

**AGREEMENT FOR ENGINEERING SERVICES  
BETWEEN THE  
CITY OF NORTH RICHLAND HILLS  
AND  
HALFF ASSOCIATES, INC.**

**I.**

This Agreement is executed by and between the City of North Richland Hills, a municipal corporation located in Tarrant County, Texas, acting by and through Mark Hindman, its duly authorized City Manager (hereinafter called "CITY"), and **HALFF ASSOCIATES, INC.**, a Texas corporation, acting by and through **LEIGH A. HOLLIS, P.E.**; its duly authorized Principal (hereinafter called "ENGINEER").

**WITNESSETH**, that CITY desires professional engineering services in connection with the **IRON HORSE BOULEVARD (EAST) RECONSTRUCTION PROJECT**.

**NOW, THEREFORE**, CITY and ENGINEER, in consideration of the mutual covenants and agreements herein contained, do mutually agree as follows:

**II. PROJECT**

In this Agreement, the "PROJECT" means the engineering design of the **IRON HORSE BOULEVARD (EAST) RECONSTRUCTION PROJECT** in accordance with the Public Works Design Manual, applicable CITY codes, regulations and standards.

**III. BASIC AGREEMENT**

ENGINEER is an independent contractor and undertakes and agrees to perform professional engineering services in connection with the PROJECT, as stated in the sections to follow. It is understood and agreed that ENGINEER is not and will not by virtue of this contract be deemed to be an agent or employee of CITY and that CITY will not be entitled to direct the performance by ENGINEER's employees or subcontractors of the tasks contemplated by this contract. All engineering services shall be performed with diligence and in accordance with professional standards customarily obtained for such services in the State of Texas. For rendering such services CITY agrees to pay ENGINEER as set forth in Section VIII: "Compensation" and Exhibit F: "Compensation."

#### **IV. SCOPE OF ENGINEER'S SERVICES**

ENGINEER shall render the professional services necessary for development of the PROJECT, in accordance with the schedule in Exhibit A: "Project Schedule" and as detailed in Exhibit B: "Basic Engineering Services," said exhibits being attached hereto and incorporated herein for all purposes. ENGINEER shall perform services with the professional skill and care ordinarily provided by competent engineers or architects practicing under the same or similar circumstances and professional license, and as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer in the Dallas/Fort Worth Metroplex area. Such services shall be of professional and technical soundness, accuracy, and adequacy of all designs, drawings, specifications, and other work and materials furnished under this Agreement.

#### **V. SPECIAL ENGINEERING SERVICES**

The CITY will pay the ENGINEER for Special Engineering Services as indicated in Exhibit C: "Special Engineering Services," attached hereto and made a part of this Agreement.

#### **VI. ADDITIONAL ENGINEERING SERVICES**

Additional Engineering Services are defined in Exhibit D: "Additional Engineering Services," attached hereto and made a part of this Agreement. No Additional Engineering Services are authorized unless authorization for specified additional services are provided to ENGINEER by CITY in writing and approved by CITY.

#### **VII. SCOPE OF CITY SERVICES**

The City will furnish items and perform those services as identified in Exhibit E: "Services to be provided by the City", attached hereto and made a part of this Agreement.

#### **VIII. COMPENSATION**

- A. In consideration of the services described herein, CITY shall pay and ENGINEER shall receive compensation in accordance with Exhibit F: "Compensation".
- B. Total payments including without limitation reimbursable expenses, to ENGINEER by CITY for the services stated in Section IV and Section V above shall not exceed **PROJECT COST (\$332,308.00)**.
- C. CITY may authorize additional services to be provided by ENGINEER as mutually agreed upon by the parties. Any authorization for additional services shall be given to ENGINEER by CITY in writing and approved by CITY.

- D. CITY and ENGINEER understand that the variables in ENGINEER's cost of performance may fluctuate. The parties agree that any fluctuation in ENGINEER's costs will in no way alter ENGINEER's obligations under this Agreement nor excuse performance or delay on ENGINEER's part.

## **IX. OWNERSHIP OF DOCUMENTS**

Following completion of ENGINEER'S professional services and receipt of payment for said services, All completed or partially completed evaluations, reports, surveys, designs, drawings and specifications prepared or developed by ENGINEER under this Agreement, including any original drawings, computer disks, mylars or blue lines, the entire list above is hereinafter referred to as "drawings", shall become the property of CITY and may be used by CITY for any lawful purpose; provided, however, that ENGINEER shall not be liable for the use of such drawings for any project other than the PROJECT described in this Agreement.

