

Project Name: THUNDERBIRD RESERVIOR UPGRADES - GMP2
Project No.: 212233.1
Amendment No: 002
Date:

This Amendment to that certain Standard Form Agreement dated September 26, 2023 by and between the City of Glendale and MGC Contractors, Inc., (CM@Risk) for services, deliverables and work related to Project No. 212233.1, Project Name: Thunderbird Reservoir Upgrades - GMP2, (the "Agreement") is made and entered into effective this 9th day of April, 2024.

1. This Amendment #002 establishes a Guaranteed Maximum Price ("GMP") and Construction Phase Fee for Construction Services and incorporates such terms into the Agreement, making the Agreement effective for Construction Phase Services:
 - a. The total fee for Construction Phase Services, which is included in the Guaranteed Maximum Price (GMP) as defined under the Agreement, shall be fixed at One Hundred Seventy Four Thousand Seven Hundred Ninety and 19/100 Dollars (\$174,790.19). [This amendment for GMP2 is part of a multi-phase agreement for the Thunderbird Reservoir Upgrades Project.](#)
 - b. The Guaranteed Maximum Price ("GMP") for Construction Services, as defined under the Agreement, shall be Two Million Eight Hundred Sixty-Five Thousand Six Hundred Fifty-Four and 56/100 Dollars (\$2,865,654.56). [This amendment for GMP2 is part of a multi-phase agreement for the Thunderbird Reservoir Upgrades Project.](#)
 - c. The total compensation under the Agreement, as amended by this Amendment, shall be:

	<u>Pre-Construction Phase</u>	<u>Construction Phase</u>	<u>Total</u>
Original Agreement:	\$75,582.00	\$5,878,219.61	\$5,953,801.61
Previous Amendments:	\$	\$769,034.14	\$769,034.14
This Amendment:	\$	\$2,865,654.56	\$2,865,654.56
Total (including this Amendment):	\$75,582.00	\$9,512,908.31	\$9,588,490.31

2. DELETE the blank template "Exhibit C – Cost of the Work – Schedule of Values" from the Agreement, and ADD "Exhibit C – MGC Contractors, Inc., Cost of the Work – Schedule of Values" dated 12 March 2024 (8 Pages), attached herein.
3. ADD "Exhibit E – Construction Documents necessary to define Scope of Work and deliverables for the Construction Phase Services, including plans, designs, drawings, specifications and other required Contract Documents" dated 12 March 2024 (10 Pages), attached herein.
4. ADD "Exhibit F - Statement of All Clarifications and Assumptions" dated 12 March 2024 (1 Page), attached herein.
5. ADD "Exhibit G – Schedule of Major Milestones" dated 12 March 2024 (1 Page), attached herein.
6. All other provisions, terms and conditions of the Agreement shall remain unchanged and in full effect.

(Signature on following page)

IN WITNESS WHEREOF, the Parties hereto have duly executed this Amendment, effective as of the date first written above.

OWNER
City of Glendale
5850 W. Glendale Avenue
Glendale, AZ 85301

CM@RISK
MGC Contractors, Inc.
4110 E. Elwood St.
Phoenix, AZ 85040

By: Its Authorized Representative:

DocuSigned by:
By Its Authorized Representative:

Bryan Foster

8339336D04C54CD

Signature

Signature

Printed Name

Printed Name

Title

Title

3/25/2024

Date

Date

ATTEST:

Julie K. Bower (SEAL)
City Clerk

APPROVED AS TO FORM:

Michael D. Bailey
City Attorney

DESIGN PROFESSIONAL
Wilson Engineers, LLC
1620 W. Fountainhead Pkwy
Tempe, AZ 85282

By Its Authorized Representative:

Stephen Todd

Signature (Reviewed in accordance with the "Agreement Between Owner and Design Professional" Section 4.8.1.14 of Exhibit A "Scope of Services for the Design Professional")

Stephen Todd
Printed Name

Principal
Title

March 21, 2024
Date

EXHIBIT C
Cost of the Work

(One (1) page - template)
(8 pages - final document to be included with GMP Amendment)

[See Attached](#)

GUARANTEED MAXIMUM PRICE

Project Number: 212233.1		Date: 2/22/2024	
Project Title: Thunderbird Reservoir Liner Replacement Guaranteed Maximum Price			
CONSTRUCTION SERVICES			AMOUNT
DIRECT COSTS			
1	Cost of Construction - Thunderbird Reservoir Liner Replacement GMP		\$ 1,664,668.44
		SUBTOTAL DIRECT COSTS	\$ 1,664,668.44
INDIRECT COSTS			CALCULATED RATE:
A.	General Conditions (Excluding Bonds and Insurance)	7.31%	\$ 209,618.80
B.	Payment and Performance Bonds	1.00%	\$ 28,656.55
C.	Insurance	2.00%	\$ 57,313.09
	D.	SUBTOTAL GENERAL CONDITIONS COSTS	\$ 295,588.44
	E.	SUBTOTAL DIRECT AND INDIRECT COSTS	\$ 1,960,256.88
F.	Construction Fee (Overhead & Profit) (on Cost of Construction only)	10.50%	\$ 174,790.19
	G.	SUBTOTAL DIRECT AND INDIRECT COSTS (INCLUDING FEE)	\$ 2,135,047.07
H.	Sales Tax		\$ 110,607.49
	I.	Direct & Indirect Cost Plus Sales Tax	\$ 2,245,654.56
	J.	Allowances	\$ 620,000.00
	L.	Total GMP Amount	\$ 2,865,654.56

