

STATE OF TEXAS §
 § **AGREEMENT FOR PROFESSIONAL SERVICES**
COUNTY OF COLLIN §

This Agreement for Professional Services (“Agreement”) is made by and between the City of Allen, Texas (“City”) and Huitt-Zollars, Inc., a Civil Engineering Design Firm (“Professional”) (each a “Party” and collectively the “Parties”), acting by and through their authorized representatives.

RECITALS:

WHEREAS, the City desires to engage the services of the Professional as an independent contractor, and not as an employee, to provide the services described in Exhibit “A” (the “Scope of Services”) to assist the City in Allen Drive / US75 Interchange Improvement (the “Project”); and

WHEREAS, the Professional desires to render professional services for the City on the terms and conditions set forth in this Agreement;

NOW THEREFORE, in exchange for the mutual covenants set forth herein, and other valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the Parties agree as follows:

Article I
Term

1.1 This Agreement shall commence on the last date of execution hereof (“Effective Date”) and continue until completion of the services, unless sooner terminated as provided herein.

1.2 Either Party may terminate this Agreement by giving thirty (30) days prior written notice to the other Party. In the event of such termination the Professional shall deliver to City all finished and unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items or materials prepared by the Professional in connection with this Agreement. Professional shall be entitled to compensation for any services completed to the reasonable satisfaction of the City in accordance with this Agreement prior to such termination.

Article II
Scope of Service

2.1 The Professional shall perform the services in connection with the Project as set forth in the Scope of Services outlined in Exhibit “A.”

2.2 The Parties acknowledge and agree that any and all opinions provided by the Professional in connection with the Scope of Services represent the professional judgment of the Professional, in accordance with the professional standard of care applicable by law to the services performed hereunder.

Article III Schedule of Work

The Professional agrees to complete the required services in accordance with the Project Schedule outlined in the following projected schedule.

	Allen Drive / US75 Interchange Improvement
Notice to Proceed	May 24, 2017
Survey Complete	July 7, 2017
Traffic Data Complete	August 11, 2017
Submit 60% Concept Plan	August 18, 2017
Submit to 60% Concept TxDOT for Review	August 21, 2017
Submit 90% Concept Plan	November 10, 2017
Submit to 90% Concept TxDOT for Review	November 13, 2017
Submit 95% Concept Plan	January 1, 2018
Submit to 95% Concept TxDOT for Review	January 8, 2018
Submit 100% Concept	March 2, 2018

The City requires that the Concept Phase of the Scope of Service outlined above be completed within [282] calendar days of the signing of the contract. Three weeks for each review is included in the overall completion time.

Article IV Compensation and Method of Payment

4.1 Professional will be compensated in accordance with the payment schedule and amounts set forth in the Scope of Services and outlined below, not to exceed a total amount of **Two Hundred Twenty-Five Thousand Nine Hundred Fifty-Three** Dollars (**\$225,953**).

A. CONCEPT DESIGN - PHASE 1:

1.	SURVEY	\$ 19,420
2.	DESIGN SCHEMATIC	\$ 63,760
3.	ROUNDAABOUT CONSULTING	\$ 49,078
4.	ENVIRONMENTAL SERVICES.....	\$ 28,238
5	REIMBURSABLE EXPENSES.....	\$ 8,982

B. CONCEPT DESIGN – PHASE 2:

1.	LANDSCAPE ARCHITECTURE	\$ 47,800
2.	SUBSURFACE UTILITY ENGINEERING.....	\$ 6,750
3.	REIMBURSABLE EXPENSES.....	\$ 1,925

TOTAL SERVICES:\$ 225,953

4.2 Unless otherwise provided herein, payment to the Professional shall be monthly based on the Professional's monthly progress report and detailed monthly itemized statement for services that shows the names of the Professional's employees, agents, contractors performing the services, the time worked, the actual services performed, the rates charged for such service, reimbursable expenses, the total amount of fee earned to date and the amount due and payable as of the current statement, in a form reasonably acceptable to the City. Monthly statements shall include authorized non-salary expenses with supporting itemized invoices and documentation. The City shall pay such monthly statements within thirty (30) days after receipt and City verification of the services and expenses unless otherwise provided herein.

4.3 Unless otherwise provided in the Scope of Services the Professional shall be responsible for all expenses related to the services provided pursuant to this Agreement including, but not limited to, travel, copying and facsimile charges, telephone, internet and email charges.

**Article V
Notice to Proceed**

Professional shall not proceed with any work required under this Agreement without a written Notice to Proceed from City. Any work performed or expenses incurred by Professional prior to Professional's receipt of a written Notice to Proceed from City shall be entirely at Professional's own risk. Work performed and expenses incurred after Professional has received a written Notice to Proceed from City will be eligible for reimbursement under the terms of this Agreement, subject to an approved task order.

**Article VI
Suspension of Work**

City shall have the right to immediately suspend work by Professional if City determines in its sole discretion that Professional has, or will fail to perform, in accordance with this Agreement. In such event, any payments due Professional shall be suspended until Contractor has taken satisfactory corrective action.

Article VII

Devotion of Time; Personnel; and Equipment

7.1 The Professional shall devote such time as reasonably necessary for the satisfactory performance of the services under this Agreement. Should the City require additional services not included under this Agreement, the Professional shall make reasonable effort to provide such additional services within the time schedule without decreasing the effectiveness of the performance of services required under this Agreement, and shall be compensated for such additional services on a time and materials basis, in accordance with Professional's standard hourly rate schedule, or as otherwise agreed between the Parties.

7.2 To the extent reasonably necessary for the Professional to perform the services under this Agreement, the Professional shall be authorized to engage the services of any agents, assistants, persons, or corporations that the Professional may deem proper to aid or assist in the performance of the services under this Agreement. The Professional shall provide written notice to and approval from the City prior to engaging services not referenced in the Scope of Services. The cost of such personnel and assistance shall be included as part of the total compensation to be paid Professional hereunder, and shall not otherwise be reimbursed by the City unless provided differently herein.

