

**DANNENBAUM ENGINEERING CORPORATION****LAREDO OFFICE:****8610 McPHERSON, SUITE 130 LAREDO, TEXAS 78040 (956)712-9817 OFFICE (956)712-9857 FAX**

August 3, 2016

Webb County  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040**Attn: Luis Perez Garcia, P.E.**  
**Webb County Engineer****Ref: Loop 20 Main Lanes and Frontage Roads from Sta. 554+00 to Just North of Loop 20 / US 59  
Overpass (TxDOT CSJ 0086-14-058)(Loop 20 Extension)****Subj: Supplemental Work Authorization No. 1 to Work Authorization No. 2**

Dear Mr. Perez Garcia,

Please find attached herewith: three (3) partially executed copies of Supplemental Work Authorization No. 1 to Work Authorization No. 2 for Engineering Services for the above referenced project, each bearing an original signature. The Contract is being increased by \$54,356.86.

Please execute each of the three (3) copies of Supplemental Work Authorization No. 1 to Work Authorization No. 2 using blue ink. Thereafter, please retain one (1) original for your files, transmit one (1) original to TxDOT, and return one (1) original to our office for our records.

Provided below are the justifications for the man-hours for the disciplines of the work required to modify the schematic and the administration requirements:

## DEC - FC - 164 Project Management

- Original timeline of project was from 9/2/13 to 3/2/15. The original timeline has been modified due to the progress of the project. The new timeline for project begins 3/2/15 to an expected project completion of 12/2/16. An additional 5 months of management hours are required for continue progress in the development of the project.

## DEC - FC - 110 Route and Design

- Ramp reconfiguration – 3 ramp - Reverse order of ramps (off-on instead of on-off).
- Frontage road turning lane – Make a dual left (shared right lane left and straight) at various intersection. Also, add deceleration right turn lanes.
- Extend multiuse bike path into park – Will not be included, it is to be included in a future work authorization if required.
- Realign park entrance – 3 entrance design alternatives to be provided due to the high volumes of traffic into the state park.
- New Bridge over Chacon Creek – Minimal work will be required to update the schematic to include the frontage road bridge over Chacon Creek.

# DANNENBAUM ENGINEERING CORPORATION

## LAREDO OFFICE:

8610 MCPHERSON, SUITE 130 LAREDO, TEXAS 78040 (956)712-9817 OFFICE (956)712-9857 FAX

- Wetland for detention/treatment facility – Will not be included, it is to be included in a future work authorization if required.
- Storm water detention between main lane and frontage road – Will not be included, it is to be included in a future work authorization if required.
- Concrete pavement for Main lanes – Estimate only.
- Concrete pavement for Frontage roads – Estimate only.
- Reduce/Eliminate small strip acquisitions – Will modify with no charge.

### DEC - FC – 161 Detention Pond Analysis

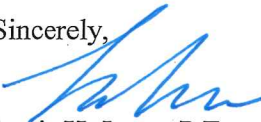
- Will not be included, it is to be included in a future work authorization if required.

### DEC - FC – 130 Right of Way

- Will not be included, it is to be included in a future work authorization if required.

Should you have any questions or require further information regarding this matter, please contact me at your earliest convenience by telephone at (956) 682-3677 or by email at [louis.jones@dannenbaum.com](mailto:louis.jones@dannenbaum.com)

Sincerely,



Louis H. Jones, P.E.  
Principal

cc: File No. 4688-01  
Richard D. Seitz, P.E.  
Nathaniel Olivarez, P.E.  
Cynthia M. Luera

Dannenbaum Engineering Corporation  
Dannenbaum Engineering Corporation  
Dannenbaum Engineering Corporation  
Dannenbaum Engineering Corporation

