APPENDIX E

GROUNDWATER ELEVATION

CONTOUR MAPS – 1988-2012

R. 13 E.

Frontage Road - Casa Grande Hwy.

I-10

Highway Drive

17ACC1 CARDINAL CASTING (2123.14)

17ACC3 SUNSET PLAZA (2123.63)

17ACC4 KAYLOR TRAILER

17DBA2 COWTOWN BOOTS

17DBA3 ARIZ TRUCK SERVICE

17DBA1 QUALITY TRUCK PARTS

17DBB1 HBI (2123.43)

17DBB2 CASA MOTEL

17DBD KNAPP

17CAD TANNER

17DAC JENK'S CAFE

17 DAD LAGUNA SCHOOL (2126.77)

17DDB1 NATIONAL TRUCK STOP

17DDB2 RANCH HOUSE

17DDC LEE'S AUTO (2127.59)

17DDD STONE HOUSE

Curtis Road

Shannon Road

Calle Colla Sgri

SOUTHERN PACIFIC RAILROAD

Santa Cruz River

2124

2125

2126

2127

W9

N-1

A1

W-1

P3

EL CAMINO DEL CERRO LANDFILL

P2

W5 (2126.97)

W2

L6

W4

RR1

Approximate Landfill Boundary

L8

N8

P1

SB-2

SB-4

SB-3

SB-5

El Camino del Cerro

L3

W3

Roger Road Wastewater Treatment Facility Effluent Holding Pond

T 13 S

17 16 20 21

EXPLANATION

- W1 — Westbay Monitor Well
- L6 — Lysimeter
- N1 — Neutron Access Tube
- L3 — Perched Zone Monitor Well with Lysimeter
- RR1 — Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 — Soil Boring
- A1 — Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 — Perched Zone Monitor Well
- W5 — Shallow Regional Aquifer Monitor Well

W5 (2126.97) — Well Identifier; Water level elevation, in feet above mean sea level, measured June 7, 1988

2125 — Approximate line of equal water level elevation, in feet, above mean sea level

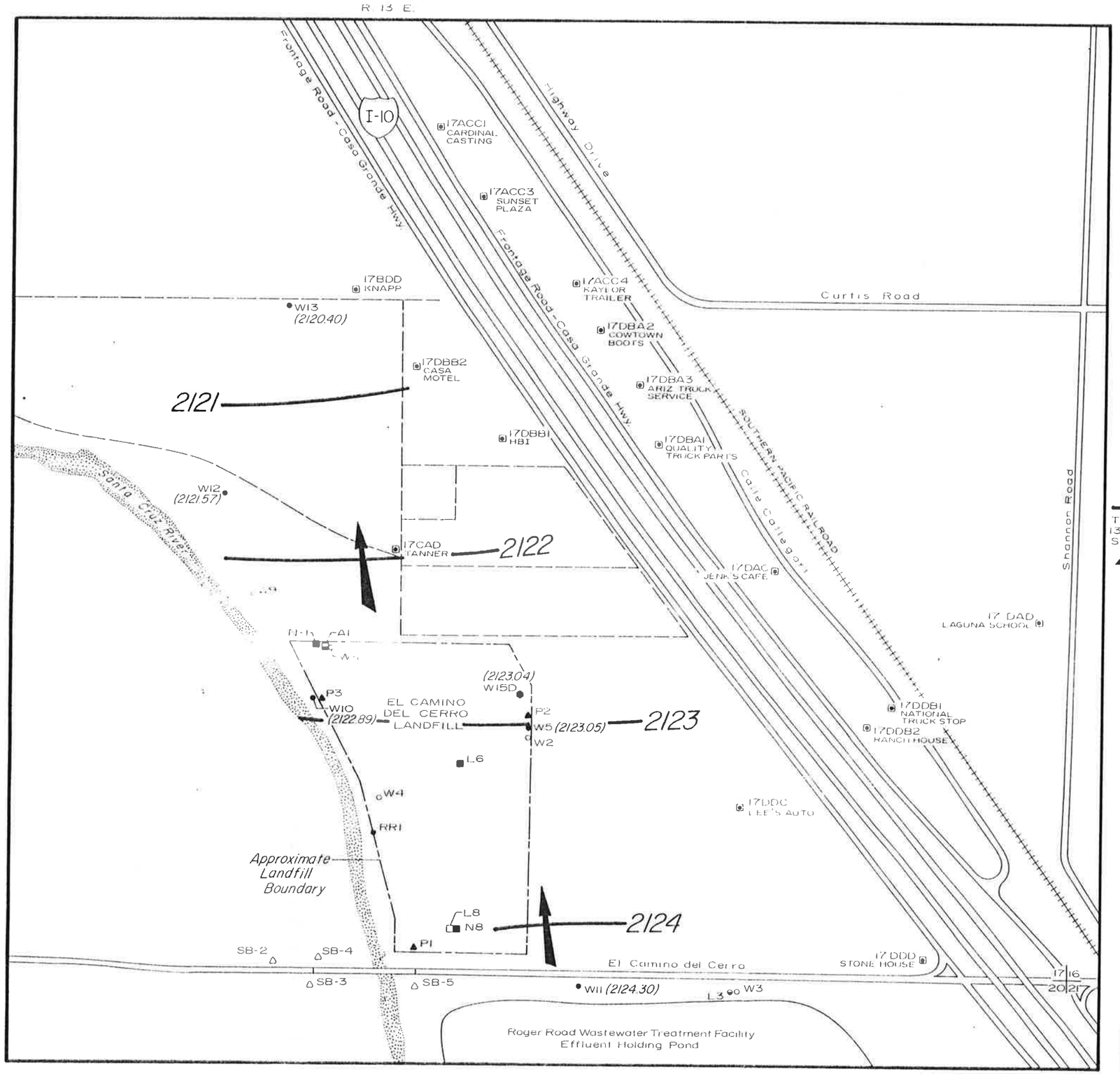
Apparent direction of lateral groundwater movement

0 200 400 FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
JUNE 7, 1988

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-OIL FIGURE 6D-1



E X P L A N A T I O N

- W1 Westbay Monitor Well
- L6 Lysimeter
- N1 Neutron Access Tube
- L3 Perched Zone Monitor Well with Lysimeter
- RR1 Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 Soil Boring
- A1 Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 Perched Zone Monitor Well
- W5 Shallow Regional Aquifer Monitor Well
- W15D Deep Regional Aquifer Monitor Well

W12 (2121.57) Well Identifier
Water level elevation, in feet above mean sea level, measured May 30, 1989

2122 Approximate line of equal water level elevation, in feet, above mean sea level

Apparent direction of lateral groundwater movement

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
MAY 30, 1989

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-01L FIGURE 6D-5

R 13 E.

T 13 S

Frontage Road - Casa Grande Hwy

Highway Drive

Curtis Road

Shannon Road

Calle Colegio

SOUTHERN PACIFIC RAILROAD

I-10

2115

2116

2117

2118

2119

17ACC1 CARDINAL CASTING (211463)

17ACC3 SUNSET PLAZA (211603)

17ACC4 KAYLOR TRAILER

17BDD KNAPP

17DBA2 COWTOWN BOOTS

17DBA3 ARIZ TRUCK SERVICE

17DBB2 CASA MOTEL

17DBB1 HBI

17DBA1 QUALITY TRUCK PARTS

17CAD TANNER

17DAC JENK'S CAFE

17 DAD LAGUNA SCHOOL

17DDB1 NATIONAL TRUCK STOP

17DDB2 RANCH HOUSE

17DDC LEE'S AUTO

17DDD STONE HOUSE

W13 (211684)

W14 (211751)

W12 (211848)

W16 (211826)

W15D (211870)

W5 (211857)

W11 (211991)

W1 W2 W3 W4 W9

W10 (211882)

P1 P2 P3

L6 L8

N1 N8

AI

SB-2 SB-3 SB-4 SB-5

EL CAMINO DEL CERRO LANDFILL

Approximate Landfill Boundary

El Camino del Cerro

Santa Cruz River

Roger Road Wastewater Treatment Facility Effluent Holding Pond

17 16 20 21

EXPLANATION

- W1 — Westbay Monitor Well
- L6 — Lysimeter
- N1 — Neutron Access Tube
- L3 — Perched Zone Monitor Well with Lysimeter
- RR1 — Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 — Soil Boring
- AI — Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 — Perched Zone Monitor Well
- W5 — Shallow Regional Aquifer Monitor Well
- W15D — Deep Regional Aquifer Monitor Well

W12 (212245) — Well Identifier; Water level elevation, in feet above mean sea level, measured September 1990

2122 — Approximate line of equal water level elevation, in feet, above mean sea level

Apparent direction of lateral groundwater movement

0 200 400 FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION SEPTEMBER 1990

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-OIL FIGURE 6D-10

R. 13 E.

Frontage Road - Casa Grande Hwy

I-10

Highway Drive

Curtis Road

Frontage Road - Casa Grande Hwy

SOUTHERN PACIFIC RAILROAD

Calle Calla 9371

Shannon Road

17ACC1 CARDINAL CASTING (2123.25)

17ACC3 SUNSET PLAZA (2123.36)

17ACC4 KAYLOR TRAILER

17BDD KNAPP

W13 (2123.75)

17DBA2 COWTOWN BOOTS

17DBB2 CASA MOTEL

2124

17DBA3 ARIZ. TRUCK SERVICE

17DBB1 HBI

17DBA1 QUALITY TRUCK PARTS

W14 (2124.21)

W12 (2124.48)

Santa Cruz River

17CAD TANNER

17DAC JENK'S CAFE

17 DAD LAGUNA SCHOOL

W9

N-1 A1 W-1

W16 (2124.79)

W15D (2124.90)

P3 W10 (2125.05)

EL CAMINO DEL CERRO LANDFILL

P2 W5 (2124.95) W2

2125

17DDB1 NATIONAL TRUCK STOP

17DDB2 RANCH HOUSE

L6

W4

RRI

17DDC LEE'S AUTO (2125.15)

Approximate Landfill Boundary

L8 N8

P1

SB-2 SB-4 SB-3 SB-5

El Camino del Cerro

17DDD STONE HOUSE

17 16 20 21

W11 (2125.59)

L3 W3

Roger Road Wastewater Treatment Facility
Effluent Holding Pond

EXPLANATION

- W1 — Westbay Monitor Well
- L6 — Lysimeter
- N1 — Neutron Access Tube
- L3 — Perched Zone Monitor Well with Lysimeter
- RR1 — Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 — Soil Boring
- A1 — Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 — Perched Zone Monitor Well
- W5 — Shallow Regional Aquifer Monitor Well
- W15D — Deep Regional Aquifer Monitor Well

- W12 (2124.48) — Well Identifier; Water level elevation, in feet above mean sea level, measured June 1991
- 2125 — Approximate line of equal water level elevation, in feet, above mean sea level
- T 13 S
- Apparent direction of lateral groundwater movement

N

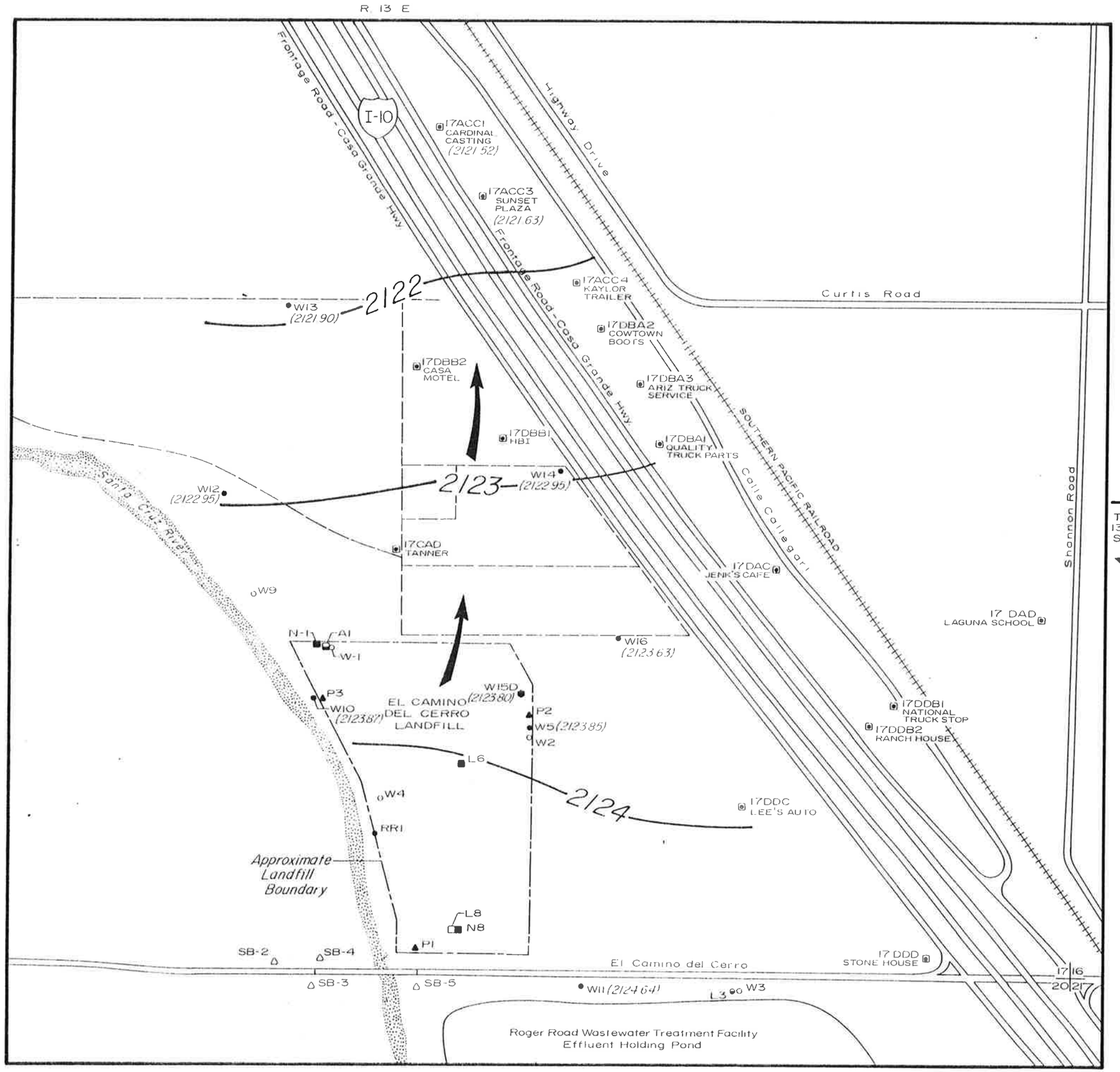
0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL

WATER LEVEL ELEVATION JUNE 1991

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-OIL FIGURE 6D-14



E X P L A N A T I O N

W1	Westbay Monitor Well
L6	Lysimeter
N1	Neutron Access Tube
L3	Perched Zone Monitor Well with Lysimeter
RR1	Perched Zone Monitor Well (Mooradian, 1980)
SB-2	Soil Boring
A1	Air Piezometer Nest
	Private Well

LESP 3 WELLS

P1	Perched Zone Monitor Well
W5	Shallow Regional Aquifer Monitor Well
W15D	Deep Regional Aquifer Monitor Well
W12 (2122.95)	Well Identifier Water level elevation, in feet above mean sea level, measured June 1992
2122	Approximate line of equal water level elevation, in feet, above mean sea level
	Apparent direction of lateral groundwater movement

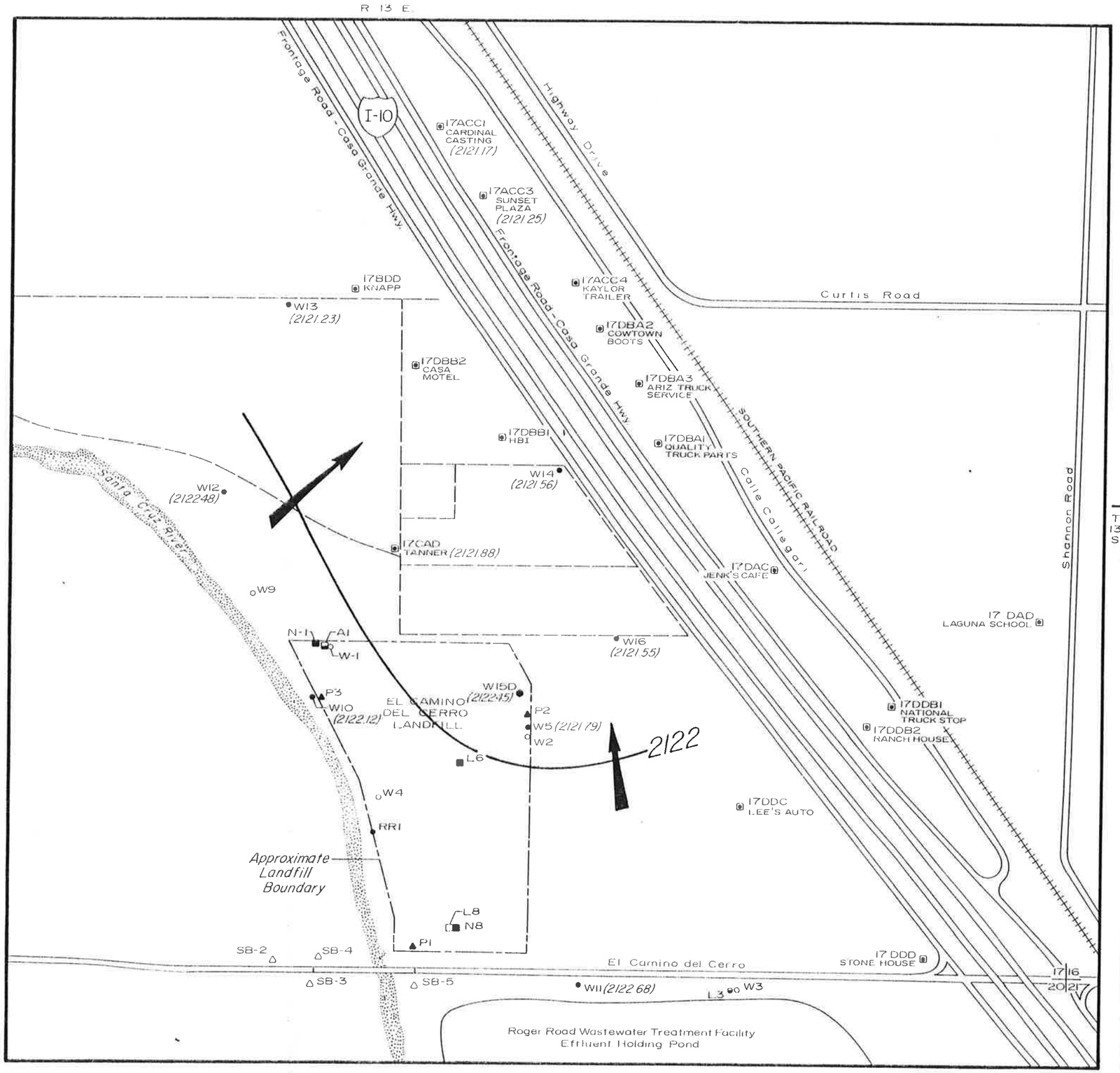
T 13 S

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
JUNE 1992

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-01L FIGURE 6D-19



EXPLANATION

W1	Westbay Monitor Well
L6	Lysimeter
N1	Neutron Access Tube
L3	Perched Zone Monitor Well with Lysimeter
RR1	Perched Zone Monitor Well (Mooradian, 1980)
SB-2	Soil Boring
A1	Air Piezometer Nest
	Private Well

LESP 3 WELLS

P1	Perched Zone Monitor Well
W5	Shallow Regional Aquifer Monitor Well
W15D	Deep Regional Aquifer Monitor Well

W12 (2122.48) — Well Identifier; Water level elevation, in feet above mean sea level, measured January 22, 1993

—2122— Approximate line of equal water level elevation, in feet, above mean sea level

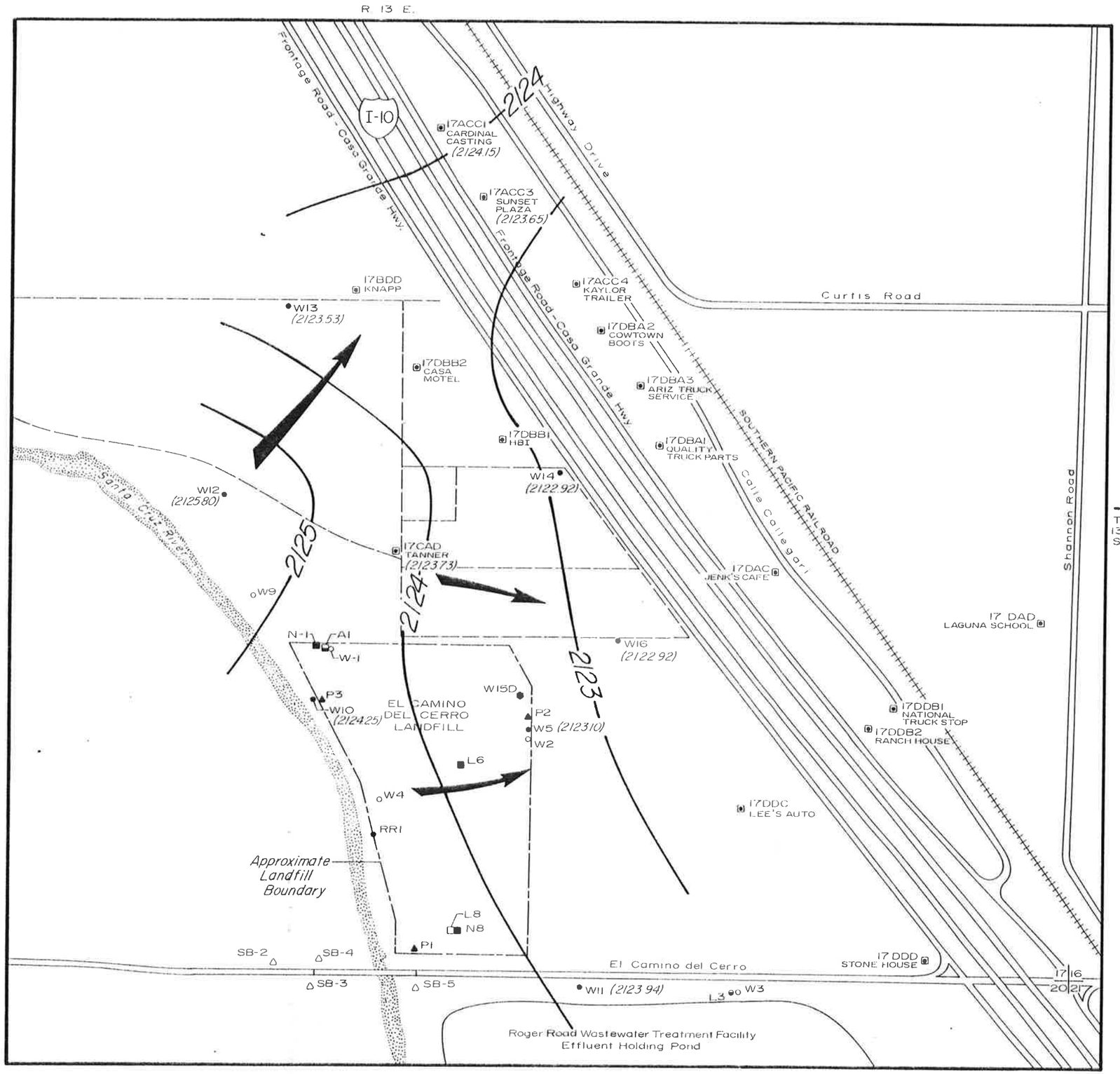
Apparent direction of lateral groundwater movement

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
JANUARY 22, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-01L FIGURE 6D-21



E X P L A N A T I O N

- W1 Westbay Monitor Well
- L6 Lysimeter
- N1 Neutron Access Tube
- L3 Perched Zone Monitor Well with Lysimeter
- RR1 Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 Soil Boring
- A1 Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 Perched Zone Monitor Well
- W5 Shallow Regional Aquifer Monitor Well
- W15D Deep Regional Aquifer Monitor Well

W12 (2125.80) Well Identifier
Water level elevation, in feet above mean sea level, measured January 29, 1993

—2123— Approximate line of equal water level elevation, in feet, above mean sea level

T 13 S

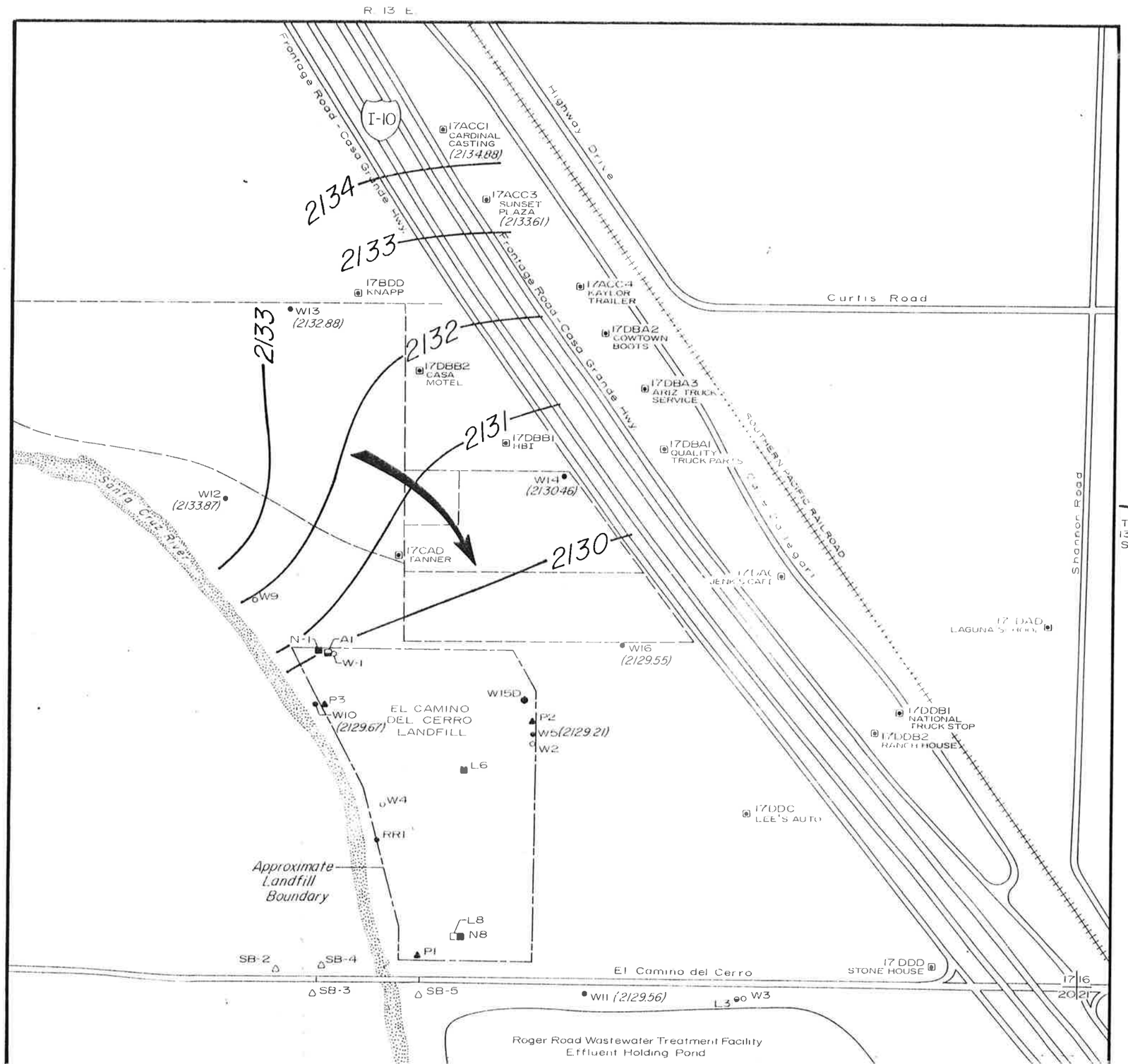
Apparent direction of lateral groundwater movement

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
JANUARY 29, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-01L FIGURE 6D-22



E X P L A N A T I O N

- W1 Westbay Monitor Well
- L6 Lysimeter
- N1 Neutron Access Tube
- L3 Perched Zone Monitor Well with Lysimeter
- RR1 Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 Soil Boring
- A1 Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 Perched Zone Monitor Well
- W5 Shallow Regional Aquifer Monitor Well
- W15D Deep Regional Aquifer Monitor Well

W12 (2133.87) Well Identifier
Water level elevation, in feet above mean sea level, measured February 24, 1993

2132 Approximate line of equal water level elevation, in feet, above mean sea level

T 13 S

Apparent direction of lateral groundwater movement

N

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
FEBRUARY 24, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA

R. 13 E.

Frontage Road - Casa Grande Hwy.