Thunderbird Reservoir Liner Replacement GMP Cost of Construction

CBS	Description	Qty	Unit	Unit Cost	Total	Labor	Materials	Owneq Equip	Rented	Equip	Subcontract	Supplies	Fees	Total
1	PROJECT SUPPORT EQUIPMENT + LABOR	1	LS	\$ 285,050.00	\$ 285,050.00	\$ 67,658.16	\$ -	\$ -	\$ 218,652.44	\$ -	\$ -	\$ 2,730.00	\$ -	\$ 285,050.00
1.1	Construction Support Equipment	45	Day	\$ 280.00	\$ 12,600.00	\$ -	\$ -	\$ -	\$ 12,600.00	\$ -	\$ -	\$ -	\$ -	\$ 12,600.00
1.2	40 Ton RT Crane	86	Day	\$ 2,681.16	\$ 230,453.76	\$ 41,665.28	\$ -	\$ -	\$ 188,788.48	\$ -	\$ -	\$ -	\$ -	\$ 230,453.76
1.3	RT Forklift	46	Day	\$ 768.96	\$ 35,372.16	\$ -	\$ -	\$ -	\$ 35,372.16	\$ -	\$ -	\$ -	\$ -	\$ 35,372.16
1.4	Air Compressor	46	Day	\$ 304.00	\$ 13,984.00	\$ -	\$ -	\$ -	\$ 13,984.00	\$ -	\$ -	\$ -	\$ -	\$ 13,984.00
1.5	Foot Traffic Control [Protect the Public]	46	Day	\$ 565.28	\$ 26,002.88	\$ 26,002.88	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,002.88
1.6	Consumable Construction Supplies	1	Each	\$ 2,730.00	\$ 2,730.00	\$ -	\$ -	\$ -	\$ -	\$ 2,730.00	\$ -	\$ -	\$ -	\$ 2,730.00
2	EXISTING LINER DEMOLITION	1	LS	\$ 180,847.00	\$ 180,847.00	\$ 138,498.00	\$ -	\$ -	\$ -	\$ 19,000.00	\$ -	\$ -	\$ -	\$ 180,847.00
2.1	Liner Removal Support Crew (No Equip)	25	Day	\$ 1,637.68	\$ 40,942.00	\$ 40,942.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,942.00
2.2	Demolish Existing Liner + Geotextile Fabric (MGC)	167310	SP	\$ 0.60	\$ 100,386.00	\$ -	\$ 87,852.00	\$ -	\$ -	\$ 12,500.00	\$ -	\$ -	\$ -	\$ 100,386.00
2.3	Support Materials + Dump Fees	167310	SP	\$ 0.10	\$ 16,731.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,731.00
2.4	Consumable Construction Supplies	1	LS	\$ 11,353.00	\$ 11,353.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,353.00
2.5	Consumable Construction Supplies	1	LS	\$ 1,157,228.22	\$ 1,157,228.22	\$ 132,034.22	\$ -	\$ -	\$ -	\$ -	\$ 1,011,472.00	\$ -	\$ -	\$ 1,157,228.22
3	WRETFALL NEW LINER	1	LS	\$ 2,640.68	\$ 2,640.68	\$ 2,640.68	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,640.68
3.1	Liner + Geotextile Install Support Crew (No Equip)	50	Day	\$ 899,413.00	\$ 899,413.00	\$ 899,413.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 899,413.00
3.2	Liner Install SUB - 45 mil XRS PW	1	LS	\$ 119,059.00	\$ 119,059.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 119,059.00	\$ -	\$ -	\$ 119,059.00
3.4	Liner Geotextile Fabric Install (SUB)	1	LS	\$ 9,722.00	\$ 9,722.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,722.00
3.5	Consumable Construction Supplies	1	LS	\$ 44,862.43	\$ 44,862.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,862.43
6	MISC. RESERVOIR DEMOLITION	1	LS	\$ 137.12	\$ 137.12	\$ 44,862.43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,862.43
6.1	Demolish Existing Uni-Strut Supports	325	EA	\$ 472.00	\$ 153,400.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 153,400.00
6.1.1	Unbolt + Remove Nuts from Anchor Bolts to Allow Grinder Access (DOUBLE NUTTED)	1300	EA	\$ 24.60	\$ 31,980.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,980.00
6.1.2	Cut Existing Uni-Strut Anchors Bolts @ EA per Support	650	EA	\$ 24.60	\$ 16,010.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,010.00
6.1.3	Unit Nuts from Uni-Strut Anchors Bolts @ EA per Support	1300	EA	\$ 24.60	\$ 31,980.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,980.00
6.1.4	Consumable Construction Supplies	930	EA	\$ 3,057.00	\$ 2,823.30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,823.30
6.1.5	Safety Supplies (Recs Shields, etc)	325	EA	\$ 3.53	\$ 1,146.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,146.00
Total Cost					\$ 1,644,658.44	\$ 346,418.30	\$ -	\$ -	\$ 217,770.14	\$ 12,500.00	\$ 1,011,472.00	\$ -	\$ -	\$ 1,644,658.44
Percentage of Direct Cost					22.01%	0.00%	0.00%	13.00%	0.75%	60.74%	1.68%	1.71%		
Subcontract Total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,700.00	\$ -	\$ -	\$ 90,700.00
Rental Equipment Total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,500.00	\$ -	\$ -	\$ -	\$ 12,500.00
Materials Total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment Total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supplies Total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fees Total					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

