FEMA issued a Best Available Data (BAD) Letter for the
Wittmann Area Drainage Master Study Update floodplains (by Entellus),
on September 26, 2007. (FEMA review case no. 07-09-1634P)

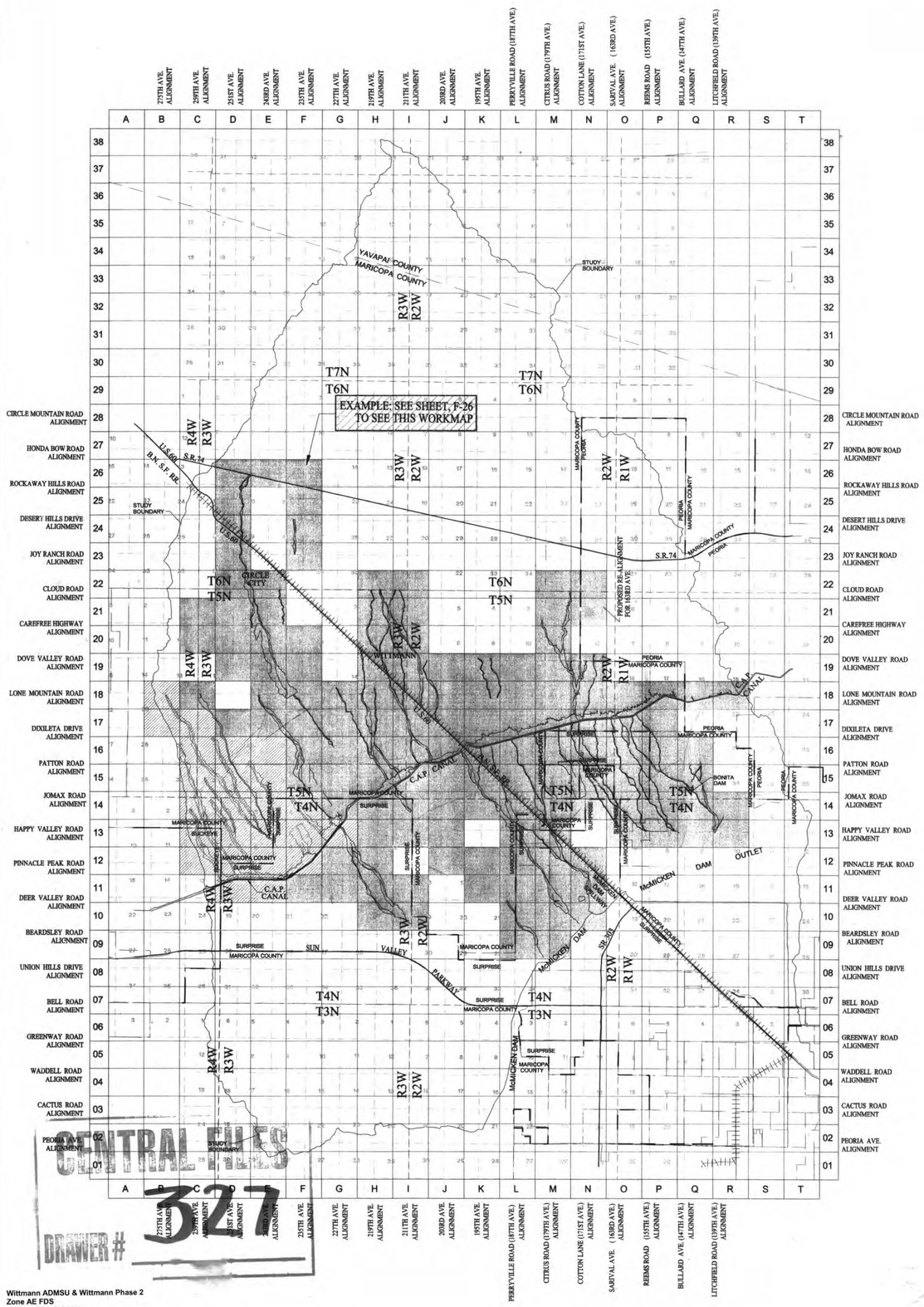
The BAD letter encourages the communities to make reasonable use of the draft work maps as the best available data for floodplain management purposes. There are no revised FIRM panels associated with this study. FEMA will incorporate the results of the Study onto the next revisions of the FIRM panels. The results of the study are currently on the pending GIS layer. The District needs to continue managing the floodplains just the same as if they were on the FIRM panels.

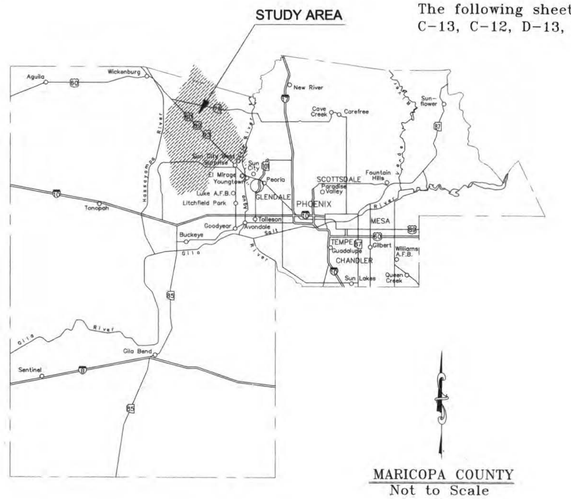
Project manager: Mike Duncan

FEMA issued a Best Available Data (BAD) Letter for the
Wittmann Phase 2 Zone AE Floodplain Delineation Study (by David Evans and Assoc.),
on September 26, 2007. (FEMA review case no. 07-09-1887P)

The BAD letter encourages the communities to make reasonable use of the draft work maps as the best available data for floodplain management purposes. There are no revised FIRM panels associated with this study. FEMA will incorporate the results of the Study onto the next revisions of the FIRM panels. The results of the study are currently on the pending GIS layer. The District needs to continue managing the floodplains just the same as if they were on the FIRM panels.

Project manager: Mike Duncan





LOCATION MAP

MARICOPA COUNTY
Not to Scale

Contract FCD2002C029

Contract FCD2004C066/FCD2002C029

CENTRAL FILES
DRAWER # 327

Wittmann ADMSU & Wittmann Phase 2
Zone AE FDS
David Evans & Assoc.
FCD2002C029 & 2003C066 Drawer 327

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\W\MARI00000044\0400CAD\DWG\EP\SHEETS\FP-WORKMAPS\Cover.dwg Nbl Oct 05, 2006 8:35:38am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT F.C.D. 2002C029

and

WITTMANN PHASE 2 ZONE AE FLOODPLAIN DELINEATION STUDY

CONTRACT F.C.D. 2004C066

The following sheets are part of both the ADMSU (FCD2002C029) and the Wittmann Phase 2 (FCD2004C066): C-17, D-16, D-15, D-14, E-16, E-15, E-14, E-13, E-12, E-11, F-12, F-13, F-14, and G-13.

The following sheets are only part of the Wittmann Phase 2 (FCD2004C066): B-18, B-17, C-16, C-15, C-14, C-13, C-12, D-13, D-12, D-11. All other sheets are part of the ADMSU (FCD2002C029).

AERIAL MAPPING

NOT A PART OF THIS CONTRACT.
SUPPLIED BY THE FLOOD CONTROL DISTRICT.

HYDROLOGY

Contract FCD2002C029
Entellus, Inc.
2255 North 44th Street, Suite 125
Phoenix, Az. 85008-3279
602.242.2566 Telephone

FLOODPLAIN DELINEATION

Contract FCD2002C029

Entellus, Inc.
2255 North 44th Street, Suite 125
Phoenix, Az. 85008-3279
602.242.2566 Telephone

Contract FCD2004C066

David Evans and Associates, Inc.
2141 East Highland Ave, Suite 200
Phoenix, Az. 85016
602.678.5151 Telephone

Portions of F-12 and F-13 only
Primatech, LLC
1295 W. Washington Street, Suite 115
Tempe, Az. 85281
602.685.9009 Telephone

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/ RAS	07/05	FEB/ NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/ HAA	07/05	FEB/ NBL	07/06

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

SUBMITTED BY: DATE:

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET 1 OF 158

SEE SHEET B-18

ERM AJ3873

SEE SHEET A-17

SEE SHEET C-17

RM6.387
Q 670cfs
FP 1728.14
FW1728.70

RM6.316
Q 670cfs
FP 1725.95
FW1726.46

RM6.209
Q 670cfs
FP 1722.04
FW1722.76

RM6.111
Q 670cfs
FP 1715.01
FW1719.35

WASH 3 WEST

Zone AE

4.0 Foot Contour Interval

DIXILETA DRIVE ALIGNMENT

23 24

26 25

275TH AVE. ALIGNMENT

2.0 Foot Contour Interval

SEE SHEET B-16

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI0000004\040CAD\DWG\EP\SHEETS\FP-WORKMAPS\B-17.dwg NBl Oct 05, 2006 8:25:18am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)	
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)	
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 (Q100=1270) FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) CERTIFICATE NO. 23989 FRANK EDWARD BROWN Date Signed ARIZONA, U.S.A.

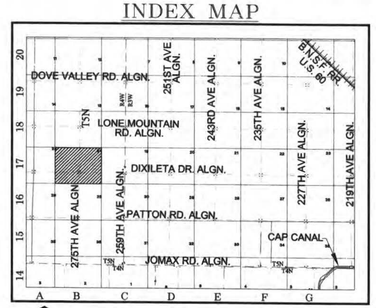
NOTE:
1. NGVD 29 + 1.98 FEET = NAVD 88
2. Wash 3-West surveyed cross-sections RM 6.912 to RM 4.709 take precedence over the 4.00-foot contour mapping for floodplain delineation.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1" = 200'

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB./NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB./NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET B-17 OF FLOODPLAIN DELINEATION

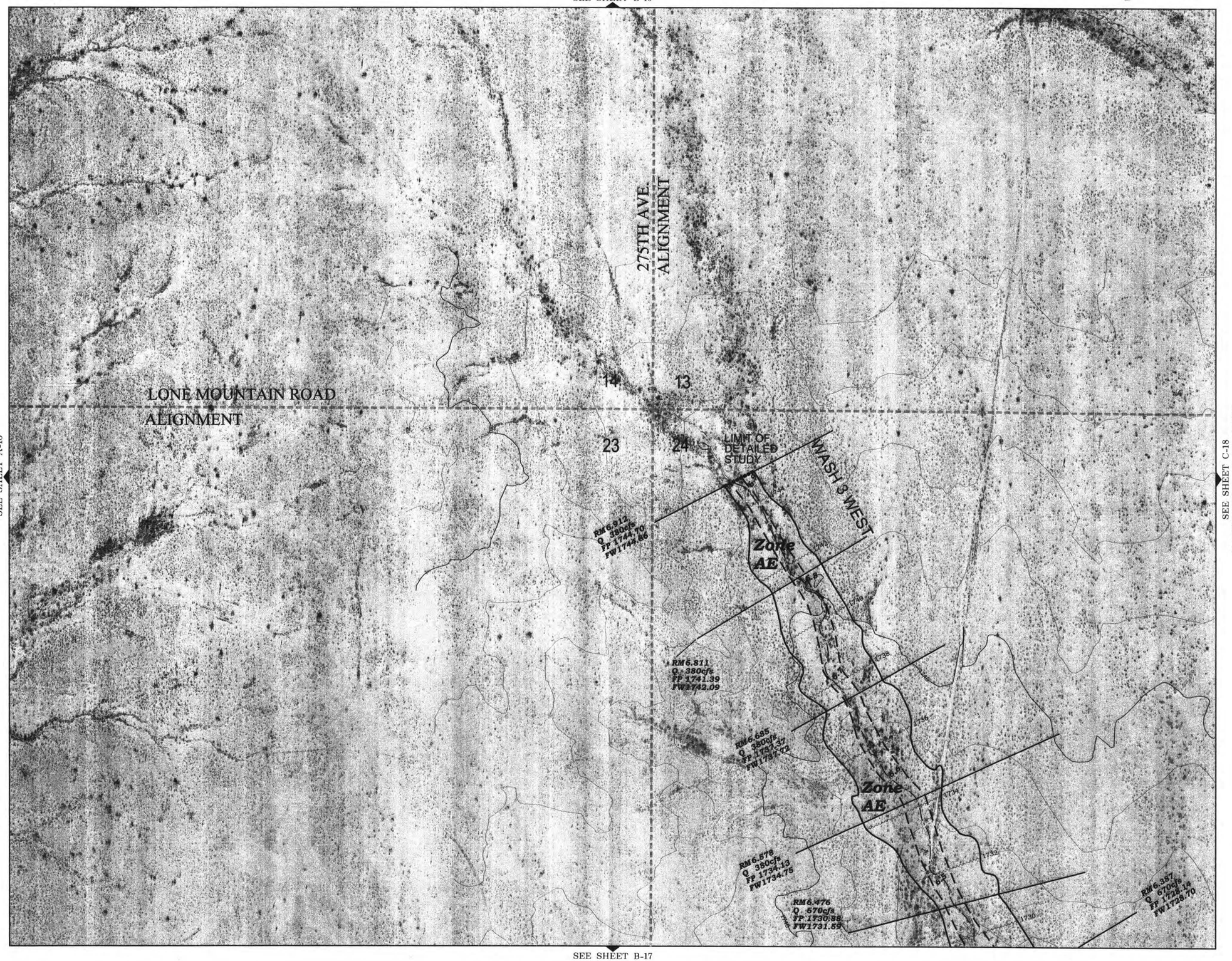
SEE SHEET B-19

ERM AJ3877

SEE SHEET A-18

SEE SHEET C-18

MATCH SHEET AT TRIANGLE



SEE SHEET B-17

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MAR00000044\04000A01\DWG\EP\SHEETS\FP-WORKMAPS\B-18.dwg Nbl Oct 05, 2006 9:07:00am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A		ZONE AE FLOODPLAIN (FP)
EFFECTIVE ZONE AE	ZONE AH		ZONE AE FLOODWAY (FW)
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 (Q100 = 1270) FP=1400.55 FW=1400.56

RM 1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) 23969 FRANK EDWARD BROWN Date Signed 10/17/2006 ARIZONA, U.S.A.

NOTE:

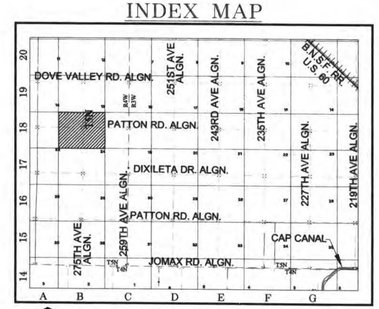
1. NGVD 29 + 1.99 FEET = NAVD 88.
2. Wash 3-West surveyed cross-sections RM 6.912 to RM 4.709 take precedence over the 4.00-foot contour mapping for floodplain delineation.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3877		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET B-18 OF FLOODPLAIN DELINEATION

SEE SHEET C-13

ERM AJ3861

SEE SHEET B-12

SEE SHEET D-12

259TH AVE. ALIGNMENT

PINNACLE PEAK ROAD ALIGNMENT

11 12 14 13

T4N-R3W-S18W

Zone AE

Zone AE

RM1.382
Q 350cfs
FP 1601.59
FW1601.84

RM1.296
Q 480cfs
FP 1599.90
FW1599.93

RM1.196
Q 480cfs
FP 1596.42
FW1596.69

RM1.104
Q 480cfs
FP 1593.96
FW1594.53

RM1.012
Q 480cfs
FP 1591.29
FW1591.72

RM0.920
Q 480cfs
FP 1586.63
FW1589.04

RM0.824
Q 480cfs
FP 1586.71
FW1586.91

RM0.732
Q 670cfs
FP 1584.21
FW1584.87

RM0.635
Q 670cfs
FP 1581.91
FW1582.32

RM0.593
Q 670cfs
FP 1580.94
FW1581.31

RM0.538
Q 670cfs
FP 1579.16
FW1579.70

SEE SHEET C-11

P:\M\MAR100000044\04000AD\DWG\EP\SHEETS\FP-WORKMAPS\C-12.dwg NBl Oct 05, 2006 9:17:15am

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

WITTMANN PHASE 2-FCD2004C066

ZONE AE FLOODPLAIN (FP)
ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE
CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed ARIZONA, U.S.A.

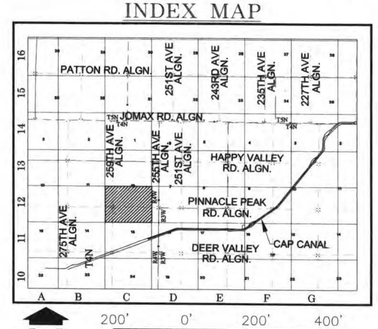
NOTE:
1. NGVD 29 + 1.93 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-12 OF FLOODPLAIN DELINEATION

SEE SHEET C-14

ERM AJ3861

SEE SHEET B-13

SEE SHEET D-13

259TH AVE ALIGNMENT

HAPPY VALLEY ROAD ALIGNMENT

MARICOPA COUNTY

BUCKEYE

T4N-R3W-S18E

T4N-R3W-S18W

Zone AE

RM2.173 Q 250cfs FP 1624.38 FW1624.53

RM2.080 Q 250cfs FP 1622.04 FW1622.22

RM1.987 Q 250cfs FP 1619.30 FW1619.44

RM1.928 Q 250cfs FP 1617.90 FW1617.96

RM1.838 Q 250cfs FP 1614.84 FW1615.05

RM1.750 Q 350cfs FP 1612.40 FW1612.67

RM1.664 Q 350cfs FP 1609.77 FW1609.78

RM1.567 Q 350cfs FP 1606.82 FW1607.06

RM1.477 Q 350cfs FP 1604.36 FW1604.38

RM1.945 Q 650cfs FP 1620.30 FW1620.66

RM1.866 Q 650cfs FP 1618.00 FW1618.39

RM1.773 Q 810cfs FP 1615.14 FW1616.13

RM1.674 Q 810cfs FP 1612.54 FW1613.47

RM1.580 Q 810cfs FP 1609.55 FW1610.25

RM1.486 Q 810cfs FP 1606.99 FW1607.10

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

RM1.378 Q 810cfs FP 1603.37 FW1604.02

RM1.382 Q 350cfs FP 1601.59 FW1601.84

RM1.282 Q 930cfs FP 1600.63 FW1601.18

RM1.192 Q 930cfs FP 1597.60 FW1598.33

SEE SHEET C-12

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI00000044\0400CAD\DWG\EP\SHEETS\EP-WORKMAPS\C-13.dwg Nbl Oct 05, 2006 9:23:52am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029

- EFFECTIVE ZONE A
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE AH
- EFFECTIVE FLOODWAY
- ZONE A
- ZONE AH
- ZONE AE
- FLOODWAY (FW)
- ZONE AO

WITTMANN PHASE 2-FCD2004C066

- ZONE AE FLOODPLAIN (FP)
- ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 / Qtec=1270 / FP=1400.55 / FW=1400.56

ENTELLUS-FCD2002C029

NOT APPLICABLE FOR THIS SHEET

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed ARIZONA, U.S.A.

NOTE:

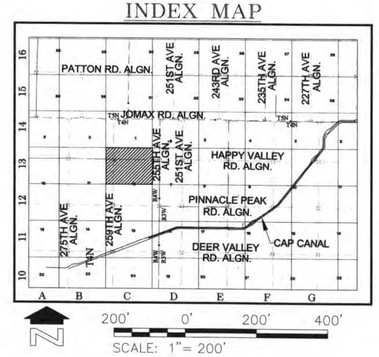
1. NGVD 29 + 1.94 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06

SUBMITTED BY: DATE:

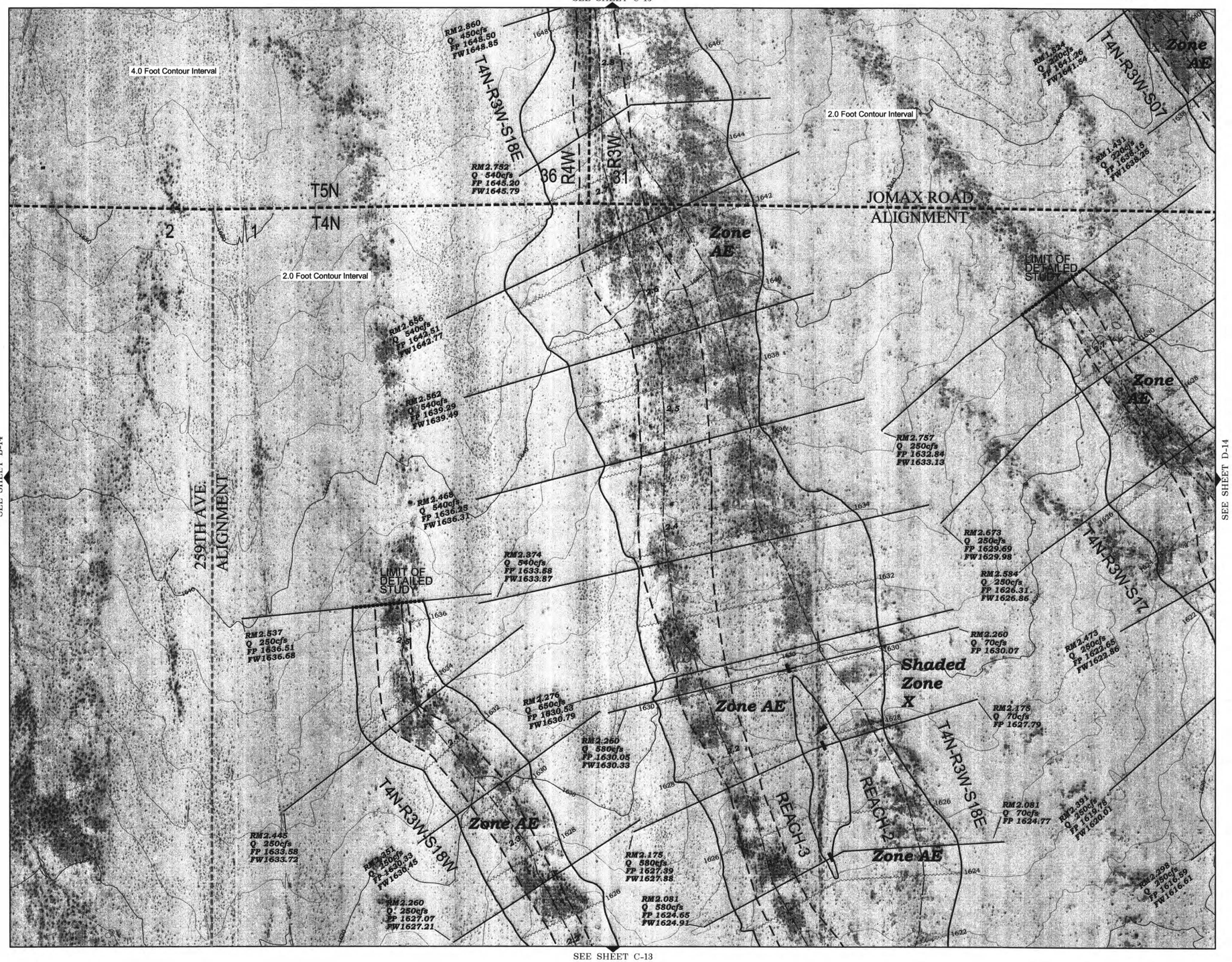
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-13 OF FLOODPLAIN DELINEATION



P:\WMARI00000044\04000CAD\DWG\EP\SHEETS\YP-WORKMAPS\C-14.dwg Nbl Oct 05, 2006 9:29:02am

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)	
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)	
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 (Q100=1270) FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) CERTIFICATE 23969 FRANK EDWARD BROWN Oct 2006 Date Signed ARIZONA, U.S.A.

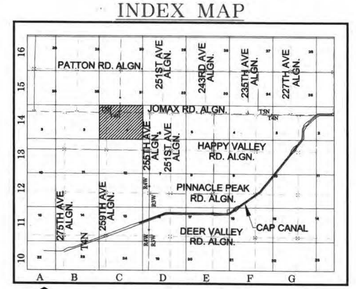
NOTE:
1. NGVD 29 + 1.95 FEET = NAVD 88.
2. Wash T4N-R3W-S18E surveyed cross-sections RM3.787 to RM 2.752 take precedence over the 4.00-foot contour mapping for floodplain delineation.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-14 OF FLOODPLAIN DELINEATION

SEE SHEET C-16

ERM AJ3873

SEE SHEET B-15

SEE SHEET D-15

SEE SHEET C-14

Zone AE

WASH 3 WEST

259TH AVE. ALIGNMENT

BLUE SKY DRIVE

GAMBIT DRIVE

LIMIT OF DETAILED STUDY

T4N-R3W-S18E

T4N-R3W-S07

T3N-R3W-S18E

R4W

R3W

4.0 Foot Contour Interval

2.0 Foot Contour Interval

RM3.706 Q 280cfs FP 1675.72 FW1675.60

RM3.578 Q 280cfs FP 1671.53 FW1671.64

RM3.461 Q 280cfs FP 1667.77 FW1667.77

RM3.344 Q 280cfs FP 1663.73 FW1663.95

RM3.264 Q 450cfs FP 1661.44 FW1661.92

RM3.153 Q 450cfs FP 1657.74 FW1658.35

RM3.059 Q 450cfs FP 1654.93 FW1655.04

RM2.961 Q 450cfs FP 1651.77 FW1652.01

RM2.860 Q 450cfs FP 1648.50 FW1648.85

RM4.421 Q 1,450cfs FP 1666.85 FW1667.37

RM4.310 Q 1,450cfs FP 1663.19 FW1664.31

RM4.136 Q 1,450cfs FP 1659.14 FW1659.96

RM4.077 Q 1,450cfs FP 1655.35 FW1655.80

RM3.959 Q 1,450cfs FP 1651.50 FW1651.50

RM1.993 Q 220cfs FP 1656.99 FW1657.04

RM1.893 Q 220cfs FP 1653.31 FW1653.62

RM1.807 Q 220cfs FP 1651.04 FW1651.19

RM1.710 Q 1,240cfs FP 1647.61 FW1647.72

RM1.617 Q 220cfs FP 1644.49 FW1644.53

RM1.524 Q 220cfs FP 1641.26 FW1641.54

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029

and

WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029 / WITTMANN PHASE 2-FCD2004C066

EFFECTIVE ZONE A — ZONE A — ZONE AE FLOODPLAIN (FP)

EFFECTIVE ZONE AE — ZONE AH — ZONE AE FLOODWAY (FW)

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 (Q100=1270) FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1665.90 FW1667.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) — 23969 — FRANK EDWARD BROWN — Date Signed 01/31/06 — ARIZONA, U.S.A.

NOTE:

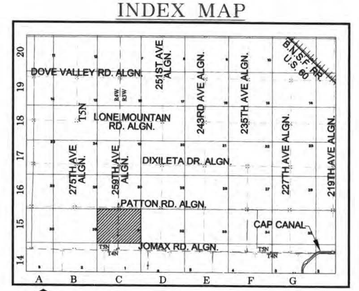
1. NGVD 29 +1.96 FEET = NAVD 88.
2. Wash T4N-R3W-S18E surveyed cross-sections RM3.787 to RM 2.752 take precedence over the 4.00-foot contour mapping for floodplain delineation.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

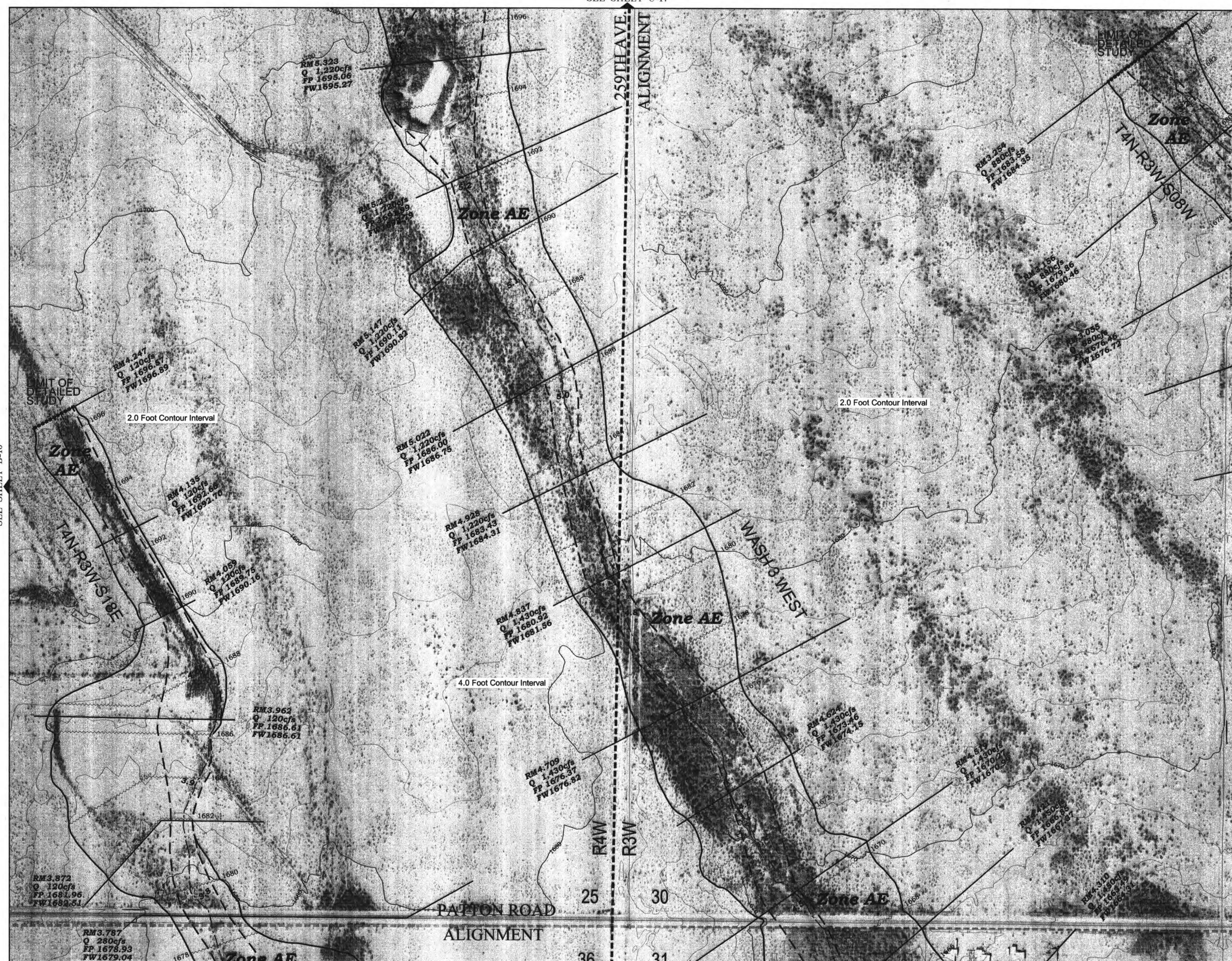
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-15 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\MYMARI0000044\04000AD\DWG\EP\SHEETS\FP-WORKMAPS\C-15.dwg Nbl Oct 05, 2006 10:02:15am



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION	ZONE A
WASH I.D. LABEL	WASH 9 EAST
ELEVATION REFERENCE MARK	ERM AJ3866
BASE FLOOD ELEVATION	1320
DIKE / LEVEE	DIKE
COUNTY BOUNDARY	
CORPORATE LIMIT	
LIMIT OF STUDY	
LIMIT OF DETAILED STUDY	
TOWNSHIP/RANGE LINE	
SECTION LINE	
SECTION NUMBER	29

ADMSU-FCD2002C029: EFFECTIVE ZONE A; EFFECTIVE ZONE AE; EFFECTIVE ZONE AH; EFFECTIVE FLOODWAY; ZONE A; ZONE AH; ZONE AE; FLOODWAY (FW); ZONE AO

WITTMANN PHASE 2-FCD2004C066: ZONE AE FLOODPLAIN (FP); ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 / Q_{100}=1270 / FP=1400.55 / FW=1400.56

RM 1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) — CERTIFICATE NO. 23969 — FRANK EDWARD BROWN — ARIZONA, U.S.A.

NOTE:

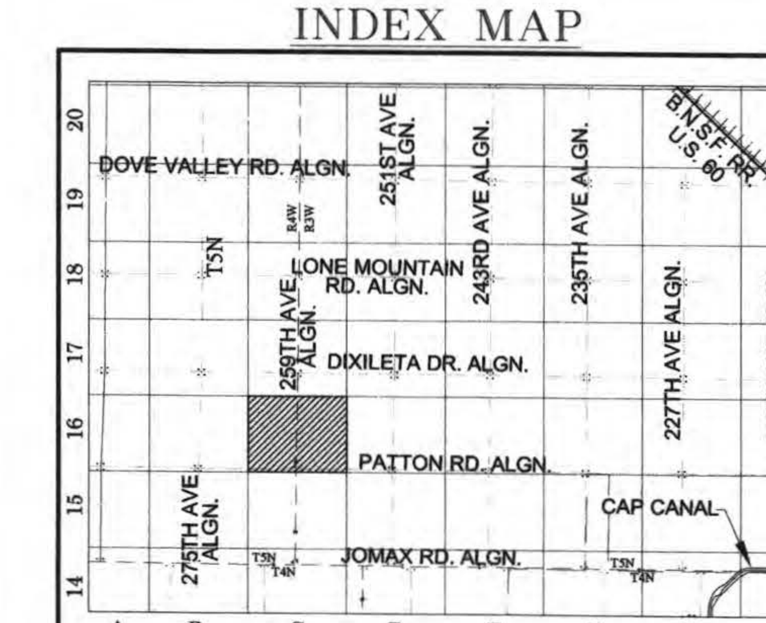
1. NGVD 29 + 1.97 FEET = NAVD 88.
2. Surveyed cross-sections Wash T4N-R3W-S18E RM 3.787 to RM 2.752 and Wash 3-West RM 6.912 to RM 4.709 take precedence over the 4.00-foot contour mapping for floodplain delineation.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06
SUBMITTED BY:		DATE:	

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-16 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI00000044\0400CAD\DWG\EP\SHEETS\FP-WORKMAPS\C-16.dwg Nbl Oct 05, 2006 9:39:41am

MATCH SHEET AT TRIANGLE
SEE SHEET C-18

ERM AJ3873

SEE SHEET B-17

SEE SHEET C-16

SEE SHEET D-17

MATCH SHEET AT TRIANGLE

4.493 FP=1713.71 Q100=430 FW=1713.71

0.078 T5N-R3W-S19 Q100=1500

4.417 FP=1711.33 Q100=1500 FW=1711.45

0.000 T5N-R3W-S19 Q100=1500

4.336 FP=1708.34 Q100=1500 FW=1708.70

4.256 FP=1705.59 Q100=2100 FW=1706.38

4.178 FP=1702.96 Q100=2100 FW=1703.80

4.102 FP=1700.27 Q100=2100 FW=1701.14

3.937 FP=1697.65 Q100=2100 FW=1698.56

3.837 FP=1695.72 Q100=2100 FW=1696.50

RM6.309 Q 970cfs FP 1722.04 FW1722.78

RM6.111 Q 670cfs FP 1719.01 FW1719.36

RM6.005 Q 670cfs FP 1715.51 FW1716.48

RM5.905 Q 980cfs FP 1712.41 FW1713.18

RM5.801 Q 980cfs FP 1709.62 FW1710.30

RM5.687 Q 980cfs FP 1705.89 FW1706.07

RM5.589 Q 980cfs FP 1702.29 FW1702.74

RM5.528 Q 980cfs FP 1700.79 FW1701.67

RM5.410 Q 980cfs FP 1697.81 FW1697.96

259TH AVE. ALIGNMENT

DIXILETA DRIVE ALIGNMENT

255TH AVE. ALIGNMENT

WASH 3 WEST

T5N-R3W-S19

T4N-R3W-S08E

Zone AE

FW

4.0 Foot Contour Interval

2.0 Foot Contour Interval

R4W R3W

24 19 25 30

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

WITTMANN PHASE 2-FCD2004C066

ZONE AE FLOODPLAIN (FP)
ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE: 13.1 12.4

CROSS SECTION: 2.199 FP=1400.55 Q100=1270 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

Professional Engineer (Civil) CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed 10/06/06 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed ARIZONA, U.S.A.

NOTE:

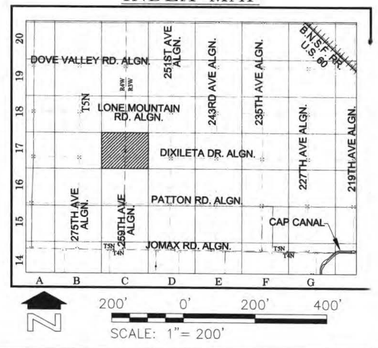
1. NGVD 29 + 1.97 FEET = NAVD 88.
2. Wash 3-West surveyed cross-sections RM 6.912 to RM 4.709 take precedence over the 4.00-foot contour mapping for floodplain delineation.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus
2366 N. 44th Street Suite 135 Phoenix, AZ 85008-3279 Tel 602.244.3566 Fax 602.244.8847 WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 100 Phoenix Arizona 85016 Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/ RAS	07/05	FEB/ NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/ HAA	07/05	FEB/ NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-17 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\AMARI00000044\d400CAD\DWG\EP\SHEETS\FP-WORKMAPS\C-17.dwg Nbl Oct 06, 2006 7:22:45am

SEE SHEET C-19

ERM AJ3873

SEE SHEET B-18

SEE SHEET D-18

259TH AVE. (ALIGNMENT)

LONE MOUNTAIN ROAD (ALIGNMENT)

R4W R3W

13 18 24 19

T5N-R3W-S19

T4N-R3W-S08E

LIMIT OF DETAILED STUDY

LIMIT OF STUDY

ZONE A

ZONE AE

1740 1724 1720 1716 1712

4.891 Q100=710

4.817 Q100=1500 FP=1725.09 FW=1725.40

4.752 Q100=1500 FP=1723.10 FW=1723.72

4.652 Q100=430 FP=1719.64 FW=1719.87

4.585 Q100=430 FP=1717.56 FW=1717.99

FP=1728.23 FW=1729.19 0.580 Q100=660

FP=1725.09 FW=1725.50 0.510 Q100=1500

FP=1723.10 FW=1723.36 0.413 Q100=1500

FP=1720.47 FW=1721.19 0.358 Q100=1070

FP=1717.84 FW=1718.63 0.263 Q100=1070

FP=1714.85 FW=1715.22 0.185 Q100=1070

FP=1713.71 FW=1715.71 4.493 Q100=430

T5N-R3W-S19 0.078 Q100=1500

T5N-R3W-S19 4.477 Q100=1500

FP=1711.53 FW=1711.45 1.000 Q100=1500

T5N-R3W-S19 4.436 Q100=1500

FP=1703.34 FW=1703.70

SEE SHEET C-17

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\301\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-C_18.dwg DATE: 07/26/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

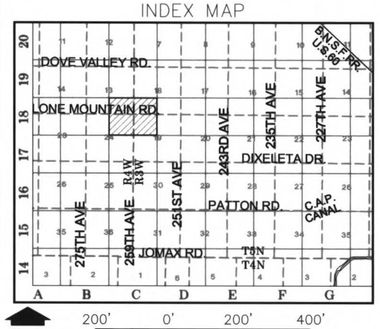
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certified Professional Engineer — 27737 — HERNAN A. ARISTIZABAL — My Signed 12/31/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-18 OF FLOODPLAIN DELINEATION

SEE SHEET C-21

ERM AJ3877

SEE SHEET B-20

SEE SHEET D-20

1.920
Q_{100}=4500

IONA TRIBUTARY

ZONE A

R4W

R3W

259TH AVE
(ALIGNMENT)

SEE SHEET C-19

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199, Q_{100}=1270, FP=1400.55, FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

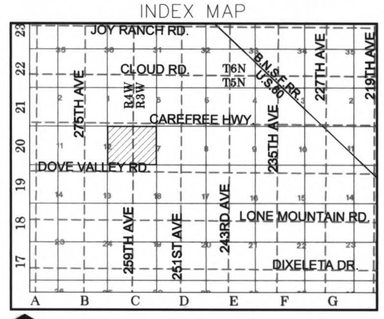
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3877		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET C-20 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-C_20.dwg DATE: 07/21/05

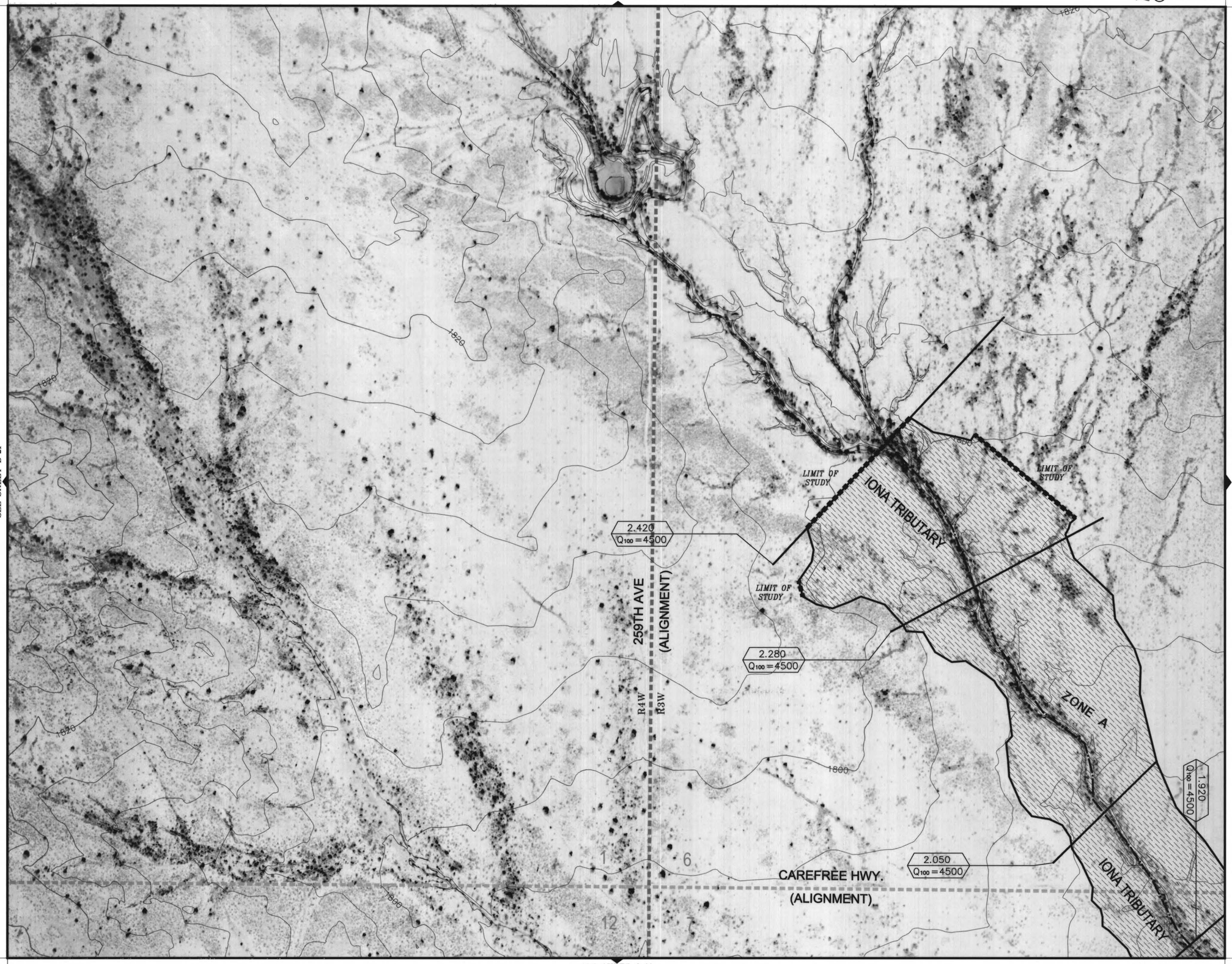
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET C-22

ERM AJ3877

SEE SHEET B-21

SEE SHEET D-21



SEE SHEET C-20

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMS)\10sk\Hydraulics\P-C_21.dwg DATE: 07/26/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

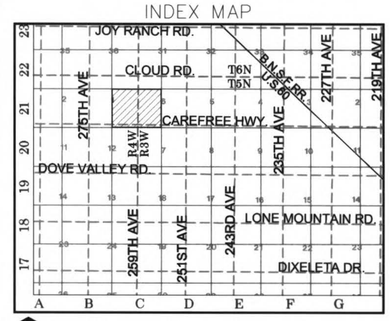
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3877		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certified Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET C-21 OF FLOODPLAIN DELINEATION

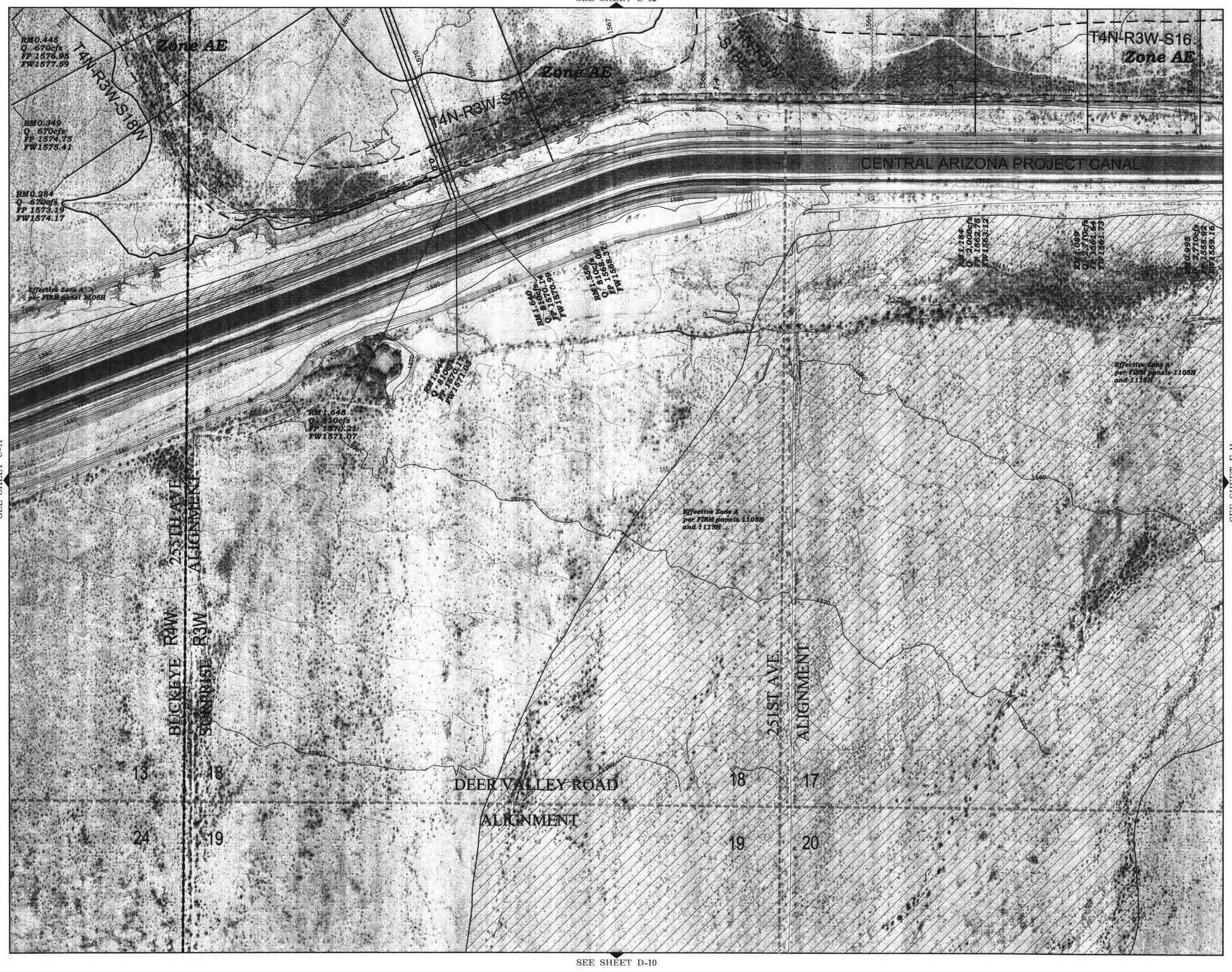
SEE SHEET D-12

ERM AJ3861

SEE SHEET C-11

SEE SHEET E-11

SEE SHEET D-10



1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI0000004\Q4000AD\DWG\EP\SHEETS\EP- WORKMAPS\D-11.dwg Nbl Oct 06, 2006 7:46:57am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)	
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)	
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE: 127 — 114
CROSS SECTION: 2.199 (Q100=1270) FP=1400.55 FW=1400.56

RM 1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) — Certificate No. 23969 — FRANK EDWARD BROWN — Date Signed — ARIZONA, U.S.A.

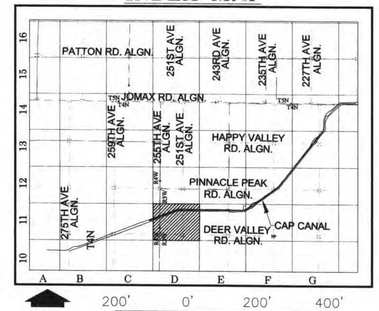
NOTE:
1. NGVD 29 + 1.92 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/ NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/ NBL	07/06

SUBMITTED BY: DATE:

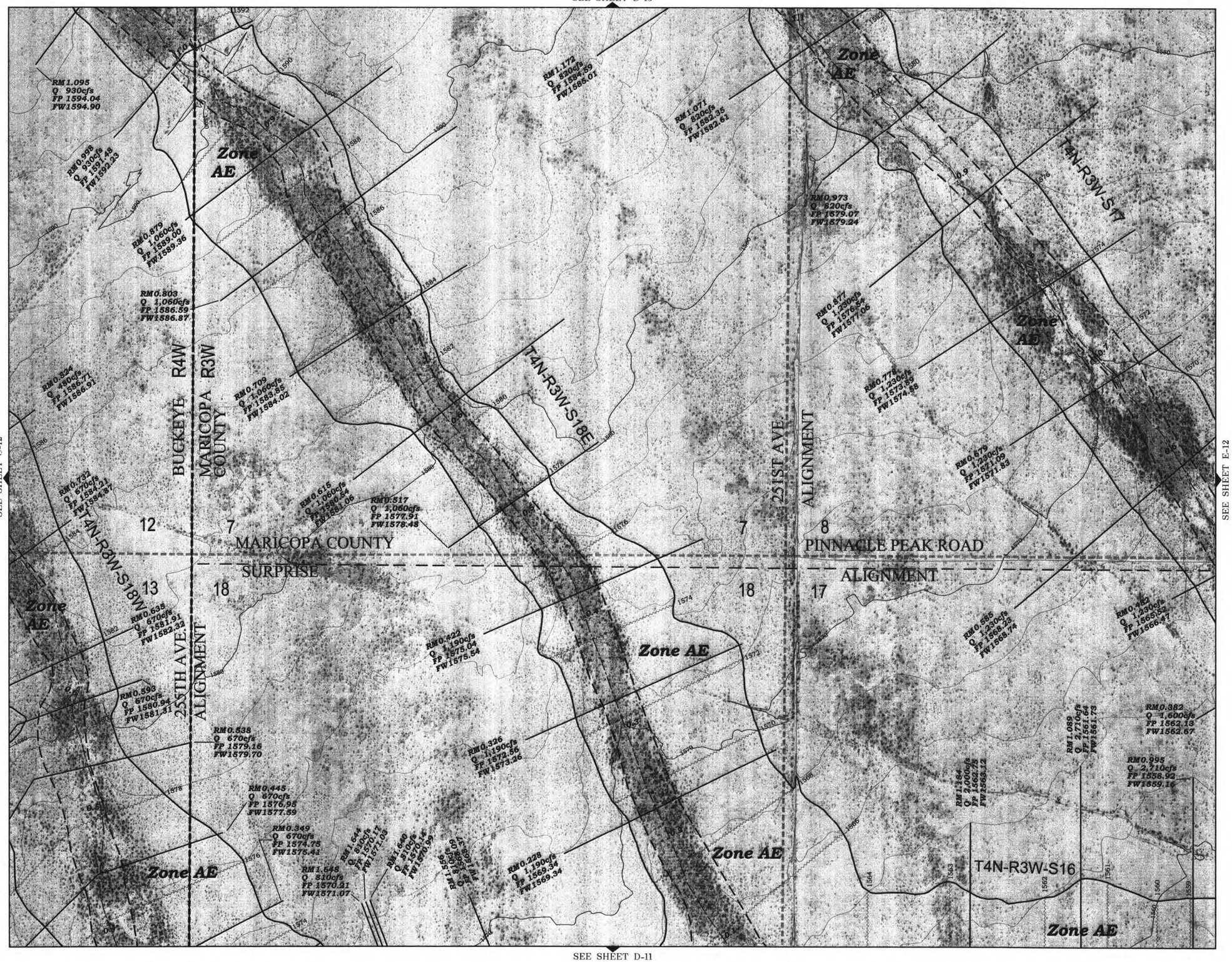
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-11 OF FLOODPLAIN DELINEATION



1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\MARI00000044\0400CAD\DWG\[FP\SHEETS\FP-WORKMAPS\D-12.dwg Nbl Oct 05, 2006 12:32:19pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029

- EFFECTIVE ZONE A
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE AH
- EFFECTIVE FLOODWAY
- ZONE A
- ZONE AH
- ZONE AE
- FLOODWAY (FW)
- ZONE AO

WITTMANN PHASE 2-FCD2004C066

- ZONE AE FLOODPLAIN (FP)
- ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 (Q100=1270) FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed 9 OCT 2006 ARIZONA, U.S.A.

