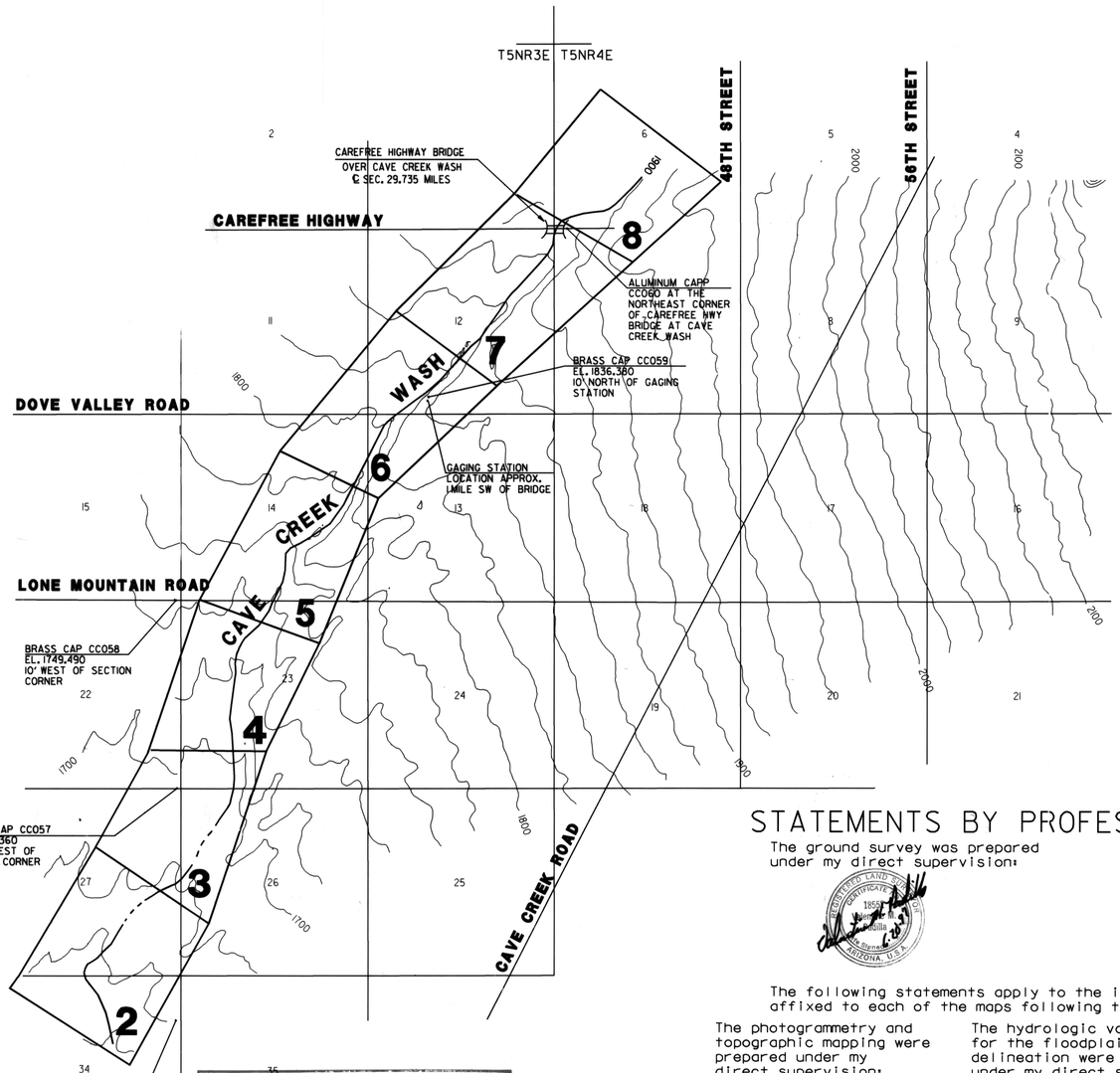
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
CAVE CREEK BELOW CAREFREE HIGHWAY FIS
FLOODPLAIN DELINEATION STUDY
F.C.D. CONTRACT 95-30



