

ENGINEERING SERVICES AGREEMENT

THIS AGREEMENT is made and entered by and between COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, hereinafter referred to as "County", and, HNTB Corporation a ~~DELAWARE~~ Corporation, hereinafter referred to as "Engineer", to be effective from and after the date as provided herein.

WITNESSETH:

WHEREAS, the County desires to engage the services of the Engineer to determine a technically preferred route and bridge location and other related engineering services in connection with the Lake Lavon Bridge in Collin County, hereinafter referred to as the "Project"; and

WHEREAS, the Engineer desires to render such engineering services for the County upon the terms and conditions provided herein.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

I. Employment of the Engineer

The County hereby agrees to retain the Engineer to perform professional engineering services in connection with the Project; Engineer agrees to perform such services in accordance with the terms and conditions of this Agreement, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances.

II. Scope of Services

2.1 The parties agree that Engineer shall perform such services as are set forth herein and described in Exhibit "A", which is attached hereto and thereby made a part of this Agreement. Work for each phase shall be preceded by a Notice to Proceed issued by County. The parties understand and agree that deviations or modifications in the form of written change orders may be authorized from time to time by the County.

2.2 The Engineer will serve as the County's professional engineering representative under this Agreement, providing professional engineering, consultation, advice and furnishing customary services incidental thereto. The Engineer agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

2.3 The Engineer shall advise the County with regard to the necessity for subcontract work such as special surveys, tests, test borings, or other subsurface investigations in connection with design and engineering work to be performed hereunder. The Engineer shall also advise the County concerning the results of same. Such survey, test, and investigations shall be furnished to the County.

2.4 The presence or duties of the Engineer's personnel at a construction site, whether as on-site representatives or otherwise, do not make the Engineer or its personnel in any way responsible for those duties that belong to County's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including but not limited to, all construction methods, means, techniques, sequences and procedures necessary for completing all portions of the construction work in accordance with the Contract Documents and any health or safety precautions required by such construction work. The Engineer and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

2.5 The Engineer will make periodic recommendations for periodic construction progress payments to the construction contractor. Recommendations by the Engineer to the County for periodic construction progress payments to the construction contractor will be based on the Engineer's knowledge, information, and belief from sampling and observation that the work has progressed to the point indicated. Such recommendations do not represent that there are not other matters at issue between the County and the construction contractor that affect the amount that should be paid.

2.6 The Engineer agrees to provide a complete and coordinated set of drawings and specifications for the construction of the Project, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. Construction drawings, specifications, and other construction documents prepared by the Engineer or its consultants and submitted to the County for approval or contractors for bidding or negotiation purposes shall be complete and capable of construction "as is". While the utility of communications between design professionals and construction contractors for the purpose of clarifying design intent is recognized, the Project should be capable of construction without the necessity of formal revisions or contract modifications to provide missing design information after construction contracts are awarded. Said documents shall comply with all applicable codes, ordinances, statutes, and regulations governing the design of the Project.

2.7 The Engineer shall assist the County in the preparation and filing of documents required for the approval of governmental authorities having jurisdiction over the Project.

III. Schedule of Services

3.1 The Engineer agrees to commence its services immediately upon execution of this Agreement, or as otherwise directed in writing by the County, and to proceed diligently with said services to completion as described in the Completion Schedule attached hereto as Exhibit "B" and thereby made a part of this Agreement. Engineer shall not be considered in default of this Agreement for delays in performance caused by circumstances beyond its reasonable control. Should such circumstances occur, the Engineer shall, within a reasonable time of being prevented from performing, give written notice to the County describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

3.2 In the event that the Engineer is delayed in the progress of the work on the Project by an act or neglect of the County, County's employees, or separate contractors employed by the County, or by changes ordered in the Project, fire, adverse weather conditions not reasonably anticipated, unavoidable casualties or other causes beyond the Engineer's control, or delay authorized by the County pending arbitration, or by other causes which the County and Engineer agree may justify delay, then the Contract Time shall be reasonably extended by Change Order. The County shall have the right at any time to delay or suspend the work or any part thereof for any reasonable time and if this happens, the Engineer's sole

remedy for any delays or suspension shall be any extension of time. However, should the delay continue for more than one year past the original completion date in the completion schedule, the Engineer may request to renegotiate their professional fee provided that the fee is reasonable and substantiated by documents showing the need for the requested increase. Any request for a fee increase shall be submitted to Collin County Commissioners' Court for final approval. The County shall not be independently liable to the Engineer for any delay or interference caused by circumstances beyond the County's control or any delay caused by any other person or entity.

IV. Compensation and Method of Payment

The parties agree that Engineer shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the Payment Schedule attached hereto as Exhibit "C" and thereby made a part of this Agreement. Engineer further agrees that it will prepare and present such monthly progress reports and itemized statements as are described in said Exhibit "C". Payment will be made in accordance with The Texas Government Code, Title 10, Subtitle F, Chapter 2251. Engineer further agrees to the following terms prior to payment being due by County:

A. Invoice and Payment

- (1) The Engineer shall provide the County sufficient documentation to reasonably substantiate the invoices.
- (2) The Engineer will issue monthly invoices for all work performed under the Agreement.
- (3) In the event of disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. The County will exercise reasonableness in contesting any portion thereof. NO interest will accrue on any contested portion of the billing until mutually resolved.
- (4) In the event of any conflict between Paragraph IV and Chapter 2251 of the Texas Government Code, The Texas Government Code shall prevail.

V. Information to be provided by the County

5.1 The County agrees to furnish to Engineer, prior to the Engineer's commencement of its services, all that information set forth and described on Exhibit "D", which is attached hereto and thereby made a part of this Agreement.

