

December 6, 2023

Eddie Guerra, Sheriff
Attn: Roy Mendez, Lieutenant
County of Hidalgo Sheriff's Office
711 El Cibolo Rd.
Edinburg, TX 78541

**RE: Contract # C-22-0728-01-01 - Work Authorization #2 ~ Hidalgo County CDI East
Parking Facility**

Dear Sheriff Guerra:

Attached for your review and approval is our invoice for services rendered under Work Authorization #2 during the month of November 2023 on the subject referenced project.

The following is attached:

- Invoice No. 40223

The following is a narrative of the progress for this period.

TASK	% Complete
Geotechnical Drilling, Testing & Eng. Services	
<p>UPDATED: B2Z secured a sample of Subgrade material for testing on the following item:</p> <ul style="list-style-type: none">• Moisture/Density Standard Proctor• Atterberg Limits of Soil <p>B2Z continued to perform Concrete and Laboratory testing. Casting of concrete cylinders included Preparation / Hold / Cure and Compressive Strength testing. B2Z continues to perform field testing with the use of the nuclear density gauge to measure compaction of Lime Treated Subgrade material for Roadways.</p>	29%

Should you have any questions regarding this submittal, please do not hesitate to call me at (956) 585-3773.

Sincerely,



Oliver Salgado, P.E.
Senior Project Manager – B2Z Engineering, LLC



Invoice

P.O. Box 2724
McAllen, Tx. 78502
(956) 585-3773

Date	Invoice #
12/6/2023	40223

P.O.#: 870316

Invoice Received By: A. Eilenberger on: 12/12/2023

Goods/Services Received By: S. Coitzy on: 12/6/2023

3-1100-423-21-280-002-0-334

Please send remittance with copy of invoice to:
Attn: Mrs. Aisha Gonzalez
P.O. Box 2724
McAllen, Tx. 78502

Bill To:
County of Hidalgo Sheriff's Office
711 El Cibolo Rd.
Edinburg, TX 78541

Project Info:
Hidalgo County
CDI East Parking Facility Project
Contract # C-22-0728-01-01
Work Authorization #2
B2Z JOB: 4128
PO # 870316

Billing Period **November 2023**

Description	Contract	Previous Applications	Current Completed	Total Completed	% Complete
Construction Materials Testing (CMT)	\$ 10,197.23	\$ 488.61	\$ 2,420.99	\$ 2,909.60	29%
Total For This Billing Period				\$2,420.99	

Work Authorization ~ Summary

WA No.	WA Amount	Previously Inv.	Percent Complete	Remaining Balance
2	\$10,197.23	\$488.61	29%	\$7,287.63

Aisha Gonzalez - President

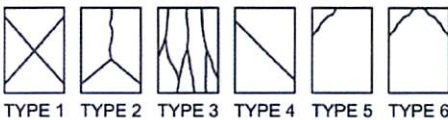
12/6/23

Mission Office
 900 S Stewart Rd, Ste. 2
 Mission, TX 78572
 Phone: 956-585-3773

Client:
 Hidalgo County
 100 North Closner
 Edinburg, TX 78539

Project:
 4128
 HCSO Detention Center East Parking Facility CMT
 701 El Cibolo Rd
 Edinburg, TX 78541

Sample Details										
Set #:	1	Technician:	Jacob Chavez	Batched:	07:16 CDT					
Specimen Size:	4 x 8 Cast Cylinder	Cast By:	Jacob Chavez	Sampled:	08:17 CDT					
Specimens In Set:	4	Date Cast:	11/01/23	Cast:	08:20 CDT					
Truck / Ticket #:	1117 / 40064	Sampled From:	Chute	Truck Empty:						
Contractor:	S&W Paving	Placement Method:	Chute	Placement Time:						
Location										
Placement Location:	Paving - Sidewalk									
Location Details:	East Parking Lot									
Sample Location / Notes:	East side parking lot									
Batch Log						Specifications				
Supplier:	VMK Concrete LLC	Mix Design:	3000R PSI SS	Strength:	3000 (psi)					
On-Site Admixtures:	None									
Field Measurements										
Weather:	Mostly Sunny	Slump (in):	5	Plastic Unit Weight:						
Air Temperature (F):	46	Concrete Temp (F):	66	Air Content:						
				Load Volume:	10.00 (yd ³)					
Standard Cure					Field Cure					
Min / Max Temp (F):	46/68									
Initial Cure Method:	Plastic Cover/Lid/Blanket									
Final Cure Method:	Water Storage Tank									
Lab Test Results										
Testing Lab: B2Z Mission Lab, 900 S. Stewart Rd., Suite 2, Mission, TX, 78572										
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in ²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
1-1	7	11/08/23	1 / 6	4.00	12.57	42,732	3,400	2	R3	1
1-2	7	11/08/23	1 / 6	4.00	12.57	44,997	3,580	2	R3	1
1-3	28	11/29/23	1 / 27							
1-4	28	11/29/23	1 / 27							
Test Age Average Strengths (psi): 7 Day - 3490										
								Capping Methods		
R3: The 7 day test results meets or exceeds the 28 day specified strength.								1: Neoprene Pad		
Tested By: Jorge Solis (1,2)										
Checked In : 11/02/2023 (1,2,3,4)										



