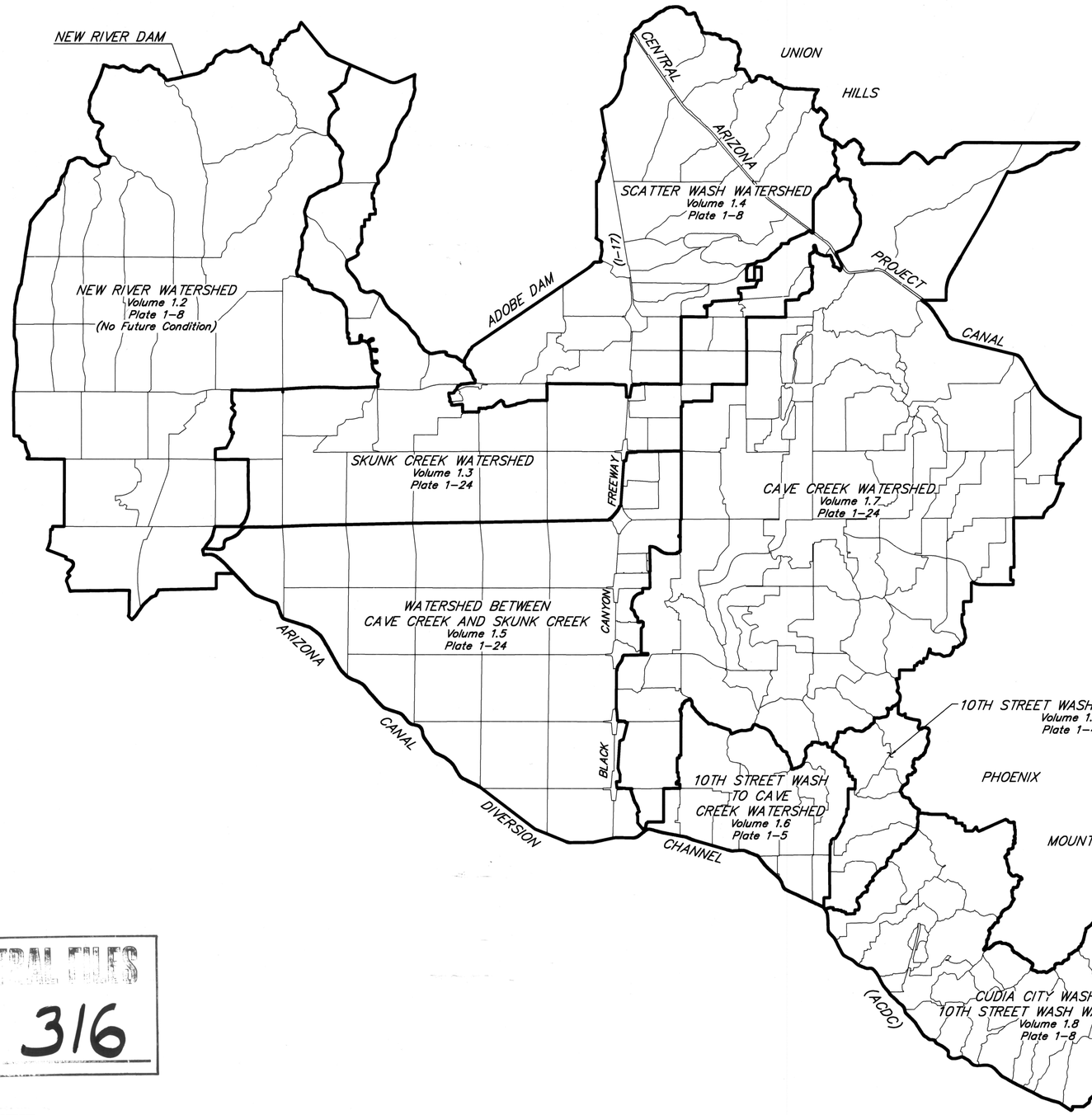


CENTRAL FILES
DRE 316

ACDC ADMS LAYER 1/WATERSHED
BOUNDARY MAPS
KAMINSKI HUBBARD
FCD 90-19 580

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY PHASE I

LEGEND

ACDC/ADMS Subwatershed Boundary

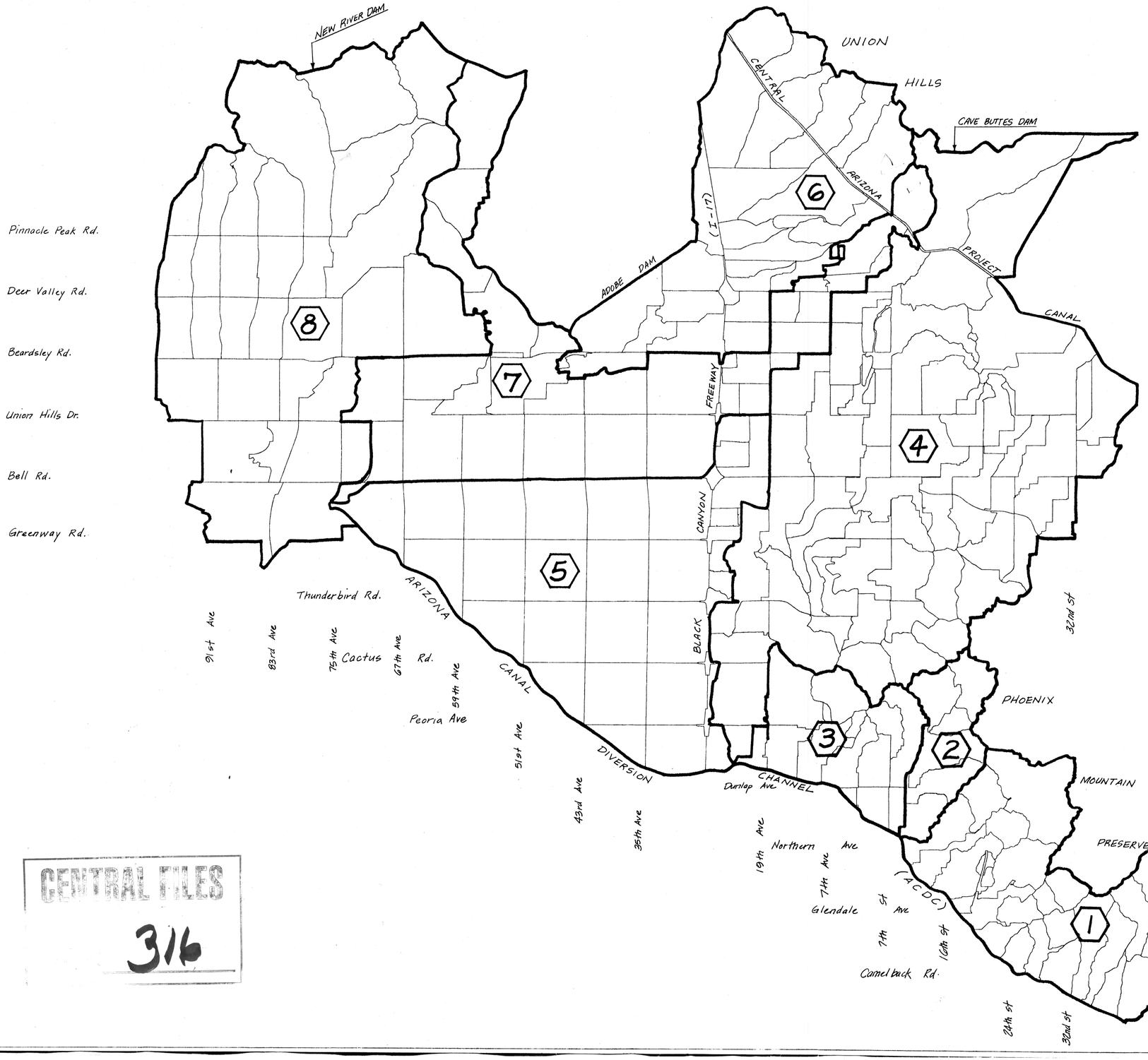
PLATE INDEX

EXISTING CONDITIONS

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
4000 2000 0 4000 8000
FEET

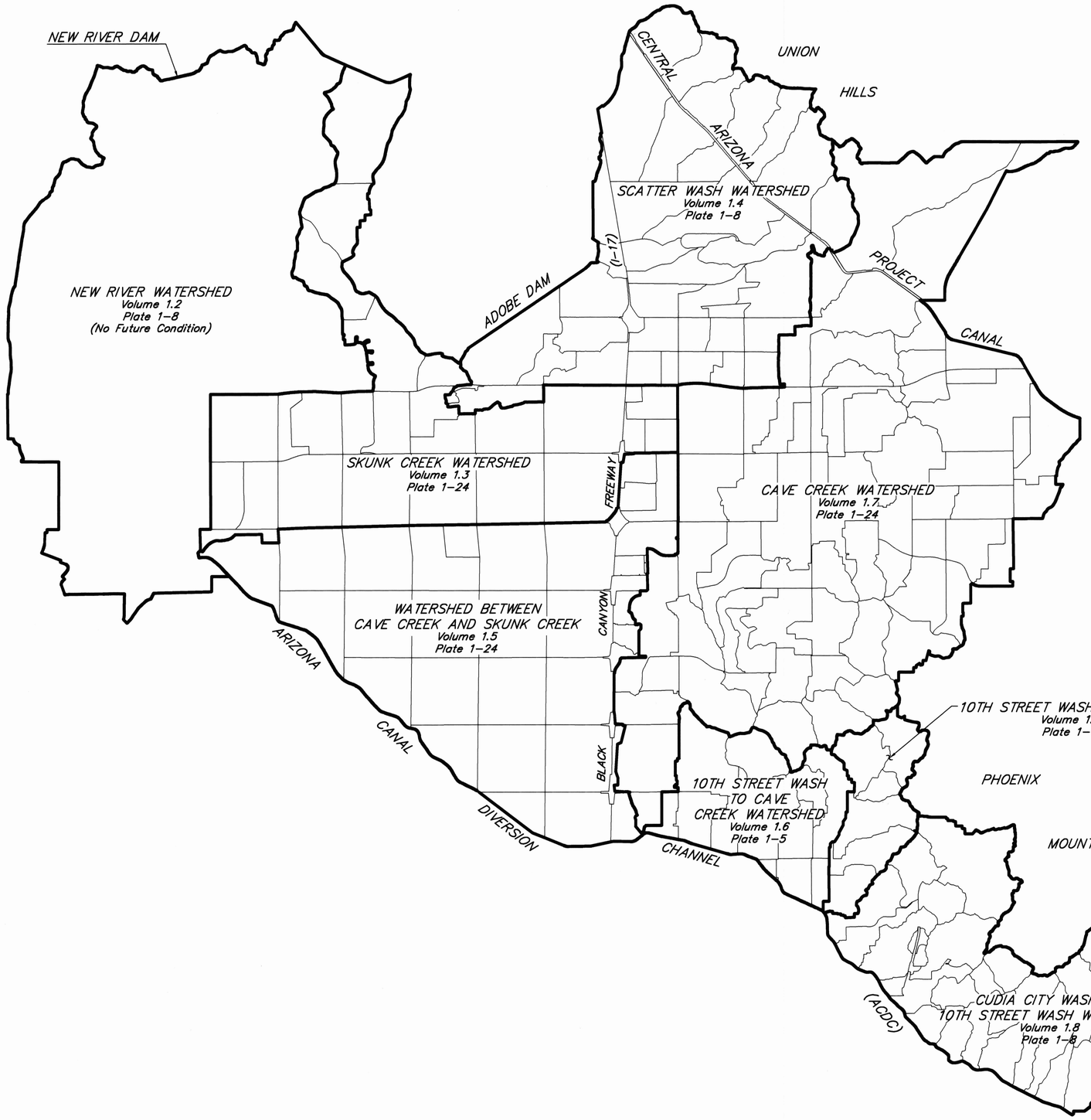


N

A.C.D.C. – A.D.M.S.
EXISTING SUBBASINS
SCALE: 1"=4000'

No.	Sub Watershed
1	Cudia City Wash to 10th St. Wash
2	10th St. Wash
3	10th St. Wash to Cave Creek
4	Cave Creek
5	Cave Creek to Skunk Creek
6	Scatter Wash
7	Skunk Creek Scatter Wash to ACDC
8	New River

CENTRAL FILES
316



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY PHASE I

LEGEND

ACDC/ADMS Subwatershed Boundary

PLATE INDEX

FUTURE CONDITIONS

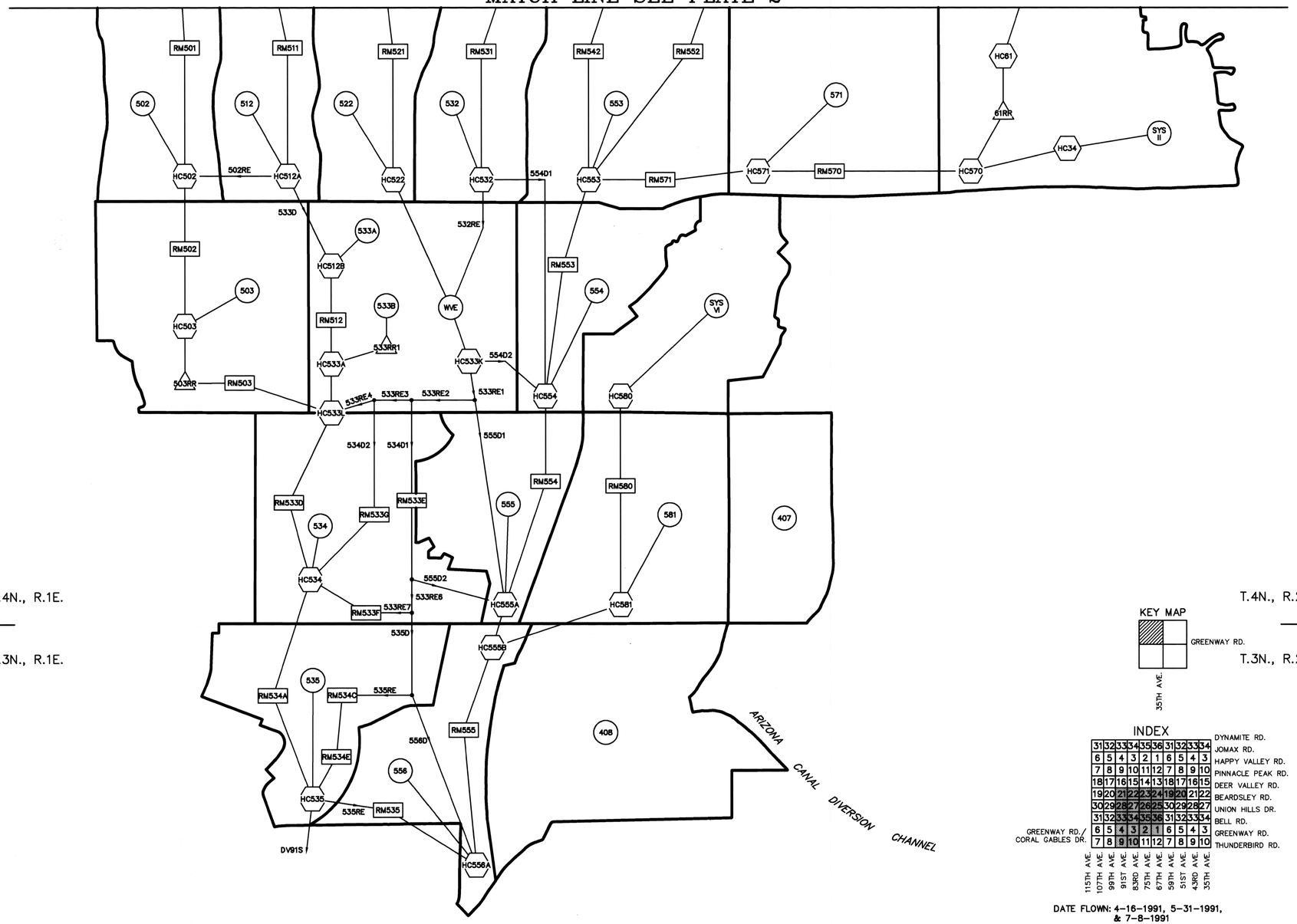
KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242–5588

N

SCALE
4000 2000 0 4000 8000
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 2



T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

T.3N., R.2E.

KEY MAP

INDEX

31	32	33	34	35	36	31	32	33	34		DYNAMITE RD.
6	5	4	3	2	1	6	5	4	3		JOMAX RD.
7	8	9	10	11	12	7	8	9	10		HAPPY VALLEY RD.
18	17	16	15	14	13	18	17	16	15		PINNACLE PEAK RD.
19	20	21	22	23	24	19	20	21	22		DEER VALLEY RD.
30	29	28	27	26	25	30	29	28	27		BEARDSLEY RD.
31	32	33	34	35	36	31	32	33	34		UNION HILLS DR.
6	5	4	3	2	1	6	5	4	3		BELL RD.
7	8	9	10	11	12	7	8	9	10		GREENWAY RD.
											THUNDERBIRD RD.
115TH AVE.	107TH AVE.	99TH AVE.	91ST AVE.	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	

GREENWAY RD./ CORAL GABLES DR.

DATE FLOWN: 4-16-1991, 5-31-1991, & 7-8-1991

T.3N., R.1E. | T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G/F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 1

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.1E.

T.5N., R.2E.

T.5N., R.1E.

T.4N., R.1E.

T.5N., R.2E.

T.4N., R.2E.

NEW RIVER DAM

CENTRAL ARIZONA PROJECT CANAL

500 501 510 511 520 521 530 531 540 541 542 550 551 552 560

RM500 RM510 RM520 RM530 RM540 RM541 RM542 RM550 RM551 RM560

HC501 HC511 HC521 HC531 HC541 HC542 HC551 HC552 HC530

5300

520RE

SYS III

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	31	32	33	34	35	36	31	32	33	34		DYNAMITE RD.
	6	5	4	3	2	1	6	5	4	3		JOMAX RD.
	7	8	9	10	11	12	7	8	9	10		HAPPY VALLEY RD.
	18	17	16	15	14	13	18	17	16	15		PINNACLE PEAK RD.
	19	20	21	22	23	24	19	20	21	22		DEER VALLEY RD.
	30	29	28	27	26	25	30	29	28	27		BEARDSLEY RD.
	31	32	33	34	35	36	31	32	33	34		UNION HILLS DR.
	6	5	4	3	2	1	6	5	4	3		BELL RD.
GREENWAY RD./ CORAL GABLES DR.	7	8	9	10	11	12	7	8	9	10		GREENWAY RD.
												THUNDERBIRD RD.
	115TH AVE.	107TH AVE.	99TH AVE.	91ST AVE.	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	

DATE FLOWN: 4-16-1991, 5-31-1991, & 7-8-1991

MATCH LINE SEE PLATE 1

T.4N., R.1E.

T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G, F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC EXISTING CONDITIONS

PLATE 2

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE

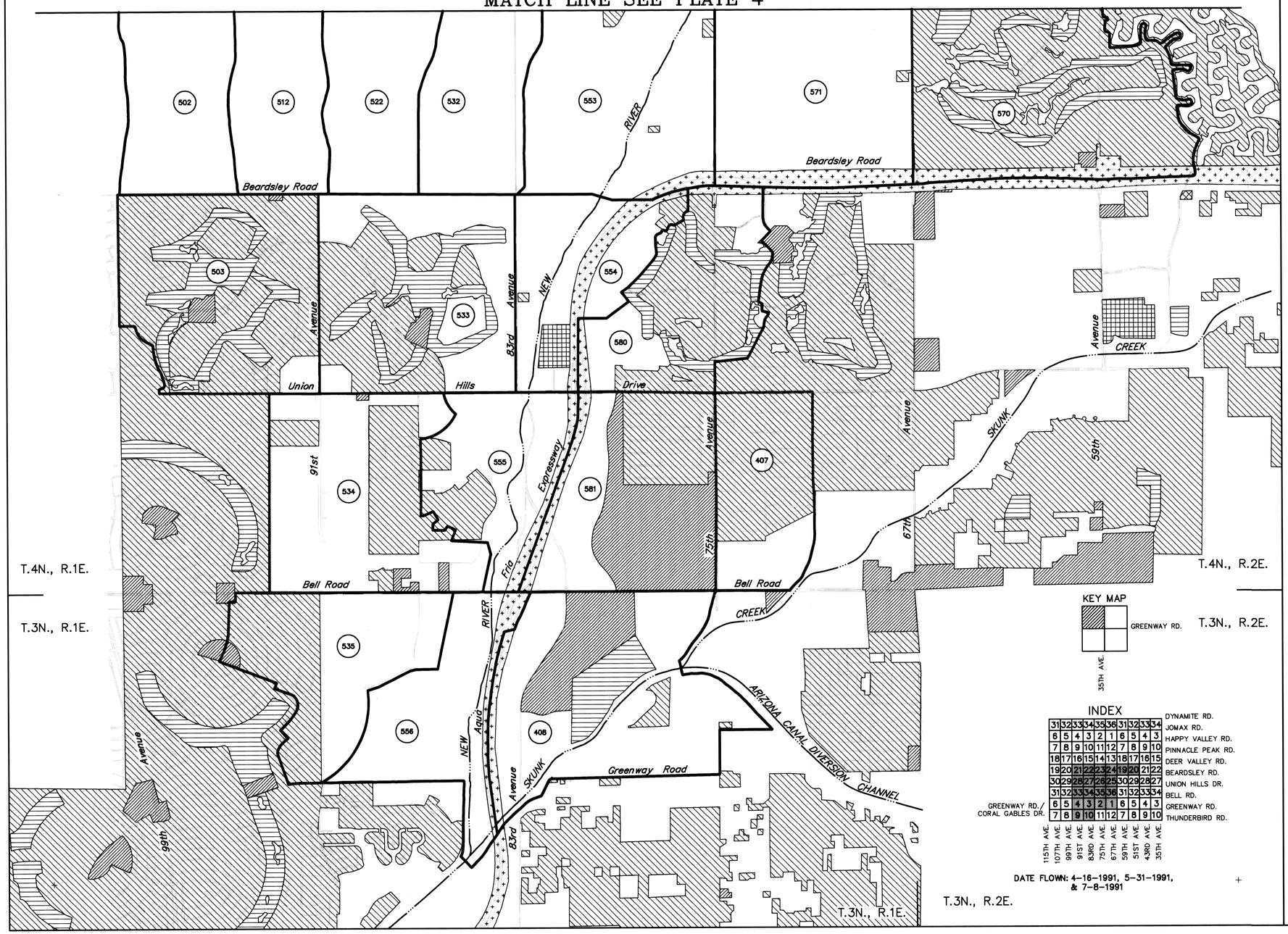
1200 600 0 1200 2400

FEET

T.4N., R.1E.

T.4N., R.2E.

MATCH LINE SEE PLATE 4



T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

T.3N., R.2E.

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	31	32	33	34	35	36	31	32	33	34		DYNAMITE RD.
	6	5	4	3	2	1	6	5	4	3		JOMAX RD.
	7	8	9	10	11	12	7	8	9	10		HAPPY VALLEY RD.
	18	17	16	15	14	13	18	17	16	15		PINNACLE PEAK RD.
	19	20	21	22	23	24	19	20	21	22		DEER VALLEY RD.
	30	29	28	27	26	25	30	29	28	27		BEARDSLEY RD.
	31	32	33	34	35	36	31	32	33	34		UNION HILLS DR.
	6	5	4	3	2	1	6	5	4	3		BELL RD.
GREENWAY RD./ CORAL GABLES DR.	7	8	9	10	11	12	7	8	9	10		GREENWAY RD.
												THUNDERBIRD RD.

115TH AVE. 107TH AVE. 99TH AVE. 91ST AVE. 83RD AVE. 75TH AVE. 67TH AVE. 59TH AVE. 51ST AVE. 43RD AVE. 35TH AVE.

DATE FLOWN: 4-16-1991, 5-31-1991, & 7-8-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Right-of-Way
- Vacant Land Use
- (510) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 3

KAMINSKI HUBBARD engineering, inc.

SURVEYING • CIVIL • HYDROLOGY

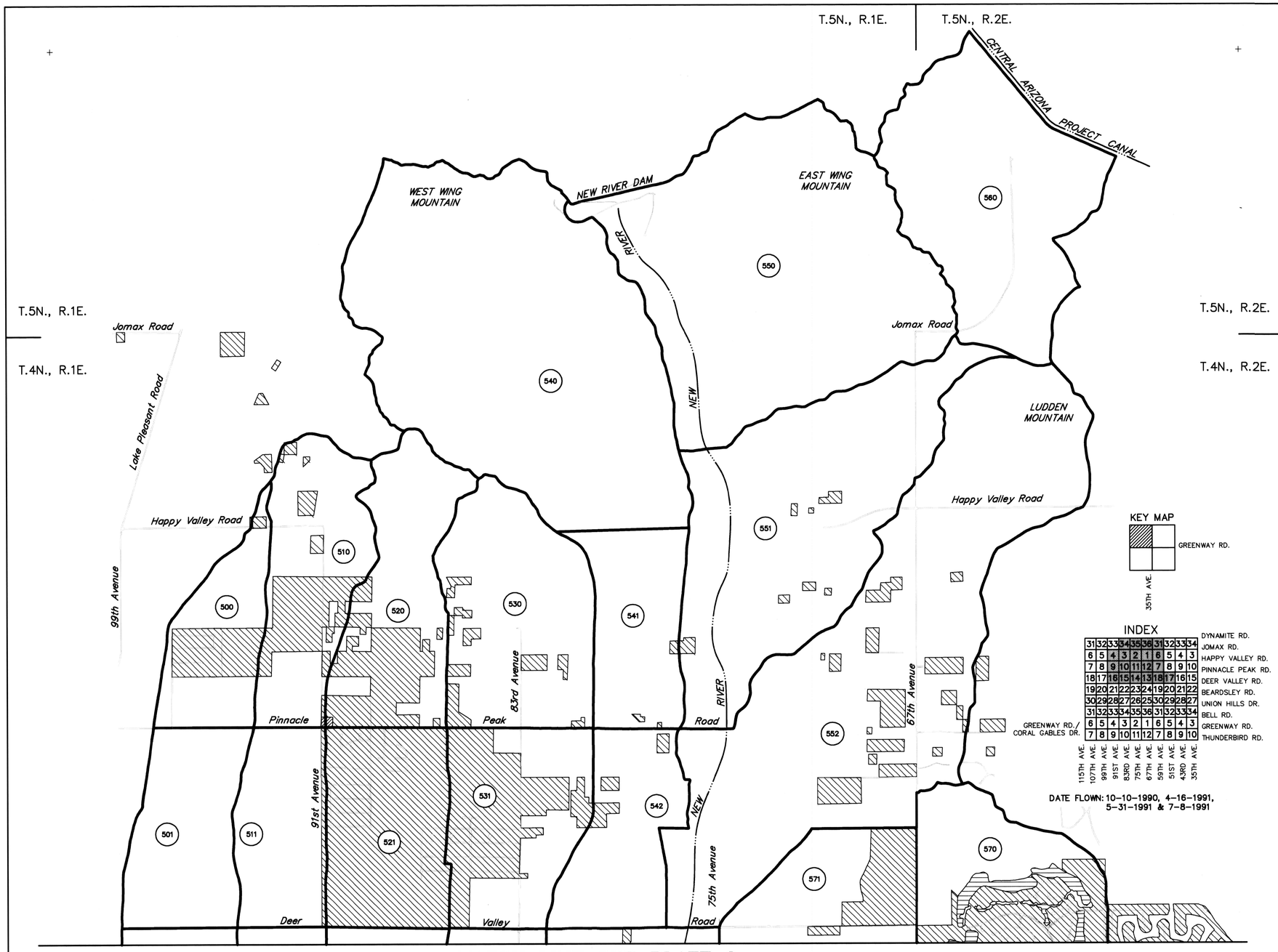
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE

1200 600 0 1200 2400

FEET



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Vacant Land Use
- (510) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 4

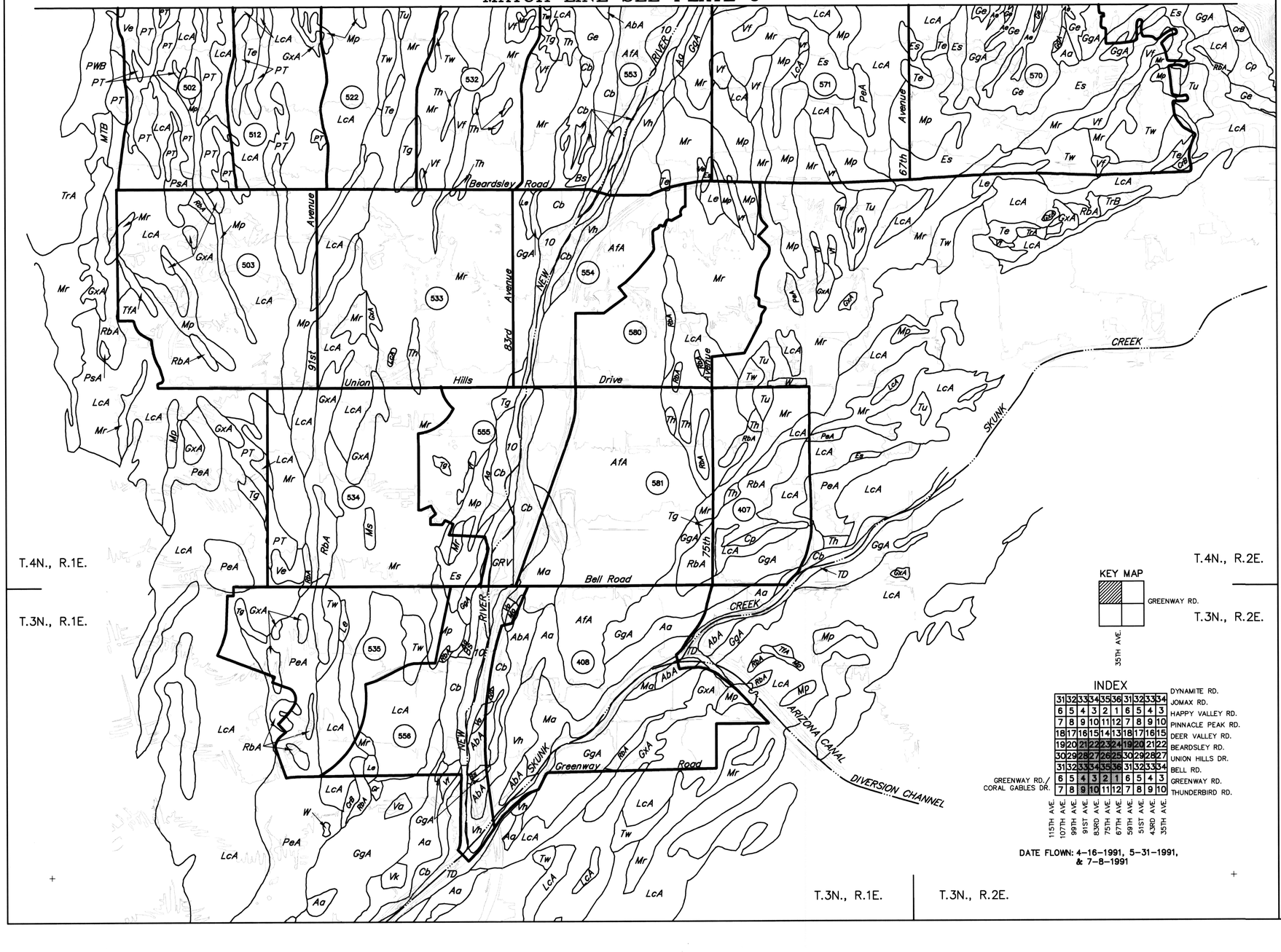
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 6



T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

T.3N., R.2E.

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

31	32	33	34	35	36	31	32	33	34	DYNAMITE RD.
6	5	4	3	2	1	6	5	4	3	JOMAX RD.
7	8	9	10	11	12	7	8	9	10	HAPPY VALLEY RD.
18	17	16	15	14	13	18	17	16	15	PINNACLE PEAK RD.
19	20	21	22	23	24	19	20	21	22	DEER VALLEY RD.
30	29	28	27	26	25	30	29	28	27	BEARDSLEY RD.
31	32	33	34	35	36	31	32	33	34	UNION HILLS DR.
6	5	4	3	2	1	6	5	4	3	BELL RD.
7	8	9	10	11	12	7	8	9	10	GREENWAY RD.
										THUNDERBIRD RD.

GREENWAY RD./ CORAL GABLES DR.

115TH AVE. 107TH AVE. 99TH AVE. 91ST AVE. 83RD AVE. 75TH AVE. 67TH AVE. 59TH AVE. 51ST AVE. 43RD AVE. 35TH AVE.

DATE FLOWN: 4-16-1991, 5-31-1991, & 7-8-1991

T.3N., R.1E. | T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (510) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 5

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE

1200 600 0 1200 2400

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

T.5N., R.1E. | T.5N., R.2E.

T.4N., R.1E. | T.4N., R.2E.

WEST WING MOUNTAIN

EAST WING MOUNTAIN

NEW RIVER DAM

NEW RIVER

CENTRAL ARIZONA PROJECT CANAL

LUDDEN MOUNTAIN

91st Avenue

83rd Avenue

67th Avenue

Pinnacle Peak Road

Deer Valley Road

GREENWAY RD.

35TH AVE.

KEY MAP

INDEX

31	32	33	34	35	36	31	32	33	34	DYNAMITE RD.
6	5	4	3	2	1	6	5	4	3	JOMAX RD.
7	8	9	10	11	12	7	8	9	10	HAPPY VALLEY RD.
18	17	16	15	14	13	18	17	16	15	PINNACLE PEAK RD.
19	20	21	22	23	24	19	20	21	22	DEER VALLEY RD.
30	29	28	27	26	25	30	29	28	27	BEARDSLEY RD.
31	32	33	34	35	36	31	32	33	34	UNION HILLS DR.
6	5	4	3	2	1	6	5	4	3	BELL RD.
7	8	9	10	11	12	7	8	9	10	GREENWAY RD.
										THUNDERBIRD RD.

115TH AVE. 107TH AVE. 99TH AVE. 91ST AVE. 83RD AVE. 75TH AVE. 67TH AVE. 59TH AVE. 51ST AVE. 43RD AVE. 35TH AVE.

DATE FLOWN: 10-10-1990, 4-16-1991, 5-31-1991 & 7-8-1991

MATCH LINE SEE PLATE 5

LEGEND

- Drainage Basin Boundary
- (510) Drainage Sub-Basin Number
- CrB — Soil Unit Boundary
- CO — Soil Unit Identification. Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 — Soil Unit Identification. Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 6

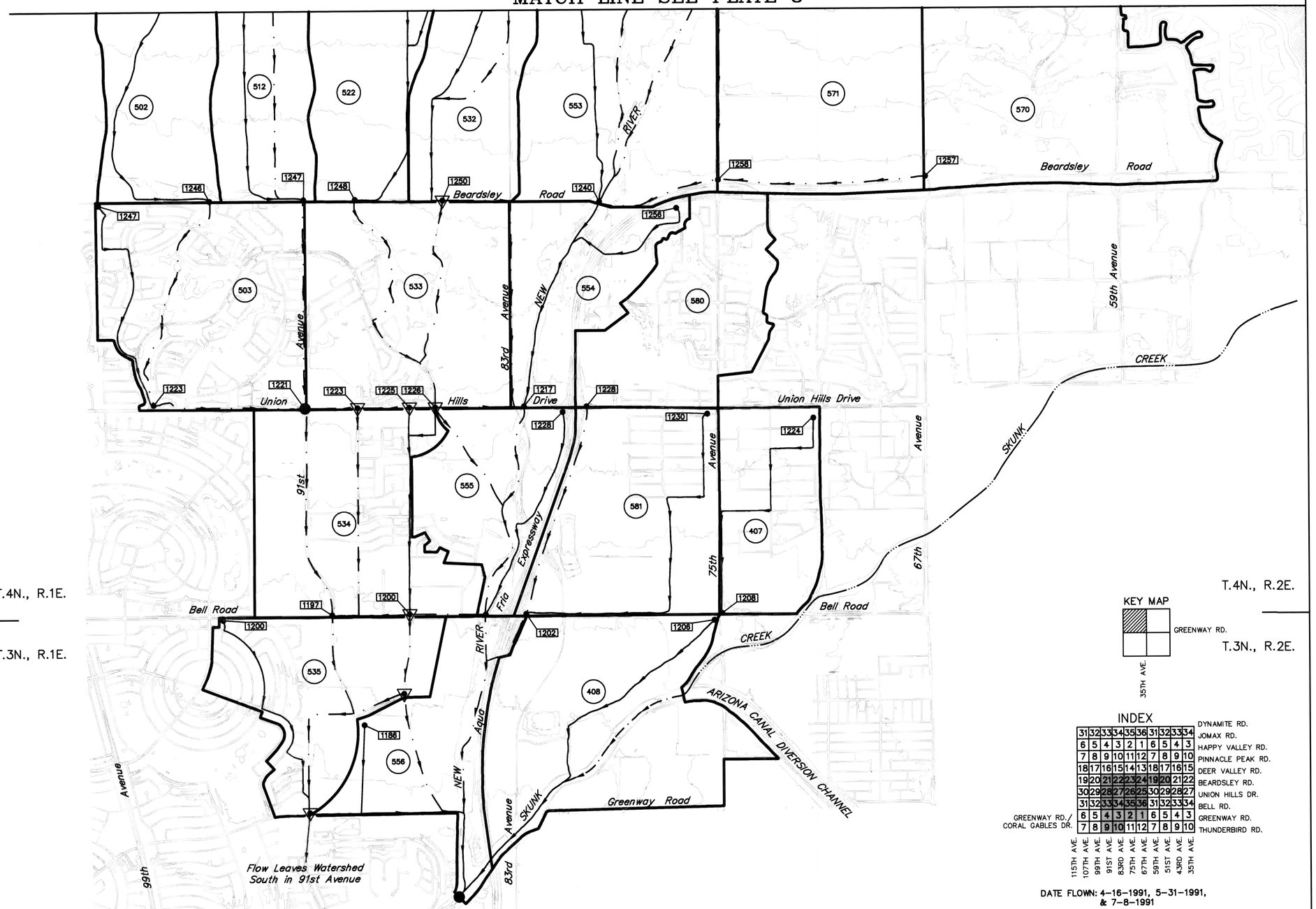
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 8



T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

T.3N., R.2E.

KEY MAP

INDEX

31	32	33	34	35	36	31	32	33	34		DYNAMITE RD.
6	5	4	3	2	1	6	5	4	3		JOMAX RD.
7	8	9	10	11	12	7	8	9	10		HAPPY VALLEY RD.
18	17	16	15	14	13	18	17	16	15		PINNACLE PEAK RD.
19	20	21	22	23	24	19	20	21	22		DEER VALLEY RD.
30	29	28	27	26	25	30	29	28	27		BEARDSLEY RD.
31	32	33	34	35	36	31	32	33	34		UNION HILLS DR.
6	5	4	3	2	1	6	5	4	3		BELL RD.
7	8	9	10	11	12	7	8	9	10		GREENWAY RD.
											THUNDERBIRD RD.
115TH AVE.	107TH AVE.	99TH AVE.	91ST AVE.	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	

GREENWAY RD./ CORAL GABLES DR.

DATE FLOWN: 4-16-1991, 5-31-1991, & 7-8-1991

T.3N., R.1E. | T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (510) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 7

KAMINSKI HUBBARD engineering,inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

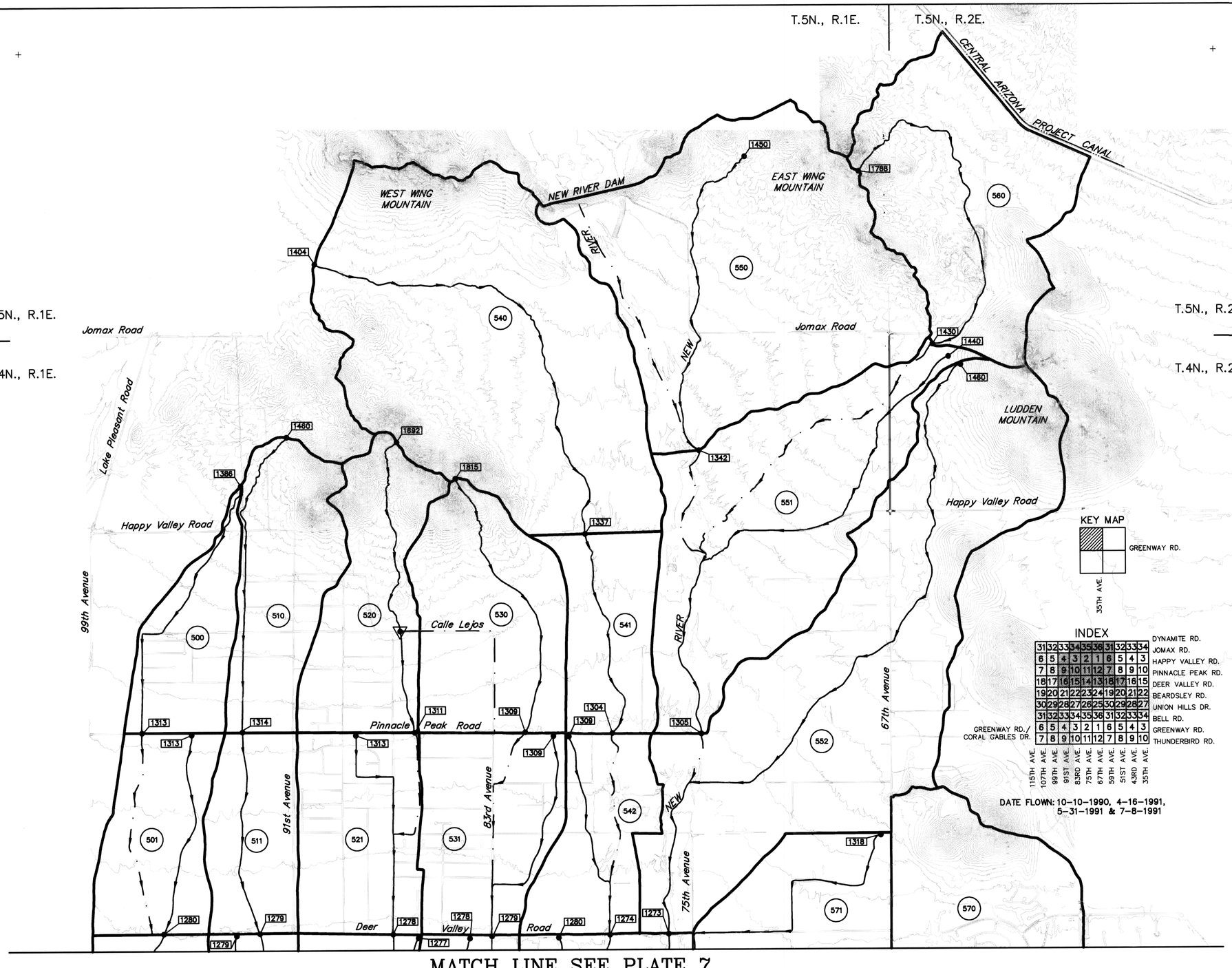
T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.

