

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and CP&Y, Inc., (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Contractor provide professional engineering services for the extension of a two-lane asphalt roadway with six-foot shoulders from IH 69 Frontage Road to 1st Street in Beasley, Texas for the Avenue J Extension Project, Number 17115, under the 2017 Mobility Bond Program (hereinafter "Services") pursuant to SOQ 14-025; and

WHEREAS, County has determined Contractor is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Contractor have negotiated to reach a fair and reasonable amount of compensation for the provision of such Services, as required under Chapter 2254 of the Texas Government Code; and

WHEREAS, Contractor represents that it is qualified and desires to perform such services.

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

AGREEMENT

Section 1. Scope of Services

Contractor shall render the professional engineering services, including the surveying, right-of-way mapping, geotechnical investigations, roadway design, drainage design, traffic control design and utility coordination for the project as described Scope of Services and Deliverable Documents attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

2.1 Contractor represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of Services required under this Agreement and that Contractor shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Scope of Services when and as required and without delays.

2.2 All employees of Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor who, in the opinion of County, is incompetent or by his conduct becomes detrimental to the project shall, upon request of County, immediately be removed from association with the project.

Section 3. Compensation and Payment

3.1 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit B. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is one hundred fifty-three thousand eight hundred ninety-three dollars and no/100 (\$153,893.00) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

3.2 All performance of the Scope of Services by Contractor including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by County.

3.3 County will pay Contractor based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Contractor shall submit to County staff person designated by the County Engineer, one (1) electronic (pdf) copy of the invoice showing the amounts due for services performed in a form acceptable to County. County shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor for processing. County shall pay each such approved invoice within thirty (30) calendar days. County reserves the right to withhold payment pending verification of satisfactory work performed.

Section 4. Limit of Appropriation

4.1 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of one hundred fifty-three thousand eight hundred ninety-three dollars and no/100 (\$153,893.00) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed one hundred fifty-three thousand eight hundred ninety-three dollars and no/100 (\$153,893.00).

Section 5. Time of Performance

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than March 6, 2022. Contractor shall complete

the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

Section 6. Modifications and Waivers

6.1 The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.

6.2 No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.

6.3 The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

Section 7. Termination

7.1 Termination for Convenience – County may terminate this Agreement at any time upon forty-eight (48) hours written notice.

7.2 Termination for Default

7.2.1 County may terminate the whole or any part of this Agreement for cause in the following circumstances:

7.2.1.1 If Contractor fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;

7.2.1.2 If Contractor materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.

7.2.2 If, after termination, it is determined for any reason whatsoever that Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7.1 above.

7.3 Upon termination of this Agreement, County shall compensate Contractor in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.

7.4 If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Contractor.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Contractor shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect survives the termination of this Agreement for a period of four years.

Section 10. Insurance

10.1 Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed. Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

10.1.2 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

10.1.3 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

10.1.4 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.

10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

10.3 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the Agreement is completed.

Section 11. Indemnity

CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS COUNTY AGAINST LOSSES, LIABILITIES, CLAIMS, AND CAUSES OF ACTION, INCLUDING THE REIMBURSEMENT OF COUNTY'S REASONABLE ATTORNEYS FEES IN PROPORTION TO CONTRACTOR'S LIABILITY, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, INTENTIONAL TORT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.

Section 12. Confidential and Proprietary Information

12.1 Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Contractor or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.

12.2 Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor shall use its best efforts

to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Contractor shall advise County immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

12.3 Contractor acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.

12.4 Contractor in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.

12.5 Contractor expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed.

Section 13. Independent Contractor

13.1 In the performance of work or services hereunder, Contractor shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.

13.2 Contractor and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

Section 14. Notices

14.1 Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).

