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## Sherman School Renovation Project

# Concept ROM Estimate - Final Updates Option 4

Date: July 12, 2023

Revision :

## Basis Of Estimate

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#### Introduction

PACS has been engaged by Antinozzi Associates to prepare a Cost estimate for the following project:

This Estimate is based on the following design information:

- **Sherman School - Concept Options Study - Option 4 final updates reviewed 7-12-23**

#### Quantities and Methodology

- The cost estimate is based on the measurement of quantities wherever possible.
- Where actual measurements are not used, parametric measurements are used in conjunction with previous but similar project benchmarks.
- PACS uses a wide range of standard measurement and quantifying methods that are common practice in the construction industry today.

#### Basis of Pricing

- a) The construction costs shown in this estimate represent the fair market value and are not intended to be a prediction of the lowest bid.
- b) The costs include: labor, material, equipment and the subcontractors overhead and profit. (Subcontractor's Mark Up)
- c) The cost of labor is based on local Prevailing wage rates for all trades.
- d) The construction rates used are based in "today's dollar" and an escalation allowance is included in the Estimate summary.
- e) Our pricing assumes competitive bidding on all elements of the construction work, assuming a minimum of three competitive bidders for all general contractors, subcontractors, materials and vendors.
- f) It is typical in our experience that if fewer bids are received or solicited, prices can be expected to be higher due to lack of competition.
- g) The subcontractor's mark ups include their own overhead, including the cost in the field as well as profit.
- h) PACS has priced this taking into account current market conditions, competition between trades and the cost fluctuations in the construction industry.
- i) Estimate assumes a Phased Occupied Renovation
- j) Proposal is based on construction being performed on regular hours, except what is required for noisy work and Building system tie-ins.

#### Design and Pricing Contingency

A Design and Pricing Contingency is used as a budgetary tool that allows for scope and detail not defined during the design stage. As the design becomes more defined as the project passes through the design stages, the Design and Pricing Contingency decreases as more scope and detail is now being shown in the documents and is therefore reflected in the cost estimate as actual trade cost. The Design and Pricing Contingency is reduced to zero at 100% Bid Documents.

#### Escalation

As outlined above the estimate is calculated using rates that are "today's dollar" and reflect the cost of the project as if it was to bid on the date of issue. Due to construction projects having long design phases and long construction schedules, it is imperative to project the construction cost further ahead into the future to the point at which it is bid out. It is common practice to escalate the cost estimate to the mid point of construction to accommodate for economic inflation. This percentage accounts for this increase.

#### Construction Contingency

PACS advise that a Construction Contingency is carried for unforeseen project conditions and field changes. Typically we see this in the range of 3% to 7.5% dependent on the scope of the project.

## Basis Of Estimate

### Probable Cost

It is important for the Owner and Design team to carefully review this cost estimate including all line item descriptions, clarifications, exclusions, unit prices, assumptions, allowances, mark ups and contingencies to ensure the estimate reflects the scope of the project.

In instances where the cost estimate is not in line with the Owner's budgetary objectives, PACS can suggest and evaluate alternate methods to assist bringing the project back in line with the desired budget.

PACS has produced the cost estimate based on the widely practiced methods of cost estimating and aims to reflect the fair market value of the construction project. Our aim is to be not the highest or the lowest in the range of bids but to use our experience and expertise in the construction industry to provide the client with a degree of confidence that the project will be close to our calculated estimate.

### Exclusions

This cost estimate excludes the following:

- Premiums for working in inaccessible or partially accessible spaces during construction
- Surplus Stock and Spares
- Unforeseen Conditions (Covered in Construction Contingency)
- Premiums for restrictive and uncompetitive bidding
- Premiums for non-standard work times
- Work beyond the project limits
- CT Sales Tax - Assumes Exempt
- Wellpoints - Assumes open trench pumping only
- Unsuitable soils remediation
- Hazardous, Contaminated or Polluted soils
- Temp Water, Power and Fuel - Assumed to be by Owner
- AV Equipment in Classrooms - Assumes part of FF&E / Technology Budget
- Student furniture (including tables) in Classrooms and Science Labs
- Utility Costs - Electric, Gas, Water