5.2 The County will make its facilities accessible to the Engineer as required for the Engineer's performance of its services. The Engineer represents that it understands the scope of this Agreement and has reviewed and inspected the Project sites, and can fully perform its obligations pursuant to this Agreement. Any failure of the Engineer to acquaint itself with the available information will not relieve the Engineer from its responsibilities pursuant to this Agreement.

5.3 The County shall disclose, to the extent known to the County, the results of prior tests, inspections or investigations conducted for the Project upon request by the Engineer.

VI. Progress Meetings

In addition to providing the monthly progress reports as required under Paragraph IV herein above, Engineer agrees to attend all monthly progress meetings scheduled by County, and at such meetings to outline work accomplished and special problem or delays encountered in connection with the

Project during the previous report period, as well as planned work activities and special problems and delays anticipated for the next report period. The Engineer agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

VII. Insurance

Engineer agrees to meet all insurance requirements as set forth on Exhibit "E" which is attached hereto and thereby made a part of this Agreement.

VIII. Indemnity

8.1 The Engineer agrees to the fullest extent permitted by law, to indemnify and hold harmless the County and its officers, agents and employees of and from damages, injuries (including death), claims, property damages (including loss of use), losses, demands, suits, judgments and costs, including reasonable attorney's fees and expenses, arising out of or occasioned by Engineer's breach of any of the terms or provisions of this Agreement, or by any other negligent act, error or omission of the Engineer, its agents, servants, employees, subcontractors, licensees, invitees, or any other persons or entities for whose acts the Engineer is legally liable.

8.2 In claims against any person or entity indemnified under this Section 8.1 by an employee of the Engineer, anyone directly or indirectly employed by the Engineer or anyone for whose acts the Engineer may be liable, the indemnification obligation under this Section 8.1 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the Engineer under workers' compensation acts, disability benefit acts or other employee benefit acts.

IX. Independent Contractor

In the performance of services hereunder, the Engineer shall be deemed an independent contractor and shall not, with respect to its acts or omissions, be deemed an agent, subcontractor or employee of the County.

X. Assignment and Subletting

The Engineer agrees that neither this Agreement nor the services to be performed hereunder will be assigned or sublet without the prior written consent of the County. The Engineer further agrees that the assignment or subletting or any portion or feature of the services required in the performance of this Agreement shall not relieve the Engineer from its full obligations to the County as provided by this Agreement.

XI. Audits and Records/Prohibited Interest

11.1 The Engineer agrees that at any time during normal business hours, and as often as County may deem necessary, Engineer shall make available to representatives of the County for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the County to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, all for a period of one (1) year from the date of final settlement of this Agreement or of such other or longer period, if any, as may be required by applicable statute or other lawful requirements.

11.2 The Engineer agrees that it is aware of the prohibited interest requirements of the state law which are applicable to persons entering into contracts with the County and will abide by the same. Further, a lawful representative of Engineer shall execute the Affidavit shown in Exhibit "F". Engineer understands and agrees that the existence of a prohibited interest during the term of this Agreement will render the agreement voidable.

11.3 The Engineer acknowledges to the County that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interest, direct or indirect, in property abutting the proposed Project and business relationships with persons or entities with interest in abutting properties.

XII. Contract Termination

The parties agree that County shall have the right to terminate this Agreement without cause upon thirty (30) days written notice to Engineer. In the event of such termination without cause, Engineer shall deliver to County all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by Engineer in connection with this Agreement. Engineer shall have the right to terminate this Agreement upon thirty (30) days written notice to County in the event of the County's breach of any material term of this Agreement, including but not limited to compensation and method of payment. Regardless of which party initiates termination, Engineer shall be entitled to compensation for any and all services completed to the satisfaction of County in accordance with the provisions of this Agreement prior to termination.

XIII. Cost Estimates

The parties recognize and agree that any and all Engineer's estimates of probable construction costs (estimates) prepared by Engineer in connection with the Project represent the best judgment of Engineer as a design professional familiar with the construction industry, but that the Engineer has no control over costs or the price of labor, equipment or materials or over the Contractor's methods of pricing and does not guarantee that any bids solicited or received in connection with the Project will not vary from estimates prepared by Engineer.

XIV. Ownership of Documents

Original drawings and specifications (Instruments of Service) created by Engineer are the property of the Engineer; however, the Project is the property of the County, and Engineer may not use the drawings and specifications for any purpose not relating to the Project without County's consent. County shall be furnished with such reproductions of drawings and specifications as County may reasonably require. Upon completion of the services or any earlier termination of this Agreement under Article XII, and payment in full of all monies due Engineer, Engineer will revise drawings to reflect significant changes made during construction as per the marked-up prints, drawings, and other data furnished to the Engineer by or through the County or Contractor. Engineer will promptly furnish the County with one (1) complete set of reproducible record prints. All such reproductions shall be the property of the County who may use them without the Engineer's permission for any proper purpose relating to the Project, including but not limited to, maintenance of the Project, additions to the Project, or completion of the Project. The aforementioned revisions will be based upon information supplied by the County's construction contractor and will be assumed by Engineer to be complete and accurate. As such,

Engineer shall not be responsible for errors or omissions resulting therefrom. Prints shall be furnished, as an additional service, at any other time requested by County. The County may use such drawings in any manner it desires; provided, however, that the Engineer shall not be liable for the use of such drawings for any project other than the Project described herein.

XV. Complete Contract

15.1 This Agreement, including the exhibits hereto numbered "A" through "F", constitute the entire agreement by and between the parties regarding the subject matter hereof and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument, signed by the County and the Engineer.