14.2 Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County:	Fort Bend County Engineering Department Attn: County Engineer 301 Jackson Street Richmond, Texas 77469
With a copy to:	Fort Bend County Attn: County Judge 401 Jackson Street, 1 st Floor Richmond, Texas 77469
Contractor:	CP&Y, Inc. Attn: Brian A. Jones, P.E., Vice President 11757 Katy Freeway, Suite 1540 Houston, Texas 77041

14.3 A Notice is effective only if the party giving or making the Notice has complied with subsections 14.1 and 14.2 and if the addressee has received the Notice. A Notice is deemed received as follows:

14.3.1 If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

14.3.2 If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

Section 15. Compliance with Laws

Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required by County, Contractor shall furnish County with

certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

Section 16. Standard of Care

Contractor represents shall perform the Services to be provided under this Agreement with the professional skill and care ordinarily provided by competent engineers practicing under the same or similar circumstances and professional license. Further, Contractor shall perform the Services as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer.

Section 17. Assignment

17.1 Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.

17.2 Neither party may delegate any performance under this Agreement.

17.3 Any purported assignment of rights or delegation of performance in violation of this Section is void.

Section 18. Applicable Law

The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity.

Section 19. Successors and Assigns

County and Contractor 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 the other party, in respect to all covenants of this Agreement.

Section 20. Third Party Beneficiaries

This Agreement does not confer any enforceable rights or remedies upon any person other than the parties.

Section 21. Severability

If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.

Section 22. Publicity

Contact with citizens of Fort Bend County, media outlets, or governmental agencies shall be the sole responsibility of County. Under no circumstances whatsoever, shall Contractor release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

Section 23. Captions

The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.

Section 24. Conflict

In the event there is a conflict between this Agreement and the attached exhibits, this Agreement controls.

Section 25. Certain State Law Requirements for Contracts

25.1 Agreement to Not Boycott Israel Chapter 2270 Texas Government Code: By signature below, Contractor verifies Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.

25.2 Texas Government Code Section 2251.152 Acknowledgment: By signature below, Contractor represents pursuant to Section 2252.152 of the Texas Government Code, that Contractor is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

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IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

FORT BEND COUNTY

CP&Y, INC

Robert E. Hebert, County Judge



David Hays, Chief Financial Officer

Date

5/9/18

Date

ATTEST:

Laura Richard, County Clerk

APPROVED:



Richard W. Stolleis, P.E., County Engineer

APPROVED AS TO LEGAL FORM:

Marcus D. Spencer, First Assistant County Attorney

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$ _____ to accomplish and pay the obligation of Fort Bend County under this contract.

Robert Ed Sturdivant, County Auditor

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EXHIBIT A

EXHIBIT A

SCOPE OF SERVICES AND DELIVERABLE DOCUMENTS

1. PROJECT DESCRIPTION

CP&Y, Inc. (ENGINEER) and its sub-consultants will provide professional engineering services to Fort Bend County (County) for the extension of Avenue J in Beasley, Texas including the construction of an asphalt roadway from First Street to IH-69 frontage road (approximately 1,500 feet) consisting of 2-12-foot wide lanes with 6-foot wide shoulders and open ditches.

The aforementioned street extension will be developed to generally match into the termini described above, with services including surveying, right-of-way mapping, geotechnical investigations, roadway design, drainage design, traffic control design and utility coordination.

2. BASE SCOPE OF DESIGN PHASE SERVICES

2.1 PROJECT MANAGEMENT

- 2.1.1 The ENGINEER shall coordinate with County's Project Manager, manage the efforts of the ENGINEER's personnel, assign manpower, delegate responsibilities, monitor conformance to the scope regarding the budget and schedule, and direct the progress of work. Prepare and submit invoices and progress reports to the County, per the terms of this Contract.
- 2.1.2 The ENGINEER will schedule and attend periodic progress meetings at the PER/30% submittal, and additional meetings as needed (assumed 3 total) in order to review the progress of the engineering effort, or address other issues which may arise. The ENGINEER may initiate meetings that include his Consultants, and if necessary other parties. The ENGINEER shall prepare and deliver meeting record memorandum of decisions and action items after each meeting in a timely manner.
- 2.1.3 The ENGINEER shall coordinate with its sub-consultants, and monitor conformance to the scope regarding the budget, schedule, and progress of the work.
- 2.1.4 The ENGINEER shall implement and perform Quality Assurance and Quality Control (QA/QC) measures at each plan submittal milestone.
- 2.1.5 The ENGINEER shall review work progress, and address plan submittal review comments from County and private utilities, as applicable, at each plan submittal milestone.
- 2.1.6 The ENGINEER shall notify the County of any deviation from the Scope of Engineering Services and Fee agreed to in this Scope of Services. The ENGINEER shall not perform services outside of the Contract scope without an Amendment to this Contract.

