# Notice of Meeting for the Georgetown Transportation Advisory Board and the Governing Body of the City of Georgetown November 13, 2020 at 10:00 AM at Virtual

The City of Georgetown is committed to compliance with the Americans with Disabilities Act (ADA). If you require assistance in participating at a public meeting due to a disability, as defined under the ADA, reasonable assistance, adaptations, or accommodations will be provided upon request. Please contact the City Secretary's Office, at least three (3) days prior to the scheduled meeting date, at (512) 930-3652 or City Hall at 808 Martin Luther King Jr. Street, Georgetown, TX 78626 for additional information; TTY users route through Relay Texas at 711.

Consistent with Governor Greg Abbott's suspension of various provisions of the Open Meetings Act, effective August 1, 2020 and until further notice, to reduce the chance of COVID-19 transmission, all City of Georgetown Advisory Board meetings will be held virtually. Public comment will be allowed via teleconference; no one will be allowed to appear in person.

To participate, please copy and paste the following weblink into your browser:

Weblink:

Join Zoom Meeting

https://georgetowntx.zoom.us/j/96768013829

Meeting ID: 967 6801 3829

One tap mobile

+13462487799,,96768013829# US (Houston)

+16699006833,,96768013829# US (San Jose)

Dial by your location

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington D.C)

888 475 4499 US Toll-free

833 548 0276 US Toll-free

833 548 0282 US Toll-free

877 853 5257 US Toll-free

Meeting ID: 967 6801 3829

Find your local number: https://georgetowntx.zoom.us/u/a0vV0zlL

Citizen comments are accepted in three different formats:

- 1. Submit written comments to emily.koontz@georgetown.org by 3:00p.m. on the date of the meeting and the Recording Secretary will read your comments into the recording during the item that is being discussed.
- 2. Log onto the meeting at the link above and "raise your hand" during the item
- 3. Use your home/mobile phone to call the toll-free number

To join a Zoom meeting, click on the link provided and join as an attendee. You will be asked to enter your name and email address (this is so we can identify you when you are called upon). To speak on an item, click on the "Raise your Hand" option at the bottom of the Zoom meeting webpage once that item has opened. When you are called upon by the Recording Secretary, your device will be remotely un-muted by the Administrator and you may speak for three minutes. Please state your name clearly, and when your time is over, your device will be muted again.

Use of profanity, threatening language, slanderous remarks or threats of harm are not allowed and will result in your being immediately removed from the meeting.

## **Regular Session**

(This Regular Session may, at any time, be recessed to convene an Executive Session for any purpose authorized by the Open Meetings Act, Texas Government Code 551.)

- A Call to Order
- B Introduction of Board Members and Visitors
- C Updates to various planning initiatives by CAMPO and TxDOT transportation improvement projects as wells as an update on GoGeo Operations. Ray Miller, Public Works Director
- D Airport Monthly Report Joseph A. Carney, C.M., Airport Manager
- E November 2020 GTAB Updates Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager.

#### Legislative Regular Agenda

- F Consideration and possible action to approve the Minutes from the September 11, 2020 Meeting. -- Emily Koontz Board Liaison
- G Consideration and possible recommendation on Task Order KHA-21-001 with Kimley-Horn and Associates of Austin, Texas in the amount of \$1,583,144 for professional engineering services related to the expansion of DB Wood Road (SH29 to Oak Ridge) -- Wesley Wright, PE, Systems Engineering Director.

# **Certificate of Posting**

I, Robyn Densmore, City Secretary for the City of Georgetown, Texas, do hereby certify that	this Notice of
Meeting was posted at City Hall, 808 Martin Luther King Jr. Street, Georgetown, TX 78626, a	place readily
accessible to the general public as required by law, on the day of	_, 2020, at
, and remained so posted for at least 72 continuous hours preceding the schedule	d time of said
meeting.	
Robyn Densmore, City Secretary	

# City of Georgetown, Texas Transportation Advisory Board November 13, 2020

## **SUBJECT:**

Call to Order

#### **ITEM SUMMARY:**

### **FINANCIAL IMPACT:**

NONE

# **SUBMITTED BY:**

Emily Koontz - Board Liaison

# City of Georgetown, Texas Transportation Advisory Board November 13, 2020

#### **SUBJECT:**

Updates to various planning initiatives by CAMPO and TxDOT transportation improvement projects as wells as an update on GoGeo Operations. - Ray Miller, Public Works Director

#### **ITEM SUMMARY:**

#### **FINANCIAL IMPACT:**

N/A

#### **SUBMITTED BY:**

Ray Miller, Jr., Acting Director of Public Works

## **ATTACHMENTS:**

Description Type

□ Meeting Memo Backup Material



#### **M**EMORANDUM

TO: Georgetown Transportation Advisory Board Members

FROM: Ray Miller, Jr., Director of Public Works

SUBJECT: Industry / CAMPO / TxDOT / Transit Updates – September 11, 2020 Meeting

DATE: September 4, 2020

The purpose of this memo is to provide GTAB with updates in regard to the subjects listed above.

#### CAMPO - NA

#### **TXDOT**

#### - Mobility-35 Projects (my35.org):

#### i. IH-35 and Williams Drive

- Reconstruct the Williams Drive interchange to a diverging diamond intersection (DDI)
- Construct north and southbound intersection bypass lanes under Williams
   Drive bridge
- Extend the northbound I-35 frontage road from Williams Drive to the Lakeway
   Drive exit ramp
- Improve bicycle and pedestrian paths along the I-35 frontage roads
- A contract has been awarded to JD Abrams, Inc. Construction should begin in late this Fall. Estimated completion is in mid-2023
- Estimated Construction Cost is \$52 million
- http://ftp.dot.state.tx.us/pub/txdot/my35/capital/projects/williams-drive/schematic.pdf



#### ii. IH-35 from FM 2243 (Leander Road) to SE Inner Loop

- Replace existing bridge at RM 2243 with a taller, wider bridge that includes three additional designated turn lanes
- Add braided entrance/exit ramps along the southbound I-35 frontage road between RM 2243 and SE Inner Loop
- Provide a northbound to southbound U-turn bridge
- Improve bicycle and pedestrian sidewalks and paths
- Construction is estimated to begin fall of 2023 with an anticipated completion the fall of 2025
- http://ftp.dot.state.tx.us/pub/txdot/my35/capital/projects/rm2243/layout.pdf

#### iii. <u>IH-35 and Westinghouse (IH-35 from SE Inner Loop to FM 1431)</u>

- Remove Westinghouse Road bridge and construct new I-35 bridge over Westinghouse Road
- Construct westbound to southbound Continuous Flow Intersection (CFI) at Westinghouse Road
- Reverse entrance/exit ramps along the southbound I-35 frontage road between
   SE Inner Loop and RM 1431
- Improve bicycle and pedestrian sidewalks and paths
- Construction is estimated to start spring 2023 with an anticipated completion in winter 2025
- <a href="http://ftp.dot.state.tx.us/pub/txdot/my35/capital/projects/rm2243-rm1431/layout.pdf">http://ftp.dot.state.tx.us/pub/txdot/my35/capital/projects/rm2243-rm1431/layout.pdf</a>

#### iv. <u>IH-35 and SH-29</u>

- Improve safety and mobility to:
  - · Improve traffic flow due to a high volume of left-turning traffic
  - · Accommodate turning movements onto and from SH 29
  - · Eliminate the need for left-turn bays and left-turn signal phases
  - Minimize the number of potential conflicts between through traffic and left-turn traffic
- Mainlane and frontage road improvements
- Intersection bypass lanes
- Replacing and widening the SH 29 bridge
- Construction is estimated to begin in late 2023 dependent on funding



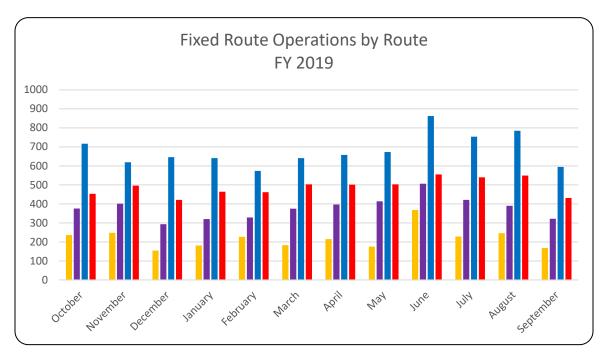
#### Other Projects in Georgetown and surrounding area (in design or ready to go to construction)

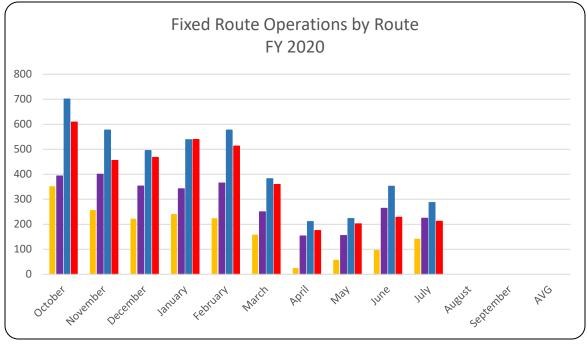
- SH-29 & DB Woods: Project will add turn lanes on both SH-29 and DB Woods, install a concrete median along SH-29 and improve drainage at the intersection. Construction is estimated to begin in mid- 2020. Estimated construction cost is \$5.7 million
- Leander Road (FM 2243) from Norwood Drive to Southwest By-Pass: Construct a 4-lane divided roadway with improved sidewalks on the north side of the roadway. Construction is estimated to begin in late 2022. Estimated construction cost is \$8.8 million. HAS BEEN PUSHED BACK - FUNDING
- IH-35 at Ronald Reagan: Replace over pass bridge and approaches. Estimated construction cost is \$12.6 million.
- IH-35 from Corn Hill (Bud Stockton Loop) to FM 972: Convert frontage road from 2-way to 2 lanes one way. Estimated construction cost is \$10.9 million.
- RM 620 from Deepwood Drive to IH-35; Construct new 4-lane overpass at Georgetown Road and Lake Creek. Estimated construction cost is \$21.5 million.
- FM 971 from Austin Avenue to Gann Street: Realignment of FM 971 to match Northwest Blvd extension and upgrade from 2-lanes to 4-lanes divided. Estimated construction cost is \$3.3 million.
- IH 35 from south of Lakeway to south of Williams Drive: Add 3-lane one-way NB frontage road. Estimated construction cost is \$18 million.
- US 183A from Hero Way to SH-29: Construct 4-lanes tolled expressway. Estimated construction cost is \$259 million.



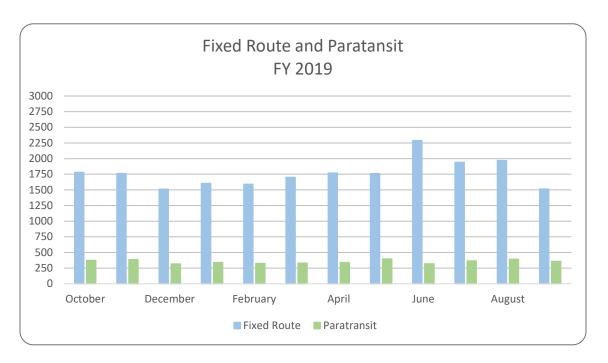
#### Transit - GoGeo

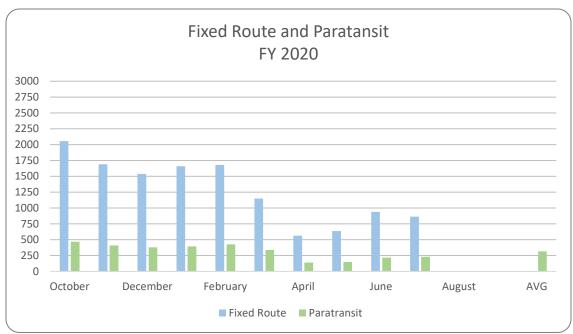
The  $1^{st}$  and  $2^{nd}$  charts show the number of riders by route and by month of the fiscal year. The  $3^{rd}$  and  $4^{th}$  charts provide ridership numbers by month and fiscal year for both the Fixed Route system and the Paratransit service. The Fixed Route system in shown in blue while the paratransit service is shown in green.













Fixed Route Comparison by FY						
	FY 2018	FY 2019	FY 2020			
October	1575	1782	2050			
November	1324	1764	1689			
December	1329	1514	1537			
January	1255	1606	1660			
February	1298	1592	1679			
March	1611	1702	1149			
April	1440	1771	564			
May	1628	1765	638			
June	1916	2291	941			
July	2026	1943	865			
August	1991	1970				
September	1582	1516				
Total	18975	21216	12772			
AVG	1581	1768	1277			



# Fiscal Year 2020 GoGeo Fixed Route Performance Measures (Oct 2019 - Jul 2020)

Passengers Per Revenue Hour	Actual Performance	FY 20 Target
Orange & Purple Routes	2	6
Blue & Red Routes	3	6
Fare Recovery Ratio	Actual Performance	FY 20 Target
Orange & Purple Routes	2%	6%
Blue & Red Routes	4%	6%
Cost Per Passenger	Actual Performance	FY 20 Target
Orange & Purple Routes	\$57	\$12
Blue & Red Routes	\$26	\$12
Cost Per Revenue Hour	Actual Performance	FY 20 Target
Orange & Purple Routes	\$79	\$87
Blue & Red Routes	\$79	\$87
On-Time Performance	Actual Performance	FY 20 Target
Orange & Purple Routes	94%	95%
Blue & Red Routes	93%	95%
Ridership	Actual Performance	FY 20 Target
Orange & Purple Routes	4,675	20,000
Blue & Red Routes	8,102	20,000
Total Fixed Route	12,777	40,000
Total Paratransit	3,163	N/A
Total Fixed Route and Paratransit Ridership	15,940	N/A
Average Daily Fixed Route Ridership	53	N/A

# City of Georgetown, Texas Transportation Advisory Board November 13, 2020

#### **SUBJECT:**

Airport Monthly Report – Joseph A. Carney, C.M., Airport Manager

#### **ITEM SUMMARY:**

#### **Airport Reports:**

- Taxiway Edge Lighting Project Update
- Operations Report (October 2020)
- Fuel Sales Report (October 2020)
- Hangar/Tie-Down Report
- FY21 Accomplishments and Projects
- AvGas Fuel Price Comparison
- Jet A Fuel Price Comparison
- Airport Monthly Financial Report (Spreadsheet and Budgeting Report)

### **FINANCIAL IMPACT:**

None

#### **SUBMITTED BY:**

Joseph A. Carney C.M., Airport Manager

#### **ATTACHMENTS:**

	Description	Type
D	Taxiway Lighting Project	Backup Material
D	Airport Operations	Backup Material
D	Airport Fuel Sales Report	Backup Material
D	Airport Hangar Tie-Down Report	Backup Material
D	FY21 Accomplishments	Backup Material
D	Avgas Fuel Comparison	Backup Material
D	Jet A Fuel Comparison	Backup Material
D	Airport Financial Summary	Cover Memo
D	Airport Financial Spreadsheet	Cover Memo

# Airport Improvements Project No. 1914GRGTN November 2020

**Project Description** FY2018 project: Taxiway Edge Lighting Project

Purpose Design and Install Taxiway Edge Lighting Project

Project Estimate \$1,287,562

**Project Bid (F&W)** \$985,150

**City Share** \$98,515

**Project Engineer** Garver Engineering



**Feb 2014** – GTAB consideration of project 1314GRGTN Preliminary Design for FY2014 project: Airfield Electrical Improvements.

**Aug 8, 2018** Georgetown Municipal Airport requests to use Garver as project engineer in letter to TxDOT

**May 29, 2019** TxDOT advises Garver that they can proceed with the Final Design for Project 1914GRGTN

May 29, 2019 Pre Design/Design meeting at Georgetown Municipal Airport Conference room with Airport Manager, TxDOT, and Garver to go over time line for design and contract documents.

June 14, 2019 GTAB consideration of project 1914GRGTN Taxiway Lighting Project.

June 25, 2019 City Council approved project

**July 9, 2019** Meeting with TxDOT, Engineer Bid Estimate was \$2,862,980.00 which is \$1,575,418.00 over the CIP Budgeted amount.

July 16, 2019 Meeting with TxDOT and Garver to discuss options for reducing cost.

**July 30, 2019** Meeting with TxDOT and Garver to discuss proposal that will be submitted for final design.

August 4 & 11, 2019 TxDOT will place ads in local newspapers for bids.

**August 30, 2019** Bid Opening at TxDOT, 4 companies submitted bids. The engineer of record, GarverUSA, is currently reviewing the bid documents for completeness and correctness.

**September 2019** There were 4 bids, one of which came in significantly under budget for the Base Bid. Garver Engineer was working with TxDOT to see if there was a possibility of pulling the PAPI lights for RWY 11/29 out of the additive alternate while staying under budget. TxDOT refused. Engineer is working on final work in conjunction with TxDOT.

**October 29, 2019** TELCON 10/31/19 with Garver, F&W. TxDOT and Airport. Contract will be fully executed 11/1/19 between TxDOT and F&W for the Taxiway Lighting Project (1914GEORG). There will be walk through 11/13/19 with all parties to get an eyes-on look and discuss phasing ideas.

November 12, 2019 Executed contract between TxDOT and F&W Electrical.

November 13, 2019 Notice to Proceed given to GarverUSA for construction phase

**November 13, 2019** Notice to Procure given to F&W to start gathering necessary parts and tools.

**December 16, 2019** F&W Started to preposition equipment and materials.

January 6, 2020 F&W Started construction. Working from North to South.

**February 25, 2020** Work on Twy A btwn the threshold RWY 18 and TWY J is complete along the west side. Complete to TWY E on the east side. Work complete TWY L from TWY G to threshold RWY 36.

**March 6, 2020** Work on TWY L south of RWY 11/29 complete except marking signs. Work is progressing on TWY F between TWY L and TWY A and should be complete by March 9, 2020. Anticipated work on TWY A and the west side of Terminal Ramp to begin March 6, 2020.