T.4N., R.1E.

T.5N., R.2E.

T.4N., R.2E.



KEY MAP

INDEX

31	32	33	34	35	36	31	32	33	33	34		DYNAMITE RD.
6	5	4	3	2	1	6	5	4	3			JOMAX RD.
7	8	9	10	11	12	7	8	9	10			HAPPY VALLEY RD.
18	17	16	15	14	13	18	17	16	15			PINNACLE PEAK RD.
19	20	21	22	23	24	19	20	21	22			DEER VALLEY RD.
30	29	28	27	26	25	30	29	28	27			BEARDSLEY RD.
31	32	33	34	35	36	31	32	33	34			UNION HILLS DR.
6	5	4	3	2	1	6	5	4	3			BELL RD.
7	8	9	10	11	12	7	8	9	10			GREENWAY RD.
												THUNDERBIRD RD.
115TH AVE.	107TH AVE.	99TH AVE.	91ST AVE.	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.		

GREENWAY RD./ CORAL GABLES DR.

DATE FLOWN: 10-10-1990, 4-16-1991, 5-31-1991 & 7-8-1991

MATCH LINE SEE PLATE 7

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 NEW RIVER HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (510) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 8

KAMINSKI HUBBARD engineering, inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

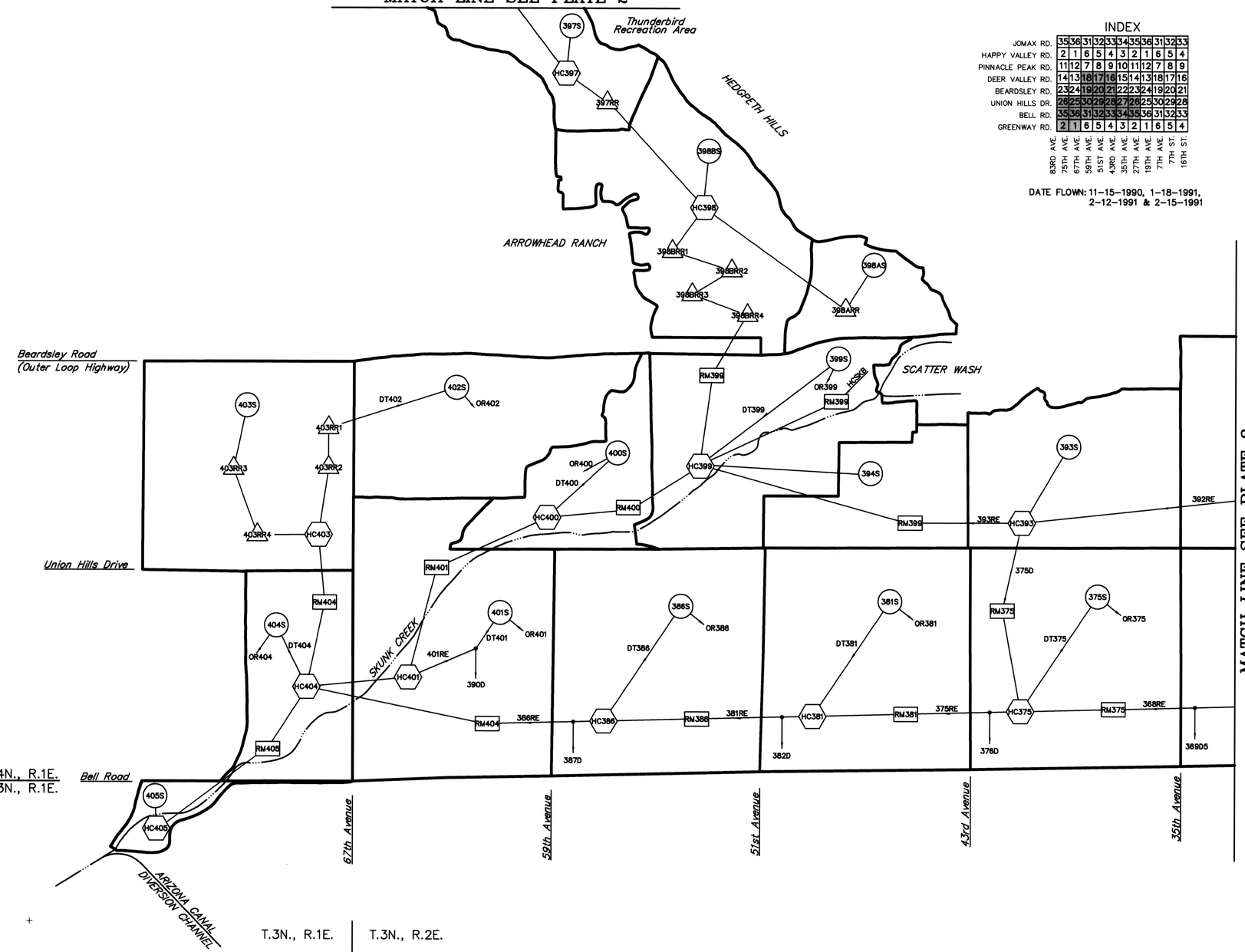
N

SCALE
1200 600 0 1200 2400
FEET

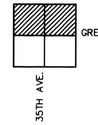
CONTOUR INTERVAL 10 FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 2



KEY MAP



INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- 9/F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 1
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

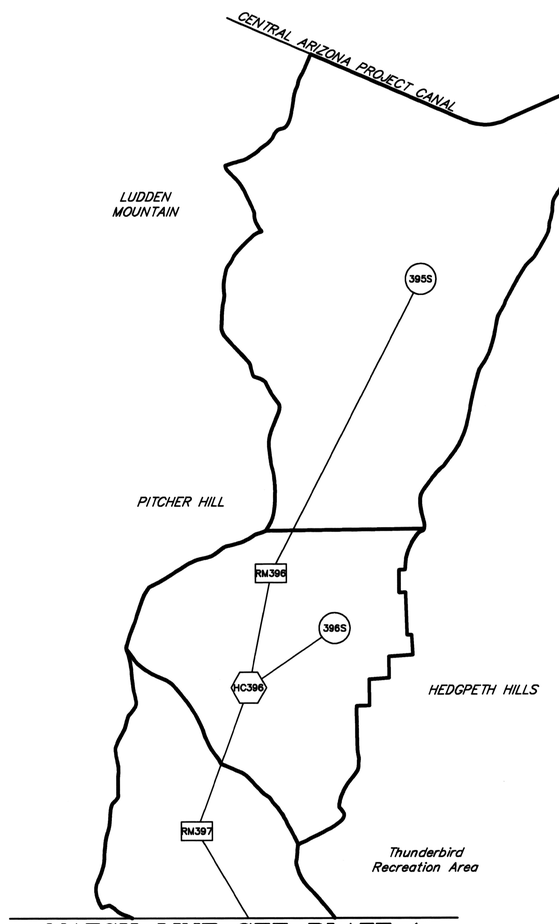
N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.1E. | T.5N., R.2E.

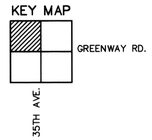
T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



MATCH LINE SEE PLATE 1

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

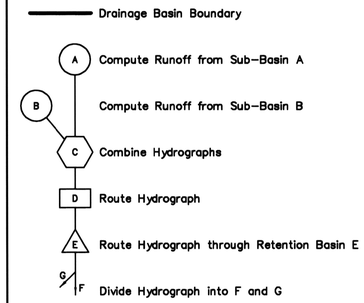
DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

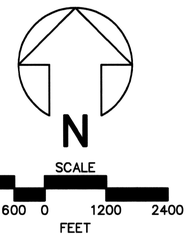
LEGEND



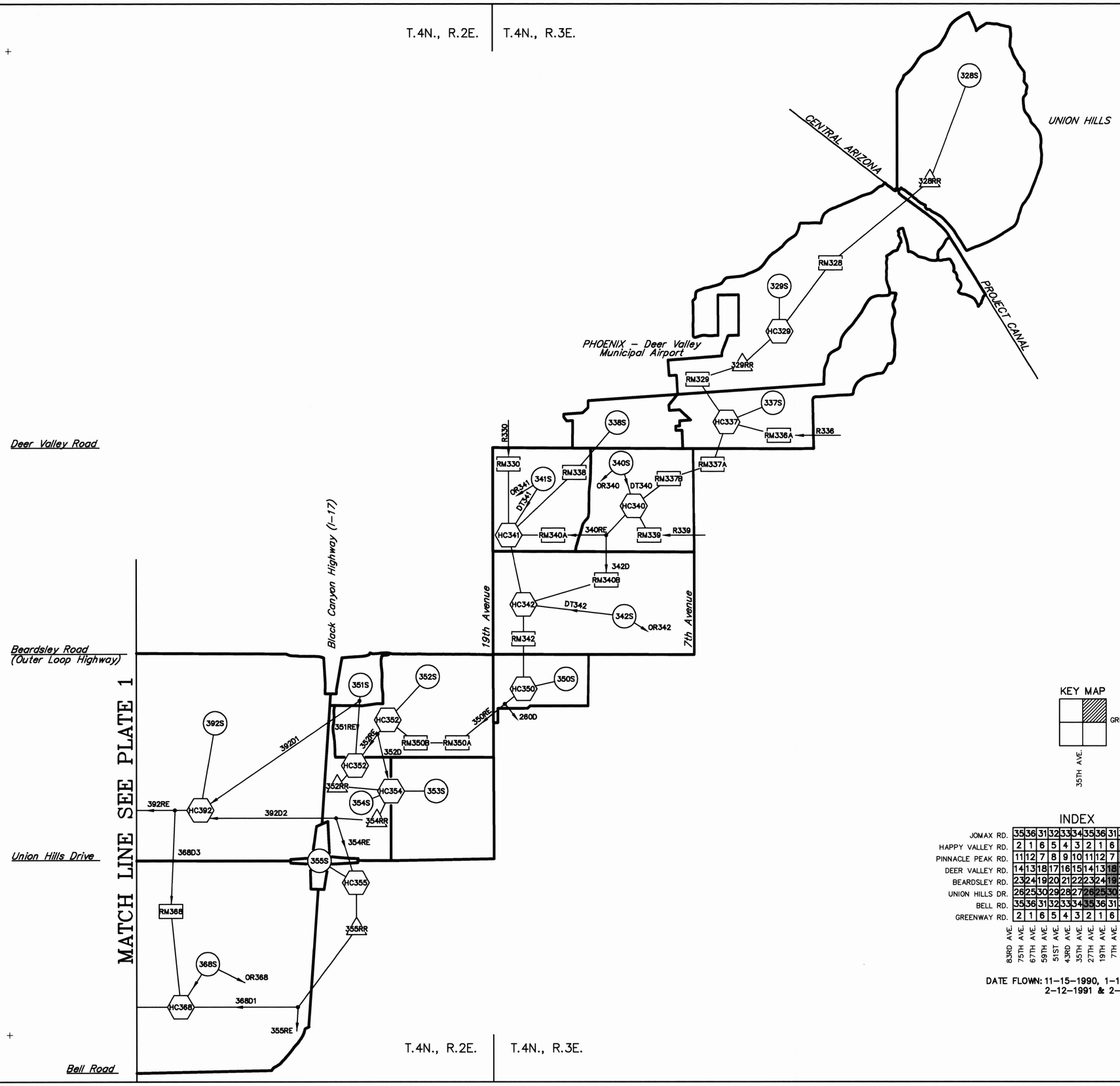
DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 2
SEPTEMBER 30, 1994

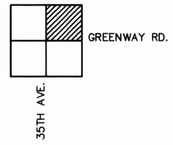
KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588



T.4N., R.2E. | T.4N., R.3E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33		
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4		
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9		
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16		
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21		
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28		
BELL RD.	35	36	31	32	33	34	35	36	31	32	33		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.2E. | T.4N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 3
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 5

Thunderbird Recreation Area

HEDGPETH HILLS

397

398B

398A

399

402

403

400

404

401

386

SKUNK CREEK

SCATTER WASH

394

393

392

381

375

368

Beardsley Road (Outer Loop Highway)

Union Hills Drive

Bell Road

MATCH LINE SEE PLATE 6

T.4N., R.2E.

T.3N., R.2E.

T.4N., R.1E.

T.3N., R.1E.

405

ARIZONA CANAL DIVERSION CHANNEL

T.3N., R.1E.

T.3N., R.2E.

67th Avenue

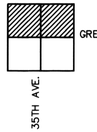
59th Avenue

51st Avenue

43rd Avenue

35th Avenue

KEY MAP



INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33	
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4	
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9	
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16	
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21	
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28	
BELL RD.	35	36	31	32	33	34	35	36	31	32	33	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number
- Right-of-Way
- Agriculture

LAND USE MAP
EXISTING CONDITIONS

PLATE 4
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

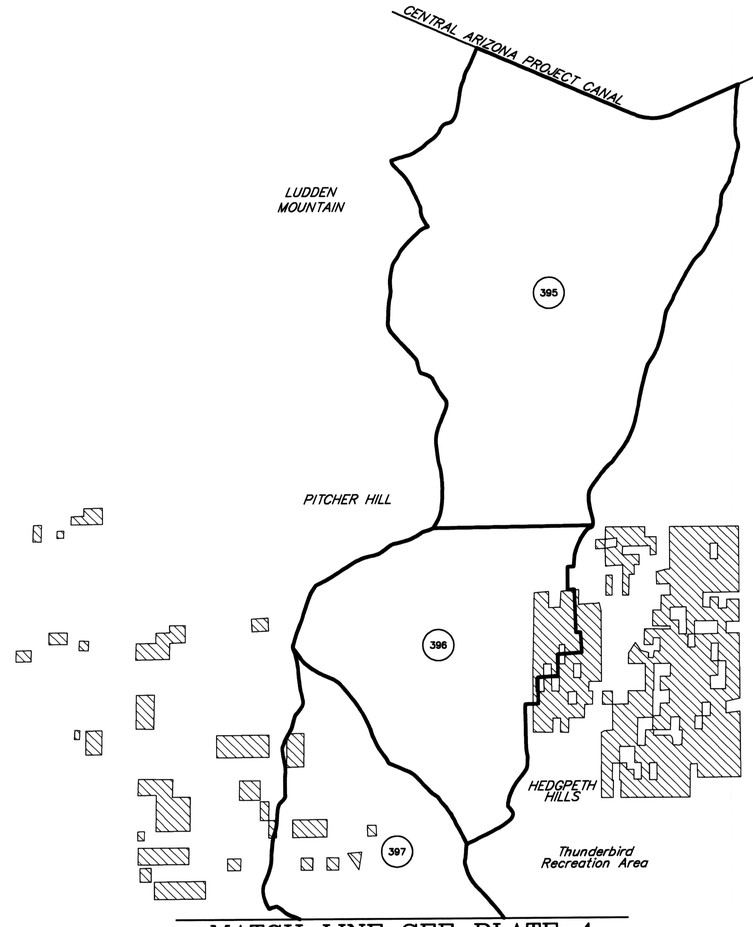
N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.
T.4N., R.1E.

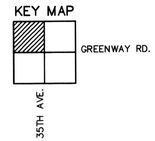
T.5N., R.2E.
T.4N., R.2E.



MATCH LINE SEE PLATE 4

T.4N., R.1E. | T.4N., R.2E.

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

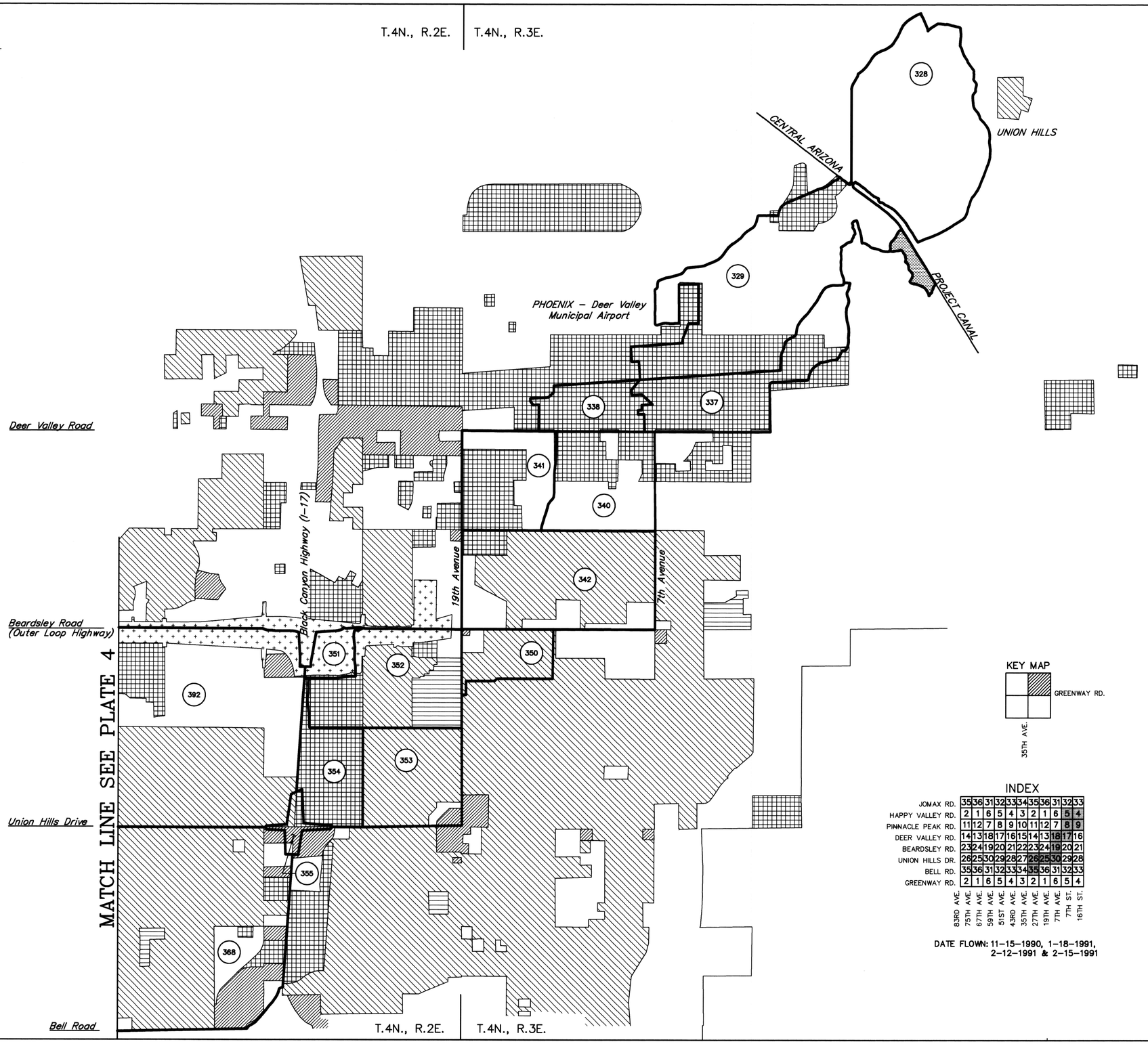
PLATE 5
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.



KEY MAP

INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33		
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4		
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9		
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16		
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21		
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28		
BELL RD.	35	36	31	32	33	34	35	36	31	32	33		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	

DATE FLOWN: 11–15–1990, 1–18–1991, 2–12–1991 & 2–15–1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub–Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 6
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242–5588

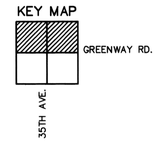
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 8

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

Thunderbird Recreation Area

ARROWHEAD RANCH

HEDGPETH HILLS

SCATTER WASH

SKUNK CREEK

Beardsley Road (Outer Loop Highway)

Union Hills Drive

Bell Road

ARIZONA CANAL DIVERSION CHANNEL

T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

T.3N., R.2E.

67th Avenue

59th Avenue

51st Avenue

43rd Avenue

35th Avenue

MATCH LINE SEE PLATE 9

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification
  Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification
  Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 7
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

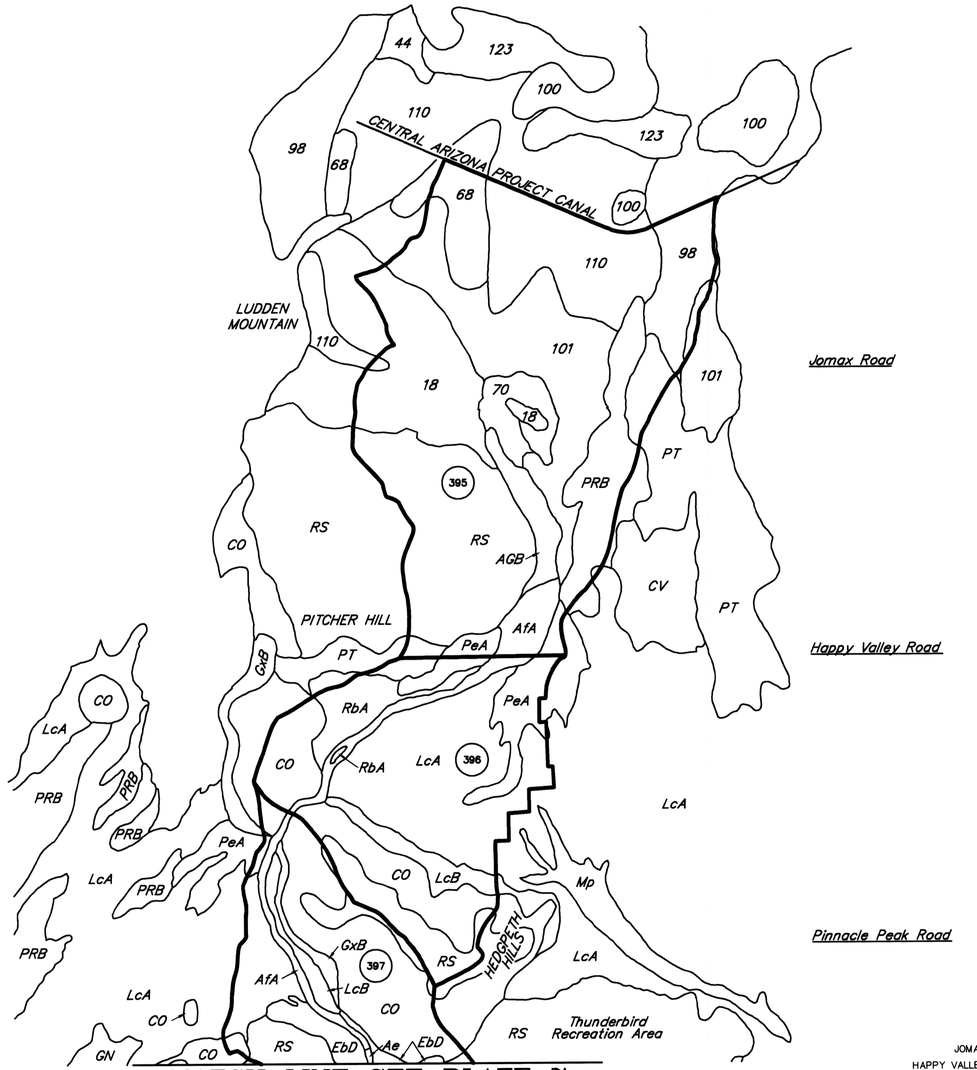
N

SCALE
1200 600 0 1200 2400
FEET

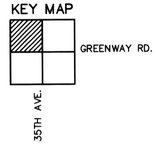
T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB — Soil Unit Boundary
- CO — Soil Unit Identification. Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 — Soil Unit Identification. Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

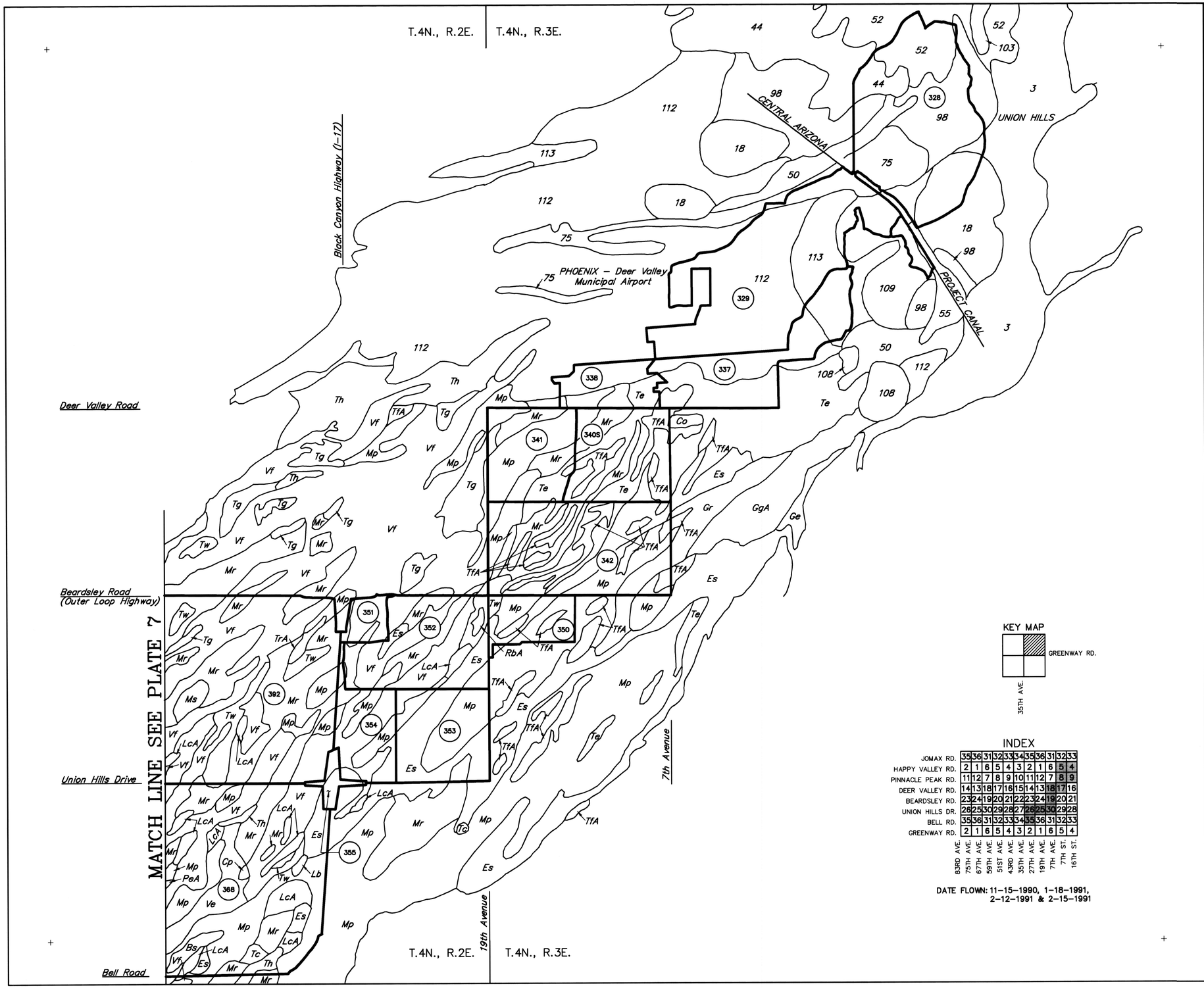
SOILS MAP
EXISTING CONDITIONS

PLATE 8
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub–Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification
  Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification
  Reference: USDA, Soil Conservation Service, Soil Survey of Aguila–Carefree Area Parts of Maricopa and Pinal Counties, Arizona

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33	
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4	
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9	
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16	
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21	
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28	
BELL RD.	35	36	31	32	33	34	35	36	31	32	33	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4	

DATE FLOWN: 11–15–1990, 1–18–1991, 2–12–1991 & 2–15–1991

SOILS MAP
EXISTING CONDITIONS

PLATE 9
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242–5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 11

Thunderbird Recreation Area

HEDGPETH HILLS

SCATTER WASH

Beardsley Road (Outer Loop Highway)

Union Hills Drive

Bell Road

SKUNK CREEK

ARIZONA CANAL DIVERSION CHANNEL

67th Avenue

59th Avenue

51st Avenue

43rd Avenue

35th Avenue

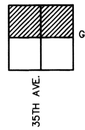
MATCH LINE SEE PLATE 12

T.4N., R.1E.
T.3N., R.1E.

T.4N., R.2E.
T.3N., R.2E.

T.3N., R.1E. | T.3N., R.2E.

KEY MAP



INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33	
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4	
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9	
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16	
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21	
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28	
BELL RD.	35	36	31	32	33	34	35	36	31	32	33	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path
- Major Water Course

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 10
SEPTEMBER 30, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

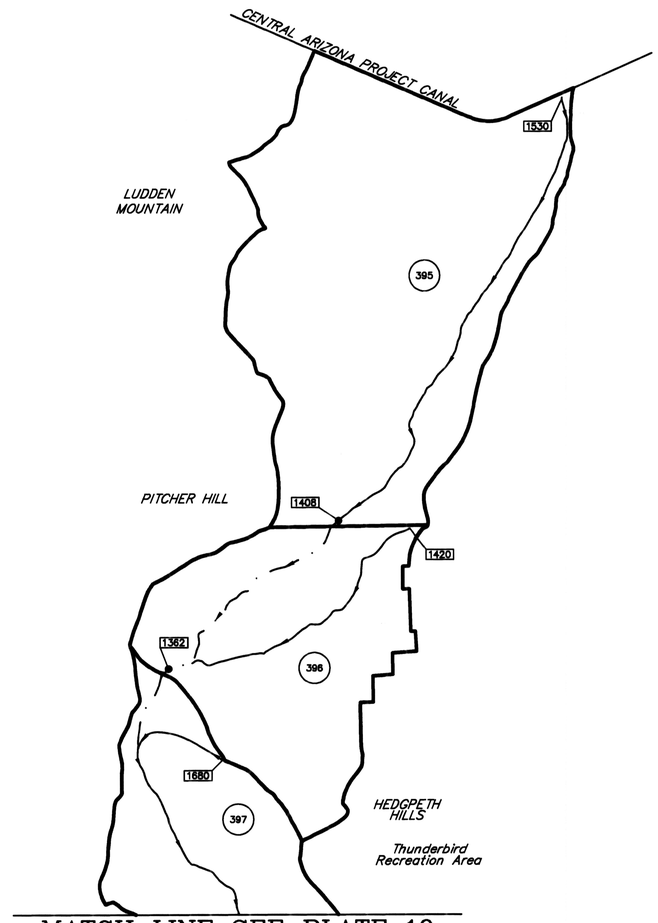
N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.1E. | T.5N., R.2E.

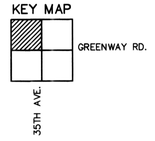
T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



MATCH LINE SEE PLATE 10

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33					
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4					
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9					
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16					
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21					
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28					
BELL RD.	35	36	31	32	33	34	35	36	31	32	33					
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4					
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.				

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

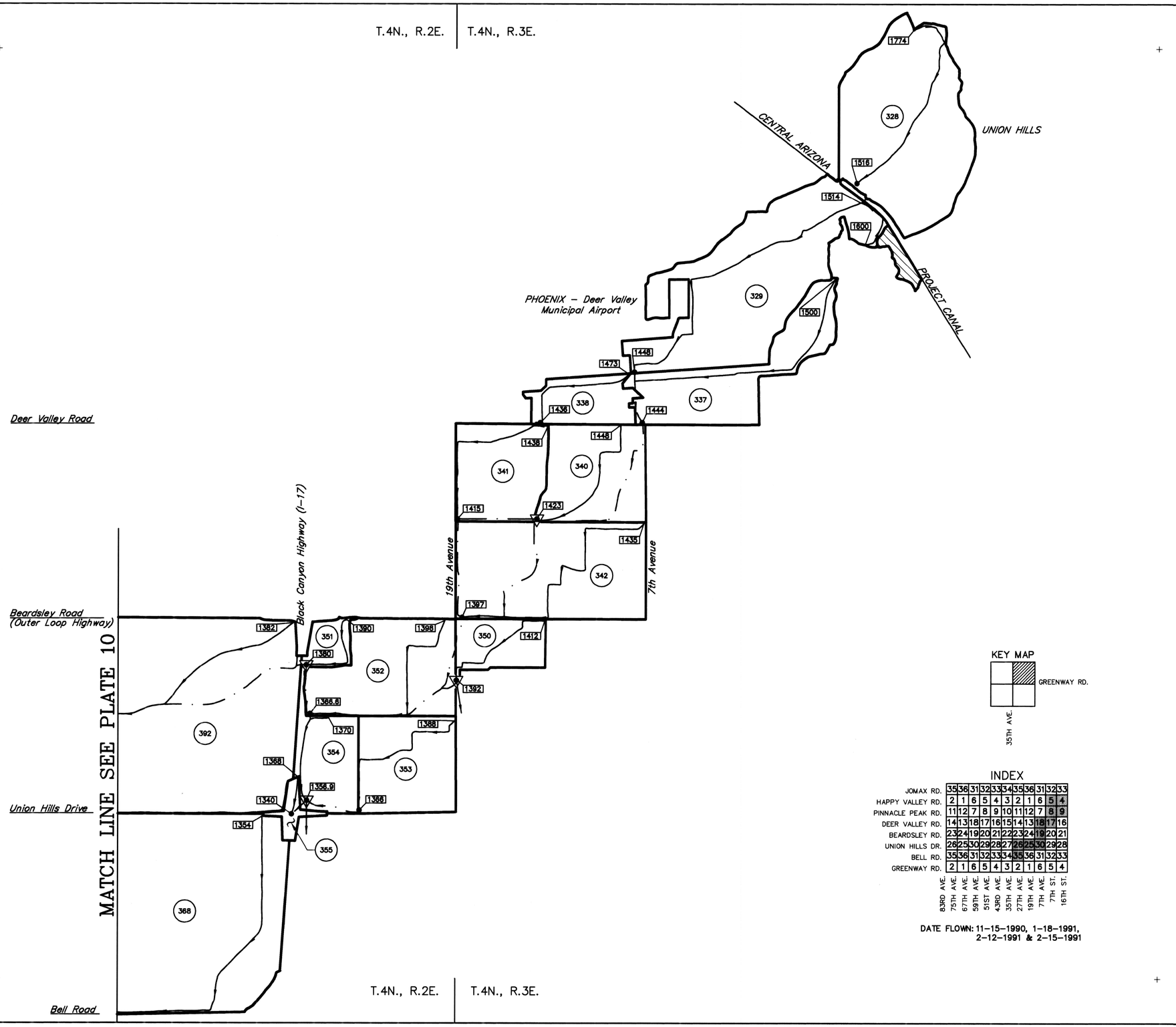
PLATE 11
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.



T.4N., R.2E. | T.4N., R.3E.

KEY MAP

INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33		
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4		
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9		
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16		
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21		
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28		
BELL RD.	35	36	31	32	33	34	35	36	31	32	33		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path
- Non Contributing Area

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 12
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 14

Thunderbird Recreation Area

HEDGPETH HILLS

ARROWHEAD RANCH

Beardsley Road (Outer Loop Highway)

Union Hills Drive

Bell Road

SCATTER WASH

SKUNK CREEK

ARIZONA CANAL DIVERSION CHANNEL

67th Avenue

59th Avenue

51st Avenue

43rd Avenue

35th Avenue

MATCH LINE SEE PLATE 15

T.4N., R.2E.
T.3N., R.2E.

T.3N., R.1E. | T.3N., R.2E.

HC361 361RR 362S HC362 362RR1 362RR2 362RR3 362RR4 363S 363RR HC363 RM363 350S HC350 RMSKB HCSKB 358S OR358 DT358 RM358 365S OR365 DT365 HC365 RM365 364S OR364 DT364 HC364 372S OR372 DT372 RM372 374S HC374 RM374 375S OR375 DT375 HC375 RM375 377S OR377 RM376 376S OR376 DT376 HC376 373S OR373 DT373 HC373 RM373 371S OR371 DT371 HC371 RM371 370S OR370 DT370 HC370 RM370 369S OR369 DT369 HC369 RM369 357S HC357 RM357 356S HC356 RM356 371RE 370RE 369RE 368RE 356RE 369D 384D 383D 382D 381D5

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

PLATE 13
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

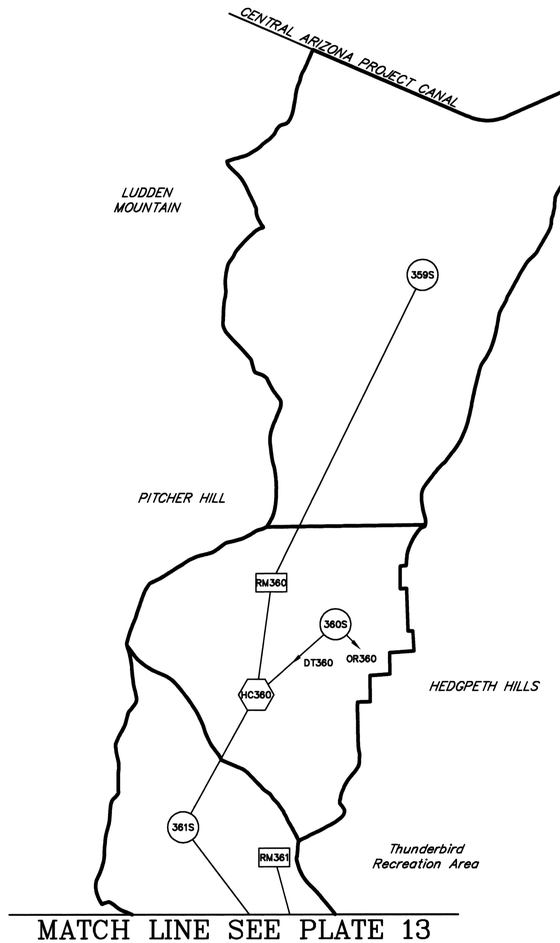
N

SCALE
1200 600 0 1200 2400
FEET

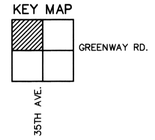
T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

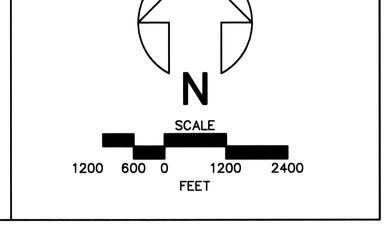
DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

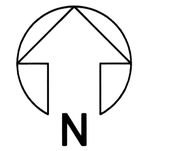
LEGEND



DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

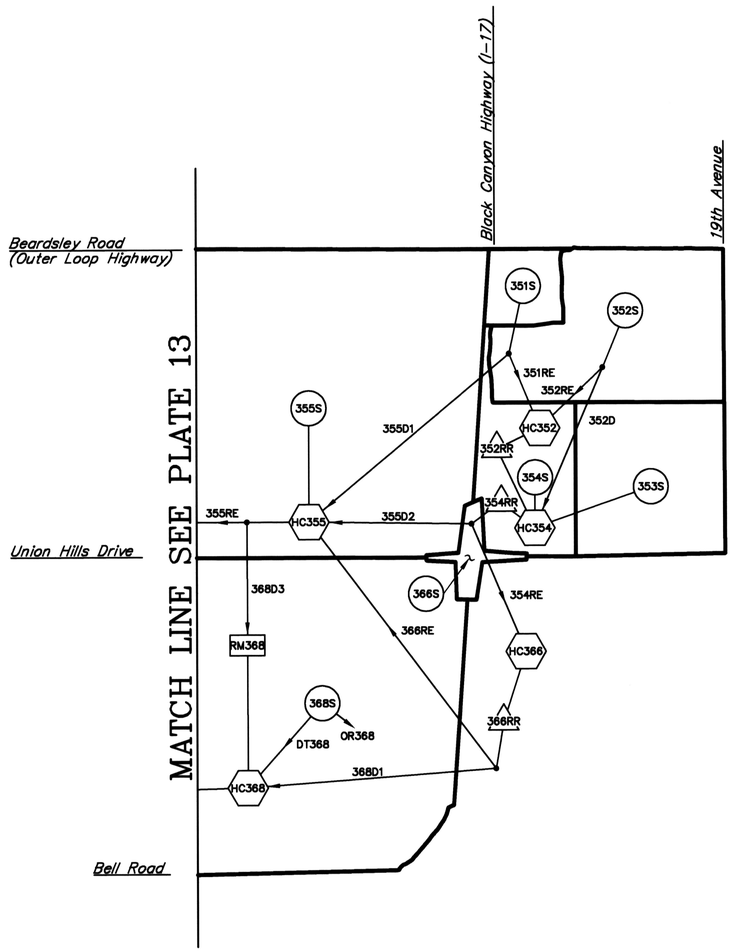
PLATE 14
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

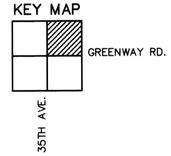


SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.

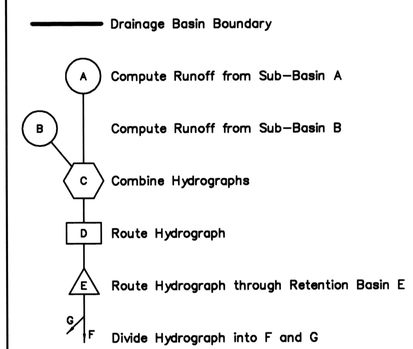
DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.2E. | T.4N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

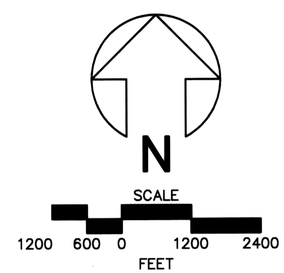


DRAINAGE AREA MAP & HEC-1 SCHEMATIC

FUTURE CONDITIONS

PLATE 15
SEPTEMBER 30, 1994

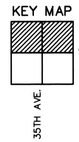
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588



T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 17

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33		
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4		
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9		
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16		
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21		
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28		
BELL RD.	35	36	31	32	33	34	35	36	31	32	33		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

Thunderbird Recreation Area

HEDGPETH HILLS

Beardsley Road (Outer Loop Highway)

SCATTER WASH

Union Hills Drive

SKUNK CREEK

MATCH LINE SEE PLATE 18

T.4N., R.2E.

Bell Road

T.3N., R.2E.

T.4N., R.1E.

T.3N., R.1E.

T.3N., R.1E. | T.3N., R.2E.