I-10

Highway Drive

17ACC1 CARDINAL CASTING (2143.36)

17ACC3 SUNSET PLAZA

17ACC4 KAYLOR TRAILER

17BDD KNAPP

Curtis Road

17DBA2 COWTOWN BOOTS (2140.28)

17DBB2 CASA MOTEL

17DBA3 ARIZ. TRUCK SERVICE

17DBB1 HBI (2136.69)

17DBA1 QUALITY TRUCK PARTS

SOUTHERN PACIFIC RAILROAD

Calle Calle Gari

Shannon Road

T 13 S

Santa Cruz River

17CAD TANNER

17DAC JENK'S CAFE

17 DAD LAGUNA SCHOOL

17DDB1 (2136.98) NATIONAL TRUCK STOP

17DDB2 RANCH HOUSE

17DDC LEE'S AUTO

17 DDD STONE HOUSE

EL CAMINO DEL CERRO LANDFILL

Approximate Landfill Boundary

El Camino del Cerro

Roger Road Wastewater Treatment Facility Effluent Holding Pond

2143

2142

2141

2140

2139

2138

2137

2136

W13 (2140.42)

W12 (2138.84)

W14 (2138.24)

W16 (2137.03)

W15D (2136.24)

W10 (2135.92)

W11 (2135.55)

P3 (DRY)

P2 (DRY)

W5 (2136.07)

W2

W9

W4

L6

RR1

L8

N8

P1

N-1

A1

W-1

SB-2

SB-3

SB-4

SB-5

L3

W3

17 16 20 21

EXPLANATION

- W1 — Westbay Monitor Well
- L6 — Lysimeter
- N1 — Neutron Access Tube
- L3 — Perched Zone Monitor Well with Lysimeter
- RR1 — Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 — Soil Boring
- A1 — Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 — Perched Zone Monitor Well
- W5 — Shallow Regional Aquifer Monitor Well
- W15D — Deep Regional Aquifer Monitor Well

W12 (2138.84) — Well Identifier; Water level elevation, in feet above mean sea level, measured March 31, 1993

2126 — Approximate line of equal water level elevation, in feet, above mean sea level

Apparent direction of lateral groundwater movement

N

0 200 400 FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
MARCH 31, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY :
TUCSON, ARIZONA 8716OM-OIL FIGURE 6D-26

R 13 E

Frontage Road - Casa Grande Hwy

I-10

Highway Drive

Curtis Road

Frontage Road - Casa Grande Hwy

Southern Pacific Railroad

Calle Colleagari

Shannon Road

T 13 S

17ACC1 CARDINAL CASTING (2141.29)

17ACC3 SUNSET PLAZA (2140.72)

17ACC4 KAYLOR TRAILER (2140.52)

17BDD KNAPP

17DBA2 COWTOWN BOOTS (2140.52)

17DBB2 CASA MOTEL

17DBA3 ARIZ TRUCK SERVICE (2140.15)

17DBB1 HBI (213765)

17DBA1 QUALITY TRUCK PARTS (2140.04)

W13 (2139.68)

W14 (2139.55)

W12 (2139.37)

Santa Cruz River

17CAD TANNER

17DAC JENK'S CAFE (2139.55)

17 DAD LAGUNA SCHOOL

W9

N-1

A1

W-1

W16 (2139.04)

W15D

P3 (DRY)

W10 (213789)

EL CAMINO DEL CERRO LANDFILL

P2 (DRY)

W5 (2138.57)

W2

L6

17DDB1 (2139.22) NATIONAL TRUCK STOP

17DDB2 RANCH HOUSE

W4

RR1

17DDC LEE'S AUTO

Approximate Landfill Boundary

L8

N8

P1 (DRY)

SB-2

SB-4

SB-3

SB-5

El Camino del Cerro

17DDD STONE HOUSE

W11 (2137.92')

L3

W3

Roger Road Wastewater Treatment Facility
Effluent Holding Pond

2141

2140

2139

2138

17 | 16
20 | 21

EXPLANATION

- W1 — Westbay Monitor Well
- L6 — Lysimeter
- N1 — Neutron Access Tube
- L3 — Perched Zone Monitor Well with Lysimeter
- RR1 — Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 — Soil Boring
- A1 — Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 — Perched Zone Monitor Well
- W5 — Shallow Regional Aquifer Monitor Well
- W15D — Deep Regional Aquifer Monitor Well

W12 (2139.37) — Well Identifier; Water level elevation, in feet above mean sea level, measured April 26, 1993

2137 — Approximate line of equal water level elevation, in feet, above mean sea level

Apparent direction of lateral groundwater movement

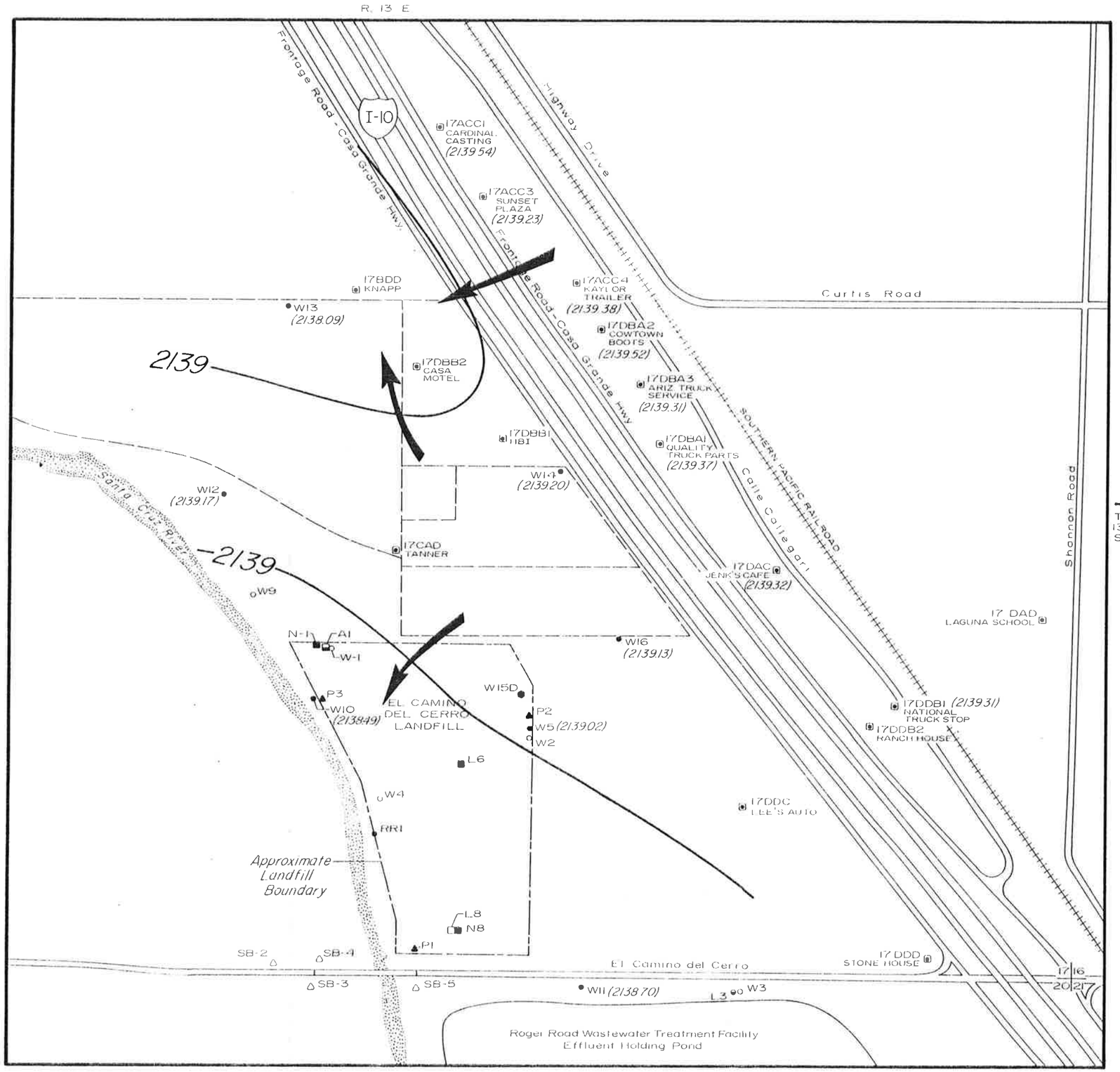
0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
APRIL 26, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-OIL FIGURE 6D-29

FIGURE 6-22



EXPLANATION

- W1 Westbay Monitor Well
- L6 Lysimeter
- N1 Neutron Access Tube
- L3 Perched Zone Monitor Well with Lysimeter
- RR1 Perched Zone Monitor Well (Mooradian, 1980)
- SB-2 Soil Boring
- A1 Air Piezometer Nest
- Private Well

LESP 3 WELLS

- P1 Perched Zone Monitor Well
- W5 Shallow Regional Aquifer Monitor Well
- W15D Deep Regional Aquifer Monitor Well

W12 (2139.17) Well Identifier
Water level elevation, in feet above mean sea level, measured May 24, 1993

—2139— Approximate line of equal water level elevation, in feet, above mean sea level

T 13 S

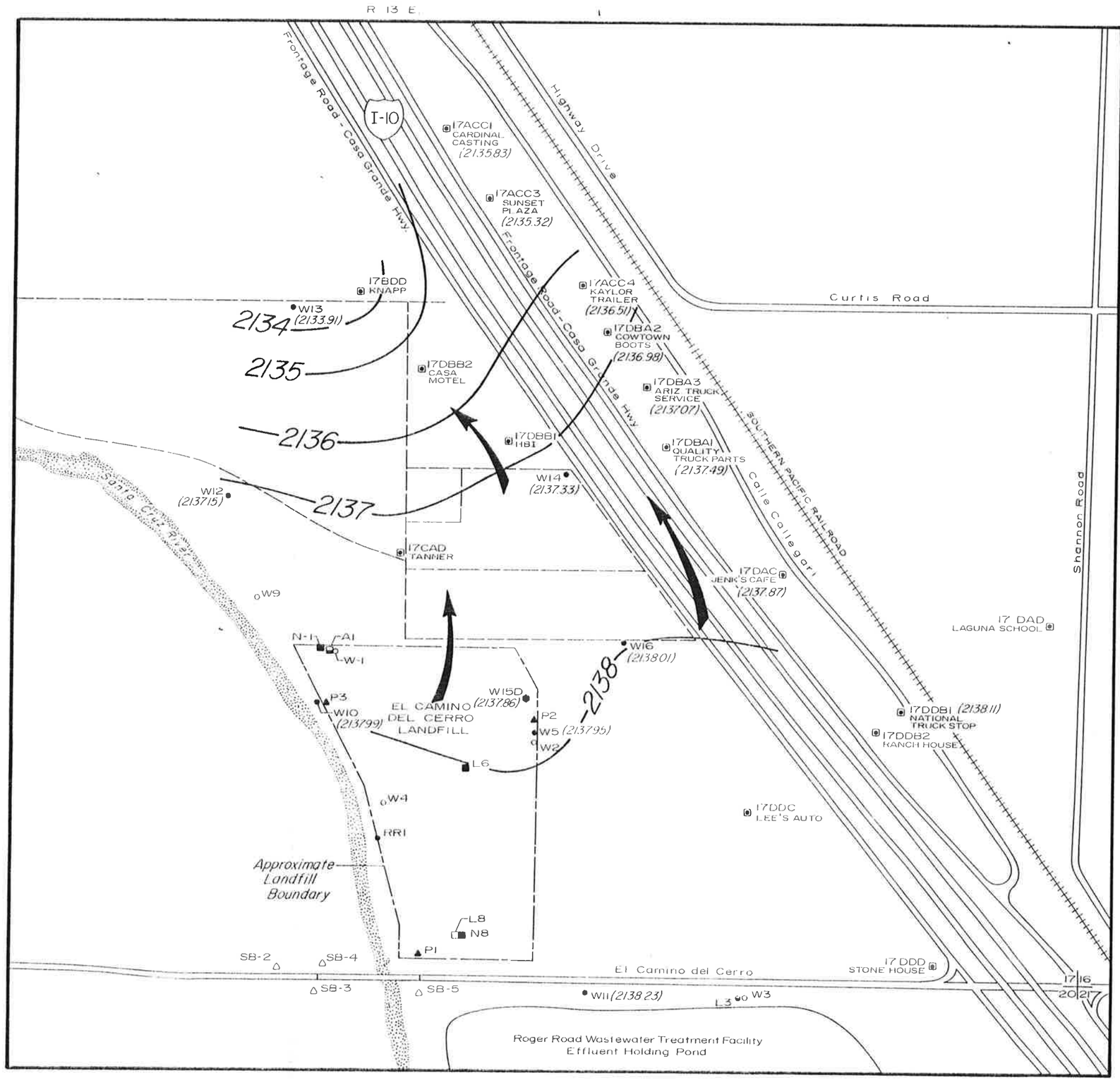
Apparent direction of lateral groundwater movement

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
MAY 24, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-01L FIGURE 6D-32



E X P L A N A T I O N

W1	Westbay Monitor Well
L6	Lysimeter
N1	Neutron Access Tube
L3	Perched Zone Monitor Well with Lysimeter
RR1	Perched Zone Monitor Well (Mooradian, 1980)
SB-2	Soil Boring
A1	Air Piezometer Nest
	Private Well

LESP 3 WELLS

P1	Perched Zone Monitor Well
W5	Shallow Regional Aquifer Monitor Well
W15D	Deep Regional Aquifer Monitor Well

W12 (2137.15) — Well Identifier; Water level elevation, in feet above mean sea level, measured June 22, 1993.