EXHIBIT C



Tab 4 - Subcontractor/Supplier Breakdown

**SUBCONTRACTOR/SUPPLIER
BREAKDOWN**



Tab 4 - Subcontractor/Supplier Breakdown

Abstract Type: Subcontract

PROJECT NAME	Thunderbird Reservoir GMP 2
PROJECT LOCATION	Glendale, AZ
Specific Trade/ Scope :	Liner Replacement
Applicable Specification Sections :	

		Field Lining Systems, Inc. Drew Ramos		Layfield Laura Quillen	
		SELECTED			
		Yes	No	Yes	No
		\$	\$	\$	\$
BASE BID = Construction Costs					
Bid per Plans & Specifications		Yes	No	Yes	Yes
Reviewed Addenda through		Yes	Yes	Yes	Yes
Was Subcontractor Invited to Bid?		Yes	Yes	Yes	Yes
Is Subcontractor Bondable? What is Bond Rate?		Yes	Yes	Yes	Yes
Primary Bid Quantities (If Applicable)	QTY UOM				
XR-5 - 9146 PW White/White 50 Mil	1 LS	\$ 910,426.00	\$ 936,985.00		
Install Geotextile Fabric	1 LS	\$ 119,059.00	No Bid		
		\$ -			
<i>If additional rows are needed, add above this row</i>					
Bid Exclusions		See scope	See Scope	See Scope	See Scope
Adjustments					
Base Bid		\$ 1,029,485.00	\$ 1,035,641.00	\$ -	\$ -
TOTAL ADJUSTED BASE BID:		\$1,029,485.00	\$ 1,035,641.00	NO BID	NO BID

NOTES:

- 1 Layfield did not include the Geotextile Fabric in their bid. They would have been significant high.
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10



Field Lining Systems, Inc.
 439 South 3rd Avenue
 Avondale, AZ 85323
 (623) 842 1255
 www.flsi.us

Quote Reference Name: COG Thunderbird Reservoir

Date Sent: Jan 12, 2024

Quote Expiration: Feb 29, 2024

Payment Terms: Material: Billed on delivery. Labor: Progress NET 30

Sales Tax: Not Included

Quote Prepared By:

Drew Ramos
 drew@flsi.us
 602-510-3742

Quote Prepared For:

Scott Whitley
 MGC Contractors, Inc.
 309-397-2151
 swhitley@mgccontractors.com

4110 E. Elwood Street
 Phoenix, AZ 85040

Item No.	Item(s) Description	Estimated Qty.	UOM	Unit Price	Total Amount
1	Reservoir Lining - XR5 9146 PW Included in price: <ul style="list-style-type: none"> • XR-5 - 9146 PW White/White, 74" wide by 175LY; each roll • New material panels will be prefabricated by FLSI • New material installed per drawings • Mechanical attachment sealing with Con Seal 665 (NSF) (if other option is required per Engineer, FLSI will need to reprice that portion) • Will reuse existing batten bar and hardware • Overtime hours included due to deadline of April 30th 	1	EA	\$ 910,426.000	\$ 910,426.000
2	Reservoir Lining - Geotextile Included in price: <ul style="list-style-type: none"> • 17,500 SY of Mirafi 180N 8 oz. Geotextile Non-Woven • Installation of geotextile • Overtime hours included due to deadline of April 30th Installation time: <ul style="list-style-type: none"> • 7-10 Business Days 	1	LS	\$ 119,059.000	\$ 119,059.000

Subtotal: \$ 1,029,485.000

Tax: \$ 0.000

Adjustment (CC fee): \$ 0.000

Grand Total: \$ 1,029,485.000

Current Material Lead Time	Current Construction Lead Time	Estimated Project Duration
XR5: 4 Weeks	6-10 Weeks	30-40 Working days
Jobsite Location	Labor Rate	Mobilization(s)
Glendale, AZ	Standard - Non-Prevailing Wage	One mobilization included

Project Scope Of Work

Purchase and supply fabrication, and installation of a new liner system.

