

October 26, 2015



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

RE: Hoehn Subdv.

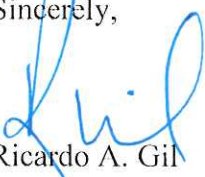
Dear Ms. Lucio:

Included for your use with this letter are test reports **R005 thru R007** for **Construction Material Testing** performed on the above referenced project. Unless otherwise noted, all test results meet or exceed requirements.

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: Vanguard Engineering

FIELD DENSITIES TEST REPORT

Project Description: Hoehn Subdv.
 Client: Hidalgo County Pct. #4
 Contractor: Vanguard Engineering

L&G Project Number: E1301501
 L&G Report Number: R005
 Sample Date: 09/22/2015
 Date Reported: 09/22/2015

Client PO: 728310

Page 1 of 1

Material Description Trench Backfill

Required % Proctor 95 Moisture Tolerance -2+3

Proctor No	Optimum % Moisture	Opt. Density, LB/CF
TB MD2	12.3	114.8

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
1	8" Force Main Sta. 15+50 Final Lift ✓	TB MD2	11.8%	115.9 pcf	101.0% (Pass)	6" ✓
2	8" Force Main Sta. 18+50 Final Lift ✓	TB MD2	11.2%	113.3 pcf	98.7% (Pass)	6" ✓

Remarks: Test results are in general compliance with the project specifications except as noted.

Test Methods: ASTM D2922, D3017

(Field Density)

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Vanguard Engineering
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering



 Ricardo A. Gil, Lab Manager

Celia Almaguer

From: Maria Lucio [maria.lucio@co.hidalgo.tx.us]
Sent: Monday, September 21, 2015 4:16 PM
To: Rick Gil; Celia Almaguer
Cc: Jesus Ozuna; Raul Sesin; Areanna E. Yzaguirre; Jesse Alvarez; Roman rodriguez (Pct 4)
Subject: Fwd: Hidalgo County Precinct 4 CMT- Hoehn Subdivision

Importance: High

E1301501
RD05

Good Afternoon,

As per your on call contract C-14-330-09-09 (Work Authorization #3 Hoehn Subdivision Project), we would like to request the following:

1. Field Density/Back- Fill Compaction testing for the 8" Force Main at Hoehn Subdivision to include standard proctor, atterberg limits of soils, material finer #200, field density test and all test reports.

Billy Ortiz from your office has been contacted by Jesse Alvarez of the County to coordinate the date and time only, please let this email serve as the formal request to begin testing Tuesday, September 22nd at 3:00pm. A representative from the County and Contractor will be there. Should you have any questions or need anything else please let me know. Thank you, have a great day!

Respectfully,

Lulu Lucio
Hidalgo County Precinct #4
Ph: 956- 292-7000 Ext. 4026
Fax:956-381-5905
maria.lucio@co.hidalgo.tx.us

From: "Jesse Alvarez" <jose.alvarez@co.hidalgo.tx.us>
To: "Maria \"Lulu\" Lucio" <maria.lucio@co.hidalgo.tx.us>
Cc: "Raul Sesin" <raul.sesin@hcdd1.org>, "Eliza Yzaguirre" <areanna.yzaguirre@co.hidalgo.tx.us>
Sent: Monday, September 21, 2015 3:59:10 PM

Good Afternoon,

Send email request as follows for tomorrow:

Please see below for testing request,

Date of Service Requested: 09/22/2015 Tuesday

Project Name/Location: County of Hidalgo Pct. No. 4 Water & Sewer Improvements Hoehn Subd.