## **X. INDEMNITY**

**ENGINEER HEREBY COVENANTS AND CONTRACTS TO WAIVE ANY AND ALL CLAIMS, RELEASE, INDEMNIFY AND HOLD HARMLESS THE CITY, ITS CITY COUNCIL, OFFICERS, EMPLOYEES, AND AGENTS, FROM AND AGAINST LIABILITY, CAUSES OF ACTION, CITATIONS, CLAIMS, COSTS, DAMAGES, DEMANDS, EXPENSES, FINES, JUDGMENTS, LOSSES, PENALTIES, OR SUITS, CAUSED BY OR RESULTING FROM ENGINEER'S NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY ENGINEER, ITS AGENT, ITS CONSULTANT UNDER CONTRACT, OR ANOTHER ENTITY OVER WHICH ENGINEER EXERCISES CONTROL. ENGINEER SHALL NOT BE OBLIGATED TO INDEMNIFY OR DEFEND CITY, ITS OFFICERS, EMPLOYEES OR AGENTS IN ANY MANNER FOR THE NEGLIGENCE OF CITY, ITS OFFICERS, EMPLOYEES OR AGENTS OR OTHER ENTITY OVER WHICH THE CITY EXERCISES CONTROL.**

**THE INDEMNIFIED ITEMS MAY INCLUDE, BUT IS NOT LIMITED TO, PERSONAL INJURY AND DEATH CLAIMS, AND PROPERTY DAMAGE CLAIMS, INCLUDING THOSE FOR LOSS OF USE OF PROPERTY. INDEMNIFIED ITEMS SHALL INCLUDE REIMBURSEMENT OF CITY'S REASONABLE ATTORNEY'S FEES AND COSTS, COURT COSTS, AND SETTLEMENT COSTS. INDEMNIFIED ITEMS SHALL ALSO INCLUDE REASONABLE EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES AND EXPENSES INCURRED BY AN INDEMNIFIED PARTY OR ENTITY IN ATTEMPTING TO ENFORCE THIS INDEMNITY PROVISION.**

**ENGINEER'S OBLIGATIONS UNDER THIS PROVISION SHALL NOT BE LIMITED TO THE LIMITS OF COVERAGE OF INSURANCE MAINTAINED OR REQUIRED TO BE MAINTAINED BY ENGINEER UNDER THIS AGREEMENT. THIS PROVISION SHALL SURVIVE TERMINATION OF THIS AGREEMENT.**

Approval by CITY of contract documents shall not constitute or be deemed to be a release of the responsibility and liability of ENGINEER, its officers, agents, employees and subconsultants, for the accuracy and competency of the services performed under this Agreement, including but not limited to evaluations, reports, surveys, designs, working drawings and specifications, and other engineering documents. Approval by CITY shall not be deemed to be an assumption of ENGINEER'S responsibility and liability by CITY for any error, omission, defect, deficiency or negligence in the performance of ENGINEER's professional services or in the preparation of the evaluations, reports, surveys, designs, working drawings and specifications or other engineering documents by ENGINEER, its officers, agents, employees and subconsultants, it being the intent of the parties that approval by CITY signifies CITY's approval of only the general design concept of the improvements to be constructed. However, ENGINEER shall be entitled to rely on the accuracy and completion of applicable data and information provided to ENGINEER by the CITY.

## **XI. INSURANCE**

For the duration of this Agreement, ENGINEER shall maintain the following minimum insurance which shall protect ENGINEER, its subcontractors, its sub-consultants and CITY from claims for injuries, including accidental death, as well as from claims for property damage which may arise from the performance of work under this Agreement.

**A. Workers' Compensation and Employer's Liability Insurance:**

Workers' Compensation	Texas Statutory Requirements
Employer's Liability	\$500,000 injury - each accident
	\$500,000 disease - each employee
	\$500,000 disease - policy limit

**B. Commercial General Liability:**

On an "occurrence" basis, including, property damage, bodily injury, products and completed operations and personal & advertising injury with limits no less than \$1,000,000 per occurrence and \$2,000,000 aggregate.

**C. Automobile Liability:**

Covering any auto, or if ENGINEER has no owned autos, covering hired and non-owned autos with a Combined Single Limit no less than \$1,000,000 per accident for bodily injury and property damage.

**D. Professional Liability (Errors and Omissions)**

ENGINEER shall maintain Professional Liability (or equivalent) errors and omissions insurance appropriate to the ENGINEER'S profession, with a limit no less than \$1,000,000 per occurrence or claim.

Insurance limits can be met with a combination of primary and excess/umbrella coverage.

The CITY, its officers, officials and employees are to be named as "Additional Insured" on the

commercial general liability and automobile liability policies as respects liability arising out of activities performed by or on behalf of the vendor.

A waiver of subrogation in favor of the CITY, its officers, officials and employees shall be contained in the Workers' Compensation insurance policy.

Policies of insurance shall not be cancelled non-renewed, terminated, or materially changed unless and until thirty (30) days notice has been given to CITY.

All insurance shall be issued by responsible insurance companies eligible to do business in the State of Texas and having an A.M. Best Financial rating of A- VI or better.

ENGINEER shall furnish the CITY certificates of insurance affecting coverage required. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of Insurance must be submitted on a form approved by the Texas Department of Insurance.

## **XII. ARBITRATION**

No arbitration arising out of or relating to this Agreement shall occur without both parties' written approval.