67th Avenue | 59th Avenue | 51st Avenue | 43rd Avenue | 35th Avenue

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Industrial Land Use
- Right-of-Way
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 16
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

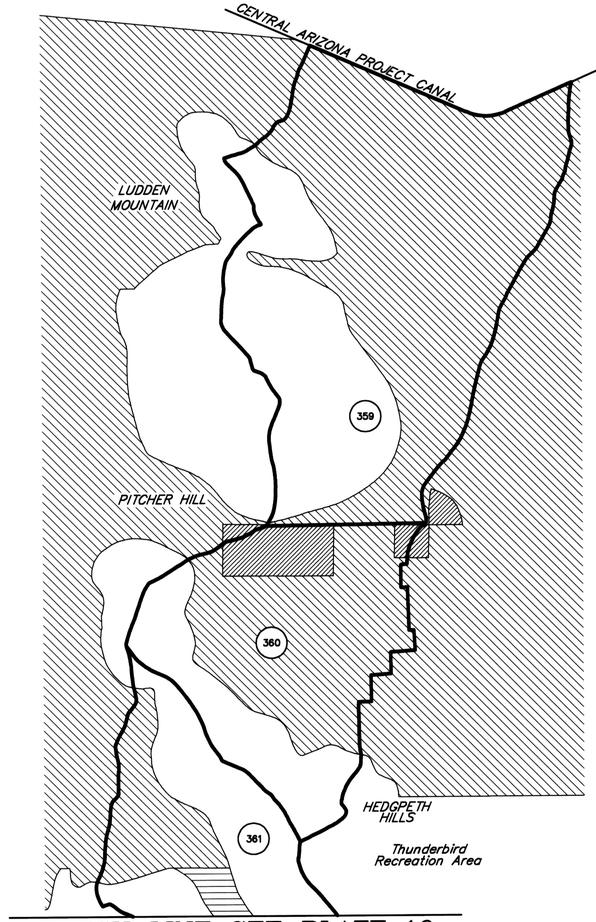
N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



Jomax Road

Happy Valley Road

Pinnacle Peak Road

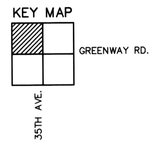
MATCH LINE SEE PLATE 16

67th Avenue

59th Avenue

51st Avenue

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Industrial Land Use
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

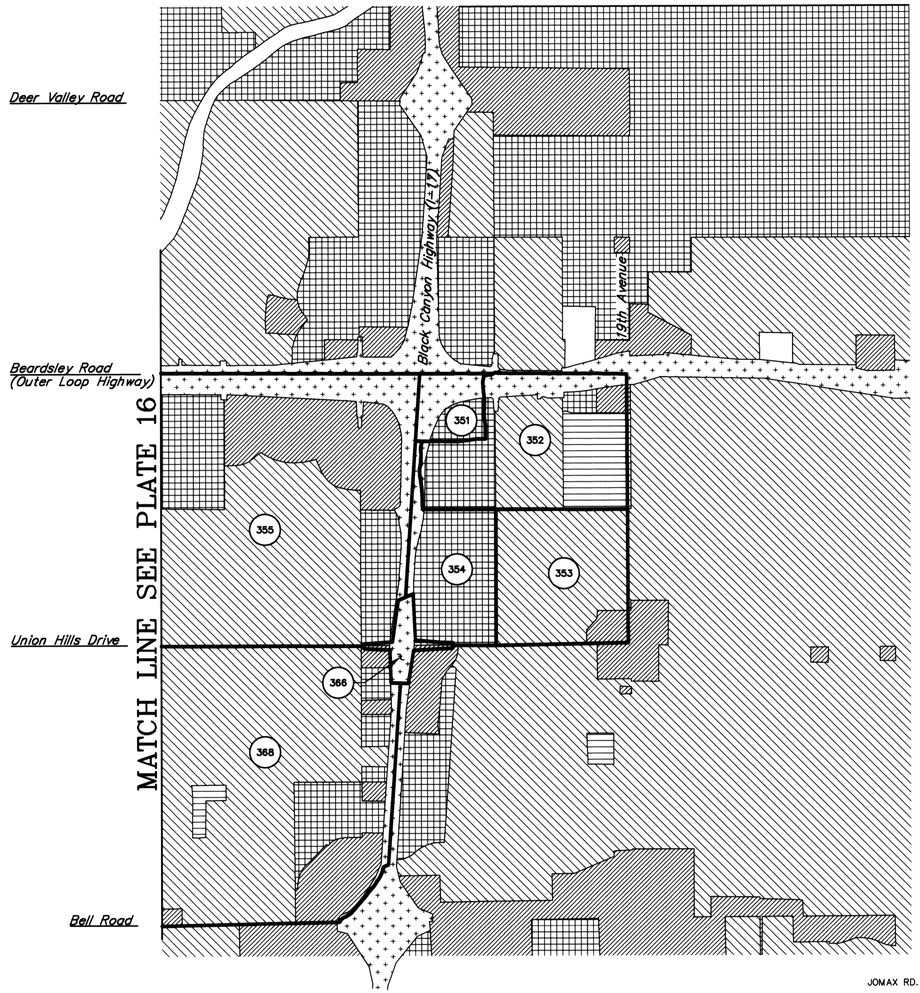
PLATE 17
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

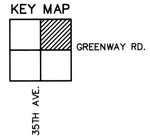
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.2E. | T.4N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Industrial Land Use
- Right-of-Way
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 18
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 20

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33			
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4			
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9			
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16			
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21			
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28			
BELL RD.	35	36	31	32	33	34	35	36	31	32	33			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

Thunderbird Recreation Area

HEDGPETH HILLS

ARROWHEAD RANCH

SCATTER WASH

SKUNK CREEK

Beardsley Road (Outer Loop Highway)

Union Hills Drive

Bell Road

ARIZONA CANAL DIVERSION CHANNEL

67th Avenue

59th Avenue

51st Avenue

43rd Avenue

35th Avenue

MATCH LINE SEE PLATE 21

T.4N., R.1E.

T.3N., R.1E.

T.3N., R.1E.

T.3N., R.2E.

T.4N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

Drainage Basin Boundary

(140) Drainage Sub-Basin Number

CrB Soil Unit Boundary

CO Soil Unit Identification
Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part

109 Soil Unit Identification
Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 19
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

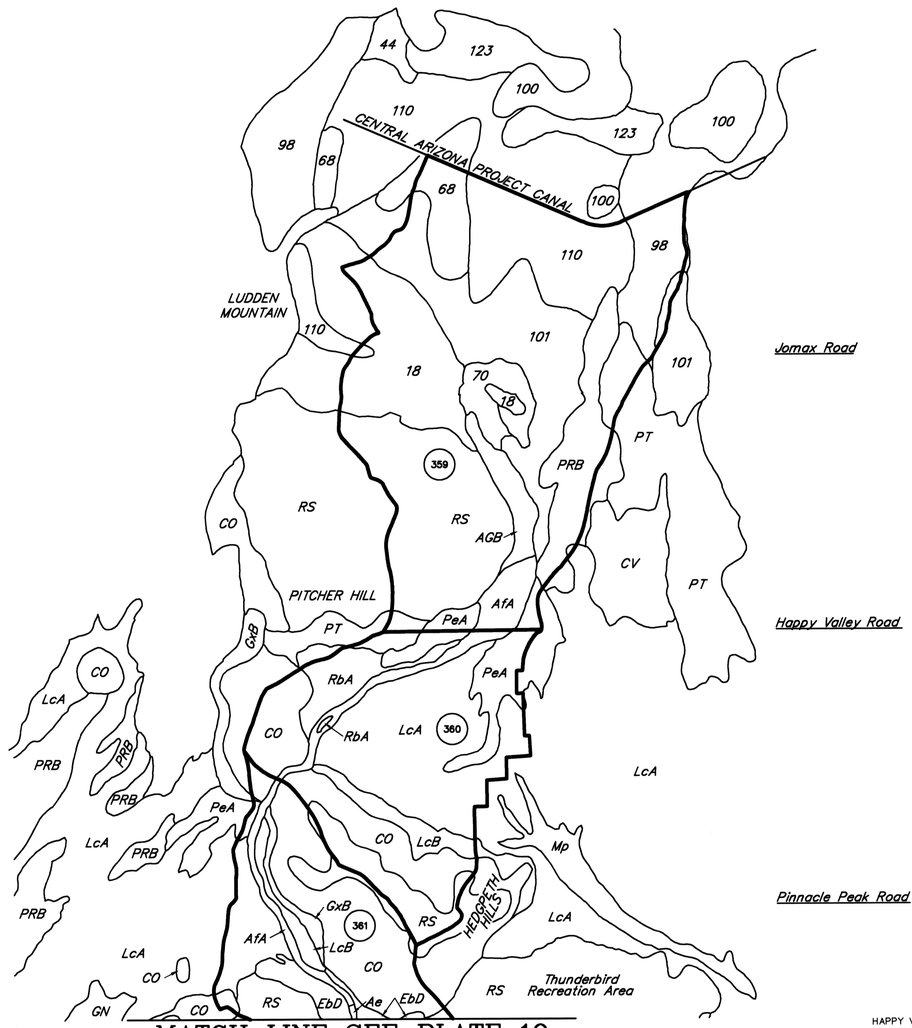
N

SCALE
1200 600 0 1200 2400
FEET

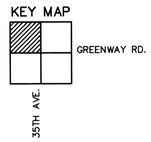
T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33				
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4				
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9				
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16				
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21				
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28				
BELL RD.	35	36	31	32	33	34	35	36	31	32	33				
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4				
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.				

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

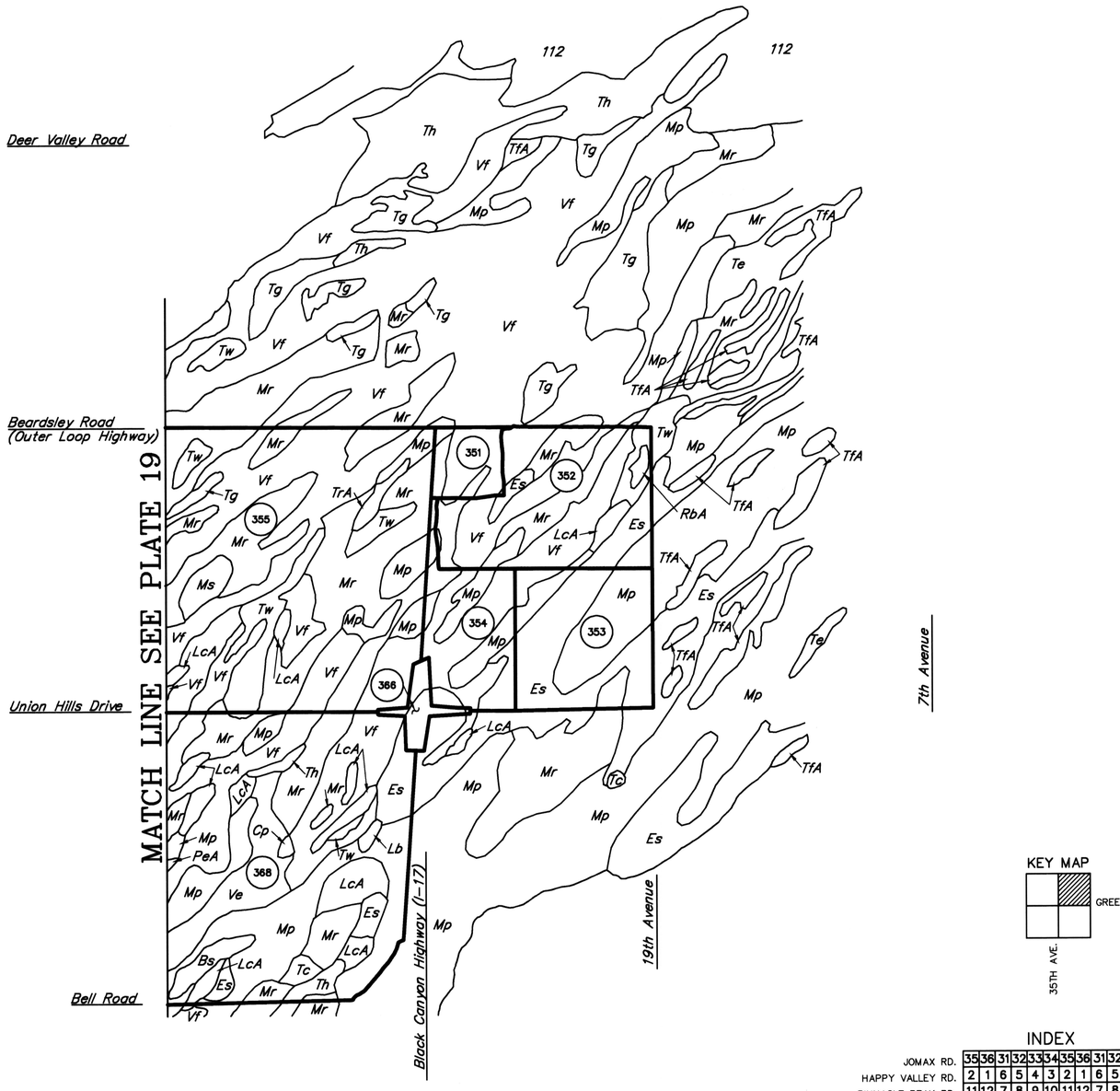
PLATE 20
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

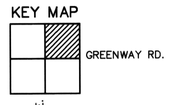
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33	
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4	
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9	
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16	
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21	
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28	
BELL RD.	35	36	31	32	33	34	35	36	31	32	33	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4	
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	77TH ST.	16TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.2E. | T.4N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 21
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

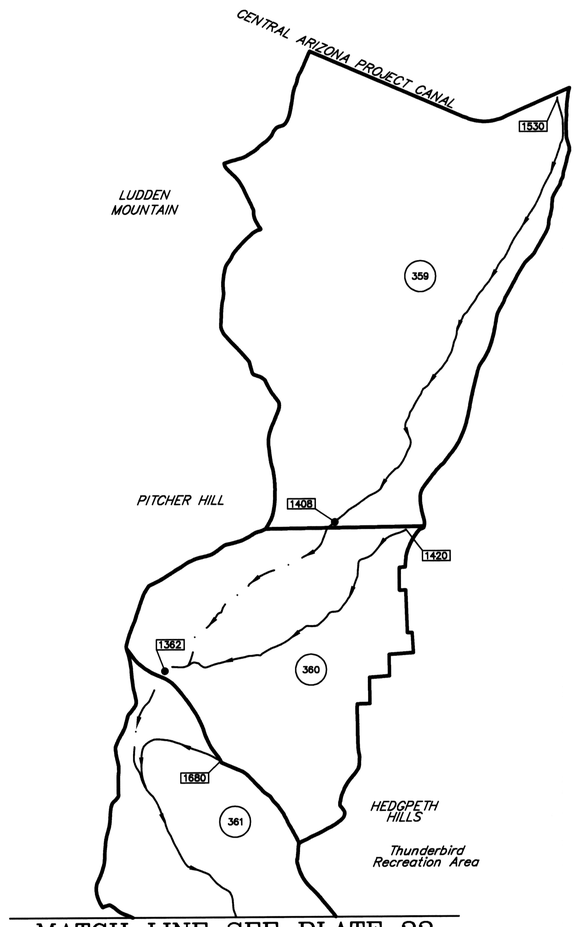
N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.1E. | T.5N., R.2E.

T.5N., R.1E.
T.4N., R.1E.

T.5N., R.2E.
T.4N., R.2E.



Jomax Road

Happy Valley Road

Pinnacle Peak Road

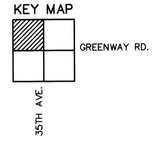
MATCH LINE SEE PLATE 22

67th Avenue

59th Avenue

51st Avenue

KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33	
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4	
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9	
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16	
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21	
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28	
BELL RD.	35	36	31	32	33	34	35	36	31	32	33	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4	
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.1E. | T.4N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

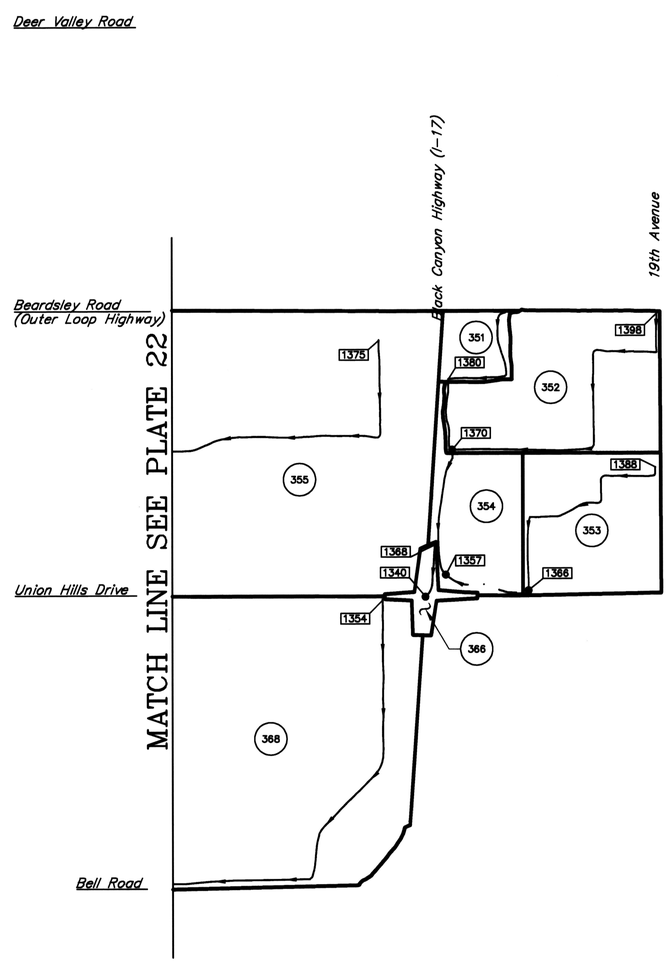
PLATE 23
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

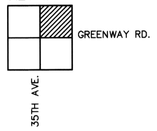
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33		
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4		
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9		
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16		
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21		
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28		
BELL RD.	35	36	31	32	33	34	35	36	31	32	33		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.4N., R.2E. | T.4N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path
- Non Contributing Area

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 24
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.5N., R.2E. | T.5N., R.3E.

T.N5., R.2E.
T.4N., R.2E.

T.N5., R.3E.
T.4N., R.3E.

Dynamite Boulevard

Jomax Road

Happy Valley Road

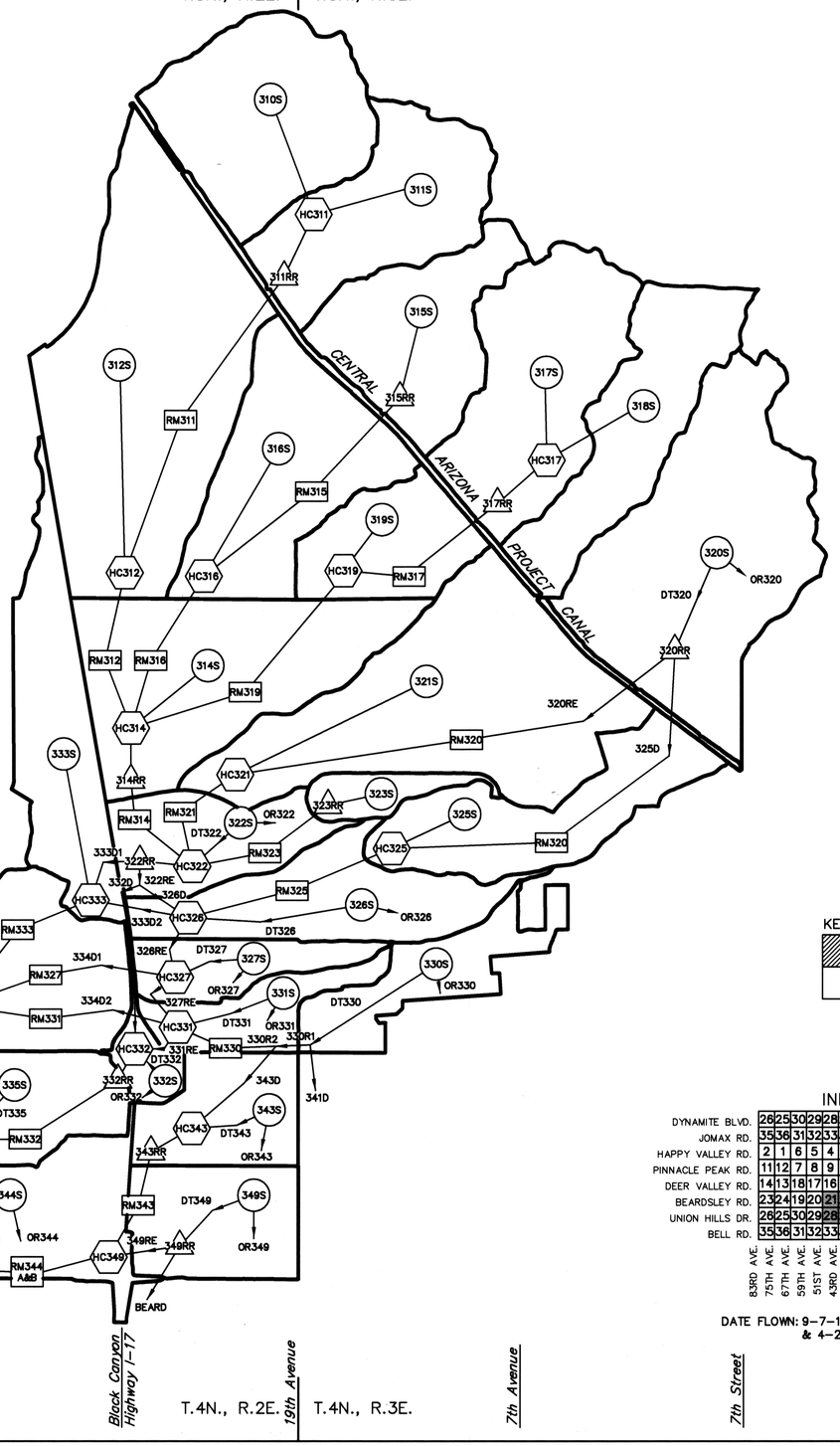
Pinnacle Peak Road

Deer Valley Road

Beardsley Road
Outer Loop Highway

ADOBE DAM

CENTRAL ARIZONA PROJECT CANAL



T.4N., R.2E. | T.4N., R.3E.

KEY MAP

INDEX

DYNAMITE BLVD.	26	25	30	29	28	27	26	25	30	29	28
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.

DATE FLOWN: 9-7-1990 Thru 11-15-1990
& 4-2-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SCATTER WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

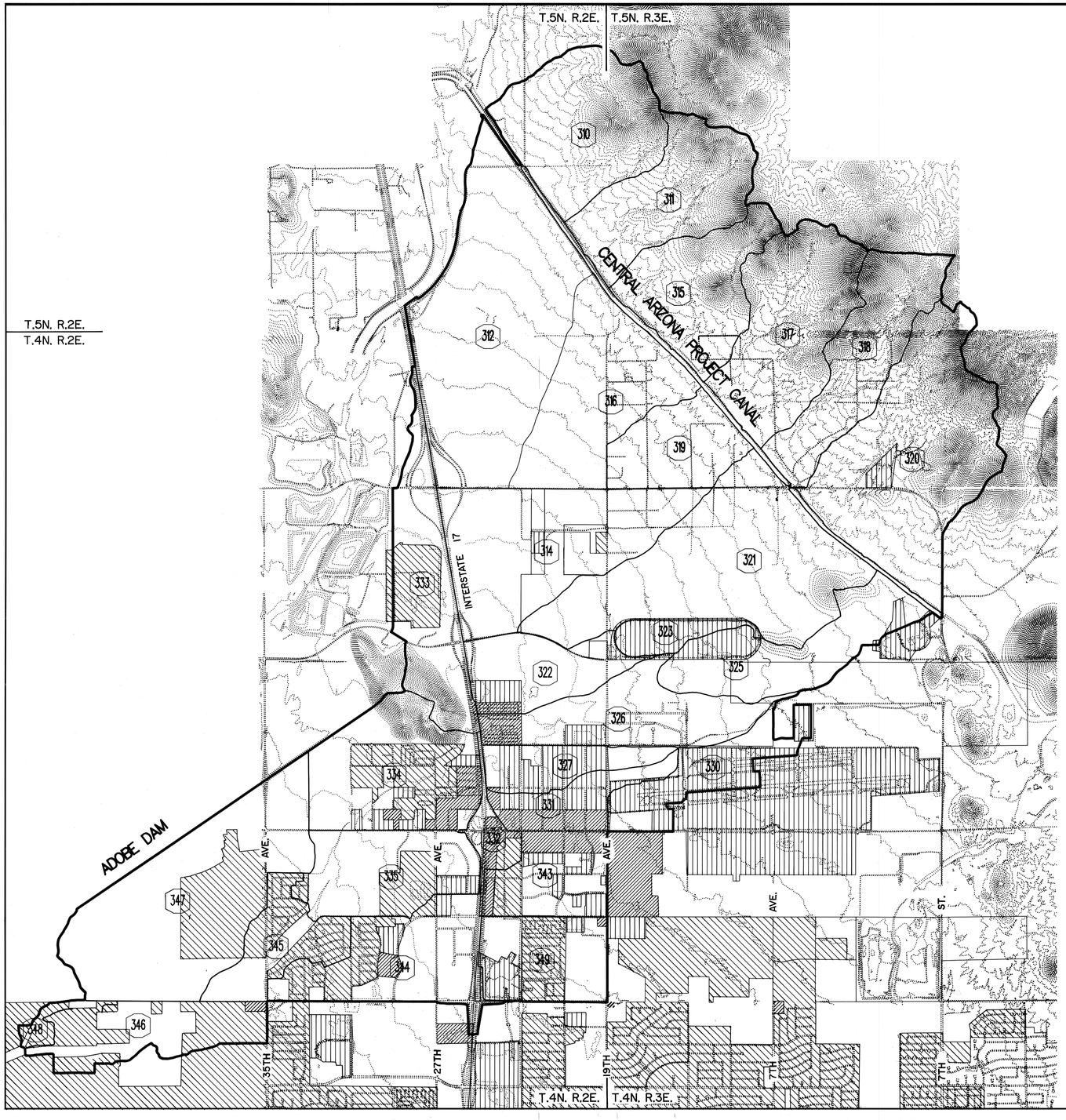
DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 1
MAY 4, 1992

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1500 750 0 1500 3000
FEET



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE I SCATTER WASH HYDROLOGY STUDY

LEGEND

- CONTOURS
- SCATTER WASH BOUNDARY
- ROADS
- SUB BASINS
- SOILS
- Residential Land Use
- Commercial Land Use
- Industrial Land Use
- Vacant Land Use

KEY MAP

INDEX

29	28	27	26	25	30	29	28	DYNAMITE BLVD.
32	33	34	35	36	31	32	33	JOMAX RD.
5	4	3	2	1	6	5	4	HAPPY VALLEY RD.
8	9	10	11	12	7	8	9	PINNACLE PEAK RD.
17	16	15	14	13	18	17	16	DEER VALLEY RD.
20	21	22	23	24	19	20	21	BEARDSLEY RD.
29	28	27	26	25	30	29	28	UNION HILLS DR.

59TH AVE. 51ST AVE. 43RD AVE. 35TH AVE. 27TH AVE. 19TH AVE. 7TH AVE. 7TH ST. 16TH ST.

DATE FLOWN: 9-7-1990 THRU 11-15-1990 & 4-2-1991

LAND USE MAP

PLATE 2

MAY 4, 1992

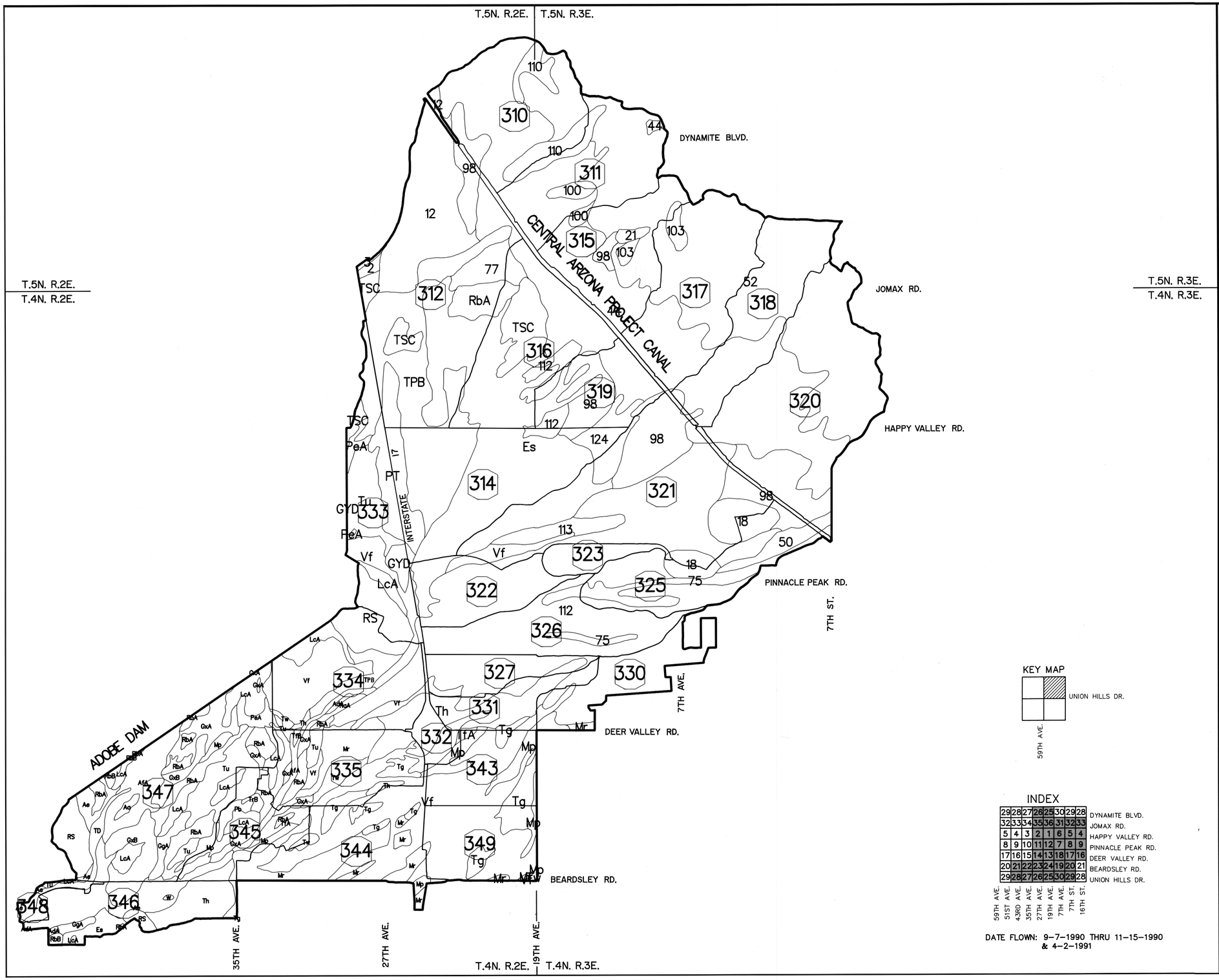
KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE

3/4 1/4 0 1/4 3/4 MILES

CONTOUR INTERVAL 10 FEET



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE I SCATTER WASH HYDROLOGY STUDY

LEGEND

- Major Drainage Basin Boundary
- Drainage Sub-Basin Boundary
- 344 — Drainage Sub-Basin Number
- LcA — Soil Unit Boundary
- ck — Soil Unit Boundary

  Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part

- 112 — Soil Unit Identification

  Reference: USDA, Soil Conservation Service, Soil Survey of Aquila-Carefree Area, Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP

PLATE 3

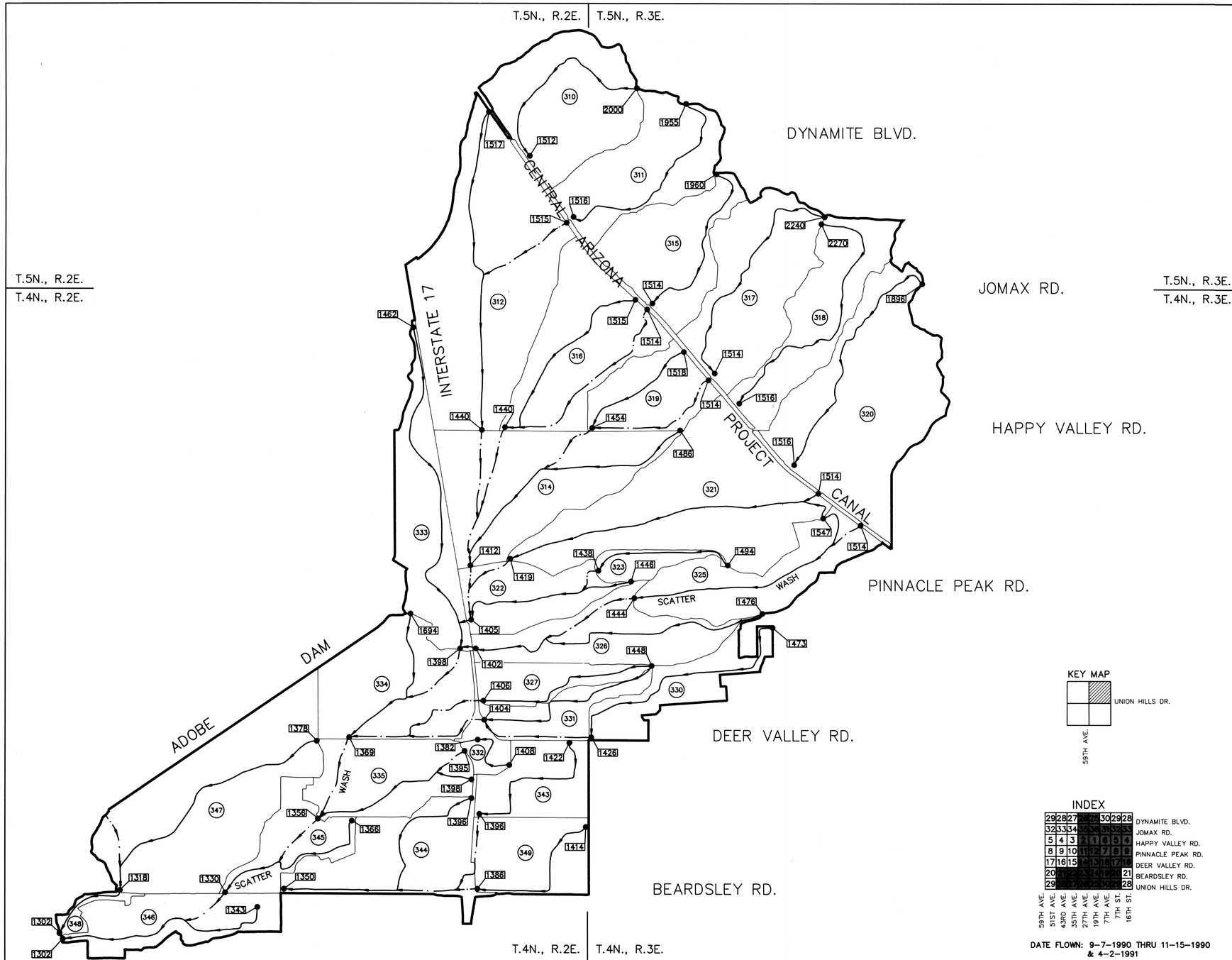
MAY 4, 1992

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE

3/4 1/4 0 1/4 3/4 MILES



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SCATTER WASH HYDROLOGY STUDY

LEGEND

- Major Drainage Basin Boundary
- Drainage Sub-Basin Boundary
- (320) Drainage Sub-Basin Number
- Drainage Sub-Basin Concentration Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP

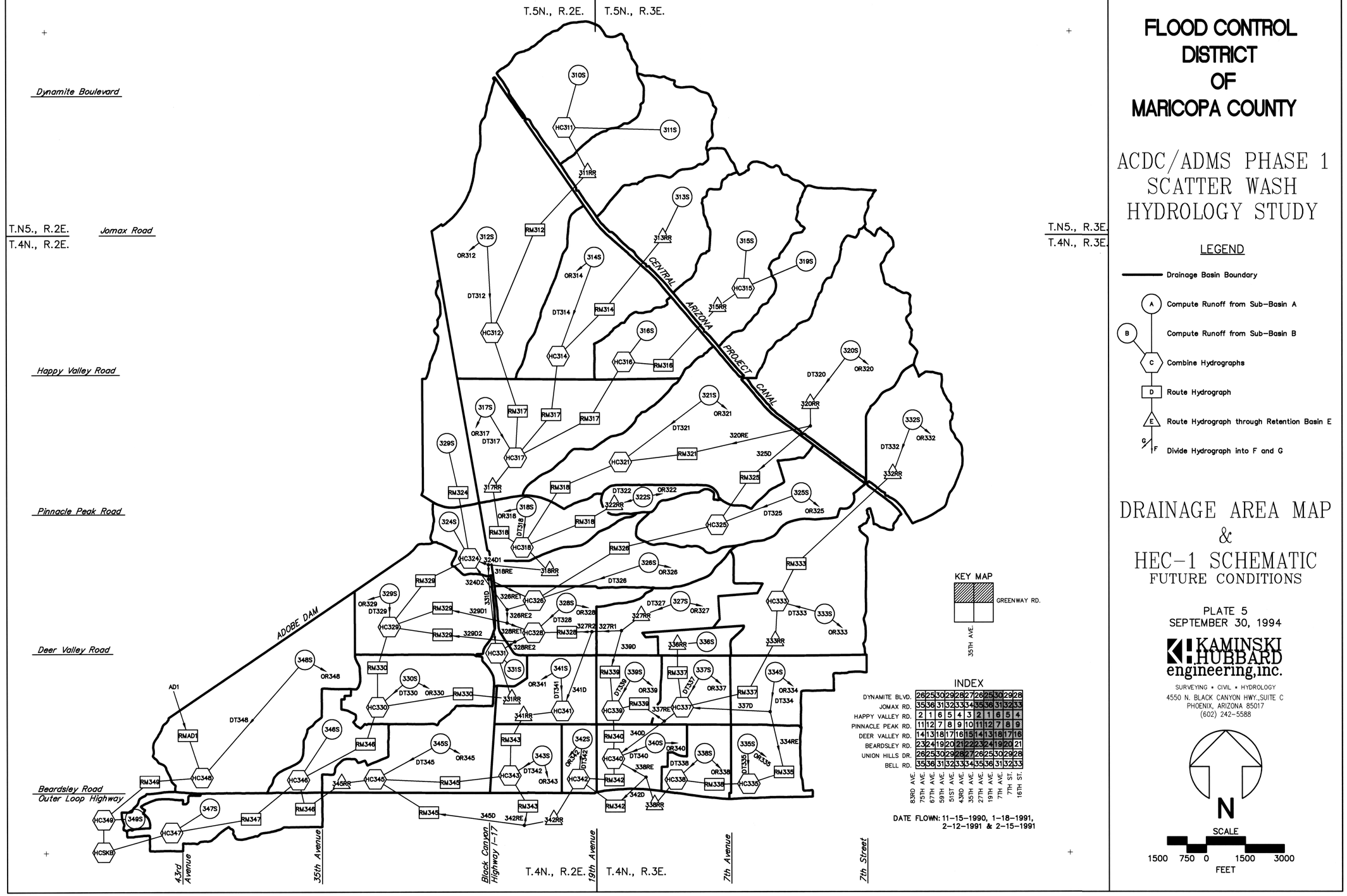
PLATE 4
MAY 4, 1992

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
3/4 1/4 0 1/4 3/4
MILES

CONTOUR INTERVAL 10 FEET



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SCATTER WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC

FUTURE CONDITIONS

PLATE 5

SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.

SURVEYING • CIVIL • HYDROLOGY

4550 N. BLACK CANYON HWY.,SUITE C

PHOENIX, ARIZONA 85017

(602) 242-5588

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SCATTER WASH HYDROLOGY STUDY

T.5N., R.2E. T.5N., R.3E.

Dynamite Boulevard

T.N5., R.2E. Jomax Road
T.4N., R.2E.

T.N5., R.3E.
T.4N., R.3E.

Happy Valley Road

Pinnacle Peak Road

Deer Valley Road

Beardsley Road
Outer Loop Highway

CENTRAL ARIZONA PROJECT CANAL

ADOBE DAM

310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349

43rd Avenue | 35th Avenue | Black Canyon Highway I-17 | 19th Avenue | 7th Avenue | 7th Street

T.4N., R.2E. T.4N., R.3E.

