

March 1, 2024

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 Jail West
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 February 2024 on the subject referenced project.

The following is attached:

- Invoice No. 40232

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

TASK	% Complete
Construction Materials Testing & Eng. Services	
UPDATED: B2Z performed field testing with the use of the nuclear gauge to measure compaction of Asphalt for Roadway. Report: HCWP-1A B2Z continued to perform Concrete and Laboratory testing. Casting of concrete cylinders included Preparation / Hold / Cure and Compressive Strength testing. Reports: HCWP-1C through HCWP-3C	55%

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



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



Invoice

Date	Invoice #
3/1/2024	40232

P.O.#: 870363

Invoice Received By: P. Eilenberger on: 3/1/2024
 Goods/Services Received By: Sgt. E Longoria on: Feb. 2024
04-1100-423-21-280-005-0-740

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
 Jail West Parking Facility Project
 Contract # C-22-0728-01-01
 Work Authorization #2
 B2Z JOB: 4129

Billing Period	February 2024		Previous Applications	Current Completed	Total Completed	% Complete
Description	Contract					
Construction Materials Testing (CMT)	\$ 16,506.93		\$ 6,602.77	\$ 2,476.04	\$ 9,078.81	55%
Total For This Billing Period						\$2,476.04

Work Authorization ~ Summary

WA No.	WA Amount	Previously Inv.	Percent Complete	Remaining Balance
2	\$16,506.93	\$6,602.77	55%	\$7,428.12

Aisha Gonzalez - President

Handwritten: 4277
3/1/24



Bituminous Density

B2Z Report No. HCWP-1A
Report Date: 01/29/2024
Test Method: ASTM 2950/Tex-207-F

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:
 4129
 HCSO Detention Center West Parking Facility
 CMT
 701 El Cibolo Rd.
 Edinburg, TX

Test Results															
Test #	Retest Of	Test Date	Test Location	Material	Mix Design	Thickness (in)	Max Density (pcf)	Max Density Source	In Place Density (pcf)	Probe Depth (in)	Percent Comp.	Min/Max Comp. (%)	Remark	Gauge SN	Technician
1		01/26/24	Other: Parking Lot Sta. Approx 5' W from North Entrance 2' N offset of Confined	Type D	Type D	2	152.7	Supplied Value	139.7	Backscatter	91.5	90.1 / 97.3	DP	4600	Manuel De Santiago
2		01/26/24	Other: Parking Lot Sta. Approx 20' W from North Entrance 2' N offset of Confined	Type D	Type D	2	152.7	Supplied Value	140.8	Backscatter	92.2	90.1 / 97.3	DP	4600	Manuel De Santiago
3		01/26/24	Other: Parking Lot Sta. Approx 5' W from North Entrance 8' N offset of Confined	Type D	Type D	2	152.7	Supplied Value	141.4	Backscatter	92.6	90.1 / 97.3	DP	4600	Manuel De Santiago
4		01/26/24	Other: Parking Lot Sta. Approx 20' W from North Entrance 7' N offset of Confined	Type D	Type D	2	152.7	Supplied Value	143.4	Backscatter	93.9	90.1 / 97.3	DP	4600	Manuel De Santiago
Remarks								Comments							
DP: Density Pass								Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter" 1: Contractor Angel, Present.							
Gauge Information															
Gauge SN	Make	Model	Density Count	Moisture Count	Standard Count Date	Last Calibration Date	Last Calibrated By								
4600	Instrotek	3500 Xplorer	2361	606	01/26/24	01/24/23	Calibration Solutions, LLC								

Respectfully Submitted by B2Z Engineering

Jorge Solis, Laboratory Manager

Mission Office

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

Client:

Hidalgo County
100 North Clossner
Edinburg, TX 78539

Project:

