PROFESSIONAL SERVICES
SUPPLEMENTAL AGREEMENT # 1
FOR
<IMMANUEL ROAD IMPROVEMENTS PROJECT>

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

This Supplemental Agreement No. 1 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and Rodriguez Transportation Group, Inc. ("Consultant"). City and Consultant may be referred to herein singularly as "Party" or collectively as the "Parties."

WHEREAS, the City and Consultant executed an Agreement for Professional Services ("Agreement") on the 5th day of August, 2021 for the Immanuel Road Improvements Project ("Project") in the amount of $ 1,096,623.36 ; and

WHEREAS, the City and Consultant desire to enter into a Supplemental Agreement # 1 for Professional Services for the Project in the amount of $ 363,029.40 to add an extension of the project limits to the southern City limits south of Wells Branch Parkway to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Scope of Services, Work Schedule, and Compensation; and

WHEREAS, it is necessary for the City to amend its agreements from time to time to comply with changes in state law relating to contracts of municipalities.

NOW, THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

I.

Article III. Scope of Services and Exhibit A, shall be amended as set forth in the attached addendum to Exhibit A-1.

Article III. Work Schedule and Exhibit B, shall be amended as set forth in the attached addendum to Exhibit B-1.

Article IV. Compensation to Consultant and Exhibit C (Fee Schedule), shall be amended by increasing by $ 363,029.40 the amount payable under the Agreement for a total of $ 1,459,652.76, as shown by the attached Addendum to Exhibit C-1 (Fee Schedule).

2.

Except as amended hereby as indicated above, the terms of the Agreement shall remain unchanged and in full force and effect.

EXECUTED and **AGREED** to as of the dates indicated below.

CITY OF PFLUGERVILLE	**CONSULTANT**
_____	_____
(Signature)	*(Signature)*
Printed Name: Sereniah Breland	Printed Name: _____
Title: City Manager	Title: _____
Date: _____	Date: _____

APPROVED AS TO FORM:

_____

Charles E. Zech
City Attorney
DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.

SUPPLEMENTAL AGGREEMENT NO. 1

EXHIBIT A-1

ENGINEERING (SCOPE OF SERVICES)

Project Limits: Immanuel Road, from Pecan Street to south city limits south of Wells Branch

Project Length: Extend Project 1,500' (0.28 Miles) to southern city limits.
Overall Project length: 7,128' (1.35 Miles)

The amendment extends the project limits to the southern city limit line along Immanuel Road and includes associated upgrades based on previous developer agreements with the City of Pflugerville.

The additional Scope of Work to be performed by the Engineer under this Amendment is described as follows:

- Extend ROW data research and parcel preparation to the extended limits of Immanuel Road to the south of the Pflugerville city limit line. Include ROW data research along Killingsworth Lane.
- Extend SUE services to the extended limits of Immanuel Road to the south of the Pflugerville city limit line. Include SUE services along Killingsworth Lane, Rendova Lane, and Bumblebee Drive.
- Extend field surveys to the extended limits of Immanuel Road to the south of the Pflugerville city limit line. Include field surveys along Killingsworth Lane, Rendova Lane, and Bumblebee Drive. Include surveys of the existing creek topography for the hydraulic analysis of the existing and proposed Gilleland Creek, Tributary No. 2 creek crossing.
- Include field surveys along the Heritage Loop Trail from 600' west of Immanuel Road to 200' east of Immanuel Road along the north side of Gilleland Creek. Field survey limits are from the north bank of the creek to the existing curb and gutter along Pecan Street.
- Extend geotechnical investigations to the extended limits of Immanuel Road to the south of the Pflugerville city limit line. Include the extend limits of Immanuel Road in the geotechnical report.
- Additional Environmental Documentation Services for extended limits of Immanuel Road to the south of the Pflugerville city limit line. Include the Gilleland Creek, Tributary No. 2 creek crossing and Killingsworth Lane in the additional documentation.
- Additional Roadway Design Services to include added Plan and Profile sheets for extended limits of Immanuel Road to the south of the Pflugerville city limit line.
- Additional Roadway Design Services to include added Plan and Profile sheets along Wells Branch and Pecan Street (FM 1825).
- Additional Drainage Design Services to prepare a hydrologic and hydraulic analysis and report of the existing and proposed bridge geometries for the Gilleland Creek, Tributary No. 2 creek crossing within the extended limits of Immanuel Road south to the Pflugerville city limits and for storm drain and SW3P design for the extended limits of Immanuel Road.

- Additional Miscellaneous Design Services to include the development of additional traffic control phases for the Gilleland Creek, Tributary No. 2 creek crossing within the extended limits of Immanuel Road to the south to the Pflugerville city limits.
- Additional design services to include retaining wall designs at the Gilleland Creek bridge crossing and along the extended limits of Immanuel Road.
- Additional Miscellaneous design services to realign the existing Heritage Loop Trail to the north side of Gilleland Creek, under the proposed Gilleland Creek Bridge, and tie into the existing Trail on the east side of Immanuel Road.

TASK DESCRIPTIONS AND FUNCTION CODES

FC 110 - Route and Design Studies; Geotechnical Investigations

A. Geotechnical Borings, Investigations and Pavement Design: The Consultant shall conduct field investigations laboratory testing and prepare the recommended pavement design as defined in the original agreement for the extended limits of Immanuel Road.

1. Perform pavement design borings (2 total), obtaining boring samples at 500-foot intervals (according to City's Pavement Design Criteria Manual) from Wells Branch Parkway to 1,500 feet south of Wells Branch.
2. Perform Bridge Borings (2 total) for the Gilleland Creek, Tributary No. 2 bridge following the schematic design. Bridge borings shall be drilled to a minimum depth of 50 feet below top of existing ground.
3. Include the extended limits in the Geotechnical report showing the summary of field investigations, laboratory testing results, recommended pavement design, recommendations for retaining wall and bridge foundations.
4. Preform Retaining Wall Borings (5 total) for retaining walls at the Gilleland Creek Bridge and various retaining walls discovered during preliminary design.

FC 120 - Environmental Documentation

Include the extended limits of the project in the Environmental Documentation, as defined in the original Agreement.

FC 130 – Right-of-Way Data/Utilities

A. Right-of-Way Map.
The Consultant shall obtain information on existing ROW and property information, as defined in the Contract, for the extended limits of Immanuel Road.

