

## Item 19



# Travis County Commissioners Court Agenda Request

**Meeting Date:** May 14, 2013

**Prepared By/Phone Number:** Jason G. Walker/44562; Marvin Brice, CPPB, Assistant Purchasing Agent

**Elected/Appointed Official/Dept. Head:** Cyd Grimes

**Commissioners Court Sponsor:** Judge Biscoe

**Agenda Language: Approve Modification No. 2 to Contract No. 4400000071 (H.T.E. No. 10AE0168JW), CP&Y, Inc., for Design Services for Wells Branch Parkway Extension.**

- **Purchasing Recommendation and Comments:** Purchasing concurs with department and recommends approval of requested action. This procurement action meets the compliance requirements as outlined by the statutes.
- The Wells Branch Parkway Extension design project is for the widening and extension of Wells Branch Parkway from .6 miles east of Immanuel Road (at Killingsworth Lane west) to 1 mile west of Cameron Road (at Killingsworth Lane east).
- This modification number two (2) is for Additional Basic Services for modification to the prepared construction documents to include the two (2) north outside lanes along with the preparation of construction documents for the two (2) south outside lanes. This will allow for the construction of four (4) lanes with sidewalks and a bicycle lane. This modification will increase the contract amount by \$53,957.19, from \$432,886.35 to \$486,843.54, and the aggregate modification amount results in a 14.99% increase of the original contract amount.
- Modification number one (1) added Additional Basic Services for hydrology and hydraulics design services due to an increase in the number of cross drainage structures from one (1) to three (3). This modification increased the contract amount by \$9,529.00, from \$423,357.35 to \$432,886.35, and the aggregate modification amount resulted in a 2.25% increase of the original contract amount.

AGENDA REQUEST DEADLINE: All agenda requests and supporting materials must be submitted as a pdf to Cheryl Aker in the County Judge's office, [agenda@co.travis.tx.us](mailto:agenda@co.travis.tx.us) by **Tuesdays at 5:00 p.m.** for the next week's meeting.

➤ **Contract Expenditures:** Within the last 12 months \$114,063.30 has been spent against this contract/requirement.

➤ **Contract-Related Information:**

Award Amount: \$423,357.35

Contract Type: A/E

Contract Period: Through completion

➤ **Contract Modification Information:**

Modification Amount: \$53,957.19

Modification Type: A/E

Modification Period: Through completion

➤ **Solicitation-Related Information: N/A**

Solicitations Sent:

Responses Received:

HUB Information:

% HUB Subcontractor:

➤ **Special Contract Considerations: N/A**

Award has been protested; interested parties have been notified.

Award is not to the lowest bidder; interested parties have been notified.

Comments:

➤ **Funding Information:**

Shopping Cart/Funds Reservation in SAP: 300000320

Fund Center(s):1490200001

Comments:

AGENDA REQUEST DEADLINE: All agenda requests and supporting materials must be submitted as a pdf to Cheryl Aker in the County Judge's office, [agenda@co.travis.tx.us](mailto:agenda@co.travis.tx.us) by **Tuesdays at 5:00 p.m.** for the next week's meeting.



## TRANSPORTATION AND NATURAL RESOURCES

STEVEN M. MANILLA, P.E., COUNTY EXECUTIVE

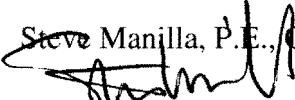
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700 Lavaca Street-5<sup>th</sup> Floor  
Travis County Administration Building  
PO Box 1748  
Austin, Texas 78767  
Phone: (512) 854-9383  
Fax: (512) 854-4697

### MEMORANDUM

**DATE:** March 25, 2013

**TO:** Marvin Brice, CPPB, Assistant Purchasing Agent

**FROM:**  Steve Manilla, P.E., County Executive

**SUBJECT:** Professional Services Contract Modification Request  
Wells Branch Parkway Extension, Sect. 2  
CP&Y Inc.  
Modification No 2 to PSA Contract No. Q10AE0168-JW

#### **Requested Action:**

Please accept this memo as a request to modify the professional services contract agreement with CP&Y Inc. for design services related to the Wells Branch Parkway Extension project in Precinct 2. This modification will increase the contract amount by \$53,957.19 from \$405,609.88 to \$459,567.07.

Additional information to help process this request is provided below. If you need any additional information, please contact the Project Manager, Chiddi N'Jie at 854-7585.

#### **Summary and Staff Recommendation:**

The Wells Branch Parkway project is a multi-phase project for widening and extension of Wells Branch Parkway from 0.6 miles East of Immanuel Road (Killingsworth Lane west) to 1 mile west of Cameron Road (Killingsworth Lane east) in Precinct 2 (see Exhibit "A"). The current contract is to produce engineered plans for the entire ultimate 6 lanes between 0.6 miles east of Immanuel Road (at Killingsworth Lane west) to 1 mile west of Cameron Road (at Killingsworth Lane east) to be used to produce construction plans for future phases, plus a set of construction plans within the same limits for the 2 outside lanes on the north.

