CITY OF PEORIA, ARIZONA
COUNCIL COMMUNICATION

CC: 17C
Amend No. _____

Date Prepared: June 2, 2009 **Council Meeting Date:** July 7, 2009

TO: Carl Swenson, City Manager

THROUGH: Susan K. Thorpe, Deputy City Manager SKT

FROM: William Mattingly, Public Works-Utilities Director WJM

PREPARED BY: Javier Setovich, Construction Superintendent JK

SUBJECT: Contract Amendment No. 5 to MGC Contractors Inc. for various improvements at the Beardsley Water Reclamation Facility

RECOMMENDATION:

Discussion and possible action to approve Contract Amendment No. 5 with MGC Contractors Inc. for the Guaranteed Maximum Price (GMP) of $3,033,588 for improvements to the Beardsley Water Reclamation Facility. Beardsley Water Reclamation Facility (Solicitation No. P08-0010), Capital Improvement Project UT00124.

SUMMARY:

On May 6, 2008, Council approved the award of a design/build contract to MGC Contractors Inc. (MGC) for improvements to the Beardsley Water Reclamation Facility (WRF) and the rehabilitation of recharge basin No. 13. This design/build team is led by MGC and was competitively selected. The project was planned to be completed in phases with a separate approval for each phase as the design is completed and the costs are determined. A Guaranteed Maximum Price is negotiated for each construction phase and it is identified as a contract amendment.

Amendment No. 5 is for Phase 2 of various planned improvements needed at the Beardsley WRF to ensure the continued reliability and redundancy of the facility. The design for these improvements is near completion and MGC has provided a GMP for the work in the amount of $3,033,588. This amendment will fund the following major improvements:

- Improvements to recharge basins No. 12 and 13.
- Rehabilitation of the existing three clarifiers.
- Addition of new process control and monitoring equipment to allow the plant treatment processes to be optimized.

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# 03608E **LIC. #**
Action Date:

REV. 10/99

- Purchase of backup parts for critical equipment to ensure the plant has redundant units onsite in case of emergencies.
- Addition of variable frequency drives to the effluent pumps to reduce operating cost and ensure the reliability of the pumps.
- Several safety upgrades throughout the plant.

Amendment No. 1 was approved to fund initial improvements to recharge basin No. 13. These improvements entailed the construction of infiltration trenches.
Amendment No. 2 was an administrative correction to adjust the amount of Amendment No. 1 by $78,970 to match the Council approved contract. An outdated proposal was used when drafting the documents for Amendment No. 1. Amendment No. 3 was for Plant Improvements Phase 1. Subsequent to the award of Amendment No. 3, City staff and the Design/Build team decreased the cost of the improvements through Value Engineering. This effort eliminated the need for new Disk filters initially identified during design. Rehabilitation of the existing filters became a more cost effective solution. Amendment No. 4 was an administrative amendment to reduce the amount of GMP No. 3 by $1,225,359 to account for this reduced scope. These savings are proposed to be applied to other plant enhancements which were previously identified but not funded. The inclusion of these items will enhance operational reliability. Amendment No. 5 is the final phase of construction.

The table below summaries the project costs.

Project Phase	Phase	Date Issued	Funding
Original Award	Design	May-2008	$960,228
Amendment 1	Rehabilitation of Basin 13	Aug-2008	$139,710
Amendment 2	Administrative Correction	Sep-2008	$0.00
Amendment 3	Plant Improvements Phase 1	Feb-2009	$1,824,314
Amendment 4	Value Engineering (Deductive C.O.)	Apr-2009	($1,225,359)
Amendment 5	Plant Improvements Phase 2	Jul-2009	$3,033,588
		Total Project Costs	$4,732,481
		Available Budget	**$4,783,432**

FISCAL NOTE:

Payment in the amount of $3,033,588 will be made from Proposed Revenue Bonds account 2454-2574-543003-CIPWW-UT00124.

ATTACHMENT(S):

A- MGC Contractors Inc. Proposal
B- Project Schedule

Attachment A
Amendment 5

MGC CONTRACTORS, INC.