FIELD DENSITIES TEST REPORT

Project Description: Hoehn Subdv.
 Client: Hidalgo County Pct. #4
 Contractor: Vanguard Engineering

L&G Project Number: E1301501
 L&G Report Number: R006
 Sample Date: 10/16/2015 ✓
 Date Reported: 10/16/2015

Client PO: 728310

Page 1 of 1

Material Description Trench Backfill

Required % Proctor 95 Moisture Tolerance -2+3

Proctor No	Optimum % Moisture	Opt. Density, LB/CF
TB MD2	12.3	114.8

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	Depth (inch)
1	Sta. 31+00 Center of Trench / Final Lift 8" Force Main	TB MD2	11.2%	109.2 pcf	95.1% (Pass)	6" ✓
2	Sta. 35+50 Center of Trench / Final Lift 8" Force Main	TB MD2	11.6%	113.8 pcf	99.1% (Pass)	6" ✓
3	Sta. 40+00 Center of Trench / Final Lift 8" Force Main	TB MD2	13.0%	111.2 pcf	96.9% (Pass)	6" ✓

Remarks: Test results are in general compliance with the project specifications except as noted.

Test Methods: ASTM D2922, D3017

(Field Density)

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Vanguard Engineering
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering



 Ricardo A. Gil, Lab Manager

Celia Almaguer

From: Maria Lucio [maria.lucio@co.hidalgo.tx.us]
Sent: Friday, October 16, 2015 1:08 PM
To: Rick Gil; Celia Almaguer
Cc: Jesus Ozuna; Raul Sesin; Areanna E. Yzaguirre; Jesse Alvarez; Roman rodriguez (Pct 4)
Subject: Fwd: County of Hidalgo Pct. No. 4 Water & Sewer Improvements Hoehn Subd. Texas Dept of Agriculture Contract No.713045

Importance: High

Good Afternoon,

As per your on call contract C-14-330-09-09 (Work Authorization #3 Hoehn Subdivision Project), we would like to request the following:

Root
1. **Field Density/Back-Fill Compaction testing** for the 8" Force Main at Hoehn Subdivision to include standard proctor, atterberg limits of soils, material finer #200, field density test and all test reports.

Billy Ortiz from your office has been contacted by Jesse Alvarez of the County to coordinate the date and time only, please let this email serve as the formal request to begin testing **Friday, October 16, 2015** at 3:00pm. A representative from the County and Contractor will be there. Should you have any questions or need anything else please let me know. I apologize for not giving you the request 24 hours prior, the request was sent to us today. Thank you, have a great day!

Respectfully,

Lulu Lucio
Executive Assistant
Hidalgo County Precinct #4
Ph: 956- 292-7000 Ext. 4026
Fax:956-381-5905
maria.lucio@co.hidalgo.tx.us

From: "Jesse Alvarez" <jose.alvarez@co.hidalgo.tx.us>
To: "Maria Lulu Lucio" <maria.lucio@co.hidalgo.tx.us>
Cc: "Raul Sesin" <raul.sesin@hcdd1.org>, "Eliza Yzaguirre" <areanna.yzaguirre@co.hidalgo.tx.us>
Sent: Friday, October 16, 2015 12:53:58 PM
Subject: Re: County of Hidalgo Pct. No. 4 Water & Sewer Improvements Hoehn Subd. Texas Dept of Agriculture Contract No.713045

Good Afternoon,
Please send email notice to L & G for Compaction
Testing @ 3:00 Today.
Testing has coordinated with Billy Ortiz.

Thank You

PROCTOR TEST REPORT

Project Description: Hoehn Subdv.
 Client: Hidalgo County Pct. #4
 Contractor: Vanguard Engineering

L&G Project Number: E1301501
 L&G Report Number: R007
 Sample Date: 10/16/2015
 Date Reported: 10/16/2015

Client PO: 728310

Page 1 of 1

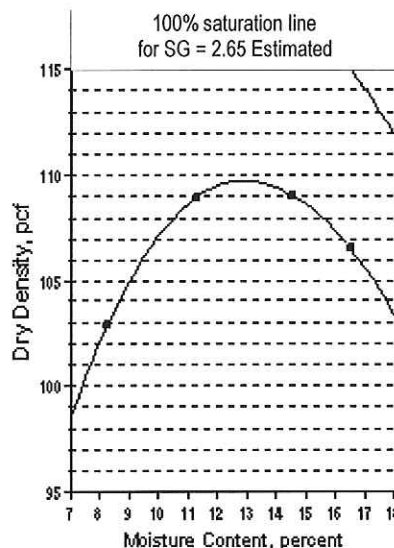
Compaction Method: ASTM D-698 ✓
 Material Description: Trench Backfill ✓