If approved, this additional services authorization request will allow CP&Y, Inc. to modify the construction document for the 2 north outside lanes and to prepare the construction documents for the 2 outside south lanes so that two of the phases can be constructed now under a single construction contract to build the 4 lanes with sidewalks and bicycle lane on each side of the street. This is expected to improve safety during construction, lower the total construction cost, duration, and associated inconvenience to users of the roadway network in the immediate area.

Staff have reviewed the additional scope of services and fees proposal (Exhibit "C") and concluded that the services proposed are complete and the fees are competitive with others of similar scope and duration in the area. Any service not currently identified can be added if it is later identified as a need.

TNR recommends approval of this additional services proposal request.

Here is a summary of the contract modifications to date, including this one:

Original contract amount:-----\$396,080.88  
Modification #1-----\$9,529.00 (current contract amount = \$405,609.88)  
Proposed Modification #2-----\$53,957.19 (new contract amount = \$459,567.07)

### **Project Background**

Wells Branch Pkwy is planned as an ultimate 6-lane divided roadway from Loop 1 to east of SH 130 (FM 973) on the CAMPO 2035 Regional Transportation Plan (illustrative plan). This goal is being achieved in phase as the need and funding becomes available. The current plan is to construct up to 4 lanes (up to the two outside lanes, each direction) from Mopac Expressway (Loop 1) to Cameron Road, and gradually add the remaining inside third lane, each direction, plus the median later to complete the 6-lane divided arterial as planned. Cameron Road improvements, from Gregg Lane to SH 130, is planned under a separate project,

The two outside lanes, each direction, from Loop 1 and Immanuel, and the two north lanes between Immanuel Road and Killingsworth Lane (west) have already been constructed.

The general scope of services under the existing contract with CP&Y is to produce engineering plans for the entire ultimate 6 lanes between 0.6 miles east of Immanuel Road (at Killingsworth Lane west) to 1 mile west of Cameron Road (at Killingsworth Lane east) to be used to generate the construction plans for future phases, plus a set of construction plans within the same limits for the 2 outside lanes on the north.

The funding for constructing the 2 southern lanes in the same limits as above plus the 2 southern lanes between Immanuel Road and 0.6 miles east of Immanuel Road (at Killingsworth Lane west) was approved by the voters in the 2011 Bond Election.

This additional service request is to allow CP&Y, Inc. to modify the construction documents prepared for the construction of the 2 outside north lanes and to prepare the construction documents for the 2 outside south lanes so that two of the phases can be constructed now under the same construction contract to build the 4 lanes with sidewalks and bicycle lane on each side of the street.

After some reassessment, TNR have concluded that construction of the two outside north lanes and the sections authorized in the 2011 Bond election (the 2 outside south lanes from Immanuel Road to Killingsworth Lane west to Killingsworth Lane east) under a single construction contract will provide some savings due to economies of scale, reduce construction duration, and reduce inconvenience to the motorists, bicyclists, and pedestrians in the area.

The modification proposed here will allow these sections to be constructed together:

1. the 2 outside north lanes between Killingsworth Lane west and Killingsworth Lane east
2. the 2 outside south lanes between Killingsworth Lane west and Killingsworth Lane east

To construct the south 2-lanes between 0.6 miles west of Emmanuel Road and Emmanuel Road, and to provide a smooth and safe transition from the proposed phases above additional engineering work will be needed. That work is being proposed under a separate design contract.

An additional extension of Wells Branch Parkway, from the terminus of this phase one mile easterly to Cameron Road is being planned under a separate project with a different developer.

### **Issues and Opportunities**

Combination of all the phases described above into one letting may result into significantly better bid prices and an appreciably reduction in the construction duration with less disruption to the emergency services providers, school bus services, motorists, bicyclists, and pedestrians in the area.

### **Budgetary and Fiscal Impact:**

Funding for this project will come from FRD 0300000320. The total amount for this contract modification is \$53,957.19 increasing the contract from \$405,609.88 to \$459,567.07. The financial tracking information for this PSA contract modification request is provided below:

Fund: 2004

Fund Center: 1490200001

IO: 600087

GL: 521050

Grant: 800160

All work for this modification will be delivered under Work Product 4.

