

# L&G Engineering

Transportation Consultants

June 30, 2017

Commissioner Joseph Palacios  
**Attn: Maria "Lulu" Lucio**  
Hidalgo County Precinct No. 4  
1102 N. Doolittle Rd.  
Edinburg, TX 78539

**RE: San Carlos CRC Sunflower Walking Trail & Sunflower Park**  
**Contract No. # C-15-301-09-15 ✓ Work Authorization #5 ✓**  
**Project No. # E130603**  
**P.O. # 746888 ✓**

Dear Ms. Lucio:

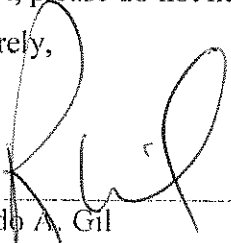
Attached for your review and approval is our invoice for the services rendered under Work Authorization #5 on the subject referenced project for the month of June.

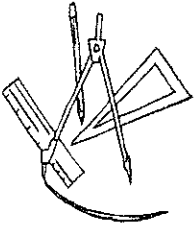
The following is attached:

- L&G's Invoice # 17-6-000004
- Test Reports and progress letters as prepared and forwarded to Pct. No. 4 and all parties involved on the project.

Should you have any questions regarding this submittal or would like clarification on any aspect of the project, please do not hesitate to call me at (956) 565-0760.

Sincerely,

  
\_\_\_\_\_  
Ricardo A. Gil  
General Manager  
Laboratory Operations



June 30, 2017

Commissioner Joseph Palacios  
Attn: Maria "LuLu" Lucio  
Hidalgo County, Pct. #4  
1102 N. Doolittle Rd.  
Edinburg, Texas 78539

**RE: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5)**

Dear Ms. Lucio:

Included for your use with this letter, are test reports **R023 thru R028** for **Field & Laboratory Concrete Testing** performed on the above referenced project. It should be noted that one specimen (Report R026-28) has been held for testing at 56 days as it did not meet the compressive strength requirements at 28 days (3000 psi).

L&G Engineering appreciates the opportunity to serve your material testing needs on this project and we look forward to working with you in the future.

If you have any questions, feel free to contact me at 956-565-0760.

Sincerely,



Ricardo A. Gil  
General Manager

Attachments

CC: G & G Contractors

2100 W. Expressway 83  
 Mercedes, TX 78570  
 Office (956) 565-0760 Fax (956) 565-6746

Client Address: Hidalgo County Pct. #4  
 Maria Lucio, Program Manager  
 1102 N. Doolittle Rd.  
 Edinburg, TX. 78539

Account No.: E130  
 Project No: E130603  
 Project Desc.: San Carlos CRC Sunflower Park Concrete  
 Walking Trail (WA #5)

Due Date: UPON RECEIPT

Budget/Remaining: \$11,351.46 / \$2,361.23

PO: 746888

===== Invoice Summary by Billing Code =====

	<u>Unit Rate</u>	<u>Qty</u>	<u>Extension</u>
920:92033 - Air Content (Pressure Method)	\$24.58	3.00	\$73.74
920:92034 - Comp. Strength of Cyl. Specimen	\$16.40	7.00	\$114.80
920:92035 - Cyl. Specimen Prep./Hold/Cure	\$12.36	9.00	\$111.24
940:94047 - Eng. Tech. (Concrete / Lab)	\$52.88	1.75	\$92.54
940:94050 - Eng. Tech. (Concrete)	\$52.88	12.00	\$634.56
940:94054 - Engineering Specialist (Lab Mgr.)	\$105.76	1.25	\$132.20
940:94055 - Engineer / P.E.	\$133.76	1.25	\$167.20
950:95058 - Vehicle Trip Charge	\$0.55	84.00	\$46.20
950:95061 - Test Report	\$24.30	5.00	\$121.50
<b>Total for this Invoice:</b>			<b>\$1,493.98</b>

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R023	05/18/2017	1.00	920:92033 - Air Content (Pressure Method)	Each	\$24.58	\$24.58
R023	05/18/2017	1.00	920:92035 - Cyl. Specimen Prep./Hold/Cure	Each	\$12.36	\$12.36
R023	05/18/2017	4.50	940:94050 - Eng. Tech. (Concrete)	Hour	\$52.88	\$237.96
R023	05/18/2017	0.25	940:94054 - Engineering Specialist (Lab Mgr.)	Hour	\$105.76	\$26.44
R023	05/18/2017	0.25	940:94055 - Engineer / P.E.	Hour	\$133.76	\$33.44
R023	05/18/2017	28.00	950:95058 - Vehicle Trip Charge	Mile	\$0.55	\$15.40
R023	05/18/2017	1.00	950:95061 - Test Report	Each	\$24.30	\$24.30
Report Number R023 for a Subtotal of:						\$374.48

REMIT TO: 2100 W. Expressway 83  
 Mercedes, TX 78570  
 Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