7.3 The Professional shall furnish the facilities, equipment and personnel necessary to perform the services required under this Agreement unless otherwise provided herein.

7.4 The Professional shall submit monthly progress reports and attend progress meetings as may be required by the City from time to time based upon Project demands. Each progress report shall detail the work accomplished and special problems or delays experienced on the Project during the previous report period, and the planned work activities and special problems or delays anticipated for the next report period.

Article VIII

Miscellaneous

8.1 Entire Agreement. This Agreement constitutes the sole and only agreement between the Parties and supersedes any prior understandings written or oral agreements between the Parties with respect to this subject matter.

8.2 Assignment. The Professional may not assign this Agreement without the prior written consent of City. In the event of an assignment by the Professional to which the City has

consented, the assignee shall agree in writing with the City to personally assume, perform, and be bound by all the covenants, and obligations contained in this Agreement.

8.3 Successors and Assigns. Subject to the provisions regarding assignment, this Agreement shall be binding on and inure to the benefit of the Parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.

8.4 Governing Law. The laws of the State of Texas shall govern this Agreement without regard to any conflict of law rules; and venue for any action concerning this Agreement shall be in the State District Court of Collin County, Texas. The Parties agree to submit to the personal and subject matter jurisdiction of said court.

8.5 Amendments. This Agreement may be amended by the mutual written agreement of the Parties.

8.6 Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

8.7 Independent Contractor. It is understood and agreed by and between the Parties that the Professional, in satisfying the conditions of this Agreement, is acting independently, and that the City assumes no responsibility or liabilities to any third party in connection with these actions. All services to be performed by Professional pursuant to this Agreement shall be in the capacity of an independent contractor, and not as an agent or employee of the City. Professional shall supervise the performance of its services and shall be entitled to control the manner and means by which its services are to be performed, subject to the terms of this Agreement.

8.8 Conflicts of Interests. The Contractor represents that no official or employee of City has any direct or indirect pecuniary interest in this Agreement.

8.9 Notice. Any notice required or permitted to be delivered hereunder may be sent by first class mail, overnight courier or by confirmed telefax or facsimile to the address specified below, or to such other Party or address as either Party may designate in writing, and shall be deemed received three (3) days after delivery set forth herein:

If intended for City:

Attn: Peter H. Vargas
City Manager
City of Allen, Texas
3rd Floor, Allen City Hall
305 Century Parkway
Allen, Texas 75013

With a copy to:

Peter G. Smith
Nichols, Jackson, Dillard, Hager & Smith, LLP
1800 Ross Tower
500 N. Akard Street
Dallas, Texas 75201

If intended for Professional:

Attn: William E. Kallas
Vice President
Huitt-Zollars, Inc.
1717 McKinney Avenue,
Suite 1400
Dallas Texas 75202-1236

With a copy to:

Kenneth A. Roberts
Vice President
Huitt-Zollars, Inc.
1717 McKinney Avenue,
Suite 1400
Dallas Texas 75202-1236

8.9 Insurance.

- (a) Professional shall during the term hereof maintain in full force and effect the following insurance: (i) a comprehensive general liability policy of insurance for bodily injury, death and property damage insuring against all claims, demands or actions relating to the Professional's performance of services pursuant to this Agreement with a minimum combined single limit of not less than \$1,000,000.00 per occurrence for injury to persons (including death), and for property damage; (ii) policy of automobile liability insurance covering any vehicles owned and/or operated by Professional, its officers, agents, and employees, and used in the performance of this Agreement with policy limits of not less than \$500,000.00 combined single limit and aggregate for bodily injury and property damage; (iii) statutory Worker's Compensation Insurance at the statutory limits and Employers Liability covering all of Professional's employees involved in the provision of services under this Agreement with policy limit of not less than \$500,000.00; and (iv) Professional Liability covering negligent acts, errors and omissions in the performance of professional services with policy limit of not less than \$2,000,000.00 per claim and \$2,000,000.00 in the aggregate.
- (b) All policies of insurance shall be endorsed and contain the following provisions: (1) name the City, its officers, and employees as additional insureds as to all applicable coverage with the exception of Workers Compensation Insurance and Professional Liability; and (2) provide for at least thirty (30) days prior written notice to the City for cancellation of the insurance; (3) provide for a waiver of subrogation against the City for injuries, including death, property damage, or any

other loss to the extent the same is covered by the proceeds of insurance, except for Professional Liability Insurance. The Professional shall provide written notice to the City of any material change of or to the insurance required herein.

- (c) All insurance companies providing the required insurance shall be authorized to transact business in Texas and rated at least "A" by AM Best or other equivalent rating service.
- (d) A certificate of insurance and copies of the policy endorsements evidencing the required insurance shall be submitted prior to commencement of services and upon request by the City.