Specific Gravity: 2.65 ✓

Liquid Limit: 33
Plastic Limit: 17
Plasticity Index: 16
% Passing No. 200: 43
Group Symbol: SC

Specimen No.:	1	2	3	4
Moisture, %:	8.2	11.2	14.4	16.5
Dry Density (pcf):	102.7	108.9	109.0	106.5

Maximum Dry Density in P.C.F.: 109.7
 Optimum Moisture (%): 12.8



Remarks: Sampled from Sta 49+00 (Composite)
Test Method: ASTM D-698 Method-B, ASTM D-1140, ASTM D-4318

(Atterberg)

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Vanguard Engineering
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering

Ricardo A. Gil

Ricardo A. Gil, Lab Manager

Celia Almaguer

From: Maria Lucio [maria.lucio@co.hidalgo.tx.us]
Sent: Friday, October 16, 2015 4:19 PM
To: Rick Gil; Celia Almaguer
Cc: Jesus Ozuna; Raul Sesin; Areanna E. Yzaguirre; Jesse Alvarez; Roman rodriguez (Pct 4)
Subject: Fwd: County of Hidalgo Pct. No. 4 Water & Sewer Improvements Hoehn Subd. Texas Dept of Agriculture Contract No.713045

Importance: High

Good Afternoon,

R007

Please include a **Back fill proctor pick up** as well, thank you!

Respectfully,

Lulu Lucio
Executive Assistant
Hidalgo County Precinct #4
Ph: 956-292-7000 Ext. 4026
Fax:956-381-5905
maria.lucio@co.hidalgo.tx.us

From: "Jesse Alvarez" <jose.alvarez@co.hidalgo.tx.us>
To: "Maria Lulu Lucio" <maria.lucio@co.hidalgo.tx.us>
Cc: "Raul Sesin" <raul.sesin@hcdd1.org>, "Eliza Yzaguirre" <areanna.yzaguirre@co.hidalgo.tx.us>
Sent: Friday, October 16, 2015 3:49:55 PM
Subject: Re: County of Hidalgo Pct. No. 4 Water & Sewer Improvements Hoehn Subd. Texas Dept of Agriculture Contract No.713045

Good Afternoon,

Send Email notice to L & G to Add **Backfill Proctor Pickup** to Compaction Densities of backfill, A change in Soil has been encountered.

R006

This addition has been coordinated with
Billy Ortiz of L & G

Thank You

Jesse Alvarez
Construction Inspector
County of Hidalgo Engineering Projects Office
902 Doolittle Rd.
Edinburg , Texas 78542
Office : 956-702-7000 ext 2029
Mobile:956-533-3992

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: E1301501
Project Desc.: Hoehn Subdv.

Due Date: UPON RECEIPT
Budget/Remaining: \$42,900.53 / \$39,987.93
PO: 728310

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

	<u>Unit Rate</u>	<u>Qty</u>	<u>Extension</u>
910:91004 - Atterberg Limits Det	\$78.48	1.00	\$78.48 ✓
910:91006 - Materials Finer #200	\$65.49	1.00	\$65.49 ✓
910:91009 - M-D ASTM D698 (Standard Proctor) (each)	\$202.78	1.00	\$202.78 ✓
910:91011 - Field Density (Nuclear Method)	\$23.56	5.00	\$117.80 ✓
940:94048 - Eng. Tech. (Soils / SP.)	\$47.14	6.50	\$306.41 ✓
940:94054 - Engineering Specialist	\$117.75	0.75	\$88.32
940:94055 - Engineer / P.E.	\$157.08	0.75	\$117.81
950:95058 - Vehicle Trip Charge	\$0.52	198.00	\$102.96
950:95061 - Test Report	\$23.24	3.00	\$69.72
Total for this Invoice:			\$1,149.77 ✓

===== 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>
R005	09/22/2015	2.00 ✓	910:91011 - Field Density (Nuclear Method)	Each	\$23.56	\$47.12
R005	09/22/2015	2.00	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$94.28
R005	09/22/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R005	09/22/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R005	09/22/2015	66.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$34.32
R005	09/22/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R005 for a Subtotal of:						\$267.67