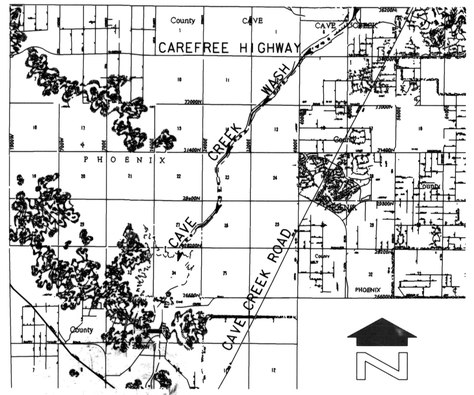
CAVE CREEK BELOW CAREFRFE HWY.
FIS FLOOD PLAIN DELINEATION STUDY
WILLDAN ASSOC.
STUDY 1996 FCD 95-30

CENTRAL FILES
DRAWER # 318

T5NR3E T5NR4E
T4NR3E

100-YEAR FLOODPLAIN DELINEATION DISCHARGES

Flooding Source	Reach	Discharge (cfs)
Cave Creek Wash	At Cave Buttes Recreation Area Ponding Limits	38,200
Cave Creek Wash	D/S Lone Mountain Road	36,800
Cave Creek Wash	Lone Mountain Road	33,800
Cave Creek Wash	Care Free Highway	33,800



VICINITY MAP
NO SCALE

Study Date: 1996

Mapping Date: 1/12/96

Aerial Mapping: Aerial Mapping Company Inc.

GIS: Aerial Mapping Company Inc.

STATEMENTS BY PROFESSIONAL REGISTRANTS

The ground survey was prepared under my direct supervision:

The following statements apply to the individual seals affixed to each of the maps following this cover sheet.

The photogrammetry and topographic mapping were prepared under my direct supervision:

The hydrologic values used for the floodplain and floodway delineation were prepared under my direct supervision:

The floodplain and floodway delineation were prepared under my direct supervision:

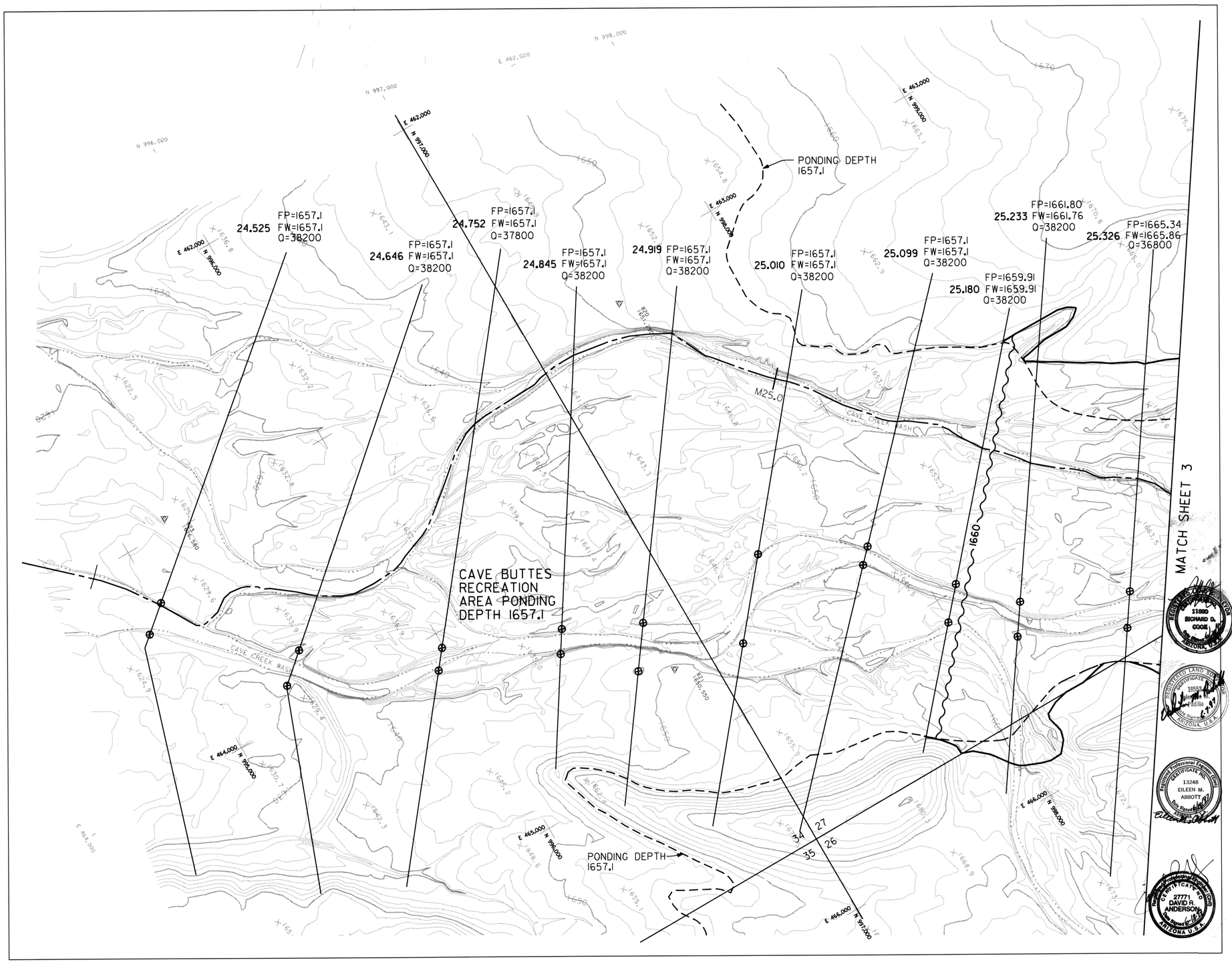
WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 W. NORTHERN AVE., SUITE 102, PHOENIX, ARIZONA 85021
(602) 870-7600