Quote ID: Q24008

City of Glendale - Thunderbird Reservoir Liner Replacement GMP

General Conditions Breakdown

Description	Qty	Unit	Unit \$	Total \$	Labor	Materials	Equip.	Subcontract	Fees/Supplies
GENERAL CONDITIONS	1	LS	\$ 209,618.80	\$ 209,618.80	\$ 172,174.80	\$ -	\$ -	\$ -	\$ 37,444.00
Project Management	2	Month	\$ 86,087.40	\$ 172,174.80	\$ 172,174.80	\$ -	\$ -	\$ -	\$ -
Project Director	2	Week	\$ 7,386.80	\$ 14,773.60	\$ 14,773.60	\$ -	\$ -	\$ -	\$ -
Project Manager	8	Week	\$ 4,600.40	\$ 36,803.20	\$ 36,803.20	\$ -	\$ -	\$ -	\$ -
Project Superintendent	8	Week	\$ 4,321.60	\$ 34,572.80	\$ 34,572.80	\$ -	\$ -	\$ -	\$ -
Project Engineer	8	Week	\$ 3,625.20	\$ 29,001.60	\$ 29,001.60	\$ -	\$ -	\$ -	\$ -
Field Engineer	4	Week	\$ 3,625.20	\$ 14,500.80	\$ 14,500.80	\$ -	\$ -	\$ -	\$ -
General Superintendent	1	Week	\$ 7,062.40	\$ 7,062.40	\$ 7,062.40	\$ -	\$ -	\$ -	\$ -
QA/QC Manager	1	Week	\$ 7,062.40	\$ 7,062.40	\$ 7,062.40	\$ -	\$ -	\$ -	\$ -
Safety Manager	1	Week	\$ 3,798.00	\$ 3,798.00	\$ 3,798.00	\$ -	\$ -	\$ -	\$ -
Light Duty Pickup	21	Week	\$ 600.00	\$ 12,600.00	\$ 12,600.00	\$ -	\$ -	\$ -	\$ -
Heavy Duty Pickup	12	Week	\$ 1,000.00	\$ 12,000.00	\$ 12,000.00	\$ -	\$ -	\$ -	\$ -
Field Office Requirements	3	Month	\$ 1,997.00	\$ 5,991.00	\$ -	\$ -	\$ -	\$ -	\$ 5,991.00
Field Office Computers - Extended Duration	3	MO	\$ 350.00	\$ 1,050.00	\$ -	\$ -	\$ -	\$ -	\$ 1,050.00
Field Office Printer - Extended Duration	3	MO	\$ 450.00	\$ 1,350.00	\$ -	\$ -	\$ -	\$ -	\$ 1,350.00
Field Office Internet - Extended Duration	3	MO	\$ 225.00	\$ 675.00	\$ -	\$ -	\$ -	\$ -	\$ 675.00
Field Office Supplies - Extended Duration	3	MO	\$ 150.00	\$ 450.00	\$ -	\$ -	\$ -	\$ -	\$ 450.00
Project IT Costs - Extended Duration	3	MO	\$ 150.00	\$ 450.00	\$ -	\$ -	\$ -	\$ -	\$ 450.00
Job Photos (1 hr/wk per Month)	3	MO	\$ 672.00	\$ 2,016.00	\$ -	\$ -	\$ -	\$ -	\$ 2,016.00
Construction Site Costs	1	LS	\$ 29,437.00	\$ 29,437.00	\$ -	\$ -	\$ -	\$ -	\$ 29,437.00
24-Hour Trailer Mounted Security Camera Extended Duration	3	MO	\$ 1,250.00	\$ 3,750.00	\$ -	\$ -	\$ -	\$ -	\$ 3,750.00
Dumpster Incl. Fees - Extended Duration	3	MO	\$ 850.00	\$ 2,550.00	\$ -	\$ -	\$ -	\$ -	\$ 2,550.00
Update Project Signs	3	EA	\$ 500.00	\$ 1,500.00	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00
Dust Permit - Yard - Extended Duration	3	MO	\$ 500.00	\$ 1,500.00	\$ -	\$ -	\$ -	\$ -	\$ 1,500.00
Maintain Straw Wattle - Extended Duration	3	MO	\$ 250.00	\$ 750.00	\$ -	\$ -	\$ -	\$ -	\$ 750.00
Construction Water Base Fee - Extended Duration	3	MO	\$ 250.00	\$ 750.00	\$ -	\$ -	\$ -	\$ -	\$ 750.00
J-Jon (6 ea) - Extended Duration	3	MO	\$ 2,400.00	\$ 7,200.00	\$ -	\$ -	\$ -	\$ -	\$ 7,200.00
Handwash Station (3 ea) - Extended Duration	3	MO	\$ 480.00	\$ 1,440.00	\$ -	\$ -	\$ -	\$ -	\$ 1,440.00
Jobsite ConEx - Extended Duration	3	MO	\$ 250.00	\$ 750.00	\$ -	\$ -	\$ -	\$ -	\$ 750.00
Ice & Water - Extended Duration	3	MO	\$ 320.00	\$ 960.00	\$ -	\$ -	\$ -	\$ -	\$ 960.00
Project Safety Supplies + Training (3% Labor)	1	LS	\$ 8,287.00	\$ 8,287.00	\$ -	\$ -	\$ -	\$ -	\$ 8,287.00
Field Support	1	LS	\$ 2,016.00	\$ 2,016.00	\$ -	\$ -	\$ -	\$ -	\$ 2,016.00
Job Photos (1 hr/wk per Month)	3	MO	\$ 672.00	\$ 2,016.00	\$ -	\$ -	\$ -	\$ -	\$ 2,016.00

