

# CONSULTING ENGINEERS CONTRACT

WHEREAS, this contract shall be administered on behalf of the **City** by its **City Engineer** or his duly authorized representative. The **Engineer** shall fully comply with any and all instructions from said **City Engineer**.

## **AGREEMENT**

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

The **City** agrees to retain the **Engineer**, and the **Engineer** agrees to provide Services in connection with the Project as defined herein, and for having rendered such Services the **City** agrees to pay to the **Engineer** fee for these Services as mutually agreed. All Services under this Contract shall be performed under the direct supervision of the **City Engineer**.

### **1. Scope of Services.**

- A. Basic Services: The work tasks and activities to be performed and deliverable to be provided by the **Engineer** shall be in accordance with Attachment A, Scope of Services, including modifications to the Basic Services as mutually agreed to by the **City** and the **Engineer** in accordance with the provisions of this Contract.
- B. Additional Services Not Included In Basic Services: When mutually agreed to in writing by the **City** and the **Engineer**, the Additional Services shall be provided by the **Engineer**. These Additional Services are not included as a part of Basic Services and shall be paid for by the **City** in addition to payment for Basic Services. Should it be determined that one or more of the requirements of this Contract conflict with the requirements of the Scope of Services, including modifications to the Scope of Services or any attachments to this contract; the requirement of the Contract shall govern. Additional services for field investigation shall be determined and negotiated based on the outcome of the initial flow monitoring.

2. **Progress Schedule.** Within ten (10) days after receiving Notice to Proceed (NTP) the **Engineer** shall submit to the **City** a Schedule of Services consisting of a listing of the major Project tasks, the estimated consultant hours required to perform the tasks, the percentage of the Contract budget estimated to be allocated to each task and a bar chart schedule showing task beginning and completion dates. Significant milestones for the Project shall be identified. At a minimum, milestones shall be provided for the three design submittals described in Attachment A, Scope of Services: Conceptual Design Submittal, Preliminary Design Submittal, and Final Plans, Specifications, and Estimate (PS&E) Submittal. Based on Schedule of Services, the **City** shall compile Attachment D, Project Schedule which shall become a part of this Contract upon approval of the **Engineer** and the **City**. The **Engineer** shall provide to the **City** information to report and monitor the design tasks within the Project Schedule by completing a "Design Progress Report" on a form provided by the **City**. The **Engineer** shall complete and provide to the **City** said report at two week intervals.

### **3. Compensation.**

- A. Basic Services Part I Fee: The **Engineer** shall be paid a fee for Basic Services Part I under this Contract pursuant to the Fee Schedule described in Attachment A, Scope of Services. Basic Services Part I Fee shall not exceed the total amount of One Hundred Ninety-Two Thousand Four Hundred Fifty-Five dollars (\$192,455) provided, however, that modifications to the Basic Services Part I, or other conditions defined herein may necessitate a change of Fee which shall be reduced to writing and approved by the City or its designee.
- B. Basic Services Part II Fee: The **Engineer** should be paid a fee under this Contract for Basic Services Part II pursuant to the scope and fee negotiations that result from a thorough review and understanding of the results of the phase I services. Any services provided under this contract for phase II shall be reduced to writing and approved by the City or its designee prior to commencing work.
- D. Invoices: The **Engineer** shall submit invoices at not less than thirty (30) calendar days for Basic Services Part I and/or Basic Services Part II on or before the twenty fifth (25th) calendar day of the month, or the preceding business day if the twenty fifth occurs on a weekend and/or observed holiday. Payment shall be based on the invoices submitted to the **City**, provided that Services completed as indicated in the Design Progress Reports approved by the **City** equals or exceeds the increment percentage requested on the **Engineer's** invoices. **Engineer's** invoices to **City** shall provide complete information and documentation to substantiate **Engineer's** charges and shall be in a form to be specified by the **City Engineer**. Should additional documentation be requested by the **City Engineer** the **Engineer** shall comply promptly with such request.
- E. Payments: All payments to **Engineer** shall be made on the basis of the invoices submitted by the **Engineer** and approved by the **City**. Following approval of invoices, **City** shall endeavor to pay **Engineer** promptly, however, under no circumstances shall **Engineer** be entitled to receive interest on amounts due. The **City**, in compliance with Texas State law, shall process a maximum of one payment to the **Engineer** per month. **City** reserves the right to correct any error that may be discovered in any invoice whether paid to the **Engineer** or not, and to withhold the funds requested by the **Engineer** relative to the error.
4. **Fee Increases.** Any other provision in this Contract notwithstanding, it is specifically understood and agreed that the **Engineer** shall not be authorized to undertake any Services pursuant to this Contract requiring the payment of any fee, expense or reimbursement in addition to the fees stipulated in Article 3 of this Contract, without having first obtained specific written authorization from the **City**. The written authorization for additional Services shall be in the form of a Modification to the Scope of Services approved by the City Engineer and/or the City Council, if required.

