT    | UNIT PRICE    | AMOUNT            |
|---|--|----------|---------|---------------|-------------------|
| 16210                                   | Process Air and Gas Pipe   |          |         |               |                   |
|   | <b>Natural Gas Pipe :-</b>                                       |          |         |               |                   |
| 1                                       | Natural Gas Main Piping in Boiler Room w/ Hgrs, Flgs (CS Sch 40) | 84       | LF      | \$ 77.31      | \$ 6,494          |
| 2                                       | Natural Gas Drop Piping to Boilers, Water Heater                 | 42       | LF      | \$ 57.78      | \$ 2,426          |
| 3                                       | Natural Gas Laboratory Outlets w/ Piping, Flgs, Hgrs             | 6        | EA      | \$ 1,150.00   | \$ 6,900          |
| 4                                       | Valving, Specialties at Service                                  | 1        | EA      | \$ 1,340.50   | \$ 1,341          |
| 5                                       | Valving, Specialties at Boilers                                  | 4        | EA      | \$ 444.00     | \$ 1,776          |
| 6                                       | Valving, Specialties at Water Heater                             | 1        | EA      | \$ 444.00     | \$ 444            |
| 7                                       | Master Gas Control Valves w/ Box, Piping                         | 6        | EA      | \$ 1,435.00   | \$ 8,610          |
| 8                                       | Rod, Gas, Lubricants   | 1        | LS      | \$ 395.00     | \$ 395            |
|   | <b>Laboratory Air Pipe :-</b>                                    |          |         |               |                   |
| 1                                       | Laboratory Air Outlets w/ Piping, Hgrs, Flgs (L Copper Cleaned)  | 47       | EA      | \$ 953.00     | \$ 44,791         |
| 2                                       | Silver Braze, Gas, Nitrogen, Etc.                                | 1        | LS      | \$ 986.00     | \$ 986            |
| 15230                                   | Acid Waste and Vent Pipe   |          |         |               |                   |
| 1                                       | Acid waste and vent pipe system                                  | 124,435  | GSF     | \$ 0.50       | \$ 62,218         |
|   | <b>DEDUCT</b>  |          |         |               |                   |
| 1                                       | ALLOCATION TO NEW "ADDITION"                                     | -1       | LS      | \$ 48,759.00  | \$ (48,759)       |
|   | <b>SUB-TOTAL</b>   |          |         |               | <b>\$ 87,820</b>  |
| 15400                                   | PLUMBING FIXTURES AND EQUIPMENT                                  |          |         |               |                   |
| 15410                                   | Plumbing Fixtures and Equipment                                  |          |         |               |                   |
| 1                                       | Wall Mounted Water Closet w/ Carrier, Roughing                   | 27       | EA      | \$ 1,595.50   | \$ 43,079         |
| 2                                       | Wall Hung Urinals w/ Carrier, Roughing                           | 3        | EA      | \$ 1,586.75   | \$ 4,760          |
| 3                                       | Undermount Lavatories w/ Metering Faucets, Roughing              | 17       | EA      | \$ 1,075.25   | \$ 18,279         |
| 4                                       | 2 Bay Kitchen Sinks w/ Garbage Disposer, Roughing                | 6        | EA      | \$ 1,284.62   | \$ 7,708          |
| 5                                       | Bi-level Electric Water Coolers w/ Roughing                      | 4        | EA      | \$ 2,962.25   | \$ 11,849         |
| 6                                       | Stainless Utility Sinks w/ Roughing                              | 1        | EA      | \$ 1,867.50   | \$ 1,868          |
| 7                                       | Art Room Sink w/ Clay Trap, Roughing                             | 4        | EA      | \$ 2,657.50   | \$ 10,630         |
| 8                                       | Classroom Sinks w/ Roughing                                      | 17       | EA      | \$ 1,169.00   | \$ 19,873         |
| 9                                       | Classroom Sinks w/ Drinking Fountain, Roughing                   | 10       | EA      | \$ 1,352.50   | \$ 13,525         |
| 10                                      | 3 Station Wash Fountain w/ Roughing                              | 4        | EA      | \$ 4,459.50   | \$ 17,838         |
| 11                                      | Mop Receptor w/ Roughing   | 1        | EA      | \$ 1,037.20   | \$ 1,037          |
| 12                                      | Laboratory Sinks w/ Roughing                                     | 43       | EA      | \$ 1,236.00   | \$ 53,148         |
| 13                                      | Shower Valves w/ Roughing  | 14       | EA      | \$ 1,126.00   | \$ 15,764         |
| 14                                      | Emergency Showers/ Eyewash w/ Mixing Valve, Roughing             | 9        | EA      | \$ 2,593.00   | \$ 23,337         |
| 15                                      | Fume Hoods w/ Roughing   | 6        | INSTALL | \$ 1,070.00   | \$ 6,420          |
| 16                                      | Dishwashers  | 3        | INSTALL | \$ 273.00     | \$ 819            |
| 17                                      | Floor Drains w/ Roughing   | 38       | EA      | \$ 706.78     | \$ 26,858         |
| 18                                      | Floor Sinks w/ Roughing  | 4        | EA      | \$ 1,102.00   | \$ 4,408          |
| 19                                      | Area Drains w/ Roughing  | 2        | EA      | \$ 1,285.00   | \$ 2,530          |
| 20                                      | 2 Bay Commercial Kitchen Sinks w/ Roughing                       | 1        | INSTALL | \$ 943.50     | \$ 944            |
| 21                                      | 3 Bay Commercial Kitchen Sinks w/ Roughing                       | 1        | INSTALL | \$ 1,082.50   | \$ 1,083          |
| 22                                      | Commercial Dishwasher w/ Roughing                                | 1        | INSTALL | \$ 817.60     | \$ 818            |
| 23                                      | Cast Iron Janitors Sink on Existing Roughing                     | 5        | EA      | \$ 588.00     | \$ 2,940          |
| 24                                      | Sensor Operated Flushometers in Existing Urinals                 | 12       | EA      | \$ 399.00     | \$ 4,788          |
| 25                                      | Elevator Sump Pumps w/ Oil Minder                                | 2        | EA      | \$ 3,537.50   | \$ 7,075          |
| 26                                      | 1,000 Gallon Per Hour Grease Interceptor                         | 1        | EA      | \$ 10,220.00  | \$ 10,220         |
| 27                                      | Duplex Domestic Water Pressure Booster Pump w/ Cushion Tank      | 1        | EA      | \$ 24,350.00  | \$ 24,350         |
| 28                                      | 50 Gallon Acid Neutralization Tanks                              | 3        | EA      | \$ 1,158.50   | \$ 3,476          |
| 29                                      | Copper Coil Domestic Water Heater                                | 2        | EA      | \$ 19,850.00  | \$ 39,700         |
| 30                                      | 500 Gallon Domestic Hot Water Storage Tanks                      | 2        | EA      | \$ 12,700.00  | \$ 25,400         |
| 31                                      | Domestic Hot Water Recirculation Pumps                           | 2        | EA      | \$ 522.50     | \$ 1,045          |
|   | <b>DEDUCT</b>  |          |         |               |                   |
| 1                                       | ALLOCATION TO NEW "ADDITION"                                     | -1       | LS      | \$ 105,989.56 | \$ (105,970)      |
|   | <b>SUB-TOTAL</b>   |          |         |               | <b>\$ 299,377</b> |
| 15950                                   | TESTING, ADJUSTING AND BALANCING                                 |          |         |               |                   |
| 15950                                   | Testing, Adjusting and Balancing                                 |          |         |               |                   |
| 1                                       | Valve Tags, Pipe Identification                                  | 1        | LS      | \$ 7,275.00   | \$ 7,275          |
| 2                                       | Rigging, Hoisting, and Scaffolding                               | 1        | LS      | \$ 8,195.00   | \$ 8,195          |
| 3                                       | Sanitization, Flushing   | 1        | LS      | \$ 2,200.00   | \$ 2,200          |
| 4                                       | Concrete Housekeeping Pads                                       | 2        | EA      | \$ 486.00     | \$ 972            |
| 5                                       | Seismic Restraints, Certification                                | 1        | LS      | \$ 5,775.00   | \$ 5,775          |
| 6                                       | Testing and Inspections  | 1        | LS      | \$ 4,950.00   | \$ 4,950          |
| 7                                       | Coordination Drawings, Submittals, As Builts, O&M's              | 1        | LS      | \$ 5,900.00   | \$ 5,900          |
|   | <b>DEDUCT</b>  |          |         |               |                   |
| 1                                       | ALLOCATION TO NEW "ADDITION"                                     | -1       | LS      | \$ 9,101.68   | \$ (9,102)        |
|   | <b>SUB-TOTAL</b>   |          |         |               | <b>\$ 28,165</b>  |
| <b>TOTAL FOR DIVISION 15 - PLUMBING</b> |  |          |         |               | <b>\$ 941,268</b> |

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| 15 MECHANICAL                                  |  |          |      |              |                   |
|--|--|----------|------|--------------|-------------------|
| DIVISION 15 - HVAC                             |  |          |      |              |                   |
| 15050 BASIC MATERIALS AND METHODS              |  |          |      |              |                   |
| 15095  |  | QUANTITY | UNIT | UNIT PRICE   | AMOUNT            |
| <b>Selective Plumbing Demolition</b>           |  |          |      |              |                   |
| 1  | Demolition of Steam/ Condensate Pipe                               | 2,400    | LF   | \$ 7.40      | \$ 17,760         |
| 2  | Steam Radiator Demolition w/ Local Piping                          | 125      | EA   | \$ 210.00    | \$ 26,250         |
| 3  | Supply Air Diffuser Demolition w/ Local Ducting                    | 48       | EA   | \$ 365.00    | \$ 16,780         |
| 4  | Exhaust Grille Demolition w/ Local Ducting                         | 28       | EA   | \$ 323.50    | \$ 9,058          |
| 5  | Duct Main Demolition   | 504      | LF   | \$ 62.60     | \$ 31,500         |
| 6  | Unit Ventilator Demolition w/ Local Piping, Ducting                | 2        | EA   | \$ 442.00    | \$ 884            |
| 7  | Air Handler Demolition w/ Local Piping, Ducting                    | 2        | EA   | \$ 2,075.00  | \$ 4,150          |
| 8  | Louver Demolition  | 2        | EA   | \$ 512.50    | \$ 1,025          |
| 9  | Compressor Demolition  | 1        | EA   | \$ 918.00    | \$ 918            |
| 10   | Boiler Demolition w/ Piping, Breeching                             | 3        | EA   | \$ 2,955.00  | \$ 8,865          |
| 11   | Boiler Feed System Demolition                                      | 1        | LS   | \$ 1,925.00  | \$ 1,925          |
| 12   | Water Softener Demolition  | 1        | EA   | \$ 625.00    | \$ 625            |
| 13   | Condensate Pump Demolition   | 2        | EA   | \$ 465.00    | \$ 930            |
| 14   | Roof Fan Demolition  | 7        | EA   | \$ 325.00    | \$ 2,275          |
| 15   | Vent a Kin Demolition  | 1        | EA   | \$ 325.00    | \$ 325            |
| 16   | Fan Coil Unit Demolition   | 7        | EA   | \$ 473.00    | \$ 3,311          |
| 17   | Condensing Demolition w/ Piping                                    | 2        | EA   | \$ 786.00    | \$ 1,572          |
| 18   | Window Air Conditioner Demolition                                  | 1        | EA   | \$ 95.00     | \$ 95             |
| 19   | Chimney Demolition   | 1        | LS   | \$ 4,495.00  | \$ 4,495          |
| 20   | Relief Hood Demolition   | 3        | EA   | \$ 488.00    | \$ 1,458          |
| 21   | Generator Exhaust Demolition                                       | 1        | EA   | \$ 2,800.00  | \$ 2,800          |
| <b>DEDUCT</b>                                  |  |          |      |              |                   |
| 1  | ALLOCATION TO NEW "ADDITION"                                       | -1       | LS   | \$ -         | \$ -              |
| <b>SUB-TOTAL</b>                               |  |          |      |              | <b>\$ 137,011</b> |
| 15100  | BUILDING SERVICES PIPE   | QUANTITY | UNIT | UNIT PRICE   | AMOUNT            |
| <b>15180 Heating and Cooling Pipe</b>          |  |          |      |              |                   |
| <b>Hot Water Supply and Return Pipe :-</b>     |  |          |      |              |                   |
| 1  | Boiler Rool Piping w/ Ftgs, Hgra (CS Stan Wt)                      | 163      | LF   | \$ 108.72    | \$ 17,721         |
| 2  | Heating Hot Water Lower Level Floor Main Piping w/ Ftgs, Hgra      | 1,743    | LF   | \$ 34.29     | \$ 59,763         |
| 3  | Heating Hot Water Upper Level Floor Main Piping w/ Ftgs, Hgra      | 672      | LF   | \$ 77.31     | \$ 51,949         |
| 4  | Heating Hot Water Runout Piping to Large Air Handler w/ Ftgs, Hgra | 63       | LF   | \$ 60.19     | \$ 3,792          |
| 5  | Heating Hot Water Runout Piping to Air Handlers w/ Ftgs, Hgra      | 900      | LF   | \$ 26.58     | \$ 23,924         |
| 6  | Heating Hot Water Piping to Terminal Units w/ Ftgs, Hgra           | 15,280   | LF   | \$ 17.30     | \$ 263,998        |
| 7  | Radiant PEX Tubing w/ Ties   | 8,400    | LF   | \$ 4.20      | \$ 35,280         |
| 8  | Valving, Specialties at Boilers                                    | 4        | EA   | \$ 1,714.00  | \$ 6,856          |
| 9  | Valving, Specialties at Primary Circulators                        | 4        | EA   | \$ 2,988.50  | \$ 11,958         |
| 10   | Valving, Specialties at Secondary Circulators                      | 2        | EA   | \$ 8,448.25  | \$ 16,897         |
| 11   | Valving, Specialties at Large AHU                                  | 1        | EA   | \$ 3,656.25  | \$ 3,656          |
| 12   | Valving, Specialties at AHU's                                      | 15       | EA   | \$ 1,854.00  | \$ 27,810         |
| 13   | Valving, Specialties at Terminal Units                             | 305      | EA   | \$ 642.25    | \$ 195,886        |
| 14   | Valving, Specialties at Radiant Zones                              | 3        | EA   | \$ 1,058.25  | \$ 3,175          |
| 15   | Makeup Water Valving   | 1        | EA   | \$ 1,554.75  | \$ 1,555          |
| 16   | Fiberglass Insulation (Varying Thickness)                          | 18,801   | LF   | \$ 9.05      | \$ 170,149        |
| 17   | Rod, Solder, Flux, Gas, Etc.                                       | 1        | LS   | \$ 18,250.00 | \$ 18,250         |
| <b>Chilled Water Supply and Return Pipe :-</b> |  |          |      |              |                   |
| 1  | Chilled Water MER/ Riser Piping w/ Ftgs, Hgra                      | 147      | LF   | \$ 155.35    | \$ 22,836         |
| 2  | Upper Level Floor Chilled Water Main Piping w/ Ftgs, Hgra          | 672      | LF   | \$ 108.72    | \$ 73,060         |
| 3  | Chilled Water Runout Piping to Large AHU w/ Ftgs, Hgra             | 63       | LF   | \$ 77.27     | \$ 4,868          |
| 4  | Chilled Water Runout Piping to AHU's                               | 903      | LF   | \$ 67.83     | \$ 52,220         |
| 5  | Valving, Specialties at Chiller                                    | 1        | EA   | \$ 8,649.50  | \$ 8,650          |
| 6  | Valving, Specialties at Circulators                                | 2        | LF   | \$ 14,284.50 | \$ 28,529         |
| 7  | Valving, Specialties at AHU's                                      | 7        | EA   | \$ 3,338.00  | \$ 23,366         |
| 8  | Fiberglass Insulation  | 1,785    | LF   | \$ 11.12     | \$ 19,849         |
| 9  | Makeup Water Valving   | 1        | EA   | \$ 1,554.75  | \$ 1,555          |
| 10   | Rod, Solder, Flux, Gas, Etc.                                       | 1        | LS   | \$ 4,600.00  | \$ 4,600          |
| <b>Refrigeration Pipe :-</b>                   |  |          |      |              |                   |
| 1  | Chiller Suction Piping w/ Ftgs, Hgra (ACR Tubing)                  | 80       | LF   | \$ 73.30     | \$ 5,864          |
| 2  | Air Handler Suction Piping w/ Ftgs, Hgra                           | 240      | LF   | \$ 32.18     | \$ 7,723          |
| 3  | Chiller Liquid Piping w/ Ftgs, Hgra                                | 80       | LF   | \$ 32.18     | \$ 2,574          |
| 4  | Air Handler Liquid Piping w/ Ftgs, Hgra                            | 240      | LF   | \$ 22.88     | \$ 5,490          |
| 5  | Elastomeric Insulation   | 320      | LF   | \$ 9.21      | \$ 2,947          |
| 6  | Specialties at Chiller   | 1        | EA   | \$ 3,521.00  | \$ 3,521          |
| 7  | Specialties at Air Handlers  | 3        | EA   | \$ 1,872.00  | \$ 5,616          |
| 8  | Purging and Charging   | 4        | EA   | \$ 745.00    | \$ 2,980          |
| 9  | Silver Braze, Gas, Nitrogen, Etc.                                  | 1        | LS   | \$ 745.00    | \$ 745            |