8.10 Indemnification. CITY SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE, OR INJURY OF ANY KIND OR CHARACTER TO ANY PERSON OR PROPERTY ARISING FROM THE SERVICES OF THE PROFESSIONAL PURSUANT TO THIS AGREEMENT. PROFESSIONAL HEREBY WAIVES ALL CLAIMS AGAINST CITY, ITS OFFICERS, AGENTS AND EMPLOYEES (COLLECTIVELY REFERRED TO IN THIS SECTION AS "CITY") FOR DAMAGE TO ANY PROPERTY OR INJURY TO, OR DEATH OF, ANY PERSON ARISING AT ANY TIME AND FROM ANY CAUSE OTHER THAN THE NEGLIGENCE OR WILLFUL MISCONDUCT OF CITY OR BREACH OF CITY'S OBLIGATIONS HEREUNDER. PROFESSIONAL AGREES TO INDEMNIFY AND SAVE HARMLESS CITY FROM AND AGAINST ANY AND ALL LIABILITIES, DAMAGES, CLAIMS, SUITS, COSTS (INCLUDING COURT COSTS, ATTORNEYS' FEES AND COSTS OF INVESTIGATION) AND ACTIONS OF ANY KIND BY REASON OF INJURY TO OR DEATH OF ANY PERSON OR DAMAGE TO OR LOSS OF PROPERTY TO THE EXTENT CAUSED BY THE PROFESSIONAL'S NEGLIGENT PERFORMANCE OF SERVICES UNDER THIS AGREEMENT OR BY REASON OF ANY NEGLIGENT ACT OR OMISSION ON THE PART OF PROFESSIONAL, ITS OFFICERS, DIRECTORS, SERVANTS, EMPLOYEES, REPRESENTATIVES, CONSULTANTS, LICENSEES, SUCCESSORS OR PERMITTED ASSIGNS (EXCEPT WHEN SUCH LIABILITY, CLAIMS, SUITS, COSTS, INJURIES, DEATHS OR DAMAGES ARISE FROM OR ARE ATTRIBUTED TO NEGLIGENCE OF THE CITY, IN WHOLE OR IN PART, IN WHICH CASE PROFESSIONAL SHALL INDEMNIFY CITY ONLY TO THE EXTENT OR PROPORTION OF NEGLIGENCE ATTRIBUTED TO PROFESSIONAL AS DETERMINED BY A COURT OR OTHER FORUM OF COMPETENT JURISDICTION). THE PROFESSIONAL'S OBLIGATIONS UNDER THIS SECTION SHALL NOT BE LIMITED TO THE LIMITS OF COVERAGE OF INSURANCE MAINTAINED OR REQUIRED TO BE MAINTAINED BY PROFESSIONAL UNDER THIS AGREEMENT. THIS PROVISION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

8.11 Counterparts. This Agreement may be executed by the Parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute one and the same instrument. Each counterpart may consist

of any number of copies hereof each signed by less than all, but together signed by all of the Parties hereto.

8.12 Exhibits. The exhibits attached hereto are incorporated herein and made a part hereof for all purposes.

[Signature Page to Follow]

EXECUTED this _____ day of _____, 2017.
CITY OF ALLEN, TEXAS

By: _____
Peter H. Vargas, City Manager

ATTEST:

By: _____
Shelley B. George, City Secretary

EXECUTED this 15 day of May, 2017.

HUITT-ZOLLARS, INC.


By: 
Name: William E. Kallas
Title: Vice President

EXHIBIT “A”
Scope of Services
(to be attached)

May 3, 2017

Mr. Kevin Bates, PE
Department of Engineering
City of Allen
305 Century Parkway
Allen, TX 75013

RE: Allen Drive Roundabouts
Allen, TX

Dear Mr. Bates:

In response to your review comments dated April 27, 2017 we are submitting the attached revised Exhibits for inclusion in our agreement for professional services contract with the City of Allen for the Design Schematic of two roundabouts at Allen Drive and US 75. The information in the attachments is based on our current understanding of the design and construction of the project.

With this letter you will find a revised Scope of Services and Man-Hour Estimate of Fees.

If you have any questions or need additional information, please feel free to call or email me at kar@huitt-zollars.com. We look forward to working with you on this unique project.

Sincerely,

HUITT-ZOLLARS, INC.



Kenneth A. Roberts, P.E.
Vice President

Attachments

SCOPE OF SERVICES FOR
ALLEN DRIVE ROUNDABOUTS
ALLEN DRIVE AT US 75
CITY OF ALLEN, TEXAS

PROJECT DESCRIPTION

The project consists of reconstructing the two intersections of Allen Drive with US 75 frontage roads, utilizing roundabouts at both intersections. The approximate limits of construction for the roundabout on the west side of US 75 will be 280 LF north of Allen Drive, 260 LF south of Allen Drive, and 200 LF along Allen Drive to the northwest. The approximate limits of construction for the roundabout on the east side of US 75 will be 200 LF north of Allen Drive, 250 LF south of Allen Drive, 300 LF along Allen Drive to the southeast, and 160 LF along Lynge Drive to the east. The Allen Drive Roundabout project will serve both frontage roads by providing a smooth and safe route along the frontage roads and across the existing bridge over US 75. A sidewalk will be added along the northeast portion of the roundabouts, providing a barrier-free path to and across the bridge. The overall project will include field topographic surveying for design, landscaping and irrigation, artwork, roundabout consultation, environmental assessment, subsurface utility engineering (if needed), and coordination with the City of Allen (CITY), TxDOT, and other stakeholders as necessary.

The design and plan preparation will be done in accordance with CITY and TxDOT specifications and requirements including preparation of a Concept Plan and Design Schematic for TxDOT review and approval. The project will be completed in two phases:

PHASE 1

SURVEY

1. Control Survey – Establish 4 project survey control points throughout project limits as needed for performing survey work and for future construction control. Control will be referenced to the City of Allen’s Geodetic Datum for both horizontal and vertical values.
2. Topographic Survey – Perform a topographic survey for the affected areas of the project. The survey will include the service roads, the Allen Drive Bridge, and the areas between the service roads and main lanes of US 75. Cross sections will be taken at 50 foot intervals and visible improvements will be located. Trees will be identified, surveyed and shown on the survey. A cadd drawing suitable for civil design will be prepared.
3. Locate existing right-of-way along US 75 and City streets adjacent to the project.
4. It is assumed that all work will be done within the limits of the existing right-of-way.