2100 W. Expressway 83  
 Mercedes, TX 78570  
 Office (956) 565-0760 Fax (956) 565-6746

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R025	05/25/2017	2.00 ✓	920:92033 - Air Content (Pressure Method)	Each	\$24.58	\$49.16
R025	05/25/2017	8.00 ✓	920:92035 - Cyl. Specimen Prep./Hold/Cure	Each	\$12.36	\$98.88
R025	05/25/2017	7.50	940:94050 - Eng. Tech. (Concrete)	Hour	\$52.88	\$396.60
R025	05/25/2017	0.25	940:94054 - Engineering Specialist (Lab Mgr.)	Hour	\$105.76	\$26.44
R025	05/25/2017	0.25	940:94055 - Engineer / P.E.	Hour	\$133.76	\$33.44
R025	05/25/2017	56.00	950:95058 - Vehicle Trip Charge	Mile	\$0.55	\$30.80
R025	05/25/2017	1.00	950:95061 - Test Report	Each	\$24.30	\$24.30
Report Number R025 for a Subtotal of:						\$659.62
R026-28	05/18/2017	3.00 ✓	920:92034 - Comp. Strength of Cyl. Specimen	Each	\$16.40	\$49.20
R026-28	05/18/2017	0.75	940:94047 - Eng. Tech. (Concrete / Lab)	Each	\$52.88	\$39.66
R026-28	05/18/2017	0.25	940:94054 - Engineering Specialist (Lab Mgr.)	Hour	\$105.76	\$26.44
R026-28	05/18/2017	0.25	940:94055 - Engineer / P.E.	Hour	\$133.76	\$33.44
R026-28	05/18/2017	1.00	950:95061 - Test Report	Each	\$24.30	\$24.30
Report Number R026-28 for a Subtotal of:						\$173.04
R027	05/25/2017	2.00 ✓	920:92034 - Comp. Strength of Cyl. Specimen	Each	\$16.40	\$32.80
R027	05/25/2017	0.50	940:94047 - Eng. Tech. (Concrete / Lab)	Each	\$52.88	\$26.44
R027	05/25/2017	0.25	940:94054 - Engineering Specialist (Lab Mgr.)	Hour	\$105.76	\$26.44
R027	05/25/2017	0.25	940:94055 - Engineer / P.E.	Hour	\$133.76	\$33.44
R027	05/25/2017	1.00	950:95061 - Test Report	Each	\$24.30	\$24.30
Report Number R027 for a Subtotal of:						\$143.42
R028	05/25/2017	2.00 ✓	920:92034 - Comp. Strength of Cyl. Specimen	Each	\$16.40	\$32.80
R028	05/25/2017	0.50	940:94047 - Eng. Tech. (Concrete / Lab)	Each	\$52.88	\$26.44
R028	05/25/2017	0.25	940:94054 - Engineering Specialist (Lab Mgr.)	Hour	\$105.76	\$26.44
R028	05/25/2017	0.25	940:94055 - Engineer / P.E.	Hour	\$133.76	\$33.44

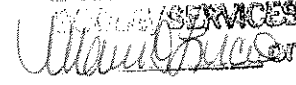
REMIT TO: 2100 W. Expressway 83  
 Mercedes, TX 78570  
 Office (956) 565-0760 Fax (956) 565-6746

**Net 30 Days**

2100 W. Expressway 83  
 Mercedes, TX 78570  
 Office (956) 565-0760 Fax (956) 565-6746

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R028	05/25/2017	1.00	950:95061 - Test Report	Each	\$24.30	\$24.30
Report Number R028 for a Subtotal of:						\$143.42
<b>Total for this Invoice:</b>						<b>\$1,493.98</b>

INVOICE RECEIVED BY:  
 ON \_\_\_\_\_  
 SERVICES RECEIVED BY:  
 5/18/17  
 5/26/17

REMIT TO: 2100 W. Expressway 83  
 Mercedes, TX 78570  
 Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

PAST DUE BALANCES SUBJECT TO 1.5% SERVICE CHARGE PER MONTH  
 PLEASE REFERENCE INVOICE NUMBER WITH PAYMENT

**REPORT OF SITE VISIT  
TEST REPORT**

Project Description: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5) L&G Project Number: E130603  
Client: Hidalgo County Pct. #4 L&G Report Number: R023  
Contractor: G & G Contractors Sample Date: 05/18/2017  
Date Reported: 05/18/2017

Client PO: 746888

Page 1 of 1

On May 18, 2017 a representative of L&G Engineering was dispatched to Sunflower Park Walking Trail to perform testing and inspection on the placement of ready-mixed concrete on Sidewalk.

Specimen Number 10 was obtained and tested at 10:37 AM, and the following were determined:

<b>Concrete Temp:</b> <u>88°f</u>	<u>N/A</u> Specification	<b>Entrapped/Entrained Air Content:</b> <u>1.9%</u>	<u>N/A</u> Specification
<b>Ambient Temp:</b> <u>86°f</u>	<u>N/A</u> Specification	<b>Slump:</b> <u>5 inches</u>	<u>N/A</u> Specification

From Specimen Number 10, a total of 4 6x12 cylindrical test specimens were cast for Compressive Strength Testing at intervals of 7 and 28 days.