PROJECT DETAILED ESTIMATE - RENOVATIONS

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| <b>Air-Conditioning Condensate Pipe :-</b> |   |                 |             |                   |                     |
|--|---|-----------------|-------------|-------------------|---------------------|
|  |   |                 |             |                   |                     |
| 1  | Air Conditioning Condensate Piping from Air Handlers w/ Figs, Hgrs (L Copper) | 300             | LF          | \$ 26.92          | \$ 8,076            |
| 2  | 1" Thk Fiberglass Insulation  | 300             | LF          | \$ 9.12           | \$ 2,736            |
| 3  | Solder, Flux, Gas, Etc.   | 1               | LS          |                   | \$                  |
| <b>DEDUCT</b>                              |   |                 |             |                   |                     |
| 1  | ALLOCATION TO NEW "ADDITION"  | -1              | LS          | \$ 313,032.78     | \$ (313,033)        |
|  |   |                 |             | <b>SUB-TOTAL</b>  | <b>\$ 885,391</b>   |
| <b>15700</b>                               | <b>HVAC EQUIPMENT</b>   | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>       |
| <b>16700</b>                               | <b>HVAC Equipment</b>   |                 |             |                   |                     |
| 1  | 125 Ton Split Air Cooled Chiller w/ Refrigerant Purger                        | 1               | EA          | \$ 79,875.00      | \$ 79,875           |
| 2  | Chilled Water Circulators, 20 HP  | 2               | EA          | \$ 6,000.00       | \$ 12,000           |
| 3  | Chilled Water Air Separator   | 1               | EA          | \$ 4,175.00       | \$ 4,175            |
| 4  | Chilled Water Expansion Tanks   | 1               | EA          | \$ 2,870.00       | \$ 2,870            |
| 5  | Gas Fired Condensing Gas Boilers, 1,706 MBH Output                            | 4               | EA          | \$ 39,200.00      | \$ 156,800          |
| 6  | Primary Heating Hot Water Circulators   | 4               | EA          | \$ 3,070.00       | \$ 12,280           |
| 7  | Secondary Heating Hot Water Circulators, 30 HP                                | 2               | EA          | \$ 6,815.00       | \$ 13,630           |
| 8  | Heating Hot Water Expansion Tanks   | 3               | EA          | \$ 3,410.00       | \$ 10,230           |
| 9  | Heating Hot Water Air Separator   | 1               | EA          | \$ 3,350.00       | \$ 3,350            |
| 10   | Central Station Air Handling w/ HW, CHW Coils 40,456 CFM                      | 1               | EA          | \$ 248,275.00     | \$ 248,275          |
| 11   | Central Station Air Handling w/ HW, CHW Coils, 10,520 CFM                     | 3               | EA          | \$ 62,925.00      | \$ 188,775          |
| 12   | Central Station Air Handling w/ HW, CHW Coils, 6,475 CFM                      | 1               | EA          | \$ 39,500.00      | \$ 39,500           |
| 13   | Central Station Air Handling w/ HW, CHW Coils, 4,940 CFM                      | 1               | EA          | \$ 29,650.00      | \$ 29,650           |
| 14   | Central Station Air Handling w/ HW, CHW Coils, 3,290 CFM                      | 1               | EA          | \$ 20,325.00      | \$ 20,325           |
| 15   | Central Station Air Handling w/ HW, CHW Coils 8,790 CFM                       | 1               | EA          | \$ 52,475.00      | \$ 52,475           |
| 16   | Central Station Air Handling w/ HW, CHW Coils, 2,100 CFM                      | 1               | EA          | \$ 12,550.00      | \$ 12,550           |
| 17   | Central Station Air Handling w/ HW, CHW Coils, 1,550 CFM                      | 1               | EA          | \$ 9,514.00       | \$ 9,514            |
| 18   | Central Station Air Handling w/ HW, CHW Coils, 3,010 CFM                      | 1               | EA          | \$ 15,875.00      | \$ 15,875           |
| 19   | Central Station Air Handling w/ HW, CHW Coils, 3,340 CFM                      | 1               | EA          | \$ 19,500.00      | \$ 19,500           |
| 20   | Central Station Air Handling w/ HW, CHW Coils, 14,150 CFM                     | 1               | EA          | \$ 83,700.00      | \$ 83,700           |
| 21   | Central Station Air Handling w/ HW, CHW Coils, 1,400 CFM                      | 1               | EA          | \$ 9,510.00       | \$ 9,510            |
| 22   | Central Station Air Handling w/ HW, CHW Coils, 7,290 CFM                      | 1               | EA          | \$ 47,500.00      | \$ 47,500           |
| 23   | Central Station Air Handling Unit w/ HW, CHW, DX Coils, 5,755 CFM w/ Conde    | 1               | LF          | \$ 42,850.00      | \$ 42,850           |
| 24   | Central Station Air Handling Unit w/ HW, CHW, DX Coils, 2,480 CFM w/ Conde    | 1               | EA          | \$ 18,850.00      | \$ 18,850           |
| 25   | Central Station Air Handling Unit w/ HW Coll, 2,970 CFM                       | 1               | EA          | \$ 18,650.00      | \$ 18,650           |
| 26   | Gas Fired Makeup Air Unit   | 1               | EA          | \$ 10,550.00      | \$ 10,550           |
| 27   | Kitchen Exhaust Fan   | 1               | EA          | \$ 10,000.00      | \$ 10,000           |
| 28   | Fume Exhaust Fan  | 6               | EA          | \$ 5,260.00       | \$ 31,560           |
| 29   | Toilet Exhaust Fans   | 3               | EA          | \$ 3,775.00       | \$ 11,325           |
| 30   | Flammable Storage Cabinet Exhaust Fan   | 1               | EA          | \$ 3,775.00       | \$ 3,775            |
| 31   | Dust Collector  | 1               | EA          | \$ 10,550.00      | \$ 10,550           |
| 32   | Commercial Fin Tube Radiation   | 930             | EA          | \$ 88.10          | \$ 81,933           |
| 33   | VAV Boxes w/ HW Reheat Coils  | 184             | EA          | \$ 725.00         | \$ 133,400          |
| 34   | Hot Water Reheat Coils  | 11              | EA          | \$ 500.00         | \$ 5,500            |
| 35   | Hydronic Cabinet Unit Heaters   | 12              | EA          | \$ 2,362.50       | \$ 28,350           |
| 36   | Hydronic Unit Heaters   | 5               | EA          | \$ 1,012.50       | \$ 5,063            |
| 37   | Glycol Feed Unit  | 1               | EA          | \$ 3,520.00       | \$ 3,520            |
| 38   | Closed Circuit Chemical Feed Program  | 2               | LS          | \$ 4,525.00       | \$ 9,050            |
| 39   | Variable Frequency Drives   | 20              | EA          | \$ 3,800.00       | \$ 76,000           |
| 40   | Magnetic Motor Starters   | 28              | EA          | \$ 1,125.00       | \$ 31,500           |
| <b>DEDUCT</b>                              |   |                 |             |                   |                     |
| 1  | ALLOCATION TO NEW "ADDITION"  | -1              | LS          | \$ 413,801.38     | \$ (413,801)        |
|  |   |                 |             | <b>SUB-TOTAL</b>  | <b>\$ 1,170,123</b> |
| <b>15800</b>                               | <b>AIR DISTRIBUTION</b>   | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>       |
| <b>15810</b>                               | <b>Ducts</b>  |                 |             |                   |                     |
| 1  | Galvanized Ductwork   | 87,574          | LBS         | \$ 7.60           | \$ 665,562          |
| 2  | Black Iron Ductwork   | 845             | LBS         | \$ 11.11          | \$ 9,388            |
| 3  | 8" Stainless Flue Pipe  | 80              | LF          | \$ 85.20          | \$ 6,816            |
| 4  | Insulation; "Ductwrap"; 2" thick  | 53,892          | SF          | \$ 3.30           | \$ 177,844          |
| 5  | Insulation; "Ductwrap"; fire-proof; 2" thick                                  | 338             | SF          | \$ 8.80           | \$ 2,974            |

PROJECT DETAILED ESTIMATE - RENOVATIONS

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| 15820 Ductwork Accessories             |  | QUANTITY | UNIT   | UNIT PRICE    | AMOUNT              |
|--|--|----------|--------|---------------|---------------------|
| 1                                      | Supply Air Diffusers   | 325      | EA     | \$ 137.75     | \$ 44,769           |
| 2                                      | 2 Slot X 4 Foot Supply Air Diffusers                                       | 70       | EA     | \$ 227.50     | \$ 15,925           |
| 3                                      | Circular Gym Supply Air Diffusers  | 16       | EA     | \$ 623.50     | \$ 9,953            |
| 4                                      | Return Air Grilles   | 187      | EA     | \$ 276.00     | \$ 51,775           |
| 5                                      | Exhaust Air Grilles  | 38       | EA     | \$ 118.86     | \$ 4,441            |
| 6                                      | Canvas Flexible Connections  | 39       | EA     | \$ 770.00     | \$ 30,030           |
| 7                                      | Fire Smoke Dampers   | 1        | ALLOW  | \$ 32,375.00  | \$ 32,375           |
| 8                                      | Fire Dampers   | 1        | ALLOW  | \$ 20,450.00  | \$ 20,450           |
| 8                                      | Volume Dampers   | 880      | 665    | \$ 51.30      | \$ 34,884           |
| 10                                     | Flexible Duct Preinsulated   | 395      | EA     | \$ 31.80      | \$ 12,561           |
| <b>DEDUCT</b>                          |  |          |        |               |                     |
| 1                                      | ALLOCATION TO NEW "ADDITION"   | -1       | LS     | \$ 292,879.06 | \$ (292,879)        |
|  |  |          |        | \$            | \$                  |
| <b>SUB-TOTAL</b>                       |  |          |        |               | <b>\$ 828,687</b>   |
| 15900 HVAC INSTRUMENTATION AND CONTROL |  | QUANTITY | UNIT   | UNIT PRICE    | AMOUNT              |
| 15950 Automatic Temperature Controls   |  |          |        |               |                     |
| 1                                      | 125 Ton Split Air Cooled Chiller w/ Refrigerant Purger                     | 4        | POINTS | \$ 700.00     | \$ 2,800            |
| 2                                      | Chilled Water Circulators, 20 HP   | 6        | POINTS | \$ 700.00     | \$ 4,200            |
| 3                                      | Gas Fired Condensing Gas Boilers, 1,706 MBH Output                         | 12       | POINTS | \$ 700.00     | \$ 8,400            |
| 4                                      | Primary Heating Hot Water Circulators                                      | 12       | POINTS | \$ 700.00     | \$ 8,400            |
| 5                                      | Secondary Heating Hot Water Circulators, 30 HP                             | 6        | POINTS | \$ 700.00     | \$ 4,200            |
| 6                                      | Central Station Air Handling w/ HW, CHW Coils 40,465 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 7                                      | Central Station Air Handling w/ HW, CHW Coils, 10,520 CFM                  | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 8                                      | Central Station Air Handling w/ HW, CHW Coils, 6,475 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 9                                      | Central Station Air Handling w/ HW, CHW Coils, 4,940 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 10                                     | Central Station Air Handling w/ HW, CHW Coils, 3,290 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 11                                     | Central Station Air Handling w/ HW, CHW Coils 8,790 CFM                    | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 12                                     | Central Station Air Handling w/ HW, CHW Coils, 2,100 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 13                                     | Central Station Air Handling w/ HW, CHW Coils, 1,560 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 14                                     | Central Station Air Handling w/ HW, CHW Coils, 3,010 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 15                                     | Central Station Air Handling w/ HW, CHW Coils, 3,340 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 16                                     | Central Station Air Handling w/ HW, CHW Coils, 14,150 CFM                  | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 17                                     | Central Station Air Handling w/ HW, CHW Coils, 1,400 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 18                                     | Central Station Air Handling w/ HW, CHW Coils, 7,290 CFM                   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 19                                     | Central Station Air Handling Unit w/ HW, CHW, DX Coils, 5,755 CFM w/ Conde | 26       | POINTS | \$ 700.00     | \$ 18,200           |
| 20                                     | Central Station Air Handling Unit w/ HW, CHW, DX Coils, 2,480 CFM w/ Conde | 26       | POINTS | \$ 700.00     | \$ 18,200           |
| 21                                     | Central Station Air Handling Unit w/ HW Coil, 2,970 CFM                    | 20       | POINTS | \$ 700.00     | \$ 14,000           |
| 22                                     | Gas Fired Makeup Air Unit  | 12       | POINTS | \$ 700.00     | \$ 8,400            |
| 23                                     | Kitchen Exhaust Fan  | 3        | POINTS | \$ 700.00     | \$ 2,100            |
| 24                                     | Fume Exhaust Fan   | 18       | POINTS | \$ 700.00     | \$ 12,600           |
| 25                                     | Toilet Exhaust Fans  | 9        | POINTS | \$ 700.00     | \$ 6,300            |
| 26                                     | Flammable Storage Cabinet Exhaust Fan                                      | 3        | POINTS | \$ 700.00     | \$ 2,100            |
| 27                                     | Dust Collector   | 4        | POINTS | \$ 700.00     | \$ 2,800            |
| 28                                     | Commercial Fin Tube Radiation  | 186      | POINTS | \$ 700.00     | \$ 130,200          |
| 29                                     | VAV Boxes w/ HW Reheat Coils   | 552      | POINTS | \$ 700.00     | \$ 386,400          |
| 30                                     | Hot Water Reheat Coils   | 22       | POINTS | \$ 700.00     | \$ 15,400           |
| 31                                     | Hydronic Cabinet Unit Heaters  | 36       | POINTS | \$ 700.00     | \$ 25,200           |
| 32                                     | Hydronic Unit Heaters  | 10       | POINTS | \$ 700.00     | \$ 7,000            |
| 33                                     | Glycol Feed Unit   | 1        | POINTS | \$ 700.00     | \$ 700              |
| 34                                     | Operators Work Station   | 1        | LS     | \$ 30,825.00  | \$ 30,825           |
| <b>DEDUCT</b>                          |  |          |        |               |                     |
| 1                                      | ALLOCATION TO NEW "ADDITION"   | -1       | LS     | \$ 237,293.80 | \$ (237,294)        |
|  |  |          |        | \$            | \$                  |
| <b>SUB-TOTAL</b>                       |  |          |        |               | <b>\$ 671,331</b>   |
| 15950 TESTING, ADJUSTING AND BALANCING |  | QUANTITY | UNIT   | UNIT PRICE    | AMOUNT              |
| 15950 Testing, Adjusting and Balancing |  |          |        |               |                     |
| 1                                      | Concrete Housekeeping Pads   | 42       | EA     | \$ 640.00     | \$ 26,880           |
| 2                                      | Rigging, Hoisting, Scaffolding   | 1        | LS     | \$ 97,300.00  | \$ 97,300           |
| 3                                      | Valve Tags, Pipe Identification  | 1        | LS     | \$ 16,100.00  | \$ 16,100           |
| 4                                      | Flushing   | 1        | LS     | \$ 6,836.00   | \$ 6,836            |
| 5                                      | Testing and Balancing  | 712      | MH     | \$ 97.50      | \$ 69,420           |
| 6                                      | Seismic Restraint, Certification   | 1        | LS     | \$ 22,760.00  | \$ 22,760           |
| 7                                      | Coordination Drawings, Submittals, O&M's As Builts                         | 1        | LS     | \$ 18,875.00  | \$ 18,875           |
| <b>DEDUCT</b>                          |  |          |        |               |                     |
| 1                                      | ALLOCATION TO NEW "ADDITION"   | -1       | LS     | \$ 67,287.42  | \$ (67,287)         |
|  |  |          |        | \$            | \$                  |
| <b>SUB-TOTAL</b>                       |  |          |        |               | <b>\$ 180,874</b>   |
| <b>TOTAL FOR DIVISION 15 - HVAC</b>    |  |          |        |               | <b>\$ 3,883,397</b> |