**May 2020** Work was stopped due to supply system hold up: Sign faces and ALCMS hardware/software.

**July/August 2020** Sign faces arrived at F&W. ALCMS will be upgraded on August 11 remotely and via local hands-on with F&W Techs. Final punch-list items will be completed by F&W in this time period.

Areas left to complete:

- 1. All dirt work to include topsoil, grass seeding and gravel/rock removal.
- 2. Missing sign faces

**Project timeline overruns** This has been asked of TxDOT. TxDOT would be the agency that processes the penalties against F&W, who then could process penalties against any of the subcontractors.

**September/October 2020** F&W working on final dirt work, filling in low spots with clean fill and establishing correct grade around light/sing bases. Seeding all dirt with clean field grass seed.

**October 23** GarverUSA hosted a "Lessons Learned" meeting with TxDOT, Garver, Airport Staff, and City Representative.

October 30 GarverUSA sent email to F&W concerning final wrap up of the punch list items.

### **Projected timeline**

- Construction phase January March
- Closeout Phase 68 days post construction
  - o Significant Completion Date is March 14, 2020
- At last count there were 9 weather days accrued

# Georgetown Municipal Airport Contract Tower Program Update Operations for Month of October 2020



	KGTU OPERATIONS FOR THE MONTH OF: OCTOBER					
TAKEOFF/L	MONTHIV	NIIMBEDS	YEAR TO	YEAR TO	PREVIOUS	S/CURRENT
ANDING	MONTHLY NUMBERS		DATE	DATE	`	<b>/</b> R
ANDING	2019	2020	2019	2020	COUNT	%
IFR	944	991	944	991	47	4.7%
VFR	3720	4199	3720	4199	479	11.4%
LOCAL	5642	6142	5642	6142	500	8.1%
TOTAL	10306	11332	10306	11332	1026	9.1%

<sup>\*</sup>This does not include flyover operations (i.e. handoffs from ABIA approach/departure control to KGTU tower then onto the next ATC.

# Georgetown Municipal Airport Fuel Sales Update For Month of October 2020



	FUEL REPORT FOR MONTH OF: OCTOBER					
TYPE OF	GALLONS SOLD FOR		YEAR TO	YEAR TO	AR TO CHANGE	
FUEL	МО	NTH	DATE	DATE	PREVIOUS/C	URRENT YR
TOLL	2019	2020	2019	2020	GALLONS	%
AVGAS	30,772	37,668	30,772	37,668	6,896	22.4%
JET A	37,188	42,332	37,188	42,332	5,144	12.2%
TOTALS	67,960	80,000	67,960	80,000	12,040	15.1%

# Airport Hangar / Tie-Down Lease Update November 2020

**Project Description** Hangar / Tie-Down Lease Agreements

Purpose Occupancy Rates

#### **Unit Stats**

Total T-Hangars – 130

- 128 Occupied
- 2 Vacant

Time on Wait-list for most recent tenant

• 5 years, 5 Months

Total Storage Units – 16

- 11 Occupied
- 5 Vacant

Total Tie-Downs – 39 Monthly, 8 for Overnight/Transient Parking

- 34 Monthly Occupied
- 4 Monthly Vacant
- 1 as last resort due to location

	T-Hangars	Storage Hangars	Tie-Downs	Total
Total	130	16	39	185
Occupied	128	11	34	173
		Percenta	ge Occupied	93.51%

# **GTU Airport FY 2020**

# **In-Work Projects**

Develop Airport Preventative Maintenance Program. Ongoing

Wildlife Hazard Assessment completed by Lou Bridges with Mead & Hunt. Draft at City Attorney's Office for review

Upgrade to bi-fold door drive motors in Hangars BB & CC. On Hold – COVID-19

Install cattle guard at north gate. Working on getting quotes, will be using CARES Act moneys for repayment

Install roller poppers in Hangar I Parts on Hand

Purchase of 1 80 kW backup generator for the Runway/Taxiway light system and the Terminal building Requisition submitted thru WorkDay for a Purchase Order

Fuel System Maintenance Contract Purchase Order process started September

South Hangar Drive; Hauling Dirt Pile In process of moving.

Taxiway Lights for TWY F and M On hand, will be installed time permitting.

# **Planned Projects**

Obtaining Pesticide Application License to allow for airport staff to spray state regulated chemicals.

Replace broken fence along Lakeway Drive.

Replace HVAC units in AeroJet Center hangar.

Install chain link fence around Tower. CARES Act

Convert lights in Hangars E, F, and G to LED.

Convert lights in CTA hangar to LED.

Spray seal asphalt pavement at north side of AeroJet Center hangar.

Spray seal asphalt pavement at Hangars H, I, and J.

Crack seal asphalt pavement at CTA hangar.

Install cattle guard at south gate.

Install decorative rock around AST and oil recovery tank fences.

# **Accomplishments**

Rekeyed all locks in the Air Traffic Control Tower (ATCT) for added security and to simplify the number of access keys needed. The locks have not been changed since the ATCT's opening in 2007.

Added a magnetic dry erase whiteboard to the north wall of the Airport Conference Room.

Repainted Airport Manager's Office and Communication Room in Terminal building.

Installed rain diverters to tin covered walkway in front of Terminal entrance.

Removed vegetation and installed predator wire on fence south of runway 11/29 for wildlife management.

Tree and brush removal completed at Genesis.

Inspected roof insulation in CTA hangar. No repair needed.

Installed timer switches in Hangar I.

Installed lending library bookcase in terminal conference room.

Inspected door rollers on Genesis hangar. No replacement needed.

Installed tv/monitor for use in Airport Conference Room.

Installed gun cabinet in maintenance shop for wildlife management.

Installed folding wall desk for laptop use with tv/monitor in Airport Conference Room.

Replaced 48 skylights on AeroJet Center's east hangar roof.

Repaired leaking roof above Hangar C-4.

Replaced HVAC units in CTA hangar.

Laid asphalt millings around Runway 36 PAPIs and Runway 11/29 threshold end lights.

Poured three concrete dumpster pads. Two at Genesis hangar and one at CTA hangar.

Installed network wiring in Airport Conference Room for phone and PC while IT Department procured the equipment.

Replace water heaters in CTA hangar.

Remove vegetation and install predator wire on fence near Genesis hangar.

Replace gutter and dilapidated panels on side of CTA hangar.

Repair failed ramp at Genesis hangar.

Updated Texas Agriculture Weights & Measures Certificate/License

Repave Terminal Drive with new asphalt.

Paint CTA hangar.

AvFuel Fuel Contract Extension.

Tree and brush removal at retention pond drainage area.

Airport fuel rate study.

Replace bottom door seals on Hangars H, I, J, and TT.

Upgrade cable guides with roller poppers in Hangar H.

Airport lease rate study.

502 Wright Brothers Drive Land Lease

CAP Lease for TT Hangar with rate reduction

2021 Budget

Tower Alarm Install

Tower CAB computer monitor replacement





**Airports** 

**Navaids** 

Airspace Fixes Aviation Fuel

**Hotels** 

iPhone App

My AirNav

1541 users online

# 100LL Avgas prices within 50 miles of KGTU

100LL

Airport / FBO

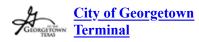
\$3.19—\$6.70 average \$4.24

KGTU Georgetown Municipal Airport Georgetown, TX













25-Oct update







**AVFUEL** FS \$4.75 GUARANTEED

T74

Taylor Municipal Airport Taylor, TX

14 ESE **Taylor Municipal Airport**  Avfuel

SS \$3.25

19-Oct <u>update</u>

18 SSE

Austin Executive Airport Austin, TX







\$5.30

PHILLIPS 66® update

KRYW Lago Vista TX - Rusty Allen Airport Lago Vista, TX 18 SW Lago Vista Airport

independent SS \$3.19

15-Oct update

Skylark Field Airport Killeen, TX **KILE** 

Flight Line Services

Avfuel

\$3.35

20-Oct <u>update</u>

3R9 25 SW

Lakeway Airpark Lakeway, TX

Lakeway Airpark

SS \$3.75

29-Oct update

88R **26 WSW**  Spicewood Airport Spicewood, TX



NAVFUEL SS

\$3.75

28-Oct update

Page 23 of 80

<b>KAUS</b>	Austin-Bergstrom International Airport Austin, T	X		
29 S	ATL NTIC independent	<u>FS</u>	\$6.52	01-Nov <u>update</u>
				<del></del>
	MILLION AIR World	<u>FS</u>	\$6.39	GUARANTEED RAIRBOSS
	Signature Flight Support independent	<u>FS</u>	\$6.70	28-Oct <u>update</u>
KBMO	Burnet Municipal Airport-Kate Craddock Field E	Burnet	t, TX	
29 W	Faulkner's Air Shop Avfuel	<u>SS</u> <u>FS</u>	\$3.30 \$3.80	19-Oct <u>update</u>
KTPL	Draughon-Miller Central Texas Regional Airport	Tem	ple, TX	
32 NNE	General Aviation Terminal	$\frac{SS}{FS}$	\$3.41 \$3.79	26-Oct <u>update</u>
KRCK	H H Coffield Regional Airport Rockdale, TX			
36 E	City of Rockdale	<u>AS</u>	\$3.80	28-Oct <u>update</u>
KDZB	Horseshoe Bay Resort Airport Horseshoe Bay, T2	X		
36 WSW	Horseshoe Bay Resort Jet Center EPIC	<u>FS</u>	\$5.49	28-Oct <u>update</u>
KLZZ	Lampasas Airport Lampasas, TX			
37 NW	City of Lampasas (FBO)	<u>SS</u>	\$3.50	GUARANTEED
KGOP	Gatesville Municipal Airport Gatesville, TX			
45 N	<u>City of Gatesville</u> independent	<u>SS</u>	\$3.80	19-Oct <u>update</u>
84R	Smithville Crawford Municipal Airport Smithville	e, TX		
47 SE	Fayette Aero LLC Avfuel	<u>SS</u>	\$3.71	29-Oct <u>update</u>
KGYB	Giddings-Lee County Airport Giddings, TX			
47 SE	Sills Aviation Services LLC	<u>SS</u>	\$3.42	22-Oct <u>update</u>
KHYI	San Marcos Regional Airport Austin, TX			
48 SSW	BERRY AVIATION, INC	<u>SS</u> <u>FS</u>	\$4.09 \$5.09	29-Oct update
50R	Lockhart Municipal Airport Lockhart, TX			
50 S	Martin & Martin Aviation Avfuel	<u>SS</u>	\$3.75	28-Oct <u>update</u>

Page 24 of 80

Copyright  $\ensuremath{\mathbb{O}}$  AirNav, LLC. All rights reserved.

Privacy Policy Contact

Page 25 of 80





Designed to be lightweight. (LEARN MORE Proven to be durable.

**Airports** 

**Navaids** 

Airspace Fixes Aviation Fuel

**Hotels** 

iPhone App

My AirNav

1542 users online **COURT** 

# Jet A prices within 50 miles of KGTU

Jet A

Airport / FBO

\$2.85-\$6.46 average \$4.50

KGTU Georgetown Municipal Airport Georgetown, TX







AeroJet AeroJet Center



**SAVFUEL** FS \$4.31 GUARANTEED

T74 14 ESE Taylor Municipal Airport Taylor, TX

**Taylor Municipal Airport** 

Avfuel

**SS** \$2.85

19-Oct update

KEDC

Austin Executive Airport Austin, TX

18 SSE



\$5.46

update



**KILE** 24 N

Skylark Field Airport Killeen, TX

Flight Line Services

Avfuel

\$3.30 \$3.90

20-Oct <u>update</u>

29 S

KAUS Austin-Bergstrom International Airport Austin, TX

01-Nov <u>update</u>





\$6.45 GUARANTEED \* AIRBOSS



Signature Flight Support

independent **FS** \$6.45

29-Oct update

KBMQ Burnet Municipal Airport-Kate Craddock Field Burnet, TX 29 W

Faulkner's Air Shop

Avfuel

\$3.86 \$3.86

19-Oct <u>update</u>

Page 26 of 80

KTPL 32 NNE	Draughon-Miller Central Texas Regional Airport General Aviation Terminal	Temp	ple, TX \$3.57 \$3.95	26-Oct update
KDZB 36 WSW	Horseshoe Bay Resort Airport Horseshoe Bay, T Horseshoe Bay Resort Jet Center EPIC	X <u>FS</u>	\$4.99	28-Oct <u>update</u>
KGYB 47 SE	Giddings-Lee County Airport Giddings, TX Sills Aviation Services LLC	<u>SS</u>	\$3.90	22-Oct <u>update</u>
KHYI 48 SSW	San Marcos Regional Airport Austin, TX  BERRY AVIATION, INC  AN ACORN ORDWITH COMPANY	- <u>FS</u>	\$4.37	29-Oct update

Copyright © AirNav, LLC. All rights reserved.

Privacy Policy Contact

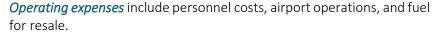


# GTAB MONTHLY REPORT AS OF OCTOBER 31, 2020

*Operating revenues* include fuel sales, leases, and all other revenue. During the month of October operating revenues totaled \$289,641.

Fuel is the largest revenue stream in the fund and represents 72.4% of budgeted operating revenues. Through the month, fuel sales total 7.8% of the fuel budget. Fuel sales are tracked every month by staff and are part of the Airport's performance metrics.

Lease and rental revenue is the second largest stream of income for the Airport. It represents 26.2% of budgeted operating revenues. Through the period, lease and rental revenue totals \$77,8922 or 8.6% of budgeted lease and rental revenues. Occupancy rates continue to be strong. The stated goal per the Airport performance management program is to have occupancy rates over 90%. During fiscal year 2020, the Airport has achieved this goal.



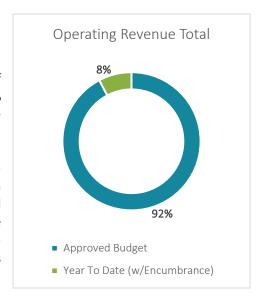
Airport operating expenses total \$3,543,120 and are comprised of personnel costs, operational expenses, and on-going capital maintenance items. Personnel related expenses total \$29,331, or 6.9% of budget. The City has experienced 2 of 26 pay periods through this period, or 7.7% of total cycles. Other airport operational related expenses include internal service and administrative allocation charges, funding for maintenance, and other expenses like credit card fees and contracts for service.

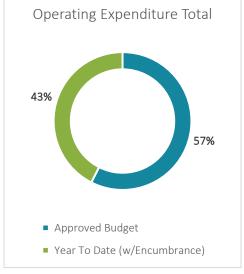
Fuel related expenses are comprised of year to date spending plus the fuel encumbrance. Year to date spending totals \$138,348 through the month. A \$2.1 million encumbrance for fuel was established at the beginning of the fiscal year. Throughout the fiscal year, the

encumbrance amount will be reduced as the year to date spend amount increases.

Non-operating revenues budget includes a total of \$700,500 for Bond Proceeds for the year.

Non-operating expenses have a total budget of \$903,931, year to date no spending has been done.





Ledger Account	Approved Budget	Current Period	YTD Actuals	YTD Encumbrance	Year To Date (w/Encumbrance)
Beginning Fund Balance	1,219,047	-	1,219,047	-	1,219,047
Operating Revenue					
Fuel and Terminal Sales	2,502,000	211,720	211,720	-	211,720
Interest and Other	47,500	, -	-	-	-
Grant Revenue	· =	-	-	-	=
Leases and Rentals	906,500	77,922	77,922	-	77,922
Operating Revenue Total	3,456,000	289,641	289,641	-	289,641
Operating Expenditures					
Operations-Fuel	2,100,000	138,348	138,348	1,971,606	2,109,954
Operations-Non Fuel	943,013	20,483	20,483	460,336	480,819
Personnel	425,107	29,331	29,331	-	29,331
CIP Maintenance Expense	75,000	-	-	-	-
Operating Expenditures Total	3,543,120	188,162	188,162	2,431,942	2,620,104
Total Net Operations	(87,120)	101,479	101,479	(2,431,942)	(2,330,462)
Non-Operating Revenue					
Bond Proceeds	700,500	_	_	<u> </u>	_
Non-Operating Revenue Total	700,500	-	-	-	-
Non-Operating Expenditures					
CIP Expense	750,000	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Debt Service	105,313	-	-	-	-
Interest Expense	53,618	-	-	-	-
Non-Operating Expenditure Total	908,931	-	-	-	-
Total Net Non-Operations	(208,431)	-	-	-	-
Excess (Deficiency) of Total Revenue over	(295,551)	101,479	101,479	(2,431,942)	(2,330,462)
Total Requirements	(293,331)	101,479	101,479	(2,431,942)	(2,330,402)
Ending Fund Balance	923,496	101,479	1,320,526	(2,431,942)	(1,111,415)
Passanias					
Reserves Contingency Reserve	332,917		332,917		332,917
Debt Service Reserve	332,917 141,478	-	332,917 141,478	<del>-</del>	332,917 141,478
Total Reserved Fund Balance	474,395	<del>-</del>	474,395	<u> </u>	474,395
Available Fund Balance	449,101	101,479	846,131	(2,431,942)	(1,585,810)

# City of Georgetown, Texas Transportation Advisory Board November 13, 2020

#### **SUBJECT:**

November 2020 GTAB Updates - Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager.

#### **ITEM SUMMARY:**

#### **November 2020 GTAB Updates Cover Sheet**

#### FM 971 - Realignment at Austin Avenue:

- TxDOT review from district office underway
- Environmental complete and submitted.
- Utility relocates to be completed outside of this project. Chasco is underway with Utility relocates.
- Final ROW parcel preparing for closing.
- Staff is coordinating with TxDOT to prepare a schedule for bidding in 2021.

#### **Northwest Blvd:**

- Utility work complete
- Roundabout at Rivery is operational
- Sub Grade prep complete base course underway
- Bridge bent caps complete
- Beam set complete
- East MSE complete, West MSE under construction 95%
- Estimated completion Spring 2021.

