CITY COUNCIL AGENDA

CITY COUNCIL CHAMBERS . 11465 WEST CIVIC CENTER DRIVE . AVONDALE, AZ 85323

SPECIAL MEETING
June 11, 2007
6:00 PM

CALL TO ORDER BY MAYOR ROGERS
PLEDGE OF ALLEGIANCE
MOMENT OF REFLECTION

1 ROLL CALL AND STATEMENT OF PARTICIPATION BY THE CITY CLERK

2 CITY MANAGER'S REPORT

a. City Manager's Report - Introduction of New Employees

3 UNSCHEDULED PUBLIC APPEARANCES

(Limit three minutes per person. Please state your name.)

4 AMENDMENT NO. 1 - CMAR CONTRACT - PCL CONSTRUCTION, INC. FOR PHASE 1 EXPANSION OF THE WATER RECLAMATION FACILITY

Staff is requesting that the City Council approve Amendment No. 2 to the CMAR contract with PCL Construction Inc., for the construction of Phase 1 of the Water Reclamation Facility (WRF) Expansion, in the amount of $2,658,842 and authorize the Mayor, or City Manager and City Clerk to execute the contract documents. The Council will take appropriate action.

5 RESOLUTION - TOWN OF BUCKEYE TRANSWESTERN PIPLELINE PROPOSED ALIGNMENT

The Council will consider a resolution supporting the Town of Buckeye's east-west alternative alignment for the proposed Transwestern Pipeline Phoenix Expansion Project through the Buckeye Municipal Planning Area. The Council will take appropriate action.

6 TRES RIOS NATURE AND EARTH FESTIVAL

Staff will brief the City Council on the Tres Rios Nature and Earth Festival and the Base and Meridian Wildlife Area. For information.

7 MUNICIPAL ARTS COMMITTEE RECOMMENDATION TO PURCHASE PUBLIC ART PIECES

The Avondale Municipal Arts Committee (AMAC) is requesting that Council consider the Art Committee recommendation to purchase Elephant Walk and Family at Play, two public art pieces for placement at Friendship Park and the Civic Center respectively. For information, discussion and direction.

8 SOUTH MOUNTAIN CITIZEN ADVISORY TEAM UPDATE

Staff will provide an update to the Mayor and Council on the Citizen Advisory Team (CAT) proceedings. For information, discussion and direction.

9 NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM POLICY

Staff will update the City Council regarding development of the Neighborhood Traffic Management Program (NTMP) policy. For information, discussion and direction.

10 **LIBRARY UPDATE**

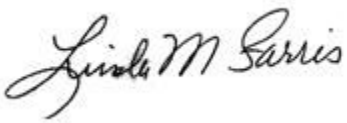
To provide the City Council with an update on the City of Avondale Library operations at the Civic Center Library and the Old Town Library construction project.

11 **DISCUSSION ITEM - YOUTH COMMISSION NLC CONFERENCE PARTICIPATION - COUNCIL MEMBER LYNCH**

Councilmember Lynch would like to discuss the Avondale Youth Advisory Commission's participation in the National League of Cities (NLC) Congressional City Conference held in Washington, D.C. versus the traveling NLC Congress of Cities conference.

12 **ADJOURNMENT**

Respectfully submitted,



Linda Farris, CMC
City Clerk

Any individual with a qualified disability may request a reasonable accommodation by contacting the City Clerk at 623-333-1200 at least 48 hours prior to the council meeting.

CITY COUNCIL REPORT

SUBJECT:
City Manager's Report - Introduction of New Employees

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Linda Farris

THROUGH: Charlie McClendon, City Manager

ATTACHMENTS:

Click to download

No Attachments Available

CITY COUNCIL REPORT

SUBJECT:
Amendment No. 1 - CMAR Contract - PCL Construction, Inc. for Phase 1 Expansion of the Water Reclamation Facility

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Daniel Davis, Acting Water Resources Director (623)333-2411

THROUGH: Charlie McClendon, City Manager

PURPOSE:

Staff is requesting that the City Council approve Amendment No. 1 to the CMAR contract with PCL Construction Inc., for the construction of Phase 1 of the Water Reclamation Facility (WRF) Expansion, in the amount of $2,668,386 and authorize the Mayor, or City Manager and City Clerk to execute the contract documents.

BACKGROUND:

On October 10, 2005, the recommendations of the Wastewater Treatment and Reclaimed Water Master Plan (Master Plan) were presented to the City Council in a work session. In summary, the Master Plan provided recommendations for the treatment of the liquid and solid streams, odor control for preliminary, primary and secondary systems, automated control systems, security, and site and electrical improvements. The recommendations will assist the City in producing a Class A+ effluent for reclaimed water recharge and irrigation and a Class B sludge or biosolids suitable for land application. It should be noted that the sludge handling process could be adapted to produce a Class A sludge in the future should regulatory requirements change. The highlights of the recommended improvements are:

- Odor control for all odor-producing components and equipment.
- Influent equalization basins to reduce plant sizing downstream of the Headworks.
- Primary clarifiers to minimize waste loading on the aeration basins and improve anaerobic digestion.
- Anaerobic digestion of solids with the ability for cogeneration of electricity to meet the base power demand at the Water Reclamation Facility.
- Tertiary Filtration (Disk Filters) to produce effluent or reclaimed water for reuse.

The recommendations of the Master Plan address the needed improvements to meet the required sewer treatment capacity for the build-out of the City presently estimated to occur by 2030; Phase 1 increases the plant's treatment capacity to 9.0 mgd.

In July 2006, the City Council approved a contract with Damon S. Williams Associates, LLC (DSWA) to provide design and construction management services for the Phase 1 improvements. In addition, the City Council approved the Construction Manager at Risk (CMAR) agreement with PCL Construction, Inc. to provide pre-construction services (i.e. cost modeling, value analysis, and constructability reviews) and guaranteed maximum price packages for the construction of the Water Reclamation Facility improvements.

DISCUSSION:

The Phase 1 improvements will be constructed over a two (2) year time frame, and will include three separate packages which will be awarded as three (3) amendments to the CMAR contract. Each Amendment will provide a Guaranteed Maximum Price (GMP). Package-1 is comprised of the conversion of an aeration basin; Package-2 will include major equipment and other long-lead items; and Package-3 is comprised of the

remaining construction improvements. DSWA has completed the design of Package-1 of the Phase 1 improvements and PCL Construction, Inc. has solicited bids from qualified subcontractors in order to generate a GMP for Package-1 in the amount of $2,668,368.

This Phase 1A (Package-1) – Aeration Basin Conversion will modify the existing aeration basin no. 1 to improve the denitrification process by converting from its current function as an in-situ digestor back into an aeration basin. The aeration basin modifications include changes in zone delineation, internal circulation, the addition of additional air supply and diffusers. Specific improvements include the following items:

· Remove an existing baffle wall extension currently used as part of the aerobic digester conversion that was implemented in 2003. (This will increase anoxic zone volumes from eleven to fifty one percent.)
· Move the intake locations for the existing MLR pumps in order to increase the nitrate concentrations and the subsequent denitrification reaction rates.
· Increase the aeration capacity by adding and/or replacing existing air diffuser membranes and air piping in the aerated (oxic) and swing zone section of the basin.
· Installation of an additional 400HP blower to increase the process air capacity and to provide a redundant air supply per the regulatory requirements.
· Install a redundant pressure transmitter on the common air header at the blower building per the regulatory requirements.
· Resize the motorized throttling values on the air drop legs to provide more consistent air distribution among the various aerobic zones as well as maintain desired Dissolved Oxygen (DO) set points.
· Construct a sewer vactor decants facility that was previously approved for construction by the Maricopa County Environmental Services Division.

SCHEDULE: The schedule to complete the recommended improvements is as follows:

Approval of GMP for Phase 1 (Package-1)	June 2007
Preconstruction Conference	June 2007
Issue Notice-to-Proceed	July 2007
Begin Construction	July 2007
Substantial Completion	March 2008
Project (Package-1) Completion	May 2008

BUDGETARY IMPACT:

Funding for Phase 1 is available in the Sewer Enterprise Fund Line Item No. E513-1109-00-8610. The Amendments to the CMAR contract represented as the three packages comprising Phase 1 are listed below:

Phase 1

· Amendment No. 1	$2,668,386
· Amendment No. 2	$5,100,000 (estimated)
· Amendment No. 3	$32,241,158 (estimated)
Project Total	$40,000,000

RECOMENDATION:

Staff recommends that the City Council approve Amendment No. 2 to the CMAR contract with PCL Construction Inc., for the construction of Phase 1 of the Water Reclamation Facility (WRF) Expansion, in the amount of $2,668,386 and authorize the Mayor, or City Manager and City Clerk to execute the contract documents.

ATTACHMENTS:

Click to download

PCL

FIRST AMENDMENT
TO
CONSTRUCTION MANAGER AT RISK AGREEMENT
BETWEEN
CITY OF AVONDALE
AND
PCL CIVIL CONSTRUCTORS, INC.

THIS FIRST AMENDMENT TO CONSTRUCTION MANAGER AT RISK AGREEMENT (this "First Amendment") is made June 11, 2007, by and between the City of Avondale, an Arizona municipal corporation (the "City") and PCL Civil Constructors, Inc., a Colorado corporation (the "Construction Manager").

RECITALS:

A. The City and the Construction Manager entered into that certain Construction Manager at Risk Agreement, approved by the City Council on April 3, 2006, for final design and complete construction of Phase I of substantial modifications to and expansion of the City's Water Reclamation Facility located at 4800 S. Dysart Road (the "Agreement"). Unless otherwise defined in this First Amendment, all capitalized terms herein shall have the meanings ascribed to them in the Agreement.

B. Pursuant to Section 3.4 of the Agreement, the City and the Construction Manager may agree to a guaranteed maximum price and a date of substantial completion for various components of the Project.

C. The Construction Manager has submitted, and the City has accepted, the Treatment Proposal. Accordingly, the City and the Construction Manager desire to establish the guaranteed maximum price and a date of substantial completion for the Treatment Improvements portion of the Project.

AGREEMENT:

NOW, THEREFORE, in consideration of the foregoing recitals, which are incorporated as if fully set forth herein, the promises and covenants set forth below and other such good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and the Construction Manager hereby agree as follows:

1. The Construction Manager's guaranteed maximum price for the Treatment Improvements portion of the Work (the "Treatment GMP"), including the Cost of the Work as defined in Article 8 of the Agreement (excluding the Pre-Construction Phase Compensation set forth in Section 7.1, but specifically including the Construction Phase Compensation as set forth in Section 7.2) is hereby agreed to be $2,668,386.00. The Treatment GMP is the total compensation from the City to the Construction Manager for the performance of the Treatment Improvements Work in accordance with Contract Documents set forth in the Agreement and pursuant to any of the following documents, as applicable:

a. Water Reclamation Facility Phase I Expansion Cost Model Pricing Assumptions – GMP 1, two pages, attached hereto as Exhibit 1.

b. A Schedule of Work, run dated May 31, 2007, one page, attached hereto as Exhibit 2.

2. The following exhibits are hereby approved and included in the Agreement:

a. Exhibit B-4-1 – Construction Manager's Guaranteed Maximum Price Proposal.

b. Exhibit B-4-2 – Scope.

c. Exhibit C – List of Design Documents.

3. The date of Substantial Completion of the Work is March 14, 2008.

4. In all other respects, the Agreement is affirmed and ratified, and, except as expressly modified herein, all terms and conditions of the Agreement shall remain in full force and effect.

5. By executing this First Amendment, the Construction Manager affirmatively asserts that the City is not currently in default, nor has been in default at any time prior to this First Amendment, under any of the terms or conditions of the Agreement.

6. This First Amendment and the Agreement may be cancelled for a conflict of interest pursuant to ARIZ. REV. STAT. § 38-511.

EXECUTED as of the date first set forth above.

"**City**"

CITY OF AVONDALE, an Arizona municipal corporation

By:_____
Marie Lopez Rogers, Mayor

ATTEST:

_____
Linda M. Farris, City Clerk

"**Construction Manager**"

PCL CIVIL CONSTRUCTORS, INC., a Colorado corporation

By:_____
Luis Ventoza
Vice President and District Manager

(ACKNOWLEDGMENTS)

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

This instrument was acknowledged before on _____, 2007, by Marie Lopez Rogers, the Mayor of the CITY OF AVONDALE, an Arizona municipal corporation, on behalf of the City of Avondale.

_____
Notary Public in and for the State of Arizona

My Commission Expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

This instrument was acknowledged before me on _____, 2007, by Luis Ventoza, the Vice President and District Manager of PCL CIVIL CONSTRUCTORS, INC., a Colorado corporation, on behalf of the corporation.

_____
Notary Public in and for the State of _____

My Commission Expires:

_____

EXHIBIT 1
TO
FIRST AMENDMENT
TO
CONSTRUCTION MANAGER AT RISK AGREEMENT
BETWEEN
CITY OF AVONDALE
AND
PCL CIVIL CONSTRUCTORS, INC.

[Cost Model Pricing Assumptions]

See following page.

CONSTRUCTION LEADERS

CITY OF AVONDALE
WATER RECLAMATION FACILITY
PHASE I EXPANSION
Pricing Assumptions- GMP 1 (revised 06/04/07)

1. The cost model excludes the costs associated with the City of Avondale's Building Permits.

2. This quote assumes a shared office trailer with one office dedicated to DSWA field engineer. We assume both PCL and DSWA can share the same phone DSL, copier and fax machines. No other provisions have been included in the cost model for the Engineer's office.

3. The cost model assumes that the new Aeration Basin bio mass transfer will be performed by plant staff.

4. Costs for an independent lab to perform quality control testing (i.e. soil densities, concrete slump and strength testing, etc.) are assumed to be the responsibility of others and is therefore, not included in our cost.

5. The cost model assumes that the sludge generated from the cleaning of the Aeration Basins will be disposed of off-site by PCL.

6. The cost model assumes that the existing guide rails can be reused for the relocated MLR and Mixers.

7. The existing thimble for the MLR pumps will close with a blind flange on one side eliminating detail 7 on S-2.

8. Relative to Vactor Truck note 4 on S-2 and note 1 on S-4, the cost model has excluded all concrete coatings for the Vactor Truck Solids Storage Facility.

9. The cost model only includes replacement of the 5282 membrane diffuser discs. It does not include any repairs to the existing air pipe, membrane housing repairs, or additional hold-downs.

10. The cost model assumes the existing stems and operators will and can be utilized for the sluice gate relocation.

11. The cost represented for concrete assumes a maximum temperature at placement of 90º F.

12. We assume the plant staff will drain the basins to the lower level.

13. The price excludes all asphalt and landscaping repairs as most of these areas will receive landscaping and re-paving in the larger project.

14. With the exception of the flow meters, all equipment and valves being relocated and installed is assumed to be accomplished without any rework or recertification. They will be relocated and installed in their current condition.

15. The cost model has assumed painted, carbon steel platforms for the relocated MLR pumps in lieu of stainless steel.

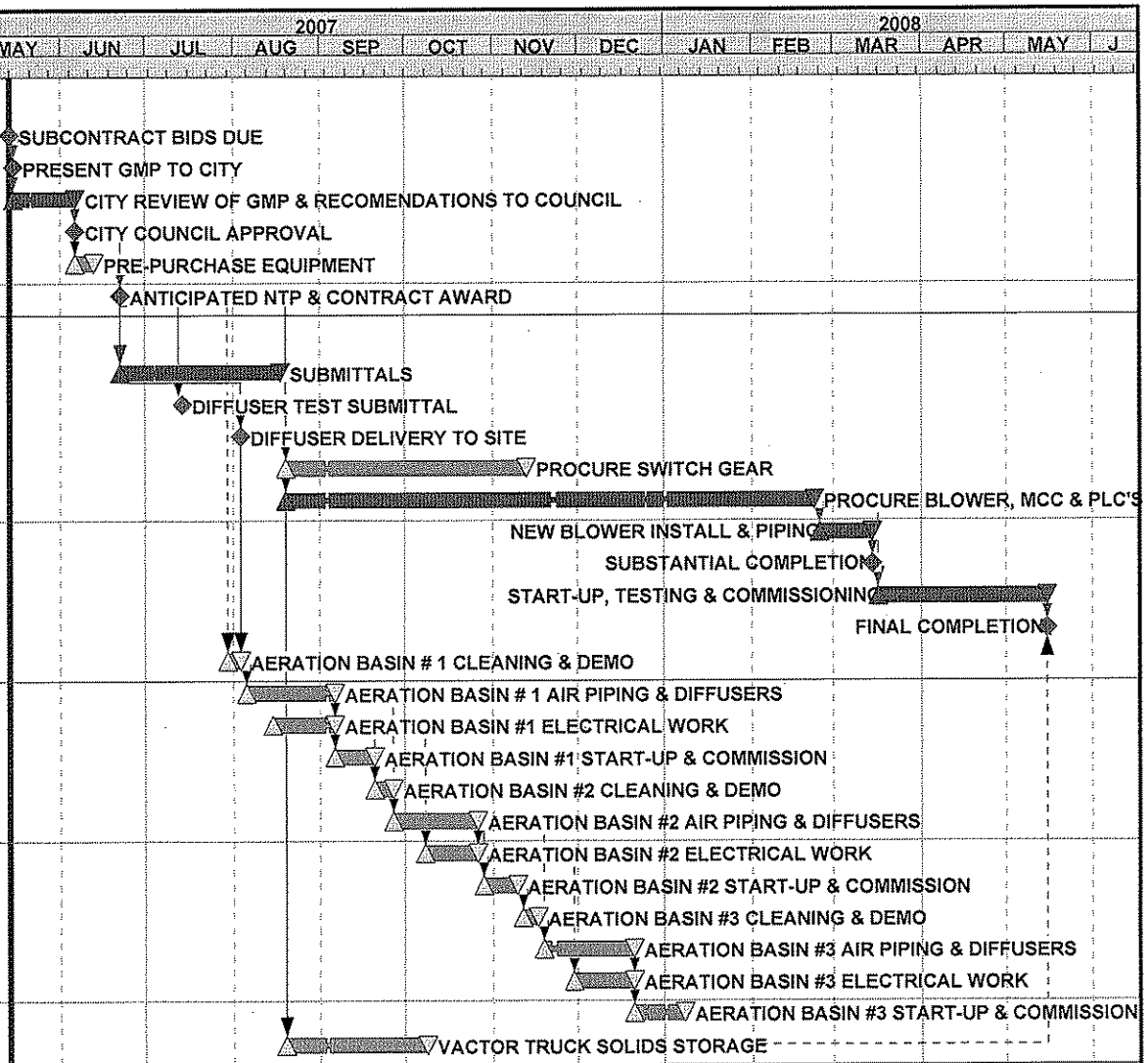
16. The cost model has excluded the costs associated with the Vactor Truck Solids Storage Facility's steel plates for the dumpsters.

EXHIBIT 2
TO
FIRST AMENDMENT
TO
CONSTRUCTION MANAGER AT RISK AGREEMENT
BETWEEN
CITY OF AVONDALE
AND
PCL CIVIL CONSTRUCTORS, INC.

[Schedule of Work]

See following pages.

Activity Description	Orig Dur	Early Start	Early Finish
PRE-CONSTRUCTION PHASE			
SUBCONTRACT BIDS DUE	0	14MAY07	
PRESENT GMP TO CITY	0	15MAY07	
CITY REVIEW OF GMP & RECOMENDATIONS TO	15	15MAY07	05JUN07
CITY COUNCIL APPROVAL	0		05JUN07
PRE-PURCHASE EQUIPMENT	5	06JUN07	12JUN07
ANTICIPATED NTP & CONTRACT AWARD	0	22JUN07	
CONSTRUCTION PHASE			
SUBMITTALS	40	22JUN07	17AUG07
DIFFUSER TEST SUBMITTAL	0		13JUL07
DIFFUSER DELIVERY TO SITE	0		03AUG07
PROCURE SWITCH GEAR	60	20AUG07	12NOV07
PROCURE BLOWER, MCC & PLC'S	130	20AUG07	22FEB08
NEW BLOWER INSTALL & PIPING	15	25FEB08	14MAR08
SUBSTANTIAL COMPLETION	0		14MAR08
START-UP, TESTING & COMMISSIONING	44	17MAR08	15MAY08
FINAL COMPLETION	0		15MAY08
AERATION BASIN # 1 CLEANING & DEMO	5	30JUL07	03AUG07
AERATION BASIN # 1 AIR PIPING & DIFFUSERS	22	06AUG07	05SEP07
AERATION BASIN #1 ELECTRICAL WORK	15	15AUG07	05SEP07
AERATION BASIN #1 START-UP & COMMISSION	10	06SEP07	19SEP07
AERATION BASIN #2 CLEANING & DEMO	5	20SEP07	26SEP07
AERATION BASIN #2 AIR PIPING & DIFFUSERS	22	27SEP07	26OCT07
AERATION BASIN #2 ELECTRICAL WORK	15	08OCT07	26OCT07
AERATION BASIN #2 START-UP & COMMISSION	10	29OCT07	09NOV07
AERATION BASIN #3 CLEANING & DEMO	5	12NOV07	16NOV07
AERATION BASIN #3 AIR PIPING & DIFFUSERS	22	19NOV07	20DEC07
AERATION BASIN #3 ELECTRICAL WORK	15	30NOV07	20DEC07
AERATION BASIN #3 START-UP & COMMISSION	10	21DEC07	07JAN08
VACTOR TRUCK SOLIDS STORAGE	35	20AUG07	08OCT07



Start Date	14MAY07
Finish Date	15MAY08
Data Date	14MAY07
Run Date	31MAY07 15:03

DM

PCL CONSTRUCTION, INC.

REV JB

City of Avondale
Water Reclamation Facility
Phase I Package I
Project # UT-06002

EXHIBIT B-4-1
TO
CONSTRUCTION MANAGER AT RISK AGREEMENT
BETWEEN
CITY OF AVONDALE
AND
PCL CIVIL CONSTRUCTORS, INC.

[Construction Manager's Treatment Proposal]

See following pages.

PCL CONSTRUCTION, INC.

City of Avondale Water Reclamation Facility Phase 1 Expansion
Package 1 (GMP 1)
PROJECT NO. UT-06002

GMP Summary					Amount
A.	Cost of the Work (Labor, Materials, Equipment, Warranty)				$2,215,141.00
INDIRECT COSTS				RATE	
B.	CM @ Risk's Contingency				$0.00
C.	Construction Fee			6.00%	$160,103.00
D.	General Conditions			4.94%	$131,724.00
	D1	Payment and Performance Bond		$37,221.00	
	D2	Insurance		$38,692.00	
E.	Sales Tax				$85,505.00
			F. TOTAL GMP		$2,668,386.00
			G. Owner's Contingency		$0.00

Formulas:
Total GMP: A+B+C+D+E=F
Rates (Percentages) are calculated by dividing each amount by F, such as B/F, D/F, and D1/F

Date	June 02, 2007
Time	03:13:15 PM
BE Number	BE060062
District File No	
Owner File No	
Estimator	Glen Lamoreaux

PCL Construction, Inc.

Civil SW, Tempe,Az

GENERAL ESTIMATE SUMMARY

Project	**Avondale WWTP Improvements GMP 1 A Basin Modifications**	Bid Closing	**May 15, 2007**
	Avondale, AZ		**2:00 PM MST**

BE Number BE060062
District File No
Owner File No
Project **Avondale WWTP Improvements GMP 1 A Basin Modifications**
Location Avondale, AZ

PCL Construction, Inc.
Civil SW, Tempe,Az

GENERAL ESTIMATE SUMMARY

June 02, 2007
03:13:15 PM

Glen Lamoreaux

Description	Quantity	Labor			Equipment			Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
		Hours	Rate	Cost	Hours	Rate	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total
DIRECT COSTS															
Div. 1 General Conditions	1.00 LS	---	---	---	2,076	3.82	7,936	---	27,165	---	---	---	2,900	---	38,001
Package 1 Structural/Mechanical	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	1,793,965	---	1,793,965
Package 2 Electrical	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	383,175	---	383,175
DIRECT COSTS	---	---		---	2,076		7,936		27,165		---		2,180,040		2,215,141
GENERAL EXPENSE COSTS	---														
FIXED GENERAL EXPENSE															
F1 MOBILIZE & DEMOBILIZE	100.00 %	---	---	---	2	1,000.00	2,000	---	---	---	---	---	---	20.00	2,000
F5 DISMAN & RESTORE SITE	100.00 %	16	29.86	478	---	---	---	---	---	---	---	---	---	4.78	478
F6 BOND	100.00 %	---	---	---	---	---	---	372.21	37,221	---	---	---	---	372.21	37,221
F7 INSURANCE	100.00 %	---	---	---	---	---	---	386.92	38,692	---	---	---	---	386.92	38,692
FIXED GENERAL EXPENSE	1.00 LS	16	---	478	2	1,000.00	2,000	---	75,912	---	---	---	---	---	78,390
VARIABLE GENERAL EXPENSE															
OPERATE SUPPORT EQUIPMENT	100.00 %	---	---	---	---	---	---	36.00	3,600	---	---	---	---	36.00	3,600
V7 PROJECT STAFF	100.00 %	1,733	63.78	110,546	---	---	---	---	---	---	---	---	---	1,105.46	110,546
V9 MANAGEMENT SERVICE	100.00 %	---	---	---	---	---	---	151.02	15,102	---	---	---	---	151.02	15,102
V12 ESCAL/TAX/UNINSURED	100.00 %	---	---	---	---	---	---	855.05	85,505	---	---	---	---	855.05	85,505
VARIABLE GENERAL EXPENSE	1.00 LS	1,733	---	110,546	---	---	---	---	104,206	---	---	---	---	---	214,752
GENERAL EXPENSE COSTS	13.23% T.D.C	1,749		111,023	2		2,000		180,119		---		---		293,142

Sub-Total Cost		1,749		111,023	2,078		9,936		207,284		---		2,180,040		2,508,283
Fee	---														160,103
Total Project Cost															2,668,386
Contingency	---														
Contingency	--- T.D.C	---		---	---		---		---		---		---		---

BE Number BE060062
District File No
Owner File No
Project **Avondale WWTP Improvements GMP 1 A Basin Modifications**
Location Avondale, AZ

PCL Construction, Inc.
Civil SW, Tempe,Az

GENERAL ESTIMATE SUMMARY

June 02, 2007
03:13:15 PM

Glen Lamoreaux

Description	Quantity	Labor			Equipment			Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
		Hours	Rate	Cost	Hours	Rate	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total
0	T.D.C	---		---	---		---		---		---		---		---
Total Cost Model															2,668,386

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

Div. 1 General Conditions 1 LS

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
Permit Fees			1.00	LS												
1 Dust Control/SWPPP	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	500	---	500
Permit Fees	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	500	---	500
Construction Photos			1.00	LS												
1 Monthly Progress Photos	6.00 MO	---	---	---	---	---	---	---	100.00	600	---	---	---	---	100.00	600
1 Pre-construction Video	1.00 LS	---	---	---	---	---	---	---	---	200	---	---	---	---	---	200
Construction Photos	1.00 LS	---	---	---	---	---	---	---	---	800	---	---	---	---	---	800
Dust Control			1.00	LS												
1 500 Gal. Pull behind Tank	6.00 MO	1.000	1.000	---	---	---	4.62	4,800	---	---	---	---	---	---	800.00	4,800
Dust Control	1.00 LS	---	---	---	---	---	---	4,800	---	---	---	---	---	---	---	4,800
Temp Sanitary & First Aid			1.00	LS												
2 Portable Toilets	6.00 MO	---	---	---	---	---	---	---	75.00	900	---	---	---	---	150.00	900
1 First Aid Station/Supplies	6.00 MO	---	---	---	---	---	---	---	50.00	300	---	---	---	---	50.00	300
1 Trash Dumpsters	6.00 MO	---	---	---	---	---	---	---	450.00	2,700	---	---	---	---	450.00	2,700
Temp Sanitary & First Aid	1.00 LS	---	---	---	---	---	---	---	---	3,900	---	---	---	---	---	3,900
Temp Fire Protection			1.00	LS												
1 Temp Fire Protection	6.00 MO	---	---	---	---	---	---	---	50.00	300	---	---	---	---	50.00	300

Div. 1 General Conditions 1 LS

No.	Description	Quantity	Production Rate	Manhrs. per Unit	Labor Hours	Labor $ / hr	Labor Cost	Equipment $ / hr	Equipment Total	Tools & Supplies $/ItemUnit	Tools & Supplies Total	Perm. Materials $/ItemUnit	Perm. Materials Total	Subcontract $/ItemUnit	Subcontract Total	Total Cost Unit	Total Cost Total
	Temp Fire Protection	1.00 LS	---	---	---	---	---	---	---	---	300	---	---	---	---	---	300
	Contractors/Engineers Field Office			1.00 LS													
	Contractors Field Office Set-up																
1	Mob/Demob Field Offices	1.00 EA	---	---	---	---	---	---	---	2,000.00	2,000	---	---	---	---	2,000.00	2,000
1	Purchase & Install Telephone Syst	1.00 LS	---	---	---	---	---	---	---	---	750	---	---	---	---	---	750
1	Sewer Main Connection	1.00 LS	---	---	---	---	---	---	---	---	600	---	---	---	---	---	600
1	Water Main Connection	1.00 LS	---	---	---	---	---	---	---	---	600	---	---	---	---	---	600
	Contractors Field Office:																
1	Trailr Office 12'x60'	6.00 MO	1.000	1.000	---	---	---	3.02	3,136	---	---	---	---	---	---	522.64	3,136
1	Power/Light Billing	6.00 MO	---	---	---	---	---	---	---	600.00	3,600	---	---	---	---	600.00	3,600
1	Tele/Fax Billing	6.00 MO	---	---	---	---	---	---	---	250.00	1,500	---	---	---	---	250.00	1,500
2	Cellular Billing	6.00 MO	---	---	---	---	---	---	---	150.00	1,800	---	---	---	---	300.00	1,800
1	Furniture	3.00 EA	---	---	---	---	---	---	---	1,000.00	3,000	---	---	---	---	1,000.00	3,000
2	Computer Equipment	6.00 MO	---	---	---	---	---	---	---	250.00	3,000	---	---	---	---	500.00	3,000
1	Computor Software	1.00 LS	---	---	---	---	---	---	---	---	150	---	---	---	---	---	150
1	Office Supplies	6.00 MO	---	---	---	---	---	---	---	150.00	900	---	---	---	---	150.00	900
1	Post & Courier	6.00 MO	---	---	---	---	---	---	---	25.00	150	---	---	---	---	25.00	150
1	Paper and supplies	6.00 MO	---	---	---	---	---	---	---	175.00	1,050	---	---	---	---	175.00	1,050
1	DSL Service	6.00 MO	---	---	---	---	---	---	---	65.00	390	---	---	---	---	65.00	390
1	Water cooler service	6.00 MO	---	---	---	---	---	---	---	50.00	300	---	---	---	---	50.00	300
1	Twice a week cleaning service	25.00 WK	---	---	---	---	---	---	---	75.00	1,875	---	---	---	---	75.00	1,875
	Contractors/Engineers Field Office	1.00 LS	---	---	---	---	---	---	3,136	---	21,665	---	---	---	---	---	24,801
	Project ID Signs			1.00 LS													