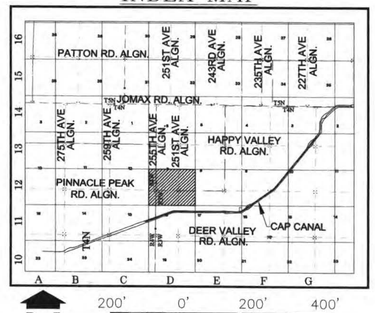
NOTE:
1. NGVD 29 + 1.92 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/ RAS	07/05	FEB/ NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/ HAA	07/05	FEB/ NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-12 OF FLOODPLAIN DELINEATION

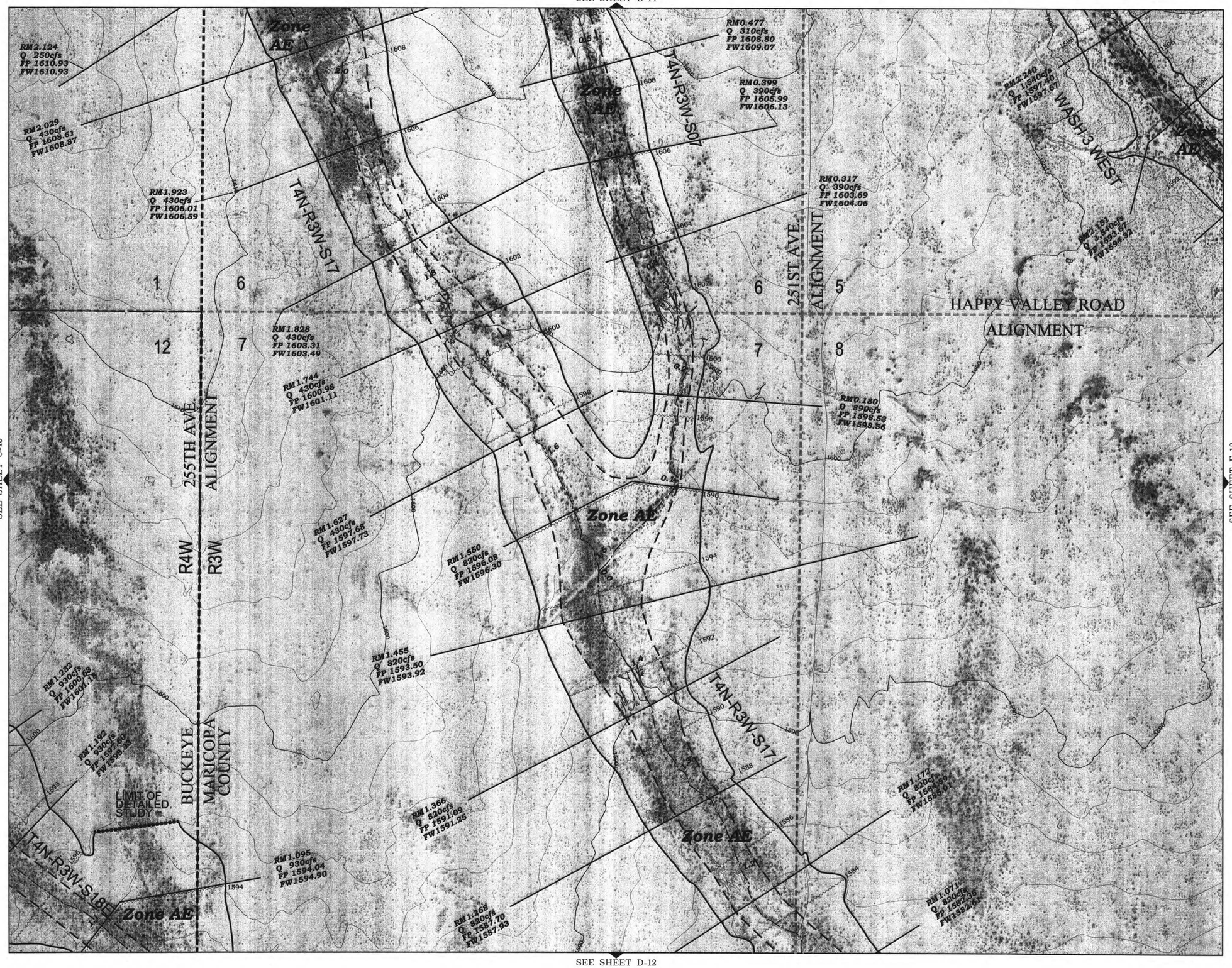
SEE SHEET D-14

ERM AJ3861

SEE SHEET C-13

SEE SHEET E-13

SEE SHEET D-12



1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI0000044\D400CAD\DWG\EP\SHEETS\EP-WORKMAPS\D-13.dwg Nbl Oct 05, 2006 12:43:53pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029

- EFFECTIVE ZONE A
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE AH
- EFFECTIVE FLOODWAY

WITTMANN PHASE 2-FCD2004C066

- ZONE A
- ZONE AH
- ZONE AE
- FLOODWAY (FW)
- ZONE AO
- ZONE AE FLOODPLAIN (FP)
- ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Qtot=1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

NOT APPLICABLE FOR THIS SHEET

Registered Professional Engineer (Civil) 23989 FRANK EDWARD BROWN Date Signed 10/5/06 ARIZONA, U.S.A.

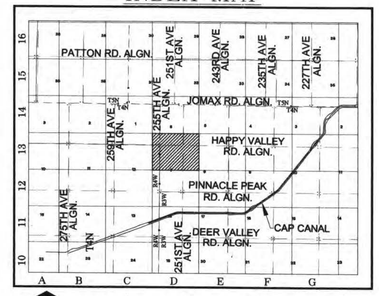
NOTE:
1. NGVD 29 + 1.93 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU	PHASE 2	
DESIGN		FEB/NBL	07/06
DESIGN CHK.		FEB	07/06
PLANS		NBL	07/06
PLANS CHK.		FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

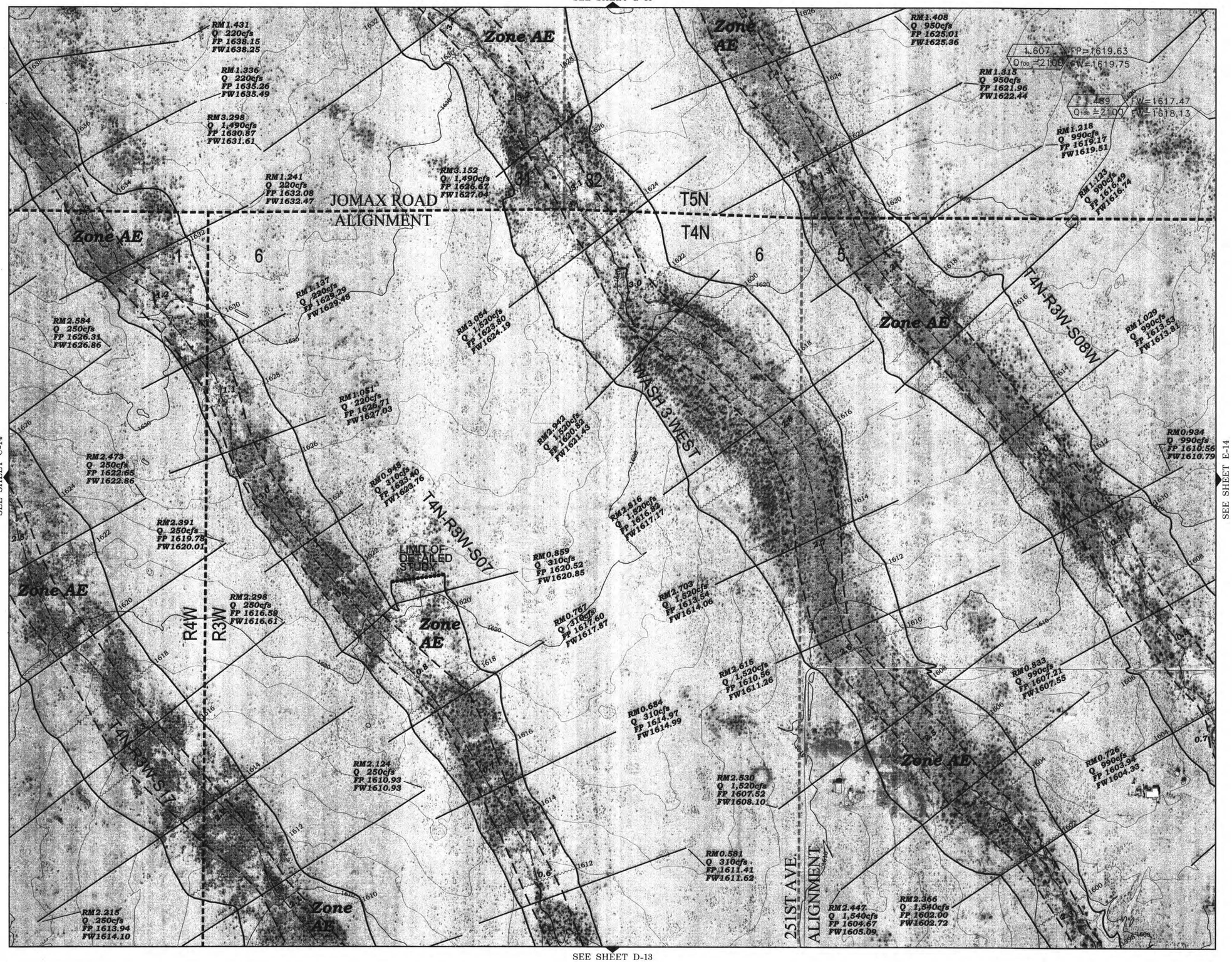
SHEET D-13 OF FLOODPLAIN DELINEATION

SEE SHEET D-15

ERM AJ38761

SEE SHEET C-14

SEE SHEET E-14



SEE SHEET D-13

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI0000044\0400CAD\DWG\EP\SHEETS\FP-WORKMAPS\D-14.dwg Nbl Oct 05, 2006 1:02:25pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A		ZONE AE FLOODPLAIN (FP)
EFFECTIVE ZONE AE	ZONE AH		ZONE AE FLOODWAY (FW)
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) — Certificate No. 29737 — Herman A. Aristizabal — Date Signed — Arizona, U.S.A.

Registered Professional Engineer (Civil) — Certificate No. 23969 — Frank Edward Brown — 11 Oct 2006 — Arizona, U.S.A.

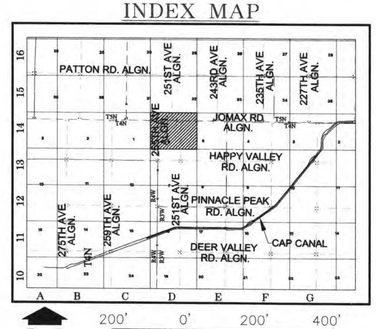
NOTE:
1. NGVD 29 + 1.94 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus — 2355 N. 44th Street, Suite 125, Phoenix, AZ 85008-3279, Tel 602.244.2000, Fax 602.244.5947, WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/ RAS	07/05	FEB/ NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/ HAA	07/05	FEB/ NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-14 OF FLOODPLAIN DELINEATION

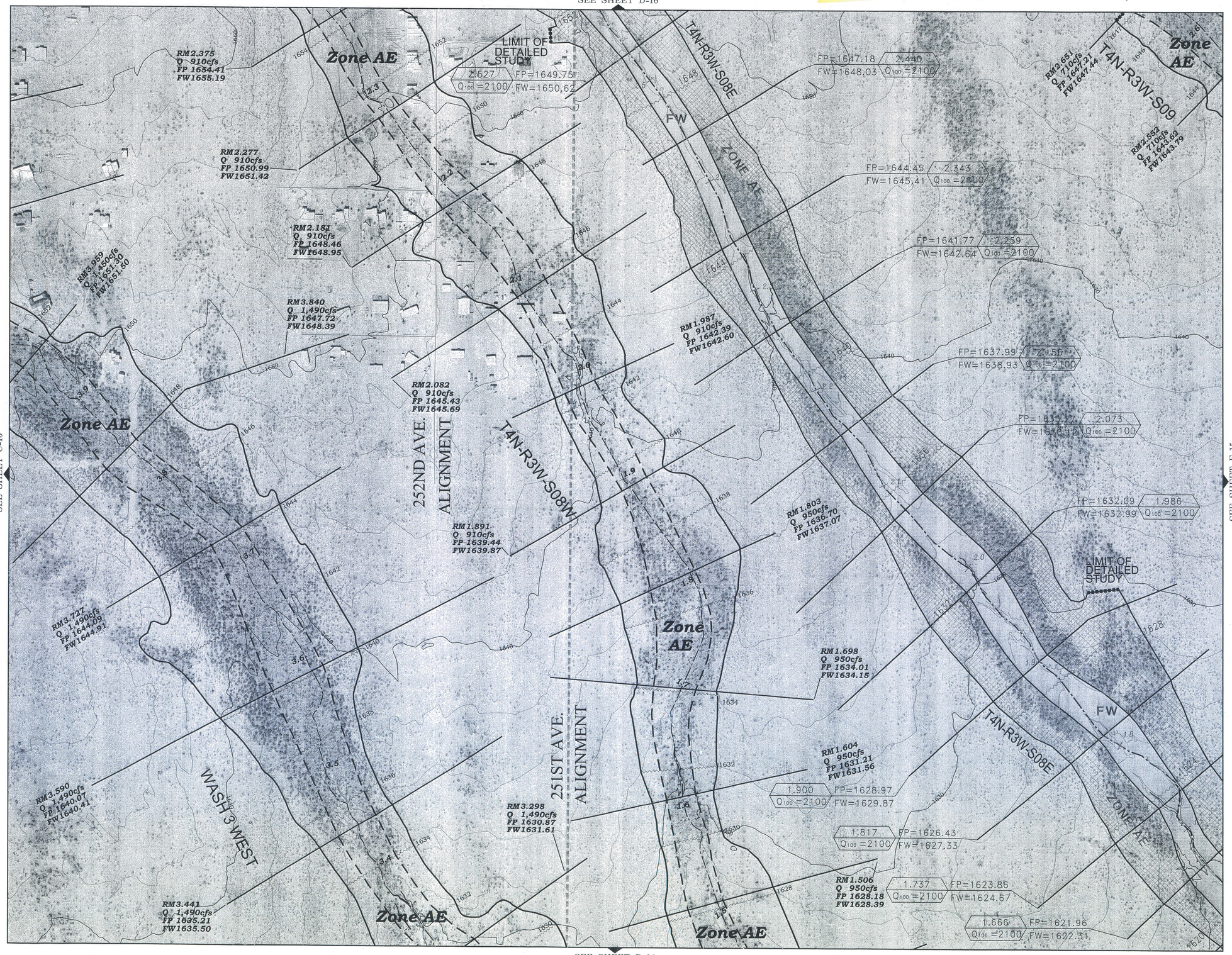
SEE SHEET D-16

See FCD 2010C027 #7 – detailed this area

ERM AJ3873

SEE SHEET C-15

SEE SHEET E-15



SEE SHEET D-14

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\MAR\0000004A\0400CAD\DWG\EP\SHEETS\EP-WORKMAPS\D-15.dwg Nbl Oct 05, 2006 1:10:16pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029

- EFFECTIVE ZONE A
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE AH
- EFFECTIVE FLOODWAY
- ZONE A
- ZONE AH
- ZONE AE
- FLOODWAY (FW)
- ZONE AO

WITTMANN PHASE 2-FCD2004C066

- ZONE AE FLOODPLAIN (FP)
- ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE: 93.1 / 1.4

CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERMAN A. ARISTIZABAL Date Signed ..... ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed 10-17-2006 ARIZONA, U.S.A.

NOTE:

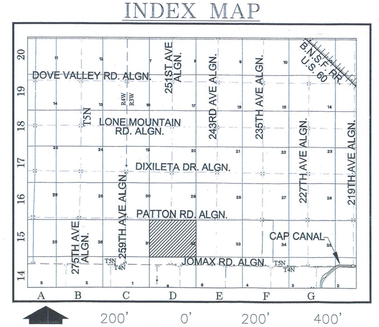
1. NGVD 29 + 1.95 = NAVD 88

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus
2255 N. 44th Street, Suite 125
Phoenix, AZ 85008-3279
TEL 602.244.0500
FAX 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

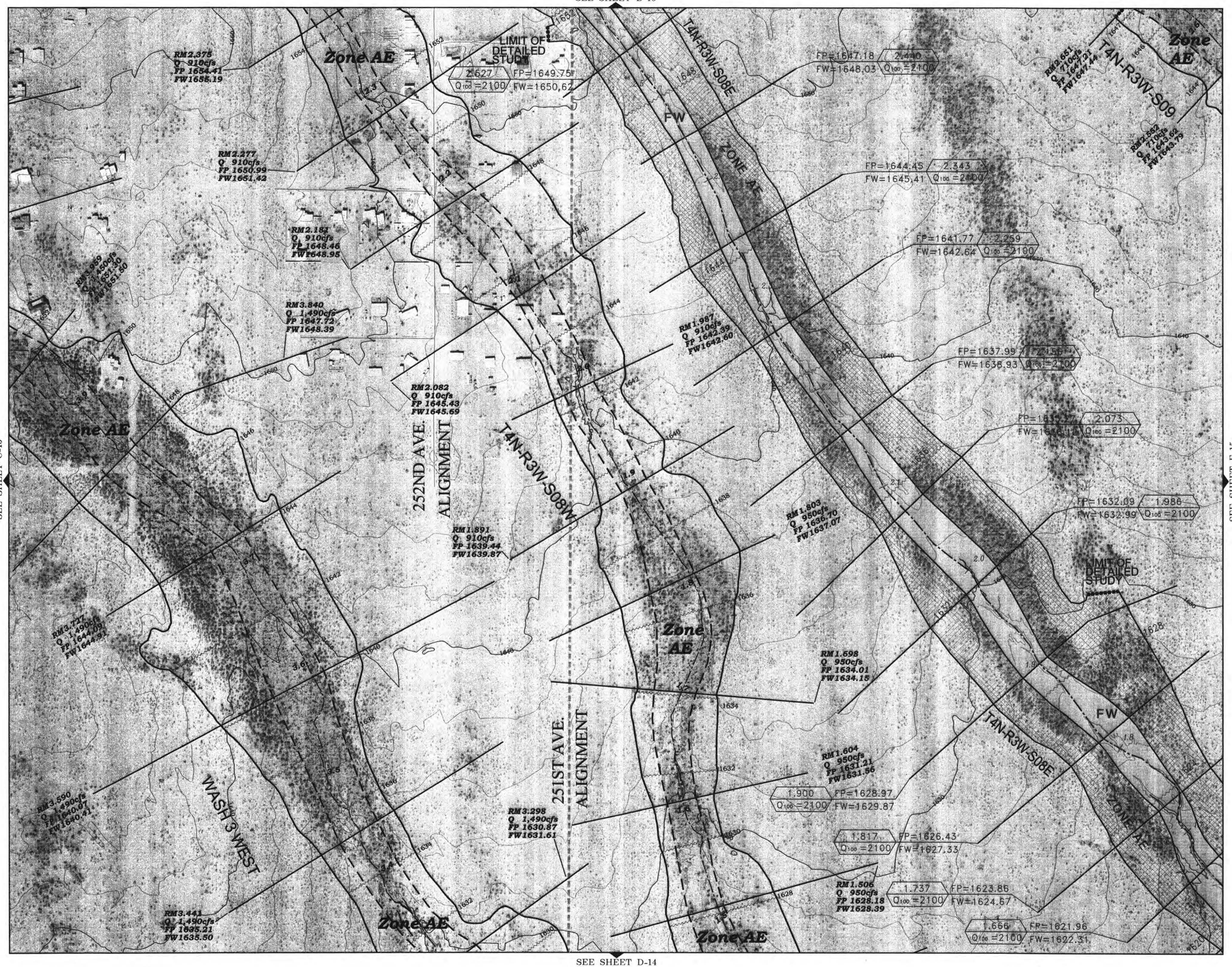
SHEET D-15 OF FLOODPLAIN DELINEATION

SEE SHEET D-16

ERM AJ3873

SEE SHEET C-15

SEE SHEET E-15



SEE SHEET D-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)	
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)	
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Q100 =1270 FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 25737 HERNAN A. ARISTIZABAL Date Signed 10/6/06 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed ARIZONA, U.S.A.

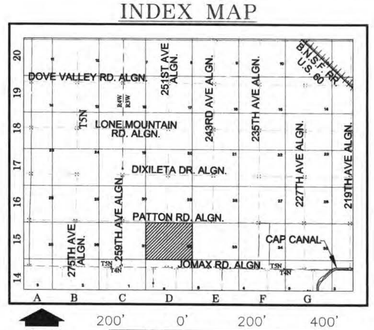
NOTE:
1. NGVD 29 + 1.95 = NAVD 88

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus 2355 N. 44th Street Suite 135 Phoenix, AZ 85008-3279 Tel 602.344.2666 Fax 602.344.5947 WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC. 2141 East Highland Avenue, Suite 200 Phoenix Arizona 85016 Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMC/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMC/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-15 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI00000044\0400CAD\DWG\FP\SHEETS\FP-WORKMAPS\D-15.dwg Nbl Oct 05, 2006 1:10:16pm

MATCH SHEET AT TRIANGLE
SEE SHEET D-17

ERM AJ3873

SEE SHEET C-16

SEE SHEET E-16

SEE SHEET D-15

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\W\AR0000044\0400CAD\DWG\EP\SHEETS\FP-WORKMAPS\D-16.dwg Nbi Oct 05, 2006 1:21:33pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

WITTMANN PHASE 2-FCD2004C066

ZONE AE FLOODPLAIN (FP)
ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE
CROSS SECTION: 2.199 FP=1400.55 / Q100 =1270 / FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERMAN A. ARISTIZABAL Date Signed 10/5/06 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Oct 5 2006 Date Signed ARIZONA, U.S.A.

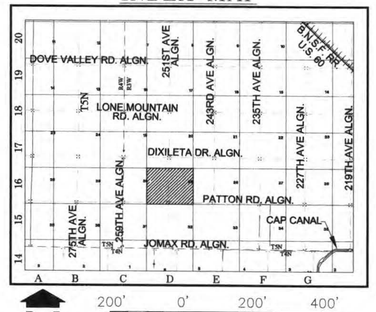
NOTE:
1. NGVD 29 + 1.96 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N
200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 135
Phoenix, AZ 85008.2279
Tel 602.244.8006
Fax 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-16 OF FLOODPLAIN DELINEATION

SEE SHEET D-18

ERM AJ3873

SEE SHEET C-17

SEE SHEET E-17

SEE SHEET D-16

FP=1702.96 FW=1703.80 — 4.178 — Q_{100}=2100

FP=1700.27 FW=1701.14 — 4.102 — Q_{100}=2100

FP=1697.65 FW=1698.56 — 4.014 — Q_{100}=2100

FP=1695.72 FW=1696.50 — 3.937 — Q_{100}=2100

FP=1693.48 FW=1693.94 — 3.856 — Q_{100}=2100

FP=1691.03 FW=1691.30 — 3.779 — Q_{100}=2100

FP=1688.07 FW=1688.44 — 3.698 — Q_{100}=2100

FP=1684.92 FW=1685.36 — 3.604 — Q_{100}=2100

FP=1682.21 FW=1682.53 — 3.524 — Q_{100}=2100

FP=1679.32 FW=1679.88 — 3.439 — Q_{100}=2100

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

T4N-R3W-S08E

ZONE AE

FW

3.9

3.8

3.7

3.6

3.5

1710 1700 1690 1680

251ST AVE (ALIGNMENT)

DIXILETA DR. (ALIGNMENT)

19 20 30 29

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

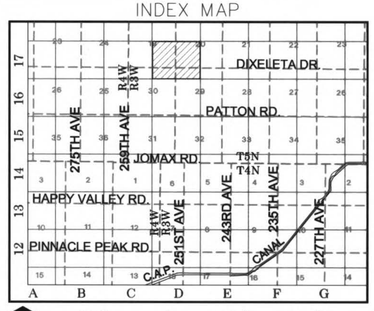
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certification Professional Engineer 39737 HERNAN A. ARISTIZABAL Date Signed 7/21/05 ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™

2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.3947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-17 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-D_16.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET D-20

ERM AJ3873

IONA TRIBUTARY

LIMIT OF STUDY

ZONE A

DOVE VALLEY RD. (ALIGNMENT)

0.620
Q_{100}=4500

0.480
Q_{100}=4500

0.270
Q_{100}=4500

0.000
Q_{100}=4500

251ST AVE (ALIGNMENT)

EFFECTIVE IONA WASH ZONE AE & FW

1760
1740
1720

SEE SHEET C-19

SEE SHEET E-19

SEE SHEET D-18

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199, Q_{100}=1270, FP=1400.55, FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

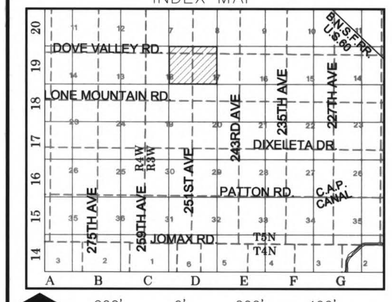
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

HERNAN A. ARISTIZABAL 39737 — Registered Professional Engineer — Certificate Expires: 7/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

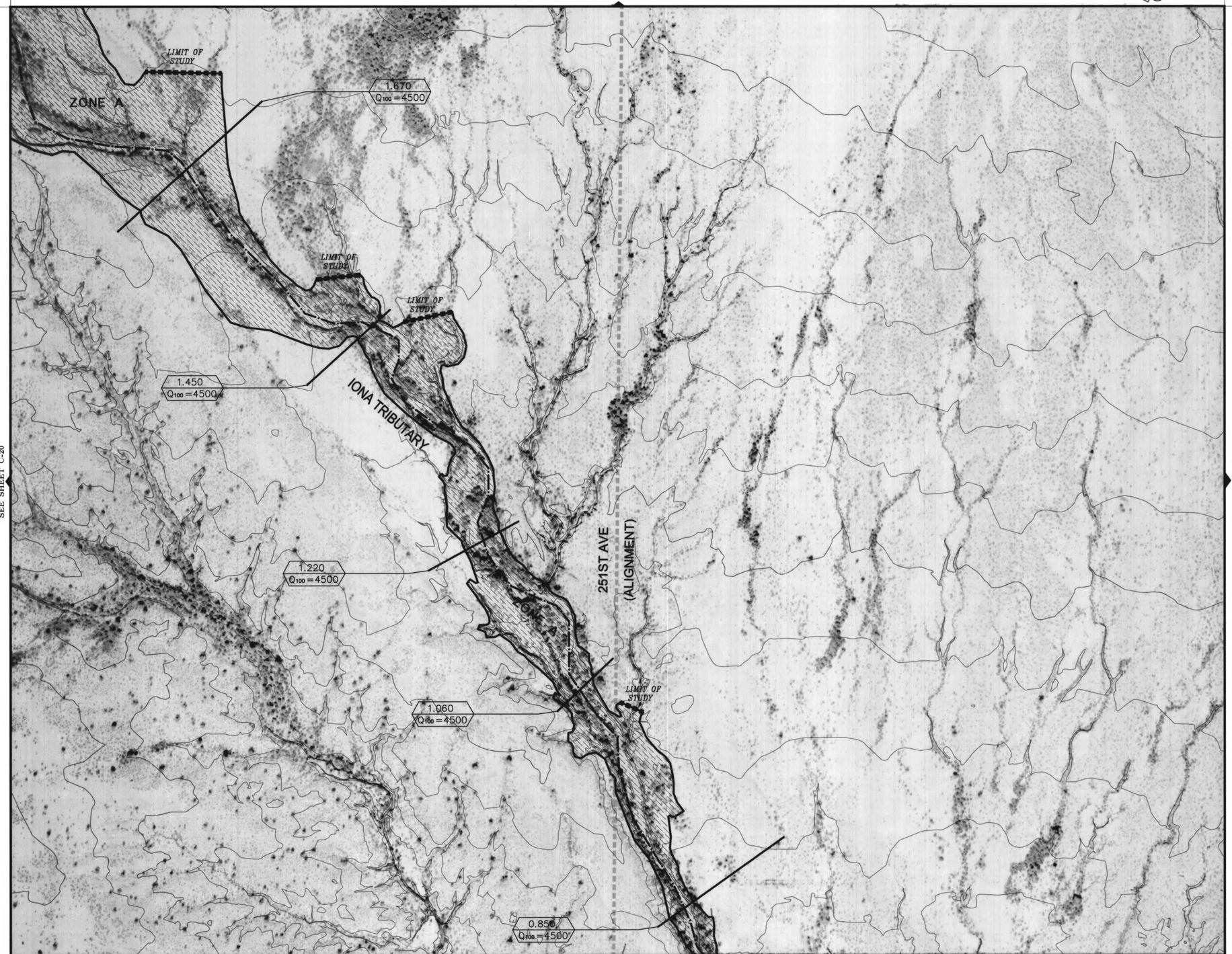
SHEET D-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-D_19.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET D-21

ERM AJ3877



SEE SHEET C-20

SEE SHEET E-20

SEE SHEET D-19

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 = 1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

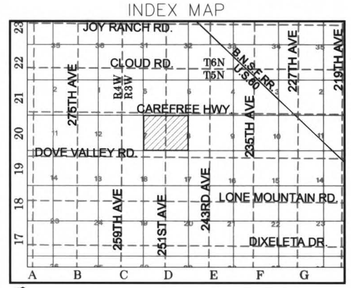
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3877		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 27737 HERNAN A. ARISTIZABAL Date Signed 7/21/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ. 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-20 OF FLOODPLAIN DELINEATION

FILE: P:\001\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-D_20.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET D-22

ERM AJ3877

0.991 / Q_{100}=2440 FP=1823.49 FW=1824.15 IONA WASH NORTH

5.261 / Q_{100}=2440 FP=1823.49 FW=1824.15 IONA WASH EAST SPLIT-1

0.905 / Q_{100}=2440 FP=1819.03 FW=1819.46 IONA WASH NORTH

5.172 / Q_{100}=2440 FP=1819.03 FW=1819.46 IONA WASH EAST SPLIT-1

0.833 / Q_{100}=1330 FP=1814.53 FW=1815.52

0.765 / Q_{100}=1330 FP=1812.11 FW=1812.90

0.682 / Q_{100}=1330 FP=1808.70 FW=1809.42

0.656 / Q_{100}=1330 FP=1807.32 FW=1807.99

0.569 / Q_{100}=1330 FP=1803.64 FW=1804.55

0.492 / Q_{100}=1330 FP=1800.15 FW=1800.98

0.396 / Q_{100}=1330 FP=1796.48 FW=1797.46

0.305 / Q_{100}=1330 FP=1792.40 FW=1793.22

0.219 / Q_{100}=1330 FP=1788.22 FW=1789.01

1.920 / Q_{100}=4500

ZONE AE, FW, ZONE A, IONA WASH NORTH, IONA TRIBUTARY

LIMIT OF DETAILED STUDY, LIMIT OF STUDY

251ST AVE (ALIGNMENT), CAREFREE HWY. (ALIGNMENT)

1820, 1818, 1816, 1814, 1812, 1810, 1808, 1806, 1804, 1802, 1800, 1798, 1796, 1794, 1792, 1790, 1788, 1786

SEE SHEET C-21

SEE SHEET E-21

SEE SHEET D-20

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q_{100}=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

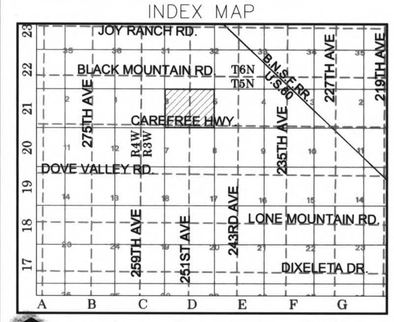
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3877		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/31/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-21 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET D-23

ERM AJ3877

SEE SHEET C-22

SEE SHEET E-22

1.925 FP=1868.34
Q100=3580 FW=1869.32

1.830 FP=1863.24
Q100=3580 FW=1863.96

1.758 FP=1859.74
Q100=3580 FW=1859.74

1.683 FP=1856.31
Q100=3580 FW=1856.32

1.603 FP=1852.13
Q100=3580 FW=1852.10

1.578 FP=1850.15
Q100=1500 FW=1850.32

1.505 FP=1843.94
Q100=1500 FW=1844.92

1.400 FP=1840.95
Q100=1500 FW=1841.43

1.293 FP=1840.17
Q100=2330 FW=1840.22

1.219 FP=1835.41
Q100=2330 FW=1835.67

1.147 FP=1830.98
Q100=2330 FW=1831.54

1.074 FP=1827.43
Q100=2440 FW=1828.12

IONA WASH NORTH

ZONE AE

FW

LIMIT OF DETAILED STUDY

251ST AVE (ALIGNMENT)

BLACK MOUNTAIN RD. (ALIGNMENT)

T6N
T5N

1866 1864 1862 1860 1858 1856 1854 1852 1850 1848 1846 1844 1842 1840 1838 1836 1834 1832 1830 1828 1826

SEE SHEET D-21

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 / Q100=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

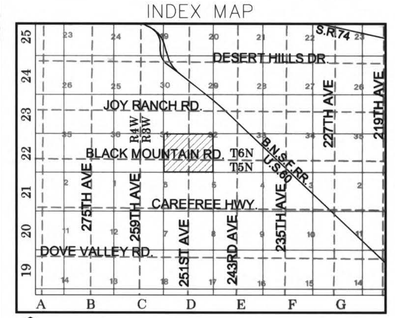
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3877		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certified Professional Land Surveyor — 28737 — HERNAN A. ARISTIZABAL — 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-22 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-D_22.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET D-24

ERM DV0929

SEE SHEET C-23

SEE SHEET E-23

SEE SHEET D-22

2.791 FP=1913.59
Q100=3540 FW=1913.67

2.678 FP=1908.26
Q100=3540 FW=1909.16

2.599 FP=1903.91
Q100=3580 FW=1904.43

2.526 FP=1900.15
Q100=3580 FW=1900.78

2.436 FP=1895.60
Q100=3580 FW=1895.60

2.324 FP=1889.61
Q100=3580 FW=1889.95

2.227 FP=1884.83
Q100=3580 FW=1885.11

2.140 FP=1880.45
Q100=3580 FW=1880.52

2.080 FP=1875.73
Q100=3580 FW=1876.67

2.000 FP=1872.42
Q100=3580 FW=1873.20

1.925 FP=1868.34
Q100=3580 FW=1869.32

LIMIT OF DETAILED STUDY

B.N.S.F.RR.

U.S.60

ZONE AE

FW

JOY RANCH RD. (ALIGNMENT)

251ST AVE (ALIGNMENT)

IONA WASH NORTH

1912 1908 1904 1900 1896 1892 1888 1886 1882 1880 1878 1874 1870

2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0

30 29 31 32

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

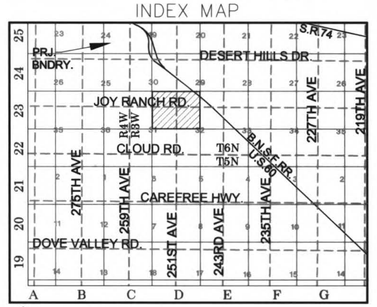
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0929		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Registered Professional Engineer — Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 3/7/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-23 OF FLOODPLAIN DELINEATION

FILE: P:\30\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-D_23.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

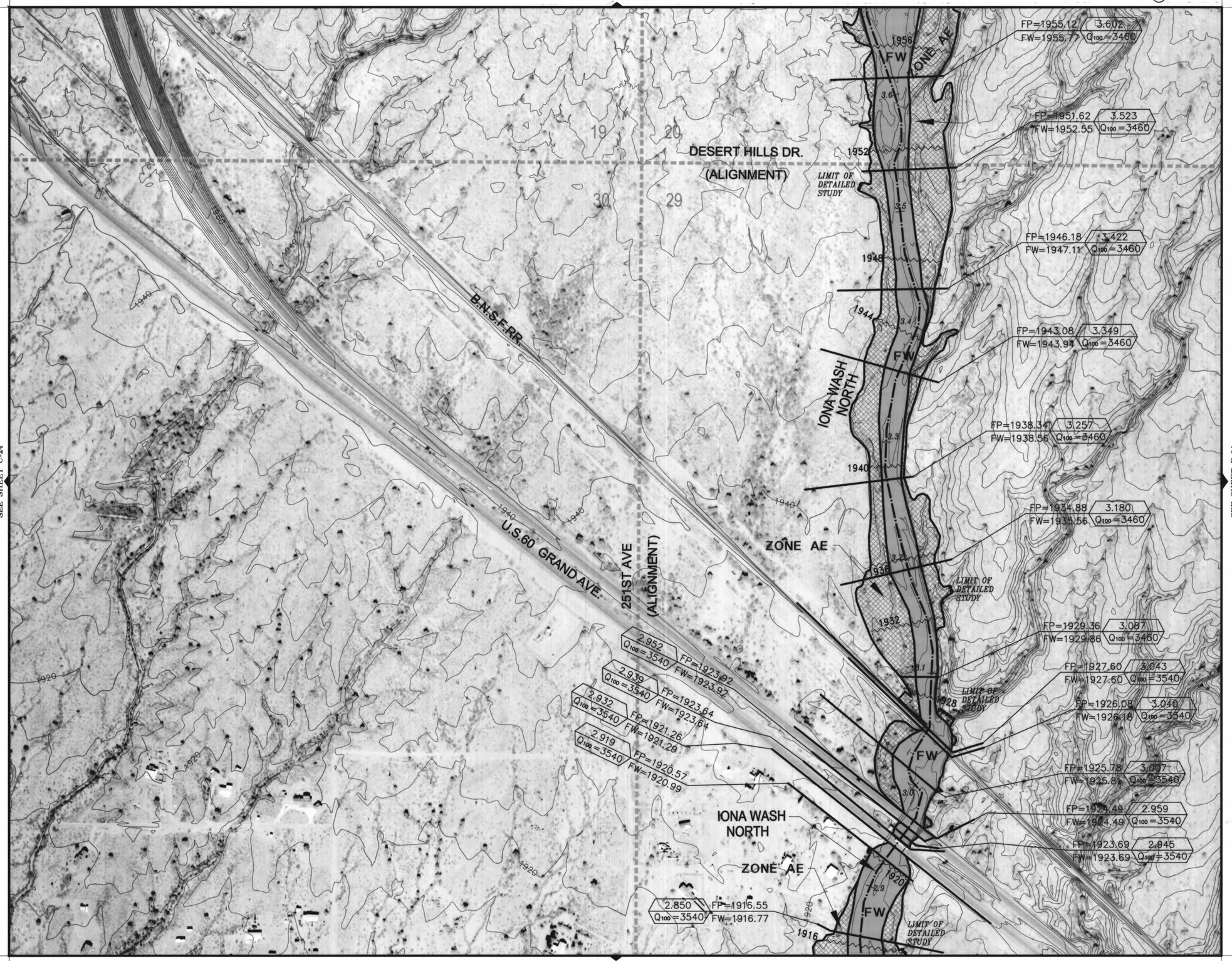
SEE SHEET D-25

ERM DV0929

SEE SHEET C-24

SEE SHEET E-24

SEE SHEET D-23



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

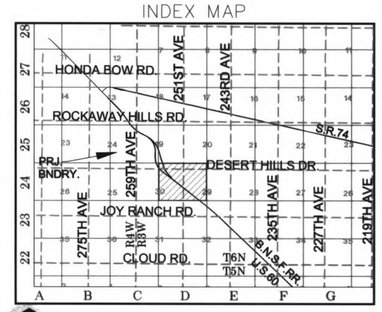
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0929		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.05 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL Date Signed 1/7/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-24 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSJ)\Task\hydraulics\FP-D_24.dwg DATE: 07/27/05

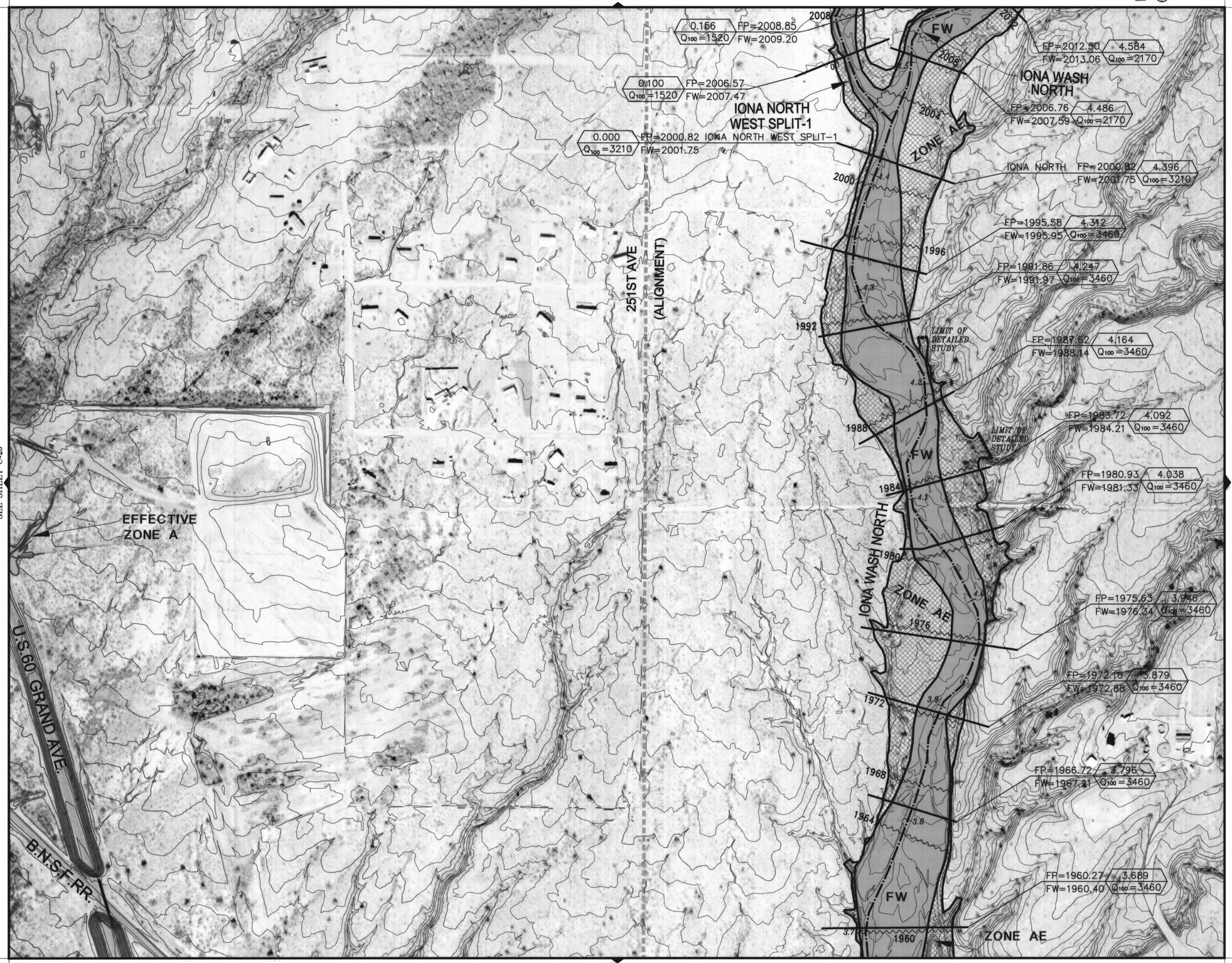
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET D-26

ERM DV0929

SEE SHEET C-25

SEE SHEET E-25



SEE SHEET D-24

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-D_25.dwg DATE: 07/27/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

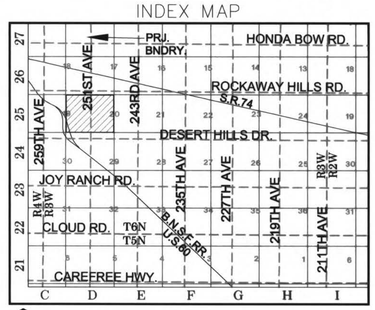
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0929		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.05 FEET = NAVD 88.

Certificate No. 28737 HERNAN A. ARISTIZABAL Date Signed 7/27/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-25 OF FLOODPLAIN DELINEATION

SEE SHEET D-27

ERM AJ3887

SEE SHEET C-26

SEE SHEET E-26

EFFECTIVE ZONE A

EFFECTIVE ZONE A

S.R.74

5.018 FP=2038.86
Q_{100}=3100 FW=2039.49

4.925 FP=2032.50
Q_{100}=3100 FW=2033.47

0.549 FP=2032.50 IONA NORTH WEST SPLIT-1
Q_{100}=3100 FW=2033.47

4.826 FP=2026.07
Q_{100}=2170 FW=2026.84

0.450 FP=2026.70
Q_{100}=1520 FW=2027.55

4.755 FP=2022.28
Q_{100}=2170 FW=2023.10

0.388 FP=2023.61
Q_{100}=1520 FW=2024.50

0.318 FP=2018.70
Q_{100}=1520 FW=2018.87

0.224 FP=2013.60
Q_{100}=1520 FW=2014.06

0.156 FP=2008.85
Q_{100}=1520 FW=2009.20

FP=2017.39 4.664
FW=2018.36 Q_{100}=2170

FP=2012.50 4.584
FW=2013.06 Q_{100}=2170

IONA NORTH

IONA WASH NORTH ZONE AE

IONA NORTH WEST SPLIT-1

IONA WASH NORTH ZONE AE

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

FW

FW

FW

2050

2032

2028

2024

2020

2016

2012

2017

4.9

5.0

4.8

4.7

4.1

0.3

0.4

0.4

1.6

251ST AVE (ALIGNMENT)

ROCKAWAY HILLS RD. (ALIGNMENT)

18

17

19

20

SEE SHEET D-25

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 / Q_{100}=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

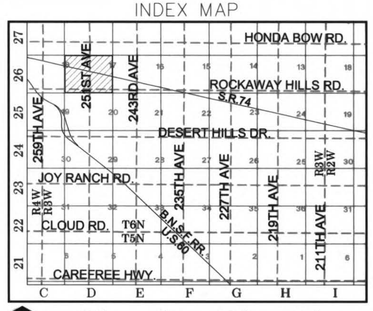
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3887		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.05 FEET = NAVD 88.

Certificate No. 39737 HERNAN A. ARISTIZABAL Date Signed 1/7/06 ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix. AZ 85008.3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET D-26 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-D_26.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET E-12

ERM AJ3861

T4N-R3W-S16

Zone AE

T4N-R3W-S16

Zone AE

Zone AE

ZONE AH
EL. 1545.10

Floodplain Mapped per Engineering Judgement

LIMIT OF DETAILED STUDY

CENTRAL ARIZONA PROJECT CANAL

RM0.599 Q 2,710cfs FP 1557.78 FW1557.78

RM0.834 Q 2,710cfs FP 1556.01 FW1556.01

RM0.207 Q 2,710cfs FP 1554.59 FW1554.59

RM0.602 Q 2,710cfs FP 1554.59 FW1554.59

RM0.506 Q 3,140cfs FP 1553.72 FW1553.72

RM0.409 Q 3,140cfs FP 1552.91 FW1552.93

RM0.297 Q 3,140cfs FP 1550.25 FW1550.46

RM0.221 Q 3,140cfs FP 1548.21 FW1548.69

RM0.102 Q 3,140cfs FP 1547.88 FW1548.40

RM0.000 Q 3,140cfs FP 1547.23 FW1547.75

Location of Possible Overtopping of CAP Canal

Floodplain Mapped per Engineering Judgement

Effective Zone A per FIRM panels 1105H and 1115H

243RD AVE. ALIGNMENT

Effective Zone A per FIRM panels 1105H and 1115H

DEER VALLEY ROAD ALIGNMENT

17 16 20 21

SEE SHEET D-11

SEE SHEET F-11
MATCH SHEET AT TRIANGLE

SEE SHEET E-10

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\MMARI0000044\0400CAD\DWG\EP\SHEETS\EP-WORKMAPS\E-11.dwg Nbl Oct 06, 2006 7:53:15am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029
and
WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029

WITTMANN PHASE 2-FCD2004C066

EFFECTIVE ZONE A

EFFECTIVE ZONE AE

EFFECTIVE ZONE AH

EFFECTIVE FLOODWAY

ZONE A

ZONE AH

ZONE AE

FLOODWAY (FW)

ZONE AO

ZONE AE FLOODPLAIN (FP)

ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE: 13.1 / 12.4

CROSS SECTION: 2,199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed ... ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed 11 Oct 2006 ARIZONA, U.S.A.

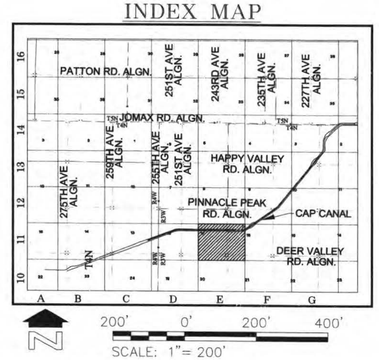
NOTE:
1. NGVD 29 + 1.92 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus
2555 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2006
Fax 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/ RAS	07/05	FEB/ NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/ HAA	07/05	FEB/ NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-11 OF FLOODPLAIN DELINEATION

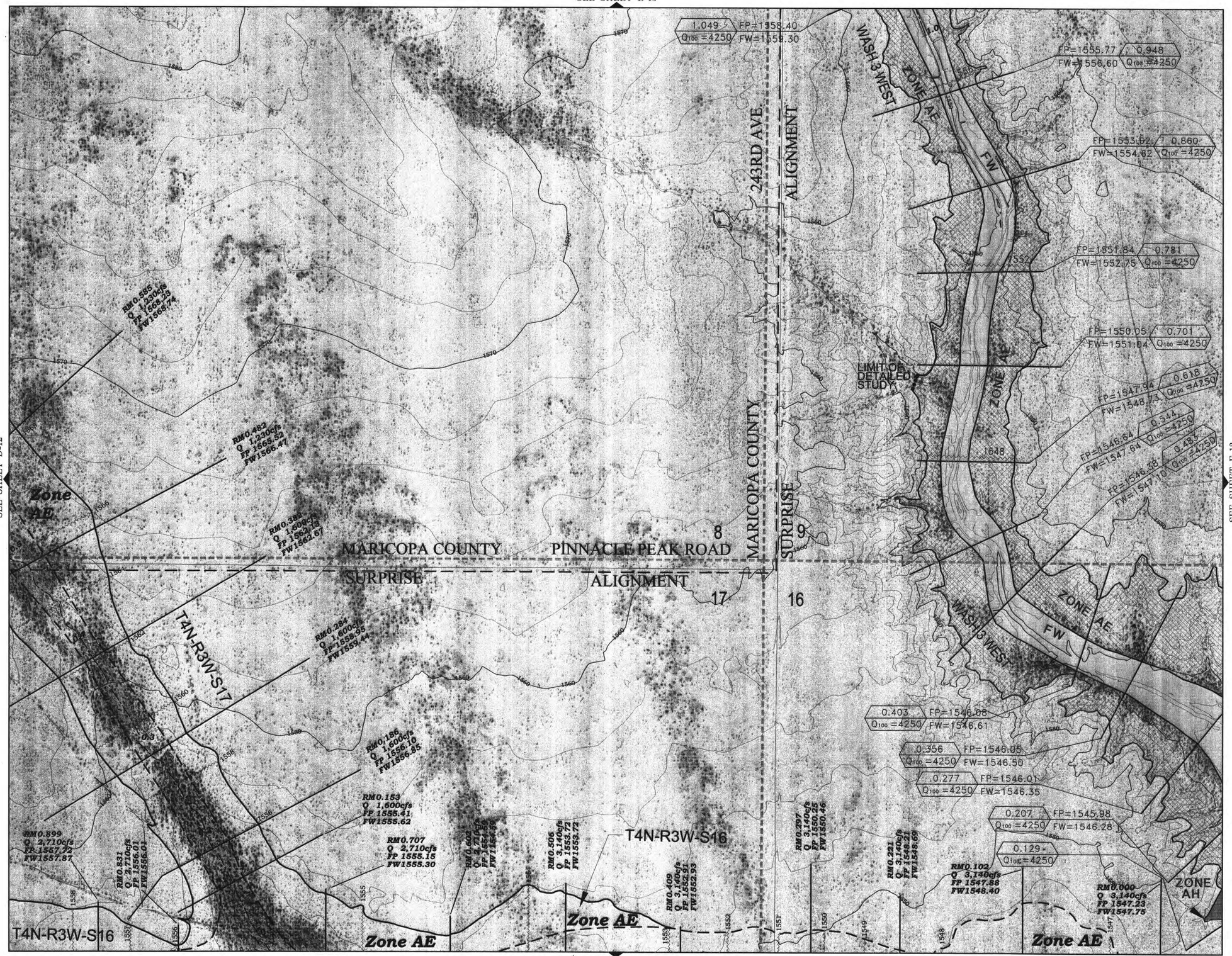
SEE SHEET E-13

ERM AJ3861

SEE SHEET D-12

SEE SHEET F-12

SEE SHEET E-11



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029	WITTMANN PHASE 2-FCD2004C066
EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO
	ZONE AE FLOODPLAIN (FP)
	ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 / Q100 =1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed 9/26/06 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed 9/11/06 ARIZONA, U.S.A.

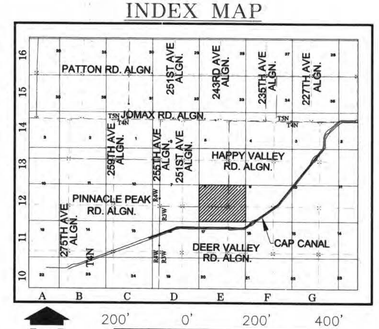
NOTE:
1. NGVD 29 + 1.91 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™ 2355 N. 44th Street Suite 135 Phoenix, AZ 85008-3279 Tel 602.244.2666 Fax 602.244.8947 WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC. 2141 East Highland Avenue, Suite 200 Phoenix Arizona 85016 Phone: 602.678.5151

		ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06	FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
DESIGN CHK.	HAA	07/05	FEB	07/06	
PLANS	KAB	07/05	NBL	07/06	RECOMMENDED BY: DATE
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06	APPROVED BY: DATE
SUBMITTED BY: DATE:					CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-12 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI00000044\04000AD\DWG\EP\SHEETS\FP-WORKMAPS\E-12.dwg Nbl Oct 05, 2006 1:43:50pm

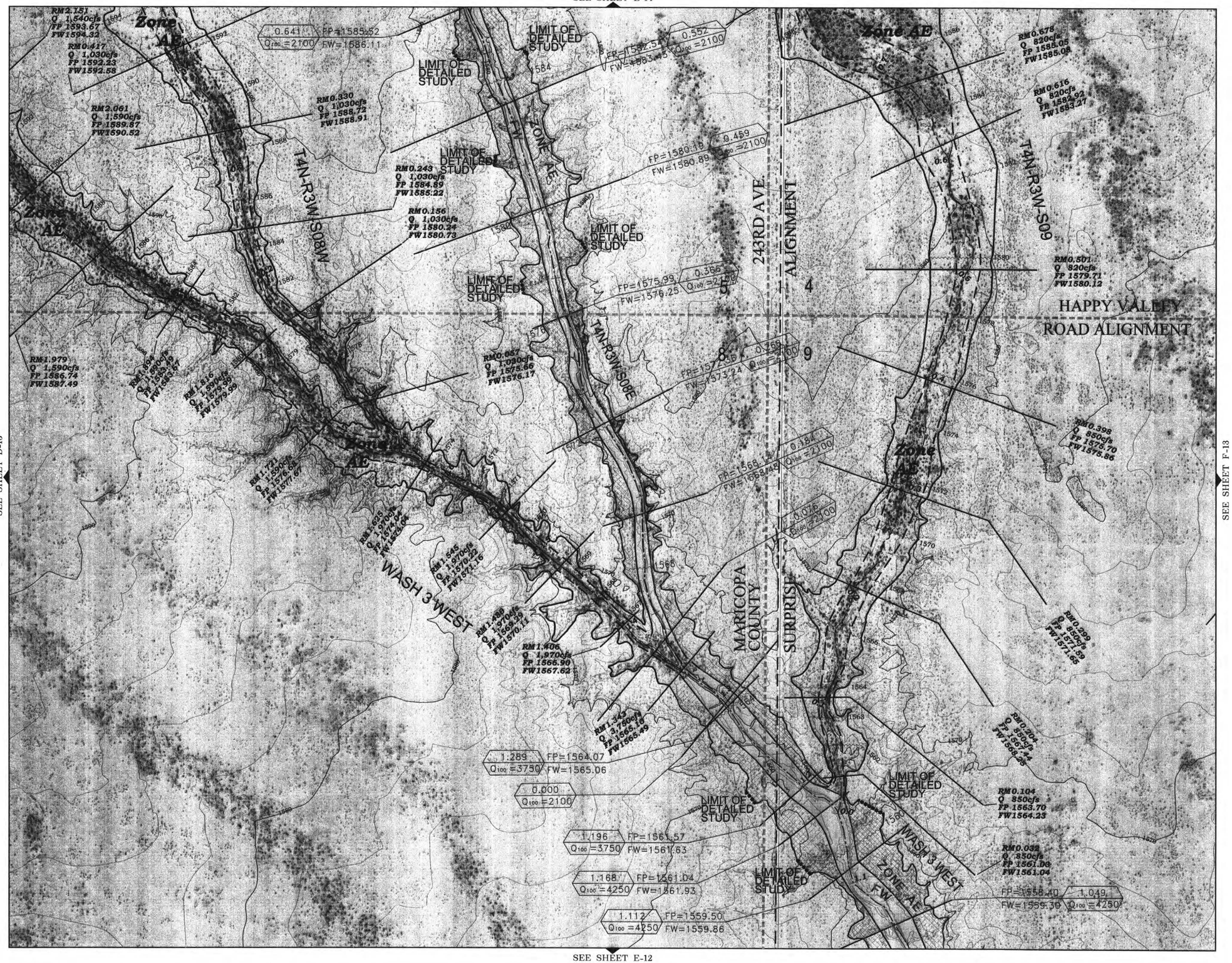
SEE SHEET E-14

ERM AJ3861

SEE SHEET D-13

SEE SHEET F-13

SEE SHEET E-12



1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI00000044\0400CAD\DWG\EP\SHEETS\EP--WORKMAPS\E--13.dwg NBl Oct 05, 2006 1:55:55pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029

and

WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029	WITTMANN PHASE 2-FCD2004C066
EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO
	ZONE AE FLOODPLAIN (FP)
	ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed 4/5/06 ARIZONA, U.S.A.