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

DYNAMITE BLVD.	26	25	30	29	28	27	26	25	30	29	28		
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33		
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4		
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9		
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16		
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21		
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28		
BELL RD.	35	36	31	32	33	34	35	36	31	32	33		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Industrial Land Use
- Right-of-Way
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 6
SEPTEMBER 30, 1994

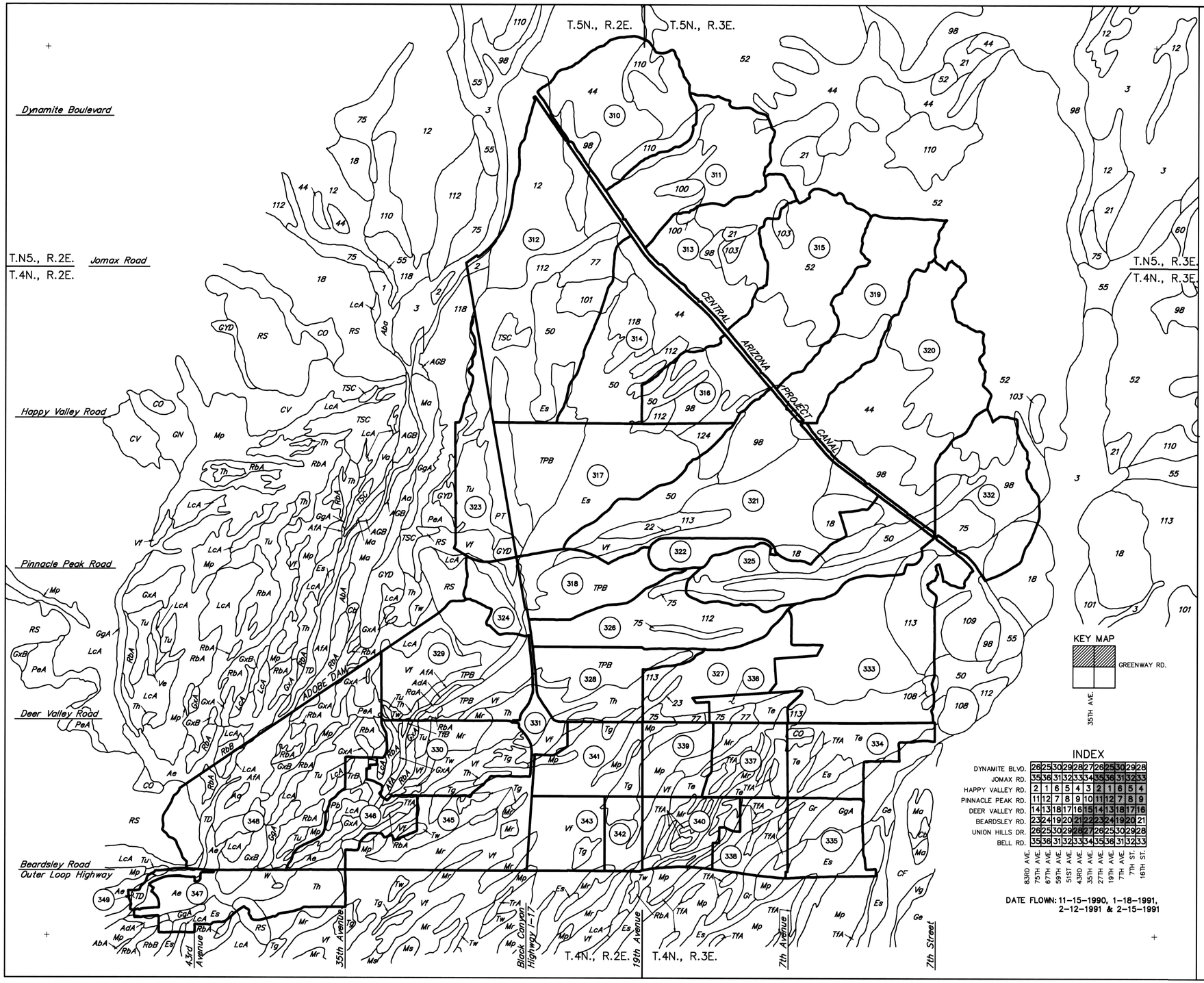
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1500 750 0 1500 3000
FEET

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SCATTER WASH HYDROLOGY STUDY



LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- *CrB* Soil Unit Boundary
- *CO* Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Maricopa County, Arizona
  Central Part
- *109* Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Aguila-Carefree Area
  Parts of Maricopa and Pinal Counties, Arizona

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

DYNAMITE BLVD.	26	25	30	29	28	27	26	25	30	29	28
JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991,
2-12-1991 & 2-15-1991

N

SCALE

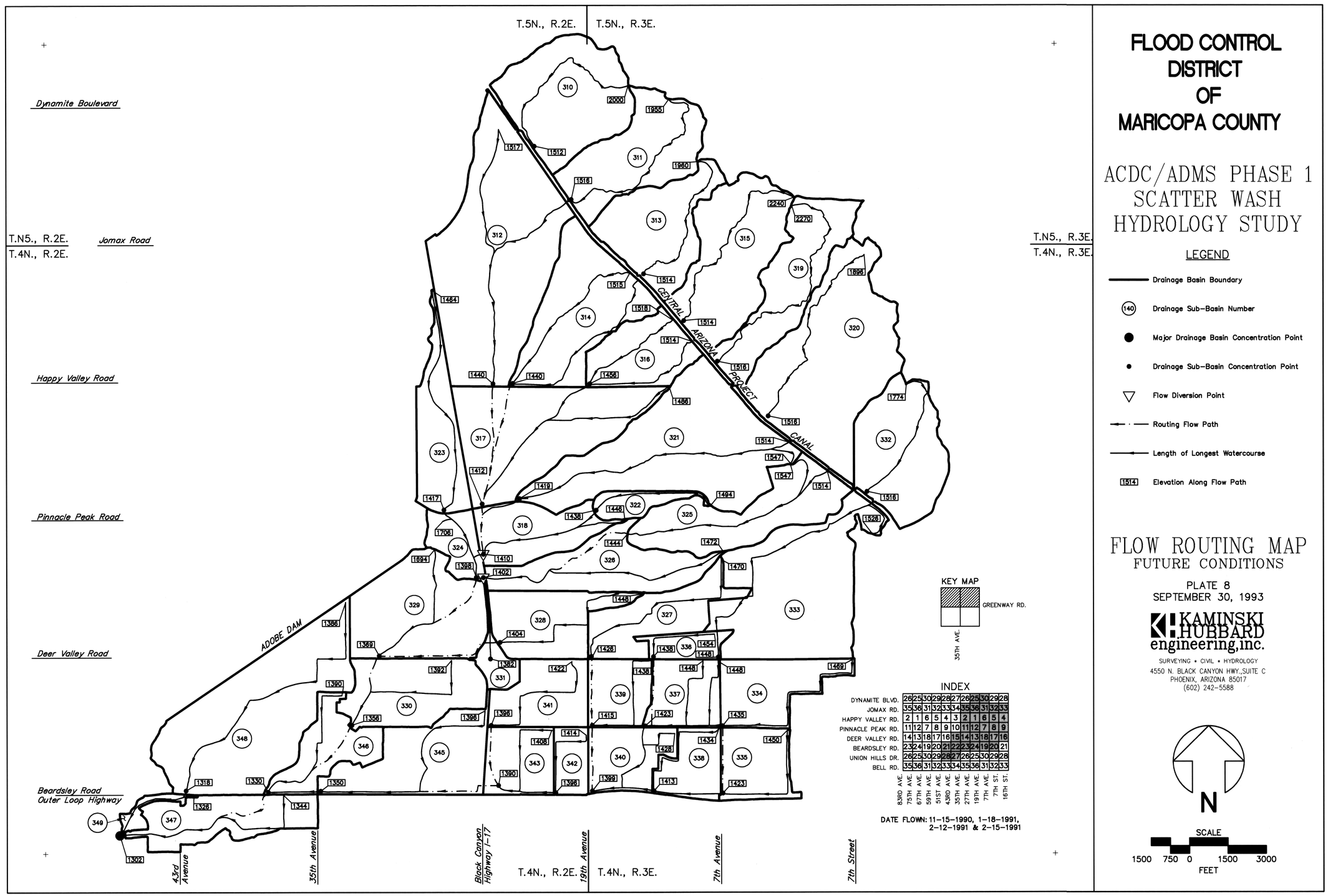
1500 750 0 1500 3000

FEET

SOILS MAP
FUTURE CONDITIONS

PLATE 7
SEPTEMBER 30, 1994

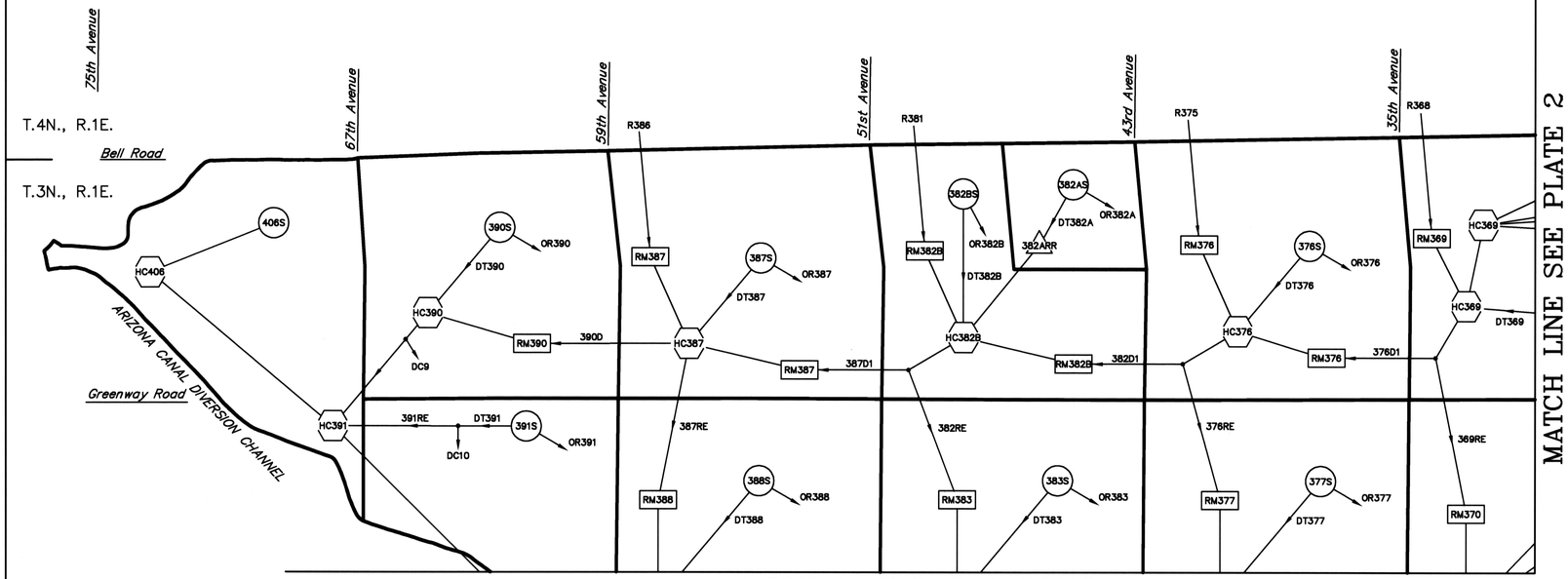
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588


T.5N., R.2E.
T.5N., R.3E.
Dynamite Boulevard
T.N5., R.2E.
T.4N., R.2E.
Jomax Road
T.N5., R.3E.
T.4N., R.3E.
Happy Valley Road
Pinnacle Peak Road
Deer Valley Road
Beardsley Road
Outer Loop Highway
ADOBE DAM
CENTRAL ARIZONA PROJECT CANAL
43rd Avenue
35th Avenue
Black Canyon Highway I-17
19th Avenue
7th Avenue
7th Street
T.4N., R.2E.
T.4N., R.3E.
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
345
346
347
348
1517
1512
1516
1514
1515
1518
1464
1440
1458
1486
1412
1417
1419
1438
1446
1494
1706
1894
1398
1410
1402
1444
1472
1470
1448
1404
1428
1454
1382
1422
1436
1469
1388
1369
1392
1390
1356
1398
1408
1414
1415
1423
1435
1450
1434
1399
1413
1318
1330
1350
1328
1344
1302
2000
1955
1960
2240
2270
1898
1774
1547
1526
1528
1491
1454
1438
1448
1428
1436
1434
1390
1396
1516
1514
1547
1514
1516
1526
1516
1514
1516
1514
1516
1514

T.4N., R.1E. | T.4N., R.2E.

T.4N., R.1E.

T.3N., R.1E.



MATCH LINE SEE PLATE 3

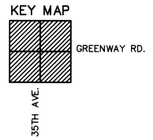
MATCH LINE SEE PLATE 2

T.4N., R.2E.

T.3N., R.2E.

T.3N., R.1E. | T.3N., R.2E.

KEY MAP



INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	
BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29		
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32		
BELL RD.	2	1	6	5	4	3	2	1	6	5		
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8		
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17		
CACTUS RD.	23	24	19	20	21	22	23	24	19	20		
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		DUNLAP AVE.
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32		
NORTHERN AVE.												

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC EXISTING CONDITIONS

PLATE 1
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

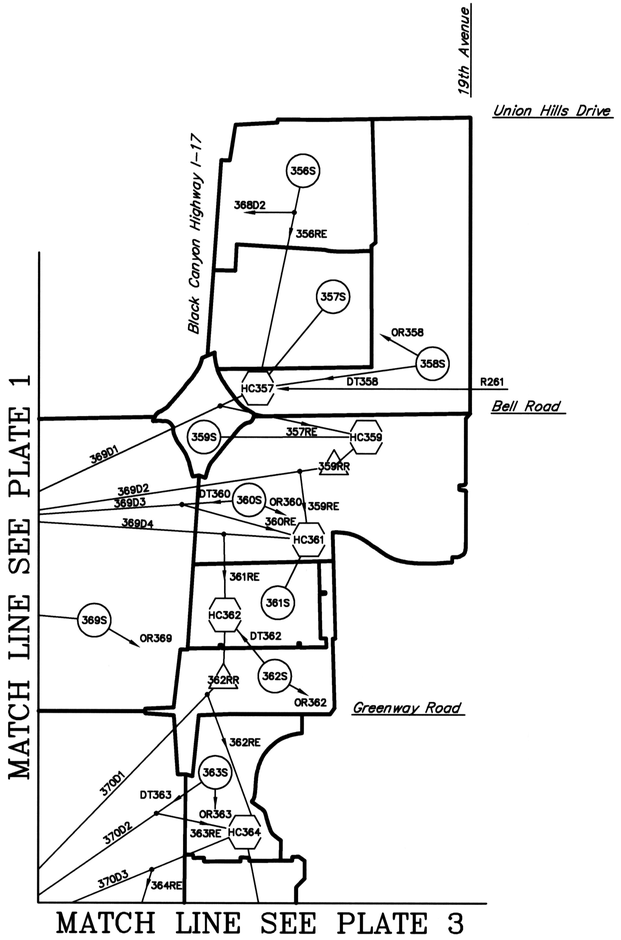
T.4N., R.2E. | T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

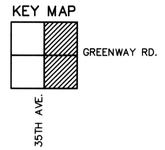
T.4N., R.3E.

T.3N., R.3E.



T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

BEARDSLEY RD.													
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29			
BELL RD.	35	36	31	32	33	34	35	36	31	32			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5			
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8			
CACTUS RD.	14	13	18	17	16	15	14	13	18	17			
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20			
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29			DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 2
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

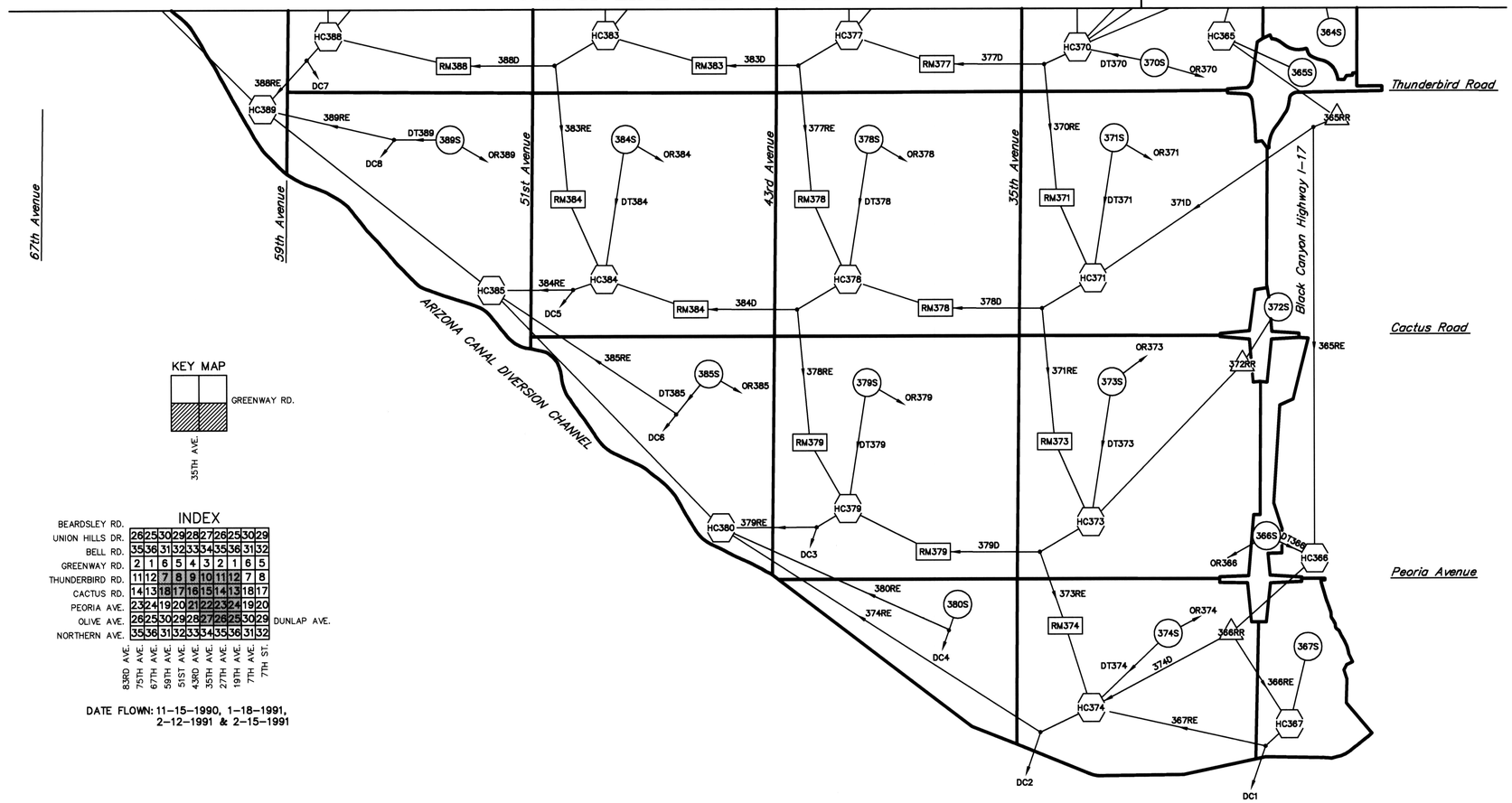
SCALE
1200 600 0 1200 2400
FEET

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 1

MATCH LINE SEE PLATE 2



KEY MAP

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	
BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29		
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32		
BELL RD.	2	1	6	5	4	3	2	1	6	5		
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8		
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17		
CACTUS RD.	23	24	19	20	21	22	23	24	19	20		
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		DUNLAP AVE.
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32		
NORTHERN AVE.												

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G/F — Divide Hydrograph into F and G

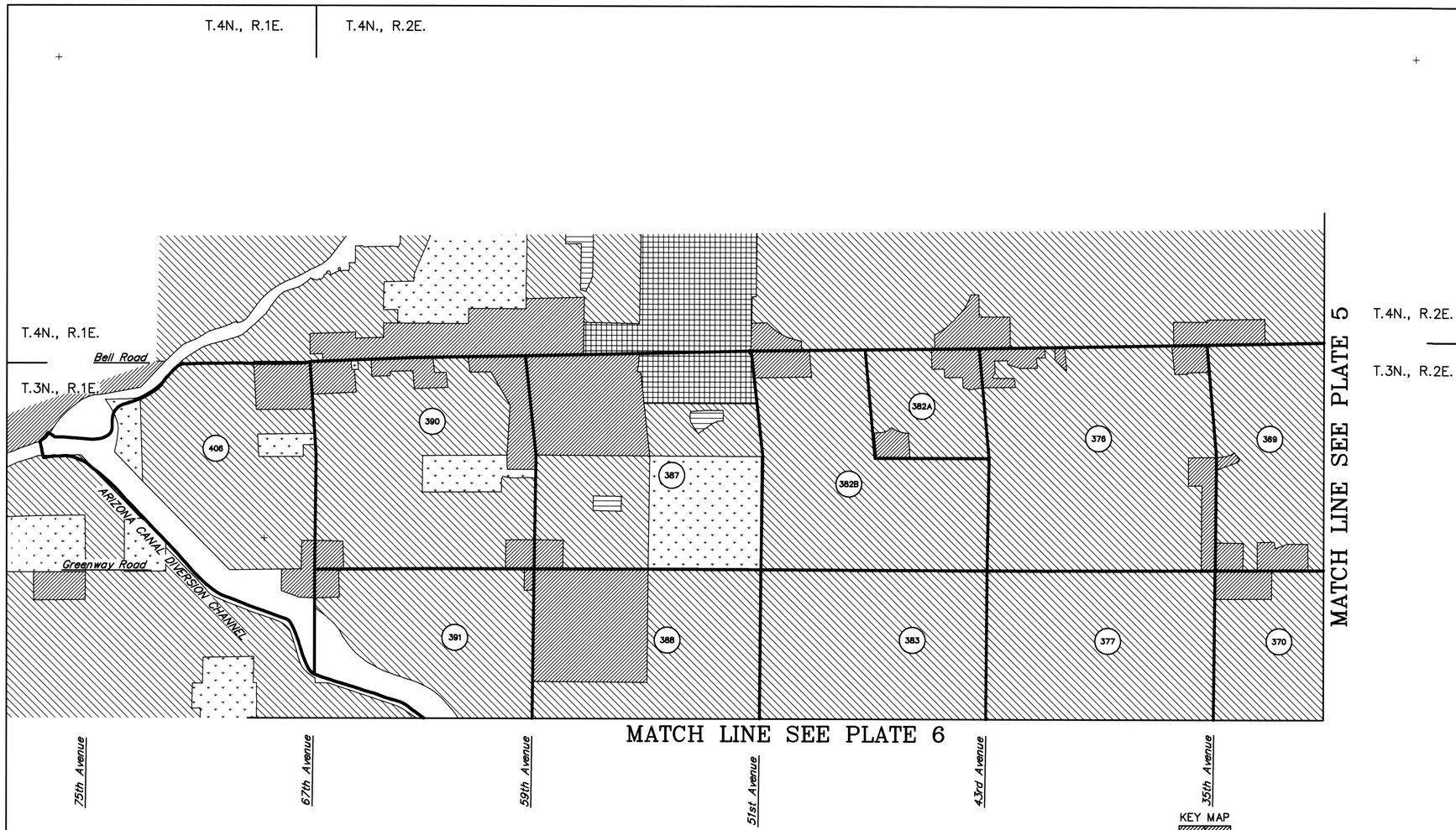
DRAINAGE AREA MAP & HEC-1 SCHEMATIC EXISTING CONDITIONS

PLATE 3
SEPTEMBER 30, 1994

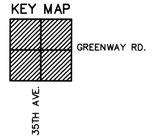
KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET



KEY MAP



INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	
BEARDSLEY RD.												
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29		
BELL RD.	35	36	31	32	33	34	35	36	31	32		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5		
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8		
CACTUS RD.	14	13	18	17	16	15	14	13	18	17		
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20		
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29		DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Industrial Land Use
- Agriculture
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 4
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

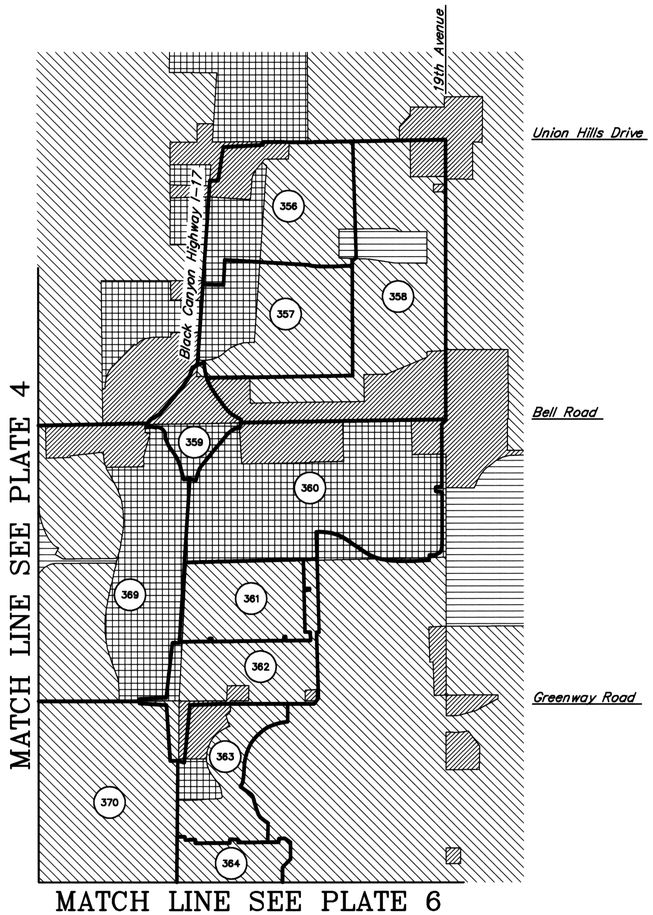
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

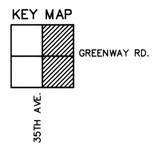


T.4N., R.3E.

T.3N., R.3E.

T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

BEARDSLEY RD.											
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	
BELL RD.	35	36	31	32	33	34	35	36	31	32	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8	
CACTUS RD.	14	13	18	17	16	15	14	13	18	17	
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32	
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 5
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 4

MATCH LINE SEE PLATE 5

KEY MAP

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.
BEARDSLEY RD.											
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	
BELL RD.	35	36	31	32	33	34	35	36	31	32	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8	
CACTUS RD.	14	13	18	17	16	15	14	13	18	17	
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Agriculture
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 6
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

Bell Road

T.3N., R.2E.

MATCH LINE SEE PLATE 8

Greenway Road

SKUNK CREEK

ARIZONA CANAL DIVERSION CHANNEL

Disposal Pit

406 390 387 388 391 382A 382B 376 377 383 369 370

MATCH LINE SEE PLATE 9

75th Avenue | 67th Avenue | 59th Avenue | 51st Avenue | 43rd Avenue | 35th Avenue

T.3N., R.1E. | T.3N., R.2E.

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	
BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29		
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32		
BELL RD.	2	1	6	5	4	3	2	1	6	5		
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8		
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17		
CACTUS RD.	23	24	19	20	21	22	23	24	19	20		
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		DUNLAP AVE.
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32		
NORTHERN AVE.												

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 7
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400

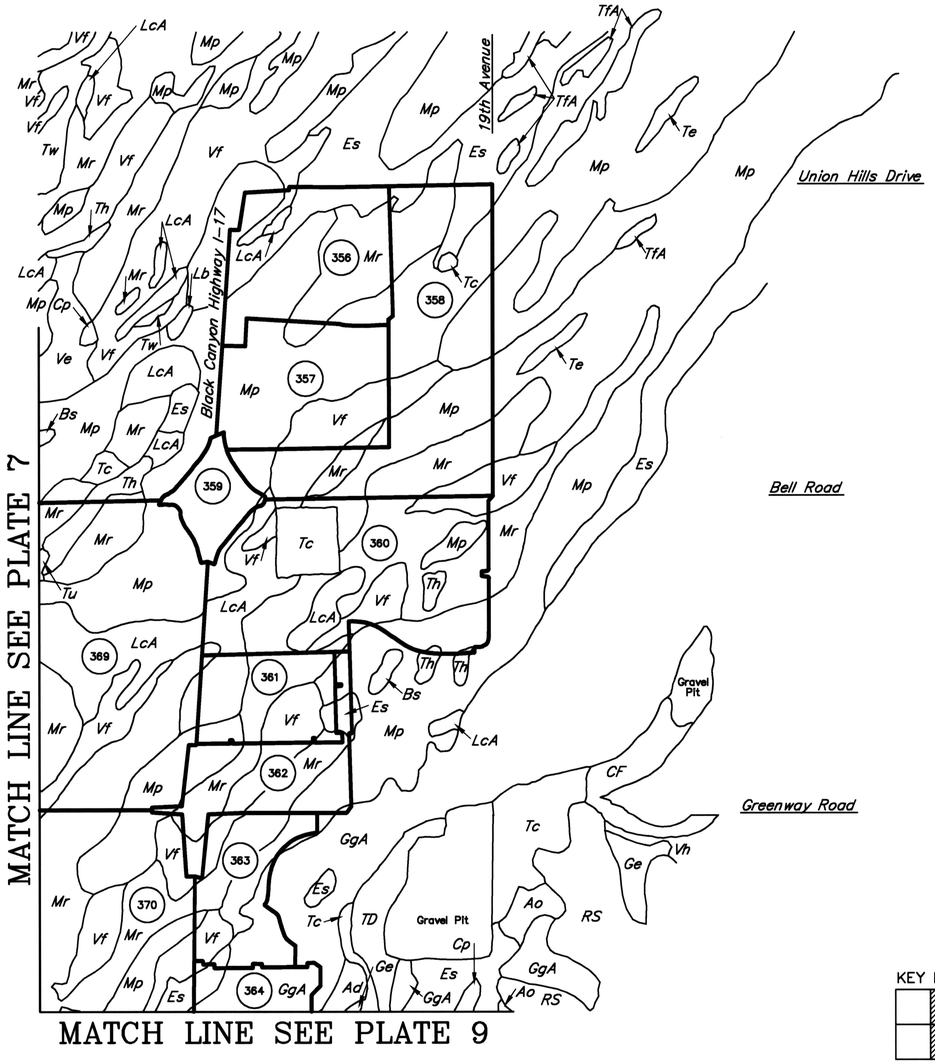
T.4N., R.2E. | T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

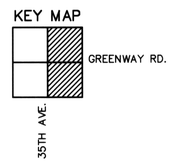
T.4N., R.3E.

T.3N., R.3E.



T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

BEARDSLEY RD.											
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	
BELL RD.	35	36	31	32	33	34	35	36	31	32	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8	
CACTUS RD.	14	13	18	17	16	15	14	13	18	17	
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32	
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.

DATE FLOWN: 11–15–1990, 1–18–1991, 2–12–1991 & 2–15–1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub–Basin Number
- CrB Soil Unit Boundary
- CO **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Aguila–Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 8
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242–5588

N

SCALE
1200 600 0 1200 2400

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

67th Avenue | 59th Avenue | 51st Avenue | 43rd Avenue | 35th Avenue | Black Canyon Highway I-17

MATCH LINE SEE PLATE 7

MATCH LINE SEE PLATE 8

Thunderbird Road

Cactus Road

Peoria Avenue

Dunlap Avenue

ARIZONA CANAL DIVERSION CHANNEL

Gravel Pit

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.
BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29	
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32	
BELL RD.	2	1	6	5	4	3	2	1	6	5	
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8	
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17	
CACTUS RD.	23	24	19	20	21	22	23	24	19	20	
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32	
NORTHERN AVE.											

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

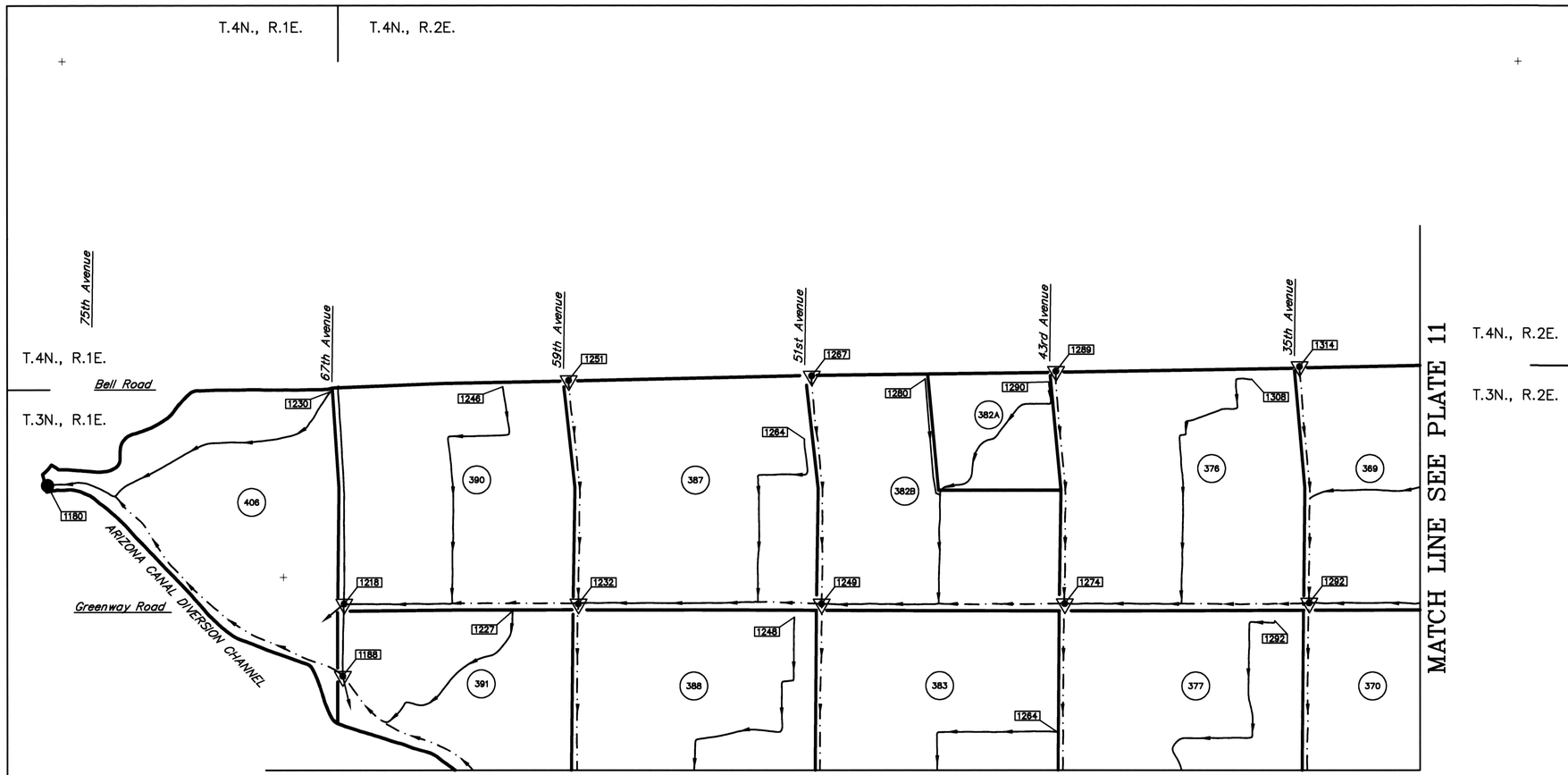
SOILS MAP
EXISTING CONDITIONS

PLATE 9
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400



INDEX

BEARDSLEY RD.												
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29		
BELL RD.	35	36	31	32	33	34	35	36	31	32		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5		
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8		
CACTUS RD.	14	13	18	17	16	15	14	13	18	17		
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20		
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.	
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 10
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.4N., R.2E.

T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

T.4N., R.3E.

T.3N., R.3E.

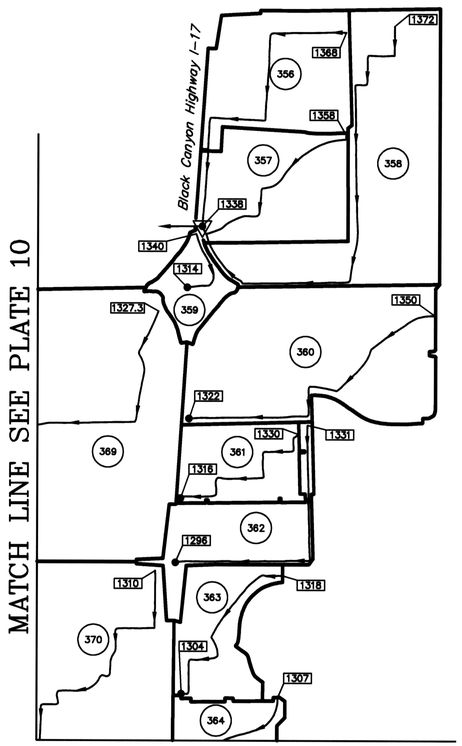
19th Avenue

Union Hills Drive

Black Canyon Highway I-17

Bell Road

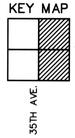
Greenway Road



MATCH LINE SEE PLATE 10

MATCH LINE SEE PLATE 12

KEY MAP



INDEX

BEARDSLEY RD.														
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29				
BELL RD.	35	36	31	32	33	34	35	36	31	32				
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5				
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8				
CACTUS RD.	14	13	18	17	16	15	14	13	18	17				
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20				
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.			
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32				
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.			

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 11
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.3N., R.2E.

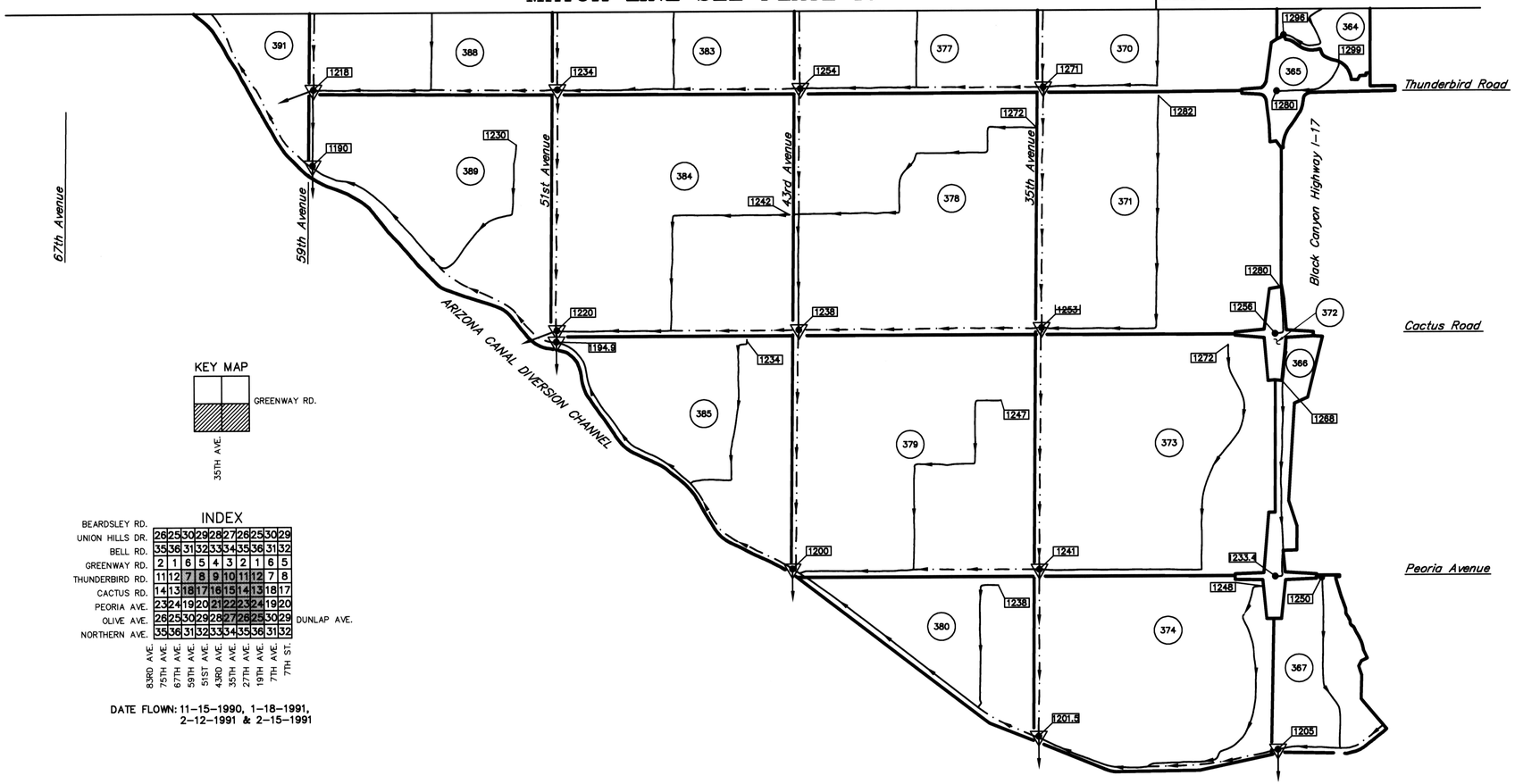
T.3N., R.3E.

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 10

MATCH LINE SEE PLATE 11



KEY MAP

INDEX

BEARDSLEY RD.													
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29			
BELL RD.	35	36	31	32	33	34	35	36	31	32			
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5			
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8			
CACTUS RD.	14	13	18	17	16	15	14	13	18	17			
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20			
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29			DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32			
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

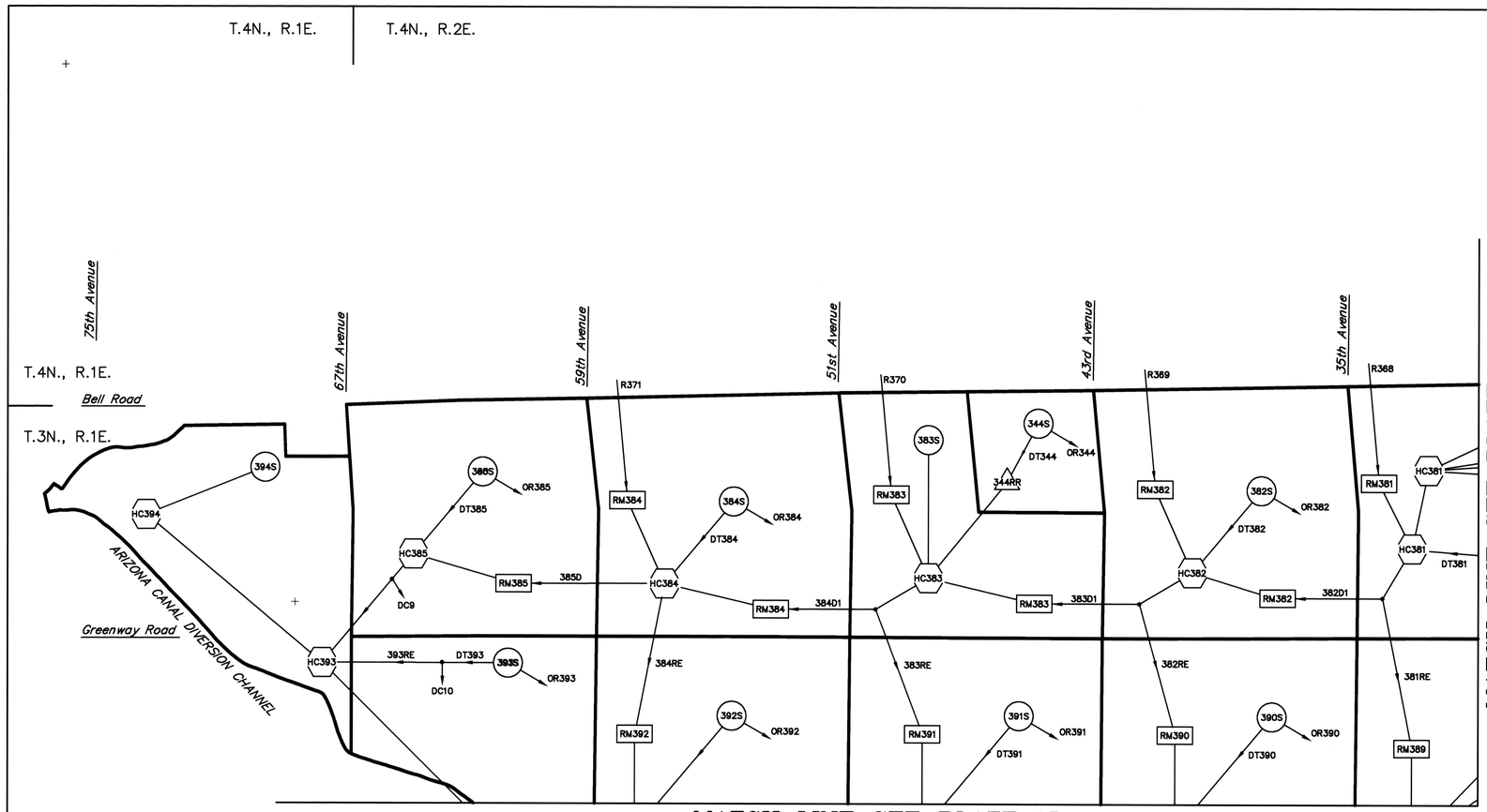
PLATE 12
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

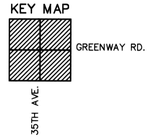
N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET



KEY MAP



INDEX

BEARDSLEY RD.												
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29		
BELL RD.	35	36	31	32	33	34	35	36	31	32		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5		
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8		
CACTUS RD.	14	13	18	17	16	15	14	13	18	17		
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20		
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.	
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

PLATE 13
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

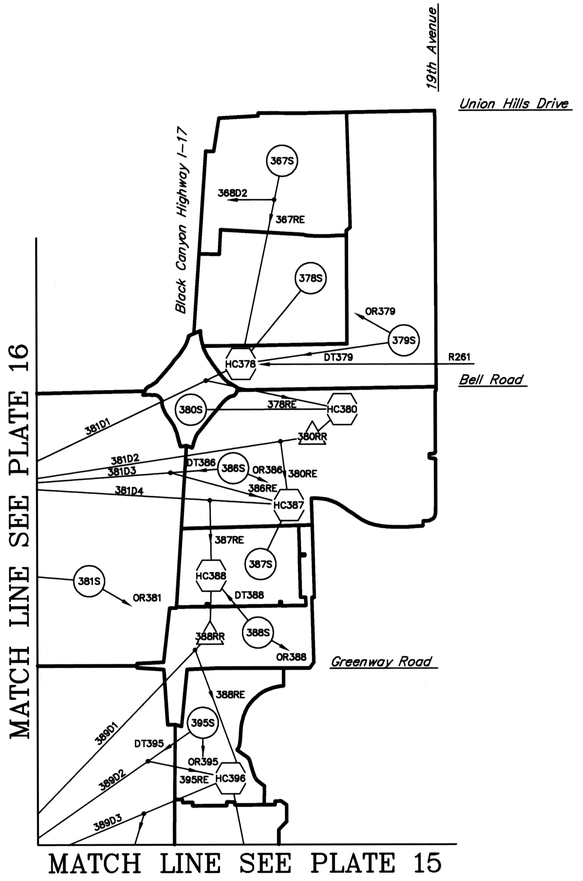
T.4N., R.2E. | T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

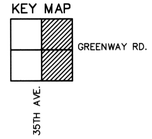
T.4N., R.3E.