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



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>
R006	10/16/2015	3.00	910:91011 - Field Density (Nuclear Method)	Each	\$23.56	\$70.68
R006	10/16/2015	2.50	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$117.85
R006	10/16/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R006	10/16/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R006	10/16/2015	66.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$34.32
R006	10/16/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R006 for a Subtotal of:						\$314.80
R007	10/16/2015	1.00	910:91004 - Atterberg Limits Det	Each	\$78.48	\$78.48
R007	10/16/2015	1.00	910:91006 - Materials Finer #200	Each	\$65.49	\$65.49
R007	10/16/2015	1.00	910:91009 - M-D ASTM D698 (Standard Proctor) (each)	Each	\$202.78	\$202.78
R007	10/16/2015	2.00	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$47.14	\$94.28
R007	10/16/2015	0.25	940:94054 - Engineering Specialist	Hour	\$117.75	\$29.44
R007	10/16/2015	0.25	940:94055 - Engineer / P.E.	Hour	\$157.08	\$39.27
R007	10/16/2015	66.00	950:95058 - Vehicle Trip Charge	Mile	\$0.52	\$34.32
R007	10/16/2015	1.00	950:95061 - Test Report	Each	\$23.24	\$23.24
Report Number R007 for a Subtotal of:						\$567.30
Total for this Invoice:						\$1,149.77

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

L & G Engineering

Consulting Engineers

Attachment "D"
L&G Engineering

Hoehn Subdivision Sanitary Sewer Improvements
Prepared for Hidalgo County Precinct No. 4

<i>In-Situ Soils Testing-Laboratory-Sanitary Sewer & Force Main</i>					
Standard Proctor	5	Ea.	\$202.78	\$1,013.90	<i>In Situ Subgrade Moisture-Density Testing on the following: Trenches for 8" and 12" Sanitary Sewer 8" Force Main</i>
Atterberg Limits of Soils	5	Ea.	\$78.48	\$392.40	
Material Finer #200	5	Ea.	\$65.49	\$327.45	
Test Report	5	Ea.	\$23.24	\$116.20	
Technician (Soils)	15	Hr.	\$47.14	\$707.10	
Mileage (Trip Charge)	400	Mi.	\$0.52	\$208.00	
				Subtotal:	\$2,765.05
<i>In-Situ Soils Testing-Field-Sanitary Sewer and Force Main</i>					
Field Density Test	450	Ea.	\$23.56	\$10,602.00	<i>Trench Backfill Field Density Testing on the Following: 8" and 12" Sanitary Sewer and 8" Force Main one test per 250 L.F. per each 12" Layer Total 16,000 L.F. x avg. 7' cover</i>
Test Report	60	Ea.	\$23.24	\$1,394.40	
Technician (Soils)	150	Hr.	\$47.14	\$7,071.00	
Mileage (Trip Charge)	4800	Mi.	\$0.52	\$2,496.00	
				Subtotal:	
<i>Treated Backfill Sand Testing-Laboratory</i>					
Standard Proctor	2	Ea.	\$202.78	\$405.56	<i>Quantity Based On 2 visits to obtain samples for laboratory testing</i>
Atterberg Limits of Soils	2	Ea.	\$78.48	\$156.96	
Test Report	2	Ea.	\$23.24	\$46.48	
Technician (Soils)	3	Hr.	\$47.14	\$141.42	
Mileage (Trip Charge)	160	Mi.	\$0.52	\$83.20	
				Subtotal:	\$833.62
<i>Treated Backfill Sand Soils Testing-Field</i>					
Field Density Test	40	Ea.	\$23.56	\$942.40	<i>Quantity Based On 10 site visits to perform compaction testing</i>
Test Report	10	Ea.	\$23.24	\$232.40	
Technician (Soils)	25	Hr.	\$47.14	\$1,178.50	
Mileage (Trip Charge)	800	Mi.	\$0.52	\$416.00	
				Subtotal:	\$2,769.30
<i>Flexible Base (Caliche) Pavement Repair Areas- Testing-Laboratory</i>					
Standard Proctor	1	Ea.	\$202.78	\$202.78	<i>Quantity based on 1 site visit to obtain sample for laboratory testing</i>
Atterberg Limits of Soils	1	Ea.	\$78.48	\$78.48	
Sieve Analysis (Dry)(4 Sieve)	1	Ea.	\$58.85	\$58.85	
Texas Wet Ball Mill	1	Ea.	\$229.11	\$229.11	
Technician (Soils)	4	Hr.	\$47.14	\$188.56	
Test Report	2	Ea.	\$23.24	\$46.48	
Mileage (Trip Charge)	84	Mi.	\$0.52	\$43.68	
				Subtotal:	\$847.94
<i>Flexible Base (Caliche) Pavement Repair Areas-Field Testing and Monitoring</i>					
Field Density Test	40	Ea.	\$23.56	\$942.40	<i>Quantities based on ten (10) visits to perform in-place testing</i>
Test Report	10	Ea.	\$23.24	\$232.40	
Technician (Soils)	25	Hr.	\$47.14	\$1,178.50	
Mileage (Trip Charge)	800	Mi.	\$0.52	\$416.00	
				Subtotal:	\$2,769.30
<i>Hot Mix Asphalt Paving-Pavement Repair Areas</i>					
Ext. Sieve Analysis/Asph Content	2	Ea.	\$229.04	\$458.08	<i>Quantities based on site visits to perform testing</i>
Density of Asphaltic Cores	3	Ea.	\$71.96	\$215.88	
Asphalt Rolling Patterns	10	Ea.	\$39.27	\$392.70	
Coring/ACP Thickness	16	Ea.	\$65.49	\$1,047.84	
Technician (Asphalt)	16	Hr.	\$60.18	\$962.88	
Mileage (Trip Charge)	300	Mi.	\$0.52	\$156.00	
Test Report	8	Ea.	\$23.24	\$185.92	
				Subtotal:	\$3,419.30