On May 19, 2017 a representative of L&G Engineering was dispatched to the referenced project to collect the cylindrical specimens cast on the placement of ready-mixed concrete on Sidewalk. The specimens were delivered to the laboratory where they were stripped, labeled, and placed in a curing tank for testing at intervals of 7 and 28 days.

Test Methods (If Applicable): ASTM C-231, ASTM C-143, ASTM C-1064, ASTM C-31, ASTM C-172

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Maria Lucio  
(1-cc copy)  
1-cc G & G Contractors Attn: Manuel Leal  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering



Ricardo A. Gil, Lab Manager

**Time / Date:** 10:00 am / 05/18/2017

**Project Name:** Concrete Walking Tra

**Project Number:** E130603

**Engineer:**

**Contractor:** G & G Contractors

**Location:**

**Testing:** Cast Cylinders - Cast Cylinders- Walking Trail

**Proctors:**

108.0 @ 15.3% MOISTURE IS MD1 10/31/16 Select Fill

**Special Instructions:** Concrete testing for walking trail as requested by Pct 4  
\*\*\*N on Fm493 & W on Fm107\*\*\*

**Contact Person:**

?

**REPORT OF SITE VISIT  
TEST REPORT**

Project Description: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5) L&G Project Number: E130603  
Client: Hidalgo County Pct. #4 L&G Report Number: R024  
Contractor: G & G Contractors Sample Date: 05/24/2017 ✓  
Date Reported: 05/24/2017

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Client PO: 746888

Page 1 of 1

On May 24, 2017 a representative of L&G Engineering was dispatched to the subject project. The technician arrived at Jobsite at 8:30 a.m. for concrete pour of 80 yds. Upon arrival there was not any sign for a pour to take place. Sidewalk forms in front of basketball area and kiddie park had forms ready for concrete. There was no contractor or concrete truck on site. The technician called the lab. and was instructed to return.

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Maria Lucio  
(1-cc copy)  
1-cc G & G Contractors Attn: Manuel Leal  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering



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Ricardo A. Gil, Lab Manager

**Billy Ortiz**

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**From:** Rick Gil [rgil@lgengineers.com]  
**Sent:** Wednesday, May 24, 2017 11:57 AM  
**To:** Nick Perez  
**Cc:** Billy Ortiz  
**Subject:** RE: San Carlos walk trails

We will schedule.

Rick

Billy, see the attached.

**From:** Nick Perez [mailto:nick.perez@co.hidalgo.tx.us]  
**Sent:** Wednesday, May 24, 2017 11:25 AM  
**To:** Rick Gil  
**Subject:** Re: San Carlos walk trails

R025, R027<sup>1</sup>, R028

The contractor has scheduled to pour concrete tomorrow morning, weather permitting for the project below. Please schedule testing for 7:00am.

Respectfully,

5/25

Nick Perez

Hidalgo County Pct.#4  
1051 N. Doolittle Rd.  
Edinburg, TX 78539

Office: (956)383-3112 Ext. 4008  
Fax: (956)381-5905  
E-Mail: [Nick.Perez@co.hidalgo.tx.us](mailto:Nick.Perez@co.hidalgo.tx.us)

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**From:** "Nick Perez" <[nick.perez@co.hidalgo.tx.us](mailto:nick.perez@co.hidalgo.tx.us)>  
**To:** "Rick Gil" <[rgil@lgengineers.com](mailto:rgil@lgengineers.com)>  
**Sent:** Tuesday, May 23, 2017 1:45:55 PM  
**Subject:** Fwd: San Carlos walk trails

Mr. Rick, please schedule "Construction Material Testing" outlined in P.O. 746888 tomorrow at 7:00am.

Location: Pct.4 Sunflower Park.

Respectfully,

Nick Perez

**REPORT OF SITE VISIT  
TEST REPORT**

Project Description: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5) L&G Project Number: E130603  
Client: Hidalgo County Pct. #4 L&G Report Number: R025  
Contractor: G & G Contractors Sample Date: 05/25/2017  
Date Reported: 05/25/2017

Client PO: 746888

Page 1 of 1

On May 25, 2017 a representative of L&G Engineering was dispatched to Concrete Walking Trail to perform inspection on the placement of ready-mixed concrete on Sidewalk.

Specimen Number 11 was obtained and tested at 7:34 AM, and the following were determined:

<b>Concrete Temp:</b> <u>84°f</u>	<u>N/A</u> Specification	<b>Entrapped/Entrained Air Content:</b> <u>1.1%</u>	<u>N/A</u> Specification
<b>Ambient Temp:</b> <u>80°f</u>	<u>N/A</u> Specification	<b>Slump:</b> <u>5 inches</u>	<u>N/A</u> Specification

From Specimen Number 11, a total of 4 6x12 cylindrical test specimens were cast for Compressive Strength Testing at intervals of 7 and 28 days.