—2136— Approximate line of equal water level elevation, in feet, above mean sea level

Apparent direction of lateral groundwater movement

0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

ELCAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
JUNE 22, 1993

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-01L FIGURE 6D-34

EXPLANATION

o W1	Westbay Monitor Well
□ L6	Lysimeter
■ N1	Neutron Access Tube
L3	Perched Zone Monitor Well with Lysimeter
● RR1	Perched Zone Monitor Well (Mooradian, 1980)
△ SB-2	Soil Boring
A1	Air Piezometer Nest
⊡	Private Well

LESP 3 WELLS

▲ P1	Perched Zone Monitor Well
● W5	Shallow Regional Aquifer Monitor Well
● W15D	Deep Regional Aquifer Monitor Well

• W5 (2133.60) — Well Identifier; Water level elevation, in feet above mean sea level, measured June 1994

—2131— Approximate line of equal water level elevation; in feet, above mean sea level

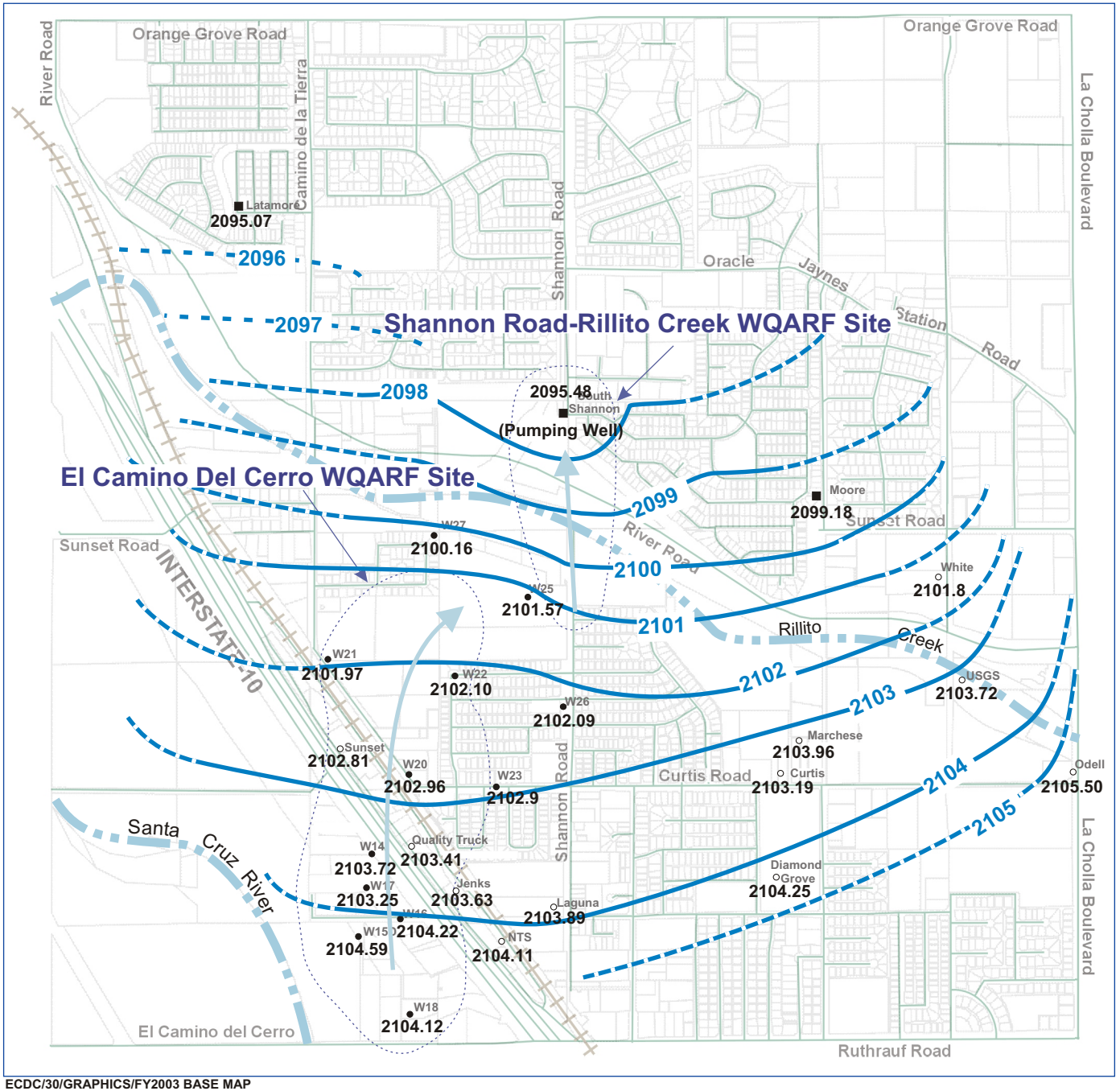
0 200 400
FEET

LANDFILL ENVIRONMENTAL STUDIES PROGRAM
PHASE 3
PIMA COUNTY SOLID WASTE MANAGEMENT
PIMA COUNTY, ARIZONA

EL CAMINO DEL CERRO LANDFILL
WATER LEVEL ELEVATION
JUNE 1994

GROUNDWATER RESOURCES CONSULTANTS, INC.
CONSULTANTS IN HYDROGEOLOGY
TUCSON, ARIZONA 87160M-OIL FIGURE 6D-42

December 2002



Legend

- Z-006A ■ Existing Production Well
- W11 • Existing Monitor Well
- White ○ Existing Private Well
- Acacia ⬠ Abandoned/Dry Well
- Approximate WQARF Site Boundary
- Approximate Water Level Contour (dashed where uncertain)
- 2101 Approximate Groundwater Elevation (feet above mean sea level)
- Approximate Flow Direction

N

1500 0 1500 3000

APPROXIMATE SCALE IN FEET

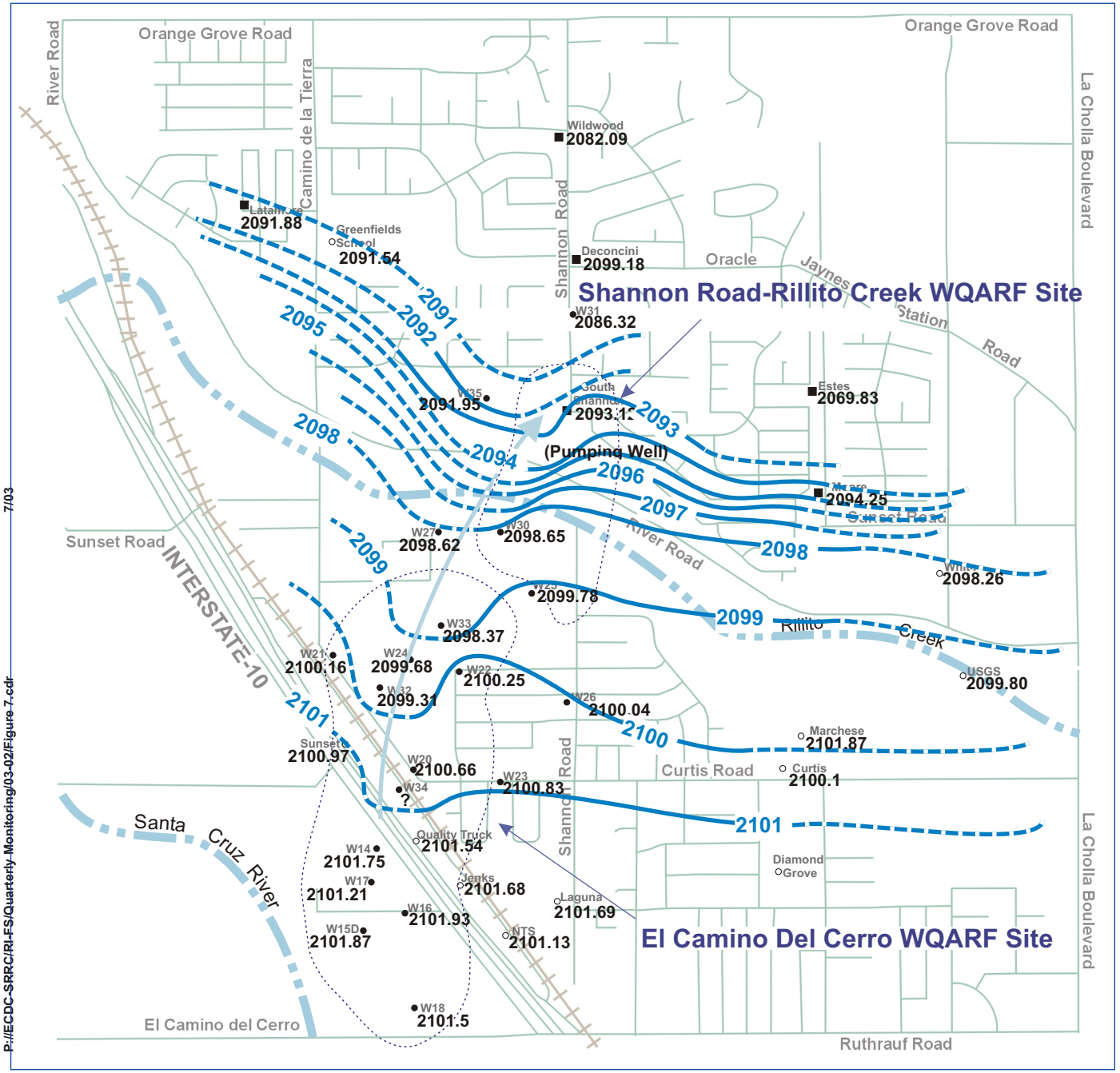
ECDC/30/GRAPHICS/FY2003 BASE MAP
P B L C NW W

Figure 3
GROUNDWATER GRADIENT MAP
Shannon Road-Rillito Creek &
El Camino Del Cerro WQARF Sites
Tucson, Arizona

URS

Note: Figure from URS Quarterly Groundwater Report - Fourth Quarter 2002

June 2003



Legend

- Z-006A ■ Existing Production Well
- W11 • Existing Monitor Well
- White ○ Existing Private Well
- Acacia ⬠ Abandoned/Dry Well
- Approximate WQARF Site Boundary
- Approximate Water Level Contour (dashed where uncertain)
- 2098 Approximate Groundwater Elevation (feet above mean sea level)
- Approximate Flow Direction

N

1500 0 1500 3000

APPROXIMATE SCALE IN FEET

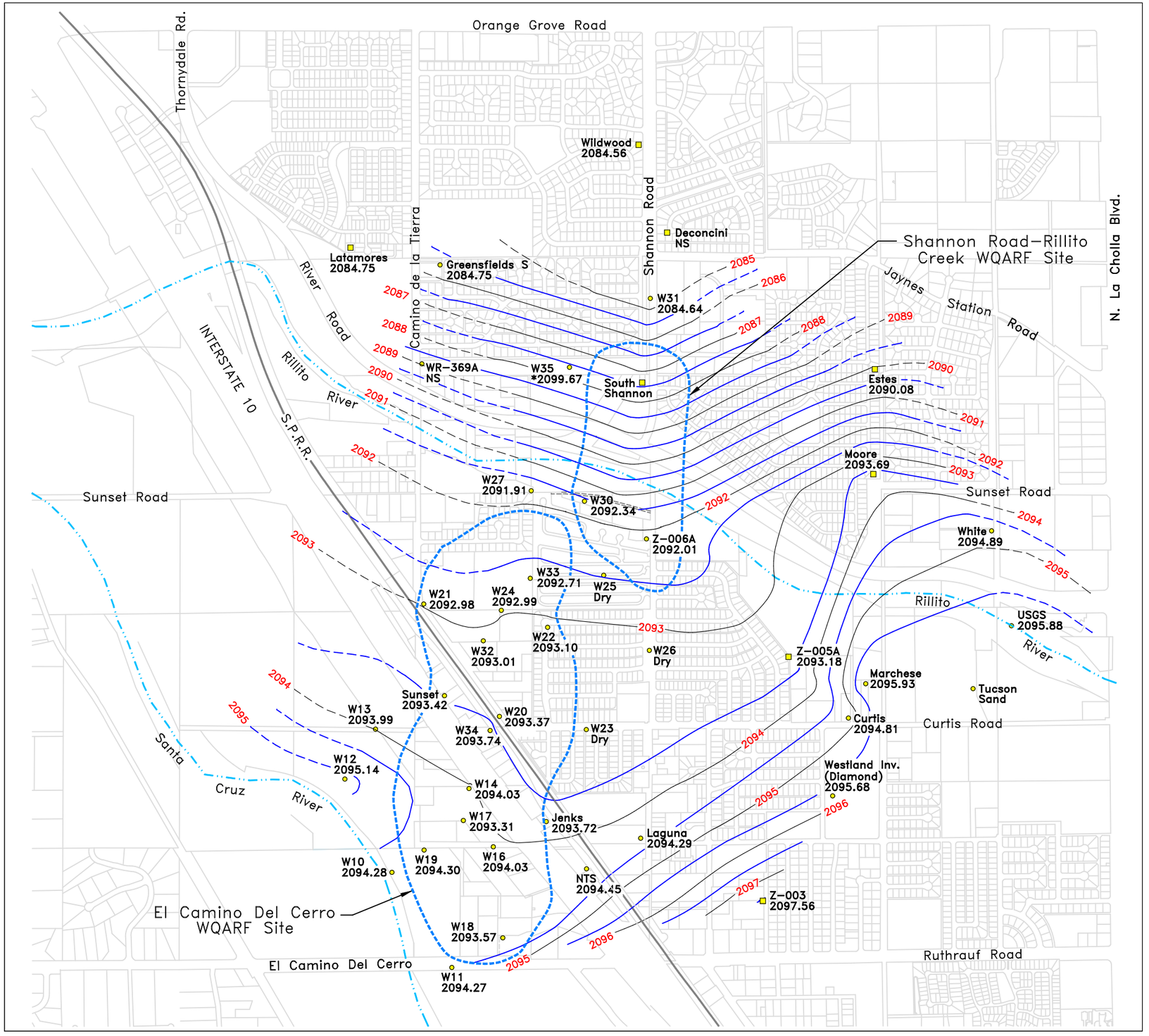
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Figure 10

GROUNDWATER GRADIENT MAP
Shannon Road-Rillito Creek &
El Camino Del Cerro WQARF Sites
Tucson, Arizona

URS

Note: Figure from URS Quarterly Groundwater Report - Second Quarter 2003



December 2003

Legend:

BDL **Below Detection Level**

NS **Not Sampled**

* **Anomalous Data (Not used for Contour)**

Existing Monitor Well/Private Well

Existing Production/Water Supply Well

Approximate Water Level Contour (Dashed Where Uncertain)

2092 **Approximate Groundwater Elevation (Feet Above Mean Sea Level)**

N

W — E

2000 0 1000 2000

SCALE IN FEET

Shannon Road-Rillito Creek and El Camino Del Cerro WQARF Sites Tucson, Arizona

Groundwater Gradient Map

Figure 7

Note: Figure from URS Quarterly Groundwater Report - Fourth Quarter 2003

URS

ORANGE GROVE ROAD

Camino de la Tierra

Shannon Road

Wildwood NM

Deconcini NM

Latamores NM

Greensfields S 2085.58

Shannon Road–Rillito Creek WQARF Site

Jaynes Station Road

RIVER ROAD

INTERSTATE 10

RILLITO RIVER

S.P.R.R.