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed 6/8/06 ARIZONA, U.S.A.

NOTE:

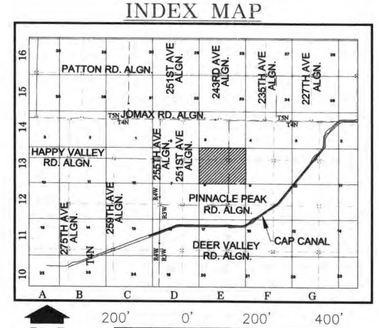
1. NGVD 29 + 1.92 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1" = 200'

Entellus
2255 N. 44th Street, Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2500
Fax 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

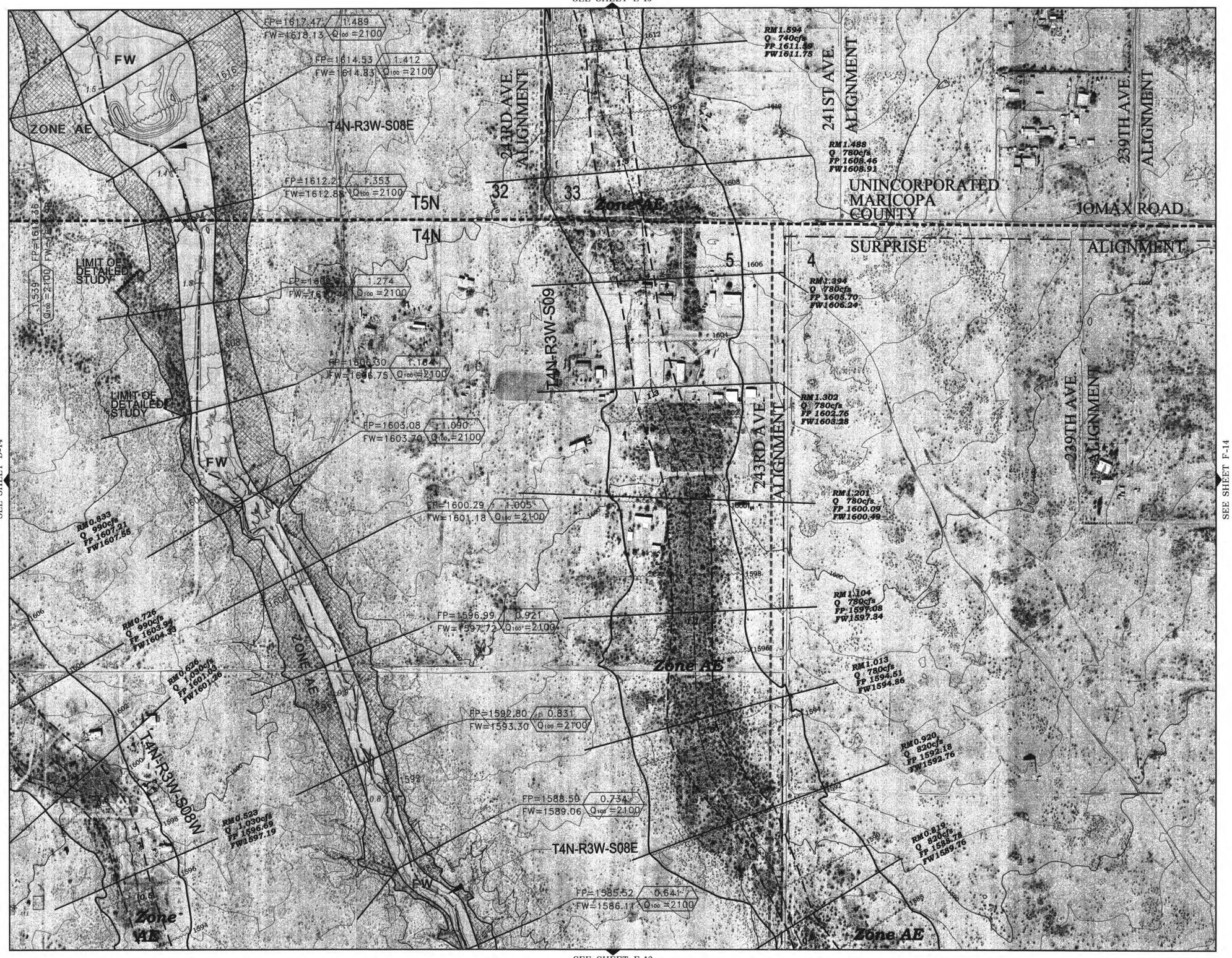
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-13 OF FLOODPLAIN DELINEATION



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)	
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)	
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERMAN A. ARISTIZABAL Date Signed 3 April 2007 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23989 FRANK EDWARD BROWN Date Signed 3 April 2007 ARIZONA, U.S.A.

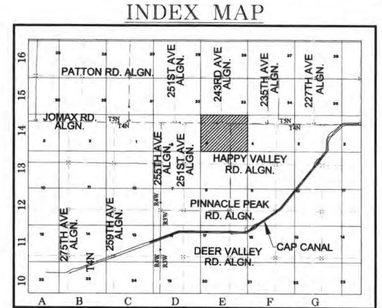
NOTE:
1. NGVD 29 + 1.93 FEET = NAVD 88.
2. FLOODWAY REVISED 04/07–SEE ADDENDUM LOCATED IN TDN

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus
2255 N. 44th Street Suite 135
Phoenix, AZ 85008-3279
Tel 602.244.3666
Fax 602.244.3647
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

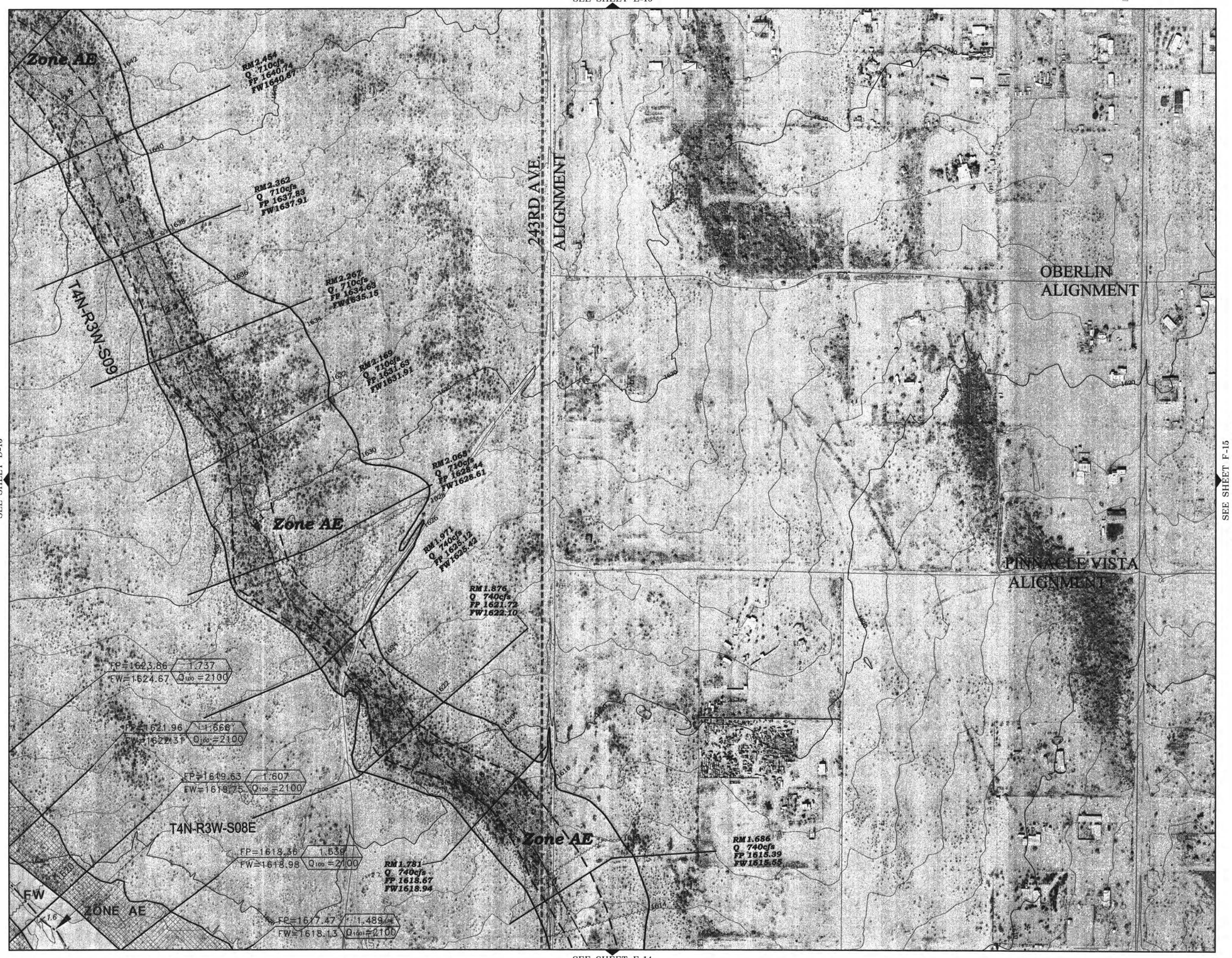
SHEET E-14 OF FLOODPLAIN DELINEATION

P:\M\MAR00000044\04000A0\DWG\EP\SHEETS\FP-WORKMAPSE-14.dwg nbl Apr 03, 2007 9:00:10am

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET E-16

ERM AJ3873



SEE SHEET D-15

SEE SHEET F-15
MATCH SHEET AT TRIANGLE

SEE SHEET E-14

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\MMARIC00000044\0400CAD\DWG\FP\SHEETS\FP-WORKMAPSYE-15.dwg nbl Apr 03, 2007 9:09:27am

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

WITTMANN PHASE 2-FCD2004C066

ZONE AE FLOODPLAIN (FP)
ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE: 3.7 / 1.4

CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

Registered Professional Engineer (Civil) CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed 4/3/07 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer (Civil) CERTIFICATE NO. 23969 FRANK EDWARD BROWN Date Signed 4 April 2007 ARIZONA, U.S.A.

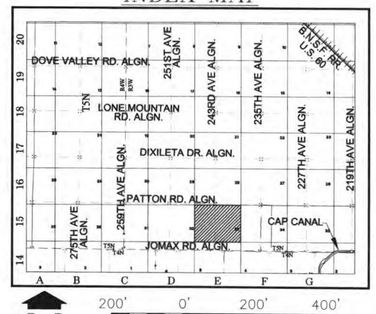
NOTE:
1. NGVD 29 + 1.94 FEET = NAVD 88.
2. FLOODWAY REVISED 04/07-SEE ADDENDUM LOCATED IN TON

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2355 N. 44th Street Suite 135
Phoenix, AZ 85008-3279
Tel 602.244.2006
Fax 602.244.8047
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/ RAS	07/05	FEB/ NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/ HAA	07/05	FEB/ NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE:

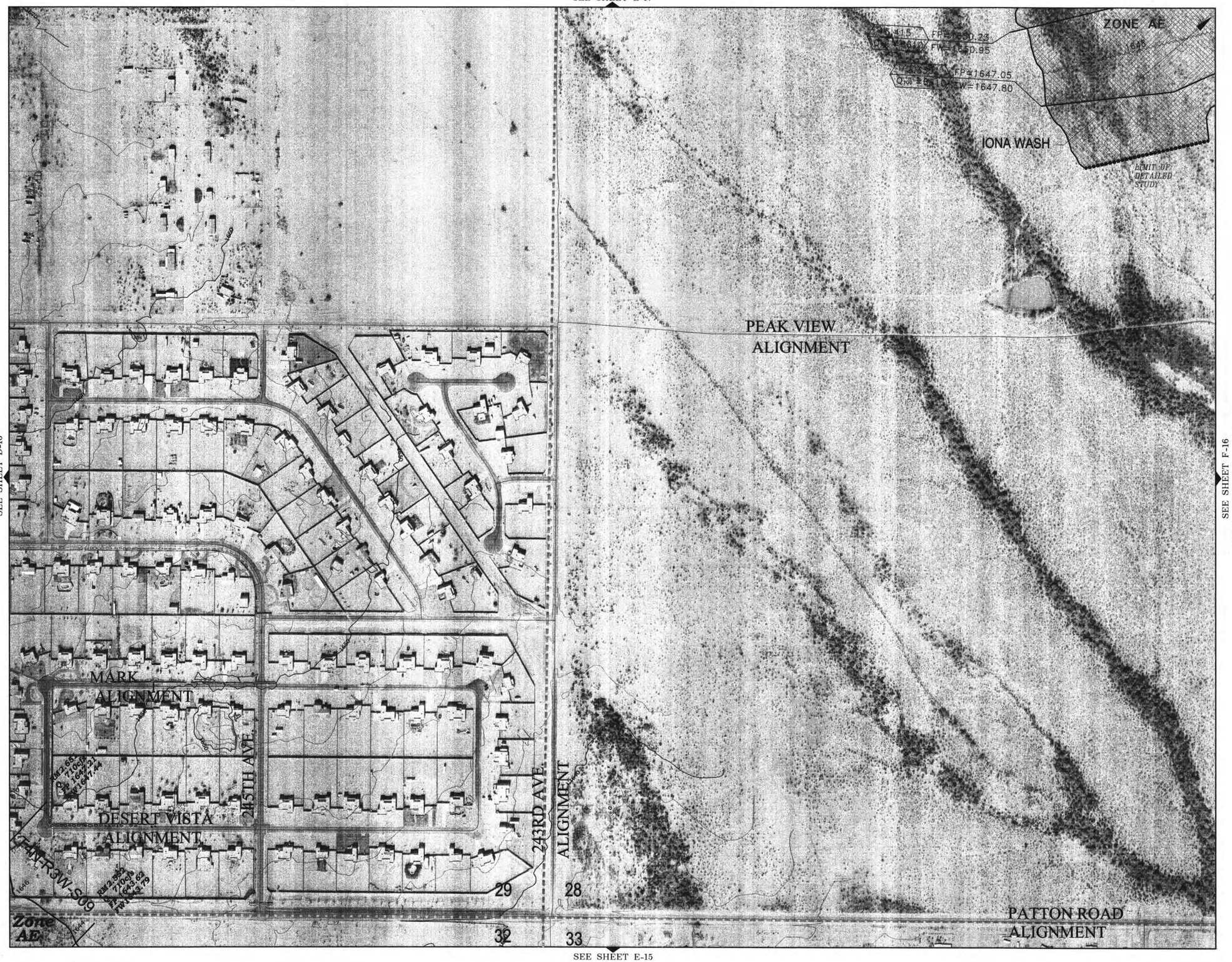
APPROVED BY: DATE:

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-15 OF FLOODPLAIN DELINEATION

MATCH SHEET AT TRIANGLE
SEE SHEET E-17

ERM AJ3873



SEE SHEET D-16

SEE SHEET F-16
MATCH SHEET AT TRIANGLE

SEE SHEET E-15

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI00000044\0400CAD\DWG\EP\SHEETS\EP-WORKMAPS\E-16.dwg Nbl Oct 05, 2006 2:33:39pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)	
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)	
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE: 21.7 — 11.4
CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56
RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029
Registered Professional Engineer (Civil) 20737 HERNAN A. ARISTIZABAL Date Signed 10/4/06 ARIZONA, U.S.A.

DAVID EVANS and ASSOCIATES INC.-FCD2004C066
Registered Professional Engineer (Civil) 23969 FRANK EDWARD BROWN Date Signed 10/4/2006 ARIZONA, U.S.A.

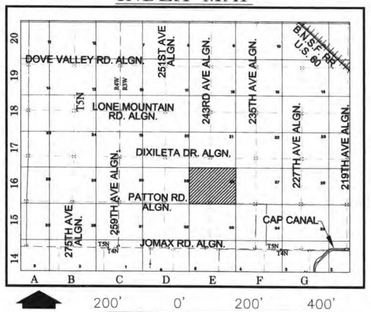
NOTE:
1. NGVD 29 + 1.95 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus
2355 N. 44th Street, Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

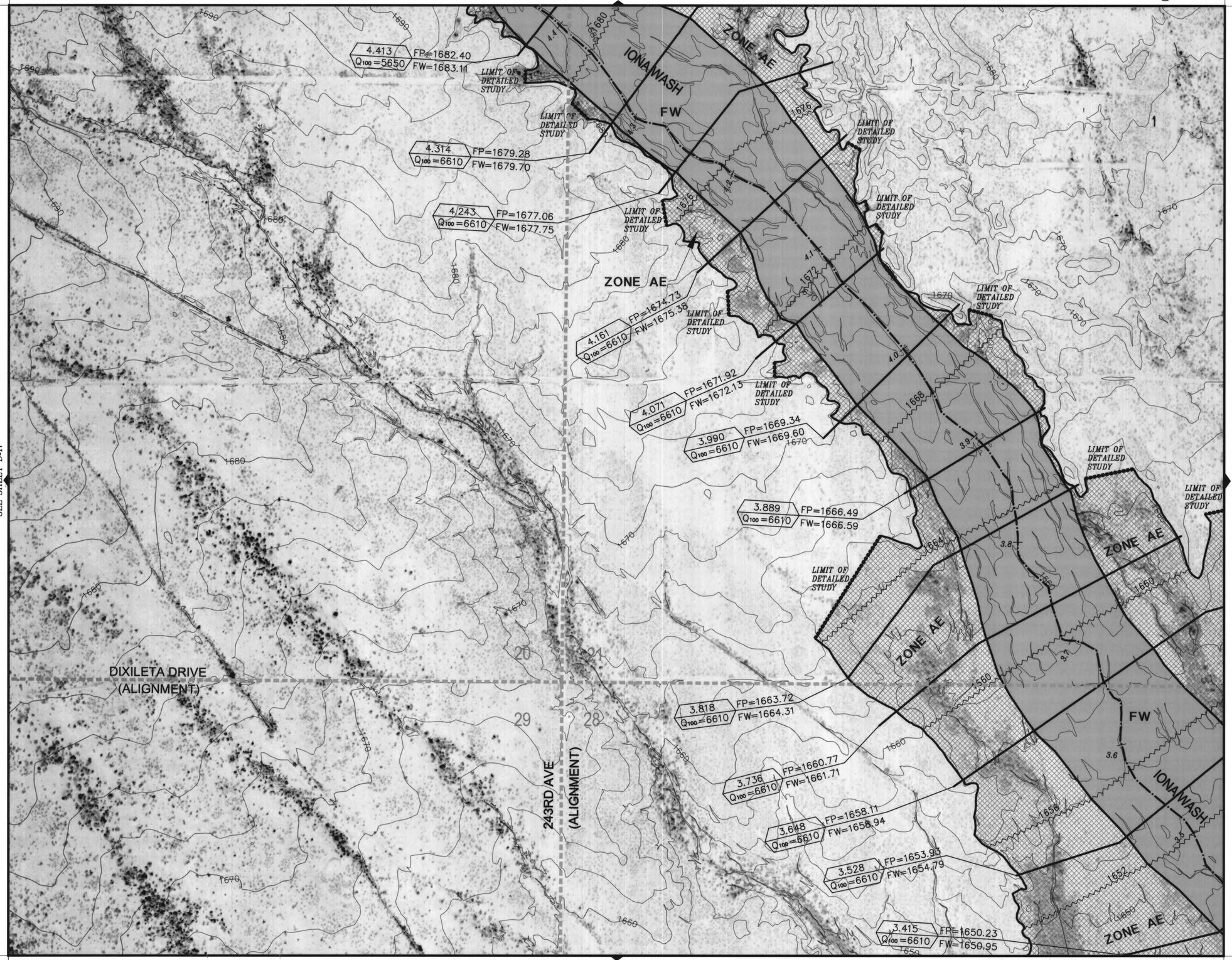
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-16 OF FLOODPLAIN DELINEATION

SEE SHEET E-18

ERM AJ3873



SEE SHEET D-17

SEE SHEET F-17

SEE SHEET E-16

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

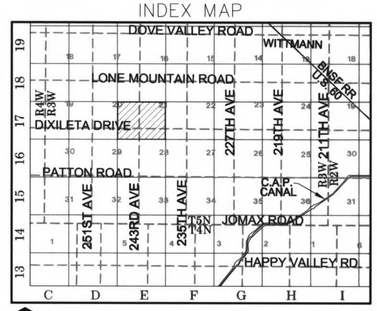
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE No. 37737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-17 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-E_17.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET E-19

ERM AJ3873

SEE SHEET D-18

SEE SHEET F-18

EFFECTIVE IONA WASH ZONE AE & FW

ZONE AO

IONA EAST SPLIT-1

2.545 Q100=1000

243RD AVE (ALIGNMENT)

LONE MOUNTAIN ROAD (ALIGNMENT)

FP=1696.69 FW=1697.44 4.901 Q100=5650

FP=1695.44 FW=1696.42 4.844 Q100=5650

FP=1693.59 FW=1693.75 4.779 Q100=5650

FP=1691.08 FW=1691.57 4.696 Q100=5650

FP=1690.43 FW=1690.64 4.629 Q100=5650

FP=1684.97 FW=1685.81 4.479 Q100=5650

FP=1682.40 FW=1683.11 4.413 Q100=5650

2.054 Q100=1000 FP=1681.66 FW=1682.39

FP=1679.28 FW=1679.70 4.374 Q100=6610

4.547 Q100=5650 FP=1687.45 FW=1688.43

IONA WASH

ZONE AE

FW

LIMIT OF DETAILED STUDY

LIMIT OF STUDY

1700 1696 1692 1690 1688 1684 1680

17 16 20 21

SEE SHEET E-17

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\3001\310\30032 (Wittmann ADMSU)\Task\hydraulics\FP-E_18.dwg DATE: 07/26/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

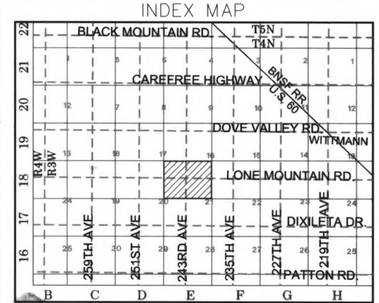
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed 1/7/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-18 OF FLOODPLAIN DELINEATION

SEE SHEET E-20

ERM AJ3873

SEE SHEET D-19

SEE SHEET F-19

ZONE A

3.419
Q100 = 290

1740

LIMIT OF DETAILED STUDY

ZONE AO

DOVE VALLEY RD.
(ALIGNMENT)

8 9 17 16

LIMIT OF STUDY

IONA EAST SPLIT-1

LIMIT OF STUDY

3.130
Q100 = 440

LIMIT OF STUDY

EFFECTIVE
IONA WASH
ZONE AE & FW

IONA TRIBUTARY

0.000
Q100 = 4500

1720

LIMIT OF STUDY

2.828
Q100 = 1000

LIMIT OF DETAILED STUDY

LIMIT OF STUDY

243RD AVE
(ALIGNMENT)

ZONE AO

IONA EAST SPLIT-1

ZONE A

2.545
Q100 = 1000

SEE SHEET E-18

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P-300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-E_19.dwg DATE: 07/26/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 = 1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

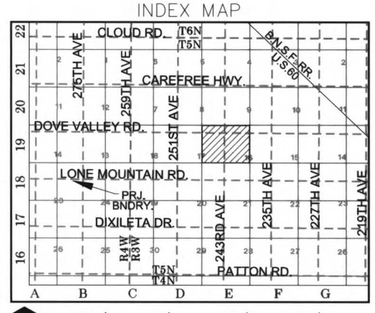
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 37737 HERNAN A. ARISTIZABAL Date Signed 7/7/06 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET E-19 OF FLOODPLAIN DELINEATION

SEE SHEET E-21

ERM AJ3873

IONA WASH NORTH
ZONE AE
LIMIT OF DETAILED STUDY

ZONE AO

FP=1781.65
FW=1782.55
0.104
Q_{100}=1330

0.006
Q_{100}=1330

ZONE AO

EFFECTIVE
IONA WASH
ZONE AE & FW

4.349
Q_{100}=190

LIMIT OF STUDY

LIMIT OF STUDY

IONA EAST SPLIT-1

ZONE A

LIMIT OF STUDY

4.047
Q_{100}=290

ZONE AO

243RD AVE
(ALIGNMENT)

3.759
Q_{100}=290

IONA EAST SPLIT-1

ZONE AO

0.493
Q_{100}=660

ZONE A

LIMIT OF STUDY

0.401
Q_{100}=660

CIRCLE CITY AREA WASH-1

EFFECTIVE
CIRCLE CITY
AREA WASH-1
ZONE AE

SEE SHEET D-20

SEE SHEET F-20

SEE SHEET E-19

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-E_20.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

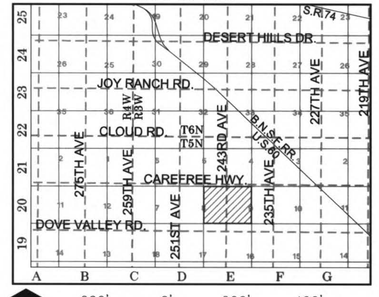
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 27737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-20 OF FLOODPLAIN DELINEATION

SEE SHEET E-22

ERM AJ3873

SEE SHEET D-21

SEE SHEET F-21

IONA WASH NORTH FW

IONA EAST SPLIT-1

IONA E.S.-1 FP=1823.91 FW=1824.28 5.261 Q100=4550

IONA WASH NORTH FP=1823.74 FW=1823.98 0.991 Q100=4550

IONA WASH NORTH FP=1818.21 FW=1818.34 0.905 Q100=1330

IONA E.S.-1 FP=1820.25 FW=1820.41 5.172 Q100=700

IONA E.S.-1 FP=1818.27 FW=1816.53 5.108 Q100=700

IONA WASH NORTH FP=1814.53 FW=1815.49 0.833 Q100=1330

FP=1813.12 FW=1814.60 5.056 Q100=700

FP=1812.11 FW=1812.92 0.765 Q100=1330

FP=1809.66 FW=1809.96 4.977 Q100=700

FP=1808.70 FW=1809.42 0.682 Q100=1330

FP=1807.32 FW=1807.99 0.656 Q100=1330

FP=1806.16 FW=1806.26 4.895 Q100=700

FP=1803.64 FW=1804.55 0.569 Q100=1330

FP=1802.82 FW=1803.60 4.808 Q100=700

FP=1798.80 FW=1799.63 4.732 Q100=700

FP=1800.15 FW=1800.98 0.492 Q100=1330

FP=1795.43 FW=1796.16 4.638 Q100=700

FP=1796.48 FW=1797.46 0.396 Q100=1330

FP=1792.40 FW=1793.22 0.305 Q100=1330

FP=1791.23 FW=1792.23 4.539 Q100=700

FP=1788.05 FW=1788.76 4.460 Q100=190

ZONE AE Q100=1330 FW=1789.01

ZONE A

ZONE AE

ZONE A

1.454 FP=1829.16 Q100=520 FW=1829.93

1.373 FP=1824.22 Q100=520 FW=1824.24

1.281 FP=1817.80 Q100=520 FW=1818.09

1.208 FP=1814.10 Q100=660 FW=1814.95

1.121 FP=1810.36 Q100=660 FW=1810.39

1.030 FP=1805.18 Q100=660 FW=1805.73

0.977 FP=1803.02 Q100=660 FW=1802.99

0.894 FP=1798.39 Q100=660 FW=1799.15

0.829 FP=1794.37 Q100=660 FW=1795.30

0.707 FP=1789.87 Q100=660 FW=1790.17

0.629 FP=1785.93 Q100=660 FW=1786.62

0.555 FP=1781.73 Q100=660 FW=1781.74

0.493 Q100=660

CIRCLE CITY AREA WASH-1

IONA WASH NORTH

IONA EAST SPLIT-1

CIRCLE CITY AREA WASH-1

243RD AVE (ALIGNMENT)

CAREFREE RD. (ALIGNMENT)

LIMIT OF DETAILED STUDY

ZONE A

ZONE AE

ZONE AO

FW

1822 1818 1814 1810 1806 1802 1798 1794 1790 1786 1782

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

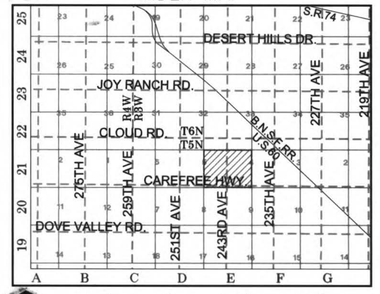
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL Date Signed 7/27/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-21 OF FLOODPLAIN DELINEATION

SEE SHEET E-20

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\3001\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-E_21.dwg DATE: 07/27/05

SEE SHEET E-23

ERM DV0929

SEE SHEET D-22

SEE SHEET F-22

EFFECTIVE CIRCLE CITY AREA WASH 7 ZONE AE & FW

EFFECTIVE CIRCLE CITY AREA WASH 6 ZONE AE & FW

EFFECTIVE ZONE A

B.N.S.F.RR.

U.S.60 (GRAND AVE.)

EFFECTIVE TRILBY WASH ZONE AE & FW

243RD AVE (ALIGNMENT)

FP=1840.95 1.105
FW=1841.43 Q_{100}=1300

ZONE AE

LIMIT OF DETAILED STUDY

FP=1840.17 1.293
FW=1840.22 Q_{100}=2330

BLACK MOUNTAIN RD. / CLOUD RD. (ALIGNMENT)

T5N

FP=1835.41 1.219
FW=1835.67 Q_{100}=2330

FW

FP=1830.98 1.147
FW=1831.54 Q_{100}=2330

IONA WASH NORTH ZONE AE

FP=1827.43 1.074
FW=1828.12 Q_{100}=2440

LIMIT OF DETAILED STUDY

FP=1846.31 1.738
FW=1846.27 Q_{100}=520

T6N
T5N

FP=1843.34 1.687
FW=1843.65 Q_{100}=520

FP=1838.66 1.610
FW=1839.22 Q_{100}=520

C.C. AREA WASH-1

FP=1833.96 1.539
FW=1834.03 Q_{100}=520

FP=1829.16 1.454
FW=1829.93 Q_{100}=520

SEE SHEET E-21

FILE: P:\300_310\310032 (Wittmann ADMS)\Tasks\Hydraulics\FP-E_22.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

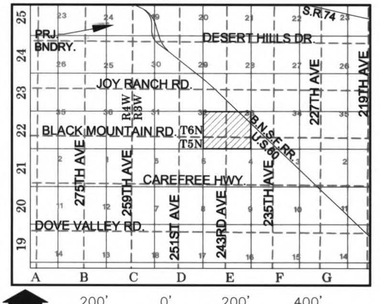
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0929		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Registered Professional Engineer — 37737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-22 OF FLOODPLAIN DELINEATION

SEE SHEET E-27

ERM AJ3887

EFFECTIVE ZONE A

EFFECTIVE ZONE A

FP=2038.86 5.018
FW=2039.49 Q_{100}=3100

LIMIT OF DETAILED STUDY

S.R.74

IONA WASH NORTH

2120

2100

2080

2080

EFFECTIVE ZONE A

EFFECTIVE ZONE A

243RD AVE (ALIGNMENT)

ROCKAWAY HILLS RD. (ALIGNMENT)

17 16 20 21

SEE SHEET D-26

SEE SHEET F-26

SEE SHEET E-25

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-E_26.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 / Q_{100}=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

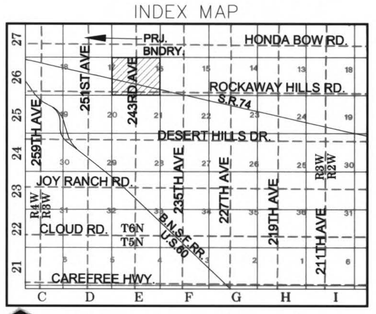
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3887		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.05 FEET = NAVD 88.

CERTIFICATE OF SURVEY — 38737 HERNAN A. ARISTIZABAL — Date Signed 1/31/07 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

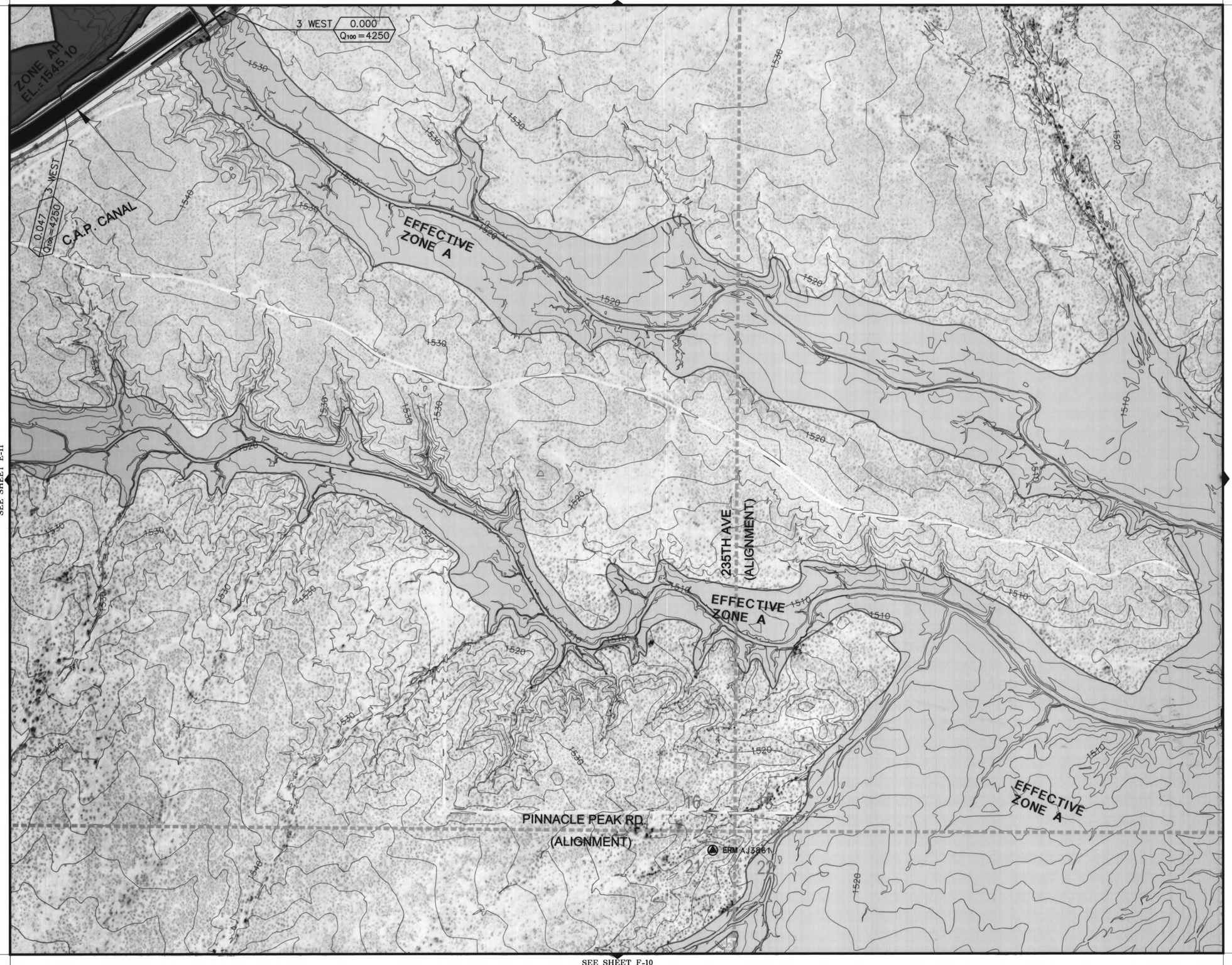
	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET E-26 OF FLOODPLAIN DELINEATION

SEE SHEET F-12



SEE SHEET E-11

SEE SHEET G-11

SEE SHEET F-10

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199, Q100 =1270, FP=1400.55, FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

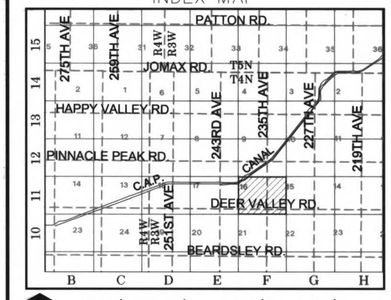
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.344.3947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-11 OF FLOODPLAIN DELINEATION

FILE: P:\301\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-F_11.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-13

ERM AJ3861

SEE SHEET E-12

SEE SHEET G-12
MATCH SHEET AT TRIANGLE

SEE SHEET F-11
MATCH SHEET AT TRIANGLE

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02). 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\MWAR100000044\0400CAD\DWG\LEP\SHEETS\FP-WORKMAPS\F-12.dwg Nbl Oct 05, 2006 3:45:57pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029 | WITTMANN PHASE 2-FCD2004C066

- EFFECTIVE ZONE A
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE AH
- EFFECTIVE FLOODWAY
- ZONE A
- ZONE AH
- ZONE AE
- FLOODWAY (FW)
- ZONE AO
- ZONE AE FLOODPLAIN (FP)
- ZONE AE FLOODWAY (FW)
- HYDRAULIC BASE LINE
- CROSS SECTION: 2.199 (Q100=1270) FP=1400.55 FW=1400.56
- RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

ENTELLUS-FCD2002C029 | DAVID EVANS and ASSOCIATES INC.-FCD2004C066

PRIMATECH-FCD2004C066

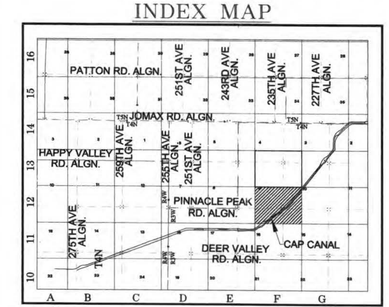
NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N
200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™ 2255 N. 44th Street Suite 135, Phoenix, AZ 85008-3279, Tel 602.244.2566, Fax 602.244.8947, WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY: DATE:
SHEET F-12 OF FLOODPLAIN DELINEATION

SEE SHEET F-14

ERM AJ3861

SEE SHEET E-13

SEE SHEET G-13

SEE SHEET F-12

LIMIT OF DETAILED STUDY

HAPPY VALLEY ROAD ALIGNMENT

T4N-R3W-S10W REACH-1

235TH AVE ALIGNMENT

T4N-R3W-S10W REACH-2

T4N-R3W-S10N

ZONE AH EL. 1553.48

Zone AE

RM0.705 Q 930cfs FP 1571.04 FW1571.45

RM0.913 Q 1,200cfs FP 1571.41

RM0.590 Q 930cfs FP 1568.07 FW1568.64

RM0.501 Q 1,200cfs FP 1567.98

RM0.706 Q 1,200cfs FP 1565.17

RM0.488 Q 930cfs FP 1565.56 FW1565.88

RM0.384 Q 930cfs FP 1562.75 FW1563.59

RM0.279 Q 930cfs FP 1559.68 FW1560.11

RM0.601 Q 1,200cfs FP 1562.18

RM0.184 Q 930cfs FP 1557.00 FW1557.67

RM0.514 Q 1,200cfs FP 1559.21

RM0.072 Q 930cfs FP 1553.47 FW1553.63

RM0.000 Q 930cfs FP 1553.48 FW1553.48

RM0.407 Q 1,200cfs FP 1555.84

RM0.387 Q 1,200cfs FP 1553.14

RM0.235 Q 1,200cfs FP 1550.87

REACH-2 RM0.354 Q 410cfs FP 1555.76

FLOOD PLAIN LIMIT AT THIS POINT BASED ON INTERPRETATION OF CONTOURS AND AERIAL PHOTOGRAPHY

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MAR00000044\04000CAD\DWG\EP\SHEETS\FP-WORKMAPS\F-13.dwg NBl Oct 05, 2006 2:44:25pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ADMSU-FCD2002C029

WITTMANN PHASE 2-FCD2004C066

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

ZONE AE FLOODPLAIN (FP)

ZONE AE FLOODWAY (FW)

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Q∞=1270 FP=1400.55 FW=1400.56

RM1.406 Q 1,970cfs FP 1566.90 FW1567.62

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

ENTELLUS-FCD2002C029

Registered Professional Engineer — Certificate No. 29737 — HERMAN A. ARISTIZABAL — Date Signed 10/6/06 — ARIZONA, U.S.A.

Registered Professional Engineer (Civil) — Certificate No. 23989 — FRANK EDWARD BROWN — Date Signed Oct 2006 — ARIZONA, U.S.A.

PRIMATECH-FCD2004C066

Registered Professional Engineer (Civil) — 19[illegible] — G.A. LOPEZ-CEPERO — Date Signed 10/6/06 — ARIZONA U.S.A.

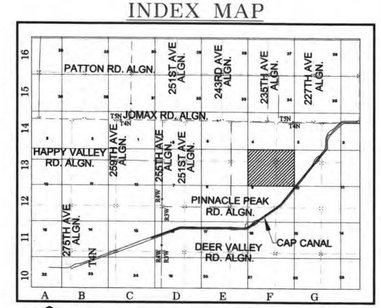
NOTE:
1. NGVD 29 + 1.92 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3861		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus — 2255 N. 44th Street Suite 135, Phoenix, AZ 85008-3279, Tel 602.244.2666, Fax 602.244.8947, WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC. — 2141 East Highland Avenue, Suite 200, Phoenix Arizona 85016, Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-13 OF FLOODPLAIN DELINEATION

MATCH SHEET AT TRIANGLE
SEE SHEET F-15

ERM AJ3866

SEE SHEET E-14

SEE SHEET G-14

MATCH SHEET AT TRIANGLE

SEE SHEET F-13

UNINCORPORATED MARICOPA COUNTY

LIMIT OF DETAILED STUDY

237TH AVE. ALIGNMENT

235TH AVE. ALIGNMENT

JOMAX ROAD ALIGNMENT

SURPRISE

T5N

T4N

T4N-R3W-S10N

33

34

4

3

10

IONA WASH EAST SPLIT-2

IONA WASH

Zone AE

ZONE AE

RM 1.492
Q 930cfs
FP 1593.82
FW1593.95

RM 1.395
Q 930cfs
FP 1591.21
FW1591.43

RM 1.292
Q 930cfs
FP 1588.53
FW1588.70

RM 1.184
Q 930cfs
FP 1585.65
FW1585.93

RM 1.093
Q 930cfs
FP 1582.88
FW1583.84

RM 0.993
Q 930cfs
FP 1580.36
FW1581.16

RM 0.901
Q 930cfs
FP 1577.39
FW1578.00

RM 0.803
Q 930cfs
FP 1574.37
FW1574.93

RM 0.705
Q 930cfs
FP 1571.04
FW1571.48

RM 0.590
Q 930cfs
FP 1568.07
FW1568.64

1.404 Q100=2960 FP=1583.78 FW=1584.15

1.322 Q100=2960 FP=1581.81 FW=1582.35

1.186 Q100=2960 FP=1574.49 FW=1575.23

1.109 Q100=2960 FP=1573.53 FW=1574.27

1.076 Q100=2960 FP=1569.26 FW=1569.67

0.914 Q100=2960 FP=1567.58 FW=1568.43

0.831 Q100=3010 FP=1566.22 FW=1566.28

0.725 Q100=3010 FP=1563.53 FW=1563.59

1.143 Q100=4090 FP=1581.30

1.254 Q100=2960 FP=1577.92 FW=1578.27

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\M\MARI0000044\0400CAD\DWG\EP\SHEETS\FP-WORKMAPS\F-14.dwg Nbl Oct 05, 2006 2:49:54pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029
and
WITTMANN PHASE 2-FCD2004C066

LEGEND

ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066	
EFFECTIVE ZONE A	ZONE A		ZONE AE FLOODPLAIN (FP)
EFFECTIVE ZONE AE	ZONE AH		ZONE AE FLOODWAY (FW)
EFFECTIVE ZONE AH	ZONE AE		
EFFECTIVE FLOODWAY	FLOODWAY (FW)		
	ZONE AO		

HYDRAULIC BASE LINE

CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM 1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029

DAVID EVANS and ASSOCIATES INC.-FCD2004C066

Registered Professional Engineer Certificate No. 29737 HERNAN A. ARISTIZABAL Date Signed ARIZONA, U.S.A.

Registered Professional Engineer (Civil) Certificate No. 23969 FRANK EDWARD BROWN Date Signed ARIZONA, U.S.A.

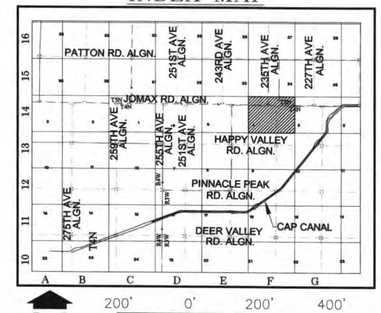
NOTE:
1. NGVD 29 + 1.91 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 135
Phoenix, AZ 85008-3279
Tel 602.244.2000
Fax 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	07/05	FEB/NBL	07/06

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-14 OF FLOODPLAIN DELINEATION

SEE SHEET F-16

ERM AJ3873

SEE SHEET E-15

SEE SHEET G-15

SEE SHEET F-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 = 1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

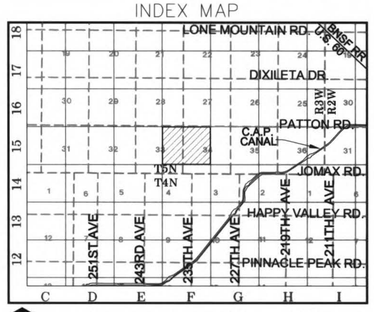
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

HERNAN A. ARISTIZABAL — 38737 — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY: DATE:

SHEET F-15 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Tools\hydraulics\FP-F_15.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-17

ERM AJ3873

FP=1644.45 3.250 FW=1645.28 Q100=6610

FP=1639.99 3.154 FW=1640.45 Q100=6610

FP=1637.01 3.056 FW=1637.90 Q100=6610

FP=1636.10 2.980 FW=1635.65 Q100=6610

FP=1633.43 2.944 FW=1634.21 Q100=6610

FP=1632.36 2.882 FW=1633.17 Q100=6610

FP=1628.67 2.759 FW=1629.27 Q100=7020

FP=1625.47 2.644 FW=1626.07 Q100=7020

FP=1621.73 2.507 FW=1621.99 Q100=7020

FP=1619.12 2.433 FW=1619.60 Q100=7020

FP=1617.56 2.396 FW=1618.53 Q100=7020

FP=1615.22 2.293 FW=1615.48 Q100=7020

FP=1615.22 2.151 IONA (ES-2) Q100=7020

FP=1647.05 3.335 FW=1647.80 Q100=6610

IONA WASH

IONA WASH EAST SPLIT 2

235TH AVE

231ST AVE

ZONE AE

FW

LIMIT OF DETAILED STUDY

PATTON ROAD

SEE SHEET E-16

SEE SHEET G-16

SEE SHEET F-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

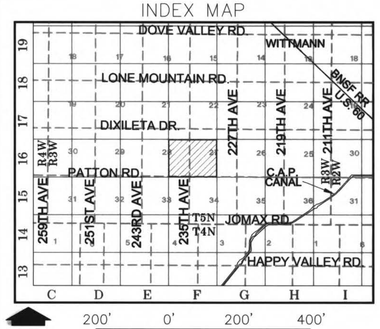
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL Date Signed 1/7/10 ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE	
DESIGN	AMG/RAS	07/2005	FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
DESIGN CHK.	HAA	07/2005	RECOMMENDED BY: DATE
PLANS	KAB	07/2005	APPROVED BY: DATE
PLANS CHK.	AMG/HAA	07/2005	CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY: DATE:			SHEET F-16 OF FLOODPLAIN DELINEATION

FILE: P:\301\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-F_16.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-18

ERM AJ3873

ZONE AE

LIMIT OF DETAILED STUDY

1.628 Q100=1410 FP=1666.34 FW=1667.29

1.480 Q100=1410 FP=1658.45 FW=1656.66

FW

IONA WASH EAST SPLIT-1

1.387 Q100=1410 FP=1653.02 FW=1653.36

1.298 Q100=1410 FP=1649.44 FW=1650.31

1.187 Q100=1410 FP=1643.37 FW=1643.99

1.091 Q100=1730 FP=1638.91 FW=1639.86

1.002 Q100=1730 FP=1635.86 FW=1636.69

0.916 Q100=1730 FP=1633.65 FW=1634.54

0.835 Q100=1730

235TH AVE

3.648 Q100=6610 FP=1658.11 FW=1658.94

3.528 Q100=6610 FP=1653.93 FW=1654.79

3.415 Q100=6610 FP=1650.23 FW=1650.95

3.335 Q100=6610 FP=1647.05 FW=1647.80

DIXILETA DR. (ALIGNMENT)

0.737 Q100=1730 FP=1626.74 FW=1627.74

0.654 Q100=1730 FP=1624.83 FW=1625.68

IONA WASH EAST SPLIT-1

IONA WASH

SEE SHEET E-17

SEE SHEET G-17

SEE SHEET F-16

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

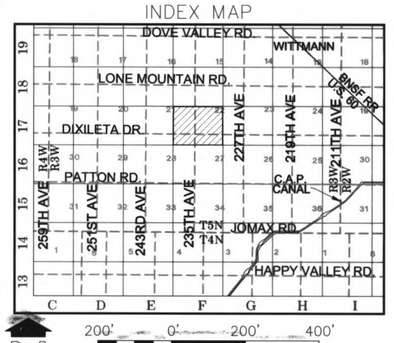
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Registered Professional Engineer — 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-17 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-F_17.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-19

SEE SHEET E-18

SEE SHEET G-18

SEE SHEET F-17

ZONE A

ZONE AO

ZONE AE

FW

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

235TH AVE

LONE MOUNTAIN RD.

IONA WASH EAST SPLIT-1

2.266 Q100=1000

2.054 Q100=1000 FP=1681.66 FW=1682.39

1.949 Q100=1410 FP=1678.77 FW=1679.76

1.834 Q100=1410 FP=1674.45 FW=1675.42

1.722 Q100=1410 FP=1670.25 FW=1671.24

1.628 Q100=1410 FP=1666.34 FW=1667.29

1.547 Q100=1410 FP=1662.30 FW=1663.21

1.480 Q100=1410 FP=1658.45 FW=1658.66

ERM AJ3873

1680 1670 1668 1676 1664 1660 1690

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A / ZONE A
EFFECTIVE ZONE AE / ZONE AH
EFFECTIVE ZONE AH / ZONE AE
EFFECTIVE FLOODWAY / FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

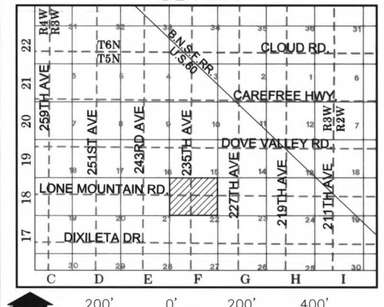
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE No. 29737 — HERNAN A. ARISTIZABAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-18 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task Hydraulics\FP-F_18.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-20

ERM AJ3873

SEE SHEET E-19

SEE SHEET G-19

DOVE VALLEY RD. (ALIGNMENT)

EFFECTIVE TRILBY WASH ZONE AE & FW

235TH AVE (ALIGNMENT)

IONA WASH EAST SPLIT-1

2,545
Q_{100} =1000

ZONE A

SEE SHEET F-18

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199; Q_{100} =1270; FP=1400.55; FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

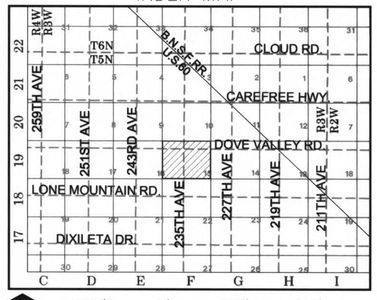
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-F_19.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-21

ERM AJ3873

LIMIT OF STUDY

Q140 = 650

CIRCLE CITY AREA WASH-1

235TH AVE (ALIGNMENT)

EFFECTIVE TRILBY WASH ZONE AE & FW

SEE SHEET E-20

SEE SHEET G-20

SEE SHEET F-19

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199, Q_{100}=1270, FP=1400.55, FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

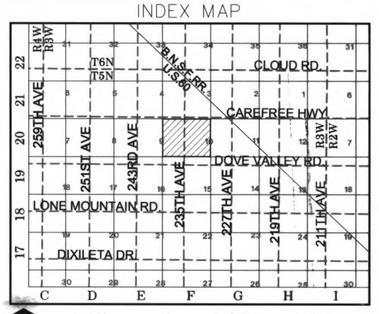
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 28737 HERNAN A. ARISTIZABAL Date Signed 1/17/06 ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-20 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-F_20.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-24

ERM AJ3887

FP=1943.45 | 18.769 | FW=1943.99 | Q100=5900

FP=1938.09 | 18.710 | FW=1938.66 | Q100=5900

FP=1931.61 | 18.615 | FW=1932.10 | Q100=5900

FP=1926.02 | 18.537 | FW=1926.65 | Q100=2670

FP=1920.80 | 18.48 | FW=1920.90 | Q100=2670

ZONE AE

TRILBY WASH

ZONE AE

FW

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

JOY RANCH RD. (ALIGNMENT)

235TH AVE

EFFECTIVE WASH 1 ZONE AE & FW

EFFECTIVE TRILBY WASH (WEST SPLIT) ZONE AE

EFFECTIVE TRILBY WASH ZONE AE & FW

SEE SHEET E-23

SEE SHEET G-23

SEE SHEET F-22

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 | Q100=1270 | FP=1400.55 | FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

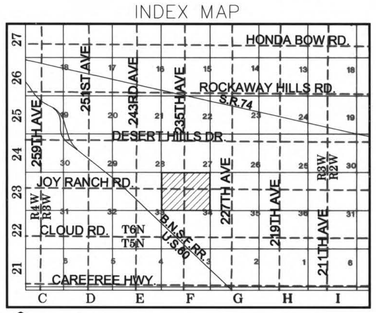
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3887		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.05 FEET = NAVD 88.