Thunderbird Reservoir Liner Replacement GMP

Allowance Breakdown

No.	Description	Quantity	Unit	Total Allowance
1	Owner's Scope Change Allowance	1	LS	\$ 200,000.00
2	24" Check Valve Allowance	1	LS	\$ 150,000.00
3	Eyewash Relocation Allowance - EDO 09	1	LS	\$ 20,000.00
4	Structural Repairs Allowance - Cracks and Slope Replacement	1	LS	\$ 250,000.00
B. TOTAL GMP ALLOWANCE				\$ 620,000.00

Thunderbird Reservoir Liner Replacement GMP Taxable and Non-Taxable Items

	Description	212233.1	Unit	Total Allowance
	Direct & Indirect Total Job Cost	1	LS	\$ 1,960,256.88
	Material List:			
	None.			
TOTAL GMP TAXABLE ITEMS				\$ 1,960,256.88
TOTAL GMP NON-TAXABLE ITEMS				\$ -
Sales Tax Total				\$ 110,607.49

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EXHIBIT E
**Construction Documents necessary to define Scope of Work and Deliverables for the
Construction Phase Services, including plans, designs, drawings, specifications and other
required Contract Documents**

(10 pages - To be Incorporated by Amendment)

[See Attached](#)



Tab 1 - Scope of Work

SCOPE OF WORK



Tab 1 - Scope of Work



March 12, 2024

City of Glendale
Water Services Department
Glendale, AZ 85308

Attn: Mr. James Hannasch

Re: 212233.1 – Thunderbird Reservoir Upgrades Project – GMP 2 – Rev 00

Dear James:

In accordance with the information provided, we are pleased to offer a cost proposal for the Scope of Work listed below at the City of Glendale Thunderbird Reservoir site. The total price is (\$2,865,654.56) Two Million Eight Hundred Sixty-Five Thousand Six Hundred Fifty-Four Dollars and Fifty-Six cents. A further breakdown of the proposal and quotations are attached. We have included all applicable sales tax, bonds, and insurance.

Reservoir	Location	Design Engineer
Thunderbird	23098 N. 64 th Avenue, Glendale, AZ 85310	Wilson Engineers

1. **Location:** 23098 N. 64th Avenue, Glendale, AZ 85310
2. **Size:** Less than 1 acre being disturbed
3. **Type of Job:** Thunderbird Reservoir Liner/Geotextile Fabric Replacement and Upgrades.
4. **Usage:** Potable Water Storage
5. **Work to be completed during this Project per Scope of Work:**
 - Removal of existing Reservoir Liner System.
 - Removal of existing Reservoir Geotextile Fabric.
 - Inspection of the Reservoir sub-floor per ADWR request, performed by Wilson Engineers, assisted by MGC.
 - Installation of new Geotextile Fabric, performed by Field Lining Services, assisted by MGC.
 - Installation of XR-5 Potable Water Liner, performed by Field Lining Services, assisted by MGC.
 - Installing two (2) 30" check valves per Wilson Engineers Design Plans.
 - Liner Protection.
 - Disinfection of the entire Thunderbird Reservoir
 - Leak test of the Thunderbird Reservoir
 - Any additional work requested by Wilson Engineering and approved by the City via an allowance adjustment.



Guaranteed Maximum Price (GMP) 2 Purpose:

This GMP 2 Cost Proposal aims to provide a fully functional Geotextile Fabric and Liner replacement in accordance with the Field Lining Services process and Wilson Engineer's guidance.

Guaranteed Maximum Price (GMP) 2 Included Scope and Deliverables:

To ensure accuracy and complete transparency on all items covered by GMP 2, please review Tab 3 – Cost of Construction/Schedule of Values and Tab 9 – Estimate Summary on the attached GMP 2 Cost Proposal. These tabs cover all project-related tasks and associated costs in detail.

- **Project Deliverables Include:**
 - Submittals on all materials used.
 - Reservoir leak testing and disinfection documentation.
 - Monthly project schedule updates and deliverables.
 - Weekly 3-week look ahead schedules.