2.2 PRELIMINARY DESIGN

2.2.1 Project Surveying:

The ENGINEER will perform topographic survey, to include the following:

- a. Deed Research:

- Research Ownership, Subdivision Plats & existing easement documentation, TxDOT right of way maps.
 - Establish the existing rights-of-way of Avenue J and U.S. 59 (I-69)
 - Acquire ownership names, deed and easement recording data.
 - An Abstractor will be hired to prepare the research at a lump sum fee.
- b. Deed Plot:
- Deed lines and easement lines will be plotted to identify ownerships, right of entry requirements, existing right of way widths and called for boundary monumentation.
- c. Right of entry:
- Prepare right of entry letters to be sent to the land owners by registered mail.
- d. Project Control:
- Horizontal control will be established on site based upon GPS observation utilizing the TxDOT RTN network.
 - Horizontal control will be based upon the Texas Coordinate System of 1983 South Central Zone.
 - Vertical data will be based upon the North American Vertical Datum of 1988 utilizing available NGS bench marks.
 - Survey control drawing will be prepared at a scale of 1"=100'.
 - Drawings will be prepared to the TSPS Standards and Specifications for a Category 1A Condition II Survey, full size and 1/2 size signed and sealed drawings will be provided.
- e. Topographic Survey:
- Topographic data will be acquired at +/- 100 grid intervals and at all grade breaks.
 - Contact Texas ONECALL to have utilities located and marked.
 - Locate all visible and marked utilities.
 - Measure all manhole and inlet inverts within the project limits as identified on the attached exhibit.
- f. Right-of-Way Map:
- Prepare Right-of-Way Maps depicting existing and proposed rights-of-way for the project. Right-of-way maps will be prepared at a scale of 1"= 20'.

2.2.2 Geotechnical Investigation:

The ENGINEER will perform geotechnical investigation, to include the following:

- a. Pavement cores, estimated maximum of 5, to a depth of 10 feet, each.
- b. Borings for detention pond slope stability analysis, estimated maximum of 2, to a depth of 15 feet, each.
- c. The field and laboratory data will be analyzed, and an engineering report,

prepared by a Licensed Professional Engineer, will be submitted upon completion of the field work.

2.2.3 Drainage Analysis:

The ENGINEER will perform hydrologic and hydraulic analysis along the project, for both the existing and proposed conditions. The analysis will help to confirm the required sizes of the proposed roadside ditches and detention facility, and verify that the proposed project meets County design criteria. In coordination with the County Drainage Engineer, the following tasks will be performed:

Task A: Hydrologic Analysis

- a. Existing Conditions Hydrologic Analysis: ENGINEER will perform an existing conditions hydrologic analysis for the project site. This task will include verifications of external and internal drainage areas delineation, verifying the Tc, land use and the computed design and 5-, 25- and 100-yr peak flows.
- b. Perform Proposed Conditions Hydrologic Analysis: ENGINEER will perform a proposed conditions hydrologic analysis for the project site. This task will include delineating or revising proposed conditions internal and external drainage areas, determining Tc, land use, and computing the design and 5-, 25- and 100-year peak flows using the Rational Method. The flows calculated will be utilized to size the proposed inlets and storm sewer pipes.