Certified Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: _____ DATE: _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE

APPROVED BY: _____ DATE

CHIEF ENGINEER AND GENERAL MANAGER

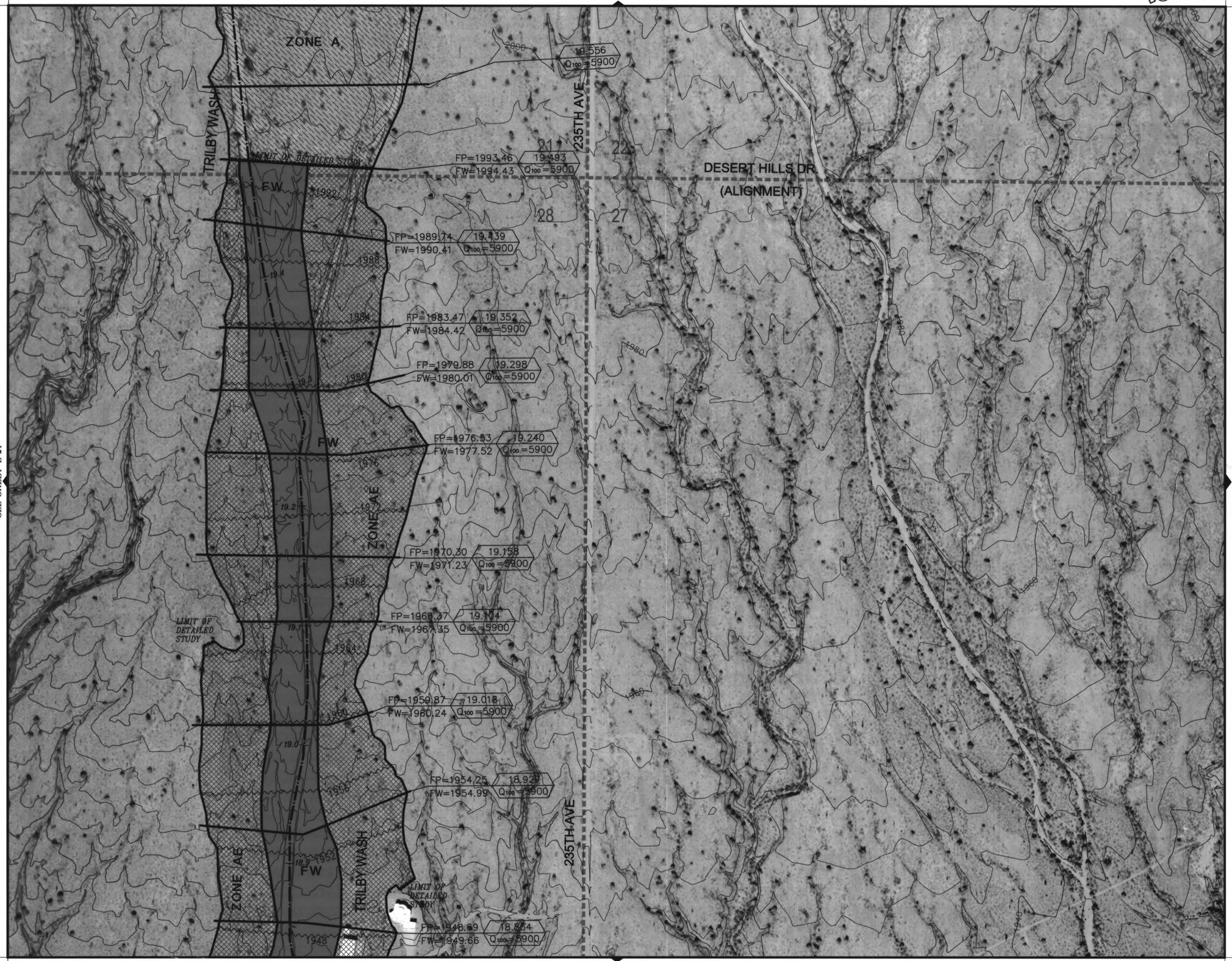
SHEET F-23 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-F_23.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-25

ERM AJ3887



SEE SHEET E-24

SEE SHEET G-24

SEE SHEET F-23

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

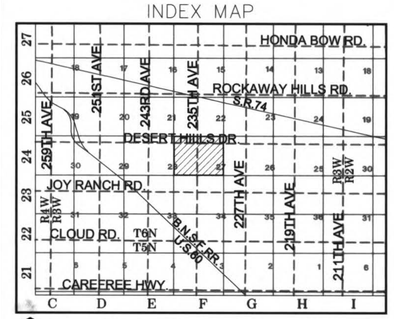
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3887		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.05 FEET = NAVD 88.

Certified Professional Engineer — 27737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/05 — ARIZONA, U.S.A.

INDEX MAP



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

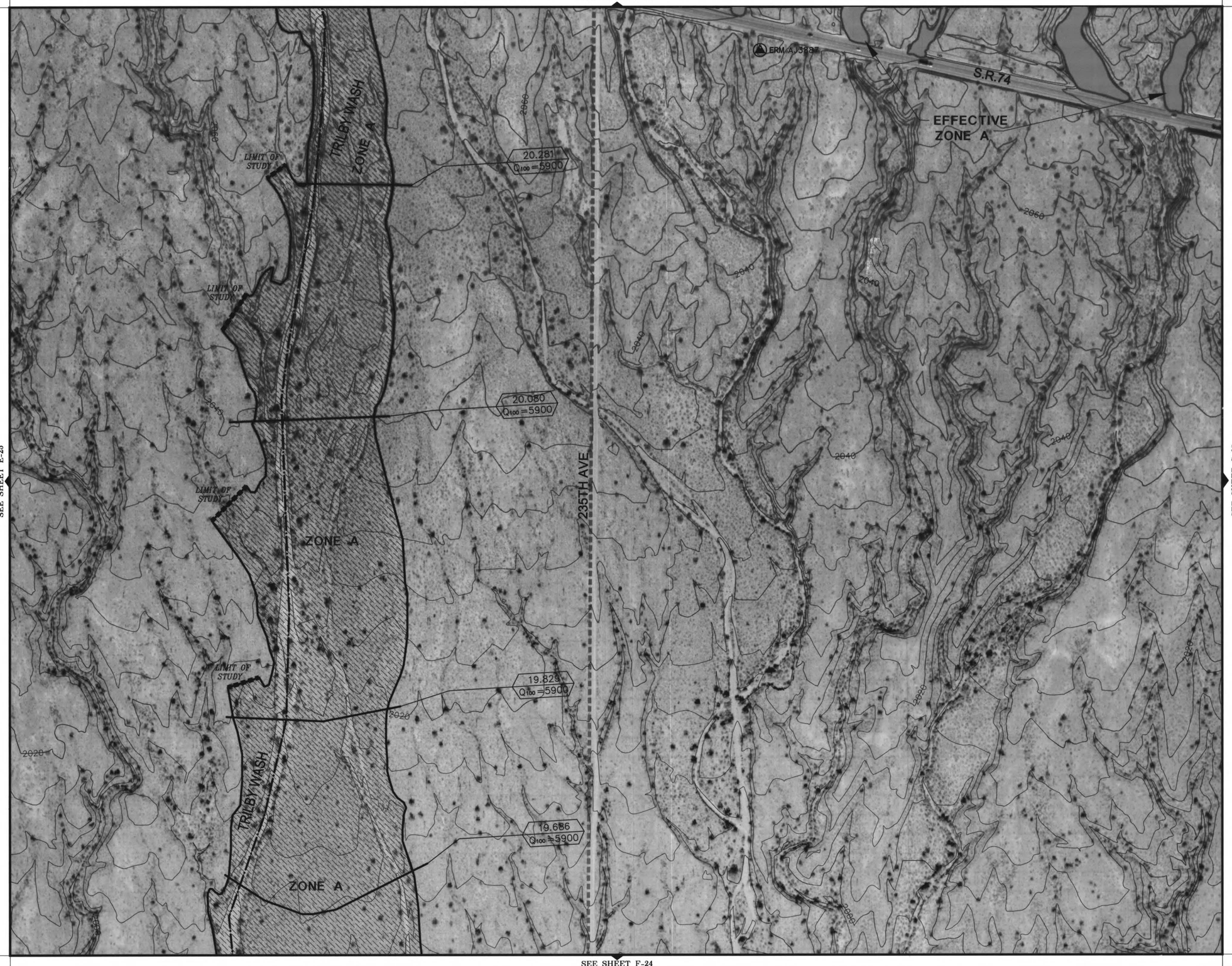
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-24 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET F-26



SEE SHEET E-25

SEE SHEET G-25

SEE SHEET F-24

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

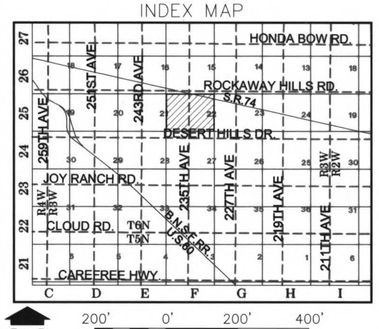
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3887		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.05 FEET = NAVD 88.

Certified Professional Engineer — 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET F-25 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-F_25.dwg DATE: 07/27/05

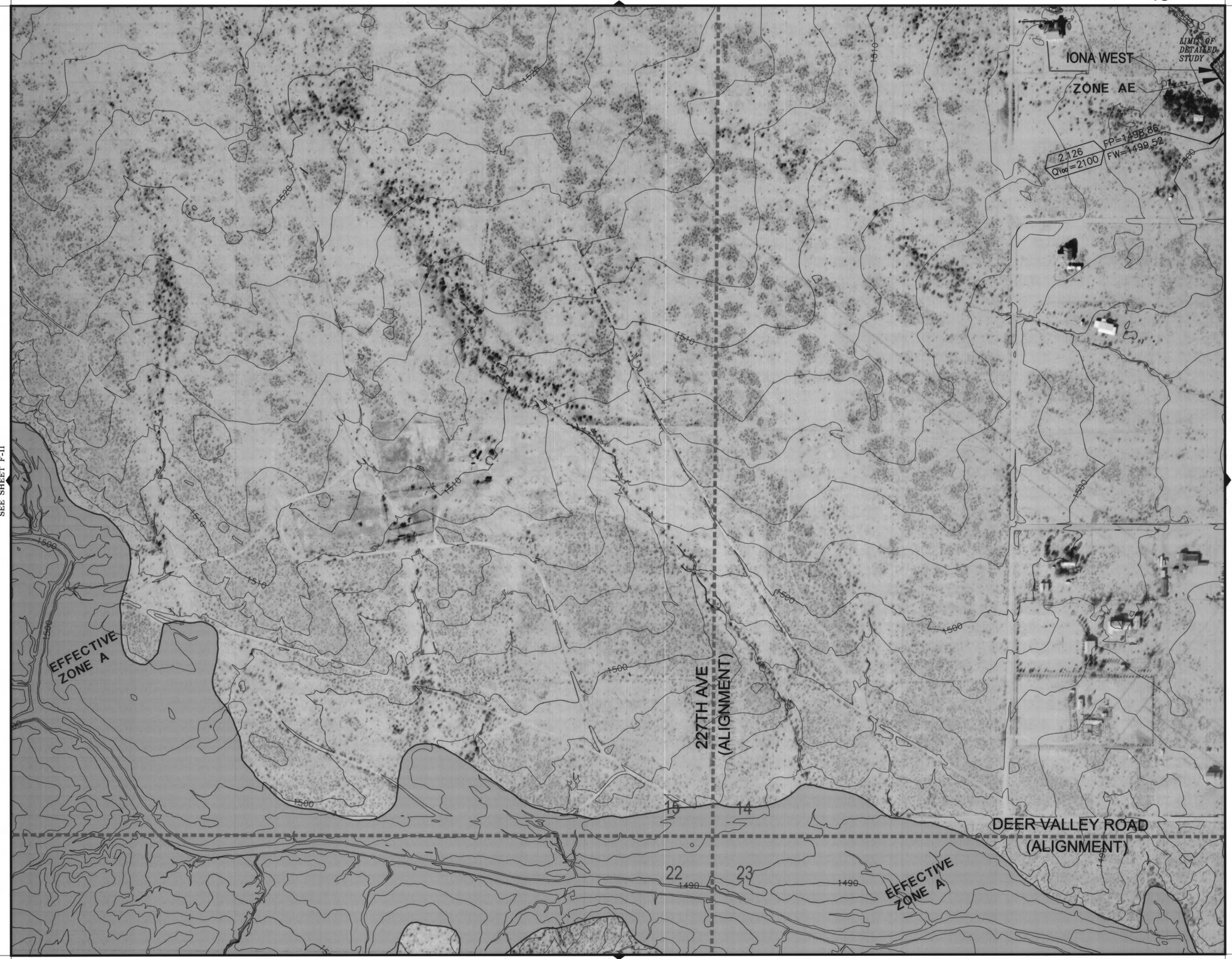
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET G-12

ERM DV2192

SEE SHEET F-11

SEE SHEET H-11



SEE SHEET G-10

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

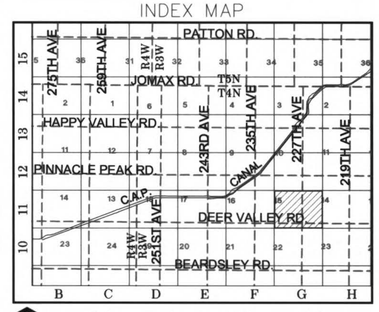
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 28737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET G-11 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-G_11.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

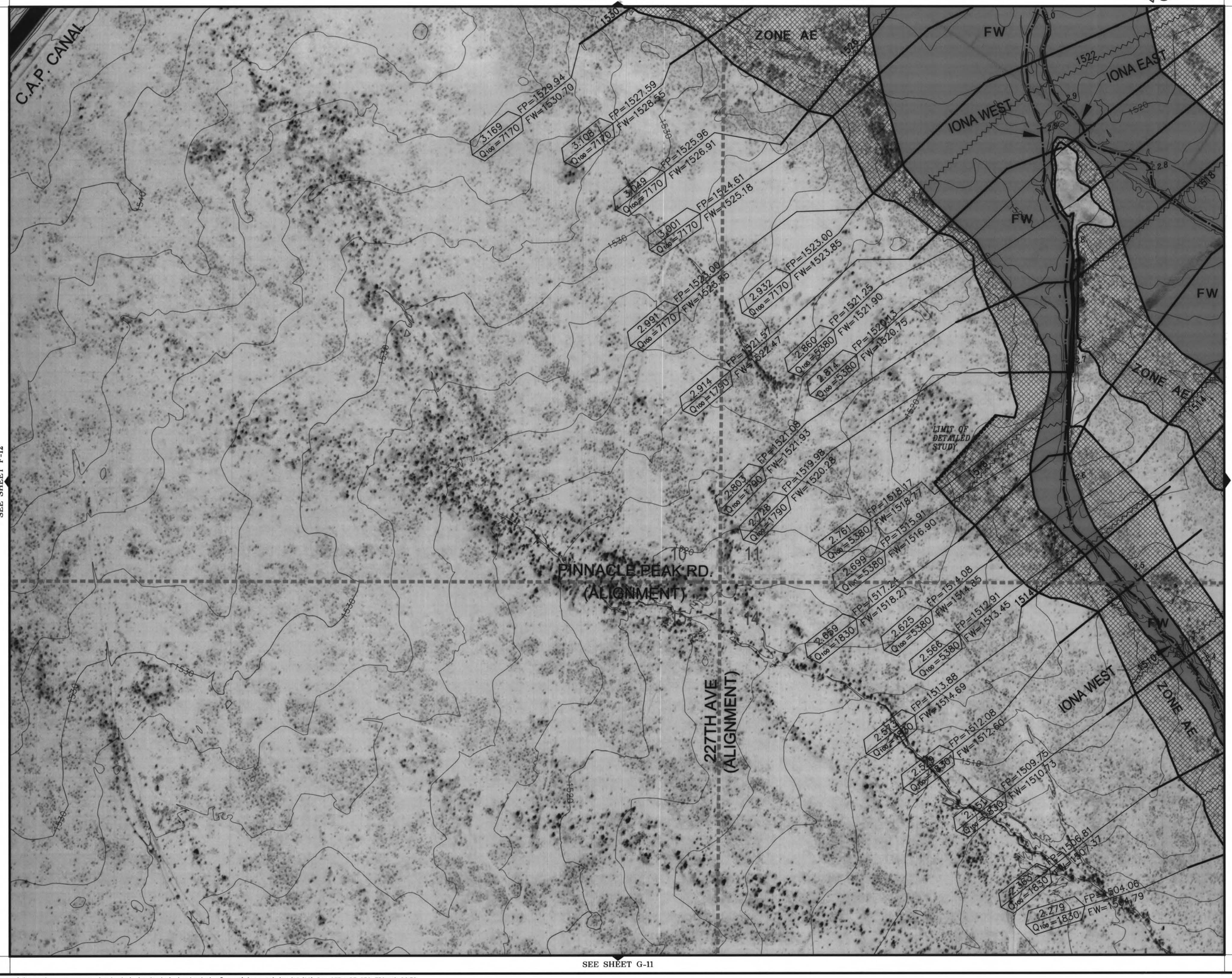
SEE SHEET G-13

ERM DV2192

SEE SHEET F-12

SEE SHEET H-12

SEE SHEET G-11



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

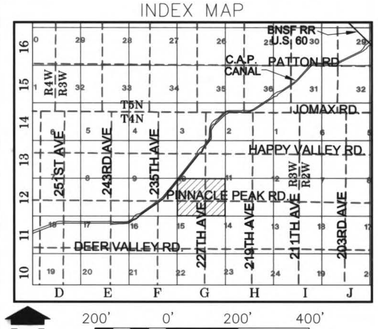
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE 39737 HERNAN A. ARISTIZABAL Date Signed 1/7/10 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix. AZ 85008.3279
Tel 602.244.2566
Fax 602.244.3947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET G-12 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-G_12.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

MATCH SHEET AT TRIANGLE
SEE SHEET G-14

ERM AJ3866

SEE SHEET F-13

SEE SHEET H-13
MATCH SHEET AT TRIANGLE

SEE SHEET G-12
MATCH SHEET AT TRIANGLE

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

P:\W\MARI0000044\0400CAD\DWG\EP\SHEETS\FP-WORKMAPS\G-13.dwg tiso Jun 04, 2008 4:08:54pm

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ADMSU-FCD2002C029 and WITTMANN PHASE 2-FCD2004C066

LEGEND

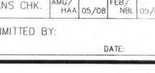
ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ADMSU-FCD2002C029		WITTMANN PHASE 2-FCD2004C066
EFFECTIVE ZONE A	ZONE A	ZONE AE FLOODPLAIN (FP)
EFFECTIVE ZONE AE	ZONE AH	ZONE AE FLOODWAY (FW)
EFFECTIVE ZONE AH	ZONE AE	
EFFECTIVE FLOODWAY	FLOODWAY (FW)	
	ZONE AO	

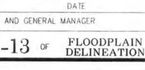
HYDRAULIC BASE LINE
CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56

RM1.406
Q 1,970cfs
FP 1566.90
FW1567.62

ENTELLUS-FCD2002C029



DAVID EVANS and ASSOCIATES INC.-FCD2004C066



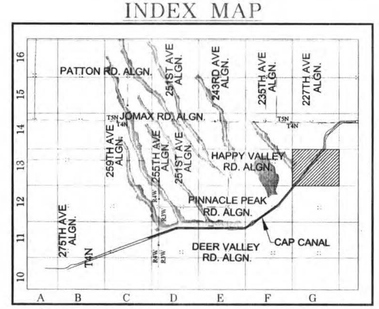
NOTE:
1. NGVD 29 + 1.89 FEET = NAVD 88.

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

INDEX MAP



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2266
Fax 602.244.8947
WEB www.entellus.com

DAVID EVANS AND ASSOCIATES INC.
2141 East Highland Avenue, Suite 200
Phoenix Arizona 85016
Phone: 602.678.5151

	ADMSU		PHASE 2	
DESIGN	AMG/RAS	07/05	FEB/NBL	07/06
DESIGN CHK.	HAA	07/05	FEB	07/06
PLANS	KAB	07/05	NBL	07/06
PLANS CHK.	AMG/HAA	05/08	FEB/NBL	05/08

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET G-13 OF FLOODPLAIN DELINEATION

SEE SHEET G-15

ERM AJ3866

SEE SHEET F-14

SEE SHEET H-14

SEE SHEET G-13

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

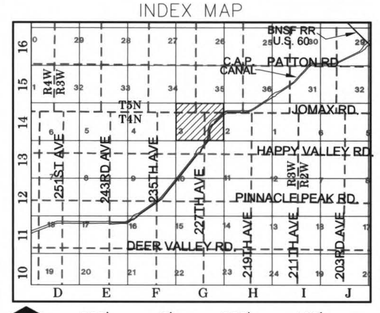
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Surveyor — No. 37737 — HERMAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET G-14 OF FLOODPLAIN DELINEATION

FILE: P:300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-G_14.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

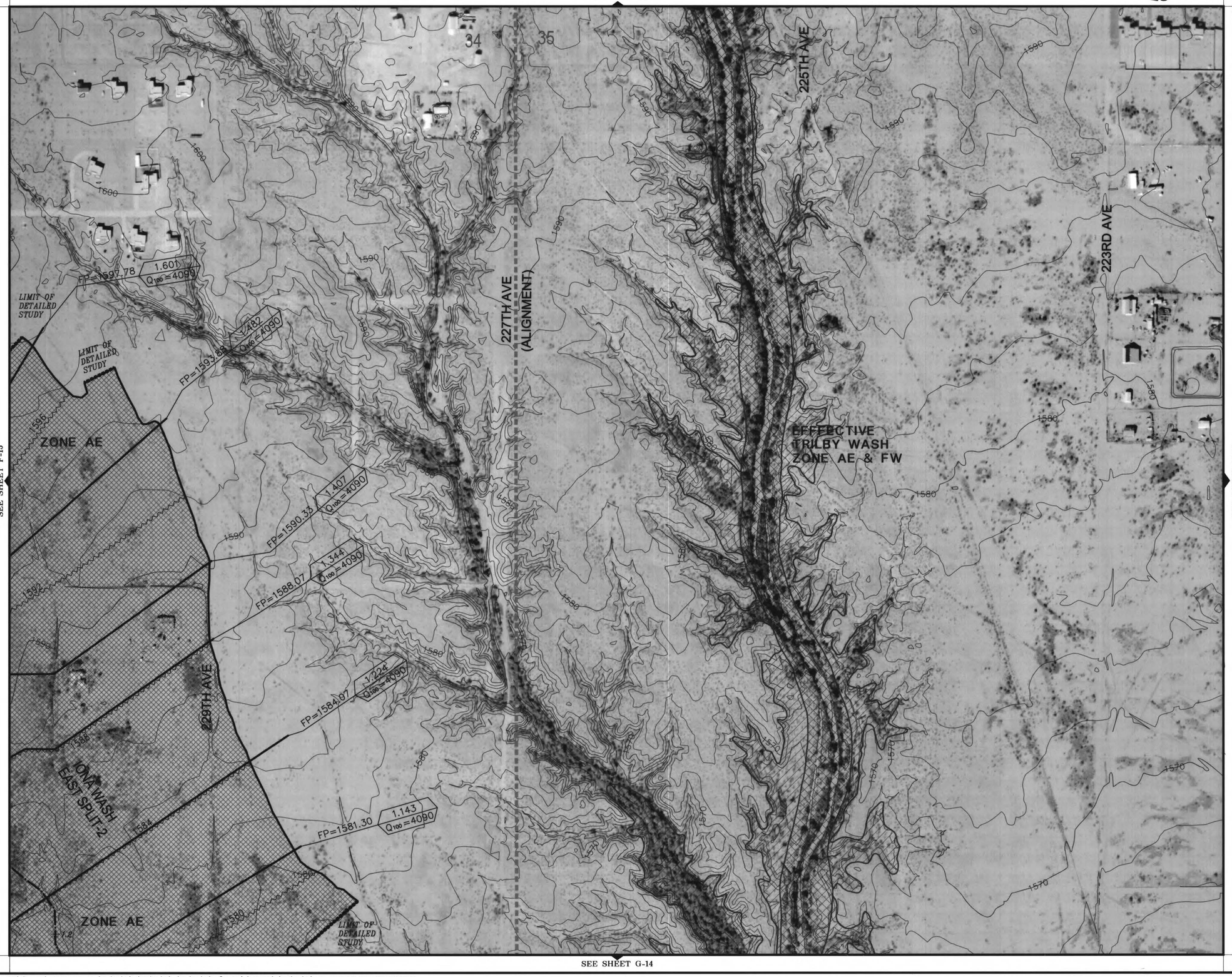
SEE SHEET G-16

ERM AJ3866

SEE SHEET F-15

SEE SHEET H-15

SEE SHEET G-14



FILE: P:\300\310\310032 (Wittmann ADMSJ)\Task\hydraulics\FP-G_15.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

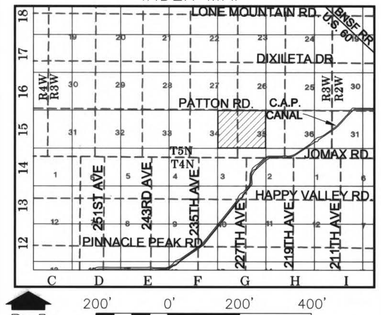
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/1/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET G-15 OF FLOODPLAIN DELINEATION

SEE SHEET G-17

ERM AJ3873

LIMIT OF DETAILED STUDY

FP=1621.09
FW=1622.03
0.492
Q100=1730

IONA WASH EAST SPLIT-1

FW

0.4
0.3

FP=1619.31
FW=1620.11
0.406
Q100=2020

FP=1617.83
FW=1618.78
0.329
Q100=2020

FP=1615.72
FW=1616.14
0.272
Q100=2020

FP=1611.61
FW=1611.66
0.179
Q100=2020

FP=1610.26
FW=1610.49
0.151
Q100=2020

LIMIT OF DETAILED STUDY

227TH AVE

LIMIT OF DETAILED STUDY

ZONE AE

EFFECTIVE TRILBY WASH ZONE AE & FW

0.061
Q100=2020

0.000
Q100=2020

227TH AVE (ALIGNMENT)

PATTON RD.

27

26

1620
1610
1600
1590

SEE SHEET F-16

SEE SHEET H-16

SEE SHEET G-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
CROSS SECTION: 2.199, Q100=1270, FP=1400.55, FW=1400.56
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

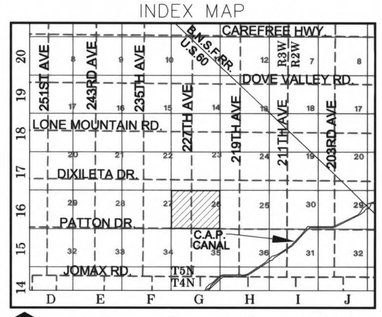
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE No. 28737 — HERNAN A. ARISTIZABAL — 12-31-06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.344.3566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET G-16 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-G_16.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

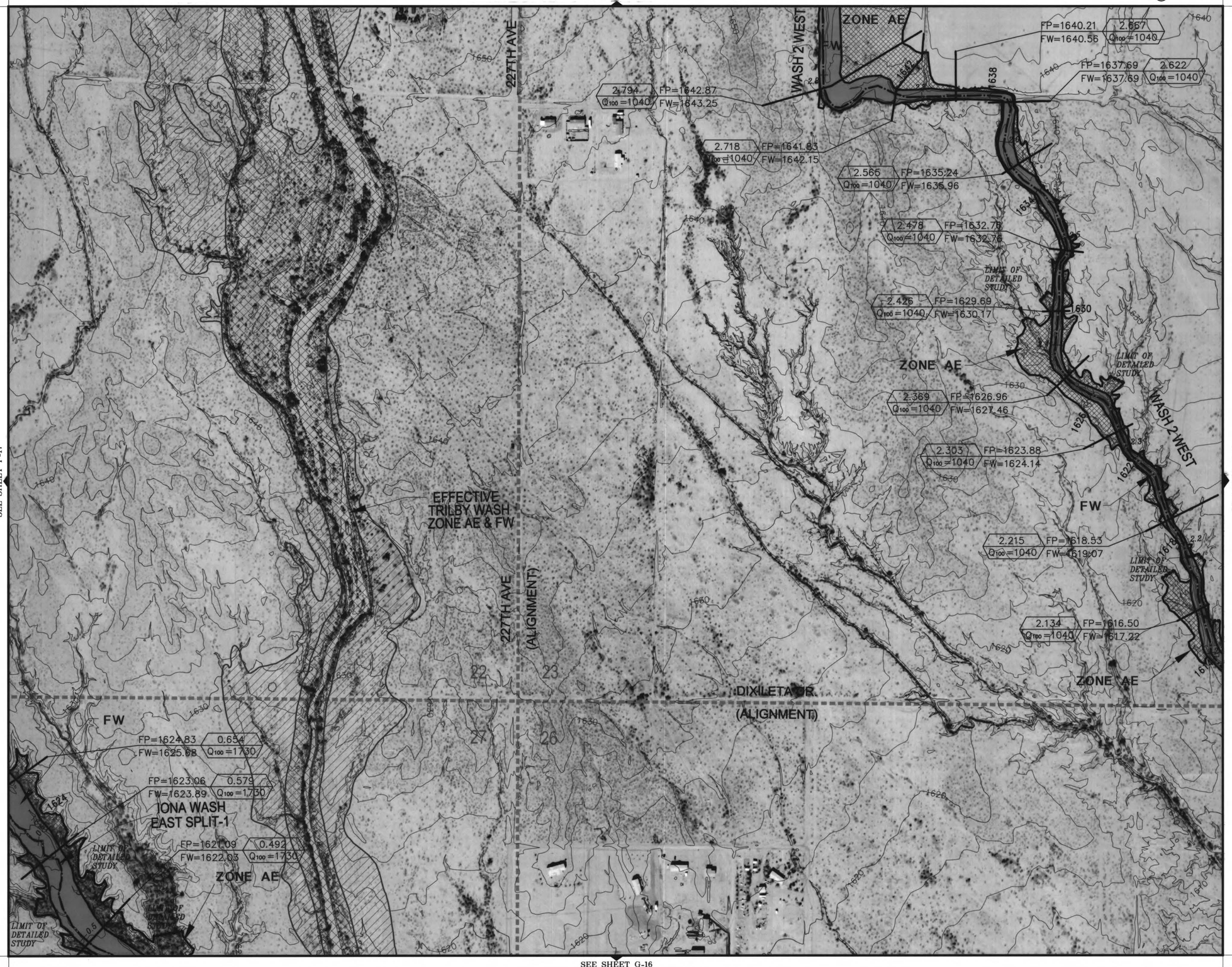
SEE SHEET G-18

ERM AJ3873

SEE SHEET F-17

SEE SHEET H-17

SEE SHEET G-16



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

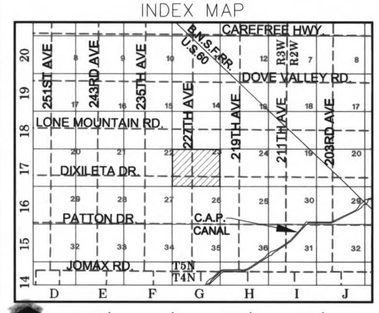
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3873		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certificate No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET G-17 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-G_17.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET G-19

ERM DV0919

SEE SHEET F-18

SEE SHEET H-18

3.553 FP=1670.53
Q100=1040 FW=1671.35

LIMIT OF DETAILED STUDY

FP=1668.96 3.484
FW=1668.90 Q100=1040

FW

ZONE AE

LIMIT OF DETAILED STUDY

FP=1661.07 3.315
FW=1661.38 Q100=1040

3.399 FP=1664.21
Q100=1040 FW=1664.55

LIMIT OF DETAILED STUDY

LONE MOUNTAIN RD.

27TH AVE

FP=1654.96 3.136
FW=1655.60 Q100=1040

3.219 FP=1657.60
Q100=1040 FW=1658.48

WASH 2 WEST

EFFECTIVE TRILBY WASH ZONE AE & FW

FP=1649.25 2.965
FW=1650.03 Q100=1040

FW

3.045 FP=1652.41
Q100=1040 FW=1653.41

ZONE AE

2.884 FP=1645.53
Q100=1040 FW=1646.53

1646

SEE SHEET G-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

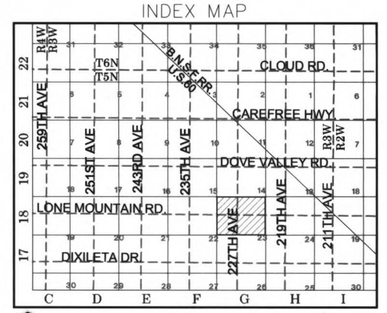
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0919		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

HERNAN A. ARISTIZABAL 28737 REGISTERED PROFESSIONAL ENGINEER ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET G-18 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-G_18.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-11

ERM DV2192

SEE SHEET G-10

SEE SHEET I-10

SEE SHEET H-09

EFFECTIVE ZONE A

EFFECTIVE ZONE A

EXISTING ZONE A

ZONE AE

ZONE AE

ZONE AE

IONA WEST

IONA EAST

IONA WEST

IONA WASH EFFECTIVE ZONE AE

FW

FW

FW

FW

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

219TH AVE

1.291 Q100=2100 FP=1473.29 FW=1474.05

1.237 Q100=2100 FP=1472.15 FW=1473.04

1.156 Q100=2100 FP=1470.77 FW=1471.67

1.097 Q100=2100 FP=1469.36 FW=1470.21

0.983 Q100=5540 FP=1468.61 FW=1470.08

1.022 Q100=2100 FP=1467.26 FW=1468.15

0.980 Q100=2100 FP=1466.49 FW=1467.32

0.936 Q100=2100 FP=1463.66 FW=1466.20

0.879 Q100=2100 FP=1464.10 FW=1464.78

0.815 Q100=2100 FP=1462.64 FW=1463.62

0.722 Q100=2100 FP=EFF. IONA WASH FW=1461.61

0.651 Q100=2100 FP=EFF. IONA WASH FW=1459.64

0.572 Q100=2100 FP=EFF. IONA WASH FW=1457.87

0.521 Q100=2100 SEE EFFECTIVE IONA WASH MODEL

0.855 Q100=5540 FP=1466.77 FW=1466.18

0.808 Q100=5540 FP=1464.02 FW=1464.51

0.741 Q100=5540 FP=1461.83 FW=1462.20

1.1

1.0

0.9

0.8

0.7

0.6

1480

1470

1460

1450

1490

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

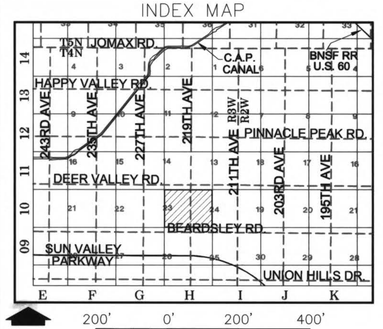
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Certified Professional Engineer — 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-10 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-H_10.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-12

SEE SHEET G-11

SEE SHEET I-11

SEE SHEET H-10

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

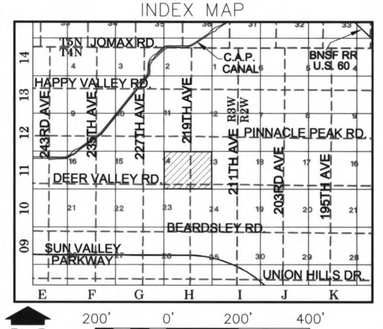
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV
DV2194		

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Registered Professional Engineer — 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-11 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSJ)\Task\hydraulics\FP-H_11.dwg DATE: 07/18/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-13

ERM DV2192

FP=1521.25 FW=1521.90 2.860 Q100=5380
FP=1520.13 FW=1520.75 2.814 Q100=5380
FP=1518.17 FW=1518.77 2.761 Q100=5380
FP=1515.91 FW=1516.90 2.699 Q100=5380
FP=1514.08 FW=1514.85 2.625 Q100=5380
FP=1512.91 FW=1513.45 2.566 Q100=5380
FP=1510.84 FW=1511.47 2.471 Q100=5460
FP=1508.98 FW=1509.52 2.385 Q100=5460
FP=1505.99 FW=1506.97 2.317 Q100=5460
FP=1504.38 FW=1505.33 2.244 Q100=5460
FP=1501.99 FW=1502.51 2.189 Q100=5460
FP=1500.13 FW=1500.87 2.106 Q100=5460
FP=1499.11 FW=1499.77 2.050 Q100=5460
FP=1497.15 FW=1497.93 1.986 Q100=5460
FP=1494.26 FW=1494.81 1.899 Q100=5460
FP=1492.91 FW=1493.33 1.845 Q100=5460
FP=1491.40 FW=1491.55 1.775 Q100=5540
FP=1490.01 FW=1490.58 1.730 Q100=5540
FP=1509.75 FW=1510.73 2.410 Q100=1830
FP=1503.21 FW=1501.31 2.363 Q100=1830
FP=1504.06 FW=1504.79 2.279 Q100=1830
FP=1501.33 FW=1502.32 2.203 Q100=1830

219TH AVE
TRILBY WASH
EFFECTIVE TRILBY WASH ZONE AE & FW
PINNACLE PEAK RD.
ZONE AE
FW
IONA EAST
IONA WEST
LIMIT OF DETAILED STUDY

SEE SHEET G-12

SEE SHEET I-12

SEE SHEET H-11

FILE: P:\301\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-H_12.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

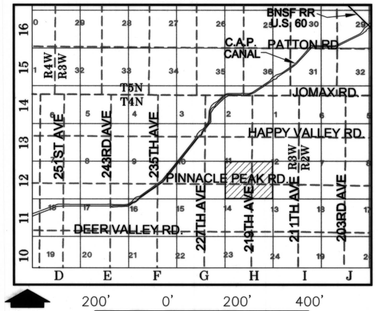
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Certified Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

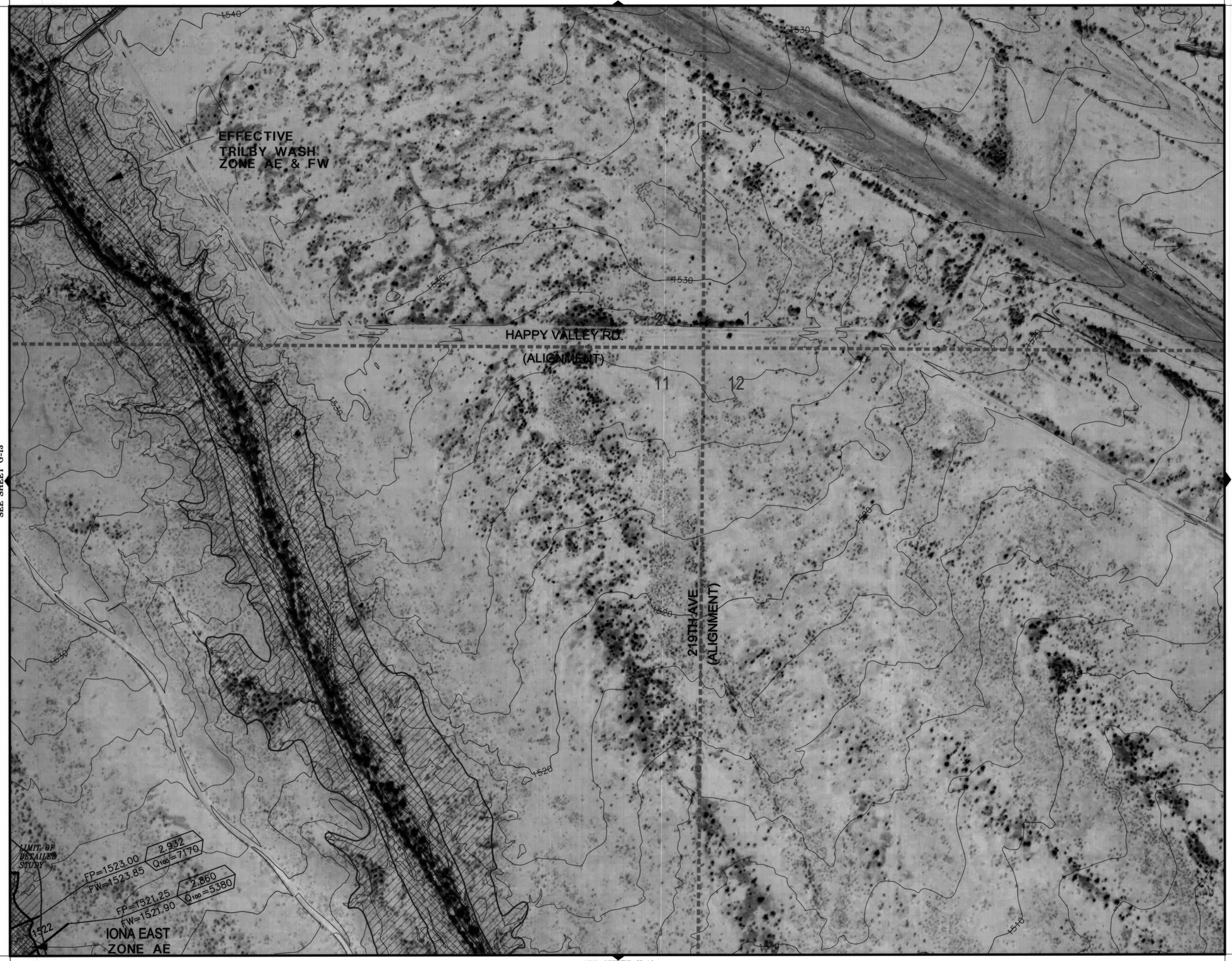
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-12 OF FLOODPLAIN DELINEATION

SEE SHEET H-14

ERM AJ3866



SEE SHEET G-13

SEE SHEET I-13

SEE SHEET H-12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

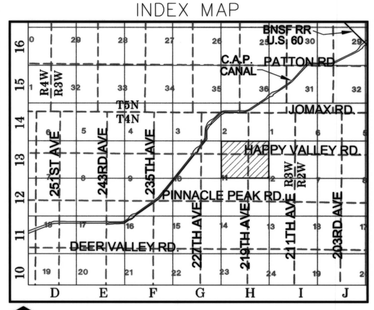
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Professional Engineer — Certificate No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2666
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-13 OF FLOODPLAIN DELINEATION

FILE: P:\301\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-H_13.dwg DATE: 07/28/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-15

ERM AJ3866

SEE SHEET G-14

SEE SHEET I-14

SEE SHEET H-13

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

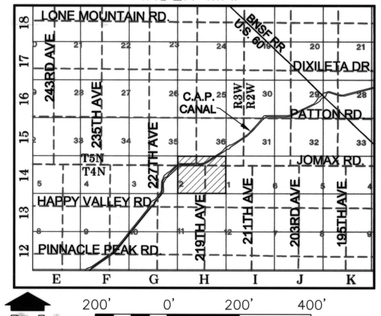
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-14 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-H_14.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-16

ERM AJ3866

PATTON RD.

35

36

219TH AVE

ZONE AE

FW

WASH 2 WEST

WASH 2 WEST TRIBUTARY 2

LIMIT OF DETAILED STUDY

0.736 FP=1568.61
Q100=4100 FW=1568.89

0.673 FP=1565.89
Q100=4100 FW=1566.88

0.597 FP=1563.45
Q100=4100 FW=1563.81

0.530 FP=1560.97
Q100=4100 FW=1561.96

0.426 FP=1557.02
Q100=4100 FW=1557.79

0.319 FP=1554.87
Q100=4100 FW=1555.40

0.237 FP=1552.36
Q100=4100

0.161
Q100=4100

0.066
Q100=4100

0.308 FP=1564.14
Q100=1410 FW=1565.14

0.405 FP=1559.73
Q100=1410 FW=1560.78

ZONE AH
EL= 1551.80

C.A.P. CANAL

SEE SHEET G-15

SEE SHEET I-15

SEE SHEET H-14

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-H_15.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 / Q100=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

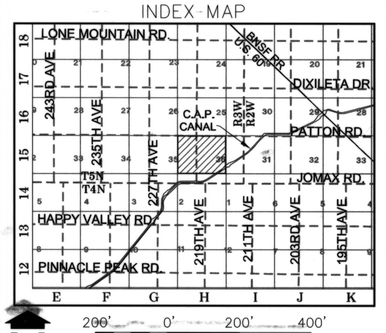
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 29737 HERNAN A. ARISTIZABAL Date Signed 7/11/06 ARIZONA, U.S.A.

INDEX-MAP



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-15 OF FLOODPLAIN DELINEATION

SEE SHEET H-17

ERM DV0916

SEE SHEET G-16

SEE SHEET I-16

SEE SHEET H-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

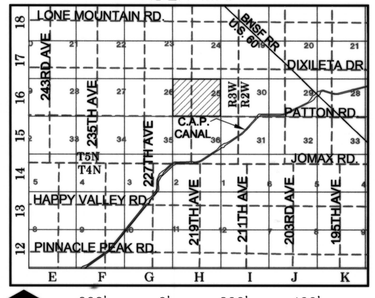
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0916		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/2005 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE	
DESIGN	AMG/RAS	07/2005	FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
DESIGN CHK.	HAA	07/2005	
PLANS	KAB	07/2005	RECOMMENDED BY: DATE
PLANS CHK.	AMG/HAA	07/2005	APPROVED BY: DATE
SUBMITTED BY: DATE:			CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-16 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-H_16.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-18

ERM DV0918

SEE SHEET G-17

SEE SHEET I-17

SEE SHEET H-16

1.651 FP=1635.90 Q100=4030 FW=1636.79

1.572 FP=1632.47 Q100=4030 FW=1633.35

1.511 FP=1629.46 Q100=4030 FW=1630.17

1.393 FP=1624.45 Q100=4030 FW=1625.44

1.328 FP=1622.18 Q100=4030 FW=1622.72

1.250 FP=1618.50 Q100=4030 FW=1619.40

FP=1629.22 2.346 FW=1629.48 Q100=1150

FP=1625.60 2.276 FW=1626.31 Q100=1150

FP=1622.54 2.195 FW=1623.04 Q100=1150

FP=1620.30 2.138 FW=1620.38 Q100=1150

FP=1617.62 2.078 FW=1618.17 Q100=1150

FP=1614.78 2.007 FW=1615.47 Q100=1150

FP=1611.75 1.932 FW=1612.69 Q100=1150

FP=1608.89 1.846 FW=1609.24 Q100=1150

FP=1607.03 0.974 FW=1607.83 Q100=3930

FP=1605.54 1.765 FW=1606.40 Q100=1150

FP=1602.55 1.679 FW=1603.40 Q100=1150

WASH 2 WEST TRIBUTARY-2 FP=1601.80 1.660 FW=1602.63 Q100=5080

WASH 2 WEST TRIBUTARY-2 FP=1599.73 1.571 FW=1599.97 Q100=5080

2.048 Q100=1040 FP=1613.34 FW=1613.96

2.033 Q100=1040 FP=1611.42 FW=1611.98

1.947 Q100=1040 FP=1608.90 FW=1609.38

1.911 Q100=1040 FP=1607.08 FW=1607.56

1.808 Q100=1410 FP=1603.34 FW=1604.23

1.181 FP=1615.80 Q100=3930 FW=1615.99

1.098 FP=1613.24 Q100=3930 FW=1614.03

1.031 FP=1610.47 Q100=3930 FW=1610.70

0.900 FP=1604.03 Q100=3930 FW=1605.01

1.750 Q100=1410 FP=1600.55 FW=1601.06

0.810 FP=1601.80 FW=1602.12 Q100=5080

0.728 FP=1599.73 Q100=5080 FW=1599.64

WASH 2 WEST TRIBUTARY-1

WASH 2 WEST TRIBUTARY-2

CROZIER (219TH AVE)

DIXILETA DR.

ZONE AE

ZONE A

FW

LIMIT OF DETAILED STUDY

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

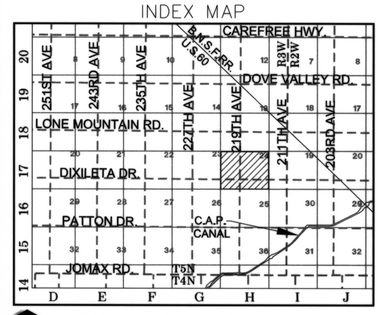
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0918		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Registered Professional Engineer — 20737 — HERNAN A. ARISTIZABAL — Date Signed 1/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-17 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-H_17.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-19

ERM DV0918

ZONE AE
FP=1671.22 2.418
FW=1672.13 Q100=1800
WASH 2 WEST TRIBUTARY 1
LAURA ST
FP=1666.19 2.339
FW=1666.95 Q100=1800
FW
GROZIER (219TH AVE.)
LIMIT OF DETAILED STUDY
FP=1662.91 2.262
FW=1663.69 Q100=1800
FP=1659.16 2.195
FW=1659.61 Q100=1800
FP=1657.43 2.105
FW=1658.18 Q100=1800
14
13
LONE MOUNTAIN RD
23
24
FP=1655.00 2.091
FW=1655.58 Q100=1800
FP=1653.12 2.033
FW=1653.10 Q100=1800
211ST AVE
FP=1648.21 1.944
FW=1649.21 Q100=4030
FP=1645.45 1.864
FW=1646.26 Q100=4030
WASH 2 WEST TRIBUTARY 1
1.793 FP=1642.79
Q100=4030 FW=1643.55
1.740 FP=1640.39
Q100=4030 FW=1641.29
FP=1661.84 3.014
FW=1662.24 Q100=530
WASH 2 WEST TRIBUTARY 2
FP=1658.15 2.953
FW=1658.02 Q100=530
FP=1655.41 2.893
FW=1655.84 Q100=530
FP=1651.26 2.817
FW=1651.35 Q100=530
FP=1647.49 2.722
FW=1647.46 Q100=530
FP=1643.17 2.633
FW=1643.50 Q100=530
FP=1639.41 2.540
FW=1639.02 Q100=530
FP=1635.90 1.651
FW=1636.79 Q100=4030
FP=1636.46 2.479
FW=1637.15 Q100=1150
FW
FP=1632.42 2.401
FW=1633.02 Q100=1150
2.753 ER=1669.42
Q100=2280 FW=1670.16
2.594 FP=1665.91
Q100=2280 FW=1666.48
WITTMANN WASH
2.632 FP=1662.46
Q100=2280 FW=1663.46
2.580 FP=1660.28
Q100=2280 FW=1661.19
LIMIT OF DETAILED STUDY
2.507 FP=1656.29
Q100=2280 FW=1657.22
2.419 FP=1651.25
Q100=2280 FW=1651.93
2.338 FP=1646.75
Q100=2280 FW=1647.59

SEE SHEET G-18
SEE SHEET I-18
SEE SHEET H-17

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-H_18.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

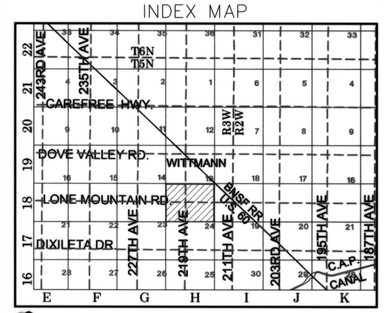
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0918		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Surveyor — 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/26/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE
APPROVED BY: _____ DATE
CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY: _____ DATE:

SHEET H-18 OF FLOODPLAIN DELINEATION

SEE SHEET H-20

SEE SHEET G-19

SEE SHEET I-19

SEE SHEET H-18

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

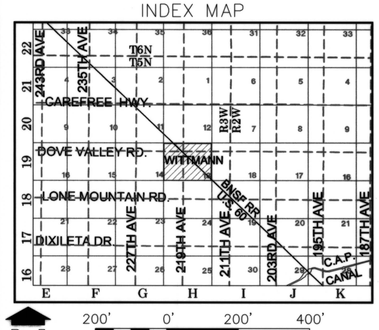
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0919		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV
DV0918		

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 7/17/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-H_19.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-21

ERM DV0919

SEE SHEET G-20

SEE SHEET I-20

SEE SHEET H-19

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

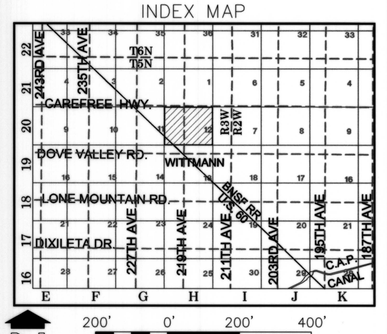
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0919		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET H-20 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-H_20.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET H-22

ERM AJ3878

SEE SHEET G-21

SEE SHEET I-21

SEE SHEET H-20

WITTMANN WASH

WITTMANN TRIBUTARY

CAREFREE HWY. (ALIGNMENT)

ZONE AE

ZONE A

ZONE AH

ZONE AO

FW

LIMIT OF DETAILED STUDY

5.476 FP=1808.59 Q100=640 FW=1809.08

5.345 FP=1800.54 Q100=640 FW=1800.95

5.254 FP=1795.63 Q100=690 FW=1796.19

5.150 FP=1789.92 Q100=690 FW=1790.53

5.056 FP=1784.38 Q100=690 FW=1784.53

5.006 FP=1781.97 Q100=690 FW=1782.16

4.955 FP=1778.49 Q100=690 FW=1778.99

4.847 FP=1772.12 Q100=690 FW=1772.90

4.738 FP=1764.67 Q100=1000 FW=1765.52

4.676 FP=1760.73 Q100=1000 FW=1761.60

1.919 FP=S07 Q100=1010 FW=S07 WITT. TRIB.

1.570 FP=1807.15 Q100=1010 FW=1808.32

1.486 FP=1802.67 Q100=1010 FW=WITT. TRIB

.851 FP=1802.67 WITT. TRIB. Q100=1010 FW=1803.25

1.430 FP=1799.16 S07 Q100=1010 FW=1799.79 WITT. TRIB.

1.770 FP=S07 Q100=1010 FW=1799.38

1.403 FP=1797.93 Q100=660 FW=1798.16

1.693 FP=1793.86 Q100=350 FW=1794.21

1.235 FP=1789.41 S07 Q100=2670 FW=1789.73

1.631 FP=1791.11 Q100=350 FW=1791.56

0.371 FP=S07 S015 Q100=2240 FW=1789.57

1.205 FP=1787.61 S07 Q100=2670 FW=1788.14

1.578 FP=1788.05 Q100=350 FW=1788.32

1.124 FP=1783.48 S07 Q100=2670 FW=1784.09

0.268 Q100=2240

1.473 FP=1781.86 Q100=350 FW=1782.38

0.194 Q100=2240

1.396 FP=1777.50 Q100=460 FW=1777.84

1.330 FP=S07 WITT. TRIB. Q100=3020 FW=1774.88

0.961 FP=1774.37 S07 Q100=3020 FW=1774.86

1.237 FP=S07 WITT. TRIB. Q100=3020 FW=1769.39

0.875 FP=1769.41 S07 Q100=3020 FW=1769.88

1.130 FP=S07 WITT. TRIB. Q100=3020 FW=S07

0.779 FP=1763.90 S07 Q100=3020 FW=1764.81

2.710 FP=1759.50 S24E Q100=3020 FW=1760.42

0.682 FP=1759.50 S07 Q100=3020 FW=1760.28

1.047 FP=1759.50 Q100=3020 FW=1760.42 WITT. TRIB.

0.620 FP=1805.92 Q100=2240 FW=1806.54

0.610 FP=1802.94 Q100=2240 FW=1803.83

0.540 FP=1799.81 Q100=2240 FW=1800.19

1.310 Q100=660 FP=1793.08 FW=1793.58

0.530 Q100=2240

0.437 Q100=2240 S015

0.344 Q100=2240 S015

1.045 FP=1778.69 Q100=2670 S07 FW=1779.60

T5N-R3W-S01S

T5N-R2W-S07

T5N-R3W-S24E

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A / ZONE A
EFFECTIVE ZONE AE / ZONE AH
EFFECTIVE ZONE AH / ZONE AE
EFFECTIVE FLOODWAY / FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 Q100=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