B. Utility Locations.
The Consultant shall gather SUE data, as defined in the Contract, for the extended limits of Immanuel Road.

C. Boundary Surveying and Parcel Preparation.

The Consultant shall perform the tasks, as defined in the Contract, for the extended limits of Immanuel Road. The total number of ROW parcels for acquisition will be increased by 3 for a total of 11 parcels.

FC 140 – Project Management and Administration

A. Extend contract duration 3 months to include the extended limits of Immanuel Road (field data collection, hydraulic analysis of additional creek crossing, bridge alternatives, and conceptual designs).

FC 150 – Field Surveying and Photogrammetry

A. Field Surveying
   1. The Consultant shall gather design survey data, as defined in the Contract, for the extended limits of Immanuel Road.

B. Digital Planimetric Mapping (DGN) and Digital Terrain Modeling (DTM)
   1. The Consultant shall prepare DGN and DTM files, as defined in the Contract, for the extended limits of Immanuel Road.

FC 160 – Roadway Design

Roadway Plans

1. The Consultant shall develop a proposed geometric schematic layout for the additional limits of Immanuel Road.
2. Following approval of the geometric schematic layout, the Consultant shall develop additional plan sheets and associated cross sections for the extended limits of Immanuel Road and turn bay modifications along Wells Branch Parkway and Pecan Street.

FC 161 – Drainage

1. The Consultant shall prepare a hydrologic and hydraulic analysis and report for the Gilleland Creek, Tributary No. 2 south of Wells Branch Parkway.
2. The Consultant shall develop additional culvert, storm drain and SW3P design plan sheets for the extended limits of Immanuel Road.

FC 162 – Signing, Pavement Markings, Signals and Illumination

A. Signing and Pavement Markings. The Consultant shall develop additional signing and pavement marking layouts to include the extended limits of Immanuel Road.

B. Illumination. The Consultant shall develop additional plan sheets to design continuous street lighting to the extended limits of Immanuel Road.

FC 163 – Miscellaneous

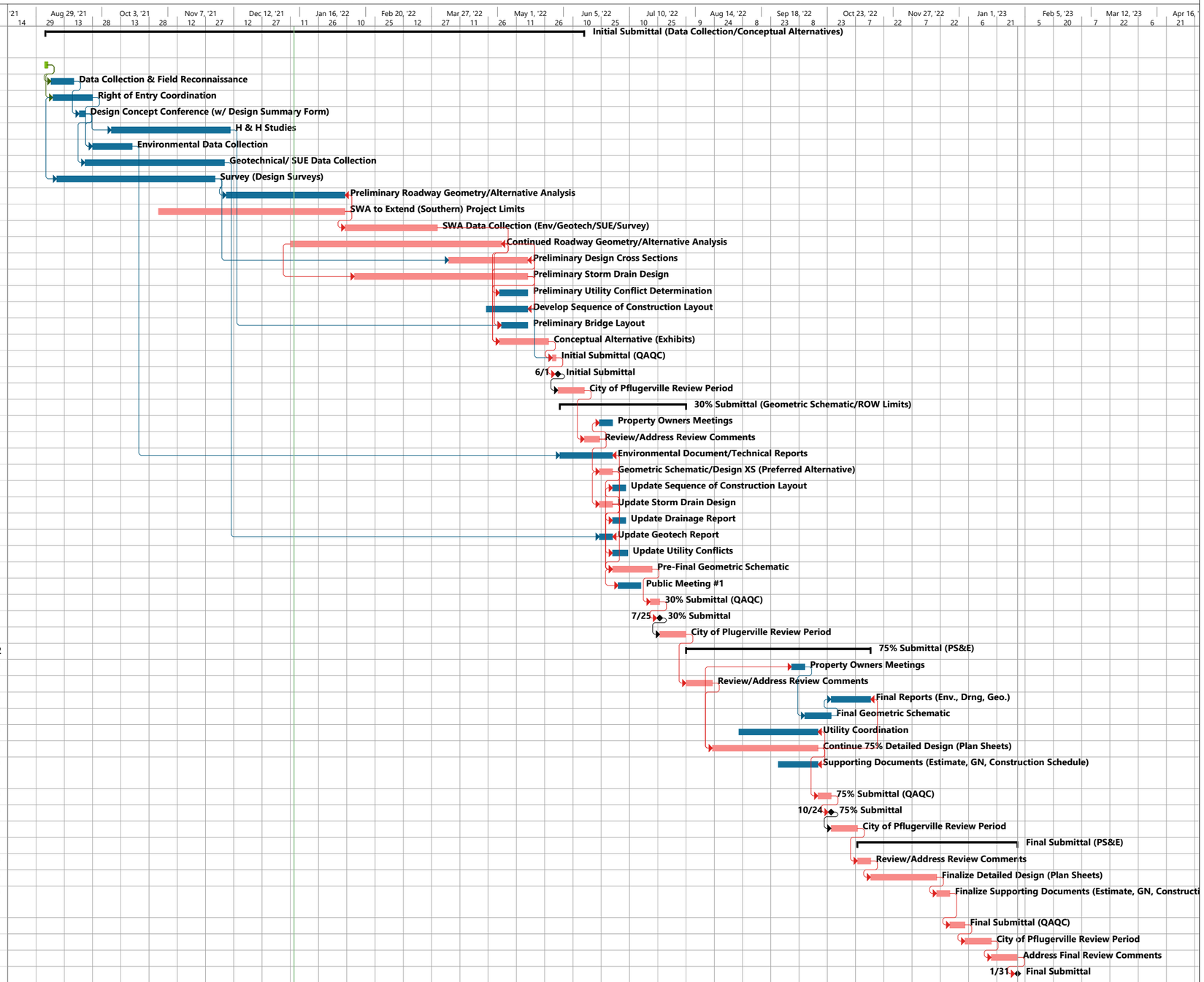
1. **Traffic Control Plan.** The Consultant shall develop additional details required for the construction of the extended limits of Immanuel Road. Included with the details will be a plan for the replacement of the existing bridge over Gilleland Creek, Tributary No. 2.
2. **Utility Conflict Identification.** The Consultant shall review existing Utility Layout and identify potential utility conflicts for the extended limits of Immanuel Road.
3. **Retaining Wall Design**. The consultant shall develop retaining wall design for retaining walls at the Gilleland Creek bridge and along Immanuel Road.
4. **Shared Use Path Design.** The consultant shall develop shared use path design for the placement of the shared use path to the north side of Gilleland creek under the proposed Gillleand Creek bridge at the north end of the project. Consultant to tie proposed shared use path to the existing shared use path on the north side of Gilleland creek approximately 500' west of Immanuel and 200' east of Immanuel.