Concrete Placement - Lift Station					
Air Content(Pressure Method)	2	Ea.	\$23.51	\$47.02	<i>Assuming 2 Placements on Lift Station Slab</i>
Test Report	2	Ea.	\$23.24	\$46.48	
Technician (Concrete)	6	Hr.	\$60.18	\$361.08	
Mileage (Trip Charge)	200	Mi.	\$0.52	\$104.00	
			Subtotal:	<u>\$558.58</u>	
Cyl. Spec. Prep, Hold, Cure	8	Ea.	\$11.83	\$94.64	<i>Quantities based on sample pickup and deliver to laboratory for Compression Testing</i>
Comp. Str. Of Cyl. Specimen	8	Ea.	\$15.88	\$125.44	
Test Reports (7 and 28 day)	4	Ea.	\$23.24	\$92.96	
Technician (Concrete)	6	Hr.	\$60.18	\$361.08	
Mileage (Trip Charge)	200	Mi.	\$0.52	\$104.00	
			Subtotal:	<u>\$778.12</u>	

Estimated Field and Laboratory Test Fees			\$36,304.61
Engineering Specialist (Report Review)(Hr.)	24	\$117.75	\$2,826.00
Engineer-Principal (Report Review)(Hr.)	24	\$157.08	\$3,769.92
Estimated Materials Testing Total			<u>\$42,900.53</u>