## **XIII. TERMINATION AND SUSPENSION**

- A. CITY may terminate this Agreement at any time for convenience or for any cause by a notice in writing to ENGINEER. Either CITY or ENGINEER may terminate this Agreement in the event the other party fails to perform in accordance with the provisions of this Agreement. Upon receipt of such notice, ENGINEER shall immediately discontinue all services and work and the placing of all orders or the entering into contracts for supplies, assistance, facilities, and materials, in connection with the performance of this Agreement and shall proceed to cancel promptly all existing contracts insofar as they are chargeable to this Agreement.
- B. If CITY terminates this Agreement under the foregoing Paragraph A, CITY shall pay ENGINEER a reasonable amount for services performed prior to the effective date of such termination, which payment shall be based upon the payroll cost of employees engaged on the work by ENGINEER up to the effective date of termination of this Agreement and for subcontract and reproduction in accordance with the method of compensation stated in Section VIII: "Compensation" hereof. In the event of termination, the amount paid shall not exceed the amount appropriate for the percentage of work completed.

#### **XIV. SUCCESSORS AND ASSIGNS**

CITY and ENGINEER each bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement; except as above, neither CITY nor ENGINEER shall assign, sublet or transfer its interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of CITY.

#### **XV. AUTHORIZATION, PROGRESS, AND COMPLETION**

CITY and ENGINEER agree that the PROJECT is planned to be completed in accordance with the Exhibit A: "Project Schedule" which is attached hereto and made a part hereof. ENGINEER shall employ manpower and other resources and use professional skill and diligence to meet the schedule; however, ENGINEER shall not be responsible for schedule delays resulting from conditions beyond ENGINEER's control. With mutual agreement, CITY and ENGINEER may modify the Project Schedule during the course of the PROJECT and if such modifications affect ENGINEER's compensation, it shall be modified accordingly, subject to City Council approval.

For Additional Engineering Services, the authorization by CITY shall be in writing and shall include the definition of the services to be provided, the schedule for commencing and completing the services and the basis for compensation as agreed upon by CITY and ENGINEER.

It is understood that this Agreement contemplates the full and complete Engineering services for this PROJECT including any and all services necessary to complete the work as outlined in Exhibit B: "Basic Engineering Services". Nothing contained herein shall be construed as authorizing additional fees for services to provide complete services necessary for the successful completion of this PROJECT.

#### **XVI. SUBCONTRACTS**

ENGINEER shall be entitled, only if approved by CITY, to subcontract a portion of the services to be performed by ENGINEER under this Agreement.

#### **XVII. RIGHT TO AUDIT**

ENGINEER agrees that CITY shall, until the expiration of three (3) years after final payment under this Agreement, have access to and the right to examine and photocopy any directly pertinent books, design calculations, quantity take-offs, documents, papers and records of ENGINEER involving transactions relating to this Agreement. ENGINEER agrees that CITY shall have access during normal working hours to all necessary ENGINEER facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. CITY shall give ENGINEER reasonable advance notice of intended audits.

ENGINEER further agrees to include in all its subconsultant agreements hereunder a provision to the effect that the subconsultant agrees that CITY shall, until the expiration of three (3) years after final payment under the subcontract, have access to and the right to examine and photocopy any directly pertinent books, design calculations, quantity take-offs, documents, papers and records of such subconsultant, involving transactions to the subcontract, and further, that CITY shall have access during normal working hours to all subconsultant facilities, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with the provisions of this article. CITY shall give subconsultant reasonable advance notice of intended audits.

## **XVIII. EXHIBITS**

Both parties agree to the following exhibits and as such, the following exhibits are made a part of this Agreement:

Exhibit "A"	Project Schedule
Exhibit "B"	Basic Engineering Services
Exhibit "C"	Special Engineering Services
Exhibit "D"	Additional Engineering Services
Exhibit "E"	Services to be provided by the City
Exhibit "F"	Compensation
Exhibit "G"	Form 1295

## **XIX. MISCELLANEOUS**

- A. Authorization to Proceed. Signing this Agreement shall be construed as authorization by CITY for ENGINEER to proceed with the work, unless otherwise provided for in the authorization.
- B. Legal Expenses. In the event legal action is brought by CITY or ENGINEER against the other to enforce any of the obligations hereunder or arising out of any dispute concerning the terms and conditions of this Agreement, the prevailing party in any litigation between the parties to this agreement shall be entitled to reasonable attorney fees. Notwithstanding the foregoing, any award of attorney's fees to be paid by CITY shall be subject to the limitations set forth in Texas Local Government Code §271.153(3) as awarded by a court of competent jurisdiction.
- C. Notices. Any notice or correspondence required under this Agreement shall be sent by certified mail, return receipt requested, or by personal delivery and shall be effective upon receipt, if addressed to the party receiving the notice or correspondence at the following address:

If to ENGINEER:

HALFF ASSOCIATES, Inc.  
Attn: Leigh A. Hollis, P.E.  
3803 Parkwood Boulevard, Suite 800  
Frisco, Texas 75034-8641

If to CITY:

City of North Richland Hills  
Attn: Caroline Wagoner, P.E.  
Director of Public Works  
4301 City Point Drive  
North Richland Hills, Texas 76180

With Copies to the City Manager and City Attorney at the same address.