#### Attachments:

1. Exhibit "A" - Project Location Map
2. Exhibit "B"- Additional Services Scope and Fee Proposal
3. Exhibit "C"- Proposed Roadway Section

Copy: Cyd V. Grimes, C.P.M., Purchasing Agent

Jason Walker, Construction Procurement Specialist, Purchasing

Hannah York, Auditor's Office

Cynthia McDonalds, TNR Financial

Donna Williams-Jones, TNR Financial

Tawana Gardner, TNR Financial

Steve Sun, P.E., TNR CIP

Chiddi N'Jie, P.E., TNR CIP

Central Files: 3100/Wells Branch/Design

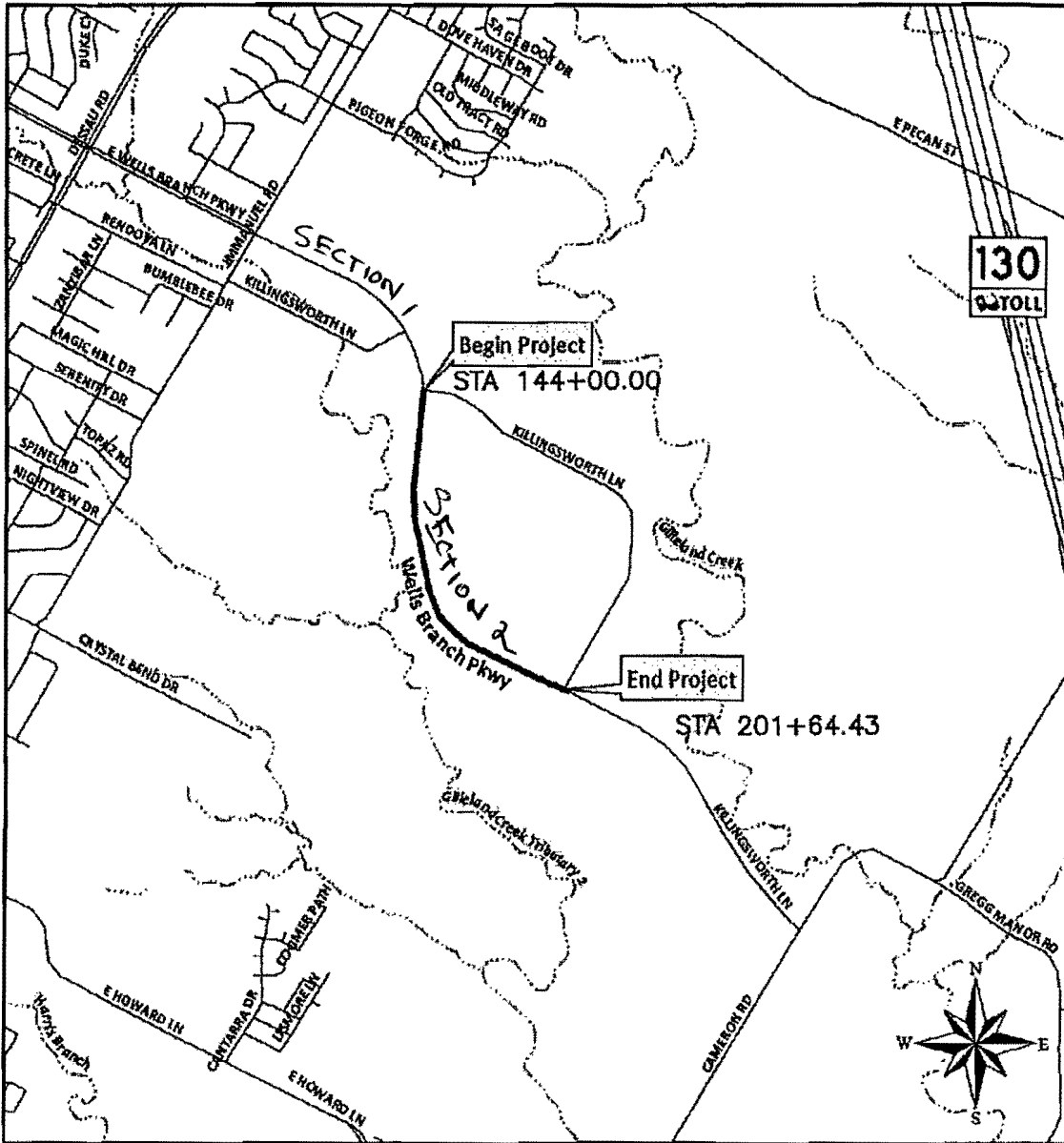
## **List of Attachments**

- **Exhibit “A “**
  - **Project Location Map**
  
- **Exhibit “B”**
  - **Additional Services Scope and Fee Proposal**
  
- **Exhibit “C”**
  - **Revised Roadway Section**

# **Project Location Map**

# WELLS BRANCH PARKWAY IMPROVEMENTS PROJECT

## LOCATION MAP



LOCATION MAP

N.T.S.