Engineers...Working Wonders With Water

City of Peoria Beardsley WRF

Date: 6/9/09 **Prepared by: MGC Contractors**

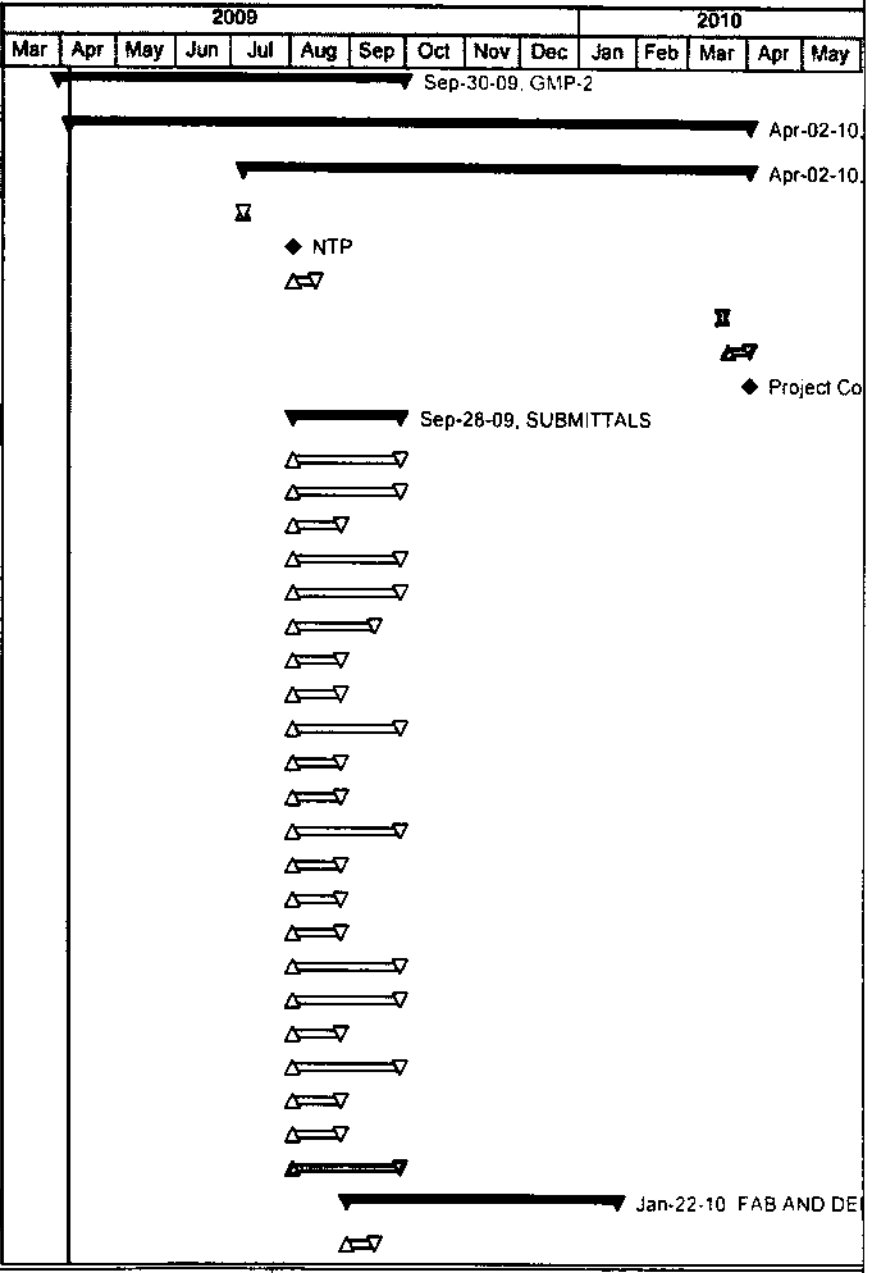
Item No.	Description		Total Price	
Amendment # 5 Electrical and Instrument & Controls (I&C)				
3,4,5	EFFLUENT PCC-C BUILDING EXTENSION & VFD'S	$	489,988	X
7	POWER BLEACH SYSTEM FROM OPS BUILDING	$	28,000	X
9	REPLACE PLC's 1,2,3, AND 4	$	139,000	X
13	ELECTRICAL AT NANCY ASH PUMP STATION	$	30,000	X
11	PRESSURE TRANSDUCER ON MAIN AIR HEADER	$	8,000	X
12	COMM CABLE FOR BLOWERS	$	30,000	X
20	INFLUENT PUMP STATION VFD'S AND INSTRUMENTATION	$	275,000	X
Amendment # 5 Process Improvement				
1	INFLUENT FLOW METER	$	160,000	X
10	EFFLUENT CHLORINE ANALYZER	$	11,000	X
15	FILTER BACKWASH FLOW METER	$	99,000	X
16	SPARE EFFLUENT PUMP	$	43,000	X
17	RECHARGE BASIN 12 & 13 REPAIR	$	620,000	X
18	REHAB CLARIFIERS 1 THRU 3	$	130,000	X
19	TURBIDITY METERS ON EACH FILTER EFFLUENT	$	51,000	X
24	REHAB FILTERS 2 & 3	$	209,000	X
14	MOTOR OPERATORS FOR FILTER INLET GATES	$	130,000	X
25	REDUNDANT ODOR SCRUBBER (BIOFILTER)	$	485,000	
26	IMPROVEMENTS TO RAS/WAS PS	$	186,000	X
28	AERATION BASIN GATE & DIFFUSER ALLOWANCE	$	50,000	X
30	ODOR CONTROL IMPROVEMENT ALLOWANCE	$	150,000	X
50	OWNER CONTINGENCY	$	60,000	X
Amendment # 5 Safety Improvements				
2	HANDRAIL @ AERATION BASIN	$	43,000	X
8	RAISE GRADE AT ELECTRICAL MANHOLES	$	5,600	X
21	JIB CRANE FOR IMLR PUMPS	$	63,000	X
22	EFFLUENT PUMP CRANE & STRUCTURE	$	-	X
23	INFLUENT PUMP STATION CRANE	$	23,000	X
27	DUCT FOUL AIR TO BLOWER INLET	$	450,000	