5. **Modifications to the Scope of Services.** Either the **Engineer** or the **City Engineer** may initiate a written request for a Modification to the Scope of Services when in the opinion of the requesting Party, the needs and conditions of the Project warrant a modification. Upon the receipt of a request by either Party, the **Engineer** and the **City Engineer** shall review the conditions associated with the request and determine the necessity of a modification. When the Parties agree that a modification is warranted, the **Engineer** and the **City Engineer** shall negotiate the specific modification(s) and any changes in the Total Maximum Fee or Project Schedule resulting from the modification(s). Approval of a modification shall be in the form of a written Modification to the Scope of Services which clearly defines the changes to the previously approved Scope of Services, Fee and/or Project Schedule. Said written Modification shall be approved by **Engineer**, authorized by the City Council, if required, and issued by the **City Engineer**. Issuance of the approved Scope of Services modification shall constitute a notice to proceed with the Project in accordance with the modified Scope of Services. The **City Engineer** may issue written Modifications to the Scope of Services without prior approval of the City Council when the modifications are to be accomplished within the authorized Total Maximum Fee and do not materially or substantively alter the overall scope of the Project, the Project Schedule or the Services provided by the **Engineer**.
6. **Project Deliverables.** For each submittal identified in Attachment A, Scope of Services, the **Engineer** shall provide the **City** with one set of reproducible, one set of bluelines or hard copy and electronic media of the submittal documents. For any required environmental assessment, the **Engineer** shall provide one set of draft and one set of final Environmental Reports. The Environmental Reports shall be submitted as original reproducible and on electronic media. The electronic file may omit photographs and government prepared maps. If photographs are included in the report they shall be taken with a 35 mm camera or larger format camera. Color laser copies may be substituted for the original photographs in the final report.
- A transmittal letter shall be included with the Environmental Reports and shall include an executive summary outlining: a.) Findings of the Reports; b.) Conclusions; c.) Recommendations; and d.) Mitigation/remediation cost estimates.
7. **Project Control.** It is understood and agreed that all Services shall be performed under the administrative direction of the **City Engineer**. No Services shall be performed under this Contract until a written Notice to Proceed is issued to the **Engineer** by the **City Engineer**. In addition, the **Engineer** shall not proceed with any Services after the completion and delivery to the **City** of the Conceptual Design Submittal, Preliminary Design Submittal, or the Final PS&E Submittal as described in the Basic Services without written instruction from the **City**. The **Engineer** shall not be compensated for any Services performed after the said submittals and before receipt of **City's** written instruction to proceed.
8. **Partnering.** The **City** shall encourage participation in a partnering process that involves the **City, Engineer** and his or her sub-consultants, and other supporting jurisdictions and/or agencies. This partnering relationship shall begin at the Pre-Design Meeting and continue

for the duration of this Contract. By engaging in partnering, the parties do not intend to create a legal partnership, to create additional contractual relationships, or to in any way alter the legal relationship which otherwise exists between the **City** and the **Engineer**. The partnering effort shall be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives of partnering are effective and efficient contract performance and completion of the Project within budget, on schedule, in accordance with the Scope of Services, and without litigation. Participation in partnering shall be totally voluntary and all participants shall have equal status.

