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ROSHKA DeWULF & PATTEN

ROSHKA DeWULF & PATTEN, PLC
ATTORNEYS AT LAW
ONE ARIZONA CENTER
400 EAST VAN BUREN STREET
SUITE 800
PHOENIX, ARIZONA 85004
TELEPHONE NO 602-256-6100
FACSIMILE 602-256-6800

November 9, 2006

Via hand-delivery

Arizona Corporation Commission

DOCKETED

NOV -9 2006

Ms. Linda A. Jaress
Executive Consultant III
Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

DOCKETED BY	<i>nr</i>
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Re: Docket Nos. SW-03575A-06-0545 and W-03576A-06-0545

Dear Ms. Jaress:

Attached is the response by Palo Verde Utilities Company and Santa Cruz Water Company to your insufficiency letter in this docket dated September 29, 2006. An engineering report is being provided directly to Ms. Dorothy Hains. Please let us know Staff has further questions.

Very truly yours,

Timothy J. Sabo

cc: Ms. Dorothy Hains
Christopher C. Kempley, Esq.
Mr. Graham Symmonds
ACC Docket Control Center (Original + 13 copies)

AZ CORP COMMISSION
DOCUMENT CONTROL

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Responses to Staff Insufficiency Letter

Docket Nos. SW-03575A-06-0545 and W-03576A-06-0545

Question 1: Water usage data for the last 13 months.

Response: Attached.

Question 2: A copy of wastewater flow records for the last 13 months.

Response: Attached.

Question 3: The proposed water plan and water system design report.

Response: SCWC has prepared preliminary design reports for its northern and southwestern service areas. This includes connecting a portion of the new service areas to the Southwest Service Area approved Decision No. 68448 (Feb. 2, 2006), and interconnecting the original SCWC service area across the northern reaches of the proposed extension area.

A summary of the water master plan is described in the attached revised engineering service report and shown in the exhibit attached to the CC&N application.

Question 4: The proposed wastewater plan and wastewater design report. This should include a reclaimed water disposal plan.

Response: PVUC has prepared preliminary design reports for its northern and southwestern service areas within the context of consolidating the entire Global planning area into one 208 Water Quality management Plan Amendment. This document details the methodology and technology associated with deploying wastewater infrastructure in the region. These plans are attached. Some properties included in this extension will be serviced by Campus 4 WRF, others will be incorporated into Campus 2 WRF and some will be provided service from Campus 1 WRF. An exhibit from the PVUC Consolidated 208 showing the sewer sheds is attached.

A summary of the wastewater master plan is described in the attached revised engineering service report and is shown in the exhibit attached to the CC&N extension filing. Also attached is Exhibit 7 from the PVUC Consolidated 208, entitled "Southwest Area Master Wastewater Report for Palo Verde Utilities Company" which shows the regional wastewater planning for the entire service area proposed in the PVUC Consolidated 208, which includes all of the properties requesting service through this CC&N extension. Due to the size of this report, it is being provided directly to Ms. Dorothy Hains.

The reclaimed water master plan is shown in the attached exhibit. Pipe sizes and lengths are included in the attached table along with the cost opinion. Design documents are

prepared as needed once the location(s) of the delivery points are identified by the developers. These facilities are generally located within the same alignment as the sewer lines.

Question 5: Provide a copy of a map of the extension area illustrating residential, commercial, industrial, green, lakes, etc.

Response: This specific information is not currently known and is dependent on the landowners developing their land-use plans. However, in order to acquire service from Global, land-use plans must conform to Global's Code of Practice GWR-CP-01-007 Land Use Plan by Section. Under this requirement, the following limitations are imposed:

Developers submitting plans for approval to the Utility must provide the following:

- Integrated Irrigation Impoundments (Reclaimed Water Storage) capable of handling 6 days with no irrigation use.
- For all open spaces, the following limitations are applied:
 - Turf = 22%
 - Xeriscape = 75%
 - Lakes = 3%

Global works closely with the developers through their entitlement process with the County or Cities, and reviews water, wastewater and reclaimed plans to ensure compatibility with the backbone plant and compliance with Global's Land Use Plan Code of Practice.

Question 6: Provide the status of the APP and AZNPDES permit modification.

Response: Campus 1 WRF is currently permitted as follows:

- APP 105228, 9 MGD
 - no modification required to accommodate this CC&N extension
- AzPDES AZ0025071, 9 MGD, 3 outfalls
 - no modification required to accommodate this CC&N extension

Campus 2 WRF is currently permitted as follows:

- APP 105668, 9 MGD (APP includes approval of recharge wells)
 - Preliminary decision to Permit issued by ADEQ
 - Public comment period ends November 18
 - Expect signed permit by 31 December 2006
- No AzPDES permit will be pursued for the Campus 2 WRF. All non-reuse reclaimed water flows will be recharged to ensure the security and availability of water resources in the area.