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

Div. 1 General Conditions 1 LS

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor Hours	Labor $ / hr	Labor Cost	Equipment $ / hr	Equipment Total	Tools & Supplies $/ItemUnit	Tools & Supplies Total	Perm. Materials $/ItemUnit	Perm. Materials Total	Subcontract $/ItemUnit	Subcontract Total	Total Cost Unit	Total Cost Total
1 Project ID Signs	1.00 LS	---	---	---	---	---	---	---	---	500	---	---	---	---	---	500
Project ID Signs	1.00 LS	---	---	---	---	---	---	---	---	500	---	---	---	---	---	500
Field Engineering			**1.00**	**LS**												
Assume 3 man crew for 1 week set up and there after misc.																
1 Project Surveying	16.00 HR	---	---	---	---	---	---	---	---	---	---	---	150.00	2,400	150.00	2,400
Field Engineering	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	2,400	---	2,400
Div. 1 General Conditions	1.00 LS	---	---	---	---	---	---	7,936	---	27,165	---	---	---	2,900	---	38,001

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

Package 1 Structural/Mechanical 1 LS

No.	Description	Quantity	Production Rate	Manhrs. per Unit	Labor Hours	Labor $ / hr	Labor Cost	Equipment $ / hr	Equipment Total	Tools & Supplies $/ItemUnit	Tools & Supplies Total	Perm. Materials $/ItemUnit	Perm. Materials Total	Subcontract $/ItemUnit	Subcontract Total	Total Cost Unit	Total Cost Total
Subcontractors Price				**1.00**	**LS**												
1	Subcontractors Price	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	1,785,792	---	1,785,792
	Direct Cost Adjustments:																
1	Eliminate Vactor Truck Sta Coatings	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	-14,040	---	-14,040
1	Eliminate Vactor Truck Dumpster Steel Plates	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	-22,412	---	-22,412
1	Utilize Painted Carbon Steel MLR Pump Platforms in Lieu of SS	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	-35,370	---	-35,370
1	Off-site Disposal of A-Basin Sludge	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	79,995	---	79,995
Subcontractors Price		1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	1,793,965	---	1,793,965
Package 1 Structural/Mechanical		1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	1,793,965	---	1,793,965

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

Package 2 Electrical 1 LS

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
Elec. Sub			1.00	LS												
1 Elec. Sub	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	383,175	---	383,175
Elec. Sub	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	383,175	---	383,175
Package 2 Electrical	1.00 LS	---	---	---	---	---	---	---	---	---	---	---	---	383,175	---	383,175

F1 MOBILIZE & DEMOBILIZE 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor Hours	Labor $ / hr	Labor Cost	Equipment $ / hr	Equipment Total	Tools & Supplies $/ItemUnit	Tools & Supplies Total	Perm. Materials $/ItemUnit	Perm. Materials Total	Subcontract $/ItemUnit	Subcontract Total	Total Cost Unit	Total Cost Total
MOBILIZE			100.00 %													
Freight In			100.00 %													
1 MOBILIZE Trailer	1.00 LS	1.000	1.000	---	---	---	---	1,000	---	---	---	---	---	---	---	1,000
Freight In	100.00 %	---	---	---	---	---	10.00	1,000	---	---	---	---	---	---	10.00	1,000
MOBILIZE	100.00 %	---	---	---	---	---	10.00	1,000	---	---	---	---	---	---	10.00	1,000
DEMOBILIZE			100.00 %													
Freight Out			100.00 %													
1 DEMOBILIZE Trailer	1.00 LS	1.000	1.000	---	---	---	---	1,000	---	---	---	---	---	---	---	1,000
Freight Out	100.00 %	---	---	---	---	---	10.00	1,000	---	---	---	---	---	---	10.00	1,000
DEMOBILIZE	100.00 %	---	---	---	---	---	10.00	1,000	---	---	---	---	---	---	10.00	1,000

BE Number BE060062
District File No
Owner File No
Project **Avondale WWTP Improvements GMP 1 A Basin Modifications**
Location Avondale, AZ

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

F1 MOBILIZE & DEMOBILIZE 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
F1 MOBILIZE & DEMOBILIZE	100.00 %	---	---	---	---	---	20.00	2,000	---	---	---	---	---	---	20.00	2,000

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

F5 DISMAN & RESTORE SITE 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
Dismantle Buildings			**100.00**	%												
1 Dismantle Office-Labor	16.00 HR	1.000	1.000	16	29.86	478	---	---	---	---	---	---	---	---	29.86	478
Dismantle Buildings	100.00 %	6.250	0.160	16	29.86	478	---	---	---	---	---	---	---	---	4.78	478
F5 DISMAN & RESTORE SITE	100.00 %	6.250	0.160	16	29.86	478	---	---	---	---	---	---	---	---	4.78	478

BE Number BE060062
District File No
Owner File No
Project **Avondale WWTP Improvements GMP 1 A Basin Modifications**
Location Avondale, AZ

PCL Construction, Inc.
Civil SW, Tempe,Az
ITEM ANALYSIS SHEET

June 02, 2007
03:13:15 PM
Glen Lamoreaux

F6 BOND 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
US CONTRACT BOND			100.00	%												
1 Contract Bond	2668386 TB	---	---	---	---	---	---	---	0.010000	26,684	---	---	---	---	0.010000	26,684
US CONTRACT BOND	100.00 %	---	---	---	---	---	---	---	266.84	26,684	---	---	---	---	266.84	26,684
SUBCONTRACT BOND			100.00	%												
1 Structural/Mechanical Pkg 1	43,000.00 EA	---	---	---	---	---	---	---	0.012000	516	---	---	---	---	0.012000	516
1 Electrical Package 2	383,175.00 EA	---	---	---	---	---	---	---	0.012000	4,598	---	---	---	---	0.012000	4,598
1 Process Equipment Bond	451,891.00 EA	---	---	---	---	---	---	---	0.012000	5,423	---	---	---	---	0.012000	5,423
SUBCONTRACT BOND	100.00 %	---	---	---	---	---	---	---	105.37	10,537	---	---	---	---	105.37	10,537
F6 BOND	100.00 %	---	---	---	---	---	---	---	372.21	37,221	---	---	---	---	372.21	37,221

F7 INSURANCE 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor Hours	Labor $ / hr	Labor Cost	Equipment $ / hr	Equipment Total	Tools & Supplies $/ItemUnit	Tools & Supplies Total	Perm. Materials $/ItemUnit	Perm. Materials Total	Subcontract $/ItemUnit	Subcontract Total	Total Cost Unit	Total Cost Total
General Liability			100.00 %													
1 Gen Liab-USA 11.00/M	2668386 TB	---	---	---	---	---	---	---	0.011000	29,352	---	---	---	---	0.011000	29,352
General Liability	100.00 %	---	---	---	---	---	---	---	293.52	29,352	---	---	---	---	293.52	29,352
Builders Risk Insurance			100.00 %													
1 Builders Risk	2668386 TB	---	---	---	---	---	---	---	0.003500	9,339	---	---	---	---	0.003500	9,339
Builders Risk Insurance	100.00 %	---	---	---	---	---	---	---	93.39	9,339	---	---	---	---	93.39	9,339
F7 INSURANCE	100.00 %	---	---	---	---	---	---	---	386.92	38,692	---	---	---	---	386.92	38,692

OPERATE SUPPORT EQUIPMENT 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
VEHICLES			**1.00**	**LS**												
1 Vehicle Allowance	6.00 MO	---	---	---	---	---	---	---	600.00	3,600	---	---	---	---	600.00	3,600
VEHICLES	1.00 LS	---	---	---	---	---	---	---	---	3,600	---	---	---	---	---	3,600
OPERATE SUPPORT EQUIPMENT	100.00 %	---	---	---	---	---	---	---	36.00	3,600	---	---	---	---	36.00	3,600

PCL Construction, Inc.
Civil SW, Tempe,Az
ITEM ANALYSIS SHEET

V7 PROJECT STAFF 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
Management			**100.00**	**%**												
1 *Proj Mgr	6.00 MO	1.000	1.000	1,040	71.70	74,569	---	---	---	---	---	---	---	---	12,428.23	74,569
1 Safety Coordinator	1.00 MO	1.000	1.000	173	40.00	6,934	---	---	---	---	---	---	---	---	6,933.61	6,934
Management	100.00 %	0.082	12.133	1,213	67.17	81,503	---	---	---	---	---	---	---	---	815.03	81,503
Engineering & Survey			**100.00**	**%**												
1 Proj Eng.	3.00 MO	1.000	1.000	520	55.85	29,043	---	---	---	---	---	---	---	---	9,680.92	29,043
Engineering & Survey	100.00 %	0.192	5.200	520	55.85	29,043	---	---	---	---	---	---	---	---	290.43	29,043
V7 PROJECT STAFF	100.00 %	0.058	17.333	1,733	63.78	110,546	---	---	---	---	---	---	---	---	1,105.46	110,546

PCL Construction, Inc.
Civil SW, Tempe,Az

ITEM ANALYSIS SHEET

V9 MANAGEMENT SERVICE 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
Engineering STS			100.00 %													
1 Eng & Drafting Equipment	1.00 EA	---	---	---	---	---	---	---	500.00	500	---	---	---	---	500.00	500
1 Eng. Supplies,Blueprints	1.00 MO	---	---	---	---	---	---	---	50.00	50	---	---	---	---	50.00	50
Engineering STS	100.00 %	---	---	---	---	---	---	---	5.50	550	---	---	---	---	5.50	550
Safety Awards			100.00 %													
2 Safety Awards	20.00 EA	---	---	---	---	---	---	---	25.00	1,000	---	---	---	---	50.00	1,000
1 Safety Supplies Hard Hats & Glasses	1,749.33 MH	---	---	---	---	---	---	---	0.120000	210	---	---	---	---	0.120000	210
Safety Awards	100.00 %	---	---	---	---	---	---	---	12.10	1,210	---	---	---	---	12.10	1,210
I.S.COSTS			100.00 %													
1 I.S. Cost Allowance	2668386 TB	---	---	---	---	---	---	---	0.005000	13,342	---	---	---	---	0.005000	13,342
I.S.COSTS	100.00 %	---	---	---	---	---	---	---	133.42	13,342	---	---	---	---	133.42	13,342
V9 MANAGEMENT SERVICE	100.00 %	---	---	---	---	---	---	---	151.02	15,102	---	---	---	---	151.02	15,102

PCL Construction, Inc.
Civil SW, Tempe,Az
ITEM ANALYSIS SHEET

V12 ESCAL/TAX/UNINSURED 100 %

No. Description	Quantity	Production Rate	Manhrs. per Unit	Labor			Equipment		Tools & Supplies		Perm. Materials		Subcontract		Total Cost	
				Hours	$ / hr	Cost	$ / hr	Total	$/ItemUnit	Total	$/ItemUnit	Total	$/ItemUnit	Total	Unit	Total
TAXES			100.00 %													
1 Arizona Gross Receipts Tax	2668386 TB	---	---	---	---	---	---	---	0.054110	144,386	---	---	---	---	0.054110	144,386
1 Equipment	-451,891.00 EA	---	---	---	---	---	---	---	0.054110	-24,452	---	---	---	---	0.054110	-24,452
1 Electrical	-180,000.00 EA	---	---	---	---	---	---	---	0.054110	-9,740	---	---	---	---	0.054110	-9,740
1 Pipe	-456,296.00 EA	---	---	---	---	---	---	---	0.054110	-24,690	---	---	---	---	0.054110	-24,690
TAXES	100.00 %	---	---	---	---	---	---	---	855.05	85,505	---	---	---	---	855.05	85,505
V12 ESCAL/TAX/UNINSURED	100.00 %	---	---	---	---	---	---	---	855.05	85,505	---	---	---	---	855.05	85,505

EXHIBIT B-4-2
TO
CONSTRUCTION MANAGER AT RISK AGREEMENT
BETWEEN
CITY OF AVONDALE
AND
PCL CIVIL CONSTRUCTORS, INC.

[Scope]

See following pages.

City of Avondale

Water Reclamation Facility Phase 1

CONTRACT DOCUMENTS

SPECIFICATIONS

Package 1 – Aeration Basin Modifications

Divisions 1-17

Volume 1 of 2

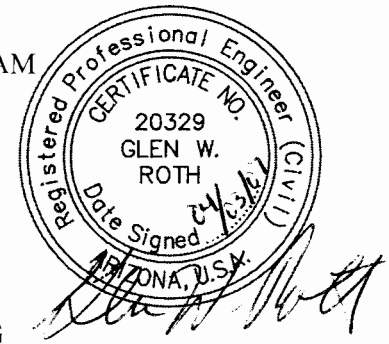
April 2007

CITY OF AVONDALE

WATER RECLAMATION FACILITY PHASE 1

CONTRACT DOCUMENTS

TABLE OF CONTENTS



CITY OF AVONDALE

WATER RECLAMATION FACILITY
PHASE 1, PACKAGE NO. 1
AERATION BASIN MODIFICATIONS
FEBRUARY 2007 AGENCY REVIEW SET

CITY PROJECT NO. UT-06002

Section 27, Township 1N, Range 1W

NOTE

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF AVONDALE CONSTRUCTION SPECIFICATIONS CURRENTLY ON FILE AND AVAILABLE AT THE CITY OF AVONDALE ENGINEERING DEPARTMENT.

STORM WATER DRAINAGE CERTIFICATION

1. THE SUBDIVISION WILL PROVIDE FOR ON-SITE RETENTION FOR THE RUNOFF FROM A 100-YEAR 2-HOUR STORM.
2. ALL FLOWS FROM THE 10-YEAR STORM WILL BE CONTAINED WITHIN THE STREET (FROM CURB TO CURB).
3. ALL STORM WATER RETENTION WILL BE DRAINED WITHIN 36 HOURS. IF BASINS DO NOT DRAIN WITHIN 36 HOURS, DEVELOPER/OWNER SHALL ENACT MEASURES TO CORRECT.
4. ALL DRAINAGE DESIGN WILL COMPLY WITH THE DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY, ARIZONA, VOLUMES I & II, JANUARY 28, 1996, AS AMENDED OR UPDATED.
5. FINISHED FLOOR ELEVATIONS MUST BE MINIMUM OF 14-INCHES ABOVE THE OUT FALL TOP OF CURB ELEVATION, OR 12-INCHES ABOVE THE COMPUTED 100-YEAR WATER SURFACE ELEVATION, WHICH EVER IS GREATER.

REGISTERED ENGINEER _____ DATE _____

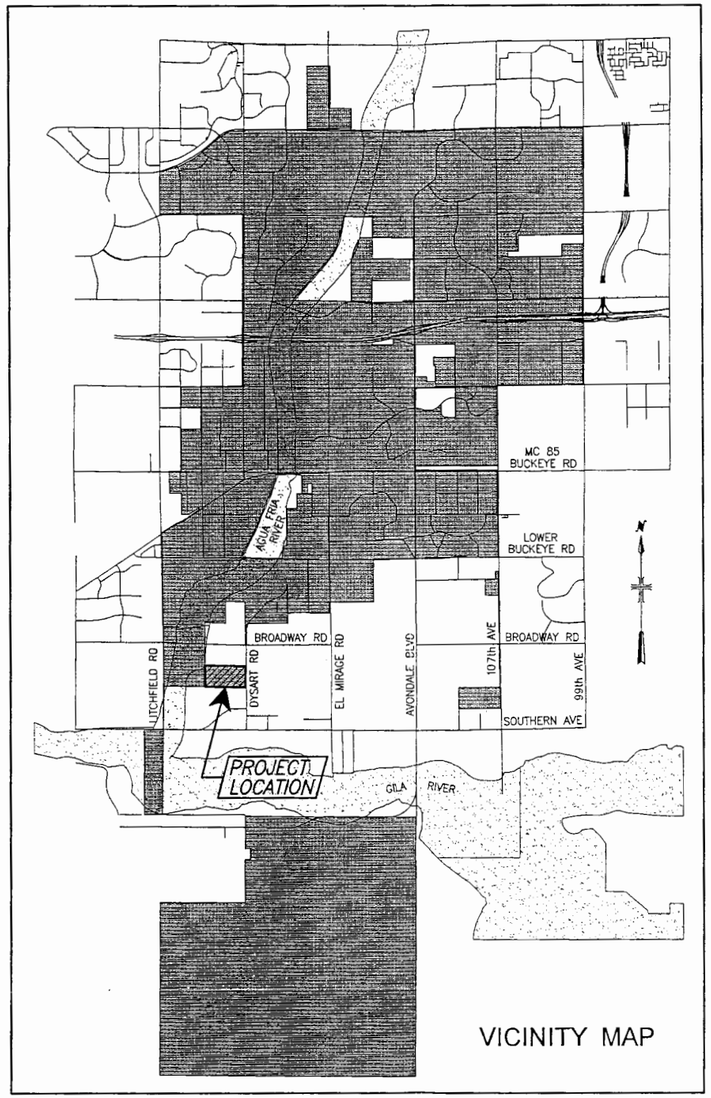
AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED ENGINEER _____

REGISTRATION NUMBER _____ DATE _____

DAMON S. WILLIAMS ASSOCIATES
2355 E. CAMELBACK RD., SUITE 700
PHOENIX, AZ 85016
602.265.5400



VICINITY MAP

BENCH MARK

THE BRASS CAP AT THE INTERSECTION OF BROADWAY ROAD AND DYSART ROAD. ELEV = 932.96

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
800-782-5348
BLUE STAKE CENTER

UTILITY CONFLICT NOTIFICATION BLOCK

THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL NOTES AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORSEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

SALT RIVER POWER DISTRICT	COMPANY REPRESENTATIVE	DATE
ARIZONA PUBLIC SERVICE	COMPANY REPRESENTATIVE	DATE
QWEST	COMPANY REPRESENTATIVE	DATE
COX COMMUNICATIONS	COMPANY REPRESENTATIVE	DATE
SOUTHWEST GAS	COMPANY REPRESENTATIVE	DATE
S.R.V.W.U.A.	COMPANY REPRESENTATIVE	DATE
ROOSEVELT IRRIGATION DISTRICT	COMPANY REPRESENTATIVE	DATE
EL PASO NATURAL GAS	COMPANY REPRESENTATIVE	DATE

APPROVED BY:

CITY ENGINEERING DEPARTMENT _____ DATE _____

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS.

CITY OF AVONDALE FIRE DEPARTMENT _____ DATE _____

MARICOPA COUNTY ENVIRONMENTAL SERVICES _____ DATE _____

Registered Professional Engineer CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed 02-23-07 ARIZONA

Registered Professional Engineer CERTIFICATE NO. 41933 SHEBA HAFIZ Date Signed 02-23-07 ARIZONA

OWNER
CITY OF AVONDALE
SCOTT J. TKACH, P.E.
WATER RESOURCES
PROJECT MANAGER
399 E. LOWER BUCKEYE RD.
SUITE 100
AVONDALE, ARIZONA 85323
PHONE: 623.333.4450
FAX: 623.333.0440

ENGINEER
DAMON S. WILLIAMS ASSOCIATES
GLEN ROTH P.E.
2355 E. CAMELBACK RD.
SUITE 700
PHOENIX, ARIZONA 85016
PHONE: 602.265.5400
FAX: 602.265.5632

City of Avondale
WATER RECLAMATION FACILITY
PHASE 1 EXPANSION
PACKAGE 1

City of Avondale

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC
Environmental Engineers and Scientists
2355 East Camelback Road, Suite 700
Phoenix, Arizona 85016-3458
Phone 602.265.5400 Fax 602.265.5632

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

ORIGINAL PLAN DATE

LATEST REVISION DATE

DWG NO G-1 SHEET NO . OF .

PROJECT NUMBER

Dwg File: U:\CAD\UT06002\110\Drawings\Package 1\AV106001-Cover.Pkg1.dwg Modified: Feb 23, 2007 - 1:54pm Plotted: Feb 26, 2007 - 8:54am

GENERAL NOTES

1. THE ELEVATIONS OF EXISTING TOPOGRAPHY SHOWN MAY VARY. CONTRACTOR TO FIELD VERIFY.
2. PORTIONS OF THE TOPOGRAPHIC AND SUBSURFACE FEATURES SHOWN ARE BASED ON AVAILABLE RECORD INFORMATION. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATON OF THE ACCURACY OF THE FEATURES SHOWN.
3. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO PROCEEDING WITH WORK WHICH INVOLVES OR AFFECTS EXISTING FEATURES OR UTILITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND INSTALLING ANY EXISTING SURVEY MONUMENTS REMOVED OR DAMAGED DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION, EXCEPT AS DEFINED BY THE SPECIFICATIONS.
6. ALL UTILITIES SHALL BE PROTECTED FROM DAMAGE AS A RESULT OF THE WORK. THE CONTRACTOR SHALL RELOCATE, REPAIR OR REPLACE ANY UTILITIES DAMAGED DURING THE WORK TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANY OR AGENCY, OR THE OWNER.
7. THE CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINT FOR EXISTING PIPING WHENEVER REQUIRED BY THE WORK. CONTRACTOR TO REPLACE OR RESTORE THE EXISTING RESTRAINT SYSTEM TO LIKE-NEW CONDITION.
8. THE CITY OF AVONDALE WATER RECLAMATION FACILITY WILL CONTINUE TO OPERATE DURING CONSTRUCTION. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SPECIFICATION 01043.
9. NOT USED
10. (*) INDICATES DIMENSIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.
11. EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED WILL BE NOTED ON DRAWINGS OR IN SPECIFICATIONS. CONTRACTOR TO DELIVER SALVAGED EQUIPMENT WITHIN CITY OF AVONDALE AREA AS DIRECTED BY ENGINEER.
12. CONTRACTOR TO MAINTAIN PLANT ROADWAY ACCESS TO ALL FACILITIES FOR MAINTAINING PLANT OPERATIONS DURING CONSTRUCTION. IF THE WORK REQUIRES INTERRUPTION OF EXISTING ACCESS TO PLANT FACILITIES, THE CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS (APPROVED BY THE ENGINEER) TO THESE FACILITIES.
13. NOT USED
14. DEMOLITION WORK WILL REQUIRE STAGED DEMOLITION TO MAINTAIN PLANT OPERATIONS.
15. REFERENCES TO MAG STANDARD DETAILS REFER TO THE "UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (LATEST VERSION).
16. ALL KNOWN EXISTING BURIED PIPING, ELECTRICAL DUCT BANKS AND OTHER BURIED UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS AND ARE FOR INFORMATIONAL PURPOSES TO INDICATE THE EXISTENCE OF SUCH UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND EXPOSING BURIED PIPE, ELECTRICAL DUCT BANKS AND OTHER ON-SITE UTILITIES PRIOR TO COMMENCING WORK.
17. THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLES, VALVE BOXES, CLEANOUTS AND FIRE HYDRANTS WITHIN WORK LIMITS REQUIRED TO MATCH PROPOSED FINAL GRADE ACCORDING TO MAG STANDARD DETAILS NO. 270, 360, 391, 422 AND 441.
18. PIPING, ELECTRICAL DUCTBANKS, INSTRUMENTATION AND OTHER FACILITIES TO BE CONTINUED BY OTHER CONSTRUCTION CONTRACTS SHALL:

    (IF THE WORK BY OTHERS IS NOT IN PLACE) BE TERMINATED AT THE LIMITS SHOWN, TESTED AND CAPPED WITH AN APPROPRIATE TERMINATION FLANGE OR DEVICE PRIOR TO COMPLETION OF THE WORK. SITE FACILITIES SHALL BE LOCATED (SURVEYED) REFERENCING PLANT COORDINATES AND ELEVATIONS. MARKERS EXTENDING 4'-0" ABOVE FINISHED GRADE SHALL BE PROVIDED WITH THE ABOVE INFORMATION. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE SURVEY NOTES UPON COMPLETION OF THE WORK; OR

    (IF THE WORK BY OTHERS IS IN PLACE) BE TERMINATED AND TESTED TO THE LIMIT OF THE WORK. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY APPURTENANCES AND ACCESSORIES, NUTS, BOLTS, ETC REQUIRED TO COMPLETE THE CONNECTION TO THE WORK BY OTHERS.
19. THE COORDINATES SHOWN & NOTED WITHIN CONTRACT DOCUMENTS ARE BASED ON THE CITY OF AVONDALE WRF COORDINATE SYSTEM. ELEVATIONS OF BENCHMARKS REFER TO PLANT DATUM. COORDINATES OF BENCHMARKS REFER TO PLANT COORDINATES.
20. NOT USED
21. INSTALL AIR/VACUUM RELIEF ASSEMBLIES AT ALL HIGH POINTS ON THE PW, RW AND PROCESS PIPING. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION. SEE TYPICAL DETAILS.
22. REFER TO M DRAWINGS FOR CONTINUATION OF PIPING AT STRUCTURES.
23. ALL BURIED PIPING SHALL BE BACKFILLED ACCORDING TO THE CONTRACT DOCUMENTS AND EXISTING PAVEMENT REPAIRED PER MAG STANDARD DETAIL NO. 200, 'I' TOP.
24. WHERE BURIED PIPING CROSSES EXISTING BURIED PIPING, CROSSINGS SHALL BE CONSTRUCTED PER MAG STANDARD DETAILS NO. 403, 404 AND 405.
25. FOR ALL BURIED VALVES, CONTRACTOR SHALL CONSTRUCT BLOCKING PER MAG STANDARD DETAIL NO. 301 AND PROVIDE A VALVE BOX PER MAG STANDARD DETAIL NO. 391, TYPE "A".
26. SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING REQUIREMENTS.
27. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
28. WHERE CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.
29. UNLESS DETAILED, SPECIFIED OR INDICATED OTHERWISE, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS ARE MEANT TO APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS OR IN SPECIFIC DRAWINGS.
30. MINIMUM COVER OVER ALL BURIED PIPING SHALL BE 4'-0" UNLESS OTHERWISE SHOWN OR APPROVED BY ENGINEER. LESS THAN 4'-0" COVER SHALL BE CONCRETE ENCASED, PER TYPICAL DETAIL.
31. OWNER SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION METHODS OR TECHNIQUES, OR FOR THE EXCAVATION OF ANY PART OF WORK SHOWN ON THESE DRAWINGS.
32. NEITHER ENGINEER NOR OWNER IS RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY PERSON PERFORMING THE WORK ON BEHALF OF THE CONTRACTOR, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
33. CONTRACTOR IS RESPONSIBLE FOR SECURITY AND FOR THE SECURE STORAGE OF GOODS AND MATERIALS ONSITE. CONTRACTOR STORAGE AND LAY DOWN AREAS TO BE PROVIDED DURING PRECONSTRUCTION MEETING BY THE CONTRACTOR.

CONSTRUCTION NOTES

1. MATERIALS IN CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.
2. PROVIDE SEPARATION BETWEEN ADJACENT POTABLE WATER, SEWER AND RECLAIMED WATER PIPELINES IN ACCORDANCE WITH THE MOST RESTRICTIVE REQUIREMENT OF ARIZONA ADMINISTRATIVE CODE, TITLE 18, CHAPTER 4 AND 9 AND MAG STANDARD DETAIL 404.
3. INSTALL NEW PIPELINES AT UNIFORM SLOPE BETWEEN POINTS FOR WHICH ELEVATIONS ARE GIVEN.
4. DETERMINE IN THE FIELD, WITH THE ENGINEERS APPROVAL, DIMENSIONS NOT SHOWN FOR THE LOCATION OF NEW PIPING.
5. PROVIDE ALL TEMPORARY PROCESS, POWER AND AUXILLARY BYPASSES AND TEMPORARY SERVICE CONNECTIONS REQUIRED TO SUSTAIN ONGOING OPERATIONS AT THE AVONDALE WRP THROUGHOUT THE COURSE OF THIS CONTRACT.

SHEET INDEX

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV1D0003.GeneralNotes.Pkg1.dwg

Designed By: SH
Drawn By: RLC, SLB
Checked By: AG

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed 2/28/07

Registered Professional Engineer (Civil) CERTIFICATE NO. 41933 SHEBA HAFIZ Date Signed 2/28/07

City of Avondale

City of Avondale
WATER RECLAMATION FACILITY
PHASE 1 EXPANSION
PACKAGE 1

GENERAL

GENERAL NOTES
AND DRAWING INDEX

DSWA Project No 060110
Date FEBRUARY 2007
100% DESIGN
Dwg No G-2
Sht No . of .

Dwg File: U:\CAD\060110\Drawings\Package 1\AV1D0003.GeneralNotes.Pkg1.dwg Modified: Feb 28, 2007 - 3:12pm Plotted: Feb 28, 2007 - 3:12pm

CITY OF AVONDALE

MAYOR
MARIE LOPEZ ROGERS

VICE MAYOR
CHARLES M. WOLF

COUNCIL MEMBERS
JIM BUSTER
JASON EARP
BETTY S. LYNCH
FRANK SCOTT
KENNETH WEISE

CITY MANAGER
CHARLIE MCCLENDON

CITY CLERK
LINDA FARRIS

NOTE

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF AVONDALE CONSTRUCTION SPECIFICATIONS CURRENTLY ON FILE AND AVAILABLE AT THE CITY OF AVONDALE ENGINEERING DEPARTMENT.

DRAWING INDEX

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED ENGINEER

REGISTRATION NUMBER DATE

DAMON S. WILLIAMS ASSOCIATES
2355 E. CAMELBACK RD., SUITE 700
PHOENIX, AZ 85016
602.265.5400

APPROVED BY:

CITY ENGINEERING DEPARTMENT DATE

THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY AND ACCEPTS NO LIABILITY FOR ERRORS OR OMISSIONS.