FC 170 – Bridge Design

The Consultant shall include the design of the bridge replacement structure at the Gilleland Creek, Tributary No. 2 creek crossing within the extended limits of Immanuel Road.

Exhibit C - Work Schedule
December 2021 (Update)

ID	Task Mode	Task Name	Duration	Start	Finish
1		**Initial Submittal (Data Collection/Conceptual Alternatives)**	**204 days**	**Fri 9/3/21**	**Wed 6/15/22**
2		Notice to Proceed (ROW Permit Approved)	1 day	Fri 9/3/21	Fri 9/3/21
3		Data Collection & Field Reconnaissance	10 days	Mon 9/6/21	Fri 9/17/21
4		Right of Entry Coordination	15 days	Tue 9/7/21	Mon 9/27/21
5		Design Concept Conference (w/ Design Summary Form)	3 days	Tue 9/21/21	Thu 9/23/21
6		H & H Studies	45 days	Fri 10/8/21	Thu 12/9/21
7		Environmental Data Collection	15 days	Tue 9/28/21	Mon 10/18/21
8		Geotechnical/ SUE Data Collection	52 days	Fri 9/24/21	Mon 12/6/21
9		Survey (Design Surveys)	60 days	Thu 9/9/21	Wed 12/1/21
10		Preliminary Roadway Geometry/Alternative Analysis	45 days	Wed 12/8/21	Tue 2/8/22
11		SWA to Extend (Southern) Project Limits	71 days	Tue 11/2/21	Tue 2/8/22
12		SWA Data Collection (Env/Geotech/SUE/Survey)	35 days	Wed 2/9/22	Tue 3/29/22
13		Continued Roadway Geometry/Alternative Analysis	80 days	Tue 1/11/22	Mon 5/2/22
14		Preliminary Design Cross Sections	30 days	Tue 4/5/22	Mon 5/16/22
15		Preliminary Storm Drain Design	66 days	Mon 2/14/22	Mon 5/16/22
16		Preliminary Utility Conflict Determination	11 days	Mon 5/2/22	Mon 5/16/22
17		Develop Sequence of Construction Layout	16 days	Mon 4/25/22	Mon 5/16/22
18		Preliminary Bridge Layout	10 days	Tue 5/3/22	Mon 5/16/22
19		Conceptual Alternative (Exhibits)	20 days	Mon 5/2/22	Fri 5/27/22
20		Initial Submittal (QAQC)	2 days	Mon 5/30/22	Tue 5/31/22
21		Initial Submittal	0 days	Wed 6/1/22	Wed 6/1/22
22		City of Pflugerville Review Period	10 days	Thu 6/2/22	Wed 6/15/22
23		**30% Submittal (Geometric Schematic/ROW Limits)**	**47 days**	**Fri 6/3/22**	**Mon 8/8/22**
24		Property Owners Meetings	5 days	Fri 6/24/22	Thu 6/30/22
25		Review/Address Review Comments	6 days	Thu 6/16/22	Thu 6/23/22
26		Environmental Document/Technical Reports	20 days	Fri 6/3/22	Fri 7/1/22
27		Geometric Schematic/Design XS (Preferred Alternative)	5 days	Fri 6/24/22	Thu 6/30/22
28		Update Sequence of Construction Layout	5 days	Fri 7/1/22	Thu 7/7/22
29		Update Storm Drain Design	5 days	Fri 6/24/22	Thu 6/30/22
30		Update Drainage Report	5 days	Fri 7/1/22	Thu 7/7/22
31		Update Geotech Report	5 days	Fri 6/24/22	Thu 6/30/22
32		Update Utility Conflicts	6 days	Fri 7/1/22	Fri 7/8/22
33		Pre-Final Geometric Schematic	15 days	Fri 7/1/22	Thu 7/21/22
34		Public Meeting #1	10 days	Mon 7/4/22	Fri 7/15/22
35		30% Submittal (QAQC)	3 days	Thu 7/21/22	Mon 7/25/22
36		30% Submittal	0 days	Mon 7/25/22	Mon 7/25/22
37		City of Plugerville Review Period	10 days	Tue 7/26/22	Mon 8/8/22
38		**75% Submittal (PS&E)**	**70 days**	**Tue 8/9/22**	**Mon 11/14/22**
39		Property Owners Meetings	5 days	Tue 10/4/22	Mon 10/10/22
40		Review/Address Review Comments	10 days	Tue 8/9/22	Mon 8/22/22
41		Final Reports (Env., Drng, Geo.)	15 days	Tue 10/25/22	Mon 11/14/22
42		Final Geometric Schematic	10 days	Tue 10/11/22	Mon 10/24/22
43		Utility Coordination	30 days	Tue 9/6/22	Mon 10/17/22
44		Continue 75% Detailed Design (Plan Sheets)	40 days	Tue 8/23/22	Mon 10/17/22
45		Supporting Documents (Estimate, GN, Construction Schedule)	15 days	Tue 9/27/22	Mon 10/17/22
46		75% Submittal (QAQC)	5 days	Tue 10/18/22	Mon 10/24/22
47		75% Submittal	0 days	Mon 10/24/22	Mon 10/24/22
48		City of Pflugerville Review Period	10 days	Tue 10/25/22	Mon 11/7/22
49		**Final Submittal (PS&E)**	**61 days**	**Tue 11/8/22**	**Tue 1/31/23**
50		Review/Address Review Comments	5 days	Tue 11/8/22	Mon 11/14/22
51		Finalize Detailed Design (Plan Sheets)	25 days	Tue 11/15/22	Mon 12/19/22
52		Finalize Supporting Documents (Estimate, GN, Construction Schedule)	5 days	Tue 12/20/22	Mon 12/26/22
53		Final Submittal (QAQC)	6 days	Tue 12/27/22	Tue 1/3/23
54		City of Pflugerville Review Period	10 days	Wed 1/4/23	Tue 1/17/23
55		Address Final Review Comments	10 days	Wed 1/18/23	Tue 1/31/23
56		Final Submittal	0 days	Tue 1/31/23	Tue 1/31/23