Amendment #5 - TOTAL (Only Items marked "X" are included in Total) **$ 3,033,588**

Attachment B

CITY OF PEORIA

Activity Name	Original Duration	Start	Finish
GMP-2	126	Mar-31-09 A	Sep-30-09
GMP3	254	Apr-06-09	Apr-02-10
GENERAL CONDITIONS	[illegible]	[illegible]	[illegible]
Council Approval	1	Jul-07-09	Jul-07-09*
NTP	0	Aug-03-09*	
Mobilization	10	Aug-03-09	Aug-14-09
Substantial Completion	1	Mar-19-10	Mar-19-10
DeMobilization	10	Mar-22-10	Apr-02-10
Project Complete	0		Apr-02-10*
SUBMITTALS	[illegible]	[illegible]	[illegible]
Effluent Pump VFD	40	Aug-03-09	Sep-28-09
PCC BLDG Expansion Materials	40	Aug-03-09	Sep-28-09
Electrical Material	20	Aug-03-09	Aug-28-09
PLC 1,2,3 & 4	40	Aug-03-09	Sep-28-09
Control Panel for NA Pump Station	40	Aug-03-09	Sep-28-09
Pressure Transmitter	30	Aug-03-09	Sep-14-09
Blower Communication Cables I/O pt	20	Aug-03-09	Aug-28-09
Blower Ethernet Switch and Com.	20	Aug-03-09	Aug-28-09
Influent P.S. VFD's and Instrumentation	40	Aug-03-09	Sep-28-09
Influent Flow Meter	20	Aug-03-09	Aug-28-09
Backwash Flow Meter	20	Aug-03-09	Aug-28-09
Spare Effluent Pump	40	Aug-03-09	Sep-28-09
Basin Mixing Techniques	20	Aug-03-09	Aug-28-09
Paint and Coating Clarifier	20	Aug-03-09	Aug-28-09
Turbidity Meters	20	Aug-03-09	Aug-28-09
Influent Gate Motor Operator	40	Aug-03-09	Sep-28-09
Actuator Plug Valve	40	Aug-03-09	Sep-28-09
TSS Monitoring Probe	20	Aug-03-09	Aug-28-09
Handrail	40	Aug-03-09	Sep-28-09
Jib Crane	20	Aug-03-09	Aug-28-09
Gantry Crane	20	Aug-03-09	Aug-28-09
New Atkinson Building	40	Aug-03-09	Sep-28-09
FAB AND DELIVER	[illegible]	[illegible]	[illegible]
Electrical Material	10	Aug-31-09	Sep-14-09



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

MGC CONTRACTORS, INC.