CITY OF AVONDALE FIRE DEPARTMENT DATE

MARICOPA COUNTY ENVIRONMENTAL SERVICES DATE

OWNER

CITY OF AVONDALE
ROB EMMETT, P.E.
(UTILITIES DIRECTOR)
1211 S. FOURTH STREET
AVONDALE, ARIZONA 85323
PHONE: 623.478.3270
FAX: 623.478.3812

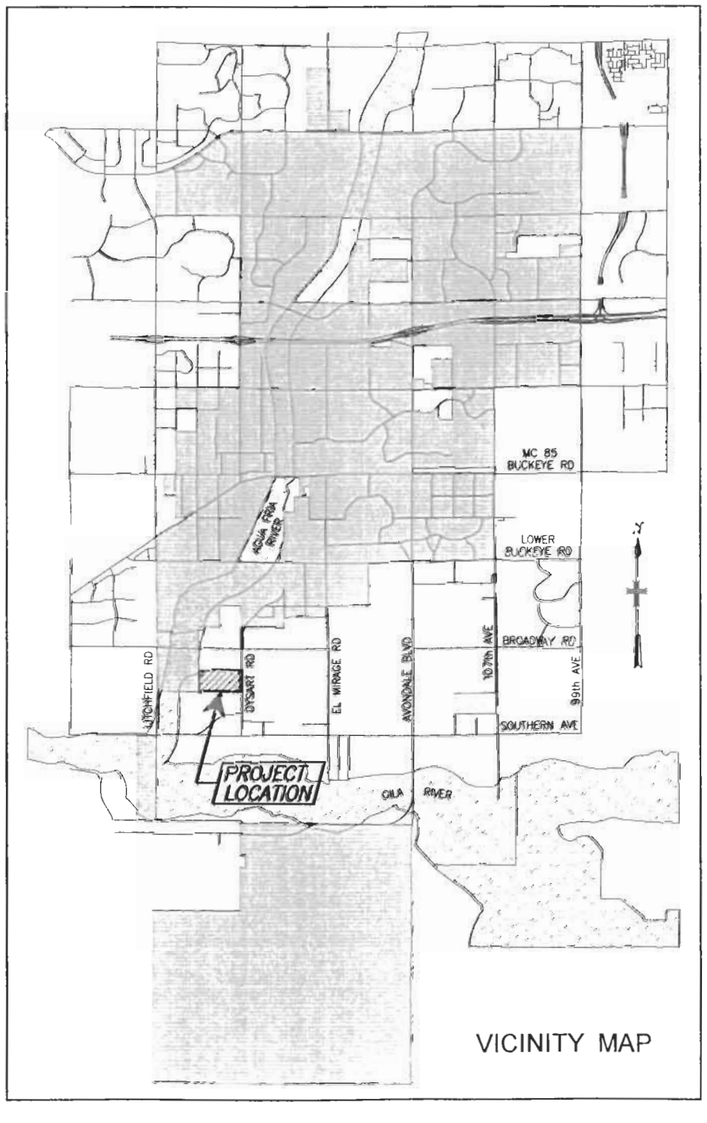
ENGINEER

DAMON S. WILLIAMS ASSOCIATES
GLEN ROTH P.E.
2355 E. CAMELBACK RD.
SUITE 700
PHOENIX, ARIZONA 85016
PHONE: 602.265.5400
FAX: 602.265.5632

CITY OF AVONDALE

VACTOR TRUCK SOLIDS STORAGE FACILITY

Section 27, Township 1N, Range 1W



VICINITY MAP

GENERAL NOTES

1. THE ELEVATIONS OF EXISTING TOPOGRAPHY SHOWN MAY VARY. CONTRACTOR TO FIELD VERIFY.
2. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO PROCEEDING WITH WORK WHICH INVOLVES OR AFFECTS EXISTING FEATURES OR UTILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND INSTALLING ANY EXISTING SURVEY MONUMENTS REMOVED OR DAMAGED DURING CONSTRUCTION.
4. COMPLY WITH ALL CONSTRUCTION PERMITS REQUIRED BY MARICOPA COUNTY, AND COORDINATE ALL REQUIRED INSPECTIONS. OWNER WILL BE RESPONSIBLE FOR PAYMENT OF ALL PERMITTING FEES. FEE AMOUNTS ARE NOT TO BE INCLUDED IN THE CONTRACT PRICE.
5. LOCATIONS OF EXISTING STRUCTURES, EQUIPMENT, UNDERGROUND PIPING AND UTILITIES SHOWN ON THE DRAWINGS ARE BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ALL CRITICAL LOCATIONS AND ELEVATIONS BEFORE CONSTRUCTION PROCEEDS.
6. NOTIFY UTILITIES AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION, DISCONNECTION, CONNECTION, OR REMOVAL OF ANY PIPE OR CONDUIT UNDER THEIR AUTHORITY. VERIFY LOCATION OF ALL UTILITIES AND AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL RELOCATE, REPAIR OR REPLACE ANY UTILITIES DAMAGED DURING THE WORK TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANY OR AGENCY, OR THE OWNER.
7. REFERENCES TO MAG STANDARD DETAILS REFER TO THE "UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" SPONSORED AND DISTRIBUTED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS (LATEST VERSION).
8. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM.
9. ALL BURIED PIPING SHALL BE BACKFILLED ACCORDING TO MAG STANDARDS AND EXISTING PAVEMENT REPAIRED PER MAG STANDARD DETAIL NO. 200, 'T' TOP.
10. WHERE BURIED PIPING CROSSES EXISTING BURIED PIPING, CROSSINGS SHALL BE CONSTRUCTED PER MAG STANDARD DETAILS NO. 403, 404 AND 405.
11. ALL WORK TO CONFORM TO MAG STANDARD DETAILS (LATEST VERSION) UNLESS OTHERWISE SHOWN.
12. OWNER SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION METHODS OR TECHNIQUES, OR FOR THE EXCEPTION OF ANY PART OF WORK SHOWN ON THESE DRAWINGS.
13. NEITHER ENGINEER NOR OWNER IS RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY PERSON PERFORMING THE WORK ON BEHALF OF THE CONTRACTOR, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

CONSTRUCTION NOTES

1. PROVIDE SEPARATION BETWEEN ADJACENT POTABLE WATER, SEWER AND RECLAIMED WATER PIPELINES IN ACCORDANCE WITH THE MOST RESTRICTIVE REQUIREMENT OF ARIZONA ADMINISTRATIVE CODE, TITLE 18, CHAPTER 4 AND 9 AND MAG STANDARD DETAIL 404.
2. INSTALL NEW PIPELINES AT UNIFORM SLOPE BETWEEN POINTS FOR WHICH ELEVATIONS ARE GIVEN.
3. DETERMINE IN THE FIELD, WITH THE ENGINEER'S APPROVAL, DIMENSIONS NOT SHOWN FOR THE LOCATION OF NEW PIPING.

BLUE STAKE CENTER
800-782-5348
263-1100
BEFORE YOU DIG
CALL TWO WORKING DAYS

GLEN M. ROTH
CERTIFICATE NO. 26949
BRENT L. STARR
CERTIFICATE NO. 42719

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

City of Avondale

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC
Environmental Engineers and Scientists
2355 East Camelback Road, Suite 700
Phoenix, Arizona 85016-3458
Phone 602.265.5400 Fax 602.265.5632

ORIGINAL PLAN DATE

LATEST REVISION DATE

DWG NO G-1 SHEET NO 1 OF 8

PROJECT NUMBER

GENERAL NOTES

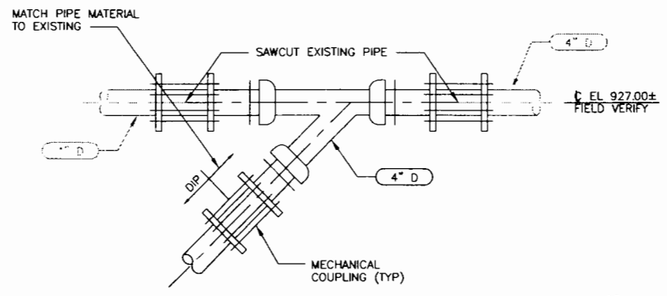
1. MECHANICAL COUPLING DRESSER STYLE 38 OR ROCKWELL TYPE 411.
2. SAWCUT AND REMOVE EXISTING PAVEMENT AND REPLACE TO LIKE NEW CONDITION WHERE NECESSARY.
3. CONTRACTOR TO PROVIDE ALL REQUIRED PIPING AND APPURTENANCES AT ALL CONNECTIONS BETWEEN EXISTING AND NEW PIPING IN ORDER TO PROVIDE A FULLY TESTED AND FUNCTIONAL SYSTEM.

KEY NOTES

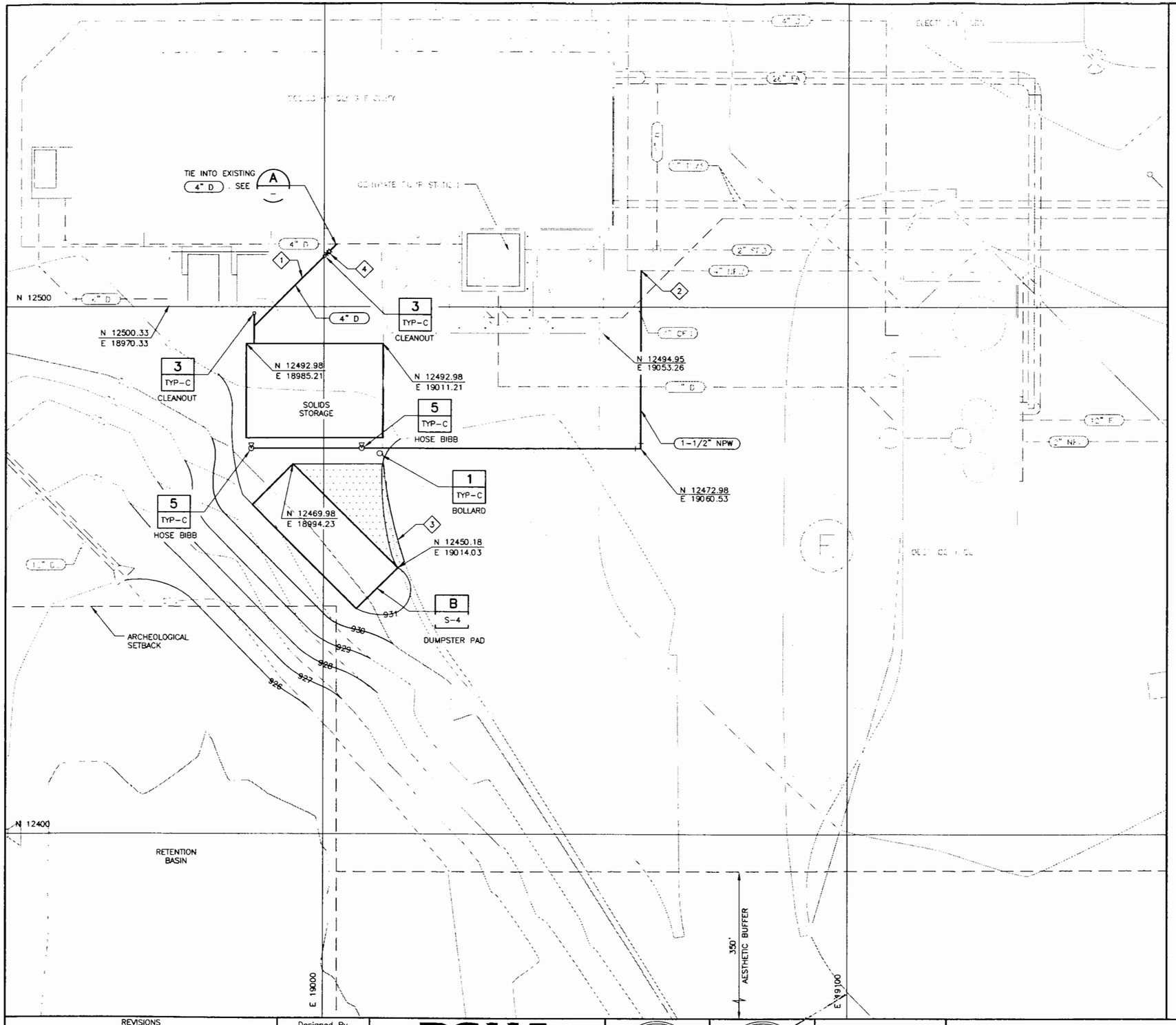
1. PIPE TRENCH. SEE 4 / TYP-C
2. REFER TO 5 / TYP-C FOR CONNECTION DETAILS.
3. ASPHALT. SEE 7 / TYP-C
4. ECCENTRIC PLUG VALVE SHALL BE DEZURIK OR APPROVED EQUAL. VALVE SHALL HAVE MECHANICAL JOINT ENDS. PROVIDE ADJUSTABLE TWO PIECE VALVE BOX WITH EXTENSION STEMS, OPERATING NUTS AND COVERS. EXTENSION STEM SHALL TERMINATE 12-INCHES BELOW FINISHED GRADE. PROVIDE STAINLESS STEEL NAMEPLATE WITH APPROPRIATE DESIGNATION. ALL BOLTS AND NUTS SHALL BE 316 STAINLESS STEEL.

SURVEY CONTROL

1. REBAR IN HANDHOLE AT E 1/4 CORNER,
   SEC 27, T1N, R1E
   N 12,036.59, E 20,028.56
   EL 928.50
2. BRASS CAP IN HANDHOLE AT NE CORNER,
   SEC 27, T1N, R1E
   N 14,631.40, E 20,021.64
   EL 932.96



A ENLARGED PLAN



N

0 5 10 20
SCALE IN FEET
1"=10'

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV1DC001.SitePlan.dwg

Designed By BIS
Drawn By PGH
Checked By GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO 20329 GLEN W. ROTH Date Signed 8/11/06 ARIZONA, U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO 42779 BRENT I. START Date Signed 8/11/06 ARIZONA, U.S.A.

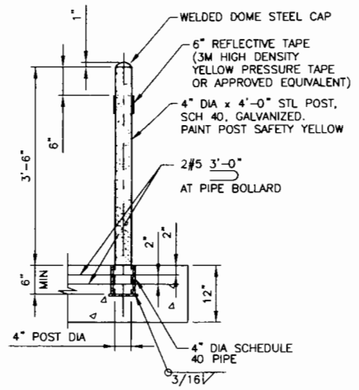
City of Avondale

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

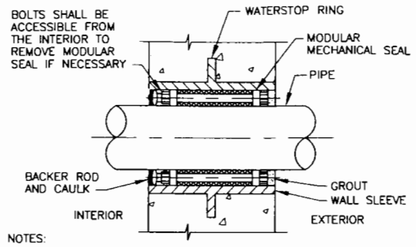
CIVIL
SITE PLAN

DSWA Project No	050320
Date	AUGUST 2006
	100% SUBMITTAL
Dwg No	C-1
Sht No	2 of 8

Dwg File: U:\CADD\050320\DWG\Vactor\AV1DC001.SitePlan.dwg Modified: Aug 09, 2006 - 2:06pm Plotted: Aug 11, 2006 - 1:19pm



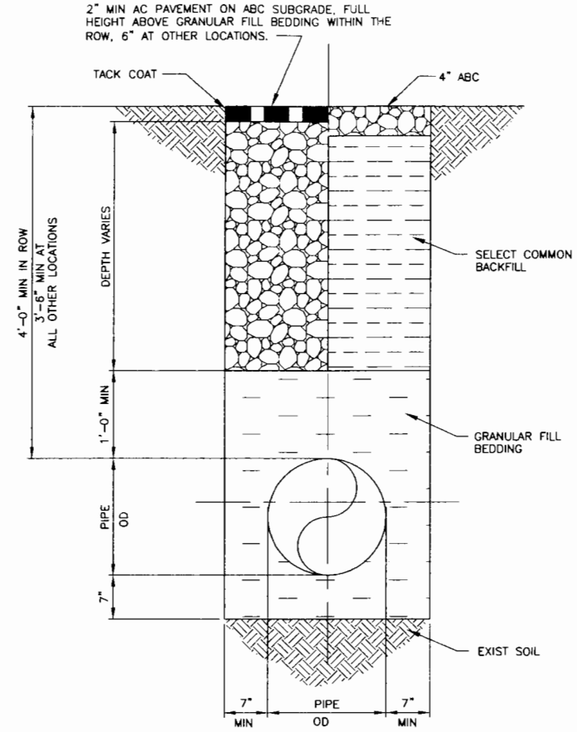
1	BOLLARD
TYP-C	NOT TO SCALE



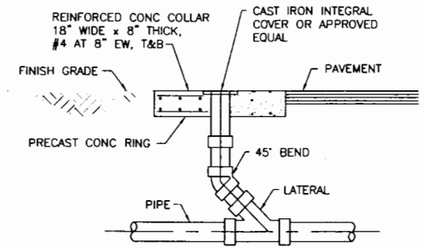
NOTES:

1. USE SLEEVE SIZE AS RECOMMENDED BY MODULAR MECHANICAL SEAL MANUFACTURER.
2. WATERSTOP RING SHALL BE THE SAME OUTSIDE DIAMETER AS STANDARD FLANGE FOR PIPING.
3. MODULAR MECHANICAL SEAL HARDWARE SHALL BE TYPE 316 SST.
4. FOR NEW CONSTRUCTION, SLEEVES SHALL BE CAST INTO WALL. BLOCKOUTS AND SUBSEQUENT GROUTING IN SLEEVES WILL NOT BE PERMITTED.
5. 6" DIA SLEEVES AND SMALLER SHALL BE SCHEDULE 40 STL PIPES.
6. 8" DIA SLEEVES AND LARGER SHALL BE 1/4" THK STL PIPE.
7. SLEEVE SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
8. PLACE BACKER ROD AND CAULK INTERIOR FACE WATERTIGHT.
9. MODULAR MECHANICAL SEAL SHALL BE LINK SEAL 475 OR APPROVED EQUAL.

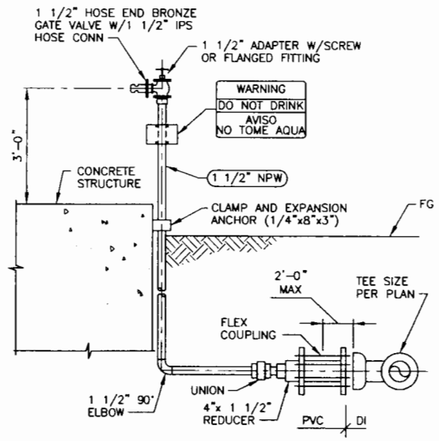
2	WALL SLEEVE
TYP-C	NOT TO SCALE



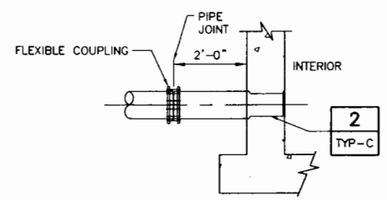
4	PIPE TRENCH
TYP-C	NOT TO SCALE



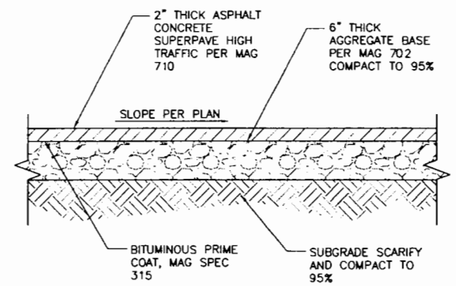
3	CLEANOUT
TYP-C	NOT TO SCALE



5	HOSE BIBB
TYP-C	NOT TO SCALE



6	FLEXIBLE COUPLING
TYP-C	NOT TO SCALE



NOTE:
AT EDGES AGAINST SOIL, USE TYPE A THICKENED EDGE PER MAG DET 201

7	ASPHALT PAVEMENT
TYP-C	NOT TO SCALE

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV1DC002.TypDetails.dwg

Designed By BIS
Drawn By PGH
Checked By GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed ARIZONA, U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO. 42779 BRENT L. START Date Signed ARIZONA, U.S.A.

City of Avondale

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

CIVIL
TYPICAL DETAILS

DSWA Project No 050320
Date AUGUST 2006
100% SUBMITTAL
Dwg No C-2
Sht No 3 of 8

Dwg File: U:\CAD\050320\DWG\Vactor\AV1DC002.TypDetails.dwg Modified: Aug 09, 2006 - 2:10...

A. GENERAL

1. UNLESS DETAILED, SPECIFIED OR INDICATED OTHERWISE, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS ARE MEANT TO APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS OR IN SPECIFIC CONTRACT DRAWINGS.
2. STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
3. MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS BUT REQUIRED BY OTHER CONTRACT DRAWINGS SHALL BE PROVIDED PRIOR TO PLACING CONCRETE.
4. STRUCTURAL DRAWINGS SHALL BE USED IN COORDINATION WITH MECHANICAL, ELECTRICAL, ARCHITECTURAL, CIVIL DRAWINGS AND SHOP DRAWINGS PROVIDED BY MANUFACTURERS OF EQUIPMENT AND REVIEWED BY THE ENGINEER.
5. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
6. HANDRAILS, STAIRS AND LADDERS SHALL CONFORM TO LATEST OSHA REQUIREMENTS.

B. CONCRETE

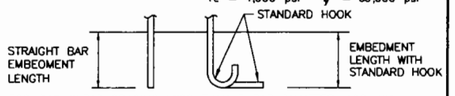
1. ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS. UNLESS OTHERWISE NOTED, ALL CONCRETE CONSTRUCTION, INCLUDING BENDING OF BARS, SHALL COMPLY WITH A.C.I. "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (A.C.I. 318-95).
2. NO BACKFILL SHALL BE PLACED AGAINST ANY STRUCTURE WALL UNTIL THE WALL HAS REACHED 75% STRENGTH AND THE CONNECTING SLABS HAVE BEEN CAST AND HAVE ALSO REACHED 75% STRENGTH.
3. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE NOTED OR SPECIFIED, SHALL BE IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES A.C.I.-315 LATEST EDITION.
4. LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEEER. SEE SPECIFICATIONS FOR LOCATION OF ADDITIONAL JOINTS, PLACE CONSTRUCTION JOINTS IN SLABS AND BEAMS, INCLUDING UPSET BEAMS, AT THE SAME TIME, CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED FOR BOND. UNLESS SHOWN OR SPECIFIED OTHERWISE, PROVIDE WATERSTOPS AT ALL CONSTRUCTION JOINTS IN WATERBEARING SLABS AND WALLS.

B. CONCRETE (CONT'D)

5. REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENT OF THE SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT, ASTM DESIGNATION A-615, GRADE 60. WELDED REINFORCING STEEL SHALL BE LOW ALLOY ASTM A-706.
6. ALL WALL REINFORCEMENT AT CORNERS OR JUNCTIONS OF WALLS SHALL BE CONTINUOUS, LAPPED OR TERMINATED IN A 90 DEGREE HOOK. UNLESS SHOWN OR SPECIFIED OTHERWISE ALL BARS SHALL BE DOWELED. UNLESS SHOWN OTHERWISE ALL DOWELS SHALL BE SAME SIZE AND SPACING AS THE REINFORCEMENT WHICH IS TO BE SPLICED TO THE DOWELS. DOWELS SHALL BE FIRMLY HELD IN POSITION AND SHALL NOT BE SHOVED INTO FRESHLY PLACED CONCRETE.
7. CONCRETE COVER AND REINFORCEMENT SHALL BE AS FOLLOWS:
   A. SURFACES NOT EXPOSED DIRECTLY TO GROUND, WEATHER OR WATER AFTER FORM REMOVAL.....1 1/2"
   B. CONCRETE PLACED DIRECTLY AGAINST GROUND.....3"
   C. SURFACES EXPOSED TO GROUND, WEATHER OR WATER AFTER FORM REMOVAL.....2"
   D. REINFORCEMENT SHALL BE PLACED WITHIN A TOLERANCE OF PLUS OR MINUS 1/4" OF POSITIONS SPECIFIED.
8. THE REINFORCING BARS FOR ALL SLABS, BEAMS AND COLUMNS SHALL HAVE A MINIMUM EXTENSION OR ANCHORAGE INTO SUPPORTS IN ACCORDANCE WITH A.C.I. COOE (318-95).
9. BAR SUPPORTS AND SPACERS SHALL BE PROVIDED IN ACCORDANCE WITH A.C.I. CODE.
10. REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE OR METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM QF 2 INCHES CLEARANCE SHALL BE PROVIDED AT ALL TIMES.
11. STIRRUP SUPPORT BARS SHALL BE PROVIDED BETWEEN ENDS OF TOP BARS AS REQUIRED.
12. CONCRETE CURING COMPOUND SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
13. THE MINIMUM LENGTH OF LAPS FOR SPLICES SHALL BE AS GIVEN IN THE TABLE BELOW:

REINFORCEMENT LAP SPLICE AND EMBEDMENT LENGTH						
BAR SIZE	BAR SPACING	** MIN. LAP LENGTH (IN.)		** MIN. EMBEDMENT LENGTH (IN.)		
				STRAIGHT BARS		WITH STD. HOOK
		TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
REQUIREMENTS FOR SLABS & WALLS						
#3	6" TO 12"	19	14	14	12	6
#4		24	19	19	14	7
#5		30	23	23	18	9
#6		36	28	28	21	10
#7		42	32	32	25	12
#8		57	44	44	34	14
#9	6"	90	69	69	53	15
	7" TO 12"	72	55	55	43	
REQUIREMENTS FOR BEAMS AND COLUMNS						
#3	—	SAME AS SLABS AND WALLS				7
#4	—					10
#5	—					12
#6	—					14
#7	—					17
#8	—	51	39	39	30	19
#9	—	64	49	49	38	22

f'_c = 4,000 psi f_y = 60,000 psi



** FOR BAR CLEAR SPACING LESS THAN 3 BAR DIAMETER, ADD 40%
FOR BAR CLEAR SPACING LESS THAN 2 BAR DIAMETER, ADD 100%.

14. TOP BARS ARE ALL HORIZONTAL BARS PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BARS. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.
15. MINIMUM BEARING ON WALLS: 12" FOR BEAMS, 6" FOR SLABS.
16. THE MINIMUM REINFORCING FOR ALL CONCRETE WALLS AND SLABS SHALL BE AS FOLLOWS:

THICKNESS	REINF. EACH WAY	LOCATION
6"	#4 @ 12"	CENTERED
8"	#5 @ 12"	CENTERED
10"	#4 @ 12"	EACH FACE
12"	#5 @ 12"	EACH FACE

PROVIDE LARGER SIZES AND MORE REINFORCING IN ALL SECTIONS OF CONCRETE WHERE REQUIRED BY THE DETAILS ON THE CONTRACT DRAWINGS OR BY THE SPECIFICATIONS.

C. ALUMINUM

1. ALUMINUM CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ALUMINUM CONSTRUCTION MANUAL OF THE ALUMINUM ASSOCIATION.
2. UNLESS OTHERWISE INDICATED, STRUCTURAL ALUMINUM SHALL BE 6061-T6 CONFORMING TO ASTM B-221.
3. WHERE ALUMINUM IS IN CONTACT WITH CONCRETE OR MASONRY SURFACES, CONTACT SURFACES SHALL BE COATED WITH HEAVY ALKALI-RESISTANT BITUMINOUS PAINT.

D. TESTING AND INSPECTION

1. SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH UBC 1997 SECTION 1701 FOR THE FOLLOWING WORK:
   A. CONCRETE FOOTINGS, WALLS, AND SLABS
2. SEE SPECIFICATIONS FOR MORE INFORMATION.

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV10S001.Notes.dwg

Designed By: BIS
Drawn By: PGH
Checked By: GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed ARIZONA, U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO. 42779 BRENT L. START Date Signed ARIZONA, U.S.A.

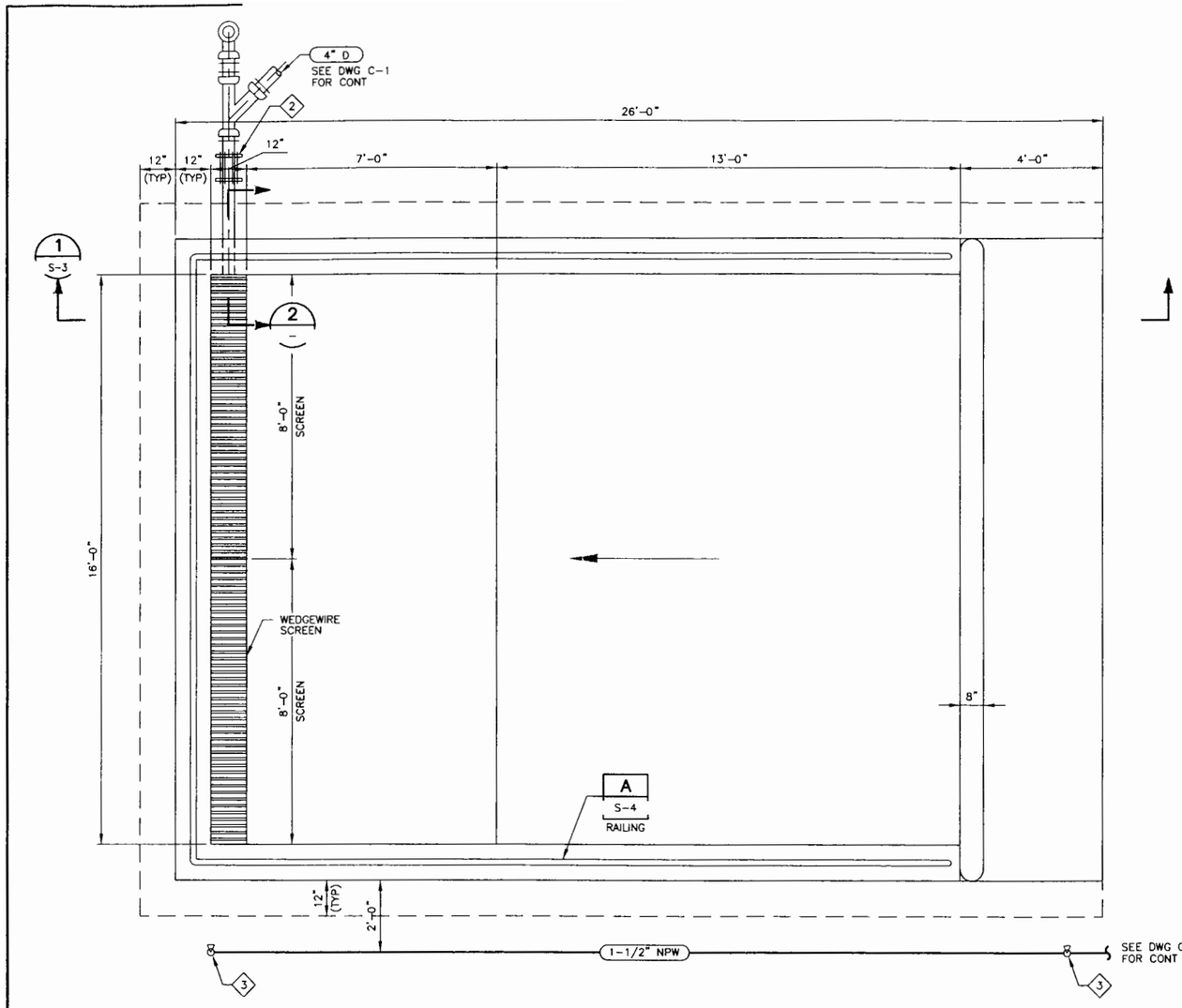
City of Avondale

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

STRUCTURAL
GENERAL NOTES

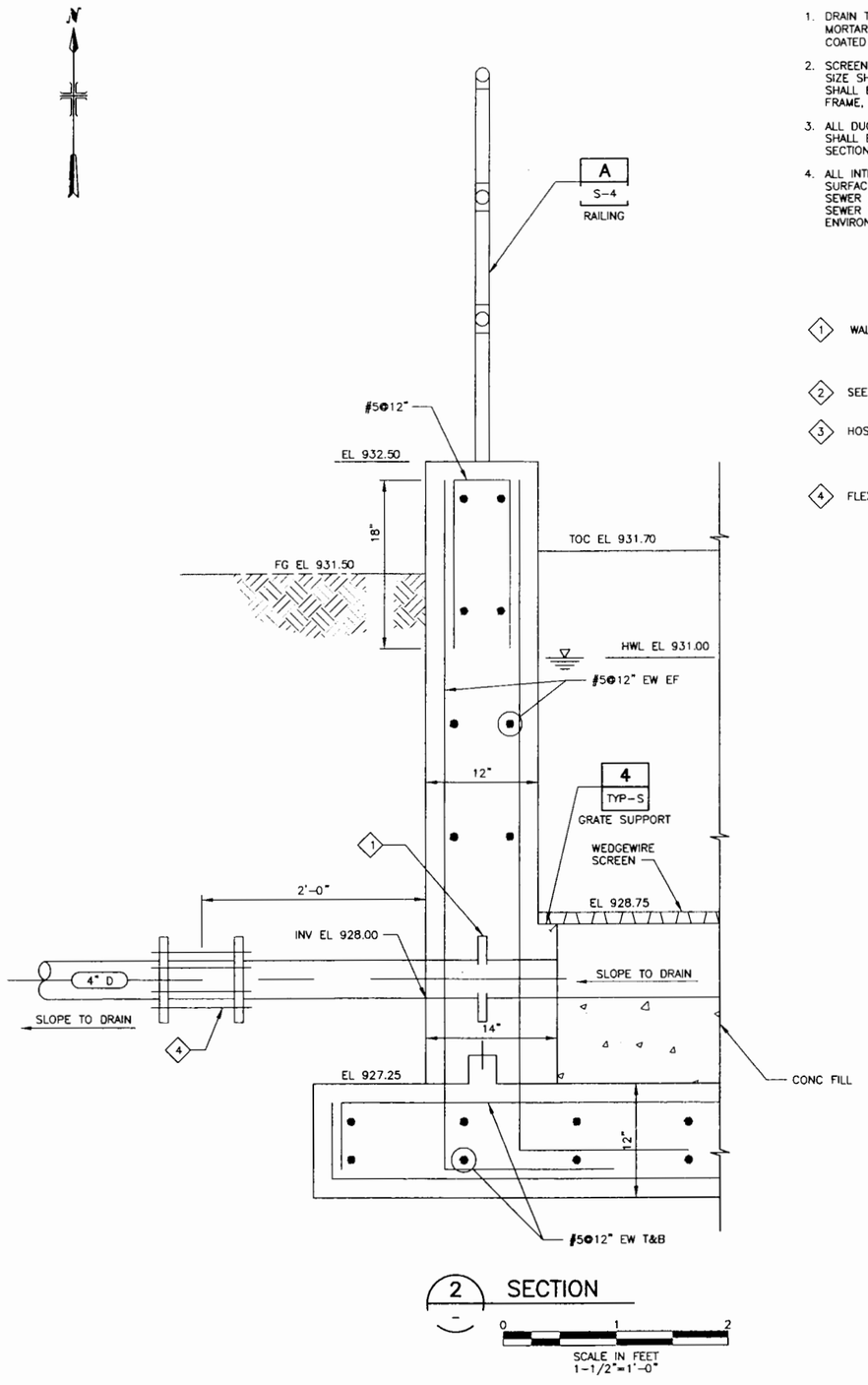
DSWA Project No 050320
Date AUGUST 2006
100% SUBMITTAL
Dwg No S-1
Sht No 4 of 8

Dwg File: U:\2005\050320\DWG\Vactor\AV10S001.Notes.dwg Modified: Aug 08, 2006 - 2:11pm



A PLAN

SCALE IN FEET
1/2"=1'-0"



2 SECTION

SCALE IN FEET
1-1/2"=1'-0"

GENERAL NOTES

1. DRAIN TO BE DI THICKNESS CLASS 53 CEMENT MORTAR LINED. PIPE TO BE BITUMINOUS COATED 1 MIL THICK.
2. SCREEN TO BE JOHNSON WEDGE 304 SS. SLOT SIZE SHALL BE 0.125". TRANSMITTING CAPACITY SHALL BE 59 GPM/FT. PROVIDE 12" 304 SS FRAME, 1/4" THICK, 1-1/4" BAR.
3. ALL DUCTILE IRON FITTINGS AND VALVES SHALL BE POLY-ETHYLENE ENCASED PER MAG SECTION 610.5.
4. ALL INTERIOR AND EXPOSED EXTERIOR CONCRETE SURFACES TO BE COATED WITH A 1/8" THICK SEWER SHIELD F-120 FOR UNDERCOAT AND 1/8" SEWER SHIELD 100 FOR SURFACE COAT BY ENVIRONMENTAL COATINGS.