EXCLUSIONS – SURVEY TASKS NOT INCLUDED:

- *Title searches*
- *Preparation of right-of-way and easement surveys and legal descriptions*

DESIGN SCHEMATIC

1. Project Schedule – Submit a project schedule to the CITY for approval within fifteen days of receipt of the “Notice to Proceed”. The bar chart shall be prepared using the latest version of Microsoft Project Management Software.
2. Kick-Off Meeting, Research and Data Gathering
 - a. Attend a project kick-off meeting conducted by the CITY.
 - b. Meeting with the CITY to obtain information on existing paving, storm drainage, water mains, sanitary sewer lines, right-of-way maps, and platted properties.
 - c. Contact the franchise utility companies to obtain information on existing and proposed facilities. This information will be used to supplement the information obtained from surveying and subsurface utility engineering and will be shown on the plans.
 - d. Participate in a project walk-thru to take photographs and notes along the project site for use during the design process.
3. Prepare a Concept Plan base map for TxDOT review, approval, and CSJ authorization. Concept plan shall be on 1-22”x34” sheet and contain plan view only.
4. Attend meetings with CITY, TxDOT, and DCBA Landscape Architecture. Meetings could include the Parks Board (one meeting/presentation), The Public Art Committee (one meeting/presentation) and TxDOT (One meeting/presentation).
5. Prepare Design Schematic plan sheets per TxDOT standards. Design Schematic shall be prepared on 11”x17” plan sheets at a scale of 1” = 40’ horizontal and include the following:
 - a. Cover Sheet.
 - b. Index of Sheets.
 - c. Horizontal Control, including centerline station and offset, coordinates, and curve information.
 - d. Typical sections, existing and proposed.
 - e. Schematic plan/profile. The plan view will show the existing right-of-way corridor, existing topography, the proposed roundabout layout, and limits of replacement for the connecting service roads and City streets. The profile view will show existing ground profile and proposed profile grades.
 - f. Utilize roundabout subconsultant services to refine the roundabout configurations. See Roundabout Consulting Services scope of work.
5. All drawings shall go through an internal quality review process prior to submittal to the CITY and TxDOT.
6. Submit five (5) half-size sets of prints of the Design Schematic to the CITY for review and distribution to the franchise utilities.
7. Submit three (3) half-size sets of prints of the Design Schematic to the TxDOT District Office for review.

8. Formally respond to CITY and TxDOT comments. Make necessary corrections to the Design Schematic based on review comments and complete the approved design schematic. Three (3) submittals and two (2) rounds of TxDOT comments are anticipated for this design schematic.
9. Prepare exhibits and materials for the Public Meetings.
10. Attend two (2) public meetings with stakeholders.
11. Prepare a preliminary opinion of probable construction costs based on the approved Design Schematic.

EXCLUSIONS – DESIGN SCHEMATIC TASKS NOT INCLUDED:

- *Fees for Permitting*
- *Drainage Design*
- *Water & Wastewater Design*
- *Lighting Design*
- *Structural Design*
- *Design Waiver/Design Exception Requests*
- *Pavement Design*
- *Geotechnical Analysis*

ROUNABOUT CONSULTING SERVICES

HZ will enter into a subcontract with MSA Professional Services, Inc. (MSA) to provide roundabout analysis for the proposed Allen Drive Roundabouts.

1. Project Meetings and Site Visits
MSA will attend one kick-off meeting to discuss project data collection, roundabout design criteria, the project communication plan, and the project schedule. The Subconsultant will also attend up to four (4) project meetings with the project team (HZ, CITY, and/or TxDOT) throughout the Design Schematic process. MSA will attend up to three (3) separate site visits throughout the project schedule to take site measurements, photos, and traffic observations.
2. Data Collection
Up-front data collection is critical to the success of the project schedule and the traffic engineering that goes into an intersection control alternatives analysis. MSA will be involved in the following data collection tasks:
 - a. Collect AM and PM peak hour turning movement counts at the NB and SB frontage road intersections along US 75 at Allen Drive.
 - b. Collect weekday and weekend 24-hr tube counts along Allen Drive, Lynge Dr, and along the NB and SB frontage roads, to supplement existing City data.
 - c. Request readily available traffic volumes along Allen Drive from the CITY via HZ. This includes: historical ADTs along Allen Dr, turning movement counts at intersections adjacent to the project, previous traffic studies and reports within the

- project limits, and any electronic files that may have been used previously to study intersections within the project limits (Synchro, SimTraffic, or other).
- d. Request readily available site plans, plats, TIAs, etc. from the CITY via HZ. The area requested will be bounded by Exchange Pkwy to the north, Raintree Cir and Junction Dr to the west, Village Way Row and W Coats Dr to the south, and Allen Dr/Whisenant Dr/Bush Dr to the east.
 - e. Request at least three years of recent collision data for the subject intersections. It is preferable for the collision data to include the date of the collision, the movements being made by each party (type of collision, such as: right-angle, rear-end, etc.), and the severity of any known injury or fatality, or if property damage was reported.
 - f. Request record drawings for infrastructure within the project limits.
 - g. Request documentation for over-sized overweight vehicles that may access the subject intersections to review historical records to determine an appropriate largest accommodation vehicle for the roundabouts.
 - h. A formal request for data collection will be provided by MSA within three business days of the notice-to-proceed for the project.
3. Operational Analysis (Capacity)
- The operational analysis for this project will include analysis for 3 scenarios, as required by TxDOT:
- a. Current condition (3-way stop),
 - b. If traffic signals were installed,
 - c. If roundabouts were installed
- The preferred intersection control alternative shall achieve a Level of Service (LOS) C or better within the most critical horizon year peak hour. The following are steps MSA will take in developing the operational analysis:
- a. Request information/data from the CITY and/or TxDOT that can be analyzed to produce an average annual rate of traffic growth at each intersection for the horizon year AM and PM peak hour.
 - b. Complete an operational analysis of the AM and PM peak hour existing year and horizon year traffic volumes for the intersections using Synchro (traffic signals and stop controlled scenarios) and Arcady and HCM capacity analysis software packages (roundabout scenario). Traffic performance will be reported as average delay per vehicle using signalized and unsignalized criteria (HCM).
 - c. Complete a technical memorandum documenting the operational analysis and confirming the proposed lane configurations and assignments for each approach leg of the two roundabouts. This technical memorandum will be completed within 10 business days after the receipt of the data collection items outlined in paragraphs 2 and 3 herein.
4. Horizontal Geometric Review/Optimization
- Upon receipt of boundary and topographic survey data, and pending results from the operational analysis, MSA will perform an electronic review of the current roundabout layout provided by the CITY (conceptual design) and provide modifications regarding the roundabout horizontal geometrics. MSA will provide guidance on setting horizontal

alignments and vertical profiles to be used in the design effort, and will conduct an in-person meeting to discuss the review and horizontal modifications. The review will focus on the following:

- a. Size and location of the Inscribed Circle Diameter (ICD)
- b. Alignment of the approaches
- c. Roundabout functionality by checking fast paths, vision angles, and phi angles
- d. Accommodating design vehicle turning movements
- e. Bicycle and pedestrian accommodations
- f. Minimization of right-of-way impacts

MSA will submit data to HZ for inclusion in the schematic design. The data will document horizontal geometric performance checks which include: horizontal design dimensions, fast paths, truck swept paths, path overlap, entry angles, and sight distance envelopes. The data will be completed and delivered to HZ within 15 business days after the receipt of the data collection items outlined in paragraphs 2 and 3 herein.