Campus 4 WRF currently has no APP or AzPDES applications.

- The APP and AzPDES will be filed in 2008 in order to ensure permits and facilities are in place prior to the completion of development.



November 8, 2006

**ENGINEERING SERVING REPORT
MEMORANDUM (Revised)**

**Re: North and South West Service Area Extension
Water and Wastewater Services,
Docket SW-03575A-06-0545 and W-03576A-06-0545**

This memorandum defines the service requirements of the extension of the South West and North Service Areas from the perspective of water supply and wastewater treatment. The extension service area includes approximately 8,694 acres with an estimated 28,000 additional dwelling units. As seen in the attached exhibits, the extension areas begin to fill in the checkerboard in the Maricopa area along the north, northwest, and southwest borders of the Ak-Chin Indian Community. Proposed water and wastewater infrastructure are shown along with the location and relationship to the existing systems.

Water

For the first year, 100 dwelling units per month are anticipated, or 1,200 per year, for both water and wastewater. For years 2-5, 200 dwelling units per month are anticipated, or 2,400 per year. This equates to an additional 204 gpm that needs to be added the first year to our well production capacity, and 408 gpm added years 2-5, or 1,836 gpm for five years, for a total of 4,760 gpm, or 7 MGD, to support water production for the entire buildout. Existing Santa Cruz Water Company ("SCWC") infrastructure will be expanded to stay ahead of the demand as growth continues. This production will be accommodated most likely from rehabilitated agricultural wells to be converted in the service area. The ACC is aware of our extensive well assessment program in the North and Southwest existing service areas, most recently seen as supporting information in our approved Southwest extension, decision number 68448, February 2, 2006. Attached is the Well Inventory and Data Review Addendum for this area which identifies additional wells in the extension area primarily in the northwest portion which appear to have ample production capability.

Wells with arsenic and nitrate levels below the Primary Drinking Water Standards will be given priority, and as necessary, blending will be used to achieve compliance. In addition, a CAP surface water treatment plant in Township 4S, 3E, Section 35 is under design which will provide up to 5 MGD of CAP water in its first phase to supplant the groundwater supplies in this region and to improve the water quality, as needed for blending, to readily meet Primary Drinking Water Standards.

A table of infrastructure to be added to serve the extension areas is included. The estimated cost of this infrastructure is \$40.6 million.

Wastewater

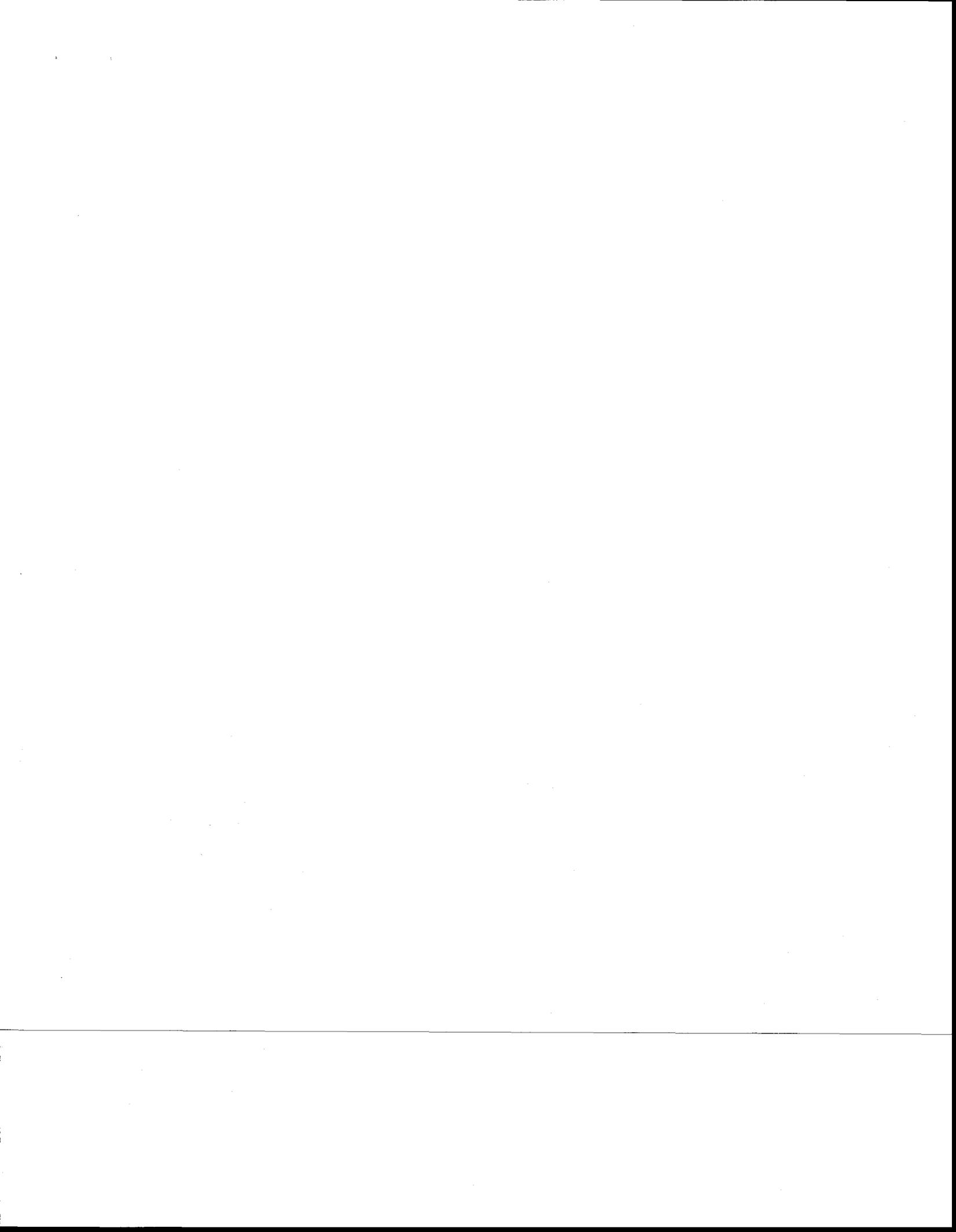
At 1200 dwelling units per year and 187 gpd/du, we expect 0.25 MGD in year one, 2.25 MGD after 5 years, and 5.25 MGD at buildout. Flows in the North area portion of the extension will be treated at the Campus 1 WRF which will be expanded to accommodate these flows. Flows from the northwest portion of the extension will be pumped over and treated at Campus 1 WRF until the sewershed builds up sufficiently to justify the construction of Campus 4 WRF, not expected within the next 5 years. The Southwest area portion of the extension will be treated at the Campus 2 WRF.