WR–369A NM

W35 *2100.04

W31 2087.03

South Shannon NM

Estes NM

Moore NM

N. LA CHOLLA BLVD.

Sunset Road

W27 2091.82

W30 2091.95

Z–006A 2092.59

Z–004A 2093.33

W33 2093.35

W25 Dry

W21 2093.21

W24 2093.62

W22 2094.16

W32 2093.77

W26 Dry

Z–005A 2095.34

White 2098.59

RILLITO

USGS 2099.08

RIVER

Marchese 2099.34

Tucson Sand

Sunset 2094.24

*W29

W13 2094.71

W20 2094.90

W34 2095.13

W23 Dry

Curtis 2098.64

CURTIS ROAD

SANTA CRUZ RIVER

W12 NM

W14 NM

W17 NM

Jenks 2096.30

Laguna 2097.58

Westland Inv. (Diamond) 2099.46

W10 2096.69

W19 2096.84

W16 2096.58

NTS 2097.55

Z–003 2100.68

El Camino Del Cerro WQARF Site

W18 NM

EL CAMINO DEL CERRO

RUTHRAUFF ROAD

W11 2098.37

2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099

February 2004

First Quarter 2004

Legend:

NS **Not Measured**

* **Anomalous Data (Not used for Contour)**

• **Monitor Well/Private Well**

■ **Production/Water Supply Well**

Ground Water Level Contour (Dashed Where Uncertain)

2092 **Groundwater Elevation (Feet Above Mean Sea Level)**

N

W — E

2000 0 1000 2000

SCALE IN FEET

Scale: 1" – 1200'

Shannon Road-Rillito Creek and El Camino Del Cerro WQARF Sites Tucson, Arizona

Groundwater Elevation Map

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Figure 7

Note: Figure from URS Quarterly Groundwater Report - First Quarter 2004

URS

ORANGE GROVE ROAD

Shannon Road/Rillito Creek & El Camino Del Cerro WQARF Site

Camino de la Tierra

Shannon Road

Wildwood NM

Deconcini NM

Latamores NM

Greensfields S 2085.58

RIVER ROAD

INTERSTATE 10

RILLITO RIVER

S.P.R.R.

W31 2087.03

WR-369A NM

W35 *2100.04

South Shannon NM

Jaynes Station Road

Estes NM

Moore NM

Sunset Road

W27 2091.82

W30 2091.95

Z-006A 2092.59

Z-004A 2093.33

W33 2093.35

W25 Dry

W21 2093.21

W24 2093.62

W22 2094.16

W32 2093.77

W26 Dry

Z-005A 2095.34

RILLITO RIVER

USGS 2099.08

Marchese 2099.34

Tucson Sand

Curtis 2098.64

CURTIS ROAD

Sunset 2094.24

*W29

W20 2094.90

W34 2095.13

W23 Dry

W13 NM

W12 2095.60

W14 NM

W17 NM

Jenks 2096.30

Laguna 2097.58

Westland Inv. (Diamond) 2099.46

W10 2095.60

W19 2095.93

W16 2096.33

W5 2096.31

NTS 2097.55

Z-003 2100.68

W18 NM

W11 NM

EL CAMINO DEL CERRO

RUTHRAUFF ROAD

SANTA CRUZ RIVER

N. LA CHOLLA BLVD.

White 2098.59

2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100

May 2004

Second Quarter 2004

Legend:

NS Not Measured

* Anomalous Data (Not used for Contour)

• Monitor Well/Private Well

■ Production/Water Supply Well

Ground Water Level Contour (Dashed Where Uncertain)

2092 Groundwater Elevation (Feet Above Mean Sea Level)

N

W — E

2000 0 1000 2000

SCALE IN FEET

Scale: 1" – 1200'

Shannon Road-Rillito Creek and El Camino Del Cerro WQARF Sites Tucson, Arizona

Groundwater Elevation Map

ADEQ Arizona Department of Environmental Quality

Figure 11

Note: Figure from URS Quarterly Groundwater Report - Second Quarter 2004

URS

ORANGE GROVE ROAD

Camino de la Tierra

Shannon Road

Wildwood NM 2079.08

Deconcini NM/

Latamores NM

Greensfields School 2080.47

W31 2080.13

Shannon Road/
El Camino del Cerro
WQARF Site

RIVER ROAD

INTERSTATE 10

RILLITO RIVER

S.P.R.R.

W35 2084.44

WR-369A NM

South Shannon NM 2084.73

W37 NM

Jaynes Station Road

Estes NM 2089.7

Moore 2091.69

Sunset Road

W27 NM

W30 2089.17

*Z-006A

Z-004A 2089.77

W33 2090.17

W25 2090.85

Palm Vista 2091.51

W21 2089.52

W24 2090.31

W38

W22 2091.34

W32 2090.72

W26 2092.50

*Z-005A

RILLITO

USGS 2097.62

RIVER

Marchese 2097.73

Tucson Sand

Sunset 2091.04

W29 NM

W20 2092.05

W13 NM

W34 2092.29

W23 2093.10

Curtis 2096.87

CURTIS ROAD

W12 NM

W14 NM

SANTA CRUZ RIVER

W17 2092.82

Jenks 2094.07

Westland Inv. (Diamond) 2098.02

Laguna 2095.95

W10 2093.33

W19 2094.17

W16 2094.05

NTS 2095.54

W5 2094.20

Z-003 2100.42

W18 2094.97

EL CAMINO DEL CERRO

RUTHRAUFF ROAD

W11 2095.58

N. LA CHOLLA BLVD.

2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100

White 2096.64

February 2005

First Quarter 2005

Legend:

NS Not Measured

* Anomalous Data (Not used for Contour)

Monitor Well/Private Well

Production/Water Supply Well

Ground Water Level Contour (Dashed Where Uncertain)

2092 Groundwater Elevation (Feet Above Mean Sea Level)

N

W — E

2000 0 1000 2000

SCALE IN FEET

Scale: 1" – 1200'

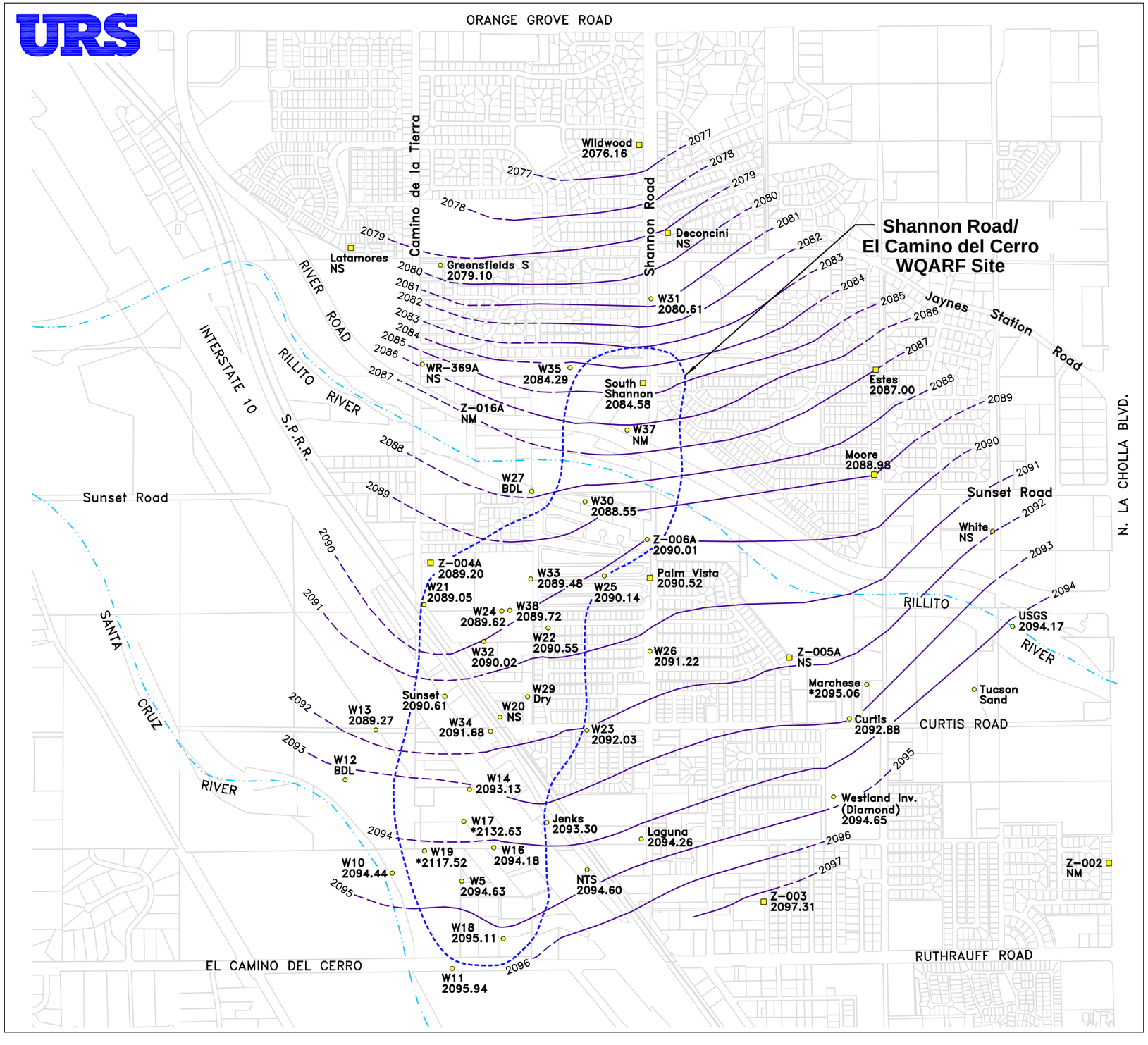
**Shannon Road/
El Camino del Cerro WQARF Sites
Tucson, Arizona**

Groundwater Elevation Map

ADEQ Arizona Department of Environmental Quality

FIGURE 11

Note: Figure from URS Quarterly Groundwater Report - First Quarter 2005



January 2006

First Quarter 2006

Legend:

- NS — Not Measured
- * — Anomalous Data (Not used for Contour)
- ○ — Monitor Well/Private Well
- □ — Production/Water Supply Well
- Ground Water Level Contour (Dashed Where Uncertain)
- 2092 — Groundwater Elevation (Feet Above Mean Sea Level)

N

W — E

2000 0 1000 2000

SCALE IN FEET

Scale: 1" – 1200'

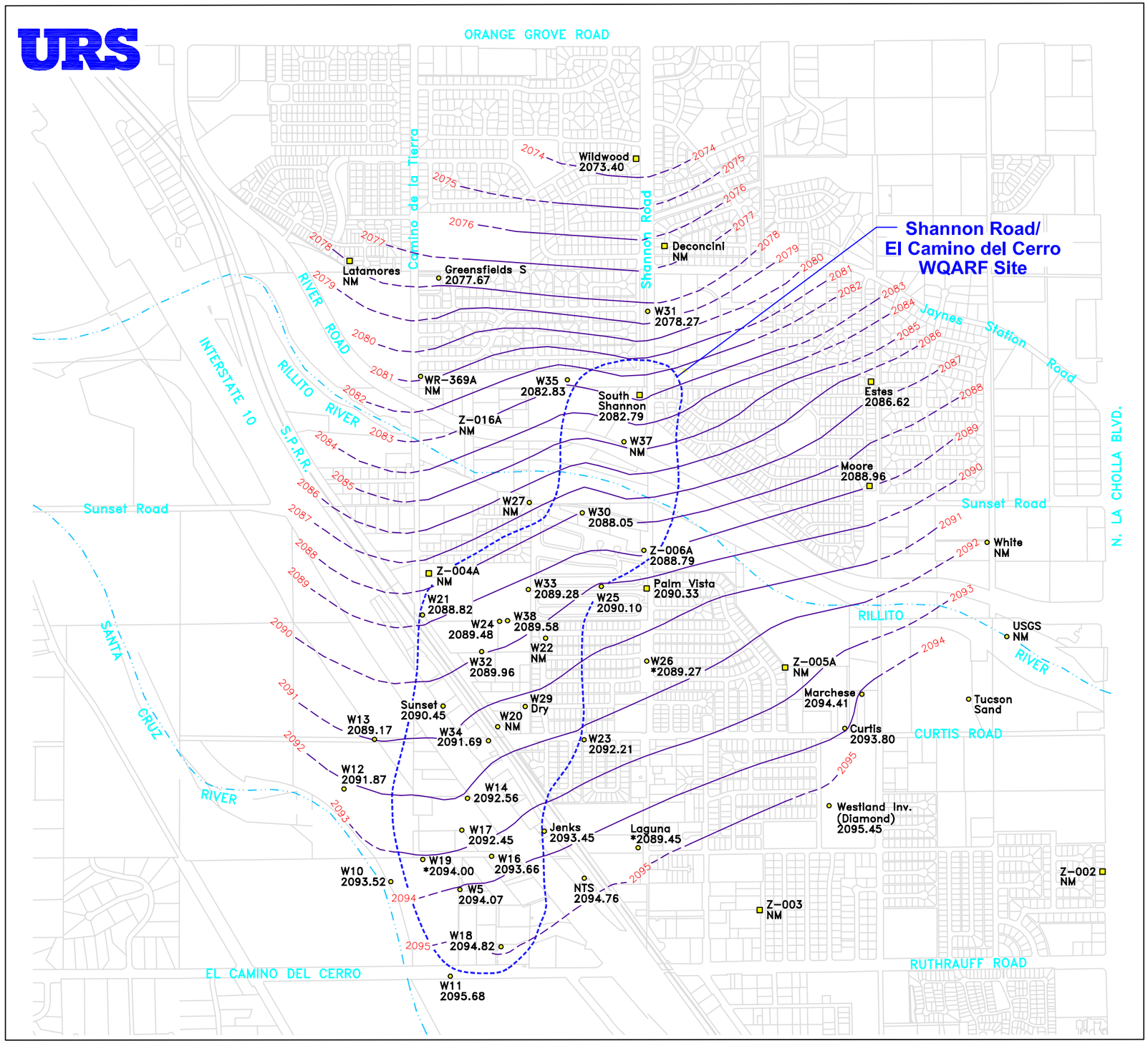
Shannon Road/
El Camino del Cerro WQARF Sites
Tucson, Arizona