PROJECT DETAILED ESTIMATE - RENOVATIONS

Draft

9/12/2011

| <b>Communications System :-</b>           |                                |                 |             |                   |                     |
|---|--------------------------------|-----------------|-------------|-------------------|---------------------|
| 1   | 4" PVC CDT UG                  | 400             | LF          | \$ 14.20          | \$ 5,681            |
| 2   | MDF                            | 1               | EA          | \$ 21,250.00      | \$ 21,250           |
| 3   | Local Patch Panel              | 4               | EA          | \$ 4,275.00       | \$ 17,100           |
| 4   | LAN Interc Board               | 4               | EA          | \$ 4,275.00       | \$ 17,100           |
| 5   | Install LON Works Cabt FBO     | 4               | EA          | \$ 882.50         | \$ 3,450            |
| 6   | TV Distr Rack                  | 4               | EA          | \$ 2,850.00       | \$ 11,400           |
| 7   | CATV Splitter                  | 4               | EA          | \$ 650.00         | \$ 2,600            |
| 8   | 4" Floor Sleeves               | 16              | EA          | \$ 212.50         | \$ 3,400            |
| 9   | 4" Wall Sleeves                | 16              | EA          | \$ 212.50         | \$ 3,400            |
| 10  | Ground Bar                     | 5               | EA          | \$ 712.50         | \$ 3,563            |
| 11  | Cable Tray 24" Alum            | 1,670           | LF          | \$ 41.00          | \$ 68,470           |
| 12  | 12 Strand Multi-Mode Fiber     | 800             | LF          | \$ 5.95           | \$ 4,760            |
| 13  | 100 Pair CAT 3 Cable           | 800             | LF          | \$ 12.25          | \$ 9,800            |
| 14  | RG11 Coax Cable                | 800             | LF          | \$ 3.88           | \$ 3,100            |
| 16  | 3/4" EMT CDT                   | 2,565           | LF          | \$ 10.55          | \$ 27,061           |
| 16  | 1" EMT CDT                     | 1,283           | LF          | \$ 12.54          | \$ 16,079           |
| 17  | 4" EMT Cdt                     | 400             | LF          | \$ 30.84          | \$ 12,255           |
| 18  | Cat 6 Cable                    | 111,150         | LF          | \$ 1.63           | \$ 189,504          |
| 19  | Coax Cable                     | 8,550           | LF          | \$ 1.11           | \$ 9,512            |
| 20  | Tel/Data Outlet (not shown)    | 86              | EA          | \$ 93.76          | \$ 8,016            |
| 21  | Tel/Data Outlet 2c             | 57              | EA          | \$ 93.75          | \$ 5,344            |
| 22  | Tel/Data Outlet 4c             | 114             | EA          | \$ 131.25         | \$ 14,983           |
| 23  | TV Outlet                      | 57              | EA          | \$ 62.50          | \$ 3,563            |
| <b>Clock/ Public Address System :-</b>    |                                |                 |             |                   |                     |
| 1   | 2 1/2" Emt, Riser Cables       | 100             | LF          | \$ 64.90          | \$ 6,490            |
| 2   | 3/4" EMT Cdt                   | 855             | LF          | \$ 10.55          | \$ 9,020            |
| 3   | 1" EMT Cdt                     | 2,810           | LF          | \$ 12.54          | \$ 35,230           |
| 4   | Comm Cable                     | 15,375          | LF          | \$ 1.63           | \$ 23,447           |
| 5   | Main Sound Rack                | 1               | LS          | \$ 42,500.00      | \$ 42,500           |
| 6   | Antenna                        | 1               | EA          | \$ 1,350.00       | \$ 1,350            |
| 7   | Admin Control Station Outlet   | 3               | EA          | \$ 356.25         | \$ 1,089            |
| 8   | Microphone Outlet              | 14              | EA          | \$ 150.00         | \$ 2,100            |
| 9   | Local Sound System Rack        | 3               | EA          | \$ 7,850.00       | \$ 23,550           |
| 10  | Time Recorder                  | 2               | EA          | \$ 700.00         | \$ 1,400            |
| 11  | Double Face Clock              | 21              | EA          | \$ 450.00         | \$ 9,450            |
| 12  | Single Face Clock              | 74              | EA          | \$ 300.00         | \$ 22,200           |
| 13  | Speaker                        | 149             | EA          | \$ 250.00         | \$ 37,250           |
| 14  | Loudspeaker Assembly           | 4               | EA          | \$ 450.00         | \$ 1,800            |
| 15  | Spherical Loudspeaker Assembly | 8               | EA          | \$ 700.00         | \$ 4,200            |
| 16  | Speaker Horn                   | 3               | EA          | \$ 250.00         | \$ 750              |
| 17  | Privacy Switch                 | 57              | EA          | \$ 137.50         | \$ 7,838            |
| <b>DEDUCT</b>                             |                                |                 |             |                   |                     |
| 1   | ALLOCATION TO NEW "ADDITION"   | -1              | LS          | \$ 404,374.84     | \$ (404,375)        |
|   |                                |                 |             |                   | \$ -                |
| <b>SUB-TOTAL</b>                          |                                |                 |             |                   | <b>\$ 1,143,904</b> |
| 16900                                     | <b>MISCELLANEOUS</b>           | <b>QUANTITY</b> | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>       |
| 16900                                     | Miscellaneous Items            |                 |             |                   |                     |
| 1   | Miscellaneous site demolition  | 124,435         | GSF         | \$ 0.80           | \$ 99,548           |
| 2   | Miscellaneous job expenses     | 1               | LS          | \$ 100,000.00     | \$ 100,000          |
| 3   | Temporary lighting and power   | 124,435         | GSF         | \$ 1.00           | \$ 124,435          |
| <b>DEDUCT</b>                             |                                |                 |             |                   |                     |
| 1   | ALLOCATION TO NEW "ADDITION"   | -1              | LS          | \$ 84,515.80      | \$ (84,518)         |
|   |                                |                 |             |                   | \$ -                |
| <b>SUB-TOTAL</b>                          |                                |                 |             |                   | <b>\$ 239,467</b>   |
| <b>TOTAL FOR DIVISION 16 - ELECTRICAL</b> |                                |                 |             |                   | <b>\$ 3,236,523</b> |

WORLD OF INQUIRY SCHOOL # 58

PROJECT DETAILED ESTIMATE - SITEWORK

Draft

9/12/2011

|  |                      |          |            |         |
|--|----------------------|----------|------------|---------|
| PHASE: SCHEMATIC ESTIMATE REVISION 1   | PROJECT AREA ( SF ): |          |            |         |
| BUILDING TYPE:   | NEW CONST.           | ADDITION | RENOVATION | TOTAL   |
| <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> RETAIL <input checked="" type="checkbox"/> EDUCATIONAL | 124,435              | 0        | 0          | 124,435 |

|   |
|---|
| PROJECT TYPE:   |
| <input type="checkbox"/> NEW CONSTRUCTION <input checked="" type="checkbox"/> ADDITION <input checked="" type="checkbox"/> RENOVATION |

|             |   |
|-------------|---|
| PROJECT :   | WORLD OF INQUIRY SCHOOL # 58              |
| EMPLOYER :  | ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD |
| LOCATION :  | ROCHESTER, NEW YORK 14621                 |
| A / E :     | JCJ ARCHITECTURE                          |
| CM :        | RJSCB / GILBANE                           |
| PROJECT # : |   |

| DIVISION     | DESCRIPTION  | QUANTITY         | UNIT        | UNIT PRICE        | AMOUNT            |
|--------------|--|------------------|-------------|-------------------|-------------------|
| <b>2</b>     | <b>DIVISION 2 - SITEWORK</b>   |                  |             |                   |                   |
| <b>02200</b> | <b>SITE PREPARATION</b>  | <b>QUANTITY</b>  | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>     |
| <b>02220</b> | <b>Selective Demolition</b>  |                  |             |                   |                   |
| 1            | Demolish existing building complete; single storey; including associated appertunances | 2,183            | SF          | \$ 6.00           | \$ 13,098         |
| 2            | Remove existing concrete sidewalks adjacent to building to be demolished               | 485              | SF          | \$ 2.00           | \$ 930            |
| 3            | Remove existing curbs adjacent to building to be demolished                            | 248              | LF          | \$ 5.00           | \$ 1,240          |
| 4            | Remove existing flagpole adjacent to building to be demolished                         | 1                | EA          | \$ 150.00         | \$ 150            |
| 5            | Remove existing landscaped areas adjacent to building to be demolished                 | 450              | SF          | \$ 1.00           | \$ 450            |
| 6            | Remove existing asphalt pavement @ parking lots  | 52,802           | SF          | \$ 2.00           | \$ 105,604        |
| 7            | Remove existing curb islands   | 211              | SF          | \$ 2.00           | \$ 422            |
| 8            | Remove existing asphalt sidewalks  | 2,711            | SF          | \$ 2.00           | \$ 5,422          |
| 9            | Remove existing concrete sidewalks   | 8,979            | SF          | \$ 2.00           | \$ 17,958         |
| 10           | ( X-Cost ) Remove existing steps   | 326              | SF          | \$ 20.00          | \$ 6,500          |
| 11           | ( X-Cost ) Remove existing ramps   | 84               | SF          | \$ 20.00          | \$ 1,680          |
| 9            | Remove existing concrete sidewalks; in public street                                   | 6,350            | SF          | \$ 3.00           | \$ 25,050         |
| 12           | Remove existing concrete equipment pads  | 109              | SF          | \$ 2.00           | \$ 218            |
| 13           | Remove existing sub-level stairway   | 105              | SF          | \$ 25.00          | \$ 2,625          |
| 14           | Remove existing curbs  | 296              | LF          | \$ 5.00           | \$ 1,480          |
| 15           | Remove existing rubber mat play areas  | 4,615            | SF          | \$ 2.00           | \$ 9,230          |
| 16           | Remove existing drainage pipes   | 289              | LF          | \$ 20.00          | \$ 5,780          |
| 17           | Remove existing drainage structures  | 5                | EA          | \$ 1,000.00       | \$ 5,000          |
| 18           | Remove existing electrical feeders; underground ( to be relocated )                    | 94               | LF          | \$ 50.00          | \$ 4,700          |
| 19           | Remove existing gas line; underground ( to be relocated )                              | 98               | LF          | \$ 20.00          | \$ 1,960          |
| 20           | Remove existing gas meter; underground ( to be relocated )                             | 1                | EA          | \$ 1,000.00       | \$ 1,000          |
| 21           | Remove existing chain link fences  | 2,063            | LF          | \$ 5.00           | \$ 10,315         |
| 22           | ( X-Cost ) Gates   | 2                | EA          | \$ 150.00         | \$ 300            |
| 23           | Remove existing wrought iron fences  | 154              | LF          | \$ 5.00           | \$ 770            |
| 24           | ( X-Cost ) Gates   | 1                | EA          | \$ 150.00         | \$ 150            |
| 25           | Remove existing metal tube rails   | 101              | LF          | \$ 10.00          | \$ 1,010          |
| 26           | Remove existing wells and associated foundations                                       | 96               | LF          | \$ 50.00          | \$ 4,800          |
| 27           | Remove existing retaining walls and associated foundations                             | 289              | LF          | \$ 100.00         | \$ 28,900         |
| 28           | Remove existing bollards   | 3                | EA          | \$ 65.00          | \$ 195            |
| 29           | Remove existing billboards   | 1                | EA          | \$ 1,000.00       | \$ 1,000          |
| 30           | Remove existing lightpoles   | 3                | EA          | \$ 1,000.00       | \$ 3,000          |
| 31           | Remove existing landscaped areas   | 8,527            | SF          | \$ 1.00           | \$ 8,527          |
| 32           | Remove existing trees  | 10               | EA          | \$ 300.00         | \$ 3,000          |
| 33           | Temporary construction fence   | 1,384            | LF          | \$ 25.00          | \$ 34,600         |
|              |  |                  |             | \$                | \$                |
|              |  | <b>SUB-TOTAL</b> |             |                   | <b>\$ 307,064</b> |
| <b>02300</b> | <b>EARTHWORK</b>   | <b>QUANTITY</b>  | <b>UNIT</b> | <b>UNIT PRICE</b> | <b>AMOUNT</b>     |
| <b>02315</b> | <b>Excavation and Fill</b>   |                  |             |                   |                   |
| 1            | Excavate @ surface finished areas ( Assumed 1' deep )                                  | 2,935            | CY          | \$ 10.00          | \$ 29,350         |
| 2            | Disposal   | 2,935            | CY          | \$ 16.00          | \$ 46,960         |
| <b>02370</b> | <b>Erosion and Sedimentation Control</b>   |                  |             |                   |                   |
| 1            | Silt fence   | 1,268            | LF          | \$ 2.00           | \$ 2,532          |
| 2            | Inlet protection   | 7                | EA          | \$ 60.00          | \$ 420            |
| 3            | Stabilized construction entrance   | 2,000            | SF          | \$ 1.00           | \$ 2,000          |
|              |  |                  |             | \$                | \$                |
|              |  | <b>SUB-TOTAL</b> |             |                   | <b>\$ 81,262</b>  |

Draft

8/12/2011

| 02500 UTILITIES                                   |   |          |      |              |                   |
|---|---|----------|------|--------------|-------------------|
| 02510   | Water Distribution  | QUANTITY | UNIT | UNIT PRICE   | AMOUNT            |
| 1   | Incoming fire water service; 6" (X-Cost) Connections to new Incoming domestic water mains; including RPZ and backflow preventor | 23       | LF   | \$ 75.00     | \$ 1,725          |
| 2   | Incoming domestic water service; 6" (X-Cost) Connections to existing mains; in public street; including tap and valve           | 1        | LS   | \$ 1,000.00  | \$ 1,000          |
| 3   |   | 279      | LF   | \$ 75.00     | \$ 20,925         |
| 4   |   | 1        | LS   | \$ 5,000.00  | \$ 5,000          |
| 02530 Sanitary Sewerage                           |   |          |      |              |                   |
| 1   | Alterations to existing sanitary sewers - Allowance   | 1        | LS   | \$ 10,000.00 | \$ 10,000         |
| 02550 Gas Piping                                  |   |          |      |              |                   |
| 1   | Gas main; relocated   | 109      | LF   | \$ 75.00     | \$ 8,175          |
| 2   | (X-Cost) Connections to existing gas mains  | 1        | EA   | \$ 5,000.00  | \$ 5,000          |
| 3   | Gas meters  | 1        | EA   | \$ 3,000.00  | \$ 3,000          |
| 02560 Site Electrical and Telephone               |   |          |      |              |                   |
| 1   | Electrical feeder to new transformer; relocated   | 150      | LF   | \$ 100.00    | \$ 15,000         |
| 2   | (X-Cost) Connections to existing feeders inside existing manhole  | 1        | EA   | \$ 5,000.00  | \$ 5,000          |
| 3   | Electrical feeder from new transformer to building  | 39       | LF   | \$ 100.00    | \$ 3,900          |
| 4   | Install 300 Kva Utility Transformer FBO   | 1        | LS   | \$ 8,000.00  | \$ 8,000          |
| Site Demolition                                   |   |          |      |              |                   |
| 1   | Allow for removing / alteration of existing utilities   |          | LS   | \$ 30,000.00 | \$ -              |
|   |   |          |      |              | \$ -              |
|   |   |          |      |              | \$ -              |
|   |   |          |      |              | \$ -              |
| <b>SUB-TOTAL</b>                                  |   |          |      |              | <b>\$ 88,725</b>  |
| 02600 DRAINAGE AND CONTAINMENT                    |   |          |      |              |                   |
| 02630   | Storm Drainage  | QUANTITY | UNIT | UNIT PRICE   | AMOUNT            |
| 1   | Storm drains; CPP; 4" diameter  | 60       | LF   | \$ 35.00     | \$ 2,100          |
| 2   | Storm drains; CPP; 6" diameter  | 201      | LF   | \$ 50.00     | \$ 10,050         |
| 3   | (X-Cost) Cleanouts  | 2        | LF   | \$ 261.00    | \$ 522            |
| 4   | Storm drains; CPP; 12" diameter   | 660      | LF   | \$ 125.00    | \$ 82,500         |
| 5   | (X-Cost) Connections to existing manholes   | 1        | EA   | \$ 1,000.00  | \$ 1,000          |
| 6   | (X-Cost) Connections to existing combined sewers; in public street  | 1        | EA   | \$ 5,000.00  | \$ 5,000          |
|   |   |          |      |              | \$ -              |
|   |   |          |      |              | \$ -              |
| <b>SUB-TOTAL</b>                                  |   |          |      |              | <b>\$ 101,172</b> |
| 02700 BASES, BALLASTS, PAVEMENT AND APPURTENANCES |   |          |      |              |                   |
| 02740   | Flexible Pavement   | QUANTITY | UNIT | UNIT PRICE   | AMOUNT            |
| 1   | Asphalt pavement @ parking lots   | 33,188   | SF   | \$ 3.50      | \$ 116,158        |
| 2   | (X-Cost) Curb Islands   | 1,287    | SF   | \$ 3.50      | \$ 4,505          |
| 02750   | Rigid Pavement  |          |      |              |                   |
| 1   | Concrete @ sidewalk   | 7,161    | SF   | \$ 4.50      | \$ 32,225         |
| 2   | (X-Cost) ADA ramps  | 265      | SF   | \$ 500.00    | \$ 142,500        |
| 3   | (X-Cost) ADA ramps @ curbs  | 5        | EA   | \$ 500.00    | \$ 2,500          |
| 4   | Concrete @ sidewalk; in public street   | 8,950    | SF   | \$ 4.50      | \$ 37,575         |
| 5   | Concrete @ loading pad  | 788      | SF   | \$ 8.00      | \$ 6,304          |
| 6   | Concrete @ dumpster pad   | 439      | SF   | \$ 8.00      | \$ 3,512          |
| 7   | Concrete @ transformer pad  | 64       | SF   | \$ 8.00      | \$ 512            |
| 02770   | Curbs and Gutters   |          |      |              |                   |
| 1   | Concrete @ curbs  | 1,131    | LF   | \$ 10.00     | \$ 11,310         |
| 02785   | Flexible Pavement Coating and Microsurfacing  |          |      |              |                   |
| 1   | Parking lot markings; parking bays  | 69       | EA   | \$ 15.00     | \$ 1,035          |
| 2   | Parking lot markings; ADA symbols   | 6        | EA   | \$ 35.00     | \$ 210            |
| 3   | Parking lot markings; hatched areas   | 3,918    | SF   | \$ 4.50      | \$ 17,831         |
| 4   | Parking lot markings; crosswalk hatched areas   | 432      | SF   | \$ 4.50      | \$ 1,944          |
| 5   | Parking lot markings; direction arrows  | 7        | EA   | \$ 35.00     | \$ 245            |
| 6   | Parking lot markings; stop bar  | 23       | LF   | \$ 3.50      | \$ 81             |
| 02790   | Athletic and Recreational Surfaces  |          |      |              |                   |
| 1   | Fitness trail and associated areas (Phase 1)  | 7,601    | SF   | \$ 3.00      | \$ 22,803         |
| 2   | Fitness trail and associated areas (Phase 2)  | 3,415    | SF   | \$ 3.00      | \$ 10,245         |
| 3   | Playground area (Phase 2)   | 1,866    | SF   | \$ 3.00      | \$ 5,598          |
| 4   | Amphitheater area   | 7,335    | SF   | \$ 50.00     | \$ 366,750        |
|   |   |          |      |              | \$ -              |
| <b>SUB-TOTAL</b>                                  |   |          |      |              | <b>\$ 783,642</b> |

