CITY OF PEORIA, ARIZONA CC: 14C

COUNCIL COMMUNICATIONS Amend No._____

Date prepared: August 1, 2008 **Council Meeting Date:** August 26, 2008

TO: Carl Swenson, City Manager

FROM: Stephen L. Bontrager, Utilities Director BB for

THROUGH: Brian Biesemeyer, Deputy Utilities Director BB

PREPARED BY: Javier Setovich, Construction Superintendent JS

SUBJECT: Approve Change Order No. 1 to MGC Construction for the first phase of construction services for the rehabilitation of Recharge Basin 13.

RECOMMENDATION:

Discussion and possible action to approve Change Order No. 1 for the first phase of construction for the rehabilitation of Recharge Basin 13 to MGC Construction for the Guaranteed Maximum Price (GMP) of $139,710. Capital Improvement Project UT00196 associated with the Beardsley Water Reclamation Facility Expansion Phase IIIA (Solicitation No. P08-0010).

SUMMARY:

On May 6, 2008, Council approved the award of the design phase of a design/build contract to MGC Construction for improvements to the Beardsley Water Reclamation Facility Phase IIIA Expansion and the rehabilitation of Recharge Basin 13 (Solicitation No. P08-0010).

Initial design has identified a phased solution for the rehabilitation of Recharge Basin 13. This solution entails the excavation of trenches which will allow for the replacement of impermeable soils increasing the percolation rate of the basin. This approach allows the project team to evaluate the enhanced performance of the basin at each phase and the need for further improvements. The City of Peoria has worked with Arizona Department of Environmental Quality (ADEQ) to create this phased approach (see Exhibit B). This plan also addresses the need for compliance testing of Nitrates. The need for additional design and construction will be evaluated after this phase of construction is completed and the

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CITY CLERK USE ONLY:
- o Consent Agenda
- o Carry Over to Date:_____
- o Approved
- o Unfinished Business (Date heard previous:_____)
- o New Business

ORD. #_____, RES. #
LCON# 036078 LIC. #
Action Date:

REV. 10/99

basin's performance is tested.

FISCAL NOTE:

Change Order No. 1 with MGC Construction is for the Guaranteed Maximum Price (GMP) of $139,710; costs are identified in exhibit A as GMP-C. Payment will be made from Wastewater Utility account 2510-2630-543003-CIPWW-UT00196.

ATTACHMENT (S):

Exhibit "A"- Recharge Basin Proposal
Exhibit "B"- Beardsley Rd WRF Proposed Plan of Action

EXHIBIT A

MGC CONTRACTORS, INC.

July 9, 2008

City of Peoria
8401 W. Monroe St.
Peoria, AZ 85345

ATTN: Javier Setovich

RE: Beardsley Rd. WRF- Recharge Basin No. 13 Repair

Dear Javier:

After closely examining the conditions present at Recharge Basin No. 13, MGC has the following proposal based on information provided by the Geotechnical Engineer for repair of the basin. The prices shown below include bond and sales tax. Below are the options we discussed to repair the basin.

GMP-A Total: $ 60,347.00

This proposal includes pressure coring 20 each 5" diameter holes 15 to 30 feet deep for sampling by the City and the excavation of 2,640 lf of trenches approximately 10 feet deep 4 feet wide for logging and determination of the soil below the bottom of the basin. Backfilling, export and import of material is excluded.

GMP-B Total: $ 86,600.00

This proposal includes pressure coring 20 each 5" diameter holes 15 to 30 feet deep for sampling by the City and the excavation of 2,640 lf of trenches approximately 10 feet deep 4 feet wide for logging and determination of the soil below the bottom of the basin. Also included is the backfill of the trenches with the excavated material from the trenches. Export and import of extra material is excluded.

MGC CONTRACTORS, INC.

GMP-C Total: $ 139,710.00

This proposal includes pressure coring 20 each 5" diameter holes 15 to 30 feet deep for sampling by the City and the excavation of 2,640 lf of trenches approximately 10 feet deep 4 feet wide for logging and determination of the soil below the bottom of the basin. Also included is the screening, and export of 1,400 cubic yards impermeable material and the import of 1,800 Tons of permeable material and the blending and backfill of the trenches.

Attached are unit price breakdowns of the above prices. If the actual conditions vary from the quantities listed the total amount will be adjusted by the unit prices.

The amounts above include bonds, sales tax, Maricopa County dust control permit, dust control using plant effluent water, supervision, and soil testing for trench excavations. The City of Peoria will provide soil testing for core samples.