Rodriguez Transportion Group, Inc.
Immanuel Road
Date: Thu 1/13/22

Task | Summary | Critical

RODRIGUEZ TRANSPORTATION GROUP, Inc.
Estimate of Engineering Services Budget

EXHIBIT C-1

City of Pflugerville
Immanuel Road
Supplemental Agreement No. 1

Task	Rodriguez Transportation Group, Inc.	Corsair Consulting LLC	Cox|McLain Environmental Consulting	Inland Geodetics	K Friese & Associates	SE3, LLC	Texas Transportation Solutions, Inc.	T2 Utility Engineers, Inc.	Total Cost
FC 110 Route and Design Studies; Geotechnical Investigation	$ 3,908.00	$ 17,187.54	$ -	$ -	$ -	$ -	$ 12,250.00	$ -	$ 33,345.54
FC 120 Environmental Documentation			$ 2,460.00	$ -	$ -	$ -	$ -	$ -	$ 2,460.00
FC 130 Right of Way Data/Utilities	$ 1,116.00		$ -	$ 13,562.36	$ -	$ -	$ -	$ 4,207.00	$ 18,885.36
FC 140 Project Management and Administration	$ 2,649.00	$ -	$ -	$ 2,673.00	$ -	$ -	$ 14,322.00	$ 215.00	$ 19,859.00
FC 150 Field Surveying and Photogrammetry	$ 3,072.00		$ -	$ 32,934.00	$ -	$ -	$ -	$ -	$ 36,006.00
FC 160 Roadway Design	$ 36,642.00		$ -	$ -	$ -	$ -	$ 8,150.00	$ -	$ 44,792.00
FC 161 Drainage	$ 53,589.00		$ -	$ -	$ -	$ -	$ -	$ -	$ 53,589.00
FC 162 Signing, Pavement Markings, Signals and Illumination	$ 13,832.00		$ -	$ -	$ -	$ -	$ -	$ -	$ 13,832.00
FC 163 Miscellaneous	$ 22,676.00		$ -	$ -	$ -	$ -	$ -	$ -	$ 22,676.00
FC 170 Bridge Design	$ -		$ -	$ -	$ -	$ -	$ 74,066.00	$ -	$ 74,066.00
FC 180 Bid and Construction Phase Services	$ -		$ -	$ -	$ -	$ -	$ 4,900.00	$ -	$ 4,900.00
Subtotal - Labor	**$ 137,484.00**	**$ 17,187.54**	**$ 2,460.00**	**$ 49,169.36**	**$ -**	**$ -**	**$ 113,688.00**	**$ 4,422.00**	**$ 324,410.90**
Subtotal - Other Direct Expenses	$ 54.00	$ 24,476.00	$ -	$ -	$ -	$ -	$ 268.50	$ 13,820.00	$ 38,618.50
GRAND TOTAL	**$ 137,538.00**	**$ 41,663.54**	**$ 2,460.00**	**$ 49,169.36**	**$ -**	**$ -**	**$ 113,956.50**	**$ 18,242.00**	**$ 363,029.40**

Exhibit C-1 - FEE SCHEDULE | **EXHIBIT C-1** | **City of Pflugerville**

Rodriguez Transportation Group, Inc. (RTG) | **Immanuel Road**

Estimate of Engineering Services Budget | **Supplemental Agreement No. 1**

Rodriguez Transportation Group, Inc.	No. of Sheets	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Engineer Specialist	Senior Engineer Tech	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$222.00	$159.00	$138.00	$115.00	$165.00	$121.00	$92.00	$69.00		
FC 110 Route and Design Studies; Geotechnical Investigation												
A. Data Collection and Field Reconnaissance												
2. Secure and review proposed development site plans		2									2	$ 480.00
3. Secure and review available flood plain information			4								4	$ 888.00
C. Develop preliminary sequence of construction exhibit		4				4		4			12	$ 1,904.00
D. Develop preliminary cost estimate				4							4	$ 636.00
FC - 110 Subtotal - Labor Hrs.	**-**	**6.0**	**4.0**	**4.0**	**-**	**4.0**	**-**	**4.0**	**-**	**-**	**22.0**	**$ 3,908.00**
FC 130 ROW Data/Utilities												
A. Right-of-Way Map (Support Only)												
1. Review design data to confirm existing/proposed ROW		2		4							6	$ 1,116.00
FC - 130 Subtotal - Labor Hrs.	**-**	**2.0**	**-**	**4.0**	**-**	**-**	**-**	**-**	**-**	**-**	**6.0**	**$ 1,116.00**
FC 140 Project Management and Administration												
A. Prepare Invoices and Monthly Progress Reports (3 Mo.)		3								3	6	$ 927.00
B. Develop and maintain project schedule				2							2	$ 318.00
E. Project file maintenance (3 Mo.)		3		3						3	9	$ 1,404.00
FC - 140 Subtotal - Labor Hrs.	**-**	**6.0**	**-**	**5.0**	**-**	**-**	**-**	**-**	**-**	**6.0**	**17.0**	**$ 2,649.00**
FC 150 Field Surveying and Photogrammetry												
A. Field Surveying (Support Only)												
6. Secure right of entry		2	2							12	16	$ 1,752.00
B. Digital Planimetric Mapping (DGN) and DTM (Review Only)												
1. Planimetric (DGN) file							4				4	$ 660.00
2. DTM File							4				4	$ 660.00
FC - 150 Subtotal - Labor Hrs.	**-**	**2.0**	**2.0**	**-**	**-**	**-**	**8.0**	**-**	**-**	**12.0**	**24.0**	**$ 3,072.00**