PROJECT DETAILED ESTIMATE - SITEWORK

Draft

9/12/2011

| 02800 SITE IMPROVEMENTS AND AMENITIES |                               | QUANTITY  | UNIT | UNIT PRICE  | AMOUNT       |
|---------------------------------------|-------------------------------|-----------|------|-------------|--------------|
| 02820 Fences and Gates                |                               |           |      |             |              |
| 1                                     | Chain link fence, 8' high     | 679       | LF   | \$ 40.00    | \$ 27,160    |
| 2                                     | Decorative fence              | 587       | LF   | \$ 75.00    | \$ 44,025    |
| 3                                     | (X-Cost) Gates                | 2         | EA   | \$ 1,000.00 | \$ 2,000     |
| 4                                     | (X-Cost) Fence pilasters      | 13        | EA   | \$ 2,000.00 | \$ 26,000    |
| 02830 Retaining Walls                 |                               |           |      |             |              |
| 1                                     | Retaining walls               | 240       | LF   | \$ 650.00   | \$ 156,000   |
|                                       |                               |           |      |             |              |
| 02900 PLANTING                        |                               | SUB-TOTAL |      |             | \$ 285,185   |
| 02900 Landscaping                     |                               | QUANTITY  | UNIT | UNIT PRICE  | AMOUNT       |
| 1                                     | Planting areas                |           |      |             |              |
| 2                                     | Community garden area         | 6,134     | SF   | \$ 1.00     | \$ 6,134     |
| 3                                     | Planters                      | 2,398     | SF   | \$ 1.00     | \$ 2,398     |
| 4                                     | Trees; deciduous; BB; 2" cal. | 487       | SF   | \$ 5.00     | \$ 2,485     |
| 5                                     | Shrubs; 18"                   | 36        | EA   | \$ 600.00   | \$ 21,600    |
| 6                                     | Shrubs; 18" - 24"             | 82        | EA   | \$ 30.00    | \$ 2,460     |
| 7                                     | Shrubs; 24"                   | 85        | EA   | \$ 35.00    | \$ 2,275     |
| 8                                     | Shrubs; 36"                   | 108       | EA   | \$ 40.00    | \$ 4,320     |
| 9                                     | Shrubs; 48"                   | 60        | EA   | \$ 45.00    | \$ 2,700     |
| 10                                    | Perennials; clumps            | 6         | EA   | \$ 65.00    | \$ 330       |
| 11                                    | Grasses; clumps               | 170       | EA   | \$ 35.00    | \$ 5,950     |
| 12                                    | Impact Overlay (Allowance)    | 179       | EA   | \$ 35.00    | \$ 6,265     |
|                                       |                               |           |      |             |              |
|                                       |                               | SUB-TOTAL |      |             | \$ 80,000    |
| TOTAL FOR DIVISION 2 - SITEWORK       |                               |           |      |             | \$ 1,721,967 |

WORLD OF INQUIRY SCHOOL # 58

"UNIFORMAT" SYSTEM ANALYSIS OF CONSTRUCTION COST

Draft

9/12/2011

PHASE : SCHEMATIC ESTIMATE REVISION 1

BUILDING TYPE :

INDUSTR.  COMMERCIAL  RESIDENTIAL  EDUCATIONAL

PROJECT TYPE :

NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT : WORLD OF INQUIRY SCHOOL # 58

EMPLOYER : ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD

LOCATION : ROCHESTER, NEW YORK 14621

A/E : JCI ARCHITECTURE

CM : LOCATION :

PROJECT # : A/E :

| PROJECT AREA (SF) : |  | ADDITIONS  |  | RENOVATIONS |  | SITEWORK   |  | TOTAL AMOUNT |  |
|---------------------|--|------------|--|-------------|--|------------|--|--------------|--|
| TOTAL AREA          |  | TOTAL AREA |  | TOTAL AREA  |  | TOTAL AREA |  | TOTAL AREA   |  |
| 32,608              |  | 11,921     |  | 11,921      |  | 12,741     |  | 124,458      |  |

| SECTION / SYSTEM                        | AMOUNT       |           | COST / SF     |           | AMOUNT       |          | COST / SF |      | AMOUNT        |           | COST / SF |      | COMMENTS |
|---|--------------|-----------|---------------|-----------|--------------|----------|-----------|------|---------------|-----------|-----------|------|----------|
|   | \$           |           | \$            |           | \$           |          | \$        |      | \$            |           | \$        |      |          |
| <b>SITE IMPROVEMENTS</b>                | \$ 52,012    | \$ 1.80   | \$ -          | \$ -      | \$ 1,414,903 | \$ 11.37 | \$ -      | \$ - | \$ 1,466,915  | \$ 11.79  | \$ -      | \$ - |          |
| 36 Site Improvements                    | \$ 52,012    | \$ 1.80   | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,414,903  | \$ 11.37  | \$ -      | \$ - |          |
| 37 Athletic Facilities                  | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| <b>FOUNDATIONS</b>                      | \$ 901,360   | \$ 27.73  | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ 901,360    | \$ 7.24   | \$ -      | \$ - |          |
| 1 Structural Foundations                | \$ 901,360   | \$ 27.73  | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ 901,360    | \$ 7.24   | \$ -      | \$ - |          |
| <b>SUPERSTRUCTURE</b>                   | \$ 1,217,216 | \$ 37.46  | \$ 295,823    | \$ 2.52   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,513,039  | \$ 12.16  | \$ -      | \$ - |          |
| 2 Superstructure                        | \$ 1,217,216 | \$ 37.46  | \$ 295,823    | \$ 2.52   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,513,039  | \$ 12.16  | \$ -      | \$ - |          |
| <b>EXTERIOR CONSTRUCTION</b>            | \$ 1,089,444 | \$ 33.30  | \$ 804,353    | \$ 6.76   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,281,125  | \$ 10.30  | \$ -      | \$ - |          |
| 3 Exterior Walls                        | \$ 476,772   | \$ 14.67  | \$ 804,353    | \$ 6.76   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,281,125  | \$ 10.30  | \$ -      | \$ - |          |
| 4 Windows and Glazed Walls              | \$ 79,263    | \$ 2.44   | \$ 801,905    | \$ 6.72   | \$ -         | \$ -     | \$ -      | \$ - | \$ 881,158    | \$ 7.08   | \$ -      | \$ - |          |
| 5 Doors and Frames                      | \$ 31,500    | \$ 0.97   | \$ 18,200     | \$ 0.20   | \$ -         | \$ -     | \$ -      | \$ - | \$ 49,700     | \$ 0.40   | \$ -      | \$ - |          |
| 6 Roofs                                 | \$ 494,944   | \$ 15.23  | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ 494,944    | \$ 3.98   | \$ -      | \$ - |          |
| <b>INTERIOR CONSTRUCTION</b>            | \$ 1,179,229 | \$ 36.17  | \$ 890,171    | \$ 7.51   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,269,392  | \$ 10.17  | \$ -      | \$ - |          |
| 7 Partitions                            | \$ 795,752   | \$ 24.46  | \$ 321,098    | \$ 2.71   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,116,850  | \$ 8.88   | \$ -      | \$ - |          |
| 8 Interior Doors                        | \$ 127,817   | \$ 3.93   | \$ 342,054    | \$ 2.90   | \$ -         | \$ -     | \$ -      | \$ - | \$ 469,871    | \$ 3.77   | \$ -      | \$ - |          |
| 9 Stair Construction                    | \$ 28,200    | \$ 0.87   | \$ 92,750     | \$ 0.78   | \$ -         | \$ -     | \$ -      | \$ - | \$ 120,950    | \$ 0.97   | \$ -      | \$ - |          |
| 10 Stair Finishes                       | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 11 Wall Finishes                        | \$ 158,885   | \$ 4.85   | \$ 890,171    | \$ 7.51   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,049,056  | \$ 8.32   | \$ -      | \$ - |          |
| 12 Floor Finishes                       | \$ 273,002   | \$ 8.40   | \$ 640,400    | \$ 5.42   | \$ -         | \$ -     | \$ -      | \$ - | \$ 913,402    | \$ 7.34   | \$ -      | \$ - |          |
| 13 Ceiling Finishes                     | \$ 188,870   | \$ 5.81   | \$ 827,273    | \$ 7.02   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,016,143  | \$ 8.16   | \$ -      | \$ - |          |
| <b>VERTICAL MOVEMENT</b>                | \$ 98,450    | \$ 2.97   | \$ 121,450    | \$ 1.02   | \$ -         | \$ -     | \$ -      | \$ - | \$ 217,900    | \$ 1.75   | \$ -      | \$ - |          |
| 14 Elevators and Lifts                  | \$ 98,450    | \$ 2.97   | \$ 121,450    | \$ 1.02   | \$ -         | \$ -     | \$ -      | \$ - | \$ 217,900    | \$ 1.75   | \$ -      | \$ - |          |
| <b>PLUMBING</b>                         | \$ 203,649   | \$ 6.25   | \$ 188,924    | \$ 1.62   | \$ -         | \$ -     | \$ -      | \$ - | \$ 392,573    | \$ 3.14   | \$ -      | \$ - |          |
| 15 Domestic Water Distribution Piping   | \$ 120,272   | \$ 3.70   | \$ 10,446     | \$ 0.09   | \$ -         | \$ -     | \$ -      | \$ - | \$ 130,718    | \$ 1.06   | \$ -      | \$ - |          |
| 16 Hot Water Supply - Generation        | \$ 32,508    | \$ 1.00   | \$ 25,403     | \$ 0.22   | \$ -         | \$ -     | \$ -      | \$ - | \$ 57,909     | \$ 0.47   | \$ -      | \$ - |          |
| 17 Plumbing Fixtures                    | \$ 116,071   | \$ 3.54   | \$ 325,842    | \$ 2.77   | \$ -         | \$ -     | \$ -      | \$ - | \$ 441,913    | \$ 3.54   | \$ -      | \$ - |          |
| 18 Sanitary Piping                      | \$ 18,263    | \$ 0.60   | \$ 188,924    | \$ 1.62   | \$ -         | \$ -     | \$ -      | \$ - | \$ 203,177    | \$ 1.63   | \$ -      | \$ - |          |
| 19 Storm Water Riser Piping             | \$ -         | \$ -      | \$ 203,649    | \$ 1.76   | \$ -         | \$ -     | \$ -      | \$ - | \$ 203,649    | \$ 1.64   | \$ -      | \$ - |          |
| <b>HVAC</b>                             | \$ 1,324,294 | \$ 40.74  | \$ 3,746,386  | \$ 31.24  | \$ -         | \$ -     | \$ -      | \$ - | \$ 5,070,681  | \$ 40.76  | \$ -      | \$ - |          |
| 20 Heating System Types                 | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 21 Cooling System Types                 | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 22 Heating / Cooling Systems            | \$ 1,324,294 | \$ 40.74  | \$ 3,746,386  | \$ 31.24  | \$ -         | \$ -     | \$ -      | \$ - | \$ 5,070,681  | \$ 40.76  | \$ -      | \$ - |          |
| 23 Exhaust Ventilation Systems          | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 24 HVAC Controls                        | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| <b>SPRINKLER SYSTEMS</b>                | \$ 224,291   | \$ 6.90   | \$ 808,827    | \$ 6.62   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,033,118  | \$ 8.27   | \$ -      | \$ - |          |
| 25 Fire Sprinkler System Types          | \$ 224,291   | \$ 6.90   | \$ 808,827    | \$ 6.62   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,033,118  | \$ 8.27   | \$ -      | \$ - |          |
| 26 Standpipe and Hose Systems           | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| <b>ELECTRICAL DISTRIBUTION SYSTEM</b>   | \$ 817,918   | \$ 25.12  | \$ 2,092,418  | \$ 17.74  | \$ -         | \$ -     | \$ -      | \$ - | \$ 2,910,336  | \$ 23.38  | \$ -      | \$ - |          |
| 27 Building Service                     | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 28 Branch Panels                        | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 29 Interior Lighting                    | \$ 291,690   | \$ 8.97   | \$ 711,321    | \$ 5.97   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,003,011  | \$ 8.08   | \$ -      | \$ - |          |
| 30 Exterior Lighting                    | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 31 Exit Signs                           | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 32 Power and Outlets                    | \$ 525,622   | \$ 16.17  | \$ 1,381,298  | \$ 11.63  | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,906,920  | \$ 15.32  | \$ -      | \$ - |          |
| 35 Emergency Power                      | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| <b>COMMUNICATIONS</b>                   | \$ 404,375   | \$ 12.44  | \$ 795,823    | \$ 6.66   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,200,198  | \$ 9.65   | \$ -      | \$ - |          |
| 33 Communication and Security Systems   | \$ -         | \$ -      | \$ 348,081    | \$ 2.87   | \$ -         | \$ -     | \$ -      | \$ - | \$ 348,081    | \$ 2.80   | \$ -      | \$ - |          |
| 34 Special Systems                      | \$ 404,375   | \$ 12.44  | \$ 795,823    | \$ 6.66   | \$ -         | \$ -     | \$ -      | \$ - | \$ 1,200,198  | \$ 9.65   | \$ -      | \$ - |          |
| <b>FIXED FURNISHINGS</b>                | \$ 767,614   | \$ 23.81  | \$ 2,111,467  | \$ 17.49  | \$ -         | \$ -     | \$ -      | \$ - | \$ 2,879,081  | \$ 23.14  | \$ -      | \$ - |          |
| 38 Fixed Furnishings                    | \$ 767,614   | \$ 23.81  | \$ 2,111,467  | \$ 17.49  | \$ -         | \$ -     | \$ -      | \$ - | \$ 2,879,081  | \$ 23.14  | \$ -      | \$ - |          |
| <b>ADA</b>                              | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 39 ADA Upgrades                         | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| <b>MISCELLANEOUS</b>                    | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 40 Miscellaneous Building Codes         | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| <b>ALTERATION</b>                       | \$ 128,846   | \$ 3.98   | \$ 1,127,273  | \$ 9.26   | \$ 307,084   | \$ 2.47  | \$ -      | \$ - | \$ 1,504,198  | \$ 12.67  | \$ -      | \$ - |          |
| 41 Alteration                           | \$ 128,846   | \$ 3.98   | \$ 1,127,273  | \$ 9.26   | \$ 307,084   | \$ 2.47  | \$ -      | \$ - | \$ 1,504,198  | \$ 12.67  | \$ -      | \$ - |          |
| <b>BUILDING SUB-TOTAL</b>               | \$ 6,873,868 | \$ 212.99 | \$ 16,337,913 | \$ 133.85 | \$ 1,721,987 | \$ 13.84 | \$ -      | \$ - | \$ 26,933,549 | \$ 216.45 | \$ -      | \$ - |          |
| <b>TEMPORARY FACILITIES</b>             | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |
| 42 TCU's and Other Temporary Facilities | \$ -         | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -      | \$ - | \$ -          | \$ -      | \$ -      | \$ - |          |