KEY NOTES

1. WALL SLEEVE. SEE 2 / TYP-C
2. SEE NOTE 1 ON DWG C-1.
3. HOSE BIBB. SEE 5 / TYP-C
4. FLEXIBLE COUPLING. SEE 6 / TYP-C

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV10S002.Plan.dwg

Designed By: BIS
Drawn By: PGH
Checked By: GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed 6-17-06 ARIZONA, U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO. 42779 BRENT I. START Date Signed 6-17-06 ARIZONA, U.S.A.

City of Avondale

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

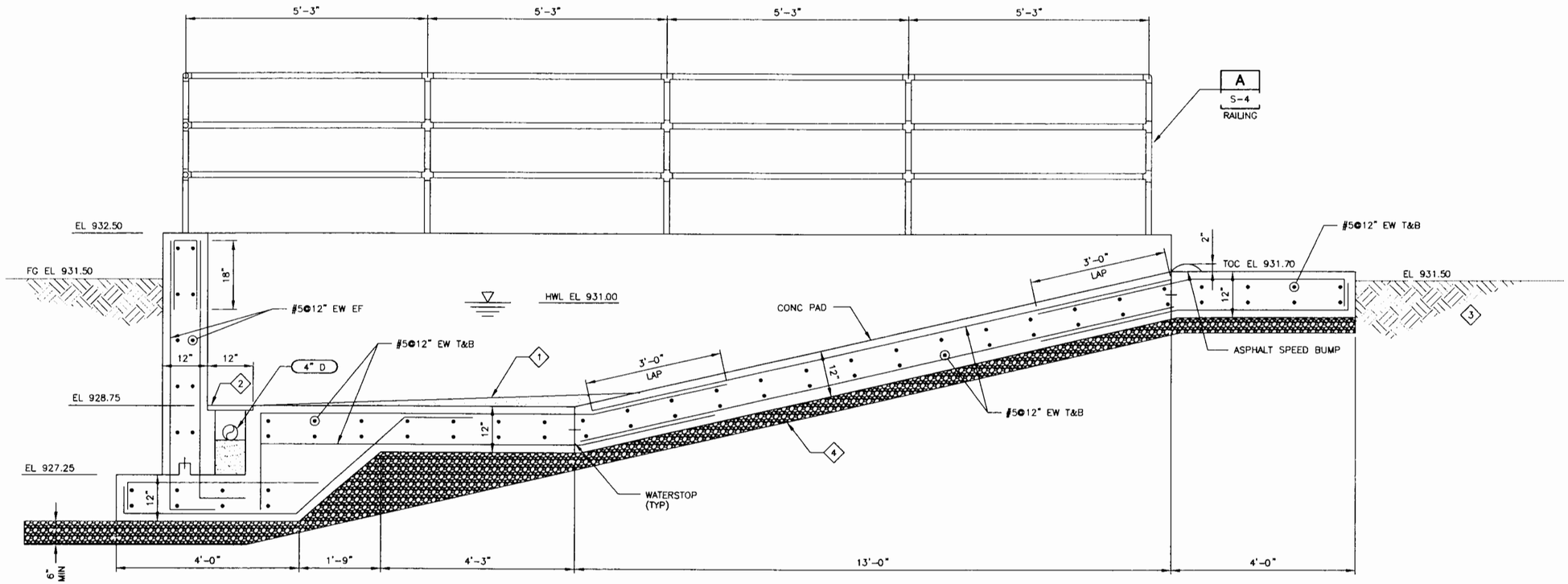
STRUCTURAL
SOLIDS STORAGE
PLAN AND SECTION

DSWA Project No 050320
Date AUGUST 2006
100% SUBMITTAL
Dwg No S-2
Sht No 5 of 8

Dwg File: U:\CAD\050320\DWG\Vactor\AV10S002.Plan.dwg Modified: Aug 09, 2006 - 2:16pm Plotted: Aug 11, 2006 - 1:22pm

KEY NOTES

1. 3" CONC FILL. SLOPE TO DRAIN.
2. SEE GENERAL NOTE 2 ON DWG S-2.
3. BACKFILL WITH NATIVE. COMPACT TO 95% ASTM D698.
4. TYPE B SELECT MATERIAL PER MAG 702, COMPACT TO 95% ASTM D698.



1 S-2 SECTION

SCALE IN FEET
3/4"=1'-0"

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV1DS003.Sec1.dwg

Designed By: BIS
Drawn By: PGH
Checked By: GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer Certificate No. 20329 GLEN W. ROTH Date Signed Arizona, U.S.A.

Registered Professional Engineer Certificate No. 42779 BRENT I. START Date Signed Arizona, U.S.A.

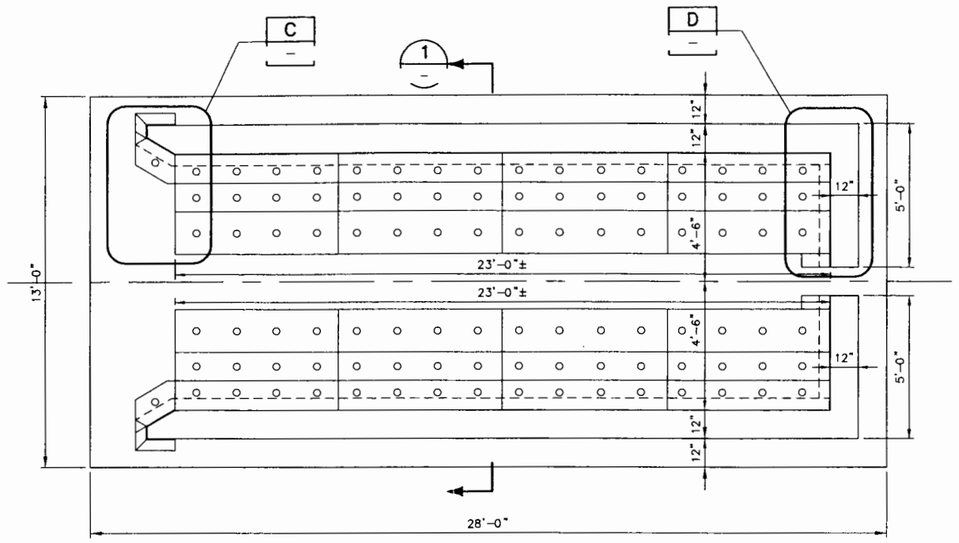
City of Avondale

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

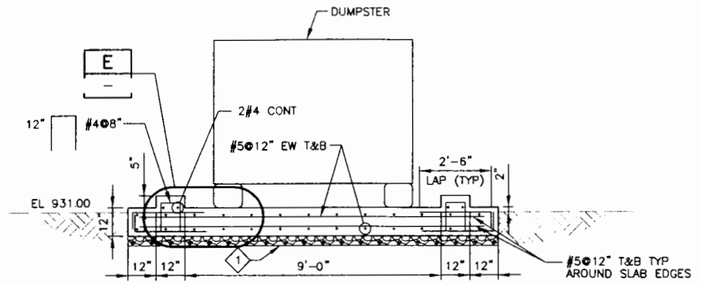
STRUCTURAL
SOLIDS STORAGE
SECTION 1

DSWA Project No 050320
Date AUGUST 2006
100% SUBMITTAL
Dwg No S-3
Sht No 6 of 8

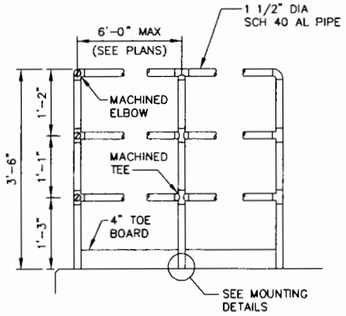
Dwg File: U:\2005\050320\DWG\Vactor\AV1DS003.Sec1.dwg Modified: Aug 09, 2006 - 2:21pm

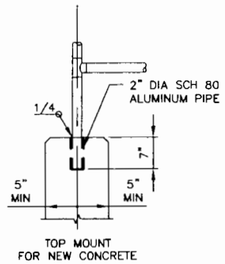


B DETAIL
C-1
0 1 2 4
SCALE IN FEET
3/8"=1'-0"



1 SECTION
0 1 2 4
SCALE IN FEET
3/8"=1'-0"





A RAILING DETAIL
S-2
0 1 2
SCALE IN FEET
3/4"=1'-0"

KEY NOTES

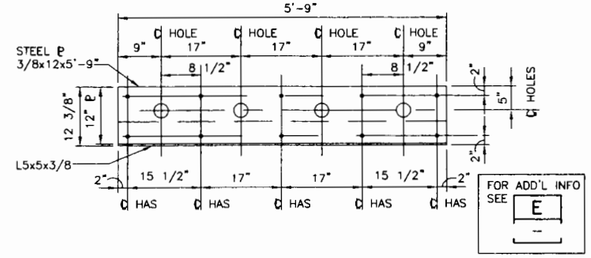
◇1 SEE NOTE ◇4 ON DWG S-3.

ABBREVIATIONS

HAS HEADED ANCHOR STUD

GENERAL NOTE

1. ALL INTERIOR AND EXPOSED EXTERIOR CONCRETE SURFACES TO BE COATED WITH A 1/8" THICK SEWER SHIELD F-120 FOR UNDERCOAT AND 1/8" SEWER SHIELD 100 FOR SURFACE COAT BY ENVIRONMENTAL COATINGS.



F DETAIL
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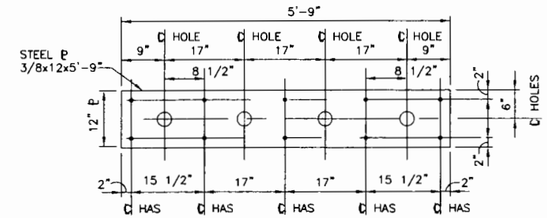

G DETAIL
0 1 2
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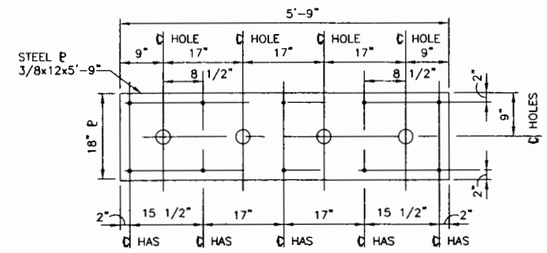
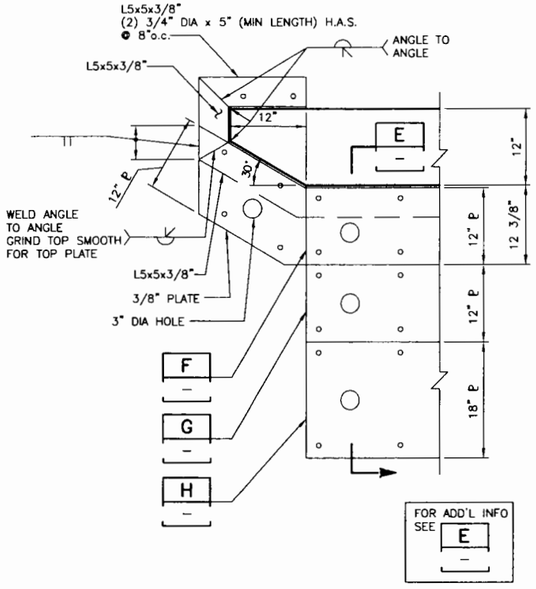
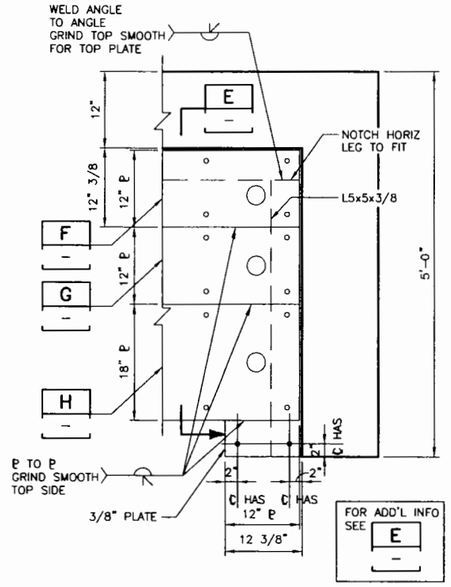


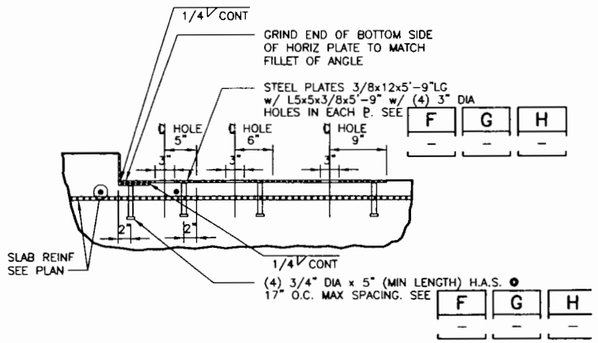
H DETAIL
0 1 2
SCALE IN FEET
3/4"=1'-0"



C DETAIL
0 1 2
SCALE IN FEET
1"=1'-0"



D DETAIL
0 1 2
SCALE IN FEET
1"=1'-0"



E DETAIL
0 1 2
SCALE IN FEET
1"=1'-0"

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV1DS004.Details.dwg

Designed By: BIS
Drawn By: PGH
Checked By: GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed ARIZONA, U.S.A.

Registered Professional Engineer CERTIFICATE NO. 42779 BRENT I. START Date Signed ARIZONA, U.S.A.

City of Avondale

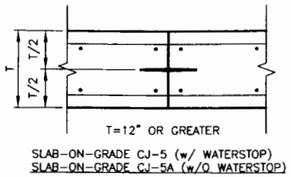
City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

STRUCTURAL

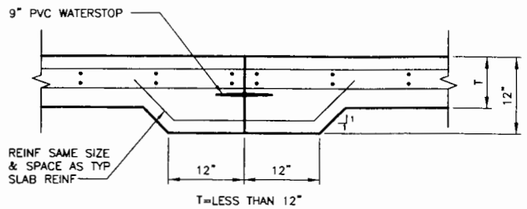
DUMPSTER PAD
DETAILS

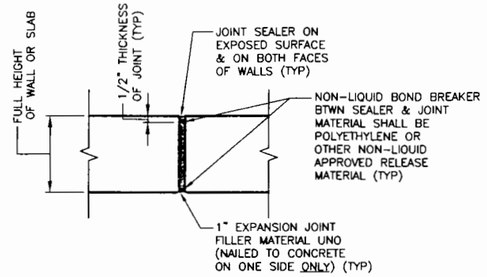
DSWA Project No 050320
Date AUGUST 2006
100% SUBMITTAL
Dwg No S-4
Sht No 7 of 8

Dwg File: U:\CAD\050320\DWG\Vactor\AV1DS004.Details.dwg Modified: Aug 11, 2006 - 1:17pm Plotted: Aug 11, 2006 - 1:18pm

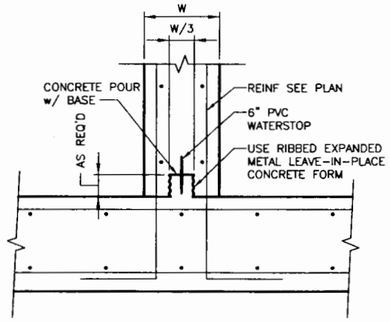


SLAB-ON-GRADE CJ-5 (w/ WATERSTOP)
SLAB-ON-GRADE CJ-5A (w/O WATERSTOP)

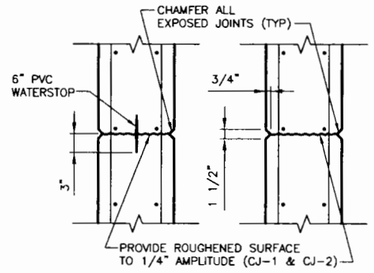




HORIZONTAL & VERTICAL EJ-1



HORIZONTAL CJ-2A ALTERNATE

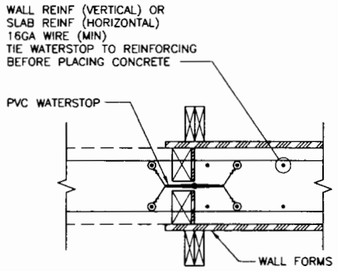


HORIZONTAL CJ-2 HORIZONTAL CJ-1

2 EXPANSION JOINT

TYP-S

SCALE IN FEET
1"=1'-0"



1 CONSTUCTION JOINT

TYP-S

SCALE IN FEET
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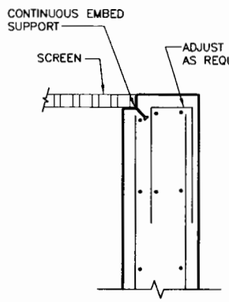
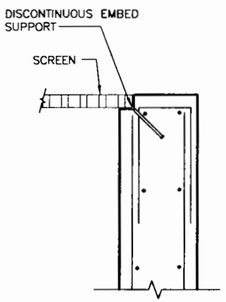
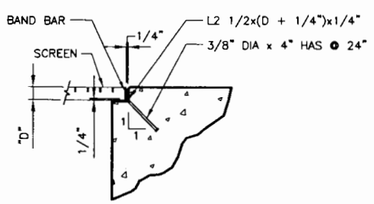


WALL REINFORCEMENT AT CONTINUOUS EMBED FOR GRATING SUPPORT



WALL REINFORCEMENT AT DISCONTINUOUS EMBED FOR GRATING SUPPORT



3 PVC WATER STOP INSTALLATION

TYP-S

SCALE IN FEET
1"=1'-0"

4 GRATING AND PLATE SUPPORT

TYP-S

SCALE IN FEET
1"=1'-0"

REVISIONS			
NO	DATE	BY	DESCRIPTION

File Name: AV1DS005.TypDetails.dwg

Designed By: BIS
Drawn By: PGH
Checked By: GWR

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO 20329 GLEN W. ROTH Date Signed 8-11-06 ARIZONA, U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO 42779 BRENT L. START Date Signed 8-10-06 ARIZONA, U.S.A.

City of Avondale

City of Avondale
VACTOR TRUCK
SOLIDS STORAGE FACILITY

STRUCTURAL

TYPICAL DETAILS

DSWA Project No 050320
Date AUGUST 2006
100% SUBMITTAL
Dwg No S-5
Sht No 8 of 8

Dwg File: U:\CAD\050320\DWG\Vactor\AV1DS005.TypDetails.dwg Modified: Aug 10, 2006 - 8:27am Plotted: Aug 11, 2006 - 1:24pm

Water Reclamation Facility Phase 1

Package 1 – Aeration Basin Modifications

City Project No. UT-06002

Addendum No. 1

April 20, 2007

CITY OF AVONDALE
WATER RECLAMATION FACILITY PHASE 1, PACKAGE 1
AERATION BASIN MODIFICATIONS
CITY PROJECT NO. UT-06002

ADDENDUM NO. 1

1 - GENERAL

1.1 SCOPE

A. This addendum forms a part of the Contract Documents and clarifies, corrects, or modifies the original Contract Documents issued by City of Avondale.

B. This addendum consists of **2** pages (including cover) and **1** attachment with two (2) sheets.

2 - DOCUMENT 1 – CONTRACT SPECIFICATIONS

2.1 SECTION 01110-SUMMARY OF WORK

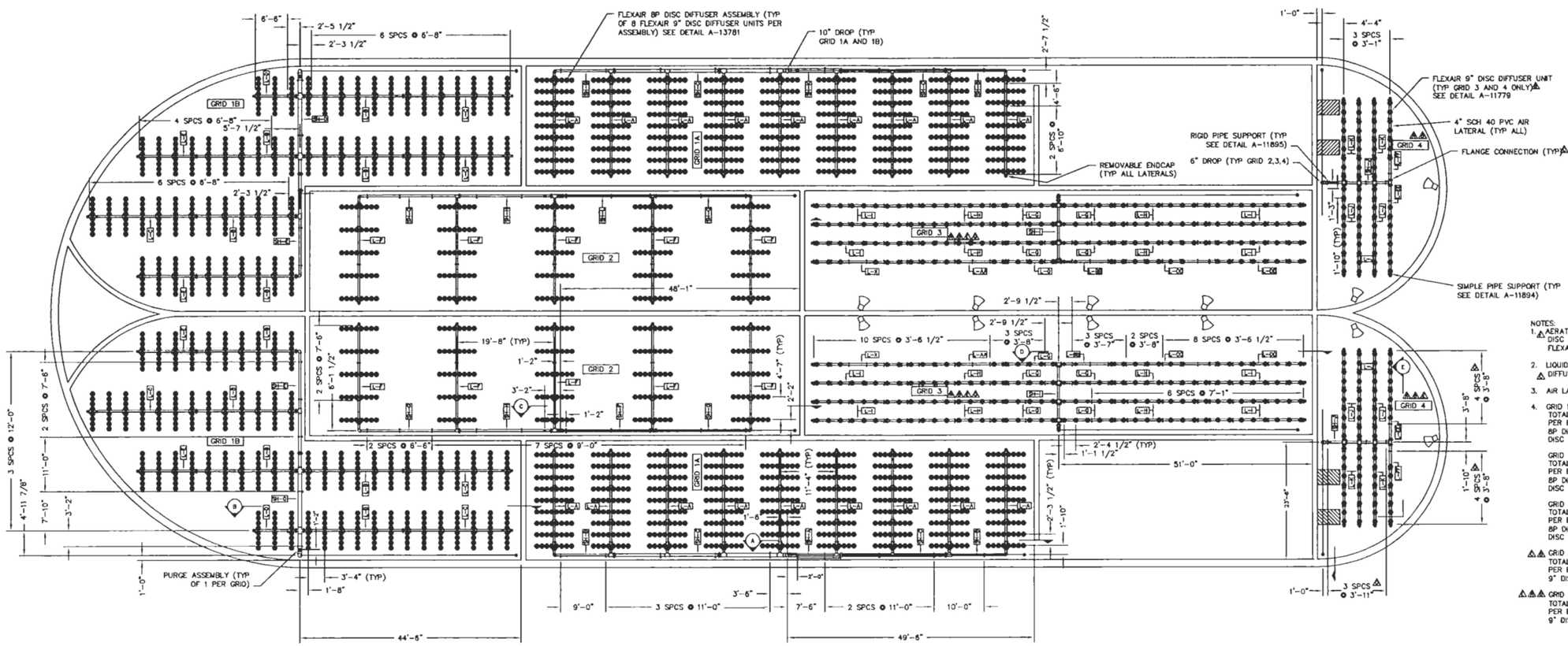
A. Part 1.3.B: **Add**
'11. Construction of a new Vactor Truck Solids Storage Facility per "Vactor Truck Solids Storage Facility" Drawings by ENGINEER, signed and sealed on August 11, 2006. The Drawings contain a total of eight (8) sheets.'

2.2 SECTION 11375-FLEXIBLE MEMBRANE FINE BUBBLE AERATION SYSTEM

A. Part 1.1.A.2: **Change** the last sentence to read 'The existing diffuser assemblies will remain in service. Replace the membranes of all the existing diffuser assemblies with new ones. The layouts and counts of existing diffusers are shown in the submittal drawings enclosed at the end of the specification. Existing and new diffuser assemblies shall have identical diffuser losses at any given air flow. Repair or replace any damaged piping or diffuser assemblies as necessary.'

B. At the end of the section, **add** the submittal drawings for the existing diffusers, attached to this Addendum.

++ END OF ADDENDUM ++



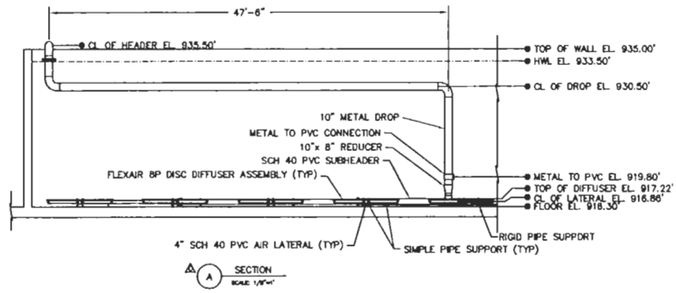
NOTES:
1. AERATION-MIXING BY EDI FLEXAIR 8P DISC DIFFUSER ASSEMBLY UNITS AND FLEXAIR 9" DISC DIFFUSER UNITS.
2. LIQUID DEPTH IS 17.25'
   DIFFUSER DEPTH IS 16.33'
3. AIR LATERALS ARE 4" SCH 40 PVC.
4. GRID 1A=
   TOTAL= 81 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES PER BASIN= 2 BASINS TOTAL= 162 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES (1296 FLEXAIR 9" DISC DIFFUSER UNITS.

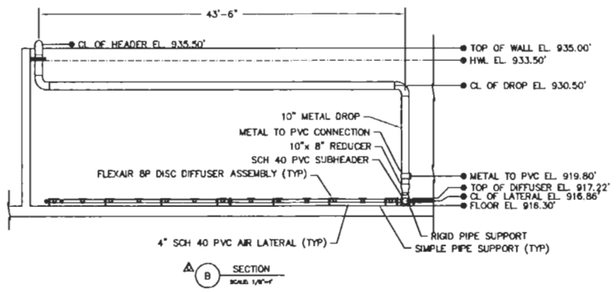
   GRID 1B=
   TOTAL= 62 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES PER BASIN= 2 BASINS TOTAL= 124 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES (992 FLEXAIR 9" DISC DIFFUSER UNITS.

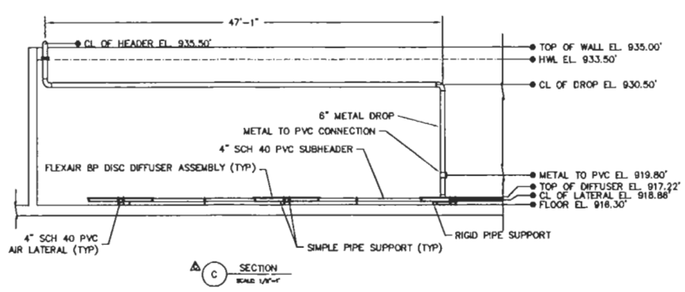
   GRID 2=
   TOTAL= 25 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES PER BASIN= 2 BASINS TOTAL= 50 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES (400 FLEXAIR 9" DISC DIFFUSER UNITS.

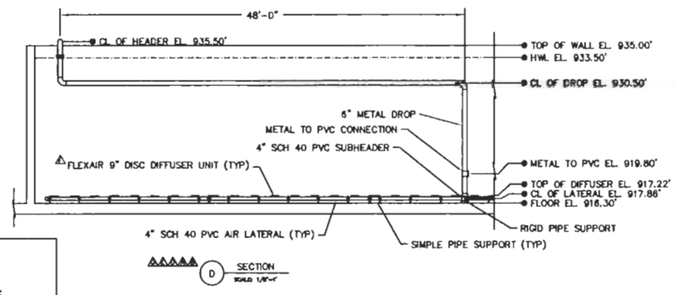
   GRID 3=
   TOTAL= 160 FLEXAIR 9" DISC DIFFUSER UNITS PER BASIN= 2 BASINS TOTAL= 320 FLEXAIR 9" DISC DIFFUSER UNITS.