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc: Q:\jn08855\hec\title.dgn

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30



LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
CROSS SECTION	5.519 FP=100 Yr WSEL FW=Floodway WSEL Q =100 Yr Flow
HEC-2 BANK LOCATION	⊕
ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	1221
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	
PONDING LIMITS	
SECTION LINES	

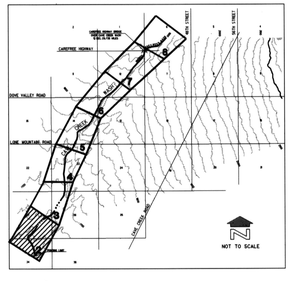
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC056	1656.170	TOP OF BRASS CAP 10 FEET WEST OF 1/4 CORNER OF SECTION 34

NOTES

INDEX MAP



SCALE: 1" = 200'
CONTOUR INTERVAL = 2' FEET

REGISTERED LAND SURVEYOR CERTIFICATE NO. 11820 RICHARD D. COOK ARIZONA U.S.A.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 18958 Steven M. Labadie 4-7-97 ARIZONA, U.S.A.

Engineering Professional Geologist CERTIFICATE NO. 13248 EILEEN M. ABBOTT Date Signed 4/8/97 ARIZONA U.S.A.

Registered Professional Engineer CERTIFICATE NO. 27771 DAVID R. ANDERSON Date Signed 4-18-97 ARIZONA U.S.A.

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 E. NORTHERN AVE., SUITE 110, PHOENIX, ARIZONA 85021
(602) 870-7600

	BY	DATE
DESIGN		
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET 2 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc: d:\jn08855\hec\sheet2.dgn

FP=1673.33
25.458 FW=1674.35
Q=36800

FP=1676.35
25.580 FW=1677.05
Q=36800

FP=1669.17
25.388 FW=1669.99
Q=36800

FP=1674.75
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Q=36800

FP=1678.52
25.644 FW=1679.05
Q=36800

FP=1682.46
25.699 FW=1682.90
Q=36800

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25.750 FW=1685.05
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FP=1685.95
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FP=1689.02
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FP=1695.28
26.044 FW=1696.24
Q=36800

FP=1698.90
26.137 FW=1699.67
Q=36800

FP=1701.16
26.239 FW=1702.03
Q=36800

BRASS CAP CC057
26.60' WEST OF
SECTION CORNER

E 464,000
N 1,000,000

E 465,000
N 1,000,000

E 465,000
N 1,002,000

E 468,000
N 1,003,000

E 468,000
N 1,002,000

E 468,000
N 1,000,000

E 467,000
N 998,000

E 466,000
N 998,000

MATCH SHEET 2

MATCH SHEET 4

1670

1680

1690

1700

M26.0

CAVE CREEK WASH

100-YR FLOODPLAIN
AND FLOODWAY BOUNDARY

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
CROSS SECTION	FP=100 Yr WSEL 5.519 FW=Floodway WSEL Q =100 Yr Flow
HEC-2 BANK LOCATION	⊕
ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	1221
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	
PONDING LIMITS	
SECTION LINES	