15.2 Warranties contained in this Agreement are in addition to and not in lieu of, any and all other liability imposed upon the Engineer by law with respect to the Engineer's duties, obligations, and performance hereunder. The Engineer's liability hereunder shall survive the County's final acceptance and payment for the Project. All representations and warranties set forth in this Agreement, including without limitation, this paragraph, shall survive the final completion of the Work or earlier termination of this Agreement. The Engineer acknowledges that the County is relying upon the Engineer's skill and experience in performing the services pursuant to this Agreement.

XVI. Mailing of Notices

Unless instructed otherwise in writing, Engineer agrees that all notices or communications to the County permitted or required under this Agreement shall be addressed to the County at the following address:

Mr. Ruben Delgado, P.E., Director
Collin County Engineering Department
825 N. McDonald, Suite 160
McKinney, Texas 75069

County agrees that all notices or communications to Engineer permitted or required under this Agreement shall be addressed to Engineer at the following address:

HNTB CORPORATION
WILLIAM S. FORBES, AUP
5910 W. PLANO PKWY #200
PLANO, TX 75093

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the date such notice or communication is posted by the sending party.

XVII. Miscellaneous

A. Paragraph Headings

The paragraph headings contained herein are for convenience only and are not intended to define or limit the scope of any provision in this Agreement.

B. Interpret Contract Fairly

Although this Agreement is drafted by County, should any part be in dispute, the parties agree that the Agreement shall not be construed more favorable for either party.

C. Venue/Governing Law

The parties agree that the laws of the State of Texas shall govern this Agreement, and that it is performable in Collin County, Texas. The venue for any litigation related to this Agreement shall be in Collin County, Texas.

D. Parties Bound

County and Engineer, and their partners, successors, subcontractors, executors, legal representatives, and administrators are hereby bound to the terms and conditions of this Agreement.

E. Severability

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

F. Effective Date

This Agreement shall be effective from and after execution by both parties hereto.

G. Term of Agreement

The term of Agreement shall conform to the schedule as stipulated in Exhibit "B" attached herein. No other extension shall be authorized unless granted by written agreement between the County and Engineer.

H. Observe and Comply

Engineer shall at all times observe and comply with all federal and State laws and regulations and with all City ordinances and regulations which in any way affect this Agreement and the work hereunder, and shall observe and comply with all orders, laws, ordinances and regulations which may exist or may be enacted later by governing bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof shall be considered. Engineer agrees to defend, indemnify and hold harmless County and all of its officers, agents, and employees from and against all claims or liability arising out of the violation or any such order, law, ordinance, or regulation, whether it be by itself or its employees.

WITNESS OUR HANDS AND SEALS on the date indicated below.

COLLIN COUNTY, TEXAS

Date: 4/13/09

By: Franklin Ybarbo
Franklin Ybarbo
Purchasing Agent
Court Order No. 2009-194-03-12

Date: 3-31-09

HNTB CORPORATION
By: William Storkes
Title: ASSOCIATE VICE PRESIDENT

4/13/09
an

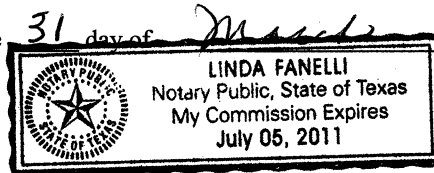
ACKNOWLEDGMENT

STATE OF TEXAS }
COUNTY OF Collin }

BEFORE ME, _____ on this day personally appeared William S. Jorke of HNTB Delaware Corporation, known to me (or proved to me on the oath of _____ or through _____ (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of the corporation, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31 day of March, 2009.

Linda Fanelli
Notary Public, State of Texas



Linda Fanelli
Printed Name

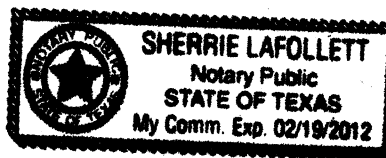
My Commission expires on the 5 day of July, 2011.

STATE OF TEXAS }
COUNTY OF COLLIN }

BEFORE ME, Sherrie LaFollett on this day personally appeared Franklin Ybarbo., Purchasing Agent of COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of COLLIN COUNTY, TEXAS, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 13 day of April, 2009.

Sherrie LaFollett
Notary Public, State of Texas



Sherrie LaFollett
Printed Name

My Commission expires on the 19 day of February, 2012.

Agreement No. 12274-09

EXHIBIT "A"

SCOPE OF SERVICES

Attached

**Collin County
Lake Lavon Bridge Route Study
From FM 1378 to SH 78**

March 5, 2009

Purpose

The purpose of this contract is to provide Collin County with the Advanced Project Development and ROW Documentation Services necessary to determine the preferred route location of a major 6 lane divided thoroughfare across Lake Lavon from FM 1378 to SH 78 in southeastern Collin County, approximately 9 miles. HNTB Corporation (the Engineer) will develop various geometric alignments within the study area, evaluate the alignments based on the project criteria, and then recommend a technically preferred alignment for approval. After the alignment has been approved by Collin County, the Engineer will provide adequate right-of-way (ROW) documentation necessary for future project development.

Details

- The route study will maximize use of previous study efforts used to develop the Collin County Mobility Plan 2007 Update.
- The Engineer will use available aerial images provided by Collin County. The Engineer will use DTM project mapping based upon the 2001 or most recent North Central Texas Council of Government (NCTCOG) digital elevation model (DEM) contours. The DEM shall be converted to a Geopak .tin to be used as the DTM project mapping. Any survey information excluding what will be provided by the County will be considered as additional services.
- Up to eight (8) horizontal alternative alignments, 120-feet in width, will be developed and evaluated to determine a recommended technically preferred alignment.
- The alternative alignment will be compared based on an evaluation matrix with environmental, engineering, cost and public input criteria.
- This scope of services provides for up to two (2) Public Meetings to be held at the direction of Collin County during the study and a final Public Hearing at the conclusion of the study.
- The work described in this scope of services will be paid as lump sum, and include the following major work tasks: Project Management; Data Assembly and Review/Develop Constraints Map; Define Design and Evaluation Criteria; Alignment Studies; Right-of-Entry; and Public Involvement.