# Funds Reservation 300000320

General Data			
Document type	FC	Document type	030
Company code	1000	Document date	09/21/2012
FM area	1000	Posting date	09/21/2012
Controlling area	1000	Currency	USD/ 1.00000
Statistics			
Entered by	WILLIAD	Created on	09/21/2012
Last changed by	HUFFH	Last changed	01/18/2013
More Data			
Text	Wells Branch Pkwy Design Contract Modification		
Reference			
Overall Amount	240,534.45 USD		

Document item 001			
Text	For pending contract mod estimate		
Commitment item	521050	Funds center	1490200001
Fund	2004	G/L account	521050
Cost center		Due on	
Vendor		Customer	
Amount	240,534.45 USD		

**MODIFICATION OF CONTRACT NUMBER: 10AE0168JW, Design Services for  
Wells Branch Parkway Extension**

<b>ISSUED BY:</b> PURCHASING OFFICE 700 LAVACA ST., SUITE 800 AUSTIN, TX 78701	<b>PURCHASING AGENT ASST:</b> Jason G. Walker TEL NO: (512) 854-9700 FAX NO: (512) 854-9185	<b>DATE PREPARED:</b> April 9, 2013
<b>ISSUED TO:</b> CP&Y, Inc. 10415 Morado Circle, Building I, Suite 200 Austin, TX 78759	<b>MODIFICATION NO.:</b> 2	<b>EXECUTED DATE OF ORIGINAL CONTRACT:</b> January 18, 2011

ORIGINAL CONTRACT TERM DATES: 1/18/11 - project completion      CURRENT CONTRACT TERM DATES: 1/18/11 - project completion

**FOR TRAVIS COUNTY INTERNAL USE ONLY:**

Original Contract Amount: \$423,357.35      Current Modified Amount \$486,843.54.

**DESCRIPTION OF CHANGES:** Except as provided herein, all terms, conditions, and provisions of the document referenced above as heretofore modified, remain unchanged and in full force and effect.

A. The additional Work Product 4 Services, as outlined in Contractor's Supplemental Agreement, attached hereto and made a part hereof, are hereby added to the contract. As a result of these additional Work Product 4 Services, contract Basic Services pricing is adjusted as follows:

1. Reference EXHIBIT 1:
  - a. Paragraph 1.1: The Basic Services sum is changed from \$405,609.88 to \$457,650.09, an increase of \$52,040.21.
  - b. Paragraph 1.1.1: Project Management & Coordination is changed from \$13,249.00 to \$15,489.00, an increase of \$2,240.00.
  - c. Paragraph 1.1.1: Work Product 4 (100% Plans) is changed from \$21,412.28 to \$71,212.49, an increase of \$49,800.21.
  
2. Reference EXHIBIT 1, SECTION 4 - REIMBURSABLE EXPENSES, 4.1, the Sub-Contract Management Fee is modified from '\$195,305.88 x 8.00% = \$15,624.47' to '\$219,268.09 x 8.00% = \$17,541.45', an increase of \$1,916.98. Also, the REIMBURSABLES TOTAL NOT TO EXCEED is changed from \$27,276.47 to \$29,193.45, an increase of \$1,916.98.
  
2. Reference EXHIBIT 1, SECTION 5 - TOTAL AGREEMENT SUM. The Total Agreement Sum is changed from an NTE amount of \$432,886.35 (\$405,609.88 Basic Services, and NTE amount of \$27,276.47 Reimbursable Expenses) to an NTE amount of \$486,843.54 (\$457,650.09 Basic Services, and NTE amount of \$29,193.45 Reimbursable Expenses) an increase of \$53,957.19.
  
4. The Contract Scope of Services in modified to include the performance by Engineer of the additional Work Product 4 Services as outlined in Contractor's Scope of Services (Attachment A).

**Note to Vendor:**  
 Complete and execute (sign) your portion of the signature block section below for all copies and return all signed copies to Travis County.  
 DO NOT execute and return to Travis County. Retain for your records.