EXHIBIT "C"
L&G ENGINEERING
CONSTRUCTION MATERIALS TESTING
LABORATORY RATES FOR FY 2014-2015

Soils Testing

		FY 2014	FY 2015
Moisture Content Determination	ASTM D2216 - Tex-103-E	\$10.40/Ea.	\$10.55/Ea.
Determination of Liquid Limit of Soils	Tex-104-E	\$52.37/Ea.	\$53.15/Ea.
Determination of Plastic Limit of Soils	Tex-105-E	\$52.58/Ea.	\$53.37/Ea.
Atterberg Limits of Soils	ASTM D 4318 - Tex-106-E	\$78.48/Ea.	\$79.66/Ea.
Bar Linear Shrinkage of Soils	Tex-107-E	\$65.49/Ea.	\$66.47/Ea.
Material Finer #200 Sieve	ASTM D 1140 -Tex-111-E	\$65.49/Ea.	\$66.47/Ea.
Lime Series Testing	Tex-112-E	\$529.04/Ea.	\$536.97/Ea.
Moisture-Density Relationship (TxDOT)	Tex-113-E/ Tex-114-E	\$209.45/Ea.	\$212.59/Ea.
Standard Proctor	ASTM D 698	\$202.78/Ea.	\$205.82/Ea.
Modified Proctor	ASTM D 1557	\$209.36/Ea.	\$212.50/Ea.
Field Density Test (Nuclear)	ASTM D 2950 - Tex-115-E	\$23.56/Ea.	\$23.91/Ea.
Determination of Soil pH	Tex-128-E	\$85.12/Ea.	\$86.40/Ea.
Soil-Lime Testing	Tex-121-E	\$157.08/Ea.	\$159.44/Ea.
Resistivity of Soils	Tex-129-E	\$95.22/Ea.	\$96.65/Ea.
Sieve Analysis (Dry)(4 Sieves)	ASTM C 136 - Tex-200-F	\$58.85/Ea.	\$59.73/Ea.
Sieve Analysis (Washed)(4 Sieve)	ASTM C 136 - Tex-200-F	\$71.20/Ea.	\$72.27/Ea.
Sieve Analysis (Additional Sieves)	ASTM C 136 - Tex-200-F	\$13.11/Ea.	\$13.31/Ea.
Texas Wet Ball Mill (Base Material Quality)	Tex-116-E	\$229.11/Ea.	\$232.55/Ea.

Coarse & Fine Aggregate Quality Testing

Decantation Test (Conc. Aggr.)	ASTM C117 - Tex-406-A	\$45.81/Ea.	\$46.50/Ea.
Specific Gravity/Absorp. (Conc. Aggr)	ASTM C127 - Tex-403-A	\$71.91/Ea.	\$72.99/Ea.
5 Cycle Magnesium Soundness	ASTM C88 - Tex-411-A	\$556.21/Ea.	\$564.55/Ea.
SSD Unit Weight of Aggregates	ASTM C29 - Tex-404-A	\$65.49/Ea.	\$66.47/Ea.
Percent Voids/Solids in Conc. Aggr.	Tex-405-A	\$13.05/Ea.	\$13.25/Ea.
*(In Conjunction w/ SSD Unit Wt of Aggregates)			
Sand Equivalent	ASTM D 2419 - Tex-203-F	\$71.91/Ea.	\$72.99/Ea.
Specific Gravity / Absorption (Fine Aggr.)	ASTM C 128 - Tex -403-A	\$78.49/Ea.	\$79.67/Ea.
Organic Impurities in Fine Aggregate	ASTM C 87 - Tex -408-A	\$45.81/Ea.	\$46.50/Ea.
Fineness Modulus of Fine Aggregate	Tex-402-A	\$15.71/Ea.	\$15.95/Ea.
Acid Insoluble of Fine Aggregate	Tex-612-J	\$85.12/Ea.	\$86.40/Ea.

Concrete/Masonry Field & Laboratory Testing

Slump Test	ASTM C 143 - Tex-415-A	\$no charge	\$no charge
Air Content (Pressure Method)	ASTM C 138 - Tex-416-A	\$23.51/Ea.	\$23.86/Ea.
Air Content (Volumetric)	ASTM C 173	\$26.17/Ea.	\$26.56/Ea.
Casting of Concrete Cylinders	ASTM C 31	\$no charge	
Compressive Strength of Cyl. Specimen	ASTM C 39 - Tex-418-A	\$15.68/Ea.	\$15.92/Ea.
Cylindrical Specimen Prep./Hold/Cure	ASTM C 192	\$11.83/Ea.	\$12.00/Ea.
Casting of Grout Prisms	ASTM C 1019	\$no charge	
Grout Prism Prep./Cure/Compressive Strength	ASTM C 39	\$32.74/Ea.	\$33.23/Ea.
Casting of Mortar Cubes	ASTM C 780	\$no charge	
Mortar Cube Prep./Cure/Compressive Strength	ASTM C 109	\$32.00/Ea.	\$32.48/Ea.
Masonry Unit Prep. /Compressive Str. (Set of 3)	ASTM C 140	\$228.98/Ea.	\$232.41/Ea.
Masonry Unit SPG/Abs./Unit Wt. (Set of 3)	ASTM C 140	\$228.98/Ea.	\$232.41/Ea.