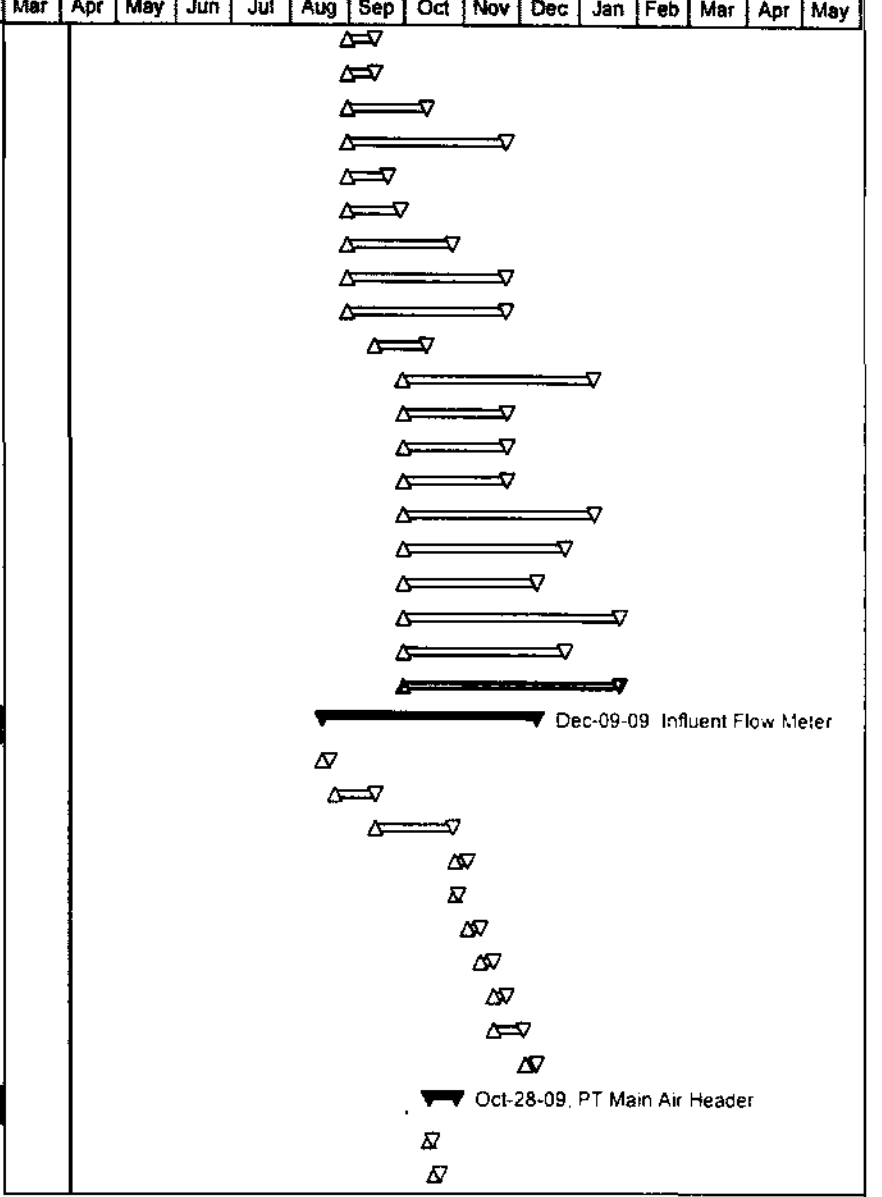
BEARDSLEY WATER RECLAMATION FACILTIY

GMP #2 and #3

Attachment B

CITY OF PEORIA

Activity Name	Original Duration	Start	Finish
Blower Communication Cables	10	Aug-31-09	Sep-14-09
Blower Ethernet Switch and Com.	10	Aug-31-09	Sep-14-09
Influent Flow Meter	30	Aug-31-09	Oct-12-09
Backwash Flow Meter	60	Aug-31-09	Nov-23-09
Paint and Coating Clarifier	15	Aug-31-09	Sep-21-09
Turbidity Meters	20	Aug-31-09	Sep-28-09
TSS Monitoring Probe	40	Aug-31-09	Oct-26-09
Jib Crane	60	Aug-31-09	Nov-23-09
Gantry Crane	60	Aug-31-09	Nov-23-09
Pressure Transmitter	20	Sep-15-09	Oct-12-09
Effluent Pump VFD	70	Sep-29-09	Jan-08-10
PCC BLDG Expansion Materials	40	Sep-29-09	Nov-23-09
PLC 1,2,3 & 4	40	Sep-29-09	Nov-23-09
Control Panel for NA Pump Station	40	Sep-29-09	Nov-23-09
Influent P.S. VFD's and Instrumentation	70	Sep-29-09	Jan-08-10
Spare Effluent Pump	60	Sep-29-09	Dec-23-09
Influent Gate Motor Operator	50	Sep-29-09	Dec-09-09
Actuator Plug Valve	80	Sep-29-09	Jan-22-10
Handrail	60	Sep-29-09	Dec-23-09
Atkinson Building for Influent Pump VFD's	80	Sep-29-09	Jan-22-10
Influent Flow Meter	[illegible]	[illegible]	[illegible]
Remove Bock Wall	5	Aug-17-09	Aug-21-09
Excavate F.M. Vault, Fine Grade	15	Aug-24-09	Sep-14-09
FPS Floor Slab, Walls, Deck	30	Sep-15-09	Oct-26-09
Backfill	5	Oct-27-09	Nov-02-09
Concrete Infill	3	Oct-27-09	Oct-29-09
Install Conduit to HW Building	5	Nov-03-09	Nov-09-09
Pull Wire and Terminate	5	Nov-10-09	Nov-16-09
Remove Pipe Install F.M.	5	Nov-17-09	Nov-23-09
Replace Blockwall & Fine Grade	10	Nov-17-09	Dec-02-09
Startup and Test Influent Flow Meter.	5	Dec-03-09	Dec-09-09
Main Air Header	[illegible]	[illegible]	[illegible]
Remove Insulation Install New Tap	3	Oct-13-09	Oct-15-09
Install and Wire Instrument	2	Oct-16-09	Oct-19-09



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Remaining Work
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MGC CONTRACTORS, INC