Reclaimed Water System

The reclaimed water system will be installed to match the pace and location of the sewer lines. Integrated irrigation impoundments will be installed by the developers to receive and store reclaimed water to meet their demand needs.

A table of infrastructure to be added for sewer and reclaimed water to serve the extension areas is included. The estimated cost of this infrastructure is \$88.0 million.



Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 28,000	LF	Unit Cost	Total
36" SEWER MAIN	13,920	\$146	\$2,032,320
30" SEWER MAIN	13,200	\$115	\$1,518,000
24" SEWER MAIN	23,760	\$105	\$2,494,800
18" SEWER MAIN	43,010	\$95	\$4,085,950
15" SEWER MAIN	42,900	\$85	\$3,646,500
12" SEWER MAIN	34,680	\$75	\$2,601,000
FORCE MAIN	22,300	\$48	\$1,070,400
24" RECLAIMED WATER	5,280	\$110	\$580,800
18" RECLAIMED WATER	85,536	\$94	\$8,040,384
16" RECLAIMED WATER	13,728	\$82	\$1,125,696
12" RECLAIMED WATER	120,912	\$53	\$6,408,336
LIFT STATION	1	\$2,000,000	\$2,000,000
WRF Expansion	MGD		
187 gpd/du =	5.236	\$10,000,000	\$52,360,000
Total Cost			\$87,964,186
Year 1			\$10,466,720
Year 2			\$8,736,800
Year 3			\$8,736,800
Year 4			\$8,671,856
Year 5			\$12,508,890

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 1 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 1,200	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	22,300	\$48	\$1,070,400
24" RECLAIMED WATER	5,280	\$110	\$580,800
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	6,600	\$82	\$541,200
12" RECLAIMED WATER	10,560	\$53	\$559,680
LIFT STATION	1	\$2,000,000	\$2,000,000
WRF Expansion	MGD		
187 gpd/du =	0.224	\$10,000,000	\$2,244,000
			\$10,466,720

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 2 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	2,640	\$82	\$216,480
12" RECLAIMED WATER	10,560	\$53	\$559,680
LIFT STATION	0	\$2,000,000	\$0
WRF Expansion	MGD		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$8,736,800

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 3 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	2,640	\$82	\$216,480
12" RECLAIMED WATER	10,560	\$53	\$559,680
LIFT STATION	0	\$2,000,000	\$0
WRF Expansion	MGD		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$8,736,800