#### **Southwestern Blvd:**

- Preliminary alignment revised
- Performing Hydrologic and Hydraulic calculations
- · Beginning ROW appraisal and acquisition

#### SE Inner Loop: This section to bid first quarter of 2020

• Construction begin in October

#### 17<sup>th</sup> St. CDBG Sidewalk:

- Project effectively complete
- One additional bus shelter being added
- Contractor has completed TDLR inspection corrections needed for the project.

#### 2020 Curb and Gutter

- Project in design, reviewing 90% plans.
- Bidding to start late 2020/early 2021.

#### Rock Sidewalk / FY20 Downtown ADA sidewalk Improvements

• Project in design.

• Tentatively to bid late November, with construction starting after the new year once awarded and approved.

## **FINANCIAL IMPACT:**

N/A

D

## **SUBMITTED BY:**

Chris Pousson

# **ATTACHMENTS:**

DescriptionTypeNovember 2020 GTAB UpdatesPresentation

#### November 2020 GTAB Updates Cover Sheet

#### FM 971 - Realignment at Austin Avenue:

TxDOT review from district office met 100% plans Klotz submitted. Environmental complete and submitted. Utility relocates to be completed outside of this project. Chasco is underway with Utility relocates.

Utility relocates underway

Final parcel preparing for closing

#### **Northwest Blvd:**

- Utility work complete
- Roundabout received final pavement lift 9-26
- Sub Grade prep complete base course underway.
- Bridge bent caps complete.
- Beam set complete
- East MSE complete, West MSE under construction 95%.
- Estimated completion Spring 21.

#### **Southwestern Blvd:**

- Preliminary alignment revised
- Performing Hydrologic and Hydraulic calculations
- ROW needs forwarded to Travis

#### SE Inner Loop: This section to bid first quarter of 2020

Construction begin in October Message Boards and signage being placed.

#### 17th St. CDBG Sidewalk:

Change order being processed for 1 bus shelter. Contractor has completed TDLR inspection corrections needed for the project.

#### 2020 Curb and Gutter

Project in design, reviewing 90% plans. Bidding to start in November 2020.

## Rock Sidewalk / FY20 Downtown ADA sidewalk Improvements

Project in design. Tentatively to bid late November, with construction starting after the new year once awarded and approved.

## FM 971 at Austin Avenue Realignment Intersection Improvements Project No. 1BZ TIP No. AG

November 2020

**Project Description** Design and preparation of final plans, specifications and estimates (PS&E) for the

widening and realignment of FM 971 at Austin Avenue, eastward to Gann Street.

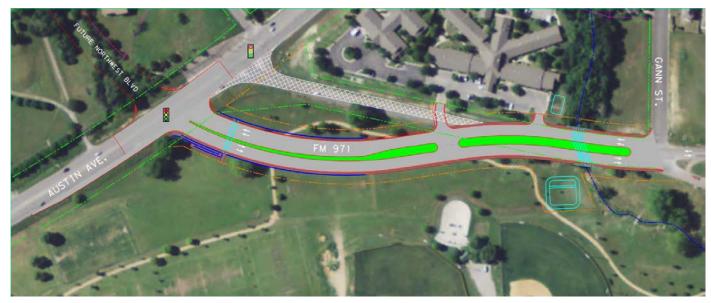
Purpose To provide a new alignment consistent with the alignment of the proposed

Northwest Boulevard Bridge over IH 35; to allow a feasible, alternate route from the west side of I 35 to Austin Avenue, to Georgetown High School, to San Gabriel

Park and a more direct route to SH 130.

**Project Managers** Joel Weaver

**Engineer** Klotz Associates, Inc.



Element	Status / Issues
Design	TxDOT review from district office met 100% plans Klotz submitted.
	Environmental complete and submitted. Utility relocates to be completed
	outside of this project. Chasco is underway with Utility relocates.
	Estimated bid 2nd quarter 2020 est completion late 2021
Environmental/	TBD
Archeological	
Rights of Way	Final parcel preparing for closing
Utility Relocations	TBD
Construction	Utility relocation underway
Other Issues	AFA with TxDOT complete.

## Northwest Boulevard (Fontana Drive to Austin Avenue) Project No. 5QX TIP No. AF November 2020

Project Description Construction of overpass and surface roads to connect Northwest Boulevard with

Austin Avenue and FM 971.

Purpose This project will relieve congestion at the Austin Avenue/Williams Drive

intersection and provide a more direct access from the west side of IH 35 corridor to

Georgetown High School and SH 130 via FM 971.

**Project Manager** Joel Weaver and Wesley Wright, P.E.

**Engineer** Klotz Associates



Element	Status / Issues					
Design	Design Complete					
Environmental/	Complete					
Archeological						
Rights of Way	ROW Documents are being finalized. All offers have been made. 8 Parcels					
	required. 5 acquired, 1 in closing, 2 in condemnation.					
<b>Utility Relocations</b>	TBD					
Construction	Utility work complete					
	Roundabout received final pavement lift 9-26					
	Sub Grade prep complete base course underway.					
	Bridge bent caps complete.					
	Beam set complete					
	East MSE complete, West MSE under construction 95%.					
	Estimated completion Spring 21.					
Other Issues						

# Widening of: SE Inner Loop - FM 1460 to Austin Avenue Roadway & Southwestern Boulevard – Raintree Drive to SE Inner Loop Roadway November 2020

**Project Description** 

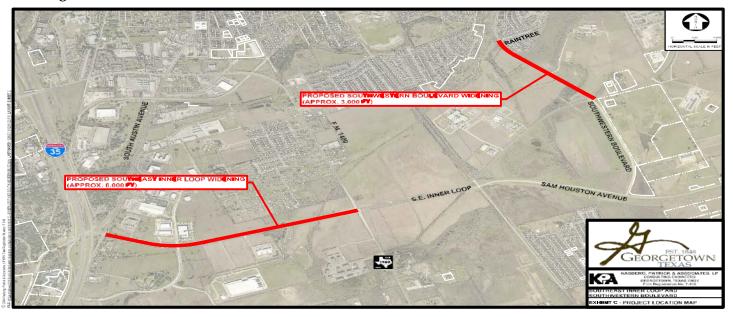
FM 1460 to Austin Avenue Roadway Widening Project & Southwestern Boulevard – Raintree Drive to SE Inner Loop Roadway Widening Project (See Attached Exhibit C). The professional services will consist of providing final roadway, drainage, water, wastewater, incidental designs, as well as, utility coordination, ROW support, environmental phase I investigations, archeological investigations, geotechnical investigations, ROW & Temporary Construction Easement (TCE) metes and bounds documents, bidding documents, bidding services, and construction administration services.

**Project Managers** 

Joel Weaver and Wesley Wright, P.E.

Engineer

**KPA & Associates** 



Element	Status / Issues		
Design	Southwestern:		
	Preliminary alignment revised		
	Performing Hydrologic and Hydraulic calculations		
	<ul> <li>ROW needs forwarded to Travis</li> </ul>		
	SE Inner Loop:		
	Construction begin in October Message Boards and	d signage being	g
	placed.		
Environmental/	Efforts to begin April 2019 and any issues are expected to be identified in the		
Archeological	coming month.		
Rights of Way	ROW needs on Southwestern to be determined	Total Parcels:	0
		Possession:	0
		Pending:	0
<b>Utility Relocations</b>	To be determined		
Construction			
Other Issues	None.		

# 17<sup>th</sup> St CDBG Sidewalks (Railroad to Forest St) Project No. 9AZ TIP No. November 2020

**Project Description** Construction of new sidewalk along 17th St from Railroad to Forest St. Improving the

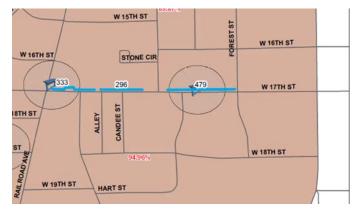
two GoGeo bus stops on that route.

Purpose This project will improve the pedestrian route connecting existing low income

housing to important community services and destinations.

**Project Manager** Chris Logan

**Engineer** KPA



Element	Status / Issues							
Design	<ul> <li>Task order is fully executed for the engineering services. Design underway</li> <li>Survey is complete, working on preliminary alignment</li> <li>Final Design – complete by early July</li> <li>Bidding – Complete by mid August</li> </ul>							
Environmental/	Complete							
Archeological								
Rights of Way	Working on 90% plans. Survey identified some ROW lines that need cleaning up at the Rail							
	Apts.							
<b>Utility Relocations</b>	TBD							
Construction	Change order being processed for 1 bus shelter. Contractor have completed							
	TDLR violations to comply with ADA standards.							
Other Issues								

# **2020 Curb and Gutter Project No.** PRJ000024 **TIP No.** None

#### November 2020

Project Description Design and preparation of final plans, specifications and estimates (PS&E) and

construction administration for curb and gutter replacements on Meadowbrook

Drive, Oakland Drive and Ridge Oak Drive.

Purpose This project consists of removing and replacing old curb and gutter that do not

properly drain storm water and prematurely damage streets.

**Project Managers** Chris Pousson

**Engineer** KPA

**Contractor** TBD

Element	Status / Issues
Design	In design
Environmental/	N/A
Archeological	
Rights of Way	N/A
<b>Utility Relocations</b>	None
Bid Phase	Tentatively Bidding in Mid to Late November
Construction	TBD
Other Issues	

# Citywide Sidewalk Improvements Project Rock Sidewalk / FY 20 Downtown ADA Improvements

**Project No.** PRJ000138 **TIP No.** None

#### November 2020

Project Description The proposed project consists of the rehabilitation and installation of pedestrian

facilities along several streets on Rock Street between 8th and 7th and Downtown ADA Sidewalk Improvements. Various methods of rehabilitating existing non-compliant sidewalks will be considered. This project requires coordination with TCEQ and TDLR and all proposed pedestrian elements will be ADA compliant with

the Texas Accessibility Standards (TAS).

Purpose To provide ADA/TDLR compliant sidewalks and ramps identified in the 2015

Sidewalk Master Plan.

**Project Managers** Chris Pousson

**Engineer** KPA

**Contractor** TBD

Element	Status / Issues
Design	Finalizing design. Submitting TCEQ WPAP Exception.
Environmental/	TBD
Archeological	
Rights of Way /	Will require a couple Temporary Construction easement.
Easements	
<b>Utility Relocations</b>	TBD
Construction	TBD
Other Issues	

# City of Georgetown, Texas Transportation Advisory Board November 13, 2020

# **SUBJECT:**

Consideration and possible action to approve the Minutes from the September 11, 2020 Meeting. -- Emily Koontz - Board Liaison

# **ITEM SUMMARY:**

# **FINANCIAL IMPACT:**

NONE

# **SUBMITTED BY:**

Emily Koontz - Board Liaison

# **ATTACHMENTS:**

**Description** Type

☐ Minutes Backup Material

# Minutes of the Meeting of the Georgetown Transportation Advisory Board and the Governing Body of the City of Georgetown, Texas September 11, 2020

The City of Georgetown is committed to compliance with the Americans with Disabilities Act (ADA). If you require assistance in participation at a public meeting due to a disability, as defined under the ADA, reasonable assistance, adaptations, or accommodations will be provided upon request. Please contact the City at least three (3) days prior to the scheduled meeting date, at (512)930-3652 or City Hall at 113 East 8th Street for additional information: TTY users route through Relay Texas at 711.

**Board Members Present:** Dan Jones, Robert Redoutey, James Hougnon, George Brown, Bryan Hutchinson, Rachael Jonrowe

Board Members Absent: Sheila Mills – Board Chair, Michael Miles, Ercel Brashear

Staff Present: Wes Wright, Ray Miller, Emily Koontz, Wayne Reed, Joseph Carney, Nathan

Parras, David Morgan

Others Present: Carl Norris-ACC, Phillip Huntley – Garver, Trae Sutton – KPA, Larry

Brundidge

# **Regular Session**

A. Call to Order: Meeting called to order by Vice-Chairperson at Hutchinson 10:00am

Georgetown Transportation Advisory Board may, at any time, recess the Regular Session to Convene an Executive Session at the request of the Chair, a Board Member, The City Manager, Assistant City Manager, General Manager of Utilities, City Council Member, or legal counsel for any purpose authorized by the Open Meetings Act, Texas Government Code Chapter 551, and are subject to action in the Regular Session that follows.

- B. Introduction of Board Members and Visitors: All board members, visitors, and staff were introduced.
- C. Updates to various planning initiatives by CAMPO and TxDOT transportation improvement projects as wells as an update on GoGeo Operations. Ray Miller gave updates. All updates included in the packet.
- D. Airport Monthly Report Joseph A. Carney, C.M., Airport Manager and Ray Miller, Acting Director of Public Works. Ray Miller gave updates. All updates included in the packet. There was discussion of the three open hangars on the airport and possible tours of the airport for new board members.

**Citizens Wishing to Address the Board**: The following people with the Airport Concerned Citizens (ACC) signed up to speak to the Board on Item E: Carl Norris – 3 minutes – Statement attached to minutes.

E. September 2020 GTAB Updates - Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager. Wesley Wright gave updates. All updates included in the packet.

# Legislative Regular Agenda

- F. Consideration and possible approval of the Minutes from the September 11, 2020 Meeting Emily Koontz Board Liaison. **MOTION by Brown, second by Hougnon** to approve the minutes. **APPROVED 6-0-3 (Brashear, Mills, and Miles absent)**
- G. Consideration and possible recommendation on Task Order KPA-20-011 for professional engineering design services for FY21 Street Maintenance, Sidewalks, Traffic Signals, and Curb & Gutter improvements with Kasberg Patrick & Associates of Georgetown, Texas in the amount of \$880,900.00 -- Wesley Wright, PE, Systems Engineering Director.

  MOTION by Redoutey, second by Jones. APPROVED 6-0-3 (Brashear, Mills, and Miles absent)
- H. Consideration and possible action to recommend an Interlocal Agreement (ILA) with Capital Metro for GoGeo Transportation Services for FY 2021 -- Ray Miller, Jr., Director of Public Works. MOTION by Brown, second by Redoutey. APPROVED 6-0-3 (Brashear, Mills, and Miles – absent)

# Adjournment

**Motion** by Jones, second by Redoutey. **APPROVED 6-0-3 (Brashear, Mills, and Miles – absent)** 

Meeting was Adjourned at 11:09 AM

Approved:		Attested:
Sheila Mills - Chair		Dan Jones – Secretary
	Emily Koontz – GTAF	Board Liaison

# GTAB STATEMENT SEPTEMBER 11, 2020 AGENDA ITEM "D" AIRPORT MONTHLY REPORT

Good morning Madam Chairman, and members of the GTAB. My name is Hugh C. Norris, Jr. My residence is 4400 Luna Trail, Georgetown, Texas. I am a member of the Airport Concerned Citizens (ACC).

Transparency and accountability are expected of governmental elected and administrative officials. Secrecy by public officials in use of taxpayer funds is not acceptable. That is why Congress passed the National Environmental Policy Act (NEPA) of 1969 and established the Council on Environmental Quality (CEQ) to provide NEPA compliance regulations for each affected federal agency.

NEPA established requirements for prior open public structured hearings by federal agencies including FAA to fully enlighten a community receiving federal and/or state taxpayer funding for a local airport funding action, identification of potential social, economic and environmental impacts, mitigation measures to eliminate or reduce adverse impacts and fully examine all practicable alternatives to a proposed action including relocation of an airport to a safe, superior site.

In 1993 Texas became a State Block Grant Program (SBGP) state and TxDOT was assigned the state agency to manage the SBGP. The SBGP provides a method for FAA's transfer of federal funds directly to Texas and TxDOT, but FAA cannot transfer its federal laws obligation including the NEPA. FAA must retain strict oversight of the SBGP.

For the past 40 years and four Airport Master Plans, \$32 Million of local, state and federal taxpayer funding have expanded airport acreage and hazardous operations. There has never been a single NEPA structured hearing on a single airport grant including the \$60 Million CIP of which the Taxiway Lighting Project is a part. The city and TxDOT with FAA approval have determined that these hazardous location expansions cause no more impacts than repainting the airport entrance sign. This NEPA evasion is a violation of government transparency and accountability.

Madam Chairman, this board has authority to discuss this important public issue openly or in Executive Session and recommend to the City Council that it provide a NEPA structured hearing affording the community an opportunity to determine airport expansions and relocation to a safe, superior site and must do so.

# City of Georgetown, Texas **Transportation Advisory Board** November 13, 2020

#### **SUBJECT:**

Consideration and possible recommendation on Task Order KHA-21-001 with Kimley-Horn and Associates of Austin, Texas in the amount of \$1,583,144 for professional engineering services related to the expansion of DB Wood Road (SH29 to Oak Ridge) -- Wesley Wright, PE, Systems Engineering Director.

#### **ITEM SUMMARY:**

The 2015 Voter Approved Road Bond Election included funds for the widening of DB Wood Road from SH29 to Oak Ridge Rd from its existing 2-lane configuration to a 5-lane roadway (inclusive of a continuous center turn lane and sidewalks).

This task order is for the engineering design services necessary to complete that roadway widening. Included in the task order scope are all necessary survey, geotechnical, environmental, and archeological analysis. Also included in this scope is the design effort necessary for a new, widened bridge over the Middle Fork of the San Gabriel River.

Kimley-Horn and Associates has significant experience in roadway and bridge design and has proven to be highly qualified and capable of completing this work. Staff recommends award of this task order.

Design is expected to take a little more than one year to complete. While additional right-of-way is not expected to be needed for this project, some easements may be necessary for utilities, grading, and other ancillary items. Staff expects to be able to bid the project and begin construction in 2022. Funds for construction are expected to be requested as part of next year's annual budget (FY22).

#### **FINANCIAL IMPACT:**

Funds for design are included in the current (FY21) Transportation Capital Improvement Plan Budget and part of the 2015 Voter Approved Road Bond Program.

#### **SUBMITTED BY:**

Wesley Wright

D

#### ATTACHMENTS:

**Description** Type DB Wood Road (29-Oak Ridge) Task Order

Backup Material

Task Order No. KHA-21-001-TO,	
consisting of pages.	