This scope of services and fee proposal is based on the following time frame for the major work categories:

Data Assembly and Review/Develop Constraints Map - 4 months
Develop Alternative Alignments and Documentation – 6 months
Prepare Draft Report, Incorporate Comments, and Prepare Final Report - 2 months

I. Project Management

- A. Perform general management and administration duties required to maintain the project and coordinate with Collin County, NCTCOG, Texas Department of Transportation (TxDOT), U.S. Army Corps of Engineers (USACE), North Texas Municipal Water District (NTMWD) the adjacent cities (Lucas, Parker, Saint Paul, Wylie, Lavon, Nevada, Josephine); property owners, and other project team members during the development of the project. Six (6) coordination meetings are estimated for the project duration. Prepare a project schedule. Perform quality assurance and quality control activities.
- B. Conduct a kick-off meeting with Collin County to define the study area, discuss the work plan for the corridor, and obtain input to refine the work plan to best meet project needs. Discuss the project schedule and identify adjustments. Discuss the availability of applicable baseline data from Collin County and other agencies. Other items of discussion will include agency contact for collection of baseline information, Collin County preference regarding notification for agency meetings and project communication methods. Prepare a memorandum summarizing the items of discussion.
- C. Attend project team meetings with Collin County as needed. The purpose of these meetings is to evaluate the project status, determine necessary adjustments to the project work plan and schedule, plan upcoming events, and to discuss and resolve key project issues. Six (6) project team meetings are estimated for the project duration.

II. Data Assembly and Review/Develop Constraints Map

The initial tasks will be to collect data and to research and identify significant issues that potentially influence the location and selection of the technically preferred alignment.

- A. Collect, review, and map information with the study area. This information will be obtained from appropriate local, regional, state, and federal resources and site investigations. Review the digital aerial images obtained from Collin County and other aeriels (i.e. color infrared) from other available sources. Baseline data collected will be stored and managed in a Geographic Information System (GIS). The GIS data will be distributed in Shapefile or Personal GeoDatabase format. With the assistance of GIS, this information will help identify environmental and design constraints that could influence alternatives or provide opportunities. GIS data management includes the following subtasks:

1. GIS Data Gathering and Coding: Contact public agencies and organizations to obtain applicable GIS layers and databases and potential alignments to be coded in the system
2. GIS Data Manipulation and Integration: Check data for consistency and update if necessary.
3. GIS Output: Develop maps and graphics (JPEG or PDF) for analysis and presentation.

Current Data if Available from the NCTCOG (to be field verified as needed):

- FEMA Q3 maps
- NCTCOG Mobility 2030 Plan, 2007 Update Recommendation
- Abandoned Landfills
- List of Park and Recreation Facilities
- Zoning
- Present and Future Population and Employment

Current Data if available from Collin County (for Collin County only)

- 2007 digital aerial images (6" resolution)
- NCTCOG Mobility 2030 Plan (has been incorporated into Collin County's thoroughfare plan)
- Collin County Mobility Plan 2007 Update
- Future Highways and Major Arterials
- City and County Boundaries
- Railroad Alignments (are available in the Collin County's appraisal district parcels layer)
- Roads
- Tier 2 Hazardous Material Sites
- Watersheds (DEM 10-30 meter)
- River and Streams
- County Parks
- Watersheds
- Regional Thoroughfare Plan
- Schools and cemeteries
- Tax Records
- Property Boundaries and Ownership

Data to be collected if available:

- Archeological and Historical Sites
- Future Land Uses
- Present and Planned Major Generators
- Present and Future Trip Patterns
- Regional and City Thoroughfare Plans
- Proposed development plans

- Traffic Count Data
- Major Utility Alignments
- Wildlife Habitats
- Related Corridor Studies
- Churches
- Hazardous Material Sites (Database Search)

- B. Evaluate the adequacy of existing data and determine the extent of field investigations needed to collect additional baseline data. Following review of the aerial photography, conduct field reconnaissance as needed to identify and confirm potentially sensitive areas or physical resources within the project area including: wildlife habitats, potential habitat for threatened or endangered species and Section 404 jurisdictional waters of the U.S./wetlands, and potential sites containing hazardous materials (records search). Photograph potentially sensitive areas during the initial field reconnaissance. Global Positioning System (GPS) will be used during field reconnaissance so that data can be quickly and accurately stored in the GIS. The initial evaluation for archeological resources will consist of a review of the National Register of Historic Places and coordination with the Texas Archeological Research Laboratory to perform a database review to determine if recorded archeological sites exist within the study area. Similarly, an historic resources evaluation will be performed to determine the existence of historic features within and adjacent to the study area and will also involve limited field reconnaissance. Dependent upon the results of these investigations, additional services may be required including an archeological impact evaluation or pedestrian survey and coordination with the Texas Historic Commission (i.e. Texas Antiquities Code permit, etc.).
- C. Prepare Constraints Map which identifies potential sensitive areas such as cemeteries, churches, hazardous material locations, and parks, etc. for use in identifying alternative alignments. Locate critical environmental resources on the constraints map. Update the GIS database established as needed and use the database to quantify and evaluate impacts to sensitive resources and graphically illustrate impacts in the evaluation of alternatives.
1. Identify which features may be impacted (e.g., wetlands, historic structures, steep terrain).
 2. Define how these features will be impacted.
 3. Overlay the impact definitions for all the potentially impacted features. Update map to show areas where, if the alignment should be routed over, an impact will occur. This map will allow quick visual analysis of paths of least impact through the study area. The constraints map will show areas that should be avoided, due to

potential impacts to a feature (e.g., wetlands, historic structures, etc.).

