

**CITY OF PEORIA, ARIZONA  
COUNCIL COMMUNICATIONS**

CC: JR  
Amend No. \_\_\_\_\_

**Date prepared:** December 19, 2008      **Council Meeting Date:** February 3, 2009

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**TO:** Carl Swenson, City Manager  
**FROM:** Stephen L. Bontrager, Utilities Director   
**THROUGH:** Shawn V. Kreuzwiesner, Utilities Manager  
**PREPARED BY:** Javier Setovich, Construction Superintendent   
**SUBJECT:** Contract Amendment No.3 to MGC Contractors Inc.

**RECOMMENDATION:**

Discussion and possible action to approve Contract Amendment No. 3 with MGC Contractors Inc. for the Guaranteed Maximum Price (GMP) of \$1,824,314 for improvements to the Beardsley Water Reclamation Facility, Capital Improvement Project UT00124, Beardsley Water Reclamation Facility Phase IIIA (Solicitation No. P08-0010).

**SUMMARY:**

On May 6, 2008, Council approved the award of a design/build contract to MGC Construction for improvements to the Beardsley Water Reclamation Facility (WRF) and the rehabilitation of recharge basin No. 13. This design/build team lead by MGC Contractors Inc. was competitively selected. The team consists of a contractor builder and a consultant designer. Throughout the phases of the project, in the design build process, a GMP is negotiated for each phase and it is identified as a contract amendment. In this project, contract Amendment No. 1 was approved to fund the improvements to recharge basin No. 13. Contract Amendment No. 2 was an administrative correction that adjusted the total contract value reflected on Contract Amendment No. 1.

City staff and the Design/Build team have identified several areas at the Beardsley WRF that are in need of improvements to ensure continued reliability and redundancy of the plant. The design for the improvements required to resolve immediate plant process concerns are complete. Contract Amendment No. 3 will fund the construction of the

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**CITY CLERK USE ONLY:**

- Consent Agenda
- Carry Over to Date: \_\_\_\_\_
- Approved
- Unfinished Business (Date heard previous: \_\_\_\_\_)
- New Business

ORD. # \_\_\_\_\_ RES. # \_\_\_\_\_  
LCON# 03608C LIC. # \_\_\_\_\_  
Action Date: \_\_\_\_\_

Council Communication Page 2 of 2  
 Beardsley Water Reclamation Facility Phase IIIA Expansion  
 February 3, 2009

following improvements:

- Installation of new disk filters and the rehabilitation of the existing units to ensure the plant systems are fully redundant in this process area.
- Installation of a new disinfection bypass line to allow the existing UV disinfection system to be more efficiently maintained or bypassed in emergencies.
- Installation of an effluent pump station overflow line to reduce the possibility of flooding critical electrical equipment.
- Improvements to the existing back-up chlorine disinfection system by extending a new injection line to the new UV bypass line.
- Purchase a new backup effluent pump to ensure the plant has a redundant unit on site in case of emergencies.

Staff and the Design/Build team are still working on completing the design for the remaining plant improvements. These improvements will include upgrades to the existing clarifiers and electrical systems along with additional work to ensure the plant has adequate recharge capacity to handle the existing and future plant flows. Staff expects to have pricing on this final scope of work before the end of the 2009 fiscal year and will award contract amendment 4 using existing project funds. The table below shows all expected costs for the project:

<b>Design</b>		\$960,228.00
<b>Construction</b>		
Contract Amendment 1	Rehabilitation of Basin 13- Funded by UT00196	\$139,710.00
Contract Amendment 2	Administrative Correction	\$0.00
Contract Amendment 3	Phase 1 of Plant Improvements	\$1,824,314.00
Contract Amendment 4 (Future)	Phase 2 of Plant Improvements	\$1,808,229.00
<b>Total Project Costs</b>	<b>Design &amp; Construction</b>	<b>\$4,732,481.00</b>
<b>Available Budget</b>	<b>UT00124 &amp;UT00196</b>	<b>\$4,783,432.00</b>

In conclusion, staff recommends that Mayor and Council approve the expenditure of existing project funds for Contract Amendment No. 3 with MGC Contractors Inc.

**FISCAL NOTE:**

Payment in the amount of \$1,824,314 will be made from Proposed Revenue Bonds account 2454-2574-543003-CIPWW-UT00124.