Allowances Breakdown (Tab 7 - GMP 2):

No.	Description	Quantity	Unit	Total Allowance
1	Owner's Scope Change Allowance	1	LS	\$ 200,000.00
2	30" Check Valve Allowance	1	LS	\$ 150,000.00
3	ED-09 Eye-Wash Relocation	1	LS	\$ 20,000.00
4	Structural Repairs Allowance – Cracks and Slope Replacement	1	LS	\$ 250,000.00
B. TOTAL GMP ALLOWANCE				\$ 620,000.00

- An allowance use proposal (adjustment) will be sent for each item utilized and approved by the Owner before conducting the adjustments outlined Scope of Work.

Anticipated Contract Duration:

- GMP 2 City Council approval – 4/23/2024
- Notice to proceed (NTP) – 4/24/2024
- **Substantial Completion – 05/27/2024**
- 33 calendar days from NTP to GMP 2 final completion.
- Project Start Date: 13 March 2024 – Project End Date: 27 May 2024
- Total Project Working Days: 23

Thank you for the opportunity to be of service; if you have any questions, please do not hesitate to call.

Sincerely,

Scott Whitley
Project Manager
MGC Contractors, Inc.
309-397-2151



4110 E. Elwood St. Phoenix, Arizona 85040 Telephone (602) 437-5000 Fax (602) 470-4000
License Numbers ROC069949 & ROC071441



**WILSON ENGINEERS
THUNDERBIRD RESERVOIR LINER
REPLACEMENT AND UPGRADES
COVER PAGE**



GITTY

GL





**WILSON ENGINEERS
THUNDERBIRD RESERVOIR
UPGRADES 90%
PROJECT SPECIFICATIONS**





CITY OF GLENDALE

WATER SERVICES DEPARTMENT

THUNDERBIRD RESERVOIR UPGRADES PROJECT

CIP PROJECT NO. 212233.1

TECHNICAL SPECIFICATIONS

Agency Review

July 2023

MAYOR

Jerry P. Weiers

CITY COUNCIL

Joyce Clark

Jamie Aldama

Ian Hugh

Ray Malnar

Lauren Tolmachoff

Bart Turner

CITY MANAGER

Kevin R. Phelps

CITY ENGINEER

David Beard, PE

WATER SERVICES DIRECTOR

Ronald Serio, PE

CITY OF GLENDALE WATER SERVICES DEPARTMENT
PROJECT NAME THUNDERBIRD RESERVOIR UPGRADES PROJECT
CIP PROJECT NUMBER 212233.1

TECHNICAL SPECIFICATIONS

CITY OF GLENDALE

THUNDERBIRD RESERVOIR UPGRADES PROJECT



DIVISION 1 GENERAL REQUIREMENTS

- 01110 SUMMARY OF WORK
- 01111 SCHEDULE OF COMPLETION
- 01291 SCHEDULE OF VALUES
- 01301 PRE-CONSTRUCTION CONFERENCE
- 01311 PROJECT COORDINATION
- 01312 PROGRESS MEETINGS
- 01321 PROGRESS SCHEDULE
- 01323 CONSTRUCTION PHOTOGRAPHS
- 01330 SUBMITTALS
- 01332 SHOP DRAWING PROCEDURE
- 01410 ADWR COORDINATION
- 01412 STORMWATER POLLUTION PREVENTION PLAN AND PERMIT
- 01415 CONFINED SPACE ENTRY PLAN
- 01416 SPECIAL INSPECTIONS
- 01420 REFERENCES
- 01453 TESTING OF HYDRAULIC STRUCTURES
- 01454 DISINFECTION OF HYDRAULIC STRUCTURES
- 01510 TEMPORARY CONSTRUCTION FACILITIES
- 01511 TEMPORARY ELECTRICITY
- 01512 TEMPORARY LIGHTING
- 01514 TEMPORARY WATER
- 01515 TEMPORARY SANITARY AND FIRST AID FACILITIES
- 01522 CONTRACTOR'S FIELD OFFICE AND SHEDS
- 01550 ACCESS ROADS AND PARKING AREAS

CITY OF GLENDALE	WATER SERVICES DEPARTMENT
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CIP PROJECT NUMBER	212233.1

- 01561 SECURITY
- 01570 TEMPORARY CONTROLS
- 01580 PROJECT IDENTIFICATION AND SIGNS
- 01651 TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT
- 01661 STORAGE OF MATERIALS AND EQUIPMENT
- 01721 PROTECTION OF THE WORK AND PROPERTY
- 01723 CUTTING AND PATCHING
- 01724 CONNECTIONS TO EXISTING FACILITIES
- 01740 CLEANING
- 01782 RECORD DOCUMENTS
- 01784 POST FINAL INSPECTION

DIVISION 2 SITEWORK

- 02220 DEMOLITIONS

DIVISION 3 CONCRETE

NOT USED

DIVISION 4 MASONRY

NOT USED

DIVISION 5 METALS

- 05051 ANCHOR BOLTS, TOGGLE BOLTS, AND CONCRETE INSERTS
- 05120 STRUCTURAL STEEL AND FRAMING
- 05501 MISCELLANEOUS METAL FABRICATIONS