Deliverables:

GIS data in electronic format

Photographs of project area (as applicable)

Constraints Map (Up to ten (10) hardcopies and electronic file)

III. Define Design and Evaluation Criteria

- A. Establish evaluation criteria to ensure the unbiased evaluation of alignment alternatives. In coordination with Collin County, develop and define the design standards. Review and summarize the list of categorized issues into a set of criteria to be used in the matrix evaluation for the analysis, evaluation and screening of alternative alignments. Define the major issues of environmental, engineering, cost and public input into more detailed evaluation categories.
- B. Document technical methodologies and procedures for alternative analysis evaluation. Quantitative and qualitative criteria and/or measures of effectiveness will be summarized in a comparative form for each issue. Develop a specific set of project planning criteria for approval by Collin County. Conceptual development of the alternative alignments will be based upon these approved criteria.

Deliverables:

Design and Evaluation criteria (Up to ten (10) hardcopies and electronic file)

Technical methodologies and procedures comparative form (Up to ten (10) hardcopies and electronic file)

IV. Alignment Studies

Identify and develop alternative alignments within the study area each approximately 120 feet wide (Based on Collin County Mobility Plan 2007 Update for a 6 lane divided section). Each alignment will be analyzed utilizing information collected in Task II. The alignments will be selected based on environmental impacts, engineering feasibility, cost, and public input. Due consideration will be given to existing and proposed development, future land use, environmental factors, geographic features, community support, and costs in identifying potential alternative alignments:

- A. Using the data obtained in Task II, identify and develop alternative alignments to determine ROW needs.
 - 1. Develop up to eight (8) horizontal alternative alignments within the corridor using approved design criteria, data collection, constraints, and opportunities identified during field reconnaissance. The

alternative alignments will be depicted on exhibits that utilize aerial images and GIS layers as base mapping data. The GIS layers will generally consist of parcels, streams, lakes, existing roads, proposed thoroughfare roads, subdivisions, contours, and sensitive environmental features.

2. Based on the viability of the horizontal alternative alignments, the Engineer will develop profiles for up to two (2) of the alternative alignments. The profiles will be depicted on plan and profile roll plot exhibits. The plan and profile roll plot exhibits shall be colorized at a scale to be determined consisting of the following elements:
 - a) Label streets, buildings, and parcels
 - b) Proposed centerline
 - c) Horizontal Curve Data (PC, PT, PI, Curve Length, Bearing, Degree of Curve)
 - d) Proposed ROW
 - e) Retaining walls (if needed)
 - f) North arrow
 - g) Direction of traffic flow (via arrows) on all roadways/typical sections.
 - h) Centerline profile
 - i) Vertical Curve Annotation (PVC, PVI, PVT, Curve Length, Grades, K values)
 - j) Proposed elevations (0.00) and existing elevations (0.0)
 - k) Proposed Typical Section
 3. Cost estimates for up to two (2) of the alternative alignments will be developed at a quantitative/feasibility level. A detailed preliminary cost estimate will only be prepared for the approved alignment. The preliminary cost estimate will be determined from estimated quantities and unit costs of major construction items including preparing ROW, pavement, and structures. The unit costs will be obtained from similar projects of scope and complexity. A contingency will be added to the preliminary cost estimate to account for items not listed in the cost estimate. Preliminary earthwork cross-sections will not be developed.
- B. Analyze key environmental, engineering, cost, and public input affecting the feasibility of each alignment. Perform a comparative evaluation of the alternative alignments. Develop a definition of impacts for each feature impacted by the alignment. Prepare a tabular summary documenting the alignment analysis. This table will summarize the degree of impact (e.g., no impact, minimal impact, or major impact) for each alignment alternative and each feature.

1. Perform additional environmental analysis to refine the preliminary data within the corridor for each alternative alignment. All additional data collected during environmental field studies will be used to update the GIS to ensure the GIS contains the most current and accurate information for the project.
2. Perform an initial assessment of ROW impacts to properties along each alignment. Assemble ROW impacts for each alignment and summarize impacts by individual owner and parcel in tabular form.
3. Evaluate access interruptions and construction feasibility to maintain access during an initial access study. Consider improvements to existing roads or extending existing roads to maintain access in construction cost estimate.
4. Assess impacts to existing utilities. Research existing overhead and underground utilities, prepare overlays in the GIS to depict the relationship of the utilities to the proposed alignment alternatives and identify potential conflicts.
5. Develop preliminary ROW and utility relocation costs estimates for each alignment based on costing methodology approved by Collin County. Analyze the topographic constraints for each alignment and impact on construction costs. Prepare a comparative analysis of construction costs.

- C. Identify the feasible alignments based on 1) Collin County and adjacent city input, and 2) review of analyses conducted by the project team. Consideration will be given to environmental, engineering, cost, and public input criteria. The team, in conjunction with Collin County, will examine the priority of the evaluation matrix factors. Following this prioritization of the evaluation factors, the study team will rank the alternatives in order of their ability to meet evaluation criteria. The project team's identification of feasible alignments will be presented to Collin County. Once an alternative alignment has been approved by Collin County, a Route Study report will be developed to document all of the project's need and purpose, process, analysis, as well as the conclusion and recommendations.