Specimen Number 12 was obtained and tested at 10:05 AM, and the following were determined:

<b>Concrete Temp:</b> <u>84°f</u>	<u>N/A</u> Specification	<b>Entrapped/Entrained Air Content:</b> <u>1.6%</u>	<u>N/A</u> Specification
<b>Ambient Temp:</b> <u>84°f</u>	<u>N/A</u> Specification	<b>Slump:</b> <u>6 1/2 inches</u>	<u>N/A</u> Specification

From Specimen Number 12, a total of 4 6x12 cylindrical test specimens were cast for Compressive Strength Testing at intervals of 7 and 28 days.

On May 26, 2017 a representative of L&G Engineering was dispatched to the referenced project to collect the cylindrical specimens cast on the placement of ready-mixed concrete on Sidewalk. The specimens were delivered to the laboratory where they were stripped, labeled, and placed in a curing tank for testing at intervals of 7 and 28 days.

Test Methods (If Applicable): ASTM C-231, ASTM C-143, ASTM C-1064, ASTM C-31, ASTM C-172

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)  
(Edinburg, TX) Attn: Maria Lucio  
(1-cc copy)  
1-cc G & G Contractors Attn: Manuel Leal  
1-cc Laboratory

Respectfully Submitted,  
L&G Engineering



Ricardo A. Gil, Lab Manager

**CONCRETE COMPRESSION  
TEST REPORT**

Project Description: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5) L&G Project Number: E130603  
 Client: Hidalgo County Pct. #4 L&G Report Number: R026-28  
 Contractor: G & G Contractors Sample Date: 05/18/2017  
 Date Reported: 06/15/2017

Client PO: 746888

Page 1 of 1

Placement Location: Sidewalk Directly South of Restrooms  
 Mix ID: 1421476 3000 Supplier: CEMEX  
 Specified Strength: 3,000 P.S.I. @ 28 days  
 Specified Slump: N/A Slump: 5.0"  
 Specified Air Content: N/A Air Content: 1.9%  
 Weather Conditions: Cloudy, Windy Air Temp.: 86°f  
 Time Batched: 9:12 am Time Sampled: 10:37 am Concrete Temp.: 88°f  
 Plant Ticket No: 44144897 Truck No: 10035672 CY: 2.0  
 Water: 10 gal.

**Compressive Strength Data**

Set No.	Identification	Test Date	Age (days)	Maximum Load (pounds)	Break Type	Comp. Strength (psi)	Average Strength (psi)	% of Design
10	A	05/25/2017	7	52,840	Type 3	1,870		62.33%
	B	05/25/2017	7	54,990	Type 4	1,940	1,910	64.67%
	C	06/15/2017	28	81,715	Type 2	2,890	2,890	96.33%



**Remarks/Comments:**

6 x 12 in. Cylinders-One specimen held for testing at 56 days

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)  
 (Edinburg, TX) Attn: Maria Lucio  
 (1-cc copy)  
 1-cc G & G Contractors Attn: Manuel Leal  
 1-cc Laboratory

Respectfully Submitted,  
L&G Engineering

Ricardo A. Gil, Lab Manager

**CONCRETE COMPRESSION  
TEST REPORT**

Project Description: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5) L&G Project Number: E130603  
 Client: Hidalgo County Pct. #4 L&G Report Number: R027  
 Contractor: G & G Contractors Sample Date: 05/25/2017  
 Date Reported: 06/01/2017

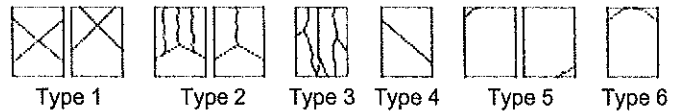
Client PO: 746888

Page 1 of 1

Placement Location: Sidewalk Surrounding Playground Area  
 Mix ID: 3000 1"C AE Supplier: CEMEX  
 Specified Strength: 3,000 P.S.I. @ 28 days  
 Specified Slump: N/A Slump: 5.0"  
 Specified Air Content: N/A Air Content: 1.1%  
 Weather Conditions: Cloudy / Cool Air Temp.: 80°f  
 Time Batched: 6:58 am Time Sampled: 7:34 am Concrete Temp.: 84°f  
 Plant Ticket No: 53992861 Truck No: 35592 CY: 10  
 Water: 25 gal.

**Compressive Strength Data**

Set No.	Identification	Test Date	Age (days)	Maximum Load (pounds)	Break Type	Comp. Strength (psi)	Average Strength (psi)	% of Design
11	A	06/01/2017	7	73,230	Type 2	2,590		86.33%
	B	06/01/2017	7	76,965	Type 3	2,720	2,660	90.67%



**Remarks/Comments:**  
6 x 12 in. Cylinders

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)  
 (Edinburg, TX) Attn: Maria Lucio  
 (1-cc copy)  
 1-cc G & G Contractors Attn: Manuel Leal  
 1-cc Laboratory

Respectfully Submitted,  
L&G Engineering

Ricardo A. Gil, Lab Manager

**CONCRETE COMPRESSION  
 TEST REPORT**

Project Description: San Carlos CRC Sunflower Park Concrete Walking Trail (WA #5) L&G Project Number: E130603  
 Client: Hidalgo County Pct. #4 L&G Report Number: R028  
 Contractor: G & G Contractors Sample Date: 05/25/2017  
 Date Reported: 06/01/2017