- D. Independent Contractor. ENGINEER shall perform services hereunder as an independent contractor, and not as an officer, agent, servant or employee of the CITY and ENGINEER shall have the exclusive right to control services performed hereunder by ENGINEER, and all persons performing same, and shall be responsible for the negligent acts and omissions of its officers, agents, employees, and subconsultants. Nothing herewith shall be construed as creating a partnership or joint venture between CITY and ENGINEER, its officers, agents, employees and subconsultants; and the doctrine of respondent superior has no application as between CITY and ENGINEER.
- E. Venue. This Agreement shall be governed by the laws of the State of Texas, and venue in any proceeding relating to this Agreement shall be in Tarrant County, Texas.
- F. Entire Agreement. This Agreement represents the entire agreement between CITY and ENGINEER and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both CITY and ENGINEER.
- G. Severability. If any provision in this Agreement shall be held illegal by a valid final judgment of a court of competent jurisdiction, the remaining provisions shall remain valid and enforceable, however, it being understood and agreed that the invalidation or unenforceability of all or a portion of this Agreement shall not render the entirety of the Agreement void and unenforceable, it being the intent of the Parties to create an legally enforceable and valid agreement.
- H. Disclosure. By signature of this Agreement, ENGINEER warrants to CITY that it has made full disclosure in writing of known existing conflicts of interest or potential conflicts of interest, including but not limited to personal financial interests, direct or indirect, in property abutting the PROJECT and business relationships with abutting property owners. ENGINEER further warrants that it will make disclosure in writing of any conflicts of interest which develop subsequent to the signing of this Agreement and prior to final payment under this Agreement.

[Signature Page Follows]



This Agreement is executed in two (2) counterparts.

IN TESTIMONY WHEREOF, the parties hereto have executed this Agreement this the \_\_\_\_ day of \_\_\_\_\_, 2021.

CITY OF NORTH RICHLAND HILLS  
(CITY)

HALFF ASSOCIATES, INC.  
(ENGINEER)

By: \_\_\_\_\_  
Mark Hindman, City Manager

By: \_\_\_\_\_  
Leigh A. Hollis, P.E., Vice President

Date: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:

ATTEST:

\_\_\_\_\_  
Alicia Richardson, City Secretary/Chief  
Governance Officer

\_\_\_\_\_  
Notary Public in and for the State of Texas

APPROVED TO FORM AND LEGALITY:

\_\_\_\_\_  
Maleshia B. McGinnis, City Attorney

\_\_\_\_\_  
Type or Print Notary's Name

My Commission Expires:

\_\_\_\_\_

***CITY SEAL***

***CORPORATE SEAL***

**EXHIBIT A**

**PROJECT SCHEDULE**

**FOR**

**IRON HORSE BOULEVARD (EAST) RECONSTRUCTION**

**(Rufe Snow Drive to York Street)**

**PROJECT SCHEDULE**

The Scope of Services for this PROJECT is based on the following schedule:

- A.** Completion of design surveys and geotechnical investigation: 30 calendar days from date of written authorization to begin work.
- B.** Completion/furnishing 30% conceptual schematic, bid quantities, and construction cost estimate: 60 calendar days from date of written authorization to begin.
- C.** Completion/furnishing 60% preliminary plans, specifications, bid quantities, and construction cost estimate: 120 calendar days from date of written authorization to begin, excluding City review time.
- D.** Completion/furnishing 90% final plans, specifications, bid quantities, and construction cost estimate: 180 calendar days from date of written authorization to begin, excluding City review time.
- E.** Completion/furnishing 100% final plans, specifications, bid quantities, and construction cost estimate: 210 calendar days from date of written authorization to begin, excluding City review time.
- F.** Bidding services: 60 calendar days from city's approval of final plans.
- G.** Construction services: In accordance with construction schedule (estimated to be 270 calendar days total)
- H.** Closure: 60 calendar days from the date of construction completion.

**EXHIBIT B**

**BASIC ENGINEERING SERVICES  
FOR  
IRON HORSE BOULEVARD (EAST) RECONSTRUCTION  
(Rufe Snow Drive to York Street)**

The scope of work for BASIC Engineering Services involves Conceptual, Preliminary and Final Design, Project Plans, Specifications and Estimates on Roadway Design services.

**I. PROJECT MANAGEMENT**

Manage the Team:

- Lead, manage and direct design team activities
- Ensure quality control is practiced in performance of the work
- Communicate internally among team members
- Allocate team resources

Communications and Reporting:

- Attend one pre-design project kickoff meeting with CITY staff to confirm and clarify scope, understand CITY objectives, and ensure economical and functional designs that meet CITY requirements.
- Conduct review meetings with the CITY at the end of each design phase. Up to three (3) total.
- Prepare and submit monthly invoices in the format acceptable to the CITY.
- Prepare and submit monthly progress reports.
- Prepare and submit baseline Project Schedule initially and Project Schedule updates.
- Coordinate with franchise utilities as necessary for the design of the proposed infrastructure and provide and obtain information needed to prepare the design. Includes up to three (3) franchise utility coordination meetings.
- Meet with City engineering staff and obtain any additional design criteria, available GIS information, pertinent utility plans, street plans, plats and right-of-way maps, existing easement information, previous studies prepared by others, as-built plans for portions of surrounding infrastructure, historical drainage complaints and other information available for the project area. This shall coincide with the project kickoff meeting.