Deliverables:

- Alternative Alignment exhibits overlaid on aerial images (Up to five (5) hardcopies for each alternative and electronic file)
- Plan and profile exhibits (Up to five (5) hardcopies for each alternative alignment and electronic file)
- Environmental Evaluation Summary
- ROW Needs Tabular Summary

- Comparative Cost Analysis
- Alignment Evaluation Matrix
- GIS data in ESRI's Shapefile or Personal GeoDatabase format (NAD83 State Plane North Central Zone) compiled as a project in ArcGIS
- Lake Lavon Bridge Crossing Study Report (Up to ten (10) hardcopies and electronic file)

V. Right-of-Entry (ROE)

A. Right-of-Entry (ROE) for Data Collection

1. Prepare ROE letters as required by Collin County to allow access by project team members to adjacent private property to establish GPS targets and perform environmental analysis as may be required for the alignment evaluations. Property owners will be contacted initially by mail. If after sending out one (1) mailing and attempting to contact by telephone there are some property owners that are non-responsive, field personnel will hand carry ROE letters to the location of the subject property in the study area to attempt to obtain permission. In the event that access is denied from owners contacted or responses are not received after several attempts to contact the property owner, the Engineer shall contact Collin County for assistance to secure access. Up to twenty (20) ROE letters are estimated for the project duration.

VI. Public Involvement

Assist Collin County with the planning and coordination of two (2) public meetings at key study milestone dates. The two public meetings will be held at interim points during the study. A final public hearing will be held at the conclusion of the study to allow for presentation of study results and final public comment to the Collin County Commissioners Court.

A. Public Meetings

1. Assist Collin County with public meeting coordination and logistics. This will include preparing and distributing the postcard notification to stakeholders, coordinating meeting sites and accompanying audio/visual equipment, and room setup and breakdown. *Collin County will create the legal advertisement and coordinate the advertisement with appropriate local newspapers.*
2. Develop project up to six (6) exhibit boards, PowerPoint presentations, agendas, comment cards, speaker cards, graphics and other presentation materials.
3. Attend, facilitate and take notes at each public meeting. Attendance will be limited to four (4) attendees.
4. Develop a project database for the Collin County Lake Lavon Bridge Crossing Route Study. Maintain and update the database to include elected/local

officials and stakeholders. The database will serve as the project mailing list for the project.

5. Compile and analyze comments received at the two public meetings and public hearing to assist in the evaluation of the alternatives. Provide a summary of verbal comments from each public meeting to be included in the public meeting summary.
6. Prepare a public meeting summary for each public meeting. Four (4) copies of each summary will be created and provided to the County.
7. Coordinate with Collin County Public Information Office to disseminate information to the public via the Collin County Web site and other methods as determined by Collin County.

B. Public Hearing

1. The Engineer will prepare and develop materials for the public hearing, including a PowerPoint presentation and supporting handouts.
2. The Engineer will attend and present at the public hearing. Attendance will be limited to three (3) attendees.

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EXHIBIT "B"

COMPLETION SCHEDULE

ATTACHMENT B

Schedule

Schedule

The completion date for this project is based on a 12 month schedule. All deliverables for the project will be complete by April 3, 2010.

EXHIBIT "C"

PAYMENT SCHEDULE

Invoices will be transmitted to the County on a monthly basis based on a percentage of completion up to that time, and payments to the Engineer will be made as follows:

A derivation of the total contract fee amount is attached.