Client PO: 746888

Page 1 of 1

Placement Location: Sidewalk Surrounding Playground Area  
 Mix ID: 3000 1" C AE Supplier: CEMEX  
 Specified Strength: 3,000 P.S.I. @ 28 days  
 Specified Slump: N/A Slump: 6.5"  
 Specified Air Content: N/A Air Content: 1.6%  
 Weather Conditions: Sunny / Warm Air Temp.: 84°f  
 Time Batched: 9:38 am Time Sampled: 10:05 am Concrete Temp.: 84°f  
 Plant Ticket No: 53992885 Truck No: 35601 CY: 60  
 Water: gal.

**Compressive Strength Data**

Set No.	Identification	Test Date	Age (days)	Maximum Load (pounds)	Break Type	Comp. Strength (psi)	Average Strength (psi)	% of Design
12	A	06/01/2017	7	66,010	Type 2	2,330		77.67%
	B	06/01/2017	7	61,155	Type 2	2,160	2,250	72.00%



**Remarks/Comments:**  
 6 x 12 in. Cylinders

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)  
 (Edinburg, TX) Attn: Maria Lucio  
 (1-cc copy)  
 1-cc G & G Contractors Attn: Manuel Leal  
 1-cc Laboratory

Respectfully Submitted,  
 L&G Engineering

Ricardo A. Gil, Lab Manager

## EXHIBIT "C" CONTRACT RATES

<b>L &amp; G Engineering</b>			
Transportation Consulting Engineers			
Audited Overhead Rate FY 2014			
Labor/Staff Classification	Hourly Base Rate	Contract Rate FY 15	Contract Rate *FY 16
Principal	\$	\$	\$
Senior Project Manager	\$ 70.00	\$ 211.40	\$ 217.74
Engineer (V) - Senior Engineer	\$ 58.00	\$ 175.16	\$ 180.41
Senior Environmental Planner/Specialist	\$ 49.00	\$ 147.98	\$ 152.42
Engineer (III) - Project Engineer	\$ 43.00	\$ 129.86	\$ 133.76
Engineering Lab Manager	\$ 34.00	\$ 102.68	\$ 105.76
Senior Engineer Tech / Geotechnical Engineer	\$ 32.00	\$ 96.64	\$ 99.54
Environmental Planner/Specialist (II)	\$ 30.00	\$ 90.60	\$ 93.32
Project Inspector (V)	\$ 28.00	\$ 84.56	\$ 87.10
Record Keeper	\$ 27.00	\$ 81.54	\$ 83.99
Environmental Planner/Specialist (I)	\$ 26.00	\$ 78.52	\$ 80.88
Project Inspector (I)	\$ 22.00	\$ 66.44	\$ 68.43
CADD Operator / GIS Analyst	\$ 22.00	\$ 66.44	\$ 68.43
Admin/Clerical	\$ 20.00	\$ 60.40	\$ 62.21
Soil & Aggregate Technician	\$ 17.00	\$ 51.34	\$ 52.88
Concrete Technician	\$ 17.00	\$ 51.34	\$ 52.88
Asphalt Technician	\$ 17.00	\$ 51.34	\$ 52.88
Negotiated Overhead Rate: 169.26%	Contract Rates include labor, overhead, and profit.		
Negotiated Profit Rate: 12.00%			
Multiplier: 3.02			
<b>Other Direct Expenses:</b>	<b>Cost:</b>		
Lodging	\$85/night		
Meals	\$36/day		
Mileage	\$0.56/mile		
Car Rental	\$75.00/day		
8 1/2" X 11" copies	\$1.00/sheet		
11" X 17" copies	\$1.50/sheet		
11" X 17" Mylar	\$2.00/sheet		
Overnight Mail - Letter Size	\$15.00/Each		
Overnight Mail - Oversized Box	\$38.00/Each		

## CONTRACT RATES

### GEOTECHNICAL & CONSTRUCTION MATERIALS TESTING SERVICES

#### Direct Expenses

#### Geotechnical Field Services

	<u>2015</u>	<u>2016</u>
Mobilization (Drill Rig and Crew)	\$441.66/Day	\$454.91/Day
Stand-By Time	\$194.18/Hr.	\$200.01/Hr
Texas Cone Penetration Test (Tex-132)	\$5.55/Ea.	\$5.72/Ea.
Soil Boring / Solid Stem	\$31.08/Lf	\$32.01/Lf
Soil Boring / Hollow Stem	\$31.08/Lf	\$32.01/Lf
Soil Boring / Mud Rotary	\$31.08/LF	\$32.01/Lf
Mileage (Logger-Soil Tech)	\$.55/Mi.	\$.55/Mi.
Support Truck	\$1.65/Mi.	\$1.70/Mi.
Piezometer / Monitoring Well	By Quote	By Quote