Engineers

BEARDSLEY WATER RECLAMATION FACILTIY

GMP #2 and #3

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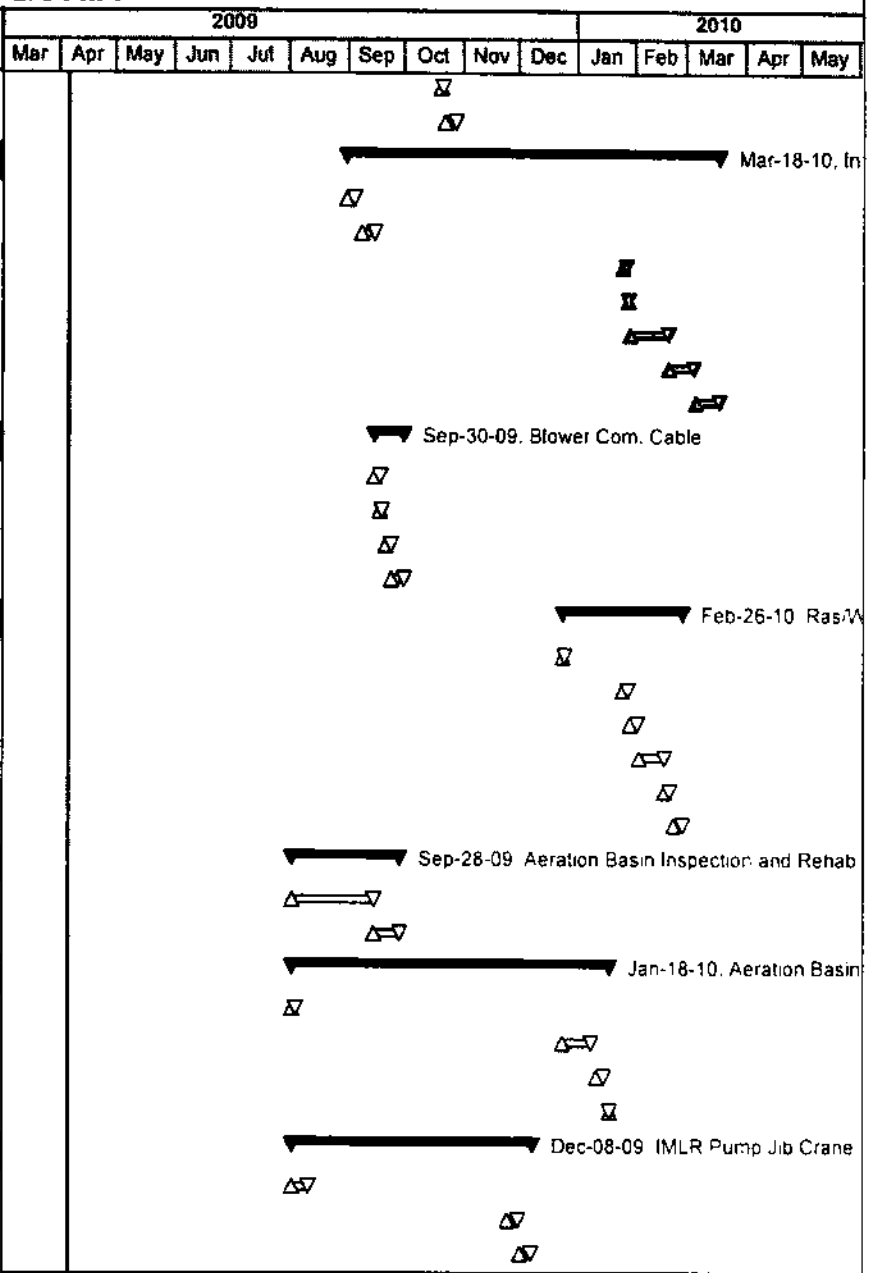
CITY OF PEORIA

Activity Name	Original Duration	Start	Finish
Peoria Programming (Additional I/O?)	2	Oct-20-09	Oct-21-09
Startup and Test New PT	5	Oct-22-09	Oct-28-09
[illegible]		[illegible]	[illegible]
Install Underground Electrical	5	Aug-31-09	Sep-04-09
Building Foundation	5	Sep-08-09	Sep-14-09
Set Atkinson Building	3	Jan-25-10	Jan-27-10
Install new VFD's	1	Jan-28-10	Jan-28-10
Pull Wire and Terminate	15	Jan-29-10	Feb-18-10
Peoria Programming	10	Feb-19-10	Mar-04-10
Startup and Test Influent PS VFD's and Inst.	10	Mar-05-10	Mar-18-10
[illegible]		[illegible]	[illegible]
Install New Com. Wire	3	Sep-15-09	Sep-17-09
Install Ethernet Switch (QTY 1) Comm. Mod. (Q	1	Sep-18-09	Sep-18-09
Peoria Programming	3	Sep-21-09	Sep-23-09
Startup and Test New Blower Com.. Cable	5	Sep-24-09	Sep-30-09
[illegible]		[illegible]	[illegible]
New Pump	1	Dec-24-09	Dec-24-09
Install Motorized Valve WAS Line	4	Jan-25-10	Jan-28-10
Install TSS Probe Wet Well	3	Jan-29-10	Feb-02-10
Install Electrical Controls	10	Feb-03-10	Feb-16-10
Peoria Programming	3	Feb-17-10	Feb-19-10
Startup and Test RAS/Was Improvements	5	Feb-22-10	Feb-26-10
[illegible]		[illegible]	[illegible]
Inspect and Repair Sanitaire Equipment	30	Aug-03-09	Sep-14-09
Startup and Test Aeration Rehab	10	Sep-15-09	Sep-28-09
[illegible]		[illegible]	[illegible]
Drill Holes	2	Aug-03-09	Aug-04-09
Install Handrail	10	Dec-24-09	Jan-08-10
FPS Stairs	5	Jan-11-10	Jan-15-10
Building Safety Inspection	1	Jan-18-10	Jan-18-10
[illegible]		[illegible]	[illegible]
FPS Base	7	Aug-03-09	Aug-11-09
Set Jib Crane	3	Nov-24-09	Nov-30-09
Install Conduit/Pull Wire and Terminate	5	Dec-01-09	Dec-07-09



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MGC CONTRACTORS, INC.