Respectfully Submitted by B2Z Engineering

Jorge Solis

Jorge Solis, Laboratory Manager

Mission Office

900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

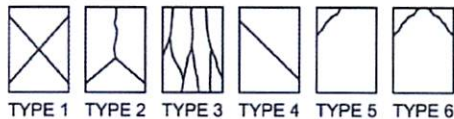
Client:

Hidalgo County
100 North Closner
Edinburg, TX 78539

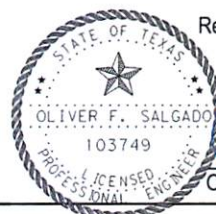
Project:

4128
HCSO Detention Center East Parking Facility CMT
701 El Cibolo Rd
Edinburg, TX 78541

Sample Details												
Set #:	2	Technician:	Jorge Solis	Batched:	12:07 CST							
Specimen Size:	4 x 8 Cast Cylinder	Cast By:	Jorge Solis	Sampled:	12:50 CST							
Specimens In Set:	4	Date Cast:	11/08/23	Cast:	12:55 CST							
Truck / Ticket #:	10064705 / 48053305	Sampled From:	Chute	Truck Empty:	13:17 CST							
Contractor:	HERRCON, LLC	Placement Method:	Chute	Placement Time:	70 (min)							
Location												
Placement Location:	Paving - Sidewalk											
Location Details:	East parking lot											
Sample Location / Notes:	East Sidewalk											
Batch Log						Specifications						
Supplier:	Cemex	Mix Design:	3000 1" GR 3-5"	Strength:	3000 (psi)							
Plant:	4207-A Edinburg											
On-Site Admixtures:	None											
Field Measurements												
Weather:	Sunny and Humid		Slump (in):	5	Plastic Unit Weight:							
Air Temperature (F):	80		Concrete Temp (F):	84	Air Content:							
					Load Volume:	10.00 (yd ³)						
Standard Cure						Field Cure						
Min / Max Temp (F):	69/92											
Initial Cure Method:	Plastic Cover/Lid/Blanket											
Final Cure Method:	Water Storage Tank											
Lab Test Results												
Testing Lab: B2Z Mission Lab, 900 S. Stewart Rd., Suite 2, Mission, TX, 78572												
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in ²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method		
2-1	7	11/15/23	1 / 6	4.00	12.57	32,243	2,570	2	F3	1		
2-2	7	11/15/23	1 / 6	4.00	12.57	34,093	2,710	2	F3	1		
2-3	28	12/06/23	1 / 27									
2-4	28	12/06/23	1 / 27									
Test Age Average Strengths (psi): 7 Day - 2640												
										Capping Methods		
F3: The 7 day test results did not meet the specifications.										1: Neoprene Pad		
Tested By: Jorge Solis (1,2)												
Checked In : 11/09/2023 (1,2,3,4)												



JS



Respectfully Submitted by B2Z Engineering

Oliver Salgado, P.E.
Oliver Salgado, P.E., Senior Project Manager

Client:

Hidalgo County
100 North Closser
Edinburg, TX 78539

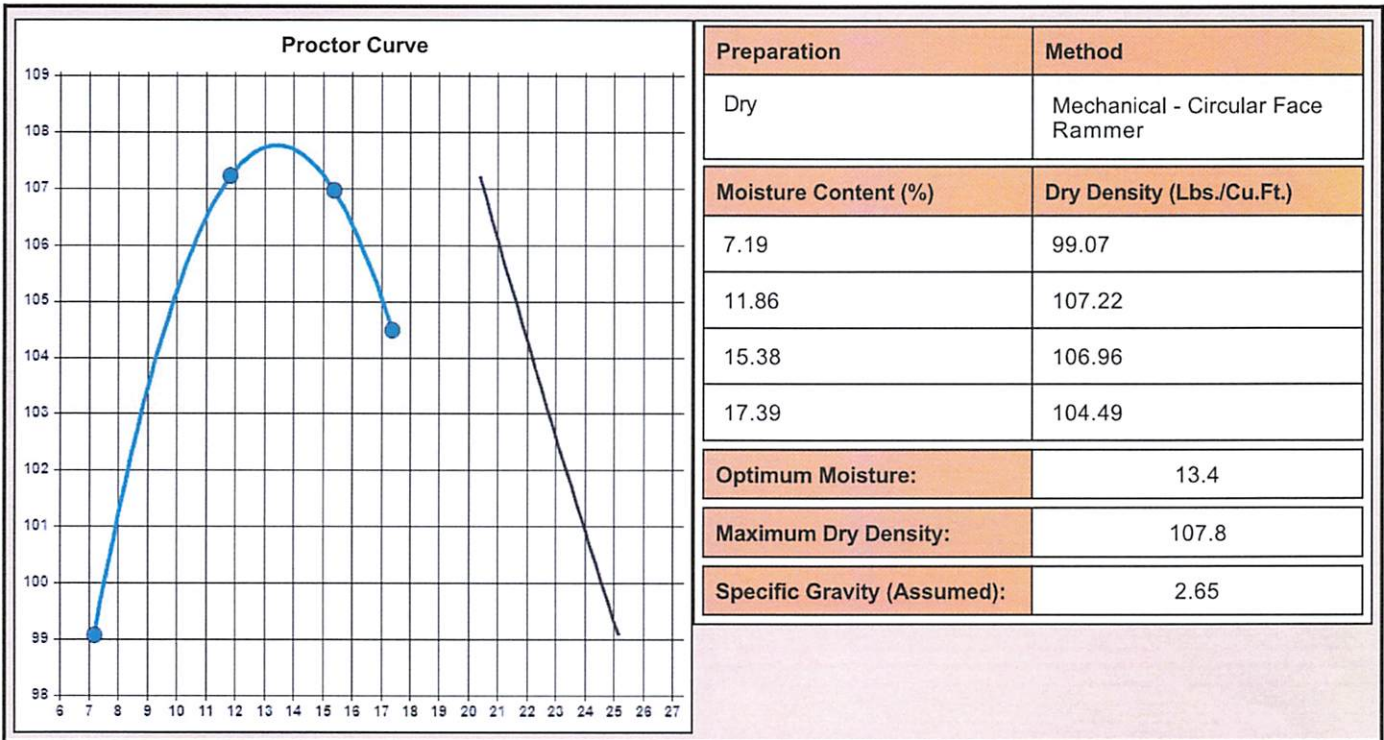
Project:

4128
HCSO Detention Center East Parking Facility CMT
701 El Cibolo Rd
Edinburg, TX 78541

General Information

Sample Date:	10/25/2023	MF Sample Number:	4598
Sample From:	Windrow	Material Type:	Lime Treated Subgrade
Sampled By:	Jorge Solis	Location Details:	East parking lot composite sample

Test Results



Test Completed Date:	10/30/2023	Test Completed By:	Jorge Solis
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Test Results: The test is for informational purposes.

Test Method (As Applicable): Tex 114-E / ASTM D-698 Method-A, Method-B or Method-C ;
Tex 104-E, Tex 105-E, Tex 106-E / ASTM D4318 ;
Tex 110-E / ASTM C-136

Respectfully Submitted by B2Z Engineering

Jorge Solis
Jorge Solis, Laboratory Manager

Client:

Hidalgo County
 100 North Closner
 Edinburg, TX 78539

Project:

4128
 HCSO Detention Center East Parking Facility CMT
 701 El Cibolo Rd
 Edinburg, TX 78541

General Information

Sample Date:	10/25/2023	Sample Number:	4598
Sample From:	Windrow	Material Type:	Lime Treated Subgrade
Technician:	Jorge Solis	Location Details:	East parking lot composite sample

Atterberg Limits

Liquid Limit (%)	Plastic Limit (%)	Plastic Index	Specification Requirements	Pass/Fail
28	13	15	≤ 20	Pass

Test Completed Date: 10/26/2023

Test Completed By: Jorge Solis

Test Results: The above test result meets the technical specifications.