9. **Disputes.** The **City Engineer** shall act as referee in all disputes under the terms of this Contract between the Parties hereto. In the event the **City Engineer** and the **Engineer** are unable to reach acceptable resolution of disputes concerning the Scope of Services to be performed under this Contract, the **City** and the **Engineer** shall negotiate in good faith toward resolving such disputes. The **City Engineer** may present unresolved disputes arising under the terms of this Contract to the City Manager or designee. The decision of the City Manager or designee shall be final and binding. An irreconcilable or unresolved dispute shall be considered a violation or breach of contract terms by the **Engineer** and shall be grounds for termination. Any increased cost incurred by the City arising from such termination shall be paid by the **Engineer**.
10. **Engineer's Seal.** The **Engineer** shall place his Texas Professional Engineers seal on all engineering documents and engineering data prepared under the supervision of the **Engineer** in the performance of this Contract.
11. **Liability.** Approval of the Plans, Specifications, and Estimate (PS&E) by the **City** shall not constitute nor be deemed a release of the responsibility and liability of **Engineer**, its employees, subcontractors, agents and consultants for the accuracy and competency of their designs, working drawings, tracings, magnetic media and/or computer disks, estimates, specifications, investigations, studies or other documents and work; nor shall such approval be deemed to be an assumption of such responsibility by the **City** for any defect, error or omission in the design, working drawings, tracings, magnetic media and/or computer disks, estimates specifications, investigations, studies or other documents prepared by **Engineer**, its employees, subcontractors, agents and consultants. **Engineer** shall indemnify **City** for damages resulting from such defects, errors or omissions and shall secure, pay for and maintain in force during the term of this Contract sufficient errors and omissions insurance in the amount of \$250,000.00 single limit, with certificates evidencing such coverage to be provided to the **City**. The redesign of any defective work shall be the sole responsibility and expense of the **Engineer**. Any work constructed, found to be in error because of the **Engineer's** design, shall be removed, replaced, corrected or otherwise resolved at the sole responsibility and expense of the **Engineer**. The parties further agree that this liability provision shall meet the requirements of the express negligence rule adopted by the Texas Supreme Court and hereby specifically agree that this provision is conspicuous.
12. **Indemnification.** **Engineer** shall indemnify, hold harmless and defend the City of Coppell, its officers, agents and employees from any loss, damage, liability or expense, including

attorney fees, on account of damage to property and injuries, including death, to all persons, including employees of **Engineer** or any associate consultant, which may arise from any errors, omissions or negligent act on the part of **Engineer**, its employees, agents, consultants or subcontractors, in performance of this Contract, or any breach of any obligation under this Contract. It is further understood that it is not the intention of the parties hereto to create liability for the benefit of third parties, but that this agreement shall be solely for the benefit of the parties hereto and shall not create or grant any rights, contractual or otherwise to any person or entity. The parties further agree that this indemnification provision shall meet the requirements of the express negligence rule adopted by the Texas Supreme Court and hereby specifically agree that this provision is conspicuous.

13. **Delays and Failure to Perform.** **Engineer** understands and agrees that time is of the essence and that any failure of the **Engineer** to complete the Services of this Contract within the agreed Project Schedule shall constitute material breach of this Contract. The **Engineer** shall be fully responsible for its delays or for failures to use diligent effort in accordance with the terms of this Contract. Where damage is caused to the **City** due to the **Engineer's** failure to perform in these circumstances, the **City** may withhold, to the extent of such damage, **Engineer's** payments hereunder without waiver of any of **City's** additional legal rights or remedies. The **Engineer** shall not be responsible for delays associated with review periods by the **City** in excess of the agreed Project Schedule.
14. **Termination of Contract.** It is agreed that the **City** or the **Engineer** may cancel or terminate this Contract for convenience upon fifteen (15) days written notice to the other. Immediately upon receipt of notice of such cancellation from either party to the other, all Services being performed under this Contract shall immediately cease. Pending final determination at the end of such fifteen-day period, the **Engineer** shall be compensated on the basis of the percentage of Services provided prior to the receipt of notice of such termination and indicated in the final Design Progress Report submitted by the **Engineer** and approved by the **City**.
15. **Personnel Qualifications.** **Engineer** warrants to the **City** that all Services provided by **Engineer** in the performance of this Contract shall be provided by personnel who are appropriately licensed or certified as required by law, and who are competent and qualified in their respective trades or professions.
16. **Quality Control.** The **Engineer** agrees to maintain written quality control procedures. The **Engineer** further agrees to follow those procedures to the extent that, in the **Engineer's** judgment, the procedures are appropriate under the circumstances.
17. **Ownership.** All **Engineer's** designs and work product under this Contract, including but not limited to tracings, drawings, electronic or magnetic media and/or computer disks, estimates, specifications, investigations, studies and other documents, completed or partially completed, shall be the property of the **City** to be used as **City** desires, without restriction; and **Engineer** specifically waives and releases any proprietary rights or ownership claims therein and is relieved of liability connected with any future use by **City**. Copies may be

retained by **Engineer**. **Engineer** shall be liable to **City** for any loss or damage to such documents while they are in the possession of or while being worked upon by the **Engineer** or anyone connected with the **Engineer**, including agents, employees, consultants or subcontractors. All documents so lost or damaged while they are in the possession of or while being worked upon by the **Engineer** shall be replaced or restored by **Engineer** without cost to the **City**.