Rodriguez Transportation Group, Inc.	No. of Sheets	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Engineer Specialist	Senior Engineer Tech	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$222.00	$159.00	$138.00	$115.00	$165.00	$121.00	$92.00	$69.00		
FC 160 Roadway Design												
A. Geometric Design (Geometric Schematic Layout)												
1. Develop conceptual horizontal alignments		2		4							6	$ 1,116.00
2. Develop and refine vertical profiles		2	2		4						8	$ 1,476.00
4. Develop conceptual design cross sections		2	4	4			24				34	$ 5,964.00
5. Establish proposed ROW limits		2		2							4	$ 798.00
6. Prepare and refine Geometric Layout		2	4			8	24				38	$ 6,248.00
B. Roadway Plans												
1. Title-Index Sheets/Project Layouts									4		4	$ 368.00
2. Typical Sections (plus Utility)		2		4	4				4		14	$ 2,036.00
3. Plan & Profile	4	8	12	12	12				12		56	$ 9,252.00
4. Intersection/Driveway Details	3	4	4		12	12			12		44	$ 5,988.00
5. Others (HAL Data, Removal Layouts, Misc Rdwy Details)	2			4	8				8		20	$ 2,476.00
7. Calculate quantities and prepare roadway summary sheets	1				4				4		8	$ 920.00
FC - 160 Subtotal - Labor Hrs.	**10**	**24.0**	**26.0**	**30.0**	**44.0**	**20.0**	**48.0**	**-**	**44.0**	**-**	**236.0**	**$ 36,642.00**
FC 161 Drainage												
A. Drainage Report												
1. Drainage Report		1	2	6	10						19	$ 3,018.00
B. Culvert and Storm Drain Design												
1a. On-site Drainage Area Maps	2	1	2	4	6	8					21	$ 3,068.00
1b. Off-site Drainage Area Maps	1	0.5	1	2		6					10	$ 1,350.00
2a. Hydraulic Computations (Runoff, Inlet & Storm Sewer)		0.5	1	2	4	8					16	$ 2,132.00
2c. Hydraulic Computations (Channels)		0.5	1	2	4	8					16	$ 2,132.00
3. Storm Drain Plan/Profile	2	1	2	4	6	8					21	$ 3,068.00
4. Storm Drain Profiles	1	0.5	1	3	6	8					19	$ 2,567.00
5. Runoff and Inlet Computation Sheets	1	1	2	4	6	6					19	$ 2,838.00
6. Others (Misc. Drainage Details)	1	0.5	1	2	4	6					14	$ 1,902.00
7. SW3P/Temp. Erosion Sediment Control Plan	2	0.5	1	2	4	8					16	$ 2,132.00
8. Permanent Erosion Sediment Control Plan	2	0.5	1	2	4	8					16	$ 2,132.00
9. Calculate quantites and prepare storm drain summary sheets	1	0.5	1	2		4					8	$ 1,120.00
C. Culvert Layouts and Detailing of Drainage Features												
1. Cross Culvert Layouts (2 culverts)	2	1	4	5	8	20					38	$ 5,327.00
2. Hydraulic Computations (2 culverts)	2	0.5	3	4	6	12					26	$ 3,630.00
3. Preliminary outfall channel layouts	1	0.5	1	3	4	8					17	$ 2,291.00
4. Calculate quantities and prepare culvert summary sheets	1	0.5	1	2		4					8	$ 1,120.00
D. Bridge Hydrologic and Hydraulic Analysis												
1. Bridge Hydraulic Data Sheet	1	1	4	8	12	20					45	$ 6,356.00
2. Scour Analysis		2	4	8	16						30	$ 4,848.00
3. Bridge Scour Data Sheet	1	1	2	6		8					17	$ 2,558.00
FC - 161 Subtotal - Labor Hrs.	**21**	**14.5**	**35.0**	**71.0**	**100.0**	**150.0**	**-**	**-**	**-**	**-**	**370.5**	**$ 53,589.00**
FC 162 Signing, Pavement Markings, Signals and Illumination												
A. Signing and Pavement Markings	4			4	4				24		32	$ 3,396.00
C. Illumination												
1. Illumination Layouts	2		2	18		18	4				42	$ 6,036.00
2. Electrical Circuit Plan	2		2			4	8				14	$ 2,224.00
3. Power Source Identification			2	8							10	$ 1,716.00
4. Calculate quantities and prepare illumination summary sheets						4					4	$ 460.00
											-	
FC - 162 Subtotal - Labor Hrs.	**8**	**-**	**6.0**	**30.0**	**4.0**	**26.0**	**12.0**	**-**	**24.0**	**-**	**102.0**	**$ 13,832.00**
FC 163 Miscellaneous												
1. Traffic Control Plan												
a. Narrative Sequence of Construction	2		2	2							4	$ 762.00
b. Typical Sections	2			2		2					4	$ 548.00
c. Traffic Control Plan (2 phases + advance warning signs)	5		4			18	18		20		60	$ 7,768.00
d. Detour Layouts	1		2			4			4		10	$ 1,272.00
e. Construction Schedule			2	4							6	$ 1,080.00
f. Quantities/Summary Sheets												
2. Utility Conflict Identification			2	4							6	$ 1,080.00
3. Retaining Wall Design	3	2	4	8	12				24		50	$ 6,504.00

Rodriguez Transportation Group, Inc.	No. of Sheets	Project Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Engineer Specialist	Senior Engineer Tech	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$222.00	$159.00	$138.00	$115.00	$165.00	$121.00	$92.00	$69.00		
4. Shared Use Path Design (Gilleland Creek - north side of creek	2			2	8	8	8				26	$ 3,662.00
F. Water/Wastewater												
FC - 163 Subtotal - Labor Hrs.	**15**	**2.0**	**16.0**	**22.0**	**20.0**	**32.0**	**26.0**	**-**	**48.0**	**-**	**166.0**	**$ 22,676.00**
TOTAL SHEETS	**54**											
Total - Labor Hours		**56.5**	**89.0**	**166.0**	**168.0**	**232.0**	**94.0**	**4.0**	**116.0**	**18.0**	**943.5**	
Total - Labor Cost		**$ 13,560.00**	**$ 19,758.00**	**$ 26,394.00**	**$ 23,184.00**	**$ 26,680.00**	**$ 15,510.00**	**$ 484.00**	**$ 10,672.00**	**$ 1,242.00**		**$ 137,484.00**
DIRECT EXPENSES				**QUANTITY**	**UNIT**	**UNIT COST**						
Mileage				100.00	mile	$0.54						$ 54.00
13-hour Turning Movement Count Major Intersection					per intersection	$800.00						$ -
Subtotal - Other Direct Expenses												**$ 54.00**
GRAND TOTAL												**$ 137,538.00**