4129
HCSO Detention Center West Parking Facility CMT
701 El Cibolo Rd.
Edinburg, TX

Sample Details

Set #:	3	Technician:	Manuel De Santiago	Batched:	09:34 CST
Specimen Size:	4 x 8 Cast Cylinder	Cast By:	Manuel De Santiago	Sampled:	10:45 CST
Specimens In Set:	4	Date Cast:	01/31/24	Cast:	10:50 CST
Truck / Ticket #:	341 / 584488	Sampled From:	Chute	Truck Empty:	11:00 CST
Contractor:	8A Builders	Placement Method:	Chute	Placement Time:	86 (min)

Location

Placement Location:	Light Pole
Location Details:	West side parking lot
Sample Location / Notes:	East Side of west parking lot

Batch Log

Supplier:	CRM Concrete Company	Mix Design:	3000CG	Strength:	3000 (psi)
Plant:	San Juan				
On-Site Admixtures:	None				

Specifications

Field Measurements

Weather:	Cloudy	Slump (in):	6	Plastic Unit Weight:	
Air Temperature (F):	68	Concrete Temp (F):	75	Air Content:	
				Load Volume:	10.00 (yd ³)

Standard Cure

Min / Max Temp (F):	58/77
Initial Cure Method:	Plastic Cover/Lid/Blanket
Final Cure Method:	Water Storage Tank

Field Cure

Lab Test Results

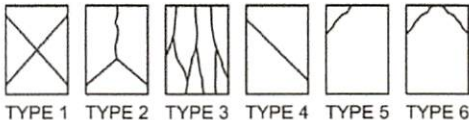
Testing Lab: B2Z Mission Lab, 900 S. Stewart Rd., Suite 2, Mission, TX, 78572

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
3-1	7	02/07/24	1 / 6	4.00	12.57	34,893	2,780	2	F3	1
3-2	28	02/28/24	1 / 27							
3-3	28	02/28/24	1 / 27							
3-4	56	03/27/24	1 / 55							

Test Age Average Strengths (psi): 7 Day - 2780

Capping Methods

F3: The 7 day test results did not meet the specifications. Tested By: Jorge Solis (1) Checked In : 02/01/2024 (1,2,3,4)	1: Neoprene Pad
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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:

4129
HCSO Detention Center West Parking Facility CMT
701 El Cibolo Rd.
Edinburg, TX

Sample Details

Set #:	2	Technician:	Jacob Chavez	Batched:	08:21 CST
Specimen Size:	4 x 8 Cast Cylinder	Cast By:	Jacob Chavez	Sampled:	09:08 CST
Specimens In Set:	5	Date Cast:	01/04/24	Cast:	09:10 CST
Truck / Ticket #:	102 / 89684	Sampled From:	Chute	Truck Empty:	09:45 CST
Contractor:	8 A Builders	Placement Method:	Chute	Placement Time:	84 (min)

Location

Placement Location: Paving - Sidewalk
Location Details: 701 El Cibolo Rd
Sample Location / Notes: North East Side Of Parking Lot

Batch Log

Supplier: Transit Ready Mix
Plant: Plant 1
Mix Design: 3500PSI
On-Site Admixtures: None

Specifications

Strength: 3500 (psi)

Field Measurements

Weather: Mostly Sunny
Air Temperature (F): 50
Slump (in): 5 1/2 "
Concrete Temp (F): 63
Plastic Unit Weight:
Air Content:
Load Volume: 10.00 (yd³)

Standard Cure

Min / Max Temp (F): 43/72
Initial Cure Method: Plastic Cover/Lid/Blanket
Final Cure Method: Water Storage Tank

Field Cure

Lab Test Results

Testing Lab: B2Z Mission Lab, 900 S. Stewart Rd., Suite 2, Mission, TX, 78572

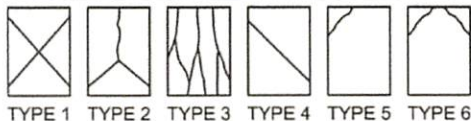
Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in ²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
2-1	7	01/11/24	1 / 6	4.00	12.57	32,531	2,590	5	F3	1
2-2	7	01/11/24	1 / 6	4.00	12.57	35,569	2,830	2	F3	1
2-3	28	02/01/24	1 / 27	4.00	12.57	38,608	3,070	2	F6	1
2-4	28	02/01/24	1 / 27	4.00	12.57	45,095	3,590	2	R6	1
2-5	56	02/29/24	1 / 55							