T.3N., R.3E.



T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

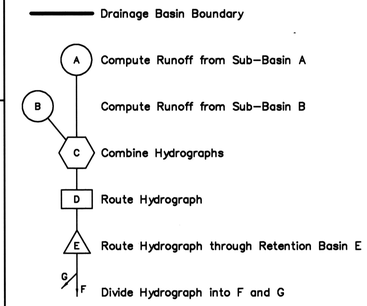
BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29			
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32			
BELL RD.	2	1	6	5	4	3	2	1	6	5			
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8			
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17			
CACTUS RD.	23	24	19	20	21	22	23	24	19	20			
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29			
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32			
NORTHERN AVE.													
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.		DUNLAP AVE.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

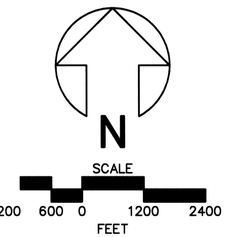
LEGEND



DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

PLATE 14
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

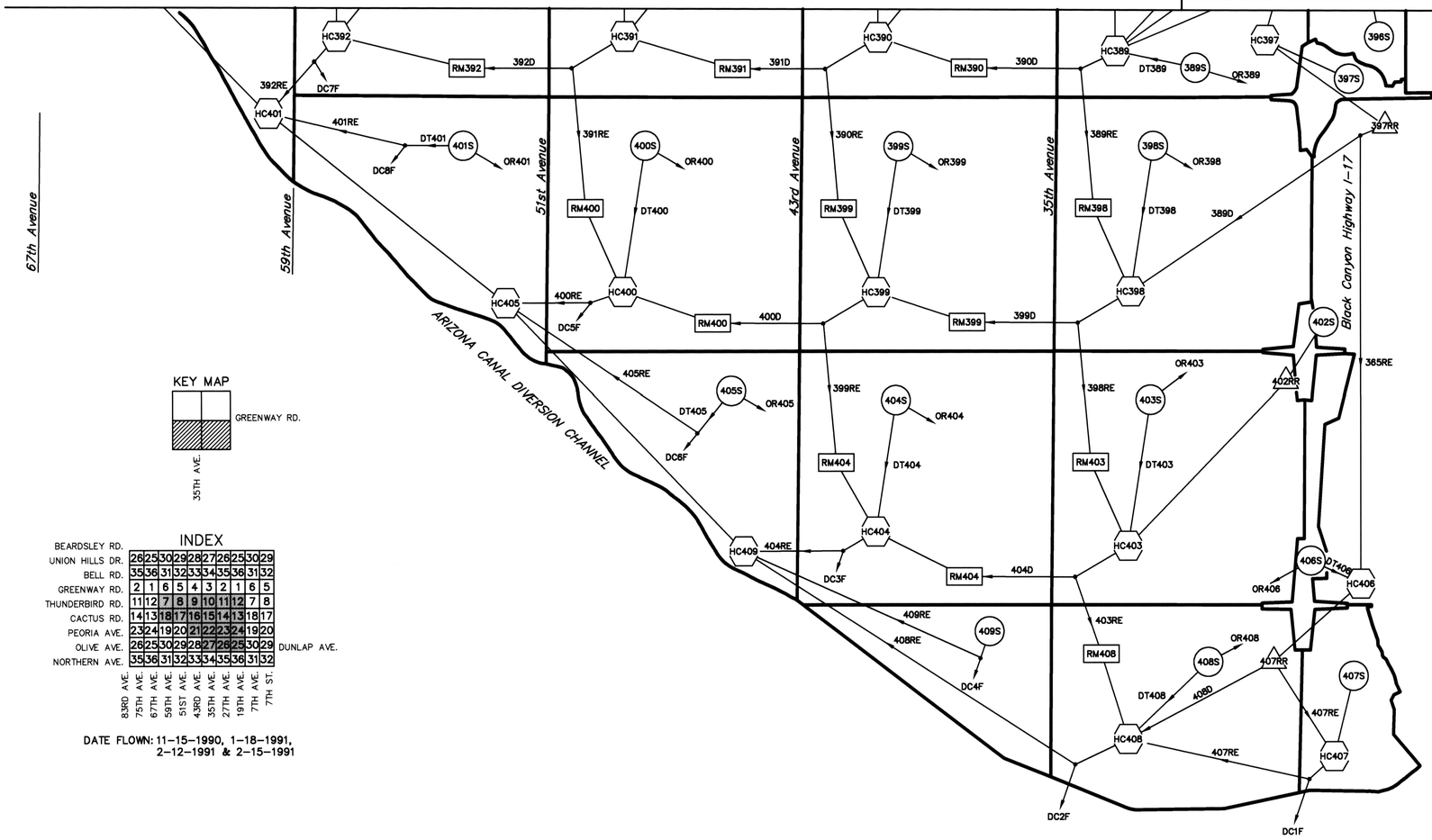


T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 13

MATCH LINE SEE PLATE 14



KEY MAP

INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	
BEARDSLEY RD.												
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29		
BELL RD.	35	36	31	32	33	34	35	36	31	32		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5		
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8		
CACTUS RD.	14	13	18	17	16	15	14	13	18	17		
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20		
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29		DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32		

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

PLATE 15
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

T.4N., R.1E.

Bell Road

T.3N., R.1E.

ARIZONA CANAL DIVERSION CHANNEL

Greenway Road

394 385 384 383 344 382 381

393 392 391 390 389

MATCH LINE SEE PLATE 18

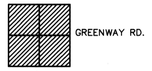
T.4N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 17

75th Avenue | 67th Avenue | 59th Avenue | 51st Avenue | 43rd Avenue | 35th Avenue

KEY MAP



INDEX

	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	
BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29		
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32		
BELL RD.	2	1	6	5	4	3	2	1	6	5		
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8		
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17		
CACTUS RD.	23	24	19	20	21	22	23	24	19	20		
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		DUNLAP AVE.
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32		
NORTHERN AVE.												

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Industrial Land Use
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 16
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

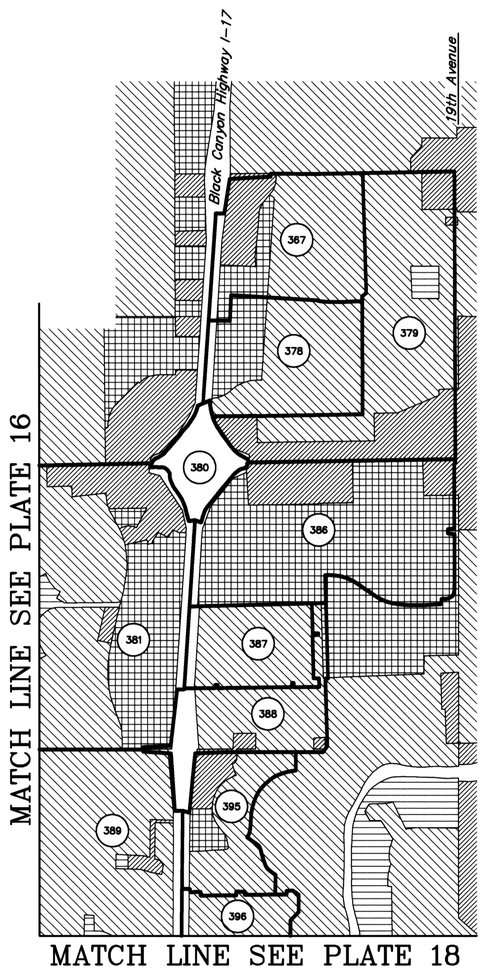
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

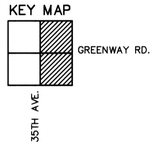


T.4N., R.3E.

T.3N., R.3E.

T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29	
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32	
BELL RD.	2	1	6	5	4	3	2	1	6	5	
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8	
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17	
CACTUS RD.	23	24	19	20	21	22	23	24	19	20	
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32	
NORTHERN AVE.											
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 17
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 16

MATCH LINE SEE PLATE 17

KEY MAP

INDEX

BEARDSLEY RD.														
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29				
BELL RD.	35	36	31	32	33	34	35	36	31	32				
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5				
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8				
CACTUS RD.	14	13	18	17	16	15	14	13	18	17				
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20				
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.			
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32				
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.			

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Agriculture
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 18
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.1E. | T.4N., R.2E.

T.4N., R.1E.

T.3N., R.1E.

T.4N., R.2E.

Bell Road

T.3N., R.2E.

MATCH LINE SEE PLATE 20

Greenway Road

MATCH LINE SEE PLATE 21

75th Avenue | 67th Avenue | 59th Avenue | 51st Avenue | 43rd Avenue | 35th Avenue

SKUNK CREEK

ARIZONA CANAL DIVERSION CHANNEL

Disposal Pit

394 | 385 | 384 | 383 | 382 | 381 | 393 | 392 | 391 | 390 | 389

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

BEARDSLEY RD.												
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29		
BELL RD.	35	36	31	32	33	34	35	36	31	32		
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5		
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8		
CACTUS RD.	14	13	18	17	16	15	14	13	18	17		
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20		
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.	
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32		
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 19
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

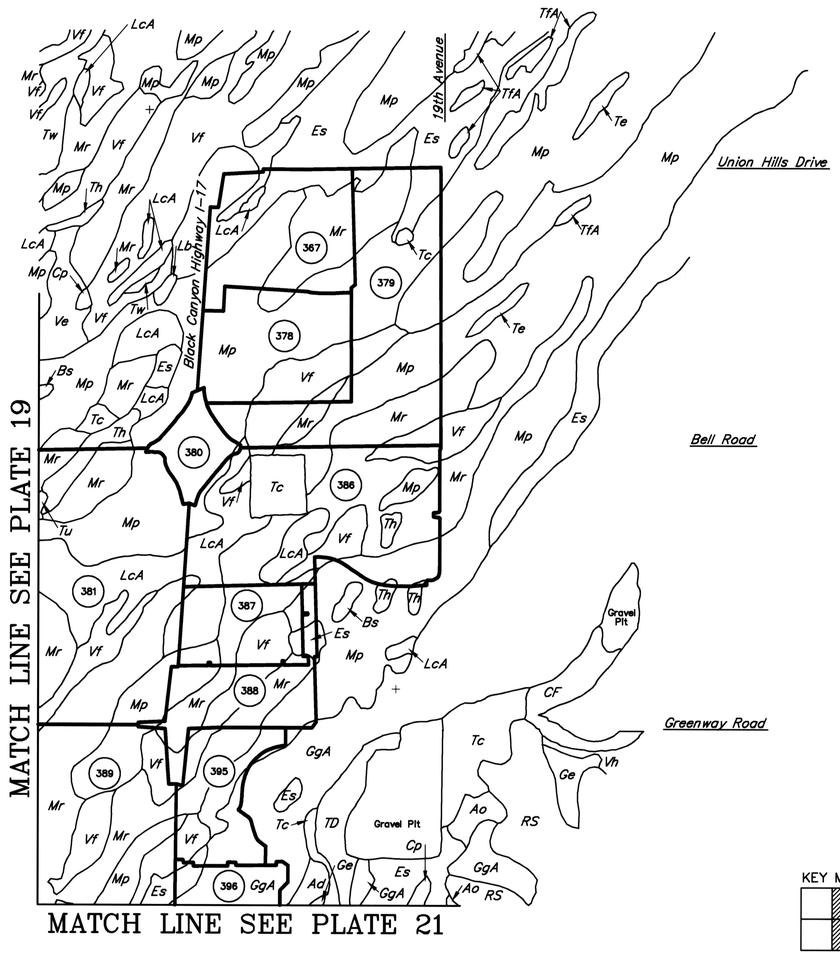
N

SCALE
1200 600 0 1200 2400

T.4N., R.2E. | T.4N., R.3E.

T.4N., R.2E.

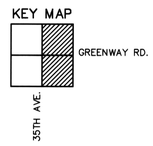
T.3N., R.2E.



T.4N., R.3E.

T.3N., R.3E.

KEY MAP



INDEX

BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29		
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32		
BELL RD.	2	1	6	5	4	3	2	1	6	5		
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8		
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17		
CACTUS RD.	23	24	19	20	21	22	23	24	19	20		
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.	
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32		
NORTHERN AVE.												
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	

DATE FLOWN: 11–15–1990, 1–18–1991, 2–12–1991 & 2–15–1991

T.3N., R.2E. | T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub–Basin Number
- CrB Soil Unit Boundary
- CO **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Aguila–Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 20
SEPTEMBER 30, 1994

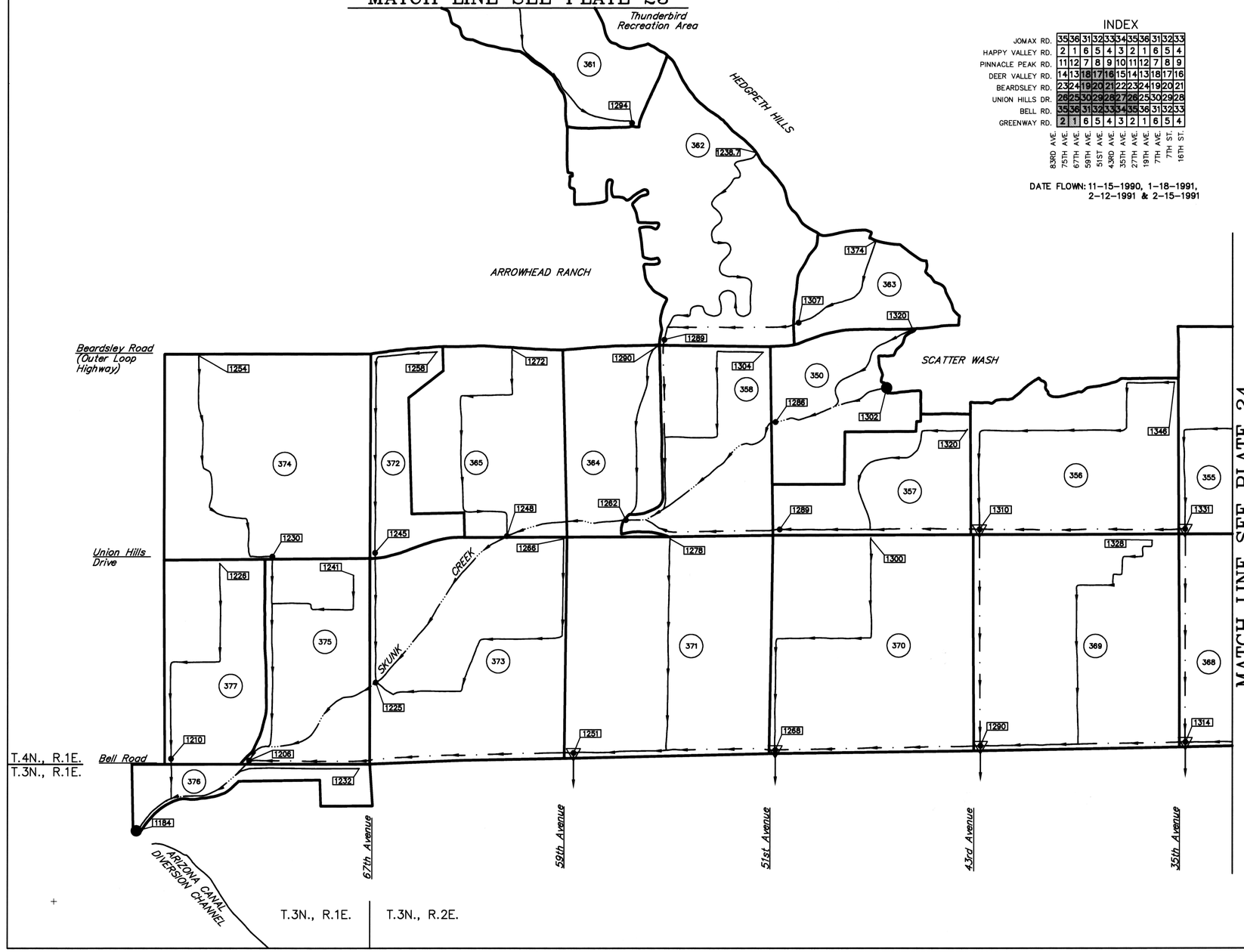
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242–5588

N

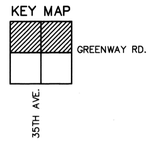
SCALE
1200 600 0 1200 2400

T.4N., R.1E. | T.4N., R.2E.

MATCH LINE SEE PLATE 23



KEY MAP



INDEX

JOMAX RD.	35	36	31	32	33	34	35	36	31	32	33
HAPPY VALLEY RD.	2	1	6	5	4	3	2	1	6	5	4
PINNACLE PEAK RD.	11	12	7	8	9	10	11	12	7	8	9
DEER VALLEY RD.	14	13	18	17	16	15	14	13	18	17	16
BEARDSLEY RD.	23	24	19	20	21	22	23	24	19	20	21
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	28
BELL RD.	35	36	31	32	33	34	35	36	31	32	33
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	4
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path
- Major Water Course

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 22
SEPTEMBER 30, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.1E. | T.3N., R.2E. | T.3N., R.2E.

67th Avenue | 59th Avenue | 51st Avenue | 43rd Avenue | 35th Avenue | Black Canyon Highway I-17

MATCH LINE SEE PLATE 19

MATCH LINE SEE PLATE 20

Thunderbird Road

Cactus Road

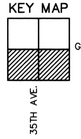
Peoria Avenue

Dunlap Avenue

ARIZONA CANAL DIVERSION CHANNEL

Gravel Pit

KEY MAP



INDEX

BEARDSLEY RD.	26	25	30	29	28	27	26	25	30	29					
UNION HILLS DR.	35	36	31	32	33	34	35	36	31	32					
BELL RD.	2	1	6	5	4	3	2	1	6	5					
GREENWAY RD.	11	12	7	8	9	10	11	12	7	8					
THUNDERBIRD RD.	14	13	18	17	16	15	14	13	18	17					
CACTUS RD.	23	24	19	20	21	22	23	24	19	20					
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29					
OLIVE AVE.	35	36	31	32	33	34	35	36	31	32					
NORTHERN AVE.															
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST				

DUNLAP AVE.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 21
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400

T.3N., R.1E. | T.3N., R.2E. | T.3N., R.2E.

T.4N., R.1E. | T.4N., R.2E.

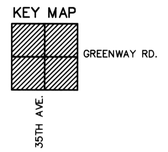
T.4N., R.1E. | T.4N., R.2E.

T.3N., R.1E. | T.3N., R.2E.

MATCH LINE SEE PLATE 23

MATCH LINE SEE PLATE 24

KEY MAP



INDEX

BEARDSLEY RD.										
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29
BELL RD.	35	36	31	32	33	34	35	36	31	32
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8
CACTUS RD.	14	13	18	17	16	15	14	13	18	17
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.

DUNLAP AVE.

7TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 22
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.4N., R.2E.

T.4N., R.3E.

T.4N., R.2E.

T.3N., R.2E.

T.4N., R.3E.

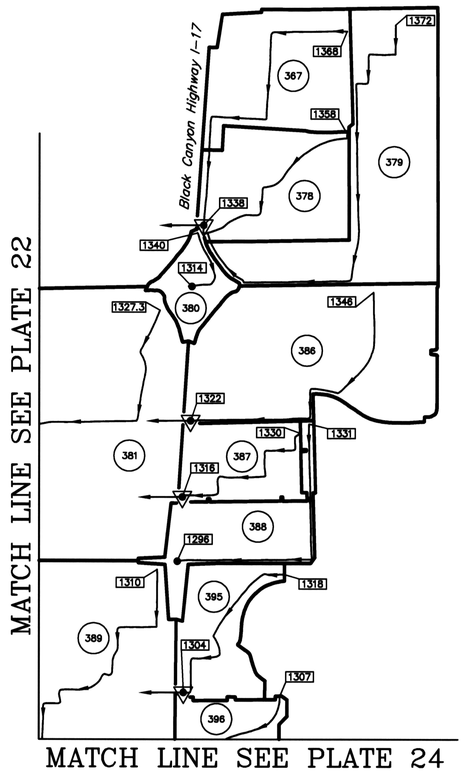
T.3N., R.3E.

19th Avenue

Union Hills Drive

Black Canyon Highway I-17

Bell Road

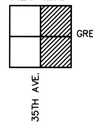


MATCH LINE SEE PLATE 22

MATCH LINE SEE PLATE 24

Greenway Road

KEY MAP



INDEX

BEARDSLEY RD.														
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29				
BELL RD.	35	36	31	32	33	34	35	36	31	32				
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5				
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8				
CACTUS RD.	14	13	18	17	16	15	14	13	18	17				
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20				
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29				DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32				
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST			

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.2E.

T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 23
SEPTEMBER 30, 1994

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

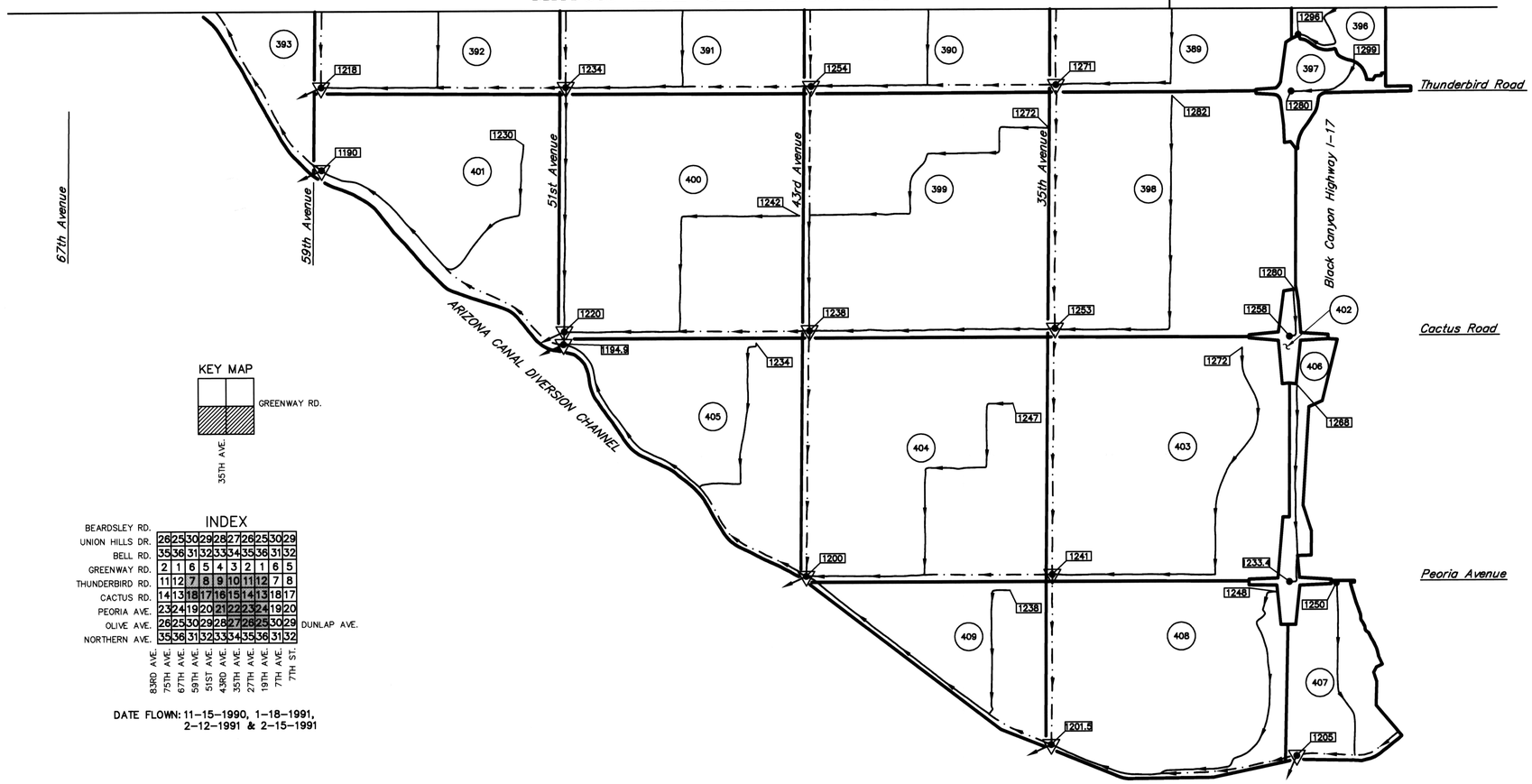
CONTOUR INTERVAL 10 FEET

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

MATCH LINE SEE PLATE 22

MATCH LINE SEE PLATE 23



KEY MAP

INDEX

BEARDSLEY RD.											
UNION HILLS DR.	26	25	30	29	28	27	26	25	30	29	
BELL RD.	35	36	31	32	33	34	35	36	31	32	
GREENWAY RD.	2	1	6	5	4	3	2	1	6	5	
THUNDERBIRD RD.	11	12	7	8	9	10	11	12	7	8	
CACTUS RD.	14	13	18	17	16	15	14	13	18	17	
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	
OLIVE AVE.	26	25	30	29	28	27	26	25	30	29	DUNLAP AVE.
NORTHERN AVE.	35	36	31	32	33	34	35	36	31	32	
	83RD AVE.	75TH AVE.	67TH AVE.	59TH AVE.	51ST AVE.	43RD AVE.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.1E. | T.3N., R.2E.

T.3N., R.2E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK TO SKUNK CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 24
SEPTEMBER 30, 1994

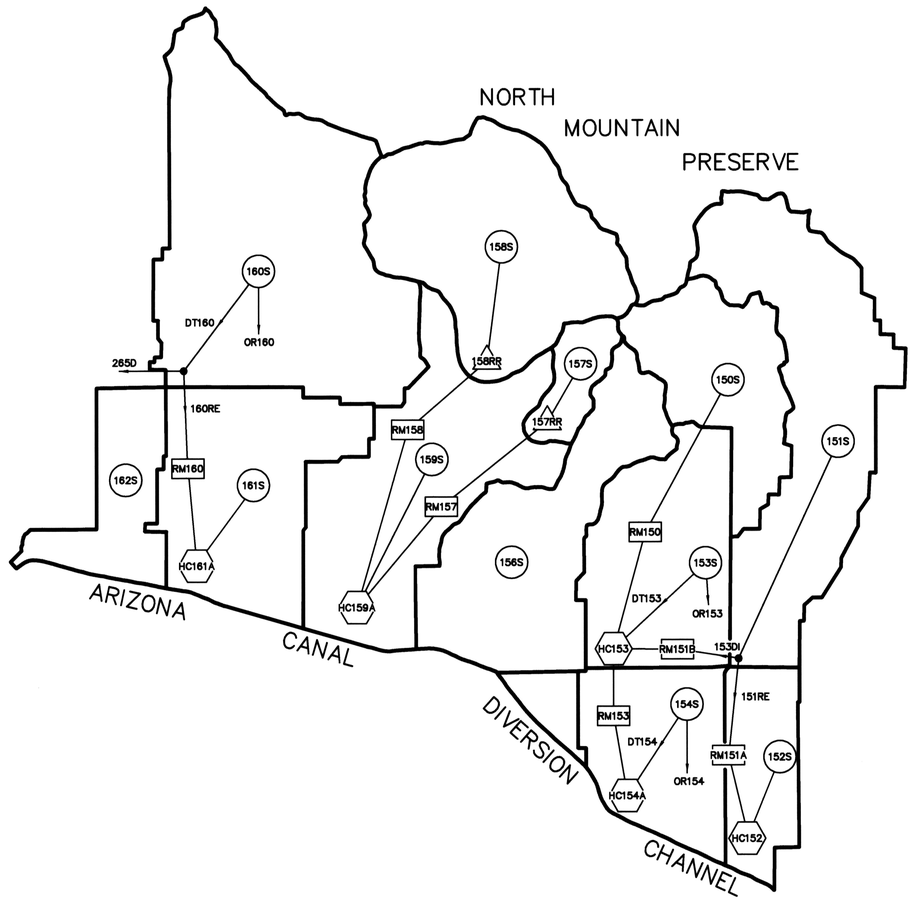
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

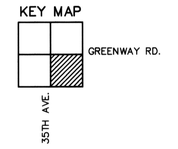
CONTOUR INTERVAL 10 FEET

T.3N., R.2E. | T.3N., R.3E.



T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.		CHAPARRAL RD.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.2E.

T.2N., R.2E.

T.2N., R.2E. | T.2N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH TO CAVE CREEK WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC

EXISTING & FUTURE CONDITIONS

PLATE 1

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

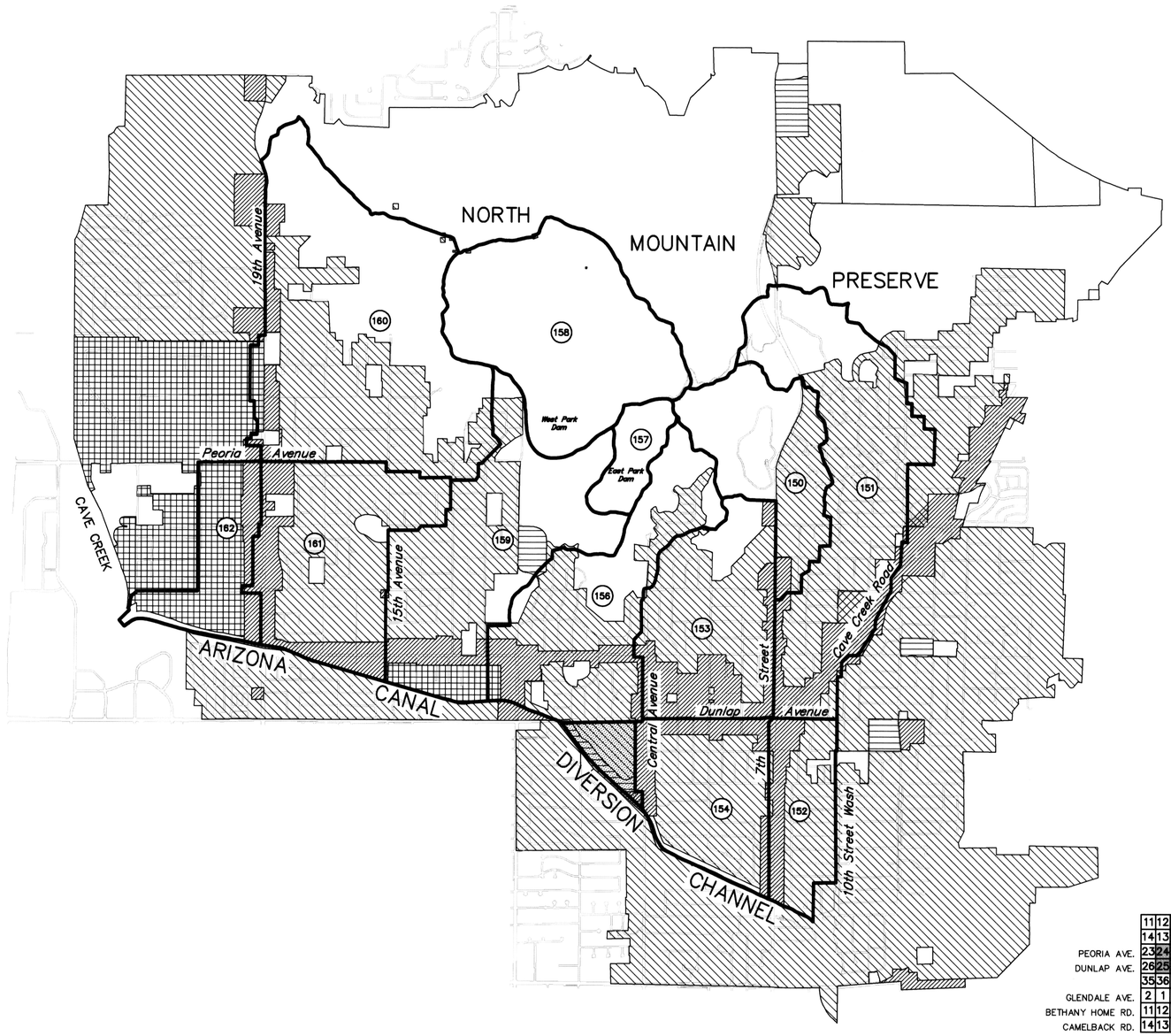
N

SCALE

1200 600 0 1200 2400

FEET

T.3N., R.2E. | T.3N., R.3E.



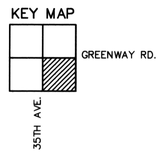
T.3N., R.3E.

T.3N., R.2E.

T.2N., R.2E.

T.2N., R.2E. | T.2N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.						

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH TO CAVE CREEK WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Vacant Land Use
- (150) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 2

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.2E. | T.3N., R.3E.

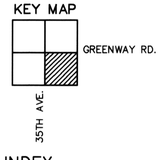
T.3N., R.3E.

T.3N., R.2E.

T.2N., R.2E.

T.2N., R.2E. | T.2N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
DUNLAP AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	CHAPARRAL RD.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH TO CAVE CREEK WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (150) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Maricopa County, Arizona
  Central Part
- 109 Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Aguila-Carefree Area
  Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING & FUTURE CONDITIONS

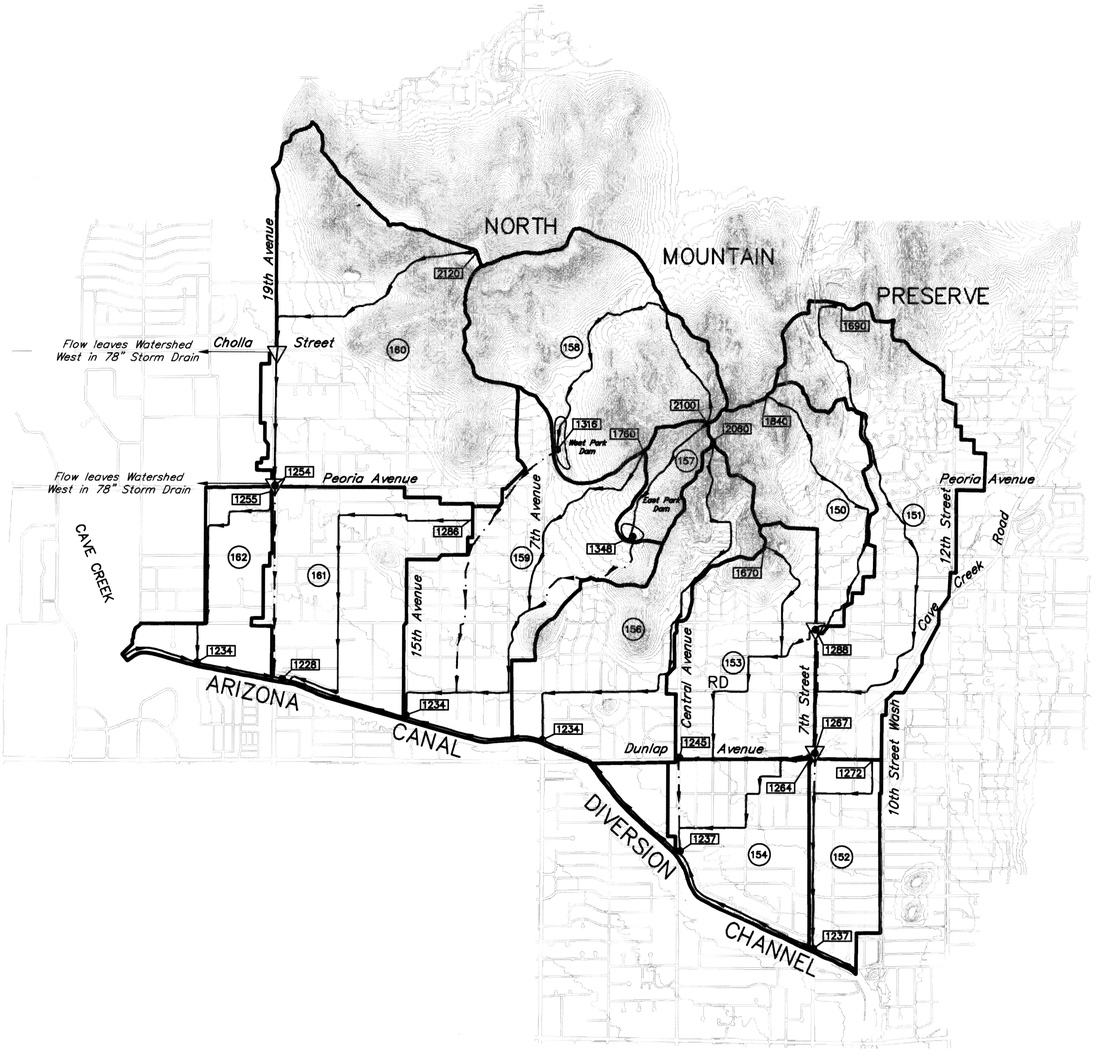
PLATE 3

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400

T.3N., R.2E. | T.3N., R.3E.



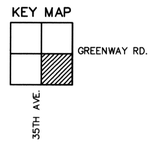
T.3N., R.2E.

T.2N., R.2E.

T.2N., R.2E. | T.2N., R.3E.

T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.

DATE FLOWN: 11-15-1990 & 8-23-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH TO CAVE CREEK WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (150) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING & FUTURE CONDITIONS

PLATE 4

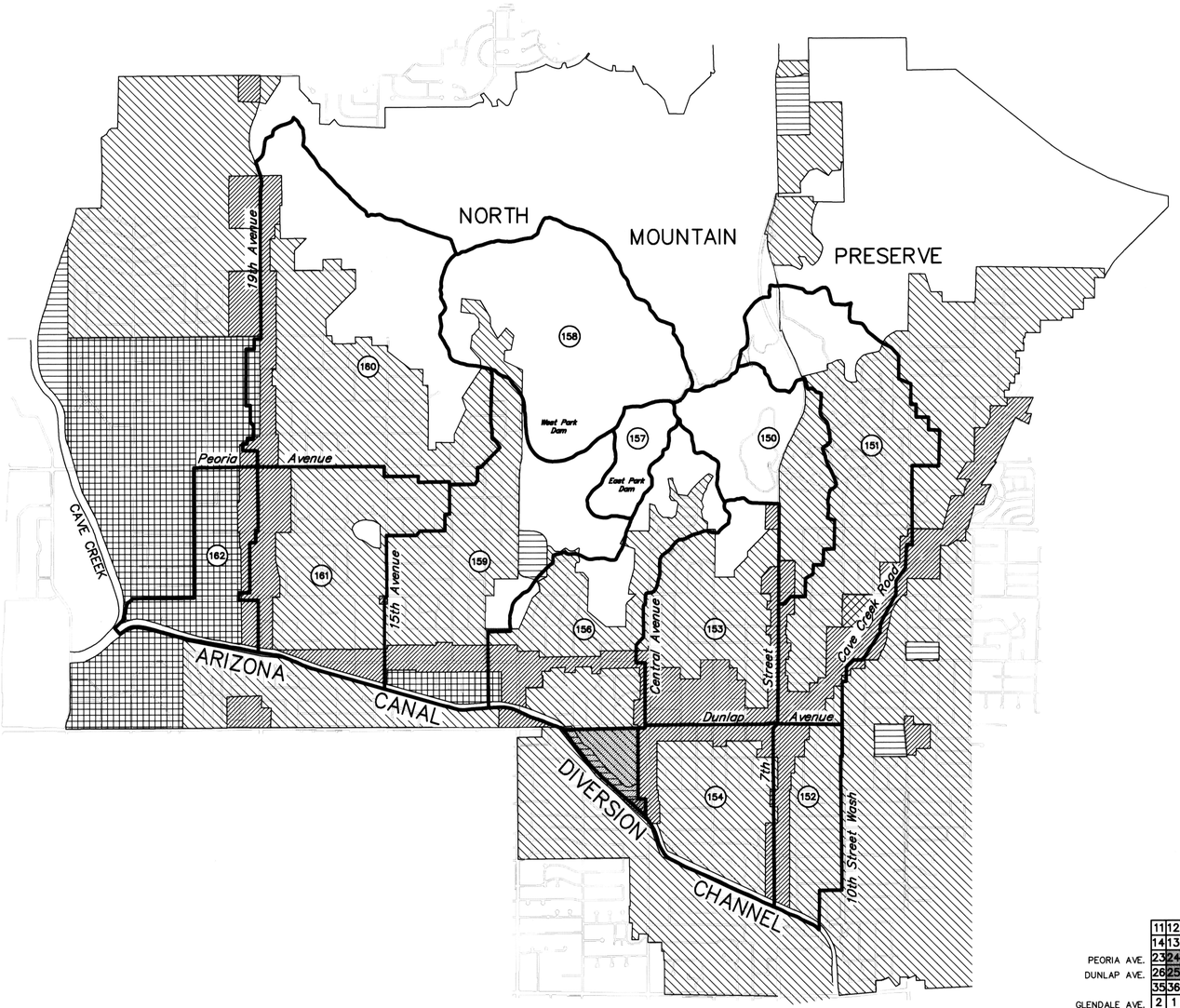
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.3N., R.2E. | T.3N., R.3E.



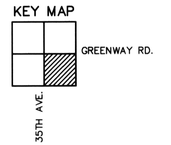
T.3N., R.3E.

T.3N., R.2E.

T.2N., R.2E.