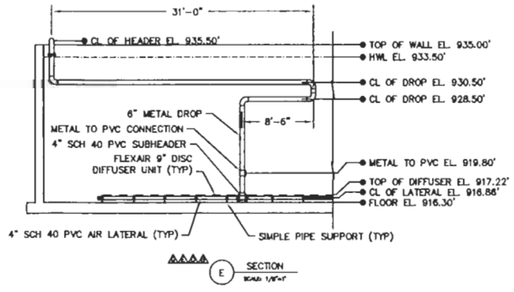
   GRID 4=
   TOTAL= 72 FLEXAIR 9" DISC DIFFUSER UNITS PER BASIN= 2 BASINS TOTAL= 144 FLEXAIR 9" DISC DIFFUSER UNITS.











NOTE:
CONTRACTOR TO CONFIRM EDI LAYOUT IS SUITABLE FOR INSTALLATION AND WILL NOT CONFLICT WITH OTHER PROCESS PIPING AND/OR STRUCTURAL COMPONENTS.

REFER TO DWG #D-14790 FOR NEW AERATION TANK 3
REFER TO DWG #D-14819 FOR CHANNEL AERATION

REV.	DATE	BY	DESCRIPTION
5	3-29-02	TEM	SUPPORTS AROUND MIXERS
4	1-4-02	TEM	DISC DIFFUSER CALLOUTS
3	11-6-01	TEM	ENGINEER REDLINES
2	10-8-01	TEM	SECTION D&E
1	10-3-01	TEM	ADD FLANGES
0	8-10-01	TEM	ENGINEER REDLINES
A	7-19-01	TEM	ENGINEER REDLINES

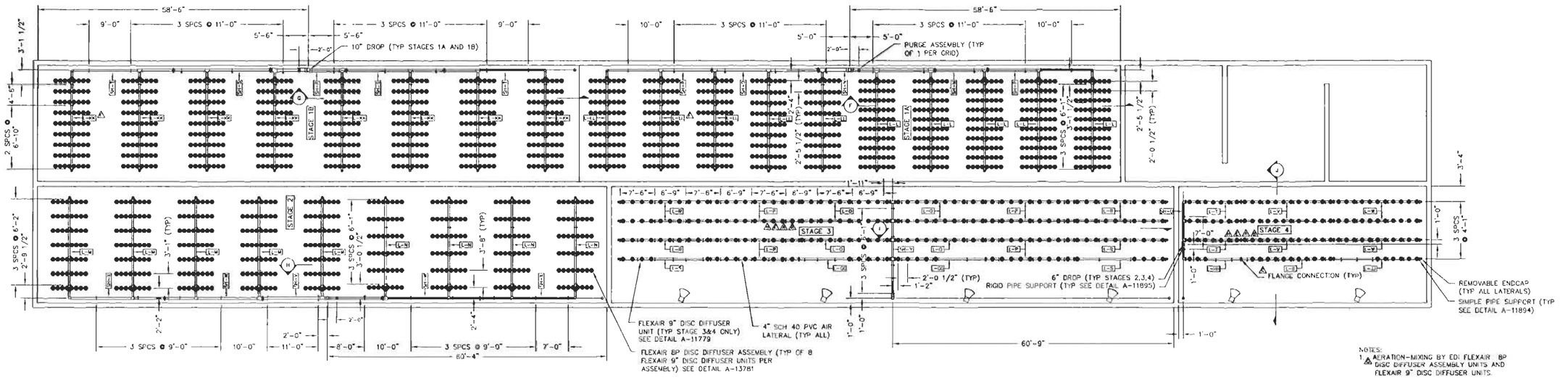
AVONDALE, AZ
EXISTING AERATION BASINS
EDI FLEXAIR AERATION--
MIXING SYSTEM

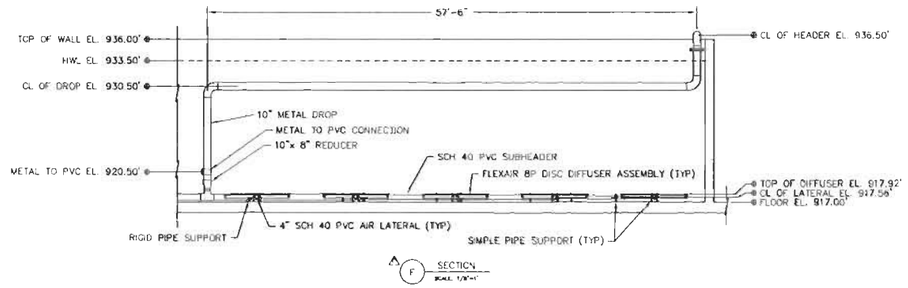
SCALE: 3/32"=1' | DATE: 4-6-01 | ENG. BY: RCB | DRAWN BY: TEM

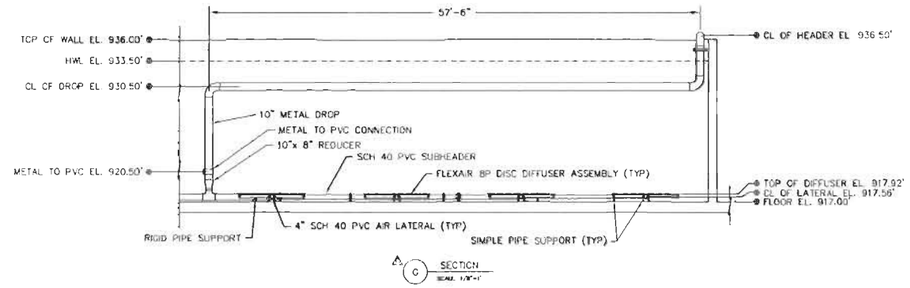
ENVIRONMENTAL DYNAMICS INC. COLUMBIA, MISSOURI

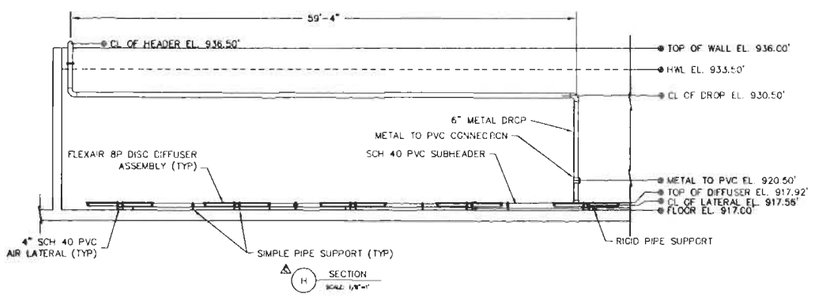
DRAWING NUMBER D-14776

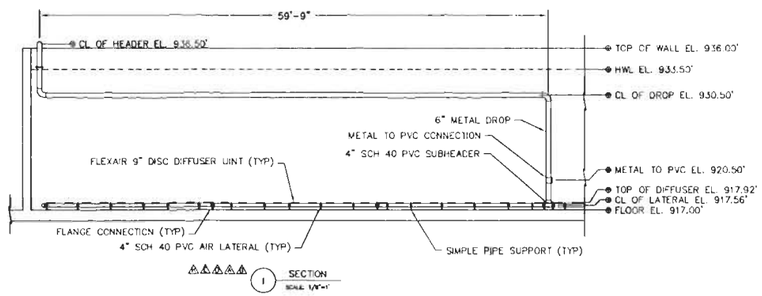
SHEET 1 OF 3 | EDI JOB NO. 2771D

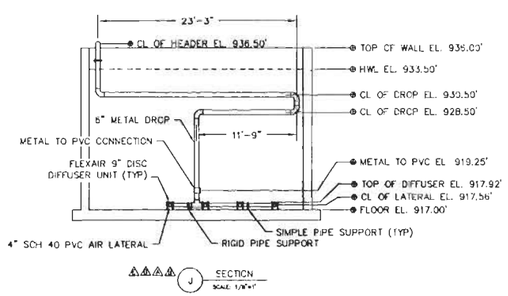












NOTES:
1. AERATION-MIXING BY EDI FLEXAIR 8P DISC DIFFUSER ASSEMBLY UNITS AND FLEXAIR 9" DISC DIFFUSER UNITS.
2. LIQUID DEPTH IS 16.50'
   DIFFUSER DEPTH IS 15.58'
3. AIR LATERALS ARE 4" SCH 40 PVC.
4. STAGE 1A=
   TOTAL= 95 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES=
   (760 FLEXAIR 9" DISC DIFFUSER UNITS.

   STAGE 1B=
   TOTAL= 72 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES=
   (576 FLEXAIR 9" DISC DIFFUSER UNITS.

   STAGE 2=
   TOTAL= 59 FLEXAIR 8P DISC DIFFUSER ASSEMBLIES=
   (472 FLEXAIR 9" DISC DIFFUSER UNITS.

   STAGE 3
   TOTAL= 212 FLEXAIR 9" DISC DIFFUSER UNITS.

   STAGE 4=
   TOTAL= 110 FLEXAIR 9" DISC DIFFUSER UNITS

NOTE:
CONTRACTOR TO CONFIRM EDI LAYOUT IS SUITABLE FOR INSTALLATION AND WILL NOT CONFLICT WITH OTHER PROCESS PIPING AND/OR STRUCTURAL COMPONENTS.

REFER TO DWG #D-14776 FOR EXISTING AERATION TANKS
REFER TO DWG #D-14819 FOR CHANNEL AERATION

REV	DATE	BY	DESCRIPTION
7	3-29-02	TEM	SUPPORTS AROUND MIXERS
6	1-4-02	TEM	DISC DIFFUSER CALLOUTS
5	11-30-01	TEM	LABELING
4	11-6-01	TEM	ENGINEER REDLINES
3	10-8-01	TEM	SECTION I&J
2	10-3-01	TEM	ADDED FLANGES
1	8-10-01	TEM	ENGINEER REDLINES
0	7-19-01	TEM	ENGINEER REDLINES

AVONDALE, AZ
NEW AERATION TANK NO.3
EDI FLEXAIR AERATION-
MIXING SYSTEM

SCALE: 3/32"=1' DATE: 4-6-01 ENG. BY: RCB DRAWN BY: TEM

ENVIRONMENTAL DYNAMICS INC.
COLUMBIA, MISSOURI

DRAWING NUMBER D-14790

SHEET 2 OF 3 EDI JOB NO. 2771D

Water Reclamation Facility Phase 1

Package 1 – Aeration Basin Modifications

City Project No. UT-06002

Addendum No. 2

May 7, 2007

CITY OF AVONDALE
WATER RECLAMATION FACILITY PHASE 1, PACKAGE 1
AERATION BASIN MODIFICATIONS
CITY PROJECT NO. UT-06002

ADDENDUM NO. 2

1 - GENERAL

1.1 SCOPE

A. This addendum forms a part of the Contract Documents and clarifies, corrects, or modifies the original Contract Documents issued by City of Avondale.

B. This addendum consists of **2** pages (including cover), **2** attached specifications, and **1** drawing.

2 - DOCUMENT 1 – CONTRACT SPECIFICATIONS

2.1 SECTION 11370-MULTI-STAGE CENTRIFUGAL AIR BLOWERS

A. **Replace** entire Section with attached 11370.

2.2 SECTION 15116-DOUBLE DISC CHECK VALVES

A. Add the attached specification section 15116 to the Contract Documents.

2.3 SECTION 17502-PROCESS CONTROL SYSTEM FUNCTIONAL DESCRIPTIONS

A. **Change** all references to "PLC" to "PLC/SCADA".

3 - DOCUMENT 2 – DRAWINGS

3.1 DRAWING N3-4

A. **Replace** the drawing with the sheet N3-4, attached to this addendum.

++ END OF ADDENDUM ++

SECTION 11370

MULTI-STAGE CENTRIFUGAL AIR BLOWERS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope:
   1. CONTRACTOR shall provide all labor, materials, equipment and incidentals as shown on the Drawings, specified and required to furnish and install one multi-stage centrifugal air blower complete and operational with electric motor and all appurtenances as shown on the Drawings and as specified herein for a complete and functional blower system. Anchor bolts for multi-stage centrifugal air blowers are included in this Section.
   2. Included, but not limited to, are the following components for each unit:
      a. Blower.
      b. Electric motor.
      c. Coupling and common base.
      d. Accessories as specified.
      e. Control panel (common).

B. Related Sections: CONTRACTOR shall coordinate the requirements of the Work in this Section along with the requirements of the Sections listed below which includes, but is not necessarily limited to, Work that is directly related to this Section.
   1. Section 01780, Operation and Maintenance Data.
   2. Section 01820, Demonstration and Training.
   3. Section 03300, Cast-In-Place Concrete.
   4. Section 09900, Painting.
   5. Section 11000, General Equipment Provisions.
   6. Section 11101, Electrical Motors.
   7. Division 15, Applicable Sections on Piping and Valves.
   8. Division 16, Electrical.
   9. Division 17, Applicable Sections on Instrumentation and Controls.

1.2 QUALITY ASSURANCE

A. Manufacturer's Qualifications:
   1. Manufacturer shall have a minimum of five years experience of producing substantially similar equipment, and shall be able to show evidence of at least five installations in satisfactory operation for at least five years. List should include model number, horsepower, capacity, year installed, location, facility and contact name and telephone number for reference.

B. Shop Tests:
   1. Blower Tests:
      a. Except as described below, test one blower of each size in accordance with ASME Power Test Code 10 for Centrifugal Compressors and Exhausters from surge to 120 percent of design volume. ASME tests, however, are not required for

standard blowers for which data on previously tested units of equal design is available. Run minimum 6 test points on each blower. Two of these points shall bracket the rated point within the allowable test condition tolerances of PTC-10. Run additional points at test conditions equivalent to the full range between specified blower operating limits. In addition to the data specified above, each test report shall contain the following:

1) A copy of certified efficiency and power factor curves from 50 percent to 100 percent full load for the drive motors to be furnished.
2) Curves showing blower performance at rated speed and for discharge pressure from minimum specified pressure to surge pressure. The performance shall be shown in terms of standard cubic feet per minute (scfm) and brake horsepower required at the input shaft of the blower. The curves shall be for the inlet conditions specified under Schedule of Service Conditions, and corresponding to un-throttled operation at rated inlet density. Surge points shall be indicated.
3) Shaft power measurements, shall be by torque measurements or electrical measurements as defined by Section 4.13 & 4.14 of ASME PTC-10 Test Code, only. No exceptions to this requirement will be allowed. Shaft power measurements by heat balance measurements will not be acceptable.

b. Prior to conducting the tests, submit the proposed test procedure for review as required by PTC-10. After successful completion of the certified performance test, submit test results for each blower. Curves and other test data from units previously tested shall be submitted for approval prior to shipment of the equipment.
c. Test each blower for minimum three hours run-time, at the manufacturer's plant with the job motor. Vibration and temperature measurements shall be taken to determine its mechanical integrity. Vibration level (double amplitude of vibration) shall be limited to a maximum of 1.25 total mils at design speed. Temperature of the bearing housing near the end of run time shall be extrapolated to the specified ambient conditions to confirm that bearing temperature shall not exceed 215°F under the specified operating range.
d. Acoustical Analysis: Conduct acoustical analysis on each blower by measuring filtered A-weighted overall sound pressure level in dBA for each of 8 octave band mid-points, beginning at 63 Hz, measured at five feet horizontally from the surface of the equipment at mid point height of the noise source. Test shall meet specified noise limits in part 2.1.A.5. Submit certified acoustical test results for each blower furnished.
e. Housing Hydrostatic Test: Conduct hydrostatic testing of each complete blower housing at 20 pounds per square inch gauge for not less than 30 minutes. Submit certified housing hydrostatic test results for each blower.
f. Impeller Balancing: Conduct static balancing of impeller units prior to blower shaft assembly. Conduct dynamic balancing of complete blower rotary assembly.
    1) Provide in certified test report for each unit, including:
    2) Date and place of the dynamic balancing.
    3) Type of balancing machine used (make and model).
    4) Balance machine weight rating.
    5) Final balanced part weight.
    6) Final balance quality (center of gravity displacement in inches).
    7) Methods used to achieve final balance (grinding, drilling, end milling, etc.).

8) A sketch showing relative locations of modification required to achieve balancing.
9) Maximum vibration amplitude at the bearings when operating at design speed after final balancing.

g. Each test shall be witnessed by a Registered Professional Engineer, who may be an employee of the manufacturer. The Registered Professional Engineer shall sign and seal each copy of the curves and shall also certify that the required tests were performed. The State of registration, registration number and name on the seal shall be clearly legible. The serial number of the equipment shall also appear on all data covering the unit.

2. Motor Tests:
   a. Perform a routine test on each motor at the manufacturer's factory. The test shall consist of: Running Light Current; Locked Rotor Current; Winding Resistance; High Potential; and Bearing Inspection.

C. Reference Standards: Comply with applicable provisions and recommendations of the following, except as otherwise shown or specified.
   1. Standards of the American Society for Testing and Materials.
   2. National Electric Code 2002.
   3. Standards of National Electrical Manufacturers Association.
   4. Institute of Electrical and Electronics Engineers.
   5. American National Standards Institute.
   6. American Petroleum Institute (API) 617, Rotary Assembly Dynamic Balancing.
   7. ASME PTC 10, Power Test Code for Centrifugal Compressors and Exhausters.
   8. AWS D1.1, Structural Welding Code.
   9. AISC, Manual of Steel Construction.
   10. AGMA Standards.
   11. National Fire Protection Association 79, Annex "D" Standards.
   12. Antifriction Bearing Manufacturers Association.

1.3 SUBMITTALS

A. Shop Drawings: Submit for approval the following per the requirements of Section 01330 Submittal Procedures:
   1. Manufacturer's literature, illustrations, specifications and engineering data.
   2. Drawings showing fabrication methods, assembly, accessories, installation details and wiring diagrams.
   3. Setting drawings, templates, and directions for the installation of anchor bolts and other anchorages.
   4. Drawings of control panels, furnished in accordance with the requirements of Division 17.
   5. A certified motor data sheet for each type and size of motor. The data sheets shall show winding resistances; torques; guaranteed minimum efficiencies at 1/2, 3/4 and full load; power factors; slip; full load, locked rotor and running light amperes; temperature rises and results of dielectric tests. All values shall be from tests of the job motor or previously manufactured electrically duplicate motor. Data sheet shall be marked to indicate motor application, manufacturer, type, frame size, bearing type, lubrication medium, insulation type, and enclosure type.
   6. Transmittal form clearly identifying deviations from the contract documents.

B. Shop Test Results:
   1. Submit test curves of actual motors and blowers furnished, or from standard units previously tested.

C. Field Test Results:
   1. Submit a written report giving the results of the field tests required.

D. Operation and Maintenance Manuals:
   1. Submit complete installation, operation and maintenance manuals including test reports, maintenance data and schedules, description of operation and spare parts information.
   2. Furnish Operation and Maintenance Manuals in conformance with the requirements of Section 01780, Operation and Maintenance Data.

E. Lubricant Specification: Furnish a lubricant specification for the type and grade necessary to meet the requirements of the equipment and service conditions.

PART 2 - PRODUCTS

2.1 SERVICE CONDITIONS

A. General:
   1. The blowers shall be suitable for continuous operation at the specified temperatures and at normal inlet barometric pressure. The blower shall operate between maximum and minimum temperature performance curves without requiring throttling at low temperature, and the brake horsepower required shall not exceed the rated motor horsepower under any condition within the operating range of its design conditions.
   2. Design the blower for continuous 24 hours per day, seven days per week operation.
   3. When the volume of flow is reduced by thirty percent, the blowers under the specified inlet conditions shall develop at least 0.50 psi above the specified discharge pressure and shall not be in surge or overload the motor.
   4. The blowers shall be provided with an automated blow off valve capable modulating during start-up and operation as needed for flow balancing and to prevent surge.
   5. The blower, when operating with its motor and all appurtenances at design speed, shall not have a free field sound pressure level greater than 93 dBA at a distance of five feet from the blower assembly.

B. Schedule of Service Conditions:

Blower Tag No.:	B3125
Location:	Blower Room
Design Point: Capacity: Discharge Pressure:	 5,600 scfm* 8.6 psig
Blower Speed:	3,600 rpm
Inlet Connection:	14 in
Outlet Connection:	14 in
Design Summer Inlet Air Temperature:	120°F
Design Winter Inlet Air Temperature:	35°F
Design Relative Humidity:	15%
Relative Humidity Range:	10 to 80%
Normal Inlet Barometric Pressure:	14.21 psia
Blower Inlet Pressure:	13.95 psia
Maximum BHP @ design point:	340 HP
Maximum Motor HP at any Point within operating range:	360 HP
Minimum rise to surge @ summer design point:	1.0 psi
Maximum Flow Turndown, % of Design Flow:	50 %

*SCFM defined at 68°F, 36% RH and 14.7 psia.

2.2 DETAILS OF CONSTRUCTION

A. General:
1. Blower unit shall be of the multi-stage centrifugal horizontal shaft type. Blower shall be designed such that it may be disassembled and all parts inspected without removing the inlet or discharge piping. Identical parts shall be interchangeable. Equipment furnished shall be amply proportioned for all stresses that may occur during fabrication.

B. Casing:
1. Casing shall be of close-grained gray cast iron able to withstand a minimum of 25 psig at 350°F. Provide eyebolts or lugs for lifting.
2. Inlet and outlet connections shall be flanged with drilling to conform to ANSI B16.1, Class 125.
3. Design diffusing vanes to receive air from one impeller and direct air to the next impeller. One set of diffusing vanes shall be located between each impeller. Design diffusing vanes to be integrally cast with the intermediate sections of the blower housing.

C. Impeller:
1. Impeller shall be of the enclosed type, accurately machined, one-piece cast aluminum alloy. Impeller shall be heat-treated, keyed and locked to the shaft in a suitable manner, and designed to ensure safe working stresses with particular consideration for the stresses incident to starting of the blower.
2. Provide ample clearance between the impeller and all stationary compressor parts.

3. Dynamically balance all impeller parts before assembly, and statically and dynamically balance each complete impeller assembly as a unit to ensure vibration free performance. Vibration at the inlet and outlet bearing housings shall not exceed 1.25 mils in the vertical plane with the blower operating under any loading.
4. Provide suitable seals around the impeller inlet opening to minimize backflow, and around the shaft between stages to prevent inter-stage leakage.

D. Shaft and Bearings:
1. Blower shaft shall be of sufficient diameter to operate at no greater than 80 percent of its first critical speed or 20 percent above the first critical speed. The second critical speed shall be at least 220 percent over maximum continuous operating speed of the blower. The shaft shall be made of ground and polished high-grade steel, and shall be perfectly true. Shaft shall be machined to accurate dimensions and all corners at change of diameter shall have ample fillets. Maximum shaft speed shall not exceed 3,600 rpm.
2. Provide the blower with inboard and outboard oil lubricated anti-friction bearings. It shall be possible to inspect or replace bearings without disconnecting any piping or disturbing the shaft. Both inlet and outlet bearings shall be sized to have a minimum rating of B-10, as defined by the Anti-Friction Bearing Manufacturers Association, with a service life of 100,000 hours. Bearings shall be suitably and adequately cooled or isolated from blower temperature. Provide an oil reservoir or an external constant level oiler, with sight glass and drain.
3. Provide labyrinth or carbon ring shaft seals.

E. Motors:
1. Motors shall conform to the requirements of Section 11101, Electric Motors.
2. Motors shall be horizontal squirrel cage induction type, TEFC, with Class F insulation, with a maximum speed of 3,600 rpm.
3. Motors shall be 400 hp, suitable for operation on 460 volt, 3 phase 60 Hz power. Minimum motor efficiency shall be 93% at ¾ load and above.
4. Motors shall be capable of driving the blower continuously under any design condition of operation without exceeding its nameplate horsepower.
5. Provide space heaters, 120 volt, single phase.
6. Motors shall have a 1.15 service factor, and shall comply with the latest ANSI, NEMA, and IEEE Standards as a minimum.
7. Locked rotor current shall be as specified in NEMA standards.
8. Motor thrust bearings shall be adequate to carry continuous thrust loads under all conditions of service, and shall have a minimum L-10 life of 100,000 hours.
9. Motors shall have a stainless steel nameplate which shall provide the following: Type, frame, insulation, class, HP, full load current, RPM, centigrade degree rise, manufacturer's name and serial number model, voltage, locked rotor KVA code, bearing numbers and a connection diagram.
10. Motors terminal box shall be oversized to provide adequate space for connections and shall be constructed of cast iron or fabricated steel, neoprene gasketed and bolted. The motor leads shall be permanently marked in agreement with the connection diagram.
11. Motors shall be grease lubricated.
12. Motor sound pressure shall not exceed 85 dBA when unloaded and measured in accordance with IEEE 85.

F. Flexible Coupling:
   1. Furnish a Rexnord Omega type coupling to connect the blower and motor. Coupling shall be of the proper size to transmit the power required to drive the blower under all conditions of operation. Coupling shall be suitably lubricated and designed for long periods of continuous operation. Coupling design shall take care of inaccuracies of alignment and permit axial adjustment. Coupling construction shall be such that either shaft of a unit may be removed without disturbing adjustment of the other. Provide and install an OSHA approved steel guard over the coupling.

G. Common Steel Base:
   1. Factory mount blower and motor, coupled together, on a common steel base, properly braced to form a rigid support for the entire unit. The units shall be factory aligned on the base prior to shipment.
   2. Furnish solid neoprene anti-vibration pads or strips, elastomer type, for use when mounting the common base on the concrete support pad.
   3. Supports: Incorporate suitable mounting provisions for power factor correction capacitors (if required). Controls, sensors, switches, and other devices requiring connection to remote panels shall be pre-wired to a blower terminal box mounted on the frame.
   4. Positively restrain unit from horizontal creep by anchor bolts anchored in the concrete equipment pad.

H. Accessories:
   1. Furnish the following accessories for each blower:
      a. Restrained and reinforced expansion joints for blower inlet and outlet. Expansion joints shall be mounted on blower inlet and discharge flange prior to connecting any piping. Expansion joints shall be rated for a minimum pressure of 25 psi and for 250°F air temperature. Flanges shall conform to ANSI B16.1, Class 125.
      b. Check valves, suitable for mounting on the discharge of each blower, and size as shown on the Drawings. Valves shall conform to the requirements of Section 15116, Double Disc Check Valves.
      c. Motorized butterfly valves with remote controls for each blower inlet and blowoff as well as manual butterfly valve for each blower outlet, as shown on the Drawings. Valves shall conform to the requirements of Section 15113, Butterfly Valves for Air Service.
      d. Silencers on blow off lines. Silencers shall be sized with maximum velocity through the silencer not exceeding 5,500 feet per minute. Silencer pressure drop shall not exceed 2.50 in w.g. at the maximum velocity, based on air flow rate of 6,600 icfm and pressure of 8.0 psig.
         1) Design and Construction: The silencer shall be of the absorptive design with annular flow. There shall be a center perforated core with a concentric outer perforated liner or lined with acoustically perforated tubes. The center core and the outer liner shall be filled with deep layers of acoustical absorptive material.
         2) The inlet and outlet flanges shall be located on the ends of the unit for in-line installation. Provide integral steel legs for vertical mounting and a screen guard for the silencer outlet.
         3) The acoustical absorption material shall be a fiberglass mat.

4) Exterior construction shall be all welded sheet and plate steel. Interior construction shall be stainless steel. Flanges shall be drilled to match ANSI Class 125 pound bolt hole drilling. The interiors shall be cleaned in accordance with SSPC-SP1 and SSPC-SP2 and the flange openings shall be sealed for shipment. The exterior surfaces of the silencer shall also be cleaned in accordance with SSPC-SP1 and SSPC-SP2 and painted with a high grade primer.
5) The minimum insertion loss of the silencer shall be:

Hz	63	125	250	500	1000	2000	4000
db	3	6	11	20	30	30	25

6) Product and Manufacturer: Provide one of the following:
   a) Stoddard Silencers, Model L21-14
   b) Burgess-Manning
   c) Universal Silencer
   d) Or Equal

I. Product and Manufacturer: Provide one of the following:
   1. Hibon, Model 200.07.
   2. Hoffman.
   3. Lamson.
   4. Spencer.
   5. Or Approved Equal.

2.3 CONTROLS

A. Provide blower controls as shown on the Drawings and as specified herein and in the applicable Sections of Division 17, Instrumentation and Controls.

B. Blower Local Control Panel (LCP):
   1. General:
      a. Furnish a local control panel for the blower.
      b. Provide devices as specified herein and as shown on the Drawings.
      c. Arrange panel devices as shown on Attachment A, Blower Panel Layout, at the end of this specification. The intent is to provide similarity between the existing blower panels and the new panel.
      d. Provide NEMA 4 LCP construction conforming to the applicable requirements of Section 17301, Panels and Enclosures and 17302 Panel Instruments and Devices and other applicable sections of Divisions 16 and 17.
      e. Factory test control panel prior to shipment per Section 17401 Process Control System Factory Testing and other applicable sections of Divisions 16 and 17.
      f. Furnish 120 volt, 1 phase, 60 Hz power feeders to the control panel. Include a main disconnect circuit breaker for each 120 volt power circuit.
      g. Design blower LCP to be delivered to jobsite as individual, pre-wired, coordinated unit ready for installation and field wiring.
      h. The LCP shall be capable of communicating with the plant monitoring and control system as indicated on the Drawings, specified herein and in Division 17. Provide the necessary communications hardware in the blower LCP.

i. The blower local control panel shall be provided with Local and Remote modes of operation for the blower, the blowoff valve and inlet throttling valves as described in Section 17502, Process Control System Functional Descriptions.

2. LCP Devices:
   a. Provide all necessary hardware including, but not limited to terminal strips, control and time delay relays, fuses, control power transformers and controls.
   b. Provide dry relay contacts and 4-20mA signals to the plant monitor and control system per the Drawings.
   c. Provide terminal strips and utilize digital and analog control signals from the plant monitor and control system per the Drawings.
   d. Provide the following or equal control input devices:
      1) Local/Off/Remote selector switch
      2) Blower Start pushbutton
      3) Blower Stop pushbutton
      4) Blowoff Valve Open/Off/Close selector switch
      5) Inlet Valve Position potentiometer
      6) Panel Power On/Off switch
      7) Alarm Reset pushbutton
      8) Alarm Silence pushbutton
   e. Provide the following or equal indication lights:
      1) Blower Running
      2) Blower Stopped
      3) Blowoff Valve Open
      4) Blowoff Valve Closed
      5) Blowoff Valve Overload
      6) Inlet Valve Overload
      7) Inlet Valve Closed
      8) Winding Temperature Warning
      9) Winding Temperature Shutdown
      10) Blower Bearing Temperature Warning
      11) Blower Bearing Temperature Shutdown
      12) Blower Vibration Warning
      13) Blower Vibration Shutdown
      14) Discharge Pressure Alarm
      15) Approaching Surge
      16) Surge Shutdown
      17) Approaching Overload
      18) Overload Shutdown
      19) Intake Differential Pressure Warning
      20) Intake Differential Pressure Shutdown
   f. Provide the following or equal displays
      1) Blower Suction Pressure
      2) Blower Discharge Pressure
      3) Current Surge/Overload
      4) Blower Airflow
      5) Inlet Valve Position
      6) Discharge Header Temperature
      7) Discharge Header Pressure
      8) Discharge Air Temperature

9) Time to Blower Start-Up

g. Provide the Following Audible Alarms:
   1) Horn triggered by blower shutdown alarm conditions.