Task B: Hydraulic Analysis (for roadside ditches and detention facility)

- c. Existing Conditions Hydraulic Analysis: Using a 1-D dynamic hydraulics model, ENGINEER will verify and confirm the existing hydraulic conditions. The design storm and 100-year hydraulic grade line (HGL) will be verified and confirmed.
- d. Perform Proposed Conditions Hydraulic Analysis: ENGINEER will prepare a proposed conditions hydraulic model to analyze the proposed ditch system and proposed cross-culvert(s) performance for the design storm and the 100-yr event. The HGL for both storm events will be determined and shown on the plan and profile sheets. In case of runoff increases from existing to proposed conditions, ENGINEER will investigate mitigating the increase runoff in the form of detention pond or similar facility as coordinated with the County Drainage Engineer.
- e. Modify Hydraulic Analysis: This task will includes modifying the hydraulic analysis up to two times to incorporate changes in the design.
- f. Preliminary Detention Pond Layout: This task will include preliminary dimensions and layout of proposed detention facility for the purpose of County review and coordination.

Task C: H&H Memo / Documentation

- g. Prepare Draft H&H Memo: ENGINEER will document the results of the drainage in a report to be included in the project Preliminary Engineering Report. Digital files of the computer model and exhibits developed for this project will be provided.

2.2.4 Preliminary Geometric Layout (30% Design):

- a. The ENGINEER will develop a preliminary project alignment plan and profile sheets for project. Minor horizontal alignment alternatives shall be considered to provide an optimal design. The preliminary plans shall show the proposed project centerline/alignment including Station PC, PTs, and proposed right-of-way (ROW) limits based on the proposed roadway typical section and anticipated cross slopes.
- b. The ENGINEER will develop a preliminary roadway typical section sheet for project.
- c. The ENGINEER will develop a preliminary engineering report (PER) to document project attributes, criteria met, and recommendations.
- d. The ENGINEER will attend and conduct a review meeting to include key County staff.

Preliminary (30%) Design Submittal Deliverables:

- Preliminary Engineering Report, including the following:
 - Design Narrative, including ROW acquisition needs, utility considerations, permit/regulatory requirements, issues and recommendations
 - Drainage Report
 - Preliminary (30%) Typical Section(s)
 - Preliminary (30%) Plan & Profile Sheets
 - Preliminary construction cost estimate
 - Geotechnical report (may be submitted subsequent to PER)

2.3 UTILITY COORDINATION

The ENGINEER will:

- 2.3.1 Perform records research and field visits to determine the presence of underground or overhead private or public utilities during the Preliminary Design phase.
- 2.3.2 Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T).
- 2.3.3 Depict utilities to a reasonable degree of accuracy on the plan and profile drawings.
- 2.3.4 Prepare a conflict table during the Preliminary Design phase to highlight conflicts between existing utilities and proposed improvements, to be updated during the Final Design phase as required.
- 2.3.5 Submit milestone-level drawings to applicable utility companies for their review.
- 2.3.6 Prepare limited relocation details for municipal utility conflicts, within the limits of existing utilities.

2.4 FINAL DESIGN:

Final design services shall include necessary engineering services for preparation of plans and specifications for the project. The ENGINEER will provide the County the necessary final engineering services (design, meetings, coordination, etc.) for the design of the planned improvements. All designs will conform to the latest engineering standards for projects of

this size and complexity. In addition, all drawings and standards will conform to the County's latest engineering guidelines. The construction package will contain the necessary drawings, notes, and details including specifications sufficient for the County to advertise, bid and award the project for construction. The Engineer will perform coordination with all affected utility companies within the project limits. The Engineer's review submittals shall 70%, 95%, then a final submittal (signed and sealed). CADD drawings and survey shall be provided to the County upon closeout. The ENGINEER will provide:

2.4.1 Traffic Control Plans:

The ENGINEER will provide the County construction traffic control plans illustrating the phases necessary to construct the planned improvements with as little interruption to the traveling public as possible. All plans will conform to the latest Texas Manual on Uniform Traffic Control Devices (TMUTCD) and the County's latest guidelines. It is noted that there are no Signal Designs currently planned for this project. All intersections will operate as Stop Operations. The Engineer will also provide the County permanent pavement marking and signage plans.

2.4.2 Storm Water Pollution Prevention Plan:

The ENGINEER will provide to the County with a Storm Water Pollution Prevention Plan (SWPPP) and specifications in accordance with TPDES and additional County guidelines.