T.2N., R.2E. | T.2N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	CHAPARRAL RD.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH TO CAVE CREEK WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Vacant Land Use
- (150) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 5

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

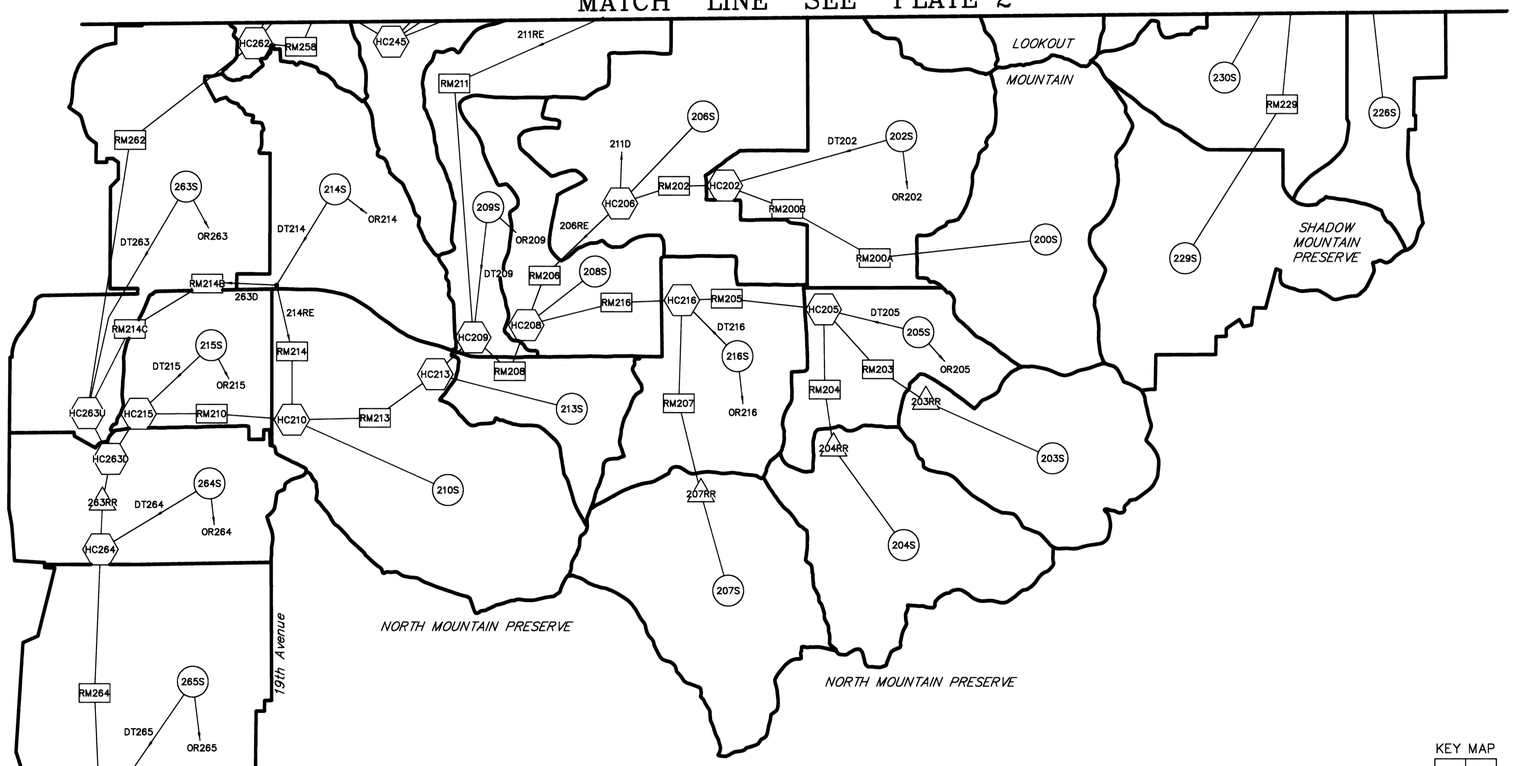
N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.2E.

T.3N., R.3E.

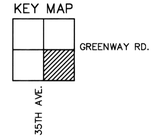
MATCH LINE SEE PLATE 2



T.3N., R.2E.

T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 1
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

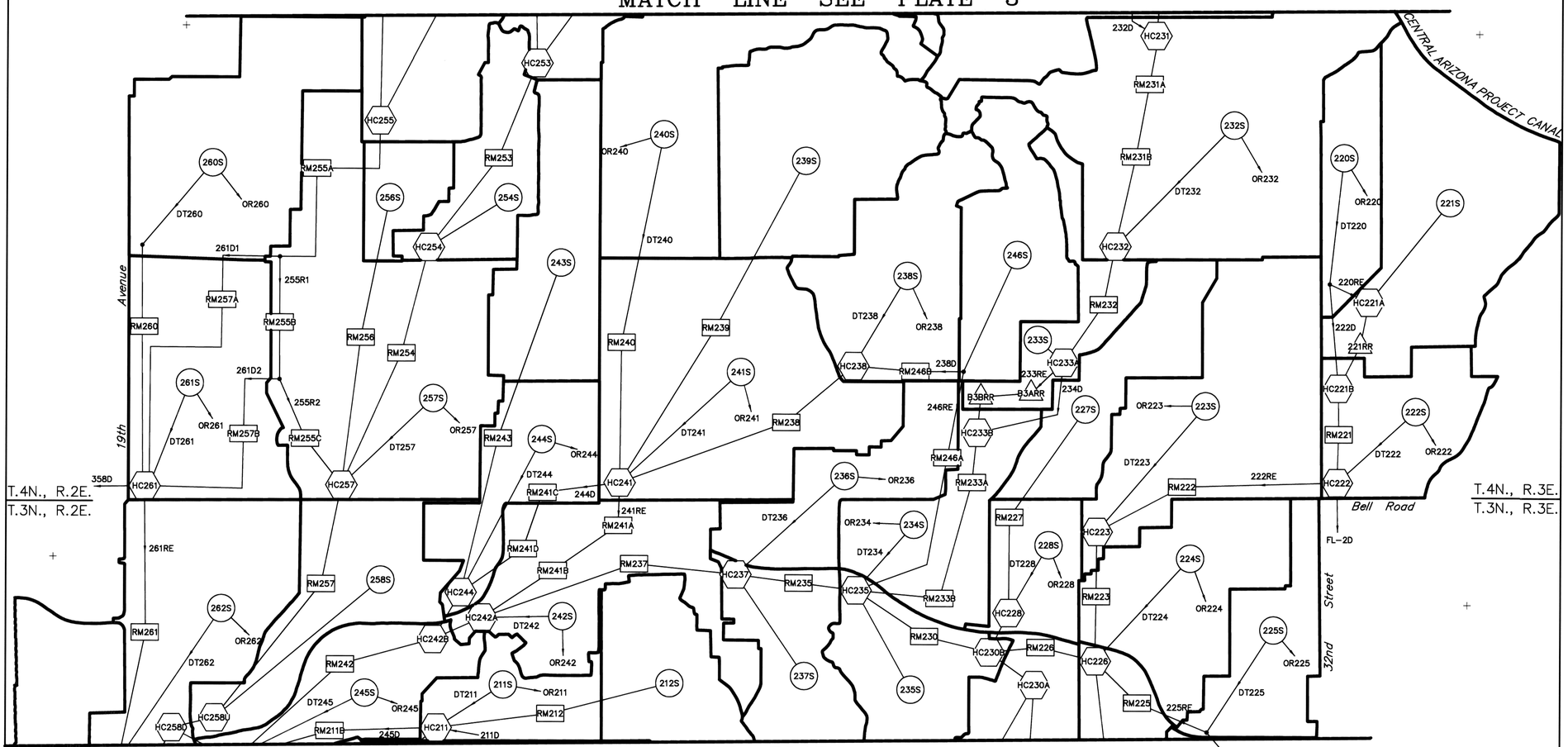
N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E.

T.4N., R.3E.

MATCH LINE SEE PLATE 3

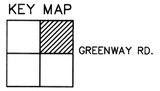


T.4N., R.2E.
T.3N., R.2E.

T.4N., R.3E.
T.3N., R.3E.

MATCH LINE SEE PLATE 1

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.

35TH AVE. 27TH AVE. 19TH AVE. 7TH AVE. 7TH ST. 16TH ST. 24TH ST. 32ND ST. 40TH ST. 48TH ST. 56TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

T.3N., R.2E.

T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1
CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP
&
HEC-1 SCHEMATIC
EXISTING CONDITIONS

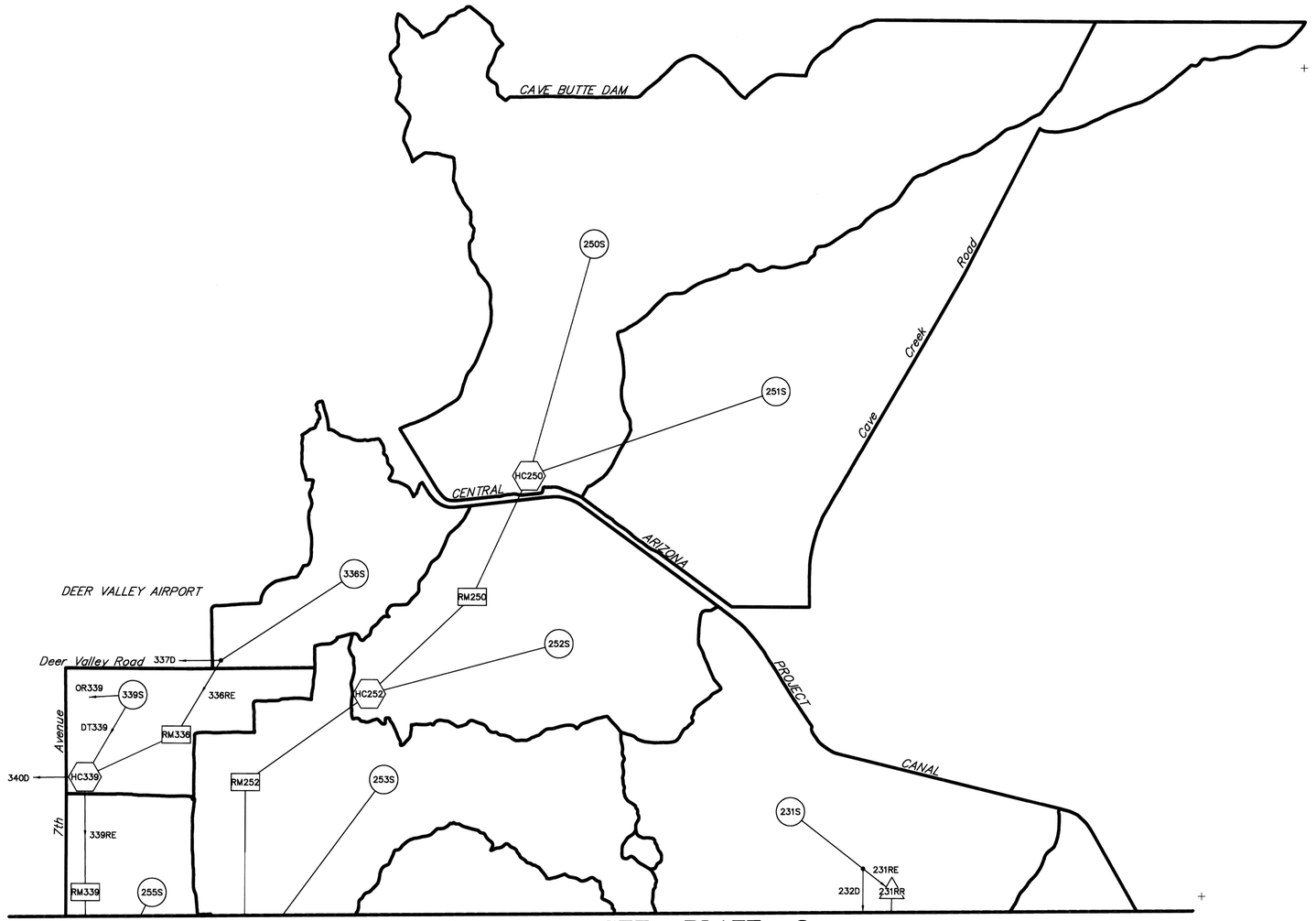
PLATE 2
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

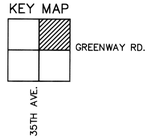
T.4N., R.3E.



MATCH LINE SEE PLATE 2

T.4N., R.3E.

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 3
MAY 21, 1993

KAMINSKI HUBBARD engineering,inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

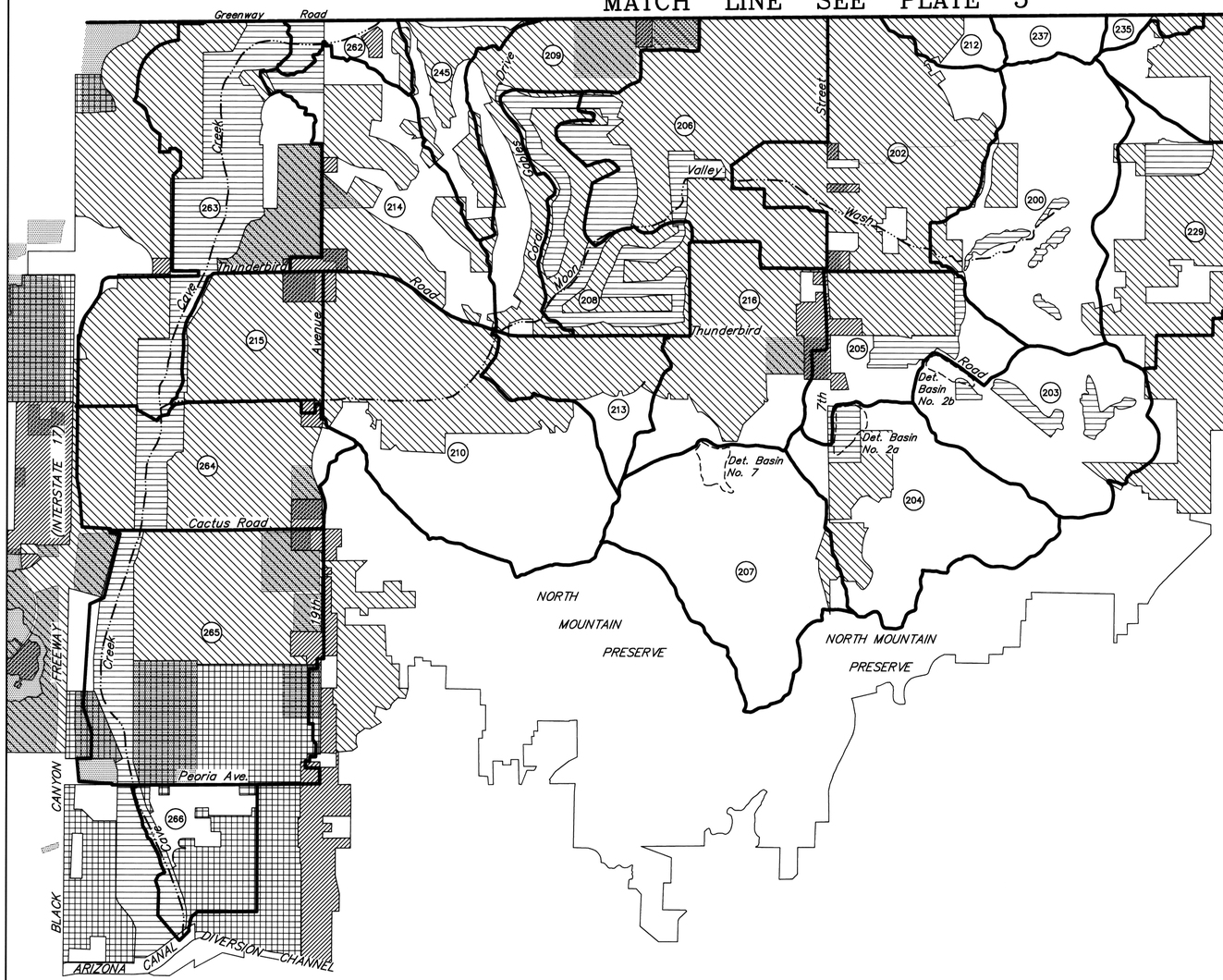
N

SCALE
1200 600 0 1200 2400
FEET

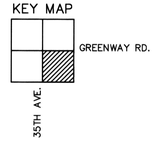
T.3N., R.2E.

T.3N., R.3E.

MATCH LINE SEE PLATE 5



KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
DUNLAP AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.					

DATE FLOWN: 11–15–1990, 1–18–1991, 2–12–1991 & 2–15–1991

T.3N., R.2E.

T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub–Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 4
MAY 21, 1993

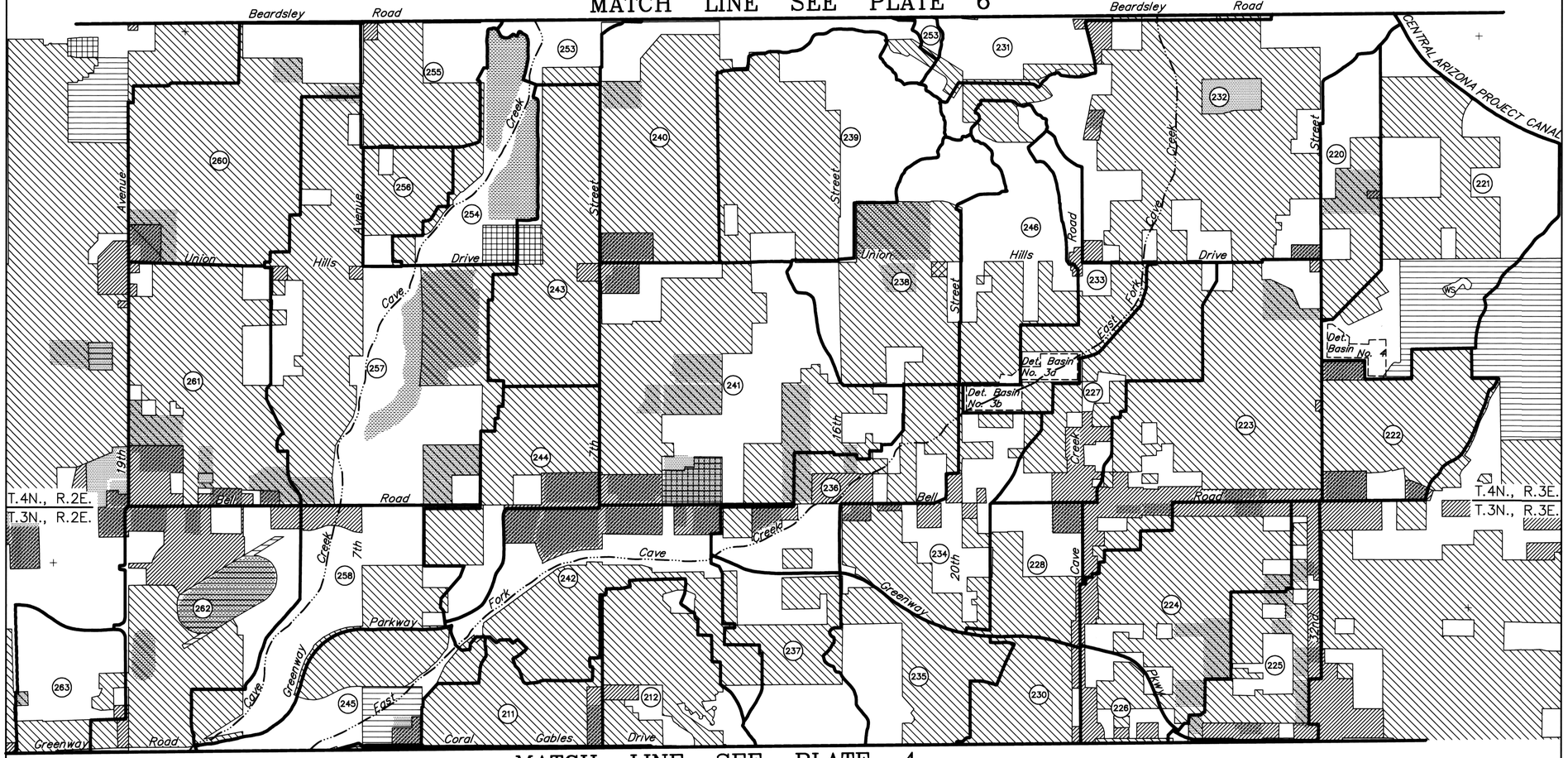
KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.

MATCH LINE SEE PLATE 6



T.4N., R.2E.
T.3N., R.2E.

T.4N., R.3E.
T.3N., R.3E.

MATCH LINE SEE PLATE 4

KEY MAP

INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

T.3N., R.2E. | T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number
- WS Water Surface

LAND USE MAP
EXISTING CONDITIONS

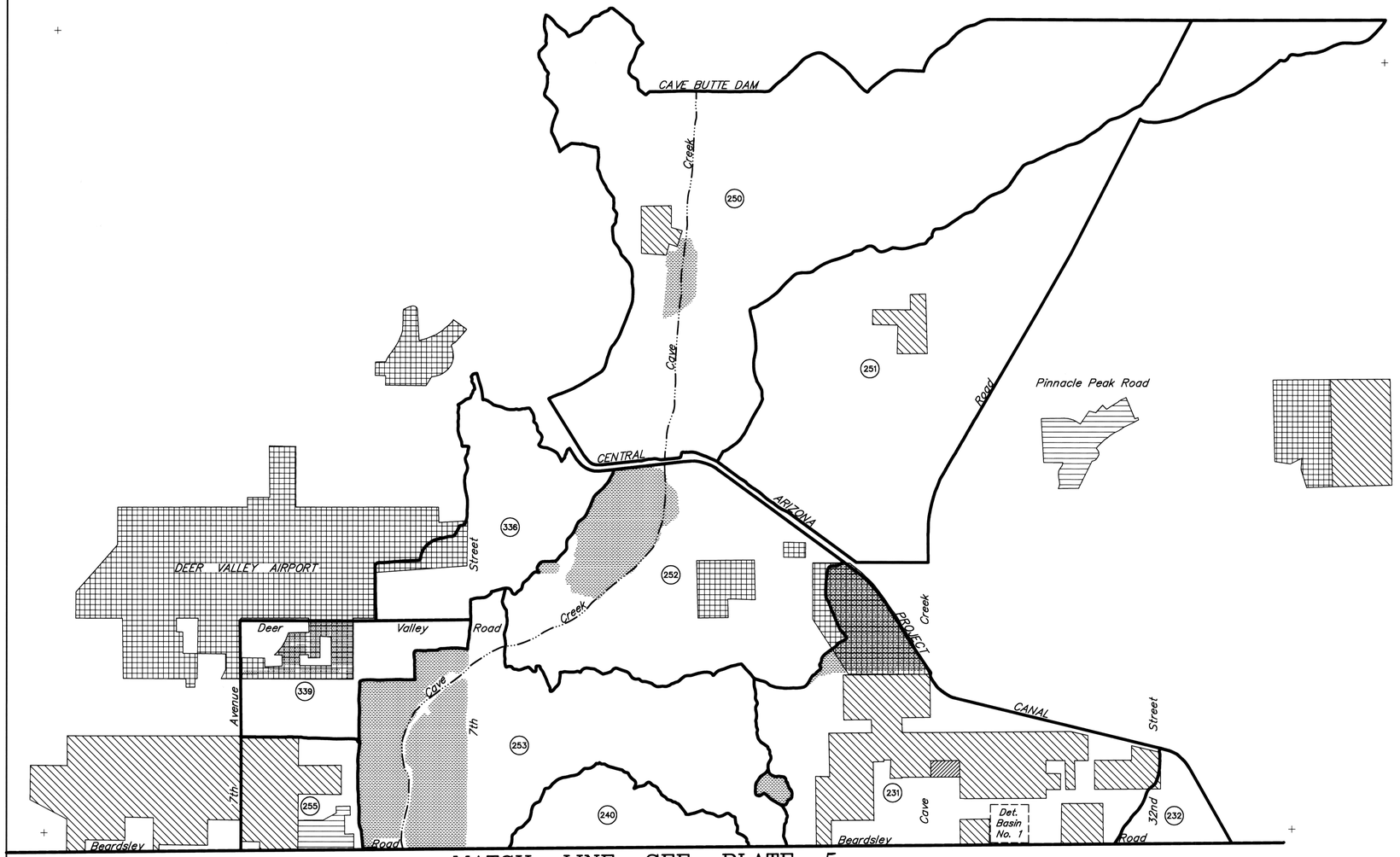
PLATE 5
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.3E.



MATCH LINE SEE PLATE 5

T.4N., R.3E.

KEY MAP

INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
EXISTING CONDITIONS

PLATE 6
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.2E.

T.3N., R.3E.

MATCH LINE SEE PLATE 8

KEY MAP

INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 7
MAY 21, 1993

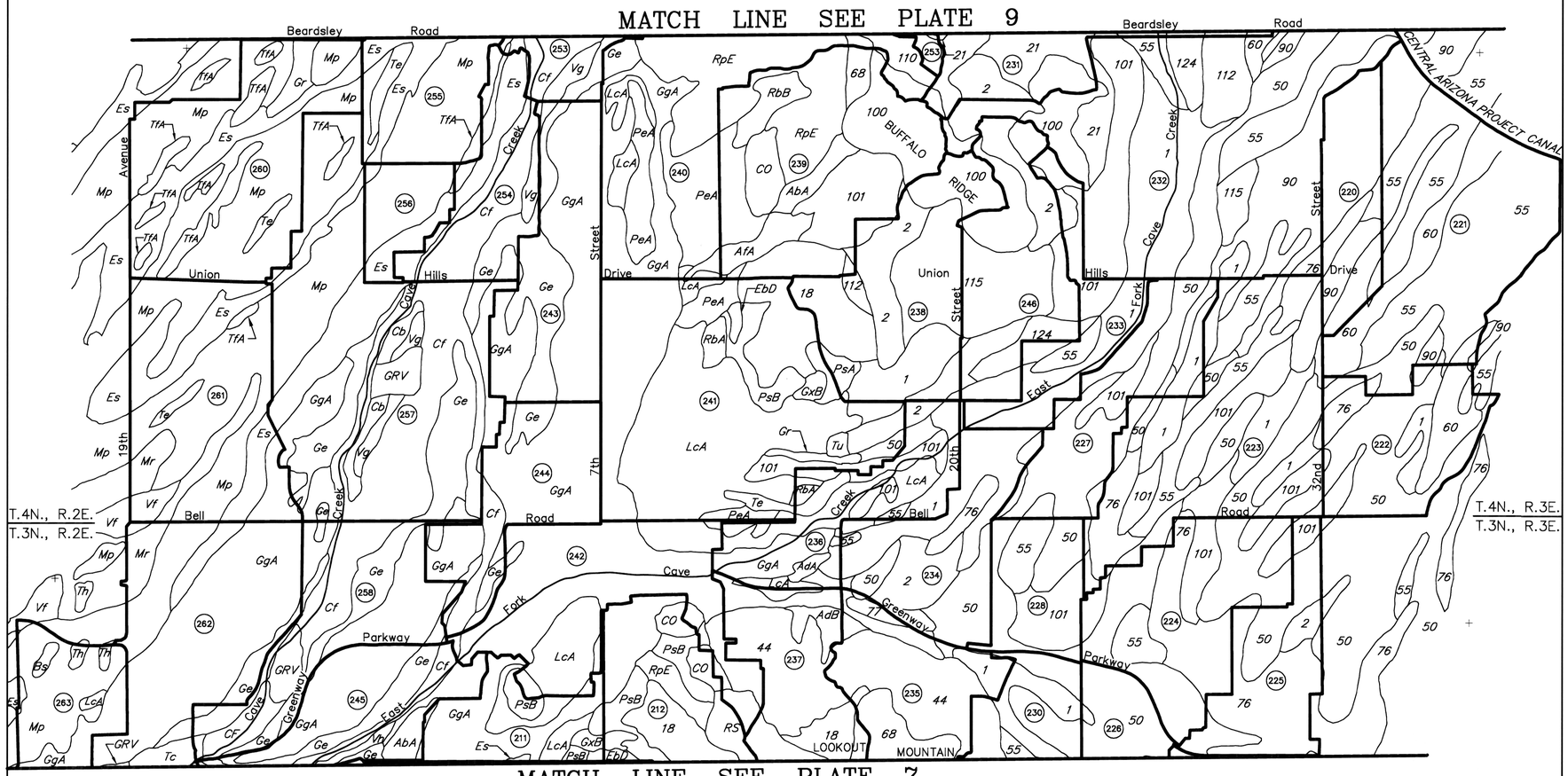
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.

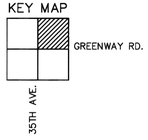
MATCH LINE SEE PLATE 9



MATCH LINE SEE PLATE 7

T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Maricopa County, Arizona
  Central Part
- 109 Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Aguila-Carefree Area
  Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

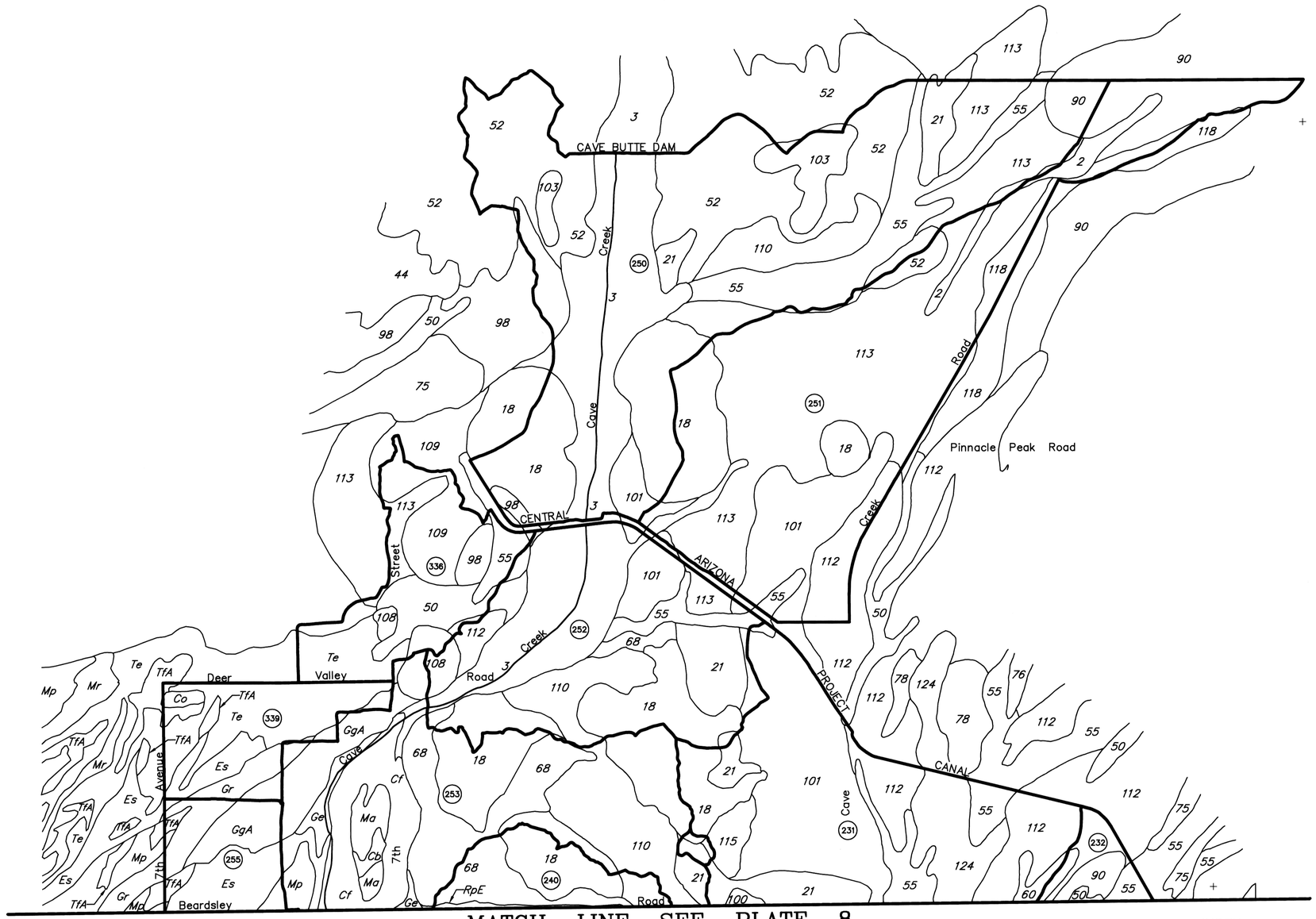
PLATE 8
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

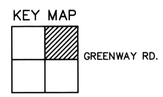
SCALE
1200 600 0 1200 2400
FEET

T.4N., R.3E.



MATCH LINE SEE PLATE 8

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.

35TH AVE. 27TH AVE. 19TH AVE. 7TH AVE. 7TH ST. 16TH ST. 24TH ST. 32ND ST. 40TH ST. 48TH ST. 56TH ST.

T.4N., R.3E.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Maricopa County, Arizona
  Central Part
- 109 Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Aguila-Carefree Area
  Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
EXISTING CONDITIONS

PLATE 9
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

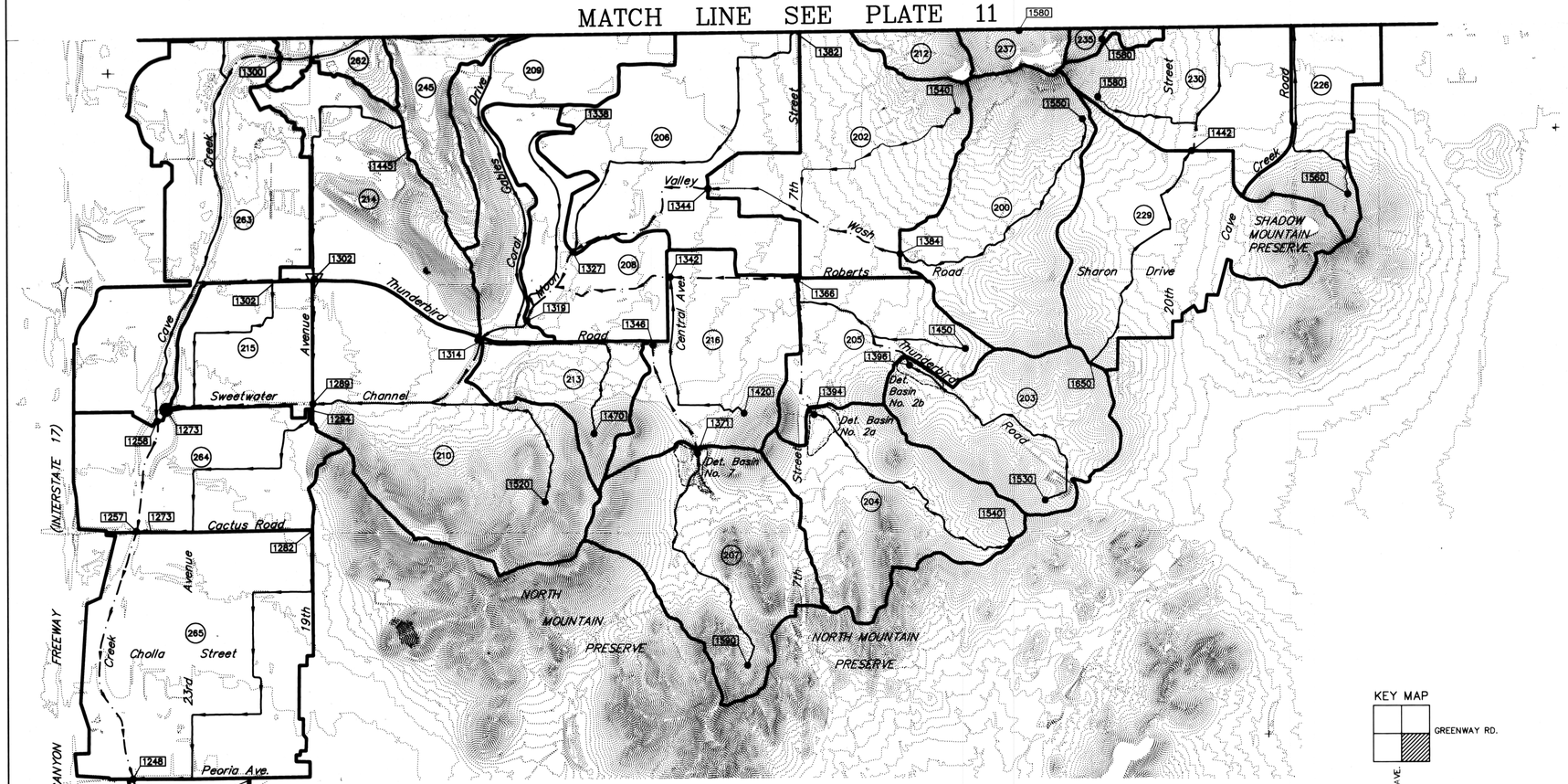
N

SCALE
1200 600 0 1200 2400
FEET

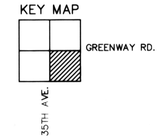
T.3N., R.2E.

T.3N., R.3E.

MATCH LINE SEE PLATE 11



KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
DUNLAP AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	CHAPARRAL RD.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.2E.

T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 10
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

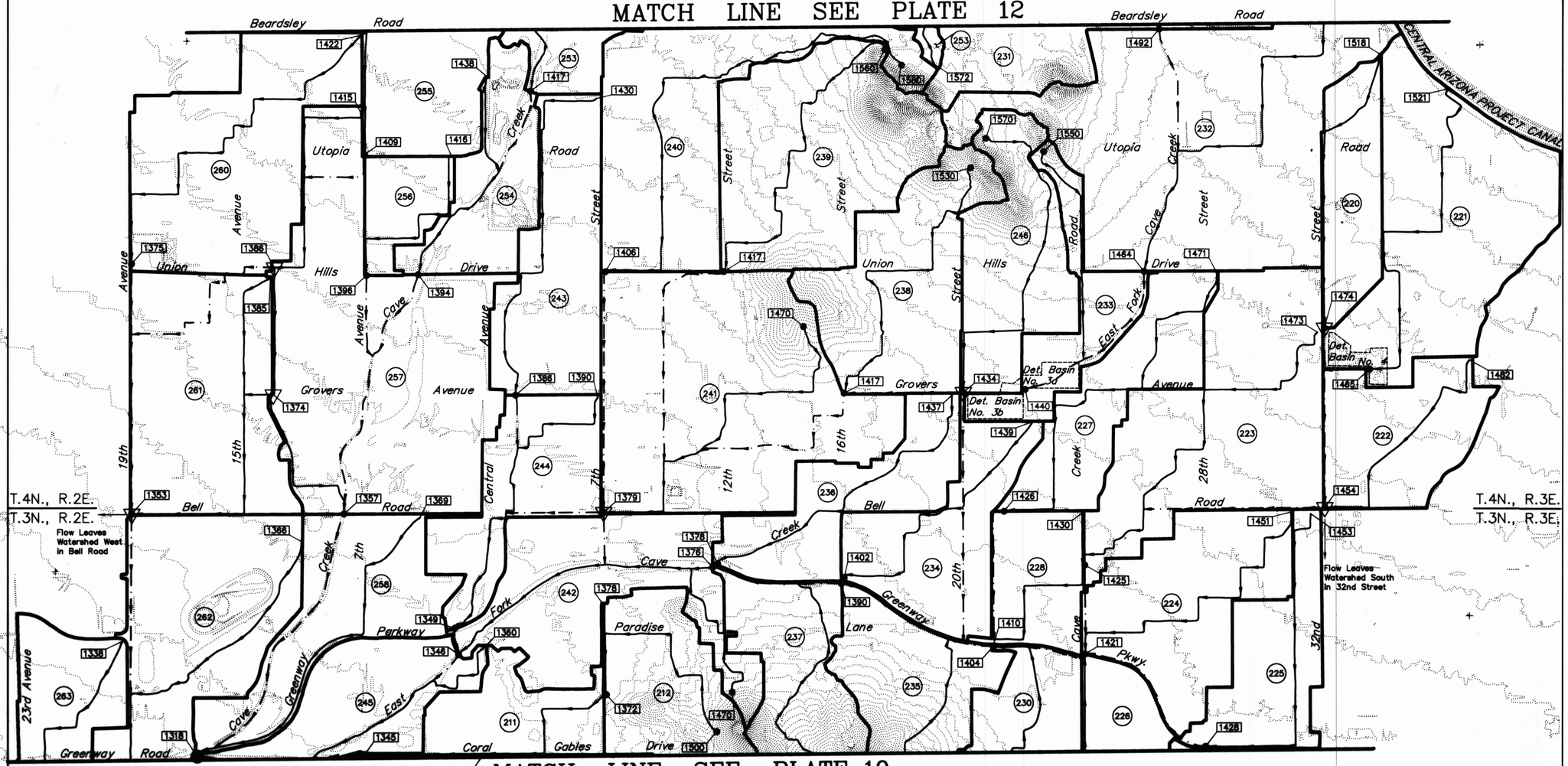
N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.4N., R.2E. | T.4N., R.3E.

MATCH LINE SEE PLATE 12



T.4N., R.2E.
T.3N., R.2E.

T.4N., R.3E.
T.3N., R.3E.

MATCH LINE SEE PLATE 10

T.3N., R.2E. | T.3N., R.3E.

KEY MAP

INDEX

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 11
MAY 21, 1993

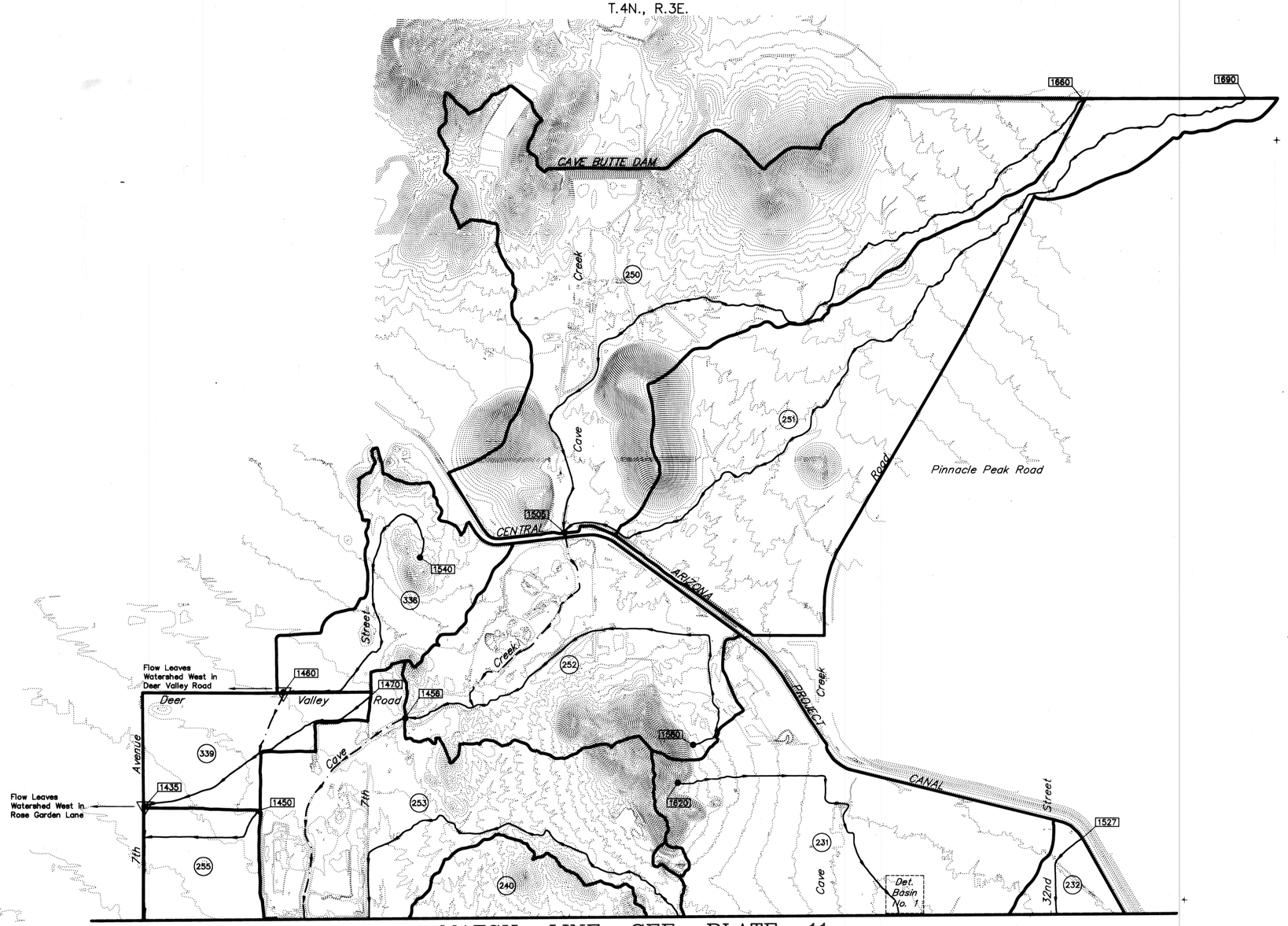
KAMINSKI HUBBARD engineering, inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

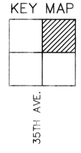
T.4N., R.3E.