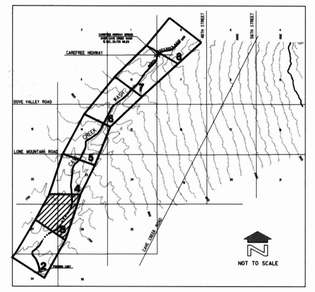
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC057	1696.360	TOP OF BRASS CAP 26.60 FEET WEST OF SECTION CORNER

NOTES

INDEX MAP



200 0' 200 400

SCALE: 1" = 200'
CONTOUR INTERVAL = 2' FEET

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 N. NORTHERN AVE. SUITE 112, PHOENIX, ARIZONA 85021
(602) 870-7600

	BY	DATE
DESIGN		
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

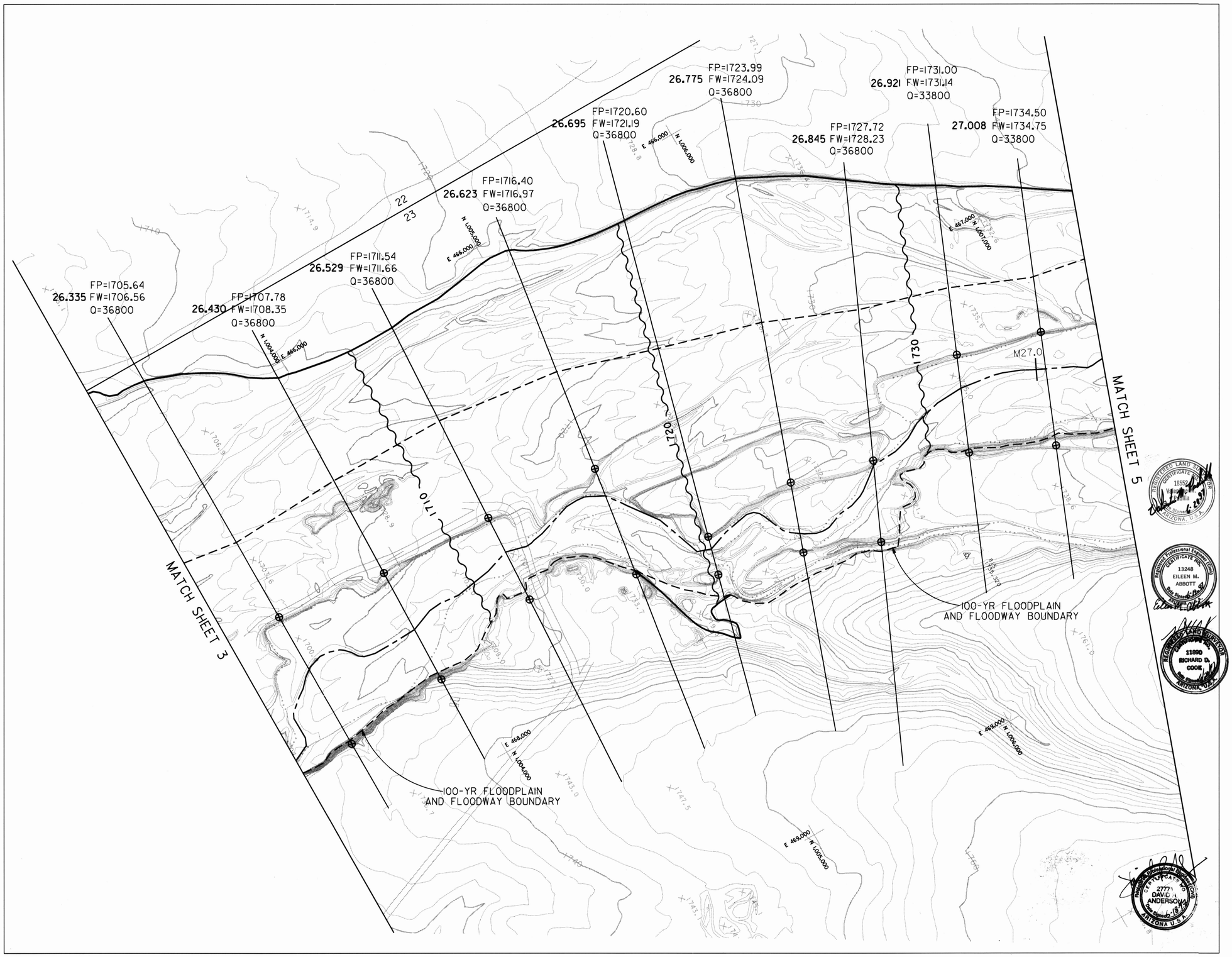
CHIEF ENGINEER AND GENERAL MANAGER

SHEET 3 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc: O:\jn08855\hec\sheet3.dgn