DIVISION 6 WOOD AND PLASTICS

NOT USED

DIVISION 7 THERMAL AND MOISTURE PROTECTION

- 07411 STANDING SEAM METAL ROOFING
- 07721 ROOF HATCHES
- 07920 CAULKING AND SEALANTS

DIVISION 8 DOORS AND WINDOWS

NOT USED

CITY OF GLENDALE	WATER SERVICES DEPARTMENT
PROJECT NAME	THUNDERBIRD RESERVOIR UPGRADES PROJECT
CIP PROJECT NUMBER	212233.1

DIVISION 9 FINISHES

09900 PAINTING

DIVISION 10 SPECIALTIES

NOT USED_

DIVISION 11 EQUIPMENT

NOT USED_

DIVISION 12 FURNISHINGS

NOT USED_

DIVISION 13 SPECIAL CONSTRUCTION

NOT USED_

DIVISION 14 CONVEYING SYSTEMS

14610 DAVIT CRANE

DIVISION 15 MECHANICAL

15106 THERMOPLASTIC PIPE
15113 THERMOPLASTIC VALVES, OPERATORS, AND
APPURTENANCES

DIVISION 16 ELECTRICAL

NOT USED

DIVISION 17 INSTRUMENTATION

NOT USED

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EXHIBIT F
Statement of All Clarifications and Assumptions (if any)

(1 page - To be Incorporated by Amendment)

[See Attached](#)



EXHIBIT F

The City of Glendale - GMP 2 Proposal - Thunderbird Reservoir Repairs - Project No. 212233.1

Tab 10 Cont. - Clarifications & Assumptions

CLARIFICATIONS & ASSUMPTIONS:

Work will be completed in accordance with Wilson Engineers Plans & Specifications for the City of Glendale's Thunderbird Reservoir Liner Replacement and Upgrades Project, with the exceptions as noted below:

- 1. PROJECT START DATE: **24 April 2024** PROJECT END DATE: **27 May 2024**
- 2. Liner Batton Bars are to be reused; if they need to be replaced, this will be an Allowance Item.
- 3. Geotextile Fabric will be replaced and is included in the GMP 2 pricing.
- 4. Liner protection will continue throughout the project and is included in the GMP 2 pricing.
- 5. Any additional repairs that the City of Glendale approves will be considered an Allowance Use Item.
- 6. For all additional allowance information, please see the Allowance breakdown page (Tab 7.)

Tab 10 Cont. - Clarifications & Assumptions



EXHIBIT F

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EXHIBIT G
Schedule of Major Milestones

(1 page - To be Incorporated by Amendment)

[See Attached](#)

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EXHIBIT H
Dispute Resolution Procedures

1. Disputes.

- 1.1 Each Dispute arising out of or related to this Agreement (including Disputes regarding any alleged breaches of this Agreement) shall be initiated and decided under the provisions of this Exhibit.
- 1.2 CMAR and City shall each designate in writing to the other party, from time to time, a member of senior management who shall be authorized to attempt to expeditiously resolve any Dispute relating to the subject matter of this Agreement in an equitable manner.
- 1.3 A party shall initiate a Dispute by delivery of written notice to the members of management designated by the respective parties under Section 1.2 of this Exhibit.
- 1.4 The parties must:
 - (A) Attempt to resolve all Disputes promptly, equitably and in a good faith manner; and
 - (B) Provide each other with reasonable access during normal business hours to any and all non-privileged records, information and data pertaining to any such Dispute.
- 1.5 With respect to matters concerning modification of the GMP or any schedule, CMAR must first follow the provisions of any Claim procedure established by the Design-Build Agreement before seeking relief under these Procedures.

2. Emergency Arbitration.

- 2.1 If the parties are unable to accomplish resolution of a Dispute, the expedited resolution of which either party considers necessary to prevent or mitigate a material delay to the critical path of the Services (a "Time Sensitive Dispute") within two days after the Time Sensitive Dispute has been initiated by a party, either party may thereafter seek emergency relief before an emergency arbitrator (the "Emergency Arbitrator") appointed as follows:
 - (A) The parties will exercise best efforts to pre-select an Emergency Arbitrator within 20 days after entering into this Agreement;
 - (B) If the Emergency Arbitrator has not been selected at the time a party delivers Notice of a Time Sensitive Dispute, the parties will each select a representative within one day after the Notice is delivered and the two representatives will then select the Emergency Arbitrator by the third day following delivery of the Notice.
 - (C) The Emergency Arbitrator shall be an attorney with at least ten (10) years' experience with commercial construction legal matters in Maricopa County, Arizona, be independent, impartial, and not have engaged in any business for or adverse to either party for at least ten (10) years.
- 2.2 The Emergency Arbitrator will conduct a hearing and render a written determination on the Dispute to both parties within five business days of the matter being referred to him or her, all in accordance with Rules O-1 to O-8 of the

American Arbitration Association ("AAA") Commercial Rules-Optional Rules for Emergency Protection Commercial Rules ("AAA Emergency Rules").