**II. CONSTRUCTION PLANS**

The Consultant shall develop construction plans for review, permitting, bidding, construction, inspection and record keeping. In general, construction plans shall be consistent with normal practice for projects of this nature. The following particulars will also apply. The construction plans will consist of numerous sheets ordered as follows:

- (1) Cover Sheet and Sheet Index: The cover sheet shall include a location map. Additionally, the cover sheet shall show the project name, project number, date, City logo, Consultant's name, address, and telephone number and other items as may be specified. Following the

title sheet shall be a sheet index with drawings numbered consecutively and without subscripts.

- (2) Project Layout Sheet(s): The project layout sheet(s) will be drawn to a scale of 1" = 50' and laid out with the north arrow up or to the right. The purpose of the project layout is to depict the project in a simplified view. Major items of work will be shown without excessive detail. Additionally, survey control points shall be shown.
- (3) Project General Notes and Legend: These sheets will include a listing of abbreviations, legend, and general notes.
- (4) Typical Sections: Typical sections shall be drawn to scales of 1" = 5' h and 1" = 2' v and shall depict a view looking north or east. As a minimum, typical sections will be drawn showing the relationship of the proposed street and existing and proposed improvements. Typical sections will include existing roadways, right-of-way lines, etc., along with all proposed roadway improvements and will depict all significant items of work.
- (5) Plan and Profile Sheets (Paving, Storm Drain, Water, and Sanitary Sewer): Plan-profile sheets will be arranged from south to north and from west to east, with the north arrow up or to the right on the sheet. Plan-profile sheets will be drawn to scales of 1" = 20' h and 1" = 4' v. Stationing will be from south to north or west to east with the beginning station being set at approximately 1+00. Each plan-profile sheet will include no more than 500 feet; thus, leaving ample margins both left and right. The plan and profile station will align vertically on the sheet with the proposed centerline drawn parallel to the profile grid. When there is a centerline curvature, the plan-profile should be drawn so that as much of the plan view is in alignment as possible. Plan-profile sheets shall depict all existing and proposed items pertinent to the project. Water line profiles shall only be provided for lines 12-inch and larger. Lines smaller than 12-inch shall be designed in plan only.
- (6) Grading Plans: Halff will provide grading plans drawn at a scale of 1"=20'.
- (7) Drainage Plans: Halff will provide a drainage area map and calculations to support the design/upsized of a closed conduit system and determine any additional inlets needed to appropriately convey runoff for the narrowed street corridor. Existing storm drain infrastructure will remain in place wherever practicable.
- (8) Detail Sheets: The City's standard drawings will be used as a beginning point in developing standard details for this project. They will be reviewed and modified for this project. Where other agency standards are used, they shall be reduced as necessary to fit on the City's standard sheet format with complete title block.
- (9) Miscellaneous: Construction plans will also address erosion control, utility adjustments, traffic control (including phasing, detours, road closures, signing, barricading, etc.), pavement markings and signage, sleeves for future median irrigation, and all other improvements.
- (10) Cross Sections: Cross sections shall be drawn to scales of 1" = 10' h and 1" = 5' v on sheets of 1" grids H and V. They shall be arranged from bottom to top of the sheet looking

up station and shall show existing and proposed features and improvements. Generally, no more than eight (8) sections per sheet are to be plotted. Each section should extend beyond the easement and rights-of-way a sufficient distance to clearly show the relationship between the proposed improvements and the existing properties. Full sections will be drawn at maximum spacings of 50 feet.

- (11) Review Plans: The Consultant shall develop conceptual plans and profiles and estimates of probable cost for the 30% milestone. A rolled schematic will be provided for review and comment and to determine the feasibility of the project and confirm constructability and cost prior to developing preliminary plans. Preliminary plans shall then be prepared and submitted at the 60% milestone. Final plans shall be prepared and submitted at the 90% and 100% milestone. Also, the Consultant may submit plan sheets or working drawings to the City for review and comment to reduce the number of revisions that otherwise would be required. During development of the plans, the Consultant shall attend meetings as needed. The Consultant shall, in company with the City, perform at least one plans-in-hand review for each submittal. Deliverables for each design submission are as follows:

a. 30% Design Package

- i. Roll schematic depicting plan layout for roadway, utilities, and storm drain conduit.
- ii. Typical Sections
- iii. Engineer's Preliminary Estimate of Probable Construction Cost

b. 60% Design Package

- i. Information provided in previous design package revised per City comment.
- ii. Cover sheet, sheet index and legend, general notes
- iii. Project layout and control
- iv. Demolition plans
- v. Roadway, storm drain, and sanitary sewer plan and profile sheets.
- vi. Drainage area map, hydraulic and inlet computations
- vii. Water line plan sheets
- viii. Preliminary grading plans.
- ix. Roadway cross-sections.
- x. Preliminary specifications.

c. 90% Design Package

- i. Information provided in previous design package revised per City comment.
- ii. Traffic control and phasing sheets
- iii. Pavement markings and signage
- iv. Erosion control plans
- v. Project detail sheets
- vi. Project manual and technical specifications.

d. 100% Final Design Package

- i. Information provided in previous design package revised per City comment, signed and sealed for bidding.