2.4.3 Miscellaneous Plans including Cover Sheet, Project Layout, and Survey Control Map.

2.4.4 Typical Sections depicting pavement structure, dimensions, cross slope, lane configuration, and roadway side slopes or ditch configuration.

2.4.5 Drainage Area Map, Drainage Calculations, Detention Pond Layout

2.4.6 Plan and Profile Sheets

2.4.7 Construction Cost Estimate

2.4.8 Specification Table

2.4.9 Bid form

Interim (70%) Design Submittal Deliverables:

- Cover sheet
- Typical and non-standard cross sections
- Overall project layout
- Survey control map
- Drainage area map with hydraulic calculations
- Plan and profile sheets
- Traffic control plan
- Storm Water Pollution Prevention Plan

Three copies of the 70 percent submittal will be required for County review, and drawings can be submitted on 11-inch by 17-inch sheets. A digital copy in Adobe Acrobat format (PDF) of the drawings, specifications and estimate will also be

required.

Pre-Final (95%) Design Submittal Deliverables:

The 95 percent submittal should be considered complete with 95% interim seal, and shall include all of the 70 percent requirements plus the following:

- General notes sheet
- Verify earthwork quantities with cross sections at 100-foot intervals (only non-standard sections should be included in plans)
- Signage and pavement marking plans (signs may be shown on plan and profile sheets and use of pavement marking standards is encouraged)
- Standard construction details
- Project manual (bid form, specification table of contents, any special specifications or conditions; contract documents excluded)
- Responses to 70 percent comments

Physical submittal requirements are the same as for the 70 percent submittal.

Final (100%) Submittal Deliverables:

The 100 percent design submittal shall consist of one sealed and signed set of drawings delivered to the County, along with a PDF submittal of the drawings, specifications and estimate.

3. ADDITIONAL SERVICES

The following Additional Services will be performed as requested by the County, on a specified rate basis as defined in Appendix 1.

3.1 PROPOSED PARCEL DOCUMENTS

The ENGINEER shall:

- 3.1.1 Prepare metes and bounds descriptions and surveys for parcel acquisition.
- 3.1.2 Establish a design/construction baseline.

3.2 BID AND CONSTRUCTION PHASE SERVICES

The ENGINEER shall perform the following, as requested by the County:

- 3.2.1 Prepare a single project manual file in PDF format, consisting of: Administrative documents, bid form (prepared by the ENGINEER), a sealed specification table of contents, applicable specifications and documents.
- 3.2.2 Prepare 27 compact discs, each with one project manual file and one drawing file. 25 compact discs will be delivered to the County Purchasing Agent for advertising, and two discs will be provided to the County's Project Manager. Printed documents are not required.
- 3.2.3 Attend a pre-bid meeting at a location specified by the County.
- 3.2.4 Prepare answers to bidder questions, as well as any other required changes, to be included in an addendum.

- 3.2.5 Attend a pre-construction meeting. The ENGINEER will produce drawing and project manual sets, in a quantity defined by the County prior to the meeting.
- 3.2.6 Review contractor submittals and responding to Requests for Information.
- 3.2.7 Participate in a substantial completion walkthrough.
- 3.2.8 After project completion, the ENGINEER will prepare record drawings based on contractor as-built markups. The record drawings may be printed on paper and delivered to the County.

3.3 ENVIRONMENTAL SITE ASSESSMENT

- 3.3.1 An Environmental Site Assessment is not anticipated. If requested by the County, this task may be added by contract amendment.

4. SERVICES TO BE PROVIDED BY THE COUNTY

The County, or it's agent via separate contract, will provide the following items and services including, but not limited to:

- 4.1 Preliminary wetlands investigation, and notification of the ENGINEER, if additional corresponding efforts or requirements will be required.
- 4.2 Project notification to the Texas Historical Commission
- 4.3 Assist the Design Consultant in identifying major utilities, and providing contact information for various utilities as needed.
- 4.4 Coordinate directly with utility companies to facilitate utility adjustments required by the proposed improvements.
- 4.5 Coordinate with utility companies during the Construction phase as required.
- 4.6 Prepare Bid Tabulation and provide a copy to the ENGINEER.