- Attachments:
1. Three (3) partially executed copies of Supplemental Work Authorization No. 1 to Work Authorization No. 2 for Engineering Services for the above referenced project, each bearing an original signature.
  2. Three copies of:
    - a. Attachment D – Form D-2 Supplemental Work Authorization No. 1 to Work Authorization No. 2 (Dated 06-22-2016)
    - b. Exhibit B Revised “Services to be provided by the Engineer” (Revised 06-22-2016)
    - c. Exhibit C Maximum Amount Payable (Revised 06-22-2016)
    - d. Exhibit C-1 Maximum Amount Payable (Revised 06-22-2016)

**ATTACHMENT D**  
**D-2**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 1**  
**TO WORK AUTHORIZATION NO. 2**  
**CONTRACT FOR ENGINEERING SERVICES**

**THIS SUPPLEMENTAL WORK AUTHORIZATION** is made pursuant to the terms and conditions of Article 5 of Contract No. Loop 20 hereinafter identified as the "Contract," entered into by and between the County of Webb (County), and Dannenbaum Engineering Corporation (the Engineer).

The following terms and conditions of Work Authorization No. 2 are hereby amended as follows:

**PART I.** The Engineer will perform engineering design and/or detailing services as set forth in Exhibit B –Services to be Provided by the Engineer, for Loop 20 main lanes and frontage roads from Sta. 554+00 to Just North of Loop 20 / US 59 Overpass (TxDOT CSJ 0086-14-058) situated in Webb County, Texas in accordance with the project description attached hereto and made a part of this Work Authorization, more specifically described as follows:

A. For services as detailed in Supplemental Work Authorization No. 1 to Work Authorization No. 2.

**PART II.** The maximum amount payable under this Work Authorization is increasing to **\$622,268.84** from **\$567,911.98** and the method of payment is lump sum as set forth in Attachment E of the Contract. This amount is based upon fees set forth in Attachment E, Fee Schedule, of the Main Contract and the Engineer's estimated Work Authorization costs included in Exhibit D, Summary of Fees of Work Authorization No. 2, previously executed.

Original Work Authorization No. 2 Amount	=	\$	567,911.98	
Supplemental Work Authorization No. 1 Amount	=	\$	54,356.86	\$ <b>622,268.84</b>

The attached Exhibit D, Detailed Fee Schedule from October 2, 2013 through August 1, 2020, shall replace original Exhibit D in WA No. 2.

This Supplemental Work Authorization shall become effective on the date of final execution of the parties hereto. All other terms and conditions of Work Authorization No. 2 are to remain in full force and effect.

**IN WITNESS WHEREOF**, this Supplemental Work Authorization is executed in duplicate counterparts and hereby accepted and acknowledged below.

**THE ENGINEER**

**THE COUNTY**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Date)

**LIST OF EXHIBITS**

Exhibit C Fee Schedule summary

*08/03/14*

**EXHIBIT B**

**SERVICES TO BE PROVIDED BY THE ENGINEER**

**(REVISED 6/22/2016)**

**EXHIBIT B**  
**(Revised 06-22-2016)**  
**Services to be Provided by the Engineer**

CSJ: 0086-14-058  
Highway: SL 20  
County: Webb County  
Project No.: CBI 2013 (881)  
Limits: Loop 20 from Sta. 554+00 to Just North of Loop 20 / US 59 Overpass  
Project Length: 7.0 Miles  
Area Office: Laredo Area Office

**Proposed Improvements**

The proposed Loop 20 from Sta. 554+00 to Just North of Loop 20 / US 59 Overpass will consist of ~~six mainlanes with shoulders and two lane frontage roads on each side~~ eight (8) lane main lanes and no frontage roads from US 59 Hwy to Airport Drive and six (6) lane main lanes and three (3) lane frontage roads from Airport Drive to International Road for the advanced project planning Phase I and Phase II (Schematic / Environmental / Right of Way), and the Phase III – PS&E phase, may be performed at a later date, with Amendment to the Contract, which will consist of ~~designing four mainlanes with shoulders and two lane frontage road each side~~ eight (8) lane main lanes and no frontage roads from US 59 Hwy to Airport Drive and six (6) lane main lanes and three (3) lane frontage roads from Airport Drive to International Road with overpasses over Shiloh Road; Del Mar Road; University Drive; Jacaman Road and Laredo International Airport Road, including corresponding underground storm sewers; cross culverts; signage and traffic signals at frontage roads.

