ATTACHMENT "A" – BASIC SCOPE OF SERVICES

The **Engineer** agrees to render services on lump sum basis necessary for the engineering design of the Project as outlined herein. Both **City** and **Engineer** have attempted to clearly define the work to be performed and address the needs of the project. The Basic Services to be performed by **Engineer** under this Contract include the following:

Southwestern Boulevard from Freeport Parkway to South Coppell Road

Task 1 – Project Management

Engineer will manage communications, coordinate internally and externally and address issues with the City's Project Manager and others as necessary to make progress on the work. Engineer will manage and direct design team activities; ensure quality control is practiced in performance of the work; attend a pre-design meeting; conduct review meetings with the City; attend public meetings; prepare and submit monthly invoices and progress reports; prepare and submit a baseline schedule and monthly project update; coordinate with other City agencies and entities for the design of proposed improvements; coordinate with franchise utility companies as required for basic deconfliction; verify with DART that the proposed Cotton Belt Corridor will not affect the project; and utilize the City's consultant for TDLR compliance (Accessology).

Assumptions:

1. Project design phase duration is anticipated at ___8___ months.
2. Project construction phase duration is anticipated at__6___ months.
3. _1_ pre-design meeting.
4. _3_ plan review meetings.
5. _3_ field review meetings with franchise utilities, business owners, City staff or other.
6. _2_ public meetings with Coppell citizens and City staff.
7. _8_ progress reports and schedules.
8. Costs associated with TDLR plan review and inspections will be paid by Engineer.
9. Specific exclusions to the project include:
    a. Landscape Plans
    b. Traffic Study

Deliverables:

1. Meeting summaries.
2. Monthly invoices and project updates.
3. TDLR registration, plan review and inspection by a Registered Accessibility Specialist.

Task 2 – Schematic Design (30 Percent)

Engineer will collect data such as existing conditions of franchise utilities and property ownership; provide an existing and proposed typical section; provide a roll plot showing proposed plan and profile; identify potential changes to driveways; provide an existing drainage area map with drainage computations; and provide an opinion of probable construction cost. Engineer will review CCTV footage of the sanitary sewer system, provide and review CCTV footage of the storm drain system,

and review as-built records to provide a condition assessment and recommendation to the City for pipe replacement within the limits of survey.

Assumptions:

1. Digital (PDF) delivery of plans and specifications.

Deliverables:

1. Schematic design roll plot and drainage area map.
2. Opinion of probable construction cost.

Task 3 – Preliminary Design (60 Percent)

Engineer will prepare plan sheets for cover, index/legend, general notes, typical sections, project control, demolition plan, drainage area map, paving plan and profile, cross sections, erosion control plan, traffic control and phasing, signing/pavement marking/lighting (excluding photometric and signalization), grading, and roadway details; prepare specifications; consult with City and private utilities to determine the approximate location of above and underground utilities (current and future); and provide an opinion of probable construction cost.

Assumptions:

1. Digital (PDF) delivery of plans and specifications.
2. The Public Works Construction Standards North Central Texas, Fourth Edition, along with the City's Supplementary Conditions will be used.

Deliverables:

1. Preliminary design drawings and specifications.
2. Opinion of probable construction cost.

Task 4 – Final Design (Construction Documents)

Engineer will finalize, sign and seal plan sheets; finalize specifications; and provide an opinion of probable construction cost.

Assumptions:

1. Digital (PDF) delivery of plans and specifications.
2. The Public Works Construction Standards North Central Texas, Fourth Edition, along with the City's Supplementary Conditions will be used.

Deliverables:

1. Final design drawings and specifications issued for construction.
2. Opinion of probable construction cost.

Task 5 – Bid Phase

Engineer will support the bid phase of the project by providing bid documents; responding to bidder questions; issuing addenda; attending a pre-bid meeting; assisting the City in determining the

qualifications and acceptability of prospective contractors; attending the bid opening; tabulating, reviewing and evaluating bids received; and incorporating all addenda into the bid documents and issuing conformed sets.

Assumptions:

1. The project will be bid only once and awarded to one contractor.
2. Electronic copies of the project will be made available online to prospective bidders. Hard copies will not be sold or distributed.
3. Three (3) sets of 11"x17" plans, three (3) sets of 22"x34" plans, and six (6) specifications delivered to City.

Deliverables:

1. Addenda.
2. Bid tabulations.
3. Recommendation of award.
4. Construction documents (conformed if applicable).

Task 6 – Construction Phase

Engineer will support the construction phase of the project by attending the pre-construction meeting; visiting the project site at requested intervals to observe and report on construction progress; interpreting and clarifying contract documents; reviewing change orders; reviewing submittals; attending the final walk through and assisting with the final punch list; and preparing record drawings based on information provided by the City.

Assumptions:

1. __5_ RFI's are assumed.
2. __2_ change orders are assumed.
3. __3_ submittal reviews are assumed.
4. __6_ site visits are assumed.

Deliverables:

1. Response to contractor's RFI.
2. Review of change orders.
3. Review of shop drawings.
4. Record drawings.
5. Periodic site observations

Task 7 – Design Survey

Engineer will perform field surveys to collect horizontal and vertical elevations and other information needed by Engineer in design and preparation of plans for the project. Information gathered during the survey shall include topographic data, elevations of all sanitary and adjacent storm sewers, rim/invert elevations, location of buried utilities, structures, trees (measure caliper), and other features relevant to the final plan sheets. Existing drainage at intersections will be verified by field surveys. Spot elevations will be shown on intersection layouts with cross slope to fit intersecting grade lines.

The minimum survey information to be provided on the plans shall include the following:

- A Project Control Sheet, showing all Control Points, used or set while gathering data. Generally, on a scale of not less than 1:400;
- The following information about each Control Point:
  a. Identified (Existing, CITY Monument #8901, PK Nail, 5/8" Iron Rod)
  b. X, Y and Z Coordinates, in an identified coordinate system, and a referred bearing base. Z coordinate on CITY Datum only.
  c. Descriptive Location (Ex. Set in the centerline of the inlet in the South curb line of Southwestern Blvd at the East end of radius at the Southeast corner of Southwestern Blvd and South Coppell Road).
- Coordinates on all P.C.'s, P.T.'s, P.I.'s, Manholes, Valves, etc., in the same coordinate system, as the Control.
- No less than two horizontal benchmarks, per line or location.
- Bearings given on all proposed centerlines, or baselines.
- Station equations relating utilities to paving, when appropriate.

Assumptions:

1. Topographic survey at intersections will include no more than 100 ft. in each direction.
2. Survey to include 20' beyond right of way.
3. Centerline alignment and stationing per maps provided by the City.
4. Easements and construction staking are excluded from this task.

Deliverables:

1. To be included in design plans.