Exhibit C-1 - FEE SCHEDULE

EXHIBIT C-1

Corsair Consulting (CC)

Immanuel Road

Estimate of Engineering Services Budget

Supplemental Agreement No. 1

Corsair Consulting	No. of Sheets	Senior Project Manager	Project Engineer	EIT	Admin /Clerical	Total Hours	Total Labor Cost
		$229.09	$146.36	$95.45	$58.24		
FC 110 Route and Design Studies; Geotechnical Investigation							
A. Data Collection and Field Reconnaissance							
4. Conduct field reconnaissance and photographic record			5			5	$ 731.80
F. Geotech & Pavement Design							
1. Identify existing pavement structure (13 borings)				1		1	$ 95.45
2. Review available data; conduct field visit and attend (1) meeting						-	$ -
3. Secure pavement design borings and laboratory testing (13 borings)				1		1	$ 95.45
4. Secure bridge borings and develop foundation recommendations (4 borings)				30		30	$ 2,863.50
5. Secure retaining wall borings and run slope stability and settlement analysis (2 borings)				30		30	$ 2,863.50
6. Prepare Geotechnical Report		6	30	50		86	$ 10,537.84
FC - 110 Subtotal - Labor Hrs.	**-**	**6.0**	**35.0**	**112.0**	**-**	**153.0**	**$ 17,187.54**
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)		0			0		$ -
FC - 140 Subtotal - Labor Hrs.	**-**	**-**	**-**	**-**	**-**	**-**	**$ -**
Total - Labor Hours		**6.0**	**35.0**	**112.0**	**-**	**153.0**	
Total - Labor Cost		**$ 1,374.54**	**$ 5,122.60**	**$ 10,690.40**	**$ -**		**$ 17,187.54**
1.0 FIELD SERVICES			**QUANTITY**	**UNIT**	**UNIT COST**		
1.1 Geotechnical Services							
1.1.1 Mobilization and demobilization, per mobilization			2.00	each	$ 450.00		$ 900.00
1.1.3 Drilling and sampling:			-				$ -
1.1.3.1 Drilling and sampling with 3-inch, thin-walled tube sampler, continous to 10.0 ft, 5.0 ft intervals thereafter			130.00	foot	$ 25.00		$ 3,250.00
1.1.3.2 Continuous drilling and sampling with 3-inch, thin-walled tube sampler or split-spoon sampler			10.00	foot	$ 39.00		$ 390.00
1.1.4 Standard penetration tests			-	each	$ 27.00		$ -
1.1.5 TxDOT cone penetration tests			26.00	each	$ 34.00		$ 884.00
1.1.9 Houly charges for boring layout, excessive time spent gaining access to boring locations, backfilling boreholes, cleaning up site, installing piezometers, and for other reasons beyond our control			4.00	hour	$ 245.00		$ 980.00
1.1.13 Traffic control			2.00	day	$ 2,800.00		$ 5,600.00
1.1.20 Mileage			250.00	mile	$ 0.60		$ 150.00
2.0 LABORATORY TESTING							
2.1 Soil							
2.1.3 Natural Moisture Content			40.00	each	$ 19.00		$ 760.00
2.1.4 Sieve Analysis (TEX-110-E)				each	$ 70.00		$ -
2.1.5 Atterberg Limits (Liquid and Plastic Limits) (TEX-104-E, TEX-105-E, TEX-106-E)			50.00	each	$ 75.00		$ 3,750.00
2.1.6 Percent Passing No. 200 Sieve (TEX-111-E)			50.00	each	$ 50.00		$ 2,500.00
2.1.12 Soluble Sulfates (TEX-145-E)			5.00	each	$ 90.00		$ 450.00
2.1.13 Soil pH (TEX-128-E)			1.00	each	$ 70.00		$ 70.00
2.1.20 Unconfined Compression Test, Soil			8.00	each	$ 65.00		$ 520.00
2.1.23 Consolidation Test, 7-load Increments			2.00	each	$ 850.00		$ 1,700.00
2.1.31 Organic Content (ASTM D 2974)			1.00	each	$ 72.00		$ 72.00
2.1.33 Consolidated Undrained Triaxial Compression Test for Undisturbed Soils (TEX-131-E)			2.00	each	$ 1,250.00		$ 2,500.00
Subtotal - Other Direct Expenses							**$ 24,476.00**
GRAND TOTAL							**$ 41,663.54**

Exhibit C-1 - FEE SCHEDULE
Cox|McLain Environmental Consulting Inc. (CMEC)
Estimate of Engineering Services Budget

EXHIBIT C-1

City of Pflugerville
Immanuel Road
Supplemental Agreement No. 1

Cox|McLain Environmental Consulting	No. of Sheets	Envir Project Manager	Envir Planner IV	Envir Planner I/II	Envir Scientist IV	Envir Scientist III	Envir Scientist I/II / Field Technician	Senior Arch. Historian / Arch. Principal	Admin /Clerical	Senior GIS Operator	GIS Operator	Total Hours	Total Labor Cost
		$170.00	$100.00	$70.00	$120.00	$85.00	$70.00	$115.00	$65.00	$105.00	$80.00		
FC 120 Environmental Documentation													
A. Data Collection Process													$ -
B. Hazardous Materials Initial Site Assessment													
1. Perform regulatory records review													$ -
2. Complete Hazardous Materials Risk Assessment						2	2					4	$ 310.00
C. Section 404 Clean Water Act Compliance		1				8	8					17	$ 1,410.00
D. Endangered Species Act Compliance													$ -
E. Texas Antiquities Code Compliance													
1. Background database search for known archeological sites													$ -
2. Prepare project initiation letter and Texas Antiquities Permint application													$ -
3. Conduct cultural resource pedestrian survey							4	4				8	$ 740.00
4. Prepare intensive survey report													$ -
5. Submit data to Texas Historical Commission													$ -
F. Public Engagement													
1. Stakeholder Engagement (up to 4 meetings)													$ -
2. Public Meetings (1 meeting)													$ -
FC - 120 Subtotal - Labor Hrs.	**-**	**1**	**-**	**-**	**-**	**10**	**14**	**4**	**-**	**-**	**-**	**29**	**$ 2,460.00**
FC 140 Project Management and Administration													
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)													$ -
C. Prepare for and attend Project Kick-Off meetings													$ -
D. Prepare for and attend City meetings (up to 5)													$ -
FC - 140 Subtotal - Labor Hrs.	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**$ -**
TOTAL SHEETS	**-**												
Total - Labor Hours		**1**	**-**	**-**	**-**	**10**	**14**	**4**	**-**	**-**	**-**	**29**	
Total - Labor Cost		**$ 170.00**	**$ -**	**$ -**	**$ -**	**$ 850.00**	**$ 980.00**	**$ 460.00**	**$ -**	**$ -**	**$ -**		**$ 2,460.00**
DIRECT EXPENSES			**QUANTITY**	**UNIT**	**UNIT COST**								
Photocopies BW (11"x17")				sheet	$0.20								$ -
Photocopies BW (8.5"x11")				sheet	$0.15								$ -
Photocopies Color (11"x17")				sheet	$1.50								$ -
Photocopies Color (8.5"x11")				sheet	$0.75								$ -
Hazardous Materials Database Search				each	$650.00								$ -
CAS Curation Drawer (records only)				inch	$260.00								$ -
TARL Archeological Site Form				each	$96.00								$ -
Subtotal - Other Direct Expenses													**$ -**
GRAND TOTAL													**$ 2,460.00**

