

SPARKS ENGINEERING, INC.
STRUCTURAL EVALUATION. DESIGN AND TESTING

RECEIVED

JUL 24 2008

BURNS ARCHITECTURE

July 23, 2008

Mr. Kenny Burns
Burns & Gill Architects
3830 Hulen Street, # 670
Fort Worth, Texas 76107
(817) 336-5804

Sent via fax to (817) 336-0211 6 pages

SUBJECT: PROPOSAL FOR FAÇADE EVALUATION AND REPAIR DESIGN - REVISED
Tom Green County Courthouse
San Angelo, Texas

Dear Mr. Burns:

We are pleased to submit this proposal for structural engineering services for the subject project. This proposal is based on information provided by you, our familiarity with the courthouse, and our experience with similar projects. The following sections present the project information, scope of services, schedule and fee information, and terms and conditions. This proposal has been revised to include repair design and construction administration services.

Project Information

Distress has been observed in the cast stone cornice at Tom Green County Courthouse. We understand that Tom Green County desires a condition assessment of the cornice, parapet, and wall assembly for restoration and repair design. Our services have been requested to evaluate the façade assembly, provide a photographic condition survey, determine the causes of deterioration, and to prepare construction documents for façade restoration.

Scope of Services

We propose the following scope of services to identify causes of deterioration and specify appropriate treatments and repairs for the courthouse façade:

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- ✓ 1. Detailed Condition Survey¹ to assess existing conditions and defects:
 - a. Visual and photographic survey of the deteriorated upper courses of cast-stone, from the parapet cap to the cornice dentils.
 - b. Non-destructive testing to locate veneer anchors.
 - c. Borescope/videoscope inspection of the wall assembly at selected locations to assess the condition of the stone and veneer ties.
 - d. Photographic documentation of conditions to a level of detail that will facilitate diagnosis and repair methods.
- ✓ 2. Materials Evaluation: representative sampling and testing of the cast stone elements, to include:
 - a. Soluble chlorides and sulfates, and pH testing to document material characteristics (up to 6 samples, from various cast stone elements and mortar).
 - b. Petrographic examination of a cornice core sample to identify causes of deterioration (one sample).
 - c. Mortar Analysis: representative sampling and testing of the existing mortar, to include:
 - i. Soluble chlorides and sulfates, and pH testing to document material characteristics (up to four samples)
 - ii. Proportions, sand gradation and mineralogical characterization (up to two samples)
- ✓ 3. Analysis to include:
 - a. Wind force calculation and assessment of the wind-resistance of the façade
 - b. Evaluation of cornice anchoring system
- ✓ 4. Assistance in preparing opinion of costs at schematic design and design development phases.
- ✓ 5. Preparation of structural drawings and specification sections in CSI format for structural items². Deliverables: Delivery of a single copy of reproducible drawing sheets for each design submittal (Design Development; Construction documents), and specifications in electronic format for inclusion in the Architect's document set. The following structural design items are included:
 - a. Replacement of cast-stone elements
 - b. Installation of retrofit veneer and stone anchors

¹ Visual observation from less than 6-feet and tactile evaluation of façade components, including probing and non-destructive testing to observe concealed conditions of wall construction. We have developed our detailed façade investigation procedure to generally follow the guidelines of ASTM E2270-05 - Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions and ASCE 30-00 - Guideline for Condition Assessment of the Building Envelope to the extent specified below.

² We understand that the Architect will provide architectural backgrounds to include exterior elevations in electronic CAD format for our use in developing the structural drawings. Our deliverables will consist of a single copy of reproducible drawing sheets for each design submittal, and specifications in electronic format for inclusion in the Architect's document set. We understand that the Architect will re-format our specifications for style.

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- c. Repair or replacement of embedded steel elements
 - d. Selection and specification of conservation treatment for exterior surfaces.
 - e. Review and revise Architect's specifications and details for waterproofing, flashing, and mortar repointing.
 - f. Recommendations for cyclical façade maintenance
6. Bid & Construction Phase services:
- a. Response to bidder's structural questions in addenda.
 - b. Processing submittals, Requests for Information, and shop drawings related to structural design;
 - c. Preparation of minor structural change orders as required;
 - d. Four site visits during bidding and construction. A written field report will be prepared for each visit.

Schedule and Fee Information

The detailed façade investigation can be completed within approximately four weeks of authorization, with completion of construction documents requiring an additional six weeks. Based on our understanding of the project requirements, we suggest the following fees:

Condition Assessment.....	\$ 5,000
Materials Evaluation.....	\$ 2,000
Analysis.....	\$ 1,500
Opinion of Cost Assistance.....	\$ 1,200
Construction Documents.....	\$ 8,000
Bid & Construction Phase Services	
Bidding Assistance.....	\$ 800
Submittals, RFIs & Changes.....	\$ 2,000
Site visits for field observation (4 visits).....	\$ 5,000
Lump Sum Fee	\$ 25,500
Reimbursable expense³ budget (Includes testing and lift rental)	\$ 6,000
Total Fee plus Expense Budget	\$ 31,500

If the required scope of services should change due to changes in the scope of the project, or because of unknown site conditions, our fee may also change.

³ Reimbursable Expenses include travel (mileage, meals, lodging), testing equipment usage, aerial lift rental, laboratory testing of samples, petrographic analysis of core sample, temporary repair of finishes, reproduction, shipping, courier, subcontracts, and other authorized expenses, and are in addition to the fee. Reimbursable expenses will be based on actual expenses and in accordance with the attached Fee Schedule.