5. Public Outreach Support

MSA will attend up to one (1) public meeting to present the intersection control alternatives to the public, including:

- a. PowerPoint slide preparation showing advantages and features of the proposed roundabout
- b. Distribution of pre-developed (Client or MSA) roundabout brochures
- c. Creation of an HO scale (1:87) vinyl roll plot of the intersection control option
- d. Documentation of comments and questions received by MSA staff from the public regarding the roundabout at the public meeting. Roundabout-related public comments will be provided to HZ after the public meeting for incorporation into the public involvement documentation.

Based on the outcome of the operational analysis, TxDOT will require micro-simulation using Vissim software for the alternative(s) that meet LOS C or better performance. This effort/task assumes traffic signal timing data would be established prior to embarking on Vissim modeling. Simulation is an effective way to evaluate interaction between roundabouts closely spaced at an interchange. It is anticipated that up to two (2) models will be created – one with roundabouts at the interchange and one with traffic signals. The models will be built on a 2d surface and will show signing, pavement markings, and illumination aspects of the project. It is not anticipated for data to be extracted from the Vissim model for analysis purposes. This Vissim model would be more for visualization purposes at the public meeting. Additional information regarding the Vissim task is as follows:

- a. Approximately 90 hours of effort for both VISSIM models.
- b. 1 roundabout scenario (both ramp terminals)
- c. 1 signalized scenario (both ramp terminals)
- d. Select 3D elements:
 - i. Basic buildings/structures immediately surrounding the project
 - ii. Street lights (standard, stock)

- iii. Traffic signs
 - iv. Traffic signals
 - v. Central island, with minimal landscaping
 - vi. Flooded background (project area)
 - e. Worst-case peak hour traffic only, for each traffic control type
 - i. 1-2 minute video of each control type – Includes processing time (adding basic labels, etc.)
6. Detailed Information Required
- The following is a detailed list of up-to-date information required to undertake this review:
- a. Posted and design speeds of approach roadways
 - b. CITY-approved average annual traffic growth rate for each roundabout; horizon year is anticipated to be the construction year + 20 years (e.g. 2019 + 20 = year 2039)
 - c. Bicycle and pedestrian traffic volume expectations
 - d. Sidewalk locations and expected pedestrian desire lines
 - e. Percentage of trucks in the forecast traffic
 - f. The design vehicle, e.g. WB-65
 - g. Scaled plans showing base mapping, right-of-way, major utilities and structures in CAD
 - h. Direction and clarification of right-of-way constraints, including obtainable/not obtainable priorities and preferences

EXCLUSIONS – ROUNDABOUT CONSULTING TASKS NOT INCLUDED:

- *Pedestrian interaction*
- *3D surface*
- *Data analysis from Vissim model*
- *Driver-perspective video*
- *Photo-realistic building facades*
- *There will be no preparation meetings MSA will attend involving City of Allen staff (including the police department and fire department), elected officials, or Client staff prior to the public meeting. Public meeting preparatory meetings can be attended by MSA as an additional service.*

ENVIRONMENTAL SERVICES

HZ will enter into a subcontract with Civil Associates, Inc. (CAI) to prepare a Categorical Exclusion, required by TxDOT, for the proposed Allen Drive Roundabouts. The proposed would be classified as c(22) - Projects, as defined in 23 U.S.C. 101, that would take place entirely within the existing operational right-of-way. Existing operational right-of-way refers to right-of-way that has been disturbed for an existing transportation facility or is maintained for a transportation purpose. This area includes the features associated with the physical footprint of the transportation facility (including the roadway, bridges, interchanges, culverts, drainage, fixed guideways, mitigation areas, etc.) and other areas maintained for transportation purposes such as clear zone, traffic control signage, landscaping, any rest areas with direct access to a controlled access highway, areas maintained for safety and security of a transportation facility, parking facilities with direct access to an existing transportation

facility, transit power substations, transit venting structures, and transit maintenance facilities. Portions of the right-of-way that have not been disturbed or that are not maintained for transportation purposes are not in the existing operational right-of-way.

1. Project Management – Conduct environmental project management activities for 12 months.
2. Project Coordination – Conduct project coordination with HZ and Texas Department of Transportation project managers.
3. Field Reconnaissance – A two-person CAI crew will perform a field reconnaissance of the project area.
4. Environmental Documentation – Each environmental service provided by CAI shall have a deliverable. Deliverables shall summarize the methods used for the environmental services, and shall summarize the results achieved. The summary of results shall be sufficiently detailed to provide satisfactory basis for thorough review by the State, Federal Highway Administration (FHWA), and (where applicable) agencies with regulatory oversight. All deliverables shall meet regulatory requirements for legal sufficiency, and shall adhere to the requirements for reports enumerated in the State's National Environmental Policy Act of 1969 (NEPA) Memorandum of Understanding.

A Scope Development Tool form (September 2015 version) shall be completed to help identify environmental activities based on the project's characteristics, recording negative and regulatory findings required by FHWA and documenting the scope development process.

Technical reports shall be produced to support the CE Determination Form (June 2014). Technical reports must be provided to the State with sufficient detail and clarity to support environmental determination(s) outlined in the TxDOT Environmental Compliance Toolkits.