Lake Lavon Bridge Route Study - From FM 1378 to SH 78

Collin County

March 9, 2009

| | Project Manager \$196 | Deputy Project Manager \$149 | GIS Manager \$149 | Environmental Manager \$186 | Environmental Planner \$77.00 | Environmental Scientist \$103 | Engineer/Planner \$97.00 | PI Manager \$144.00 | Sc. PI Rep. \$112.00 | Graphic Designer \$82.00 | Clerical \$66 | Total |
|--|--------------------------|---------------------------------|----------------------|--------------------------------|----------------------------------|----------------------------------|-----------------------------|------------------------|-------------------------|-----------------------------|------------------|--------------|
| A. General Mgmt/Administration | | | | | | | | | | | | |
| 1. Coordinate and Attend Meetings (6) with various agencies | 24 | 24 | 8 | 8 | | 12 | 24 | | | | 30 | 130 |
| 2. Prepare and update project schedule | 3 | 14 | | | | | | | | | | 17 |
| 3. OAVOC | 6 | 12 | | | | | | | | | | 18 |
| B. Kickoff Meeting | | | | | | | | | | | | |
| 1. Preparation | | 2 | | | | | 2 | | | | | 4 |
| 2. Facilitate/Attend | 4 | 4 | 4 | 4 | | 4 | 4 | | | | 1 | 24 |
| 3. Prepare Meeting Minutes | | 3 | | | | | | | | | | 4 |
| C. Project Team Mtg with Collin Co (6) | | | | | | | | | | | | |
| 1. Preparation | 12 | 6 | | | | | 12 | | | | 6 | 36 |
| 2. Facilitate/Attend | 24 | 24 | 8 | 8 | | 24 | 24 | | | | | 112 |
| 3. Prepare Meeting Minutes | 6 | 18 | | | | | | | | | 6 | 30 |
| A. Map Information | | | | | | | | | | | | |
| 1. GIS Data Gathering and Coding | | 2 | 8 | | 40 | 60 | | | | | | 110 |
| 2. GIS Data Manipulation | | 2 | 42 | | 40 | 80 | | | | | | 164 |
| 3. GIS Data Deliverable | | 4 | 20 | 2 | | 15 | | | | | | 41 |
| B. Evaluate Data and Preliminary Field Investigation | | | | | | | | | | | | |
| 1. Evaluate Existing Data | | 2 | 4 | 12 | 40 | 60 | | | | | | 118 |
| 2. Conduct Field Reconnaissance As Needed | | 4 | 4 | 8 | 40 | 40 | | | | | | 92 |
| 3. Documentation and Analysis of Collected Data | | 4 | 8 | 12 | 40 | 60 | | | | | | 124 |
| C. Prepare Constraints Map | 4 | 8 | 12 | 8 | | 72 | | | | | | 104 |
| A. Establish Design and Evaluation Criteria/Define Major Issues | 2 | 8 | | | | 24 | | | | | | 34 |
| B. Establish Technical Methodology Plan | 2 | 8 | | 4 | | 24 | | | | | | 38 |
| A. Alternative Alignments | | | | | | | | | | | | |
| 1a. Develop horizontal alternative alignments (up to 8) | 14 | 40 | 8 | | | 8 | 128 | | | | | 198 |
| 1b. Develop GIS Exhibits depicting alternative alignments (up to 8) | 8 | 24 | 20 | 10 | | 104 | 40 | | | | | 206 |
| 2a. Develop profiles of alternative alignments (up to 2) | 5 | 6 | | | | | 40 | | | | | 51 |
| 2b. Develop plan/profile roll plots of alternative alignments (up to 2) | | 6 | | | | | 48 | | | | | 54 |
| 3a. Develop quantitative cost estimates (up to 2) | 2 | 3 | | | | | 24 | | | | | 29 |
| 3b. Develop detailed preliminary cost estimate of approved alignment | 1 | 2 | | | | | 10 | | | | | 13 |
| B. Analyze Impacts | | | | | | | | | | | | |
| 1. Environmental/Add Field Data | | | | 24 | 80 | 120 | | | | | | 224 |
| 2. ROW Assessment | 2 | 8 | 12 | | | 24 | 34 | | | | | 80 |
| 3. Evaluate access and feasibility | 3 | 6 | | | | | 36 | | | | | 45 |
| 4. Evaluate impacts to existing major utilities | 3 | 6 | | | | | 36 | | | | | 45 |
| 5. Develop preliminary ROW and utility relocation costs | 3 | 6 | 4 | | | | 36 | | | | | 49 |
| C. Evaluation Matrix and Route Study Report | | | | | | | | | | | | |
| 1. Develop evaluation matrix analyzing each alternative | | | 4 | 10 | | 30 | 50 | | | | | 94 |
| 2. Prepare draft Route Study Report | 8 | 40 | 12 | 12 | | 30 | 50 | | | | | 152 |
| 3. Incorporate revisions into final Route Study Report | 2 | 4 | | 4 | | 10 | 8 | | | | | 28 |
| A. Prepare ROE Letters (up to 20) | 2 | 8 | | | | 30 | 12 | | | | | 52 |
| A. Public Meetings (2) | | | | | | | | | | | | |
| 1. Preparation for meeting logistics | | 8 | | | 8 | 8 | | 2 | 16 | | 30 | 72 |
| 2. Prepare meeting materials (postcards, exhibit boards, comment/speaker cards, sign-in sheets, PPT, etc.) (2) | 6 | 24 | | | 12 | 12 | | 24 | 60 | 80 | 40 | 258 |
| 3. Facilitate/attend meeting/take notes at meeting (2) | 4 | 8 | | | 8 | | | | 16 | | | 36 |
| 4. Develop and maintain project database | | 2 | 4 | | | | | | 20 | | 80 | 110 |
| 5. Compile and analyze comments | | 12 | | | | | | | | | | 12 |
| 6. Prepare meeting summary report | | 8 | | | | | | 4 | 8 | | 24 | 44 |
| 7. Web site and information coordination with the county | | 4 | | | | | | | 4 | | | 8 |
| B. Public Hearing (1) | | | | | | | | | | | | |
| 1. Hearing preparation/PPT development | 6 | 24 | | | | | | | 4 | 16 | | 50 |
| 2. Attendance | 4 | 4 | | | | | | | | | | 8 |
| Total Hours | 160 | 398 | 182 | 128 | 308 | 851 | 618 | 34 | 128 | 96 | 217 | 3118 |
| Direct Labor | \$31,680.00 | \$59,302.00 | \$27,118.00 | \$23,436.00 | \$23,716.00 | \$87,653.00 | \$59,946.00 | \$4,896.00 | \$14,336.00 | \$7,872.00 | \$14,322.00 | \$354,277.00 |

Total Labor \$354,277.00
 Expenses \$12,710.00
TOTAL FEE \$366,987.00

| Expenses | Quantity | Unit | Unit Cost | Total |
|------------------------------------|----------|------|------------|--------------------|
| Travel | 1200 | mi | \$0.550 | \$660.00 |
| 8.5 x11 (B/W) | 900 | EA | \$0.07 | \$63.00 |
| 11x17 (B/W) | 900 | EA | \$0.14 | \$126.00 |
| 8.5x11 (Color) | 600 | EA | \$0.78 | \$468.00 |
| 11x17 (Color) | 400 | EA | \$1.55 | \$620.00 |
| Color Plotting | 1060 | SF | \$1.70 | \$1,802.00 |
| Postcards | 2000 | EA | \$0.50 | \$1,000.00 |
| PMMPH Exhibits | 6 | EA | \$133.00 | \$798.00 |
| Facility Rental | 2 | EA | \$1,000.00 | \$2,000.00 |
| ROE Letters | 40 | EA | \$0.45 | \$18.00 |
| Postage | 2000 | EA | \$0.42 | \$840.00 |
| Order Oil/Gas Data | 1 | EA | \$800.00 | \$800.00 |
| Archeology Study (Geo-Marine Inc.) | 1 | EA | \$3,515.00 | \$3,515.00 |
| Total Expenses | | | | \$12,710.00 |

EXHIBIT "D"

INFORMATION TO BE PROVIDED BY THE COUNTY

The County will make available to Engineer any and all information, data, etc. as it may have in its possession relating to the project described herein.