EXHIBIT B

EXHIBIT B
SUMMARY OF COMPENSATION FOR PROFESSIONAL SERVICES
METHOD OF PAYMENT: LUMP SUM

PRIME PROVIDER NAME: CP&Y, INC.
PROJECT NAME: AVENUE J EXTENSION
PROJECT NO.: 1-15

TASK DESCRIPTION	PROJECT MANAGER	PROJECT ENGINEER	STAFF ENGINEER	SR. CADD/ DESIGNER	GRADUATE ENGINEER (EIT)	CADD/ DESIGNER	CLERICAL/ ADMIN	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	COST PER TASK
2. BASE SCOPE OF DESIGN PHASE SERVICES											
2.1 PROJECT MANAGEMENT	10	8					2	20			
2.1.1 COORDINATE W/ COUNTY PM, MANAGE STAFF	10	8					2	20	N/A		\$3,404.00
2.1.2 ATTEND PROGRESS MEETINGS	9	9						18	N/A		\$3,213.00
2.1.3 COORDINATE W/ SUBS	8	8						16	N/A		\$2,856.00
2.1.4 QA/QC	16	16						32	N/A		\$5,712.00
2.1.5 ADDRESS COMMENTS	1	3	4		8			16	N/A		\$2,239.00
2.1.6 NOTIFY COUNTY OF DEVIATION FROM SCOPE	1							1	N/A		\$194.00
2.2 PRELIMINARY DESIGN											
2.2.1 PROJECT SURVEYING								0	N/A		\$18,897.00
a. DEED RESEARCH											
b. DEED PLOT											
c. RIGHT OF ENTRY											
d. PROJECT CONTROL											
e. TOPOGRAPHIC SURVEY											
2.2.2 GEOTECHNICAL INVESTIGATION								0	N/A		\$4,800.00
a. PAVEMENT CORES (5 @ 10-FT EA)											
b. DETENTION POND BORINGS (2 @ 15-FT EA)											
c. ANALYSIS & GEOTECHNICAL REPORT											
2.2.3 DRAINAGE ANALYSIS											
a. EXISTING HYDROLOGIC ANALYSIS		2	4		8			14	N/A		\$1,882.00
b. PROPOSED HYDROLOGIC ANALYSIS		4	8		16			28	N/A		\$3,764.00
c. EXISTING HYDRAULIC ANALYSIS		2	4		8			14	N/A		\$1,882.00
d. PROPOSED HYDRAULIC ANALYSIS		4	8		20			32	N/A		\$4,284.00
e. MODIFY HYDRAULIC ANALYSIS		2	4		4			10	N/A		\$1,382.00
f. PRELIM DETENTION POND LAYOUT		2	4		16			22	1	22	\$2,882.00
g. DRAFT H&H MEMO	1	12	24		32			69	N/A		\$9,486.00
2.2.4 PRELIM GEOMETRIC LAYOUT											
a. PRELIM PLAN & PROFILE SHEETS	2	4	8	8	20	20		62	4	15.5	\$8,180.00
b. TYPICAL SECTION SHEET		1	2		8	4		15	1	15	\$1,926.00
b. PRELIMINARY ENGINEERING REPORT	1	8	16		40			65	N/A		\$8,722.00
c. 30% REVIEW MEETING	4	4						8	N/A		\$1,426.00
2.3 UTILITY COORDINATION											
2.3.1 RECORDS RESEARCH & SITE VISITS			8		12			20	N/A		\$2,612.00
2.3.2 SUBMIT REQUESTS TO UTIL CO'S			1		4		1	6	N/A		\$719.00
2.3.3 DEPICT UTILITIES ON PLANS			2	2	4	8		16	N/A		\$2,026.00
2.3.4 UTILITY CONFLICT TABLE			4		8			12	N/A		\$1,556.00
2.3.5 SUBMIT MILESTONE DRAWINGS TO UTILITIES					4		8	12	N/A		\$1,140.00
2.3.6 MUNICIPAL UTILITY ADJUSTMENT DETAILS			4		8			12	N/A		\$1,556.00
2.4 FINAL DESIGN											
2.4.1 TRAFFIC CONTROL PLANS	2	2	4	8	16	16		48	2	24	\$6,310.00
2.4.2 SW3P PLANS	2	2	4	8	12	16		44	2	22	\$5,810.00
2.4.3 MISCELLANEOUS PLANS	4	4	8	8	28	30		82	12	7	\$10,788.00
2.4.4 TYPICAL SECTIONS	1		2		4	4		11	1	11	\$1,460.00
2.4.5 DRAINAGE PLANS	2	8	8	8	36	28		90	6	15	\$11,808.00
2.4.6 ROADWAY PLANS	2	2		8	16	3		31	4	7.75	\$4,166.00
2.4.7 CONSTRUCTION COST ESTIMATE		1			4			5	N/A		\$663.00
2.4.8 SPECIFICATIONS		2	4					6	N/A		\$882.00
2.4.9 BID FORM		1	1		4			6	N/A		\$802.00
2.2.7 EXPENSES											\$480.00
HOURS SUB-TOTALS	76	119	138	50	340	129	13	863	33		
CONTRACT RATE PER HOUR	\$194.00	\$163.00	\$139.00	\$138.00	\$125.00	\$122.00	\$80.00				
TOTAL LABOR COSTS	\$14,744.00	\$19,397.00	\$18,904.00	\$6,800.00	\$42,500.00	\$15,735.00	\$1,040.00	\$119,123.00			
TOTAL BASE SCOPE OF DESIGN PHASE SERVICES											\$139,696.00