Definition of technical report for environmental services: a report detailing resource-specific studies identified during the process of gathering data to prepare an environmental document.

Environmental technical reports will include appropriate NEPA or federal regulatory language in addition to the purpose and methodology used in delivering the service. Technical reports will include sufficient information to determine the significance of impacts. The technical reports to be prepared are listed below:

- a. Air Quality Transportation Conformity Report Form
A Transportation Conformity Report Form (October 2015 version) will be prepared for the proposed project.
- b. Historic Project Coordination Request
- c. A Project Coordination Request for Historic Studies (August 2015 version) will be prepared for the proposed project.
- d. Biological Technical Form (January 2017 version) and Tier I Site Assessment (November 2016) will be prepared for the proposed project.

5. Quality Assurance/Quality Control Review

For each deliverable, CAI shall perform quality assurance quality control (QA/QC) reviews of environmental documents and on other supporting environmental documentation to determine whether documents conform with:

- a. Current Environmental Compliance Toolkit guidance published by the State's Environmental Affairs Division and in effect as of the date of receipt of the documents or documentation to be reviewed;
- b. Current state and federal laws, regulations, policies, guidance, agreements, and memoranda of understanding between the State and other state or federal agencies; and
- c. FHWA and American Association of State Highway and Transportation Officials (AASHTO) guidelines contained in "Improving the Quality of Environmental Documents, A Report of the Joint AASHTO and American Council of Engineering Companies (ACEC) Committee in Cooperation with the Federal Highway Administration" (May 2006) for:
 - i. Readability, and
 - ii. Use of evidence and data in documents to support conclusions.
- d. Submit environmental document to TxDOT DES Division for review and approval, per TxDOT requirements.

6. Address Review Comments

- a. Address HZ Comments (1 round)
- b. Address CITY Comments (1 round)
- c. Address TxDOT Comments (2 rounds)

EXCLUSIONS – ENVIRONMENTAL TASKS NOT INCLUDED:

- *Right of Entry will be provided for CAI prior to field reconnaissance*
- *Air Quality Analysis other than the Transportation Conformity Report Form*
- *Archeological Resources documentation*
- *Historic Resources other than the Project Coordination Request for Historic Studies*
- *Coordination with Texas Historical Commission*
- *Other NEPA documentation*
- *Meetings*
- *Additional field investigations to respond to requests for additional information.*

PHASE 2

LANDSCAPE ARCHITECTURE SCHEMATIC

Huitt-Zollars, Inc. (HZ) will enter into a subcontract with DCBA Landscape Architecture (DCBA) to study encompassing areas within the surrounding proposed roundabouts as well as the associated TxDOT right-of-way north and south of the Allen Drive Bridge over US 75. Concept planning may also include CITY identification and/or artwork on the north and south face of the existing bridge structure. DCBA will work with the CITY to meet the requirements of the Governor's Community Achievement Award (GCAA), the Public Art Committee, and the CITY's Community Development Program while developing conceptual options for the creation of enhancements offering a unique sense of place that identifies the CITY and welcomes travelers passing through and within the study area. DCBA project design shall begin upon completion of TxDOT's initial review and approval of the roundabout design.

1. Field Evaluation
 - a. Site visit to verify and inventory existing conditions of the study area taking special note of the following:
 - i. Optimum views and vistas
 - ii. Existing TxDOT improvements
 - iii. Topography
 - iv. Adjacent property development (existing and proposed)
 - b. Photographically document the study area for use in future planning efforts and presentations. Included will be an Existing Conditions Plan which will graphically show locations where photos were taken as well as other important conditions which will influence concept planning (i.e. utility easements, visibility easements, proposed TxDOT landscaping, etc.)
 - c. Along with HZ and CITY, DCBA shall attend a meeting with TxDOT to discuss pre-design site limitations, restrictions, etc.
2. Artist Selection Consultation
 - a. Consultation to the CITY in the selection process for an artist to work as a member of the design team for the project, including:
 - i. Attend a maximum three (3) meetings with CITY staff and pertinent stakeholder committees (i.e. Public Art Committee, Keep Allen Beautiful) to discuss the proposed artist selection process, and provide meeting notes.
 - ii. Collaborate with CITY staff in development of an artist solicitation call.
 - iii. Attend a maximum three (3) meetings to interview potential artists, and provide meeting notes.
 - iv. Consult with the selected Artist to clarify project roles and responsibilities, study area issues, schedule, expected Conceptual Design deliverables, etc.
3. Conceptual Design
 - a. Preliminary Conceptual Designs: DCBA shall work in coordination with HZ and Artist to provide concepts (maximum 2) consisting of planimetric drawings, elevations, sections, sketch details, and other documents to fix and describe the size, character, and

theme for the project in conceptual (schematic) form. Included will be both hardscape and softscape for the following:

- i. Paving, walls, and other hardscape features
 - ii. Art incorporation
 - iii. Signage
 - iv. Site furnishings (i.e. benches, bollards, etc.)
 - v. Lighting
 - vi. Landscaping
 - vii. Irrigation (limits only for budgeting purposes)
 - b. Prepare a model of the proposed design(s) in Sketch-Up to be used for communication of design intent and presentation purposes.
 - c. Help prepare for and attend the following meetings or presentations:
 - i. Parks Board – One (1) Meeting/Presentation
 - ii. Public Art Committee – One (1) Meeting/Presentation
 - iii. TxDOT – One (1) Meeting/Presentation
 - d. Preferred Conceptual Design: Incorporate comments from the meetings and presentations to stakeholder groups into a final Preferred Conceptual Design. Update the Opinion of Probable Cost and Sketch-Up model for the Preferred Conceptual Design.
4. Opinion of Probable Cost
- a. Concurrent with Task 3, submit a detailed Preliminary Opinion of Probable Cost broken down into specific elements of the proposed Preliminary Conceptual Designs.
 - b. Submit a detailed Final Opinion of Probable Cost based on the Preferred Conceptual Design.
5. Illustrative Concept Drawings
- a. Prepare an illustrative Site Plan in color rendered, high resolution print quality for the preferred concept:
 - b. Retain and coordinate with a subcontracted professional renderer to prepare a maximum of three (3) views of the preferred concept. Views shall be collectively selected by CITY, DCBA, and HZ.