Test Age Average Strengths (psi): 7 Day - 2710, 28 Day - 3330

Capping Methods

F3: The 7 day test results did not meet the specifications.
F6: The 28 day test results did not meet the specifications.
R6: The 28 day test results meets or exceeds the 56 day specified strength.
Tested By: Jorge Solis (1,2), Manuel De Santiago (3,4)
Checked In : 01/05/2024 (1,2,3,4,5)

1: Neoprene Pad



Respectfully Submitted by B2Z Engineering

Jorge Solis

Jorge Solis, Laboratory Manager

Houston Office
 1304 Langham Creek Drive
 Suite 130
 Houston, TX 77084
 Phone: 281-717-4016

Client:
 Hidalgo County
 100 North Closner
 Edinburg, TX 78539

Project:
 4129
 HCSO Detention Center West Parking Facility CMT
 701 El Cibolo Rd.
 Edinburg, TX

Sample Details

Set #:	1	Technician:	Manuel De Santiago	Batched:	09:32 CST
Specimen Size:	4 x 8 Cast Cylinder	Cast By:	Manuel De Santiago	Sampled:	10:45 CST
Specimens In Set:	5	Date Cast:	12/20/23	Cast:	11:00 CST
Truck / Ticket #:	112 / 89346	Sampled From:	Chute	Truck Empty:	11:02 CST
Contractor:	8A Builders	Placement Method:	Chute	Placement Time:	90 (min)

Location

Placement Location:	Curb
Location Details:	West side parking lot
Sample Location / Notes:	East Side Curb Exit

Batch Log

Supplier:	Transit Ready Mix	Mix Design:	3500PSI	Strength:	3000 (psi)
Plant:	Plant 1				
On-Site Admixtures:	None				

Specifications

Field Measurements

Weather:	Mostly cloudy	Slump (in):	3	Plastic Unit Weight:	
Air Temperature (F):	71	Concrete Temp (F):	73	Air Content:	
				Load Volume:	10.00 (yd ³)

Standard Cure

Min / Max Temp (F):	59/78
Initial Cure Method:	Plastic Cover/Lid/Blanket
Final Cure Method:	Water Storage Tank

Field Cure

Lab Test Results

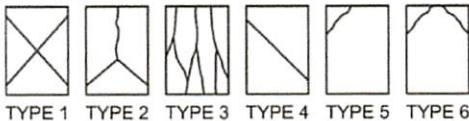
Testing Lab: B2Z Mission Lab, 900 S. Stewart Rd., Suite 2, Mission, TX, 78572

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	12/27/23	1 / 6	4.00	12.57	42,137	3,350	2	R3	1
1-2	7	12/27/23	1 / 6	4.00	12.57	44,992	3,580	3	R3	1
1-3	28	01/17/24	1 / 27	4.00	12.57	54,972	4,370	2	R6	1
1-4	28	01/17/24	1 / 27	4.00	12.57	57,950	4,610	3	R6	1
1-5	56	02/14/24	1 / 55	4.00	12.57	63,043	5,020	2	R9	1

Test Age Average Strengths (psi): 7 Day - 3470, 28 Day - 4490, 56 Day - 5020

Capping Methods

<p>R3: The 7 day test results meets or exceeds the 28 day specified strength. R6: The 28 day test results meets or exceeds the 56 day specified strength. R9: The 56 day test results meets specifications. Tested By: Jorge Solis (1,2,3,4,5) Checked In : 12/21/2023 (1,2,3,4,5)</p>	1: Neoprene Pad
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Respectfully Submitted by B2Z Engineering

Jorge Solis
 Jorge Solis, Laboratory Manager