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
CROSS SECTION	FP=100 Yr WSEL 5.519 FW=Floodway WSEL Q =100 Yr Flow
HEC-2 BANK LOCATION	⊕
ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	1221
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	
PONDING LIMITS	
SECTION LINES	

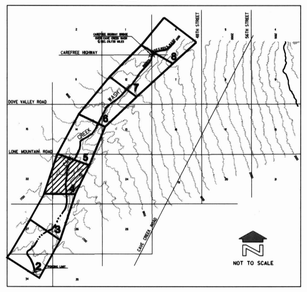
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC058	1749.490	TOP OF BRASS CAP 10 FEET WEST OF SECTION CORNER.

NOTES

INDEX MAP



200 0' 200 400

SCALE: 1" = 200'
CONTOUR INTERVAL = 2' FEET

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 E. NORTHERN AVE., SUITE 112, PHOENIX, ARIZONA 85021
(602) 870-7600

	BY	DATE
DESIGN		
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: _____ DATE

APPROVED BY: _____ DATE

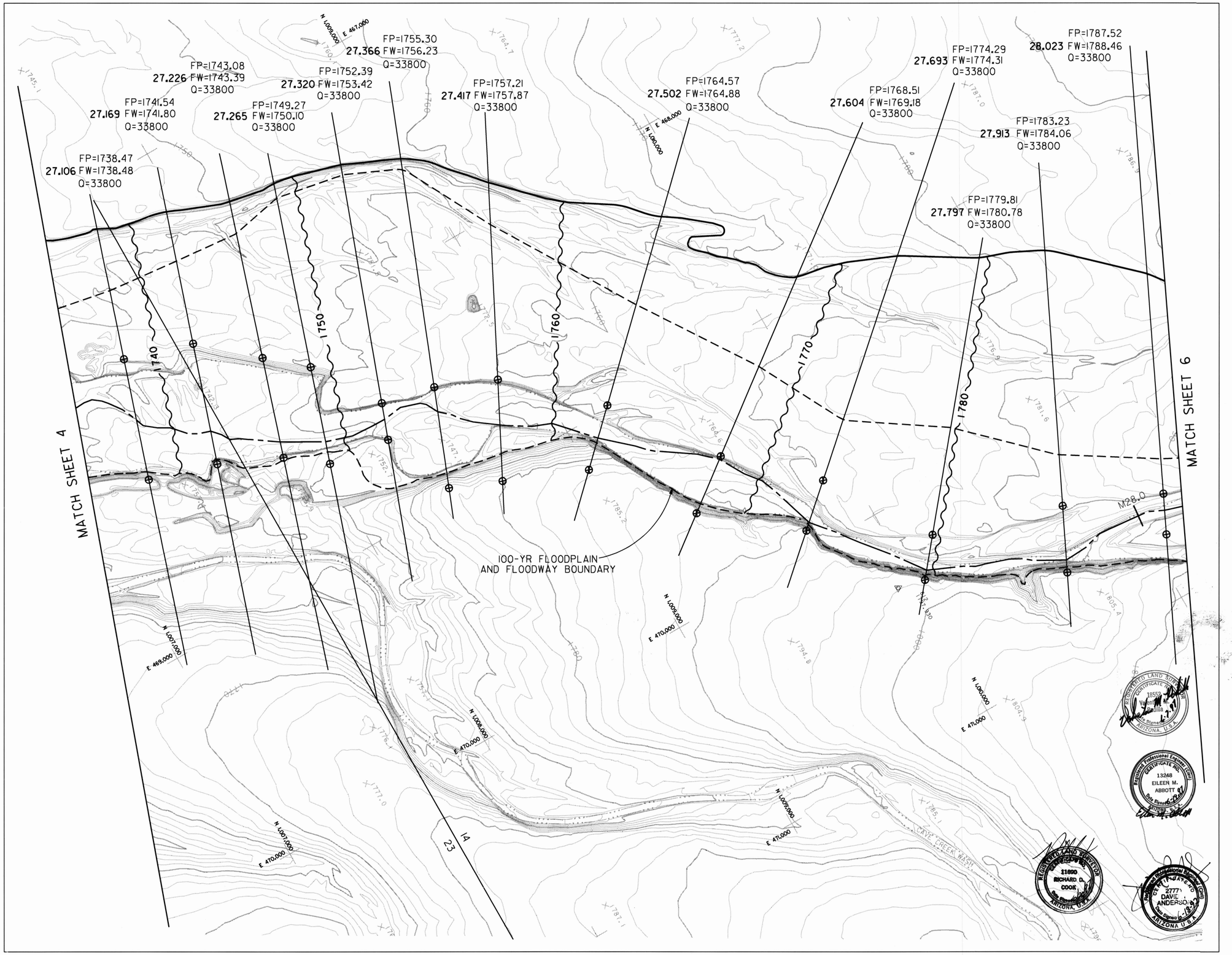
CHIEF ENGINEER AND GENERAL MANAGER

SHEET 4 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc: G:\jn0885\hec\sheet4.dgn



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
CROSS SECTION	FP=100 Yr WSEL 5.519 FW=Floodway WSEL Q =100 Yr Flow
HEC-2 BANK LOCATION	⊕
ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	1221
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	
PONDING LIMITS	
SECTION LINES	

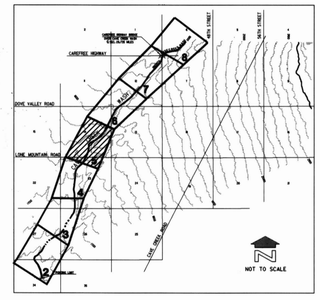
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC058	1749.490	TOP OF BRASS CAP 10 FEET WEST OF SECTION CORNER.

NOTES

INDEX MAP



200 0' 200 400

SCALE: 1" = 200'

CONTOUR INTERVAL = 2' FEET

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 E. NORTHERN AVE., SUITE 112, PHOENIX, ARIZONA 85021
(602) 870-7600