EXHIBIT "E"

INSURANCE REQUIREMENTS

1.0 Before commencing work, the vendor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) required by Texas Law indicating the coverage is to remain in force throughout the term of this contract. In addition to any coverage required by Texas Law, the vendor shall provide the following coverages.

1.1 Broad Form Commercial General Liability insurance at minimum combined single limits of (\$1,000,000 per-occurrence and \$2,000,000 general aggregate) for bodily injury and property damage, which coverage shall include products/completed operations, independent contractors, and contractual liability each at \$1,000,000 per occurrence. Coverage must be written on an occurrence form.

1.2 Workers Compensation insurance at statutory limits, including employers liability coverage at minimum limits. In addition to these, the contractor must meet each stipulation below as required by the Texas Department of Insurance, Division of Workers' Compensation; (Note: If you have questions concerning these requirements, you are instructed to contact the DWC.

1.2.1 Definitions: Certificate of coverage ("certificate"). A copy of a certificate of authority to self-insure issued by the commission, or a coverage agreement in a form approved by the DWC (i.e. DWC-81, DWC-82, DWC-83, OR DWC-84), showing statutory workers compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project. Duration of the project includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project includes, but is not limited to, all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project.

1.2.2 The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Title 5 of the Texas Labor Code, for all employees of the contractor providing services on the project, for the duration of the project.

1.2.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

1.2.4 If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

1.2.5 The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

1.2.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

1.2.5.2 no later than seven (7) days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

1.2.6 The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

1.2.7 The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

1.2.8 The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

1.2.9 The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

1.2.9.1 provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Title 5 of the Texas Labor Code, for all of its employees providing services on the project, for the duration of the project;

1.2.9.2 provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

1.2.9.3 provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

1.2.9.4 obtain from each other person with whom it contracts, and provide to the contractor:

1.2.9.4.1 a certificate of coverage, prior to the other person beginning work on the project; and

1.2.9.4.2 a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

1.2.9.5 retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

1.2.9.6 notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

1.2.9.7 contractually require each person with whom it contracts, to perform as required by paragraphs 1.2.1 through 1.2.7, with the certificates of coverage to be provided to the person for whom they are providing services.

1.2.10 By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

1.2.11 The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

1.3 Commercial Automobile Liability insurance shall be no less than \$500,000 combined single limits per accident for bodily injury and property damage, including owned, non-owned, and hired vehicle coverage.

1.4 Professional Liability Insurance at minimum limits of \$1,000,000. This policy must have a two (2) year extended period of coverage, (i.e. tail coverage). If you choose to have project coverage endorsed onto your base policy, this would be acceptable.

2.0 The required limits may be satisfied by any combination of primary, excess or umbrella liability insurances, provided the primary policy complies with the above requirements and the excess umbrella is following form. The vendor may maintain reasonable and customary deductibles, subject to approval by Collin County.

3.0 With reference to the foregoing insurance requirement, the vendor shall endorse applicable insurance policies as follows:

3.1 A waiver of subrogation in favor of Collin County, its officials, employees, volunteers and officers shall be contained in the workers compensation coverage.

3.2 The vendor's insurance coverage shall name Collin County as additional insured under the General Liability policy.

3.3 All insurance policies shall be endorsed to require the insurer to immediately notify Collin County of any decrease in the insurance coverage limits.

3.4 All insurance policies shall be endorsed to the effect that Collin County will receive at least thirty (30) days notice prior to cancellation, non-renewal or termination of the policy.

3.5 All copies of Certificates of Insurance shall reference the project/contract number.

4.0 All insurance shall be purchased from an insurance company that meets the following requirements:

4.1 A financial rating of B+VII or better as assigned by the BEST Rating Company or equivalent.

5.0 Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, and shall contain provisions representing and warranting the following:

Agreement No. 12274-09

5.1 Sets forth all endorsements and insurance coverages according to requirements and instructions contained herein.

5.2 Sets forth the notice of cancellation or termination to Collin County.

EXHIBIT "F"

AFFIDAVIT OF NO PROHIBITED INTEREST

I, the undersigned, declare and affirm that no person or officer in this sole proprietorship, partnership, or corporation, whatever the case, has or will have during the term of this contract a prohibited interest as that term is defined in Vernon's Texas Codes Annotated, Local Government Code Title 5, Section C, Chapter 171.

I further understand and acknowledge that the existence of a prohibited interest at any time during the term of this contract will render the contract voidable.

Name of Engineer HNTB CORPORATION
Title of Officer ASSOCIATE VICE PRESIDENT
Signature of Officer William S. Forbes
Date: 3-31-09

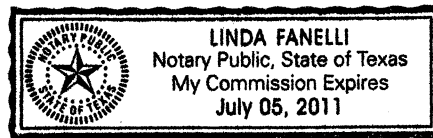
ACKNOWLEDGMENT

STATE OF TEXAS }
COUNTY OF Collin }

BEFORE ME, on this day personally appeared William S. Forbes, known to me (or proved to me on the oath of _____ or through _____ (description of identity card or other document) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31 day of March, 2009.

Linda Fanelli
Notary Public, State of Texas
Linda Fanelli
Printed Name



My Commission expires on the 5 day of July, 2011.