Engineers

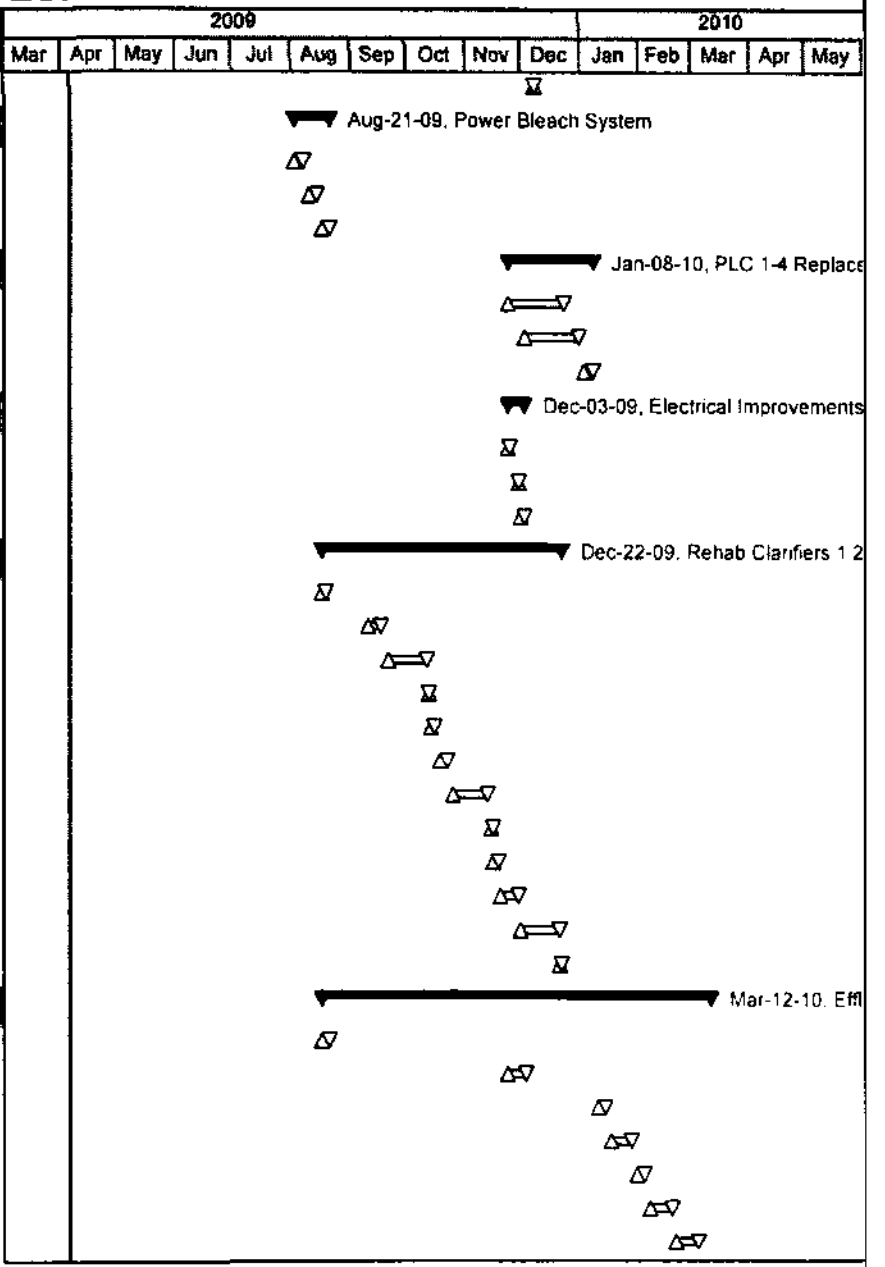
BEARDSLEY WATER RECLAMATION FACILTIY

GMP #2 and #3

Attachment B

CITY OF PEORIA

Activity Name	Original Duration	Start	Finish
Startup and Test New Jib Crane	1	Dec-08-09	Dec-08-09
[illegible]			
Ductbank to Existing Admin Building	5	Aug-03-09	Aug-07-09
Pull Wire and Terminate	5	Aug-10-09	Aug-14-09
Startup and Test Power Bleach System	5	Aug-17-09	Aug-21-09
[illegible]			
R and R Existing PLC 1-4	20	Nov-24-09	Dec-23-09
Peoria Programing	20	Dec-03-09	Dec-31-09
Startup and Test PLC 1-4 Replacement	5	Jan-04-10	Jan-08-10
[illegible]			
Shut Down & Temp Pump Station	2	Nov-24-09	Nov-25-09
Install New Wires Pump Station	1	Nov-30-09	Nov-30-09
Startup and Test P.S. Improvements	3	Dec-01-09	Dec-03-09
[illegible]			
Drain Clarifier 1	3	Aug-17-09	Aug-19-09
Repair Equipment 1	5	Sep-11-09	Sep-17-09
Blast and Coat 1	15	Sep-22-09	Oct-12-09
Return to Service Clarifer 1	1	Oct-13-09	Oct-13-09
Drain Clarifier 2	3	Oct-14-09	Oct-16-09
Repair Equipment 2	5	Oct-19-09	Oct-23-09
Blast and Coat 2	15	Oct-26-09	Nov-13-09
Return to Service Clarifier 2	1	Nov-16-09	Nov-16-09
Drain Clarifier 3	3	Nov-17-09	Nov-19-09
Repair Equipment 3	5	Nov-20-09	Nov-30-09
Blast and Coat 3	15	Dec-01-09	Dec-21-09
Return to Service Clarifier 3	1	Dec-22-09	Dec-22-09
[illegible]			
Building Foundation	5	Aug-17-09	Aug-21-09
Building Expansion Install	7	Nov-24-09	Dec-04-09
Install Gear	5	Jan-11-10	Jan-15-10
Rough In Conduit	10	Jan-18-10	Jan-29-10
Pull Wire andTerminate	5	Feb-01-10	Feb-05-10
Modify Local Control Panels	10	Feb-08-10	Feb-19-10
Peoria Program Flow Pace	10	Feb-22-10	Mar-05-10