We will further assist the City with testing and measurement of the recharge basin as required to determine the effectiveness of the modifications.

If you require further information, or have any questions or comments, please do not hesitate to call.

Sincerely,

Randy L. Gates
Preconstruction Services Manager

4110 E. Elwood St. Phoenix, Arizona 85040 • P. O. Box 61748 Phoenix, AZ 85082-1748
Telephone (602) 437-5000 Fax (602) 470-4000
License Numbers ROC 069949 & ROC071441

Proposal

A

Job Description: Beardsley Basin 13

Proposal Date: 07/09/2008
Time: 01:00:00A

From: MGC CONTRACTORS, INC.

Bid Item Number	Bid Item Description	Quantity	UM	Unit Price	Total Price
15	EXCAVATE TRENCHES	2,640.0000	LF	7.50	19,800.00
20	SCREEN & BACKFILL TRENCHES	4,700.0000	CY	0.00	0.00
25	PERMEABLE BACKFILL	1,800.0000	TN	0.00	0.00
30	HAUL OFF EXCESS	1,400.0000	CY	0.00	0.00
35	CORE TEST HOLES	20.0000	EA	1,800.00	36,000.00
	TOTAL DIRECT COST			Subtotal Running Total	55,800.00 55,800.00
40	BOND	1.0000	LS	726.00	726.00
50	SALES TAX	1.0000	LS	3,821.00	3,821.00
	TOTAL INDIRECT COST			Subtotal Running Total	4,547.00 60,347.00
				GRAND TOTAL	60,347.00

Proposal

B

Job Description: Beardsley Basin 13

Proposal Date: 07/09/2008
Time: 01:00:00A

From: MGC CONTRACTORS, INC.

Bid Item Number	Bid Item Description	Quantity	UM	Unit Price	Total Price
15	EXCAVATE TRENCHES	2,640.0000	LF	7.50	19,800.00
20	SCREEN & BACKFILL TRENCHES	4,700.0000	CY	5.40	25,380.00
25	PERMEABLE BACKFILL	1,800.0000	TN	0.00	0.00
30	HAUL OFF EXCESS	1,400.0000	CY	0.00	0.00
35	CORE TEST HOLES	20.0000	EA	1,800.00	36,000.00
	TOTAL DIRECT COST			Subtotal Running Total	81,180.00 81,180.00
40	BOND	1.0000	LS	865.00	865.00
50	SALES TAX	1.0000	LS	4,555.00	4,555.00
	TOTAL INDIRECT COST			Subtotal Running Total	5,420.00 86,600.00
				GRAND TOTAL	86,600.00

Proposal

C

Job Description: Beardsley Basin 13

Proposal Date: 07/03/2008
Time: 01:00:00A

From: MGC CONTRACTORS, INC.

Bid Item Number	Bid Item Description	Quantity	UM	Unit Price	Total Price
15	EXCAVATE TRENCHES	2,640.0000	LF	7.50	19,800.00
20	SCREEN & BACKFILL TRENCHES	4,700.0000	CY	9.00	42,300.00
25	PERMEABLE BACKFILL	1,800.0000	TN	11.80	21,240.00
30	HAUL OFF EXCESS	1,400.0000	CY	8.30	11,620.00
35	CORE TEST HOLES	20.0000	EA	1,800.00	36,000.00
	TOTAL DIRECT COST			Subtotal Running Total	130,960.00 130,960.00
40	BOND	1.0000	LS	1,397.00	1,397.00
50	SALES TAX	1.0000	LS	7,353.00	7,353.00
	TOTAL INDIRECT COST			Subtotal Running Total	8,750.00 139,710.00
				GRAND TOTAL	139,710.00

EXHIBIT B

City of Peoria
Utilities
8401 West Monroe Street, Peoria, Arizona 85345
Ph: 623-773-7286 Fax: 623-773-7291

June 11, 2008

Cynthia Campbell
ADEQ Water Quality Compliance Section Manager
1110 W Washington St.
Phoenix, AZ 85007

RE: Beardsley Road WRF APP P-100091 Proposed plan of action for Nitrate mitigation.

Ms. Campbell,

This letter is being prepared at the request of ADEQ personnel as a follow-up and proposal of a plan of action regarding the Total Nitrogen and Nitrate-Nitrite as N excursion event that was discovered during routine sampling performed on December 10, 2007, at monitoring well 3 at the Beardsley Road WRF (BWRF) 19980 North 111th Avenue, Peoria, AZ, 85382.