	BY	DATE
DESIGN		
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

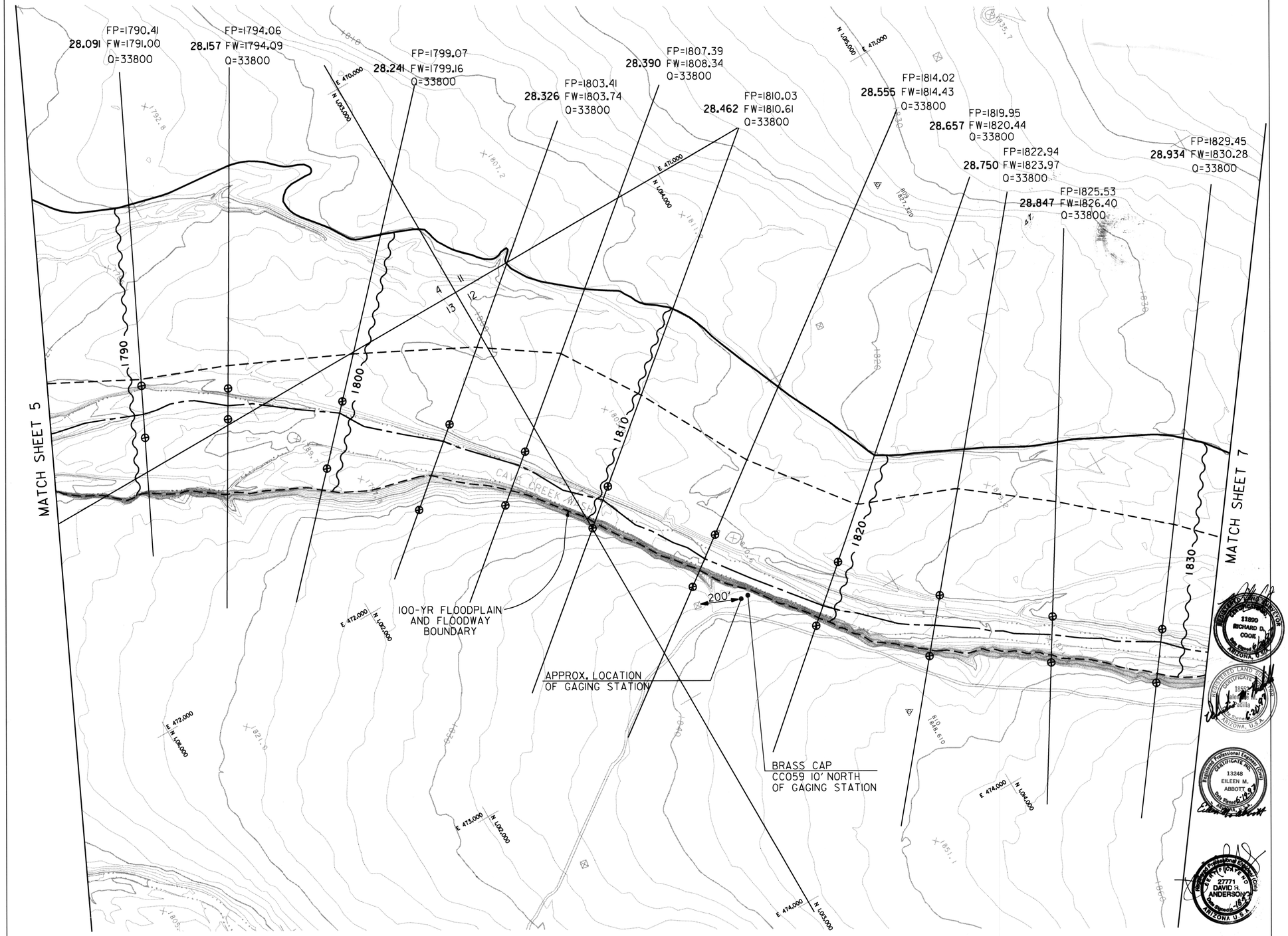
CHIEF ENGINEER AND GENERAL MANAGER

SHEET 5 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc:0:\jn08855\hec\sheet5.dgn



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30

LEGEND

- 100-YR FLOODPLAIN BOUNDARY
- FLOODWAY BOUNDARY
- HYDRAULIC BASE LINE WITH RIVER MILE — M12.0 — M13.0
- CROSS SECTION — 5.519 FP=100 Yr WSEL FW=Floodway WSEL Q =100 Yr Flow
- HEC-2 BANK LOCATION
- ELEVATION REFERENCE MARK
- BASE FLOOD ELEVATIONS — 1221
- ZONE DESIGNATIONS — ZONE AE
- CORPORATE LIMITS
- PONDING LIMITS
- SECTION LINES

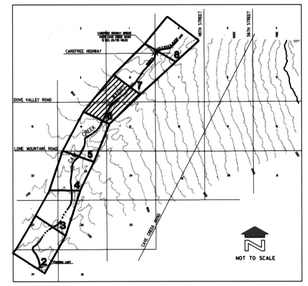
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC059	1836.380	TOP OF BRASS CAP 10 FEET NORTH OF GAGING STATION

NOTES

INDEX MAP



200 0' 200 400

SCALE: 1" = 200'
CONTOUR INTERVAL = 2' FEET

REGISTERED LAND SURVEYOR
22890
RICHARD D. COOK
ARIZONA, U.S.A.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
18894
Richard M. Billis
ARIZONA, U.S.A.

Professional Engineer (Civil)
CERTIFICATE NO.
13248
EILEEN M. ABBOTT
ARIZONA, U.S.A.

Professional Engineer (Civil)
CERTIFICATE NO.
27771
DAVID R. ANDERSON
ARIZONA, U.S.A.