Test Method (As Applicable):
 Tex 104-E, Tex 105-E, Tex 106-E / ASTM D4318

Respectfully Submitted by B2Z Engineering



Jorge Solis, Laboratory Manager



Soil Nuclear Gauge

B2Z Report No. HCSO-4S

Report Date: 11/01/2023

Test Method: ASTM D 6938

Client:

Hidalgo County
100 North Closner
Edinburg, TX 78539

Project:

4128
HCSO Detention Center East Parking Facility
CMT
701 El Cibolo Rd
Edinburg, TX 78541

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
1		10/31/23	Lime Treated Subgrade		CL/CH	13.4	107.8	13.6	107.3	121.9	6	99.5	95	DP/MP
2		10/31/23	Lime Treated Subgrade		CL/CH	13.4	107.8	12.6	102.6	115.5	6	95.2	95	DP/MP
3		10/31/23	Lime Treated Subgrade		CL/CH	13.4	107.8	14.8	105.7	121.4	6	98.1	95	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Make / Model / SN / Calibrated	Field Technician
1	Roadway: E Side CDI Parking Lot 25'E 75'S NW Corner 1st & Final			Instrotek / 3500 Xplorer / 5018 / 04/05/2023	Jacob Chavez
2	Roadway: E Side CDI Parking Lot Center 1st & Final			Instrotek / 3500 Xplorer / 5018 / 04/05/2023	Jacob Chavez
3	Roadway: E Side CDI Parking Lot 20'W 80'N of SE Corner 1st & Final			Instrotek / 3500 Xplorer / 5018 / 04/05/2023	Jacob Chavez

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. 1: Inspector Eddie Ramirez, present.

Respectfully Submitted by B2Z Engineering


 Jorge Solis, Laboratory Manager

December 6, 2023

Eddie Guerra, Sheriff
Attn: Roy Mendez, Lieutenant
County of Hidalgo Sheriff's Office
711 El Cibolo Rd.
Edinburg, TX 78541

*4 Roy Mendez #1881
12-6-2023*

RE: Contract # C-22-0728-01-01 - Work Authorization #3 ~ Hidalgo County CDI East Parking Facility

Dear Sheriff Guerra:

Attached for your review and approval is our invoice for services rendered under Work Authorization #3 during the month of November 2023 on the subject referenced project.

The following is attached:

- Invoice No. 40223

The following is a narrative of the progress for this period.

TASK	% Complete
Geotechnical Drilling, Testing & Eng. Services	
UPDATED: B2Z secured a sample of Subgrade material for testing on the following item: <ul style="list-style-type: none">• Moisture/Density Standard Proctor• Atterberg Limits of Soil B2Z continued to perform Concrete and Laboratory testing. Casting of concrete cylinders included Preparation / Hold / Cure and Compressive Strength testing. B2Z continues to perform field testing with the use of the nuclear density gauge to measure compaction of Lime Treated Subgrade material for Roadways.	29%

Should you have any questions regarding this submittal, please do not hesitate to call me at (956) 585-3773.

Sincerely,



Oliver Salgado, P.E.
Senior Project Manager – B2Z Engineering, LLC



Invoice

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McAllen, Tx. 78502
(956) 585-3773

Date	Invoice #
12/6/2023	40223

Please send remittance with copy of invoice to:

Attn: Mrs. Aisha Gonzalez
P.O. Box 2724
McAllen, Tx. 78502

Bill To:
County of Hidalgo Sheriff's Office
711 El Cibolo Rd.
Edinburg, TX 78541

Project Info:
Hidalgo County
CDI East Parking Facility Project
Contract # C-22-0728-01-01
Work Authorization #3
B2Z JOB: 4128
PO # 870316

Billing Period **November 2023**

Description	Contract	Previous Applications	Current Completed	Total Completed	% Complete
Construction Materials Testing (CMT)	\$ 10,197.23	\$ 488.61	\$ 2,420.99	\$ 2,909.60	29%
Total For This Billing Period					\$2,420.99

Work Authorization ~ Summary

<u>WA No.</u>	<u>WA Amount</u>	<u>Previously Inv.</u>	<u>Percent Complete</u>	<u>Remaining Balance</u>
3	\$10,197.23	\$488.61	29%	\$7,287.63


Aisha Gonzalez - President