# **Task Order**

In accordance with paragraph 1.01 of the Master Services Agreement between Owner and Kimley-Horn and Associates, Inc. ("Engineer") for Professional Services – Task Order Edition, dated November 21, 2016 ("Agreement"), Owner and Engineer agree as follows:

1.	Specific Project Data
1.	A. Title: DB Wood Road Improvements [29 – Oak Ridge]
	B. Description: Develop Plans, Specifications, & Estimate for roadway widening, pedestrian and bicycle improvements, flush median, intersection improvements, storm sewer design, bridge widening or replacement, culvert widening, retaining walls, signal improvements, utility coordination, bidding, and construction phase services.
	C. City of Georgetown Project Number:
	D. City of Georgetown General Ledger Account No.:
	E. City of Georgetown Purchase Order No.:
	F. Master Services Agreement, Contract Number: 2017-743-MSA
2.	Services of Engineer
	See Exhibit B – Scope of Services
3.	Owner's Responsibilities
	Owner shall have those responsibilities set forth in the Agreement subject to the following: See Exhibit C – Services to be Provided by the City.
4.	Times for Rendering Services
	See Exhibit E – Project Schedule

# 5. Payments to Engineer

A. Owner shall pay Engineer for services rendered as follows:

Category of Services  Services (Preliminary Design, Final Design, Bidding or Negotiating, Construction	Compensation Method	Lump Sum or Not to Exceed Amount of Compensation for Services					
	Lump Sum	\$1,583,144					
(Preliminary Design, Final							
Design, Bidding or							
Negotiating, Construction							
Phase)							

- B. The terms of payment are set forth in Article 4 of the Agreement unless modified in this Task Order.
- 6. **Consultants:** Kimley-Horn and Associates, Inc.
- 7. Other Modifications to Agreement:
- 8. Attachments:

Exhibit A – Location Map

Exhibit B – Scope of Services

Exhibit C – Services to be Provided by the City

Exhibit D – Fee Schedule

Exhibit E – Project Schedule

9. **Documents Incorporated By Reference:** The Agreement effective November 21, 2016.

Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effect	tive Date of this Task Order is	<u>,</u> 2020.	
OWNER:		ENGINEER:	
By:		By:	
Name:	Dale Ross	Name: Trey No	eal
Title:	Mayor, City of Georgetown	Title: Assista	nt Secretary
Date:		Engineer License or Fi Certificate No. State of:  Date: 11/05/2020  APPROVED AS TO F	F-928 Texas
		City Attorney	

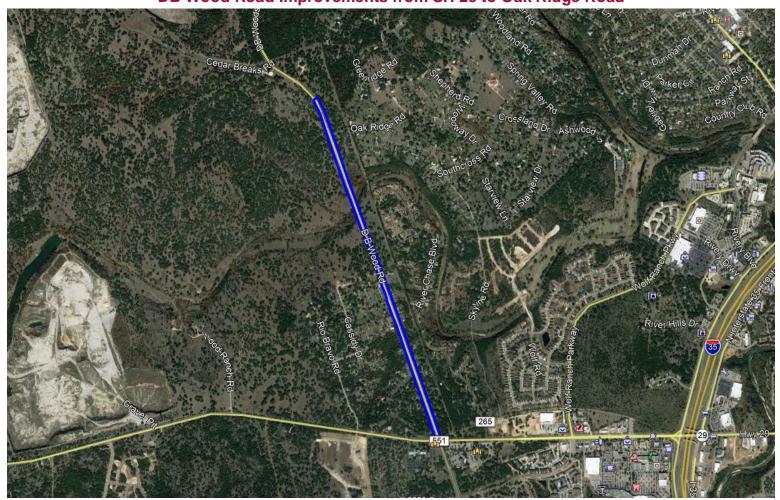
DESIGNATED REPRESENTATIVE FOR

DESIGNATED REPRESENTATIVE FOR

TASK OI	RDER:	TASK ORD	DER:
Name:	Joel Weaver	Name:	Austin Helton, P.E.
Title:	Project Manager	Title:	Associate
Address:	300-1 Industrial Ave. Georgetown, TX 78626	Address:	10814 Jollyville Rd. Campus IV, Suite 200 Austin, TX 78759
E-Mail Address:	Joel.Weaver@georgetown.org	E-Mail Address:	austin.helton@kimley-horn.com
Phone:	512-930-7698	Phone:	512-418-4538
Fax:	512-930-3559	Fax:	512-418-1791



Exhibit A – Location Map
DB Wood Road Improvements from SH 29 to Oak Ridge Road



# EXHIBIT B Scope of Services

# DB Wood Road Improvements from SH 29 to Oak Ridge Road

#### SCOPE OF WORK OVERVIEW

The services on this project will include developing plans, specifications, & estimates (PS&E) for the proposed improvements to DB Wood Road from Highway 29 to Oak Ridge Road. The project will consist of the design of approximately 1.5 miles of DB Wood Road widening, pedestrian and bicycle improvements, flush median, intersection improvements, storm sewer design, bridge widening or replacement, culvert widening, signal improvements, topographic survey, utility conflict coordination, bidding, and construction phase services.

#### TASK 1 PROJECT ADMINISTRATION

Kimley-Horn and Associates, Inc. (K-H) will perform typical project management duties to meet the schedule discussed in subsequent sections. Project management duties will include coordination and communication with sub consultants, TxDOT and the City, monthly status updates and accounting activities related to the project.

K-H will prepare for and attend project meetings with the City as required. For the purpose of this proposal, it is assumed that up to eighteen (18) such meetings will be held: 1) Kickoff meeting 2) 30% Schematic Design Review meeting; 3) 90% Design Review meeting; 4) Monthly Progress Meetings; 5) 3 Additional Review meetings with subject matter experts. Meeting minutes and or comment responses for comments received will be prepared after each meeting.

#### TASK 2 DATA COLLECTION

- Conduct field observation to identify and evaluate constraints during preliminary design process
- Collect and review available information including existing reports, record drawings, as-built plans and other pertinent information required for the proposed improvements

#### TASK 3 SURVEY AND RIGHT-OF-WAY DATA

The Surveyor shall conduct the topographic mapping within the right-of-way of DB Woods from SH 29 to 800 feet north of Oak Ridge Road along with 200 feet along side roads and 400 feet along the legs of SH 29 for a total of 11,000 LF. This task will include:

 Utilize survey datum control as established previously for local, State, City, and County projects in the immediate vicinity of these locations. The values will be



reconciled to NAD 83 Texas State Plan Coordinates, Central Zone 4203, US Survey feet. Vertical datum will be GPS Orthometric heights from VRS observations using the Leica SmartNet system.

- Right of Entry will be secured by the City of Georgetown and forwarded to the Engineer.
- Establish and densify secondary control as needed for topographic and boundary data gathering procedures.
- Perform differential level loops for installation of a benchmark system at strategic locations at approximate 800-foot intervals within the project limits.
- Collect spot elevations along the project route including edges of back of curbs, driveways, visible utilities, drainage structures, bridge elements, centerline of roads, significant trees (12" and up), any other hard surfaced improvements within the defined area, grade breaks, flowlines and cross sections of watercourses, and other significant features relevant to the project (MH inverts, if any). The collected data will include spot elevations and breaklines sufficient to generate and/or merge to a 1-foot contour interval DTM for the project.
- Locate and process up to nineteen (19) geotechnical boreholes within the project limits at each location.
- Tie the utility markings made by owners (if any) and/or Rios Group designators. This includes locating and processing up to 20 Level A potholes along the project route.
- Obtain 3 upstream and 3 downstream channel cross sections of the Middle Fork San Gabriel River from the DB Wood Bridge crossing. This should include bottom of channel, ordinary water mark if visible, bank breaks, and top of bank. These cross sections should be spaced at approximately 150'
- Obtain 1 directly upstream and 1 directly downstream channel cross sections of the Middle Fork San Gabriel River for the low water crossing located approximately 600' downstream from the DB Wood crossing. 1 crossing along the middle of the structure and 1 cross section 150' downstream of this structure. This should include bottom of channel, ordinary water mark if visible, bank breaks, and top of bank.
- Perform sufficient deed research and field surveying to determine the existing ROW
  condition and adjoining property configurations at the ROW. This task does not
  include acquisition grade surveying of the complete property for this proposal.
- Prepare easement documents for up to 20 parcels. Assumed cost for each document is \$4,500.

The following deliverables will be provided as part of this task:

- Digital Terrain Models (DTM) and the Triangular Irregular Network (TIN) files.
- Computer printouts or other tabulations summarizing the results of field surveys.
- Digital files or media containing field survey data (ASCII Data files).
- Maps, plats, plans, sketches, or other documents acquired from utility companies, private corporations, or other public agencies, the contents of which are relevant to the survey.
- Field survey notes, as electronic and hard copies.
- ASCII files of the control points at both grid and surface.
- Any pictures taken during the topographic mapping.



#### TASK 4 SUBSURFACE UTILITY ENGINEERING/UTILITY COORD

The Rios Group, Inc will perform the subsurface utility engineering for the project. This task will include:

- Identify and coordinate the Project with the affected utility owners.
- Prepare Quality Level B Subsurface Utility Engineering (SUE) within the right-of-way from 140 feet south of DB Wood Road and SH 29 to 1000 feet north of Oak Ridge Road as well as 100 feet along the right-of-way of each intersecting street within the project limits.
- Prepare up to twenty (20) Quality Level A SUE test holes at locations selected by the Engineer after review of the Quality Level B SUE data.
- Attempt to designate the following utilities: potable water, reclaimed water, chilled water, natural gas/crude oil/refined product pipelines, communication duck banks, fiber optic, cable television, telephone, and electric. Wastewater and storm drain facilities will be inverted at manholes and will be depicted as Quality Level C information.
- Perform an inventory of overhead utilities within the project limits. Irrigation lines and utility service lines are excluded from this scope of work.
- Utility Quality Levels are defined in cumulative order (least to greatest) as follows:
  - Quality Level D and C SUE provider to perform due-diligence with regards to records research and the acquisition of available utility records. The due diligence provided will consist of contacting the applicable One Call agency and associated utility owners/municipalities, visually inspecting the work area for evidence of utilities, and reviewing available utility record information. Additional utilities not identified through these efforts will be referred to as Unknown utilities.
  - Quality Level B Following a review of the project scope and available utility records with the project manager, field personnel will begin designating the approximate horizontal position of known subsurface utilities within the project area. A suite of geophysical equipment that includes magnetic and electromagnetic induction will be used to designate conductive utilities. Where access is available, a sonde will be inserted into non-conductive utilities to provide a medium for transmission which can then be designated using geophysical equipment. Non-conductive utilities can also be designated using other proven methods, such as rodding and probing. The Engineer will make a reasonable attempt to designate Unknown utilities identified during field work; however, no guarantee is made that all Unknown utilities will be designated. Utilities will be marked and labeled to distinguish type and ownership. Field data depicting the designated utilities, as well as relevant surface features, will be produced to ensure accuracy and completeness of subsequent survey data. The project manager will review the collected survey data, field data, and utility records for accuracy and completeness.
  - Quality Level A Utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, the Engineer will follow the QL "B" – Designating procedures described above. Once each utility is located, the Engineer will record the size, type, material, and depth. Test holes will be uniquely marked. Excavations will be backfilled by mechanical means with the appropriate material, and the original surface will be restored. If



necessary, the Engineer can core pavement up to a depth of 12 inches. Asphalt surfaces will be repaired with an asphalt cold path, and concrete cores will be epoxied in place, flush with the surrounding surface. The engineer assumes that flowable fill will not be required when backfilling test holes and that full-section pavement repair (including sidewalks) will not be required to restore the original pavement surface. If requested, these services can be provided at an additional cost.

The Engineer will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flag persons, etc.) are required, this service will be invoiced as a direct expense. Due to the high risk of damage, the Engineer will not attempt to probe or excavate test holes on AC water lines unless approval is obtained from the owner in advance. Additionally, excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.

The Engineer has made the following assumptions with regard to the test holes on this project:

- Test holes will be accessible to truck-mounted vacuum excavation equipment
- Right-of-way permits from the City of Georgetown and/or Texas
   Department of Transportation will be required for up to five (5) test holes.

   The Engineer will obtain all required City/TxDOT permits and ensure that coordination and compliance with the appropriate agency is provided.
- Designated traffic control plans will not be required.
- Non-routine traffic control measures will be required for up to five (5) test holes. The Engineer will acquire the services of a qualified Maintenance-Of-Traffic (MOT) Subcontractor and ensure that adequate traffic control is provided.
- The coring of pavement will be required for up to five (5) test holes.
- Attend up to two (2) coordination meetings, including an initial utility coordination meeting with all utility owners within corridor to notify owners of project and begin coordination of potential conflicts and resolutions.
- Determine which utilities will conflict with proposed construction and make the utility company aware of these conflicts. Develop and maintain a utility impact spreadsheet.
- Right of Entry will be secured by the City of Georgetown.

The following deliverables will be provided as part of this task:

- Utility file in CAD format depicting all designated and located utilities.
- Summary sheet of all test hole coordinate data and depth information.
- 8.5" x 11" Test Hole Data Forms for all test hole locations completed. These plans will be signed and sealed by a Professional Engineer in electronic PDF form.
- 11" x 17" SUE Plan Sheets depicting all designated and located utilities. These plans will be signed and sealed by a Professional Engineer in PDF form.
- Master Utility Contact List
- Utility Conflict Impact Spreadsheet



#### TASK 5 ENVIRONMENTAL DOCUMENTATION

Terracon will perform the Environmental Assessments for the project. This task will include:

#### PHASE I ENVIRONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) will be performed consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process.* The purpose of this ESA is to assist the City in developing information to identify recognized environmental conditions (RECs) in connection with the site. RECs are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment, 2) under conditions indicative of a release to the environment, or 3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

#### a) Historical Use Information

A review of selected historical sources, where reasonably ascertainable and readily available, will be conducted in an attempt to document obvious past land use of the site and adjoining properties back to 1940 or when the site was initially developed, whichever is earlier. The following selected references, depending on applicability and likely usefulness, will be reviewed for the site:

- Historical topographic maps
- Aerial photographs (approximate 10 to 15-year intervals)
- City directories (approximate 5-year intervals)
- Fire (Sanborn) insurance maps
- Property tax file information
- Building department records
- Zoning records
- Prior environmental reports, permits and registrations; or geotechnical report, if provided by the City.
- Site title search information, if provided by City
- Environmental liens, if provided by City

The City and the current owner or their representative will be interviewed to provide information regarding past uses of the site and information pertaining to the use of hazardous substances and petroleum products on the site.

#### b) Regulatory Records Review

Consistent with ASTM E1527-13, federal, state, and tribal databases, where applicable and within ASTM-defined minimum search distances from the nearest property boundary, will be reviewed for indications of RECs. A database firm will be subcontracted to access governmental records used in this portion of the assessment. Additional federal, state, and



local databases may be reviewed if provided by the database firm. Determining the location of unmapped facilities is beyond the scope of this assessment.

In addition to the database review and if customary practice for the site location, an attempt will be made to review reasonably ascertainable and useful local lists or records such as Brownfield sites, landfill/solid waste disposal sites, registered storage tanks, land records, emergency release reports, and contaminated public wells. A reasonable attempt will also be made by the consultant to interview at least one staff member of any one of the following types of local government agencies: fire department, health agency, planning department, building department, or environmental department. The scope of work includes a cursory regulatory agency file and/or records review, including City-provided reports and files. Review of regulatory files and/or records, when authorized, will be for the purpose of identifying RECs.

#### c) Site and Adjoining/Surrounding Property Reconnaissance

A site reconnaissance will be conducted to identify RECs. The reconnaissance will consist of visual observations of the site from the site boundaries and selected interior portions of the site. The site reconnaissance will include, where applicable, an interview with site personnel who the City has identified as having knowledge of the uses and physical characteristics of the site. Pertinent observations from the site reconnaissance will be documented including:

- Site description
- General site operations
- Aboveground chemical or waste storage
- Visible underground chemical or waste storage, drainage, or collection systems
- Electrical transformers
- Obvious releases of hazardous substances or petroleum products

The adjoining property reconnaissance will consist of visual observations of the adjoining/surrounding properties from the site boundaries and accessible public rights-of-way.

#### d) ESA Report Preparation

A report will be prepared summarizing the results of the Phase I ESA. The final report will be signed by an environmental professional responsible for the Phase I ESA, and the report will contain an environmental professional statement as required by 40 CFR 312.21(d). Recommendations will be developed as part of the Phase I ESA scope of services.

#### GEOLOGIC ASSESSMENT

A Geologic Assessment (GA) is required by the Texas Commission on Environmental Quality for all site development activities over the Recharge Zone of the Edwards Aquifer. A GA is also required for any installation of aboveground or underground storage tank facilities within the Recharge Zone or the Transition Zone of the Edwards Aquifer. The purpose of



the GA is to identify and characterize any significant geologic or manmade features, as defined in 30 TAC §213, present within the study area.

#### a) Field Assessment

A field assessment will be performed by environmental personnel to identify geologic or manmade features. These features include:

- closed depressions
- sinkholes and caves
- faults and fractures
- wells
- borings
- excavations

Particular attention will be paid to any sensitive features, which are defined as features where rapid infiltration from the surface to the Edwards Aquifer can occur. Features observed will be numbered, described and measured, plotted on a site map, and tabulated. The consultant will also evaluate the site for the potential presence of springs or streams in accordance with the City of Georgetown Ordinance 2013-59.

#### b) GA Report Preparation

The GA report will include the completed Geologic Assessment Table; the completed Geologic Assessment Form; a brief narrative description of any identified features and site-specific geology; and a site geologic map identifying the location of all identified features. The site geologic map will be at the same scale as the base map included in the Water Pollution Abatement Plan (WPAP), being prepared by the Engineer.