- (12) Design: The design of the project shall be in general accordance with the City of North Richland Hills ordinances, standard details, and good Consulting practices. During the

design phase, the Consultant shall contact various utility companies and obtain information relating to existing utility lines. The design should avoid major utility relocations, where practical. When required, proposed relocations or replacements will be shown in plan and profile.

(13) Prints: The Consultant shall provide prints of construction plans for review and permitting. Five (5) sets of half-size plans will be submitted to the City for each review stage. The Consultant will provide utility companies with half-size copies of 60% plans for review. The Consultant will provide up to eleven (11) sets of half-size prints for bidding and construction. Electronic files in PDF format shall be provided to the City for use by City staff during the bidding process.

(14) General: Construction plans shall be furnished full-size and half-size. Overall dimensions of full-size construction plans shall be 22" x 34". The City's standard format shall be used. Up to two (2) full-size and five (5) half-size final construction plans shall be furnished to the City. Up to two (2) full-size and six (6) half-size final construction plans shall be furnished to the Contractor. Electronic files in PDF and DGN or DWG format shall be provided to the Contractor for use during construction.

(15) Generic Sheet List: Following is a general list of plan sheets required for each construction package.

- (a) Cover Sheet
- (b) Sheet Index and Legend
- (c) Project General Notes
- (d) Typical Paving Sections
- (e) Project Layout Sheet(s)
- (f) Demolition Plans
- (g) Paving Plan and Profile Sheets
- (h) Grading Plans
- (i) Drainage Area Map and Calculations
- (j) Storm Drain Plan and Profile Sheets
- (k) City of North Richland Hills Pavement Standard Details
- (l) Miscellaneous Pavement Details
- (m) Water Line Plan Sheets
- (n) Sanitary Sewer Plan and Profile Sheets
- (o) City of North Richland Hills Water Standard Details
- (p) City of North Richland Hills Wastewater Standard Details
- (q) Erosion Control Plans
- (r) City of North Richland Hills Erosion Control Details
- (s) Pavement Markings, and Signage Plans and Details
- (t) Traffic Control and Sequencing Plans
- (u) Roadway Cross Sections

(16) Specifications: The Consultant shall prepare a project manual and technical specifications required for bidding and constructing the project. The project manual will be provided in the City's standard format. Only specifications amending or supplementing COG specifications need be furnished. Project manual, specifications, bid items and quantities shall be furnished on hard copy and by electronic file.

### **III. BID AND CONSTRUCTION PHASE ASSISTANCE**

- (1) Bidding – During the bidding phase, the Consultant will prepare bid documents and assist the City in advertising the project for bids. The Consultant will address technical questions and prepare addenda and issue to the bidders. The Consultant shall attend a pre-bid meeting and prepare minutes. The Consultant will tabulate bids and make recommendation for award of contract.
- (2) Construction:
  - (a) Attend a pre-construction meeting and monthly progress meetings as required. Document each meeting with written minutes.
  - (b) Visit the project site at appropriate intervals as construction proceeds to observe and report on the progress and quality of the executed work. In performing these services the Professional will endeavor to protect the City against defects and deficiencies in the work of the Contractor. However, the Professional cannot guarantee the performance of the Contractor, nor be responsible for the actual supervision of the construction operations or for the safety measures that the Contractor takes or should take.
  - (c) Review shop drawings and Contractor submittals.
  - (d) Review laboratory test reports on materials and equipment.
  - (e) Prepare and negotiate Change Orders between the Contractor and the City.
  - (f) Prepare record drawings from information supplied by the Contractor.
  - (g) Attend final inspection and assist in preparation of a punch list report.
- (3) Closure – The Consultant shall prepare “record” plans, incorporating all changes and known variations to provide the City the best possible set of record drawings. The final record drawings shall be furnished in.pdf format on CD. CADD files shall be furnished on CD as well.

**EXHIBIT C**  
**SPECIAL ENGINEERING SERVICES**  
**FOR**  
**IRON HORSE BOULEVARD (EAST) RECONSTRUCTION**  
**(Rufe Snow Drive to York Street)**

The scope of work for SPECIAL Engineering Services involves Surveys (Design), Subsurface Utility Engineering (SUE), Geotechnical Engineering, and Coordination with the Economic Development Administration (EDA) regarding Coronavirus Aid Relief and Economic Security (CARES) Funding. The scope of work for the Special Engineering Services is more generally described as follows:

**I. FIELD SURVEY**

The Consultant shall provide surveying services, which, in general, may be defined as normal services applicable to a project of this type. The following particulars will also apply.

- (1) Vertical benchmarks shall be established such that all points of construction shall be within 500 feet of a benchmark. Benchmarks should not be subject to loss during construction. Fire hydrants and similar appurtenances are not to be used for benchmarks. The surveyor shall establish temporary benchmarks throughout the length of the project.
- (2) Topographic features will be surveyed along with any and all other features needed for design, review, permitting, construction, and inspection of the project. Coverage will extend beyond the proposed rights-of-way far enough to integrate the design with the adjacent properties.
- (3) Existing property corners, iron pins, etc. shall be tied in order to establish existing rights-of-way. Prior to surveying on private property, the surveyor shall secure written permission from the property owners and/or tenant and shall provide the City a copy of said written permission. Should only oral permission be granted, the surveyor shall document the permission granted by letter to the property owner/tenant, with a copy to the City. If permission cannot be obtained, the City will assist or other arrangements will be worked out.