**ATTACHMENT(S)**  
 Contract Amendment



# CONTRACT AMENDMENT

## Change Order

Materials Management  
Procurement  
8314 W. Cinnabar Ave.  
Peoria, AZ 85345  
Telephone: (623) 773-7115  
Fax: (623) 773-7118  
Buyer: Athena Bonner

Solicitation No.: P08-0010 Page 1 of 2  
Amendment No.: Three (3) Date: January 8, 2009

Project No.: UT00124/UT00196 Agreement Date: May 10, 2008  
Project Description: Beardslay WRF Phase IIIA Expansion Completion Date: February 11, 2010  
Change Order Type:  Owner Initiated  Errors & Omissions  Unknown Conditions

The changes as shown on the attached sheet are hereby made to the contract.

### Contract Price Change:

Original Contract Price:	\$960,228.00
Total of previous change orders:	139,710.00
Original contract price plus previous change order(s):	\$1,099,938.00
The contract price due to this change order will be increased/decreased by:	\$1,824,314.00
The new contract price including this change order will be:	\$2,924,252.00

### Contract Time Change:

The contract time will be increased by 0 days.  
The new date for completion of all work will be Unchanged

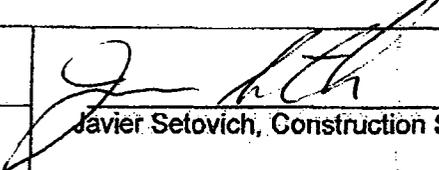
Contractor hereby acknowledges receipt and agreement. A signed copy shall be filed with the City of Peoria, Materials

Signature: [Redacted] Date: 1/12/09  
Typed Name and Title: Randy L. Gates, President  
Company Name: MGC Contractors, Inc.

4110 E. Elwood St. Phoenix AZ 85040  
Address City State Zip Code

Attested By:

Mary Jo Kief, City Clerk

 1/12/09  
Javier Setovich, Construction Superintendent

Athena Bonner, Contract Officer

Approved By: Herman F. Koebergen, Materials Manager

Approved as to Form: Stephen M. Kemp, City Attorney  
The above referenced Contract Amendment is hereby Executed  
\_\_\_\_\_ at Peoria, Arizona

Carl Swenson, City Manager

FR 020309  
CC Number

LCON03608C  
Contract Number

City Seal

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Official File



# CONTRACT AMENDMENT

## Change Order Summary Sheet

Materials Management  
Procurement  
8314 W. Cinnabar Ave.  
Peoria, AZ 85345  
Telephone: (623) 773-7115  
Fax: (623) 773-7118

Solicitation No.: P08-0010 Page 1 of 2

Amendment No.: Three (3) Date: January 8, 2009

Buyer: Athena Bonner

Prepared By: Athena Bonner

Project Description: Beardsley WRF Phase IIIA Expansion

**Intent:** This form is to be utilized to summarize the key changes on the attached change order(s). Please use common description to condense the essential or main points of the changes(s) and the dollars associated with each of those changes.

**This amendment adds Garaunteed Maximum Price (GMP) #2 to this project. All work is to be in accordance with the attached contract Exhibits A, B, C, D, E. Cost for all work included in this amendment is for the GMP of \$1,824,314.00.**

**All other terms and conditions remain unchanged.**

#### Attachments:

1. EXHIBIT A: SCOPE OF WORK (2 PAGES)
2. EXHIBIT B: SCHEDULE OF FEE PAYMENTS (1 PAGE)
3. EXHIBIT C: SCHEDULE (2 PAGES)
4. EXHIBIT D: GUARANTEED MAXIMUM PRICE AND FEE EXHIBIT (1 PAGE)
5. EXHIBIT E: SCHEDULE OF CONSTRUCTION ALLOWNACE ITEMS (1 PAGE)

**EXHIBIT A  
GMP #2**

**MGC Contractors, Inc.  
City of Peoria  
Beardsley Road WRF Phase III A Expansion  
MGC Contractors, Inc. Scope of Services  
January 8, 2009**

***PROJECT OVERVIEW***

MGC Contractors, Inc. (MGC) has contracted with City of Peoria to design and construct plant upgrades for Beardsley WRF and has retained Carollo Engineers to perform professional engineering services for the project.