#### ARCHEOLOGICAL SURVEY

In Texas, cultural resources are protected under the federal National Historic Preservation Act (NHPA) of 1966, as amended and the state Antiquities Code of Texas (ACT). The Texas Historical Commission (THC) is responsible for enforcing cultural resource compliance in Texas. Under the Antiquities Code of Texas, projects that are undertaken by a "political subdivision" require THC coordination if the project affects a cumulative area larger than five acres or disturbs a cumulative area of more than 5,000 cubic yards, whichever measure is triggered first, or if the project is inside a designated historic district or recorded archeological site. A "political subdivision" is defined as a local governmental entity created and operating under the laws of this state, including a city, county, school district, or special district created under Article III, Section 52(b)(1) or (2), or Article XVI, Section 59, of the Texas Constitution. The professional archeologist conducting the survey is required to receive a permit before any archeological investigations may proceed.



Because this project may require a U.S. Army Corps of Engineers (USACE) permit, this federal action is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) (54 U.S.C. § 300101 et seq.). Therefore, the archeological survey will be performed to comply with both Section 106 as well as ACT.

#### a) Antiquities Code of Texas Permit Application and Research Design

Because the undertaking falls under the ACT, qualified cultural resources personnel will prepare a permit application and associated research design. The project sponsor (City of Georgetown) will need to review and sign the permit. Once signatures have been collected, the application and research design will be submitted to THC for approval. Upon approval, a permit number will be issued and the archeological survey can commence.

#### b) Intensive Pedestrian Archeological Survey

Qualified cultural resources personnel will perform an intensive 100 percent pedestrian survey using the Minimum Survey Standards set forth by the THC and the Council of Texas Archeologists (CTA). For the approximate 1.5-mile long alignment for the roadway improvements, one survey transect on either side of the road will be shovel tested at a rate of 16 shovel tests per mile. For any non-linear project areas associated with the project (e.g. detention ponds), these locations will be surveyed and shovel tested at a rate of two shovel tests per acre. Not all areas will be subjected to shovel testing due to either previous disturbances, greater than 30 percent ground visibility, or low potential for archeological resources. The total extent of ground disturbances and/or acquisition of new right-of-way and/or temporary or permanent easements associated with this project will be considered the area of potential effect (APE). Shovel tests will be excavated in 20-centimeter arbitrary levels, and excavated sediment will be passed through \( \frac{1}{2} \)-inch hardware mesh. Shovel tests will be recorded through field notes, photography, and hand-held geographic positioning system (GPS) device. Cultural materials encountered through the course of shovel test excavations will be described and returned to their approximate origin. Archeological sites encountered will be recorded with the Texas Archeological Research Laboratory and be assessed for eligibility for inclusion in the National Register of Historic Places or listing as a State Antiquities Landmark as appropriate. The consultant will have a "no-collection" policy for this survey; therefore, diagnostic artifacts (if encountered) will be documented in the field and not collected. Records would be curated by the Center for Archaeological Studies at Texas State University upon completion of the project, per required by the THC permit.

Deep soil testing (using backhoe) of the APE may be necessary during an investigation depending on the soil data. At times the soil data may not be equal with soil existing on the ground. A cursory review of the soils indicates deep soils are mapped within the portion of the APE near the Middle Fork San Gabriel River. However, a review of photographs of the area and the closest archeological sites recorded to the APE seem to indicate that the soils



actually present at this location are likely shallow. Therefore, it is unlikely mechanical trenching will be necessary for this project.

#### c) Reporting, Agency Coordination, and Curation

After fieldwork has been completed a report of the results will be prepared. Comprehensive reports typically address the applicable regulatory framework, describe the assessment methodology, limitations and findings, and provide site-specific conclusions and recommendations, as appropriate. Exhibits such as figures, referenced resource documents, data and photographs are included. The report will be provided to the City for review and comment. The final draft report will be submitted to the THC for agency review and concurrence. The THC will have 30 calendar days to complete their review.

After project approval has been received from the THC, the permit will be closed according to permit stipulations. Several reports are required to be sent to repositories and libraries, GIS files of the survey sent to THC, and final reports and an online abstract are prepared for delivery. Finally, curation of records associated with the project will be prepared and submitted to Center for Archaeological Studies at Texas State University, a qualified repository.

#### PRELIMINARY WATERS OF THE US DELINEATION/DETERMINATION

This task is presented in order to assist the City in complying with Section 404 of the Clean Water Act (CWA) and/or Section 10 of the Rivers and Harbors Act (RHA) during future construction activities onsite. To accomplish this task, Terracon will perform subtasks which include a desktop review, a site visit, and report preparation as described below.

#### a) Desktop Review

Prior to visiting the site, background research will be conducted and will consist of locating and reviewing pertinent maps, aerial photographs, historic topographic maps, soil surveys, plant species data, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), and other related data necessary for a desktop review of site conditions. This desktop review will assist the consultant in preliminarily identifying suspect aquatic resources on the site. Consultant will review topographic maps, aerial photographs, and floodplain maps to make a preliminary determination based on consultant's opinions and experiences of the areas that could be potentially be categorized as jurisdictional WOTUS and those that may not be jurisdictional.



#### b) Site Visit

A site visit will be performed to determine the existence and approximate locations of suspect WOTUS, including wetlands on the site following the USACE 1987 Manual and the applicable USACE regional supplement. Consultant will identify potential WOTUS, including traditional navigable waters, relatively permanent waters, non-relatively permanent waters, and wetlands that are abutting, adjacent to, or isolated from these waters. The site visit will include completion of USACE wetland determination data forms with plant identification, notation of hydrologic indicators, and excavation of shallow soil profiles, as appropriate within each different vegetative community spread throughout the Project. Potentially jurisdictional waterbodies will be identified by delineating ordinary high water marks and then mapped using a GPS with sub-meter accuracy and the procedures required by the USACE. Following the site visit, exhibits showing the boundaries (polygons) and acreage and/or linear footage (if applicable) of all aquatic resources identified onsite during the site visit will be prepared. Consultant will provide a professional opinion regarding the likelihood for the identified aquatic resources to be considered jurisdictional and regulated by the USACE.

#### c) WOTUS Report Preparation

A report will be prepared for the project documenting the results of the Preliminary WOTUS Determination/Delineation performed onsite. The Preliminary WOTUS Delineation report will include the following information, as applicable:

- Brief description of the project, methods/sampling procedures, and results as required by the USACE;
- A preliminary determination and description of the potentially jurisdictional WOTUS and potentially non-jurisdictional aquatic resources identified in the Project;
- Acreage of the project area evaluated with boundaries indicated:
- Location of each observation point/data point/soil sample station;
- Wetland Determination Data Forms completed in accordance with USACE guidelines for each observation point/data point/soil sample station;
- Acreage and linear footage (if applicable) of each aquatic resource onsite and total
  potentially jurisdictional areas (suspect WOTUS) and potentially non-jurisdictional
  aquatic resources including polygons of aquatic resources (mapped by GPS) shown
  on exhibits:
- Historical information (including topographic quadrangle maps, historic aerial photographs, FEMA maps, NWI maps, and soil surveys) to document the potential limits of USACE jurisdiction for the identified aquatic resources (if applicable); and
- Professional opinions regarding the potential jurisdictional status of the identified aquatic resources with supporting documentation and rationale.



The Preliminary WOTUS Delineation report will be prepared in a manner to be easily attached and serve as a supplement to additional documentation which would be submitted to the USACE for review, concurrence, and authorization if necessary. In addition to the above referenced documentation, the consultant will perform:

- Up to three (3) meetings with Engineer and City to discuss project schedule, avoidance and minimization measures, plan reviews, and construction site operations as they may pertain to environmental constraints Technical review of engineering plans (as it pertains to environmental permitting constraints), preparation of figures, impact calculations, and environmental database management;
- Preparation of supplemental documentation to support permitting efforts as design modifications are made.

#### d) NWP 14 Application and USACE Consultation

This task is presented in order to assist the City in remaining in compliance with Section 404. If, after the Engineer, City, and consultant evaluate project design to implement practicable avoidance and minimization options, it is determined that pre-construction notification is unavoidable, consultant will prepare the appropriate documentation to obtain USACE authorization for impacts to WOTUS associated with the proposed project. It is the understanding that the proposed project would qualify as a "Linear Transportation Project", which could fall under the terms and conditions of Nationwide Permit (NWP) No. 14. Under NWP No. 14, the submittal of a Pre-Construction Notification (PCN) is required if any of the following criteria are met:

- A section 10 permit is required;
- Discharges result in the loss of greater than 1/10-acre of WOTUS
- Discharges in a special aquatic site, including wetlands
- The project may affect threatened or endangered species;
- The project may affect historic properties or cultural resources.

Should any of these criteria be met for the proposed project, consultant will assist the City in obtaining authorization under NWP No. 14. In order to obtain authorization from the USACE, the Engineer and City will provide the following items to the USACE:

- Engineering plans;
- Alternative routes which were considered;
- Avoidance and minimization measures; and
- Need and purpose.

It should be known that if the PCN criteria are not met, formal notification to the USACE may not be required and the project may proceed assuming it is in accordance with the NWP General Conditions and USACE Forth Worth District Regional Conditions. Should it be determined that pre-construction notification is not required, consultant will assist Client in preparing documentation demonstrating compliance with the General Conditions and Fort



Worth District Regional Conditions for the NWP Program. Additionally, if the proposed project results in a loss of greater the 1/10-acre of WOTUS, compensatory mitigation will likely be required as a term of authorization under NWP 14.

#### THREATENED AND ENDANGERED SPECIES HABITAT ASSESSMENT

General Condition 18 of the 2017 Nationwide Permit Program states that:

"No activity is authorized under and NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species."

#### a) Desktop Review

To provide the information necessary to make a determination of effect, and demonstrate compliance with General Condition 18, the consultant will conduct a Desktop Review of ESA listed species for the project area. This will include a review of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) report for the project area, a review of the USFWS critical habitat database, a review of the Texas Parks and Wildlife (TPWD) Natural Diversity Database, and a review of potentially suitable habitat utilizing the TPWD Ecological Mapping System of Texas (EMST) landcover database and aerial imagery. Additionally, information regarding landcover and dominant plant communities (collected during the wetland delineation) will be reviewed during the assessment of potentially suitable habitat and determination of effect.

#### b) Threatened and Endangered Species Assessment Report

A Threatened and Endangered Species Assessment Report for the site will be prepared including photographs, aerial imagery, Geographic Information System (GIS) mapping, and a description of the field observations with conclusions and recommendations. This report will also include information regarding compliance with the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA) as well as summarize the likelihood of affecting locally known Threatened or Endangered bird, karst or salamander species.

# c) Application to Williamson County Regional Habitat Conservation Plan

Depending on the results of the Threatened and Endangered Species Habitat Assessment, consultant will prepare an application to participate in the Williamson County Regional Habitat Conservation Plan. Consultant will coordinate with the City, Engineer, and Williamson County Conservation Foundation staff on the application submission and



coordinate with specialists (permitted subconsultants) to prepare appropriate materials needed to complete the submission.

#### SPECIAL ENVIRONMENT STUDIES

#### a) Springs Study Along Middle Fork San Gabriel River

A survey for springs will be conducted at the existing DB Wood Road crossing along the flowline and banks of the Middle Fork San Gabriel River and approximately 500 feet upstream and 500 feet downstream. Springs will be documented, and the results will be provided in a report.

#### b) Salamander Study

If springs are located during the spring survey along the Middle Fork San Gabriel River, a presence/absence survey for Georgetown salamanders will be conducted at the located spring. The level of effort will include survey at the springhead and approximately 250 feet downstream. Following field investigations, a report detailing the findings will be produced. Findings will be coordinated with the Williamson County RHC Plan administrators. The findings of any listed salamander surveys must be reported to USFWS as part of the subconsultant's permit to complete such surveys.

#### c) Cave Survey for Endangered Karst Invertebrates

If large karst features are located that require presence/absence surveys for endangered karst invertebrates (EKI), the subconsultant will conduct presence/absence surveys on features located by others as they meet the potential karst invertebrate habitat criteria as defined by the USFWS. Presence/absence surveys for karst invertebrates will be conducted in accordance with USFWS Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Presence/Absence Surveys for endangered karst invertebrate species (2015). USFWS survey protocols require features with potential habitat be surveyed with baited traps 14 times with at least 48 hours between surveys. Surveys may be conducted any time of year, as long as suitable weather conditions are present. A data logger recording temperature and humidity will be installed in each feature for the duration of the surveys. The subconsultant will provide electronic copies of the report summarizing survey related activities and all findings. Findings will be coordinated with the Williamson County RHC Plan administrators. As required by the USFWS, results from faunal surveys will be included in the subconsultant's annual report to USFWS.

#### d) Golden-Cheeked Warbler Survey

If Golden-Cheeked Warbler (GCWA) habitat is within the project area, the subconsultant's biologists will conduct a GCWA presence/absence survey in accordance with USFWS



protocol for the DB Wood ROW plus 400 feet on either side of the ROW. Survey protocol requires a minimum of five site visits with no more than one visit within any 5-day period to be conducted between March 15 and June 1, with at least 60 percent of the surveys being conducted prior to May 15. Upon completion of the survey, a report including all findings will be provided. Current reporting requirements include submission of any GCWA observation data in GIS format. After the final survey, the subconsultant will extrapolate the required data from field records, convert it to GIS format, then coordinate with USFWS to submit the survey data. As USFWS presence/absence survey protocol and reporting requirements are occasionally updated, the subconsultant will confirm that the appropriate requirements are followed for this task prior to the first survey day. Surveys will be completed in accordance with the most recent USFWS protocols and requirements. Findings will be coordinated with the Williamson County RHC Plan administrators.

#### TASK 6 GEOTECHNICAL ENGINEERING

Terracon will perform the geotechnical engineering for the project. This task will include:

- Determine the location of proposed borings for bridges, embankments, retaining
  walls and pavement widening improvement areas. The boring layout with general
  location and depths shall be reviewed and approved before field work begins. The
  Design Engineer's land surveyor shall survey subsurface exploration boring locations
  and provide ground elevations, coordinates and off-sets to the Engineer for reporting
  on the boring logs.
- Perform soil borings, rock coring, testing and analysis to include slope and global stability analysis for embankments and retaining walls, settlement analysis, and foundation design recommendations for retaining walls, bridges, embankments and pavement foundations.
- Perform retaining wall/embankment analyses, when applicable. This analysis shall
  include the computation of the factor of safety for bearing capacity, global stability,
  overturning and sliding. In addition, the Geotechnical Engineer shall include
  allowable bearing pressures, passive earth pressures, friction factors, consolidation
  parameters and lateral earth pressures for the retaining walls.
- All soil classification shall be done in accordance with the Unified Soil Classification System. Laboratory Engineering soil classification tests shall be limited to soil moisture content tests, soil particle size analysis tests, liquid limit and plasticity index tests, soil unit weight tests, unconfined compression tests, unconsolidated undrained triaxial, soil sulfate, pH, soil moisture density relationship tests, and/or laboratory California Bearing Ratio tests on subgrade soil samples collected from new paving areas.
- Submit a signed, sealed and dated geotechnical report in accordance with the schedule agreed upon by the Geotechnical Engineer and Design Engineer. Report shall include, but not be limited to, soil boring locations, boring logs, laboratory test results, generalized subsurface conditions, ground water conditions, analyses and recommendations for settlement and global stability of the earthen embankments and retaining walls, skin friction tables and design capacity curves including skin friction and point bearing. The skin friction tables and design capacity curves must be



presented for driven piling and drilled shaft foundations, as applicable. TXDOT Wincore boring logs and files and electronic CLG files shall be provided to the Engineer for the Bridge Boring Locations to be incorporated into the design drawings as required.

- If applicable, the Geotechnical Engineer shall perform sieve analysis tests and provide Grain Size distribution curves with D50 and D95 values.
- The soil borings for bridges shall be drilled 15 to 20 feet below the anticipated foundation bearing depth and at intervals not to exceed 300 feet. Retaining wall borings shall be drilled to at least 15 feet below the anticipated retaining wall depth at 200 feet intervals. Embankment area borings shall be drilled to at least 35 feet at 200 feet intervals. Borings for the development of new pavement recommendations shall be drilled to a maximum depth of 10 feet below existing grade and be spaced at about 500-foot intervals along the alignments. The Geotechnical Engineer shall present proposed subsurface exploration vertical boring locations to the Design Engineer for review.
- Two (2) bridge borings, six (6) retaining wall/embankment borings, and eleven (11) pavement borings are planned along the alignment. Each drilling location will be cleared for all utilities prior to beginning drilling operations.
- The Design Engineer shall incorporate soil boring data sheets prepared, signed, sealed and dated by the Geotechnical Engineer. The Design Engineer shall prepare retaining wall design sheets based on recommendations provided by the Geotechnical Engineer. Retaining wall design sheets shall be reviewed by the Geotechnical Engineer and signed and sealed in conjunction with the Design Engineer.
- Prepare and implement a Traffic Control Plan (TCP) for operations on or near the roadway.
- The Engineer shall, and shall require its subcontractors to, (1) provide personal protective equipment (PPE) to their personnel, (2) provide business vehicles for their personnel, and (3) require their personnel to use PPE and drive only business vehicles while performing work on or near roadways. The PPE must meet all (1) current standards set by the Occupational Safety and Health Administration (OSHA) and (2) TxDOT requirements (e.g., safety glasses, Type 3 (TY 3) pants for night work). Each business vehicle must be clearly marked with the Engineer's business name, or the name of the appropriate subcontractor, such that the name can be identified from a distance.