18. **Project Records and Right to Audit.** The **Engineer** shall keep, retain and safeguard all records relating to this Contract or work performed hereunder for a minimum period of three (3) years following the Project completion, with full access allowed to authorized representatives of the **City** upon request for purposes of evaluating compliance with provisions of this Contract. Should the **City Engineer** determine it necessary, **Engineer** shall make all its records and books related to this Contract available to **City** for inspection and auditing purposes.
19. **Non-Discrimination.** As a condition of this Contract, the **Engineer** shall take all necessary action to ensure that, in connection with any work under this Contract it shall not discriminate in the treatment or employment of any individual or groups of individuals on the grounds of race, color, religion, national origin, age, sex or physical impairment unrelated to experience, qualifications or job performance, either directly, indirectly or through contractual or other arrangements.
20. **Gratuities.** City of Coppell policy mandates that employees shall never, under any circumstances, seek or accept, directly or indirectly from any individual doing or seeking to do business with the City of Coppell, loans, services, payments, entertainment, trips, money in any amount, or gifts of any kind.
21. **No Waiver.** No action or failure to act on the part of either Party at any time to exercise any rights or remedies pursuant to this Contract shall be a waiver on the part of that Party of any of its rights or remedies at law or contract.
22. **Compliance with Laws.** The **Engineer** shall comply with all Federal, State and local laws, statutes, City Ordinances, rules and regulations, and the orders and decrees of any courts, or administrative bodies or tribunal in any matter affecting the performance of this Contract, including without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, **Engineer** shall furnish the **City** with satisfactory proof of compliance therewith.
23. **Severability.** In case one or more of the provisions contained in this Contract shall for any reason be held invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions hereof and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

24. **Venue.** With respect to any and all litigation or claims, the laws of the State of Texas shall apply and venue shall reside in Dallas County.
25. **Prior Negotiations.** This Contract supersedes any and all prior understandings and agreement by and between the Parties with respect to the terms of this Contract and the negotiations preceding execution of this Contract.
26. **Contacts.** The **Engineer** shall direct all inquiries from any third party regarding information relating to this Contract to the City Engineer.



27. **Notification.** All notices to either Party by the other required under this Contract shall be delivered personally or sent by certified U.S. mail, postage prepaid, addressed to such Party at the following respective addresses:

**City:** City of Coppell, Texas  
255 Parkway Blvd.  
Coppell, TX 75019  
Attn: Keith Marvin

**Engineer:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, the City of Coppell, Texas and the **Engineer** has caused these presents to be executed by duly authorized representatives on the day and year set forth above.

**THE CITY OF COPPELL**  
**BY:**

\_\_\_\_\_  
**City Manager**

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

**ATTEST:**

\_\_\_\_\_

**ENGINEER:** \_\_\_\_\_  
**BY:**

\_\_\_\_\_  
Name & Title

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

**ATTEST:**

\_\_\_\_\_

(CORPORATE SEAL)

## **ATTACHMENT "A" BASIC SERVICES**

### **A. SCOPE OF SERVICES**

The Services to be provided shall consist of components of a Sanitary Sewer Evaluation Survey (SSES) and report to complement the City's sewer improvement efforts. The services to be performed by the ENGINEER will consist of tasks as stated below. The tasks will be timed in accordance with the City's needs and be tailored to match the requirements and expectations of the Texas Commission on Environmental Quality (TCEQ).

It is anticipated that the project will include, but may not be limited to, the following tasks –

Task 1 - Flow Monitoring

#### **Schedule of Technical Memoranda**

Technical memoranda are included below and are further described in the task descriptions that follow. A meeting will be held with the City to review the TM. The TM meetings are in addition to the project status meetings.

TM -1 Flow Analysis and Projections

The City will be provided with four (4) draft copies of each Technical Memorandum and four (4) final copies once all changes have been incorporated.

### **Task 1 - Flow Monitoring Task**

#### **A.1.1 Project Administration**

The Engineer shall coordinate the overall work of the project to include all field inspections and engineering analysis. The Engineer shall provide monthly progress reports that will show the percent completion of each task. A bi-monthly progress meeting with the CITY will be conducted.

#### **A.1.2 Flow Monitoring Services**

Prior to installing flow monitors, the Engineer will develop a flow monitoring plan. The flow monitoring plan will include the preliminary monitoring sites selected from a review of the City's existing sewer maps. These sites will be based on a distribution of approximately 40,000 to 60,000 linear feet per flow monitor. Special attention areas or split flow conditions may require additional flow monitors. Potential flow monitoring sites will be identified with consideration given to basin size, evidence of surcharging, overflow locations,

projected maintenance activities, and other factors. Potential and alternate sites will be inspected and the site hydraulics evaluated.