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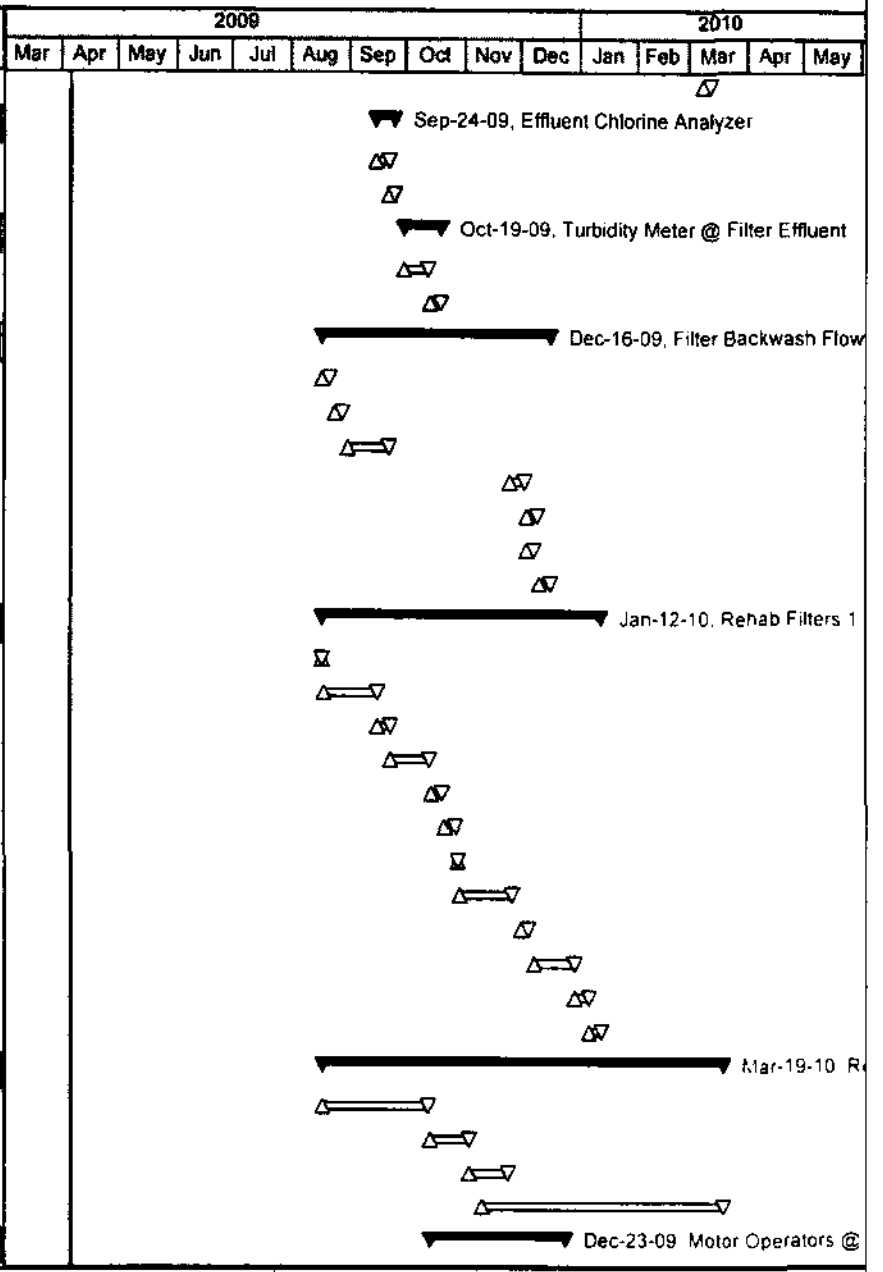
BEARDSLEY WATER RECLAMATION FACILTIY