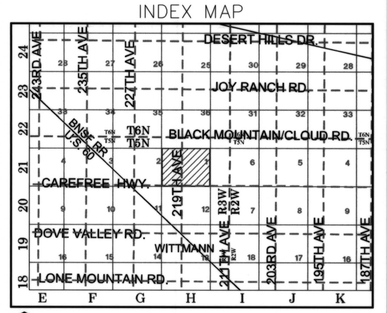
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3878		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

Certified Professional Engineer — Certificate No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET H-21 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task \Hydraulics\FP-H_21.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

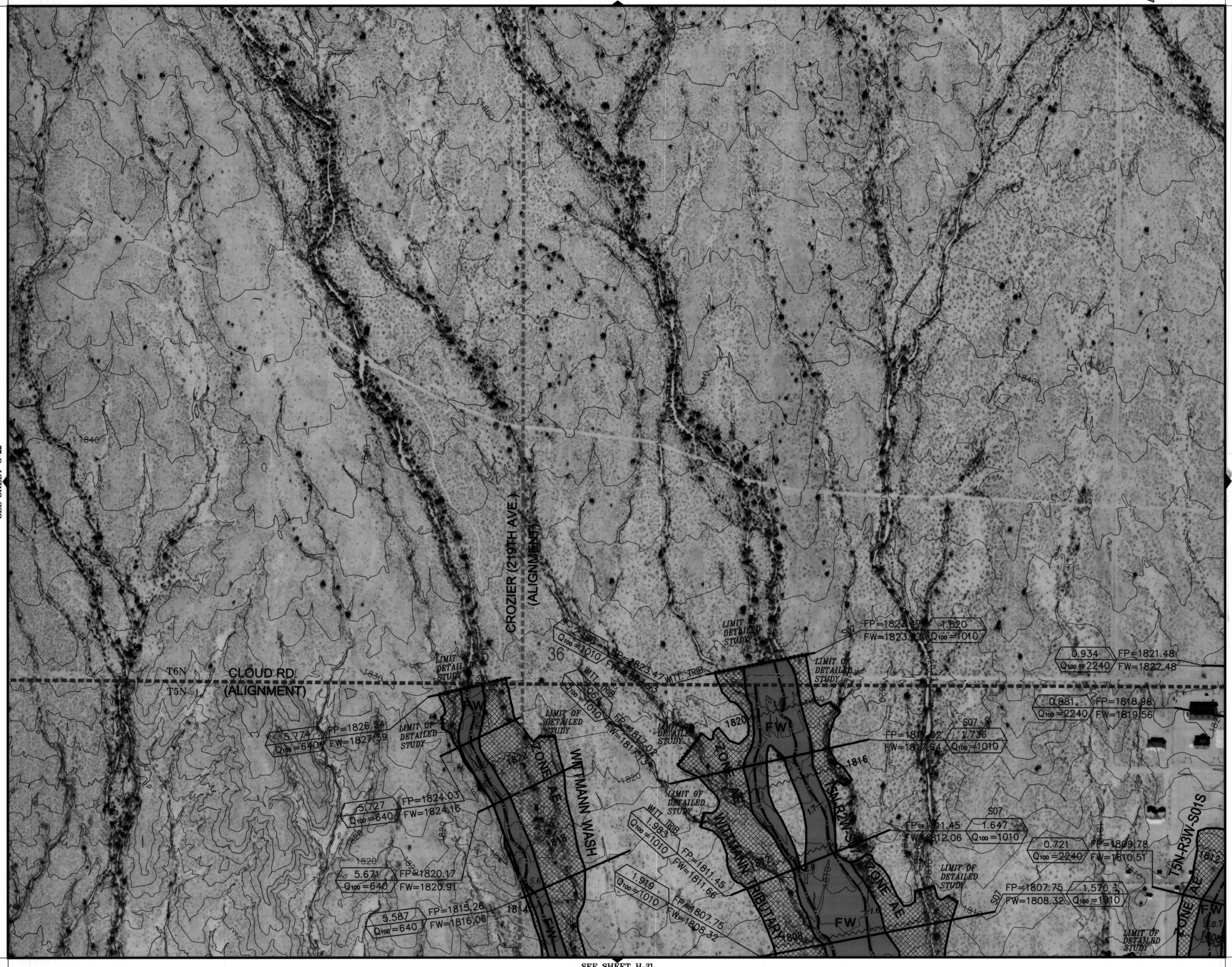
SEE SHEET H-23

ERM AJ3878

SEE SHEET G-22

SEE SHEET I-22

SEE SHEET H-21



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

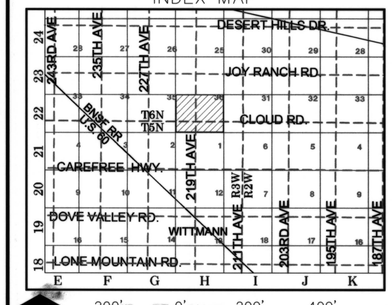
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3878		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 27737 — HERMAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

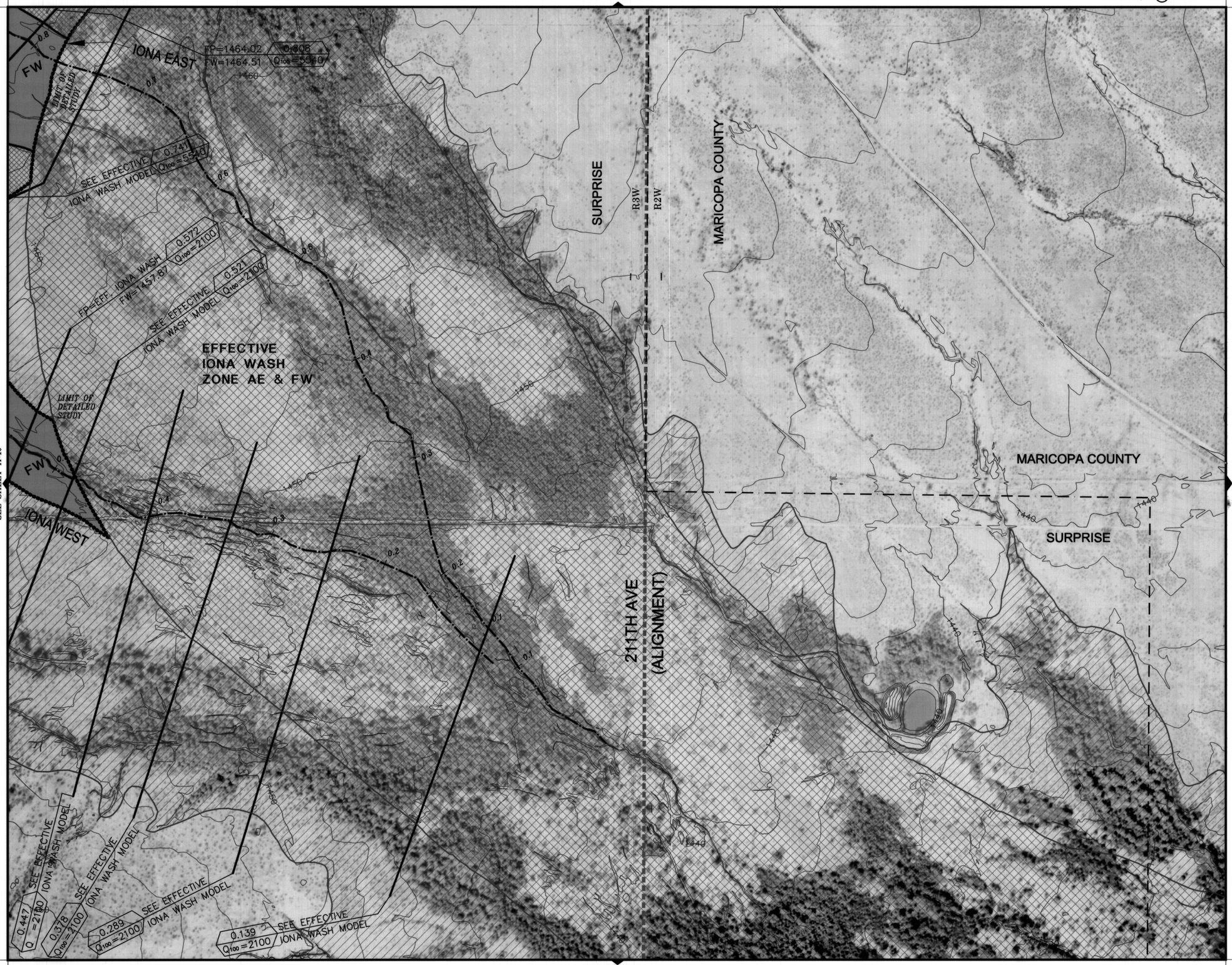
SHEET H-22 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\30032 (Wittmann ADMSU)\Task\hydraulics\FP-H_22.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-11

ERM DV2192



SEE SHEET H-10

SEE SHEET J-10

SEE SHEET I-09

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 = 1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

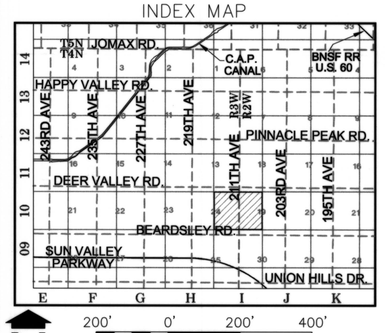
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

Certified Professional Surveyor — CERTIFICATE NO. 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-10 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-I_10.dwg DATE: 07/26/05

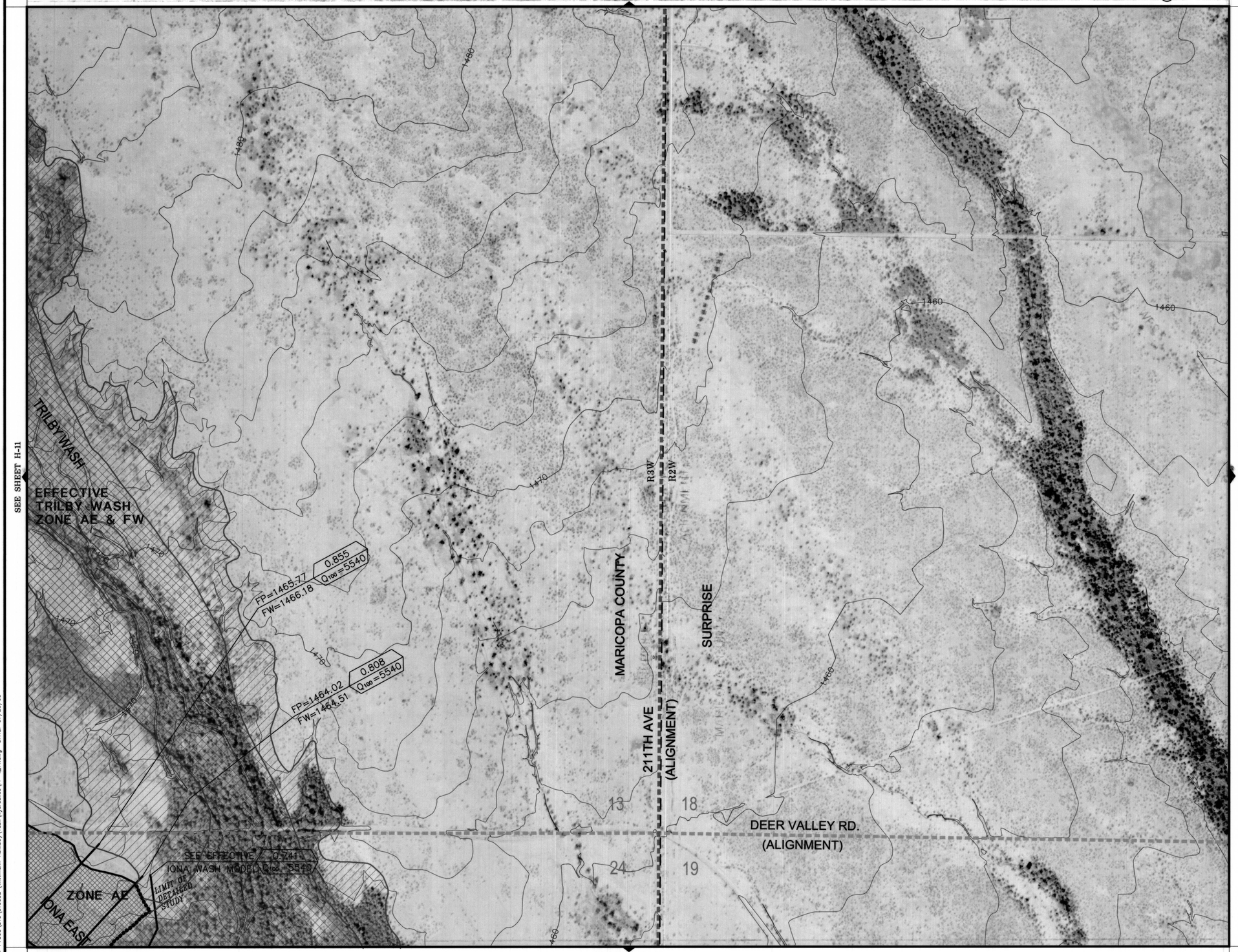
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-12

ERM DV2192

SEE SHEET H-11

SEE SHEET J-11



SEE SHEET I-10

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-I_11.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE — 29.1
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

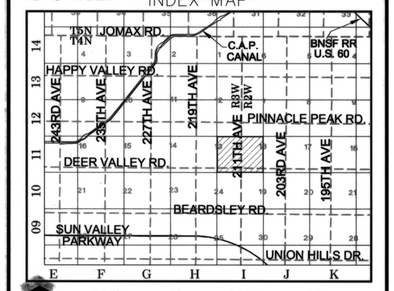
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2192		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

CERTIFICATE NO. 28737 — HERNAN A. ARISTIZABAL — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

SUBMITTED BY: _____ DATE: _____

RECOMMENDED BY: _____ DATE

APPROVED BY: _____ DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-11 OF FLOODPLAIN DELINEATION

SEE SHEET I-14

ERM AJ3866

6.155
Q_{100} =2880

5.925
Q_{100} =2880

5.727
Q_{100} =2880

ZONE A

WASH 2 WEST

LIMIT OF STUDY

HAPPY VALLEY RD.
(ALIGNMENT)

211TH AVE
(ALIGNMENT)

SURPRISE

MARICOPA COUNTY

R3W R2W

1 6 12 7

1529 1510 1500

SEE SHEET H-13

SEE SHEET J-13

SEE SHEET I-12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100} =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

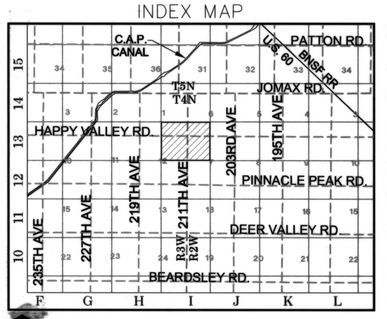
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

Registered Professional Engineer — Certificate No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/05 — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

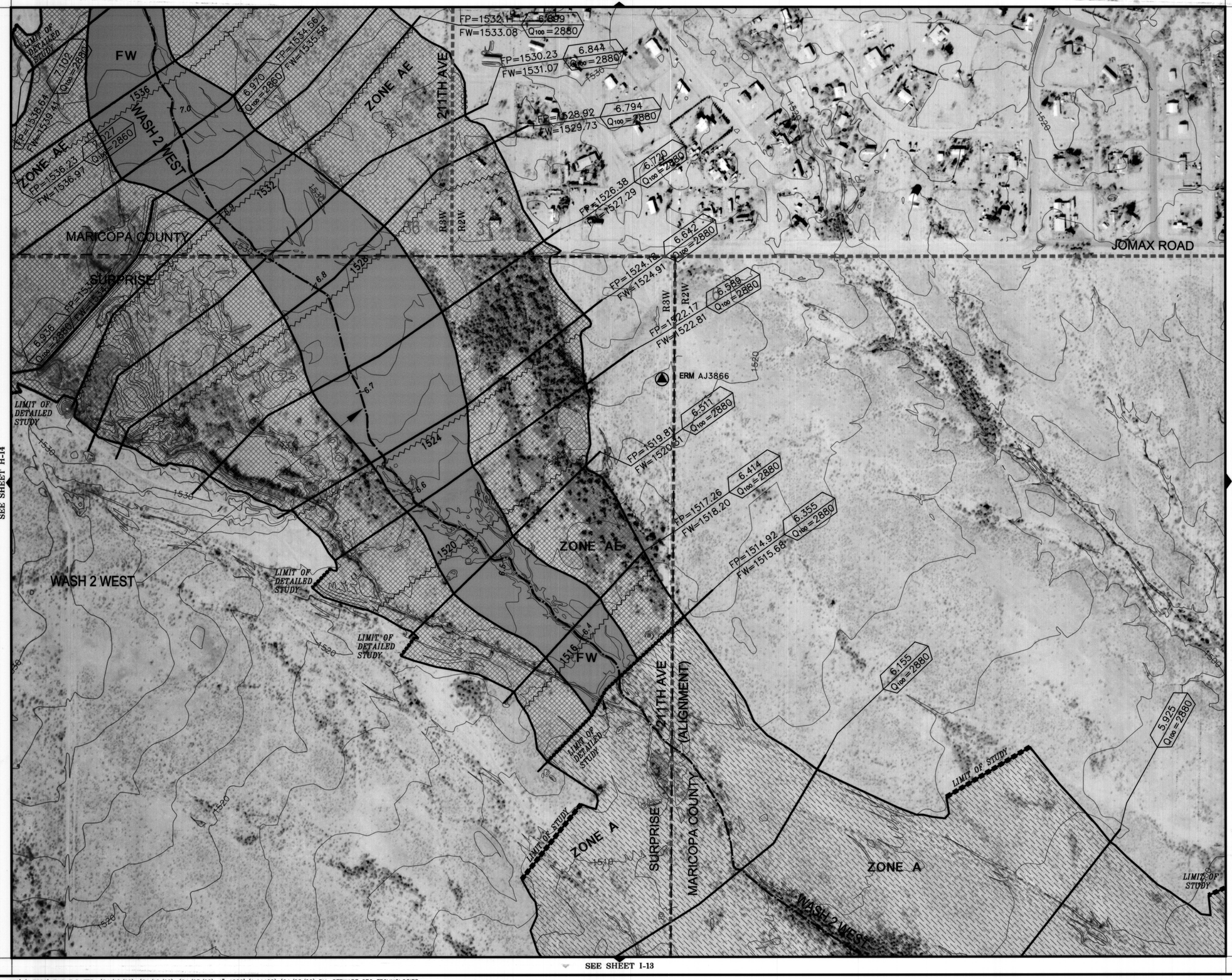
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-13 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-I_13.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

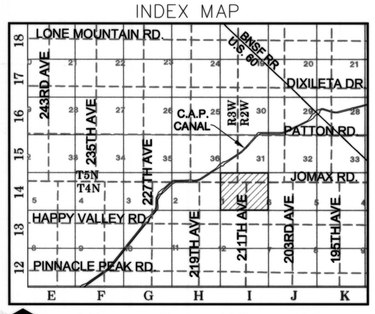
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/17/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-14 OF FLOODPLAIN DELINEATION

FILE: P:\30\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-L_14.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-16

ERM AJ3866

SEE SHEET H-15

SEE SHEET J-15

SEE SHEET I-14

PATTON RD.

PATTON RD.

ZONE AH
EL.=1551.80

ZONE AE

ZONE AH
EL.=1551.80

ZONE AH
EL.=1551.80

C.A.P. CANAL

C.A.P. CANAL
OVERCHUTE
STRUCTURE

WASH 2 WEST
TRIBUTARY-2

FW

WASH 2 WEST

ZONE AE

FW

211TH AVE

R3W R2W

36 31

FP=1559.73 FW=1560.18 0.405 Q100=1410

FP=1555.89 FW=1556.44 0.313 Q100=1410

FP=1552.26 FW=1552.53 0.225 Q100=1410

0.154 Q100=2870

0.084 Q100=2870

0.016 Q100=420

FP=1550.69 FW=1550.69
WITTMANN SOUTH SPLIT

0.066 Q100=4100

7.277 Q100=2880

FP=1546.49 FW=1546.49

FP=1542.81 FW=1543.78 7.227 Q100=2880

FP=1540.77 FW=1541.26 7.167 Q100=2880

FP=1538.64 FW=1539.41 7.102 Q100=2880

FP=1536.23 FW=1536.97 7.027 Q100=2880

FP=1534.56 FW=1535.56 6.970 Q100=2880

FP=1533.41 FW=1534.27 6.936 Q100=2880

0.4 0.3 0.2 0.1 1.3 1.2

1560 1550 1540 1530

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

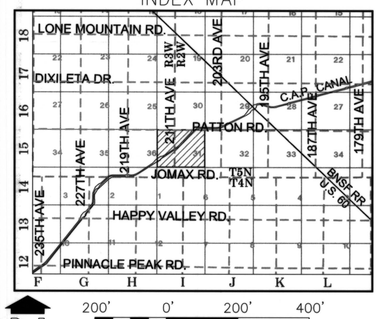
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 29737
HERNAN A. ARISTIZABAL
Date Signed 1/17/06
ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-15 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-I_15.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-17

ERM DV0916

SEE SHEET H-16

SEE SHEET J-16

SEE SHEET I-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

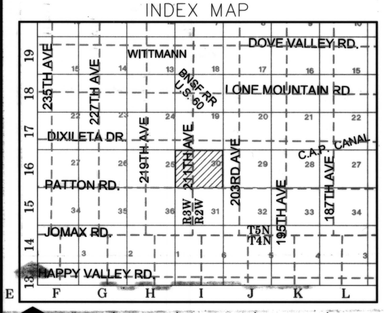
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0916		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

REGISTERED PROFESSIONAL ENGINEER CERTIFICATE NO. 28737 HERNAN A. ARISTIZABAL Date Signed 1/1/06 ARIZONA, U.S.A.

INDEX MAP



SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET I-16 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-1_16.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-18

ERM DV1875

1.933 Q100=3070 FP=1627.76 FW=1628.30 WITTMANN WASH

1.833 Q100=3070 FP=1623.65 FW=1624.63 WITTMANN WASH

WITTMANN WASH

FW

ZONE AE

LIMIT OF DETAILED STUDY

1.747 Q100=3070 FP=1619.84 FW=1620.39 WITTMANN WASH

T5N-R3W-S24E 0.076 Q100=1660

T5N-R3W-S24E

T5N-R3W-S24E 0.000 Q100=1660

FP=1616.51 FW=1617.23 1.674 Q100=3070

1.569 Q100=3070 FP=1612.64 FW=1613.63

FP=1610.90 FW=1611.53 1.512 Q100=3070

1.466 Q100=3070 FP=1609.12 FW=1609.83

FP=1606.04 FW=1607.04 1.394 Q100=3070

1.312 Q100=3070 FP=1603.10 FW=1603.84

FP=1600.62 FW=1601.56 1.248 Q100=3070

1.177 Q100=3070 FP=1597.90 FW=1598.68

FP=1594.15 FW=1595.13 1.078 Q100=3070

FP=1591.31 FW=1591.43 0.996 Q100=3070

WITTMANN SOUTH SPLIT

DIXILETA DR. (ALIGNMENT)

BRADLEY RD.

RADFORD RD.

MITCHELL RD.

206TH AVE.

211TH AVE

U.S.60 (GRAND AVE.)

BNSF RR

R3W R2W

SEE SHEET H-17

SEE SHEET J-17

SEE SHEET I-16

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-I_17.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

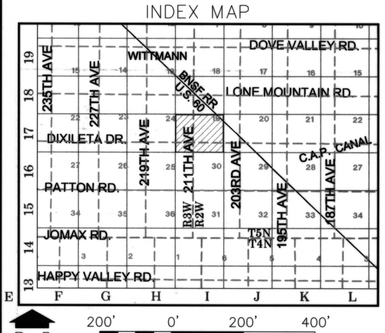
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV1875		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Surveyor — CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET I-17 OF FLOODPLAIN DELINEATION

SEE SHEET I-19

ERM DV0916

SEE SHEET H-18

SEE SHEET J-18

SEE SHEET I-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

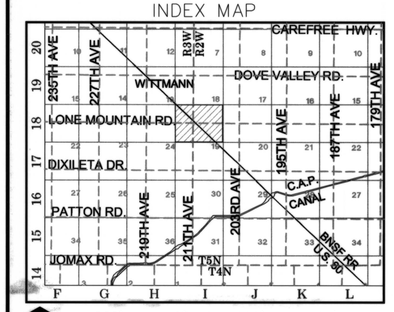
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0916		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Registered Professional Engineer — Certificate No. 29737 — Stephen HERNAN A. ARISTIZABAL — Date Signed 1/7/05 — ARIZONA, U.S.A.

INDEX MAP



SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-18 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\\Task\hydraulics\FP-I_18.dwg DATE: 06/08/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-20

ERM DV0918

SEE SHEET H-19

SEE SHEET J-19

SEE SHEET I-18

1.801 FP=1708.60 Q100=1660 FW=1709.59

FP=1703.04 FW=1703.97 1.697 Q100=1660

1.704 FP=1706.76 Q100=2740 FW=1707.26

FP=1702.48 FW=1703.11 1.632 Q100=2740

FP=1701.36 FW=1702.12 1.607 Q100=2740

1.538 FP=1697.62 Q100=5620 FW=1698.27

1.638 FP=1699.63 Q100=1660 FW=1700.32

1.474 FP=1693.37 Q100=5620 FW=1694.33

1.623 FP=1698.70 Q100=1660 FW=1699.50

1.538 FP=1694.29 Q100=1660 FW=1695.29

1.462 FP=1690.17 Q100=1660 FW=1690.99

1.398 FP=1692.25 Q100=5620 FW=1693.19

1.315 FP=1688.28 Q100=5620 FW=1689.27

1.390 FP=1686.26 Q100=1660 FW=1687.15

1.225 FP=1684.78 Q100=5620 FW=1685.79

1.304 FP=1681.06 Q100=1660 FW=1681.59

1.213 FP=1676.11 Q100=1660 FW=1677.11

2.753 Q100=2280 FP=1669.42 FW=1670.16

1.104 FP=1670.08 Q100=1660 FW=1670.01

1.037 FP=1667.30 Q100=1660 FW=1668.13

0.972 FP=1663.63 Q100=1660 FW=1664.51

1.135 FP=1680.72 Q100=4250 FW=1681.69

1.079 FP=1678.01 Q100=4250 FW=1678.99

1.004 FP=1674.48 Q100=4250 FW=1675.34

0.923 FP=1671.02 Q100=4250 FW=1671.99

0.846 FP=1666.81 Q100=4250 FW=1667.66

1.497 FP=1668.80 Q100=1490 FW=1669.46

1.421 FP=1664.86 Q100=1490 FW=1665.75

2.054 Q100=270 FP=1694.42 FW=1694.42

1.859 Q100=270 FP=1689.86 FW=1689.56

1.741 Q100=1490 FP=1683.86 FW=1684.09

1.653 Q100=1490 FP=1679.70 FW=1679.77

1.560 Q100=1490 FP=1676.50 FW=1677.41

FP=1672.19 FW=1672.50

ZONE AE

ZONE AH

FW

LIMIT OF DETAILED STUDY

211TH AVE

CHRYSLER LOOP RD

DOVE VALLEY RD

T5N-R2W-S19W

T5N-R3W-S24E

T5N-R2W-S19E

WITTMANN WASH

U.S.60

B.N.S.F.R.R.

211TH AVE (ALIGNMENT)

R3W R2W

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

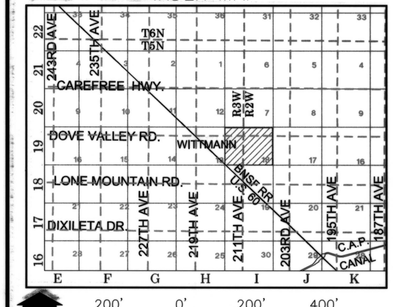
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0918		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Registered Professional Engineer — CERTIFICATE NO. 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/2005 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-I_19.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

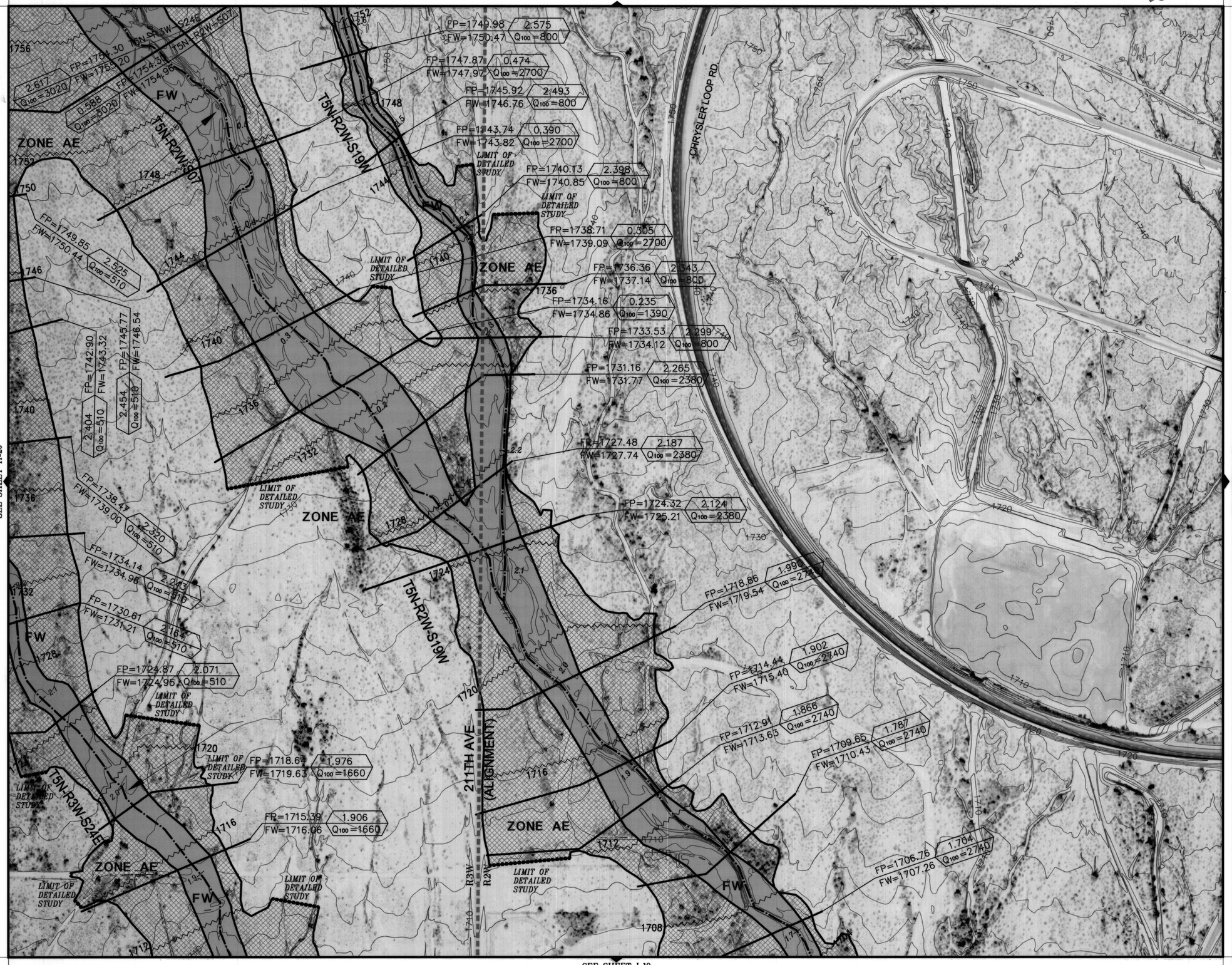
SEE SHEET I-21

ERM AJ3878

SEE SHEET H-20

SEE SHEET J-20

SEE SHEET I-19



SEE SHEET H-20

SEE SHEET J-20

SEE SHEET I-19

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

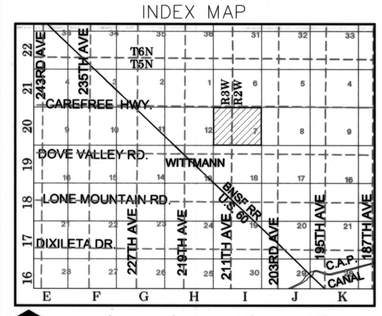
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3878		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate of Professional Engineer — 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-20 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-I_20.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET I-22

ERM AJ3878

T5N-R3W-S01S

T5N-R2W-S19W

ZONE AE

FW

LIMIT OF DETAILED STUDY

FP=1805.92 FW=1806.57 0.620 Q100=2240

FP=1801.71 FW=1802.42 3.483 Q100=800

FP=1799.81 FW=1799.80 0.540 Q100=2240

FP=1796.33 FW=1796.76 0.530 Q100=2240

FP=1797.66 FW=1798.31 3.397 Q100=800

FP=1795.82 FW=1795.93 3.369 Q100=800

FP=1792.84 FW=1793.27 3.318 Q100=800

FP=1792.81 FW=1793.04 0.437 Q100=2240

FP=1789.20 FW=1789.28 3.265 Q100=800

0.344 Q100=2240

FP=1787.62 FW=1788.17 1.205 Q100=2670

FP=1786.21 FW=1786.75 3.221 Q100=800

FP=1783.48 FW=1784.08 1.124 Q100=2670

FP=1781.50 FW=1782.20 3.130 Q100=800

0.268 Q100=2240

FP=1778.69 FW=1779.63 1.045 Q100=2670

0.194 Q100=2240

FP=1775.79 FW=1776.13 3.037 Q100=800

T5N-R2W-S19W

FP=1774.36 FW=1774.88 1.330 Q100=3020

FP=1774.36 FW=1774.84 0.961 Q100=3020

FP=1771.12 FW=1771.37 2.953 Q100=800

WITT. TRIB.

FP=1769.42 FW=1769.39 1.237 Q100=3020

FP=1769.42 FW=1769.91 0.875 Q100=3020

211TH AVE

FP=1765.78 FW=1766.21 2.859 Q100=800

FP=1763.90 FW=1764.79 0.779 Q100=3020

FP=1763.90 FW=1763.97 1.130 Q100=3020

FP=1762.30 FW=1762.71 2.789 Q100=800

FP=1759.50 FW=1760.42 2.710 Q100=3020

FP=1758.50 FW=1760.42 1.047 Q100=3020

FP=1759.50 FW=1760.17 0.682 Q100=3020

FP=1758.14 FW=1758.29 2.725 Q100=800

T5N-R2W-S07

FP=1754.30 FW=1755.22 0.952 Q100=3020

FP=1754.30 FW=1755.20 2.617 Q100=3020

FP=1754.30 FW=1754.96 0.588 Q100=3020

FP=1755.76 FW=1753.81 2.640 Q100=800

CHRYSLER LOOP RD.

CAREFREE HIGHWAY (ALIGNMENT)

SEE SHEET H-21

SEE SHEET J-21

SEE SHEET I-20

FILE: P:\300\310\310032 (Wittmann ADMSJ)\Task\hydraulics\FP-I_21.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3878		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certified Professional Floodplain Manager — CERTIFICATE NO. 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/17/06 — ARIZONA, U.S.A.

INDEX MAP

T6N T5N R3W R2W
CLOUD RD.
CAREFREE HWY.
DOVE VALLEY RD.
WITTMANN
LONE MOUNTAIN RD.
DIXILETA DR.
243RD AVE 235TH AVE 227TH AVE 219TH AVE 211TH AVE 203RD AVE 195TH AVE 187TH AVE
C.A.P. CANAL

200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

SUBMITTED BY: DATE:

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET I-21 OF FLOODPLAIN DELINEATION

SEE SHEET I-23

SEE SHEET H-22

SEE SHEET J-22

SEE SHEET I-21

211TH AVE

T5N-R2W-S19W

T5N-R3W-S01S

R3W R2W

T6N T5N

CLOUD RD.

ERM AJ3878

LIMIT OF DETAILED STUDY

ZONE AE

FW

FP=1822.99 FW=1823.18 3,765 Q100=800

FP=1816.53 FW=1817.00 3,678 Q100=800

FP=1808.65 FW=1808.62 3,576 Q100=800

FP=1801.71 FW=1802.42 3,483 Q100=800

FP=1818.98 FW=1819.56 0.881 Q100=2240

FP=1621.48 FW=1822.48 0.734 Q100=2240

FP=1815.09 FW=1815.90 0.817 Q100=2240

FP=1809.78 FW=1810.51 0.721 Q100=2240

1860 1850 1840 1830 1820 1810 1808 1816 1812 1804

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

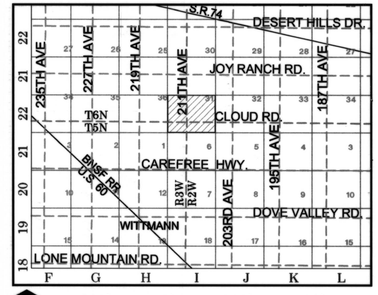
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3878		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certified Professional Engineer — 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/06 — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET I-22 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-I_22.dwg DATE: 07/26/05

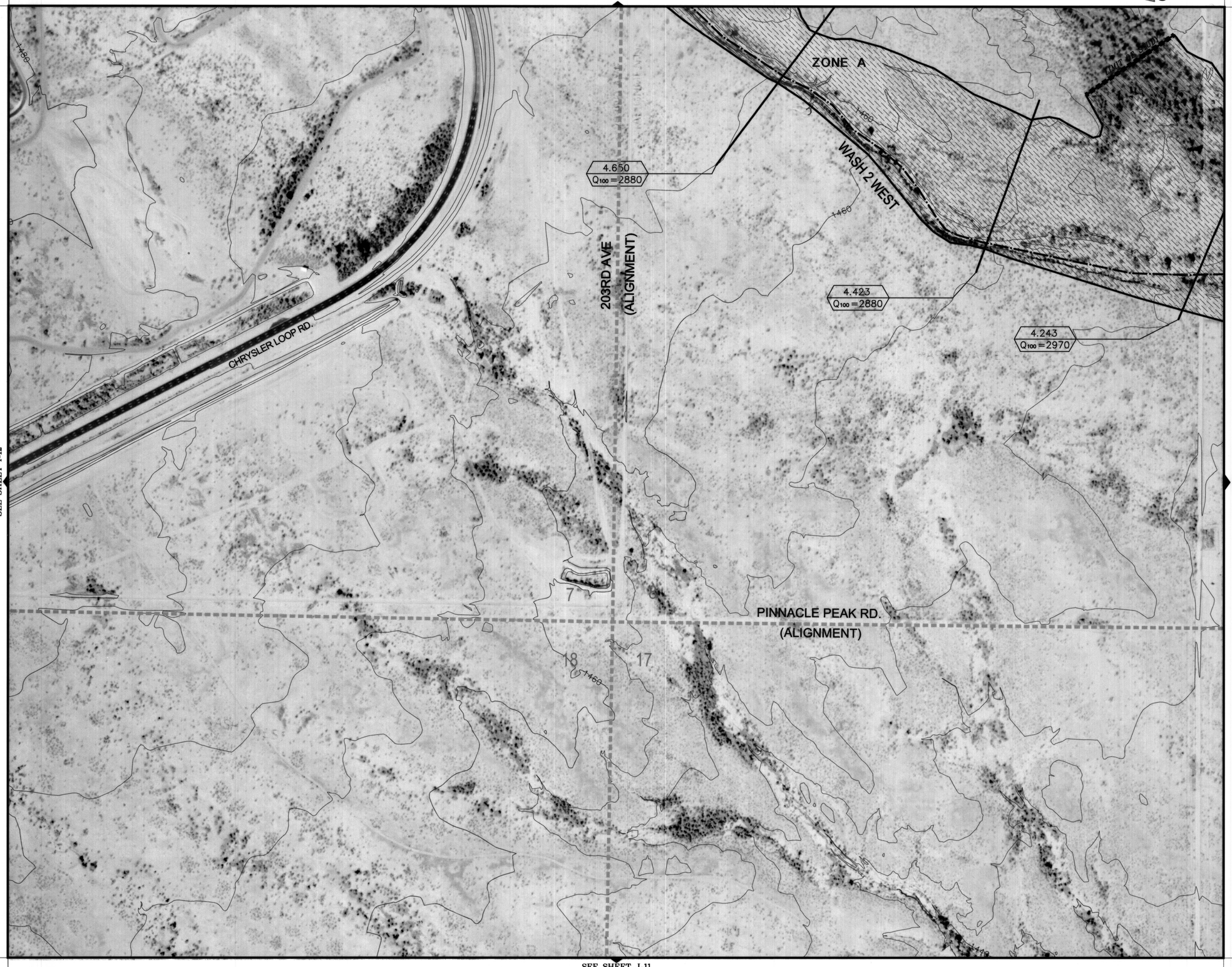
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET J-13

ERM AJ3860

SEE SHEET I-12

SEE SHEET K-12



SEE SHEET J-11

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-J_12.dwg DATE: 07/27/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 = 1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

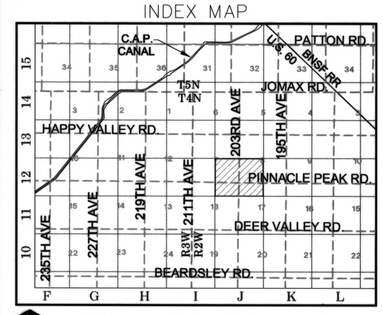
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

Professional Engineer — Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: _____ DATE: _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE

APPROVED BY: _____ DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET J-12 OF FLOODPLAIN DELINEATION

SEE SHEET J-14

ERM AJ3866

SEE SHEET I-13

SEE SHEET K-13

SEE SHEET J-12

5.727
Q_{100}=2880

LIMIT OF STUDY

203RD AVE (ALIGNMENT)

5.291
Q_{100}=2880

1480

HAPPY VALLEY RD.

5.035
Q_{100}=2880

ZONE A

WASH 2 WEST

4.862
Q_{100}=2880

CHRYSLER LOOP RD.

LIMIT OF STUDY

4.650
Q_{100}=2880

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

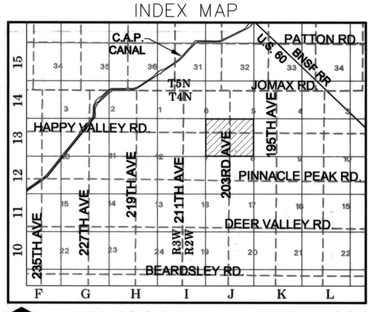
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

Professional Engineer — Certificate No. 27137 — HERNAN A. ARISTIZABAL — Date Signed 7/7/2005 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET J-13 OF FLOODPLAIN DELINEATION

FILE: P:\300_31\0\310032 (Wittmann ADMS)\Task\hydraulics\FP-J_13.dwg DATE: 07/27/05

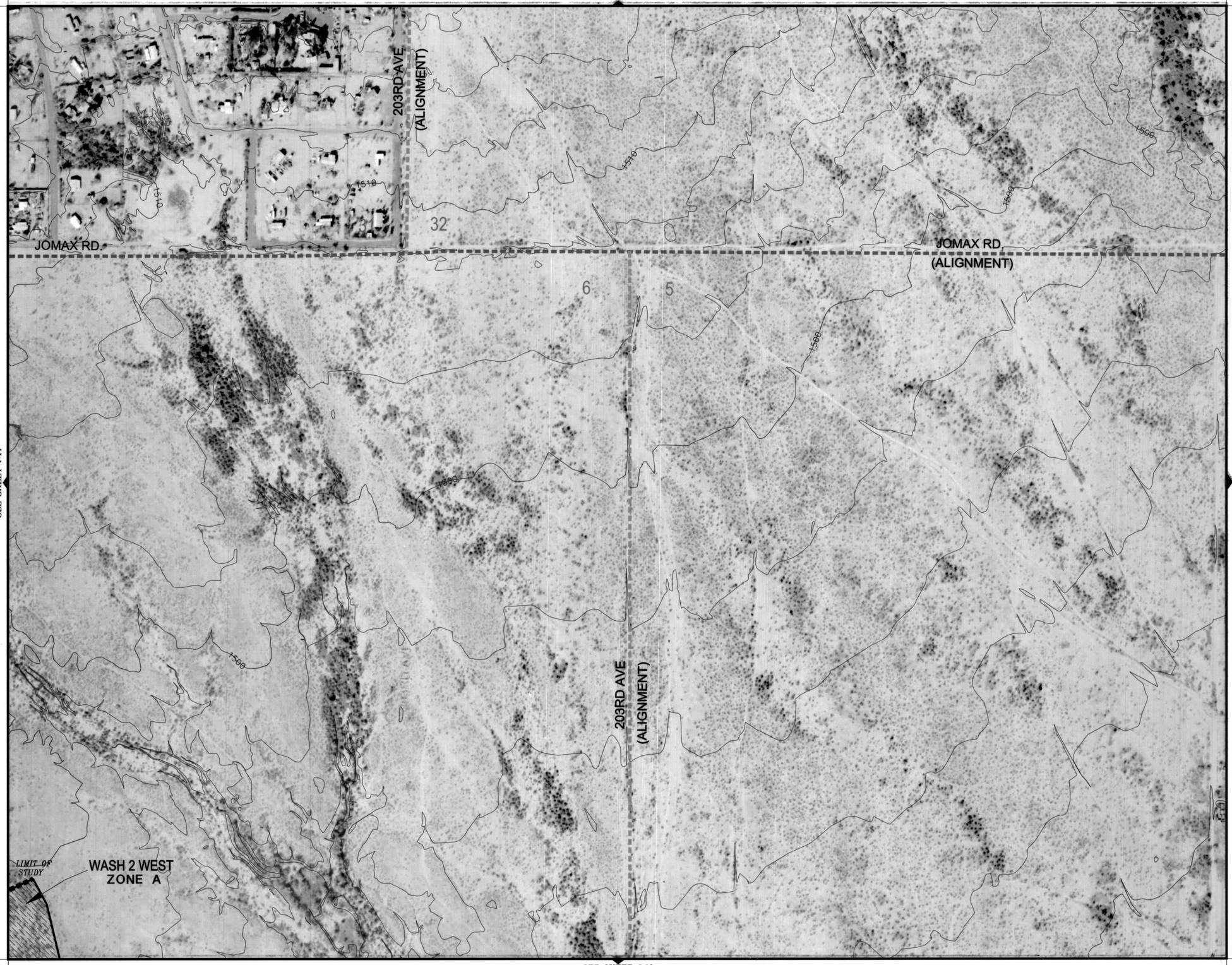
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET J-15

ERM AJ3866

SEE SHEET I-14

SEE SHEET K-14



SEE SHEET J-13

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

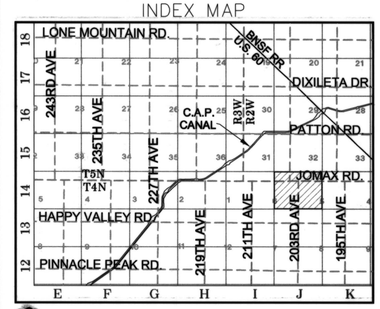
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3866		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/17/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET J-14 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSJ)\Task\hydraulics\FP-J_14.dwg DATE: 07/28/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET J-16

ERM DV1875

PATTON ROAD

6.083 FP=1529.34
Q100=7170 FW=1530.19

WASH 1 WEST

203RD AVE

SEE SHEET I-15

SEE SHEET K-15

SEE SHEET J-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 / Q100=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

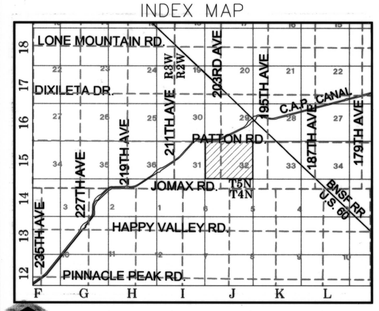
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV1875		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/17/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET J-15 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-J_15.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET J-17

ERM DV1875

SEE SHEET I-16

SEE SHEET K-16

SKINNER DR.

JANICE RD.

203RD AVE

205TH AVE

WITTMANN WASH

FP=1565.00 / FW=1565.85 — 0.339 / Q_{100}=2800

FP=1561.83 / FW=1562.53 — 0.246 / Q_{100}=2800

FP=1558.56 / FW=1559.52 — 0.170 / Q_{100}=2800

FP=1555.23 / FW=1555.90 — 0.082 / Q_{100}=2800

0.040 / Q_{100}=2800

0.019 / Q_{100}=2800

ZONE AH
EL.=1553.36

203RD AVE BYPASS

C.A.P. CANAL

PATTON RD.
(ALIGNMENT)

U.S.60 (GRAND AVE.)

B.N.S.F. RR

EXISTING
ZONE A

C.A.P. CANAL
OVERCHUTE
STRUCTURE

ZONE AH
EL.=1553.36

6.497 / Q_{100}=7170 — FP=1551.75 / FW=1551.84

6.453 / Q_{100}=7170 — FP=1548.17 / FW=1548.72

6.390 / Q_{100}=7170 — FP=1543.15 / FW=1543.77

6.320 / Q_{100}=7170 — FP=1540.31 / FW=1541.07

WASH 1 WEST

6.230 / Q_{100}=7170 — FP=1536.72 / FW=1537.61

6.173 / Q_{100}=7170 — FP=1534.31 / FW=1535.23

SEE SHEET J-15

FILE: P:\300\310\310032 (Wittmann ADMS)\) Tools\hydraulics\FP-_J_16.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE / SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

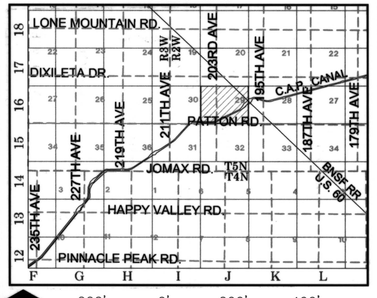
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV1875		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/1/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus

2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET J-16 OF FLOODPLAIN DELINEATION

SEE SHEET J-18

SEE SHEET I-17

SEE SHEET K-17

SEE SHEET J-16

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

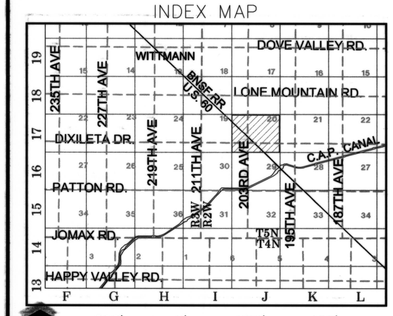
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0916		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV
DV1875		

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/4/06 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2205 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET J-17 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-J_17.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET J-19

ERM DV0916

FP=1659.22 FW=1660.21 1.330 Q_{100}=1660

FP=1655.61 FW=1656.56 1.244 Q_{100}=1660

FP=1651.38 FW=1652.37 1.147 Q_{100}=1660

FP=1646.60 FW=1647.27 1.042 Q_{100}=1660

FP=1642.49 FW=1643.49 0.954 Q_{100}=1660

FP=1638.29 FW=1639.27 0.855 Q_{100}=1660

FP=1634.61 FW=1635.62 0.778 Q_{100}=1660

FP=1631.01 FW=1631.74 0.695 Q_{100}=1660

FP=1626.70 FW=1627.69 0.586 Q_{100}=1660

FP=1622.56 FW=1623.47 0.503 Q_{100}=1660

FW

ZONE AE

T5N-R2W-S19E

T5N-R2W-S19E

203RD AVE

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LONE MOUNTAIN RD. (ALIGNMENT)

SEE SHEET I-18

SEE SHEET K-18

SEE SHEET J-17

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310332 (Wittmann ADMSU)\Task\hydraulics\FP-_L_18.dwg DATE: 07/27/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION: ZONE A

WASH I.D. LABEL: WASH 9 EAST

ELEVATION REFERENCE MARK: ERM AJ3866

CROSS SECTION: 2.199 Q_{100}=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION: 1320

DIKE / LEVEE: DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER: 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

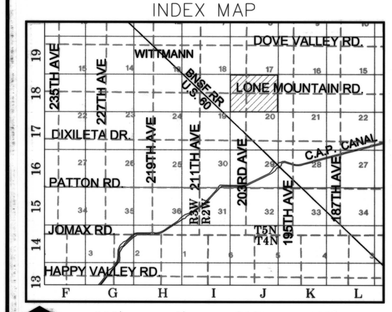
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0916		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — CERTIFICATE EXPIRES 12/31/06 — 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus

2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

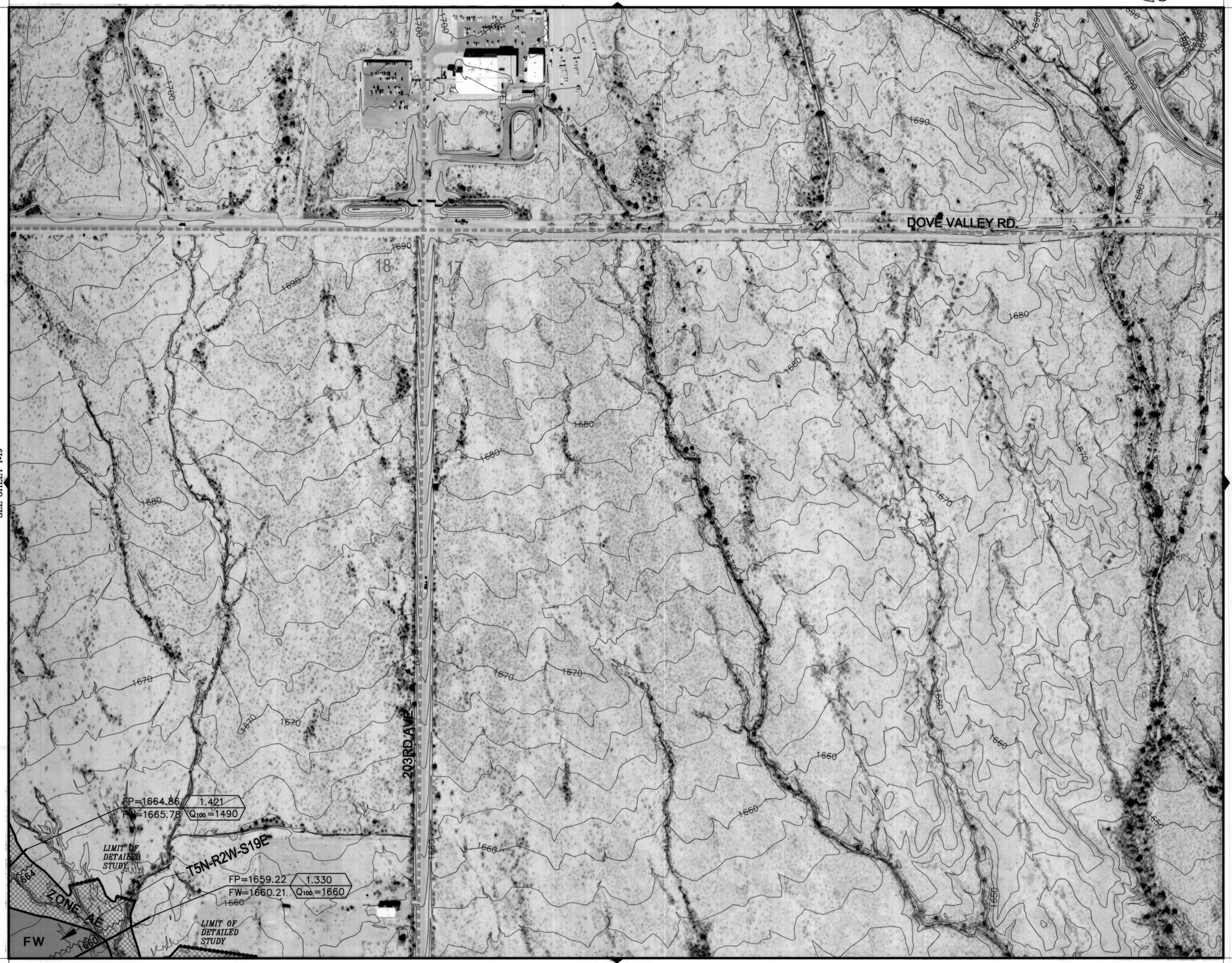
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET J-18 OF FLOODPLAIN DELINEATION

SEE SHEET J-20

ERM AJ3872



SEE SHEET I-19

SEE SHEET K-19

SEE SHEET J-18

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

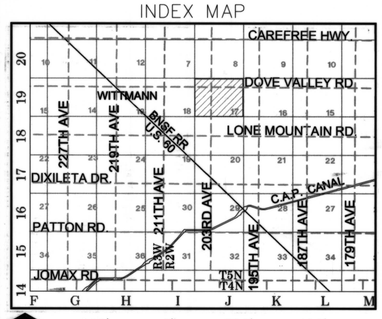
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE

APPROVED BY: _____ DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: _____ DATE:

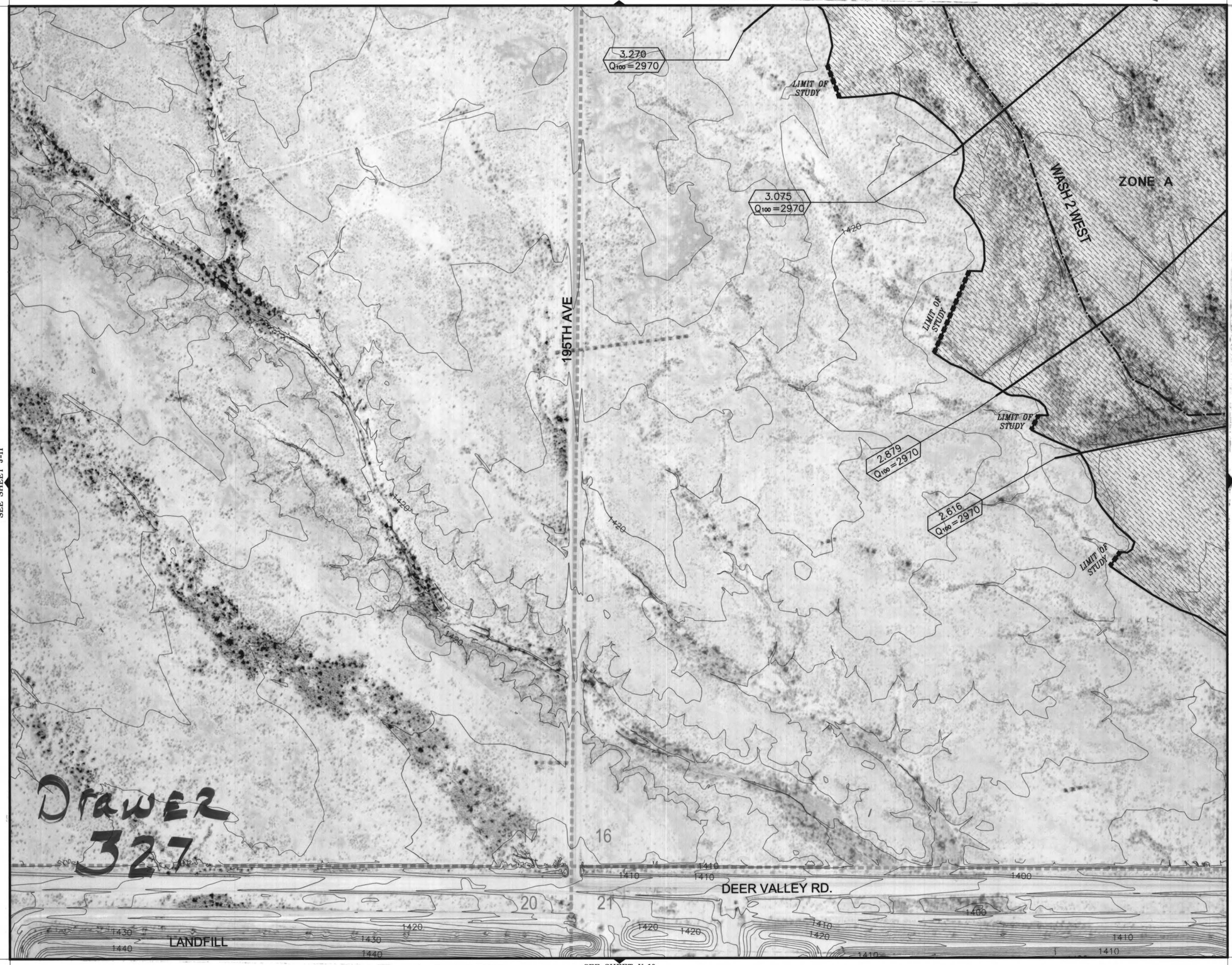
SHEET J-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task \Hydraulics\FP-J_19.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET K-12

ERM AJ3860



SEE SHEET J-11

SEE SHEET L-11

SEE SHEET K-10

Drawer 327

DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMSU)\Tasks\hydraulics\FP-K_11.dwg DATE: 07/27/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

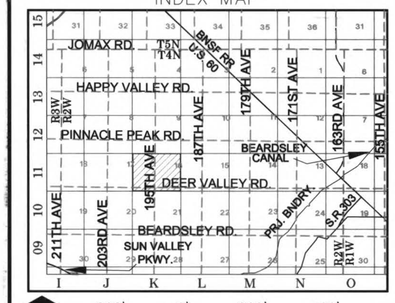
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Professional Engineer — 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET K-11 OF FLOODPLAIN DELINEATION

Sheets
K-11 thru R-18

SEE SHEET K-13

ERM AJ3860

SEE SHEET J-12

SEE SHEET L-12

SEE SHEET K-11

4.243
Q_{100}=2970

4.103
Q_{100}=2970

3.924
Q_{100}=2970

3.702
Q_{100}=2970

3.478
Q_{100}=2970

3.270
Q_{100}=2970

3.075
Q_{100}=2970

LIMIT OF STUDY

ZONE A

WASH 2 WEST

195TH AVE

193RD AVE.