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 E. NORTHERN AVE., SUITE 112, PHOENIX, ARIZONA 85021
(602) 870-7600

	BY	DATE
DESIGN		
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET 6 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30

FP=1832.94
29.012 FW=1833.15
Q=33800

FP=1836.92
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Q=33800

FP=1842.95
29.258 FW=1842.91
Q=33800

FP=1848.75
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Q=33800

FP=1849.60
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Q=33800

FP=1852.27
29.493 FW=1853.31
Q=33800

FP=1854.96
29.538 FW=1855.17
Q=33800

100-YR FLOODPLAIN
AND FLOODWAY BOUNDARY

FP=1859.72
29.601 FW=1860.38
Q=33800.0

FP=1867.55
29.770 FW=1867.94
Q=33800.0

FP=1871.83
29.850 FW=1871.82
Q=33800.0

FP=1865.57
29.710 FW=1866.42
Q=33800

FP=1866.16
29.720 FW=1867.01
Q=33800.0

FP=1864.50
29.663 FW=1864.54
Q=33800

ALUMINUM CAPP
CC060 AT THE
NORTHEAST CORNER
OF CAREFREE HWY
BRIDGE AT CAVE CREEK
WASH

CAREFREE HWY

MATCH SHEET 6

MATCH SHEET 8

N 1,017,000
E 473,000
N 1,016,000
E 473,000
N 1,018,000
E 474,000
N 1,019,000
E 475,000
N 1,019,000
E 477,000
N 1,016,000
E 476,000
N 1,017,000
E 477,000
E 447,6000 N 1,015,000