The following deliverables will be provided as part of this task:

- A signed and sealed pavement design report. Proposed pavement designs include permanent pavement, interim condition transition pavement, and temporary detour pavement. The pavement design report must document assumptions and design considerations. The pavement design report must include the following:
  - Cover sheet with highway designation, district, county, geographical limits, and signatures of persons involved in the preparation and approval
  - Existing and proposed typical sections
  - Soils map of the project area with a brief description of each type of soil located within the project area
  - Design input values and output



- Conclusion consisting of recommended pavement design or designs based on the data, analyses, and procedures included in the report.
- Pavement design details specified for each location that includes structural layer materials, general specifications, and layer thicknesses
- Site conditions that might influence the design and performance of pavements
- Relevant geotechnical data and drainage requirements including boring logs, laboratory soil test results, active or passive drainage system design, ground penetrating radar (GPR) data, falling weight deflectometer (FWD) data, dynamic cone penetrometer (DCP) data, pavement coring and report log (up to 10-foot depth), and soil classifications with Atterberg limits
- Results of the field explorations and testing of pavement sections
- o Recommended pavement rehabilitation methods and designs for new pavements
- Design criteria used in determining pavement designs, including traffic loads, pavement material characterization, environmental conditions, and pavement design life
- Design summary from the program used to design (e.g., FPS 21, DARWin, TxCRCP-ME, MODULUS 6.1)
- Life-cycle cost analysis, including the periods for resurfacing, reconstruction, and other rehabilitation measures and what these activities are likely to entail
- Traffic control plans required for subsurface geotechnical and pavement investigations
- Other considerations used in developing the pavement designs, including subgrade preparations and stabilization procedures

#### TASK 7 30% SCHEMATIC DESIGN AND INVOLVEMENT

K-H will prepare one 30% Preliminary Design Schematic roll plot. The preliminary design schematic will be limited to existing topography and utilities, horizontal and vertical alignments, intersection horizontal alignments and profiles (where applicable), identified easements, roadway typical sections, existing right-of-way, existing and proposed pavement edges, proposed sidewalks, proposed lane striping, proposed cross drainage improvements, proposed bridge improvements and proposed BMPs types/locations. This task will include:

- Horizontal and vertical alignment design.
- Prepare existing and proposed typical sections.
- Prepare bridge analysis to compare existing bridge widening to bridge replacement.
- Prepare preliminary cross sections at a spacing no less than 100 feet and at driveways, cross drainage structures, utility crossings, and intersections, which will show pavement and subgrade, right-of-way limits, side slopes, pavement crossslopes, curbs, sidewalks and utilities.
- Presenting this schematic at one (1) stakeholder meeting and providing support and attendance.
- Coordination with the City to prepare a stakeholder meeting summary which will consist of information provided at the meeting, comments, and responses to comments.
- Perform internal quality control review

The following deliverables will be provided as part of this task:



- Two (2) copies and one (1) electronic copy of the 30% Preliminary Design Schematic roll plots
- Two (2) copies and one (1) electronic copy of the 30% Cross Sections
- One (1) copy and one (1) electronic copy of Opinions of Probable Construction Cost for 30% Preliminary Design Schematic
- Stakeholder meeting summary

# TASK 8 PLANS, SPECIFICATIONS & ESTIMATE (PS&E)

K-H will develop the plans, specifications and estimate for the project. This task will include:

#### ROADWAY DESIGN

- Prepare a Title Sheet, Index of Sheets, and a Project Layout which references survey control benchmarks.
- Prepare existing and proposed typical section sheets incorporating any unresolved comments from the Preliminary/Schematic Design Phase.
- Prepare Removal Plans identifying and quantifying removals at a scale of 1"=40"
- Prepare Plan-Profile Sheets for DB Wood Road at a scale of 1"=40' horizontal and 1"=4' vertical.
- Prepare Intersection Detail Sheets for six (6) intersections at a scale of 1"=20"
- Prepare Driveway Layout Sheets for thirty (30) driveways at a scale of 1"=20"
- Prepare Roadway Miscellaneous Details Sheet
- Prepare Retaining Wall Plan and Profile Layout Sheets at a scale of 1"=40"
- Assuming MSE Retaining Walls to be used. Design to be provided by MSE Wall fabricator.
- Update cross sections to final roadway design
- Prepare Sequence of Work narrative and General Traffic Control Notes for construction
- Prepare Traffic Control Typical Sections
- Prepare Traffic Control Sheets at a scale of 1"=40'. Assume 3 phases of construction.

#### DRAINAGE

- Prepare Drainage Design for Hydrology & Hydraulics for Storm Drain and Cross Culverts
- Establish Existing and Proposed Conditions
  - o Data Collection: obtain studies, models, terrain, surveys, and plans,
  - o Terrain: merge field survey with LiDAR for seamless terrain model
  - Hydrology: define methodology, delineate basins, determine parameters, estimate existing and future urbanized land use conditions.
- Storm and Culvert Hydrology/Hydraulics
  - Produce exterior drainage area maps
  - Produce interior drainage area maps
  - Develop storm water hydrology for the ultimate roadway section for the project area. The hydrology will be modeled utilizing rational method or HEC-HMS with



City of Georgetown drainage criteria. The model will incorporate the 50%, 20%, 10%, 4%, 2% and 1% annual chance storm events. Modeling will develop storm water flows to all culverts and roadway conveyances. Based on the data developed drainage infrastructure will be designed for final design for the project area.

- Provide runoff, inlet and storm drain calculation sheets
- Produce plan and profile sheets at 1"=40' scale for the storm sewer system and include limits of trench protection and hydraulic grade line.
- o Produce lateral profile sheets for the storm sewer system at 1"=40' scale
- Prepare drainage details for outlet protection and outlet structures
- Prepare Hydraulic Data Sheets for all bridge and cross drainage structures at the outfall channel and indicate site location (e.g., station and name of creek), if applicable.
- Develop Subsurface drainage layouts at retaining walls
- Produce offsite detention pond layout sheet at 1"=40' scale with detention pond calculations summary
- o Produce five (5) culvert layout sheet at 1"=20' scale
- o Provide structural drainage detail sheet for detention pond outfall
- o Provide non-structural drainage detail sheet
- Design erosion control measures to be utilized for the project and shall identify the locations of the measures to be installed on erosion control layout sheets.
- Bridge Hydrology/Hydraulics
  - Perform a FEMA data request to obtain FEMA effective hydraulic modeling associated with Middle Fork San Gabriel River.
  - Coordinate with Williamson County to obtain modeling and spatial data from the San Gabriel River Flood Protection Planning Study (City-effective study)
  - Update City-effective hydrologic model with Atlas 14 rainfall to generate Atlas 14 peak flows.
  - Update City-effective hydraulic model with Atlas 14 peak flows.
  - Update City-effective hydraulic model with on-ground topographic information and LiDAR available from TNRIS outside the limit of on-ground survey to create a revised existing hydraulic model. The subject reach will extend from 500 linear feet downstream to 500 linear feet upstream of the existing crossing.
  - Update revised existing hydraulic model based on proposed bridge improvements. The bridge will be sized such that there is no rise in upstream or downstream water surface elevation as a result of the improvements.
  - Summarize the results of this task in a Floodplain Study for submittal to the City of Georgetown and Williamson County.

#### **WATER QUALITY**

o Finalize the requirements for water quality for the roadway section. Designs will be based on the new impervious cover that will be established with the ultimate roadway section and current TCEQ requirements for construction within the Edwards Aquifer Recharge Zone. The Engineer will endeavor to combine conveyance infrastructure with water quality in an effort to minimize project costs.



- Prepare final design of in line water quality treatment located within the project limits and shall include final design for the storm water interceptors and plan layouts.
- Prepare Water Pollution Abatement Plan (WPAP) and submit to TCEQ.

#### **BRIDGE**

- Prepare the bridge layout and final bridge design plans for the proposed structure/structures along DB Wood Road crossing the Middle Fork San Gabriel River
- Assume no waterline, wastewater line, gas line utilities, or aesthetic features (nonstandard rails, non-standard shapes, fascias, etc.) are to be incorporated into this bridge crossing. Assume C411 rail with Type C opening to be using on bridge.
- Utilize TxDOT Standards to the extent practical.
- Assume no need for a bridge deck drainage system. If deck drains are required, it is assumed that they will be allowed to discharge directly into the floodplain.
- Prepare Bridge Layout and Bridge Typical Sections
  - Bridge Layout will show plan and profile geometry of the structure, and Bridge Typical Sections will show cross sections of the structure. These sheets will be prepared according to the TxDOT checklist for Bridge Layouts
- Foundation Piers
  - Layout of drilled shaft or driven pile locations
- Bridge Boring Logs
- Abutment Details
  - Abutment plan views, elevation views, and common details including control elevations and bearing seat elevations.
- Bent Details
  - Bent plan views, elevation views, and common details including control elevations and bearing seat elevations.
- Framing Plans
  - o Framing Plans of the girders including bent and beam reports.
- Span Unit/Slab Details and Typical Transverse Section
  - Detail slab reinforcement and dimensions for each span unit. Detail structural typical sections for dimensions and reinforcing of bridge decks and end diaphragms.
- Prestressed Girder Design Sheet
- Bridge Quantity Summary

#### TRAFFIC AND SIGNAL DESIGN PLANS

- The signal plans will be prepared at a scale of 1"=40' and will include the following sheets.
  - Existing Conditions sheet will show locations of existing traffic control devices, underground, and overhead utilities at each intersection.
  - Signal Layout sheet will show the locations of proposed signal poles, pedestrian poles, signal heads, communication equipment, electrical conduits, ground boxes, signal cabinet, new electrical service, existing utilities, right of way, and



- proposed roadway improvements. Locations of pedestrian poles and pedestrian access ramps will be designed in conformance with ADA requirements. Due to lateral and vertical clearance required from an overhead electric line (per the State law), the Engineer will coordinate with the City before finalizing locations of signal poles, where applicable.
- Signal Elevation sheet will show placement of signal heads on a mast-arm and vertical clearance required for the mast-arm.
- Conduit Chart and Electrical Wiring sheet will show the type and number of electrical wires in each conduit run. A new electrical service will be designed to support total electrical load due to the new traffic signal and safety lighting at the intersection. The electrical service will include two separate circuits for traffic signal and illumination. At the 30% field review meeting, the Engineer will coordinate with the City and local electric service provider to determine location of new electrical service.
- Phasing & Detection sheet will show the proposed phasing at each intersection.
   Phasing and signal-heads for left-turn movements will be designed in conformance with 2011 Texas MUTCD. Video detection details for each movement will also be shown.
- APS load switch assignment sheet
- Quantities sheet will be provided for the intersection.
- Prepare Signing and Pavement Marking sheets at a scale of 1"=40'. Design signing and pavement markings in accordance with the Texas Manual for Uniform Traffic Control Devices. Include signage identifying the bike route within the corridor.
- The Engineer will use latest general notes issued by the City and update appropriately as required for traffic signals.

#### **ILLUMINATION**

- Identify appropriate LED or High Pressure Sodium (HPS) lamp to be used for continuous street lighting along the corridor.
- Develop Photometric model for the corridor, using AGi 32 software, to determine appropriate pole height and spacing that generates lighting levels to meet AASHTO Roadway Lighting criteria.
- Develop Illumination Layout sheets to show pole locations, electrical conduits, wiring charts, sheet quantity summary details.
- Conduct Voltage Drop and Electrical calculations to determine appropriate locations and design of electrical services and wire sizes.
- Conduit charts summarizing wiring details.

#### STANDARDS, SPECIFICATIONS, AND ESTIMATE

Download and prepare the appropriate City and TxDOT standards, as appropriate.
 Standards that require modification will be corrected and sealed by the Engineer. All other standards will have their title blocks filled out with the applicable project data and printed for inclusion in the final plan set.



- Prepare a list of applicable special specifications. If needed, the Engineer will develop or modify up to two (2) unique special specifications where an existing statewide specification is unavailable.
- Calculate quantities and prepare Item Summaries Sheets tabulating project quantities.
- Prepare An opinion of probable construction cost will be prepared at each submittal
- Prepare General Notes and a Construction Timeline Estimate

In addition to the items described above in this task, K-H will:

- Perform internal quality control review
- Address one round of comments each for the 30% Schematic and 90% PS&E from the City and incorporate those comments into the plans.

The following deliverables will be provided as part of this task:

- 90% Plans Submittal to contain:
  - Three (3) hard copies and a PDF of the following 90% Design Plans (11"x17"):
    - Title Sheet
    - Index of Sheets
    - Project Layout
    - Roadway Typical Sections
    - General Notes
    - Item Summaries
    - Traffic Control Narrative
    - Traffic Control Plans
    - Survey and Control Index Sheets
    - Horizontal and Vertical Control Sheets
    - Alignment Data Sheets
    - Roadway Plan-Profile Sheets
    - Intersection Detail Sheets
    - Driveway Detail Sheets
    - Miscellaneous Roadway Details Sheet
    - Retaining Wall Layouts
    - Miscellaneous Retailing Wall Details Sheet
    - Drainage Area Map Sheets
    - Hydraulic Calculation Sheets
    - Culvert Lavouts
    - Drainage Plan and Profile Sheets
    - Miscellaneous Drainage Details Sheet
    - Water Quality Sheets
    - Water Quality Details
    - Bridge Hydraulic Data Sheet
    - Bridge Layout
    - Bridge Structural Details Sheet
    - Traffic Signal Layout
    - Illumination Sheets
    - Signing and Pavement Markings Sheets
    - Erosion Control Layouts



- Removal Plans
- Standard Details
- Three (3) hard copies and a PDF of the 90% Opinion of Probable Construction Costs
- o Three (3) hard copies and a PDF of the 90% Construction Timeline
- Final Plans Submittal to contain:
  - Three (3) hard copies and a PDF of the Final Design Plans consisting of all sheets from the 90% submittal
  - Three (3) hard copies and a PDF of the Final Opinion of Probable Construction Costs
  - o Three (3) hard copies and a PDF of the Final Construction Timeline

#### TASK 9 CLOMR

If required, K-H will prepare a Conditional Letter of Map Revision for submittal to the City of Georgetown, Williamson County, and FEMA. K-H will provide the services specifically stated below:

- Prepare a HEC-2 hydraulic model based on effective information provided by FEMA to create a duplicate effective hydraulic model in digital format. This task assumes hard copy output only is provided by FEMA as part of the FEMA data request.
- Convert the duplicate effective model to HEC-RAS and update it based on on-ground survey information in the vicinity of the existing crossing to create a corrected effective hydraulic model.
- Update the corrected effective model based on the proposed bridge improvements to create a proposed hydraulic model.
- Perform floodway modeling based on the corrected effective and proposed hydraulic models.
- Summarize the results of this task in a report for submittal to the City of Georgetown,
   Williamson County, and FEMA. The report will include the following:
  - Report Text
  - o Hydraulic Model Output
  - Hydraulic Workmaps
  - o Bridge Plans
  - Appropriate FEMA Forms
  - FIRM and Annotated FIRM
  - o ESA Compliance Documentation (to be performed under Environmental Task)
  - o Draft Public Notice
  - Digital Files
- Submit the Conditional Letter of Map Revision to the City, County, and FEMA electronically.
- Respond to one round of ordinary and reasonable comments from the City, County, and FEMA.

#### TASK 10 BIDDING PHASE SERVICES

K-H will perform the following tasks as part of the Bid Phase:



- Prepare one set of bid documents in accordance with the City of Georgetown standards
- Attend one (1) pre-bid meeting with the City and assist the City in developing meeting agenda
- Receive, record and provide responses to prospective bidder's and suppliers
  questions. Issue addenda as appropriate to clarify, correct, or change the bidding
  documents
- Assist the City in opening of bids, review and evaluate all bids including bid amount and prepare recommendation letter for award of the contract for construction

#### TASK 11 CONSTRUCTION PHASE SERVICES

K-H will provide the construction phase services specifically stated below:

- Pre-Construction Conference. Consultant will conduct a Pre-Construction Conference prior to commencement of construction activity.
- Visits to Site and Observation of Construction. Consultant will make up to eighteen
   (18) progress site visits as directed by Client in order to observe the progress of the
   work. Such observations will not be exhaustive or extend to every aspect of
   Contractor's work. Observations will to be limited to spot checking, selective
   measurement, and similar methods of general observation. Based on information
   obtained during site visits, Consultant will evaluate whether Contractor's work is
   generally proceeding in accordance with the Contract Documents, and Consultant
   will keep Client informed of the general progress of the work.
- Consultant will not supervise, direct, or have control over Contractor's work, nor shall
  Consultant have authority to stop the Work or have responsibility for the means,
  methods, techniques, equipment choice and usage, schedules, or procedures of
  construction selected by Contractor, for safety programs incident to Contractor's
  work, or for any failure of Contractor to comply with any laws. Consultant does not
  guarantee the performance of any Contractor and has no responsibility for
  Contractor's failure to perform its work in accordance with the Contract Documents.
- Recommendations with Respect to Defective Work. Consultant will recommend to Client that Contractor's work be disapproved and rejected while it is in progress if, on the basis of its observations, Consultant believes that such work will not produce a completed Project that generally conforms to the Contract Documents.
- Clarifications and Interpretations. Consultant will respond to up to thirty (30)
   Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents. Any orders authorizing variations from the Contract Documents will be made by Client.
- Change Orders. Consultant may recommend Change Orders to the Client and will review and make recommendations related to Change Orders submitted or proposed by the Contractor.
- Shop Drawings and Samples. Consultant will review and approve up to sixteen (16) shop drawings or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, schedules, or procedures of construction or to related safety programs.



- Substitutes and "or-equal." Consultant will evaluate and determine the acceptability
  of substitute or "or-equal" materials and equipment proposed by Contractor in
  accordance with the Contract Documents.
- Disagreements between Client and Contractor. Consultant will, if requested by Client, render written decision on all claims of Client and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents. In rendering decisions, Consultant shall be fair and not show partiality to Client or Contractor and shall not be liable in connection with any decision rendered in good faith.
- Applications for Payment. Based on its observations and on review of applications for payment and supporting documentation, Consultant will determine amounts that Consultant recommends Contractor be paid. Such recommendations will be based on Consultant's knowledge, information and belief, and will state whether in Consultant's opinion Contractor's work has progressed to the point indicated, subject to any qualifications stated in the recommendation. For unit price work, Consultant's recommendations of payment will include determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests. Consultant's recommendations will not be a representation that its observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work, or involved detailed inspections.
- Substantial Completion. Consultant will, after notice from Contractor that it considers
  the Work ready for its intended use, in company with Client and Contractor, conduct
  a site visit to determine if the Work is substantially complete. Work will be
  considered substantially complete following satisfactory completion of all items with
  the exception of those identified on a final punch list.
- Final Notice of Acceptability of the Work. Consultant will conduct a final site visit to determine if the completed Work of Contractor is generally in accordance with the Contract Documents and the final punch list so that Consultant may recommend final payment to Contractor. Accompanying the recommendation for final payment, Consultant shall also provide a notice that the Work is generally in accordance with the Contract Documents to the best of Consultant's knowledge, information, and belief based on the extent of its services and based upon information provided to Consultant.
- Construction Phase Engineering Support for Karst features encountered
- Record Drawings

#### **ADDITIONAL SERVICES**

Any services not specifically provided for in the above scope will be considered additional services and can be performed at our then current hourly rates. Additional services we can provide include, but are not limited to, the following:

- Right-of-Way acquisition and/or condemnation assistance;
- Landscaping and streetscaping services
- Franchise Utility relocation design
- Appearing as an expert witness in any litigation for the City.