In an effort to determine the source of the elevated Total Nitrogen and Nitrate-Nitrite as N levels, the City has continued its current course of increased sampling of the Monitoring Well(s) and plant effluent.

Sampling data suggests that increased Effluent filtration into the aquifer may reduce Nitrate levels. As per recommendations set forth at the meeting of May 6, 2008, between the City, ADEQ and ADWR staff, the following Plan of Action is proposed:

Trenching and sampling of Basin 13

It is proposed that trenching and excavation be undertaken in Basin 13 with the objective of conducting Nitrate-Nitrite as N sampling as well as increasing percolation rates by penetrating the existing impermeable layer of substrate lying approximately 7 feet below the surface. The City intends to excavate trenches and back fill with a permeable material without affecting the size of the basin's total wetted area. Please see attached figure 1 for trench locations. Four (4) sampling points in basin thirteen are shown in figure 2, (sample points 1 through 4).

Core Sampling

In an effort to determine the extent of potential Nitrate-Nitrite as N contamination, it is proposed that sixteen (16) borings, each twenty (20) feet in depth, in addition to the Basin 13 samples mentioned above, are performed throughout the plant. Testing will be done at the surface and every 5 feet down to a depth of 20 feet (see attached figure 2 for sample locations 5 through 20).

Basin 13 Recharge Plan

After completion of the above activities, it is proposed that recharge of Basin 13 commence according to the following schedule:

Recharge for 7 days then allow 7 days of rest.
Recharge for 14 days then allow 7 days of rest.
Recharge for 30 days then allow 7 days of rest.

This will allow the City to determine the effectiveness of the trenching and excavating activities listed above. Weekly sampling at Monitoring Well 3 for Nitrate-Nitrite as N will continue and an updated report including information gathered during the investigation will be provided to ADEQ in a timeframe to be determined by City, ADEQ and ADWR staff members.

In addition, the City of Peoria will monitor piezometers located on the perimeter of the basin. Visual inspections of the adjacent Arizona American Water property will also be conducted. Coordination with Arizona American Water will be in place before commencing Basin 13 operations.

The City of Peoria is committed to operating its facilities in a manner that meets all aspects of our ADEQ permit. If you have any questions or require any additional information, please do not hesitate to contact Cynthia Bain at (623) 773- 0745 (cynthia.bain@peoriaaz.gov) or myself at (623) 773-7181 (brian.biesemeyer@peoriaaz.gov).