GMP # 2 has been issued to construct the following based on preliminary scoping meeting on November 7, 2008 with City of Peoria, MGC Contractors and Carollo engineering:

- **Division 2 – Site Work and Yard Pipe.**  
Installation of 24" UV Bypass pipe from the South channel to the Effluent Pump Station running parallel to existing UV Channel with gate valves on the intake and free discharge downstream.  
Installation of 24" Effluent Pump Station Overflow Pipe from wet well to terminate at existing storm pond, Recharge basin No. 3 with Tide Flex Check Valve.  
Demolition of Existing Filter Basin by saw cutting the concrete floor and removal to excavate the base at required depth for the new filters.
- **Division 3 – Concrete.**  
Installation of reinforced concrete on filter base, perimeter wall extension and divider walls to fit up to (3) new filters.
- **Division 5 – Metals.**  
Temporary removal of existing metal deck over filters area and replacement.  
Installation of miscellaneous metals required such as railings and grating.
- **Division 9 – Painting.**  
Provide touch up and painting of reinstalled structure, exposed pipe and signs.
- **Division 11 – Equipment.**  
Furnish and Install (2) disk filters in reconstructed filter structure, furnish and install slide gates and valves for flow control and furnish a new spare pump for Effluent Pump Station to match existing capacity.
- **Division 13 – Specialties.**  
Provide installation and removal of a rental unit for temporary filtration matching the capacity of the filter out of service.  
Provide maintenance service for remaining Traveling Bridge Filters, including draining, cleaning, lubrication of moving parts and media reinstallation.

**EXHIBIT A**  
**GMP #2**

- **Division 15 – Mechanical.**  
Supply and install mechanical process pipe and pipe materials for the new filter units, and interconnections.  
Furnish and install new IMLR Pump Baffle adjacent to the IMLR Pump and the required draining for access.
  
- **Division 16 & 17 – Electrical & Instrumentation**  
This division includes the electrical upgrades and controls for the new filter units and the interaction for sequence of operation and remote control.

MGC Contractors, Inc is to provide start up and training assistance, O&M Manuals, punch list and redlines.

## BEARDSLEY WRF GMP #2

Division	Description	% of Total	Cost	Comments
<b>Project Number:</b> P08-0010				
<b>Contractor:</b> MGC Contractors Inc.				
<b>Date:</b> 08-Jan-09				
With 2 filters				
<b>Construction Indirect Costs Summary</b>				
00000	Division 0 - Bidding and Contract Requirements			
	Dust Control Permit	0.05%	\$1,000	
	Sales Tax	3.37%	\$61,427	
	Fee	6.98%	\$109,440	
	General Liability Insurance	0.95%	\$17,416	
	Builders Risk Insurance	0.23%	\$4,200	
	Bond	0.77%	\$14,000	
		0.00%		
00000	<b>Sub-Total Division 00000</b>	<b>11.4%</b>	<b>\$207,483</b>	
01000	Division 1 - General Requirements			
	Project Site Temporary Facilities	0.90%	\$16,500	
	Storage of Materials and Equipment	0.66%	\$12,100	
	Project Staff	7.26%	\$132,440	
	Construction Administration	7.00%	\$127,680	Carollo Engineers
01000	<b>Sub-Total Division 01000</b>	<b>15.8%</b>	<b>\$288,720</b>	
	<b>Sub-Total Indirect Costs</b>	<b>27.2%</b>	<b>\$496,203</b>	
02000	Division 2 - Site work & Yard Pipe			
	Install 24" UV Bypass Pipe	2.20%	\$40,128	From MGC Hard \$ estimate
	Install 24" Effluent Pump Station Overflow Pipe	1.20%	\$21,907	From MGC Hard \$ estimate
	Demo existing Filter Basin	3.64%	\$66,336	From MGC Hard \$ estimate
	<b>Sub-Total Division 02000</b>	<b>7.0%</b>	<b>\$128,370</b>	
03000	Division 3 - Concrete			
	Rebar Subcontractor	1.34%	\$24,503	Harris Arizona
	Ready Mix Concrete	1.04%	\$18,898	Cemex
	Concrete Work For Filters	3.36%	\$61,283	From MGC Hard \$ estimate
03000	<b>Sub-Total Division 03000</b>	<b>5.7%</b>	<b>\$104,684</b>	
05000	Division 5 - Metals			
	Misc. & Structural Metals	1.43%	\$26,000	SH Engineering
	Install metals from estimate	0.39%	\$7,185	From MGC Hard \$ estimate
05000	<b>Sub-Total Division 05000</b>	<b>1.8%</b>	<b>\$33,185</b>	
09000	Division 9 - Finishes			
09900	Painting	0.33%	\$6,000	Filter piping
09000	<b>Sub-Total Division 09000</b>	<b>0.3%</b>	<b>\$6,000</b>	
11000	Division 11 - Equipment			
11367	Furnish Disc Filters	29.17%	\$532,215	IES/Aqua Aerobics
11367	Install Disc Filters	2.80%	\$51,139	From MGC Hard \$ estimate
	Furnish Slide Gates & Valves	1.10%	\$20,000	From MGC Hard \$ estimate
	Install Gates & Valves	2.12%	\$38,610	From MGC Hard \$ estimate
	Furnish Spare Effluent Pump	1.68%	\$30,608	JCH/Flygt
11000	<b>Sub-Total Division 11000</b>	<b>36.9%</b>	<b>\$672,572</b>	
13000	Division 13 - Specialties			
	Rent Temporary Filter	3.92%	\$71,500	IES/Aqua Aerobics
	Setup and take down Filter	1.51%	\$27,484	From MGC Hard \$ estimate
	Clean & Tune-up Traveling Bridge Filters	0.34%	\$6,268	From MGC Hard \$ estimate
13000	<b>Sub-Total Division 13000</b>	<b>5.8%</b>	<b>\$105,251</b>	
15000	Division 15 - Mechanical			
	Mechanical Pipe Installation	1.86%	\$33,911	From MGC Hard \$ estimate
	Pipe Materials	5.62%	\$102,515	MGC estimate from separate spreadsheet
	Furnish & Install IMLR Pump Baffle	1.95%	\$35,624	From MGC Hard \$ estimate
15000	<b>Sub-Total Division 15000</b>	<b>9.4%</b>	<b>\$172,050</b>	
16 & 17	Division 16 & 17- Electrical & Instrumentation			
16 & 17	Electrical & Controls	5.48%	\$100,000	Filter Electrical
17	Programing Allowance	0.33%	\$6,000	
16 & 17	<b>Sub-Total Division 16000 &amp; 17000</b>	<b>5.8%</b>	<b>\$106,000</b>	
	<b>Sub-Total Direct Costs</b>	<b>72.8%</b>	<b>\$1,328,111</b>	
	<b>Overall Total</b>		<b>\$1,824,314</b>	