Exhibit C-1 - FEE SCHEDULE
Inland Geodetics (IG)
Estimate of Engineering Services Budget

EXHIBIT C-1

City of Pflugerville
Immanuel Road
Supplemental Agreement No. 1

Inland Geodetics	No. of Sheets	Registered Professional Land Surveyor	Clerical Support	Senior Project Manager - Survey	Surveyor-In-Training (SIT)	Senior Survey Technician	2 - Person Survey Crew	3 - Person Survey Crew	1 - Person Survey Crew	Total Hours	Total Labor Cost
		$180.66	$76.53	$162.62	$131.19	$131.19	$174.00	$207.00	$122.00		
FC 130 ROW Data/Utilities											
C. Boundary Surveying and Parcel Preparation											
1. Locate property corners and confirm existing ROW limits		8				8	16		16	48	$ 7,230.80
2. Prepare ROW base map/property schematic of the overall project		4				16				20	$ 2,821.68
3. ROW documents (8 parcels)											$ -
4. Establish monuments on the proposed ROW											$ -
5. Prepare and submit ROW Plan Set		2			24					26	$ 3,509.88
FC - 130 Subtotal - Labor Hrs.	**-**	**14**	**-**	**-**	**24**	**24**	**16**	**-**	**16**	**94**	**$ 13,562.36**
FC 140 Project Management and Administration											
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)			6	4						10	$ 1,109.66
B. Develop and maintain project schedule				2						2	$ 325.24
C. Prepare for and attend Project Kick-Off meetings				4						4	$ 650.48
D. Prepare for and attend City meetings (up to 6)											$ -
E. Project file maintenance (15 Mo.)											$ -
F. Implement & execute QAQC plan (Schematic (30%), 75% and Final)				2		2				4	$ 587.62
FC - 140 Subtotal - Labor Hrs.	**-**	**-**	**6**	**12**	**-**	**2**	**-**	**-**	**-**	**20**	**$ 2,673.00**
FC 150 Field Surveying and Photogrammetry											
A. Field Surveying											
1. Project Control		0	2	2		2	4	8	4	22	$ 3,580.68
2. Project Control Sheets		2				2				4	$ 623.70
3. Datum Ties				0							$ -
4. Field Surveys (topographic)		2		0		8	16		48	74	$ 10,050.84
5. Field survey (drainages channels)		2					8	0	16	26	$ 3,705.32
6. Secure right of entry			2	4		4				10	$ 1,328.30
7. Tie visible utilities and develop DGN file				2		2			16	20	$ 2,539.62
8. Profile existing drainage facilities		2				4	8			14	$ 2,278.08
9. Provide traffic control for survey activities							4			4	$ 696.00
10. Tie soil boring locations						2			4	6	$ 750.38
B. Digital Planimetric Mapping (DGN) and DTM											
1. Planimetric (DGN) file		4				16				20	$ 2,821.68
2. DTM File		2				32				34	$ 4,559.40
FC - 150 Subtotal - Labor Hrs.	**-**	**14**	**4**	**8**	**-**	**72**	**40**	**8**	**88**	**234**	**$ 32,934.00**
TOTAL SHEETS	**-**										
Total - Labor Hours		**28**	**10**	**20**	**24**	**98**	**56**	**8**	**104**	**348**	
Total - Labor Cost		**$ 5,058.48**	**$ 765.30**	**$ 3,252.40**	**$ 3,148.56**	**$ 12,856.62**	**$ 9,744.00**	**$ 1,656.00**	**$ 12,688.00**		**$ 49,169.36**
GRAND TOTAL											**$ 49,169.36**