#### Soil Testing

	<u>2015</u>	<u>2016</u>
Moisture Content Determination - ASTM D2216/Tex-103-E	\$10.55/Ea.	\$10.87/Ea.
Determination of Liquid Limit of Soils - Tex-104-E	\$53.15/Ea.	\$54.74/Ea.
Determination of Plastic Limit of Soils - Tex-105-E	\$53.37/Ea.	\$54.97/Ea.
Atterberg Limits of Soils - ASTM D 4318/Tex-106-E	\$79.66/Ea.	\$82.05/Ea.
Bar Linear Shrinkage of Soils - Tex-107-E	\$66.47/Ea.	\$68.46/Ea.
Particle Size Analysis of Soils (Gradation) - ASTM D 422/Tex-110-E	\$95.76/Ea.	\$98.63/Ea.
Material Finer #200 Sieve - ASTM D 1140/Tex-111-E	\$66.47/Ea.	\$68.46/Ea.
Lime Series Testing (PI Relation) - Tex-112-E	\$477.96/Ea.	\$492.30/Ea.
Lime Series Testing (pH Relation) - Tex-121-E (Part III)	\$518.40/Ea.	\$533.95/Ea.
Moisture-Density Relationship (TxDOT) - Tex-113-E /Tex-114-E	\$212.59/Ea.	\$218.97/Ea.
Standard Proctor - ASTM D 698	\$205.82/Ea.	\$211.99/Ea.
Modified Proctor - ASTM D 1557	\$212.50/Ea.	\$218.88/Ea.
Field Density Test (Nuclear) - ASTM D 6938/Tex-115-E	\$23.91/Ea.	\$24.63/Ea.
Determination of Soil pH - Tex-128-E	\$86.40/Ea.	\$88.99/Ea.
Soil-Lime Testing - Tex-121-E (Part I)	\$159.44/Ea.	\$164.22/Ea.
Resistivity of Soils - Tex-129-E	\$96.65/Ea.	\$99.55/Ea.
Sulfate Content of Soils - Tex-145-E	\$86.40/Ea.	\$88.99/Ea.
Texas Wet Ball Mill (Material Quality) - Tex-116-E	\$232.55/Ea.	\$239.53/Ea.
Triaxial Compression (Dist. Soil & Base) - Tex-117-E	\$350.00/Ea.	\$360.50/Ea.
Unconfined Compression-Soil - ASTM D 2166	\$49.95/Ea.	\$51.45/Ea.
Uniaxial Compression-Rock - ASTM D 7012	\$53.27/Ea.	\$54.87/Ea.
Consolidation Test - ASTM D 2435	\$521.51/Ea.	\$537.16/Ea.

#### Coarse & Fine Aggregate Quality Testing

	<u>2015</u>	<u>2016</u>
Sieve Analysis (Dry)(4 Sieves) - ASTM C 136/Tex-200-F	\$59.73/Ea.	\$61.52/Ea.
Sieve Analysis (Washed)(4 Sieve) - ASTM C 136/Tex-200-F	\$72.27/Ea.	\$74.44/Ea.
Sieve Analysis (Conc. Aggregate)(5 Sieve) - Tex-401-A	\$85.00/Ea.	\$87.55/Ea.
Sieve Analysis (Additional Sieves) - All Methods	\$13.31/Ea.	\$13.71/Ea.
Deleterious Material (Coarse Aggr.) - Tex-217-F (Part I)	\$46.50/Ea.	\$47.90/Ea.
Deleterious Material (Concrete Aggr.) - Tex-413-A	\$46.50/Ea.	\$47.90/Ea.
Decantation (Coarse Aggr.) - Tex-217-F (Part II)	\$46.50/Ea.	\$47.90/Ea.
Decantation Test (Fine Aggr. - Conc.) - ASTM C 117/Tex-406-A	\$46.50/Ea.	\$47.90/Ea.
Specific Gravity/Absorp. (Conc. Aggr) - ASTM C127/Tex-403-A	\$72.99/Ea.	\$75.18/Ea.
L.A. Abrasion - ASTM C13/ Tex-410-A	\$564.55/Ea.	\$581.49/Ea.
Soundness (5 Cycle Magnesium Sulfate) - ASTM C 88/Tex-411-A	\$564.55/Ea.	\$581.49/Ea.
SSD Unit Weight of Aggregates - ASTM C29/Tex-404-A	\$66.47/Ea.	\$68.46/Ea.
Percent Voids/Solids in Conc. Aggr. - Tex-405-A	\$13.25/Ea.	\$13.65/Ea.
*(In Conjunction w/ SSD Unit Wt of Aggregates)		

## CONTRACT RATES

Sand Equivalent - ASTM D 2419/Tex-203-F	\$72.99/Ea	\$75.18/Ea
Specific Gravity / Absorption (Fine Aggr.) - ASTM C 128/Tex -403-A	\$79.67/Ea.	\$82.06/Ea.
Organic Impurities in Fine Aggregate -ASTM C 87/Tex -408-A	\$46.50/Ea.	\$47.90/Ea.
Fineness Modulus of Fine Aggregate - Tex-402-A	\$15.95/Ea.	\$16.43/Ea.
Flat & Elongated Particles (Coarse Aggr.) - Tex-280-F	\$60.00/Ea.	\$61.80/Ea.
Coarse Aggr. Crushed Face (Coarse Aggr.) - Tex-460-A (Part I)	\$80.00/Ea.	\$82.40/Ea.
Acid Insoluble of Fine Aggregate - Tex-612-J	\$86.40/Ea.	\$88.99/Ea.