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8/12/2011

PHASE: SCHEMATIC ESTIMATE REVISION 1  
 BUILDING TYPE:  
 INDUSTR.  COMMERCIAL  RESIDENTIAL  EDUCATIONAL

PROJECT TYPE:  
 NEW CONSTRUCTION  ADDITION  RENOVATION

PROJECT: WORLD OF INQUIRY SCHOOL # 58  
 EMPLOYER: ROCHESTER JOINT SCHOOL CONSTRUCTION BOARD  
 LOCATION: ROCHESTER, NEW YORK 14821  
 A/E: JCJ ARCHITECTURE  
 CM: LOCATION:  
 PROJECT #: A/E:

| SECTION / SYSTEM | PROJECT AREA / SF:                                      |               |           |               |           |              |          |               | TOTAL AMOUNT | COMMENTS |
|------------------|---|---------------|-----------|---------------|-----------|--------------|----------|---------------|--------------|----------|
|                  | AMOUNT  | COST / SF     | AMOUNT    | COST / SF     | AMOUNT    | COST / SF    | AMOUNT   | COST / SF     |              |          |
| 43               | MOVABLE FURNITURE                                       |               |           |               |           |              |          |               |              |          |
|                  | Furniture   | \$ -          | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -          | \$ -         |          |
| 44               | EQUIPMENT WITH A LIFE EXPECTANCY OF 10 YEARS OR GREATER |               |           |               |           |              |          |               |              |          |
|                  | Equipment   | \$ -          | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -          | \$ -         |          |
|                  | <b>BUILDING + TEMP. FAC. SUB-TOTAL</b>                  | \$ 9,873,869  | \$ 272.99 | \$ 16,337,913 | \$ 177.72 | \$ 1,721,967 | \$ 13.84 | \$ 26,933,649 | \$ 216.46    |          |
| 19               | GENERAL CONDITIONS                                      | 10.00%        |           |               |           |              |          |               |              |          |
|                  | SUB-TOTAL   | \$ 867,387    | \$ 27.30  | \$ 1,633,761  | \$ 17.77  | \$ 172,167   | \$ 1.38  | \$ 2,663,385  | \$ 21.64     |          |
|                  | <b>SUB-TOTAL</b>  | \$ 9,761,036  | \$ 300.28 | \$ 17,971,705 | \$ 195.50 | \$ 1,894,163 | \$ 15.22 | \$ 29,626,904 | \$ 238.09    |          |
| 20               | CM FEES ( TBD )   | 0.00%         |           |               |           |              |          |               |              |          |
|                  | SUB-TOTAL   | \$ -          | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -          | \$ -         |          |
|                  | <b>SUB-TOTAL</b>  | \$ 9,761,036  | \$ 300.28 | \$ 17,971,705 | \$ 195.50 | \$ 1,894,163 | \$ 15.22 | \$ 29,626,904 | \$ 238.09    |          |
| 21               | ESCALATION  | 0.00%         |           |               |           |              |          |               |              |          |
|                  | SUB-TOTAL   | \$ -          | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -          | \$ -         |          |
|                  | <b>SUB-TOTAL</b>  | \$ 9,761,036  | \$ 300.28 | \$ 17,971,705 | \$ 195.50 | \$ 1,894,163 | \$ 15.22 | \$ 29,626,904 | \$ 238.09    |          |
| 22               | DESIGN CONTINGENCY                                      | 10.00%        |           |               |           |              |          |               |              |          |
|                  | SUB-TOTAL   | \$ 976,104    | \$ 30.03  | \$ 1,797,170  | \$ 19.85  | \$ 189,416   | \$ 1.52  | \$ 2,962,650  | \$ 23.81     |          |
|                  | <b>SUB-TOTAL</b>  | \$ 10,737,139 | \$ 330.31 | \$ 19,768,875 | \$ 215.05 | \$ 2,083,579 | \$ 16.74 | \$ 32,589,554 | \$ 261.90    |          |
| 23               | CONSTRUCTION CONTINGENT                                 | 0.00%         |           |               |           |              |          |               |              |          |
|                  | SUB-TOTAL   | \$ -          | \$ -      | \$ -          | \$ -      | \$ -         | \$ -     | \$ -          | \$ -         |          |
|                  | <b>TOTAL CONSTRUCTION COST ( EXCLUDING ESCALATION )</b> | \$ 10,737,139 | \$ 330.31 | \$ 19,768,875 | \$ 215.05 | \$ 2,083,579 | \$ 16.74 | \$ 32,589,554 | \$ 261.90    |          |

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# EXECUTIVE SUMMARY

Building More Than Buildings®

## CostAdvisor® for K-12

### EXECUTIVE SUMMARY

Project: Charlotte High School #102

Scenario: Scenario 102

Project Date: 5/19/2011

Project Type: K-12

|   |  |
|---|--|
| <b>Location:</b> NY - Rochester               | <b>Architect:</b> CJS                      |
| <b>Report Date:</b> 08/16/2011                | <b>COE Representative:</b> Tom Roger       |
| <b>Owner:</b> Rochester City Schools          | <b>Gilbane Estimator:</b> Tom Sieczkowski  |
| <b>Program Manager:</b> Tom Roger             | <b>Gilbane:</b>                            |
| <b>Preconstruction Start Date:</b> 08/01/2011 | <b>Construction Start Date:</b> 07/01/2012 |
|   | <b>Construction End Date:</b> 08/01/2013   |

### CONCEPTUAL MODEL COST SUMMARY

|  | SF      | Cost                | Cost/BGSF        |
|--|---------|---------------------|------------------|
| New Construction Fit-Out:                            | 0       | \$0                 | \$0.00           |
| Renovation:  | 216,056 | \$18,311,319        | \$84.75          |
| Total new / Reno Fit-Out (BGSF):                     | 216,056 | \$18,311,319        | \$84.75          |
| New Construction Core and Shell:                     |         | \$488,402           |                  |
| <b>Building Construction Total:</b>                  |         | <b>\$18,799,721</b> | <b>\$87.01</b>   |
| Sitework and Building Demolition:                    |         | \$1,295,129         | Infinity         |
| <b>Total Conceptual Model Cost:</b>                  |         | <b>\$20,094,850</b> | <b>\$93.01</b>   |
| Construction Escalation to midpoint of construction: | 4.91 %  | \$943,599           | included in cost |

### SOFT COST SUMMARY

| Group 100 - Professional Fees                 | % Cur Model Cost | Lump Sum    | Cost/BGSF |
|---|------------------|-------------|-----------|
| CM- General Conditions (Field Office Support) | 6.00 %           | \$1,218,199 | \$5.64    |
| Architect Basic Services                      | 9.00 %           | \$1,827,298 | \$8.46    |
| Food Service consultant                       | 0.25 %           | \$50,758    | \$0.23    |
| GC/CM Pre-Construction Services               | 1.00 %           | \$203,033   | \$0.94    |
| Geotechnical and Foundations Engineer         | 0.25 %           | \$50,758    | \$0.23    |

Report created on:  
8/16/2011

\*All information contained herein is designed to provide assistance and advice and does NOT constitute an estimate or promise of price.





**EXECUTIVE SUMMARY**

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|   |        |                    |                |
|---|--------|--------------------|----------------|
| <b>Master Plan Consultant</b>                                   | 2.00 % | \$408,066          | \$1.88         |
| <b>Total for Group 100 - Professional Fees Soft Cost Types:</b> |        | <b>\$3,756,113</b> | <b>\$17.38</b> |

| <b>Group 200 - Pre-Planning Costs</b>                            | <b>% Cur Model Cost</b> | <b>Lump Sum</b> | <b>Cost/BGSF</b> |
|--|-------------------------|-----------------|------------------|
| <b>Master Plan Studies</b>                                       | 0.20 %                  | \$40,607        | \$0.19           |
| <b>Total for Group 200 - Pre-Planning Costs Soft Cost Types:</b> |                         | <b>\$40,607</b> | <b>\$0.19</b>    |

| <b>Group 300 - Info Tech Sys/Apps</b>                            | <b>% Cur Model Cost</b> | <b>Lump Sum</b> | <b>Cost/BGSF</b> |
|--|-------------------------|-----------------|------------------|
| <b>Computer network/hub equipment</b>                            | 0.20 %                  | \$40,607        | \$0.19           |
| <b>Total for Group 300 - Info Tech Sys/Apps Soft Cost Types:</b> |                         | <b>\$40,607</b> | <b>\$0.19</b>    |

| <b>Group 400 - Equipment and Furnishings</b>                            | <b>% Cur Model Cost</b> | <b>Lump Sum</b>  | <b>Cost/BGSF</b> |
|---|-------------------------|------------------|------------------|
| <b>Furniture &amp; Furnishings</b>                                      | 2.00 %                  | \$408,066        | \$1.88           |
| <b>Food service equipment</b>   | 2.00 %                  | \$408,066        | \$1.88           |
| <b>Total for Group 400 - Equipment and Furnishings Soft Cost Types:</b> |                         | <b>\$812,132</b> | <b>\$3.76</b>    |

| <b>Group 500 - Owner's Project Costs</b>                            | <b>% Cur Model Cost</b> | <b>Lump Sum</b>  | <b>Cost/BGSF</b> |
|---|-------------------------|------------------|------------------|
| <b>Bond issuance costs</b>  | 2.00 %                  | \$408,066        | \$1.88           |
| <b>Builder's Risk Insurance</b>                                     | 0.10 %                  | \$20,303         | \$0.09           |
| <b>Total for Group 500 - Owner's Project Costs Soft Cost Types:</b> |                         | <b>\$426,370</b> | <b>\$1.97</b>    |

| <b>Group 600 - Contingencies</b>                            | <b>% Cur Model Cost</b> | <b>Lump Sum</b>    | <b>Cost/BGSF</b> |
|---|-------------------------|--------------------|------------------|
| <b>Owner contingency</b>                                    | 5.00 %                  | \$1,015,166        | \$4.70           |
| <b>Total for Group 600 - Contingencies Soft Cost Types:</b> |                         | <b>\$1,015,166</b> | <b>\$4.70</b>    |

| <b>Group 700 - Escalation</b>                            | <b>% Cur Model Cost</b> | <b>Lump Sum</b>  | <b>Cost/BGSF</b> |
|--|-------------------------|------------------|------------------|
| <b>Construction costs</b>                                | 3.00 %                  | \$609,099        | \$2.82           |
| <b>Total for Group 700 - Escalation Soft Cost Types:</b> |                         | <b>\$609,099</b> | <b>\$2.82</b>    |

|                         |                    |                |
|-------------------------|--------------------|----------------|
| <b>Soft Costs Total</b> | <b>\$6,700,093</b> | <b>\$31.01</b> |
|-------------------------|--------------------|----------------|

Soft Cost Escalation to three months prior to end of construction: 6.00 % \$379,198 included in cost

**Project Total Cost: \$26,794,943 \$124.02**

# CONSTRUCTION COST SUMMARY (BY PROGRAM)

Building More Than Buildings®

## CostAdvisor® for K-12

### CONSTRUCTION COST SUMMARY (BY PROGRAM)

Project: Charlotte High School #102

Project Date: 5/19/2011

Scenario: Scenario 102

Project Type: K-12

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| HS Custodial   | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BCSF |
|--|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 8,990    | B       | \$89          | \$76       |                | \$682,307       |            | \$682,307  | \$76      |
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 156      | B       | \$89          | \$54       |                | \$8,358         |            | \$8,358    | \$54      |
| Storage Closets  |         | 0        | B       | \$113         | \$0        |                | \$0             |            |            |           |
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 240      | B       | \$89          | \$54       |                | \$12,858        |            | \$12,858   | \$54      |
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 490      | B       | \$89          | \$54       |                | \$26,251        |            | \$26,251   | \$54      |
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 1,576    | B       | \$89          | \$54       |                | \$84,432        |            | \$84,432   | \$54      |
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 6,894    | B       | \$89          | \$54       |                | \$369,338       |            | \$369,338  | \$54      |
| Custodial, MEP Rooms, Storage, Shafts, El Closets Complete |         | 630      | B       | \$89          | \$54       |                | \$33,751        |            | \$33,751   | \$54      |

Report created on: 8/16/2011

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**CONSTRUCTION COST SUMMARY (BY PROGRAM)**

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Report created on: 8/16/2011

# CONSTRUCTION COST SUMMARY (BY PROGRAM)

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|                           |  |        |   |      |      |             |             |
|---------------------------|--|--------|---|------|------|-------------|-------------|
| Storage Interior Large Rm |  | 398    | B | \$65 | \$39 | \$15,636    | \$39        |
| Totals for program:       |  | 19,374 |   |      |      | \$1,232,931 | \$1,232,931 |

| HS Circulation                | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/ECSF |
|-------------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Circulation Complete          |         | 2,374    | B       | \$83          | \$0        | \$0            |                 |            |            |           |
| Circulation Complete          |         | 4,816    | B       | \$83          | \$71       | \$341,148      |                 |            | \$341,148  | \$71      |
| Circulation Complete          |         | 1,799    | B       | \$83          | \$71       | \$127,435      |                 |            | \$127,435  | \$71      |
| Stairs per flight             |         | 253      | B       | \$77          | \$46       | \$11,747       |                 |            | \$11,747   | \$46      |
| Stairs per flight             |         | 1,078    | B       | \$77          | \$46       | \$50,052       |                 |            | \$50,052   | \$46      |
| Circulation Complete          |         | 639      | B       | \$83          | \$96       | \$61,240       |                 |            | \$61,240   | \$96      |
| Circulation Corr no lockers   |         | 136      | B       | \$83          | \$71       | \$9,634        |                 |            | \$9,634    | \$71      |
| Circulation Complete          |         | 1,328    | B       | \$83          | \$50       | \$66,403       |                 |            | \$66,403   | \$50      |
| Circulation Complete          |         | 7,228    | B       | \$83          | \$96       | \$692,714      |                 |            | \$692,714  | \$96      |
| Circulation Corr with lockers |         | 1,690    | B       | \$101         | \$86       | \$145,366      |                 |            | \$145,366  | \$86      |
| Stairs per flight             |         | 479      | B       | \$77          | \$46       | \$22,240       |                 |            | \$22,240   | \$46      |
| Public Lobby                  |         | 46       | B       | \$126         | \$106      | \$4,888        |                 |            | \$4,888    | \$106     |
| Stairs per flight             |         | 260      | B       | \$77          | \$46       | \$11,608       |                 |            | \$11,608   | \$46      |
| Stairs per flight             |         | 2,102    | B       | \$77          | \$46       | \$97,597       |                 |            | \$97,597   | \$46      |
| Circulation Complete          |         | 3,626    | B       | \$83          | \$71       | \$256,853      |                 |            | \$256,853  | \$71      |
| Circulation Complete          |         | 4,493    | B       | \$83          | \$71       | \$318,268      |                 |            | \$318,268  | \$71      |
| Stairs per flight             |         | 611      | B       | \$77          | \$46       | \$28,369       |                 |            | \$28,369   | \$46      |
| Stairs per flight             |         | 597      | B       | \$77          | \$46       | \$27,719       |                 |            | \$27,719   | \$46      |

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**CONSTRUCTION COST SUMMARY (BY PROGRAM)**

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Report created on: 8/16/2011

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# CONSTRUCTION COST SUMMARY (BY PROGRAM)

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|                               |  |        |   |       |      |  |             |  |             |
|-------------------------------|--|--------|---|-------|------|--|-------------|--|-------------|
| Circulation Corr with lockers |  | 2,925  | B | \$101 | \$86 |  | \$251,596   |  | \$86        |
| Totals for program:           |  | 36,470 |   |       |      |  | \$2,524,877 |  | \$2,524,877 |

## K12 Grossing factors

|  | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
|--|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Exterior Wall Footprint sf per bidg area |         | 0        | B       | \$54          | \$24       |                | \$0             |            |            |           |
| Exterior Wall Footprint sf per bidg area |         | 0        | D       | \$0           | \$0        |                | \$0             |            |            |           |
| Interior Wall Footprint sf per bidg area |         | 0        | D       | \$0           | \$0        |                | \$0             |            |            |           |
| Exterior Wall Footprint sf per bidg area |         | 13,293   | B       | \$54          | \$0        |                | \$0             |            |            |           |
| Interior Wall Footprint sf per bidg area |         | 13,293   | B       | \$54          | \$24       |                | \$320,470       |            | \$320,470  | \$24      |
| Shell Space                              |         | 13,294   | B       | \$65          | \$29       |                | \$391,715       |            | \$391,715  | \$29      |
| Totals for program:                      |         | 39,880   |         |               |            |                | \$712,186       |            | \$712,186  |           |

## HS Toilet Rooms

|                            | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
|----------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Toilets Single             |         | 80       | B       | \$226         | \$260      |                | \$20,810        |            | \$20,810   | \$260     |
| Toilet Rooms Small ~10 Fix |         | 341      | B       | \$220         | \$253      |                | \$86,370        |            | \$86,370   | \$253     |
| Toilet Rooms Large ~25 Fix |         | 572      | B       | \$220         | \$253      |                | \$144,879       |            | \$144,879  | \$253     |
| Toilet Rooms Large ~25 Fix |         | 553      | B       | \$220         | \$253      |                | \$140,067       |            | \$140,067  | \$253     |
| Toilet Rooms Small ~10 Fix |         | 153      | B       | \$220         | \$253      |                | \$38,753        |            | \$38,753   | \$253     |
| Toilet Rooms Large ~25 Fix |         | 244      | B       | \$220         | \$132      |                | \$32,244        |            | \$32,244   | \$132     |