EXHIBIT "C"

Act ID	Description	Work Days	Early Start	Early Finish	2008			2009										
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
<b>DESIGN PHASE</b>																		
<b>PRE-DESIGN</b>																		
PBDC1010	Pre-Design Report (Draft)	41	29SEP08	26NOV08														
PBDC1020	Pre-Design Report (Final)	18	27NOV08	22DEC08														
PBDC1030	Master Plan Update	54	29SEP08	15DEC08														
<b>DESIGN PHASE</b>																		
PBDC1100	Filter Design	29	03NOV08	15DEC08														
PBDC1110	30 % Design	58	29SEP08	19DEC08														
PBDC1120	Cost Modeling	14	10DEC08	31DEC08														
PBDC1130	VE Session 1	0	07JAN09															
PBDC1140	60% Design	27	22DEC08	30JAN09														
PBDC1150	Cost Modeling	14	22JAN09	10FEB09														
PBDC1160	VE Session 2	0	17FEB09															
PBDC1170	90% Design	27	02FEB09	10MAR09														
PBDC1180	Cost Modeling	14	02MAR09	19MAR09														
PBDC1190	Final Plans & Specs	44	02MAR09	30APR09														
<b>PERMITTING</b>																		
<b>DESIGN PHASE</b>																		
PBDC1200	Filter to MCESD	20	19JAN09	13FEB09														
PBDC1210	Filter to Peoria Building & Safety	20	19JAN09	13FEB09														
PBDC1220	MCESD ATC	40	06APR09	01JUN09														
<b>PROCUREMENT</b>																		
<b>PROCUREMENT</b>																		
PBDC1300	Bid Filters	12	16OCT08	31OCT08														
PBDC1310	Issue GMP 2	8	17DEC08	30DEC08														
PBDC1320	Filter Submittal	30	03NOV08	16DEC08														
PBDC1330	GMP 2 to Council	0	03FEB09															
PBDC1340	Notice to Proceed on GMP 2	0	10FEB09															
PBDC1350	Filter Fabrication and Delivery	100	05JAN09	22MAY09														

Start date 29SEP08  
Finish date 02SEP09

Page number 1A

CITY OF PEORIA  
BEARDSLEY WATER RECLAMATION FACILITY  
MGC CONTRACTORS, INC AND CAROLLO ENGINEERS



- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point



**EXHIBIT D**

**Design Phase (Applicable to Design Build Projects)**

Tag	Scope Item	%	Calculation	Amount
D1	A&E Fees (exclusive for construction administration)			\$ 723,830.00
D2	Reimbursable Expense Estimate (If not a lump sum in the A&E Fees)			\$ 35,000.00
D3	Fire Protection Design Allowance			\$ 0.00
D4	Fire Alarm Design Allowance			\$ 0.00
D5	Other Specialty Design Allowance			\$ 0.00
D6	Contractor's Preconstruction Services			\$ 105,628.00
D7	Contractor's Professional Liability Insurance			\$ 3,000.00
D8	Other Recharge Basin Modifications Preconstruction & Design			\$ 92,770.00
D9	Total Awarded in Design Phase			\$
D10	A&E Fees (Construction Administration)			\$ 127,680.00
D11	Total Awarded in Construction Phase		D10+C14	\$ 1,824,314.00