LEGAL BUSINESS NAME: <u>CP&amp;Y, Inc.</u> BY:  SIGNATURE BY: <u>James J. Roohms, P.E.</u> PRINT NAME TITLE: <u>Senior Vice President</u> ITS DULY AUTHORIZED AGENT	<input type="checkbox"/> DBA <input checked="" type="checkbox"/> CORPORATION <input type="checkbox"/> OTHER DATE: <u>4/25/2013</u>
TRAVIS COUNTY, TEXAS BY:  CYD V. GRIMES, C.P.M., CPPO, TRAVIS COUNTY PURCHASING AGENT	DATE:
TRAVIS COUNTY, TEXAS BY: _____ SAMUEL T. BISCOE, TRAVIS COUNTY JUDGE	DATE:

**DRAFT**

## **ATTACHMENT A**

### **Consultant Services**

**PSA Modification No. 2 for Additional Services  
Wells Branch Parkway Extension, Section 2  
0.6 Miles East of Immanuel Road to 1 Mile West of Cameron Road  
Travis County, Texas, Precinct 2**

### **SERVICES TO BE PERFORMED BY THE CONSULTANT**

Wells Branch Parkway is built or planned to be built as a 6-lane arterial from Loop 1 to east of SH 130. The segment between Loop 1 and FM 1825 has already been completed as a 6-lane arterial. Between FM 1825 and Immanuel Road near Pflugerville, it is a 4-lane arterial. East of Immanuel Road, a half-mile 2-lane section of it has been constructed.

The scope of this Wells Branch Parkway Extension project is for complete PS&E for the continuation of a 4-lane section approximately one mile eastward from the west intersection of Killingsworth Ln to the approximate south property line of the Travis County North East Metro Park and the eastern boundary of the Pflugerville ISD property, hereafter called Wells Branch Pkwy Section 2. The alignment will follow a previously dedicated 124' right-of-way corridor. Wells Branch Pkwy between Immanuel Rd and the west intersection of Killingsworth Ln shall hereafter be called Section 1.

The anticipated engineering services will be for the design of the ultimate 6-lane arterial. However, the construction will be phased and only the initial 4-lane road construction will be built with this project. The layout of the initial 4-lane road will be as described below. This phased construction is also being planned for the extension of the Wells Branch Parkway an additional one mile further eastward from the eastern terminus of this project to Cameron Road. That section is being designed by others.

The existing 124' right-of-way will be increased generally on its south side to approximately 140', through future dedication, to accommodate the ultimate 6-lane arterial. Additional slope, drainage, and temporary construction easements and easements for detention and water quality ponds have been identified for acquisition by the County. This project is being developed through a Road Construction Agreement between the County and Sun Communities. Sun Communities shall have approval authority for the design but the project design and construction phases will be managed by the County. This project is located in Travis County Precinct 2.

#### **1 GENERAL SCOPE OF SERVICES**

Provide professional services to revise final PS&E Documents for the MAD 6 Wells Branch Parkway Extension from its current terminus 0.6 miles east of Immanuel Rd to the eastern boundary of the Pflugerville ISD property on Killingsworth Lane. This project will also include developing a phased construction plan for the initial 4-lane road.

Under the original work authorization for this contract, the Engineer previously completed the engineering design for the ultimate MAD 6 for Wells Branch Parkway from 0.6 miles east of Immanuel Road to the Killingsworth Ln east intersection (Wells Branch Pkwy Section 2). The Engineer also included the engineering design for an interim 2-lane section in the north half of the ROW.

These services generally will include, but are not limited to the following: roadway and sidewalk design, storm water drainage system analysis and design, and water quality pond design; preparing construction documents; completing land surveys, and intersection plans; developing roadway signage and pavement marking plans, traffic control plans, and coordinating utility relocations; monitoring project cost and applying cost recovery methodologies such as value engineering; preparing and executing project management, risk reduction and QA/QC plans; and preparing phased construction plans for the initial 4-lane road construction. The project is to meet all applicable local, state, and federal regulatory requirements. No federal funds will be used for this project.

In addition, the CONSULTANT will perform the following services:

- A. Develop all plans and specifications to standards stipulated by Travis County (may include Travis County, City of Austin and TxDOT criteria, specifications, standards, special specifications and special provisions, and AASHTO design criteria).
- B. Develop and submit a construction cost estimate at each phase of the design for the initial 4-lane road and the remaining ultimate MAD 6.
- C. Use generally recognized engineering methodology and standards of care and ensure designs are compliant with ADA accessibility requirements.
- D. Establish and provide a detailed project design task completion report. Monitor and provide task completion report to the County.
- E. Coordinate utility relocation efforts as described in the detailed Work Phase descriptions below.
- F. Prepare appropriate displays and attend meetings with Travis County staff, regulatory agencies, and public groups, both as a technical advisor and as a project presenter.

Design services related to the design and plan production for this project will be performed in accordance with the latest available AASHTO design criteria and City of Austin guidelines. TxDOT guidelines and design standards will also be used where appropriate. The drainage systems and water quality ponds will be designed per City of Austin criteria. The development of the project will typically be consistent with TxDOT design procedures and practices. This project will be developed utilizing Microstation V8i and Geopak V8i.