Groundwater Elevation Map

ADEQ Arizona Department of Environmental Quality

FIGURE 11

Note: Figure from URS Quarterly Groundwater Report - First Quarter 2006



April 2006

Second Quarter 2006

Legend:

- NM — Not Measured
- * — Anomalous Data (Not used for Contour)
- ○ — Monitor Well/Private Well
- □ — Production/Water Supply Well
- Ground Water Level Contour (Dashed Where Uncertain)
- 2092 — Groundwater Elevation (Feet Above Mean Sea Level)

N

W — E

2000 0 1000 2000

SCALE IN FEET

Scale: 1" – 1200'

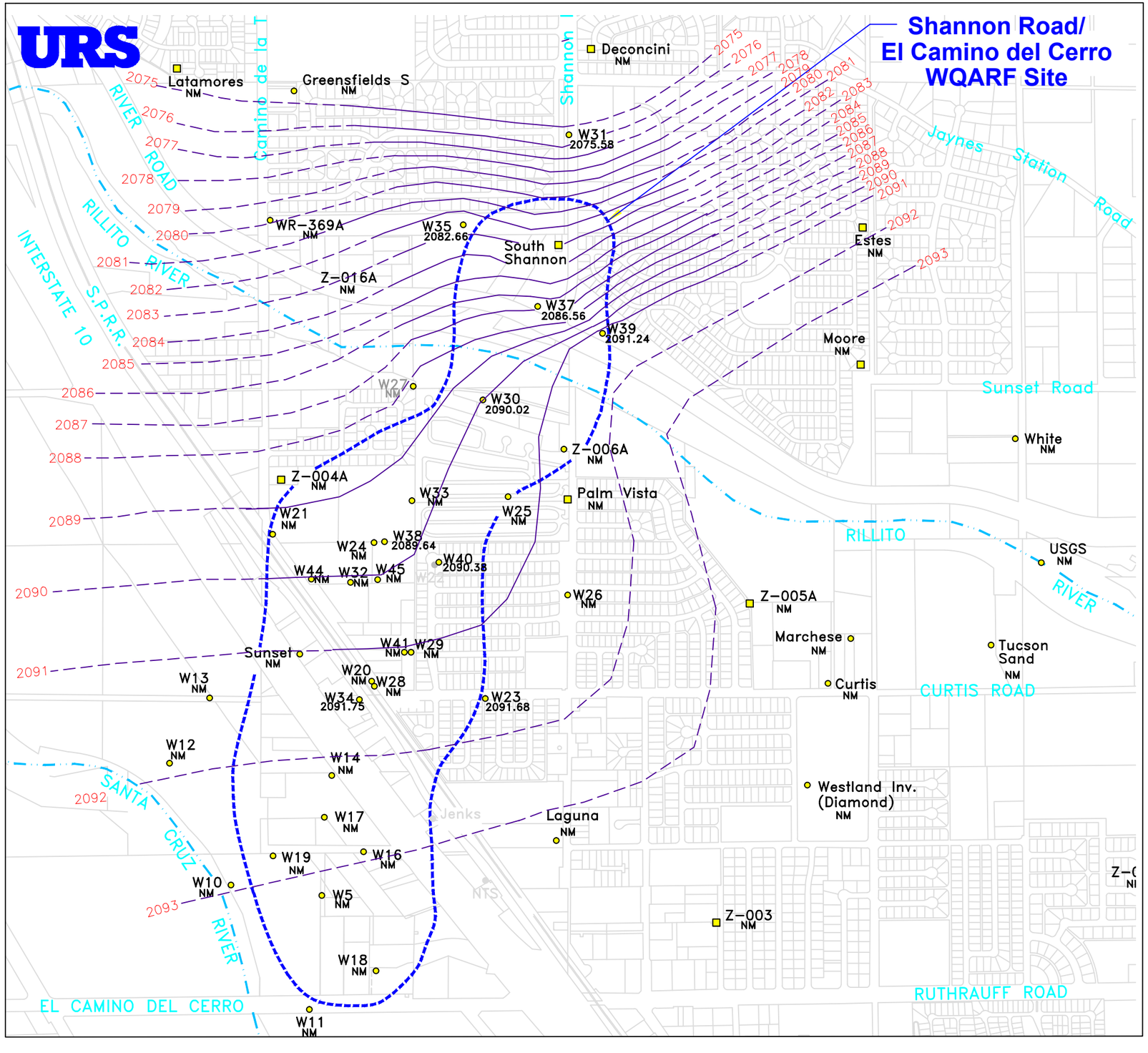
Shannon Road/
El Camino del Cerro WQARF Sites
Tucson, Arizona

Groundwater Elevation Map

ADEQ Arizona Department of Environmental Quality

FIGURE 11b

Note: Figure from URS Quarterly Groundwater Report - Second Quarter 2006



October 2006

Legend:

- NM — Not Measured
- * — Anomalous Data (Not used for Contour)
- ○ — Monitor Well/Private Well
- □ — Production/Water Supply Well
- Ground Water Level Contour (Dashed Where Uncertain)
- 2092 — Groundwater Elevation (Feet Above Mean Sea Level)

N

W — E

2000 0 1000 2000

SCALE IN FEET

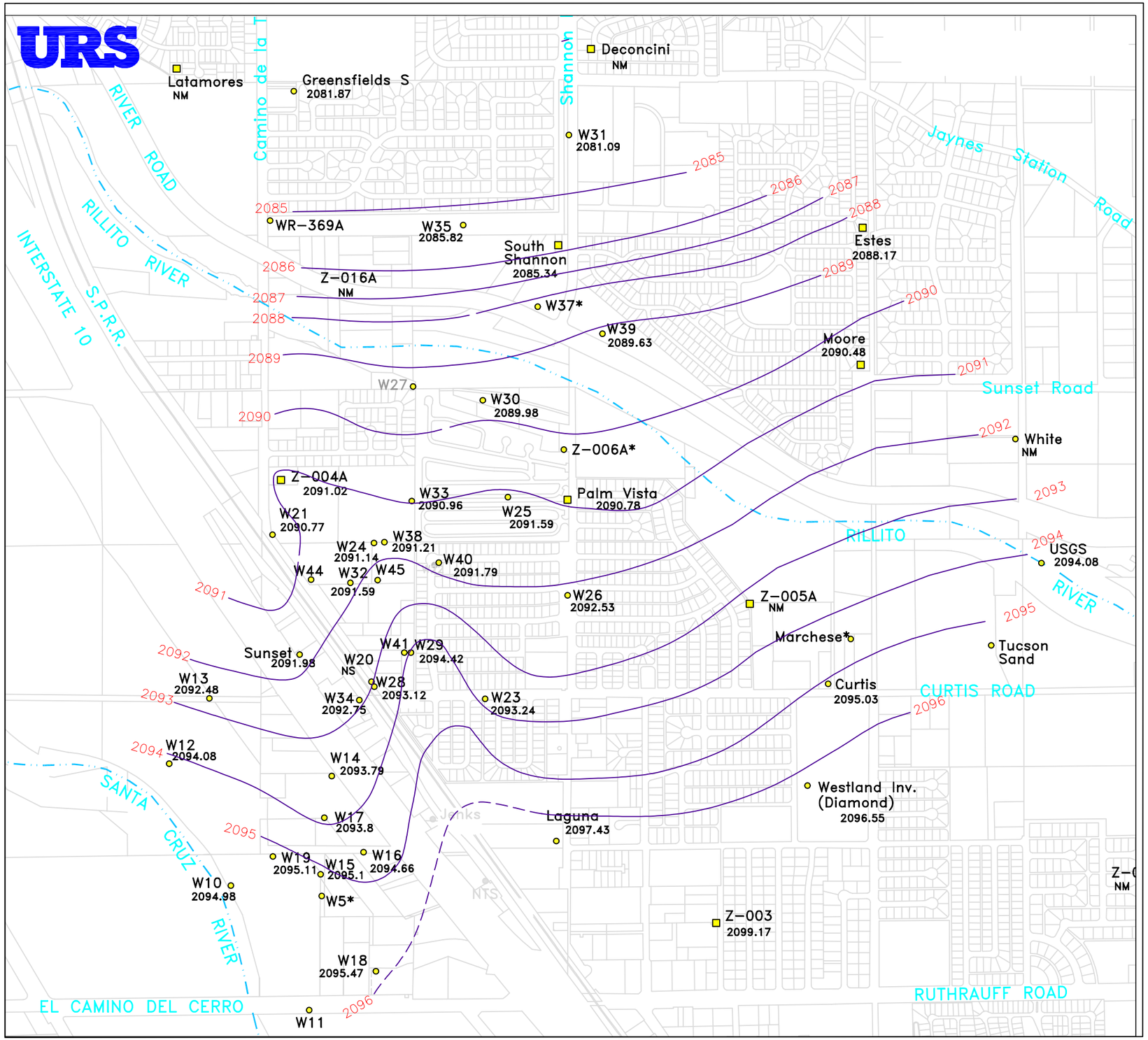
Scale: 1" – 1200'

Shannon Road/
El Camino del Cerro WQARF Sites
Tucson, Arizona

Groundwater Elevation Map

P:\ECDC-SRRC\dwg\Logo\image001.png

Note: Figure from URS Quarterly Groundwater Report - Third Quarter 2006



January 2007 Groundwater Elevation Map

Legend:

- NM — Not Measured
- * — Anomalous Data (Not used for Contour)
- ○ — Monitor Well/Private Well
- □ — Production/Water Supply Well
- Ground Water Level Contour (Dashed Where Uncertain)
- 2092 — Groundwater Elevation (Feet Above Mean Sea Level)

N
W — E

2000 0 1000 2000
SCALE IN FEET

Scale: 1" – 1200'

Shannon Road/ El Camino del Cerro WQARF Sites Tucson, Arizona

ADEQ Arizona Department of Environmental Quality

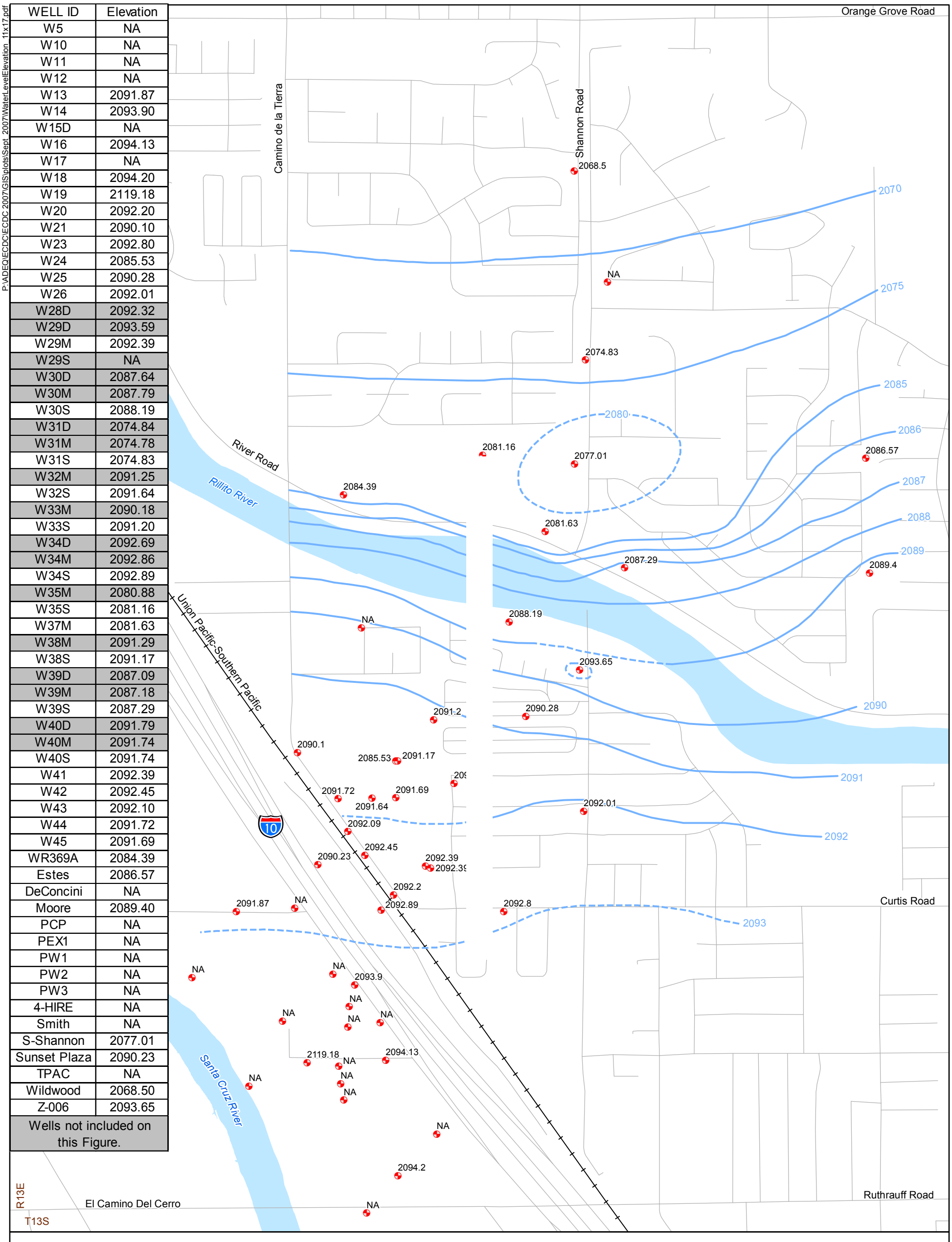
FIGURE 7

Note: Figure from URS Quarterly Groundwater Report - First Quarter 2007

August 2007

P:\ADEQ\ECDC\ECDC 2007\GIS\plots\Sept 2007\WaterLevelElevation 11x17.pdf

WELL ID	Elevation
W5	NA
W10	NA
W11	NA
W12	NA
W13	2091.87
W14	2093.90
W15D	NA
W16	2094.13
W17	NA
W18	2094.20
W19	2119.18
W20	2092.20
W21	2090.10
W23	2092.80
W24	2085.53
W25	2090.28
W26	2092.01
W28D	2092.32
W29D	2093.59
W29M	2092.39
W29S	NA
W30D	2087.64
W30M	2087.79
W30S	2088.19
W31D	2074.84
W31M	2074.78
W31S	2074.83
W32M	2091.25
W32S	2091.64
W33M	2090.18
W33S	2091.20
W34D	2092.69
W34M	2092.86
W34S	2092.89
W35M	2080.88
W35S	2081.16
W37M	2081.63
W38M	2091.29
W38S	2091.17
W39D	2087.09
W39M	2087.18
W39S	2087.29
W40D	2091.79
W40M	2091.74
W40S	2091.74
W41	2092.39
W42	2092.45
W43	2092.10
W44	2091.72
W45	2091.69
WR369A	2084.39
Estes	2086.57
DeConcini	NA
Moore	2089.40
PCP	NA
PEX1	NA
PW1	NA
PW2	NA
PW3	NA
4-HIRE	NA
Smith	NA
S-Shannon	2077.01
Sunset Plaza	2090.23
TPAC	NA
Wildwood	2068.50
Z-006	2093.65
Wells not included on this Figure.	