3. Surge/Overload Protection Systems:
   a. Provide a surge/overload protection system with each blower unit.
   b. Each surge/overload protection system shall monitor blower motor amperage, annunciate over-current alarms for the blower motor, and shut down the blower when motor current corresponds to blower surge or to amperage equivalent to motor nameplate horsepower (except at startup). Provide adjustable timed startup override and alarm response delay.
   c. Each surge protection system shall include a current transformer, necessary relays and contacts, and adjustable time delay. Time to blower start-up shall be indicated on the LCP.
   d. The current transformer shall be installed in the LCP. Provide alarm contacts for motor control center shutdown of the blower motor.
   e. Correction factors shall be provided to reflect the effect of the specified range of inlet pressure and temperature variations on the indicated SCFM and surge region.
   f. Upon surge, the motor shall shut down. Motor over-amp shall shut down the motor at the MCC.
4. Air Pressure and Temperature Instrumentation:
   a. Provide pressure and temperature instruments for each blower suction and discharge as specified and indicated on the Drawings per Division 17.
5. Blower and Motor Instrumentation
   a. Motor Resistance Temperature Detectors (RTDs)
      1) Provide motor winding RTDs, one for each motor phase, as specified in Section 17200, Process Control System Primary Sensors and Field Instruments. RTDs shall be distributed about the stator, each being embedded between upper and lower coil in the coil slot. Leads shall be brought out to a separate terminal box through a flexible sleeve which will protect the leads and ensure their flexibility after dipping and baking of stator.
      2) One dual type RTD of the same rating and material as defined above shall be provided for the motor bearings on the blind end and the coupling end and wired to a separate terminal box.
      3) The RTD leads shall be terminated in the motor mounted terminal box for connection to the blower local control panel.
      4) Temperature signals for "high temperature" and "high-high temperature" from the RTDs shall send an alarm signal to the plant's Programmable Logic Controller/System Control and Data Acquisition (PLC/SCADA). The blower shall shut down upon "high-high" winding temperature.
   b. Blower Bearing Resistance Temperature Detectors (RTDs)
      1) The inboard and outboard blower bearings shall be provided with RTDs as specified in Section 17200, Process Control System Primary Sensors and Field Instruments.
      2) The Resistance Temperature Detectors leads shall be terminated in the blower frame mounted terminal box for connection to the blower local control panel.
      3) Temperature levels and alarm signals for "high temperature" and "high-high temperature" from the RTDs shall send an alarm signal to the PLC/SCADA. The blower shall shut down upon "high-high" blower bearing temperature.
   c. Blower Vibration Detection and Monitoring Systems:

1) Provide a vibration detection and monitoring system on the casing of the blower.
2) Each vibration set point shall be field adjustable over the range of 1 to 5 mils and shall be field adjustable for time delay over the range of 2 to 15 seconds.
3) Vibration levels and alarm signals for "high vibration" and "high-high vibration" from the vibration monitoring system shall send an alarm signal to the PLC/SCADA. The blower shall shut down upon "high-high" blower vibration.

2.4 SPARE PARTS

A. Furnish and deliver the following for each blower:
   1. One set of bearings and seals for one blower and motor.
   2. One complete set of gaskets for one blower and motor.
   3. One set of special tools required for normal operations and maintenance.

B. Spare parts shall be packed in sturdy containers with clear indelible identification markings and shall be stored in a dry, warm location until transferred to the OWNER at the conclusion of the Project.

2.5 SURFACE PREPARATION AND PAINTING

A. Blowers, motors, drives, frames, baseplates, appurtenances, etc., shall receive shop primer and shop finish coating conforming to the requirements of Section 09900, Painting. If any damage to the paint system occurs, the equipment shall be repainted as directed by the ENGINEER.

B. Surface preparation and painting shall conform to the requirements of Section 09900, Painting. Final finish colors shall match existing equipment colors.

C. All gears, bearing surfaces, machined surfaces and other surfaces which are to remain unpainted shall receive a heavy application of grease or other rust-resistant coating. This coating shall be maintained during storage and until the equipment is placed into operation.

D. CONTRACTOR shall certify, in writing, that the shop primer and shop finish coating system conforms to the requirements of Section 09900, Painting.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install blower equipment in complete accordance with the manufacturer's instructions and approved Shop Drawings. Install each blower unit on a concrete base with anti-vibration pads or strips as recommended by the manufacturer.

B. Furnish and install all required oil and grease for initial operation.

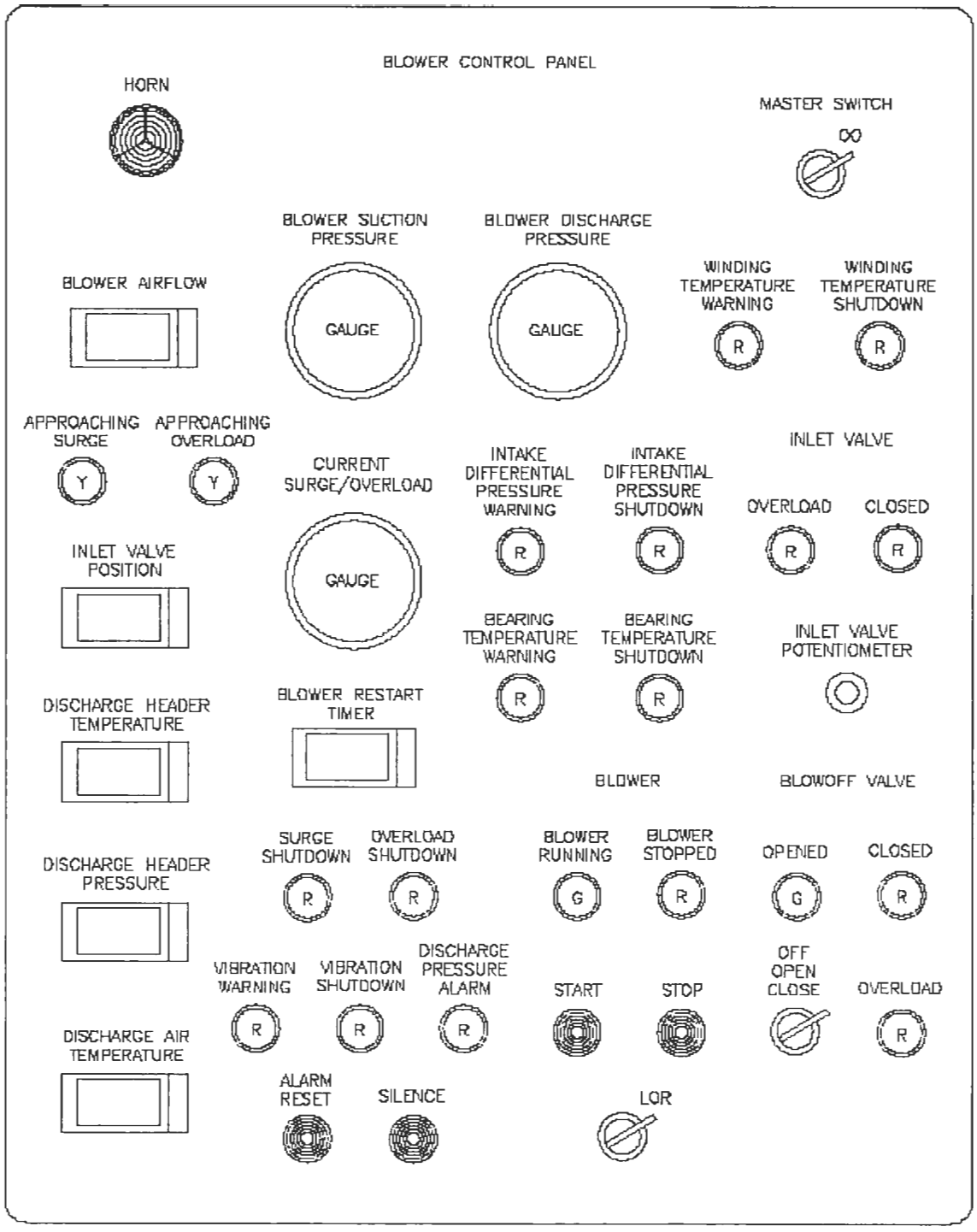
3.2 FIELD TESTS

A. After CONTRACTOR and ENGINEER have mutually agreed that the equipment installation is complete, CONTRACTOR and a qualified field service representative of the manufacturer shall conduct a running test and a sound test of the blowers and controls in the presence of ENGINEER to demonstrate that each blower and its controls will function correctly, and that sound levels do not exceed maximum limits:
   1. Running Tests:
      a. All blower units together with their controls shall be field tested. Tests shall demonstrate to ENGINEER that each part and all parts together function in the manner intended. All necessary testing equipment and manpower shall be provided by CONTRACTOR.
      b. In the event that the manufacturer is unable to demonstrate that equipment meets the requirements of the tests, CONTRACTOR shall adjust, modify and retest the equipment as often as necessary in order to meet the specified requirements.
   2. Sound Tests:
      a. Perform an overall sound-pressure level test on one blower of each size. Test results shall be rated in decibels in accordance with ANSI Standard S5.1.
      b. Take the overall sound pressure level at points evenly spaced around the blower and motor assembly and at five feet from the nearest part of the units. Sound level shall not exceed 93 decibels at five foot distance measured on the A-weighted scale.
      c. It is the intent of this Section that the complete unit as finally installed shall not exceed the sound pressure level as specified herein. Manufacturer shall submit a statement as to the unit's conformance with this Section, whether remedial measures will be required, and if so, what remedial measures manufacturer proposes.
      d. CONTRACTOR shall provide all instruments, necessary labor, tools, and materials to conduct the field tests.

3.3 MANUFACTURER'S SERVICES

A. A factory-trained mechanic, employed by the blower manufacturer, with certifiable centrifugal blowers start-up experience of minimum 5 years, shall be provided for installation supervision, start-up and test services and operation and maintenance personnel training services. The representative shall make a minimum of 3 visits to the site. The first visit shall be for assistance in the installation of equipment. The second visit shall be for checking the completed installation and start-up of the system. The third visit shall be as described under Section 01820, Demonstration and Training. Manufacturer's representative shall test operate the system in the presence of the ENGINEER and verify that the blowers conform to requirements. Representative shall revisit the job site as often as necessary until all trouble is corrected and the installation is entirely satisfactory.

B. All costs, including travel, lodging, meals and incidentals, shall be considered as included in CONTRACTOR'S bid price.



ATTACHMENT A – EXISTING BLOWER PANEL LAYOUT

++ END OF SECTION ++

SECTION 15116

DOUBLE DISC CHECK VALVES

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope:
   1. CONTRACTOR shall provide all labor, materials, equipment and incidentals, as shown on the Drawings, required to furnish and install all double disc check valves, and appurtenances, complete and operational.
   2. The Work includes, but is not necessarily limited to, all valves required for buried, exposed, submerged and other types of piping, except where otherwise specifically included in other Sections.

B. Coordination:
   1. Review installation procedures under other Sections and coordinate with the Work which is related to this Section including exposed piping installation and site utilities.

C. Related Sections: CONTRACTOR shall coordinate the requirements of the Work in this Section along with the requirements of the Sections listed below which includes, but is not necessarily limited to, Work that is directly related to this Section.
   1. Section 01780, Operation and Maintenance Data.
   2. Section 09900, Painting. Specifications for surface preparation and shop priming required under Section 15116, Double Disc Check Valves are included under Section 09900, Painting.
   3. Section 15100, Piping Installation.
   4. Section 15060, Pipe Hangers and Supports.
   5. Section 15102, Steel Pipe.
   6. Section 15103, Stainless Steel Pipe.
   7. Section 15120, Piping Specialties and Accessories.
   8. Division 16, Electrical.

1.2 QUALITY ASSURANCE

A. Manufacturer's Qualifications:
   1. Manufacturer shall have a minimum of five years experience of producing substantially similar equipment, and shall be able to show evidence of at least five installations in satisfactory operation for at least five years.
   2. All double disc check valve shall be the product of one manufacturer.

B. Reference Standards: Comply with applicable provisions and recommendations of the following, except as otherwise shown or specified.
   1. API 594, Wafer Check Valves.
   2. API 598, Valve Inspection and Test.
   3. ASME / ANSI B16.34, Valves Flanged, Threaded and Welding End.
   4. ASTM A 126, Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.
   5. ASTM A 276, Specification for Stainless Steel Bars and Shapes.
   6. ASTM A 278, Specification for Gray Iron Castings for Pressure Containing Parts for Temperatures up to 350 Degrees C.

7. ASTM A 351/A 351M, Specification for Steel Castings, Austenitic, Austenitic-Ferritic (Duplex) for Pressure Containing Parts.

1.3 SUBMITTALS

A. Shop Drawings: Submit for approval the following:
   1. Manufacturer's literature, illustrations, paint certifications, specifications, detailed drawings, data and descriptive literature on all valves and appurtenances.
   2. Deviations from Contract Documents.
   3. Engineering data including dimensions, materials, size and weight.

B. Operation and Maintenance Manuals:
   1. Furnish Operation and Maintenance Manuals in conformance with the requirements of Section 01780, Operation and Maintenance Data, including but not limited to complete installation, operation and maintenance manuals including test reports, maintenance data and schedules, description of operation, and spare parts information.

C. Shop Tests:
   1. Hydrostatic tests shall be performed, when required by the valve specifications included herein.

D. Certificates: Where specified or otherwise required by ENGINEER, submit test certificates.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the site to ensure uninterrupted progress of the Work.

B. All boxes, crates and packages shall be inspected by CONTRACTOR upon delivery to the site. CONTRACTOR shall notify ENGINEER if any loss or damage exists to equipment or components. Replace loss and repair damage to new condition, in accordance with manufacturer's instructions.

C. Store materials to permit easy access for inspection and identification. Keep all material off the ground, using pallets, platforms or other supports. Protect steel members and packaged materials from corrosion and deterioration.

D. Provide full-face protectors of waterproof material fastened to each side of the valve body to protect joints and the valve interior.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General:
   1. Internal Temperature Rating: Minimum 300°F.
   2. Minimum Cv Values: 7,000 gpm for 16" valve.
   3. Cracking Pressure: ¼ – ½ psi pressure differential.
   4. Service: low pressure air with working pressure no greater than 10 psi.

B. Valve Construction:
   1. The valves shall operate without hammer or shock.

2. The valves shall be equipped with double doors, and low torque springs. Each of the dual plates shall be provided with its own springs to provide independent closing action
3. Style: Wafer, for installation between ANSI Class 125 flanges.
4. Seat shall be completely out of the flow stream and protected from wear.
5. Each valve shall incorporate a hinge pin and a stop pin of sufficient strength to contain the valve plates within the valve body and to serve as a stop for plates in open position.

C. Materials of Construction:
1. Body: Cast Iron, ASTM A 126, Class B, or ASTM A 278, Class 40.
2. Discs: Aluminum Bronze or Type 316 stainless steel.
3. Hinge and Stop Shafts: Type 316 stainless steel.
4. Springs: Type 316 stainless steel.
5. Seat Material: Synthetic rubber suitable for air service and for rated temperature.
6. All internal and external bolting and other hardware including pins, set screws, studs, bolts, nuts and washers: Type 316 stainless steel.

D. The check valve discs shall be spring-loaded and normally closed by means of one or more torsion springs. Unless otherwise specified, discs or plates shall be aluminum bronze. Discs on valves used for sludge gas shall be Type 316 stainless steel. End connections shall be flat or plain faced. Seating shall be resilient and watertight.

E. Unless otherwise specified, valves shall be designed for a working pressure of 175 psi and tested at a hydrostatic pressure of 300 psi.

F. Testing:
1. Test all valves in the shop with water against leakage at the rated pressures.
2. Permitted Leakage: Zero.
3. Test all valves hydrostatically at twice the rated pressure.

G. Product and Manufacturer: Provide one of the following:
1. APCO Series 9000
2. Gulf Valve Model MB
3. Or approved equal.

2.2 SURFACE PREPARATION AND PAINTING

A. Valves, appurtenances, etc., shall receive shop primer and shop finish coating conforming to the requirements of Section 09900, Painting. If any damage to the paint system occurs, the equipment shall be repainted as directed by the ENGINEER.

B. Surface preparation and painting shall conform to the requirements of Section 09900, Painting.

C. All bearing surfaces, machined surfaces and other surfaces which are to remain unpainted shall receive a heavy application of grease or other rust-resistant coating. This coating shall be maintained during storage and until the equipment is placed into operation.

D. CONTRACTOR shall certify, in writing, that the shop primer and shop finish coating system conforms to the requirements of Section 09900, Painting.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install all valves and appurtenances in accordance with manufacturer's instructions.

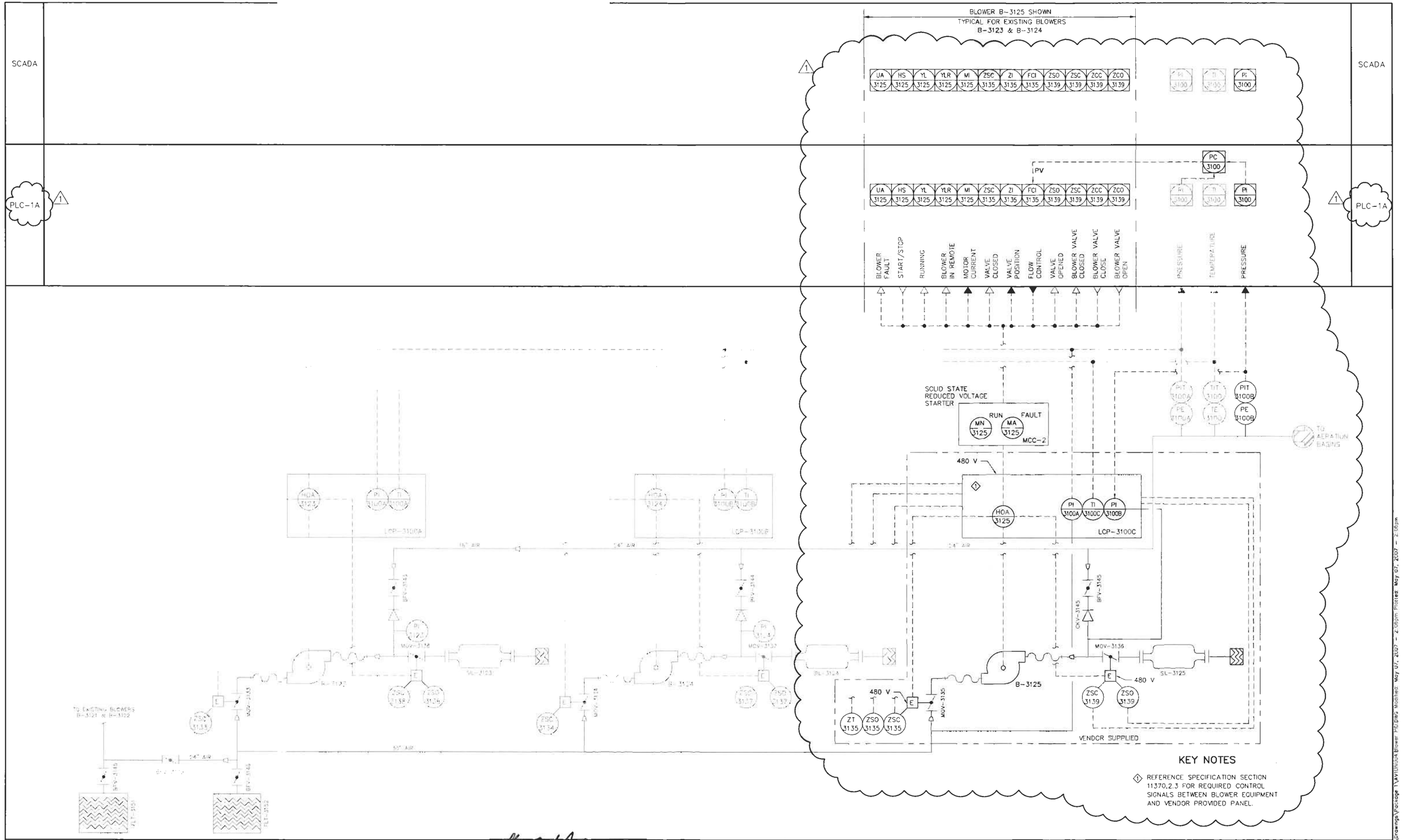
B. Unless otherwise approved by the ENGINEER, install all valves plumb and level. Install valves free from distortion and strain caused by misaligned piping, equipment or other causes.

3.2 FIELD TESTS AND ADJUSTMENTS

A. Adjust all parts and components as required to provide correct operation.

B. Conduct functional field test of each valve in presence of ENGINEER to demonstrate that each part and all components together function correctly.

++ END OF SECTION ++



KEY NOTES

1. REFERENCE SPECIFICATION SECTION 11370,2.3 FOR REQUIRED CONTROL SIGNALS BETWEEN BLOWER EQUIPMENT AND VENDOR PROVIDED PANEL.

REVISIONS			
NO	DATE	BY	DESCRIPTION
1.	5/4/07	DH	BLOWER ADDENDUM

File Name: AV1DN004 Blower PID.DWG

Designed By: LFE
Drawn By: JLB
Checked By: LFE

DSWA
DAMON S. WILLIAMS ASSOCIATES, LLC

Registered Professional Engineer (Civil) CERTIFICATE NO. 20329 GLEN W. ROTH Date Signed 04-30-07 ARIZONA, U.S.A.

Registered Professional Engineer (Electrical) CERTIFICATE NO. 34947 LAWRENCE F. EDWARDS Date Signed 04-30-07 ARIZONA, U.S.A.

City of Avondale

City of Avondale
WATER RECLAMATION FACILITY
PHASE 1 EXPANSION
PACKAGE 1

INSTRUMENTATION

AERATION BLOWER
P&ID

DSWA Project No 060110
Date APRIL 2007
100% DESIGN
Dwg No N3-4
Sht No 28 of 42

Drawing File: U:\CAD\060110\Drawings\Package 1\AV1DN004 Blower PID.DWG Modified: May 07, 2007 - 2:06pm Plotted: May 07, 2007 - 2:08pm

EXHIBIT C
TO
CONSTRUCTION MANAGER AT RISK AGREEMENT
BETWEEN
CITY OF AVONDALE
AND
PCL CIVIL CONSTRUCTORS, INC.

[List of Design Documents]

List of Design Documents

1. City of Avondale Water Reclamation Facility Phase 1 Contract Document Specifications, Package 1-Aeration Basin Modifications, Divisions 1-17, Volumes 1-17 issued by DSWA and dated April 2007.

2. City of Avondale Water Reclamation Facility Phase 1, Package 1 Aeration Basin Modifications drawing set issued and DSWA and dated 4/3/2007.

3. City of Avondale Vactor Truck Solids Storage Facility drawing set issued and DSWA and dated August 2006.

4. Addendum 1 dated April 20, 2007.

5. Addendum 2 dated May 7, 2007.

6. DSWA's Response to Pre-bid RFI's for Phase I, Package 1 dated May 9, 2007.

CITY COUNCIL REPORT

SUBJECT:
Resolution - Town of Buckeye Transwestern Pipleline Proposed Alignment

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Shirley Gunther, Intergovernmental Affairs Manager (623)333-1612

THROUGH: Charlie McClendon, City Manager

PURPOSE:

To consider a Resolution supporting the Town of Buckeye's alternative proposed alignment to the Transwestern Pipeline route.

BACKGROUND:

Transwestern Pipeline Company owns and operates a 2,400-mile interstate natural gas pipeline extending from West Texas and Oklahoma through New Mexico and Arizona to the California border. Transwestern Pipeline Company proposes to build a major natural gas pipeline through Buckeye's planned development area along Sun Valley Parkway. The proposed route for the Phoenix Expansion Project consists of 27.8 miles of pipeline to be routed through the Town. According to Transwestern's Application to the Federal Energy Regulatory Commission (FERC), the purpose of the Phoenix Expansion Project is to provide natural gas transmission service from the San Juan Basin (New Mexico) to markets in the Phoenix area.

The complete project consists of 259 miles of new pipeline beginning at Transwestern's existing mainline near Ash Fork and traversing southward through Yavapai, Maricopa and Pinal Counties in Arizona. The pipeline terminates at the beginning of El Paso Natural Gas (EPNG) Company's East Valley Lateral southwest of Phoenix.

DISCUSSION:

The Buckeye Town Council recently passed a Resolution and proposed an alternative route that would divert nearly 15 miles of existing or planned developments along the parkway. The proposed east-west alignment will add and additional 19 miles to the project. The City of Buckeye estimated this cost to be $40 million however, Transwestern estimates the additional miles will cost $80 million.

The Town of Buckeye is opposed to the Transwestern alignment for numerous reasons. One primary reason is that the proposed route will place the pipeline 15 feet from the edge of the APS transmission line right of way that parallels the Sun Valley Parkway, a major transportation backbone and anchor for significant residential and commercial development in the Buckeye area. Additionally, the Town of Buckeye is concerned that Transwestern's design is based on existing dwelling density in early 2006 and does not account for current and on-going development and additional permitted development within the potential impact radius including an elementary school, a fire station, an APS substation, two water wells, a worship site, numerous parks and open space recreation areas, and a planned Maricopa County Flood Control District flood-retardant structure. Finally, the Town has experessed overall health and saftey concerns for their residents with the Transwestern route.

BUDGETARY IMPACT:

None.

RECOMENDATION:

Motion to approve the Resolution supporting the east-west alternative alignment for the proposed Transwestern Pipeline Phoenix Expansion Project through the Buckeye Municipal Planning Area.

ATTACHMENTS:

Click to download

- Town of Buckeye Proposed Transwestern Pipeline Alignment
- RES

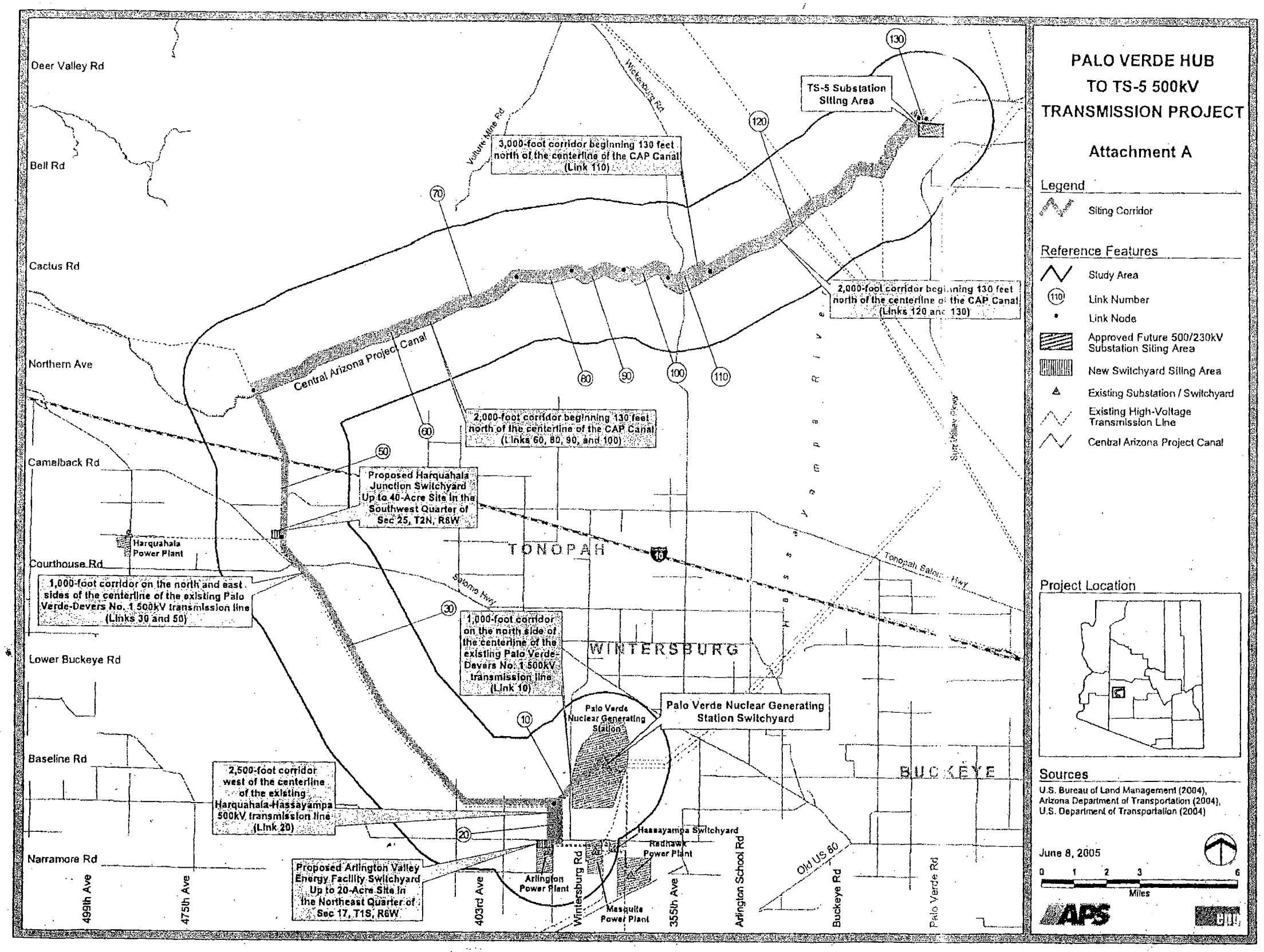
Comparative Pipeline Routes

Alternate Route in Approved APS 500KV Corridor

Proposed Transwestern Route

Douglas Ranch
Festival Ranch
Spurlock Ranch
Buena Vista Ranch
Surprise Foothills
Mesquite Mtn Ranch
Fox Trails
Sun City
Sun Valley
Sun Valley Pkwy
243rd Ave
211th Ave
Trillium
White Tank Mountain Regional Park
Belmont
Lennar
Mirabella
Anthem West
Hassayampa Ranch
Estrella West
Estrella
Tartesso
Verrado
Tesota Hills
Military Reservation
West Phoenix Estates
Desert Creek
Cipriani
Sundance
Westwind
West Park
Youngker
Silver Rock
Buckeye Farms
Copper Falls
Lamb Trimark
Buckeye
Benessere
Indian School Rd
Mcdowell Rd
W Van Buren St
W Buckeye Rd
Lower Buckeye Rd
Broadway Rd
Buckeye-Salome Hwy
Baseline Rd
Beloat Rd
W Elliot Rd
431st Ave
419th Ave
411th Ave
395th Ave
387th Ave
N Wintersburg Rd
371st Ave
363rd Ave
S 355th Ave
N 339th Ave
331st Ave
10

Prepared by Stardust Companies 12/11/2006



Decision No. 68063

RESOLUTION NO. 2656-607

A RESOLUTION OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, SUPPORTING THE EAST-WEST ALTERNATIVE ROUTING FOR THE PROPOSED TRANSWESTERN PIPELINE PHOENIX EXPANSION PROJECT THROUGH THE BUCKEYE MUNICIPAL PLANNING AREA AND REQUESTING A FAVORABLE FINDING FOR THE EAST-WEST ALTERNATIVE ROUTE BY THE COMMISSIONERS OF THE FEDERAL ENERGY REGULATORY COMMISSION.