1840
1850
1860
1870

M29.0

BOS 1856.950
BOS 1856.240

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
CROSS SECTION	5.519 FP=100 Yr WSEL FW=Floodway WSEL Q =100 Yr Flow
HEC-2 BANK LOCATION	⊕
ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	1221
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	
PONDING LIMITS	
SECTION LINES	

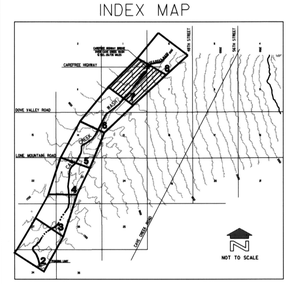
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC060	1878.994	TOP OF ALUMINUM CAP AT THE NORTHEAST CORNER OF CAREFREE HWY BRIDGE AT CAVE CREEK WASH

NOTES

INDEX MAP



200 0' 200 400
SCALE: 1" = 200'
CONTOUR INTERVAL = 2' FEET

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 E. NORTHERN AVE., SUITE 112, PHOENIX, ARIZONA 85021
(602) 870-7600

DESIGN	BY	DATE
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97
SUBMITTED BY:		DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET 7 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc: O:\jn08855\hec\sheet7.dgn

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD DELINEATION STUDY OF CAVE CREEK BELOW CAREFREE HIGHWAY

F.C.D. CONTRACT NO. 95-30

LEGEND

100-YR FLOODPLAIN BOUNDARY	
FLOODWAY BOUNDARY	
HYDRAULIC BASE LINE WITH RIVER MILE	M12.0 — M13.0
CROSS SECTION	FP=100 Yr WSEL 5.519 FW=Floodway WSEL Q =100 Yr Flow
HEC-2 BANK LOCATION	⊕
ELEVATION REFERENCE MARK	
BASE FLOOD ELEVATIONS	1221
ZONE DESIGNATIONS	ZONE AE
CORPORATE LIMITS	
PONDING LIMITS	
SECTION LINES	

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

I.D. NUMBER	ELEVATION (FT)	LOCATION E,N
CC060	1878.994	TOP OF ALUMINUM CAP AT THE NORTEAST CORNER OF CAREFREE HWY BRIDGE AT CAVE CREEK WASH

NOTES

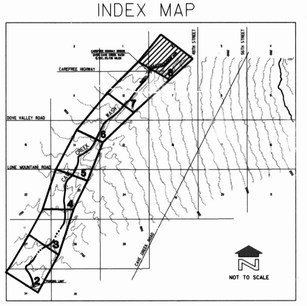
REGISTERED LAND SURVEYOR
CERTIFICATE NO.
11690
RICHARD D. COOK
ARIZONA, U.S.A.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
19661
Valerie Mills
ARIZONA, U.S.A.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
13248
EILEEN M. ABBOTT
ARIZONA, U.S.A.

Registered Professional Engineer (Civil)
CERTIFICATE NO.
27771
DAVID H. ANDERSON
ARIZONA, U.S.A.

INDEX MAP



200 0' 200 400

SCALE: 1" = 200'
CONTOUR INTERVAL = 2' FEET

WILLDAN ASSOCIATES
ENGINEERS PLANNERS
1717 E. NORTHERN AVE., SUITE 112, PHOENIX, ARIZONA 85021
(602) 870-7600

	BY	DATE
DESIGN		
DESIGN CHK.		
PLANS	KK	6/97
PLANS CHK.	DH	6/97

SUBMITTED BY: DATE:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

SHEET 8 OF 8

AERIAL MAPPING COMPANY, INC.
SURVEYING AND PHOTOGRAMMETRY
FLIGHT DATE: 1/12/96

THIS MAP WAS PREPARED BY PHOTOGRAMMETRIC METHODS TO NATIONAL MAP ACCURACY STANDARDS
1" = 200' HORIZONTAL SCALE AND 2' CONTOUR INTERVALS AND BASED ON GROUND CONTROL SURVEY
DATA PROVIDED BY (VALCO)

Date: 18-JUN-1997 Plotted by: Plotter Dgnspc: G:\jn0885\hec\sheet8.dgn