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**CONSTRUCTION COST SUMMARY (BY PROGRAM)**

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|                               | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
|-------------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Toilet Rooms Large<br>~25 Fix |         | 285      | B       | \$220         | \$253      |                | \$72,439        |            | \$72,439   | \$253     |
| Toilet Rooms Large<br>~25 Fix |         | 537      | B       | \$220         | \$253      |                | \$136,014       |            | \$136,014  | \$253     |
| Totals for program:           |         | 2,766    |         |               |            |                | \$671,576       |            | \$671,576  |           |

| HS Administration            |         |          |         |               |            |                |                 |            |             |           |
|------------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|-------------|-----------|
|                              | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost  | Cost/BGSF |
| Staff Office                 |         | 367      | B       | \$107         | \$123      |                | \$45,222        |            | \$45,222    | \$123     |
| Admin Complete all<br>shools |         | 510      | B       | \$119         | \$71       |                | \$36,430        |            | \$36,430    | \$71      |
| Admin Complete all<br>shools |         | 730      | B       | \$119         | \$137      |                | \$99,945        |            | \$99,945    | \$137     |
| Admin Complete all<br>shools |         | 627      | B       | \$119         | \$137      |                | \$85,843        |            | \$85,843    | \$137     |
| Admin Complete all<br>shools |         | 1,258    | B       | \$119         | \$137      |                | \$172,234       |            | \$172,234   | \$137     |
| Admin Complete all<br>shools |         | 6,580    | B       | \$119         | \$137      |                | \$900,873       |            | \$900,873   | \$137     |
| Admin Complete all<br>shools |         | 232      | B       | \$119         | \$71       |                | \$16,572        |            | \$16,572    | \$71      |
| Admin Complete all<br>shools |         | 71       | B       | \$119         | \$137      |                | \$9,721         |            | \$9,721     | \$137     |
| Totals for program:          |         | 10,375   |         |               |            |                | \$1,366,839     |            | \$1,366,839 |           |

| HS Health/Nurse           |         |          |         |               |            |                |                 |            |            |           |
|---------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
|                           | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
| Health /Nurse<br>Complete |         | 1,179    | B       | \$137         | \$157      |                | \$185,630       |            | \$185,630  | \$157     |
| Exam Room                 |         | 150      | B       | \$179         | \$152      |                | \$22,769        |            | \$22,769   | \$152     |
| Totals for program:       |         | 1,329    |         |               |            |                | \$208,399       |            | \$208,399  |           |

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# CONSTRUCTION COST SUMMARY (BY PROGRAM)

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## K12 Swimming Pool

|                                     | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
|-------------------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Swimming Pool Area<br>1 wall common |         | 5,926    | B       | \$89          | \$54       | \$317,478      |                 |            | \$317,478  | \$54      |
| Totals for program:                 |         | 5,926    |         |               |            | \$317,478      |                 |            | \$317,478  |           |

## HS Physical Education

|                          | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost  | Cost/BGSF |
|--------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|-------------|-----------|
| PE Locker/Shower Room    |         | 7,529    | B       | \$193         | \$116      | \$871,251      |                 |            | \$871,251   | \$116     |
| Gym Equip Storage        |         | 2,207    | B       | \$71          | \$43       | \$94,590       |                 |            | \$94,590    | \$43      |
| Showers/Toilets Only     |         | 415      | C       | \$167         | \$192      | \$79,545       |                 |            | \$79,545    | \$192     |
| Gymnasium 3 walls common |         | 10,899   | B       | \$86          | \$111      | \$1,208,674    |                 |            | \$1,208,674 | \$111     |
| Gym Equip Storage        |         | 685      | B       | \$71          | \$43       | \$29,358       |                 |            | \$29,358    | \$43      |
| Totals for program:      |         | 21,735   |         |               |            | \$2,283,419    |                 |            | \$2,283,419 |           |

## HS Food Service

|   | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost  | Cost/BGSF |
|---|---------|----------|---------|---------------|------------|----------------|-----------------|------------|-------------|-----------|
| Full Service Kitchen and Cafeteria Complete |         | 926      | B       | \$170         | \$102      | \$94,588       |                 |            | \$94,588    | \$102     |
| Full Service Kitchen and Cafeteria Complete |         | 11,602   | B       | \$170         | \$196      | \$2,271,467    |                 |            | \$2,271,467 | \$196     |
| Totals for program:                         |         | 12,528   |         |               |            | \$2,366,056    |                 |            | \$2,366,056 |           |

## HS General Classrooms

|                    | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
|--------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| General Classrooms |         | 2,666    | B       | \$89          | \$76       | \$202,339      |                 |            | \$202,339  | \$76      |
| General Classrooms |         | 4,009    | B       | \$89          | \$103      | \$411,656      |                 |            | \$411,656  | \$103     |
| General Classrooms |         | 4,750    | B       | \$89          | \$76       | \$360,507      |                 |            | \$360,507  | \$76      |

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|                            | NewArea | RenoArea      | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$    | C and S \$ | Total Cost         | Cost/BGSF |
|----------------------------|---------|---------------|---------|---------------|------------|----------------|--------------------|------------|--------------------|-----------|
| General Classrooms         |         | 1,539         | B       | \$89          | \$76       |                | \$116,804          |            | \$116,804          | \$76      |
| General Classrooms         |         | 586           | B       | \$89          | \$103      |                | \$60,172           |            | \$60,172           | \$103     |
| General Classrooms         |         | 9,221         | B       | \$89          | \$76       |                | \$699,839          |            | \$699,839          | \$76      |
| General Classrooms         |         | 6,463         | B       | \$89          | \$76       |                | \$490,517          |            | \$490,517          | \$76      |
| General Classrooms         |         | 1,345         | B       | \$89          | \$103      |                | \$138,109          |            | \$138,109          | \$103     |
| General Classrooms         |         | 2,596         | B       | \$89          | \$76       |                | \$197,026          |            | \$197,026          | \$76      |
| General Classrooms         |         | 7,303         | B       | \$89          | \$76       |                | \$554,270          |            | \$554,270          | \$76      |
| General Classrooms         |         | 3,628         | B       | \$89          | \$76       |                | \$275,351          |            | \$275,351          | \$76      |
| General Classrooms         |         | 1,976         | B       | \$89          | \$103      |                | \$202,902          |            | \$202,902          | \$103     |
| <b>Totals for program:</b> |         | <b>46,082</b> |         |               |            |                | <b>\$3,709,493</b> |            | <b>\$3,709,493</b> |           |

## K12 Music / Dance

|                            | NewArea | RenoArea     | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost      | Cost/BGSF |
|----------------------------|---------|--------------|---------|---------------|------------|----------------|-----------------|------------|-----------------|-----------|
| Music Choral/Band Room     |         | 1,143        | B       | \$89          | \$76       |                | \$86,749        |            | \$86,749        | \$76      |
| <b>Totals for program:</b> |         | <b>1,143</b> |         |               |            |                | <b>\$86,749</b> |            | <b>\$86,749</b> |           |

## HS Science

|                                 | NewArea | RenoArea     | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$  | C and S \$ | Total Cost       | Cost/BGSF |
|---------------------------------|---------|--------------|---------|---------------|------------|----------------|------------------|------------|------------------|-----------|
| Science Labs w/1 fumehood       |         | 1,502        | B       | \$161         | \$185      |                | \$277,614        |            | \$277,614        | \$185     |
| Science Labs w/1 fumehood       |         | 942          | B       | \$161         | \$185      |                | \$174,109        |            | \$174,109        | \$185     |
| Science Prep Rooms w/1 fumehood |         | 2,249        | B       | \$207         | \$238      |                | \$535,767        |            | \$535,767        | \$238     |
| <b>Totals for program:</b>      |         | <b>4,693</b> |         |               |            |                | <b>\$987,491</b> |            | <b>\$987,491</b> |           |

## HS Auditorium

|                | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BGSF |
|----------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Backstage Area |         | 132      | B       | \$167         | \$100      |                | \$13,201        |            | \$13,201   | \$100     |

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|                     | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost  | Cost/BSSF |
|---------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|-------------|-----------|
| Auditorium Complete |         | 8,535    | B       | \$133         | \$153      |                | \$1,308,757     |            | \$1,308,757 | \$153     |
| Auditorium Complete |         | 2,299    | B       | \$133         | \$153      |                | \$352,529       |            | \$352,529   | \$153     |
| Totals for program: |         | 10,966   |         |               |            |                | \$1,674,487     |            | \$1,674,487 |           |

## HS Library/Media/Techology

|                                 | NewArea | RenoArea | Int BOD | Fit-out \$/ft | Reno \$/ft | New Fit-out \$ | Reno Fit-out \$ | C and S \$ | Total Cost | Cost/BSSF |
|---------------------------------|---------|----------|---------|---------------|------------|----------------|-----------------|------------|------------|-----------|
| Library / Media Center Complete |         | 2,789    | B       | \$101         | \$61       |                | \$169,340       |            | \$169,340  | \$61      |
| Totals for program:             |         | 2,789    |         |               |            |                | \$169,340       |            | \$169,340  |           |

**New Fit-out Total Cost:** \$0  
**Reno Fit-out Total Cost:** \$18,311,319  
**Total Area All Buildings:** 216,056  
**Core and Shell Total Cost:** \$488,402  
**Core and Shell Cost/SqFt:**  
**Building Cost All Buildings:** \$18,799,721

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## John Williams School # 5

Located in the northeast zone, School No. 5 is a Pre K – 6 school with a current enrollment of approximately 550 students. It is the northwest LEAP school—a school for children whose native language is other than English—for the City School District. Constructed in 1926, this three-story building with a basement contains 124,924 square feet of building space. The building contains 46 general classrooms, most of which are smaller than today's standard. Core spaces within the building include a gymnasium with two teaching stations, cafeteria, a library media center, a fully equipped computer lab, a wireless lab, and computers in every classroom. The building does not have an auditorium, however a stage located in the gymnasium allows the gym to function as an auditorium/performing arts venue.

The proposed scope of work for this facility centers on the conversion from a Pre K – 6 school to a 3-strand (3 classrooms per grade level) Pre K – 8 facility. The proposed scope includes moderate to heavy renovations of approximately 102,000 square feet of existing space. This includes renovation of the kitchen, the main office/agency partner space, and the nurse's suite on the 1<sup>st</sup> floor; and renovation of the library and computer classroom. Reconfiguration and alteration of approximately 32,000 square feet of existing interior spaces will create two special education classrooms, an art room for 7<sup>th</sup> and 8<sup>th</sup> grade students, a band/chorus classroom, dedicated classroom space or occupational therapy/physical therapy, and two science classrooms/labs for grades 7 and 8.

The building sits on a 2.94 acre site that includes the building footprint, parking a playground, athletic field, baseball diamond, and a basketball court. Presently, the buses unload along Verona Street. In the proposed scope of work, a portion of Verona Street between Smith and Jay Streets will be acquired and the intersections of Verona and Smith Street at Jay Street will be modified to suit their new purpose as driveway curb cuts to the site. Proposed site work includes the addition of approximately 35 – 40 additional parking spaces on the southwest side of Verona Street on City of Rochester property to address the parking deficiency as the expected demand exceeds the number currently available on site.

Approximately \$2.4 million dollars in infrastructure work has been identified to repair and replace deficient and outdated systems in the school's physical plant. This work includes HVAC, plumbing and electrical upgrades; interior work, fire safety and emergency lighting, and handicapped accessibility items.

Master plan construction budget for #5 includes the following:

|                            |                 |
|----------------------------|-----------------|
| Renovation work            | \$16.78 million |
| Sitework                   | \$0.95 million  |
| Assumed Construction Total | \$17.73 million |

Schedule milestones for this project are as follows:

|                            |          |
|----------------------------|----------|
| Start Program Verification | 11/15/11 |
| Start Schematic Design     | 2/15/12  |
| Start Design Development   | 5/15/12  |
| Start Contract Documents   | 8/15/12  |
| Submit for SED Approval    | 1/15/13  |
| - Final SED Approval       | 3/15/13  |
| Bid documents complete     | 3/28/13  |
| Contract Award             | 5/15/13  |
| Start Construction         | 7/1/13   |
| Complete Construction      | 7/30/14  |
| Complete Closeout          | 12/31/14 |

**Assumed Design Phase Duration 14.5 months**



## James P. B. Duffy School # 12

Located in the south zone, School No. 12 is a kindergarten through grade 6 school with a current enrollment of approximately 770 students. Constructed in 1971, this three-story building contains 95,337 square feet of building space. The building contains 40 general classrooms. Small learning environments were created through the use of a "cluster" design - open plan pods of four classrooms. The building does not have a gymnasium, auditorium, or school library. Located adjacent to a City Recreation Facility, the school shares the City's gymnasium and locker rooms for its physical education programs and sports programs; and the public library located at this site. Having a strong visual arts program, the building features a "cafetorium," a stage located in the cafeteria that allows the lunchroom to function as an auditorium/performing arts venue. Special academic programs offered include the Major Achievement Program (MAP) for grades 4 – 6, and the Spanish/English Dual Language enrichment program (HOLA) for grades K-6.

The proposed scope of work for this facility centers on its conversion from a K – 6 facility to a 4-strand (4 classrooms per grade level) K – 8 facility. The proposed scope includes alterations and renovations of approximately 95,000 square feet of existing interior space including the construction of new partitions to create separate classrooms. Interior rehabilitation work of the existing building includes the removal and replacement of interior finishes, doors; HVAC, plumbing and electrical system upgrades, and abatement of asbestos and asbestos containing materials. Exterior work includes complete window replacement, exterior doors, and rehabilitation of the existing brick masonry and concrete. Options for consideration to meet the model program needs of a K – 8 school include an addition of approximately 8,000 square feet to include the construction of four new 3-story stair towers and two one-story classroom additions, and construction of a one-story addition to infill the overhang area on the South Avenue side of the building, and construct corridor additions at the 2<sup>nd</sup> and 3<sup>rd</sup> floors along South Avenue that connect between two of the new stair towers.

The building sits on an 8.02 acre site that includes the building footprint, parking, a playground, athletic field, two baseball diamonds, and a basketball court. The buses unload at a bus loop located off the east face of the building on South Avenue. Adjacent to the school at the west location is Highland Park. The proposed scope of work includes expanding the existing parking lot to add approximately 30 – 35 additional parking spaces. Approximately \$1.7 million dollars in infrastructure work has been identified to repair and replace deficient and outdated systems in the school's physical plant.

Master plan construction budget for #12 includes the following:

|                            |                 |
|----------------------------|-----------------|
| Renovation/addition work   | \$14.91 million |
| Sitework                   | \$0.74 million  |
| Assumed Construction Total | \$15.65 million |

Schedule milestones for this project are as follows:

|                            |          |
|----------------------------|----------|
| Start Program Verification | 11/15/11 |
| Start Schematic Design     | 3/15/11  |
| Start Design Development   | 7/15/12  |
| Start Contract Documents   | 11/15/12 |
| Submit for SED Approval    | 6/15/13  |
| -Final SED Approval        | 8/15/13  |
| Bid documents complete     | 10/28/13 |
| Contract Award             | 12/15/13 |
| Start Construction         | 7/1/14   |
| Complete Construction      | 7/30/15  |
| Complete Closeout          | 12/31/15 |

**Assumed Design Phase Duration 23.5 months**

## Thomas Jefferson High School

Located in the northwest area of Rochester, Thomas Jefferson High is a grades 7 through 12 school with a current enrollment of 936 students. Constructed in 1917, Jefferson is a four-story building with a basement, totaling 255,371 square feet in building area. The building sits on a 2.75 acre site; has parking, a track, football field, seven baseball/softball fields, four basketball courts and four tennis courts. The buses unload off the west face of the school in the parking lot off Bloss Street.

Jefferson was transformed into one high school comprised of three separate learning communities: Merchants of Dreams: School of Artistic Expression, Merchants of Hope & Inspiration: School of Entrepreneurial Studies and Applied Sciences, and Merchants of Inspiration: School of Sports and Health Sciences/Nursing. It offers the Newcomer Program, which focuses on intense English language acquisition for international students new to the United States, AVID, a full band and choir program, and an on-site Student Support Center.

The school contains 78 general classrooms, most of which meet today's standard. Common spaces include a cafeteria, two, two teaching station gymnasiums, a natatorium, auditorium and library. The proposed scope of work includes alterations and reconstruction to approximately 115,000 square feet of building area. Approximately \$7.2 million in infrastructure work has been identified to repair and replace deficient and outdated systems in the school's physical plant. Interior rehabilitation work includes the removal and replacement of interior finishes, doors, HVAC, infrastructure needs such as HVAC, plumbing and electrical systems and asbestos abatement. Exterior rehabilitation work includes window replacement, exterior door replacement, roof replacement, and masonry rehabilitation.