WHEREAS, on September 15, 2006, Transwestern Pipeline Company, LLC ("Transwestern") filed an application with the Federal Energy Regulatory Commission (the "Commission" or the "FERC") seeking a Certificate of Public Convenience and Necessity (the "Certificate") to construct, own and operate an expansion of its existing interstate natural gas transmission pipeline system; and

WHEREAS, the portion of the pipeline expansion project known as the Phoenix Expansion Project consists of 259.3 miles of new 42" and 36" diameter pipeline traversing Yavapai, Maricopa and Pinal counties in Arizona, of which 27.8 miles is proposed to be routed through the Town of Buckeye; and

WHEREAS, Transwestern has proposed to construct 259.3 miles of 42" and 36" diameter pipeline to supply natural gas to the Phoenix area with approximately 28 miles of 36" diameter pipe with a maximum operating pressure of 1,000 psig passing through the Town of Buckeye; and

WHEREAS, 49 C.F.R. § 192, Subpart O, identifies the calculation method to define the Potential Impact Radius ("PIR") as a result of a pipe failure based on the operating pressure of the line and diameter of pipe, in which the PIR for the proposed line is 790 feet from the centerline of the pipe; and

WHEREAS, Transwestern's proposed route will place the pipeline 15 feet from the edge of the Arizona Public Service transmission line right-of-way that parallels the Sun Valley Parkway, a major transportation backbone and anchor for significant residential and commercial development in the Town of Buckeye; and

WHEREAS, significant development has been planned and permitted along the Sun Valley Parkway, including several high density, master-planned communities; and

WHEREAS, Transwestern's design calls for construction of the pipeline within a distance of 660 feet from the center line of the pipe, not the PIR of 790 feet; and

WHEREAS, Transwestern's design based on existing dwelling density in early 2006 does not account for current and on-going development and additional permitted development within the PIR including an elementary school, a fire station, an APS substation, two water wells, a worship site, numerous parks and open space recreation areas, and a planned Maricopa County Flood Control District structure; and

WHEREAS, a viable alternate east-west route alignment that would avoid the Town of Buckeye exists along the Palo Verde-Devers Utility Corridor, an established Arizona Public Service utility corridor, and in open unpopulated desert (the "East-West Alternative").

NOW, THEREFORE, **BE IT RESOLVED** BY THE COUNCIL OF THE CITY OF AVONDALE as follows:

SECTION 1. That, for the health, safety and welfare of the West Valley community, the Council of the City of Avondale supports the East-West Alternative routing for the proposed Transwestern Pipeline Phoenix Expansion Project through the Buckeye Municipal Planning Area and requests a favorable finding for the East-West Alternative route by the Commissioners of the Federal Energy Regulatory Commission.

SECTION 2. That the Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized and directed to take all steps necessary to carry out the purpose and intent of this Resolution.

PASSED AND ADOPTED by the Council of the City of Avondale, June 11, 2007.

_____
Marie Lopez Rogers, Mayor

ATTEST:

_____
Linda M. Farris, City Clerk

APPROVED AS TO FORM:

_____
Andrew J. McGuire, City Attorney

739956.1

CITY COUNCIL REPORT

SUBJECT:
Tres Rios Nature and Earth Festival

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Daniel Davis, Director of Parks, Recreation and Libraries (623)333-2411

THROUGH: Charlie McClendon, City Manager

PURPOSE:

Staff will provide the City Council with information regarding the Tres Rios Nature and Earth Festival and the Base and Meridian Wildlife Area.

BACKGROUND:

The property referred to as the Base and Meridian Wildlife Area is located adjacent to the PIR racetrack on the Gila River and is an important wildlife area for many organizations including: Arizona Game and Fish, Maricopa County, and the City of Avondale. The wildlife area within the boundary of the City of Avondale provides a great opportunity to promote and encourage eco-tourism and provide unique outdoor recreation opportunities for residents. In March, the annual Tres Rios Nature and Earth Festival was held at this location. This report will highlight the opportunities for recreation and outreach within this ribbon of blue in the Metro area and take a quick look at the value this riparian area holds for not only resident wildlife, but for people too. Heidi Vasiloff, Executive Director for Wildlife for Tomorrow Foundation, assisted staff in developing this report.

DISCUSSION:

In 1973, the Arizona Game and Fish Commission acquired approximately 200 acres of river and adjacent riparian habitat at the confluence of the Salt River and Gila River just west of the Phoenix metropolitan area. The B&M Wildlife Area is located 17 miles west of Phoenix at 115th Avenue and the Gila River in Maricopa County, in Avondale, Arizona. This land was seen as rural and due to floods, reserved for the Gila River Drainage (Maricopa County Flood Control District) and at that time, denoted as a Wildlife Refuge overseen by Game and Fish officials. The Tres Rios corridor, known specifically as the Base and Meridian Wildlife area, was once a dumping ground and is now renown as a place to preserve, 'treed lightly', bird watch, catch and release (fishing) and enjoy the Gila waters on non-motorized canoe or kayak.

The Base and Meridian (B&M) Wildlife Area is the home of Monument Hill, the official base and meridian point for our region. The area is also primarily a riparian wetland and riverbank habitat. The riparian habitat common to the Gila River is recognized as the highest quality nesting habitat for white-winged dove, gambel's quail, great egret, osprey, falcon, hawk, coots, gallinules and other shorebirds. The B&M Wildlife Area is also valuable as habitat for Yuma clapper rails and other sensitive species as well as great blue heron, belted kingfisher, western screech-owl. Mammals to the area include beaver, bobcat, desert kangaroo rat, javelina, and an array of reptilian inhabitants such as the California kingsnake, sonoran mud turtle, and diamondback rattlesnake.

The State department of Game and Fish with collaboration of a local citizen response group known as the Wildlife for Tomorrow Fund, decided to celebrate the 'Tres Rios' area, creating a Spring Festival as a blanket means to share the appreciation and importance of this sacred wildlife refuge. The goal was to change deviant habits to ones of understanding, consideration, and preservation of this local wildlife refuge. In collaboration with Arizona Game and Fish, Wildlife for Tomorrow Foundation, Cities of Phoenix, Avondale, Goodyear, Luke Air Force Base, Maricopa County, and many supporting corporate partners, the concept of the 'Tres Rios

Nature Festival' was born in 2003.

A unique event to the metropolitan area, visitors to the festival are invited to partake in the many educational, recreational and preservation programs:
- Listen and talk to experts about wildlife, the outdoors, and area history.
- Educational programs and interpretive tours are offered throughout the weekend.
- Participants are encouraged to walk to nearby wildlife-viewing areas or take a hike on one of the many new devised trails (thanks to local Eagle Scouts).
- Explore the booths of wildlife and conservation organizations.
- Browse and shop at a farmers' market.
- Discover how Luke Air Force Base and local communities are making a difference in environmental projects.
- Listen to local entertainers and sample a diverse food menu.
- Participate in a fishing clinic for kids.
- Ride on a canoe at the lake created at the confluence of the Salt and Gila rivers.
- Visit an extensive children's area will have hands-on crafts, live animals, up-close encounters with critters, educational displays, storytelling and more!

Game and Fish officials have reported a drastic improvement and decreased crime in the Wildlife Preserve area. A local trash removal company has donated time to weekly pick up contained trash at the site as well as Boy scouts and residents are commonly found on weekends picking up trash or refurbishing trails. Safe and appropriate forms of recreational activities are taking place. Families are hiking the areas, watching, and respecting the wildlife in the area.

The City of Avondale recognizes this event as a unique grassroots approach of collaborative organizations to promote wildlife preservation and environmental responsibility. To date, the efforts of the this event has reached thousands of participants, protected the wildlife that call the area home, and initiated commitments to further preserve this unique riparian corridor. This event has also been well received by many grant funding cooperatives. To date the initiative has been supported by more than $750,000 in sponsorship funds.

The following individuals are members of the 2007 Tres Rios Nature Festival steering committee, and serve as an indication of the widespread collaboration of the initiative:

Heidi Vasiloff - Wildlife For Tomorrow Foundation, Festival Coordinator

Jackie Meck - 2006 Festival Co-Chair, Buckeye Conservation and Water District

Mike Rupp - Desert Rivers Audubon

Tom Hildebrandt, Darren Julian, Phil Smith - Arizona Game and Fish Department

Tice Supplee - Audubon Arizona

Ingrid Melle - City of Avondale

Paula Ilardo - City of Goodyear

Mary Reker - City of Phoenix

Alice Brawley-Chesworth - City of Phoenix

Jeffery Schone - Luke Air Force Base

Kirsten Hall - Estrella Mountain Community College

Diana Stuart, Jennifer Pokorski, Theresa Pinto - Maricopa County Flood Control District

Bob McCormick - Sonoran Audubon

Mollyanne Garrett - Liberty Wildlife

Sharolyn Hohman – SouthWestValley Chamber of Commerce

Robin N. Clayton - Freelance Writer

Angela Vasiloff, Austin Hopper, Cathy Wise - Wildlife for Tomorrow Foundation

RECOMENDATION:

For information only.

ATTACHMENTS:

Click to download

No Attachments Available

CITY COUNCIL REPORT

SUBJECT:
Municipal Arts Committee Recommendation to Purchase Public Art Pieces

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Rogene Hill, Assistant City Manager (623)333-1012

THROUGH: Charlie McClendon, City Manager

PURPOSE:

The Avondale Municipal Arts Committee (AMAC) is requesting that Council consider the Art Committee recommendation to purchase Elephant Walk and Family at Play, two public art pieces for placement at Friendship Park and the Civic Center respectively.

BACKGROUND:

The Avondale Municipal Art Committee was established in 2005 to support the City Council's Goal to "provide quality of life options and opportunities in the community". The Municipal Art Committee's role is to recommend specific purchases and their placement to City Council for final approval. From its initial annual budget of $100,000 the AMAC funded the Gallery 37 Project for $30,000 that produced the Sun Dial, which was installed at the new Civic Center Library. The Committee decided that the most cost effective means of obtaining public art with the remaining budget would be to purchase reasonably priced fabricated pieces from sculptors whose work they had seen and really liked.

In late February, the Committee traveled as a group to Palm Desert, CA to view their temporary public art display of 17 eye-catching sculptures and view the City's extensive collection at the civic center and City Park. In Palm Desert nearly every municipal building and private development has a public art display. The AMAC was able to view a wide variety of pieces from the very traditional to the very abstract and obtain the names and artist contact information for pieces that were of interest to them.

During the spring festival season, individual members of AMAC attended many of the art festivals around the Valley viewing the work of sculptors and artists. Members also searched the internet and looked at work recommended to them by friends and Council Members. Several AMAC members visited sculpture galleries in Scottsdale to scout pieces and bring recommendations to AMAC meetings.

DISCUSSION:

The AMAC decided to follow a theme for its initial purchases. The theme is family with emphasis on nurturing the young. The full Committee discussed the merits of the various recommendations gathered from these scouting endeavors and agreed upon the final recommendation. They also discussed the sites, installation and long term maintenance of the pieces, and believe that their recommendations not only meet the thematic goals, but are also best suited for the sites they have selected and present the least concerns for maintenance. Delivery and oversight by the artist during installation has been factored into the purchase price. Each artist submitted a concept proposal with pricing for AMAC to review. (See Attachment)

The AMAC recommends:

1. Purchase Frederick Prescott's Mother and Baby Elephant for placement in Friendship Park
2. Purchase James Moore's Family at Play for the Civic Center

Fred Prescott's work was on display in Palm Desert and other pieces were later seen by AMAC committee members at the Carefree, Cave Creek and Fountain Hills Art Festivals. Mr. Prescott visited Avondale in March and toured Friendship Park to recommend both a site and pieces that would be appropriate in scale. The Mother and Baby Elephant if purchased separately would cost $71,000. However, AMAC is recommending purchasing both together as one public art element for $63,000.

Representatives of AMAC met with the Parks and Recreaton Commission on May 9, 2007 to present their proposal and get the Commission's input. There was discussion about the placement, safety and maintenance of the pieces, which AMAC answered to their satisfaction. The Parks and Recreation Commission agreed with the recommendation going forward to City Council.

James Moore's work was viewed in Mesa and he has pieces in Scottsdale. Mr. Moore visited Avondale in April and toured the Civic Center Campus. He works in stainless steel and his recommendation was to fabricate a piece specific to Avondale rather than replicate some of his earlier works. This public art piece will consist of several pieces placed to create a scene of a family at play. The total cost is $63,750.

Staff will work with the artists on the placement and installation of the pieces. Each artists will provide insurance to cover the transport of the pieces and the cost of transporting and placing the pieces in included. Staff will need to pour the concrete footings and install additional lighting as appropriate.

The Committee is well aware that they will not have much remaining in their budget for the rest of FY 07-08, but felt that getting wonderful and highly visible pieces for the Community was their number one priority. During the coming year, the Committee has a lot more work to do in developing a catalogue of artists, working with staff to bring forward recommendations for a new ordinance and several other exciting initiatives that they identified at their annual retreat in April.

BUDGETARY IMPACT:

In the budget that Council adopted for FY 07-08 the Avondale Municipal Arts Committee was allocated $100,000. The AMAC has $65,797 remaining from the FY 06-07 budget. The total cost of the Prescott Elephant Walk (both mother and baby) and Moore's Family at Play will be $126,750 leaving the AMAC with $39,047.

RECOMENDATION:

For discussion and direction only.

ATTACHMENTS:

Click to download

- Elephant Composite
- Family-At-Play
- Proposal for Elephant Walk
- Proposal for Family at Play

The Family

by Frederick Prescott

City of Avondale

MUNICIPAL arts COMMITTEE

AVONDALE'S FRIENDSHIP PARK

"Family at Play"
James Moore

PRESCOTT STUDIO
3040 AGUA FRIA STREET
SANTA FE, NM 87507
TEL. 505-424-8449 / CEL. 505-660-9753

Rogene Hill
Asst. City Manager
11465 West Civic Center Drive
City of Avondale
Avondale, AZ 85323

We are pleased to propose Prescott kinetic sculptures for installation in the city of Avondale. Prescott sculptures are whimsical and eye-catching for people of all ages, making them the perfect art pieces for public view. As an addition to any public square or town center, a Prescott sculpture will inspire and fascinate, as a work of art, and as a colorful addition to the ambiance of the town!

How the pieces satisfy the theme of family/friendship/companionship:
A mother elephant with a baby elephant are both endearing and exotic. They epitomize the bond between mother and child, the importance of family and companionship, and the joy of just being around those you love! This is a theme that is represented every day in public places by parents out with their children, couples enjoying lunch, and friends having fun together. Wouldn't it be great to see a pair of elephants trekking across a park in Avondale? "Meet me at the elephants!" and "Let's have lunch with the elephants!" will be phrases heard every day!

Description of specific pieces:
The pieces to be installed are as follows: "Elephant Walk" measuring 10' x 4'6" x 12', and "Baby Elephant Walk" measuring 5'10" x 2'8" x 7'1". These larger-than-life sculptures are welded steel that can be powder coated or given a rust patina. The heads of the elephants are balanced in such a way that they move in the wind, thereby creating the effect of a real pair of elephants on a trek across the park!

Are these pieces specifically commissioned and created for Avondale?
These pieces are to be made specifically for Avondale, to be viewed by the public.

Is this a unique piece?
The elephants are to be original, unique pieces for Avondale. All Prescott pieces are created individually, one at a time. Each one is a unique work of art with its own personality!

What is the total price for the "Elephant Walk" pieces with installation?
The price will not exceed a total of $63,000. Baby Elephant Walk is $17,000 and Mama Elephant is $46,000. The price includes delivery to the Avondale park, where the artist will site the best space for the sculptures, so that they look fantastic.

How long will the sculpture take to be created and delivered?
A deposit of $31,500 is requested to start the sculptures, which will then be completed in three months and delivered to Avondale.

When is the remaining balance due?
The balance of $31,500 will be due at the time of delivery. Because the sculptures are created in Santa Fe and shipped out-of-state, there will be no taxes to the city of Avondale.

Would the artist come back and help us dedicate the pieces?
Fredrick Prescott would be pleased to be in Avondale when the "Elephant Walk" sculptures are dedicated.

Who will install the sculptures?
The artist will deliver and site the sculpture for optimal viewing. The city of Avondale will be responsible for pouring the foundation to act as the footing on which to mount the sculptures.

Recommended lighting:
The ideal lighting would come from the ground up. Proper lighting brings out the color and shadows on the body of the sculpture. The elephants will also look beautiful in the natural sunlight, and the shadows created on the ground will make the effect all the more dramatic as the sun rises and sets.

Order of installation:
The sculpture should be positioned in the desired place, before the pad is poured.

Is the piece designed to weather naturally?
Yes. These are outdoor pieces that are designed and finished especially for superior weather resistance. Prescott outdoor sculptures have weathered snow, heat, and hurricanes, and remain intact and good-as-new. The pieces are fairly indestructible.

Sculpture concept for City of Avondale, Civic Center

After having reviewed the available sites for sculpture in the city of Avondale I have focused on the Civic Center as the most appropriate choice for my work. Based on the scale of the focal building and the wonderfully open space the site provides, I have narrowed my general impressions and ideas to a composition that I think will fully satisfy the city's desire to bring high quality, long lasting public art to it's citizens.

After my initial visit to the Civic Center Plaza I went back to the site to spend some time just observing the space. Over the course of a couple of hours, I saw many people coming and going, engaged in conversation about this or that.

One particular "group" - a family, struck me. There were two children with what I immediately knew to be their parents. I knew this not from anything overt but by the simple and loving way the parents interacted with the children and by the way they lovingly corralled them to keep the family moving forward.

It was in that moment that I came to understand that this center of civic business was not just about issuing certificates and licenses. This Civic Center was about moving the city forward. It was about doing so from a place of caring.

So this sculpture, as I envision it, will reflect those qualities of love, caring and a watchful anticipation of things to come and of course fun.

My idea for this sculpture involves three figures engaged in playful interaction around a sort of "balance beam". On the "balance beam" is a child with a parent figure on either side. On one side is the female or mother figure in a gesture suggesting the release of the child as she watches with excited anticipation at the possibilities that lay ahead. On the other side is the male or father figure with outstretched arms again with a gesture suggesting anticipation and excitement. The "child's" gesture reflects the unbridled joy and fun of a child at play.

This composition brings to mind the many first steps of an individual, a family and a community.

Because the figures are centered on an action of play, the piece takes on a light, joyous feeling - one filled with anticipation and fun. On another, deeper level, this piece speaks to the relationship dynamics of family and community and always with a sense of fun.

Location: After reviewing all the available sites I was captured by the possibilities that the City Hall site. I think that setting and my sculpture is a particularly good match. I envision the sculpture placed on the smaller grassy section in front of the main building (second grass section from the building)

Scale: After viewing the site and spending some hours there getting a feel for the space I think the appropriate scale would need to include figures approximately 81/2 to 9 feet tall for the adult figures and about 5 feet tall for the child figure. The "beam" would stand about four feet off the ground and would span approximately 11 feet. I believe this scale enables the sculpture to fit nicely into the environment. Not overpowering but not so small that it would be lost from a distant perspective.

Materials: all sculptural elements will be constructed using stainless steel. Accent colors will be applied either in the form of a high quality automotive paint. Using a highly durable automotive paint allows for on-site repair should the need arise.

Esthetics: My sculptures are known for having a sense of whimsy and gestural poetry. I accomplish this by paying keen attention to the proportions of each work and by creating surfaces that invite touching. Traces of the artist's hand at work are visible reminding the viewer that a human being created this for their pleasure. I avoid an industrial look by softening all edges so as to invite touching by even the softest of little hands.

Installation of Sculpture: The installation of the work should be pretty straight forward and would involve the pouring of a concrete pad approximately 15 feet wide by 6 feet deep and should set off from the lawn by approximately 6-8 inches (final dimensions to be established as scale is finalized). The various elements of the sculpture would be anchor bolted with epoxy directly into the concrete. The specific location of the anchor bolts holes to be determined by me when the piece is on site and would be drilled and fixed by me. This would allow maximum flexibility in determining the final orientation of the piece to the space.

Timing of installation: The creation delivery and installation of the sculpture is anticipated to take approximately two months from the time project is approved and first payment is received. I have a team of expert welders and finishing technicians at my disposal insuring that all studio deadlines are met.

Uniqueness of composition: The concept and composition for this sculpture are site specific and has not been created or installed in any other location.

Lighting: The sculpture should be appropriately lit for night viewing. I will offer advise on lighting and will be available to consult with the City's technicians in creating the most appropriate lighting for the sculpture.

Price : The price for creating, delivering, and installing the four elements that comprise this sculpture is $63,750.00.

Other services and participations by the artist:

If commissioned to create this sculpture for the City of Avondale, I would be pleased and honored to return to assist in its dedication as well as participate in ongoing discussions, presentations, or promotional efforts regarding this sculpture as it relates to the City's public artworks.

James Moore
Sculptor

I've been a self taught , working sculptor for more than a quarter of a century. In that time I've explored all of the traditional sculptural materials available today. For the past ten years I have worked almost exclusively in welded and forged metal. During that time I have exhibited nationwide and created numerous large scale private commissions.

The geometrically-abstracted figurative work presented here draws on the compelling history of Minimalist art. Underlying the overt boundaries present in the hard edged structure of stainless steel lay something more human. It is this dichotomy of a hard edged structure depicting the soft flow of movement that I believe makes the work interesting and compelling.

Of course after all the art-speak is done this work is really about fun. The fun I have as I create it and the fun people experience as the look at it.

These stainless steel geometric figures are created using the highly technical process known as tungsten inert gas welding. This is the same process used in welding airplanes, racing car engines, and even space craft.

My work can be found in both corporate and private collections here in the United States, various countries in Europe, and in Japan. I am also represented by galleries on the West Coast.

James Moore
28 Paul Drive Suite G
San Rafael, CA 94903
1-888-274-0897

Born Oakland, California, April 4, 1959

Selected Exhibitions

ArtScape Gallery Walnut Creek, CA, 2003-present
Gallery Kieoki, Tahoe, CA 2003-present
John Pense Gallery, San Francisco, CA 1997
Museum of Children's Art, Oakland, CA 1995, one person show
American Institute of Architecture, Oakland, CA 1995
ACCI Gallery, Berkeley, CA, 1995, Featured Artist
Zawadi Gallery, Sacramento, CA 1994
Center for the Visual Arts, Oakland, CA 1993
Pro Arts Gallery, Oakland, CA 1992
Davis Art Center, Davis CA, 1991, Juried Competition
Galeria Mesa, Mesa, AZ, Juried competition

Selected Commissions & Public Placements

City of Los Altos, CA, (scheduled installation 2007)
Mr. Andrew Watson, San Francisco, CA 2007
Mr. Dominic Orr, Saratoga, CA 2006
The Wiseman Group, San Francisco, CA 2006
Mr. and Mrs. Ron and Nan Chapman, Saratoga, CA 2005
Goodland Landscape and Construction, San Ramon, CA 2005
Creative Marketing Concepts, San Francisco, CA 2005
Mr. Fred Pavlow, San Francisco, CA 2004
Ms. Nancy A. Chillag, Esq. Palo Alto, CA 2002
The Darwin Group, Dallas, TX 1998
Kaiser Permanente, Oakland, CA 1994
Club Sport, Oakland, CA 1994
Office of Mayor Elihu Harris, Oakland, CA 1993

Education: Self taught

Professional Affiliations International Sculpture Society
National Association of Independent Artists

CITY COUNCIL REPORT

SUBJECT:
South Mountain Citizen Advisory Team Update

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Shirley Gunther, Intergovernmental Affairs Manager (623)333-1612

THROUGH: Charlie McClendon, City Manager

PURPOSE:

Staff will provide an update to the Mayor and Council on the Citizen Advisory Team (CAT) proceedings and the South Mountain Freeway status and receive direction from Council.

BACKGROUND:

South Mountain Citizen Advisory Team:
Since 2002, the Arizona Department of Transportation (ADOT) has worked with a Citizen Advisory Team (CAT), representing various stakeholder groups in the South Mountain Freeway Study Area. The group meets to review environmental and technical data, discuss the interests and concerns of their respective organizations, and to help find a consensus solution for this proposed project. The CAT reconvened in March, 2007 to begin an evaluation of the Eastside alternatives. The CAT also met in April and had a meeting scheduled for May; however, this meeting did not have a quorom.

The City Council recently appointed Jim MacDonald as Avondale's representative to the CAT. He has attended all meetings since his appointment.

DISCUSSION:

Status:
Following public release of the Draft Environmental Impact Statement, the CAT will have an opportunity to provide a final recommendation of "build" or "no-build" based on available alternatives for the South Mountain Freeway. Timing of this recommendation, which will signal accomplishment of the CAT's mission, will be based on progress of the corridor study.

Gila River Indian Community (GRIC)
Since the beginning of the study in 2001, ADOT and FHWA have been working with the GRIC to determine if a portion of a freeway might be located on community land to the south of Pecos Road. To date, no GRIC options have been approved by the community for further study. GRIC has sole authority to decide if and where a freeway might be studied or built on its land. Therefore, if an eastern preference must be identified without GRIC alternatives, options would include either the Pecos Road alignment or not building the South Mountain Freeway.

RECOMENDATION:

Staff recommends that the City Council direct Avondale's representative on the CAT to support the Pecos Road alignment.

ATTACHMENTS:

Click to download

No Attachments Available

CITY COUNCIL REPORT

SUBJECT:
Neighborhood Traffic Management Program Policy

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Kelly LaRosa P.E. Traffic Engineer, 623-333-4229

THROUGH: Charlie McClendon, City Manager

PURPOSE:

Staff will update the City Council regarding development of the Neighborhood Traffic Management Program (NTMP) policy.

BACKGROUND:

Over the past several years, our residents have increasingly requested that the City provide or install traffic calming to address their concerns about speeding and other traffic related activities. In recognition of this growing concern, the City Council identified the development and implementation of a traffic calming program as a goal for Fiscal Year 2006/2007.

The implementation of Council's goal manifested itself in two ways: 1) the inclusion of $300,000 for Neighborhood Traffic Calming Structures in the current year Capital Improvement Program; and 2) the development of a Neighborhood Traffic Management Program policy (NTMP) that will be funded in future years.

Council approved the current year budget including funding to develop and implement a Neighborhood Traffic Management Program (NTMP). Staff is currently developing two methods of achieving this goal: 1) a demonstration traffic calming CIP project funded by $300,000 in the Streets CIP fund; and 2) the development of an NTMP policy including a resident application process for traffic calming projects in their neighborhood. Staff seeks Council input regarding a variety of proposed traffic calming measures and the development of a process to evaluate requests. This program and proposed project are being prepared in support of the City Council goal of Traffic Management.

DISCUSSION:

Demonstration Project

The goal of the proposed demonstration project is to install different types of traffic calming features as examples in various locations throughout the City. These examples address traffic concerns in select residential neighborhoods and provide model traffic calming measures for residents from other areas of the City to observe and determine if traffic calming is something they want to pursue in their own neighborhoods.

Locations for the installation of the demonstration project were determined based on commonly requested locations received from residents, Police Department records, and feedback from community meetings. The following locations were selected:

1. Six (6) speed humps on 5th Street and 6th Street between Riley Drive and Western Avenue south of Agua Fria High School
2. A traffic circle at the intersection of 113th Avenue and Durango Street

The speed hump project on 5th and 6th Street received 100% approval from the immediately adjacent property

owners. The speed humps were constructed in April 2007 and no complaints have been received to date. The traffic circle at 113th Avenue and Durango Street is currently under design and the design phase should be completed at the end of August, 2007.

Neighborhood Traffic Management Program (NTMP)

Staff has drafted a proposed policy to create a traffic calming program for the City. The City of Avondale NTMP focuses on reducing excessive vehicular speeds and traffic volumes in neighborhoods using traffic calming measures to improve residents' quality of life. This program is based on community involvement and provides residents a way to request their neighborhoods be investigated for potential traffic calming projects.

If a neighborhood meets the criteria for traffic calming, a process that includes petitions to get approval from a majority of the property owners in the neighborhood is required. The proposed NTMP process includes the following steps:

1. Initial Contact
   A property owner contacts the City to inquire about traffic calming in their neighborhood, and an information packet and "NTMP Request Form" will be provided to the requestor.
2. Traffic Study
   Upon receipt of a completed "NTMP Request Form", a traffic study will be scheduled in the neighborhood.
3. Develop Plan
   If the results of the traffic study show the neighborhood meets the NTMP criteria, the next step is for homeowners to work with City staff to develop a draft traffic calming plan. Staff will propose various traffic calming options that would be effective in the neighborhood for residents to consider.
4. Petition
   Consensus will be obtained by homeowners through a petitioning process to determine approval to proceed with a traffic calming project in the neighborhood.
5. Implementation & Evaluation
   Traffic calming features will be funded and installed by the City. "Before" and "After" traffic studies will be conducted to evaluate their effectiveness.

Program Strategies:

Funding
The NTMP is proposed to be fully funding by the City of Avondale CIP. An annual budget of $200,000 is proposed starting in FY 2007-2008. This will include costs for conducting traffic studies, materials, mailings, design and construction.

Public Participation
Public participation is vital to the success of the NTMP. The petitioning process will ensure a majority of property owners approve any traffic calming project in their neighborhood. Information will be available to all residents and property owners through newsletter mailings, meetings, open houses, the City's website, contact with City staff, and community interaction.

Staffing
The NTMP will require significant time and resources from staff. Hiring of additional staff will be crucial to the success of the program, and should be completed prior to implementing the NTMP. Time-consuming tasks include the following:

- Coordinating residential requests
- Studying neighborhood streets
- Holding open houses or give presentations to residents
- Coordinating the petitioning process
- Conducting field work

- Creating forms and pamphlets
- Gathering and providing information to neighborhoods via newsletters Developing and maintain information for the website
- Managing the design and construction of projects

Timeline

From the time an information packet is mailed to residents, the estimated time it may take for an average neighborhood to go through the NTMP process is approximately 10 months. This is dependent upon how quickly petitions are returned to the City, and may vary for different neighborhoods. An example timeline is provided below for a medium-sized neighborhood requesting traffic calming on two (2) or three (3) streets, and taking three (3) months to circulate petitions:

1. Filling out request form and returning to the city (Residents) 1 Week
2. Conducting Traffic Study and Analyzing Results (City) 8 Weeks
3. Developing Proposed Plan (City and Residents) 6 Weeks
4. Preparing Petitions (City) 3 Weeks
5. Circulating Petitions for Signatures (Residents) 12 Weeks
6. Verifications of Completed Petitions (City) 2 Weeks
7. Scheduling Instllation of Speed Humps (City) 8 Weeks

Total 40 Weeks or 10 Months

Please note this example is for a neighborhood in the first year of the NTMP process with constructing only speed humps or speed tables. The NTMP process could take as short at six (6) months or as long as twelve (12) months depending on how long a neighborhood takes to circulate their petitions.