**Construction Phase (Design Build or CM @Risk)**

Tag	Scope Item	%	Calculation	Amount	Resultant % of GMP (S/C14)
C1	General Conditions (Specifically Site Personnel Expense, Including Vehicles)			\$ 132,440.00	(C1+C2) / C14
C2	Division 1 Requirements			\$ 29,800.00	9.55%
C3	Division 2-16 Subcontract Costs			\$ 1,328,109.00	
C4	Contractor's Contingency Held Within the GMP			\$ 1.00	
C5	Owner's Contingency Held Within the GMP			\$ 1.00	
C6	Subtotal Direct Cost		C1+C2+C3+C4+C5	\$ 1,490,151.00	
C7	Builder's Risk Insurance	0.28%	% x C6	\$ 4,200.00	
C8	General Liability Insurance	1.17%	% x C6	\$ 17,416.00	
C9	Professional Liability Insurance (Not Applicable - Full Premium to be Paid in Design Phase)			\$ 0.00	
C10	Subcontractor Default Insurance (As Applicable)	0.00%	% x (C3+C4+C5)	\$ 0.00	
C11	Payment & Performance Bonds	0.94%	% x C6	\$ 14,000.00	
C12	Contractor's Fee	7.17%	% x (C6+C7+C8+C10+C11)	\$ 109,440.00	
C13	Sales Tax	3.37%	% x (C6+C7+C8+C10+C11+C12)	\$ 61,427.00	
C14	Guaranteed Maximum Price (GMP)		C6+C7+C8+C10+C11+C12+C13	\$ 1,696,634.00	

MGC CONTRACTORS, INC.  
 Beardsley GMP 2 EXHIBIT E  
 General Expenses Breakdown

Description	Quantity	UM	Cost per Unit	Labor Base	Equipment Ownership	Equipment Rent	Material	Subcontract	Total
Project Manager	18	WK	\$ 1,800	\$ 32,400					\$ 32,400
Project Supt	31	WK	\$ 1,700	\$ 52,700					\$ 52,700
Project Engr	22	WK	\$ 1,500	\$ 33,000					\$ 33,000
Project Admin	4	WK	\$ 1,000	\$ 4,000					\$ 4,000
Pickup Trucks	18	MO	\$ 600		\$ 10,800				\$ 10,800
Job Fence	500	LF	\$ 2.50				\$ 1,250		\$ 1,250
J-Jon (ea)	6	MO	\$ 150					\$ 900	\$ 900
Communications	2000	LS	\$ 1					\$ 2,000	\$ 2,000
Const Water	1500	LS	\$ 1				\$ 1,500		\$ 1,500
Temp Electric	1000	LS	\$ 1					\$ 1,000	\$ 1,000
Survey	3000	LS	\$ 1					\$ 3,000	\$ 3,000
Testing	1	LS	\$ 1						By COP
Equipment Transport	6000	LS	\$ 1					\$ 6,000	\$ 6,000
Bldrs Risk Insurance	1	LS	\$ 4,290					\$ 4,290	\$ 4,290
Dust Permit	1000	LS	\$ 1					\$ 1,000	\$ 1,000
Contractor Fld Off	6	MO	\$ 500					\$ 3,000	\$ 3,000
Contr. F.O. Computers	4	MO	\$ 350				\$ 1,400		\$ 1,400
Carollo Admin/testing	126680	LS	\$ 1					\$ 126,680	\$ 126,680
Dust Control Cost	2000	LS	\$ 1				\$ 2,000		\$ 2,000
Jobsite Expense	1000	LS	\$ 1					\$ 1,000	\$ 1,000
Misc Dump Fees	1000	LS	\$ 2					\$ 2,000	\$ 2,000
Misc Offsite Hauling	1000	LS	\$ 3					\$ 3,000	\$ 3,000
Ice & Water	1000	LS	\$ 1					\$ 1,000	\$ 1,000
				\$ 122,100	\$ 10,800	\$ -	\$ 6,150	\$ 154,870	\$ 293,920