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

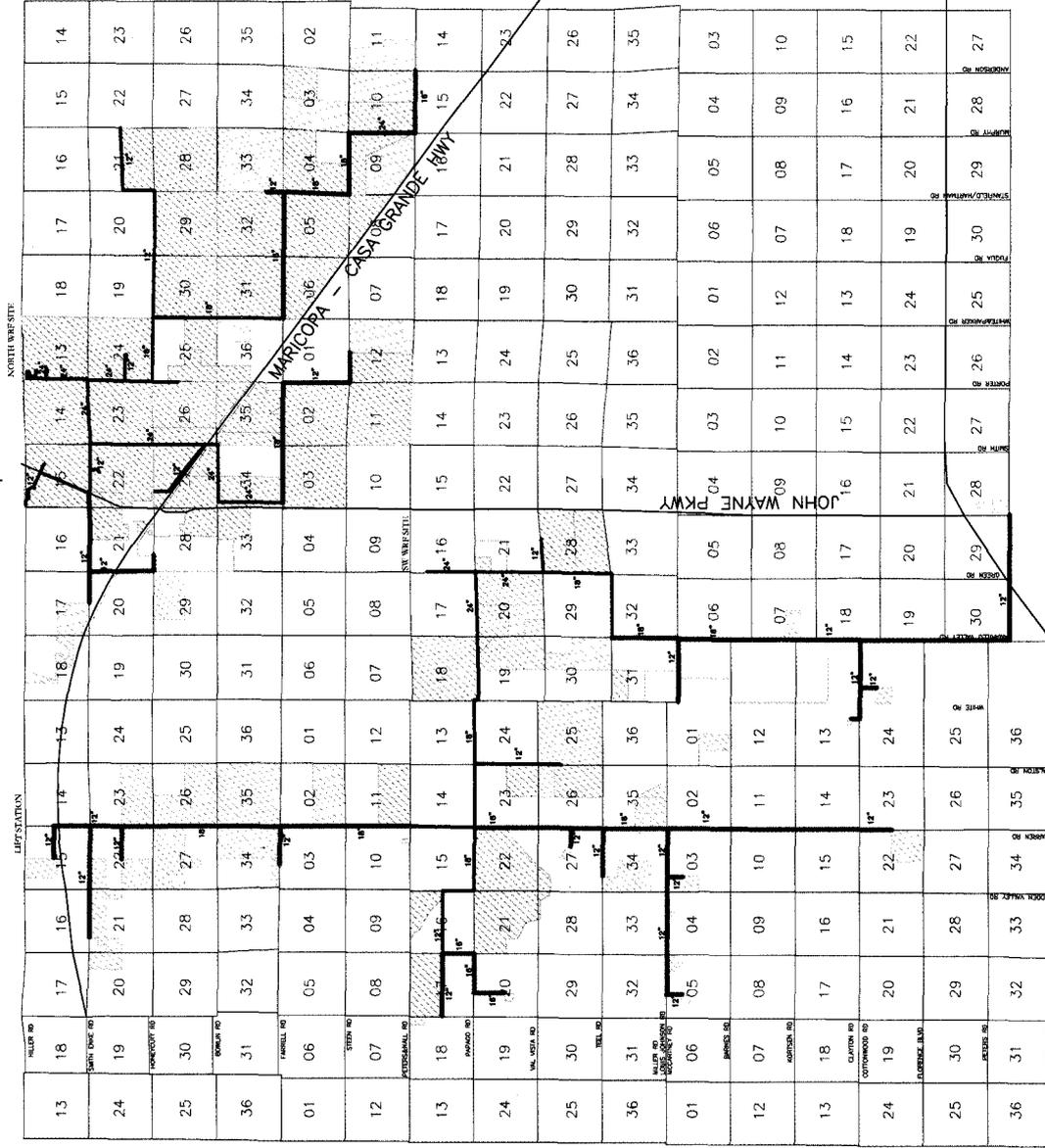
YEAR 4 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	1,848	\$82	\$151,536
12" RECLAIMED WATER	10,560	\$53	\$559,680
LIFT STATION	0	\$2,000,000	\$0
WRF Expansion	MGD		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$8,671,856

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

GLOBAL WATER - PALO VERDE UTILITIES CO.

Reclaimed Water Expansion Exhibit



LEGEND

- EXISTING RECLAIMED WATER LINE
- PROPOSED RECLAIMED WATER LINE
- EXISTING PUBLIC CULVERT
- PROPOSED PUBLIC CULVERT
- PROPOSED WATER MAIN EXTENSION

QUANTITIES - Reclaim Line

Existing

- 12" = 14.0 mi.
- 18" = 9.1 mi.
- 24" = 11.5 mi.

Proposed

- 12" = 22.9 mi.
- 16" = 2.6 mi.
- 18" = 16.2 mi.
- 24" = 1.0 mi.



MARICOPA
EXPANSION

GLOBAL WATER RESOURCES, LLC
21410 NORTH 10TH AVENUE
PHOENIX, ARIZONA, 85027
PHONE: 602.360.8000
FAX: 602.360.8001
WWW.GWRRESOURCES.COM