## **2 SPECIFIC PROJECT INFORMATION, LOCATION AND LIMITS**

This project consists of the extension of Wells Branch Parkway from 0.6 miles east of Immanuel Road to the eastern boundary of the Pflugerville ISD property for a length of approximately 1.0 mile (Section 2). Typical roadway cross section for Wells Branch Pkwy Section 2 for the ultimate MAD 6 includes three 12' wide travel lanes for each direction, 23' wide grassed median measured from face-of-curb to face-of-curb, 5' wide bike lane abutting the concrete gutter along each outside lane of the road, 2' wide concrete curb and gutter along outside edge of the bike lane, and 6' wide sidewalk on the both sides of the road directly behind the outside backs of curb.

The initial construction phase for Wells Branch Pkwy Section 2 will include two outside lanes in each direction and just the outside curbs. Each direction will consist of a 31' pavement width: 5' bike lane, two 12' lanes, 2' inside paved shoulder, and 10' inside grass shoulder. A median ditch will be needed to drain superelevated sections. Construct a pavement width transition for the north side pavement from the 41' pavement width in Section 1 to the 31' pavement width in Section 2. Inner 10' wide grass shoulders should allow the median ditches to remain as originally designed; however this can be reevaluated as design progresses. Use a 30 mph transition at the east end of Section 2 to shift the eastbound traffic lane to tie into the existing two-lane section on Killingsworth Ln. Killingsworth Ln then continues east to Cameron Rd.

Median breaks with turn lanes in both directions and driveway cuts shall also be included. Design speed is 50 MPH. Pavement structure shall be designed for a 20-year design life based on geotechnical analysis and pavement engineering. Proposed right-of-way width should be no less than 140' plus slope, drainage, detention pond, water quality pond easements and temporary access/construction easements as reasonably required by the construction of the roadway and associated improvements. Storm drain pipes for the initial 4-lane road shall be constructed to meet the ultimate MAD 6 requirements.

Naming convention for the phased construction of the ultimate 6-lane facility:

- Phase 1 – Original interim phase of Section 2 (one lane in each direction); this section will become the two north/westbound lanes in Phase 2.

- Phase 2 – Revised interim phase of Section 2 (two outermost lanes in each direction); construction and quantities for payment include the two south/eastbound lanes.
- Phase 3 – Final ultimate build-out of Section 2 (three lanes in each direction); construction includes the innermost lane in each direction.

Bid schedules will reflect the base bid and add alternate as follows:

- Base bid – Section 2 north side (Phase 1)
- Add alternate 1 – Sections 1 and 2 south side (Phase 2)

The County's private partner will review the plans and specifications for specific project items including reasonable roadway design, median breaks, and driveway cuts as well as the proposed size and location of any slope, drainage, detention pond, water quality pond and temporary access/construction easements.

The CONSULTANT will be expected to provide three (3) specific work phases and/or support service, each with a separate agreement and a separate fee, with each requiring a separate "Notice to Proceed" under the same contract. After the first work phase and each additional work phase thereafter, if authorized, the County may or may not exercise the option to supplement the contract to produce additional work phases. Authorization to proceed to the next work phase must be in writing in the form of a "Notice to Proceed".

The required work phases include Work Phase 1, 30% complete design documents; Work Phase 2, 90% complete design documents; and Work Phase 3, the 100% bid-ready set of construction documents. Each Work Phase shall be submitted for review and written "Notice to Proceed" must be issued by the County Purchasing Agent before proceeding to the next Work Phase.

The review process shall consist of submitting an electronic set (PDF format) of the plans (11"x17") specifications and estimates of probable construction costs to TNR when the design is 30%, 90% and 100% completed. Each submittal shall include a cover letter from the consultant stating who from their design team performed a Quality Assurance/Quality Control Check. Allow three weeks for TNR to review and provide written comments and/or approval for each submittal. Submit two final check sets and allow three weeks for TNR to review and provide written comments and/or approval.

## **2.1 WORK PHASES**

### **2.1.1 WORK PHASE 1 - 30% PLAN SUBMITTAL**

The 30% submittal will consist of the preliminary engineering and 30% complete design documents required to fully address the project scope.

Total projected time for completion of Work Phase 1 will be no more than 45 calendar days. A detailed list of tasks follows.

#### **2.1.1.1 SURVEYING SERVICES *(Provided by Inland Geodetics)***

##### **A. DESIGN SERVICES**

- a. The Surveyor will prepare six (6) parcel plats with metes and bounds descriptions signed and sealed by a Texas Registered Professional Land Surveyor for additional right-of-way acquisition as indicated on the project plans. Additionally, the Surveyor will prepare parcel plats and metes and bounds for seven (7) permanent slope and/or drainage easements contiguous with the previously stated right-of-way acquisition parcels. These parcels will also be delineated from information provided by the owner or prime consultant on the plans.
- b. The Surveyor will remove monuments previously set along the existing right-of-way line where new right-of-way will be acquired. The surveyor will set monuments along the proposed additional right-of-way acquisition line as described in item (g). The Surveyor shall, at their discretion, use 5/8" iron rods with aluminum caps stamped "Travis ROW" or other durable entities for the monumentation as applicable.