- Prepare a Section 404 USACE regional or individual permit and/or mitigation planning
- Taxonomy and/or genetic sequencing of specimens collected during presence/absence surveys
- Preparing Mitigation Plans related to Environmental Resources
- Formal USFWS Section 7 Consultation
- Preparing Biological Opinions
- Hiring an Abstract Company for title search for Phase I ESA
- A full Phase I (historical aerial and topography and interviews with past property owners) or Phase II (drilling and lab testing) Environmental Site Assessment for Petroleum and Hazardous Substance
- Historic Resources Survey or Archival Research
- Section 4(f)/6(f) analysis
- Preparing final Letter of Map Revision for FEMA (LOMR)
- Continuous illumination lighting
- Additional meetings other than those listed in the scope



#### **EXHIBIT C**

# Services To Be Performed By The City DB Wood Road Improvements from SH 29 to Oak Ridge Road

#### SCOPE OF WORK OVERVIEW

Kimley-Horn and Associates, Inc. (K-H) will provide engineering services including developing plans, specifications, & estimates (PS&E) for the proposed improvements to DB Wood Road from Highway 29 to Oak Ridge Road. The project will consist of the design of approximately 1.5 miles of DB Wood Road widening, pedestrian and bicycle improvements, intersection improvements, storm sewer design, bridge widening or replacement, culvert widening, signal improvements, topographic survey, utility conflict coordination, bidding, and construction phase services.

#### SERVICES TO BE PROVIDED BY THE CITY

- A. Provide a project coordinator to work with Kimley-Horn and Associates, Inc. (K-H) during the development of the project.
- B. Provide timely review of submittals.
- C. Provide any available Subsurface Utility Engineering information available for the project corridor.
- D. Provide available copies of associated studies and coordination with ongoing related city projects.
- E. Provide any available traffic counts for the SH 29 and DB Wood Rd intersection along with any traffic counts along DB Wood Rd.
- F. Coordination of right of entry.

#### EXHIBIT D FEE SCHEDULE DB Wood Road Improvements from SH 29 to Oak Ridge Road

Application to Regional USACE Pre-Constructior Cultural Resources (CR) ESA Compliance Letter Species Study - Cave Spi Species Study - Golden- Spring study Salamander Study	Itlan Reports Maintain Project Files Maintain Project Files pplan  s s ume 12) s (Assume 6)  Total Task 1:  Ssance data  Total Task 2:  Of-Way Data  occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits M Assume 2)  kup  Total Task 4: cumentation	98 98 120 24 150 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S   S   S   S   S   S   S   S   S   S	7,680 9,960 17,640,00 15,178 16,776 17,640,00 17,640,00 17,640,00 17,640,00 17,640,00 17,640,00 17,640,00 17,640,00 17,640,00 18,188 166,954,00 17,640,00 17,640,00 18,188 18,159 1126,367,20	## 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	40 40 24 24 24 60 18 9 199 12 24 36	24 24 18 12 54 12 24 36	o o Sanior Technical Support	18 18 0 0	\$ 61,776	0.00	-   S
Jask 1 - Project Administra Invoicing and Progress I Project Administration/ Maintain/Develop Word Coordinate with TADD 1 Coordinate with Subs Bi-weekly status update Progress Meetings (Ass Design Review Meeting Progress Meetings (Ass Design Review Meeting Perform Field Reconnal Collect/Review existing Collect/Review existing Survey and Righted Survey Product Fee Easement Acquisition D 10% Subconsultant Mar Meeting Survey Product Fee Lasement Acquisition D 10% Subconsultant Mar Subconsultant Mar Meeting Survey Product Fee 10% Subconsultant Mar Meeting Survey	Itlan Reports Maintain Project Files Maintain Project Files pplan  s s ume 12) s (Assume 6)  Total Task 1:  Ssance data  Total Task 2:  Of-Way Data  occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits M Assume 2)  kup  Total Task 4: cumentation	98 72 52 48 120 24 54 30 498 42 60 102 0 0 0 120 76 18 0 0 214	S   S   S   S   S   S   S   S   S   S	16,730 12,360 10,120 9,120 22,800 4,800 9,270 5,040 7,680 9,960 17,640,00 15,178 166,954,00 20,600 12,240 3,780 31,588 8,159	4 4 6 6 6 6 6 6 6 6	40 24 24 24 60 24 18 9 223 12 12 24	24 24 24 60 18 9 199 12 24 36	18 12 54 12 24 36	0	18	Fee	- S	- \$
Invoicing and Progress I Project Administration/ Maintain/Develop Word Coordinate with XuDs Bi-weekly status update Progress Meetings (Ass) Design Review Meeting Ass 2 - Data Collection Perform Field Reconnat Collect/Review existing Ass 3 - Survey and Righted Survey Provider Fee Easement Acquisition D 10% Subconsultant Mar  Subsection of Control of Collection Ass 4 - Subsurface Utility I Utility Coordination to Stakeholder meetings (Ass) Subsection of Coordination of Coordi	Reports Administration Project Files (plan  ssume 12) (s (Assume 6)  Total Task 1:  ssance data  Total Task 2:  of-Way Data  occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits M Assume 2)  kup  Total Task 4:  cumentation	72 52 48 120 24 54 30 498 42 60 102 0 0 0 0 0 0	S	12,360 10,120 9,120 22,800 4,800 9,270 5,040 90,240,00 17,640,00 15,178 166,954,00 20,600 12,240 3,780 15,88 8,159	6 6	24 24 24 60 24 18 9 223 12 12 12 0	24 24 24 60 18 9 199 12 24 36	18 12 54 12 24 36	0	18	\$ 5 61,777 \$ 90,000	· S	- \$
Invoicing and Progress I Project Administration/ Maintain/Develop Word Coordinate with XuDs Bi-weekly status update Progress Meetings (Ass) Design Review Meeting Ass 2 - Data Collection Perform Field Reconnat Collect/Review existing Ass 3 - Survey and Righted Survey Provider Fee Easement Acquisition D 10% Subconsultant Mar  Subsection of Control of Collection Ass 4 - Subsurface Utility I Utility Coordination to Stakeholder meetings (Ass) Subsection of Coordination of Coordi	Reports Administration Project Files (plan  ssume 12) (s (Assume 6)  Total Task 1:  ssance data  Total Task 2:  of-Way Data  occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits M Assume 2)  kup  Total Task 4:  cumentation	72 52 48 120 24 54 30 498 42 60 102 0 0 0 0 0 0	S	12,360 10,120 9,120 22,800 4,800 9,270 5,040 90,240,00 17,640,00 15,178 166,954,00 20,600 12,240 3,780 15,88 8,159	6 6	24 24 24 60 24 18 9 223 12 12 12 0	24 24 24 60 18 9 199 12 24 36	18 12 54 12 24 36	0	18	\$ 61,777 \$ 90,000	- \$	- \$
Maintain/Develop Wort Coordinate with Subs Coordinate with Subs Eli-weekly status update Progress Meetings (Ass Design Review Meeting ask 2 - Data Collection Perform Field Reconnat Collect/Review existing ask 3 - Survey and Right-c Survey Prodder Fee Easement Acquisition D 10% Subconsultant Mar Louis Coordination Subseption of Create and Maintain UC Stakeholder meetings (US Subseption Create and Maintain UC Stakeholder meetings (US Subseption Create and Maintain UC Stakeholder Ree 10% Subconsultant Mar D Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WOI) Threatened and Endang Application to Regional USAGE Pre-Construction Cultural Resources (CR) ESA Compliance Letter Species Study - Coiden- Spring study - Golden- Spring	ssance data  Total Task 1:  Ssance data  Total Task 2:  of-Way Data  occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits Massume 2)  kup  Total Task 4:  cumentation	52 48 120 124 54 54 30 498 42 60 102 0 0 0 0 0	S	10,120 9,120 22,800 4,800 9,270 5,040 90,240,00 7,680 9,960 17,640,00 15,178 166,954,00 12,240 3,780 11,590 11,240 12,240 3,780 11,590	6 6	24 24 24 60 24 18 9 223 12 12 24 0	24 24 60 60 18 9 199 12 24 36 0	18 12 54 12 24 36	0	0	\$ 61,777 \$ 90,000	- \$	- \$
Coordinate with TADD T Coordinate with Subs Bi-weekly status update Bi-weekly status update Progress Meeting (Ass Design Review Meeting ask 2 - Data Collection Perform Field Reconnai Collect/Review existing ask 3 - Survey and Right-C Survey Prodder Fee Easement Acquistion D 10% Subconsultant Mar 10% Subcons	s sume 12) (Assume 6)  Total Task 1:  SSANCE data  Total Task 2:  MWay Data  Occuments  Kup  Total Task 3:  Engineering/Utility Coord  Exhibits  MA  Assume 2)  kup  Total Task 4:  cumentation	48 120 24 54 54 56 60 60 60 60 60 60 60 60 60 60 60 60 60	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	9,120 22,800 4,800 9,270 5,040 90,240,00 90,240,00 7,680 9,960 17,640,00 15,178 166,954,00 20,600 12,240 3,780 81,588 8,159	6	24 60 24 18 9 223 12 12 12 24 0	24 60 18 9 199 12 24 36	12 54 12 24 36 0	0	0	\$ 61,777 \$ 90,000	- \$	- \$
Bl-weekly status update Progress Meetings (Ass Design Review Meeting Indiana Progress Meeting (Ass Design Review Meeting Indiana Progress Meeting Indiana Progress Meeting Indiana Progress Meeting Indiana Progress Indiana Progre	ume 12) s (Assume 6)  Total Task 1:  Ssance data  Total Task 2:  If-Way Data occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits  M Assume 2)  kup  Total Task 4:  cumentation	24 54 30 498 42 60 102 0 0 0 0 0 0 0 0 0 0 0 0 2 120 76 18 0 0	S   S   S   S   S   S   S   S   S   S	4,800 9,270 5,040 90,240,00 7,680 9,960 17,640,00 61,776 90,000 15,178 166,954,00 20,600 12,240 3,158 8,159	6	24 18 9 223 12 12 24 0 0	18 9 199 12 24 36 0	12 54 12 24 36 0	0	0	\$ 61,777 \$ 90,000	- \$	- \$
Progress Meetings (Assa Design Review Meeting Interest Meeting Design Review Meeting Fask 2 - Data Collection Perform Field Reconnai Collect/Review existing  ask 3 - Survey and Right-c Survey Provider Fee Lasement Acquisition D 10% Subconsultant Mar  ask 4 - Subsurface Utility Utility Coordination and Create and Maintain UC Stakeholder meeting ( Sube Provider Fee 10% Subconsultant Mar  Stakeholder meeting ( Suber Provider Fee 10% Subconsultant Mar  Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CRI ESA Complication to Regional USACE Pre-Construction Cultural Resources (ERI ESA Complication to Regional USACE Pre-Construction Cultural Resources (ERI ESA Complication to Regional USACE Pre-Construction Cultural Resources (ERI ESA Complication to Regional Waller Sudy - Colden- Species Study - Cave Sp Species Study - County Count	ume 12) s (Assume 6)  Total Task 1:  Ssance data  Total Task 2:  If-Way Data occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits  M Assume 2)  kup  Total Task 4:  cumentation	54 30 498 42 60 102 0 0 0 0 120 76 18 0 0	S	9,270 5,040 90,240.00 7,680 9,960 17,640.00 61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	6	18 9 223 12 12 12 24 0 0	9 1199 12 24 36 0 0	12 54 12 24 36 0	0	0	\$ 61,777 \$ 90,000	- \$	- \$
lask 2 - Data Collection Perform Field Reconnai Collect/Review existing Fask 3 - Survey and Right-C Survey Provider Fee Easement Acquisition D 10% Subconsultant Mar  ask 4 - Subsurface Utility Lutility Coordination and Create and Maintain UC Stakeholder meetings (v SUE Provider Fee 10% Subconsultant Mar  10% Subconsultant Mar  ask 5 - Environmental Doo Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WO) Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CR) ESA Compliance Letter Species Study - Cave Sp Species Study - Cave Sp Species Study - Colden- Spring study - Solden- Spring study - Suddy Salamander Study Williamson County Con Univil County Sulfiamson County Con Williamson County Con County Co	Total Task 1:  ssance data  Total Task 2:  If-Way Data occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits M M Assume 2) kup  Total Task 4:  currentation	498  42 60 102 0 0 0 0 120 76 18 0 0 214	S	90,240.00 7,680 9,960 17,640.00 61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	6	223 12 12 24 0 0	199 12 24 36 0	12 24 36 0	0	0	\$ 61,777 \$ 90,000	- \$	- \$
Perform Field Reconnai Collect/Review existing  Task 3 - Survey and Right-C Survey Prodder Fee Easement Acquisition D 10% Subconsultant Mar  Task 4 - Subsurface Utility Utility Coordination and Create and Maintain UC Stakeholder meetings ( Stakeholder	Sasance data  Total Task 2:  occuments kup  Total Task 3:  Engineering/Utility Coord Exhibits M Assume 2)  kup  Total Task 4:  cumentation	42 60 102 0 0 0 0 0 0 120 76 18 0 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,680 9,960 17,640.00 61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	6	12 12 24 0 0	12 24 36 0 40 18	12 24 36 0	0	0	\$ 61,777 \$ 90,000	- \$	- \$
Perform Field Reconnai Collect/Review existing  Task 3 - Survey and Right-C Survey Prodder Fee Easement Acquisition D 10% Subconsultant Mar  Task 4 - Subsurface Utility Utility Coordination and Create and Maintain UC Stakeholder meetings ( Stakeholder	data  Total Task 2:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S	9,960 17,640.00 61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	0	12 24 0 40 18	24 36 0 40 18	24 36 0			\$ 61,776 \$ 90,000	5.00	
Perform Field Reconnai Collect/Review existing  ask 3 - Survey and Right-C Survey Prodder Fee Easement Acquisition D 10% Subconsultant Mar  ask 4 - Subsurface Utility Utility Coordination and Create and Maintain UC Stakeholder meetings ( Stakeholder me	data  Total Task 2:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S	9,960 17,640.00 61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	0	12 24 0 40 18	24 36 0 40 18	24 36 0			\$ 61,776 \$ 90,000	5.00	
lask 3 - Survey and Right-C Survey Provider Fee Easement Acquisition D 10% Subconsultant Mar 10% Subconsultant	Total Task 2:  If-Way Data  ocuments  kup  Total Task 3:  Engineering/Utility Coord  E shibits  If M  Assume 2)  kup  Total Task 4:  cumentation	102 0 0 0 0 0 120 76 18 0 0	S	17,640.00 61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	0	0 40 18	0 40 18	0			\$ 61,776 \$ 90,000	5.00	
Survey Provider Fee Easement Acquistion D 10% Subconsultant Mar Fask 4 - Subsurface Utility I Utility Coordination and Create and Maintain UC Stakeholder meetings ( SUE Provider Fee 10% Subconsultant Mar Fask 5 - Environmental Doo Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WOT) Threatend and Endang Application to Regional USACE PTe-Construction Cultural Resources (CR) Species Study - Cave Sp Species Study - Golden- Spring study - Golden- Spring study - Salamander Study Salamander Study Williamson County Con	ocuments kup Total Task 3: Engineering/Utility Coord I Exhibits M Assume 2) kup Total Task 4: cumentation	0 0 0 0 120 76 18 0 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	61,776 90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	0	0 40 18	0 40 18	0 40			\$ 61,776 \$ 90,000	5.00	
Survey Provider Fee Easement Acquistion D 10% Subconsultant Mar Fask 4 - Subsurface Utility I Utility Coordination and Create and Maintain UC Stakeholder meetings ( SUE Provider Fee 10% Subconsultant Mar Fask 5 - Environmental Doo Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WOT) Threatend and Endang Application to Regional USACE PTe-Construction Cultural Resources (CR) Species Study - Cave Sp Species Study - Golden- Spring study - Golden- Spring study - Salamander Study Salamander Study Williamson County Con	ocuments kup  Total Task 3: Engineering/Utility Coord Exhibits M Assume 2) kup  Total Task 4: cumentation	0 0 0 120 76 18 0 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	6	40 18	40 18	40	0	0	\$ 90,000	0.00	-   \$
Survey Provider Fee Easement Acquistion D 10% Subconsultant Mar Fask 4 - Subsurface Utility I Utility Coordination and Create and Maintain UC Stakeholder meetings ( SUE Provider Fee 10% Subconsultant Mar Fask 5 - Environmental Doo Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WOT) Threatend and Endang Application to Regional USACE PTe-Construction Cultural Resources (CR) Species Study - Cave Sp Species Study - Golden- Spring study - Golden- Spring study - Salamander Study Salamander Study Williamson County Con	ocuments kup  Total Task 3: Engineering/Utility Coord Exhibits M Assume 2) kup  Total Task 4: cumentation	0 0 0 120 76 18 0 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	90,000 15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	6	40 18	40 18	40	0	0	\$ 90,000	0.00	- \$
10% Subconsultant Mar  Task 4 - Subsurface Utility   Utility Coordination and Create and Maintain UC Stakeholder meetings ( SUE Provider Fee   10% Subconsultant Mar  Task 5 - Environmental Dor Phase 1 ESA   Geologic Assessment (G Waters/Wetlands (WO) Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CR)   SEA Compliance Letter   Species Study - Cave Sp   Species Study - Cave Sp   Species Study - Golden- Spring study   Salamander Study   Salamander Study   Williamson County Con	Kup  Total Task 3: Engineering/Utility Coord Exhibits M Assume 2) kup  Total Task 4: cumentation	0 0 120 76 18 0 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,178 166,954.00 20,600 12,240 3,780 81,588 8,159	6	40 18	40 18	40	0	0			- \$
Fask 4 - Subsurface Utility   Utility Coordination and Create and Maintain UC Stakeholder meetings (s SUE Provider Fee 10% Subconsultant Mar 10% Subconsul	Total Task 3: Engineering/Utility Coord Exhibits M Assume 2) kup Total Task 4: cumentation	0 120 76 18 0 0	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	20,600 12,240 3,780 81,588 8,159	6	40 18	40 18	40	0	0	\$ 151,776	5.00 \$	- \$
Utility Coordination and Create and Maintain U.Stakeholder meetings (SUE Provider Fee 10% Subconsultant Mar Subconsultant Mar 10% Subconsultant Subconsultant Subconsultant Resources (CR) ESA Compliance Letter Species Study - Cade Species Study - Cade Species Study - Cade Spring Study - Salamander Study Williamson County Con	Engineering/Utility Coord  E shibits  M  Messume 2)  kup  Total Task 4:  cumentation	120 76 18 0 0	\$ \$ \$ \$ \$	20,600 12,240 3,780 81,588 8,159	6	40 18	40 18	40	0	0	\$ 151,776	5.00 \$	- \$
Utility Coordination and Create and Maintain U.Stakeholder meetings (SUE Provider Fee 10% Subconsultant Mar Subconsultant Mar 10% Subconsultant Subconsultant Subconsultant Resources (CR) ESA Compliance Letter Species Study - Cade Species Study - Cade Species Study - Cade Spring Study - Salamander Study Williamson County Con	LEARIDITS M Assume 2) kup Total Task 4: cumentation	76 18 0 0	\$ \$ \$ \$	12,240 3,780 81,588 8,159		18	18						
Utility Coordination and Create and Maintain U.Stakeholder meetings (SUE Provider Fee 10% Subconsultant Mar Subconsultant Mar 10% Subconsultant Subconsultant Subconsultant Resources (CR) ESA Compliance Letter Species Study - Cade Species Study - Cade Species Study - Cade Spring Study - Salamander Study Williamson County Con	LEARIDITS M Assume 2) kup Total Task 4: cumentation	76 18 0 0	\$ \$ \$ \$	12,240 3,780 81,588 8,159		18	18						I
Stakeholder meetings ( SUE Provider Fee  10% Subconsultant Mar  Subconsultant Mar  Phase 1 ESA Geologic Assessment (G Waters/Wetlands (W0) Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CR) ESA Compliance Letter Species Study - Golden- Spring study - Golden- Spring study - Salemander Study Walliamson County Con Williamson County C	Assume 2)  kup  Total Task 4:  cumentation  FA)	18 0 0	\$ \$	3,780 81,588 8,159				40					
10% Subconsultant Mar fask 5 - Environmental Doi Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WO) Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CR) Species Study - Colden- Species Study - Colden- Spring study - Golden- Spring study - Salamander Study Salamander Study Williamson County Con Williamson County Con	Total Task 4: zumentation	214	\$	8,159	6				l				1
Fask 5 - Environmental Doo Phase 1 ESA Geologic Assessment (G Waters/Wellands (WOI Threatened and Endang Application to Regional USACE Pre-Constructior Cultural Resources (CR) Species Study - Cave Sp Species Study - Cave Sp Species Study - Golden- Spring study Salamander Study Williamson County Con	Total Task 4: zumentation	214			6								\$ 8
Phase 1 ESA Geologic Assessment (G Waters/Wetlands (WOT Inreatened and Endang Application to Regional USAGE Pre-Construction Cultural Resources (CR) ESA Compiliance Letter Species Study - Gave Sp. Species Study - Goden- Spring study Salamander Study Williamson County Con	cumentation	0	\$ 1	126,367.20	6		1					ļ	
Phase 1 ESA Geologic Assessment (G Waters/Wellands (WOT Threatened and Endang Application to Regional USAGE Pre-Construction Cultural Resources (CR) ESA Compiliance Letter Species Study - Gave 5p. Species Study - Golden- Spring study Salamander Study Williamson County Con	sA)					64	64	80	0	0	\$	- \$	- \$ 8
Phase 1 ESA Geologic Assessment (G Waters/Wellands (WOT Threatened and Endang Application to Regional USAGE Pre-Construction Cultural Resources (CR) ESA Compiliance Letter Species Study - Gave 5p. Species Study - Golden- Spring study Salamander Study Williamson County Con	sA)												
Waters/Wetlands (WOT Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CR). ESA Compilance Letter Species Study - Coden- Species Study - Golden- Spring study Salamander Study Williamson County Con		0	\$	3,200								\$ 3,20	
Threatened and Endang Application to Regional USACE Pre-Construction Cultural Resources (CR) ESA Compliance Letter Species Study - Cave Sp Species Study - Golden- Spring study Salamander Study Williamson County Con	US	0	\$ \$	4,500 11,000								\$ 4,50 \$ 11,00	
USACE Pre-Construction Cultural Resources (CR) ESA Compliance Letter Species Study - Cave Spi Species Study - Golden- Spring study Salamander Study Williamson County Con	gered Species Habitat Assessment (T/E)	0	\$	2,200								\$ 2,20	0.00
Cultural Resources (CR) ESA Compliance Letter Species Study - Cave Spi Species Study - Golden- Spring study Salamander Study Williamson County Con		0	\$	4,500 4,000								\$ 4,50 \$ 4,00	
Species Study - Cave Sp Species Study - Golden- Spring study Salamander Study Williamson County Con		0	\$	10,400								\$ 10,40	
Species Study - Golden- Spring study Salamander Study Williamson County Con	aries	30 0	\$	4,800 10,000		6	8	16				\$ 10,00	0.00
Salamander Study Williamson County Con	Cheeked Warbler Species Study	0	\$	16,500								\$ 16,50	0.00
Williamson County Con		0	\$ \$	3,900 4,800								\$ 3,90 \$ 4,80	
10% Subconsultant Mai	servation Foundation Coordination	0	\$	6,000								\$ 6,00	
	kup	0	\$	8,100									
	Total Task 5:	30	\$	93,900.00	0	6	8	16	0	0	\$	- \$ 81,00	0.00 \$
Task 6 - Geotechnical Engir	neering												
Geotech w/exist pavem	ent eval (FWD/GPR)	0	S	89,448								\$ 89,44	3.00
10% Subconsultant Mar	kup	0	\$	8,945									
	Total Task 6:	0	\$	98,393.00	0	0	0	0	0	0	\$	- \$ 89,44	8.00 \$
Task 7 - 30% Schematic De	sign and Stakeholder Involvement												
Design Items		0	S										
Develop Design Criteria Horizontal and Vertical		14 150	\$	2,200 23,280	2	2 12	4 36	8 80	20				+
Existing/Proposed Typic	cal Sections	28	\$	4,400		4	8	16	20				
Perform Bridge Layout ( Pedestrian Facilities Ana	Configuration	36 48	\$	6,120 7,440	4	4	12 12	16 24	8		ļ		
Driveway Design		64	\$	9,680		4	12	36	12				
Intersections/Cross Stre		44 78	\$	6,820 12,620	2	4 12	12 24	24 40	4				-
Delineate external drain	nage areas	92	\$	14,220	4	4	24	60					
Culvert Hydrology (ratio Hydraulic (HY-8) Analysi		56 36	\$	8,360 5,480		4	12	40 24					-
FIS Data Request		2	\$	270				2					
Bridge Hydrology (HEC- Bridge Hydraulics (HEC-	HMS) RAS) Exist/Proposed	30 80	\$	4,900 13,120	2	4 12	8 24	16 40					
Culvert Extension Desig	ns	78	\$	12,620	2	12	24	40					
Pavement Marking Desi		48 140	\$	7,340 22,480		4 24	8 36	24 60	12 20				
TCP Phasing Concept (3 Misc	рнаэсэ)	140	\$	22,48U -		24	30	OU	∠0			-	_
Schematic Roll Plot		92	S	14,300	4	8	20	60					
Prelim 3D Model Prelim XSC		72 68	\$	11,320 10,520		8	24 24	40 40			1	+	+-
OPCC		30	\$	4,900	2	4	8	16					
Prepare Stakeholder Me Attend stakeholder Mee		60 9	\$	9,340 1,545		8	16 3	36 3				-	+
Compile and Respond to		12	\$	2,060		4	4	4					
QA/QC		80	S	18,000	40	40						-	$+\!-\!$
_ 1	eting	0	\$						·	1			