MATCH LINE SEE PLATE 11

T.4N., R.3E.

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32		DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5		JOMAX RD.
11	12	7	8	9	10	11	12	7	8		HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17		PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20		DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29		BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32		UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5		BELL RD.
											GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.		

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 12
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

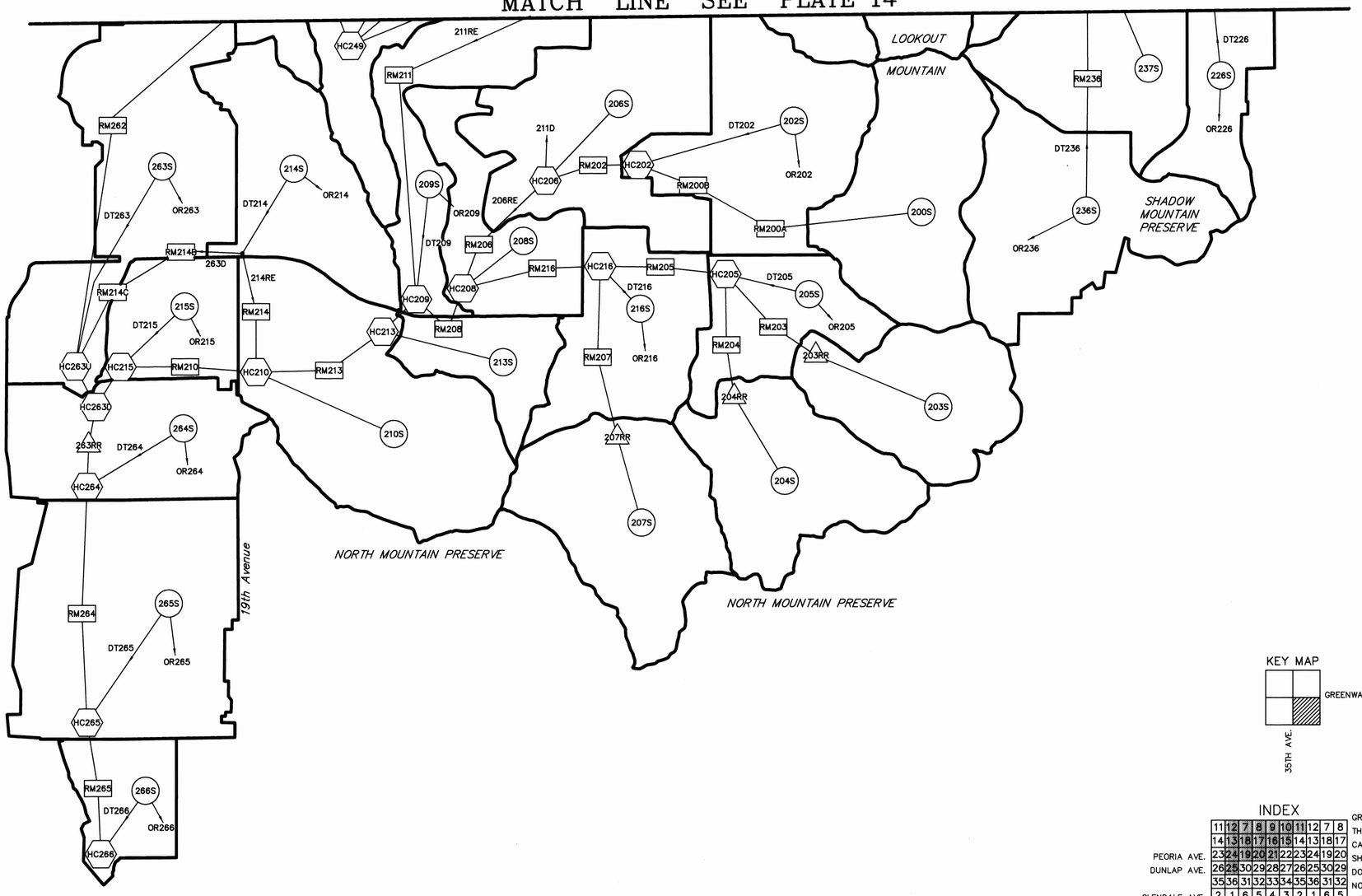
SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.3N., R.2E.

T.3N., R.3E.

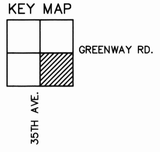
MATCH LINE SEE PLATE 14



T.3N., R.2E.

T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.				CHAPARRAL RD.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

T.3N., R.2E.

T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC
FUTURE CONDITIONS

PLATE 13
MAY 21, 1993

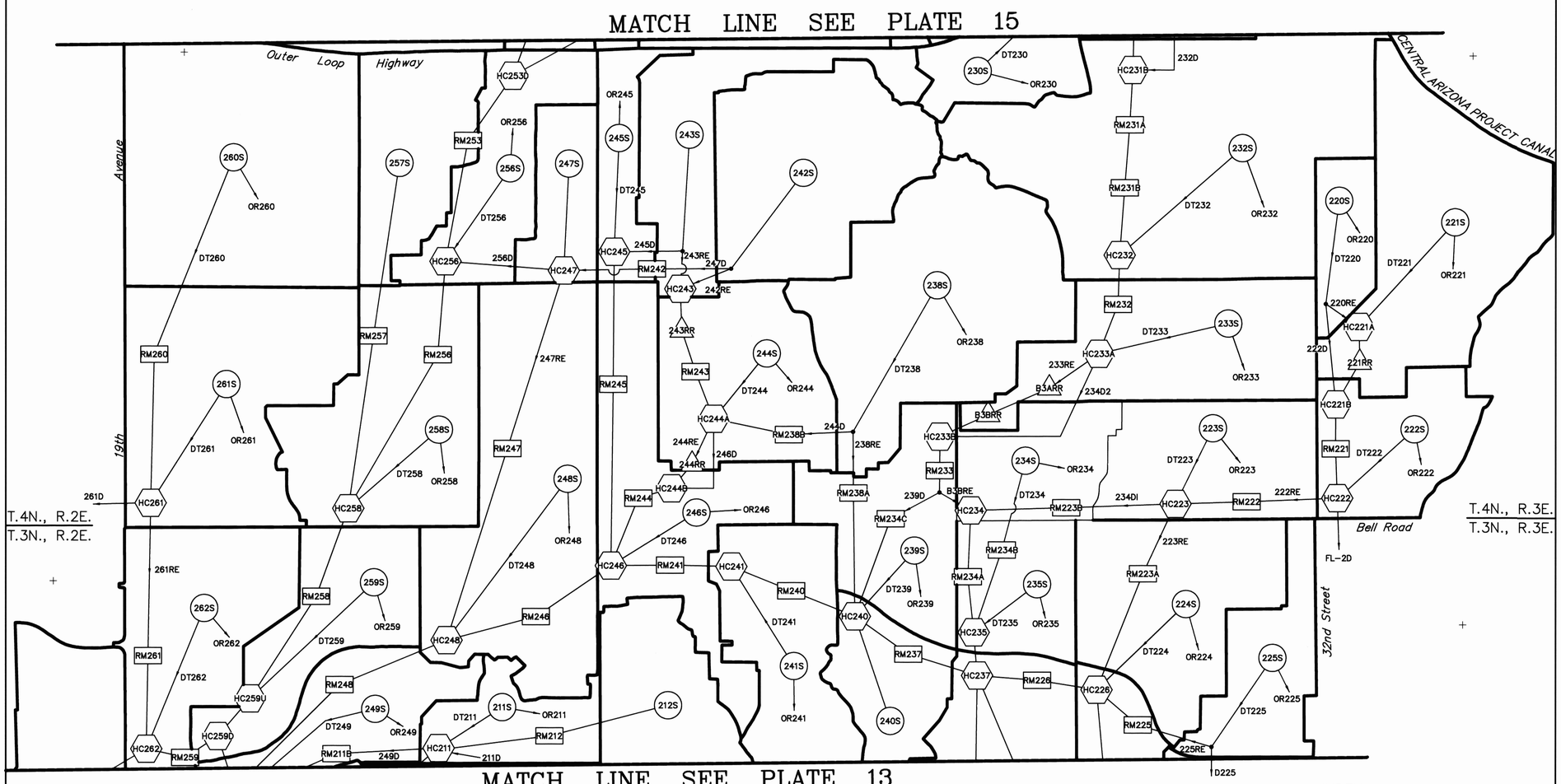
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.

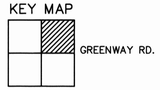
MATCH LINE SEE PLATE 15



MATCH LINE SEE PLATE 13

T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.

35TH AVE. | 27TH AVE. | 19TH AVE. | 7TH AVE. | 7TH ST. | 16TH ST. | 24TH ST. | 32ND ST. | 40TH ST. | 48TH ST. | 56TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

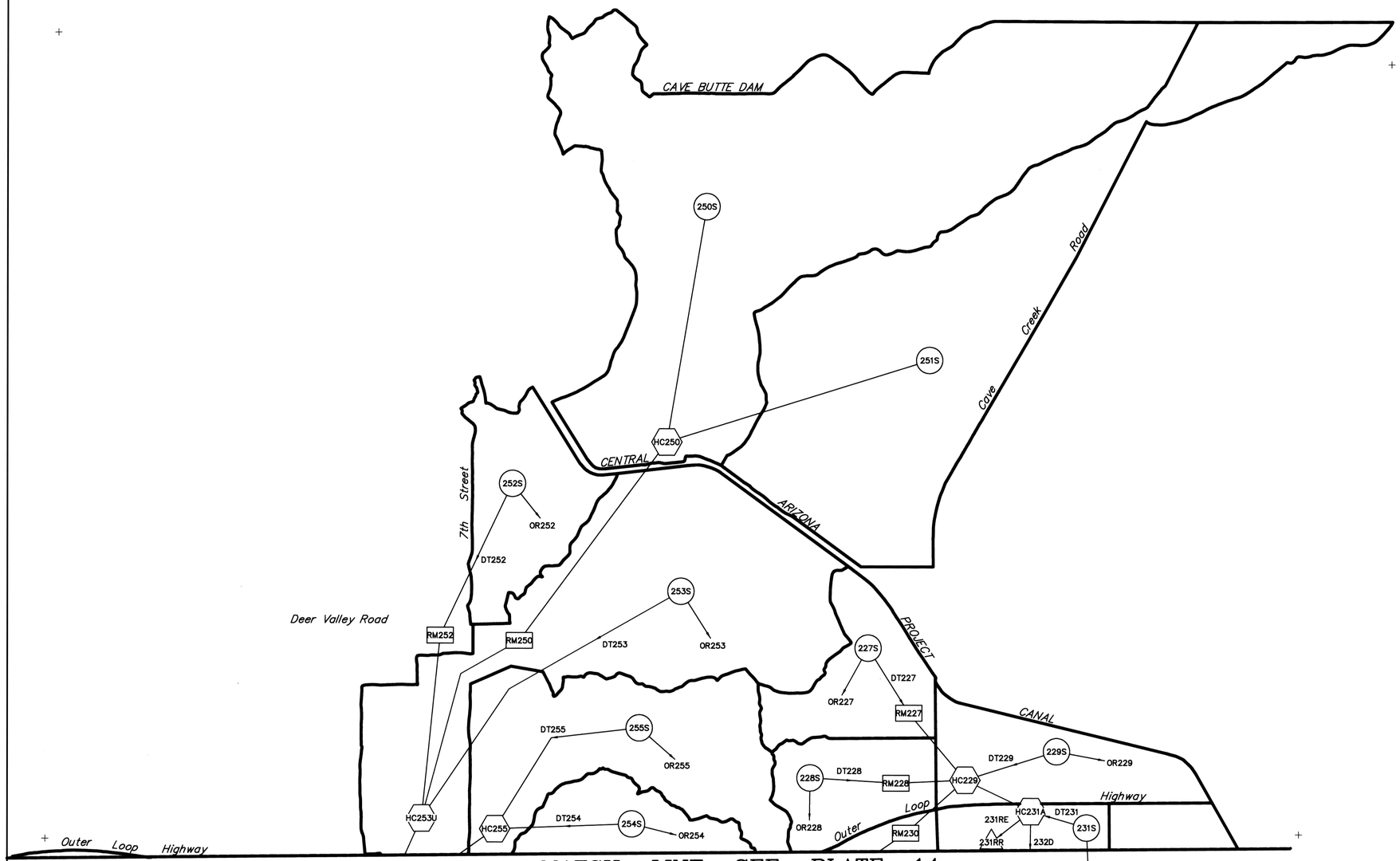
PLATE 14
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.3E.



KEY MAP

INDEX

35	36	31	32	33	34	35	36	31	32		DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5		JOMAX RD.
11	12	7	8	9	10	11	12	7	8		HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17		PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20		DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29		BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32		UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5		BELL RD.
											GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

T.4N., R.3E.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

PLATE 15
MAY 21, 1993

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

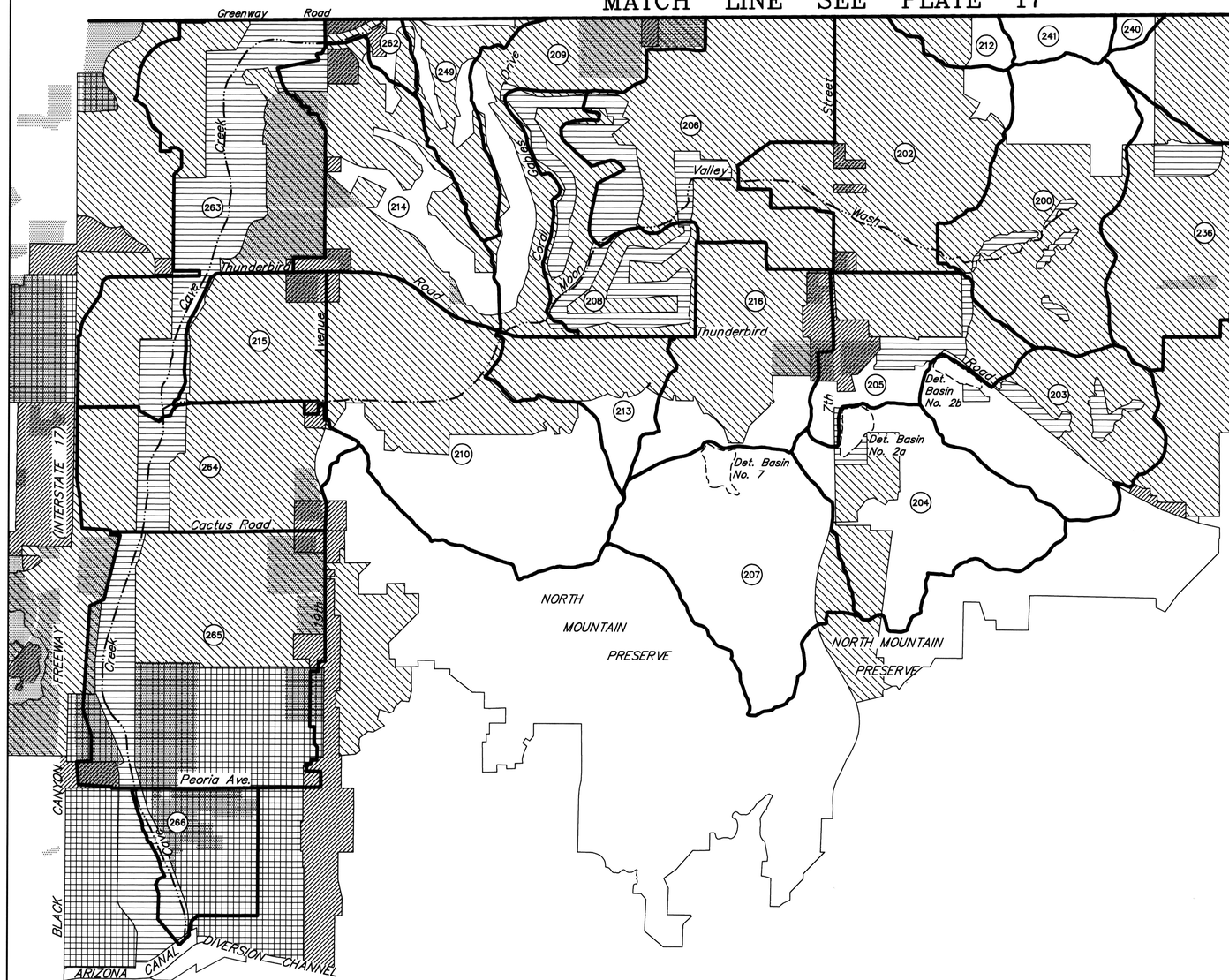
N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.2E.

T.3N., R.3E.

MATCH LINE SEE PLATE 17



T.3N., R.2E.

T.3N., R.3E.

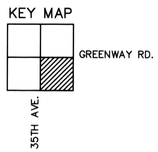
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	CHAPARRAL RD.

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

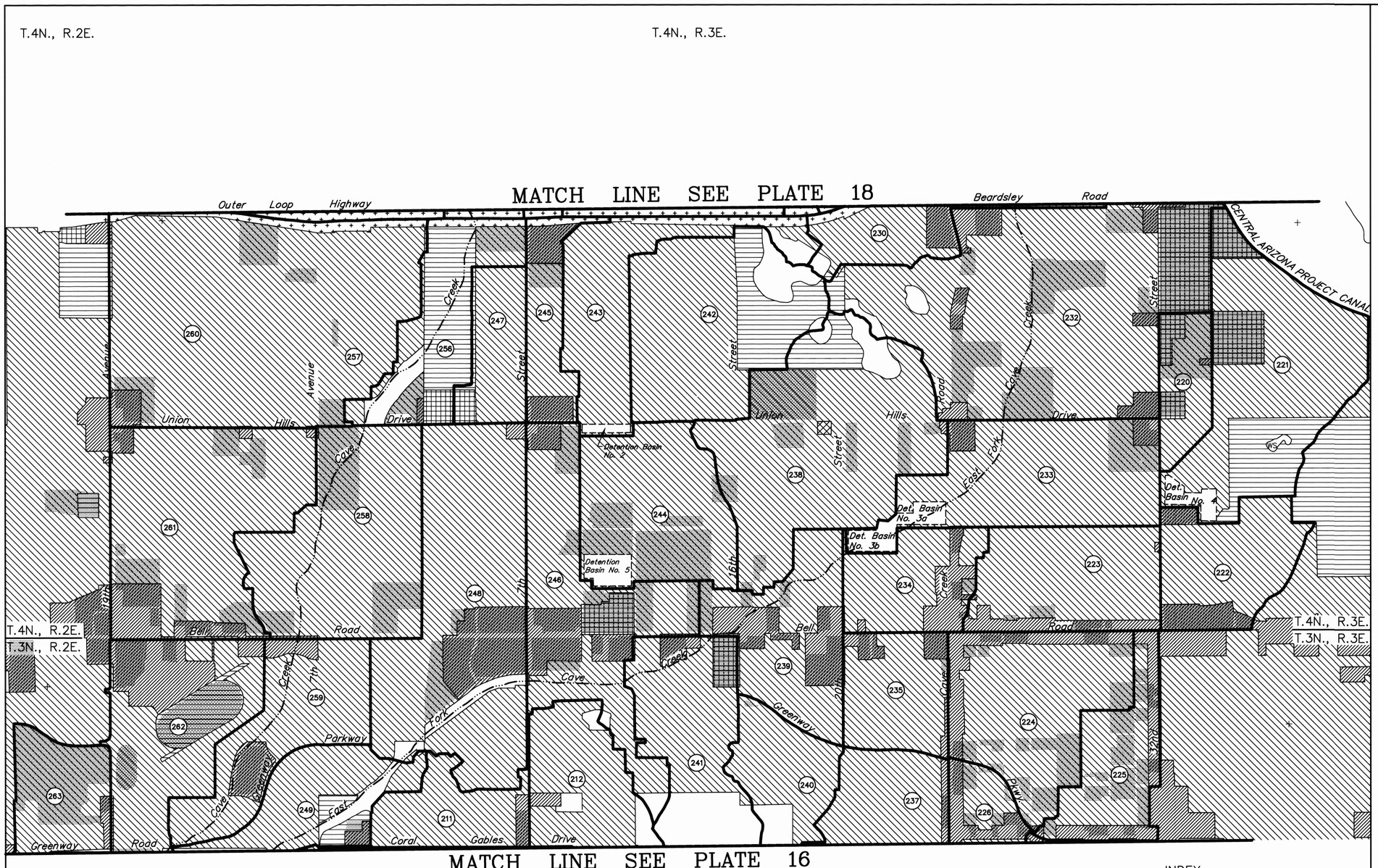
LAND USE MAP
FUTURE CONDITIONS

PLATE 16
MAY 21, 1993

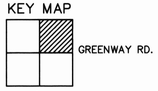
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET



KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.

35TH AVE. 27TH AVE. 19TH AVE. 7TH AVE. 7TH ST. 16TH ST. 24TH ST. 32ND ST. 40TH ST. 48TH ST. 56TH ST.

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Right-of-Way
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number
- (WS) Water Surface

LAND USE MAP
FUTURE CONDITIONS

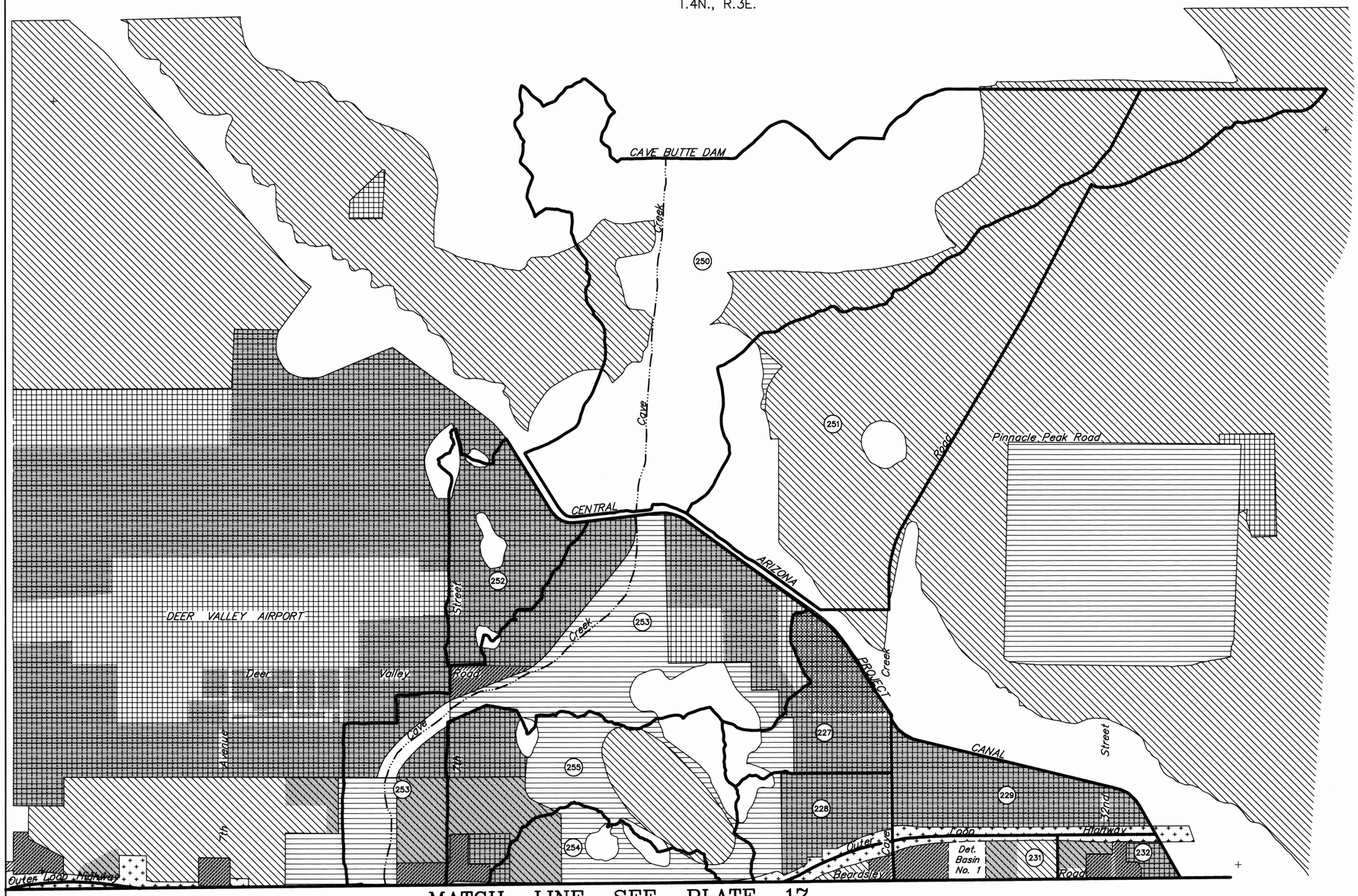
PLATE 17
MAY 21, 1993

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

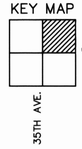
SCALE
1200 600 0 1200 2400
FEET

T.4N., R.3E.



MATCH LINE SEE PLATE 17

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32		DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5		JOMAX RD.
11	12	7	8	9	10	11	12	7	8		HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17		PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20		DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29		BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32		UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5		BELL RD.
											GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

T.4N., R.3E.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1
CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Right-of-Way
- Significant Onsite Retention Area
- Noncontributing Area
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 18
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

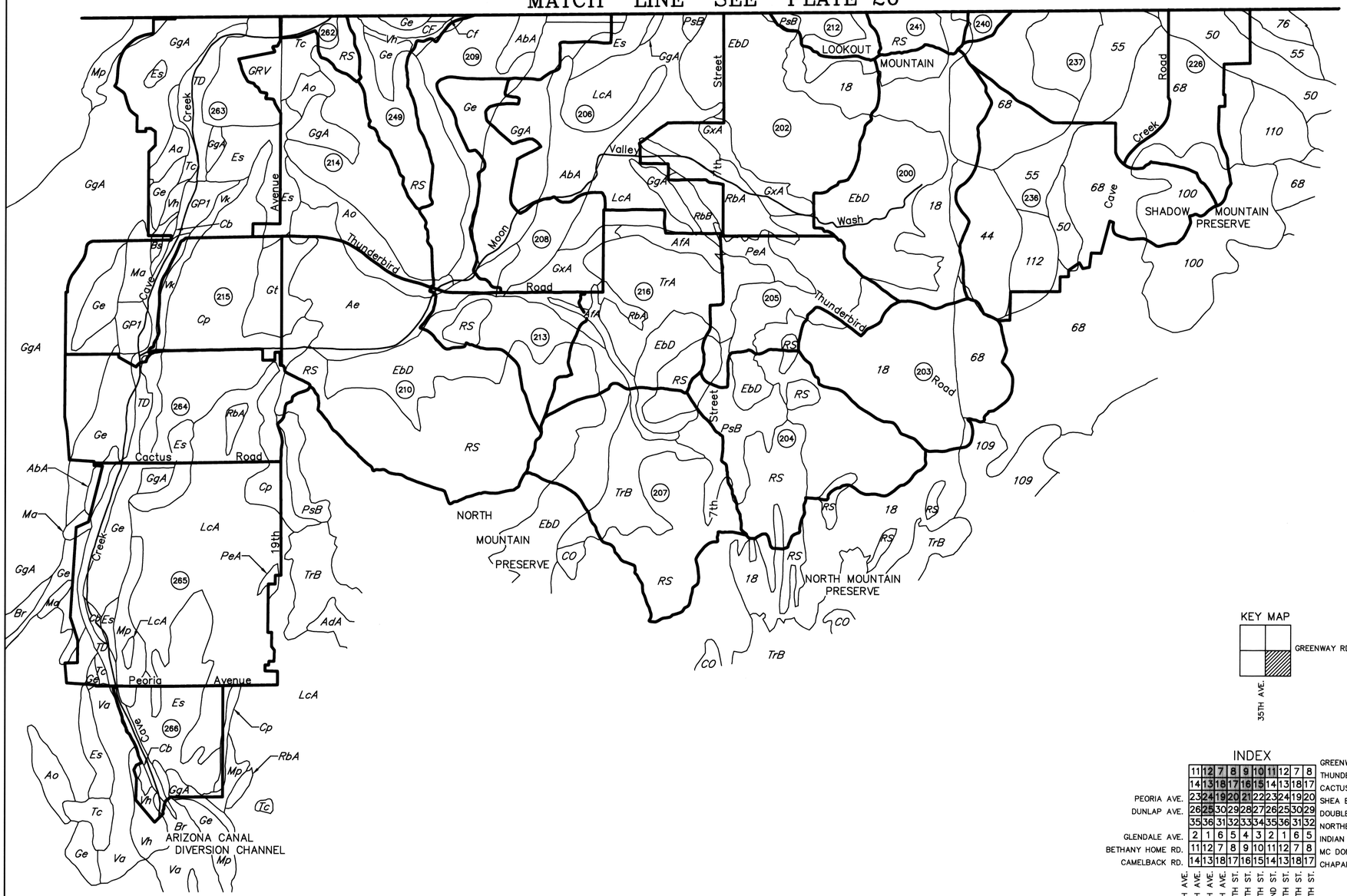
N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.2E.

T.3N., R.3E.

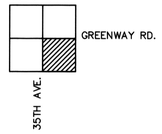
MATCH LINE SEE PLATE 20



T.3N., R.2E.

T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification — Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 19
MAY 21, 1993

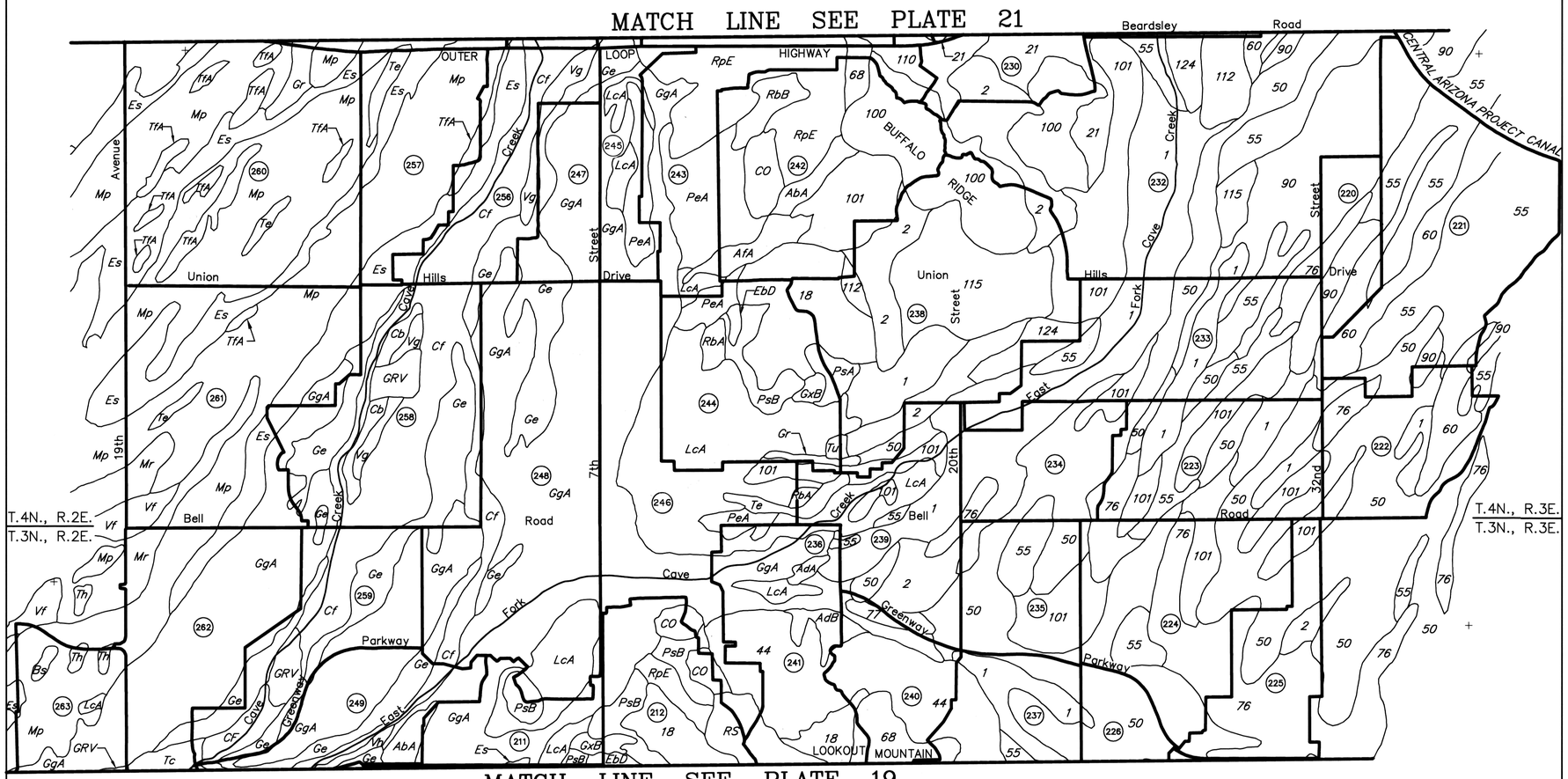
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.2E. | T.4N., R.3E.

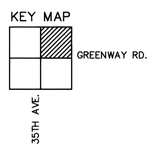
MATCH LINE SEE PLATE 21



MATCH LINE SEE PLATE 19

T.3N., R.2E. | T.3N., R.3E.

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32		DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5		JOMAX RD.
11	12	7	8	9	10	11	12	7	8		HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17		PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20		DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29		BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32		UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5		BELL RD.
											GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

DATE FLOWN: 11-15-1990, 1-18-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB — Soil Unit Boundary
- CO — Soil Unit Identification. Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 — Soil Unit Identification. Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

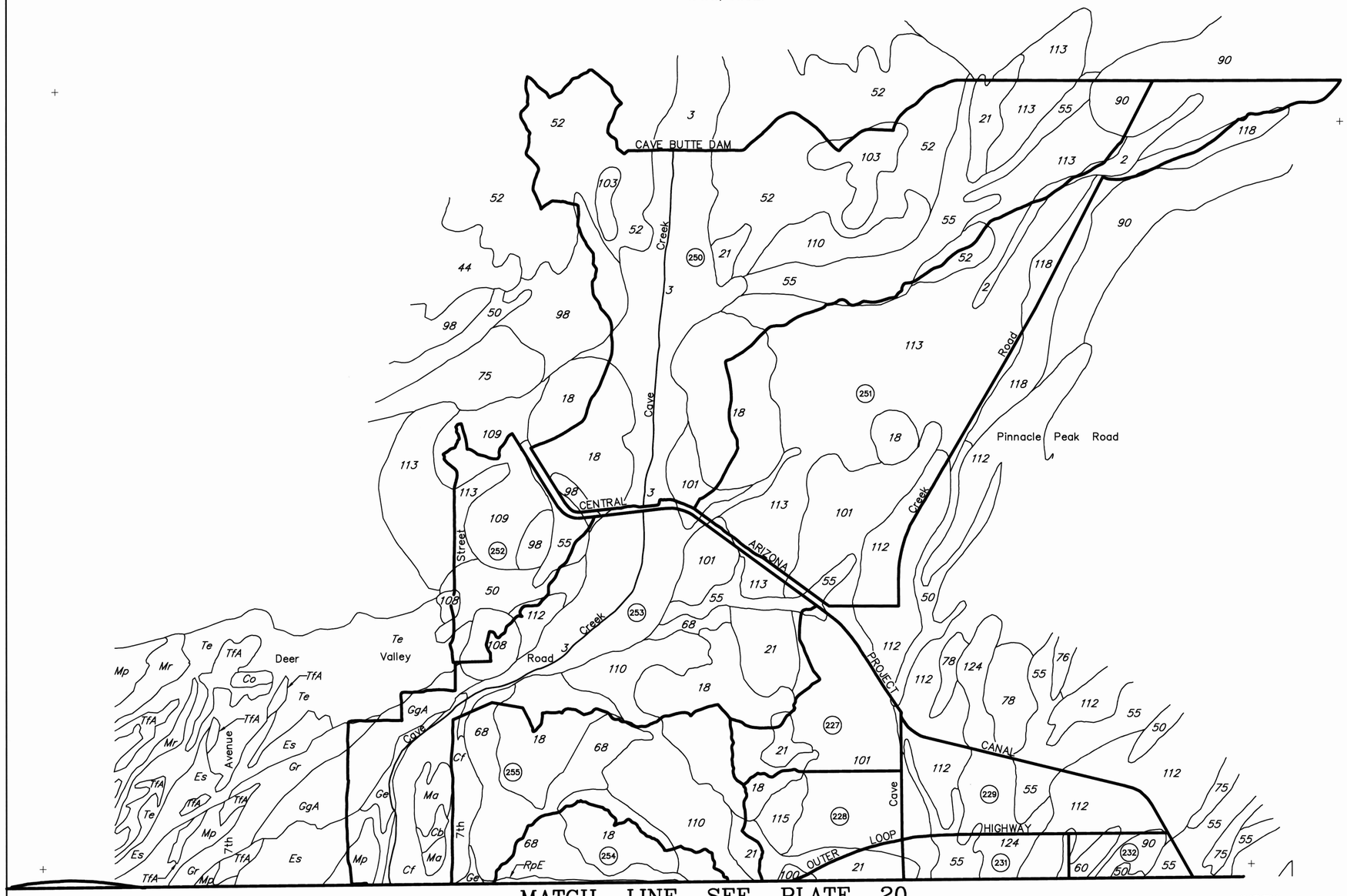
PLATE 20
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

T.4N., R.3E.



MATCH LINE SEE PLATE 20

T.4N., R.3E.

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	
35	36	31	32	33	34	35	36	31	32		DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5		JOMAX RD.
11	12	7	8	9	10	11	12	7	8		HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17		PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20		DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29		BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32		UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5		BELL RD.
											GREENWAY RD.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO Soil Unit Identification
  Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 Soil Unit Identification
  Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 21
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

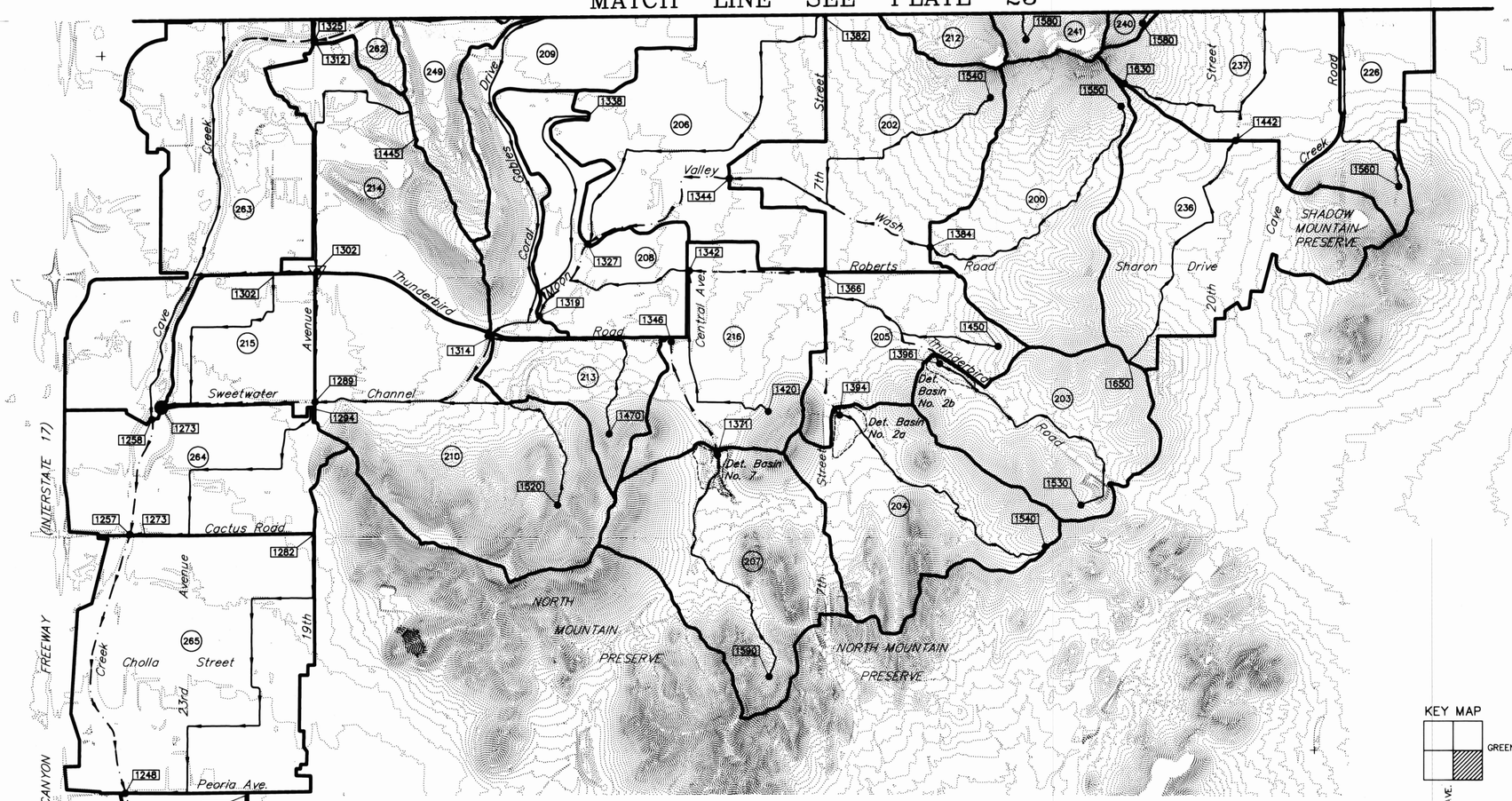
N

SCALE
1200 600 0 1200 2400
FEET

T.3N., R.2E.

T.3N., R.3E.