- 2.3 Although the hearing will be conducted using AAA rules, unless both parties agree otherwise, this dispute process will not be administered by the AAA but will be conducted by the parties in accordance with these procedures.
- 2.4 If, however, an Emergency Arbitrator has not selected within three days after delivery of the Notice, either party may upon three days additional notice, thereafter seek emergency relief before the AAA, in accordance with the AAA Emergency Rules, provided that the Emergency Arbitrator meets the qualifications set forth above.
- 2.5 All proceedings to arbitrate Time Sensitive Disputes shall be conducted in Glendale, Arizona.
- 2.6 Presentation, request for determination (i.e., a party's prayer), and the Emergency Arbitrators decision will adhere to the procedures required in Section 3.6 of this Exhibit.
- 2.7 The finding of the Emergency Arbitrator with respect to any Time Sensitive Dispute will be binding upon the parties on an interim basis during progress of the Services, subject to review de novo by arbitration after the Project Substantial Completion Date.
- 2.8 The time and extent of discovery will be as determined by the Emergency Arbitrator.
 - (A) Discovery orders of the Emergency Arbitrator will consider the time sensitivity of the matter and the parties desire to resolve the issue in the most time and costs efficient manner;
 - (B) The parties are obligated to cooperate fully and completely in the provision of documents and other information, including joint interviews of individuals with knowledge such that the matter moves toward resolution in the most time and costs efficient manner and the Emergency Arbitrator is empowered to fashion any equitable penalty against a party that fail to meet this obligation.

3. Non-Emergency Arbitration.

- 3.1 Except as provided in Section 5 of this Exhibit, any Dispute that is either a non-emergency Dispute that has not been resolved by negotiation, or a de novo review of an AAA emergency arbitration will be decided by binding arbitration by a panel of three arbitrators in accordance with, but not necessarily administered by, the Construction Industry Rules of the AAA.
 - (A) The parties shall each select an arbitrator within 15 days after notice that a party desires to resolve a dispute by arbitration.
 - (B) The two arbitrators shall then each select a third arbitrator. If an arbitrator is not selected within any such 15 day period, then the arbitrator shall be appointed by the AAA.
- 3.2 The arbitrator(s) shall meet the qualifications of Emergency Arbitrators as provided in Section 2 of this Exhibit.

- 3.3 The arbitrators do not have the authority to consider or award punitive damages as part of the arbitrators' award.
- 3.4 In connection with such arbitration, each party shall be entitled to conduct up to five depositions, and, no less than 90 days prior to the date of the arbitration hearing, each party shall deliver to the other party copies of all documents in the delivering party's possession that are relevant to the dispute.
- 3.5 The arbitration hearing shall be held within 150 days of the appointment of the arbitrators.
- 3.6 At the arbitration hearing, each party will argue its position to the arbitrators in support of one proposed resolution to the dispute (a "Proposed Resolution").
 - (A) Each party's Proposed Resolution must be fully dispositive of the dispute.
 - (B) The arbitrators must select one Proposed Resolution by majority consent and are not free to fashion any alternative resolutions.
 - (C) The parties must submit their proposed resolution of the matter to the arbitrators and the other party 15 days prior to the date set for commencement of the arbitration proceeding.
 - (D) The decision of the arbitrators will be forwarded to the parties within 15 days after the conclusion of the arbitration hearing.
 - (E) The decision of the arbitration panel is final and binding on the parties and may be entered in any court of competent jurisdiction for the purpose of securing an enforceable judgment.
 - (F) All costs and expenses associated with the arbitration, including the reasonable legal fees and costs incurred by the prevailing party, must be paid by the party whose position was not selected by the arbitrators.
4. **Continuing Work.** Unless otherwise agreed to in writing, CMAR must continue to perform and maintain progress of the Work during any Dispute Resolution or arbitration proceedings, and City will continue to make payment to CMAR in accordance with the Agreement.
5. **Exceptions.**
 - 5.1 Neither City nor CMAR are required to arbitrate any third-party claim, cross-claim, counter claim, or other claim or defenses in any action that is commenced by a third-party who is not obligated by contract to arbitrate disputes with City and CMAR.
 - 5.2 City or CMAR may commence and prosecute a civil action to contest a lien or stop notice, or enforce any lien or stop notice (but only to the extent the lien or stop notice the party seeks to enforce is enforceable under Arizona law), including, without limitation, an action under A.R.S. § 33-420, without the necessity of initiating or exhausting the procedures of this Exhibit.
 - 5.3 This Exhibit does not apply to, and may not be construed to require arbitration of, any claims, actions or other process undertaken, filed, or issued by the City of Glendale Building Safety Department, Code Compliance Department, Police Department, Fire Department, or any other agency of City acting in its

governmental permitting, for the benefit of public health, safety, and welfare, or other regulatory capacity.

- 5.4** In connection with any arbitration, the arbitrators do not have the authority to, and may not enforce, any provision of the Federal or Arizona Rules of Civil Procedure.