### Pavement Testing (Mix & Roadway) / Asphalt Quality

	<u>2015</u>	<u>2016</u>
Sieve Analysis (Paving Mix Gradation) - Tex-236-F/Tex-200-F	\$90.00/Ea.	\$92.70/Ea.
Asphalt Content - Tex-236-F	\$90.00/Ea.	\$92.70/Ea.
Voids in Mineral Aggr. (VMA) - Tex-207-F	\$110.00/Ea.	\$113.30/Ea.
Boil Test (Effect of Water on Paving Mix) - Tex-530-C/Tex-531-C	\$86.40/Ea.	\$88.99/Ea.
Indirect Tensile Strength Test - Tex-226-F	\$600.00/Ea.	\$618.00/Ea.
Moisture Content (Paving Mix) - Tex-212-F (Part II)	\$15.00/Ea.	\$15.45/Ea.
Lab Molded Density - Tex-207-F	\$80.00/Ea.	\$82.40/Ea.
Hamburg Wheel Tracker - Tex-242-F	\$900.00/Ea.	\$927.00/Ea.
Field Coring – ACP Thickness - ASTM D 3549	\$66.47/Ea.	\$68.46/Ea.
Pavement Thickness Det. (Full Depth) - ASTM D 3549	\$88.45/Ea.	\$91.10/Ea.
Density of Cores (4 or 6 inch) (Set of 2) - Tex-207-F	\$73.04/Ea.	\$75.23/Ea.
In-Place Air Voids - Tex-207-F	\$25.00/Ea.	\$25.75/Ea.
Maximum Theoretical SPG (Rice Gravity) - Tex-227-F	\$90.00/Ea.	\$92.70/Ea.
Extraction/Sieve Analysis/Asphalt Content - Tex-210-F/Tex-200-F	\$232.48/Ea.	\$239.45/Ea.
Asphalt Rolling Pattern (Nuclear Method) - Tex-207-F (Part IV)	\$39.86/Ea.	\$41.06/Ea.
Segregation Profile - Tex-207-F (Part V)	\$300.00/Ea.	\$309.00/Ea.
Joint Density - Tex-207-F (Part VII)	\$300.00/Ea.	\$309.00/Ea.
Tack Coat Adhesion - Tex-243-F	\$100.00/Ea.	\$103.00/Ea.
Thermal Profile - Tex-244-F	\$175.00/Ea.	\$180.25/Ea.
Ride Quality - Tex-1001-S	By Quote	By Quote

### Pavement Investigation (All Inclusive – QA Verification Field Sample) ~

Includes Core Exist. Asphalt for Thick. Perform Caliche Base Thick., Sieve Analysis & P.I., Stabilized Subgrade Thickness & P.I	\$498.08/Ea.	\$513.02/Ea.
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### Concrete/Masonry Field & Laboratory Testing

	<u>2015</u>	<u>2016</u>
Temperature Test (Fresh Mix Conc.) - Tex-422-A	No Charge	No Charge
Slump Test - ASTM C 143/Tex-415-A	No Charge	No Charge
Air Content (Pressure Method) - ASTM C 138/Tex-416-A	\$23.86/Ea.	\$24.58/Ea.
Air Content (Volumetric) - ASTM C 173	\$26.56/Ea.	\$27.36/Ea.
Casting of Concrete Cylinders - ASTM C 31/Tex-447-A	No Charge	No Charge
Cylindrical Specimen Prep./Hold/Cure - ASTM C 192/ Tex-447-A	\$12.00/Ea.	\$12.36/Ea.
Compressive Strength of Cyl. Specimen - ASTM C 39/Tex-418-A	\$15.92/Ea.	\$16.40/Ea.
Casting of Grout Prisms - ASTM C 1019	No Charge	No Charge
Grout Prism Prep./Cure/Comp. Strength - ASTM C 39	\$33.23/Ea.	\$34.23/Ea.
Casting of Mortar Cubes - ASTM C 780	No Charge	No Charge
Mortar Cube Prep./Cure/Comp. Strength - ASTM C 109	\$32.48/Ea.	\$33.45/Ea.
Masonry Unit Prep. /Comp. Str. (Set of 3) - ASTM C 140	\$232.41/Ea.	\$239.38/Ea.
Masonry Unit SPG/Abs./Unit Wt. (Set of 3) - ASTM C 140	\$232.41/Ea.	\$239.38/Ea.