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Additional Services

Further investigation, meetings, additional testing, additional site visits, and preparation of the contract for construction, are additional services and are not included in our proposed scope of services. A proposal for additional services will be provided at your request.

Client Responsibilities

We understand that the Client will provide the following to facilitate our services on the project:

1. Entry to the facility and access to the roof at the time of our site investigation. We will obtain an aerial man-lift to allow us to safely access the structure.
2. Any available documentation related to the structural condition of the building, such as original drawings, inspection and repair records, and previous condition assessment reports. We understand that the Architect will provide architectural backgrounds in electronic CAD format for our use. We prefer that this documentation be made available to us prior to our site visit.
3. Our condition survey will involve the use of a large aerial man-lift which could cause damage to turf, sidewalks, and irrigation systems. We will endeavor to avoid such damage; however, our services do not include restoration of landscape or repairs to sidewalks or the irrigation system as a result of our use of lift equipment on the site. The owner should mark the location of the irrigation system prior to our use of a man lift on the site, and no watering should be done within three days of our site visit to minimize damage from the lift equipment.

Terms and Conditions

1. *Services:* Sparks Engineering, Inc. (Consultant) is an independent consultant and agrees to perform the Scope of Services as described above.
2. *Standard of Care:* Consultant's services will be performed using that degree of care and skill ordinarily exercised under similar conditions by reputable members of the engineering profession practicing in the same or similar locality at the time of service. No warranty, express or implied, is made or intended by this proposal or by oral or written reports or designs.
3. *Professional Liability:* To the fullest extent permitted by applicable law, Client agrees that Consultant's liability, and that of each of its employees, agents and subcontractors, to Client, any Secondary Clients, or any third party, due to Consultant's breach of contract or negligent professional acts, errors or omissions will be limited to an aggregate of \$50,000 or the total fees paid by Client to Consultant, whichever is greater.
4. *Site Responsibility:* Consultant's services do not include supervision or direction of the means, methods or actual work of contractor(s) not retained by Consultant. The presence of Consultant's representatives will not relieve the contractor(s) of its responsibility to perform the work in accordance with the contract documents. Consultant will not be responsible for job or site safety or security, other than for Consultant's employees.
5. *Opinions of Cost:* Opinions of Cost for construction prepared by Consultant are intended to provide information on the magnitude of such costs and are not a quotation or guarantee of actual costs. Client understands that the actual cost of construction is beyond Consultant's control and may vary significantly from Consultant's opinion of cost.

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- 6. *Ownership of Documents:* All reports, drawings, specifications, computer files, field data, notes and other original documents prepared by Consultant are instruments of service and shall remain the property of Consultant and may not be used for any purposes not specifically agreed to by Consultant. The consultant shall retain all common law, statutory and other reserved rights, including copyright thereto.
- 7. *Priority over Form Agreements:* These terms and conditions shall govern over any Form Agreements such as Purchase Orders or Work Orders or other form writings issued by the Client, without altering the terms hereof, regardless of any contrary language appearing in the Form Agreement.
- 8. *Payment:* Invoice terms are Net 30 Days. If payment is not received within 60 days of invoice date, Consultant reserves the right to suspend work efforts until all outstanding invoices are paid in full.

Authorization

To authorize these services, please sign below and return one signed original.

Thank you for the opportunity to serve as your engineering consultant.

Sincerely,

SPARKS ENGINEERING, INC.



S. Patrick Sparks, P.E.
President

Attachments: Fee Schedule

CLIENT:

Name _____ Attention _____
 Address _____ Phone _____
 _____ Fax _____
 City _____ State _____ Zip _____

ACCEPTED:



8-25-08

Signature of Client's authorized representative

Date

Michael D. Brown, County Judge, Tom Green Co., TX
Print or type name of authorized representative and title

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2008 Fee Schedule

Personnel

The following hourly rates (plus expenses⁴) apply for time spent in project management, consultation or meetings related to the project, conducting field inspections, sampling, evaluations, review and analysis of field and laboratory data, report preparation and review, design, travel time, etc.

A. Professional

Principal Engineer	\$ 130.00/hr
Senior Engineer or Consultant	\$ 120.00/hr
Project Manager	\$ 120.00/hr
Project Engineer	\$ 100.00/hr
Expert Witness ⁵	\$ 195.00/hr

B. Support Personnel

Administrative Assistant	\$ 45.00/hr
CAD Operator/Drafter	\$ 60.00/hr
Technician	\$ 70.00/hr

C. Special Rate Personnel

Expenses

A. Travel Expenses⁶

1. Company or personal vehicle, per mile: Current Federal Rate
2. Per Diem expenses: Meals & Incidentals shall be \$39 per day
 Lodging - when required to remain overnight or on full-time projects outside metropolitan area of the home office.

- B. Special equipment or supplies, permits, shipping charges, special printing or other items not customarily provided will be charged at cost.

C. Drawing plots and copies, as follows:

1. Bond:	\$ 3.00/sheet
2. Translucent Bond:	\$ 5.00/sheet
3. Vellum:	\$10.00/sheet

Subcontracts

- A. Subcontract services (if required) will be invoiced at cost. Administrative and professional fees for coordination and administration of the subcontract will be included in our proposed fee.

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⁴ All fees and expenses are portal to portal.

⁵ Expert witness fees apply to testimony in trial, arbitration, or deposition.

⁶ When possible, we will pro-rate travel expenses among active projects involving travel to the same general area.