**B. DELIVERABLES**

The Surveyor shall provide:

- a. Parcel plats with metes and bounds descriptions signed and sealed by an RPLS for 6 right-of-way parcels and 7 easement parcels.

**C. ASSUMPTIONS**

The Surveyor shall notify the client prior to performing the work if:

- a. Sufficient right-of-way monumentation cannot be found to re-establish the existing alignments and associated right-of-way lines along the project corridor.
- b. Traffic Control cannot be managed by the Surveyor's personnel.
- c. The work is delayed due to weather or other circumstances beyond the Surveyor's direct control.
- d. Existing Project Control cannot be recovered or verified.
- e. Access is denied to properties for any reason.

**2.1.1.2 30% DESIGN PLANS**

**A. MISCELLANEOUS PLANS** *(Provided by CP&Y, Inc.)*

- a. Modify the Section 2 project layout sheets for the revised interim typical section.

**B. ROADWAY PLANS** *(Provided by CP&Y, Inc.)*

- a. Modify the Section 2 proposed typical section sheets for the revised interim design.
- b. Modify the roadway plan and profile sheets for Section 2 to reflect the revised interim and ultimate typical sections.
- c. Updated the design cross sections for Wells Branch Parkway Section 2 to reflect the revised interim and ultimate typical sections.

**C. GRADING AND DETAILS** *(Provided by CP&Y, Inc.)*

- a. Modify driveway details for each driveway in Section 2 to reflect the revised ultimate typical section.

**D. DRAINAGE PLANS** *(Provided by Unintech Consulting Engineers)*

- a. Update drainage plan and profile sheets for Section 2 depicting locations of inlets and manholes. These sheets will be prepared at a scale of 1"=50'.

**E. WATER QUALITY** *(Provided by CAS Consulting and Services, Inc.)*

The project site is not located within an Edwards Aquifer recharge, contributing or transition zone. It is within the City of Austin 2-mile ETJ limits and so falls within their Watershed Protection Development Review Regulatory Area. The extent of the project is located in the Suburban (Outside City Limits) Desired Development Zone for ordinance purposes. Detention will be provided through the participation in the City's Regional Stormwater Management Program; therefore, no detention facilities or detention related calculations will be provided for this project.

- a. The Engineer will revise the proposed water quality pond plans previously prepared for Wells Branch Parkway Extension Section 2 to reflect the revised interim roadway design.

F. QA/QC *(Provided by CP&Y, Inc.)*

Perform a QA/QC review prior to submittal of Work Phase 1.

**2.1.2 WORK PHASE 2 - 90% PLAN SUBMITTAL**

The 90% complete drawings will be virtually "ready to bid" with minor revisions, no outstanding design issues, all work coordinated and illustrated on the drawing. This submittal will include design documents that incorporate the ultimate 6-lane and interim 4-lane configurations.

Total projected time for completion of Work Phase 2 will be no more than 60 calendar days. A detailed list of tasks follows.

**2.1.2.1 90% DESIGN PLANS**

A. ROADWAY PLANS *(Provided by CP&Y, Inc.)*

- a. Finalize proposed typical sections.
- b. Finalize plan and profile sheets. Add cut/fill quantities.
- c. Finalize design cross sections. Calculate the cut/fill quantities from these sections.

B. GRADING AND DETAILS *(Provided by CP&Y, Inc.)*

- a. Finalize ditch tables.

C. CROSS CULVERTS *(Provided by K Friese & Associates)*

- a. Update culvert layouts to reflect revised interim construction section.

D. DRAINAGE PLANS *(Provided by Unintech Consulting Engineers)*

- a. Finalize interior drainage area maps and run-off calculations.
- b. Finalize drainage plan and profile sheets for Section 2 depicting locations of inlets, manholes, storm sewers, culverts, utilities, channel improvements, and ditch locations and flowlines as required. Storm sewer profiles will be prepared at a scale of 1"=50' H and 1"=5' V. Storm sewer profiles will show pipe size and type, slope, existing and proposed ground lines above the pipe, pertinent hydraulic information, and locations and sizes of inlets and junctions.