Site work includes the reconstruction and/or replacement of existing site elements including asphalt and concrete pavement and sidewalks, fencing, and other miscellaneous site elements.

Master plan construction budget for Thomas Jefferson HS includes the following:

|                            |                 |
|----------------------------|-----------------|
| Renovation work            | \$19.46 million |
| Sitework                   | \$1.50 million  |
| Assumed Construction Total | \$20.96 million |

Schedule milestones for this project are as follows:

|                            |          |
|----------------------------|----------|
| Start Program Verification | 11/15/11 |
| Start Schematic Design     | 2/15/12  |
| Start Design Development   | 5/15/12  |
| Start Contract Documents   | 8/15/12  |
| Submit for SED Approval    | 1/15/13  |
| - Final SED Approval       | 3/15/13  |
| Bid documents complete     | 3/28/13  |
| Contract Award             | 5/15/13  |
| Start Construction         | 7/1/13   |
| Complete Construction      | 7/30/14  |
| Complete Closeout          | 12/31/14 |

**Assumed Design Phase Duration 14.5 months**

## James Monroe High School

Located in the northwest area of Rochester, James Monroe High School is a grades 7 through 12 United Nations School with a current enrollment of 1079 students. Constructed in 1921, Monroe is a four-story building with a basement totaling 274,087 square feet of area. The building sits on an 8.32 acre site, has parking, an athletic field and three tennis courts. The buses unload off the north face of the school at Alexander Street.

The school presently contains 69 general classrooms, most of which meet today's standard. Common spaces include a cafeteria, two, two teaching station gymnasiums, a pool, auditorium and library. It offers The Language Academy, an accelerated program designed for native Spanish speakers and English-speaking students interested in developing and excelling in Spanish; the Advancement Via Individual Determination (AVID) program, and the Bilingual Developmental Program, a full-day program for Spanish speakers who are English Language Learners and Former English Language Learners in Grades 7 and 8. The program is designed to provide instruction in Spanish and English in the content areas and ESOL services in a pull out and co-teaching model.

The proposed scope of work includes alterations and reconstruction to approximately 200,000 square feet of building area. Approximately \$3.9 million in infrastructure work has been identified to repair and replace deficient and outdated systems in the school's physical plant. Interior rehabilitation work includes stabilizing the floor structure, removal and replacement of interior finishes, doors, HVAC, plumbing, and electrical systems, and asbestos abatement. Exterior rehabilitation work includes window replacement, roof replacement, and masonry rehabilitation.

Proposed site work includes reconstruction and /or replacement of existing site elements including asphalt and concrete pavement and sidewalks, athletic fields, backstops, fencing, and other miscellaneous site improvements.

Master plan construction budget for James Monroe HS includes the following:

|                            |                 |
|----------------------------|-----------------|
| Renovation work            | \$22.00 million |
| Sitework                   | \$1.50 million  |
| Assumed Construction Total | \$23.50 million |

Schedule milestones for this project are as follows:

|                            |          |
|----------------------------|----------|
| Start Program Verification | 11/15/11 |
| Start Schematic Design     | 3/15/12  |
| Start Design Development   | 7/15/12  |
| Start Contract Documents   | 11/15/12 |
| Submit for SED Approval    | 6/15/13  |
| -Final SED Approval        | 8/15/13  |
| Bid documents complete     | 10/28/13 |
| Contract Award             | 12/15/13 |
| Start Construction         | 7/1/14   |
| Complete Construction      | 7/30/15  |
| Complete Closeout          | 12/31/15 |

**Assumed Design Phase Duration 23.5 months**

## East High School

Located in the northeast area of Rochester, East High School's current enrollment is 1713 students in grades 7 through 12. Constructed in 1957, East is a three-story building comprised of 418,536 square feet of building area. The building sits on a 29.9 acre site, has parking, a track, football, soccer, baseball and softball fields, four tennis courts and an obstacle/ropes course. The buses unload in the bus loop off the at the north south face of the school at Main Street.

The school contains 100 general classrooms, most of which meet or exceed today's standard. Common spaces include a cafeteria, two teaching station gymnasium, auditorium and library. East is presently in the preliminary stages of becoming a large grades 9 – 12 high school with several small Learning Communities that will prepare students for college and careers after graduation. Students will choose their career pathway in 9th grade and take courses within a smaller school community for their final four years of high school. Beginning with the 2011-2012 school year, the five learning communities are:

- The Foundation Academy (7-8th Grades)
- The Academy of Business Management and Finance (9-12th Grades)
- The Academy of Humanities, Arts & Communication (9-12th Grades)
- The Academy of Environmental Sciences, Information Technology & Pre-Engineering (9-12th Grades)
- The Academy of Human, Health & Public Services (9-12th Grades)

Approximately \$12 million of infrastructure work was identified through the 2010 Building Condition Survey. The proposed scope of work is driven by completing all infrastructure modernization focusing on the D and F wings of the school building and includes alterations and reconstruction to approximately 125,000 square feet of building area, Interior rehabilitation work including the removal and replacement of interior finishes, doors, HVAC, plumbing and electrical systems and asbestos abatement are proposed. Exterior rehabilitation work includes replacement of the original windows and curtain wall system, roof replacement, exterior door replacement, and masonry rehabilitation. Site work proposed includes the reconstruction and/or replacement of existing site elements including asphalt and concrete pavement and sidewalks, athletic fields, backstops, fencing, site lighting, and the removal and replacement of the antenna structure.

Master plan construction budget for East HS includes the following:

|                            |                 |
|----------------------------|-----------------|
| Renovation work            | \$18.64 million |
| Sitework                   | \$1.20 million  |
| Assumed Construction Total | \$19.84 million |

Schedule milestones for this project are as follows:

|                            |          |
|----------------------------|----------|
| Start Program Verification | 11/15/11 |
| Start Schematic Design     | 2/15/12  |
| Start Design Development   | 5/15/12  |
| Start Contract Documents   | 8/15/12  |
| Submit for SED Approval    | 1/15/13  |
| - Final SED Approval       | 3/15/13  |
| Bid documents complete     | 3/28/13  |
| Contract Award             | 5/15/13  |
| Start Construction         | 7/1/13   |
| Complete Construction      | 7/30/15  |
| Complete Closeout          | 12/31/15 |

**Assumed Design Phase Duration 14.5 months**

## Edison Educational Campus

Located in the northwest area of Rochester, Edison Educational Campus was restructured for the 2010 – 2011 school year. Constructed in 1979, Edison is a five-story building with a basement consisting of 464,519 square feet of building area. The building sits on a 29.27 acre site, has 325 parking spaces, a track, football field, two baseball/softball fields and five tennis courts. The buses unload off the south face of the school in the parking lot off Colfax Street.

The school contains 149 general classrooms, most of which meet today's standard. Common spaces include a cafeteria, a two teaching station gymnasium, a natatorium, auditorium and library. The Edison Educational Campus houses Rochester S.T.E.M. (Science, Technology, Engineering, and Mathematics) High School for students in grades 9 – 12. Structured as three academies: the Academy of Engineering, Academy of Information Technology, and Academy of Medical Sciences; this high school provides small learning communities for its students. The Robert Brown School of Construction and Design is also housed on the Edison Campus.

Approximately \$15.8 million of infrastructure work is identified in the 2010 Building Condition Survey as being in need of repair or replacement. The proposed scope of work includes alterations and reconstruction to approximately 125,000 square feet of building area. Interior rehabilitation work includes structural rehabilitation of the post-tensioned concrete floor system, the removal and replacement of interior finishes, doors, HVAC, plumbing, and electrical systems, and asbestos abatement. Exterior rehabilitation work includes window replacement, roof replacement, exterior door replacement, and masonry rehabilitation. Proposed site work includes the reconstruction and/or replacement of existing site elements including asphalt and concrete pavement and sidewalks, retaining walls, athletic fields, backstops, fencing, and tennis courts, and other miscellaneous site amenities.

Master plan construction budget for Edison includes the following:

|                            |                 |
|----------------------------|-----------------|
| Renovation work            | \$20.90 million |
| Sitework                   | \$1.30 million  |
| Assumed Construction Total | \$22.20 million |

Schedule milestones for this project are as follows:

|                            |          |
|----------------------------|----------|
| Start Program Verification | 11/15/11 |
| Start Schematic Design     | 2/15/12  |
| Start Design Development   | 5/15/12  |
| Start Contract Documents   | 8/15/12  |
| Submit for SED Approval    | 1/15/13  |
| - Final SED Approval       | 3/15/13  |
| Bid documents complete     | 3/28/13  |
| Contract Award             | 5/15/13  |
| Start Construction         | 7/1/13   |
| Complete Construction      | 7/30/15  |
| Complete Closeout          | 12/31/15 |

**Assumed Design Phase Duration 14.5 months**

## *Appendix G*

**Rochester Joint Schools Construction Board  
Rochester Schools Modernization Program  
PLA Benefit Analysis  
Summary**

**Cost Savings Summary**

| Cost Savings                       | Amount Saved        |
|------------------------------------|---------------------|
| Regular Work Hours/Days            | \$ 223,793          |
| 4 - 10 Hour Days                   | \$ 642,255          |
| Industry Funds                     | \$ 843,600          |
| Apprentice Ratio                   | \$ 249,882          |
| Non Union Apprentices              | \$ 1,376,565        |
| Guaranteed Pay                     | \$ 6,049            |
| Mileage and Parking                | \$ 258,645          |
| Offsite Fabrication                | \$ 307,536          |
| Enhanced Minority Workforce        | \$ (352,247)        |
| Management Rights                  | \$ 2,755,125        |
| <b>Total Savings without 4-10s</b> | <b>\$ 5,668,948</b> |
| <b>Total Savings with 4-10s</b>    | <b>\$ 6,311,203</b> |

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
 Regular Work Hours/Days

Productivity gain of 1 hour per person per crew per week for coordination of trades for 2 months per year for 3 years (2012, 2013, 2014) for the following crafts. 6 Months total.

| <b>Craft</b>  | <b>Workers per Week</b> | <b>Hours per Week</b> | <b>Weeks per Month</b> | <b>Months</b> | <b>Rate</b> | <b>Savings</b>    |
|---------------|-------------------------|-----------------------|------------------------|---------------|-------------|-------------------|
| Electrician   | 78                      | 1                     | 4                      | 6             | \$ 53.10    | \$ 99,403         |
| Plumbers      | 62                      | 1                     | 4                      | 6             | \$ 50.54    | \$ 75,204         |
| Operators     | 9                       | 1                     | 4                      | 6             | \$ 48.69    | \$ 10,517         |
| Laborers      | 43                      | 1                     | 4                      | 6             | \$ 37.47    | \$ 38,669         |
| Total Savings |                         |                       |                        |               |             | <b>\$ 223,793</b> |



**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
4-10 Hour Days

4 - 10 Hr. Days - All Contractors Work 4 - 10's  
Project Length = 37 months

Utilized during summer months of construction (June, July, August) 3 months in 2012, 3 months in 2013, and 3 months in 2014. Increased productivity resulting from 1 less set up/clean up cycle per week per employee. Savings available regardless of union/non-union affiliation.

| <b>Workers per<br/>Week</b> | <b>Hours per<br/>Week</b> | <b>Weeks per<br/>Month</b> | <b>Months</b> | <b>Average<br/>Rate</b> |
|-----------------------------|---------------------------|----------------------------|---------------|-------------------------|
| 397                         | 1                         | 4                          | 9             | \$ 44.97                |
|                             |                           |                            | Savings       | <b>\$ 642,255</b>       |

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Industry Fund

Industry Fund - Eliminate Contribution  
Maximum Fund Contribution = \$2.09/hr.  
Minimum Fund Contribution = \$0.00/hr.

Maximum savings = \$1,124,700  
75% ADJ union/non-union  
= \$843,600.00

**Round to: \$843,600**

**TOTAL INDUSTRY FUND  
CONTRIBUTION BY CRAFT**

| Craft                   | Original Estimated Total Hours | Industry Fund Contribution per Hour | Total Estimated Cost |
|-------------------------|--------------------------------|-------------------------------------|----------------------|
| Boilermakers            | 4,012                          | \$0.00                              | \$0                  |
| Bricklayers (Bldg.)     | 255,416                        | \$1.06                              | \$270,741            |
| Carpenters (Bldg.)      | 369,934                        | \$0.00                              | \$0                  |
| Electricians            | 386,059                        | \$0.33                              | \$127,399            |
| Glazers                 | 64,191                         | \$2.09                              | \$134,159            |
| Heat & Frost Insulators | 38,271                         | \$0.10                              | \$3,827              |
| Iron Workers            | 33,532                         | \$0.07                              | \$2,347              |
| Laborers (Bldg.)        | 302,692                        | \$0.00                              | \$0                  |
| Operating Eng. (Bldg.)  | 51,424                         | \$0.10                              | \$5,142              |
| Painters                | 113,412                        | \$0.10                              | \$11,341             |
| Plumbers/Steamfitters   | 324,741                        | \$1.63                              | \$529,328            |
| Roofers                 | 154,484                        | \$0.20                              | \$30,897             |
| Sheet Metal Workers     | 209,745                        | \$0.00                              | \$0                  |
| Sprinkler Fitters       | 38,263                         | \$0.25                              | \$9,566              |
|                         | <b>2,346,175</b>               |                                     | <b>\$1,124,748</b>   |
|                         |                                | <b>Percent Union/Non-Union</b>      | <b>75%</b>           |
|                         |                                | <b>Total Savings</b>                | <b>\$843,600</b>     |

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Labor Cost Using Apprentice Ratios of 3:1 of Better

**LABOR COST USING APPRENTICE RATIOS PER AGREEMENTS**

| Craft                   | Journeyman Rate \$/hr (incl. Benefits) | Apprentice Rate \$/hr (incl. Benefits) | Journeyman: Apprentice Ratio |   | Average Rate \$/hr per Crew | Estimated Total Hours per Craft | Craft % of Total Hours | Labor \$ per Craft  |
|-------------------------|--|--|------------------------------|---|-----------------------------|---------------------------------|------------------------|---------------------|
|                         |  |  |                              |   |                             |                                 |                        |                     |
| Boilermakers            | \$ 52.19                               | \$ 44.62                               | 3                            | 1 | \$50.30                     | 4,012                           | 0.2%                   | \$201,821           |
| Bricklayers             | \$ 44.63                               | \$ 26.78                               | 3                            | 1 | \$40.17                     | 255,416                         | 10.9%                  | \$10,259,426        |
| Carpenters              | \$ 38.91                               | \$ 22.67                               | 2                            | 1 | \$33.50                     | 369,934                         | 15.8%                  | \$12,391,293        |
| Electrical Workers      | \$ 53.10                               | \$ 35.65                               | 3                            | 2 | \$46.12                     | 386,059                         | 16.5%                  | \$17,805,043        |
| Glaziers                | \$ 39.45                               | \$ 29.83                               | 1                            | 1 | \$34.64                     | 64,191                          | 2.7%                   | \$2,223,567         |
| Heat & Frost Insulators | \$ 43.77                               | \$ 34.89                               | 3                            | 1 | \$41.55                     | 38,271                          | 1.6%                   | \$1,590,179         |
| Iron Workers            | \$ 46.96                               | \$ 31.47                               | 4                            | 1 | \$43.86                     | 33,532                          | 1.4%                   | \$1,470,781         |
| Laborers                | \$ 37.47                               | \$ 26.23                               | 3                            | 1 | \$34.66                     | 302,692                         | 12.9%                  | \$10,491,289        |
| Operating Engineers     | \$ 48.69                               | \$ 37.63                               | 3                            | 1 | \$45.93                     | 51,424                          | 2.2%                   | \$2,361,634         |
| Painters                | \$ 39.26                               | \$ 21.22                               | 3                            | 1 | \$34.75                     | 113,412                         | 4.8%                   | \$3,941,058         |
| Plumbers & Steamfitters | \$ 50.54                               | \$ 31.62                               | 4                            | 1 | \$46.76                     | 324,741                         | 13.8%                  | \$15,183,600        |
| Roofers                 | \$ 40.77                               | \$ 29.67                               | 3                            | 1 | \$38.00                     | 154,484                         | 6.6%                   | \$5,869,602         |
| Sheet Metal Workers     | \$ 48.97                               | \$ 31.91                               | 3                            | 1 | \$44.71                     | 209,745                         | 8.9%                   | \$9,376,660         |
| Sprinkler Fitters       | \$ 50.05                               | \$ 34.99                               | 1                            | 1 | \$42.52                     | 38,263                          | 1.6%                   | \$1,626,949         |
|                         |  |  |                              |   |                             |                                 |                        |                     |
| <b>Totals</b>           |  |  |                              |   |                             | <b>2,346,175</b>                | <b>100.00%</b>         | <b>\$94,792,900</b> |

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Labor Cost Using Apprentice Ratios of 3:1 of Better