191ST AVE.

NORWICH DR.

BELINDA AVE.

PINNACLE PEAK RD.

PINNACLE PEAK RD. ALIGNMENT

1440

1420

17

16

8

1

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

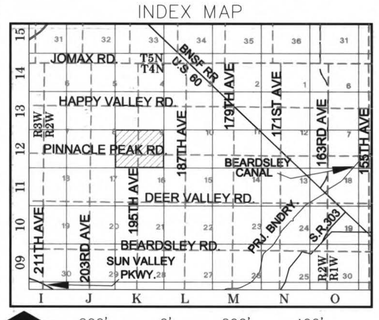
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Professional Engineer — Christopher T. Hays — 39737 — Hernan A. Aristizabal — Date Signed 1/17/06 — Arizona, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET K-12 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-K_11.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET K-15

ERM DV0268

SEE SHEET J-14

SEE SHEET L-14

SEE SHEET K-13

5.069 Q100=7360 FP=1488.02 FW=1488.97

LIMIT OF DETAILED STUDY

195TH AVE.

ZONE AE

FW

WASH 1WEST

4.872 Q100=7360 FP=1481.28 FW=1481.74

4.783 Q100=7360 FP=1478.21 FW=1476.3

4.741 Q100=7360 FP=1472.28 FW=1473.27

4.872 Q100=7360

5.006 Q100=7360 FP=1485.62 FW=1486.53

4.971 Q100=7360 FP=1484.45 FW=1485.32

4.929 Q100=7360 FP=1483.40 FW=1484.24

193RD AVE

JOMAX RD. (ALIGNMENT)

JOMAX RD.

LIMIT OF STUDY

4.512 Q100=7360

4.356 Q100=7360

4.234 Q100=7360

ZONE A

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

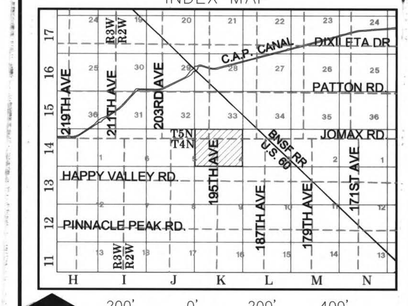
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 28737 HERNAN A. ARISTIZABAL Date Signed 7/21/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET K-14 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-K_14.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET K-16

ERM DV0268

SEE SHEET J-15

SEE SHEET L-15

SEE SHEET K-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

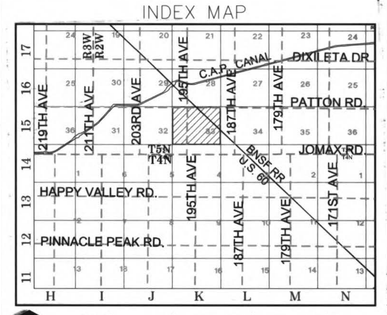
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 38737 HERNAN A. ARISTIZABAL Date Signed 1/1/2006 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET K-15 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task 1\hydraulics\FP-K_15.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET K-17

ERM DV1875

SEE SHEET J-16

SEE SHEET L-16

SEE SHEET K-15

195TH AVE. (ALIGNMENT)

ZONE AH
EL.=1555.12

C.A.P. CANAL

BNSF RR.

ZONE AE

EXISTING ZONE A

WASH 1 WEST

US80 (GRAND AVE.)

BASELINE RD.

PATTON RD.

WASH 1 EAST

WASH 2 EAST

LIMIT OF DETAILED STUDY

FW

6.453	Q_{100}=7170
6.390	Q_{100}=7170
6.920	Q_{100}=7170
6.230	Q_{100}=7170
6.173	Q_{100}=7170
6.083	Q_{100}=7170
4.380	Q_{100}=470
4.338	Q_{100}=470
4.247	Q_{100}=470
4.192	Q_{100}=470
4.145	Q_{100}=470
4.085	Q_{100}=470
4.017	Q_{100}=470
3.938	Q_{100}=470
3.849	Q_{100}=470
1.310	Q_{100}=470
1.260	Q_{100}=470
1.180	Q_{100}=470
1.090	Q_{100}=470
1.010	Q_{100}=470
0.960	Q_{100}=470
0.910	Q_{100}=470
0.880	Q_{100}=470
0.875	Q_{100}=450
0.870	Q_{100}=450
0.860	Q_{100}=450
0.850	Q_{100}=450
0.810	Q_{100}=450

FP=1548.17	FW=1548.72
FP=1543.15	FW=1543.77
FP=1540.51	FW=1541.07
FP=1536.72	FW=1537.36
FP=1534.31	FW=1535.23
FP=1529.34	FW=1540.19
FP=1542.54	FW=1542.54
FP=1541.91	FW=1541.92
FP=1538.42	FW=1538.38
FP=1534.78	FW=1534.90
FP=1526.34	FW=1526.35
FP=1525.61	FW=1525.63
FP=1525.46	FW=1525.43
FP=1523.67	FW=1523.76
FP=1536.39	FW=1536.65
FP=1533.29	FW=1533.29
FP=1531.17	FW=1531.17
FP=1529.78	FW=1529.79
FP=1527.63	FW=1527.81
FP=1524.70	FW=1524.80
FP=1522.62	FW=1522.62
FP=1519.78	FW=1519.79
FP=1516.19	FW=1516.18
FP=1532.44	FW=1532.47
FP=1529.62	FW=1530.07
FP=1527.77	FW=1528.02
FP=1527.39	FW=1527.34
FP=1526.93	FW=1526.93

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

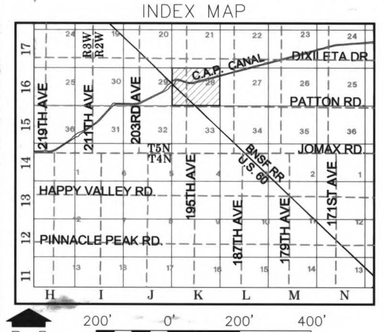
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV1875		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 28737 — HERNAN A. ARISTIZABAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET K-16 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-K_16.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET K-18

ERM AJ3872

SEE SHEET J-17

SEE SHEET L-17

SEE SHEET K-16

DIXILETA DR. (ALIGNMENT)

195TH AVE (ALIGNMENT)

ZONE AH
EL.=1555.12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

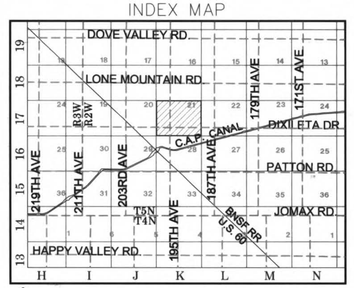
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL Date Signed 1/7/05 ARIZONA, U.S.A.

INDEX MAP



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET K-17 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSJ)\Task\Hydraulics\FP-K_17.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET K-19

ERM AJ3872

SEE SHEET J-18

SEE SHEET L-18

SEE SHEET K-17

WASH 2E (N of CAP)

WASH 2 EAST-TRIBUTARY

LONE MOUNTAIN RD. (ALIGNMENT)

195TH AVE. (ALIGNMENT)

ZONE AE

LIMIT OF DETAILED STUDY

FP=1632.47 0.920 FW=1633.06 Q_{100}=2150

FP=1628.60 0.844 FW=1629.52 Q_{100}=2150

FP=1624.54 0.762 FW=1624.69 Q_{100}=2150

FP=1620.41 0.681 FW=1621.38 Q_{100}=2150

FP=1616.29 0.599 FW=1616.53 Q_{100}=2150

FP=1612.97 0.537 FW=1613.46 Q_{100}=2150

1.831 FP=1636.02 Q_{100}=1450 FW=1636.48

1.742 FP=1630.87 Q_{100}=1450 FW=1631.22

1.651 FP=1625.14 Q_{100}=1450 FW=1626.07

1.559 FP=1620.16 Q_{100}=1450 FW=1620.84

1.478 FP=1616.29 Q_{100}=1450 FW=1616.62

1.417 FP=1612.55 Q_{100}=1450 FW=1613.05

0.450 FP=1609.10 Q_{100}=2150 FW=1609.97

0.392 FP=1606.24 Q_{100}=2150 FW=1607.24

1.338 FP=1607.55 Q_{100}=1450 FW=1608.55

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 Q_{100}=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

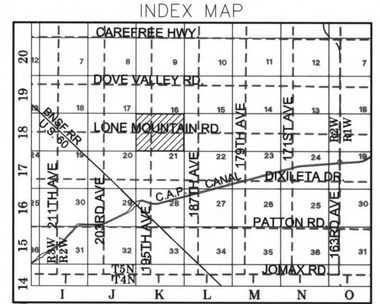
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certificate No. 29737 HERNAN A. ARISTIZABAL Date Signed 7/27/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET K-18 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310332 (Wittmann ADMSU)\Task\hydraulics\FP-K_18.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

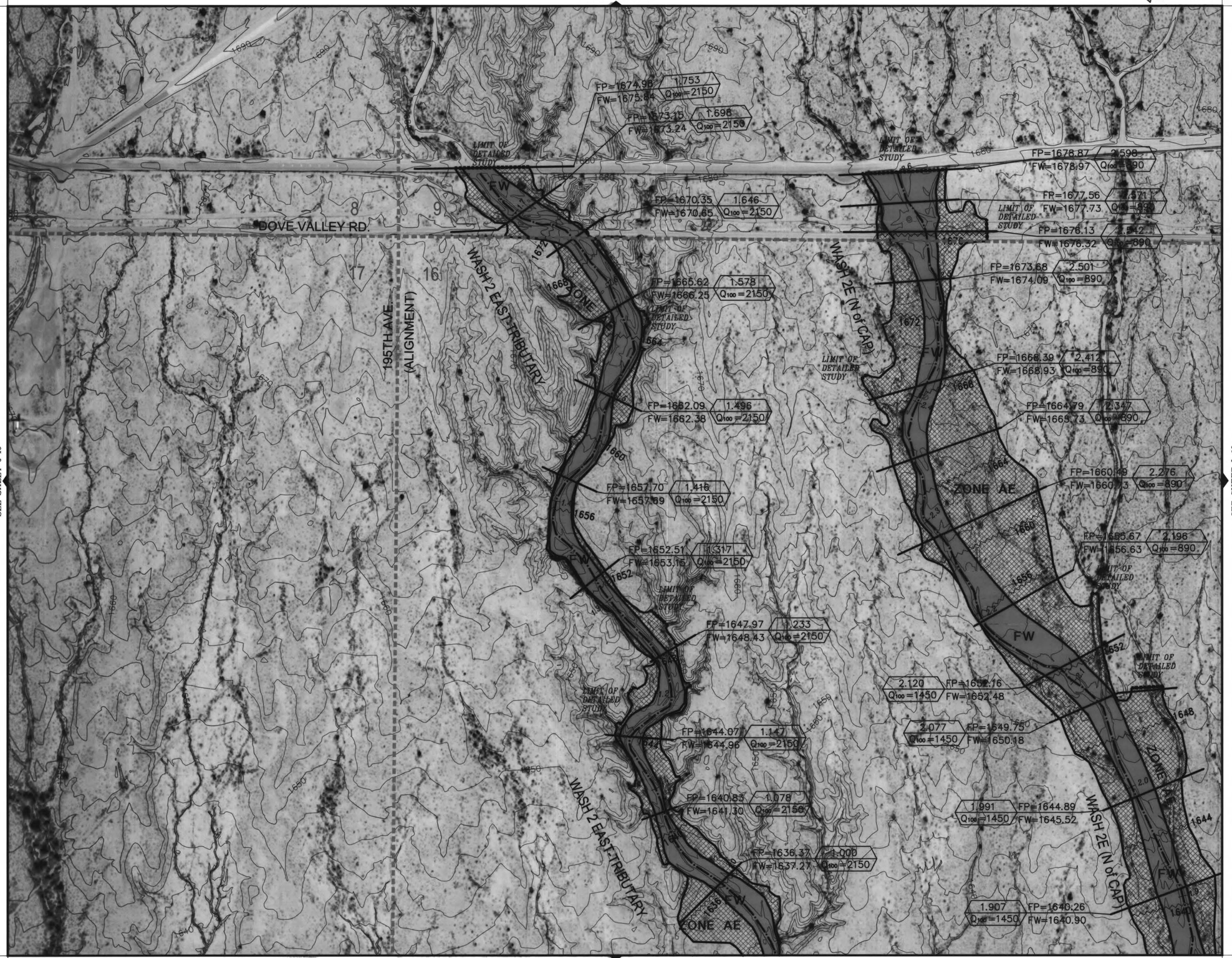
SEE SHEET K-20

ERM AJ3872

SEE SHEET J-19

SEE SHEET L-19

SEE SHEET K-18



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

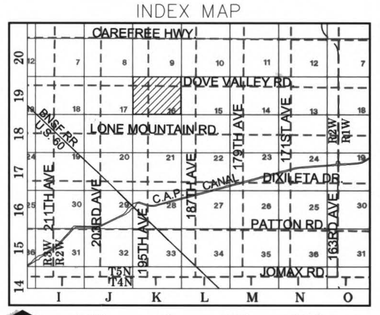
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE 29737 HERNAN A. ARRIZABALAGA Date Signed 1/31/06 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

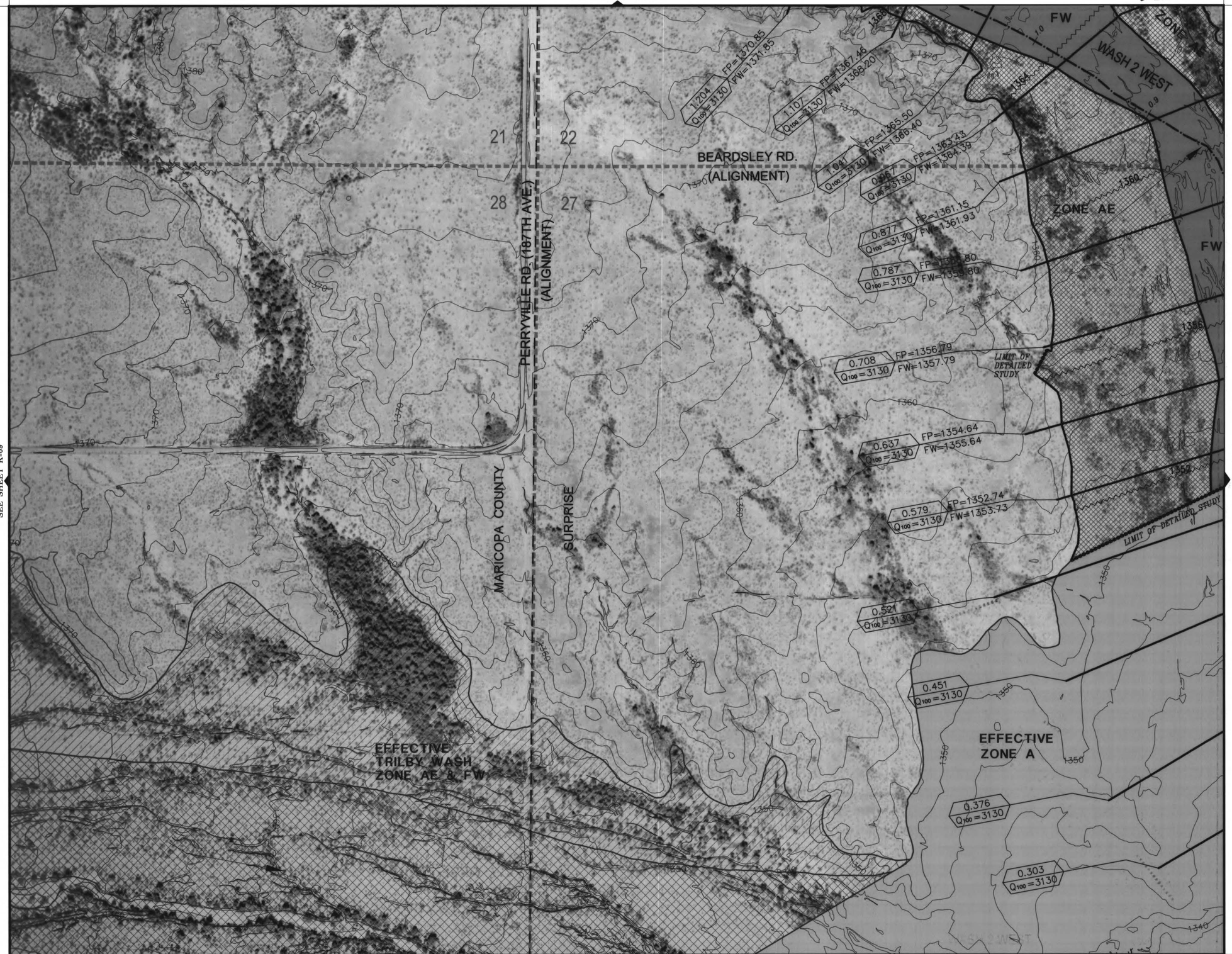
SHEET K-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-K_19.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-10

ERM AJ3860



SEE SHEET K-09

SEE SHEET M-09

SEE SHEET L-08

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

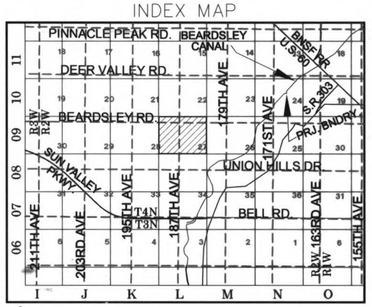
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix. AZ 85008.3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY: DATE:

SHEET L-09 OF FLOODPLAIN DELINEATION

FILE: P:\30\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-L_09.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-11

ERM AJ3860

SEE SHEET K-10

SEE SHEET M-10

SEE SHEET L-09

FP=1389.87 FW=1390.57 2.020 Q100=2970

FP=1388.52 FW=1389.47 1.949 Q100=2970

FP=1387.22 FW=1388.18 1.863 Q100=2970

FP=1385.27 FW=1386.01 1.779 Q100=2970

FP=1382.75 FW=1383.13 1.692 Q100=2970

FP=1378.64 FW=1378.65 1.586 Q100=3130

FP=1378.65 FW=1378.71 1.554 Q100=3130

FP=1376.91 FW=1377.43 1.486 Q100=3130

FP=1375.91 FW=1376.06 1.412 Q100=3130

FP=1374.93 FW=1375.06 1.336 Q100=3130

FP=1373.82 FW=1373.96 1.285 Q100=3130

FP=1372.91 FW=1373.10 1.204 Q100=3130

FP=1370.85 FW=1371.85 1.107 Q100=3130

FP=1367.46 FW=1368.20 1.044 Q100=3130

FP=1365.50 FW=1366.40 0.967 Q100=3130

FP=1363.43 FW=1364.39 0.896 Q100=3130

2.096 Q100=2970 FP=1391.95 FW=1392.73

FW

ZONE AE

ZONE AH

WASH 2 WEST

LIMIT OF DETAILED STUDY

ZONE A

MARICOPA COUNTY

SURPRISE

PERRYVALLE RD. (187TH AVE.) (ALIGNMENT)

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

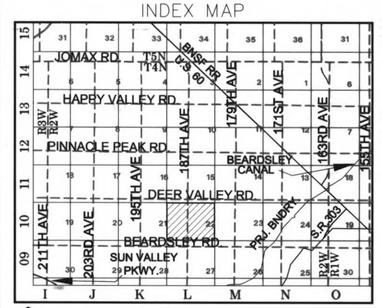
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

HERNAN A. ARISTIZABAL 29737 Date Signed 7/27/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-10 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-L_10.dwg DATE: 07/27/05

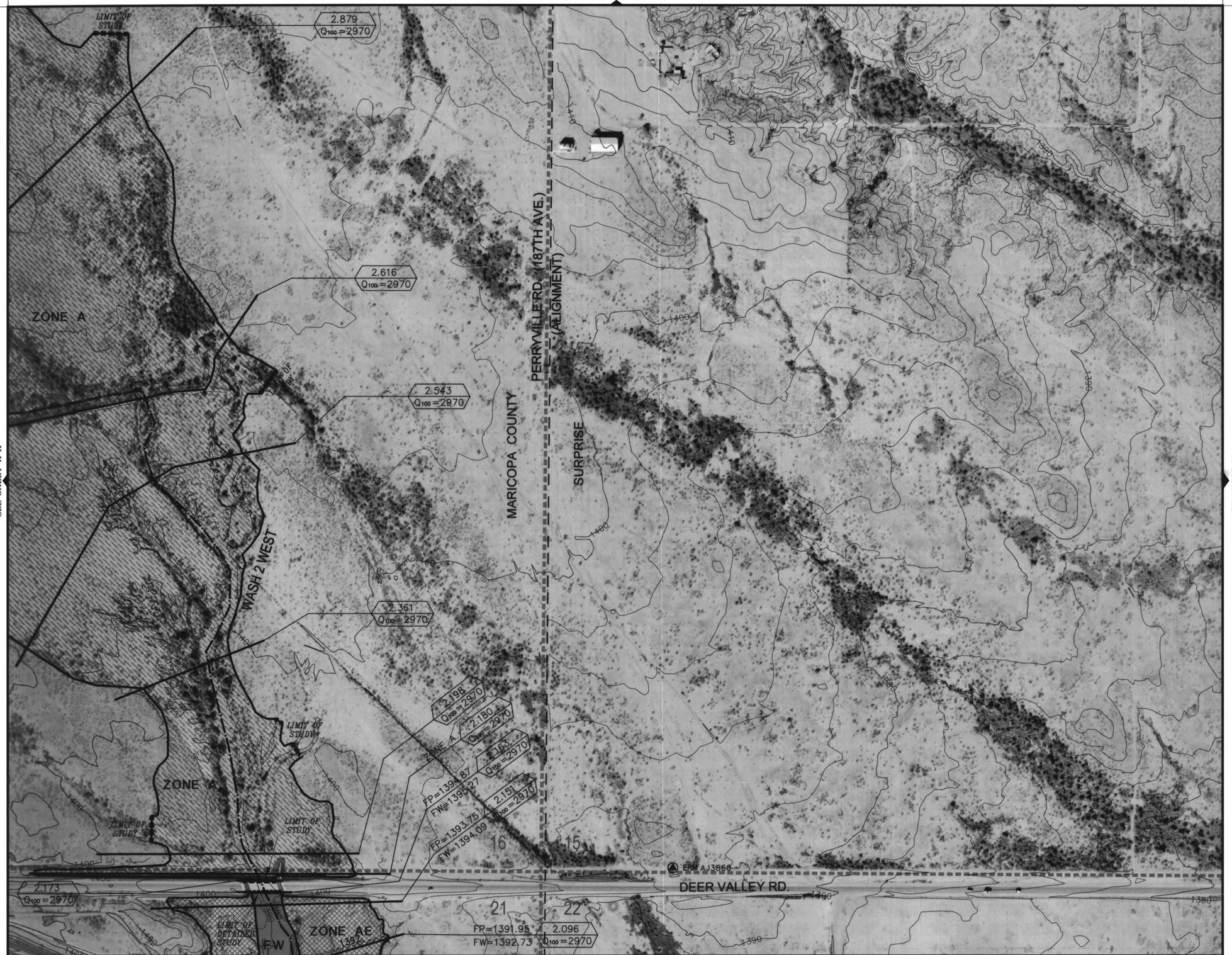
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-12

SEE SHEET K-11

SEE SHEET M-11

SEE SHEET L-10



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

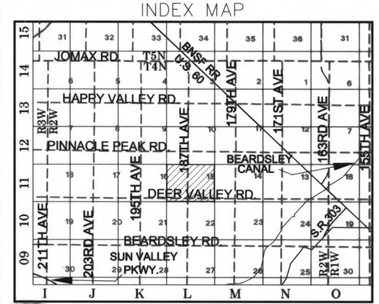
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Certified Professional Surveyor — 29737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.344.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-11 OF FLOODPLAIN DELINEATION

FILE: P:\301\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP_L_11.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-13

ERM DV0268

SEE SHEET K-12

SEE SHEET M-12

SEE SHEET L-11

ZONE AE

FW

WASH 1 WEST

PERRYVILLE RD. (187TH AVE.) (ALIGNMENT)

PINNACLE PEAK RD.

MARICOPA COUNTY

SURPRISE

ZONE A

WASH 2 WEST

3.057 Q100=7490 FP=1425.07 FW=1426.05

2.978 Q100=7490 FP=1423.01 FW=1423.96

2.897 Q100=7490 FP=1420.34 FW=1421.28

2.811 Q100=7490 FP=1418.31 FW=1418.75

2.725 Q100=7490 FP=1415.08 FW=1415.92

2.669 Q100=7490 FP=1413.60 FW=1414.50

2.593 Q100=7490 FP=1411.97 FW=1412.91

2.513 Q100=7490 FP=1410.16 FW=1411.07

2.453 Q100=7490 FP=1408.50 FW=1409.28

2.388 Q100=7490 FP=1405.60 FW=1406.12

2.340 Q100=7490 FP=1403.77 FW=1404.59

2.277 Q100=7490 FP=1402.26 FW=1402.98

3.075 Q100=2570

LIMIT OF DETAILED STUDY

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-L_12.dwg DATE: 07/27/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

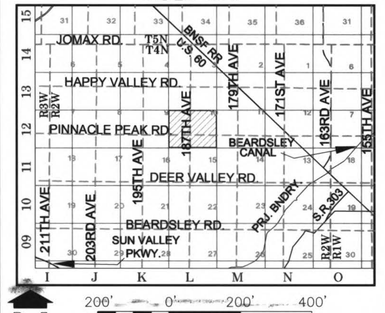
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

Professional Engineer — Certificate No. 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-12 OF FLOODPLAIN DELINEATION

SEE SHEET L-14

ERM DV0268

SEE SHEET K-13

SEE SHEET M-13

SEE SHEET L-12

ZONE A

WASH 1 WEST

ZONE A

WASH 2 EAST

LIMIT OF DETAILED STUDY

3.881 Q100=7360

LIMIT OF STUDY

1.895 Q100=610 FP=1443.35 FW=1444.00

FP=1441.56 FW=1442.20 1.838 Q100=610

1.781 Q100=1020 FP=1440.20 FW=1441.13

1.708 Q100=1020 FP=1438.11 FW=1438.98 2 EAST

1.685 Q100=250 FP=1 WEST FW=1437.54 2 EAST

1.593 Q100=250 FP=1 WEST FW=1434.89 2 EAST

1.523 Q100=250 FP=1433.34 FW=1433.37

1.461 Q100=250 FP=1431.03 FW=1431.30

1.392 Q100=450 FP=1429.77 FW=1430.53

ZONE AE

FW

DIKE

2 EAST

LIMIT OF DETAILED STUDY

HAPPY VALLEY RD.

1.704 Q100=1020 FP=1438.27 FW=1439.22

3.600 Q100=7360

3.511 Q100=7360 FP=1437.58 1 WEST FW=1438.37

3.427 Q100=7360 FP=1435.25 1 WEST FW=1436.22

LIMIT OF DETAILED STUDY

NOTE:
THIS NOTE IS GOING TO SAY SOMETHING VERY IMPORTANT ABOUT FLOOD WATERS.

ZONE AE

WASH 1 WEST

3.149 Q100=7490 FP=1427.75 FW=1428.72

3.100 Q100=7490 FP=1426.30 FW=1427.30

1.285 Q100=450 FP=1426.82 FW=1427.64

3.057 Q100=7490 FP=1425.07 FW=1426.05

1.213 Q100=450 FP=1424.21 FW=1425.00

1.167 Q100=660 FP=1422.90 FW=1423.76

1.130 Q100=660 FP=1421.66 FW=1422.28

2.978 Q100=7490 FP=1423.01 FW=1423.96

2.897 Q100=7490 FP=1420.34 FW=1421.28

3.313 Q100=7490 FP=1432.22 1 WEST FW=1432.93

3.219 Q100=7490 FP=1429.17 FW=1429.94

MARICOPA COUNTY

PERRYVILLE RD. (187TH AVE.) (ALIGNMENT)

SURPRISE

LIMIT OF DETAILED STUDY

ZONE AE

FW

ZONE AE

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

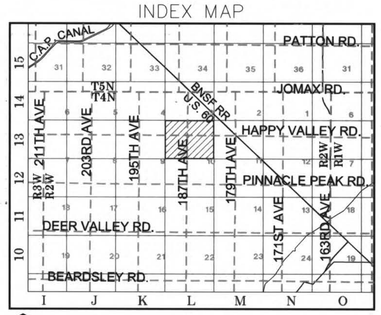
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

CERTIFICATE No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-13 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSJV)\Task\hydraulics\FP-L_13.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02)-BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-15

SEE SHEET K-14

SEE SHEET M-14

SEE SHEET L-13

FW

2.824 Q100=470 FP=1480.54 FW=1480.54

2.750 Q100=470 FP=1476.16 FW=1476.16

WASH 2 EAST

PERRYVILLE RD. (187TH AVE.) (ALIGNMENT)

ZONE AE

LIMIT OF DETAILED STUDY

JOMAX RD.

T5N T4N

FP=1471.96 FW=1472.72 2.625 Q100=610

FP=1470.18 FW=1471.12 2.583 Q100=610

2.526 Q100=610

4.512 Q100=7360

LIMIT OF STUDY

2.419 Q100=610

4.356 Q100=7360

ZONE A

4.234 Q100=7360

4.073 Q100=7360

2.225 Q100=610

WASH 1 WEST

WASH 2 EAST

2.052 Q100=610

SURPRISE

1.895 Q100=610 FP=1443.35 FW=1444.00

FP=1473.95 FW=1474.82 2.667 Q100=470

FP=1473.83 FW=1474.49 2.650 Q100=610

FP=1472.45 FW=1473.19 2.634 Q100=610

EFFECTIVE ZONE A

US60

BNSF RR

4.349 Q100=780 FP=1467.70 FW=1468.67

4.283 Q100=780 FP=1465.43 FW=1466.25

WASH 3 EAST

4.210 Q100=780 FP=1461.72 FW=1462.17

JOMAX RD. (ALIGNMENT)

4.126 Q100=780 FP=1458.30 FW=1459.09

(GRAND AVE.)

3.977 Q100=1650 FP=1453.56 FW=1454.08

3.925 Q100=1650 FP=1450.80 FW=1451.66

3.829 Q100=1650 FP=1447.79 FW=1448.30

MARICOPA COUNTY

ERM DV0268

ERM DV2040

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

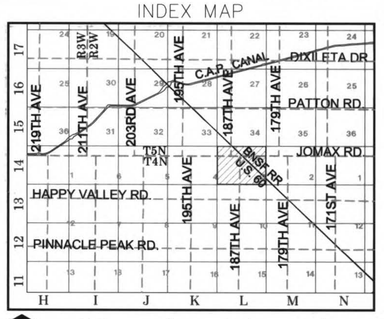
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV
DV2040		

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE No. 38737 HERNAN A. ARISTIZABAL Date Signed 1/31/06 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-14 OF FLOODPLAIN DELINEATION

FILE: P:\300,310\310032 (Wittmann ADMSU)\Task \hydraulics\FP-L_14.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-16

ERM DV0268

PATTON RD. (ALIGNMENT)

PERRYVILLE RD. (187TH AVE.) (ALIGNMENT)

ZONE AE

FW

LIMIT OF DETAILED STUDY

WASH 3 EAST

WASH 2 EAST

B.N.S.F. RR

US80

(GRAND AVE.)

5.291 Q100=440 FP=1507.89 FW=1508.43

5.203 Q100=780 FP=1504.05 FW=1505.04

5.140 Q100=780 FP=1501.85 FW=1502.21

5.071 Q100=780 FP=1499.16 FW=1499.43

4.997 Q100=780 FP=1495.80 FW=1495.80

4.919 Q100=780 FP=1492.27 FW=1492.71

4.865 Q100=780 FP=1489.84 FW=1490.59

4.811 Q100=780 FP=1487.42 FW=1487.83

4.744 Q100=780 FP=1484.90 FW=1485.19

4.675 Q100=780 FP=1481.97 FW=1482.50

4.595 Q100=780 FP=1478.86 FW=1479.46

4.521 Q100=780 FP=1475.66 FW=1476.13

4.454 Q100=780 FP=1472.69 FW=1473.36

4.349 Q100=780 FP=1467.70 FW=1468.67

3.277 Q100=470 FP=1496.67 FW=1496.96

3.196 Q100=470 FP=1493.73 FW=1493.74

3.166 Q100=470 FP=1492.79 FW=1492.79

3.163 Q100=470 FP=1492.22 FW=1492.23

3.159 Q100=470 FP=1491.72 FW=1491.74

3.141 Q100=470 FP=1491.67 FW=1491.69

3.134 Q100=470 FP=1491.62 FW=1491.63

3.097 Q100=470 FP=1491.40 FW=1491.39

3.085 Q100=470 FP=1489.01 FW=1489.01

3.078 Q100=470 FP=1487.72 FW=1487.72

3.059 Q100=470 FP=1487.30 FW=1487.30

3.036 Q100=470 FP=1486.71 FW=1486.71

2.997 Q100=470 FP=1485.10 FW=1485.10

2.972 Q100=470 FP=1484.64 FW=1484.64

2.931 Q100=470 FP=1482.46 FW=1482.46

2.900 Q100=470 FP=1481.85 FW=1481.85

SEE SHEET K-15

SEE SHEET M-15

SEE SHEET L-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A / ZONE A
EFFECTIVE ZONE AE / ZONE AH
EFFECTIVE ZONE AH / ZONE AE
EFFECTIVE FLOODWAY / FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION: ZONE A
WASH I.D. LABEL: WASH 9 EAST
ELEVATION REFERENCE MARK: ERM AJ3866
CROSS SECTION: 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION: 1320
DIKE / LEVEE: DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER: 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

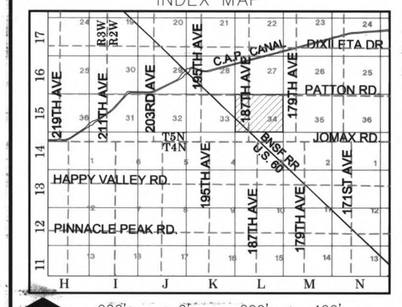
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Registered Professional Engineer — Certificate No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.3947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-15 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-L_15.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET L-17

ERM DV1875

ZONE AH
EL.=1555.12

6.085 Q100=440 FP=1542.14 FW=1542.34

6.024 Q100=440 FP=1536.85 FW=1537.22

C.A.P. CANAL

WASH 3 EAST

FW

6.062 Q100=440 FP=1537.77 FW=1537.95

5.983 Q100=440 FP=1536.14 FW=1536.57

5.941 Q100=440 FP=1534.52 FW=1534.66

5.874 Q100=440 FP=1531.25 FW=1531.67

5.806 Q100=440 FP=1528.84 FW=1529.63

LIMIT OF DETAILED STUDY

ZONE AE

5.737 Q100=440 FP=1526.77 FW=1527.58

LIMIT OF DETAILED STUDY

5.662 Q100=440 FP=1523.44 FW=1524.38

2.305 Q100=530 FP=1536.07 FW=1536.18

PERRYVILLE RD. (187TH AVE.) (ALIGNMENT)

5.584 Q100=440 FP=1520.16 FW=1521.06

5.519 Q100=440 FP=1518.20 FW=1519.01

ZONE AE

5.435 Q100=440 FP=1513.88 FW=1514.06

FW

5.361 Q100=440 FP=1510.94 FW=1511.52

WASH 3 EAST

5.291 Q100=440 FP=1507.89 FW=1508.43

LIMIT OF DETAILED STUDY

SEE SHEET K-16

SEE SHEET M-16

SEE SHEET L-15

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

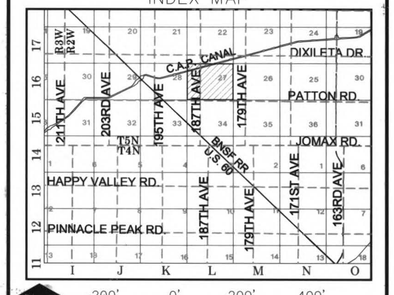
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV1875		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 28757 HERNAN A. ARISTIZABAL Registered Professional Engineer STATE OF ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-16 OF FLOODPLAIN DELINEATION

SEE SHEET L-18

ERM AJ3872

SEE SHEET K-17

SEE SHEET M-17

PERRYVILLE RD. (187TH AVE) (ALIGNMENT)

DIXELETA DR. (ALIGNMENT)

ZONE AH EL.=1555.12

ZONE AH EL.=1555.12

ZONE AH EL.=1555.12

2.418 FP=1545.17
Q_{100}=530 FW=1545.17

2.377 FP=1539.25
Q_{100}=530 FW=1539.26

2.336 FP=1537.78
Q_{100}=530 FW=1537.86

WASH 4 EAST

ZONE AE

C.A.P. CANAL

SEE SHEET L-16

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-L_17.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

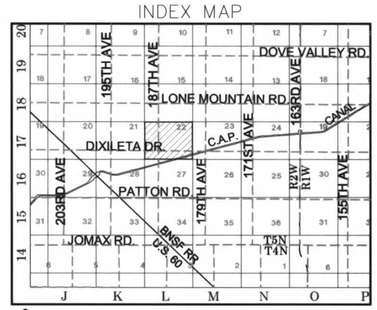
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL Date Signed 7/27/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix. AZ 85008.3279
Tel 602.244.2566
Fax 602.244.2947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

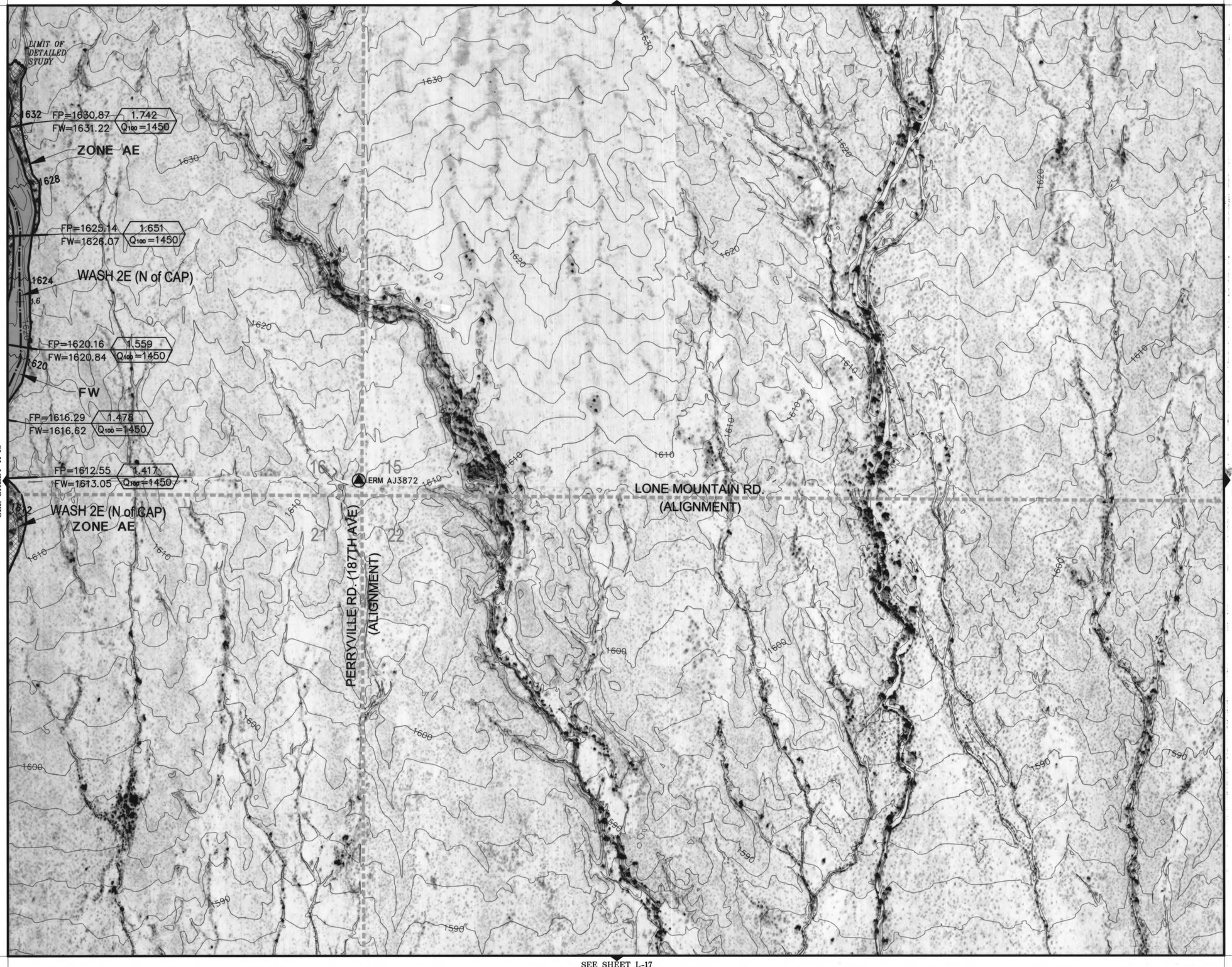
RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET L-17 OF FLOODPLAIN DELINEATION

SEE SHEET L-19



SEE SHEET K-18

SEE SHEET M-18

SEE SHEET L-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

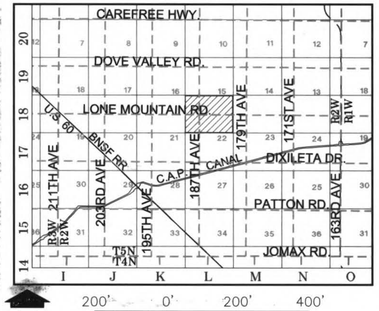
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Professional Engineer — Arizona — CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/10 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET L-18 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-L_18.dwg DATE: 07/26/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-10

SEE SHEET L-09

SEE SHEET N-09

SEE SHEET M-08

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-M_10.dwg DATE: 07/16/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

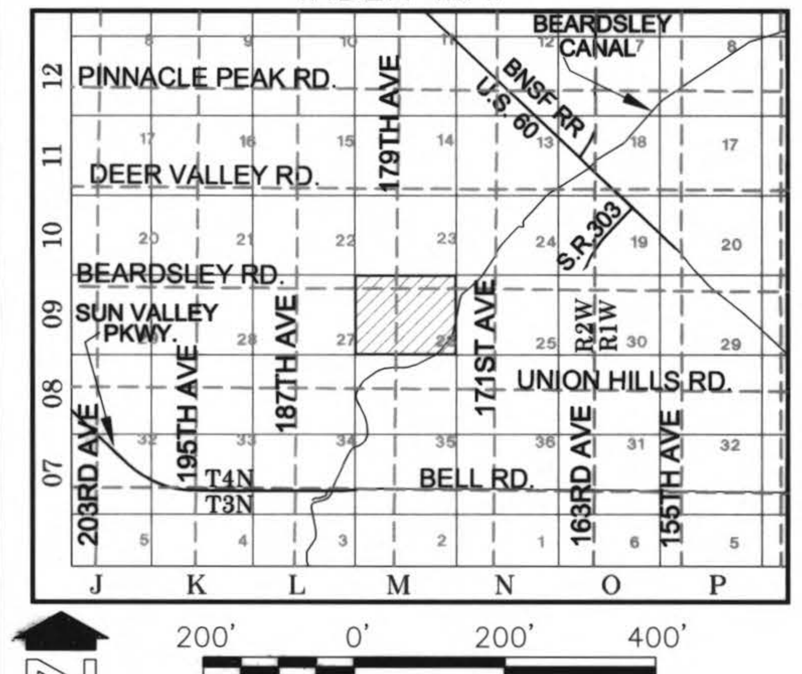
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV1860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Registered Professional Engineer — CERTIFICATE NO. 28737 — HERNAN A. ARISTIZABAL — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus — 2255 N. 44th Street Suite 125, Phoenix, AZ 85008.3279, Tel 602.244.2566, Fax 602.244.8947, WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-09 OF FLOODPLAIN DELINEATION

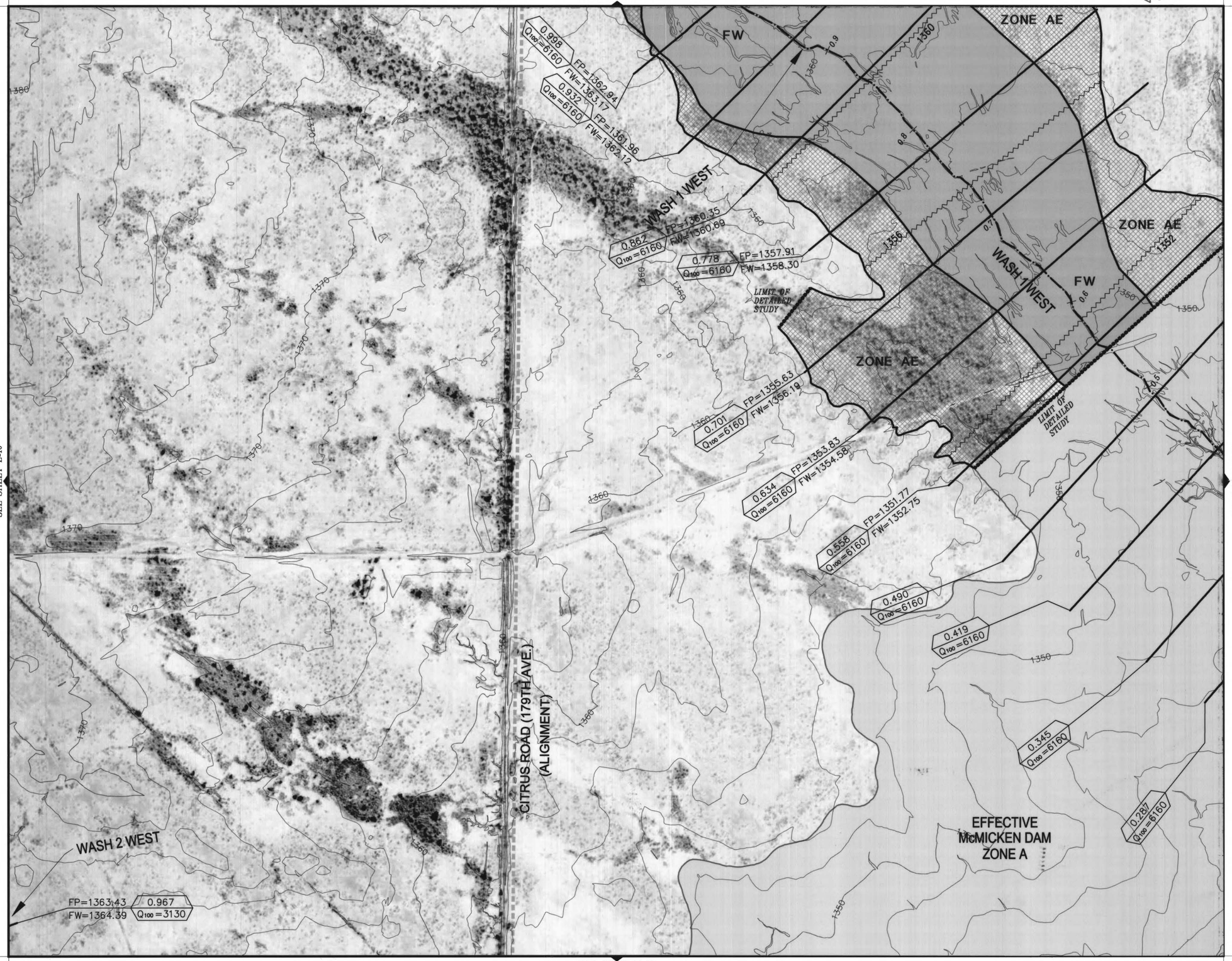
SEE SHEET M-11

ERM DV0095

SEE SHEET L-10

SEE SHEET N-10

SEE SHEET M-09



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

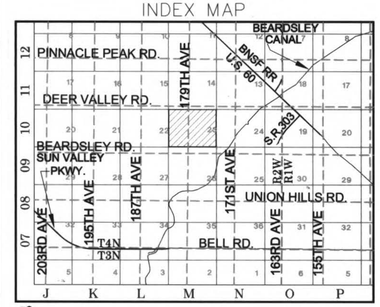
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0095		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

HERNAN A. ARISTIZABAL 28737 — Registered Professional Engineer — State of Arizona, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-10 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-M_10.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-12

ERM AJ3860

SEE SHEET L-11

SEE SHEET N-11

SEE SHEET M-10

FW

WASH 1 WEST

ZONE AE

CITRUS RD (179TH AVE.)

LIMIT OF DETAILED STUDY

1.932 Q100=5980 FP=1390.76 FW=1391.68

1.859 Q100=5980 FP=1388.90 FW=1389.88

1.803 Q100=5980 FP=1387.13 FW=1387.98

1.722 Q100=5980 FP=1384.26 FW=1385.02

1.625 Q100=5980 FP=1380.94 FW=1381.59

1.560 Q100=5980 FP=1378.65 FW=1379.64

1.498 Q100=6160 FP=1376.57 FW=1377.28

1.395 Q100=6160 FP=1373.08 FW=1373.89

1.302 Q100=6160 FP=1370.54 FW=1370.98

1.242 Q100=6160 FP=1369.01 FW=1369.93

1.176 Q100=6160 FP=1368.80 FW=1369.76

1.116 Q100=6160 FP=1368.77 FW=1369.73

1.089 Q100=6160 FP=1368.75 FW=1369.67

1.058 Q100=6160 FP=1363.28 FW=1363.77

0.998 Q100=6160 FP=1362.94 FW=1363.17

0.932 Q100=6160 FP=1361.96 FW=1362.12

0.862 Q100=6160 FP=1360.35 FW=1360.69

DEER VALLEY RD.