EXHIBIT B
SUMMARY OF COMPENSATION FOR PROFESSIONAL SERVICES
METHOD OF PAYMENT: SPECIFIED RATE

PRIME PROVIDER NAME: CP&Y, INC.
PROJECT NAME: AVENUE J EXTENSION
PROJECT NO.: 1-15

TASK DESCRIPTION	PROJECT MANAGER	PROJECT ENGINEER	STAFF ENGINEER	SR. CADD/ DESIGNER	GRADUATE ENGINEER (EIT)	CADD/ DESIGNER	CLERICAL/ ADMIN	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET	COST PER TASK
3. ADDITIONAL SERVICES											
3.1 PROP ROW MAPS / PARCEL DESC (1 PARCEL @ \$2500 EA)											\$2,500.00
3.2 BID & CONSTRUCTION PHASE SERVICES											
3.2.1 PREPARE PROJECT MANUAL		1			4		2	7	N/A		\$823.00
3.2.2 PREPARE BIDDER'S COMPACT DISCS		1			2		4	7	N/A		\$733.00
3.2.3 ATTEND PRE-BID MEETING	3	3						6	N/A		\$1,071.00
3.2.4 PRE-BID QUESTIONS & ADDENDUM	1	1	2	2	4	2	1	13	N/A		\$1,731.00
3.2.5 PRE-CONSTRUCTION MEETING	3	3						6	N/A		\$1,071.00
3.2.6 REVIEW SUBMITTALS, RESPOND TO RFI	1	2	4		8		1	16	N/A		\$2,156.00
3.2.7 SUBSTANTIAL COMPLETION WALK-THROUGH	4	4						8	N/A		\$1,428.00
3.2.8 AS-BUILT PLANS	1		2	1	8	8		20	N/A		\$2,584.00
HOURS SUB-TOTALS	13	15	8	3	26	10	8	83	0		
CONTRACT RATE PER HOUR	\$194.00	\$183.00	\$139.00	\$136.00	\$125.00	\$122.00	\$80.00				
TOTAL LABOR COSTS	\$2,522.00	\$2,445.00	\$1,112.00	\$408.00	\$3,250.00	\$1,220.00	\$640.00	\$11,597.00			
TOTAL MAXIMUM ESTIMATED ADDITIONAL SERVICES											\$14,197.00