### Risks to the Cost Estimate

Items that may affect the cost estimate, the list as follows but not limited:

- Changes to the design subsequent to the issue of the documents stated above which this estimate is based on
- Unforeseen and Unknown Structural conditions
- Non Competitive Bid restrictions and the sole sourcing of products/materials from specific vendors
- Restrictive technical specifications that produce a non competitive environment
- Changes to the project schedule that delay the project and therefore have impact on cost
- Incomplete and poorly coordinated documentation
- Access restrictions, unidentified out of hours work policies and phasing restrictions
- Restrictive technical specifications that produce a non competitive environment
- Unforeseen and unknown base building conditions

| Trade    |                                                   | Option 4 Recap |
|----------|---------------------------------------------------|----------------|
| 01 50 00 | Temporary Facilities and Controls                 | \$ 735,715     |
| 02 11 00 | Contaminated Soil Excavation                      | \$ -           |
| 02 12 00 | Transportation/Disposal of Contaminated Materials | \$ -           |
| 02 80 00 | Hazardous Abatement                               | \$ 953,996     |
| 02 41 16 | Building Demolition                               | \$ 354,675     |
| 02 41 19 | Selective Demolition                              | \$ 918,575     |
| 03 30 00 | Cast-In-Place Concrete                            | \$ 436,045     |
| 04 20 00 | Unit Masonry                                      | \$ 1,358,418   |
| 05 12 00 | Structural Steel                                  | \$ 494,075     |
| 05 40 00 | Cold Formed Metal Framing                         | \$ -           |
| 05 50 00 | Metal Fabrications                                | \$ 135,518     |
| 06 10 00 | Rough Carpentry                                   | \$ 175,000     |
| 06 20 00 | Finish Carpentry                                  | \$ 360,800     |
| 07 10 00 | Damp / Waterproofing                              | \$ 9,475       |
| 07 21 00 | Thermal Insulation                                | \$ -           |
| 07 25 00 | Air & Vapor Barriers                              | \$ 50,603      |
| 07 40 00 | Siding & Panels                                   | \$ 220,771     |
| 07 50 00 | Membrane Roofing                                  | \$ 1,997,974   |
| 07 62 00 | Sheet Metal Flashings & Trim                      | \$ -           |
| 07 81 00 | Applied Fireproofing                              | \$ 12,500      |
| 07 84 00 | Penetration Firestopping                          | \$ 25,000      |
| 07 92 00 | Joint Sealants                                    | \$ 50,000      |
| 07 95 00 | Expansion Control                                 | \$ 47,130      |
| 08 10 00 | Hollow Metal Doors & Frames                       | \$ 200,000     |
| 08 30 00 | Specialty Doors                                   | \$ 31,500      |
| 08 41 00 | Entrances & Storefront                            | \$ 567,558     |
| 08 44 00 | Metal Framed Curtainwall                          | \$ -           |
| 08 50 00 | Windows                                           | \$ -           |
| 08 71 00 | Door Hardware                                     | \$ 325,000     |
| 08 80 00 | Glass & Glazing                                   | \$ -           |
| 08 90 00 | Louvers & Vents                                   | \$ -           |
| 09 21 00 | Gypsum Board Assemblies                           | \$ 874,122     |
| 09 30 00 | Tile                                              | \$ 103,526     |
| 09 51 00 | Acoustical Ceiling                                | \$ 466,629     |
| 09 64 00 | Wood Flooring                                     | \$ 124,077     |
| 09 61 10 | Vapor Mitigation                                  | \$ 74,288      |
| 09 65 00 | Resilient Flooring                                | \$ 386,669     |
| 09 66 00 | Terrazzo                                          | \$ -           |
| 09 67 00 | Resinous Flooring                                 | \$ 27,987      |
| 09 68 00 | Carpet                                            | \$ 36,938      |
| 09 80 00 | Acoustical Treatment                              | \$ 75,000      |
| 09 91 00 | Painting & Wallcoverings                          | \$ 247,325     |
| 10 11 00 | Visual Display Surfaces                           | \$ 145,000     |
| 10 14 00 | Signage                                           | \$ 75,000      |