Sidewalks on both sides of the proposed Loop 20 Freeway from the Loop 20 / US 59 overpass to the Loop 20/ International Boulevard overpass.

Hike and Bike Trail along one side of the proposed Loop 20 Freeway from the Loop 20 / US 59 overpass to the Loop 20/ International Boulevard overpass.

**PHASE I- ADVANCED PROJECT DEVELOPMENT SERVICES**

**I. FEASIBILITY STUDIES**

**II. ROUTE AND DESIGN STUDIES**

**Task: Roadway Design Criteria (FC: 110)**

The Engineer shall revise the roadway design criteria to include sidewalks on both sides of Loop 20.

**Supplemental Work Authorization No. 1 to Work Authorization No. 2**

The Engineer shall revise the roadway design criteria to include small signs. The signs are to be designed in accordance with TxDOT "Sign Crew Field Book" and AASHTO "Guide for the Development of Bicycle Facilities (2012)

The Engineer shall revise the roadway design criteria to include a hike and bike trail on one side of Loop 20. Hike and bike trails is to be designed in accordance with AASHTO "Guide for the Development of Bicycle Facilities (2012)". Details are to be added illustrating sidewalk and hike and bike crossings of driveways.

**Task: Design Schematic (FC: 110)**

- b. Prepare a schematic plan and profile drawing (1"=50'H, 1" = 10'V) on a continuous color plot paper roll. The Schematic will include hike and bike trail, small signs, the ultimate edge of pavement, proposed hike and bike trail profile, existing utility crossings, proposed culvert crossings, proposed bridges, proposed R.O.W., existing cross streets, proposed driveways, proposed outfall channels, proposed channelized intersections, ultimate interchange configurations, signing, and pavement markings.

Task: Value Engineering Studies (FC 110)

- a. TxDOT will be responsible for preparing; holding and documenting Value Engineering Study with Engineer's Staff attending one(1) day.

**Supplemental Work Authorization No. 1 to Work Authorization No. 2**

- Ramp reconfiguration – 3 ramp - Reverse order of ramps (off-on instead of on-off).
- Frontage road turning lane – Make a dual left (shared right lane left and straight) at various intersection. Also, add deceleration right turn lanes.
- Extend multiuse bike path into park – Will not be included, it is to be included in a future work authorization if required.
- Realign park entrance – 3 alternatives will be provided on the project.
- New Bridge over Chacon Creek – Minimal work will be required to update the schematic to include the frontage road bridge over Chacon Creek.
- Wetland for detention/treatment facility – Will not be included, it is to be included in a future work authorization if required.
- Storm water detention between main lane and frontage road – Will not be included, it is to be included in a future work authorization if required.
- Concrete pavement for Main lanes – Estimate Only
- Concrete pavement for Frontage roads – Estimate Only.
- Reduce/Eliminate small strip acquisitions – Will modify with no charge.

**Task: Detention Pond Analysis (FC: 161)**

**Supplemental Work Authorization No. 1 to Work Authorization No. 2**

- Will not be included, it is to be included in a future work authorization if required

#### IV. FIELD SURVEYING AND PHOTOGRAMMETRY

##### FIELD SURVEY

**Task: Establish Ground Control (FC: 150)**

1. Set all monuments and complete GPS obstruction field sketches, to reach descriptions and reference swing ties. Also, update, if necessary, all information on existing control to be used on this survey. Monuments will consist of ~~aluminum disks~~ "Berntsen Driven-In Survey Monuments" that are to be driven into the ground until "refusal" or to a depth of fifteen feet (whichever is reached first). The station ID is to be stamped on the disk.