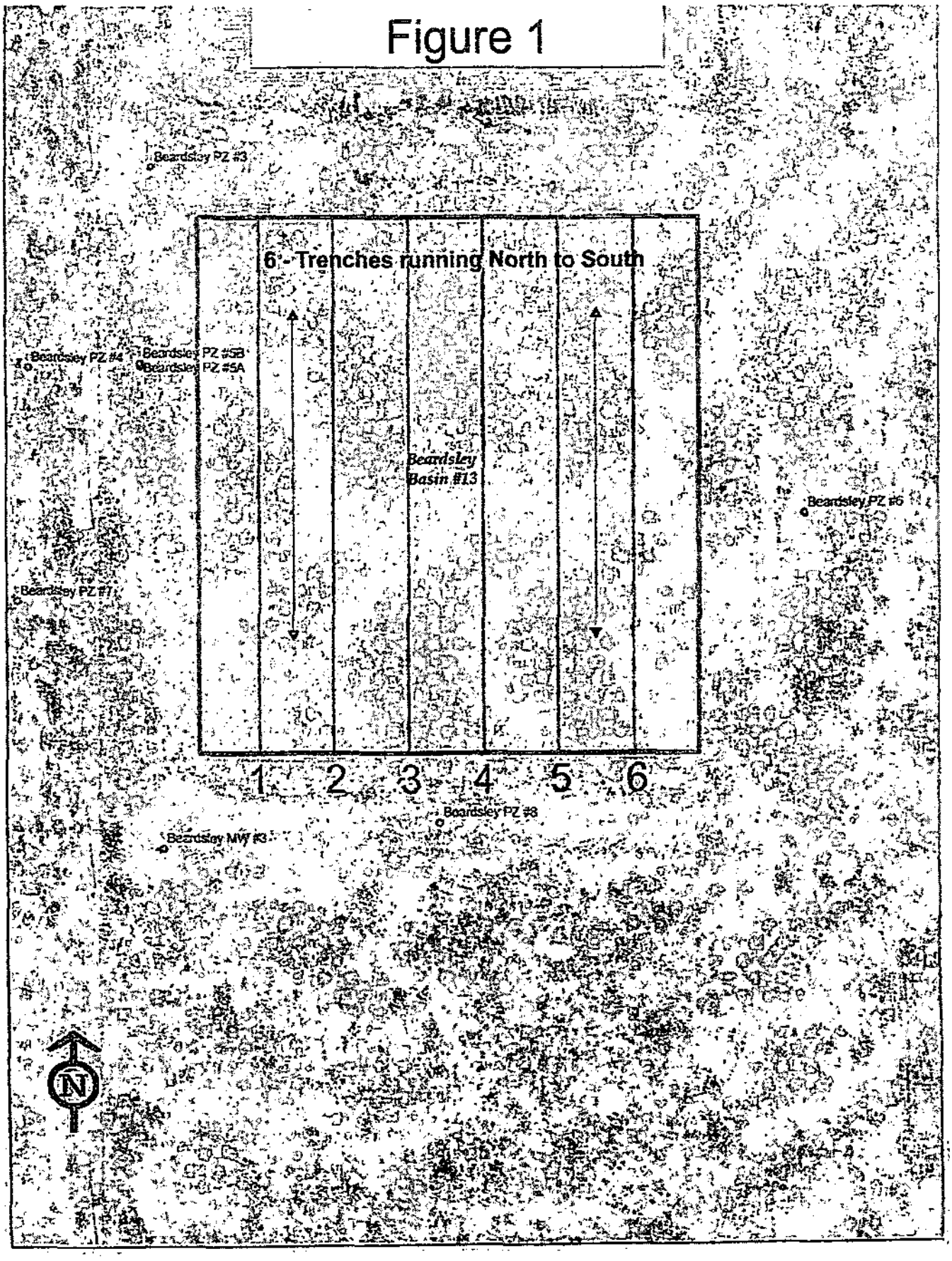
Sincerely,

Brian K. Biesemeyer, P.E.
Deputy Utilities Director

Enc.

Cc: John Gibbons, ADEQ
Gary Harmon, ADEQ
Mason Bolitho, ADEQ
Maribeth Greenslade, ADEQ
Asif Majeed, ADEQ
Dale Bodiya, MCESD
William Kenning, MCESD
Stella Murillo, ADWR
John Bodenchuck, ADWR
Stu Peckman, ADWR
Tracey Carpenter, ADWR
Ryan Hort, ADWR
Drew Swieczkovoski, ADWR
Stephen Bontrager, City of Peoria
Alan Dulaney, City of Peoria
Linda Bezy-Botma, City of Peoria
Cynthia Bain, City of Peoria
Leisha Williams, City of Peoria
Javier Setovich, City of Peoria
File

Figure 1


Beardsley PZ #3
6 - Trenches running North to South
Beardsley PZ #4
Beardsley PZ #5B
Beardsley PZ #5A
Beardsley Basin #13
Beardsley PZ #6
Beardsley PZ #7
1
2
3
4
5
6
Beardsley PZ #8
Beardsley MW #3
N