*(In Conjunction w/ Field Inspection)

<u>Pavement Thickness / Asphalt Quality</u>		FY 2014	FY 2015
Coring – ACP Thickness	ASTM D 3549	\$65.49/Ea.	\$66.47/Ea.
Pavement Thickness Determination (Full Depth)	ASTM	\$87.14/Ea.	\$88.45/Ea.
Density of Asphaltic Cores (4 or 6 inch)	Tex-207-F	\$71.96/Ea.	\$73.04/Ea.
Extraction/Sieve Analysis/Asphalt Content	Tex-210-F / Tex-200-F	\$229.04/Ea.	\$232.48/Ea.
Asphalt Rolling Pattern (Nuclear Method)	Tex-207-F – Part IV	\$39.27/Ea.	\$39.86/Ea.
Eff. Of Water on Asphalt Mixtures (As Rec'd)	Tex-531-C	\$85.12/Ea.	\$86.40/Ea.

<u>Pavement Investigation</u>	FY 2014	FY 2015
Core Existing Asphalt for Thickness, Perform Caliche Base Thickness, Sieve Analysis and Plasticity Index, Stabilized Subgrade Thickness and Plasticity Index	\$490.72/Ea.	\$498.08/Ea.

L&G Engineering provides Technical and Engineering services at the rates listed below.

<u>Personnel:</u>			
Engineer (Principal).....	\$157.08/Hr.	\$159.44/Hr.	
Engineering Specialist.....	\$117.75/Hr.	\$119.52/Hr.	
Technician (Soils).....	\$ 47.14/Hr.	\$47.85/Hr.	
Technician (Concrete).....	\$ 60.18/Hr.	\$61.08/Hr.	
Technician (Asphalt).....	\$ 60.18/Hr.	\$61.08/Hr.	

<u>Engineering Review, Evaluation, Management & Administration</u>	FY 2014	FY 2015
Test Report.....	\$ 23.24/Ea.	\$23.59/Ea.

The specific hourly rate within each classification listed above 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.

<u>Expenses:</u>	Mileage.....	.52/Mi.	.53/Mi.
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All other project specific, third-party costs will be charged at cost plus 10 percent.

Invoices will be submitted monthly for work in progress in our standard format. They are due and payable upon receipt and become past due 30 days after the billing date. Past due invoices may be subject to late charges at the rate of 1 ½ percent per month (18 percent per annum). In the event that the State of Texas legislates a sales tax on Professional Services, the amount of the tax will be added to the appropriate service rate charged. Our invoices are due and payable upon receipt at 2100 W. Expressway 83, Mercedes, Texas 78570.

^^Fees adjusted approximately 1.5% annually.