#### PHASE V. RIGHT OF WAY SERVICES

**Task: Ownership Data and Permission for Right of Entry (FC: 130)**

The Engineer shall obtain ownership data for all impacted property owners within the project limits and shall obtain right of entry from all property owners prior to commencing any work for surveying and/or right of way services. Number of parcel has increased from 50 parcels identified in "SCOPE AND FEE SCHEDULE ASSUMPTIONS", Paragraph F.8 to over 200 parcels.

**Task: Right-of-Way (Detention Pond) (FC: 130)**

**Supplemental Work Authorization No. 1 to Work Authorization No. 2**

- Will not be included, it is to be included in a future work authorization if required

#### DELIVERABLES

##### *D. RIGHT OF WAY DELIVERABLES*

1. Right of Entry letters. Number of parcel has increased from 50 parcels identified in "SCOPE AND FEE SCHEDULE ASSUMPTIONS", Paragraph F.8 to over 200 parcels.

#### SCOPE AND FEE SCHEDULE ASSUMPTIONS

##### F. RIGHT OF WAY:

8. For Right of Way Mapping, 50 parcels have been assumed. Parcel count above 50 will be considered scope change and will require additional fee. Number of parcel has increased from 50 parcels to over 200 parcels.

**EXHIBIT C**

**MAXIMUM AMOUNT PAYABLE**



**EXHIBIT C**  
**SUMMARY OF FEE SCHEDULE FOR PHASE I (ADVANCED PROJECT DEVELOPMENT SERVICES) SUPPORTING LUMP SUM CALCULATIONS**

Contract No. \_\_\_\_\_  
 SWA No. 1 to WA NO. 2  
 PHASE II

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2  
 LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)

**PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES**

*Provide Advanced Project Development Services, Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D), for Extension of Loop 20*

*from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

**SUPPLEMENTAL WA NO. 1 TO WA NO 2**

**PHASE I SUMMARY**

Function Codes	PRIME		DBE		DBE		DBE		DBE		DBE		DBE		NON-DBE		NON-DBE			
	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee		
Dannenbaum Engineering Corporation																				
Arredondo, Zepeda & Brunz, LLC																				
Arias & Associates, Inc.																				
Aerial Data Services, Inc.																				
Ammaterra Environmental, Inc.																				
RODS, SUE, Inc.																				
Howland Engineering & Surveying Co.																				
Gilpin Engineering Company																				
FC-102 Feasibility Studies																				
FC-110 Route and Design Studies	404	\$ 54,356.86																		
FC-120 Social, Economic and Environmental Studies and Public Involvement																				
FC-130 Right of Way Data																				
FC-150 Field Surveying																				
FC-160 Roadway Design Controls																				
FC-161 Drainage																				
FC-162 Signing, Pavement Markings, Signalization																				
FC-163 Miscellaneous (Roadway)																				
FC-164 Managing Advanced Planning Services and Overall CA/QC Services																				
FC-165 Traffic Management Systems																				
FC-170 Bridge Design																				
Direct Expenses																				
<b>Total</b>	404	\$ 54,356.86	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
<b>Percent Participation</b>		100.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%

<b>% PARTICIPATION =</b>	
NON-DBE \$	54,356.86 100.00%
DBE \$	- 0.00%
<b>TOTAL \$</b>	<b>54,356.86 100.00%</b>

**EXHIBIT C-1**

**DETAILED FEE SCHEDULE  
FOR  
SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2  
(DANNENBAUM ENGINEERING CORPORATION)**

# EXHIBIT C-1

## DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2

LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)

PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

*Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D)*

*for  
Extension of Loop 20 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