Note: Figure from URS Groundwater Sampling Report - August 2007

P:\ADEQ\ECDC\ECDC 2008\GIS\plots\March_2008\WaterLevelElevation_11x17.pdf

Well ID	GW Elevation
W29M	N/A
W30M	2091.76
W31M	2079.63
W32M	2092.88
W33M	2092.29
W34M	2094.26
W35M	2085.31
W37M	2089.40
W38M	2093.24
W39M	2093.55
W40M	2094.45
W46M	2094.36
W48M	2091.26
W49M	2096.84
Deconcini	2075.41
Estes	2087.43
S-Shannon	2076.74
Wildwood	2076.82
Z-006	2090.35

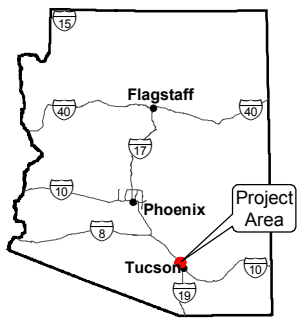
Orange Grove Road
Camino de la Tierra
Shannon Road
River Road
Rillito River
Union Pacific-Southern Pacific
Curtis Road
Santa Cruz River
El Camino Del Cerro
Ruthrauff Road
R13E
T13S

2076.82
2075.41
2079.63
2085.31
2076.74
2087.43
2089.4
2096.84
2093.55
2091.26
2091.76
2094.36
2090.35
2092.29
2093.24
2094.45
2092.88
NA
2094.26

2078
2076
2088
2090
2092
2094
2096
2092
2092
2094

LEGEND

- Sampled Wells
- 2080 Groundwater Contour (Dashed Where Inferred)
- Roads
- Railroad
- River
- NA Not Available



N

0 250 500 1,000
Feet

Source:
URS 2008
Base Data: Pima County 2006
Brown and Caldwell 2007
Precision Land Survey 2008

URS

Groundwater Elevation
January-February, 2008
Shannon Road/ El Camino del Cerro WQARF Site Tucson, Arizona

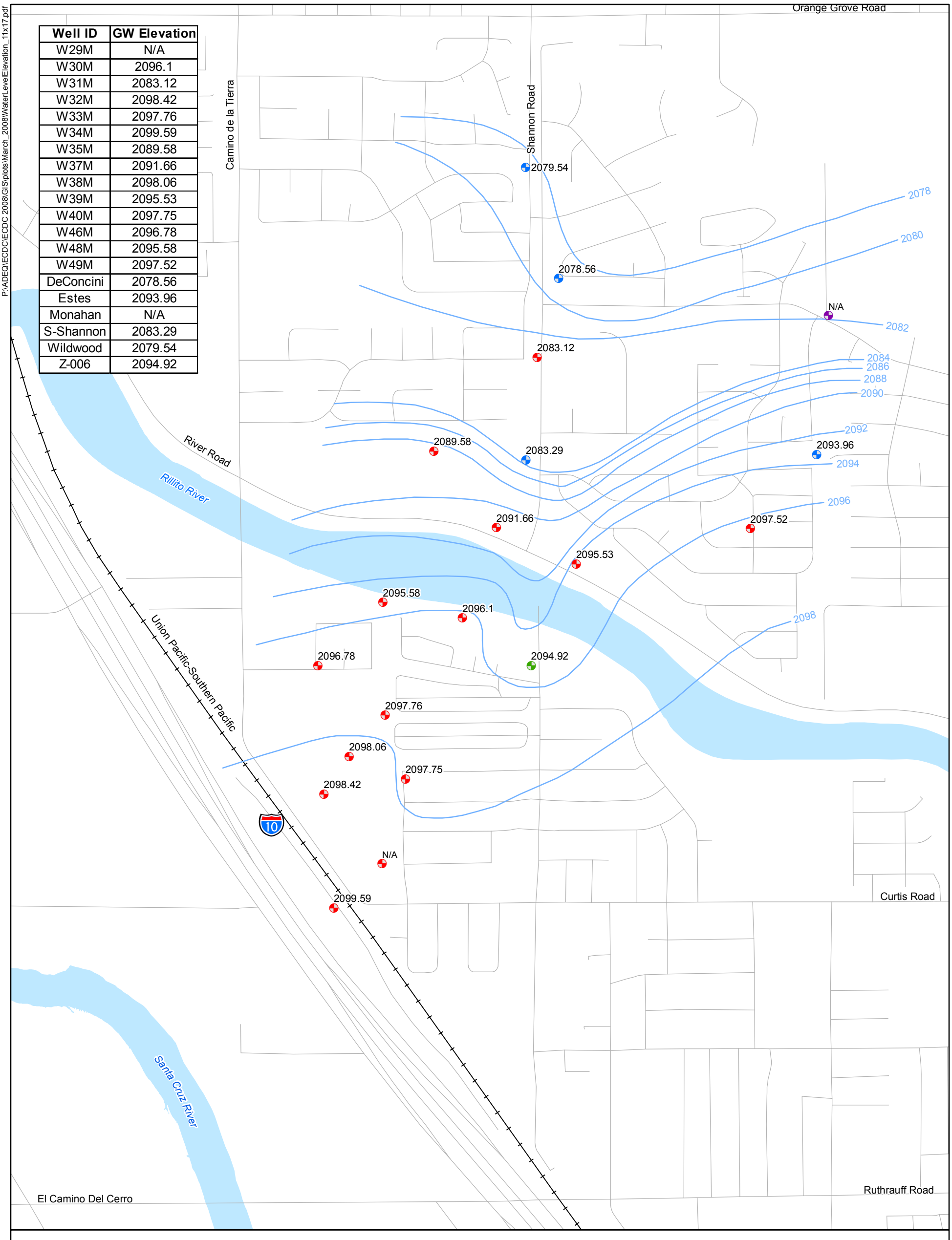
ADEQ Arizona Department of Environmental Quality

Figure 7

Note: Figure from URS Groundwater Sampling Report - January-February 2008

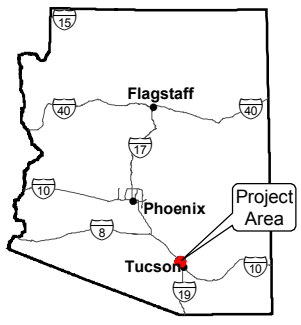
P:\ADEQ\ECDC\ECDC 2008\GIS\plots\March_2008\WaterLevelElevation_11x17.pdf

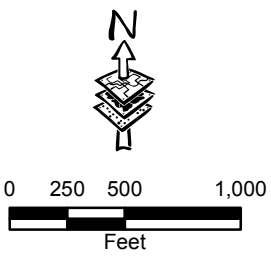
Well ID	GW Elevation
W29M	N/A
W30M	2096.1
W31M	2083.12
W32M	2098.42
W33M	2097.76
W34M	2099.59
W35M	2089.58
W37M	2091.66
W38M	2098.06
W39M	2095.53
W40M	2097.75
W46M	2096.78
W48M	2095.58
W49M	2097.52
DeConcini	2078.56
Estes	2093.96
Monahan	N/A
S-Shannon	2083.29
Wildwood	2079.54
Z-006	2094.92



LEGEND

- Monitor Well
- Active Production Well
- Inactive Production Well
- Domestic Well
- 2080 Groundwater Contour (Dashed Where Inferred)
- Roads
- Railroad
- River
- N/A Not Available





Source:
URS 2008
Base Data: Pima County 2006
Brown and Caldwell 2007
Precision Land Survey 2008

URS

Groundwater Elevation - Middle Zone Wells
April, 2008
Shannon Road/
El Camino del Cerro
WQARF Site
Tucson, Arizona

ADEQ Arizona Department of Environmental Quality

Figure 7

Note: Figure from URS Groundwater Sampling Report - April 2008

P:\ADEQ\ECDC\ECDC 2008\GIS\mxds\December2008\WaterLevelElevation_11x17.pdf(psr)

Camino de la Tierra

Shannon Road

Pegler Wash

River Road

Rillito River

Union Pacific-Southern Pacific

10

SRC-W31S
2090.49

SRC-W39S
2097.38

SRC-W30S
2097.61

SRC-W47S
2098.22

Z-004
2096.50

CDC-W33S
2098.28

CDC-W25
2098.51

CDC-W21
2098.81

CDC-W24
2098.48

SRC-W38S
2098.49

SRC-W40S
2098.51

SRC-W44
2098.80

CDC-W32S
2098.66

SRC-W45
2098.70

CDC-W26
2098.53

SRC-W43
2098.81

SRC-W42
2098.82

SRC-W41
2098.63

CDC-W29S
2098.63

CDC-W20
2098.86

CDC-W13
2099.44

CDC-PW1
2095.78

CDC-W34S
2098.89

CDC-W23
2098.72

Curtis Road

SRC-W50S
2098.91

CDC-W12
2100.71

CDC-W14
2098.95

CDC-PEX1
2099.06

CDC-PW2
2098.19

CDC-W19
2099.28

CDC-W16
2098.75

CDC-W10
2099.75

CDC-PW3
2099.12

CDC-W5
2098.92

Santa Cruz River

CDC-W18
2097.89

CDC-W11
2098.31

El Camino Del Cerro

Ruthrauff Road

R13E

T13S

2096

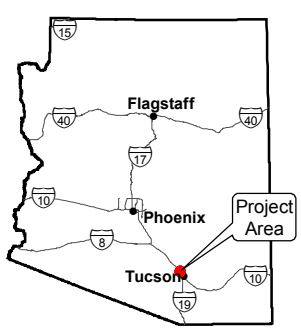
2097

2098

2099

LEGEND

- Monitor Well
- 2080 Groundwater Contour (Dashed Where Inferred)
- Interstate
- Road
- Railroad
- River



N

0 250 500 1,000
Feet

Source:
URS 2008
Base Data: Pima County 2006
Brown and Caldwell 2007
Precision Land Survey 2008

Groundwater Elevation - Shallow Zone Wells
October - November 2008
Shannon Road/ El Camino del Cerro WQARF Site Tucson, Arizona

ADEQ Arizona Department of Environmental Quality

URS

Figure 7

Note: Figure from URS Groundwater Sampling Report - October 2008

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
5 Foot Contour Interval

Groundwater Elevation Contours
1 Foot Contour Interval

CDC-W10
2099.60
Well Name and
Ground Water Elevation
(Feet Above Mean Sea Level)

NA
Water Level Not Available

BROWN AND CALDWELL

Figure 3
GROUNDWATER ELEVATIONS AND CONTOURS JANUARY 12, 2009

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
5 Foot Contour Interval

Groundwater Elevation Contours
1 Foot Contour Interval

CDC-W11
2099.55
Well Name and Ground Water Elevation
(Feet Above Mean Sea Level)