DEER VALLEY RD.

WASH 1 WEST

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-M_11.dwg DATE: 07/26/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

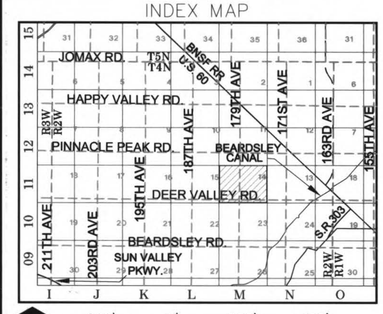
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3860		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

CERTIFICATE No. 38737 HERMAN A. ARISTIZABAL Date Signed 7/27/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-11 OF FLOODPLAIN DELINEATION

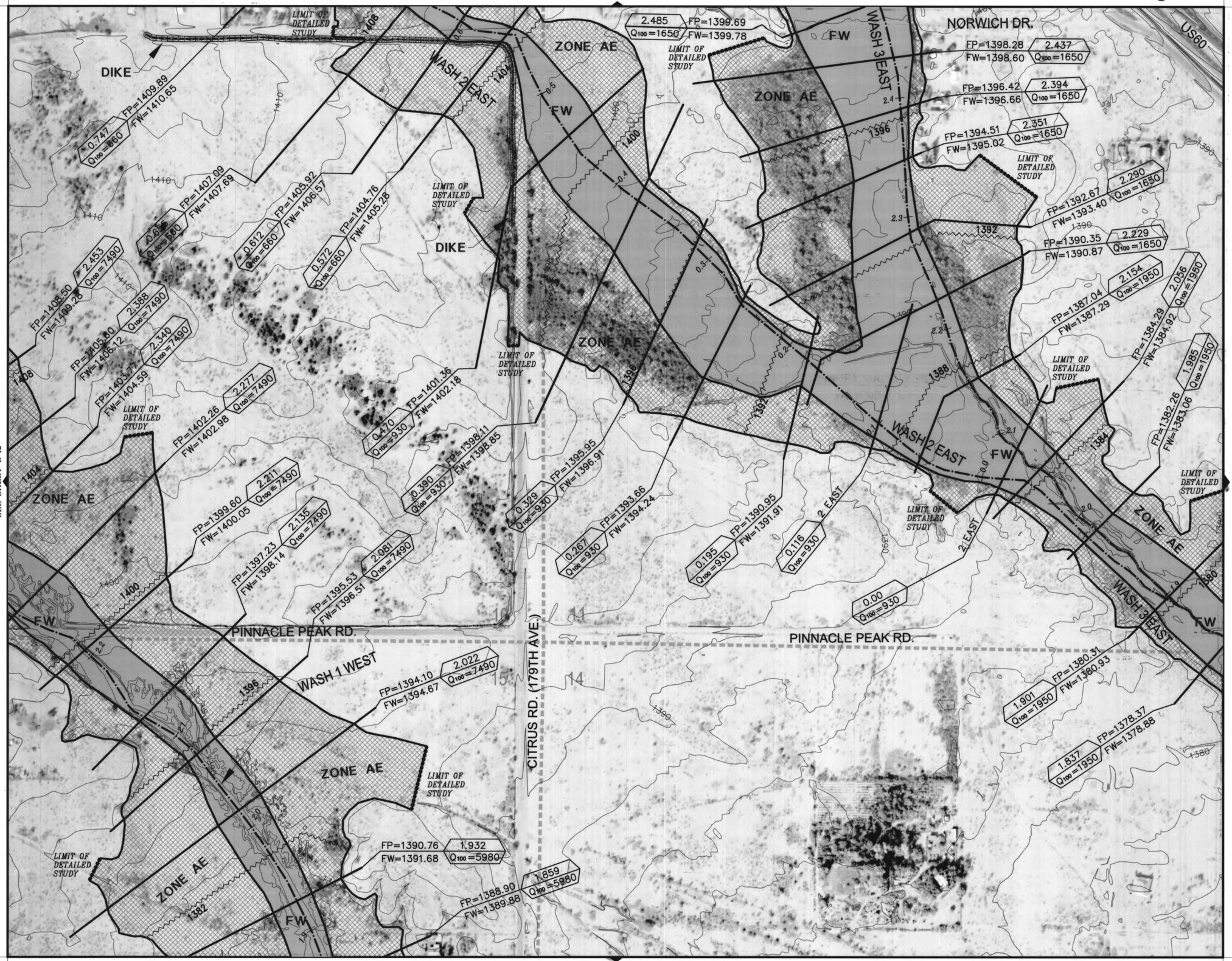
SEE SHEET M-13

ERM DV0091

SEE SHEET L-12

SEE SHEET N-12

SEE SHEET M-11



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

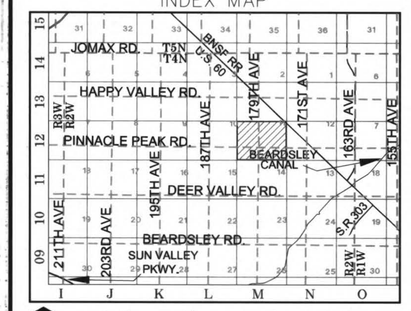
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0091		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

CERTIFICATE NO. 27137 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.5947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-12 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-M_12.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-14

ERM DV2040

SEE SHEET L-13

SEE SHEET N-13

SEE SHEET M-12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

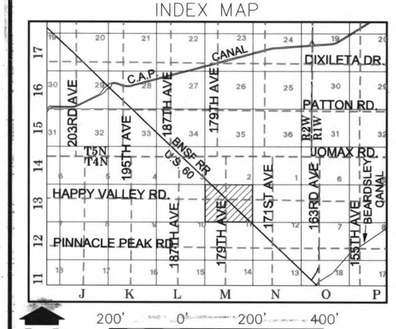
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2040		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

Registered Professional Engineer — CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-13 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-M_13.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-15

ERM DV2040

FP=1465.43 Q100=780 4.283 FW=1466.25
LIMIT OF DETAILED STUDY
FP=1461.72 Q100=780 4.210 FW=1462.17
ZONE AE
FP=1458.30 Q100=780 4.126 FW=1459.09
FW
WASH 4 EAST
DIKE
ZONE AE
LIMIT OF DETAILED STUDY
0.000
4 EAST FP=1455.56 Q100=670 0.315 FW=1455.87
FP=1462.96 Q100=670 0.535 FW=1463.75
FP=1460.26 Q100=670 0.462 FW=1461.15
CITRUS RD. (179TH AVE.) (ALIGNMENT)
FP=1458.70 Q100=670 0.416 FW=1459.61
FP=1456.47 Q100=670 0.355 FW=1457.35
SURPRISE
JOMAX RD. (ALIGNMENT)
T5N
T4N
MARICOPA COUNTY
4 EAST FP=1452.56 Q100=1650 3.977 FW=1454.08
FP=1450.80 Q100=1650 3.925 FW=1451.66
4 EAST FP=1452.82 Q100=670 0.241
FP=1447.79 Q100=1650 3.826 FW=1448.30
WASH 3 EAST
FP=1445.28 Q100=1650 3.781 FW=1446.26
FP=1442.32 Q100=1650 3.686 FW=1442.96
FP=1440.01 Q100=1650 3.615 FW=1440.98
FP=1438.45 Q100=1650 3.560 FW=1439.12
FP=1435.10 Q100=1650 3.475 FW=1436.01
FP=1432.39 Q100=1650 3.407 FW=1433.20
CITRUS RD. (179TH AVE.) (ALIGNMENT)
ZONE AE
FW
MARICOPA COUNTY
LIMIT OF DETAILED STUDY
SURPRISE
B.N.S.F. RR.
US60
(GRAND AVE.)
WASH 3 EAST

SEE SHEET L-14

SEE SHEET N-14

SEE SHEET M-13

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-M_14.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

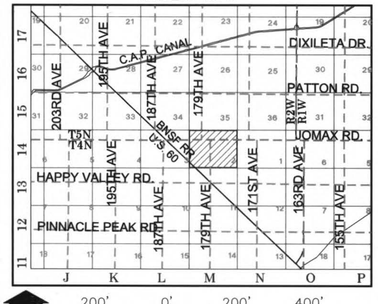
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2040		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 28737 HERNAN A. ARISTIZABAL ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-14 OF FLOODPLAIN DELINEATION

SEE SHEET M-16

SEE SHEET M-14

SEE SHEET L-15

SEE SHEET N-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

- EFFECTIVE ZONE A
- EFFECTIVE ZONE AE
- EFFECTIVE ZONE AH
- EFFECTIVE FLOODWAY
- ZONE A
- ZONE AH
- ZONE AE
- FLOODWAY (FW)
- ZONE AO
- HYDRAULIC BASE LINE
- ZONE DESIGNATION — ZONE A
- WASH I.D. LABEL — WASH 9 EAST
- ELEVATION REFERENCE MARK — ERM AJ3866
- CROSS SECTION — 2.199 FP=1400.55 Q100=1270 FW=1400.56
- BASE FLOOD ELEVATION — 1320
- DIKE / LEVEE — DIKE
- COUNTY BOUNDARY
- CORPORATE LIMIT
- LIMIT OF STUDY
- LIMIT OF DETAILED STUDY
- TOWNSHIP/RANGE LINE
- SECTION LINE
- SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

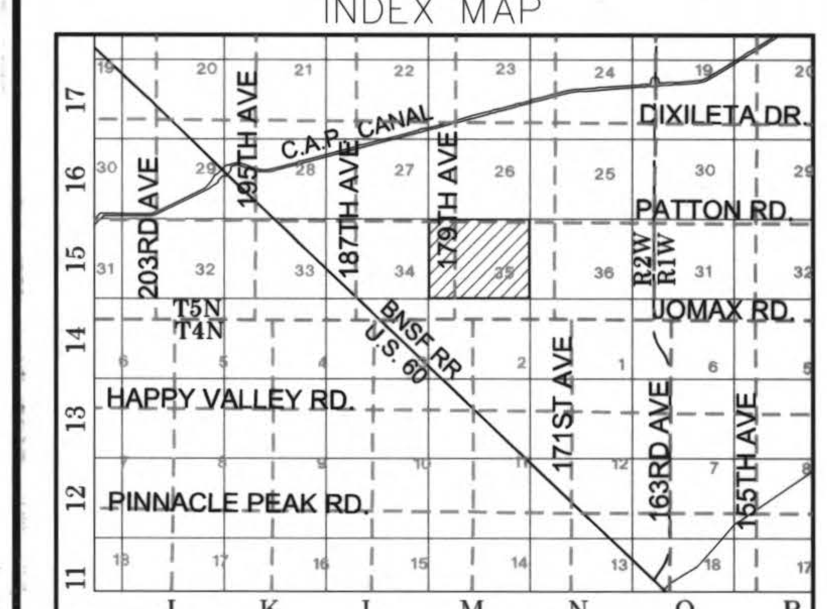
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0268		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE 28737 HERNAN A. ARISTIZABAL ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-15 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-M_15.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-17

ERM AJ3867

FP=1536.07 FW=1536.18 2.305 Q100=530
FP=1533.11 FW=1533.10 2.230 Q100=530
FP=1530.62 FW=1530.70 2.170 Q100=530
FP=1527.59 FW=1527.59 2.108 Q100=530
FP=1526.27 FW=1526.37 2.078 Q100=530
FP=1525.64 FW=1525.83 2.061 Q100=530
FP=1523.45 FW=1524.37 1.992 Q100=530
FP=1523.41 FW=1524.09 1.938 Q100=530
FP=1523.12 FW=1523.38 1.932 Q100=530
FP=1518.38 FW=1518.46 1.903 Q100=530
FP=1515.16 FW=1515.16 1.822 Q100=530
FP=1514.91 FW=1514.90 1.796 Q100=550
FP=1514.17 FW=1514.16 1.772 Q100=550
FP=1510.47 FW=1510.72 1.709 Q100=670
FP=1506.80 FW=1507.00 1.625 Q100=670
FP=1504.15 FW=1504.16 1.556 Q100=670
FP=1501.45 FW=1501.50 1.481 Q100=670
FP=1499.37 FW=1500.06 1.430 Q100=670

4.881 Q100=580 FP=1527.27 FW=1528.19

WASH 5 EAST
FP=1526.13 FW=1526.79 4.847 Q100=580
FP=1524.25 FW=1525.02 4.806 Q100=580
FP=1522.27 FW=1523.12 4.759 Q100=580
FP=1518.53 FW=1519.31 4.696 Q100=580
FP=1516.17 FW=1517.11 4.630 Q100=580
FP=1514.48 FW=1514.88 4.580 Q100=580
FP=1511.98 FW=1512.87 4.534 Q100=580
FP=1510.45 FW=1510.99 4.487 Q100=580
FP=1508.34 FW=1509.13 4.444 Q100=580

4.551 Q100=440 FP=1524.12 FW=1524.48
WASH 6 EAST
4.381 Q100=580 FP=1506.06 FW=1506.62
4.280 Q100=580 FP=1501.93 FW=1502.86
4.185 Q100=750 FP=1499.00 FW=1499.52
4.111 Q100=750 FP=1497.21 FW=1498.10
4.052 Q100=750 FP=1496.56 FW=1497.56
4.010 Q100=750 FP=1496.30 FW=1497.25
4.318 Q100=580 FP=1503.86 FW=1504.14

MARICOPA COUNTY
CITRUS ROAD (179TH AVE.) (ALIGNMENT)
SURPRISE
Dale Ln.
Dale Ln.
LIMIT OF DETAILED STUDY
ZONE AE
ZONE A
FW
WASH 4 EAST
DIKE
ZONE AO

SEE SHEET L-16
SEE SHEET N-16
SEE SHEET M-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
WITTMANN AREA DRAINAGE MASTER STUDY UPDATE
CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

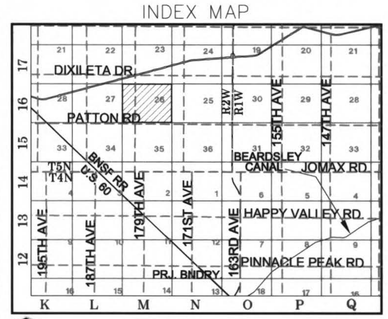
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3867		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

HERNAN A. ARISTIZABAL 28737 CERTIFICATE NO. REGISTERED PROFESSIONAL ENGINEER STATE OF ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-16 OF FLOODPLAIN DELINEATION

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-18

ERM AJ3872

SEE SHEET L-17

SEE SHEET N-17

WASH 7 EAST
ZONE AE

0.287 FP=1560.79
Q_{100}=3930 FW=1561.79

LIMIT OF DETAILED STUDY

0.200 FP=1556.27
Q_{100}=3930 FW=1557.02

0.127
Q_{100}=3930

ZONE AH
EL.= 1555.12

CITRUS RD. (179TH AVE)
(ALIGNMENT)

ZONE AH
EL.= 1555.12

C.A.P. CANAL

FP=1543.18 5.146
FW=1543.20 Q_{100}=420

FP=1540.66 5.120
FW=1541.21 Q_{100}=580

LIMIT OF DETAILED STUDY

MARICOPA COUNTY

4.772 FP=1535.02
Q_{100}=440 FW=1535.09

FP=1537.12 5.064
FW=1537.87 Q_{100}=580

4.728 FP=1532.56
Q_{100}=440 FW=1532.94

DIXILETA DR.
(ALIGNMENT)

ZONE AE

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

FP=1534.05 5.016
FW=1534.93 Q_{100}=580

SURPRISE

WASH 6 EAST

WASH 5 EAST

FP=1530.20 4.953
FW=1530.92 Q_{100}=580

4.630 FP=1528.28
Q_{100}=440 FW=1528.37

FP=1527.27 4.881
FW=1528.19 Q_{100}=580

C.A.P. CANAL

WASH 4 EAST

FW FP=1536.07 2.305
FW=1536.18 Q_{100}=530

MARICOPA COUNTY

SURPRISE

SEE SHEET M-16

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-N_17.dwg DATE: 07/24/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 / Q_{100}=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

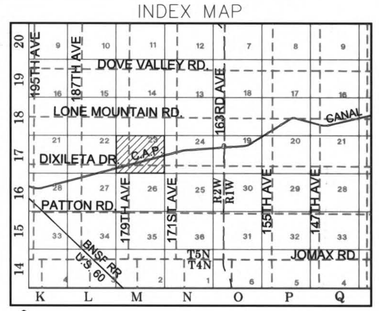
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

28737
HERNAN A. ARRISTIZABAL
Date Signed 1/27/06
ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-17 OF FLOODPLAIN DELINEATION

SEE SHEET M-19

ERM AJ3872

SEE SHEET L-18

SEE SHEET N-18

CITRUS RD. (179TH AVE.)
(ALIGNMENT)

LONE MOUNTAIN RD.
(ALIGNMENT)

0.637 / Q_{100}=3930 FP=1577.56 FW=1577.93

0.561 / Q_{100}=3930 FP=1573.39 FW=1573.73

0.467 / Q_{100}=3930 FP=1569.36 FW=1569.78

0.385 / Q_{100}=3930 FP=1565.15 FW=1565.65

LIMIT OF DETAILED STUDY

WASH 7 EAST
ZONE AE

SEE SHEET M-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

- EFFECTIVE ZONE A / ZONE A
- EFFECTIVE ZONE AE / ZONE AH
- EFFECTIVE ZONE AH / ZONE AE
- EFFECTIVE FLOODWAY / FLOODWAY (FW)
- ZONE AO
- HYDRAULIC BASE LINE
- ZONE DESIGNATION: ZONE A
- WASH I.D. LABEL: WASH 9 EAST
- ELEVATION REFERENCE MARK: ERM AJ3866
- CROSS SECTION: 2.199 / Q_{100}=1270 FP=1400.55 FW=1400.56
- BASE FLOOD ELEVATION: 1320
- DIKE / LEVEE: DIKE
- COUNTY BOUNDARY
- CORPORATE LIMIT
- LIMIT OF STUDY
- LIMIT OF DETAILED STUDY
- TOWNSHIP/RANGE LINE
- SECTION LINE / SECTION NUMBER: 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

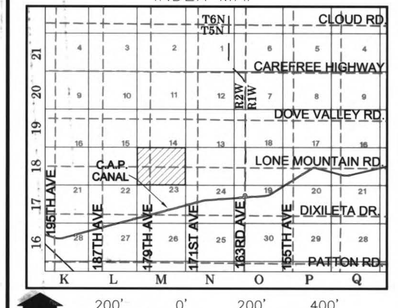
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer
CERTIFICATE NO.
28737
HERNAN A. ARISTIZABAL
Date Signed 1/31/06
ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-18 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-M_18.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-20

ERM AJ3872

SEE SHEET L-19

SEE SHEET N-19

SEE SHEET M-18

LIMIT OF STUDY

ZONE A

T5N-R2W-S14N

DOVE VALLEY RD. (ALIGNMENT)

CITRUS RD. (179TH AVE.) (ALIGNMENT)

0.580 Q_{100}=2930

1.070 Q_{100}=2680

0.920 Q_{100}=2680

0.380 Q_{100}=2930

0.120 Q_{100}=2930

0.000 Q_{100}=3000

1660

1640

1620

10

15

14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q_{100}=1270 / FP=1400.55 / FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

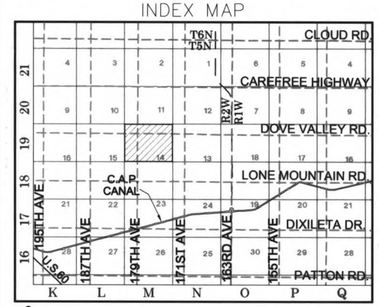
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™

2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-19 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-M_19.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-21

ERM AJ3879

CAREFREE HIGHWAY (ALIGNMENT)

LIMIT OF STUDY

ZONE A

T5N-R2W-S11

T5N-R2W-S14N

T5N-R2W-S11

T5N-R2W-S14N

0.955
Q_{100}=2700

0.735
Q_{100}=2700

0.475
Q_{100}=2700

0.253
Q_{100}=2700

0.066
Q_{100}=2700

1.440
Q_{100}=3590

1.140
Q_{100}=3590

1.010
Q_{100}=3590

0.780
Q_{100}=3590

1720

1700

1680

1660

1640

CITRUS RD. (179TH AVE.) (ALIGNMENT)

SEE SHEET L-20

SEE SHEET N-20

SEE SHEET M-19

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

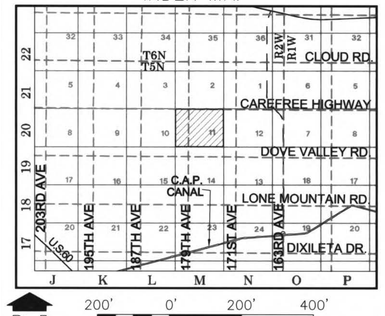
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3879		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

HERNAN A. ARISTIZABAL, 29737, Registered Professional Engineer, State of Arizona, U.S.A., Date Signed 12/7/05

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ. 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-20 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-M_20.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-22

ERM AJ3879

SEE SHEET L-21

SEE SHEET N-21

SEE SHEET M-20

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

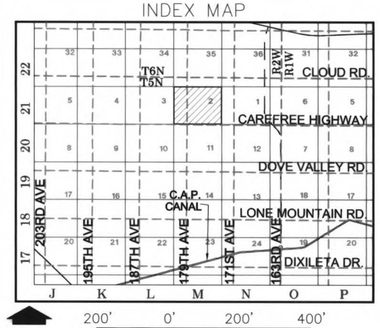
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3879		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.2947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-21 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310332 (Wittmann ADMSU)\Task\hydraulics\FP-M_21.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET M-23

ERM AJ3879

SEE SHEET L-22

SEE SHEET N-22

CITRUS RD. (179TH AVE.)
(ALIGNMENT)

CLOUD RD.
(ALIGNMENT)

T6N
T5N

2.640
Q_{100}=610

T5N-R2W-S14N
ZONE A

2.510
Q_{100}=610

LIMIT OF STUDY

LIMIT OF STUDY

1860
1840
1820
1800

SEE SHEET M-21

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE — 43.1
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

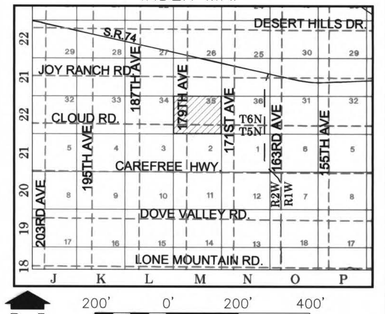
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3879		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 27737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/08 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: _____ DATE: _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

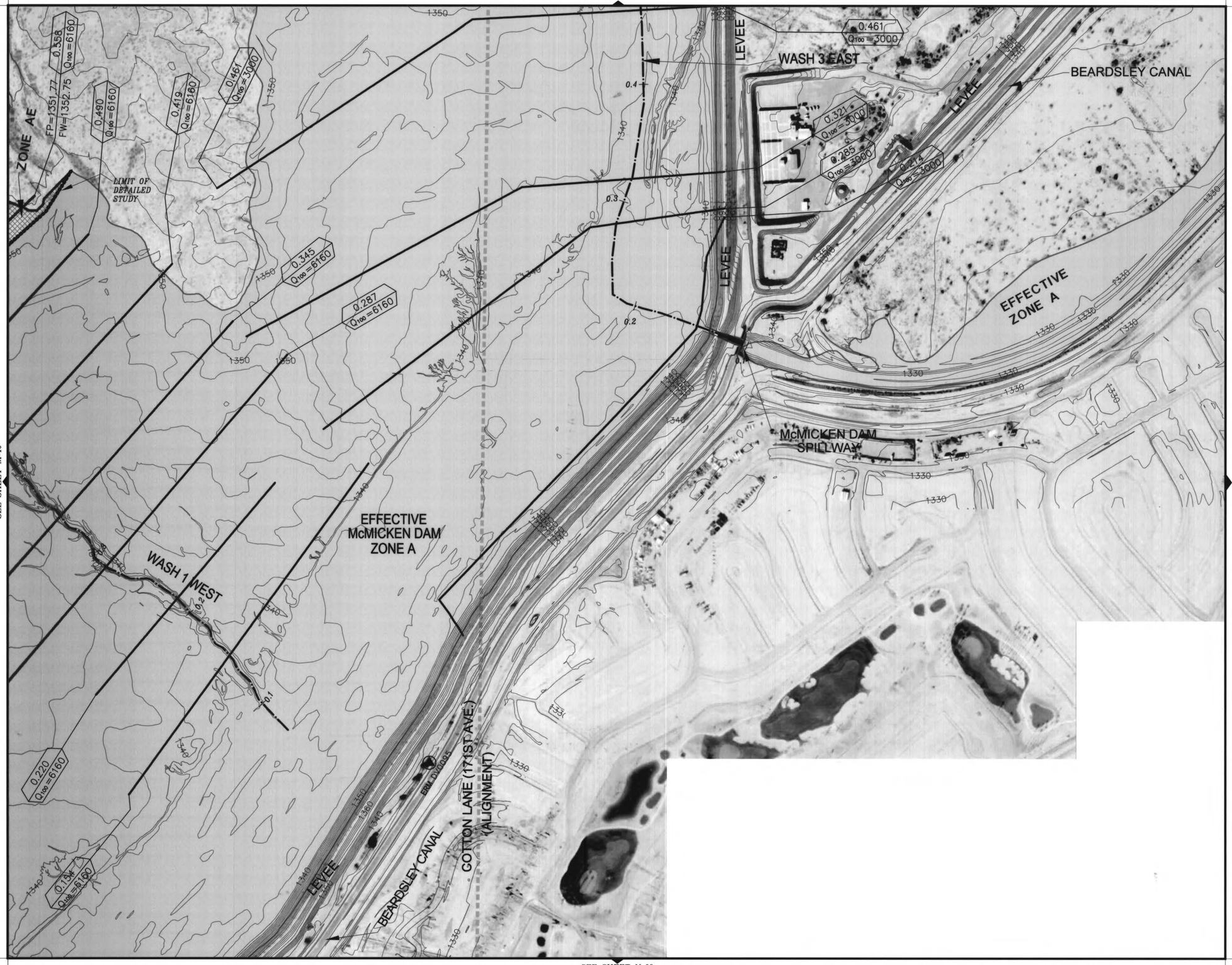
CHIEF ENGINEER AND GENERAL MANAGER

SHEET M-22 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-1_22.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-11



SEE SHEET M-10

SEE SHEET O-10

SEE SHEET N-09

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A		ZONE A
EFFECTIVE ZONE AE		ZONE AH
EFFECTIVE ZONE AH		ZONE AE
EFFECTIVE FLOODWAY		FLOODWAY (FW)
		ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

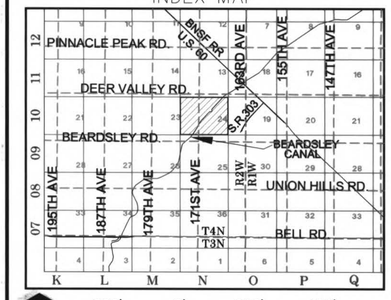
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0095		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

HERNAN A. ARISTIZABAL, No. 28737, Registered Professional Engineer, State of Arizona, Date Signed 1/31/06, ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-10 OF FLOODPLAIN DELINEATION

FILE: P-300\310_310032 (Wittmann ADMS)\Task\Hydraulics\FP-N_10.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-12

ERM DV0089

1.398 FP=1366.19 / Q_{100}=2460 FW=1366.40

ZONE AE

1.381 FP=1365.88 / Q_{100}=2460 FW=1365.85

1.351 FP=1363.77 / Q_{100}=2460 FW=1364.10

1.284 FP=1363.25 / Q_{100}=2460 FW=1363.77

1.233 FP=1362.57 / Q_{100}=2460 FW=1363.26

DEER VALLEY RD.

LIMIT OF DETAILED STUDY

FW

WASH 3 EAST

1.2

1.1

1.0

0.9

0.8

0.7

0.6

0.5

1360

1364

1370

1380

1350

1340

FP=1360.44 1.156 / FW=1360.73 Q_{100}=2460

FP=1356.50 1.132 / FW=1357.11 Q_{100}=2460

FP=1356.14 1.122 / FW=1356.80 Q_{100}=2460

B.N.S.F. RR

EFFECTIVE ZONE A

US60 (GRAND AVE.)

FP=1354.55 1.039 / FW=1355.26 Q_{100}=2460

FP=1354.20 0.942 / FW=1355.01 Q_{100}=2460

McMICKEN DAM EMERGENCY SPILLWAY

FP=1353.86 0.831 / FW=1354.71 Q_{100}=2520

0.699 Q_{100}=2520

0.587 Q_{100}=2520

0.522 Q_{100}=2520

FP=1362.94 0.998 / FW=1363.17 Q_{100}=6160

LIMIT OF DETAILED STUDY

WASH 1 WEST

ZONE A

LIMIT OF DETAILED STUDY

EFFECTIVE McMICKEN DAM ZONE A

ZONE AE

COTTON LANE (174ST AVE.) (ALIGNMENT)

DEER VALLEY RD (ALIGNMENT)

LIMIT OF STUDY

LEVEE

BEARDSLEY CANAL

SEE SHEET M-11

SEE SHEET O-11

SEE SHEET N-10

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-N_11.dwg DATE: 08/31/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q_{100}=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

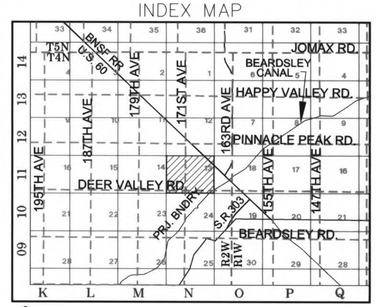
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0089		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.80 FEET = NAVD 88.

Certificate No. 20737 HERNAN A. ARISTIZABAL Date Signed 7/7/06 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™

2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-11 OF FLOODPLAIN DELINEATION

SEE SHEET N-13

ERM DV0091

EFFECTIVE ZONE A

COTTON LANE (171ST AVE.) (ALIGNMENT)

EFFECTIVE ZONE A

LIMIT OF DETAILED STUDY

FP=1380.31 FW=1380.93 1.901 Q100=1950

FP=1378.37 FW=1378.88 1.837 Q100=1950

FP=1376.59 FW=1377.12 1.776 Q100=1950

FP=1374.15 FW=1374.47 1.706 Q100=1950

FP=1372.00 FW=1372.22 1.636 Q100=1950

FP=1368.80 FW=1369.82 1.555 Q100=1950

FP=1366.53 FW=1367.11 1.462 Q100=1950

FP=1366.19 FW=1366.40 1.398 Q100=2460

FP=1365.88 FW=1365.85 1.381 Q100=2460

FP=1363.77 FW=1364.10 1.351 Q100=2460

FP=1363.25 FW=1363.77 1.284 Q100=2460

ZONE AE

FW

WASH 3 EAST

B.N.S.F. RR

US60

PINNACLE PEAK RD. (ALIGNMENT)

DEER VALLEY RD.

POWER FACILITY

(GRAND AVE.)

SEE SHEET M-12

SEE SHEET O-12

SEE SHEET N-11

FILE: P:\390\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-N_12.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

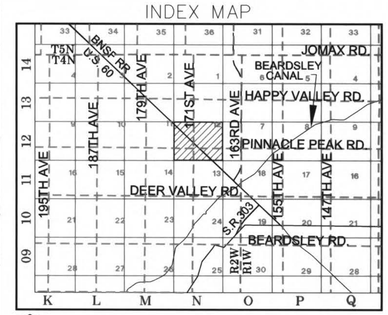
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0091		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.80 FEET = NAVD 88.

CERTIFICATE NO. 29737 — HERNAN A. ARISTIZABAL — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-12 OF FLOODPLAIN DELINEATION

SEE SHEET N-15

ERM AJ3867

SEE SHEET M-14

SEE SHEET O-14

SEE SHEET N-13

WASH 5 EAST

WASH 9 EAST

ZONE AE

ZONE AO

FW

SURPRISE

MARICOPA COUNTY

COTTON LANE (171ST AVE.) (ALIGNMENT)

JOMAX RD. (ALIGNMENT)

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

T5N
T4N

0.000

2.610 Q100=800 FP=1442.52 FW=1443.36

2.555 Q100=830 FP=1439.71 FW=1440.55

2.489 Q100=830 FP=1436.60 FW=1437.16

2.422 Q100=830 FP=1433.82 FW=1434.76

2.381 Q100=830 FP=1431.77 FW=1432.45

2.307 Q100=830 FP=1428.53 FW=1429.50

2.257 Q100=830 FP=1426.33 FW=1426.88

2.208 Q100=830 FP=1424.17 FW=1425.10

2.131 Q100=830 FP=1421.97 FW=1422.72

2.052 Q100=830 FP=1418.71 FW=1419.14

2.663 Q100=700 FP=1441.79 FW=1442.59

2.582 Q100=700 FP=1438.98 FW=1439.91

2.525 Q100=700 FP=1436.59 FW=1437.27

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

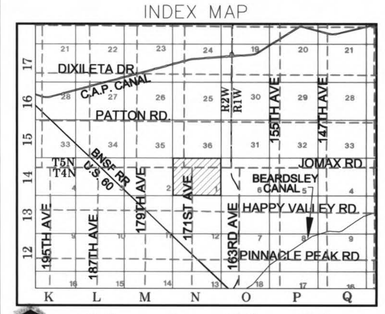
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3867		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Professional Engineer — 28737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-14 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-N_14.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-16

ERM AJ3867

SEE SHEET M-15

SEE SHEET O-15

SEE SHEET N-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

- EFFECTIVE ZONE A — ZONE A
- EFFECTIVE ZONE AE — ZONE AH
- EFFECTIVE ZONE AH — ZONE AE
- EFFECTIVE FLOODWAY — FLOODWAY (FW)
- ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

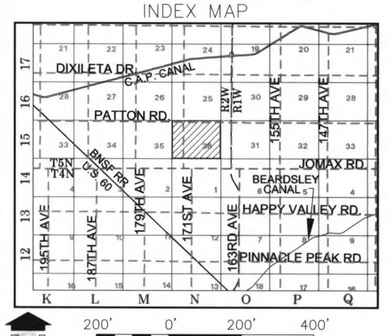
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3867		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE

APPROVED BY: _____ DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: _____ DATE:

SHEET N-15 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310332 (Wittmann ADMSU)\Task\Hydraulics\FP-N_15.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-17

ERM AJ3867

SEE SHEET M-16

SEE SHEET O-16

SEE SHEET N-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

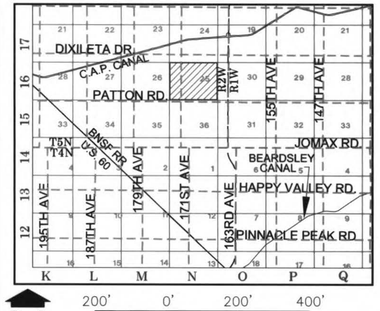
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3867		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 37737 HERNAN A. ARISTIZABAL Date Signed 7/7/05 ARIZONA, U.S.A.

INDEX MAP



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2666
Fax 602.244.9947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET N-16 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Tools\hydraulics\FP-N_16.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-18

ERM AJ3872

SEE SHEET M-17

SEE SHEET O-17

SEE SHEET N-16

ZONE AE
ZONE AH
EL.= 1555.12
FW
WASH 7 EAST
LIMIT OF DETAILED STUDY
FP=1560.79 0.287
FW=1561.79 Q100=3930
FP=1563.14 0.347
FW=1563.72 Q100=510
FP=1559.81 0.291
FW=1559.95 Q100=510
FP=1556.27 0.200
FW=1557.02 Q100=3930
FP=1555.54 0.198
Q100=510
0.127
Q100=3930
0.095
Q100=510
0.099
Q100=510
0.043
Q100=510
C.A.P. CANAL
FP=1542.04 3.029
FW=1542.01 Q100=490
FP=1536.37 2.953
FW=1536.51 Q100=490
FP=1542.80 0.951
FW=1542.78 Q100=410
FP=1543.58 4.966
FW=1543.74 Q100=440
FP=1538.49 0.900
FW=1538.46 Q100=410
WASH 7 EAST (WEST SPLIT)
COTTON LN. (171ST AVE.) (ALIGNMENT)
FP=1535.28 0.815
FW=1535.40 Q100=410
FP=1540.62 4.896
FW=1540.70 Q100=440
FP=1538.22 4.832
FW=1538.26 Q100=440
0.750
Q100=410
FP=1532.67 7 W.S.
FW=1532.69
FP=1532.67 1.458
FW=1532.69 Q100=410
FP=1535.02 4.772
FW=1535.09 Q100=440
0.696
Q100=280
FP=1530.76
FW=1530.91
FP=1529.75 1.395
FW=1529.92 Q100=410
FP=1532.56 4.728
FW=1532.94 Q100=440
MARICOPA COUNTY
DIXELETA DR. (ALIGNMENT)
SURPRISE ZONE AE
WASH 8 EAST
FP=1534.47 2.898
FW=1534.50 Q100=490
FP=1528.68 2.799
FW=1528.79 Q100=490
FP=1524.89 2.711
FW=1525.07 Q100=490
FP=1524.08 2.681
FW=1524.19 Q100=490
FP=1521.47 2.633
FW=1521.50 Q100=490
FP=1519.03 2.583
FW=1519.00 Q100=490
FP=1515.90 2.530
FW=1516.26 Q100=490
FP=1528.28 4.630
FW=1528.37 Q100=440
0.582
Q100=280
FP=1526.42
FW=1526.88
WASH 6 EAST
FP=1524.12 4.551
FW=1524.48 Q100=440
0.517
Q100=280
FP=1523.63
FW=1524.53
WASH 7 EAST (EAST SPLIT)
FP=1525.50 1.306
FW=1525.76 Q100=410
FP=1522.82 1.242
FW=1523.18 Q100=410

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
WITTMANN AREA DRAINAGE MASTER STUDY UPDATE
CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

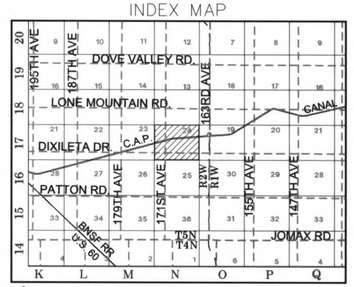
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

HERNAN A. ARISTIZABAL 39737 REGISTERED PROFESSIONAL ENGINEER ARIZONA U.S.A. Date Signed 7/7/05

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.3566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-17 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-N_17.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-19

ERM AJ3872

LIMIT OF STUDY

ZONE A T5N-R2W-S14W

LIMIT OF STUDY

ZONE A

WASH 7 EAST

1.122 Q100 =1290

ZONE AE

LIMIT OF DETAILED STUDY

FP=1605.03 FW=1605.47 1.187 Q100 =510

FP=1600.68 FW=1601.08 1.105 Q100 =510

FP=1596.14 FW=1596.47 1.031 Q100 =510

FW

WASH 7 EAST TRIBUTARY

FP=1591.47 FW=1591.54 0.940 Q100 =510

0.290 Q100 =3040

LIMIT OF STUDY

7 EAST 0.897 Q100 =3930

COTTON LANE (171ST AVE.) (ALIGNMENT)

EFFECTIVE PADELFORD ZONE AE & FW

ZONE A

FP=1587.55 FW=1587.77 0.857 Q100 =510

0.100 Q100 =3040

LIMIT OF DETAILED STUDY

FP=1586.00 FW=1586.84 0.811 Q100 =3930

FW

ZONE AE

LIMIT OF DETAILED STUDY

FP=1584.11 FW=1584.79 0.778 Q100 =510

LONE MOUNTAIN ROAD (ALIGNMENT)

WHITE WING ROAD

LIMIT OF DETAILED STUDY

WASH 7 EAST

FP=1581.74 FW=1582.14 0.722 Q100 =510

FP=1581.57 FW=1581.97 0.724 Q100 =3930

ZONE AE

FP=1578.78 FW=1579.60 0.666 Q100 =510

FP=1577.56 FW=1577.93 0.637 Q100 =3930

LIMIT OF DETAILED STUDY

FP=1574.20 FW=1575.01 0.567 Q100 =510

FP=1573.39 FW=1573.73 0.561 Q100 =3930

ZONE AE

FP=1569.36 FW=1569.78 0.467 Q100 =3930

LIMIT OF DETAILED STUDY

FP=1570.13 FW=1570.52 0.488 Q100 =510

FW

FP=1566.84 FW=1567.45 0.418 Q100 =510

FP=1565.15 FW=1565.65 0.385 Q100 =3930

0.347 Q100 =510 FP=1563.14 FW=1566.72

FW

SEE SHEET M-18

SEE SHEET O-18

SEE SHEET N-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

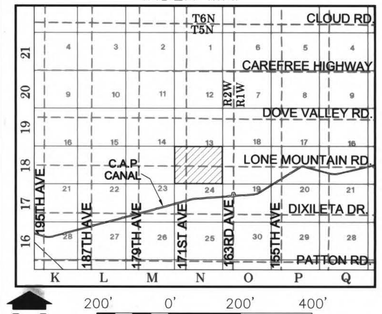
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3872		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

HERNAN A. ARISTIZABAL, 28737, REGISTERED PROFESSIONAL ENGINEER, STATE OF ARIZONA, U.S.A., CERTIFICATE EXPIRES 7/31/06

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-18 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-N_18.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-20

ERM AJ3879

SEE SHEET M-19

SEE SHEET O-19

SEE SHEET N-18

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

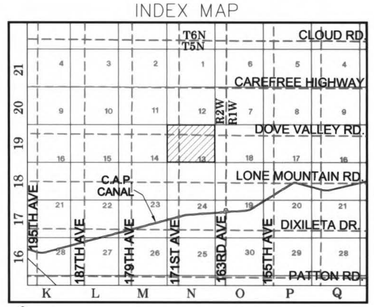
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3879		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/21/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET N-19 OF FLOODPLAIN DELINEATION

FILE: P:\3001\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-N_18.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-22

ERM AJ3879

SEE SHEET M-21

SEE SHEET O-21

SEE SHEET N-20

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

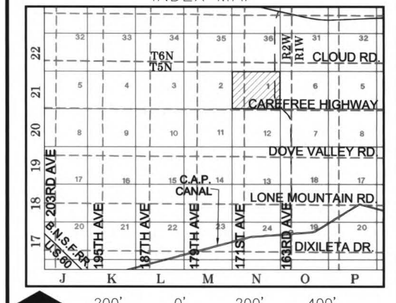
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3879		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 27137 — HERNAN A. ARISTIZABAL — Date Signed 7/11/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET N-21 OF FLOODPLAIN DELINEATION

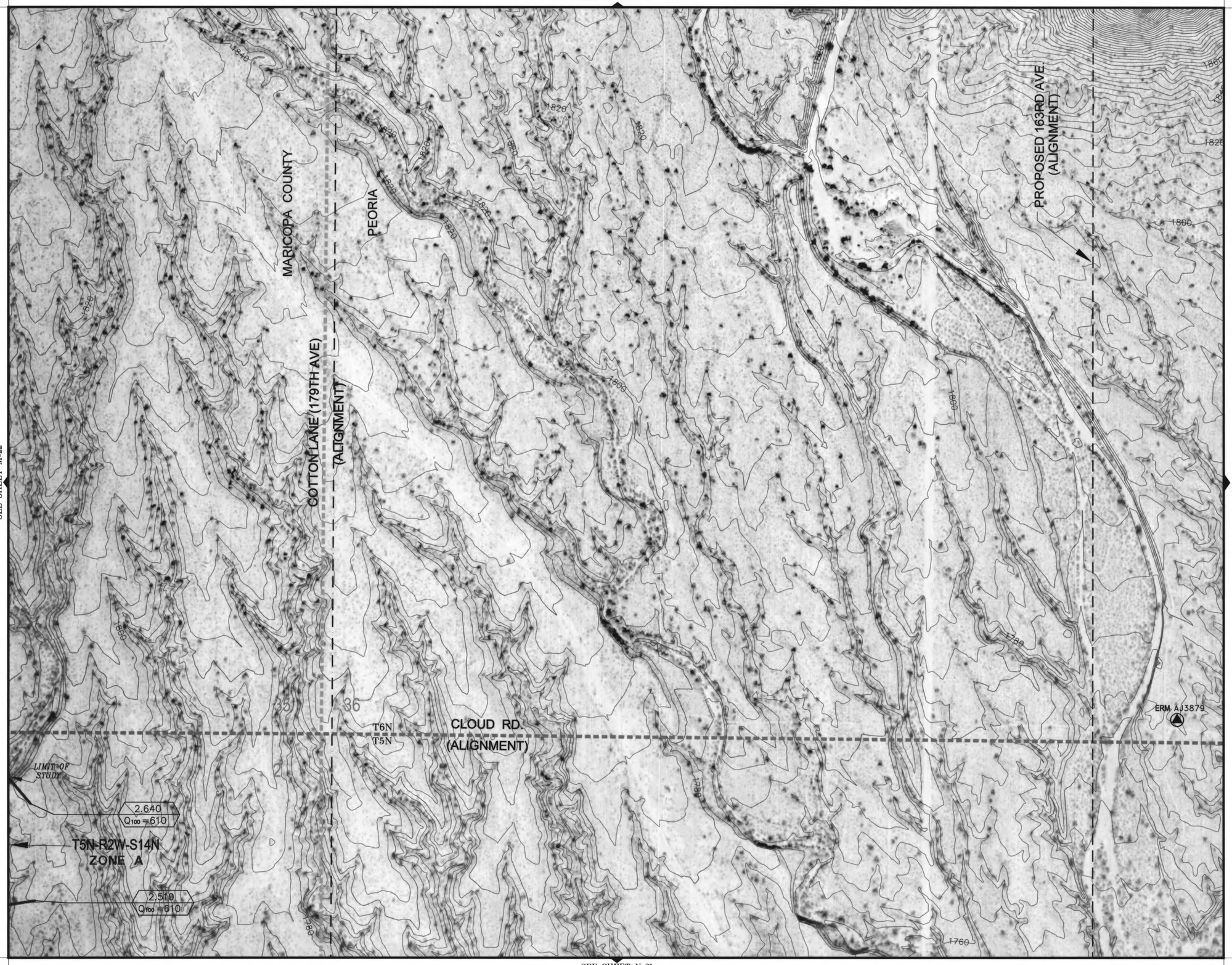
FILE: P:\301\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-N_21.dwg DATE: 05/02/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET N-23

SEE SHEET M-22

SEE SHEET O-22



SEE SHEET N-21

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-N_22.dwg DATE: 07/21/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

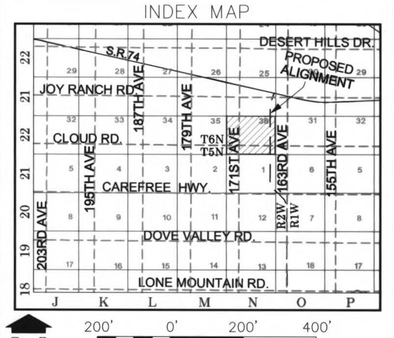
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3879		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 2.00 FEET = NAVD 88.

Registered Professional Engineer — Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/7/10 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

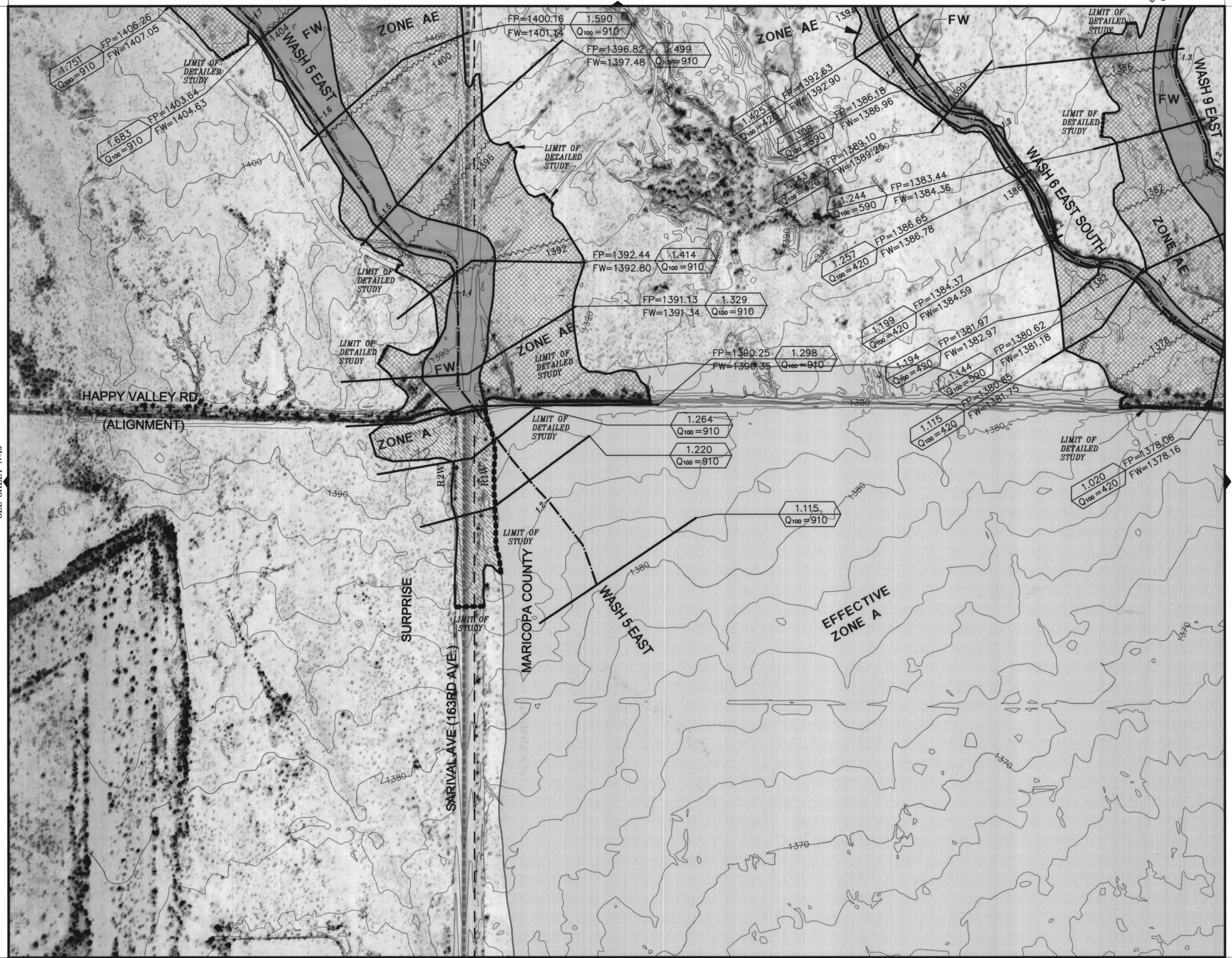
SHEET N-22 OF FLOODPLAIN DELINEATION

SEE SHEET O-14

ERM AJ3867

SEE SHEET N-13

SEE SHEET P-13



SEE SHEET O-12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

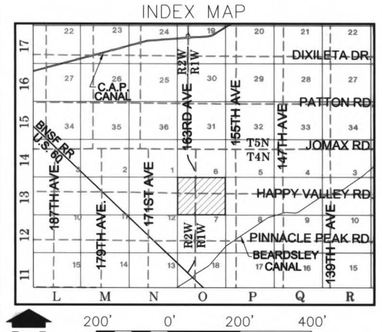
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3867		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certificate No. 28737 — HERNAN A. ARISTIZABAL — Date Signed — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET O-13 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\Hydraulics\FP-O_13.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET O-15

SEE SHEET N-14

SEE SHEET P-14

SEE SHEET O-13

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 =1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

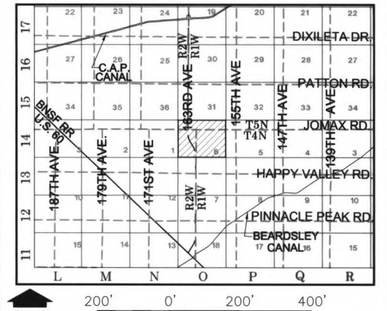
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
AJ3867		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE No. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/21/05 — ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET O-14 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-O_14.dwg DATE: 07/23/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET O-16

ERM DV2039

SURPRISE

MARICOPA COUNTY

SARIVAL AVE (163RD AVE.)

PATTON RD. (ALIGNMENT)

EFFECTIVE ZONE A

ZONE AE

WASH 9 EAST

WASH 9 EAST-SPLIT

WASH 8 EAST

FW

LIMIT OF DETAILED STUDY

FP=1467.53 FW=1468.48 3.267 Q100=440

FP=1464.98 FW=1465.53 3.208 Q100=440

FP=1459.60 FW=1460.31 3.091 Q100=500

FP=1456.41 FW=1456.95 3.021 Q100=500

FP=1453.97 FW=1454.57 2.966 Q100=500

FP=1450.56 FW=1450.96 2.892 Q100=500

FP=1447.34 FW=1447.42 2.815 Q100=500

FP=1443.64 FW=1444.29 2.749 Q100=540

FP=1440.56 FW=1441.07 2.668 Q100=340

FP=1438.68 FW=1439.00 2.647 Q100=340

FP=1435.52 FW=1436.26 2.577 Q100=340

FP=1433.05 FW=1433.65 2.511 Q100=340

FP=1430.85 FW=1431.06 2.452 Q100=340

FP=1427.86 FW=1427.95 2.382 Q100=500

FP=1425.17 FW=1425.94 2.321 Q100=590

FP=1422.75 FW=1423.49 2.256 Q100=590

FP=1441.95 FW=1442.28 0.852 Q100=1080

FP=1438.09 FW=1438.13 0.771 Q100=1080

FP=1435.42 FW=1435.49 0.701 Q100=1080

FP=1438.98 FW=1439.91 2.582 Q100=700

FP=1443.70 FW=1444.29 0.421 Q100=500

FP=1440.36 FW=1441.20 0.346 Q100=160

FP=1435.91 FW=1436.22 0.268 Q100=160

FP=1433.59 FW=1434.22 0.169 Q100=160

FP=1430.14 FW=1430.53 0.124 Q100=160

FP=1427.86 FW=1427.95 0.054 Q100=160

0.000 Q100=500

SEE SHEET N-15

SEE SHEET P-15

SEE SHEET O-14

FILE: P-300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-O_15.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

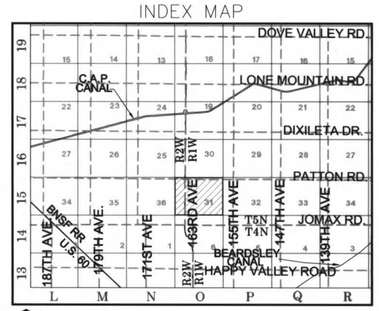
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL — Date Signed 7/21/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET O-15 OF FLOODPLAIN DELINEATION

SEE SHEET O-17

ERM DV2039

SEE SHEET N-16

SEE SHEET P-16

SEE SHEET O-15

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY

ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100 = 1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

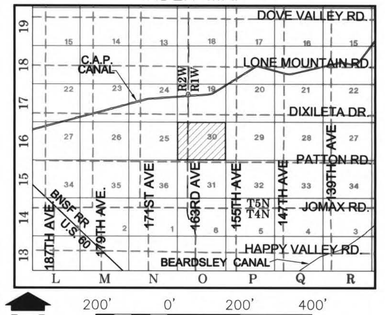
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 27737 — HERNAN A. ARISTIZABAL — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET O-16 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task \Hydraulics\FP-O_16.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET O-18

ERM DV2039

SEE SHEET N-17

SEE SHEET P-17

SEE SHEET O-16

ZONE AH EL.= 1555.12

ZONE AH EL.= 1550.12

C.A.P. CANAL

SARIVAL AVE (163RD AVE.)