### DANNENBAUM ENGINEERING CORPORATION

TASK DESCRIPTION	Principal or Project Manager	Depty Project Manager	Senior Engineer (Civil)	Senior Engineer (Bridge)	Engineer	Senior Designer	CAD Operator or CADD Tech. I	Clerical	Total Labor Hours	Task Cost
<b>ADVANCED PROJECT DEVELOPMENT</b>										
<b>ADVANCE PROJECT DEVELOPMENT</b>										
<b>FC 164 - PROJECT MANAGEMENT (FC 102 TO FC 164) (ADVANCED PROJECT DEVELOPMENT SERVICES (ADDITIONAL 5 MONTHS))</b>										
PREPARE CLIENT MANAGEMENT/MANAGE WORK AUTHORIZATIONS INCLUDING RECORD KEEPING/FILING (ADVANCED PROJECT DEVELOPMENT)	1	3	0	0	0	0	0	4	8	\$ 1,295.70
SCHEDULE & ATTEND WORK AUTHORIZATION DEVELOPMENT MEETINGS	2	2	2	0	0	0	0	4	10	\$ 1,838.56
COORDINATION/PREPARE SUB WORK AUTHORIZATIONS/MANAGE SUBCONSULTANTS	2	4	4	0	0	3	0	7	20	\$ 3,276.29
PREPARATION OF INVOICES AND PROGRESS REPORTS (ADDITIONAL 5 EA)	3	10	0	0	5	0	0	10	28	\$ 4,653.84
SCHEDULE, ATTEND AND PREPARE MINUTES (ADDITIONAL MEETINGS HELD)	1	2	2	0	0	0	0	2	7	\$ 1,380.85
MONITOR SUB-PROVIDER'S SCHEDULES ON MONTHLY BASIS (ADDITIONAL 5 MONTHS)	1	5	1	0	5	2	0	3	17	\$ 2,802.18
PREPARE & ASSEMBLE PRELIMINARY COST ESTIMATES (ADDITIONAL ESTIMATES DEVELOPED)	1	1	1	0	4	2	8	1	18	\$ 2,263.55
<b>SUB-TOTAL - FC 164 - PROJECT MANAGEMENT</b>	<b>11</b>	<b>27</b>	<b>10</b>	<b>0</b>	<b>14</b>	<b>7</b>	<b>8</b>	<b>31</b>	<b>108</b>	<b>\$ 17,510.97</b>
<b>TOTAL ADVANCE PROJECT DEVELOPMENT MANHOURS (DANNENBAUM)</b>	<b>11</b>	<b>27</b>	<b>10</b>	<b>0</b>	<b>14</b>	<b>7</b>	<b>8</b>	<b>31</b>	<b>108</b>	<b>\$ 17,510.97</b>
<b>BASIC SERVICES</b>										
<b>BASIC SERVICES (DANNENBAUM)</b>										
<b>FC 110 - ROUTE AND DESIGN STUDIES</b>										
RAMP RECONFIGURATION-3 RAMPS	2	0	14	0	26	28	30	0	100	\$ 12,736.32
FRONTAGE ROAD TURNING LANES	2	0	4	0	24	30	36	0	96	\$ 10,931.06
EXTEND MULTIUSE BIKE PATH INTO PARK (NOT INCLUDED)(FUTURE W.A. IF REQUIRED)	0	0	0	0	0	0	0	0		
REALIGN PARK ENTRANCE-3 ALTERNATIVES	1	0	3	0	12	20	24	0	60	\$ 6,724.87

# EXHIBIT C-1

## DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2

LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)

PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

*Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D)*

for

*Extension of Loop 20 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

### DANNENBAUM ENGINEERING CORPORATION

TASK DESCRIPTION	Principal or Project Manager	Depty Project Manager	Senior Engineer (Civil)	Senior Engineer (Bridge)	Engineer	Senior Designer	CAD Operator or CADD Tech. I	Clerical	Total Labor Hours	Task Cost
NEW BRIDGE OVER CHACON CREEK	0	0	0	0	0	0	0	0		
WETLAND FOR DETENTION/TREATMENT FACILITY (NOT INCLUDED)(FUTURE W.A. IF REQUIRED)	0	0	0	0	0	0	0	0		
STORMWATER DETENTION BEWTEEN MAIN LANE AND FRONTAGE ROAD (NOT INCLUDED)(FUTURE W.A. IF REQUIRED)	0	0	0	0	0	0	0	0		
CONCRETE PAVEMENT FOR MAINLANES										
UPDATE ESTIMATE	1	3	4	0	4	4	4	0	20	\$ 3,226.82
CONCRETE PAVEMENT FOR FRONTAGE ROADS										
UPDATE ESTIMATE	1	3	4	0	4	4	4	0	20	\$ 3,226.82
REDUCE/ ELIMINATE SMALL STRIP ACQUISITIONS (WILL MODIFY WITH NO CHARGE)	0	0	0	0	0	0	0	0		
<b>SUB-TOTAL - FC 110 - ROUTE AND DESIGN STUDIES</b>	<b>7</b>	<b>6</b>	<b>29</b>	<b>0</b>	<b>70</b>	<b>86</b>	<b>98</b>	<b>0</b>	<b>296</b>	<b>\$ 36,845.89</b>
<b>TOTAL BASIC SERVICES MANHOURS (DANNENBAUM)</b>	<b>7</b>	<b>6</b>	<b>29</b>	<b>0</b>	<b>70</b>	<b>86</b>	<b>98</b>	<b>0</b>	<b>296</b>	<b>\$ 36,845.89</b>
<b>HOURS SUB-TOTALS</b>	<b>7</b>	<b>6</b>	<b>29</b>	<b>0</b>	<b>70</b>	<b>86</b>	<b>98</b>	<b>0</b>	<b>296</b>	
LABOR RATE PER HOUR	\$ 327.93	\$ 236.07	\$ 225.50	\$ 225.50	\$ 132.09	\$ 106.64	\$ 83.44	\$ 64.89		
DIRECT LABOR COSTS	\$2,295.51	\$1,416.42	\$6,539.50	\$0.00	\$9,246.30	\$9,171.04	\$8,177.12	\$ -	CHECK	
<b>TOTAL BASIC SERVICES FEE (DANNENBAUM)</b>	<b>2,295.51</b>	<b>1,416.42</b>	<b>6,539.50</b>	<b>0.00</b>	<b>9,246.30</b>	<b>9,171.04</b>	<b>8,177.12</b>	<b>0.00</b>	<b>36,845.89</b>	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	6.23%	3.84%	17.75%	0.00%	25.09%	24.89%	22.19%	0.00%	100.00%	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	2.36%	2.03%	9.80%	0.00%	23.65%	29.05%	33.11%	0.00%	100.00%	
<b>FC-161-DETENTION POND ANALYSIS (NOT INCLUDED) (FUTURE W.A. IF REQUIRED)</b>									<b>\$ -</b>	
<b>FC 130 - RIGHT OF WAY (DETENTION POND)(NOT INCLUDED) (FUTURE W.A. IF REQUIRED)</b>									<b>\$ -</b>	
									<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BASIC SERVICES (ROADWAY AND DRAINAGE + DANNENBAUM DIRECT EXPENSES)</b>										<b>\$ 54,356.86</b>

# EXHIBIT C-1

## DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2

LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)

PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

*Provide Advanced Project Development Services, Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D), for Extension of Loop 20*