Deliverables:

- Field survey points and descriptions in CAD format.

## **II. GEOTECHNICAL ANALYSIS**

The Consultant will subcontract with CMJ Engineering, Inc. to provide sub-surface investigations in the form of boring logs. Borings shall be of sufficient depth and spacing to provide general information needed for the design and construction of the project. An engineering report will be prepared to present the results of the field and laboratory data together with analyses of the results and recommendations.

Deliverables:

- Geotechnical report summarizing analyses and recommendations for channel improvement earthwork, foundations and construction.

## **III. SUBSURFACE UTILITY ENGINEERING**

Halff will perform SUE in accordance with ASCE CI/ASCE 38-02 “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data.” This standard defines the following Quality Levels:

- Quality Level-A: Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for utility damage. A precise horizontal and vertical location, as well as other utility attributes, is shown on plan documents.
- Quality Level-B: Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality Level-B data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents.
- Quality Level-C: Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level-D information.
- Quality Level-D: Information derived from existing records or oral recollections.

(1) Quality Level-A Utility Test Holes (Vacuum Excavation): Up to four (4) test holes will be performed on various utilities at locations approved by the City of North Richland Hills. Halff will cut up to a 12” square test hole, excavate down to utility, record the depth to top of utility, backfill & compact the hole, and restore the surface to its original condition. An iron rod with cap or “x-cut” will be set to mark the approximate centerline location of the utility. A jackhammer will be utilized for work to be performed in asphalt and concrete areas. This Scope of Services includes all test holes being performed under one (1) mobilization.

(2) SUE Field Manager / Professional Engineer: A SUE Field Manager will be on-site for a portion of this project for field crew supervision, field quality control, and coordination with on-site personnel. A Professional Engineer will be responsible for QA/QC, management of the contract, coordination with the project team and signing the final deliverables if required.

- (3) Permitting: Street Cut permits will be coordinated with the City of North Richland Hills as required.
- (4) Work Zone Traffic Control: Halff will provide standard temporary work zone traffic control consisting of cones and free-standing signage for this project. This Scope of Services does not include lane closure(s), flag person(s), changeable message board(s), arrow board(s) and/or engineered traffic control plans.

Deliverables:

- Deliverables for the Quality Level-A Test Hole Excavations will be an 8.5-in. x 11-in. Test Hole Data Form for each Test Hole performed indicating depth, size, locations, and other notable characteristics of the utility.

#### **IV. GRANT FUNDING COORDINATION**

The Consultant will provide specifications, plan details, and submittal documents as required by the U.S. Economic Development Administration (EDA) to secure project funding under the CARES Act. This scope assumes the Environmental Narrative for the project was completed during the grant application process and is not included under this contract.

#### **V. PERMITTING**

The Consultant shall prepare applications to the Texas Department of Licensing and Review (TDLR) for code review of sidewalks and ramps. After construction the Consultant shall notify TDLR of completion date. Consultant shall address any questions or issues by TDLR as a result of review and inspection. TDLR review and inspection fees are included in this proposal.

#### **VI. CONSTRUCTION STAKING**

During the construction phase, the Consultant shall provide construction control staking for use by the Contractor. Control monumentation set during design surveys shall be checked and/or re-established. Offset line and grade stakes for pavement back of curb, storm drain, water and sanitary sewer lines, including appurtenances shall be set by the Contractor. A minimum of five (5) days' notice must be given before start of construction control staking. Any lost or destroyed stakes shall be replaced at the Contractor's expense. If requested, the Consultant shall verify by survey, line and grade of the proposed improvements to assure the City that the improvements are constructed in accordance with the plans and specifications.

**EXHIBIT D**

**ADDITIONAL ENGINEERING SERVICES  
FOR  
IRON HORSE BOULEVARD (EAST) RECONSTRUCTION  
(Rufe Snow Drive to York Street)**

- I.** Other additional services, not included in this contract, will be negotiated with the City as needed. Compensation will be based upon a mutually agreed lump sum fee or an hourly rate as described below. Items that are considered additional services include:
- Attendance or preparation for Public Meeting(s)
  - Attendance or preparation for City Council Meetings
  - Subsurface Utility Engineering Level B
  - Full Tree preservation/mitigation plan
  - Landscape architecture and irrigation design
  - Lighting and electrical design
  - Traffic signal design
  - Revisions to plans requested by the City after plans are approved
  - Permit fees, filing fees, pro-rated fees, impact fees and taxes
  - Preparation of easement or right-of-way documents
  - Property acquisition or negotiations
  - Design of gas, telephone, or other utility improvements except as noted herein
  - Full time construction inspection
  - Certification that the work is built in accordance with plans and specifications (by City inspector)
  - Graphic products except as noted herein
  - Design of utilities of other improvements outside of the project boundary or roadway rights of way (not in scope)
  - Quality control and material testing services during construction
  - Construction inspection
  - SWPPP preparation
  - Environmental Narrative for the EDA
  - Preparation of formal reports to the EDA