WASH 9 EAST

WASH 10 EAST

WASH 11 EAST (PADELFORD WASH)

WASH 12 EAST

WASH 10 EAST (EAST SPLIT-1)

WASH 9 EAST

ZONE AE

FW

LIMIT OF DETAILED STUDY

MARICOPA COUNTY

SURPRISE

(DIXILETA DR. (ALIGNMENT)

R2W

R1W

4.666 FP=1540.49 FW=1540.50 Q100=360
4.652 FP=1539.96 FW=1539.95 Q100=360
4.618 FP=1538.31 FW=1538.38 Q100=390
4.596 FP=1536.78 FW=1536.84 Q100=390
4.568 FP=1535.29 FW=1535.33 Q100=390
4.536 FP=1534.35 FW=1534.36 Q100=390
4.524 FP=1533.26 FW=1533.31 Q100=390
4.471 FP=1531.41 FW=1530.18 Q100=390
4.442 FP=1530.14 FW=1527.18 Q100=390
4.386 FP=1527.40 FW=1523.75 Q100=390
4.338 FP=1523.71 Q100=390
4.270 FP=1520.21 FW=1520.22 Q100=390
4.206 FP=1516.82 FW=1516.80 Q100=390
4.152 FP=1513.08 FW=1513.10 Q100=390
4.423 FP=1536.91 FW=1537.14 Q100=220
4.378 FP=1534.20 FW=1534.27 Q100=220
4.314 FP=1531.21 FW=1531.64 Q100=220
4.253 FP=1527.87 FW=1528.07 Q100=220
4.223 FP=1526.14 FW=1526.27 Q100=140
4.172 FP=1523.60 FW=1523.68 Q100=140
4.094 FP=1518.54 FW=1518.72 Q100=140
4.052 FP=1516.98 FW=1516.00 Q100=140
3.984 FP=1511.75 FW=1511.95 Q100=140
4.466 FP=1539.76 FW=1539.81 Q100=220
4.606 FP=1534.96 FW=1535.68 Q100=970
0.850 Q100=220
0.830 Q100=100
0.760 Q100=100
0.720 Q100=100
0.640 Q100=100
0.570 FP=1511.67 FW=1511.67 Q100=100
0.510 FP=1508.74 FW=1508.77 Q100=100
0.450 FP=1504.86 FW=1504.83 Q100=100
3.905 FP=1507.28 FW=1507.86 Q100=140
FP=1527.87 FW=1528.18
FP=1526.40 FW=1527.38
FP=1523.19 FW=1524.11
FP=1521.73 FW=1522.38
FP=1516.37 FW=1516.56
4.615 FP=1535.04 FW=1535.73 Q100=910
4.552 FP=1533.28 FW=1533.95 Q100=970
4.423 FP=1528.33 FW=1528.65 Q100=360
4.522 FP=1532.03 FW=1532.51 Q100=970
4.365 FP=1525.98 FW=1526.11 Q100=360
4.332 FP=1524.43 FW=1524.85 Q100=360
4.461 FP=1528.69 FW=1528.94 Q100=970
4.299 FP=1522.53 FW=1522.60 Q100=360
4.239 FP=1519.29 FW=1519.75 Q100=360
4.394 FP=1524.42 FW=1524.53 Q100=560
4.354 FP=1522.16 FW=1523.16 Q100=560
4.341 FP=1521.47 FW=1522.08 Q100=560
4.323 FP=1519.94 FW=1520.90 Q100=560
4.284 FP=1518.10 FW=1519.05 Q100=560
4.254 FP=1516.79 FW=1517.35 Q100=560
4.208 FP=1514.05 FW=1514.06 Q100=560
4.158 FP=1511.56 FW=1511.70 Q100=560
4.114 FP=1509.78 FW=1510.20 Q100=560
4.077 FP=1507.69 FW=1508.48 Q100=560
4.043 FP=1505.98 FW=1506.71 Q100=560
4.554 FP=1535.45 FW=1535.47 Q100=360
4.491 FP=1531.57 FW=1531.57 Q100=360

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

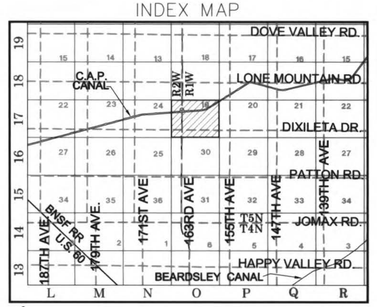
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 28737 HERNAN A. ARISTIZABAL — Date Signed 7/27/06 — ARIZONA, U.S.A.

INDEX MAP



N 200' 0' 200' 400'

SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET O-17 OF FLOODPLAIN DELINEATION

FILE: P:\00\31\310132 (Wittmann ADMSU)\Task\hydraulics\FP-O_17.dwg DATE: 07/22/05

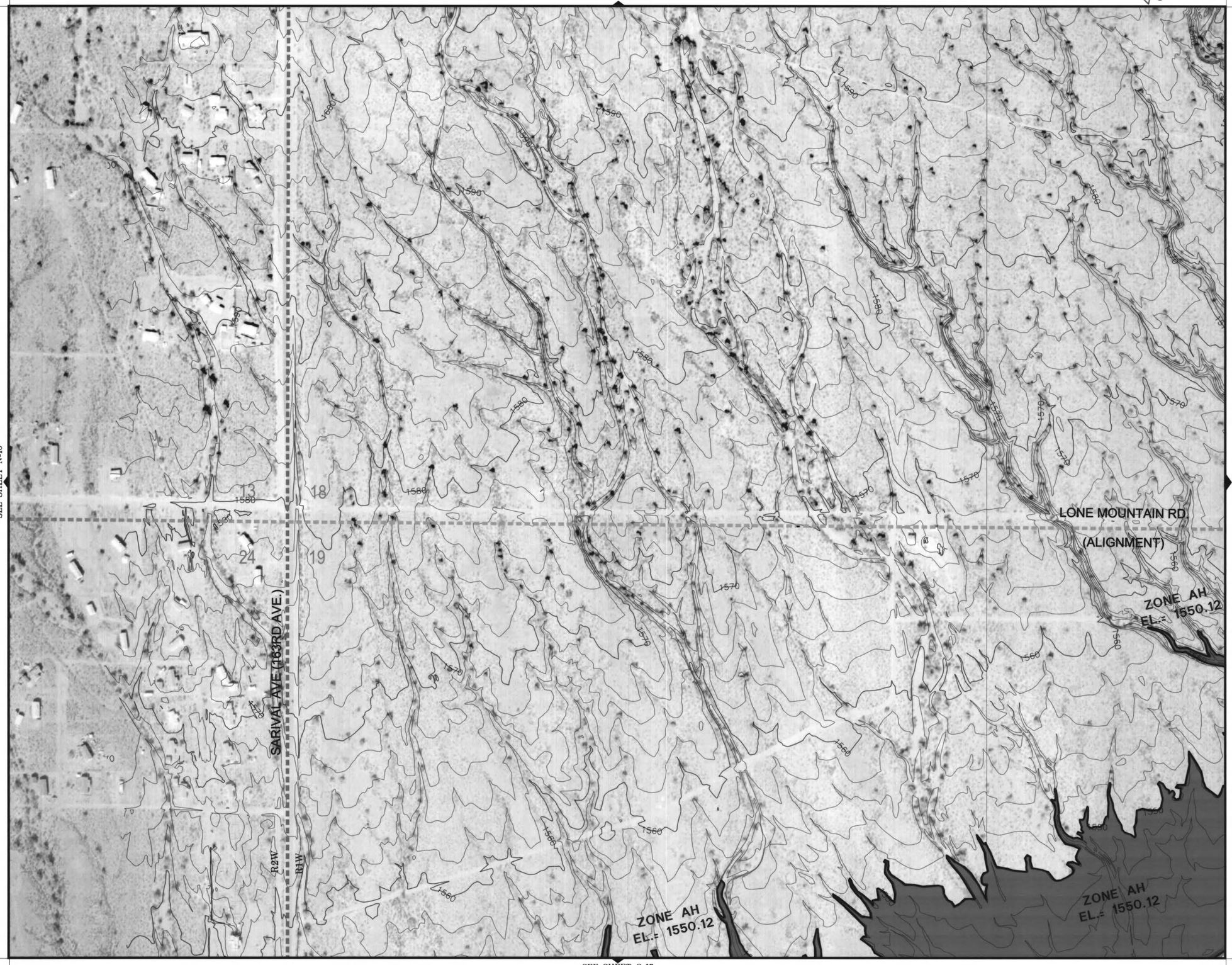
1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET O-19

ERM DV2039

SEE SHEET N-18

SEE SHEET P-18



SEE SHEET O-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

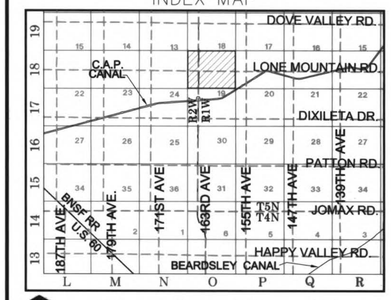
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

HERNAN A. ARISTIZABAL — 28737 — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET O-18 OF FLOODPLAIN DELINEATION

FILE: P-300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-O_18.dwg DATE: 07/28/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET P-14

SEE SHEET O-13

SEE SHEET Q-13

SEE SHEET P-12

ERM DV2039

1.008 FP=1374.01 Q100=440 FW=1374.80

0.927 FP=1370.29 Q100=440 FW=1371.07

0.877 FP=1368.34 Q100=440 FW=1369.25

0.793 FP=1365.98 Q100=440 FW=1366.81

0.733 FP=1363.84 Q100=440 FW=1364.28

0.656 FP=1360.85 Q100=440 FW=1361.02

0.596 FP=1358.50 Q100=440 FW=1358.89

0.541 FP=1357.28 Q100=440 FW=1358.09

0.462 Q100=440

0.365 Q100=200

FP=1370.90 FW=1371.48 Q=0.850 Q100=200

FP=1367.21 FW=1367.58 Q=0.737 Q100=200

FP=1363.07 FW=1363.38 Q=0.650 Q100=200

FP=1361.07 FW=1361.62 Q=0.591 Q100=200

FP=1358.65 FW=1358.71 Q=0.531 Q100=200

Q=0.468 Q100=200

FP=1380.62 FW=1381.12 Q=1.144 Q100=590

FP=1375.90 FW=1376.10 Q=1.050 Q100=570

Q=0.979 Q100=570

Q=0.912 Q100=570

WASH 9 EAST

ZONE AE

9 EAST

WASH 10 EAST

WASH 10 EAST (EAST SPLIT-2)

10E (ES-2)

10E (ES-2)

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

FW

10 EAST

10 EAST

10 EAST

10 EAST

HAPPY VALLEY RD. (ALIGNMENT)

6 EAST SOUTH 0.984 FP=1375.97 FW=1376.03 Q100=420

6 EAST SOUTH 0.909 FP=1374.34 FW=1374.39 Q100=1200

6 EAST SOUTH 0.843 Q100=1200

WASH 6 EAST SOUTH

EFFECTIVE ZONE A

EFFECTIVE ZONE A

REEMS ROAD (155TH AVE.) (ALIGNMENT)

1380 1378 1376 1374 1372 1370 1368 1366 1364 1362 1360 1358 1356 1354 1352 1350

5 8

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A

EFFECTIVE ZONE AE — ZONE AH

EFFECTIVE ZONE AH — ZONE AE

EFFECTIVE FLOODWAY — FLOODWAY (FW)

ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

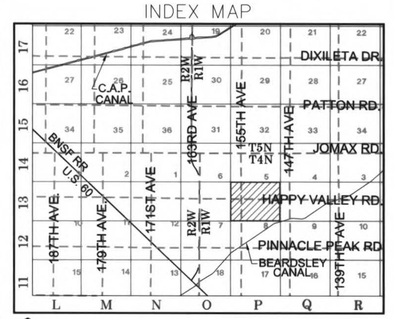
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE — 28737 HERNAN A. ARISTIZABAL — Date Signed 1/7/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET P-13 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-O_14.dwg DATE: 07/24/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET P-15

ERM DV2039

FP=1411.77 | 1.979 | FW=1411.84 | Q_{100}=290
FP=1410.40 | 1.929 | FW=1410.42 | Q_{100}=290
FP=1409.15 | 1.878 | FW=1409.28 | Q_{100}=290
FP=1407.78 | 1.827 | FW=1408.33 | Q_{100}=290
FP=1408.86 | 1.686 | FW=1408.97 | Q_{100}=200
FP=1405.87 | 1.612 | FW=1406.20 | Q_{100}=200
FP=1401.64 | 1.535 | FW=1401.70 | Q_{100}=200
FP=1397.60 | 1.475 | FW=1397.87 | Q_{100}=200
FP=1394.58 | 1.399 | FW=1395.28 | Q_{100}=200
FP=1390.72 | 1.306 | FW=1390.98 | Q_{100}=200
FP=1387.87 | 1.237 | FW=1388.23 | Q_{100}=200
FP=1383.32 | 1.150 | FW=1383.50 | Q_{100}=200
FP=1379.95 | 1.094 | FW=1380.05 | Q_{100}=200
FP=1376.56 | 1.012 | FW=1376.60 | Q_{100}=200
FP=1373.45 | 0.934 | FW=1373.58 | Q_{100}=200
1.734 | FP=1404.11 | Q_{100}=290 | FW=1404.99
1.630 | FP=1397.57 | Q_{100}=290 | FW=1398.33
1.538 | FP=1393.55 | Q_{100}=290 | FW=1394.40
1.465 | FP=1390.56 | Q_{100}=290 | FW=1390.81
1.412 | FP=1388.15 | Q_{100}=440 | FW=1388.73
1.538 | Q_{100}=590 | FP=1394.45 | FW=1395.12
1.323 | FP=1385.45 | Q_{100}=440 | FW=1386.33
1.245 | FP=1383.00 | Q_{100}=440 | FW=1383.97
1.199 | FP=1381.37 | Q_{100}=440 | FW=1381.95
1.473 | Q_{100}=590 | FP=1391.93 | FW=1392.83
1.131 | FP=1378.76 | Q_{100}=440 | FW=1379.75
1.062 | FP=1376.52 | Q_{100}=440 | FW=1377.24
1.400 | Q_{100}=590 | FP=1390.03 | FW=1390.55

WASH 10 EAST
WASH 10 EAST (EAST SPLIT-2)
WASH 9 EAST
ZONE AE
FW
LIMIT OF DETAILED STUDY
SURPRISE
MARICOPA COUNTY
JOMAX RD.
REEMS ROAD (155TH AVE)
T5N
T4N

SEE SHEET O-14
SEE SHEET Q-14
SEE SHEET P-13

FILE: P-300\310\310032 (Wittmann ADMS)\Task\hydraulics\FP-Q_14.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

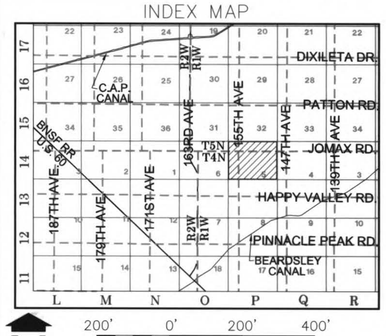
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/27/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER

SHEET P-14 OF FLOODPLAIN DELINEATION

SEE SHEET P-16

SEE SHEET O-15

SEE SHEET Q-15

SEE SHEET P-14

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

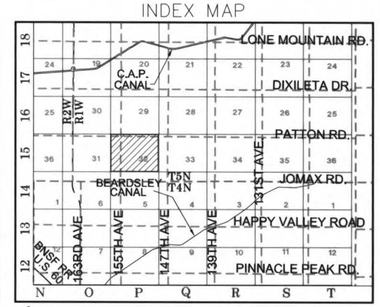
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certified Professional Engineer — CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 7/7/05 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE
APPROVED BY: DATE
CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY: DATE:

SHEET P-15 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMS\)\Task\Hydraulics\FP-P_15.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET P-17

SEE SHEET O-16

SEE SHEET Q-16

SEE SHEET P-15

ERM DV2039

ZONE AE
FW
EXISTING ZONE A
WASH 12 EAST
WASH 11 EAST (RADELFORD WASH)
REEMS ROAD (155TH AVE.)
SURPRISE
MARICOPA COUNTY
LIMIT OF DETAILED STUDY

3.649 Q100=360 FP=1487.27 FW=1487.50
FP=1484.28 FW=1484.28 3.582 Q100=360
FP=1480.74 FW=1480.74 3.506 Q100=360
FP=1478.48 FW=1478.48 3.460 Q100=360
FP=1475.61 FW=1475.61 3.410 Q100=360
FP=1472.57 FW=1472.57 3.342 Q100=360
FP=1471.17 FW=1471.17 3.303 Q100=360
FP=1469.91 FW=1469.92 3.283 Q100=360
FP=1469.07 FW=1469.08 3.262 Q100=360
FP=1467.83 FW=1467.83 3.216 Q100=360
FP=1465.24 FW=1465.30 3.170 Q100=360
FP=1463.26 FW=1463.27 3.129 Q100=360
FP=1461.54 FW=1461.65 3.090 Q100=360
FP=1460.09 FW=1460.20 3.046 Q100=360
FP=1456.76 FW=1456.75 2.991 Q100=360
FP=1456.13 FW=1456.14 2.973 Q100=360
FP=1451.86 FW=1451.88 2.896 Q100=360
FP=1450.52 FW=1450.62 2.862 Q100=360
FP=1474.81 FW=1475.72 3.450 Q100=560
FP=1474.16 FW=1473.22 3.313 Q100=560
FP=1470.76 FW=1471.26 3.332 Q100=1030
FP=1468.76 FW=1468.88 3.278 Q100=1030
FP=1464.76 FW=1464.98 3.201 Q100=1030
FP=1460.21 FW=1461.07 3.120 Q100=1030
FP=1457.64 FW=1458.09 3.054 Q100=1030
FP=1454.41 FW=1454.42 2.985 Q100=1030

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

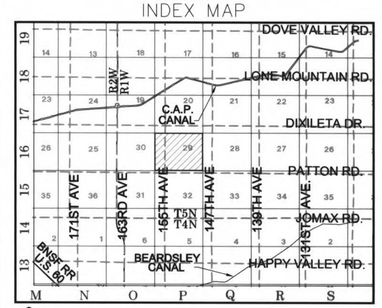
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

HERNAN A. ARISTIZABAL — 27137 — CERTIFICATE NO. — PROFESSIONAL ENGINEER — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE	
DESIGN	AMG/RAS	07/2005	FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
DESIGN CHK.	HAA	07/2005	
PLANS	KAB	07/2005	RECOMMENDED BY: DATE
PLANS CHK.	AMG/HAA	07/2005	APPROVED BY: DATE
SUBMITTED BY: DATE:			CHIEF ENGINEER AND GENERAL MANAGER

SHEET P-16 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310332 (Wittmann ADMSU)\Task\Hydraulics\FP-P_16.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET P-18

ERM DV2039

C.A.P. CANAL

REEMS ROAD (155TH AVE.) (ALIGNMENT)

EFFECTIVE ZONE A

EFFECTIVE ZONE A

EFFECTIVE ZONE A

FP=1522.53 4.299
FW=1522.60 Q_{100}=360

FP=1519.29 4.239
FW=1519.75 Q_{100}=360

FP=1516.36 4.166
FW=1516.83 Q_{100}=360

FP=1514.26 4.127
FW=1514.33 Q_{100}=360

FP=1511.76 4.088
FW=1511.88 Q_{100}=290

FP=1508.51 4.021
FW=1509.20 Q_{100}=290

FP=1504.05 3.951
FW=1504.46 Q_{100}=290

FP=1501.48 3.902
FW=1502.03 Q_{100}=290

FP=1499.67 3.867
FW=1500.41 Q_{100}=290

FP=1496.32 3.804
FW=1496.28 Q_{100}=290

FP=1490.95 3.716
FW=1491.21 Q_{100}=360

FP=1487.27 3.649
FW=1487.50 Q_{100}=360

WASH 12 EAST

WASH 12 EAST SPLIT

WASH 12 EAST

LIMIT OF DETAILED STUDY

ZONE AE

ZONE AE

ZONE AE

ZONE AE

FW

MARICOPA COUNTY

DIXILETA DR. (ALIGNMENT)

SURPRISE

EFFECTIVE ZONE A

SEE SHEET O-17

SEE SHEET Q-17

SEE SHEET P-16

FILE: P:\300\310\310332 (Wittmann ADMS)\Task\Hydraulics\FP-P_17.dwg DATE: 07/27/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

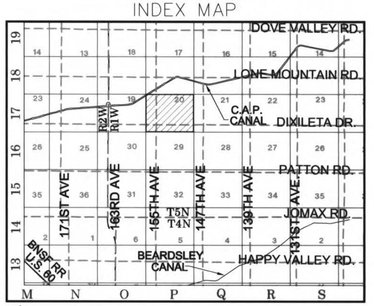
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Arizona Professional Engineer — CERTIFICATE — 28757 — HERNAN A. ARISTIZABAL — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET P-17 OF FLOODPLAIN DELINEATION

SEE SHEET P-19

ERM DV2039

SEE SHEET P-17

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO

- HYDRAULIC BASE LINE — 13.7
- ZONE DESIGNATION — ZONE A
- WASH I.D. LABEL — WASH 9 EAST
- ELEVATION REFERENCE MARK — ERM AJ3866
- CROSS SECTION — 2.199, Q_{100} =1270, FP=1400.55, FW=1400.56
- BASE FLOOD ELEVATION — 1320
- DIKE / LEVEE — DIKE
- COUNTY BOUNDARY
- CORPORATE LIMIT
- LIMIT OF STUDY
- LIMIT OF DETAILED STUDY
- TOWNSHIP/RANGE LINE
- SECTION LINE
- SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

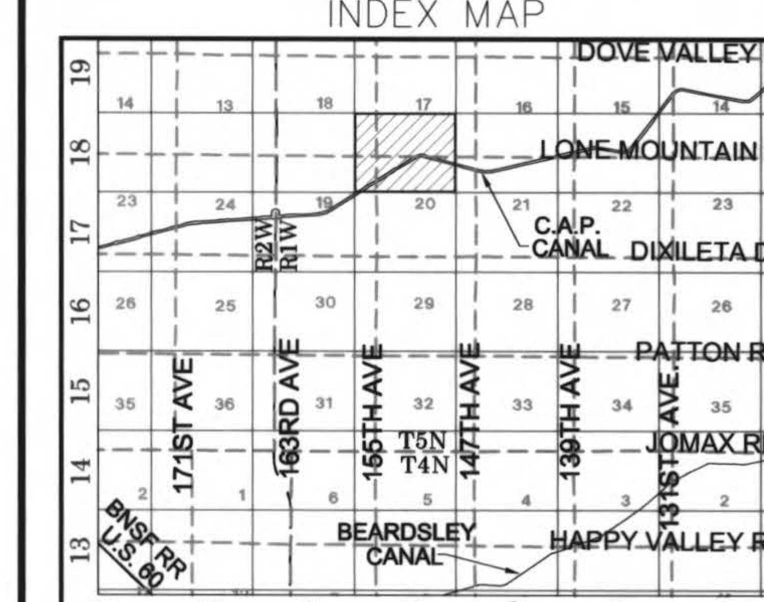
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

HERNAN A. ARISTIZABAL, ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1" = 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE	
DESIGN	AMG/RAS	07/2005	FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
DESIGN CHK.	HAA	07/2005	RECOMMENDED BY: DATE
PLANS	KAB	07/2005	APPROVED BY: DATE
PLANS CHK.	AMG/HAA	07/2005	CHIEF ENGINEER AND GENERAL MANAGER
SUBMITTED BY:		DATE:	SHEET P-18 OF FLOODPLAIN DELINEATION

FILE: P:300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-P_18.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

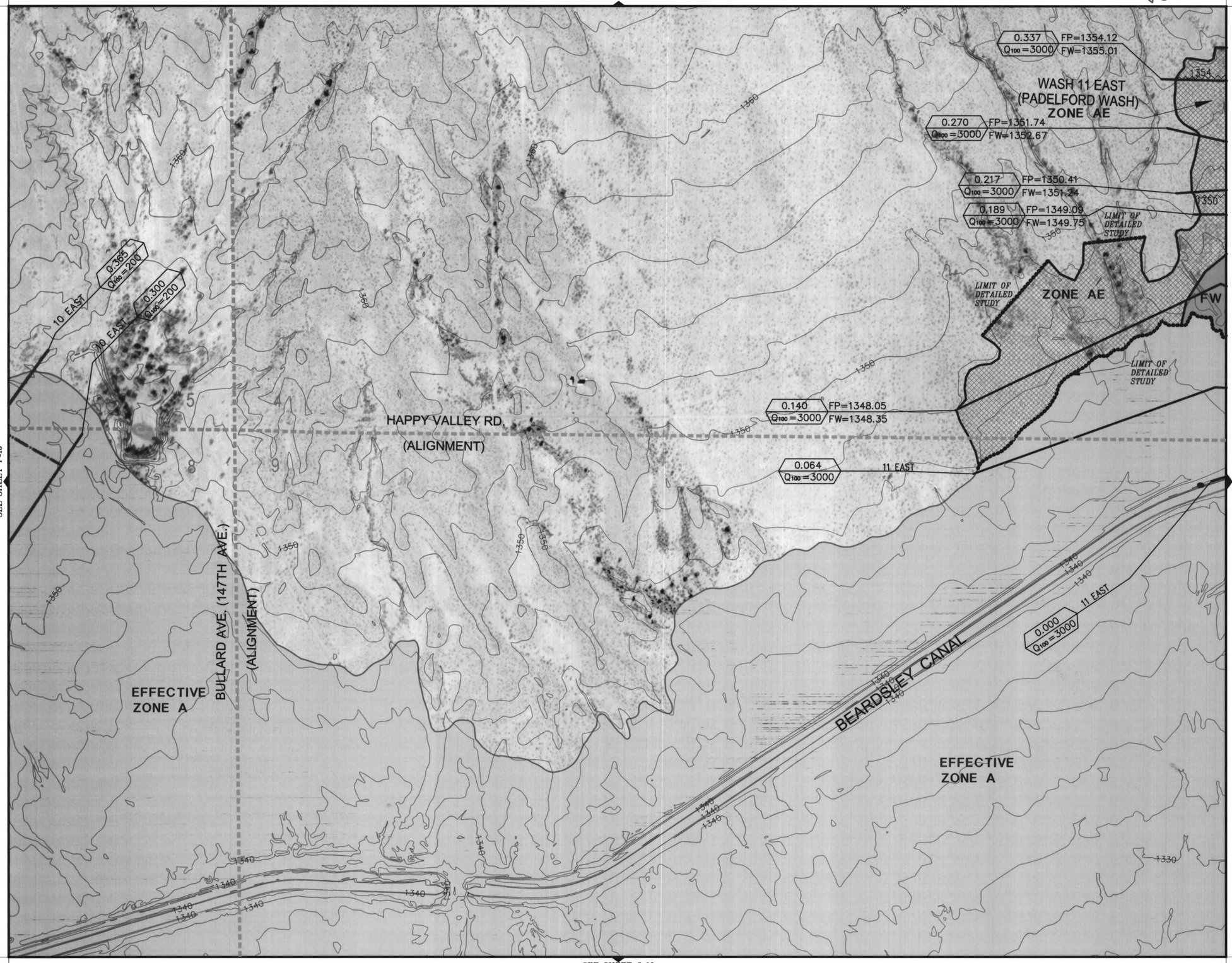
SEE SHEET Q-14

ERM DV0083

SEE SHEET P-13

SEE SHEET R-13

SEE SHEET Q-12



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 Q100=1270 FP=1400.55 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

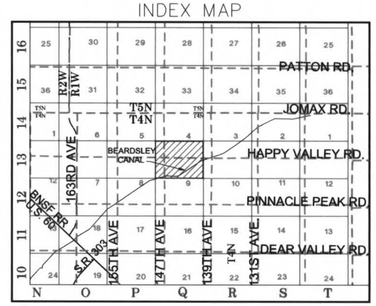
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0083		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET Q-13 OF FLOODPLAIN DELINEATION

FILE: P:\3001\310\30032 (Wittmann ADMSU)\Task\hydraulics\FP-Q_13.dwg DATE: 06/06/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET Q-15

ERM DV2039

SEE SHEET P-14

SEE SHEET R-14

SEE SHEET Q-13

1.482 FP=1396.60 Q100=1310 FW=1397.45

1.397 FP=1393.61 Q100=1310 FW=1394.10

1.350 FP=1391.87 Q100=1310 FW=1392.23

1.294 FP=1389.65 Q100=1310 FW=1390.44

1.255 FP=1388.10 Q100=1310 FW=1388.53

1.189 FP=1385.22 Q100=1310 FW=1386.01

1.137 FP=1383.07 Q100=1310 FW=1383.70

1.099 FP=1381.25 Q100=1310 FW=1382.02

0.999 FP=1377.88 Q100=1310 FW=1378.73

0.920 FP=1374.35 Q100=1310 FW=1374.71

0.848 FP=1371.73 Q100=2950 FW=1372.20

0.848 FP=1371.73 Q100=1830 FW=1371.87

0.765 FP=1368.68 Q100=2950 FW=1369.60

0.677 FP=1365.40 Q100=2950 FW=1366.27

0.613 FP=1363.36 Q100=2950 FW=1364.32

0.536 FP=1360.57 Q100=2950 FW=1361.55

0.469 FP=1358.07 Q100=3000 FW=1358.98

1.284 FP=1388.26 Q100=1830 FW=1389.26

1.189 FP=1384.72 Q100=1830 FW=1385.43

1.090 FP=1380.99 Q100=1830 FW=1381.55

0.995 FP=1377.56 Q100=1830 FW=1378.21

0.517 FP=1374.52 Q100=1830 FW=1374.92

ZONE AE

WASH 11 EAST (PADELFORD WASH)

WASH 13 EAST

WASH 15 EAST

FW

LIMIT OF DETAILED STUDY

JOMAX RD.

T5N

T4N

BULLARD AVE. (147TH AVE.) (ALIGNMENT)

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 FP=1400.55 Q100=1270 FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

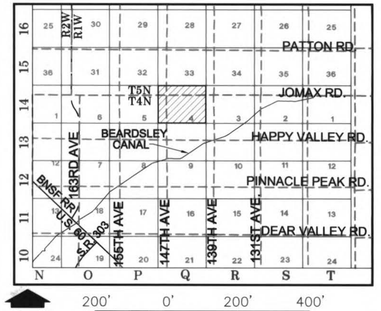
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:

1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 HERNAN A. ARISTIZABAL Date Signed 7/21/05 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'

SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET Q-14 OF FLOODPLAIN DELINEATION

FILE: P:300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-Q_14.dwg DATE: 07/12/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET Q-16

ERM DV2039

SEE SHEET P-15

SEE SHEET R-15

SEE SHEET Q-14

PATTON ROAD (ALIGNMENT)

BULLARD AVE. (147TH AVE.)

WASH 9 EAST

WASH 11 EAST

WASH 13 EAST

WASH 14 EAST

BONITA DIKE

DIKE

DAM

BREACH SECTION, SEE TDN FOR SPECIFICS AND DOCUMENTATION

ZONE A

ZONE AE

FW

LIMIT OF DETAILED STUDY

2.191	FP=1421.22	FW=1421.53	Q_{100}=460
2.137	FP=1419.40	FW=1419.49	Q_{100}=460
2.076	FP=1417.70	FW=1417.81	Q_{100}=460
2.043	FP=1416.93	FW=1417.03	Q_{100}=460
2.027	FP=1416.86	FW=1416.92	Q_{100}=460
2.006	FP=1415.08	FW=1415.08	Q_{100}=460
1.934	FP=1409.38	FW=1409.66	Q_{100}=460
1.918	FP=1408.82	FW=1408.84	Q_{100}=460
2.239	FP=1422.97	FW=1423.71	Q_{100}=460
2.001	FP=1413.67	FW=1414.08	Q_{100}=460
0.283	FP=1418.04	FW=N/A	Q_{100}=140
0.241	FP=1417.19	FW=N/A	Q_{100}=140
0.148	FP=1414.55	FW=N/A	Q_{100}=140
0.116	FP=1413.13	FW=N/A	Q_{100}=140
0.059	FP=1411.70	FW=N/A	Q_{100}=140
0.018	FP=1408.85	FW=N/A	Q_{100}=140
0.000	FP=1408.85	FW=N/A	Q_{100}=140
1.947	FP=1414.53	FW=1414.99	Q_{100}=1300
2.017	FP=1416.43	FW=1416.82	Q_{100}=1300
1.884	FP=1412.15	FW=1412.79	Q_{100}=1300
1.886	FP=1408.73	FW=1408.19	Q_{100}=460
1.842	FP=1406.18	FW=1406.37	Q_{100}=460
1.794	FP=1404.51	FW=1405.44	Q_{100}=460
1.635	FP=1400.91	FW=1401.57	Q_{100}=1810
1.836	FP=1410.22	FW=1411.09	Q_{100}=1300
1.764	FP=1408.34	FW=1409.06	Q_{100}=1300
1.693	FP=1406.34	FW=1407.24	Q_{100}=1300
1.634	FP=1403.88	FW=1404.37	Q_{100}=1300
1.598	FP=1401.48	FW=1401.49	Q_{100}=1310
1.578	FP=1399.04	FW=1399.55	Q_{100}=1310
1.557	FP=1398.95	FW=1399.46	Q_{100}=1310
1.613	FP=1402.85	FW=1403.44	Q_{100}=1310
1.591	FP=1400.24	FW=1400.24	Q_{100}=1310
1.567	FP=1399.16	FW=1399.63	Q_{100}=1310
1.546	FP=1398.98	FW=1399.44	Q_{100}=1310
1.482	FP=1396.60	FW=1397.45	Q_{100}=1310
1.397	FP=1393.61	FW=1394.10	Q_{100}=1310
2.168			Q_{100}=1380
2.135			Q_{100}=1380
2.112	FP=1417.39	FW=1417.73	Q_{100}=1380
2.089	FP=1416.53	FW=1417.15	Q_{100}=1380
2.026	FP=1414.35	FW=1415.31	Q_{100}=1380
0.186	FP=1416.20	FW=N/A	Q_{100}=140
1.941	FP=1411.59	FW=1412.41	Q_{100}=1380
1.894	FP=1410.10	FW=1410.40	Q_{100}=1380
1.831	FP=1407.63	FW=1408.41	Q_{100}=1380
1.772	FP=1405.54	FW=1406.53	Q_{100}=1380
1.737	FP=1404.15	FW=1405.07	Q_{100}=460
1.635			Q_{100}=1380
1.581	FP=1398.85	FW=1399.50	Q_{100}=1810
1.529	FP=1397.41	FW=1397.77	Q_{100}=1830
1.446	FP=1394.34	FW=1395.15	Q_{100}=1830
1.368	FP=1390.79	FW=1391.51	Q_{100}=1830

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-Q_15.dwg DATE: 07/12/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 / FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

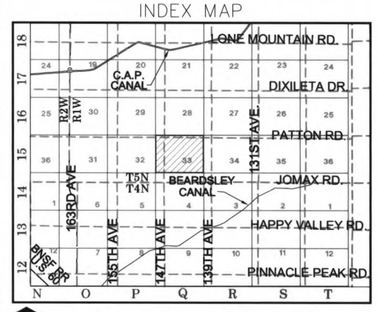
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/31/06 — ARIZONA, U.S.A.

INDEX MAP



SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SUBMITTED BY: DATE:

SHEET Q-15 OF FLOODPLAIN DELINEATION

SEE SHEET Q-17

ERM DV2039

EFFECTIVE ZONE A

EFFECTIVE ZONE A

EFFECTIVE ZONE A

BULLARD AVE. (147TH AVE.) (ALIGNMENT)

EFFECTIVE ZONE A

WASH 13 EAST ZONE A

LIMIT OF STUDY

ZONE A 2.294 Q_{100}=460

WASH 14 EAST ZONE A

LIMIT OF STUDY

ZONE A 2.244 Q_{100}=1380

SEE SHEET P-16

SEE SHEET R-16

SEE SHEET Q-15

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-Q_16.dwg DATE: 07/12/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

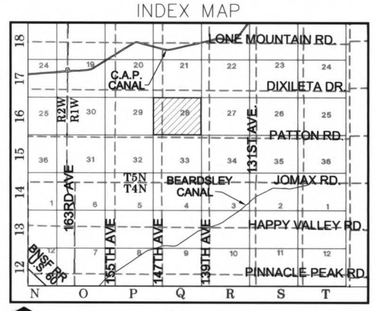
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

Certificate No. 37737 HERNAN A. ARISTIZABAL Date Signed 1/3/06 ARIZONA, U.S.A.

INDEX MAP



200' 0' 200' 400'
SCALE: 1"= 200'

Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

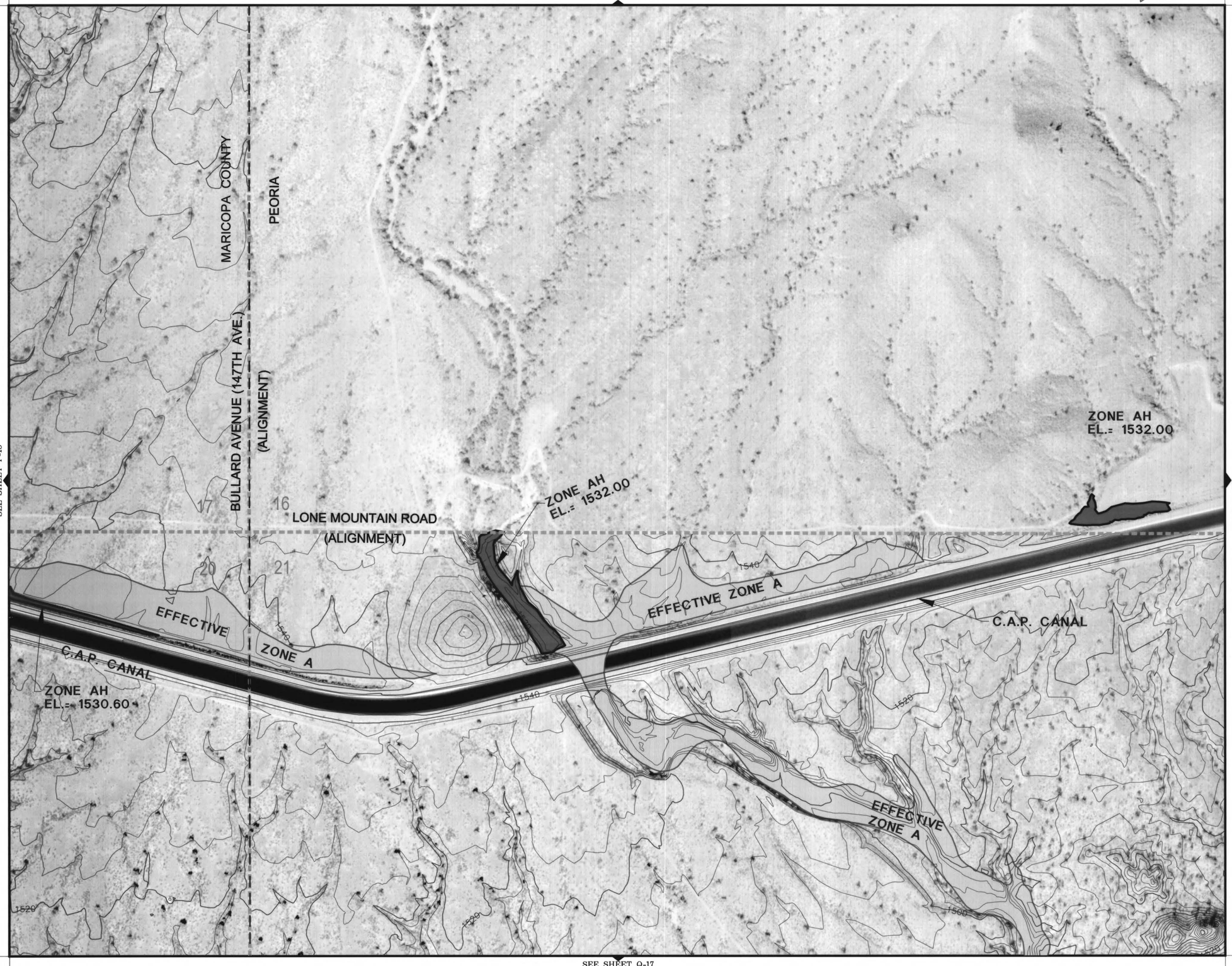
APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET Q-16 OF FLOODPLAIN DELINEATION

SEE SHEET Q-19

ERM DV2039



SEE SHEET P-18

SEE SHEET R-18

SEE SHEET Q-17

FILE: P:\300\310\310032 (Wittmann ADMS)\Task 1\Hydraulics\FP-Q_18.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

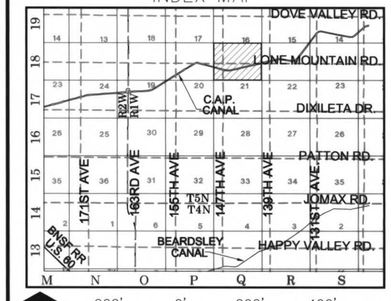
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 2.00 FEET = NAVD 88.

CERTIFICATE NO. 39737 — HERNAN A. ARISTIZABAL — Date Signed 1/21/05 — ARIZONA, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

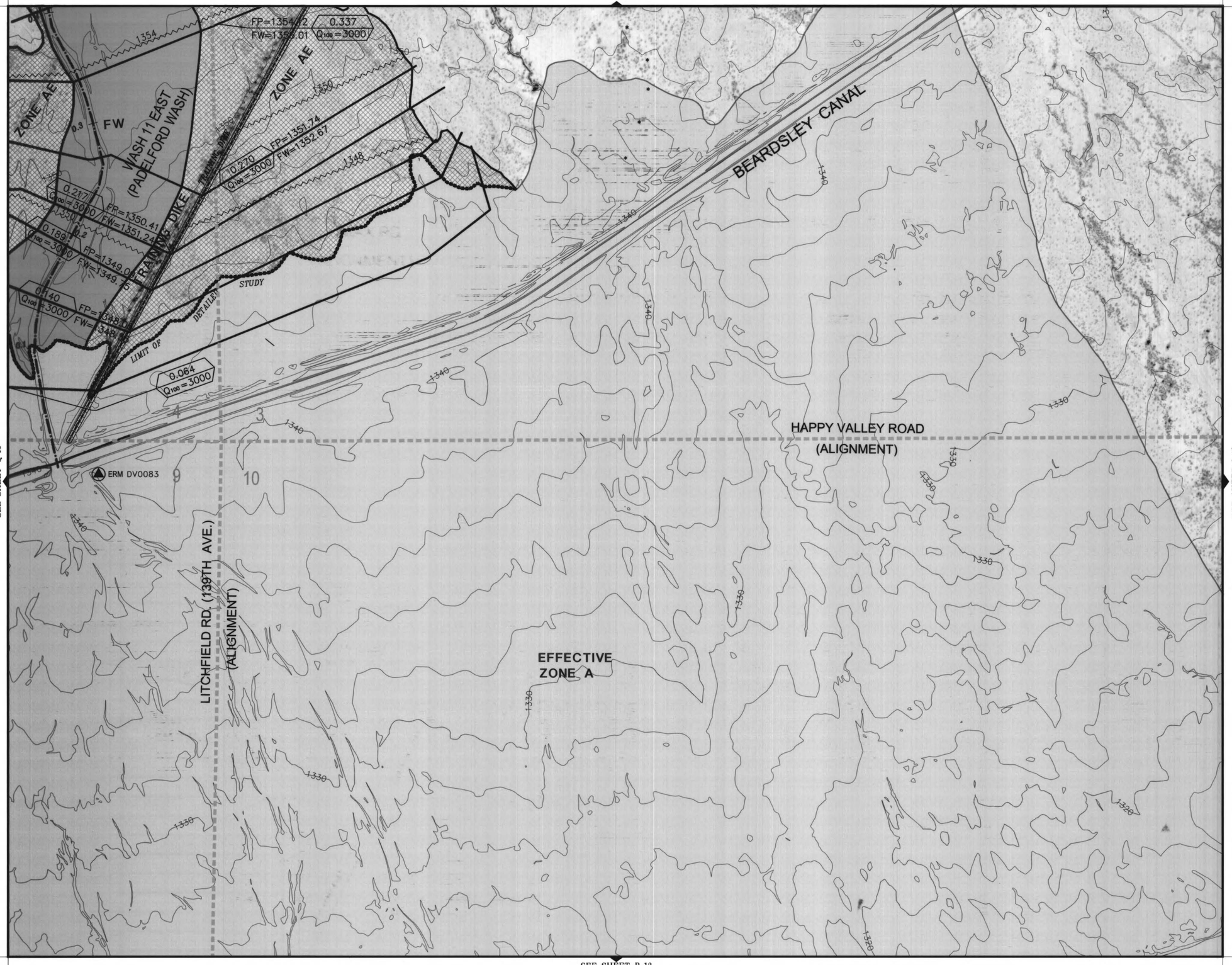
CHIEF ENGINEER AND GENERAL MANAGER

SHEET Q-18 OF FLOODPLAIN DELINEATION

SEE SHEET R-14

SEE SHEET Q-13

SEE SHEET S-13



SEE SHEET R-12

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A — ZONE A
EFFECTIVE ZONE AE — ZONE AH
EFFECTIVE ZONE AH — ZONE AE
EFFECTIVE FLOODWAY — FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q100=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

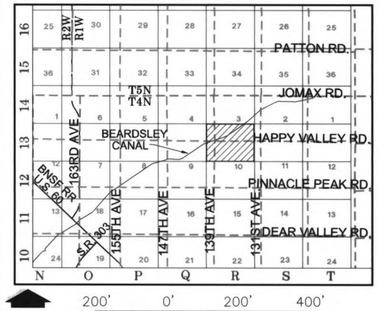
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0083		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

Certificate No. 29737 — HERNAN A. ARISTIZABAL — Date Signed 1/27/06 — ARIZONA, U.S.A.

INDEX MAP



N
200' 0' 200' 400'
SCALE: 1" = 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET R-13 OF FLOODPLAIN DELINEATION

FILE: P:\300\310\310032 (Wittmann ADMSU)\Task\hydraulics\FP-R_13.dwg DATE: 07/12/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

SEE SHEET R-15

SEE SHEET Q-14

SEE SHEET S-14

JOMAX RD. (ALIGNMENT)

LITCHFIELD RD. (139TH AVE.) (ALIGNMENT)

T5N
T4N

LIMIT OF DETAILED STUDY

FP=1371.73 FW=1372.20 0.848 Q_{100}=2950

FP=1368.68 FW=1369.60 0.766 Q_{100}=2950

FP=1365.40 FW=1366.27 0.677 Q_{100}=2950

FP=1363.36 FW=1364.32 0.613 Q_{100}=2950

FP=1360.57 FW=1361.55 0.536 Q_{100}=2950

FP=1358.07 FW=1358.98 0.469 Q_{100}=3000

FP=1356.10 FW=1357.03 0.403 Q_{100}=3000

FP=1354.12 FW=1355.01 0.337 (11E) Q_{100}=3000

WASH 11 EAST (PADELFORD WASH)

ZONE AE

FW

0.5

TRAINING DIKE

EFFECTIVE ZONE A

ERM DV0081

BEARDSLEY CANAL

SEE SHEET R-13

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FILE: P:\300\310\310032 (Wittmann ADMS)\Task\Hydraulics\FP-R_14.dwg DATE: 07/12/05

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A
EFFECTIVE ZONE AE
EFFECTIVE ZONE AH
EFFECTIVE FLOODWAY
ZONE A
ZONE AH
ZONE AE
FLOODWAY (FW)
ZONE AO

HYDRAULIC BASE LINE
ZONE DESIGNATION — ZONE A
WASH I.D. LABEL — WASH 9 EAST
ELEVATION REFERENCE MARK — ERM AJ3866
CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56
BASE FLOOD ELEVATION — 1320
DIKE / LEVEE — DIKE
COUNTY BOUNDARY
CORPORATE LIMIT
LIMIT OF STUDY
LIMIT OF DETAILED STUDY
TOWNSHIP/RANGE LINE
SECTION LINE
SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

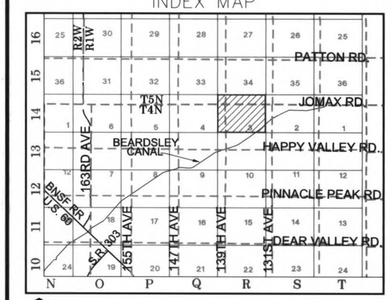
I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV0081		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

* : SECTION ASSUMING TRAINING DIKE HAS FAILED.

CERTIFICATE NO. 28737 HERNAN A. ARISTIZABAL 7/31/06 Date Signed REGISTERED PROFESSIONAL ENGINEER ARIZONA, U.S.A.

INDEX MAP



Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008-3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE:

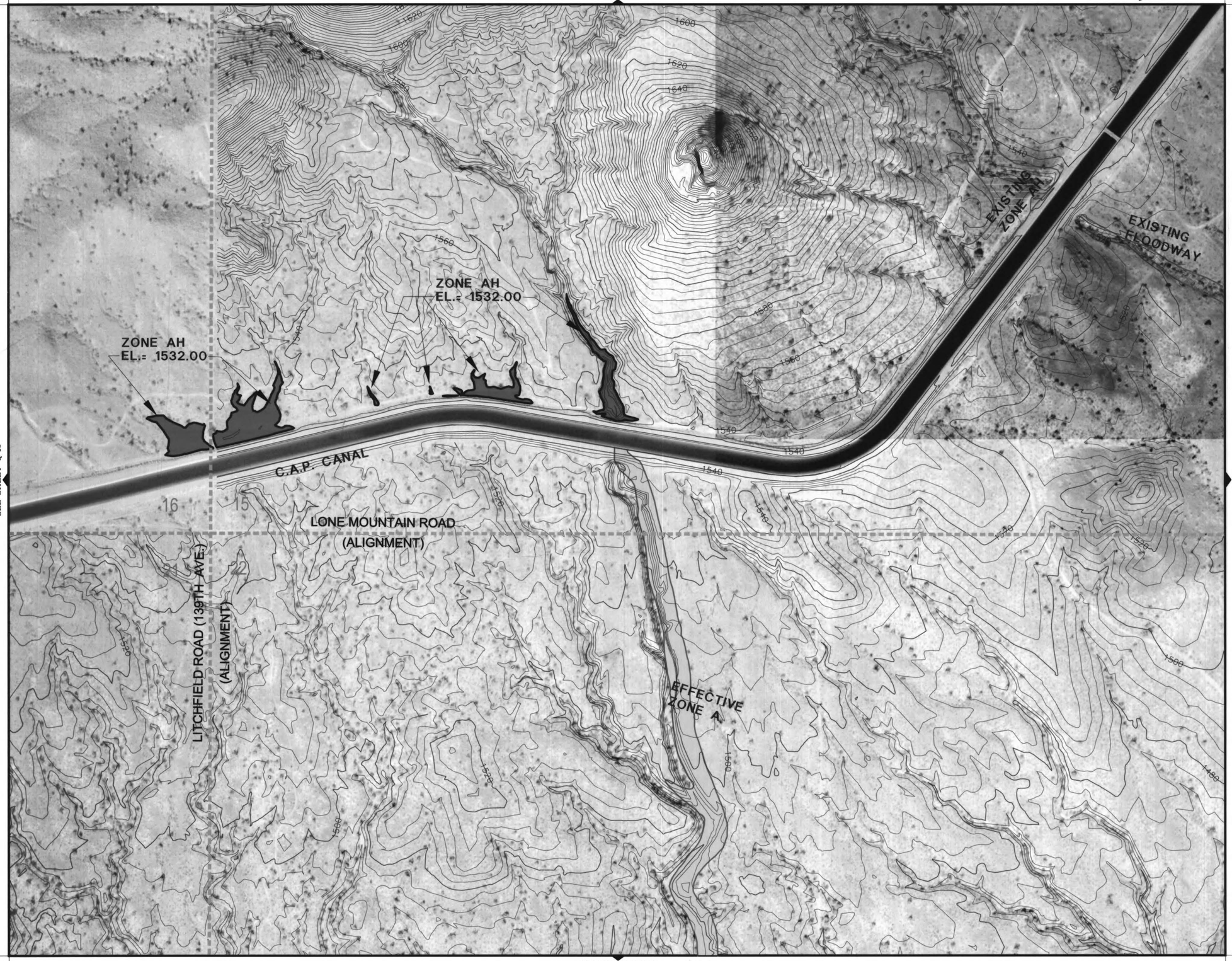
APPROVED BY: DATE:

CHIEF ENGINEER AND GENERAL MANAGER

SHEET R-14 OF FLOODPLAIN DELINEATION

SEE SHEET R-19

ERM DV2039



SEE SHEET Q-18

SEE SHEET S-18

SEE SHEET R-17

FILE: P:\300_310\310032 (Wittmann ADMS)\Task Hydraulics\FP-R_18.dwg DATE: 07/22/05

1" = 600' (1:7200) FLIGHT DATES: (04/18/02), (04/19/02), (04/23/02), 1"=1200' (1:14400) (04/23/02) BY: STEWART GEO TECHNOLOGIES

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

WITTMANN AREA DRAINAGE MASTER STUDY UPDATE

CONTRACT FCD 2002C029

LEGEND

EFFECTIVE ZONE A	ZONE A
EFFECTIVE ZONE AE	ZONE AH
EFFECTIVE ZONE AH	ZONE AE
EFFECTIVE FLOODWAY	FLOODWAY (FW)
	ZONE AO

HYDRAULIC BASE LINE

ZONE DESIGNATION — ZONE A

WASH I.D. LABEL — WASH 9 EAST

ELEVATION REFERENCE MARK — ERM AJ3866

CROSS SECTION — 2.199 / Q_{100}=1270 — FP=1400.55 / FW=1400.56

BASE FLOOD ELEVATION — 1320

DIKE / LEVEE — DIKE

COUNTY BOUNDARY

CORPORATE LIMIT

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

TOWNSHIP/RANGE LINE

SECTION LINE

SECTION NUMBER — 29

ELEVATION REFERENCE MARKS

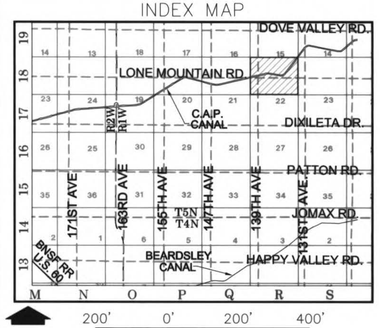
NOTE: ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

I.D. NUMBER	ELEV. (FT)	DESCRIPTION/LOCATION
DV2039		NOTE: FOR ERM DESCRIPTION AND ELEVATIONS GO TO THE NATIONAL GEODETIC SURVEY WEB SITE, WWW.NGS.NOAA.GOV

NOTE:
1. NGVD 29 + 1.90 FEET = NAVD 88.

HERNAN A. ARISTIZABAL, 37737, Certified Professional Engineer, Arizona, U.S.A.

INDEX MAP



N

200' 0' 200' 400'

SCALE: 1"= 200'

Entellus™
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
Fax 602.244.8947
WEB www.entellus.com

	BY	DATE
DESIGN	AMG/RAS	07/2005
DESIGN CHK.	HAA	07/2005
PLANS	KAB	07/2005
PLANS CHK.	AMG/HAA	07/2005

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

SUBMITTED BY: DATE:

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET R-18 OF FLOODPLAIN DELINEATION