CLARIFICATION/ARTIST SERVICES AND PERFORMANCE:

DCBA does not assume responsibility for the selected Artist's performance or schedule. It is assumed that the Artist will contract directly with the CITY and DCBA's services will include coordination with the Artist and other design team members as necessary to facilitate an approved conceptual design and Opinion of Probable Cost.

EXCLUSIONS – LANDSCAPE ARCHITECTURE TASKS NOT INCLUDED:

- *Artist fees or reimbursable expenses*
- *Design Development, Construction Documents, Bidding, or Contract Administration Services*
- *Providing base data information to include existing roadway infrastructure improvements, right-of-ways, utilities, etc. (assumed to be provided by HZ at no cost to the Consultant)*
- *Surveying or instrument field verification of existing hardscape, topography, or tree locations*
- *Architect, Structural Engineer, Civil Engineer, or MEP Engineer services*
- *Traffic studies or traffic engineering*
- *Geotechnical soils engineering/testing including earthwork compaction criteria and pavement design*
- *Materials testing*
- *Tree mitigation / removal plans*
- *Appearances before regulatory agencies other than CITY*
- *Assistance to CITY as an expert witness in any litigation with third parties arising from the development or construction of the Project.*
- *Preparation of applications and supporting documents for government grants or planning advances for public works projects.*
- *Environmental assessment services, preparation of environmental statements, and assistance to CITY in preparing for and attending public (environmental) hearings.*
- *Establish and monument property corners*
- *Acquisition of individual federal or state permits that may be required (Note: This does not apply to federal or state general permits)*
- *Texas Accessibility Standards (TAS) plan review or inspection fees.*
- *Legal services*
- *Zoning services and representation at public hearings (regarding zoning)*
- *Construction surveying or staking for any improvements*
- *Advertising and associated costs for stakeholder's public involvement meetings*
- *Redesign of project in attempt to reduce construction costs after Opinion of Probable Cost approval*

SUBSURFACE UTILITY ENGINEERING (SUE) INVESTIGATION

HZ will enter into a subcontract with The Rios Group (TRG) to perform the SUE work required for this project in general accordance with the recommended practices and procedures described in ASCE Publication CI/ASCE 38-02 (Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data). As described in the mentioned ASCE publication, four levels have been established to describe the quality of utility location and attribute information used on plans. The quality levels for this scope of work are as follows:

1. Quality Level D (QL"D") – Information derived from existing utility records;
2. Quality Level C (QL"C") – QL"D" information supplemented with information obtained by surveying visible above-ground utility features such as valves, hydrants, meters, manhole covers, etc.
3. Quality Level B (QL"B") – Two-dimensional (x,y) information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as "designating" this quality level provides the horizontal position of subsurface utilities within approximately one foot.

It is the responsibility of the SUE provider to perform due-diligence with regard to records research (QL "D") and acquisition of available utility records. The due-diligence provided for this project will consist of visually inspecting the work area for evidence of utilities and reviewing the available utility record information. Utilities that are not identified through these efforts will be here forth referred to as "unknown" utilities. TRG personnel will scan the defined work area using electronic prospecting equipment to search for "unknown" utilities. However, TRG is not responsible for designating and locating these "unknown" utilities.

The scope of this proposal includes Quality Level "B" SUE. Utilities to be designated include gas, telecommunications, electric, storm, water and sanitary sewer. Designating will only be performed within the project limits.

TRG has assumed that all designating marks will be surveyed as part of this scope.

Prior to beginning field designating activities, TRG's field manager will review the project scope of work and available utility records. Once these initial reviews are complete, the field manager and technicians will begin designating the approximate horizontal position of known subsurface utilities within the specified project limits. A suite of geophysical equipment (electromagnetic induction, magnetic) will be used to designate metallic/conductive utilities (e.g. steel pipe, electrical cable, telephone cable). TRG will establish routine/ordinary traffic control (cones and free standing signage, etc.) whenever required as part of our standard pricing.

Accurate collection and recording of designated utilities is a critical component of the SUE process. TRG utilizes a proven method of collecting and recording survey information once the utilities have been designated in the field. TRG's field manager will produce detailed sketches depicting each utility as well as relevant surface features such as roadways, buildings, manholes, fire hydrants, utility pedestals, valves, meters, etc. Each utility will be labeled with a unique ID code. For example, if two different water lines exist on the project, one will be

labeled W1 and the other W2. Paint and pin flags will be used to designate the utilities in the field. A labeled pin flag or paint mark will be used to mark each location where a survey shot is required. The locations will be numbered sequentially for each individual utility line. For example, if there are 10 shots required on water line W1, the points will be numbered W1-1 through W1-10.

TRG will produce a utility file, in AutoCAD format, depicting the type and horizontal location of the designated utilities. The size of each utility will be presented in the utility file if this information is indicated on available record drawings.

Field work can commence within approximately 2 weeks after receipt of NTP. TRG estimates that the work can be completed in approximately 2 weeks.

REIMBURSABLE EXPENSES

The CITY shall reimburse Huitt-Zollars, Inc. for: mileage; parking fees; delivery costs; all printing costs; postage; and other materials as a consequence of the work. Sub-consultant costs will be billed at Cost Plus 10% for project management of the sub-consultants. The budget for reimbursable expenses shall not be increased without the approval of the CITY.