Exhibit C-1 - FEE SCHEDULE | **EXHIBIT C-1** | **City of Pflugerville**

Texas Transportation Solutions (TTS) | **Immanuel Road**

Estimate of Engineering Services Budget | **Supplemental Agreement No. 1**

Texas Transportation Solutions	No. of Sheets	Senior Project Manager	Senior Structural Engineer	Structural Engineer	Structural Engineer-In-Training	Sr Structural Engineering Specialist	Engineer Tech	Admin /Clerical	Total Hours	Total Labor Cost
		$240.00	$198.00	$175.00	$115.00	$165.00	$126.00	$90.00		
FC 110 Route and Design Studies; Geotechnical Investigation										
A. Data Collection and Field Reconnaissance										
1. Secure and review available misc. data		4	16						20	$ 4,128.00
4. Conduct field reconnaissance and photographic record			16		16				32	$ 5,008.00
D. Develop preliminary cost estimate	2	2	4	6					12	$ 2,322.00
E. Prepare for and attend DCC meeting			4						4	$ 792.00
FC - 110 Subtotal - Labor Hrs.	**2**	**6**	**40**	**6**	**16**	**-**	**-**	**-**	**68**	**$ 12,250.00**
FC 140 Project Management and Administration										
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)		5						5	10	$ 1,650.00
C. Prepare for and attend Project Kick-Off meetings										$ -
D. Prepare for and attend City meetings (up to 5)										$ -
F. Implement & execute QAQC plan (Schematic (30%), 75% and Final)			64						64	$ 12,672.00
G. Attend Comments Resolution Mtngs (Schematic (30%), 75%)										$ -
FC - 140 Subtotal - Labor Hrs.	**-**	**5**	**64**	**-**	**-**	**-**	**-**	**5**	**74**	**$ 14,322.00**
FC 160 Roadway Design										
A. Geometric Design (Geometric Schematic Layout)										
3. Develop (2) conceptual typical sections (Bridge Only)	1	2	6			14			22	$ 3,978.00
6. Prepare and refine Geometric Layout (Bridge Only)	1		4	8		12			24	$ 4,172.00
FC - 160 Subtotal - Labor Hrs.	**2**	**2**	**10**	**8**	**-**	**26**	**-**	**-**	**46**	**$ 8,150.00**
FC 170 Bridge Design										
A. Bridge Condition Surveys										
1. Bridge Condition Survey (roadway bridge)		6	8		6			4	24	$ 4,074.00
B. Bridge Type and Cost Report (roadway bridge)		2	4		6			4	16	$ 2,322.00
C. Bridge Design (roadway bridge)										
1. Bridge Layout	2	4	16	24		82			126	$ 21,858.00
2. Bridge Details Summary	1	2	6	4	8		4		24	$ 3,792.00
3. Bridge Details (Replacement)	10	16	34	48	56	64	48		266	$ 42,020.00
FC - 170 Subtotal - Labor Hrs.	**13**	**30**	**68**	**76**	**76**	**146**	**52**	**8**	**456**	**$ 74,066.00**
FC 180 Bid Phase and Construction Phase Services										
B. Construction Phase Services										
1. Review shop drawings, forming details and equipment submittals				16					16	$ 2,800.00
2. Attend Pre-Con meeting and prepare meeting minutes										$ -
3. Attend monthly status meetings and prepare meeting minutes (up to 2)										$ -
4. Attend site visits (up to 4)										$ -
6. Respond to RFIs				12					12	$ 2,100.00
FC - 180 Subtotal - Labor Hrs.	**-**	**-**	**-**	**28**	**-**	**-**	**-**	**-**	**28**	**$ 4,900.00**
TOTAL SHEETS	**15**									
Total - Labor Hours		**43**	**182**	**118**	**92**	**172**	**52**	**13**	**672**	
Total - Labor Cost		**$ 10,320.00**	**$ 36,036.00**	**$ 20,650.00**	**$ 10,580.00**	**$ 28,380.00**	**$ 6,552.00**	**$ 1,170.00**		**$ 113,688.00**

DIRECT EXPENSES		QUANTITY	UNIT	UNIT COST		
Photocopies BW (11"x17")		200.00	sheet	$0.20		$ 40.00
Photocopies BW (8.5"x11")		400.00	sheet	$0.15		$ 60.00
Photocopies Color (11"x17")		50.00	sheet	$1.50		$ 75.00
Photocopies Color (8.5"x11")		50.00	sheet	$0.75		$ 37.50
Mileage		100.00	mile	$0.56		$ 56.00
Overnight Mail - Letter Size		-	each delivery	$14.00		$ -
Overnight Mail - Oversize Box		-	each delivery	$50.00		$ -
Subtotal - Other Direct Expenses						**$ 268.50**
GRAND TOTAL						**$ 113,956.50**

Exhibit C-1 - FEE SCHEDULE | **EXHIBIT C-1** | **City of Pflugerville**

T2 Utility Engineers, Inc. (T2E) | **Immanuel Road**

Estimate of Engineering Services Budget | **Supplemental Agreement No. 1**

T2 Utility Engineers, Inc.	No. of Sheets	Senior Project Manager (T2 Project Manager)	Quality Manager (T2 Survey Manager)	Senior Engineer	Project Engineer	Senior CAD Operator	CADD Operator	Senior Engineer Tech (T2 SUE Supervisor)	Engineer Tech (T2 SUE Field Tech)	Admin /Clerical	Total Hours	Total Labor Cost
		$130.00	$150.00	$275.00	$227.00	$130.00	$100.00	$128.00	$85.00	$85.00		
FC 130 ROW Data/Utilities												
B. Utility Locations												
1. Secure record drawings of all utilities along the corridor		1				1	2				4	$ 460.00
2. Perform in-field visual inspection; record discrepancies w/ record		1			1			4			6	$ 869.00
3. Interview utility owners to address discrepancies			1				2	2			5	$ 606.00
4. Map utilities			1								1	$ 150.00
5. Record all marks on electronic field sketches						1			2		3	$ 300.00
6. Gather QL-A (10 locations) and QL-B Data		2		1	1	2	8				14	$ 1,822.00
FC - 130 Subtotal - Labor Hrs.	**-**	**4**	**2**	**1**	**2**	**4**	**12**	**6**	**2**	**-**	**33**	**$ 4,207.00**
FC 140 Project Management and Administration												
A. Prepare Invoices and Monthly Progress Reports (5 Mo.)		1								1	2	$ 215.00
FC - 140 Subtotal - Labor Hrs.	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**2**	**$ 215.00**
TOTAL SHEETS	**-**											
Total - Labor Hours		**5**	**2**	**1**	**2**	**4**	**12**	**6**	**2**	**1**	**35**	
Total - Labor Cost		**$ 650.00**	**$ 300.00**	**$ 275.00**	**$ 454.00**	**$ 520.00**	**$ 1,200.00**	**$ 768.00**	**$ 170.00**	**$ 85.00**		**$ 4,422.00**
EQUIPMENT/OTHER DIRECT RATES												
Utility Designating					32.00	hour	$235.00					$ 7,520.00
QL C and QL D Depicted					-	LF	$0.80					$ -
QL B Achieved and Depicted					-	LF	$1.53					$ -
Utility Locating (QL A Test Hole Excavation)					-	hour	$350.00					$ -
0 to 5 ft. depth					4.00	each	$950.00					$ 3,800.00
5 to 8 ft. depth					2.00	each	$1,250.00					$ 2,500.00
8 to 13 ft. depth					-	each	$1,675.00					$ -
Subtotal - Other Direct Expenses												**$ 13,820.00**
GRAND TOTAL												**$ 18,242.00**