# EXHIBIT D FEE SCHEDULE DB Wood Road Improvements from SH 29 to Oak Ridge Road

	Kimley-Horn Staff Subconsultants													
	Professional Service Description	Total Task Hours	Total Task Cost	Senior Professional III	Senior Professional I	Professional	Analyst	Senior Technical Support	Support Staff	an (Survey)	ae (Geotech/ENV)	Rios (SUE)		
Ta	Task 8 - Plans, Specifications & Estimate (PS&E)					1				100	100	100		
R	Roadway Title Sheet	7	\$ 1,100		1	2	4							
	Index	11	\$ 1,640		1	2	8							
	Project Layout Finalize Typical Sections	30 14	\$ 4,540 \$ 2,110		2	8 2	20 10							
	Prepare Removal Plans	88	\$ 13,220		4	24	60							
	Prepare Horizontal Alignment Data Sheet Finalize Design and Prepare Roadway Plan/Profile Sheets	7 220	\$ 1,100 \$ 34,600		20	2 80	4 120							
	Finalize and Prepare Intersection Layouts	98	\$ 14,860	2	4	20	60	12						
	Finalize and Prepare Driveway Layouts Finalize and Prepare Roadway Misc Details	128 26	\$ 20,560 \$ 4,360	4	12 4	40 8	60 12	12						
	Finalize and Prepare Retaining Wall Plan/Profile	158	\$ 24,600	6	12	40	100							
	Finalize and Prepare Retaining Wall Misc Details Final 3D Model	26 72	\$ 4,260 \$ 11,320		6	8 24	12 40							
	Final XSC	68	\$ 10,520		4	24	40							
	Prepare TCP Narrative Prepare TCP Typical Section	20 24	\$ 3,240 \$ 3,680	2	4	4	12 16							
	Finalize and Prepare TCP Plans (Assume 3 phases)	248	\$ 39,900	12	36	60	140							
D	Drainage Delineate internal drainage areas	0 70	\$ - \$ 10,430		4	16	50							
	Storm System Hydrology (rational method) Analysis	68	\$ 10,520		4	24	40							
	Hydraulic (StormCAD) Analysis Finalize and Prepare Hydrologic and Hydraulic Data Sheets	98 72	\$ 15,320 \$ 11,320	2	12 8	24 24	60 40							
	Finalize and Prepare Storm Plan and Profile	140	\$ 22,000		20	40	80							
-	Finalize and Prepare Culvert Layouts Finalize and Prepare Drainage Misc Details	78 20	\$ 12,620 \$ 3,330	2	12	24 6	40 10				-			
	Prepare Erosion Control Layout	68	\$ 10,520		4	24	40							
W	Floodplain Study/Report Water Treatment	46 0	\$ 7,600 \$ -	4	6	12	24				-			
-	Prepare Inline Treatment Layout	100	\$ 15,820	4	12	24	60							
R	Prepare WPAP Bridge	46 0	\$ 6,960 \$ -		6	8	32				-			
	Finalize and Prepare Bridge Layout	110	\$ 17,380		14	36	60							
-	Prepare Bridge Typical Sections Prepare Foundation Design	18 40	\$ 2,740 \$ 6,740		2	4 24	12 12				-			
	Prepare Abutment Details	150	\$ 24,250		20	60	70							
	Prepare Bent Details Prepare Framing Plans	112 28	\$ 17,700 \$ 4,580		12 4	40 12	60 12							
	Prepare Span Unit/Slab Details	100	\$ 16,260		12	44	44							
	Prepare Prestressed Girder Design Sheet Bridge Quantity Summary	22 38	\$ 3,500 \$ 5,800		4 2	6 12	12 24							
Ti	Traffic	0	\$ -											
	Prepare Signal Design Prepare Existing Condition Layout	64 7	\$ 9,980 \$ 1,100		4	24	36 4							
	Finalize and Prepare Signal Layout	22	\$ 3,325		2	5	15							
_	Prepare Signal Elevation Sheet Prepare Conduit Chart and Electrical Wiring	7 14	\$ 1,100 \$ 2,200		1 2	2	8							
	Prepare Phasing & Detection Sheet	7	\$ 1,100		1	2	4							
	Prepare APS load assignment sheet Prepare Phasing & Detection Sheet	5 7	\$ 740 \$ 1,100		1	2	4							
	Finalize and Prepare Signing and Pavement Marking Sheet	0	\$ -			_	·							
III	Illumination Prepare Develop Photometric Model for Continuous Street Lighting	0 70	\$ - \$ 11,000		10	20	40							
	Develop plans for Illumination Layout	125	\$ 19,200		15	30	80							
_	Conduct Voltage Drop & Wire Sizing Calcs  Develop Electrical Service, Conduit & Wiring Charts	60 35	\$ 9,650 \$ 5,500		10 5	20 10	30 20							
N	Misc	0	\$ -											
	Prepare General Notes Prepare Standards	26 32	\$ 4,260 \$ 4,940		6 4	8	12 20							
	Prepare Specifications	24	\$ 3,860		4	8	12							
_	Prepare Quantity Summary Sheets 90% & Final OPCC	20 32	\$ 3,270 \$ 5,300	2	6	8	10 16							
	90% & Final QA/QC	80	\$ 18,000	40	40									
	Construction Timeline Address 30% Review Comments	34 70	\$ 6,320 \$ 10,920		10	24 24	40							
	90% Submittal & Address Review Comments	54	\$ 8,400		6	16	32							
	Final Submittal	26	\$ 4,260		6	8	12				1			
	Total Task 8:	3,490	\$ 556,525.00	84	434	1045	1903	24	0	\$ -	\$ -	\$ -		
Ta	Task 9 - CLOMR											l		
T	Prepare Digital Version of Effective HEC-2 Model	28	\$ 4,500	2	2	8	16							
	Convert HEC-2 model to HEC-RAS  Create Corrected Effective HEC-RAS model	21 30	\$ 3,350 \$ 4,900	1 2	2	6	12 16							
	Create Proposed HEC-RAS model	30	\$ 4,900	2	4	8	16							
-	Perform Floodway Modeling Prepare CLOMR Report	46 24	\$ 7,600 \$ 4,000	2	6 4	12 6	24 12							
	Prepare FEMA Forms	8	\$ 1,350	1	1	2	4							
+	Prepare Hydraulic Workmaps Submit CLOMR	24 7	\$ 4,000 \$ 1,190	2	2	6	12 4							
	Respond to Comments (assume 1 round)	38	\$ 5,980	2	4	8	24							
-		0	\$ - \$ -							<del> </del>				
	Total Total			19	22		140	0	0	l e	¢	s -		
_+	Total Task 9:	256	\$ 41,770.00	17	33	64	140	U	U	\$ -	\$ -			
Ta	Task 10 - Bidding Phase Services	40	\$ 8,240		1/	1/	1/			T	1	ı		
	Assemble bid docs Assist with Agenda and Attend Pre-Bid Meeting	48 6	\$ 1,140		16 3	16 3	16							
1	Respond to Bidder Comments and Issue Addenda Assist with Bid Opeing Meeting (assume 1)	32 2	\$ 5,400 \$ 400	4	4 2	8	16							
<u></u>	Evaluate Bids and Prepare Letter of Recommendation	16	\$ 2,470		2	4	10							
	Total Task 10:	104	\$ 17,650.00	4	27	31	42	0	0	-	9	9		
	<u> </u>	104	¥ 17,000.00	*	- 21	31	42		U					
Ta	Task 11 - Construction Phase Services Attend Pre-Construction Meeting	12	\$ 2,520	4	4	4				i		1		
	Attend Progress Site Meetings (assume 18)	54	\$ 11,340	18	18	18								
I	Respond to RFIs (assume 30) Review Change Orders	68 36	\$ 10,960 \$ 5,480	4	12 4	12 8	40 24				H			
	Review Shop Drawing Submittals	140	\$ 22,200	4	16	40	80							
	Coordination with Testing and Inspection Team  Review and approve pay applications	60 36	\$ 11,400 \$ 6,030		30 18	30	18							
	Final Walkthrough and Punch List	24	\$ 4,020		12		12			<u> </u>				
	<del></del>													

				EXHIBIT											
	Į	OB Wood Road Ir	npro	FEE SCHED evements fro		to Oak Ri	dge Road								
							Kimley-l	Horn Staff				Su	bconsultants		
	Professional Service Description	Total Task Hours		Total Task Cost	Senior Professional II	Senior Professional I	Professional	Analyst	Senior Technical Support	Support Staff		Inland Geodetics (Survey)	Terracon (Geotech/ENV)		Rlos (SUE)
												Fee	Fee		Fee
	Construction Phase Engineering Support for Karst Features	0	\$	50,000											
	Prepare Record Drawings	94	\$	14,420		10	24	60			1			_	
	Total Task 11:	430	\$	138,370.00	30	124	136	234	0	0	\$		\$	- \$	-
R	eimbursable Expenses Plotting & Reproduction		S	1.200				_							
			3	300							+			+	
_	Mileage FIS Data Request Fee		0	400							+			+	
	Courier		\$	100				-	-		+			+	
	codilei		J.	100							1			_ــــ	
	Total Reimbursable Expenses:	0	\$	2.000.00	0	0	0	0	0	0	Ś		S	- S	
		-	Ĺ	,							Ť			Ť	
To	otal Hours	6,571	t		219	1,128	1,946	3,254	100	18	t			$\neg$	
											1			$\neg$	
	Total Fee		\$	1,583,144							\$	151,776	\$ 170,4	18 ¢	81,588