**LABOR COST USING APPRENTICE RATIOS OF 3:1 OR BETTER**

| Craft                   | Journeyman Rate \$/hr (incl. Benefits) | Apprentice Rate \$/hr (incl. Benefits) | Journeyman: Apprentice Ratio |   | Average Rate \$/hr per Crew | Estimated Total Hours per Craft | Craft % of Total Hours         | Labor \$ per Craft  |
|-------------------------|--|--|------------------------------|---|-----------------------------|---------------------------------|--------------------------------|---------------------|
|                         |  |  |                              |   |                             |                                 |                                |                     |
| Boilermakers            | \$ 52.19                               | \$ 44.62                               | 3                            | 1 | \$50.30                     | 4,012                           | 0.2%                           | \$201,821           |
| Bricklayers             | \$ 44.63                               | \$ 26.78                               | 3                            | 1 | \$40.17                     | 255,416                         | 10.9%                          | \$10,259,426        |
| Carpenters              | \$ 38.91                               | \$ 22.67                               | 2                            | 1 | \$33.50                     | 369,934                         | 15.8%                          | \$12,391,293        |
| Electrical Workers      | \$ 53.10                               | \$ 35.65                               | 3                            | 2 | \$46.12                     | 386,059                         | 16.5%                          | \$17,805,043        |
| Glaziers                | \$ 39.45                               | \$ 29.83                               | 1                            | 1 | \$34.64                     | 64,191                          | 2.7%                           | \$2,223,567         |
| Heat & Frost Insulators | \$ 43.77                               | \$ 34.89                               | 3                            | 1 | \$41.55                     | 38,271                          | 1.6%                           | \$1,590,179         |
| Iron Workers            | \$ 46.96                               | \$ 31.47                               | 3                            | 1 | \$43.09                     | 33,532                          | 1.4%                           | \$1,444,811         |
| Laborers                | \$ 37.47                               | \$ 26.23                               | 3                            | 1 | \$34.66                     | 302,692                         | 12.9%                          | \$10,491,289        |
| Operating Engineers     | \$ 48.69                               | \$ 37.63                               | 3                            | 1 | \$45.93                     | 51,424                          | 2.2%                           | \$2,361,634         |
| Painters                | \$ 39.26                               | \$ 21.22                               | 3                            | 1 | \$34.75                     | 113,412                         | 4.8%                           | \$3,941,058         |
| Plumbers & Steamfitters | \$ 50.54                               | \$ 31.62                               | 3                            | 1 | \$45.81                     | 324,741                         | 13.8%                          | \$14,876,395        |
| Roofers                 | \$ 40.77                               | \$ 29.67                               | 3                            | 1 | \$38.00                     | 154,484                         | 6.6%                           | \$5,869,602         |
| Sheet Metal Workers     | \$ 48.97                               | \$ 31.91                               | 3                            | 1 | \$44.71                     | 209,745                         | 8.9%                           | \$9,376,660         |
| Sprinkler Fitters       | \$ 50.05                               | \$ 34.99                               | 1                            | 1 | \$42.52                     | 38,263                          | 1.6%                           | \$1,626,949         |
|                         |  |  |                              |   |                             |                                 |                                |                     |
| <b>Totals</b>           |  |  |                              |   |                             | <b>2,346,175</b>                | <b>100.00%</b>                 | <b>\$94,459,725</b> |
|                         |  |  |                              |   |                             |                                 | <b>Savings</b>                 | <b>\$333,176</b>    |
|                         |  |  |                              |   |                             |                                 | <b>Percent Union/Non-Union</b> | <b>75%</b>          |
|                         |  |  |                              |   |                             |                                 | <b>Total Savings</b>           | <b>\$249,882</b>    |

**Rochester Joint Schools Construction Board  
Rochester Schools Modernization Program  
PLA Benefit Analysis**

Non Union Labor Cost Using Apprentice Ratios of 3:1 or Better

**NON UNION LABOR COST USING NO APPRENTICES**

| Craft                   | Journeyman Rate \$/hr<br>(incl. Benefits) | Apprentice Rate \$/hr<br>(incl. Benefits) | Journeyman:<br>Apprentice<br>Ratio |   | Average Rate \$/hr<br>per Crew | Est. Total Hours per Craft | Non Union Estimated Total Hours per Craft | Craft % of Total Hours | Labor \$ per Craft  |
|-------------------------|---|---|------------------------------------|---|--------------------------------|----------------------------|---|------------------------|---------------------|
|                         |   |   |                                    |   |                                |                            |   |                        |                     |
| Boilermakers            | \$ 52.19                                  | \$44.62                                   | 3                                  | 0 | \$52.19                        | 4,012                      | 1,003                                     | 0.2%                   | \$52,353            |
| Bricklayers             | \$ 44.63                                  | \$26.78                                   | 3                                  | 0 | \$44.63                        | 255,416                    | 63,854                                    | 10.9%                  | \$2,849,805         |
| Carpenters              | \$ 38.91                                  | \$22.67                                   | 2                                  | 0 | \$38.91                        | 369,934                    | 92,483                                    | 15.8%                  | \$3,598,528         |
| Electrical Workers      | \$ 53.10                                  | \$35.65                                   | 3                                  | 0 | \$53.10                        | 386,059                    | 96,515                                    | 16.5%                  | \$5,124,934         |
| Glaziers                | \$ 39.45                                  | \$29.83                                   | 1                                  | 0 | \$39.45                        | 64,191                     | 16,048                                    | 2.7%                   | \$633,081           |
| Heat & Frost Insulators | \$ 43.77                                  | \$34.89                                   | 3                                  | 0 | \$43.77                        | 38,271                     | 9,568                                     | 1.6%                   | \$418,785           |
| Iron Workers            | \$ 46.96                                  | \$31.47                                   | 4                                  | 0 | \$46.96                        | 33,532                     | 8,383                                     | 1.4%                   | \$393,666           |
| Laborers                | \$ 37.47                                  | \$26.23                                   | 3                                  | 0 | \$37.47                        | 302,692                    | 75,673                                    | 12.9%                  | \$2,835,463         |
| Operating Engineers     | \$ 48.69                                  | \$37.63                                   | 3                                  | 0 | \$48.69                        | 51,424                     | 12,856                                    | 2.2%                   | \$625,955           |
| Painters                | \$ 39.26                                  | \$21.22                                   | 3                                  | 0 | \$39.26                        | 113,412                    | 28,353                                    | 4.8%                   | \$1,113,136         |
| Plumbers & Steamfitters | \$ 50.54                                  | \$31.62                                   | 4                                  | 0 | \$50.54                        | 324,741                    | 81,185                                    | 13.9%                  | \$4,103,105         |
| Roofers                 | \$ 40.77                                  | \$29.67                                   | 3                                  | 0 | \$40.77                        | 154,484                    | 38,621                                    | 6.6%                   | \$1,574,574         |
| Sheet Metal Workers     | \$ 48.97                                  | \$31.91                                   | 3                                  | 0 | \$48.97                        | 209,745                    | 52,436                                    | 9.0%                   | \$2,567,806         |
| Sprinkler Fitters       | \$ 50.05                                  | \$34.99                                   | 1                                  | 0 | \$50.05                        | 38,263                     | 9,566                                     | 1.6%                   | \$478,768           |
|                         |   |   |                                    |   |                                |                            |   |                        |                     |
| <b>Totals</b>           |   |   |                                    |   |                                | <b>2,342,163</b>           | <b>585,541</b>                            | <b>100.00%</b>         | <b>\$26,317,606</b> |

**Rochester Joint Schools Construction Board  
Rochester Schools Modernization Program  
PLA Benefit Analysis**

Non Union Labor Cost Using Apprentice Ratios of 3:1 or Better

**NON UNION LABOR COST USING APPRENTICE RATIOS OF 3:1 OF BETTER**

| Craft                   | Journeyman Rate \$/hr<br>(incl. Benefits) | Apprentice Rate \$/hr<br>(incl. Benefits) | Journeyman:<br>Apprentice<br>Ratio |   | Average Rate \$/hr<br>per Crew | Est. Total Hours per Craft | Non Union Estimated Total Hours per Craft | Craft % of Total Hours | Labor \$ per Craft  |
|-------------------------|---|---|------------------------------------|---|--------------------------------|----------------------------|---|------------------------|---------------------|
|                         |   |   |                                    |   |                                |                            |   |                        |                     |
| Boilermakers            | \$ 52.19                                  | \$44.62                                   | 3                                  | 1 | \$50.30                        | 4,012                      | 1,003                                     | 0.2%                   | \$50,455            |
| Bricklayers             | \$ 44.63                                  | \$26.78                                   | 3                                  | 1 | \$40.17                        | 255,416                    | 63,854                                    | 10.9%                  | \$2,564,856         |
| Carpenters              | \$ 38.91                                  | \$22.67                                   | 2                                  | 1 | \$33.50                        | 369,934                    | 92,483                                    | 15.8%                  | \$3,097,823         |
| Electrical Workers      | \$ 53.10                                  | \$35.65                                   | 3                                  | 2 | \$46.12                        | 386,059                    | 96,515                                    | 16.5%                  | \$4,451,261         |
| Glaziers                | \$ 39.45                                  | \$29.83                                   | 1                                  | 1 | \$34.64                        | 64,191                     | 16,048                                    | 2.7%                   | \$555,892           |
| Heat & Frost Insulators | \$ 43.77                                  | \$34.89                                   | 3                                  | 1 | \$41.55                        | 38,271                     | 9,568                                     | 1.6%                   | \$397,545           |
| Iron Workers            | \$ 46.96                                  | \$31.47                                   | 3                                  | 1 | \$43.09                        | 33,532                     | 8,383                                     | 1.4%                   | \$361,203           |
| Laborers                | \$ 37.47                                  | \$26.23                                   | 3                                  | 1 | \$34.66                        | 302,692                    | 75,673                                    | 12.9%                  | \$2,622,822         |
| Operating Engineers     | \$ 48.69                                  | \$37.63                                   | 3                                  | 1 | \$45.93                        | 51,424                     | 12,856                                    | 2.2%                   | \$590,408           |
| Painters                | \$ 39.26                                  | \$21.22                                   | 3                                  | 1 | \$34.75                        | 113,412                    | 28,353                                    | 4.8%                   | \$985,264           |
| Plumbers & Steamfitters | \$ 50.54                                  | \$31.62                                   | 3                                  | 1 | \$45.81                        | 324,741                    | 81,185                                    | 13.9%                  | \$3,719,099         |
| Roofers                 | \$ 40.77                                  | \$29.67                                   | 3                                  | 1 | \$38.00                        | 154,484                    | 38,621                                    | 6.6%                   | \$1,467,401         |
| Sheet Metal Workers     | \$ 48.97                                  | \$31.91                                   | 3                                  | 1 | \$44.71                        | 209,745                    | 52,436                                    | 9.0%                   | \$2,344,165         |
| Sprinkler Fitters       | \$ 50.05                                  | \$34.99                                   | 1                                  | 1 | \$42.52                        | 38,263                     | 9,566                                     | 1.6%                   | \$406,737           |
|                         |   |   |                                    |   |                                |                            |   |                        |                     |
| <b>Totals</b>           |   |   |                                    |   |                                | <b>2,342,163</b>           | <b>585,541</b>                            | <b>100.00%</b>         | <b>\$23,564,476</b> |

*For this Project crew sizes large enough to utilize apprentice ratios is estimated to be 50 percent of the total labor hours.*

|   |                     |
|---|---------------------|
| <b>Non Union Labor Using No Apprentices</b> | <b>\$26,317,606</b> |
| <b>Non Union Labor Using Apprentices</b>    | <b>\$23,564,476</b> |
| <b>Savings</b>                              | <b>\$2,753,130</b>  |
| <b>Utilization Based on Site Activity</b>   | <b>50%</b>          |
| <b>Total Savings</b>                        | <b>\$1,376,565</b>  |

**Rochester Joint Schools Construction Board  
Rochester Schools Modernization Program  
PLA Benefit Analysis  
Guaranteed Pay**

3 possible events, 1st during 2012, 2nd during 2013, and the 3rd during 2014

**Guaranteed Pay During 3 Events**

| Craft              | Journeyman Rate<br>\$/hr (incl. Benefits) | Number of<br>Workers on<br>Site | Guaranteed<br>Pay | Number of<br>Events | Total<br>Estimated Cost | Revised<br>Guaranteed<br>Pay   | Total<br>Estimated<br>Cost |
|--------------------|---|---------------------------------|-------------------|---------------------|-------------------------|--------------------------------|----------------------------|
| Laborers (Bldg.)   | \$ 37.47                                  | 9                               | 2 hrs             | 3                   | \$2,023                 | 1 hr                           | \$340                      |
| Electricians       | \$ 53.10                                  | 16                              | 2 hrs             | 3                   | \$5,098                 | 1 hr                           | \$853                      |
| Carpenters (Bldg.) | \$ 38.91                                  | 11                              | 2 hrs             | 3                   | \$2,568                 | 1 hr                           | \$431                      |
|                    |   |                                 |                   |                     | <b>\$ 9,689</b>         |                                | <b>\$ 1,624</b>            |
|                    |   |                                 |                   |                     |                         | <b>Savings</b>                 | <b>\$ 8,065</b>            |
|                    |   |                                 |                   |                     |                         | <b>Percent Union/Non-Union</b> | <b>75%</b>                 |
|                    |   |                                 |                   |                     |                         | <b>Total Savings 3 Events</b>  | <b>\$ 6,049</b>            |

\*Based on average number of workers on site for the length of the project

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Mileage and Parking

**Mileage and Parking Compensation**

| Craft                      | Original Estimated Total Days | Parking Comensation per Day    | Total Estimated Cost |
|----------------------------|-------------------------------|--------------------------------|----------------------|
| Boilermakers               | 502                           | \$ -                           | \$ -                 |
| Bricklayers (Bldg.)        | 31,927                        | \$ -                           | \$ -                 |
| Carpenter (Bldg.)          | 46,242                        | \$ 4.75                        | \$ 219,648.02        |
| Electrical                 | 48,257                        | \$ -                           | \$ -                 |
| Glaziers                   | 8,024                         | \$ -                           | \$ -                 |
| Insulators                 | 4,784                         | \$ 7.00                        | \$ 33,487.53         |
| Ironworkers                | 4,192                         | \$ -                           | \$ -                 |
| Laborer (Building)         | 37,836                        | \$ -                           | \$ -                 |
| Operating Engineer (Bldg.) | 6,428                         | \$ -                           | \$ -                 |
| Painters                   | 14,176                        | \$ -                           | \$ -                 |
| Plumbers                   | 40,593                        | \$ -                           | \$ -                 |
| Roofers                    | 19,310                        | \$ 4.75                        | \$ 91,724.60         |
| Sheet Metal                | 26,218                        | \$ -                           | \$ -                 |
| Sprinkler Fitters          | 4,783                         | \$ -                           | \$ -                 |
|                            | <b>292,770</b>                |                                | <b>\$ 344,860</b>    |
|                            |                               | <b>Percent Union/Non-Union</b> | <b>75%</b>           |
|                            |                               | <b>Total Savings</b>           | <b>\$ 258,645</b>    |



**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Offsite Fabrication

| Trade  | Total Hours Worked | Hourly Wage | Percentage Worked Offsite | Cost Reduction | Cost Savings      |
|--|--------------------|-------------|---------------------------|----------------|-------------------|
| Carpenters                                   | 369,934            | \$ 38.91    | 5%                        | 20%            | \$ 143,941        |
| Electrical Workers                           | 386,059            | \$ 53.10    | 2%                        | 20%            | \$ 81,999         |
| Iron Workers                                 | 33,532             | \$ 46.96    | 5%                        | 20%            | \$ 15,747         |
| Plumbers & Steamfitters                      | 324,741            | \$ 50.54    | 2%                        | 20%            | \$ 65,650         |
| Sheet Metal Workers                          | 209,745            | \$ 48.97    | 5%                        | 20%            | \$ 102,712        |
| <b>Total</b>                                 |                    |             |                           |                | <b>\$ 410,049</b> |
| <b>Adjustment factor for Union/Non-union</b> |                    |             |                           |                | <b>75%</b>        |
| <b>Total Cost Savings</b>                    |                    |             |                           |                | <b>\$ 307,536</b> |

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Enhanced Minority Workforce Program

To support the Enhanced Minority Workforce Program each contractor will contribute \$0.15 per trade for each craft hour worked to the Rochester Careers in Construction, Inc. a non-profit 501(c)(3) corporation.

| Total Labor Hours | Cost of Program<br>(\$/hr.) | Total Cost of<br>Program |
|-------------------|-----------------------------|--------------------------|
| 2,348,310         | \$ 0.15                     | \$ <b>352,247</b>        |

**Rochester Joint Schools Construction Board**  
**Rochester Schools Modernization Program**  
**PLA Benefit Analysis**  
Management Rights

2% for large complex projects

1% for smaller, less complex projects

1/4 to 1/2% deduction for jurisdictional restrictions on small projects

| Management Rights Percentage | Total Construction Cost | Percent Union/Non-Union | Cost Savings        |
|------------------------------|-------------------------|-------------------------|---------------------|
| 1.5%                         | \$ 244,900,000          | 75%                     | \$ <b>2,755,125</b> |

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