E. EROSION CONTROL *(Provided by CP&Y, Inc.)*

- a. Update erosion control plans for the Section 2 interim construction. Temporary storm water management devices will be needed to minimize the sediment runoff during construction of this project. The anticipated design components to be utilized on this project are silt fence, sand bags, rock filter dams, sediment traps, and construction exits. One temporary erosion control plan will be developed with notes that indicate that the contractor is responsible for phasing the devices along with the construction sequencing. Permanent erosion control measures will be included on these sheets as well.
- b. Update the Storm Water Pollution Prevention Plan (SW3P) for this job in accordance with TCEQ regulations to include Section 2. These sheets will consist of the TxDOT SW3P text sheets that summarize erosion control measures.

F. SIGNING AND PAVEMENT MARKINGS *(Provided by CP&Y, Inc.)*

- a. Prepare Signing and Pavement marking layouts at a scale of 1"=50' for the interim configuration of Section 2. These layouts will depict striping and delineator type and location, as well as MBGF location,

lengths, and end treatments. Each sign will have a corresponding number that will relate that sign to the sign summaries.

- b. Detail sheets for small signs will be prepared for non-standard signs. This sheet is intended to show the overall dimensions of the signs by determining letter size and spacing. Details will not be to scale.

G. TRAFFIC SIGNAL DESIGNS *(Provided by Saenz+Bury Engineering)*

- a. Update traffic signal layout to reflect the revised interim construction section.

H. TRAFFIC CONTROL PLAN *(Provided by Aguirre & Fields, LP)*

- a. Traffic control typical sections will be prepared for each stage of the construction sequence to clearly delineate the position of the existing traffic with respect to the proposed construction. Temporary traffic barriers and pavement markings will also be shown and dimensioned.
- b. Update narrative for the sequence of construction to revise Section 2.
- c. Modify one (1) detailed traffic control plan sheet at a scale of 1"=50' for the east Killingsworth tie-in. This plan will describe the maintenance of traffic and sequence of work for each phase of the proposed construction. Location of work areas, temporary paving, signing, barricades and other details will be required to describe the traffic control plan. Temporary drainage will not be considered part of this scope of services.

I. QUANTITIES *(Provided by CP&Y, Inc.)*

Update quantities for each of the following and as necessary to bid this project and broken into separate totals for the base bid and two add alternate bids:

- a. Earthwork
- b. Roadway
- c. Traffic Signals *(Provided by Saenz+Bury)*

J. QA/QC *(Provided by CP&Y, Inc.)*

Perform a QA/QC review prior to submittal of Work Phase 2.

**2.1.3 WORK PHASE 3 - 100% PLAN SUBMITTAL**

The 100% design complete services will include final plans, specifications, estimates, bid quantities, and permits. This submittal will include complete plans for the ultimate 6-lane and interim 4-lane configurations assembled into a single plan set.

Total projected time for completion of Work Phase 3 will be no more than 35 calendar days. A detailed list of tasks follows.

**2.1.3.1 100% DESIGN PLANS**

A. PLAN SHEETS *(Provided by All)*

- a. Address all remaining comments.
- b. Issue final set of plan sheets in electronic format for plotting at the County print shop.

B. QA/QC *(Provided by CP&Y, Inc.)*

Perform a final QA/QC review prior to submittal of Work Phase 3.



## **2.2 MANAGEMENT TASKS (Provided by CP&Y, Inc.)**

### **2.2.1 PROJECT MANAGEMENT**

- A. Create and submit monthly invoices suitable for payment by the County.
- B. Prepare monthly progress reports for submission with the monthly invoices to provide a written account of the progress made to date on the project.

## **3 DELIVERABLES**

- 3.1 Completed specific work phase/plan stage documents for review.
- 3.2 Completed PS&E documents.
- 3.2 Transmit a letter stating completion of QA/QC process at each submittal signed by the Project Manager and QA/QC reviewer.
- 3.4 Engineer's Opinion of Construction costs, Project Schedule, & CPM, updated and submitted with each submittal, including at monthly invoicing.
- 3.5 All required permits to start and complete project.
- 3.6 Survey services with electronic and soft copy of survey on NAD 83 or as determined by Travis County.
- 3.7 Design calculations.
- 3.8 Electronic copy of above deliverables, where applicable (all drawings and e-files must be in MicroStation V8 format, as appropriate. A set of construction plans with engineer's PE seal and signature shall be provided in PDF format for bidding. Text documents must be in Microsoft Word or Excel format as applicable. Schedules and CPMs must be in Microsoft Project Gantt chart format with tracking).

## **ADDITIONAL SERVICES**

The following services are not included in this scope of work and can be provided as additional services if authorized by Travis County. Scope of Work and Compensation for Additional Services will be agreed to prior to their performance:

- Detention design or related calculations
- Any calculations or revisions to the existing ponds or water quality treatment system
- Interim roadway water quality ponds
- Landscape and Tree Protection sheets
- Utility relocations
- Bid and Construction phase services
- Hazardous site assessments