| Trade                                           |                                            | Option 4 Recap |                   |
|-------------------------------------------------|--------------------------------------------|----------------|-------------------|
| 10 21 00                                        | Cubicles                                   | \$             | -                 |
| 10 21 13                                        | Toilet Compartments                        | \$             | 33,225            |
| 10 21 23                                        | Cubicle Curtain & Track                    | \$             | 3,500             |
| 10 22 00                                        | Operable Partitions                        | \$             | 17,600            |
| 10 26 00                                        | Wall & Door Protection                     | \$             | 5,500             |
| 10 28 00                                        | Toilet Accessories                         | \$             | 39,035            |
| 10 41 00                                        | Emergency Access Cabinets                  | \$             | 925               |
| 10 44 00                                        | Fire Protection Specialties                | \$             | 10,000            |
| 10 51 00                                        | Lockers                                    | \$             | 96,370            |
| 11 13 00                                        | Loading Dock Equipment                     | \$             | -                 |
| 11 30 00                                        | Residential Appliances                     | \$             | 8,940             |
| 11 40 00                                        | Foodservice Equipment                      | \$             | 350,000           |
| 11 52 00                                        | Audio-Visual Equipment                     | \$             | 40,000            |
| 11 53 00                                        | Laboratory Fume Hood                       | \$             | 17,950            |
| 11 61 00                                        | Theater & Stage Equipment                  | \$             | 180,625           |
| 11 66 00                                        | Athletic Equipment                         | \$             | 228,880           |
| 11 90 00                                        | Miscellaneous Equipment                    | \$             | 50,500            |
| 12 20 00                                        | Window Treatment                           | \$             | 43,361            |
| 12 35 53                                        | Laboratory Casework                        | \$             | 80,000            |
| 12 48 13                                        | Entrance Mats & Frame                      | \$             | 15,922            |
| 12 52 00                                        | Seating                                    | \$             | -                 |
| 13 00 00                                        | Special Construction                       | \$             | 198,000           |
| 14 20 00                                        | Elevators                                  | \$             | 125,000           |
| 21 00 00                                        | Fire Protection                            | \$             | 566,045           |
| 22 00 00                                        | Plumbing                                   | \$             | 1,677,964         |
| 23 00 00                                        | HVAC                                       | \$             | 5,259,708         |
| 26 00 00                                        | Electrical                                 | \$             | 4,438,443         |
| 33 00 00                                        | Sitework - See Attached Sitework Breakdown | \$             | 3,262,349         |
| <b>TOTAL DIRECT COST</b>                        |                                            | <b>\$</b>      | <b>28,846,730</b> |
| Design & Estimating Contingency                 | 8.50%                                      | \$             | 2,451,972         |
| Construction Contingency (CM@R)                 | 3.00%                                      | \$             | 865,402           |
| Escalation - 1.5 years @ 8.0%                   | 12.00%                                     | \$             | 3,859,692         |
| General Conditions- @ 105,000 / Month           | \$ 105,000                                 | \$             | 1,890,000         |
| General Conditions- 2nd shift work              | \$ 75,000                                  | \$             | 75,000            |
| Preconstruction                                 | \$ 95,000                                  | \$             | 95,000            |
| GL Insurance - CM@R                             | 0.75%                                      | \$             | 270,178           |
| State Education Fund                            | 0.026%                                     | \$             | 9,972             |
| CM P&P Bond                                     | 0.70%                                      | \$             | 268,548           |
| CM Fee                                          | 1.70%                                      | \$             | 656,752           |
| <b>TOTAL CONSTRUCTION COST</b>                  |                                            | <b>\$</b>      | <b>39,289,246</b> |
| <b>Construction Cost / SF:</b>                  |                                            | <b>\$</b>      | <b>627.48</b>     |
| <b>TOTAL PROJECT COST WITH 17% SOFT COST</b>    |                                            | <b>\$</b>      | <b>45,968,418</b> |
| <b>Construction &amp; Soft Cost @ 17% / SF:</b> |                                            | <b>\$</b>      | <b>734.16</b>     |
| <b>Alternates:</b>                              |                                            |                |                   |
| Upgrade to New 3,000Amp Electrical Service      |                                            | \$             | 250,000           |