**EXHIBIT E**

**SERVICES TO BE PROVIDED BY THE CITY  
FOR  
IRON HORSE BOULEVARD (EAST) RECONSTRUCTION  
(Rufe Snow Drive to York Street)**

The CITY will provide the following services to the ENGINEER in the performance of the PROJECT upon request:

- I.** Provide any existing data the CITY has on file concerning the PROJECT, if available.
- II.** Provide any available As-Built plans for existing streets and drainage facilities, if available.
- III.** Provide any available As-Built plans for existing water and sanitary sewer mains, if available.
- IV.** Assist the ENGINEER, as necessary, in obtaining any required data and information from TxDOT and/or other local utility companies.
- V.** Provide standard details and specifications in digital format.
- VI.** Assist the ENGINEER by requiring appropriate utility companies to expose underground utilities within the Right-Of-Way, when required.
- VII.** Give prompt written notice to ENGINEER whenever CITY observes or otherwise becomes aware of any development that affects the scope or timing of the ENGINEER's services.

**EXHIBIT F**  
**COMPENSATION**  
**FOR**  
**IRON HORSE BOULEVARD (EAST) RECONSTRUCTION**  
**(Rufe Snow Drive to York Street)**

**I. COMPENSATION**

For and in consideration of the services to be rendered by the ENGINEER, the CITY shall pay, and the ENGINEER shall receive the compensation hereinafter set forth for the Design and Construction Phases of the work and additionally for Special Engineering Services and/or Additional Engineering Services that are in addition to the Basic Engineering Services. All remittances by CITY of such compensation shall either be mailed or delivered to the ENGINEER's home office as identified in the work authorization.

- A. Compensation for the Basic Engineering Services (Project Management and Design Phase) shall be completed for a lump sum fee of **\$198,617.00** and Bidding and Construction Phase services will be completed for a lump sum fee of **\$19,241.00**.
- B. Compensation for Special Engineering Services not covered by the Basic Engineering Services provided herein above shall be as follows:

Design Surveys: Lump Sum Fee of **\$34,150.00**

Geotechnical Engineering: Lump Sum Fee of **\$13,090.00**

Subsurface Utility Engineering (Level A): Up to four (4) test holes at \$2,500 each = **\$10,000.00**

Grant Funding Coordination: Lump Sum Fee of **\$10,264.00**

Permitting: Lump Sum Fee of **\$1,800.00**

Construction Staking: Lump Sum Fee of **\$45,146.00**

Payments to the ENGINEER for authorized Additional Engineering Services will be due monthly, upon presentation of monthly statement by the ENGINEER for such services.

## **II. AUDIT AND SCOPE CHANGE**

Cost budgets are set forth above and are subject to the audit provisions of this Agreement, Section XVII: "Right to Audit". It is also understood that the cost budgets are based upon ENGINEER's best estimate of work and level of effort required for the proposed scope of services. As the PROJECT progresses, it is possible that the level of effort and/or scope may differ up or down from that assumed. If there are no scope changes, the ENGINEER shall receive the full amount of lump sum and unit price fees, regardless of the cost. If at any time it appears that the cost budget may be exceeded, the ENGINEER shall notify the CITY as soon as possible in writing.

If there is a scope change, the ENGINEER shall notify the CITY as soon as possible in writing and shall include a revised scope of services, estimated cost, revised fee schedule, and a revised time of completion. Upon negotiation and agreement via a signed amendment by both parties, the cost budget, fee schedule, and total budget will be adjusted accordingly.

CITY shall not be obligated to reimburse the ENGINEER for costs incurred in excess of the cost budget. The ENGINEER shall not be obligated to perform on any change in scope of work or otherwise incur costs unless and until the CITY has notified the ENGINEER in writing that the total budget for Engineering Services has been increased and shall have specified in such notice a revised total budget which shall thereupon constitute a total budget for Engineering Services for performance under this Agreement.

A detailed scope of work, total budget, and schedule will be prepared by the ENGINEER and executed by the CITY if the ENGINEER is authorized to perform any Additional Engineering Service(s).

## **III. PAYMENT**

Payments to the ENGINEER will be made as follows:

### **A. Invoice and Time of Payment**

Monthly invoices will be issued by the ENGINEER for all work performed under this Agreement. Invoices are due and payable on receipt. Invoices will be prepared in a format approved by the CITY prior to submission of the first monthly invoice. Once approved, the CITY agrees not to require changes in the invoice format, but reserves the right to audit. Monthly payment of the fee will be in proportion to the percent completion of the total work (as indicated in Exhibit B: "Basic Engineering Services").

Upon completion of services enumerated in Exhibit B: "Scope of Basic Engineering Services", the final payment of any balance will be due upon receipt of the final invoice.

**EXHIBIT G**

**FORM 1295**

**FOR**

**PUBLIC WORKS CAPITAL PROJECT**

[Form 1295 is submitted as the following page]