Due to the need to hire additional staff and prepare information booklets, marketing materials and mailings, it is proposed that the Neighborhood Traffic Management Program officially begin August 15, 2007.

Future Tasks

There are several other elements of the proposed NTMP that need to be addressed.

- Finalize comments from staff input. The draft NTMP policy has been routed to other departments for review and gather consensus. Coordination with the Fire Department regarding roadways that are main access routes for emergency is important.
- Prepare marketing information, request forms and brochures, mailings, and update City website with NTMP information.
- Hire Assistant Traffic Engineer. The implementation and kick-off of this program will require an extreme amount of staff time and resources, especially the first year or two. It is imperative that additional staff be hired before the NTMP is officially kicked-off in order to ensure a quality and effective program is provided to Avondale citizens.
- Council adoption, scheduled for June 18, 2007.
- Public outreach after the program is adopted for implementation.
- Kick-off NTMP with an official start date of August 15, 2007.

BUDGETARY IMPACT:

Funding for the NTMP is available in the line item 304-1199-00-8420, Neighborhood Traffic Calming Structures.

ATTACHMENTS:

Click to download

Neighborhood Traffic Management Program Policy

NTMP
Neighborhood Traffic Management Program

City of Avondale
Engineering Department
11465 W. Civic Center Drive
Avondale, AZ 85323
623-333-4200

May, 2007

NTMP

Neighborhood Traffic Management Program

Traffic calming measures are physical features constructed as an integral part of a roadway. They cause motorists to change their driving behavior to reduce traffic problems on residential streets. The City of Avondale NTMP focuses on reducing excessive vehicular speeds and traffic volumes in existing neighborhoods using traffic calming measures to improve residents' quality of life. It is a program that is based on community involvement and adopted by Avondale City Council. The program includes the following steps:

1. Initial Request
2. Traffic Study
3. Develop Plan
4. Petition
5. Construction

1. INITIAL REQUEST

A property owner can contact the City to inquire about traffic calming in their neighborhood. An information packet and "NTMP Request Form" can be downloaded from the website or sent in the mail to a requestor. After reading the information, if a homeowner is interested in the NTMP and willing to be a volunteer liaison, they should fill out the "NTMP Request Form" and return it in the mail to the City. This will initiate the process for participating in the NTMP.

When contacting the City of Avondale or submitting the "NTMP Request Form", it is important to identify a neighborhood volunteer to act as a liaison between the neighborhood and the City. The volunteer could be an interested homeowner, small committee, or an HOA representative. This will enable a smooth and efficient process of coordination between the City and Avondale residents.

Public roadways that are paved and maintained by the City may be eligible for the NTMP. Construction of new subdivision developments must be completely built out before they are eligible for the NTMP because developments under construction may impact traffic patterns within the neighborhood and affect the traffic study. Private subdivisions are not subject to the NTMP program, but are encouraged to follow applicable traffic engineering guidelines and standards when considering and installing traffic calming features. Neighborhoods interested in funding their own traffic calming features on public streets must still participate in this NTMP process in order to obtain a permit for construction, but will not be subject to waiting for City funding.

2. TRAFFIC STUDY

Upon receipt of a completed "NTMP Request Form", a traffic study will be scheduled in the neighborhood. Requests for studies will be conducted in the order they are received. Traffic studies are usually conducted during the school year and on a weekday unless unique circumstances exist, as determined by City staff. The study area will be determined by City staff using engineering judgment to include the area most likely to be affected by the implementation of the traffic calming measures requested in order to address residents concerns. Residential neighborhoods that meet the following criteria are eligible to participate in the NTMP:

Minimum NTMP Criteria

Street Classification (with Posted Speed Limit)	Avg. Daily Traffic Volume (veh. per day)	Avg. Vehicular Speeds (MPH)	Top-end 15 Percentile Speeds (MPH)
Local (25 MPH)	1000	25	35
Collector (30 MPH)	6000	30	40

At least one street in the study area must meet one of the above criteria for the neighborhood to qualify for the NTMP program. In addition, the roadway that qualifies the neighborhood for the NTMP must receive traffic calming in order for other streets to be eligible. Roadways greater than 30 MPH are not eligible for traffic calming features.

Collector roadways may only be eligible if all of the following apply and they still meet the above NTMP criteria:

- They have no more than 1 travel lane in each direction
- They posted speed limit is 30 MPH or less
- They go through a residential neighborhood
- The Avondale Fire Department approves based on primary emergency response access routes

In an effort to provide traffic calming features in a cost effective and timely manner to neighborhood areas citywide, every neighborhood that qualifies for the NTMP must try speed humps/tables only for the first year, measured from the date the first traffic study was conducted. If a neighborhood is interested in paying for traffic calming features, they do not have to wait or try speed humps only for the first year.

3. DEVELOP PLAN

If the results of the traffic study show the neighborhood meets the NTMP criteria, the next step is for homeowners to work with City staff in the development of a draft traffic calming plan. The City will propose various options of traffic calming features that would be effective in the neighborhood for residents to consider. This can be done in several ways:

- A public meeting or open house can be held.
- A survey can be conducted.

- The HOA Board or representative can participate on behalf of the neighborhood.
- A traffic calming committee of homeowners can work with City staff on preferences.

Due to the extra time a public meeting can add to the process, a public meeting is optional if approved by City staff. In the absence of a public meeting, a newsletter will be sent by the City to the neighborhood to inform homeowners of the proposed traffic calming efforts and NTMP information. Requests for meetings are scheduled in the order they are received. Meeting notices, surveys or newsletters are prepared by City staff and mailed to residents and property owners through the U.S. Postal Service according to the Maricopa County Property Appraiser addresses records. Information distributed will include discussion of traffic calming and the NTMP process, the results of the traffic study, petition requirements, and potential alternatives for traffic projects in the neighborhood.

Various types of traffic calming measures are eligible in residential neighborhoods through the NTMP. These include, but are not limited to, the following examples:

- *Speed Humps (local streets only)*
- *Speed Tables (collector roadways)*
- *Traffic Circles*
- *Raised Intersections*
- *Median Islands*
- *Diagonal Diverters*
- *Right Turn Diverters*
- *Bulb-outs/Neckdowns*

Demonstration traffic calming features have been and will be installed in the city to allow residents to see examples of types of traffic calming available as options. Unless a unique circumstance exists or otherwise determined as needed by City staff, all traffic calming measures will be installed on permanently; no measures will be tried on a temporary basis due to the added expense, maintenance requirements and aesthetic issues. In addition, no road closures are allowed as part of the NTMP.

Speed humps will be allowed on local streets and Speed tables will be allowed on collector roadways.

4. PETITION

After a preferred alternative is developed, consensus must be obtained by homeowners to determine approval to proceed with at traffic calming project in the neighborhood. Consensus will be determined through a petitioning process. The City of Avondale will prepare requested petitions for specific traffic calming features on specific roadways. All petition forms will be prepared by City staff and provided to residents. A map showing the location of the traffic calming measures and the

petition boundary area will also be included. City staff shall determine petition boundaries for each measure based on the homes that will be most directly impacted by the proposed feature(s).

Property owners must sign the petition. Every reasonable attempt will be made to help the neighborhood liaison or volunteers circulating the petitions to contact non-owner occupied properties within the petition boundary. Renters are only allowed to sign petitions if the owner grants written permission for their tenant act as their representative and is confirmed by the City.

In order for a petition for traffic calming measures to be approved, 80% of property owners within the petition boundary must sign the petition. Only one property owner signature per house will be accepted. In addition, property owners immediately adjacent to a proposed traffic calming feature must sign the petition in order for the traffic calming measures in that proposed location to be approved. For example, the homeowners on each side of a proposed speed hump location, or homeowners on each corner of a proposed traffic circle, must sign the petition for that specific feature to be constructed in its proposed location.

Homeowners will be provided 4 months from the date the petitions are provided to the neighborhood by the City for the petitions to be circulated and returned. After 4 months, the petitions will expire. An additional 1 month extension can be requested by the neighborhood in writing (letter or email is acceptable). If a petition expires, a neighborhood will be required to wait 1 year to reapply.

5. CONSTRUCTION

Traffic calming features will be funded and installed by the City on a first come, first serve basis after completed and approved petitions are received and verified by City staff. "Before" and "after" traffic studies will be conducted to evaluate the effectiveness of the NTMP measures. Information will be provided to residents if the neighborhood decides to pursue additional traffic calming features.

To remove traffic calming measures, a petition to remove must be approved according to the same requirements listed above, and the cost for removal must be paid for by the property owners.

CITY COUNCIL REPORT

SUBJECT:
Library Update

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Christopher Reams, Acting Director of Parks, Recreation and Libraries (623)333-2412

THROUGH: Charlie McClendon, City Manager

PURPOSE:

Staff will provide the City Council with an update on the City of Avondale Library operations at the Civic Center Library and the Old Town Library construction project.

BACKGROUND:

The City of Avondale Parks, Recreation and Library Department / Library Division consist of two libraries. The Civic Center Library, 11350 W. Civic Center Drive, which formally began operations on March 31, 2007 and the Old Town Library, 328 W. Western Avenue. The Old Town Library is currently in the process of being redesigned and will be replaced with a new library which will be located just west of the Avondale Police substation on Western Avenue. The new library is expected to be open by the end of 2008. This report will provide City Council with an update on the operation and planning for both libraries.

DISCUSSION:

Civic Center Library

On July 7, 2004, Council approved an Intergovernmental Agreement (IGA) between the City of Avondale (the City) and the Maricopa County Library District (the County) for the operation of the Civic Center Library. Under the terms of the agreement, the City constructed the 31,000 square foot library and the County manages library operations. The grand opening for the Civic Center Library was Saturday, March 31, 2007. The IGA provides expanded library services for Avondale and Maricopa County residents. This report will provide an update on the major provisions of the IGA.

District Library operation: A.R.S. 48-3901 provides for the establishment of a library district within Maricopa County and further provides that cities and towns within the County may elect to join the library district. The IGA establishes a modified version of this policy. Under the current IGA, The City was responsible for construction of the facility at a cost of approximately $7 million and the County is responsible for the management of library operations for five years. The agreement terminates June 30, 2011, unless extended or terminated earlier by mutual agreement of both parties. At the time of termination of the IGA, the management of all library operations will be assumed by the City. The District manages all patron programming and the hours of operation reflect the District's established library hours of operation:
Monday through Thursday 10am – 9pm
Friday and Saturday 10am – 5pm
Closed Sundays

The City of Avondale Library Advisory board will provide advice regarding both libraries and coordinate issues that relate to Avondale residents. Cindy Kolaczynski, Deputy Director for the Maricopa County Library District, regularly attends Avondale Library Board meetings and all Avondale residents are eligible to participate on the Maricopa County Library Advisory Board.

Operating Cost – The operating budget is developed jointly by the City and the County. The administration of

the budget is maintained by the City. Total costs of operations are shared at a graduated rate over five years. However, the District's total annual contribution shall not exceed $1,000,000, as amended on March 6, 2006. The percentage of operating cost to be paid by both parties during the term of the agreement is as follows:

Fiscal Year 2006 -2007	District 100%	City 0%
Fiscal Year 2007 -2008	District 75%	City 25%
Fiscal Year 2008 -2009	District 50%	City 50%
Fiscal Year 2009 -2010	District 25%	City 75%
Fiscal Year 2010 -2011	District 0%	City 100%

The District must also pay to the City a percentage of reciprocal borrowing funds (RBF) on a graduated scale over the next five years. The reciprocal borrowing program provides supplemental funding to local municipalities if non-residents use our local libraries. The program is calculated on an annual basis, and provides a reimbursement to the city if more non-residents use Avondale Libraries than if Avondale residents use libraries in other municipalities. This program reciprocation schedule will continue during the term of the IGA as follows:

Fiscal Year 2006 - 2007	0%
Fiscal Year 2007 - 2008	25%
Fiscal Year 2008 - 2009	50%
Fiscal Year 2009 - 2010	75%
Fiscal Year 2010 – 2011	100%

Personnel – Each party has designated a representative to coordinate the IGA and establish communication between the City and the County. Christopher Reams, Assistant Director for Parks, Recreation, and Libraries is the representative for the City and Cindy Kolaczynski, Deputy Director for the Maricopa County Library District, is the representative for Maricopa County. The Civic Center Library is managed by Ava Gutwein. Ava is the Library Manager and a County employee. She replaced Kevin Tomlinson in May, 2007.

The library is staffed with 20 personnel: 4 full time staff (all City employees), 15 part time staff, and the Library Manager (County employees). City personnel assigned to the Civic Center Library are directly supervised by the County Library Manager. All pay and benefits are regulated by City Human Resource policies and directives. Christopher Reams and Ava Gutwein meet once per week to discuss operational issues and any open or outstanding concerns either party may have. Lise Chlebanowski, Old Town Library Manager, and Ava have also held programming collaboration meetings.

The City has no obligation to employ the County employees that work at the Civic Center Library and the County employees shall have no obligation to continue working at the Library upon termination of the IGA.

FF&E – All materials, furniture, equipment, computers, and supplies necessary for library operations are property of the City and will be retained by the City upon termination of this agreement. The designated representatives coordinate the selection and purchase schedules of any required materials or equipment, based on budget and operation requirements. All procurement is handled through the City and subject to City procurement policies and procedures. Each party is also authorized to participate in the public procurement contracts already established by either party.

Technology – The Civic Center Library and the Old Town Library are both equipped with computers for patron use and self check out capability. Each self check out system is operated with Polaris Intergraded Library System (ILS) cataloging. However, ILS integrates the check out system with the internal customer databases of the user library and its parent system, not the databases of other library systems. The Old Town Library and the Civic Center library do not share material databases or customer databases. For this reason, each library must continue to use separate Library cards. The databases may be shared at the end of the IGA period, provided that both libraries are operated under the same library system.

Facility Management – The City is responsible for maintaining the library building in good condition and repair at no cost to the District. The City Facilities personnel maintain the building under existing building schedules

and maintenance contracts. All facility issues are reported and resolved through the City workorder management system.

The Civic Center Library has a meeting room that is open to the public and City staff for specific events. The room can be reserved through the City room reservation system and rental is subject to City rules and procedures for facility reservations.

The Civic Center Library and the Old Town Library are equipped with space for a concession operations. Agenor Foods was awarded the contract to operate the concessions at the Civic Center Library through a competitive bid process. However, negotiations with Agenor Foods were not successful. The contract will be rebid with the addition of the Old Town Library concession operation under one contract. Staff believes the combination of sites will enhance the opportunity for vendors. In addition, PRLD and procurement staff will conduct increased mailings and contacts with local vendors, concessionaires, and restaurants to increase the number of applicants.

Old Town Library

On June 20, 2005 Council awarded a Design-Build contract to Sundt Construction, Inc. for preconstruction services relating to the Civic Center and Old Town Branch Libraries. Staff has been working with the Smith Group design team and Sundt Construction on the development of the Old Town Library project.

Ground breaking for the project is scheduled to begin in the fall on the site just west of the Avondale Police substation on Western Avenue. This facility is designed to replace the current Avondale Public Library/Old Town Branch located at 328 W. Western Avenue. The new library is expected to be open by the end of 2008.

During the construction phase of the new library, the current library will remain open, providing seamless customer service to library patrons. Fifth Street will be closed south one block from Western Avenue to Belmont Drive during construction. In addition, upon completion of the project, Fifth Street will be abandoned from Belmont to Western Avenue and the project site lots will be combined into one property. Area residents have been sent information on the project and updates on the projected street closures.

The facility will be approximately 12,500 square feet and cost an estimated $5 million. Services will include: children's, teens, and adults sections; computer and wi-fi access; study nooks; a café; storytime area; and a community meeting room.

Hours of operation for the Old Town Library will not change:
Monday through Thursday 10am – 7pm
Friday and Saturday 10am – 5pm
Closed Sunday

Sernas Plaza will also be remodeled as part of the construction. The new library, along with the recent remodeling of the Police substation, represents the Avondale City Council's commitment to creating a vibrant OldTown.

The design team has also been directed by Council to incorporate energy-efficient "green building" concepts into the design and construction wherever possible. Staff, in cooperation with the design team, is nearing completion of the design phase and developing a construction schedule.

Tentative key design and construction dates are:
100% Design Documents (DD) End of June 2007
DD to City for approval July 2007
100% Construction Documents (CD) August 2007
Issue Permits September 2007
Begin Construction Phase September 2007
Substantial Completion September 2008
Owner Move-In December 20008

Staff is expecting to present the GMP to the City Council on July 2, 2007.

RECOMENDATION:

For information only.

ATTACHMENTS:

Click to download

- IGA between the Maricopa County Library District and the City of Avondale

1170HC

CLERK OF THE BOARD
BASKET PICK UP

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
2004-0789761 07/09/04 13:30
20 OF 32
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C-65-04-025-2

INTERGOVERNMENTAL AGREEMENT
BETWEEN
THE MARICOPA COUNTY LIBRARY DISTRICT
AND
THE CITY OF AVONDALE

THIS INTERGOVERNMENTAL AGREEMENT (this "Agreement") is made on July 9, 2004 between the Maricopa County Library District, a political subdivision of the State of Arizona ("DISTRICT") and the City of Avondale, an Arizona municipal corporation ("AVONDALE"). AVONDALE and the DISTRICT are collectively referred to herein as the "Parties" or individually as a "Party".

RECITALS:

A. The Parties have the legal capacity to enter into this Agreement pursuant to Arizona Revised Statutes ("A.R.S.") § 11-951, *et seq.*

B. A.R.S. § 48-3901 provides for the establishment of a library district within Maricopa County and further provides that cities and towns within the County may elect to join the library district.

C. AVONDALE is a member of the DISTRICT and desires to expand and improve the library facilities available to its residents.

D. AVONDALE and the DISTRICT desire to cooperate in the operation of a new library on property owned by AVONDALE located on Coldwater Springs Boulevard near Avondale Boulevard (the "Library"). The Library will provide expanded benefits to Avondale residents and surrounding Maricopa County residents, such as expanded public library service, specialized library programs and other services which might not otherwise be available.

C-65-04-025-2

INTERGOVERNMENTAL AGREEMENT
BETWEEN
THE MARICOPA COUNTY LIBRARY DISTRICT
AND
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THIS INTERGOVERNMENTAL AGREEMENT (this "Agreement") is made on _____, 2004 between the Maricopa County Library District, a political subdivision of the State of Arizona ("DISTRICT") and the City of Avondale, an Arizona municipal corporation ("AVONDALE"). AVONDALE and the DISTRICT are collectively referred to herein as the "Parties" or individually as a "Party".

RECITALS:

A. The Parties have the legal capacity to enter into this Agreement pursuant to Arizona Revised Statutes ("A.R.S.") § 11-951, *et seq.*

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C. AVONDALE is a member of the DISTRICT and desires to expand and improve the library facilities available to its residents.

D. AVONDALE and the DISTRICT desire to cooperate in the operation of a new library on property owned by AVONDALE located on Coldwater Springs Boulevard near Avondale Boulevard (the "Library"). The Library will provide expanded benefits to Avondale residents and surrounding Maricopa County residents, such as expanded public library service, specialized library programs and other services which might not otherwise be available.

AGREEMENT:

NOW, THEREFORE, in consideration of the foregoing and the covenants hereinafter set forth, the Parties agree as follows:

1. GENERAL

1.1 Purpose of Agreement: It is the intent of the Parties that AVONDALE will construct and the DISTRICT will establish, as provided by this Agreement, the new AVONDALE public Library.

1.2 This Agreement shall be effective on the date it is filed with the Maricopa County Recorder. The Agreement shall terminate June 30, 2011, unless extended or terminated earlier by mutual agreement of the Parties.

1.3 Promptly after executing this Agreement, each Party shall designate in writing a representative. The Parties' representatives shall serve as the points of contact between the Parties for the purpose of enhancing communication, resolving disputes and otherwise carrying out the purposes of this Agreement. Either Party may change the identity of its representative by giving the other Party written notice of such change.

1.4 By May 1 of each year during the term of this Agreement, the Parties shall meet and establish a budget for operation of the Library for the fiscal year beginning July 1 of that same year and continuing until June 30 of the following year.

1.5 The Library shall open on or about July 1, 2006.

1.6 It is understood all the materials, furniture, equipment, computers, supplies, etc. purchased under terms of this Agreement are the property of AVONDALE and shall be retained by AVONDALE upon termination of this Agreement.

1.7 The Parties shall establish a method of reimbursement for the operating expenses of the Library.

2. DESIGN AND CONSTRUCTION OF LIBRARY

2.1 AVONDALE will design and construct the Library. AVONDALE shall pay all costs associated with designing, constructing, furnishing, equipping and staffing the Library.

2.2 AVONDALE shall provide the DISTRICT an opportunity to review the design of the Library; provided, however, that AVONDALE shall have absolute discretion with respect to all final design and construction decisions regarding the Library.

3. OBLIGATIONS OF THE DISTRICT

The DISTRICT shall:

3.1 Pay its portion of the direct operating costs of the Library pursuant to the schedule set forth on Exhibit A, attached hereto and incorporated herein by reference; provided, however, that the DISTRICT's total annual contribution shall not exceed $850,000.00. The DISTRICT shall pay the DISTRICT's portion of the Library's annual budgeted costs from revenues received pursuant to the DISTRICT's taxes levied pursuant to A.R.S. § 48-3903.

3.2 Provide centralized acquisitions, cataloging, processing and graphic arts services.

3.3 Provide coordinating and consulting services, including, but not limited to, providing AVONDALE with expertise and advice on the furnishings and equipment needed for the Library.

3.4 Employ a qualified Library Manager, who shall be a DISTRICT employee during the term of this agreement, and who shall have a voice in selection of the Library staff, all of whom shall be AVONDALE employees. Upon termination of this Agreement, AVONDALE shall have no obligation to employ the Library Manager and the Library Manager shall have no obligation to continue working at the Library.

3.5 Provide policies, procedures and operations manuals and support network.

3.6 Provide adult programming, advanced reference research, online reference resources and reference collection development.

3.7 Provide coordinated children's programs and services which may include summer reading, year-round reading, film programs, book-week programs, storytelling, school visits, crafts, read-aloud programs, performances and special events.

3.8 Encourage ongoing input from citizens in the selection of library materials and programs.

3.9 Provide hours of service consistent with the needs of the residents of Avondale.

3.10 Be responsible for the operation of the Library under terms set forth in this Agreement.

3.11 Provide for a library automation system which will incorporate the existing library at 328 W. Western Avenue as a branch of the new facility.

3.12 Work with its primary vendors to select and supply a shelf-ready and shelved Opening Day Library materials collection. The DISTRICT's professional staff will establish specifications for the collection and use their experience and expertise to select items appropriate for the Library and the community it serves.

4. OBLIGATIONS OF AVONDALE

4.1 Purchase the Library materials collection, including books, non-print materials, and electronic materials, in FY2005-2006, at an estimated cost of $1,500,000. Accounts specifically for the Library materials collection will be established with the DISTRICT's primary print and media vendors. All invoices, upon approval for payment by DISTRICT, will be submitted to AVONDALE for payment.

4.2 Provide for and pay for the operation of the library in the percentages listed on an annual basis as provided in Exhibit A.

4.3 Pay or cause to be paid an amount to be determined for the acquisition and installation of all the furnishings, computers, equipment and a library automation system.

4.4 Cooperate with the DISTRICT at all times in good faith in order to facilitate the provision of library services.

4.5 Maintain in full force and effect insurance which insures the Library against fire, flood, wind, and other casualty loss.

4.6 Keep and maintain the Library building in good condition and repair and shall correct any hazardous conditions existing as the result of any structural defect or unsoundness in the Library building at no cost to the DISTRICT.

5. DISPUTE RESOLUTION

The authorized representatives shall meet and attempt to resolve any dispute arising under this Agreement within five business days after written notice is given of the nature of the dispute, unless both Parties agree to a longer period of time.

6. TERMINATION OR EXPIRATION

This Agreement shall terminate under the following circumstances:

6.1 By mutual, written agreement of the Parties on an agreed-upon date.

6.2 Upon expiration of this Agreement or any extension or renewal thereof.

7. MISCELLANEOUS

7.1 Any notice or other communication required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if (i) delivered to the party at the address set forth below, (ii) deposited in the U.S. Mail, registered or certified, return receipt requested, to the address set forth below or (iii) given to a recognized and reputable overnight delivery service, to the address set forth below:

If to AVONDALE:
City Manager
City of Avondale
11465 Civic Center Drive, Suite 220
Avondale, Arizona 85323-6804

If to the DISTRICT:
Director
Maricopa County Library District
17811 N. 32nd Street
Phoenix, Arizona 85032

or at such other address, and to the attention of such other person or officer, as any Party may designate in writing by notice duly given pursuant to this Section. Notices shall be deemed received (i) when delivered to the Party, (ii) three business days after being placed in the U.S. Mail, properly addressed, with sufficient postage or (iii) the following business day after being given to a recognized overnight delivery service,

with the person giving the notice paying all required charges and instructing the delivery service to deliver on the following business day. If a copy of a notice is also given to a Party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a Party shall mean and refer to the date on which the Party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

7.2 This Agreement comprises the entire agreement of the Parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

7.3 This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona, and the laws, rules and regulations of the City of Avondale and Maricopa County. Specifically, this Agreement may be cancelled by either Party pursuant to A.R.S. § 38-511.

7.4 AVONDALE will indemnify, defend and hold harmless the DISTRICT and its agents, officials and employees for, from and against all liability for damages resulting from injury, death, property damage and economic loss suffered by a third person as a result of the negligent or wrongful act or omission of AVONDALE or AVONDALE's agent, official or employee which arises out of AVONDALE's performance of, or the failure to perform, its obligations under this Agreement. The damages which are subject of this indemnity shall include, but not be limited to attorney fees, court costs, settlement expenses and litigation expenses related to liability described in this paragraph and/or related to any claim or action asserting such liability against the DISTRICT or any of its agents, officials and employees.

7.5 The DISTRICT will indemnify, defend and hold harmless AVONDALE and its agents, officials and employees for, from and against all liability for damages resulting from injury, death, property damage and economic loss suffered by a third person as a result of the negligent or wrongful act or omission of the DISTRICT or the DISTRICT's agent, official or employee which arises out of the DISTRICT's performance of, or the failure to perform, its obligations under this Agreement. The damages which are subject of this indemnity shall include, but not be limited to attorney fees, court costs, settlement expenses and litigation expenses related to liability described in this paragraph and/or related to any claim or action asserting such liability against AVONDALE or any of its agents, officials and employees.

7.6 During the term of this agreement, Avondale shall not be eligible to receive Reciprocal Borrowing funds.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed the day and year first written above.

FOR AVONDALE:

By: _____
Ronald J. Drake, Mayor

FOR THE DISTRICT:

By: _____ 7/7/04
Chairman of the Board

ATTEST:

_____
Linda M. Farris, City Clerk

ATTEST:

_____
Clerk of the Board

ATTORNEY DETERMINATION

In accordance with the requirements of ARIZ. REV. STAT. § 11-952(D), the undersigned attorneys acknowledge (i) that they have reviewed the above Agreement on behalf of their respective clients and (ii) that, as to their respective clients only, each attorney has determined that this Agreement is in proper form and is within the powers and authority granted under the laws of the State of Arizona.

_____
Rachelle Leibsohn, Deputy County Attorney

_____
Andrew J. McGuire, Avondale City Attorney

EXHIBIT A

Percentage of direct operating costs to be paid by District and Avondale during the term of the Agreement is as follows:

Fiscal Year 2006/07:	Library District 100%	Avondale 0%
Fiscal Year 2007/08:	Library District 75%	Avondale 25%
Fiscal Year 2008/09:	Library District 50%	Avondale 50%
Fiscal Year 2009/10:	Library District 25%	Avondale 75%
Fiscal Year 2010/11:	Library District 0%	Avondale 100%

RESOLUTION NO. 2418-04

A RESOLUTION OF THE COUNCIL OF THE CITY OF AVONDALE, ARIZONA, APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE MARICOPA COUNTY LIBRARY DISTRICT RELATING TO THE OPERATION OF THE AVONDALE PUBLIC LIBRARY.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF AVONDALE as follows:

SECTION 1. That the Intergovernmental Agreement between the City of Avondale and the Maricopa County Library District relating to the operation of the Avondale Public Library (the "Agreement") is hereby approved in the form attached hereto as Exhibit A and incorporated herein by this reference.

SECTION 2. That the Mayor, the City Manager, the City Clerk and the City Attorney are hereby authorized directed to take all steps necessary to cause the execution of the Agreement.

PASSED AND ADOPTED by the Council of the City of Avondale, May 3, 2004.

Ronald J. Drake, Mayor

ATTEST:

Linda M. Farris, City Clerk

APPROVED AS TO FORM:

Andrew J. McGuire, City Attorney

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4-20-04-1

CITY COUNCIL REPORT

SUBJECT:
Discussion Item - Youth Commission NLC Conference Participation - Council Member Lynch

MEETING DATE:
June 11, 2007

TO: Mayor and Council

FROM: Christopher Lopez, Youth Development Coordinator (623)333-2719

THROUGH: Charlie McClendon, City Manager

PURPOSE:

Councilmember Lynch would like to discuss the Avondale Youth Advisory Commission's participation in the National League of Cities Congressional City Conference held in Washington, D.C. versus the traveling Congress of Cities conference.

BACKGROUND:

Councilmember Lynch requested that information be gathered regarding youth activities offered and costs associated with each of the two annual National League of Cities conferences.

DISCUSSION:

The National League of Cities invites youth representatives to participate in its two annual conferences. These conferences are the Congressional City Conference held in Washington D.C. and the Congress of Cities conference which is hosted by a different city each year. Historically, the City of Avondale has sent members of its Avondale Youth Advisory Commission to participate in the Congressional City Conference in Washington D.C.

Youth Elements
Recent correspondence with National League of Cities staff indicates that neither conference offers a "youth track". At each of the two conferences, youth participate in the same sessions as adults. Each conference does however offer three special sessions for youth that include an orientation, a meal with officials, and an opportunity to network. The Congress of Cities conference offers an additional youth only social event. It is expected that the Congressional City Conference will add a youth only social event in the future.

Conference Focus
Feedback from NLC staff indicates that the Congressional City Conference (Washington D.C.) has a legislative focus whereas the Congress of Cities (traveling) focuses on best practices.

Youth Input
The Avondale Youth Advisory Commission discussed the value of each conference during their April 9th 2007 meeting. Youth Commissioners communicated that the Congressional City Conference would be of more value, due to the opportunity it offers to learn about the United States Capitiol, the legislative process and opportunites to visit major landmarks and museums.

BUDGETARY IMPACT:

In 2007 there did exist a significant difference in the cost of participation in the conferences. In 2007 the Congressional City Conference cost $1,173 per participant as compared to the Congress of Cities Conference at $797. This disparity in cost is due to the higher hotel rates in Washington D.C. It is important to note that the

cost for lodging will vary for the Congress of Cities conference depending on the location it is held each year.

RECOMENDATION:

For Council discussion and to provide direction to staff as necessary.

ATTACHMENTS:

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No Attachments Available