*from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

### Dannenbaum Engineering Corporation

SPECIAL SERVICES (FC 161) HYDROLOGIC TASK DESCRIPTION	Principal/PM	DEPUTY PM	Senior Engineer- Civil	Senior Engineer- Bridge	Engineer	Senior Designer	CADD Operator/ Tech	Clerical	Total Labor Hrs.	Remarks	Task Cost
FC 161 - DRAINAGE											
DETENTION POND ANALYSIS											
RESEARCH & EVALUATE DETENTION STORAGE LOCATIONS	0		0		0	0	0		0		\$ -
SIZE DETENTION POND STORAGE AND OUTLET SIZES	0		0		0	0	0		0		\$ -
QA/QC (STORAGE LOCATIONS & DETENTION POND STORAGE)	0		0						0		\$ -
SUBMIT FOR REVIEW AND COMMENTS	0		0		0	0			0		\$ -
ADDRESS COMMENTS AND SUBMIT FINAL DESIGN	0		0		0	0	0		0		\$ -
SUB-TOTAL - FC 161 - DRAINAGE	0	0	0	0	0	0	0	0	0		\$ -
<b>TOTAL DIRECT EXPENSES (FROM BELOW)</b>											<b>\$0.00</b>
TOTAL - FC 161 - DRAINAGE INCLUDING DIRECT EXPENSES											\$ -
<b>TOTAL ENGINEERING (SUBCONSULTANT) - SPECIAL SERVICES (FROM BELOW)</b>											<b>\$ -</b>
TOTAL FC 161 - DRAINAGE											\$ -
<b>HOURS SUB-TOTALS</b>	0	0	0	0	0	0	0	0	0		
LABOR RATE PER HOUR	\$ 327.93	\$ 236.07	\$ 225.50	\$ 225.50	\$ 132.09	\$ 106.64	\$ 83.44	\$ 64.89			
DIRECT LABOR COSTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	CHECK
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ -
<b>DIRECT EXPENSES</b>											
REPRO -400 SHEETS X \$0.20 / PAPER SHEET x 10 Sets											\$ -
REPRO -200 8 1/2" x 11" COLOR COPIES X \$1.00 / PAPER SHEET x 10 Sets											\$ -
PER DIEM - \$121 /NIGHT STAY X 2 PERSON X 4 NIGHT (\$85 hotel/\$36 meals)											\$ -
DELIVERY SERVICES - \$50 / PACKAGE X 4 PACKAGES											\$ -
MILEAGE 4 TRIP x 286 MI / TRIP @ \$0.565/mile											\$ -
<b>TOTAL DIRECT EXPENSES</b>											<b>\$ -</b>

# EXHIBIT C-1

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2  
 LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)  
 PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

*Provide Advanced Project Development Services, Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D), for Extension of Loop 20  
 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

**Dannenbaum Engineering Corporation**

SPECIAL SERVICES (FC 130) ROW SERVICES TASK DESCRIPTION	Principal Manager	Surveying PM	Surveying Supervisor	Field Crew (3- man)	EIT	CADD Designer	Admin Asst	Total Labor Hrs.	Task Cost
ROW SERVICES									
<b>FC 130 - RIGHT-OF-WAY (DETENTION POND)</b>									
PARCEL ABSTRACT	0	0	0			0		0	\$ -
DEVELOP WORKING SKETCHES		0	0			0		0	\$ -
COORDINATE WITH LAND OWNER	0	0	0					0	\$ -
LOCATE AND TIE CORNERS		0	0	0		0		0	\$ -
RESOLVE BOUNDARIES		0				0		0	\$ -
PREPARE ROW MAP		0	0			0		0	\$ -
PREPARE PARCELS AND METES AND BOUNDS		0	0					0	\$ -
STAKE PARCEL TAKINGS		0	0	0				0	\$ -
<b>SUB-TOTAL - ROW SERVICES</b>	0	0	0	0	0	0	0	0	\$ -
<b>TOTALS - RIGHT OF WAY</b>	0	0	0	0	0	0	0	0	\$ -
<b>HOURS SUB-TOTALS</b>	0	0	0	0	0	0	0	0	
LABOR RATE PER HOUR	\$ 200.04	\$ 156.78	\$ 93.75	\$ 148.98	\$ 76.29	\$ 80.04	\$ 43.26		
DIRECT LABOR COSTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
<b>DIRECT EXPENSES</b>									
DELIVERY SERVICES - \$50 / PACKAGE X 10 PACKAGES									\$ -
MILEAGE (APPROX 1,000 MI @ \$0.565/mile)									\$ -
TRAFFIC CONTROL									\$ -
<b>TOTAL DIRECT EXPENSES</b>									\$ -
<b>GRAND TOTAL - RIGHT-OF-WAY</b>	(LABOR, CADD & DIRECT EXPENSE)								\$ -

**ASSUMPTION:**  
 1. 1 PARCEL PER DETENTION POND  
 2. 10 DETENTION PONDS  
 3. RIGHT OF ENTRIES STILL VALID