The Engineer shall conduct field investigations to verify the suitability of each potential monitoring location. The Engineer shall prepare a site investigation sheet for each selected site and shall submit to the CITY for approval prior to installation of the flow meters. **A total of 22 meter sites are anticipated in this project.**

After approval of the recommended sites, the Engineer shall install and maintain the meters for a 60-day period. The Engineer shall also select rain gauge monitoring sites and install continuous recording rain gauges.

Flow monitoring will be performed utilizing 3ADS or America Sigma or equal monitors capable of measuring both depth and velocity of flow. **Approximately 7 tipping bucket rain gauges** will be used for the study. The tipping bucket gauges will be installed to obtain rainfall distribution data.

#### A.1.3 Flow Data Management

During the flow monitoring study, flow data will be continually reviewed and analyzed in order to assess the accuracy and quality of the data. This management will also include hydraulic calibrations of each meter to ensure data integrity and accuracy. The calibrations will consist of a field measured depth and velocity profile at installation, approximately one week after installation, mid-project and at meter removal. The field measurements will be compared against the meter's reading at the same time.

#### A.1.4 Flow Data Analysis

##### A.1.4.1 Rainfall Relationship

Adequate rainfall will be necessary to establish the relationship between peak inflow and rainfall intensity. This relationship will be used to determine the impact on the collection system during wet weather and high groundwater conditions. A correlation of flow and rainfall intensity will be made using the area-coefficient method of analysis. It is anticipated that a minimum of three storm events that do not cause surcharging of the collection system will be recorded during the 60-day monitoring period.

Data from the continuously recording rainfall gauges will be used to establish the intensity of rainfall and duration for each storm event. The Thiessen Method for rainfall distribution analysis will be used.

For each monitoring site, data developed as part of the analysis will include:

- Average Dry Weather Diurnal Curve Flows for weekdays and weekends
- Rainfall / Wet Weather Wastewater Flow Correlations for selected storm events during the monitoring period
- Design peak inflow rate at the design storm event
- Capacity analysis at the monitoring sites

A.1.4.2 Based on the flow data analysis, the various basins will be ranked according to their inflow contribution and infiltration contribution. The I&I ratings shall be used to develop a prioritization for each basin. Using the various rankings, the ENGINEER shall provide the CITY with a recommendation for the basins in which to perform SSES activities.

A.1.4.3 Flow analysis and flow projections will be summarized in Technical Memorandum (TM-1) and submitted to the CITY for review.

#### A.1.5 Existing Meter Installation Check

ENGINEER shall perform one site visit to the magnetic meter station identified by the CITY. ENGINEER shall record dimensions of the permanent meter station and location of flow measurement instrument and compare the findings with the manufacturer's recommendations. Upon completion of the project the results of the findings shall be provided in the report.

**City of Coppel**  
**Flow Monitoring by RJN Group, Inc.**  
**Cost Estimate**  
**April, 2015**

Note: System Wide Monitoring  
Twenty-Two (22) Flow Monitors  
Seven (7) Rain Gauges  
Telemetry – Raw Data: flows viewable daily by City  
Field Calibrations (min. of 4 for each meter)  
90 Day Monitoring Period

<b>FLOW MONITORING</b>				
	<u><b>Units</b></u>	<u><b>Qty.</b></u>	<u><b>Unit Cost</b></u>	<u><b>Total</b></u>
Management and Supervision	Lump Sum	1	\$8,140.00	\$8,140.00
Flow Meter Investigation	Meters	22	\$375.00	\$8,250.00
Flow Meter Installation	Meters	22	\$850.00	\$18,700.00
Rain Gauge Investigation and Installation	Gauges	7	\$295.00	\$2,065.00
FM Monitoring Period	Meter Days	1980	\$57.00	\$112,860.00
RG Monitoring Period	Gauge Days	630	\$8.00	\$5,040.00
Data Analysis/Deliverables/Reporting	Lump Sum	1	\$37,400.00	\$37,400.00
<b>Total Contract (Not to Exceed) =</b>				<b>\$192,455.00</b>

Note: The flow meters may be removed before the end of the 90 day period if the RJN Engineers determine sufficient flow data has been received to deliver meaningful results. Sufficient flow data may include representative dry weather flows and a suitable number of varied types of wet weather events. The City would be charged for the number of days the meters were installed.

--END--