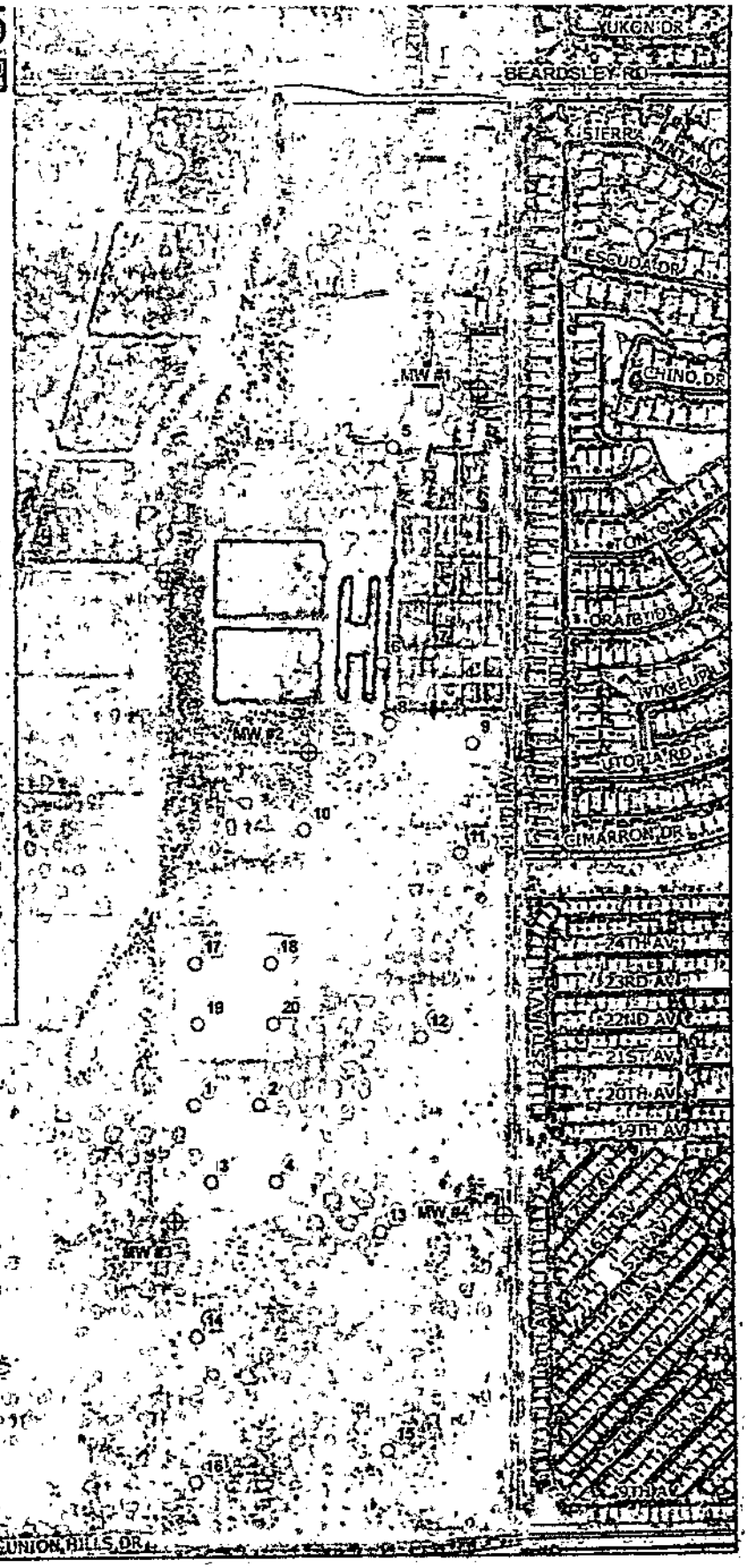
City of Peoria
Utilities Department
Engineering Division
Geographic Information System

Figure 2

Bore Sites for Nitrate Mitigation

Bore Site Coordinates

Id	Easting	Northing
1	582589.70	966749.80
2	582834.98	966748.35
3	582650.65	966468.25
4	582895.91	966468.25
5	583340.83	969133.08
6	583298.83	968349.06
7	583473.50	968387.31
8	583322.86	968130.69
9	583627.33	968061.49
10	583004.56	967743.18
11	583582.84	967658.31
12	583437.04	966994.40
13	583280.83	966283.64
14	582590.89	965908.72
15	583299.05	965489.55
16	582583.08	965377.60
17	582593.93	967261.53
18	582879.98	967261.53
19	582602.35	967042.79
20	582888.39	967042.79



CONTRACT AMENDMENT
Change Order

Solicitation No.: P08-0010 Page 1 of 2

Amendment No.: One (1) Date: August 6, 2008

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

Project No.: UT00124/UT00196 Agreement Date: May 10, 2008

Project Description: Beardsley 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:	$881,258.00
Total of previous change orders:	0
Original contract price plus previous change order(s):	$881,258.00
The contract price due to this change order will be **increased**/decreased by:	$139,710.00
The new contract price including this change order will be:	$1,020,968.00

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 Management Division

8/8/08	Randy L. Gates General Manager	MGC Contractors, Inc.
Date	Typed Name and Title	Company Name

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

Attested By:

Mary Jo Kief, City Clerk

Brian Biesemeyer, Deputy Utilities Director

Athena Bonner, Contract Officer

14C 052608
CC Number

Approved By: Herman F. Koebergen, Materials Manager

LCON03608A
Contract Number

Approved as to Form: Stephen M. Kemp, City Attorney

The above referenced Contract Amendment is hereby Executed

_____, _____, at Peoria, Arizona

City Seal

Official File

Carl Swenson, City Manager

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