



January 11, 2010

From:

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To:

Mr. Alf Bumgardner, AIA  
City of Arlington  
Public Works and Transportation  
101 W. Abram Street  
Arlington, Texas 76010

Project: New Facility For Fire Station No. 9 – 909 Wimbledon Drive, Arlington, Texas

Hergenrether Penner McGuire Consulting Engineers, Inc. (HPM) is pleased to offer our proposal for the mechanical, electrical, and plumbing engineering design for the approximately 11,057 square foot new fire station facility in Arlington, Texas. The facility is anticipated to have 10 sleeping units, a kitchen, a dayroom, a workout area, shower facilities, offices, support spaces, and a four-bay apparatus bay.

It is our understanding that the project will be designed such that it could receive LEED certification, but we will not be required to submit LEED template forms. We understand that a construction manager at risk will likely be brought in to the project prior to the design being finalized in order to help with cost estimation. It is our understanding that up until the point the construction manager is brought on board, we may be requested to provide some basic equipment cost information on mechanical and electrical system components in order to help the Owner in making decisions regarding selection of the mechanical and electrical systems to be designed for the facility. We understand that such pricing information would not be to the level of a construction cost estimate.

Scope of services to be provided:

1. Provide coordination with the electrical utility company as required for providing a new electrical service to the facility. This will include completion of required utility company load sheets.
2. Provide complete lighting design services for the facility. This includes both interior and exterior lighting, control, and circuitry.
3. Provide complete power design services for the facility. This includes the design of the electrical distribution system; both normal and emergency power; layout of electrical receptacles, power design for support of mechanical equipment, and power design for support of all electrical utilization equipment in the facility.

4. Provide device layout and design of low voltage raceways for communications cabling. This is limited to telephone and data wiring.
5. Provide fire alarm system device layout and system performance specification for final system design to be performed by a licensed fire alarm system contractor.
6. Provide system device layout and specification of the following low voltage systems: 1) A station radio speaker system with speakers throughout the interior and exterior of the facility, 2) An intercom system with master station located at a central location and remote stations located throughout the interior and exterior of the building, 3) An alert bell system activated from the exterior front main entry of the building.
7. Provide complete design of HVAC systems. This will include heating, cooling, and exhaust systems. Exhaust system design will include apparatus bay exhaust systems, as necessary, and a kitchen exhaust system.
8. Provide complete plumbing system design to include water, waste, and vent systems. Waste system design will include design of a sand/oil interceptor for the apparatus bays and grease interceptor for the kitchen. We anticipate that the kitchen equipment connection requirements will be provided to us either by a kitchen equipment consultant or by the Project Architect.
9. Provide a performance specification for the fire sprinkler system and coordinate fire sprinkler riser location with Civil Engineer. Final fire sprinkler system design will be performed by a licensed fire sprinkler system contractor.
10. Provide Mechanical and Electrical specifications for inclusion in the project manual. These will either be Divisions 15 and 16, or will follow the 2004 CSI Masterformat numbering system, as defined by the Project Architect.
11. Provide Comcheck energy reports for new HVAC and Lighting Systems.
12. All construction drawings will be produced in .dwg AutoCad format.
13. Review of any contractor generated submittal documents is included.
14. Construction Administration site observation visits are included in this proposal. The extent to which they have been included is addressed below.

Our engineering work in this proposal does not include the following services. These items will be considered extra services and will be invoiced at our extra service rates below:

1. Engineering services other than mechanical, electrical, and plumbing.
2. Design of piping systems outside of 5' beyond the building limits.
3. Evaluation of Construction Contractor bids.
4. Design of low voltage telephone and data cabling and systems.

Construction Administration:

Construction Administration services, identified in Item 14 above, include the following:

1. Attendance by a mechanical and electrical engineer at the pre-bid meeting.
2. Attendance by a mechanical and electrical engineer at the pre-construction meeting.
3. Site visits by a mechanical and electrical engineer to the project site twice per month, on approximately two week intervals, for the final six months of the project duration.
4. Final punch list preparation by a mechanical and electrical engineer.

- 5. Verification of correction of the final punch list by a mechanical and electrical engineer.
- 6. Review of contractor generated mechanical and electrical submittals.