EXHIBIT "C"
L&G ENGINEERING
GEOTECHNICAL ENGINEERING
LABORATORY RATES FOR FY 2014-2015

<u>Geotechnical Field Services</u>	FY 2014	FY 2015
Mobilization (Drill Rig and Crew)	\$435.13/Day	\$441.66/Day
Stand-By Time	\$191.31/Hr.	\$194.18/Hr.
Texas Cone Penetration Test (Tex-132)	\$5.47/Ea.	\$5.55/Ea.
Soil Boring / Solid Stem	\$30.62/Lf	\$31.08/Lf
Soil Boring / Hollow Stem	\$30.62/Lf	\$31.08/Lf
Soil Boring / Mud Rotary	\$30.62/Lf	\$31.08/Lf
Mileage (Logger-Soil Tech)	.52/Mi.	.53/Mi.
Support Truck	\$1.63/Mi.	\$1.65/Mi.
Peizometer / Monitoring Well	By Quote	By Quote
<u>Soil Classification Testing</u>	FY 2014	FY 2015
Moisture Content Determination	\$10.40/Ea.	\$10.45/Ea.
Determination of Liquid Limit of Soils	\$52.37/Ea.	\$53.16/Ea.
Determination of Plastic Limit of Soils	\$52.50/Ea.	\$53.29/Ea.
Atterberg Limits of Soils	\$78.48/Ea.	\$79.66/Ea.
Bar Linear Shrinkage of Soils	\$65.49/Ea.	\$66.47/Ea.
Sieve Analysis		
Through #200 Sieve	\$76.52/Ea.	\$77.67/Ea.
Finer #200 Sieve	\$65.49/Ea.	\$66.47/Ea.
Unit Dry Weight	\$28.42/Ea.	\$28.85/Ea.
Specific Gravity	\$76.94/Ea.	\$78.09/Ea.
Hydrometer Analysis – w/Sieve Analysis	\$94.35/Ea.	\$95.76/Ea.
<u>Strength / Volume Change Laboratory Testing</u>	FY 2014	FY 2015
Unconfined Compression-Soil Shelby Tube Specimen	\$49.21/Ea.	\$49.95/Ea.
Unconfined Compression-Rock Core Specimen	\$52.48/Ea.	\$53.27/Ea.
Swell Test-Pressure Method	\$273.30/Ea.	\$277.40/Ea.
Swell Test-Free Swell	\$153.05/Ea.	\$155.35/Ea.
Consolidation Test	\$513.80/Ea.	\$521.51/Ea.
Hydraulic Conductivity	\$382.61/Ea.	\$388.35/Ea.
<u>Personnel and Expenses</u>	FY 2014	FY 2015
Engineer (Principal)	\$157.08/Hr.	\$159.44/Hr.
Engineer (Staff)	\$157.08/Hr.	\$159.44/Hr.
E.I.T(Engineer in Training)	\$117.75/Hr.	\$119.52/Hr.
Engineering Specialist	\$117.75/Hr.	\$119.52/Hr.
Technician (Soils)(Logger	\$47.14/Hr.	\$47.85/Hr.
Technician (CADD)	\$60.18/Hr.	\$61.08/Hr.
Admin./Clerical/Report Reproduction	\$46.44/Hr.	\$47.14/Hr.



Purchase Order COUNTY OF HIDALGO

PO# 728310

DATE: 07/08/15

PAGE NO: 1 Of 1

PO TYPE:

VENDOR: 280046

REQ: 00279604

PHONE: (956)565-9813

Fax: (956)565-6746

EMAIL:

SHIP TO: HIDALGO CO. PCT 4

1051 N. DOOLITTLE
EDINBURG TX 78542

L & G CONSULTING ENGINEERS, INC.
2100 W. EXPRESSWAY 83
MERCEDES TX 78570

CONTACT:

SITE: COMMISSIONER, PRECINCT 4

CONTRACT NO:

SPECIAL INSTRUCTIONS: Pct. # 728

VENDOR NOTES:

1. Do not add to, or alter this Purchase Order. This Order is not renewable.
2. TAX EXEMPTION: This Purchase Order may be accepted in lieu of Exemption Certificate.
3. This Order is also placed F.O.B. Destination. Vendor must repay all shipping costs.
4. Invoice each Purchase Order singly. Original invoices are required customer copy may be accepted. Out number must appear on all invoices, bills of lading, and packages.
5. Payment will be made only for bona fide and full completed orders, unless otherwise attached.

QTY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DO NOT DUPLICATE ORDER		
		C-14-330-09-09 EXP 9-08-15 Approved CC 06/23/15 AI-50218, Consent AI- 50241, Regular		
1.00	LOT	CC WA # 3- Construction Materials Testing Services for the "Hoehn Subdv." Project in Hidalgo County Precinct No. Four (4)	42,900.53	42,900.53
		TOTAL:		42,900.53
		***** For Hidalgo County use only 5-1200-431-00-124-159-0-841	42,900.53	

Authorized by: Martha Salazar