End of Scope of Services

Allen Drive Roundabouts
Allen, Texas

MANHOUR ESTIMATE OF FEES	
PHASE 1	
Survey (Huitt-Zollars, Inc.)	\$ 19,420
Design Schematic (Huitt-Zollars, Inc.)	\$ 63,760
Roundabout Consulting (MSA Professional Services, Inc.)	\$ 49,078
Environmental Services (Civil Associates, Inc.)	\$ 28,238
Reimbursable Expenses (Huitt-Zollars, Inc.)	\$ 8,982
TOTAL PHASE 1	\$ 169,478
PHASE 2	
Landscape Architecture (DCBA Landscape Architecture)	\$ 47,800
Subsurface Utility Engineering (The Rios Group)	\$ 6,750
Reimbursable Expenses (Huitt-Zollars, Inc.)	\$ 1,925
TOTAL PHASE 2	\$ 56,475
GRAND TOTAL	\$ 225,953

Allen Drive Roundabouts - Phase 1
Allen, Texas

TASK DESCRIPTION	PM (RPLS) \$190	2-MAN GPS FIELD PARTY \$145	SR SURVEYOR (RPLS) \$150	TOTAL HRS
Survey - HZI				
Control Survey	2	14	2	18
Topographic Survey	5	60	32	97
Existing ROW Survey	1	6	8	15
TOTAL ESTIMATED MAN-HOURS	8	80	42	130
ESTIMATED LABOR COSTS	\$1,520	\$11,600	\$6,300	
TOTAL SURVEY FEE				\$19,420

TASK DESCRIPTION	PM \$240	PROJECT ENGINEER \$160	ENGINEER IN TRAINING \$110	TOTAL HRS
Design Schematic - HZI				
Prepare Project Schedule	2	4		6
Kick-Off Meeting & Data Collection	2	4	16	22
Concept Plan	4	16	32	52
Meetings	8	8	6	22
Cover Sheet	1	2	2	5
Index of Sheets	1	2	2	5
Horizontal Control	1	6	12	19
Typical Sections - Existing & Proposed	1	4	6	11
Roundabout Schematic	16	52	52	120
Schematic Cost Estimate	2	8	16	26
QA/QC of Schematic Plan Set	8	8	8	24
Prepare Schematic Submittal		4	4	8
Revise Plans for Round 1 of District Review Comments	8	20	20	48
Formally Respond to TxDOT Comments	2	6		8
Prepare Schematic Resubmittal		4	4	8
Revise Plans for Round 2 of District Review Comments	4	12	16	32
Formally Respond to TxDOT Comments	1	4		5
Prepare Final Schematic Submittal	1	4	4	9
TOTAL ESTIMATED MAN-HOURS	62	168	200	430
ESTIMATED LABOR COSTS	\$14,880	\$26,880	\$22,000	
TOTAL SCHEMATIC DESIGN FEE				\$63,760

TASK DESCRIPTION	PRINCIPAL \$233	SENIOR PROJECT MANAGER \$184	PROJECT ENGINEER \$114	DESIGNER/ CADD \$86	ADMIN/ CLERICAL \$81	TOTAL HRS
Roundabout Consulting - MSA						
Project Meetings & Site Visits		28				28
Data Collection	2	24		24		50
Operational Analysis	4	24	24	24		76
Horizontal Geometric Review/Optimization	4	24		12		40
Public Outreach Support	8	12			8	28
VISSIM Models		8	90			98
TOTAL ESTIMATED MAN-HOURS	18	120	114	60	8	320
ESTIMATED LABOR COSTS	\$4,194	\$22,080	\$12,996	\$5,160	\$648	\$45,078
Reimbursable Expenses						\$4,000
TOTAL ROUNDABOUT CONSULTING FEE						\$49,078

Allen Drive Roundabouts - Phase 1
Allen, Texas

TASK DESCRIPTION	PROJECT MANAGER \$290	SR. ENVR. SCIENTIST \$223	ENVR. SCIENTIST \$148	ADMIN./ CLERICAL \$90	TOTAL HRS
Environmental Services - Civil Associates, Inc.					
Project Management & Coordination		10		12	22
Field Reconnaissance		8	8		16
Environmental Documentation		36	52		88
QA/QC & Address Review Comments	4	8	12		24
Document Processing & Production		2		8	10
TOTAL ESTIMATED MAN-HOURS	4	64	72	20	160
ESTIMATED LABOR COSTS	\$1,160	\$14,272	\$10,656	\$1,800	\$27,888
Reimbursable Expenses					\$350
TOTAL ENVIRONMENTAL SERVICES FEE					\$28,238

TASK DESCRIPTION	LUMP SUM
Reimbursable Expenses	
HZI Management of Roundabout Consulting	\$4,908
HZI Management of Environmental Services	\$2,824
Miscellaneous Reimbursable Expenses	\$1,250
TOTAL REIMBURSABLE EXPENSES	\$8,982

TOTAL PHASE 1	\$169,478
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Allen Drive Roundabouts - Phase 2
Allen, Texas

TASK DESCRIPTION	LA PRINCIPAL \$175	LA PM \$125	CLERICAL \$57.50	TOTAL HRS
Landscape Architecture - DCBA				
Field Evaluation	9	13		22
Arist Selection Consultation	23	23		46
Conceptual Design	63	117		180
Opinion of Probable Cost	10	10	4	24
Illustrative Concept Drawings (excluding professional artist renderings, see below)	2	18		20
TOTAL ESTIMATED MAN-HOURS	107	181	4	292
ESTIMATED LABOR COSTS	\$18,725	\$22,625	\$230	\$41,580
Subcontracted Professional Artist Renderings (3 @ \$1,500)				\$4,500
Reimbursable Expenses				\$1,720
TOTAL LANDSCAPE ARCHITECTURE FEE				\$47,800

TASK DESCRIPTION	LUMP SUM
Subsurface Utility Engineering - The Rios Group	
Survey (one day)	\$1,750
QL "B" (two days)	\$5,000
TOTAL SUE FEE	\$6,750

TASK DESCRIPTION	LUMP SUM
Reimbursable Expenses	
HZI Management of SUE	\$675
Miscellaneous Reimbursable Expenses	\$1,250
TOTAL REIMBURSABLE EXPENSES	\$1,925

TOTAL PHASE 2	\$56,475
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