BROWN AND CALDWELL

Figure 4
GROUNDWATER ELEVATIONS AND CONTOURS JULY 24, 2009

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
5 Foot Contour Interval

Groundwater Elevation Contours
1 Foot Contour Interval

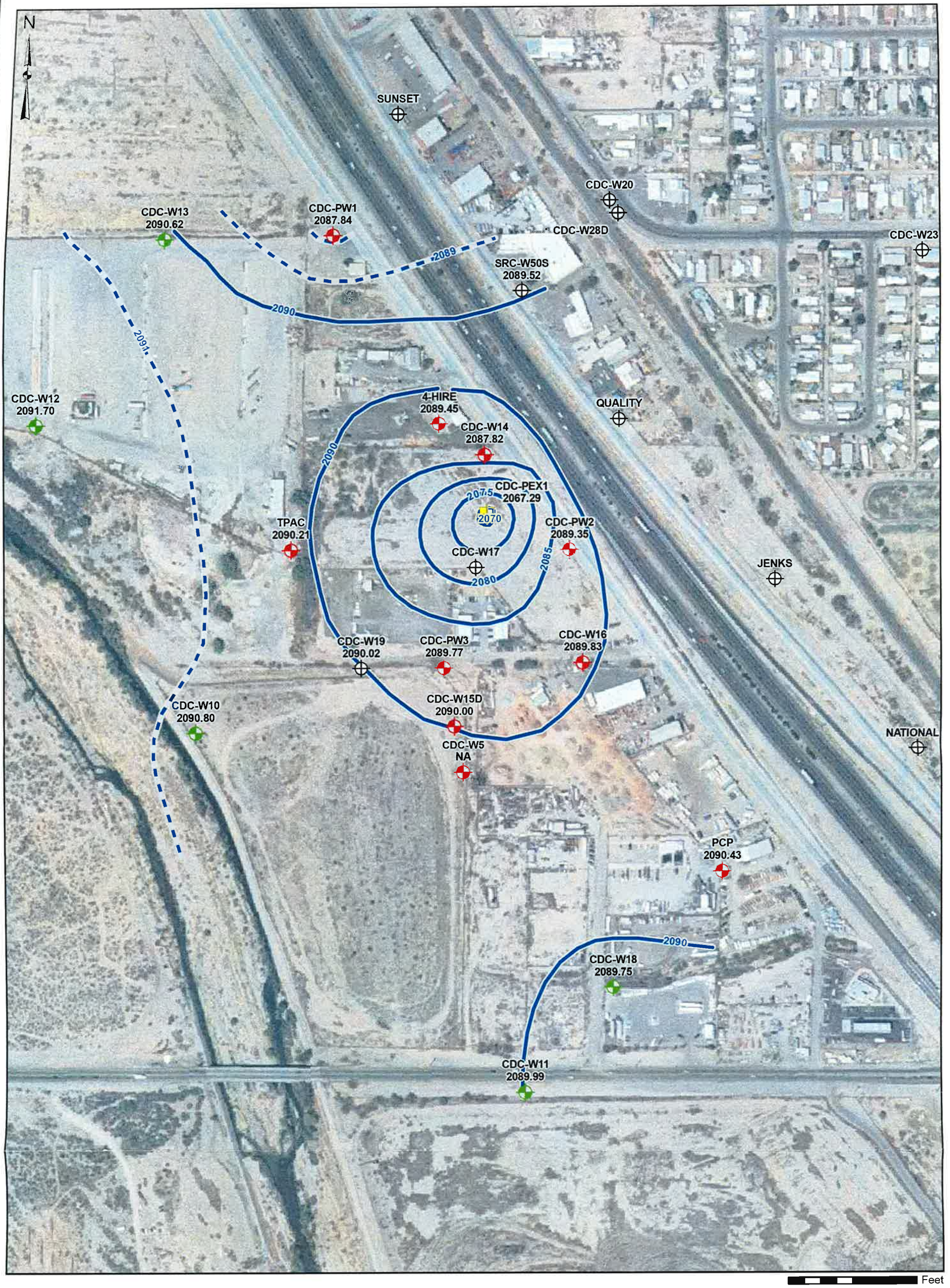
CDC-W11
2092.61

Well Name and Ground Water Elevation
(Feet Above Mean Sea Level)

BROWN AND CALDWELL

Figure 5
GROUNDWATER ELEVATIONS AND CONTOURS AUGUST 26, 2009

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA



EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

- Groundwater Elevation Contours 5 Foot Contour Interval
- Groundwater Elevation Contours 1 Foot Contour Interval

CDC-W11 2089.99 — Well Name and Ground Water Elevation (Feet Above Mean Sea Level)

NA — Water Level Not Available

BROWN AND CALDWELL

Figure 6
GROUNDWATER ELEVATIONS AND CONTOURS OCTOBER 29, 2009

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
1 Foot Contour Interval
(Inferred Where Dashed)

CDC-W10 2090.60 — Well Name and Ground Water Elevation (Feet Above Mean Sea Level)

NA — Water Level Not Available

NOTE: PCP and 4-HIRE water levels not used for contouring due to daily domestic use.

BROWN AND CALDWELL

Figure 3
GROUNDWATER ELEVATIONS AND CONTOURS JANUARY 8, 2010

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

P:\GIS\Projects\Pima_County\136166 - El Camino Del Cerro Landfill Pilot Study\ARCMAPS\FIGURES\GW Elev 2010\136168_GWElev_Jan08_2010.mxd 8/23/2010

Feet
0 100 200 400

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
1 Foot Contour Interval
(Inferred Where Dashed)

CDC-W10 2092.05 — Well Name and Groundwater Elevation (Feet Above Mean Sea Level)

NA — Water Level Not Available

NOTE: PCP and 4-HIRE water levels not used for contouring due to daily domestic use.

BROWN AND CALDWELL

Figure 4
GROUNDWATER ELEVATIONS AND CONTOURS MAY 17, 2010

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

P:\GIS\Projects\Pima_County\136168 - El Camino Del Cerro Landfill Pilot Study\ARCMAPS\FIGURES\GW Elev 2010\136168_GWElev_May17_2010.mxd 8/23/2010

N

CDC-W13
2089.89

CDC-PW1
2087.33

2088 ft

2089 ft

CDC-W20

CDC-W28D

CDC-W34S

CDC-W23

SRC-W50S
2089.50

CDC-W12
2090.70

2090 ft

4-HIRE

CDC-W14
2087.68

CDC-PEX1
2060.81

TPAC
2089.69

CDC-PW2
2089.11

CDC-W17
NA

2089 ft

CDC-W16
2089.49

CDC-W19
NA

CDC-PW3
2089.51

CDC-W10
2089.94

2090 ft

CDC-W15D
2090.26

CDC-W5
DRY

PCP

2090 ft

CDC-W18
2089.05

CDC-W11
2089.22

Feet
0 100 200 400

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
1 Foot Contour Interval
(Inferred Where Dashed)

CDC-W10
2089.94
Well Name and
Ground Water Elevation
(Feet Above Mean Sea Level)

NA
Water Level Not Available

NOTE: PCP and 4-HIRE water levels not used for contouring due to daily domestic use.

BROWN AND CALDWELL

Figure 5
GROUNDWATER ELEVATIONS AND CONTOURS JULY 6, 2010

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

P:\GIS\Projects\Pima_County\136168 - El Camino Del Cerro Landfill Pilot Study\ARCMAPS\FIGURES\GW Elev 2010\136168_GWElev_July06_2010.mxd 8/23/2010

EXPLANATION

Well Purpose - Sampling Frequency

- Monitoring - Annually (January Only)
- Monitoring - Semi-Annual (January - July)
- Extraction - Monthly
- Damaged or Off-Site Wells

Groundwater Elevation Contours
1 Foot Contour Interval
(Inferred Where Dashed)

CDC-W10
2088.18
Well Name and
Ground Water Elevation
(Feet Above Mean Sea Level)

NA
Water Level Not Available

NOTE: PCP and 4-HIRE water levels not used for contouring due to daily domestic use.

BROWN AND CALDWELL

Figure 6
GROUNDWATER ELEVATIONS AND CONTOURS OCTOBER 12, 2010

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

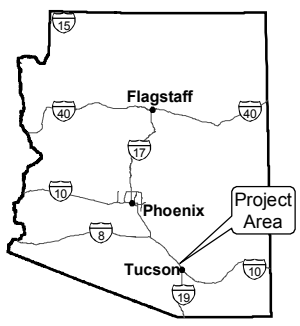
P:\GIS\Projects\Pima_County\136168 - El Camino Del Cerro Landfill Pilot Study\ARCMAPS\FIGURES\GW Elev 2010\test.mxd Updated: March 11, 2011

Wildwood, NM
DeConcini, NM
Latamore-N, NM
Latamore-S, NM
W31M, 2075.2
2076
2077
2078
2079
W35M, 2079.68
S-Shannon, NM
Estes, NM
2080
2081
2082
2083
2084
2085
2086
2087
WR-369A, NM
W37M, 2080.5
W49M, 2087.99
2088
Moore, NM
W39M, 2085.25
W48M, 2085.03
W30M, 2085.65
Smith, NM
W46M, 2086.34
Z-006, NM
W33M, 2087.36
W38M, 2087.95
W40M, 2088.78
W32M, 2088.21
2089
W29M, NM
PW1S, 2087.15
W34M, 2090.49
W13S, 2089.46
2090
2091
2092
W14S, 2093.35
W12S, 2090.67
PEX1S, 2090.85
PW2S, 2091.21
W17S, NM
W16S, 2091.33
W19S, NM
PW3S, 2091.4
W10S, 2091.22
W5S, 2091.42
Santa Cruz River
W18S, 2092.17
W11S, 2092.3

LEGEND

- Domestic Well
- Monitor Well
- Municipal Well
- Pima County
- Groundwater Contour (Dashed Where Inferred)
- Roads
- Railroad
- River

Note:
NM - Not Measured
Water Level is Feet above sea-level



N

0 250 500
Feet

Groundwater Elevation - Medium Zone Wells
April 2011

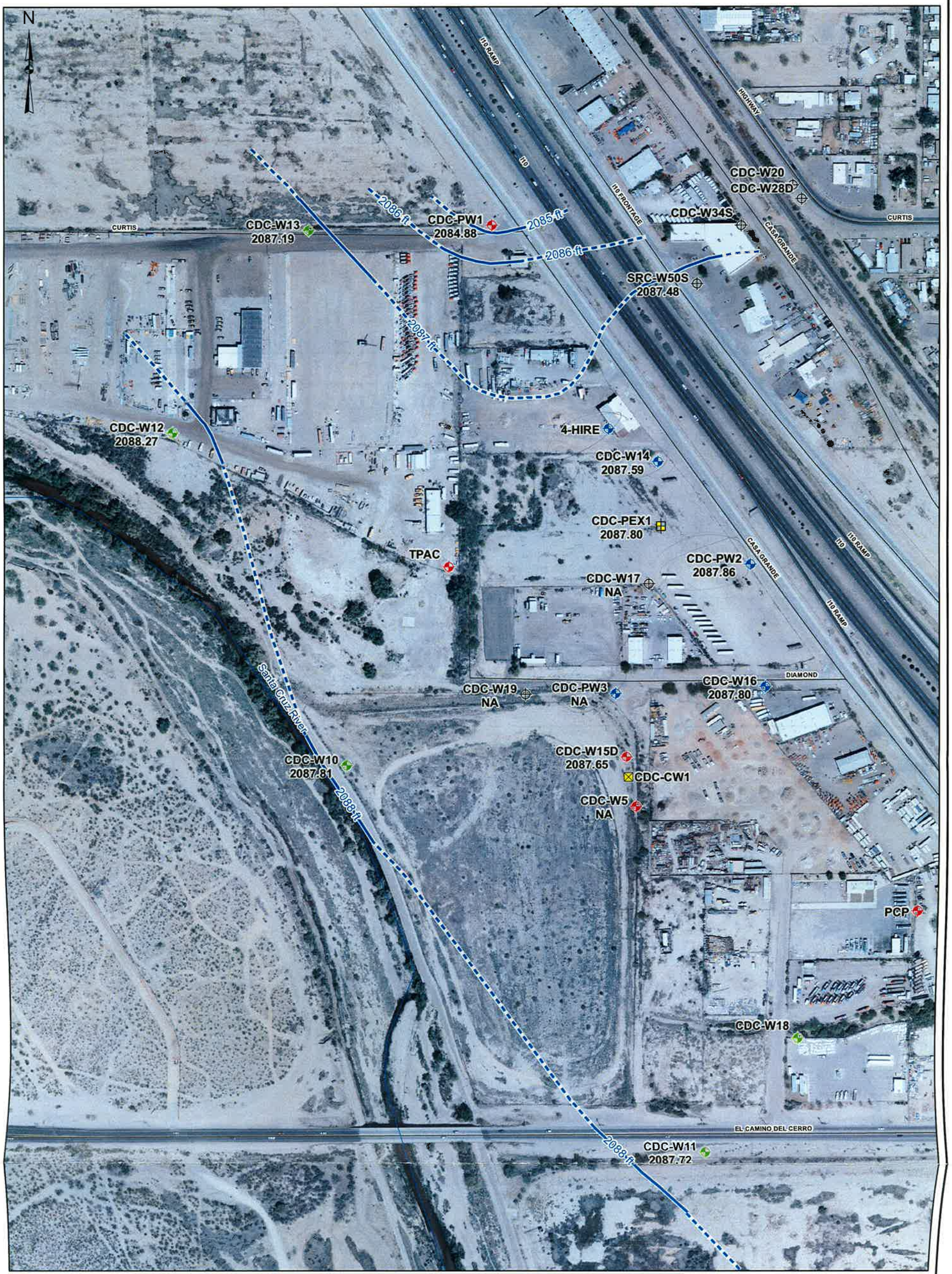
URS

Shannon Road/
El Camino del Cerro
WQARF Site
Tucson, Arizona

Source:
URS 2008
Pima County 2006
Brown and Caldwell 2007
Precision Land Survey 2008

Figure 3

Note: Figure from URS Groundwater Monitoring Report - April 2011



EXPLANATION

Well Purpose-Sampling Frequency

- Monitoring- Annually (January only)
- Monitoring- Semi-Annual (January -July)
- Monitoring- Operational and Semi-Annual
- Extraction
- Extraction not in Use
- Damaged or Off-Site Wells

Groundwater Elevation Contours
1 Foot Contour Interval
(inferred where dashed)

CDC-W10 2087.81 — Well Name and Ground Water Elevation (Feet Above Mean Sea Level)

NA — Water Level Not Available or Insufficient Water for Measurment

NOTE: PCP, TPAC, and 4-HIRE water levels not used for contouring due to daily domestic use. CDC-W18 value not used-suspect measurment.

Feet
0 125 250 500

Figure 2
GROUNDWATER ELEVATIONS AND CONTOURS JULY 26, 2011

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

BROWN AND CALDWELL

BCPhx03:\GIS\Projects\Pima_County\139732 - El Camino Del Cerro Landfill Pilot Study\ARCMAPS\FIGURES\139732_GWElevJuly_2011.mxd 9/21/2011

EXPLANATION

- Monitoring- Annually (January only)
- Monitoring- Semi-Annual (January -July)
- Monitoring- Operational and Semi-Annual
- Extraction
- Damaged or Off-Site Wells

Groundwater Elevation Contours
1 Foot Contour Interval
(Inferred Where Dashed)

CDC-W10 2088.46 — Well Name and Ground Water Elevation (Feet Above Mean Sea Level)

NA — Water Level Not Available

NOTE: PCP, TPAC, and 4-HIRE water levels not used for contouring due to daily domestic use.

0 125 250 500 Feet

BROWN AND CALDWELL

Figure 2
GROUNDWATER ELEVATIONS AND CONTOURS FEBRUARY 20, 2012

EL CAMINO DEL CERRO LANDFILL
PIMA COUNTY, ARIZONA

Path: \\BCPHXFP01\Projects\GIS\Projects\Pima_County\136168 - El Camino Del Cerro Landfill Pilot Study\ARCMAPS\FIGURES\GW Elev 2012\139732_GWElev_Feb202012A.mxd Date: 4/22/2012