MATCH LINE SEE PLATE 23



DATE FLOWN: 11-15-1990, 1-18-1991, 2-12-1991 & 2-15-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- ● Major Drainage Basin Concentration Point
- • Drainage Sub-Basin Concentration Point
- ▽ Flow Diversion Point
- —·— Routing Flow Path
- —•— Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 22
MAY 21, 1993

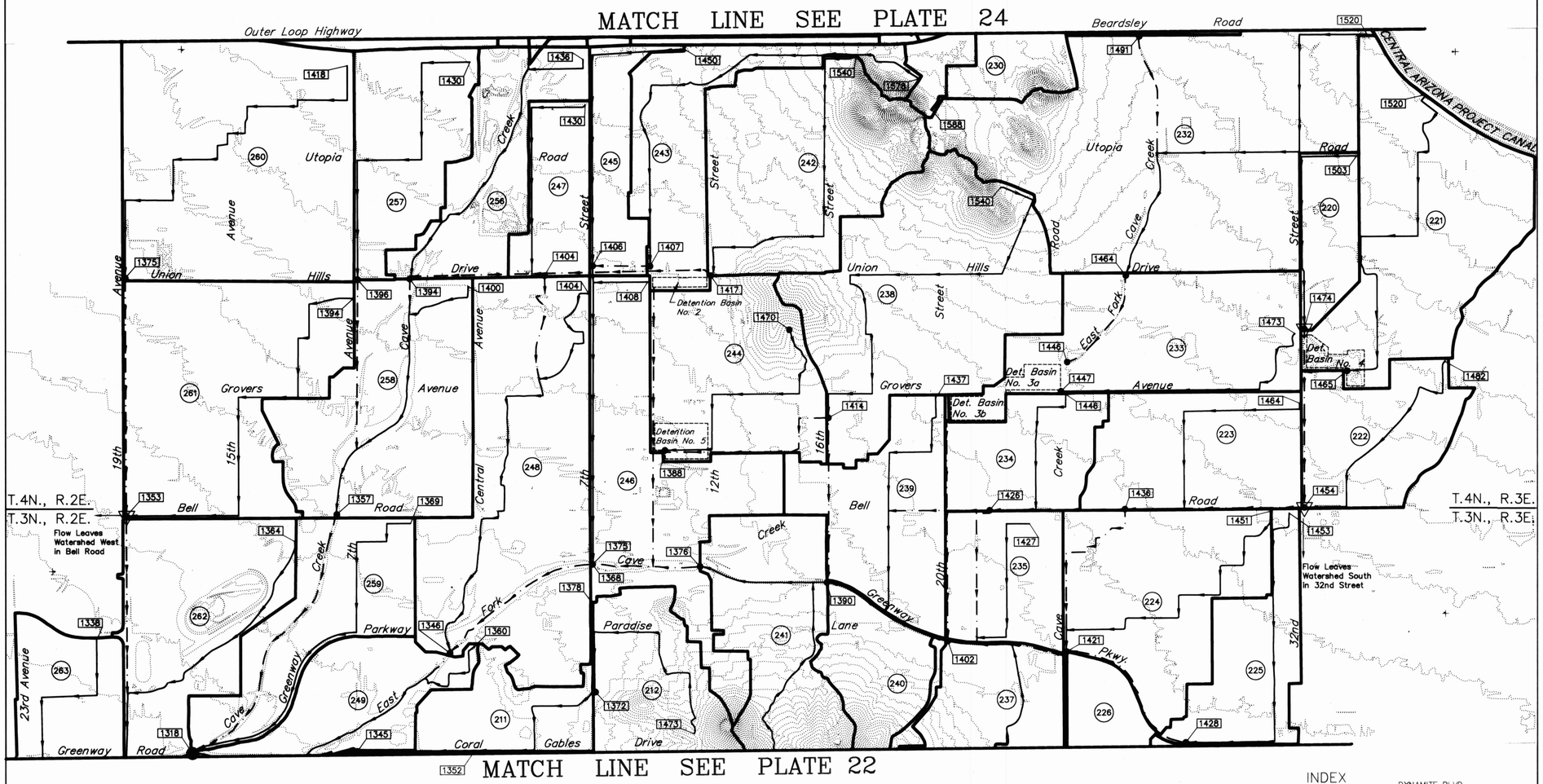
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

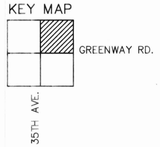
SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.4N., R.2E. | T.4N., R.3E.



KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32		DYNAMITE BLVD.
2	1	6	5	4	3	2	1	6	5		JOMAX RD.
11	12	7	8	9	10	11	12	7	8		HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17		PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20		DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29		BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32		UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5		BELL RD.
											GREENWAY RD.
35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.		

DATE FLOWN: 11–15–1990, 1–18–1991 & 2–15–1991

T.3N., R.2E. | T.3N., R.3E.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub–Basin Number
- ● Major Drainage Basin Concentration Point
- • Drainage Sub–Basin Concentration Point
- ▽ Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 23
MAY 21, 1993

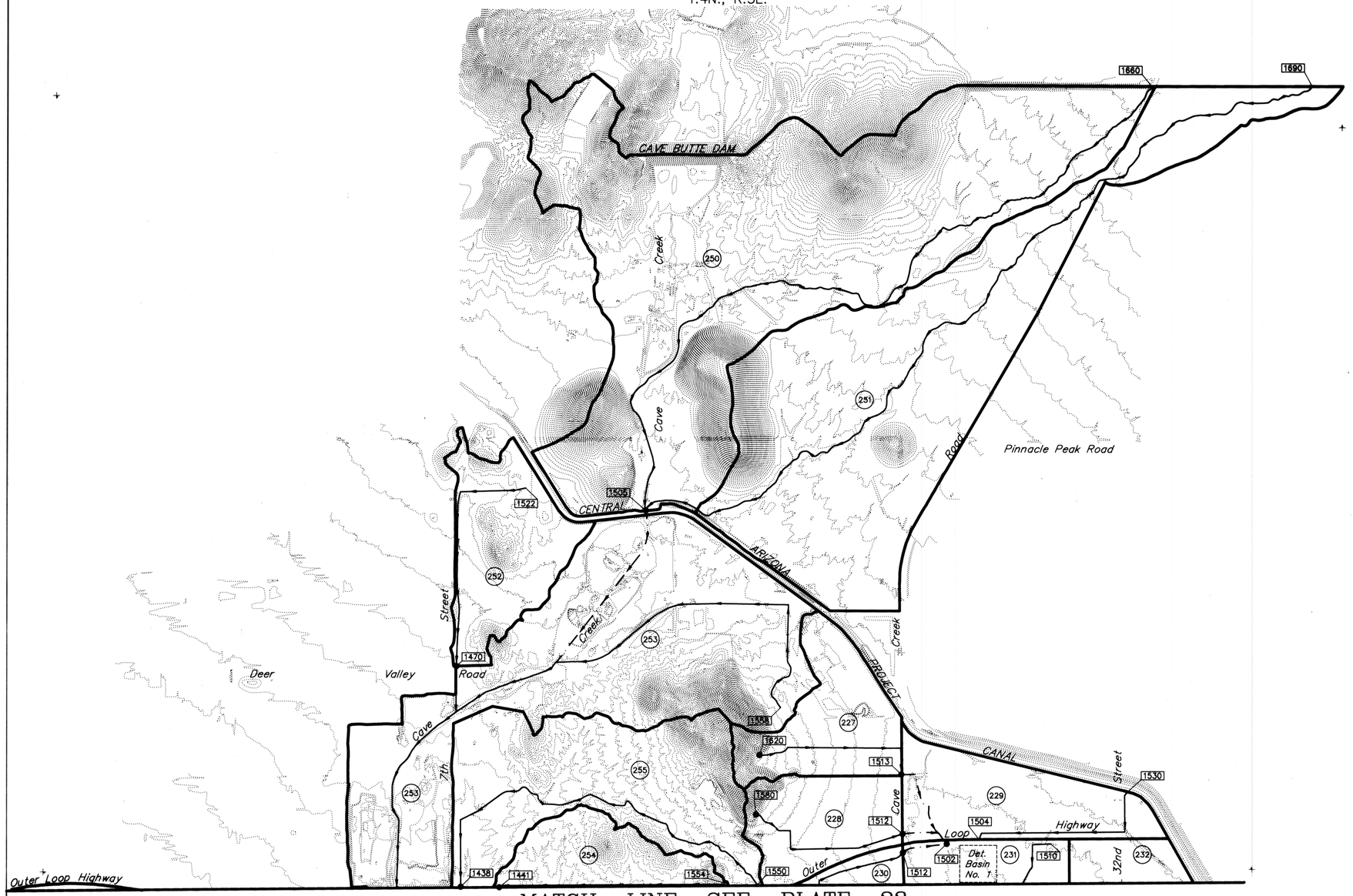
KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242–5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

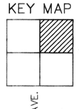
T.4N., R.3E.



MATCH LINE SEE PLATE 23

T.4N., R.3E.

KEY MAP



INDEX

35	36	31	32	33	34	35	36	31	32	DYNAMITE RD.
2	1	6	5	4	3	2	1	6	5	JOMAX RD.
11	12	7	8	9	10	11	12	7	8	HAPPY VALLEY RD.
14	13	18	17	16	15	14	13	18	17	PINNACLE PEAK RD.
23	24	19	20	21	22	23	24	19	20	DEER VALLEY RD.
26	25	30	29	28	27	26	25	30	29	BEARDSLEY RD.
35	36	31	32	33	34	35	36	31	32	UNION HILLS DR.
2	1	6	5	4	3	2	1	6	5	BELL RD.
										GREENWAY RD.

35TH AVE. 27TH AVE. 19TH AVE. 7TH AVE. 7TH ST. 16TH ST. 24TH ST. 32ND ST. 40TH ST. 48TH ST. 56TH ST.

DATE FLOWN: 9-7-1990 & 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CAVE CREEK HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

PLATE 24
MAY 21, 1993

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

T.3N., R.3E. | T.3N., R.4E.

T.3N., R.3E.

T.2N., R.3E.

T.3N., R.4E.

T.2N., R.4E.

KEY MAP

INDEX

		11	12	7	8	9	10	11	12	7	8		GREENWAY RD.
		14	13	18	17	16	15	14	13	18	17		THUNDERBIRD RD.
		23	24	19	20	21	22	23	24	19	20		CACTUS RD.
PEORIA AVE.		26	25	30	29	28	27	26	25	30	29		SHEA BLVD.
DUNLAP AVE.		35	36	31	32	33	34	35	36	31	32		DOUBLE TREE RANCH RD.
		2	1	6	5	4	3	2	1	6	5		NORTHERN AVE.
GLENDALE AVE.		11	12	7	8	9	10	11	12	7	8		INDIAN BEND RD.
BETHANY HOME RD.		14	13	18	17	16	15	14	13	18	17		MC DONALD DR.
CAMELBACK RD.													CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.		

DATE FLOWN: 11-15-1990 & 8-23-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

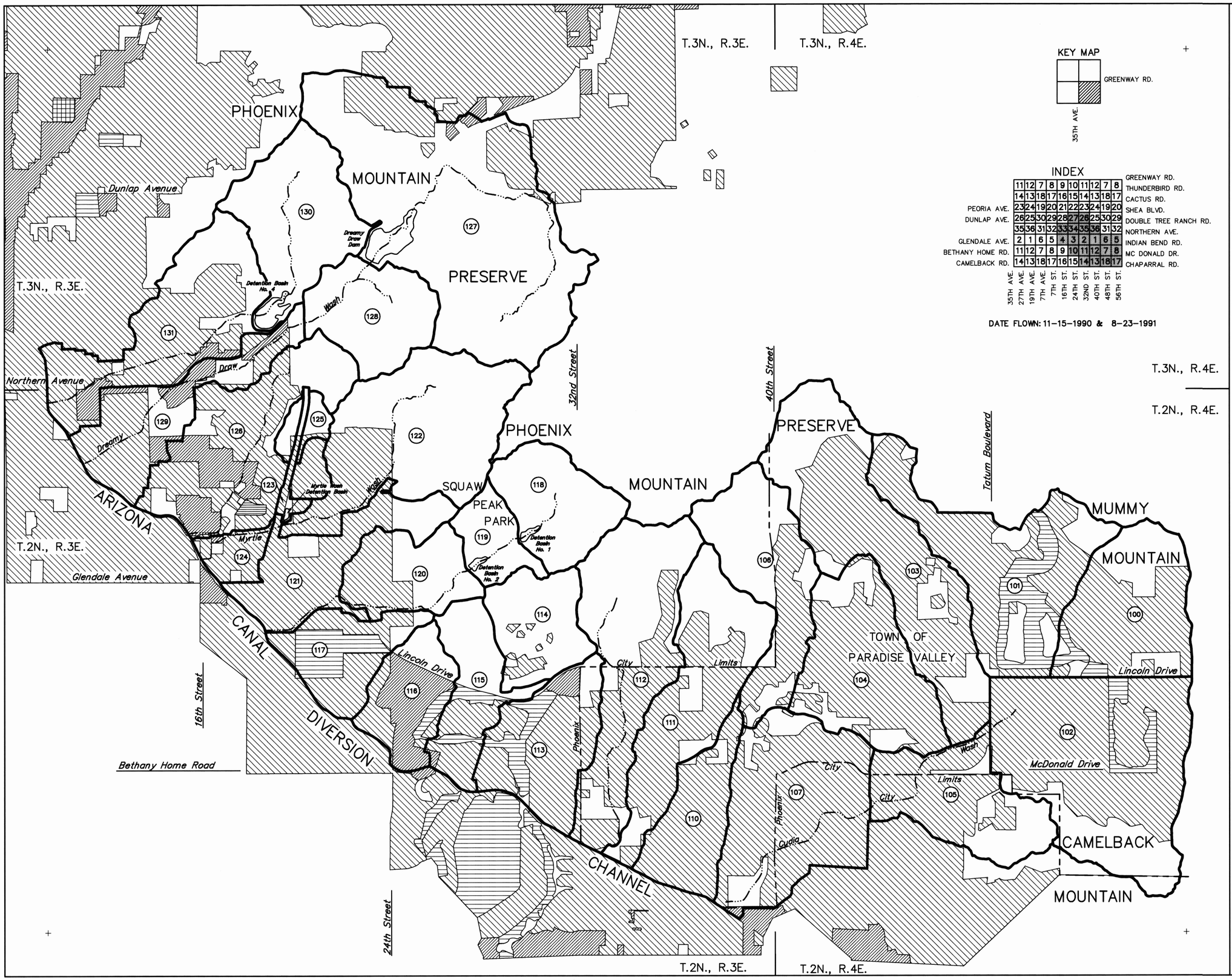
DRAINAGE AREA MAP & HEC-1 SCHEMATIC
EXISTING CONDITIONS

PLATE 1

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET



KEY MAP

INDEX

	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	
	11	12	7	8	9	10	11	12	7	8		GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17		THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20		CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		SHEA BLVD.
DUNLAP AVE.		35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
		2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.		11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.		14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.												CHAPARRAL RD.

DATE FLOWN: 11-15-1990 & 8-23-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- Phoenix City Limits Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Vacant Land Use
- (140) Drainage Sub-Basin Number

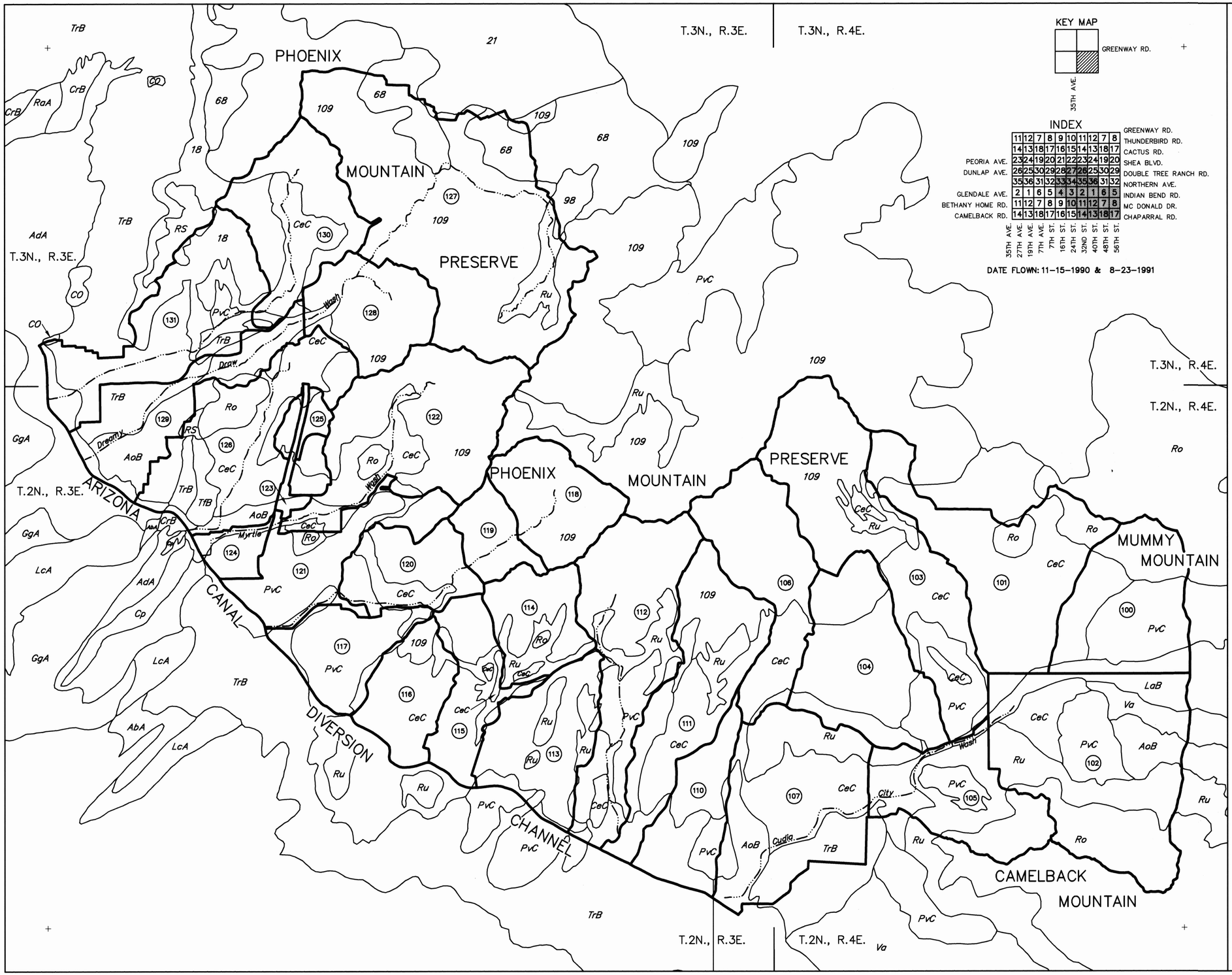
LAND USE MAP
EXISTING CONDITIONS

PLATE 2

KAMINSKI HUBBARD engineering,inc.
SURVEYING * CIVIL * HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET



KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	
	11	12	7	8	9	10	11	12	7	8		GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17		THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20		CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32		DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5		NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8		INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17		MC DONALD DR.
CAMELBACK RD.												CHAPARRAL RD.

DATE FLOWN: 11-15-1990 & 8-23-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

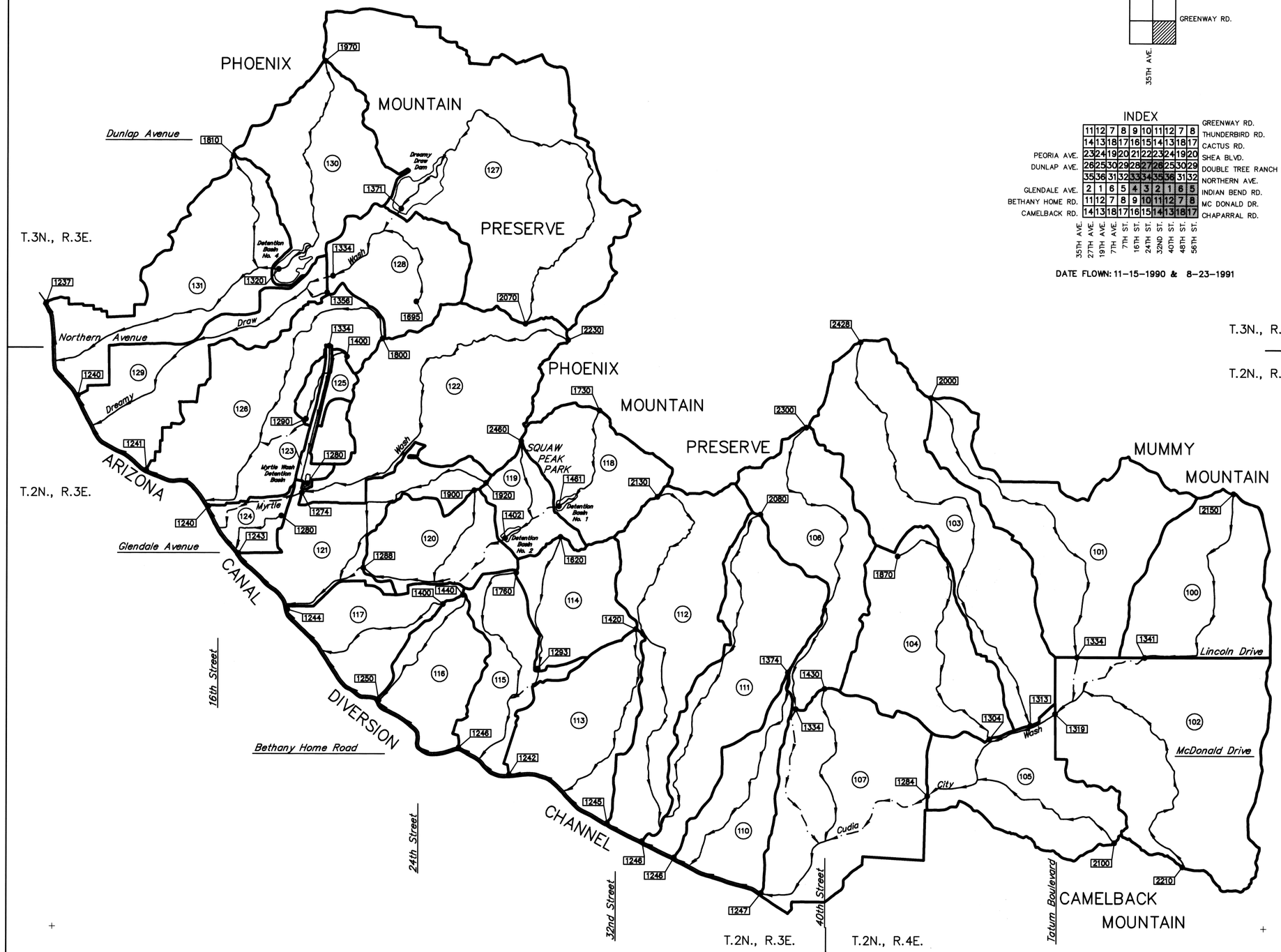
SOILS MAP
EXISTING CONDITIONS

PLATE 3

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- ● Major Drainage Basin Concentration Point
- • Drainage Sub-Basin Concentration Point
- ▽ Flow Diversion Point
- —·— Routing Flow Path
- —•— Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
EXISTING CONDITIONS

PLATE 4

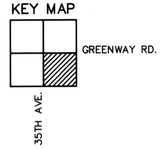
KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET

KEY MAP



INDEX

	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	
	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.

DATE FLOWN: 11-15-1990 & 8-23-1991

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Drainage Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

DRAINAGE AREA MAP & HEC-1 SCHEMATIC FUTURE CONDITIONS

PLATE 5

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400
FEET

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

T.3N., R.3E. T.3N., R.4E.

PHOENIX MOUNTAIN PRESERVE

Dunlap Avenue

Peak Parkway

Peak Dreamy Draw Dam

Detention Basin No. 4

Wash

Northern Avenue

Draw

Dreamy

Squaw

Myrtle Wash Detention Basin

Wash

Myrtle

Glendale Avenue

CANAL DIVERSION CHANNEL

16th Street

Lincoln Drive

Bethany Home Road

24th Street

22nd Street

40th Street

T.2N., R.3E. T.2N., R.4E.

ARIZONA

SQUAW PEAK PARK

Detention Basin No. 7

Detention Basin No. 2

PHOENIX MOUNTAIN PRESERVE

City Limits

Phoenix

Cudia

City

City Limits

Wash

McDonald Drive

Tatum Boulevard

TOWN OF PARADISE VALLEY

MUMMY MOUNTAIN

CAMELBACK MOUNTAIN

Lincoln Drive

T.3N., R.4E.

T.2N., R.4E.

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	
	11	12	7	8	9	10	11	12	7	8		GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17		THUNDERBIRD RD.
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20		CACTUS RD.
DUNLAP AVE.	26	25	30	29	28	27	26	25	30	29		SHEA BLVD.
	35	36	31	32	33	34	35	36	31	32		DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5		NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8		INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17		MC DONALD DR.
												CHAPARRAL RD.

DATE FLOWN: 11-15-1990 & 8-23-1991

LEGEND

- Drainage Basin Boundary
- Phoenix City Limits Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course/Park
- Utility Land Use
- Industrial Land Use
- Right-of-Way
- Vacant Land Use
- (140) Drainage Sub-Basin Number

LAND USE MAP
FUTURE CONDITIONS

PLATE 6

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

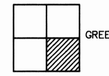
N

SCALE
1200 600 0 1200 2400
FEET

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

KEY MAP



INDEX

	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	
	11	12	7	8	9	10	11	12	7	8		GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17		THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20		CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29		SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32		DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5		NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8		INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17		MC DONALD DR.
CAMELBACK RD.												CHAPARRAL RD.

DATE FLOWN: 11-15-1990 & 8-23-1991

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB Soil Unit Boundary
- CO **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Maricopa County, Arizona Central Part
- 109 **Soil Unit Identification** Reference: USDA, Soil Conservation Service, Soil Survey of Aguila-Carefree Area Parts of Maricopa and Pinal Counties, Arizona

SOILS MAP
FUTURE CONDITIONS

PLATE 7

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1200 600 0 1200 2400

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 CUDIA CITY WASH TO 10TH STREET WASH HYDROLOGY STUDY

T.3N., R.3E. | T.3N., R.4E.

T.2N., R.3E. | T.2N., R.4E.

PHOENIX MOUNTAIN PRESERVE

PHOENIX MOUNTAIN PRESERVE

MUMMY MOUNTAIN

CAMELBACK MOUNTAIN

ARIZONA CANAL DIVERSION CHANNEL

Dunlap Avenue

Northern Avenue

Dreamy Draw

Glendale Avenue

Myrtle

Bethany Home Road

16th Street

24th Street

32nd Street

40th Street

Tatum Boulevard

Lincoln Drive

McDonald Drive

City Cudia Wash

Detention Basin No. 1

Detention Basin No. 2

Myrtle Wash Detention Basin

SQUAW PEAK PARK

KEY MAP

GREENWAY RD.

35TH AVE.

INDEX

	11	12	7	8	9	10	11	12	7	8							GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17							THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20							CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29							SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32							DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5							NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8							INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17							MC DONALD DR.
CAMELBACK RD.																	CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.						

DATE FLOWN: 11-15-1990 & 8-23-1991

LEGEND

- Drainage Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Flow Diversion Point
- Routing Flow Path
- Length of Longest Watercourse
- [1514] Elevation Along Flow Path

FLOW ROUTING MAP
FUTURE CONDITIONS

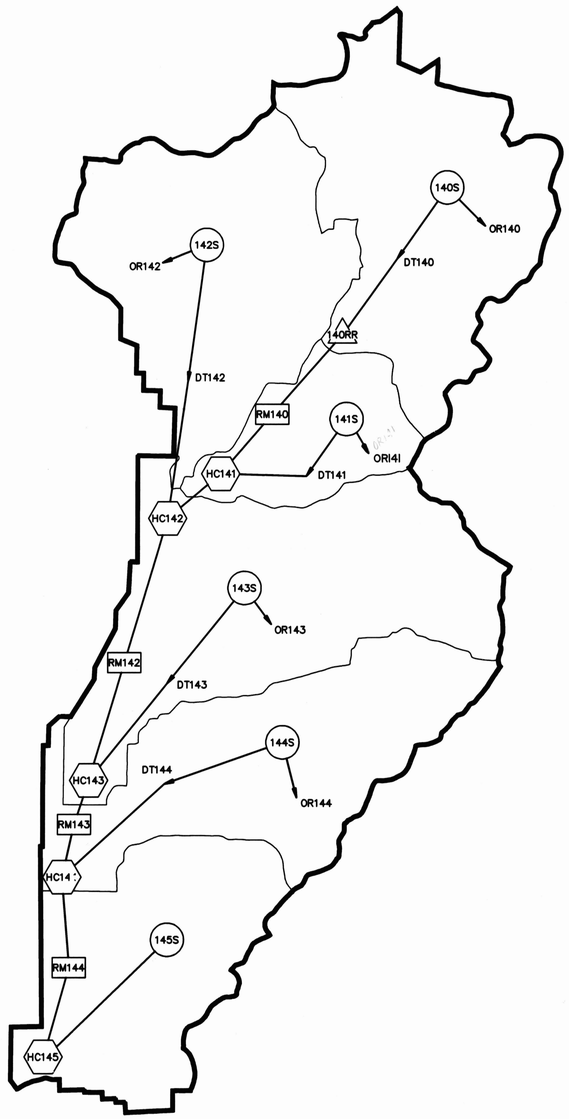
PLATE 8

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

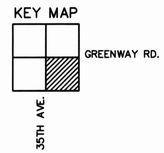
SCALE
1200 600 0 1200 2400
FEET

CONTOUR INTERVAL 10 FEET



T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
											NORTHERN AVE.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	INDIAN BEND RD.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	MC DONALD DR.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	

DATE FLOWN: 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Major Drainage Basin Boundary
- Drainage Sub-Basin Boundary
- A — Compute Runoff from Sub-Basin A
- B — Compute Runoff from Sub-Basin B
- C — Combine Hydrographs
- D — Route Hydrograph
- E — Route Hydrograph through Retention Basin E
- G / F — Divide Hydrograph into F and G

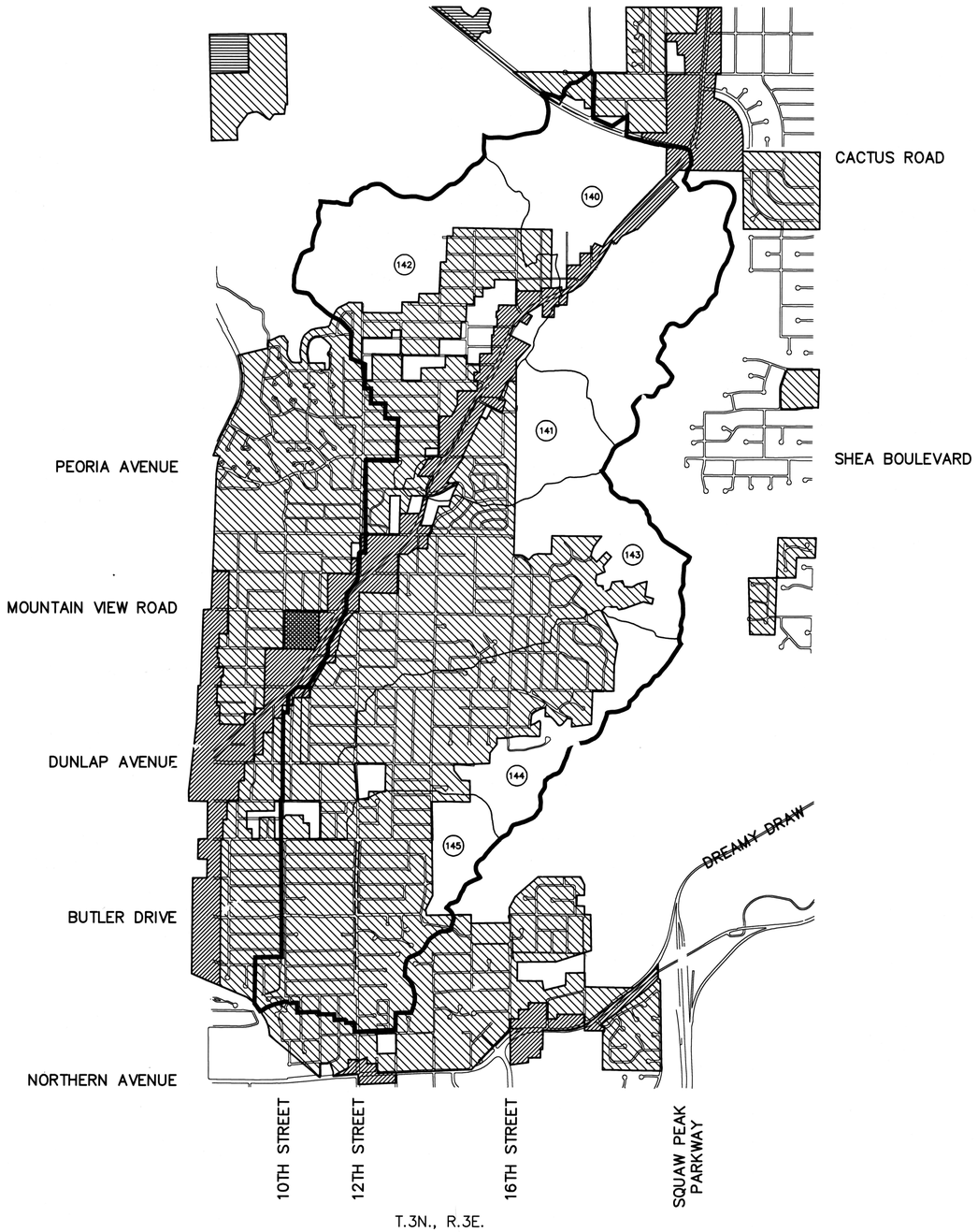
DRAINAGE AREA MAP & HEC-1 SCHEMATIC

PLATE 1
JUNE 11, 1992

KAMINSKI HUBBARD engineering,inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

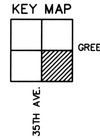
N

SCALE
1000 500 0 1000 2000
FEET



T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
DUNLAP AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	CHAPARRAL RD.
	56TH ST.										

DATE FLOWN: 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Major Drainage Basin Boundary
- Drainage Sub-Basin Boundary
- Residential Land Use
- Commercial Land Use
- Golf Course
- Utility Land Use
- Vacant Land Use
- (140) Drainage Sub-Basin Number

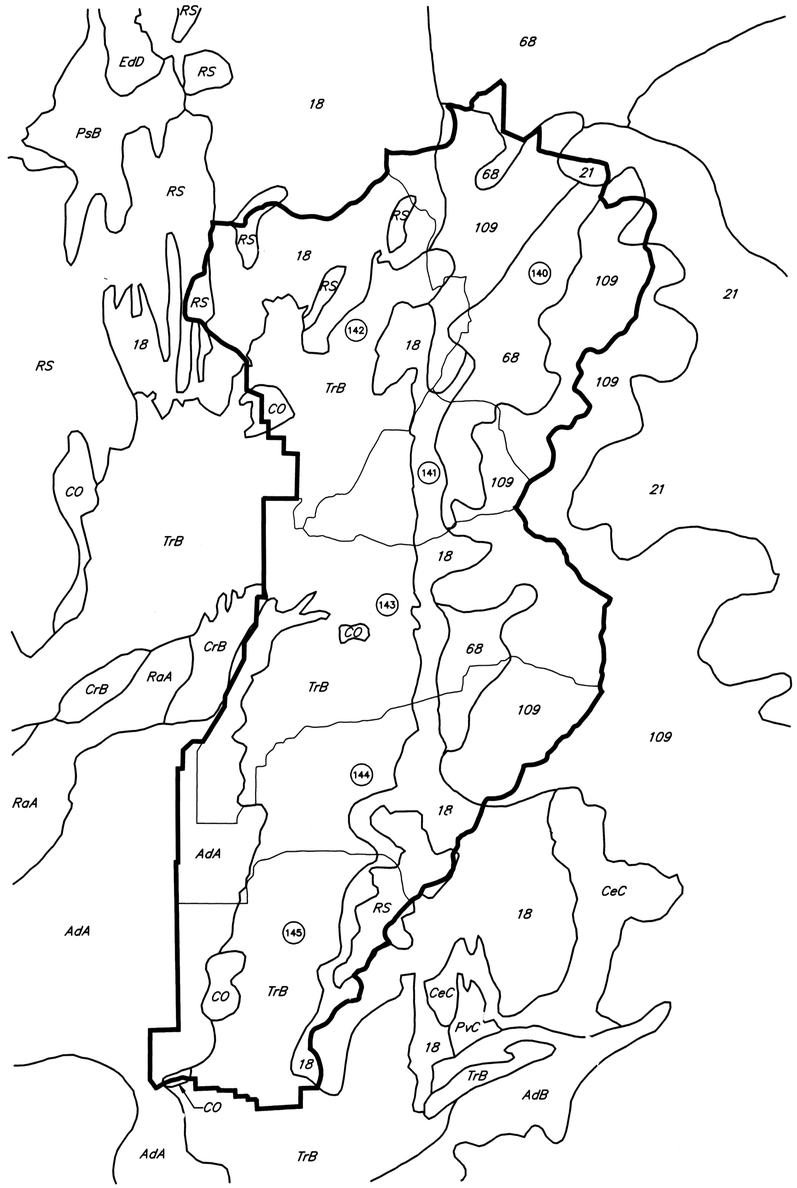
LAND USE MAP

PLATE 2
JUNE 11, 1992

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

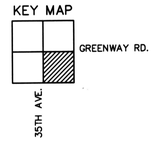
N

SCALE
1000 500 0 1000 2000
FEET



T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	14	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
PEORIA AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
DUNLAP AVE.	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
GLENDALE AVE.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
BETHANY HOME RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
CAMELBACK RD.											CHAPARRAL RD.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.						

DATE FLOWN: 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Major Drainage Basin Boundary
- Drainage Sub-Basin Boundary
- (140) Drainage Sub-Basin Number
- CrB — Soil Unit Boundary
- CO — Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Maricopa County, Arizona
  Central Part
- 109 — Soil Unit Identification
  Reference: USDA, Soil Conservation Service,
  Soil Survey of Aguila-Carefree Area
  Parts of Maricopa and Pinal Counties, Arizona

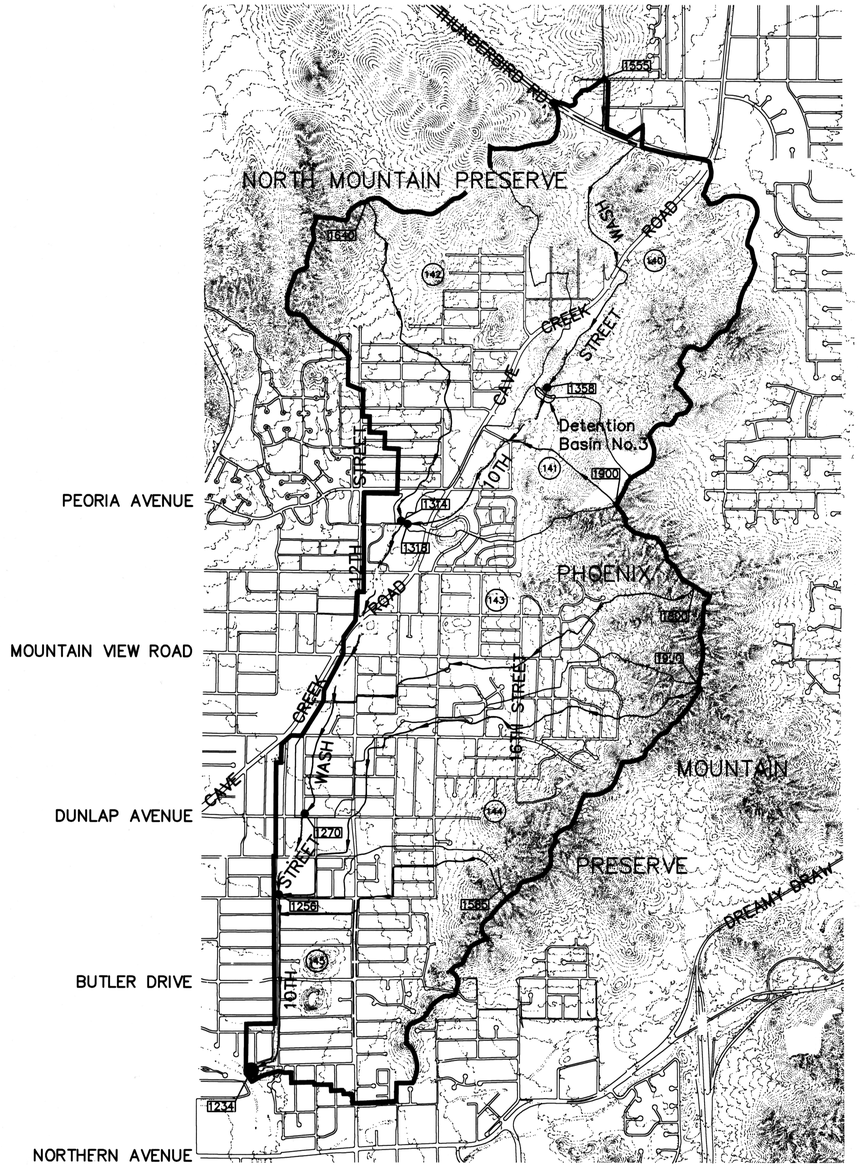
SOILS MAP

PLATE 3
JUNE 11, 1992

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

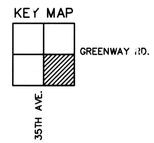
N

SCALE
1000 500 0 1000 2000
FEET



T.3N., R.3E.

KEY MAP



INDEX

	11	12	7	8	9	10	11	12	7	8	GREENWAY RD.
	4	13	18	17	16	15	14	13	18	17	THUNDERBIRD RD.
PEORIA AVE.	23	24	19	20	21	22	23	24	19	20	CACTUS RD.
DUNLAP AVE.	26	25	30	29	28	27	26	25	30	29	SHEA BLVD.
	35	36	31	32	33	34	35	36	31	32	DOUBLE TREE RANCH RD.
GLENDALE AVE.	2	1	6	5	4	3	2	1	6	5	NORTHERN AVE.
BETHANY HOME RD.	11	12	7	8	9	10	11	12	7	8	INDIAN BEND RD.
CAMELBACK RD.	14	13	18	17	16	15	14	13	18	17	MC DONALD DR.
	35TH AVE.	27TH AVE.	19TH AVE.	7TH AVE.	7TH ST.	16TH ST.	24TH ST.	32ND ST.	40TH ST.	48TH ST.	56TH ST.	CHAPARRAL RD.

DATE FLOWN: 11-15-1990

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

ACDC/ADMS PHASE 1 10TH STREET WASH HYDROLOGY STUDY

LEGEND

- Major Drainage Basin Boundary
- Drainage Sub-Basin Boundary
- (140) Drainage Sub-Basin Number
- Major Drainage Basin Concentration Point
- Drainage Sub-Basin Concentration Point
- Routing Flow Path
- Length of Longest Watercourse
- 1514 Elevation Along Flow Path

FLOW ROUTING MAP

PLATE 4
JUNE 11, 1992

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

N

SCALE
1000 500 0 1000 2000
FEET

CONTOUR INTERVAL 10 FEET