GMP #2 and #3

Attachment B

CITY OF PEORIA

Activity Name	Original Duration	Start	Finish
Startup and Test Effluent P.S. VFD	5	Mar-08-10	Mar-12-10
[illegible]			
New Electrical Conduit	5	Sep-15-09	Sep-21-09
Startup and Test Effluent Chlorine Analyzer	3	Sep-22-09	Sep-24-09
[illegible]			
Install Instrument and Terminate	10	Sep-29-09	Oct-12-09
Startup and Test Turbidity Meter	5	Oct-13-09	Oct-19-09
[illegible]			
Excavation	5	Aug-17-09	Aug-21-09
Underground Electric	5	Aug-24-09	Aug-28-09
FPS Slab, Walls	15	Aug-31-09	Sep-21-09
Install Flowmeter and Piping	5	Nov-24-09	Dec-02-09
Pull Terminate Wire	5	Dec-03-09	Dec-09-09
Backfill and Inst. Misc Metals	3	Dec-03-09	Dec-07-09
Startup up and Test Filter BW Flowmeter	5	Dec-10-09	Dec-16-09
[illegible]			
Filter #2 Offline	1	Aug-17-09	Aug-17-09
Remove/Replace Filter #2 Media	20	Aug-18-09	Sep-15-09
Install #2 Air Scour System	5	Sep-16-09	Sep-22-09
Install Filter #2 Indexing System	15	Sep-23-09	Oct-13-09
Install Filter #2 Misc. Metals.	5	Oct-14-09	Oct-20-09
Startup and Test Filter #2	5	Oct-21-09	Oct-27-09
Filter #1 Offline	1	Oct-28-09	Oct-28-09
Remove/Replace Filter #1 Media	20	Oct-29-09	Nov-25-09
Install 12 Air Scour System	5	Nov-30-09	Dec-04-09
Install Filter #1 Indexing System	15	Dec-07-09	Dec-28-09
Install Filter #1 Misc. Metals.	5	Dec-29-09	Jan-05-10
Startup and Test Filter #1	5	Jan-06-10	Jan-12-10
[illegible]			
Install Slurry Trench	40	Aug-17-09	Oct-12-09
Excavate Basin 13 Settling Trenches	15	Oct-13-09	Nov-02-09
Excavate Basin 12 Settling Trenches	15	Nov-03-09	Nov-23-09
RIP Basin Floors	90	Nov-10-09	Mar-19-10
[illegible]			



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MGC CONTRACTORS, INC.

Engineers

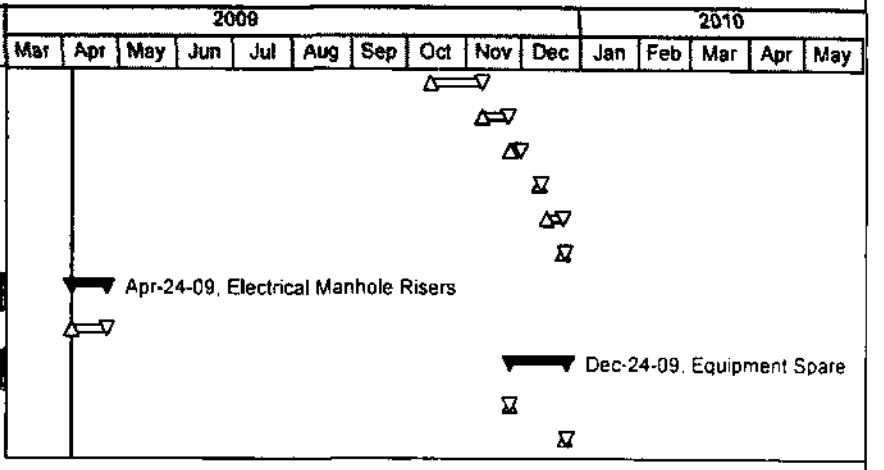
BEARDSLEY WATER RECLAMATION FACILTIY

GMP #2 and #3

Attachment B

CITY OF PEORIA

Activity Name	Original Duration	Start	Finish
Inspect &Repair Gates	20	Oct-13-09	Nov-09-09
Exposed Conduit Install	10	Nov-10-09	Nov-23-09
Add Remote I/O Panel	3	Nov-24-09	Nov-30-09
Install Motorized Actuators	2	Dec-10-09	Dec-11-09
Pull and Terminate Wire	7	Dec-14-09	Dec-22-09
Startup and Test New Operators at Gates	1	Dec-23-09	Dec-23-09
Electrical Manhole Risers	5	[illegible]	[illegible]
Raise Rings	15	Apr-06-09	Apr-24-09
Equipment Spare	2	[illegible]	[illegible]
Gantry Crane	1	Nov-24-09	Nov-24-09
Spare Pump	1	Dec-24-09	Dec-24-09



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MGC CONTRACTORS, INC

Engineers

BEARDSLEY WATER RECLAMATION FACILTIY

GMP #2 and #3

CONTRACT AMENDMENT
Change Order

Solicitation No.: P08-0010 Page 1 of 2

Amendment No.: Five (5) Date: June 17, 2009

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:	$960,228.00
Total of previous change orders:	$738,665.00
Original contract price plus previous change order(s):	$1,698,893.00
The contract price due to this change order will be **increased** by:	$3,033,588.00
The new contract price including this change order will be:	$4,732,481.00

Contract Time Change:

The contract time will be increased by 51 days.

The new date for completion of all work will be April 2, 2010

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

Signature	Date	Typed Name and Title	Company Name
[redacted]	06/19/09	Randy L. Gates, President	MGC Contractors, Inc.

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

Attested By:

Mary Jo Kief, City Clerk

17C-7/7/09
CC Number

LCON03608E
Contract Number

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

_____, 2009, at Peoria, Arizona

Carl Swenson, City Manager

City Seal

Official File

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