LEED Design

It is unknown, at the time of this proposal, the extent of mechanical and electrical design effort that will be required to support achievement of the LEED goals for the project. Therefore, the exact effect of these design requirements on our design fee is unknown. In an effort to resolve this, we have included an attachment to this proposal that includes a listing of the LEED points, associated with the mechanical and electrical design, that we believe could potentially be achieved on this project presuming the project budget can support them. The added effect that each item will have on our design fee is included for each item. We have included in our base proposal a meeting to discuss these items, and the relative effect of each item on the project construction budget. It would be our intention that, following such a meeting, the Owner would be able to select which items are to be designed into the project. From there, the effect of the LEED design on our overall fee can be determined.

Additional Services:

Engineering work not described above will be considered additional services. Additional services will not be performed without first receiving written direction. Additional services will be invoiced at the hourly rates indicated below. These rates are to be in effect for one calendar year from the date of this proposal.

Registered Professional Engineer	\$115.00/Hour
CADD Draftsman	\$50.00/Hour
Word Processing	\$30.00/Hour

Reimbursable Expenses:

Reimbursable expenses for the project will be invoiced with no markup and will be in addition to the base fee quoted in this proposal. Reimbursable expenses are not anticipated for this project, other than possible delivery courier services. We have included a maximum number of One Thousand Dollars (\$1,000.00) in this proposal to cover the possibility of these expenses.

Schedule:

HPM can complete our design work within a reasonable time frame. We anticipate that the project will have deliverables as follows:

- 1. Design development document submission
- 2. 50% construction documents submission
- 3. 95% construction documents submission
- 4. Sealed 100% construction documents submission.

We understand that the sealed 100% construction documents submission will be in May 2010. We are available to start work on this project immediately and anticipate meeting the design schedule.

Professional Fees:

HPM proposes to perform the base mechanical and electrical engineering design work described above for a fixed fee of Thirty Thousand Seven Hundred Fifty-Five Dollars (\$30,755.00). HPM proposes to perform all construction administration work described above for an additional Eight Thousand Seven Hundred Forty Dollars (\$8,740). Should the Owner wish to reduce this cost, HPM is willing to reduce the quantity of site observation visits as requested by the Owner. HPM proposes to provide design of the LEED points for the items as defined in the attached document. The design fee associated with each LEED item is included in the attachment and will be in addition to the base fee identified above. If the design is required to be performed to achieve all the suggested LEED points, the total maximum not-to-exceed value of this proposal would be Fifty-Three Thousand Three Hundred Seventy-Five Dollars (\$53,375.00.). This includes the maximum number of One Thousand Dollars (\$1,000.00) for reimbursable expenses, as identified above.

Invoicing:

HPM anticipates invoicing, on a percentage basis, the base fee and fee for selected LEED items at the completion of each deliverable item listed above. The construction administration fee will be invoiced as the corresponding work is performed. Reimbursable expenses will be invoiced as they occur. All invoices are due within thirty (30) days of billing.

Thank you for the opportunity to work with you and your staff on this project.

Authorization to Proceed Accepted this day of \_\_\_\_\_ By

Signature \_\_\_\_\_

Name Title \_\_\_\_\_

**LEED Design Proposal**

The items listed below are items, associated with the mechanical and electrical design, that we believe could potentially be achieved on this project presuming the project budget can support them.

<b>Category</b>	<b>Credit</b>	<b>Title</b>	<b>Points</b>	<b>HPM Additional Fee</b>
Sustainable Sites	Credit 8	Light Pollution Reduction	1 Point	\$460.00
Water Efficiency	Credit 3	Water Use Reduction	2 Points	\$460.00
Energy & Atmosphere	Credit 1	Optimize Energy Performance	2 Points	\$6,440.00
Energy & Atmosphere	Credit 2	On-Site Renewable Energy	1 Point	\$2,300.00
Energy & Atmosphere	Credit 3	Enhanced Commissioning	2 Points	\$460.00
Energy & Atmosphere	Credit 4	Enhanced Refrigerant Mgmt	2 Points	\$460.00
Indoor Envir. Quality	Credit 1	Outdoor Air Del. Monitoring	1 Point	\$920.00
Indoor Envir. Quality	Credit 6.1	Cont. of Sys. – Lighting	1 Point	\$920.00
Indoor Envir. Quality	Credit 6.2	Cont. of Sys. – Thermal Comfort	1 Point	\$230.00
Indoor Envir. Quality	Credit 7.1	Thermal Comfort – Design	1 Point	\$230.00
<b>Maximum Potential Total Cost for LEEDS Points Listed Above</b>				<b>\$12,880.00</b>