\*(In Conjunction w/ Field Inspection)

## CONTRACT RATES

### Miscellaneous Testing

	<u>2015</u>	<u>2016</u>
Drilled Shaft Slurry Density - Tex-130-E (Part II)	\$25.00/Ea.	\$25.75/Ea.
Drilled Shaft Slurry Sand Content - Tex-130-E (Part III)	\$20.00/Ea.	\$20.60/Ea.
Drilled Shaft Slurry Viscosity - Tex-130-E (Part IV)	\$25.00/Ea.	\$25.76/Ea.

### Engineering Review, Evaluation, Management & Administration

Test Report	\$23.59/Ea.	\$24.30/Ea.
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The specific hourly rate within each classification listed under Labor/Staff Classification depends on the experience, training, and qualifications of the personnel. A two (2) hour minimum billing at the applicable rate will be assessed per visit to project site.

Services provided on Saturday, Sunday and all work in excess of "normal" work hours will be invoiced at an overtime rate 1.5 times the applicable rate for the work performed. The cost of services is based upon the assumption that services will be provided during "normal" working hours. Normal working hours are between 7:00 a.m. and 6:00 p.m., Monday through Friday.

### Expenses:

Mileage.....	.55/Mi.	.55/Mi.
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All other project specific, third-party costs will be charged at cost plus 10 percent.

**Attachment "D"**  
**L&G Engineering**  
**Concrete Walking Trail at San Carlos CRC & Sunflower Park**  
**Prepared for Hidalgo County Precinct No. 4**

<i>In-Situ Soils/Select Fill Testing-Laboratory</i>					
Standard Proctor	3	Ea.	\$211.99	\$635.97	<i>In Situ Subgrade Moisture-Density Testing on the following:  Walking Trail Subgrade Walking Trail Select Fill</i>
Atterberg Limits of Soils	3	Ea.	\$82.05	\$246.15	
Material Finer #200	3	Ea.	\$68.48	\$205.38	
Test Report	3	Ea.	\$24.30	\$72.90	
Technician (Soils)	9	Hr.	\$52.88	\$475.92	
Mileage (Trip Charge)	120	MI.	\$0.55	\$66.00	
				<b>Subtotal:</b>	<b>\$1,702.32</b>
<i>In-Situ Soils / Select Fill Testing-Field</i>					
Field Density Test	30	Ea.	\$24.83	\$730.90	<i>Testing on the Following: 10 trips to perform testing Walking Trail Subgrade Walking Trail Select Fill</i>
Test Report	10	Ea.	\$24.30	\$243.00	
Technician (Soils)	20	Hr.	\$52.88	\$1,057.60	
Mileage (Trip Charge)	300	MI.	\$0.55	\$165.00	
				<b>Subtotal:</b>	
<i>Concrete Placement - Foundations and Drilled Piers</i>					
Air Content(Pressure Method)	10	Ea.	\$24.58	\$245.80	<i>10 site visits for placement testing</i>
Test Report	10	Ea.	\$24.30	\$243.00	
Technician (Concrete)	20	Hr.	\$52.88	\$1,057.60	
Mileage (Trip Charge)	300	MI.	\$0.55	\$165.00	
				<b>Subtotal:</b>	
Cyl. Spec. Prep, Hold, Cure	40	Ea.	\$12.38	\$494.40	<i>Quantities based on sample pickup and deliver to laboratory for Compression Testing</i>
Comp. Str. Of Cyl. Specimen	40	Ea.	\$16.40	\$656.00	
Test Reports (7 and 28 day)	20	Ea.	\$24.30	\$486.00	
Technician (Concrete)	20	Hr.	\$52.88	\$1,057.60	
Mileage (Trip Charge)	300	MI.	\$0.55	\$165.00	
				<b>Subtotal:</b>	<b>\$2,859.00</b>

Estimated Field and Laboratory Test Fees			\$8,477.22	
Laboratory Manager (Report Review)(Hr.)	12		\$105.76	\$1,269.12
Project Engineer (Report Review)(Hr.)	12		\$133.76	\$1,805.12
Estimated Materials Testing Total				<b>\$11,351.46</b>

Purchase Order Inquiry - FUJNQ01A 02/09/17 11:30 AM

PO No **746888** Requisition No **00300676** Po Date - From To Search  
 PO Date **07-19-2016** Vendor No **280046**  
 Owner **NPEREZ** Vendor Name **L & G CONSULTING ENGINEERS, INC.**  
 PO Type Address **2100 W. EXPRESSWAY 83**  
**MERCEDES, TX 78570**

PO Total **11,351.46**  
 Amount Paid **7,496.25**  
 Amount Liquidated **7,496.25**  
 Open Amount **3,855.21**

Detail Header Payment Info Journals

Line No	Ordered	Quantity Received	Canceled	Catalog No	Description	Unit Price	Amount
1	1			CC	Work Authorization No. 5 - L&G Engineering for Project: Constructi	11,351.460	11,351.46
<b>Total</b>							<b>11,351.46</b>
Account Number	Description	Amount	Amount Lq	Open Amount			
7-1345-419-40-124-123-0-740	CO2014-PCT4 CRC SUNFLOWER/SH107-IMPRC	11,351.46	7,496.25	3,855.21			

*Need a report of*