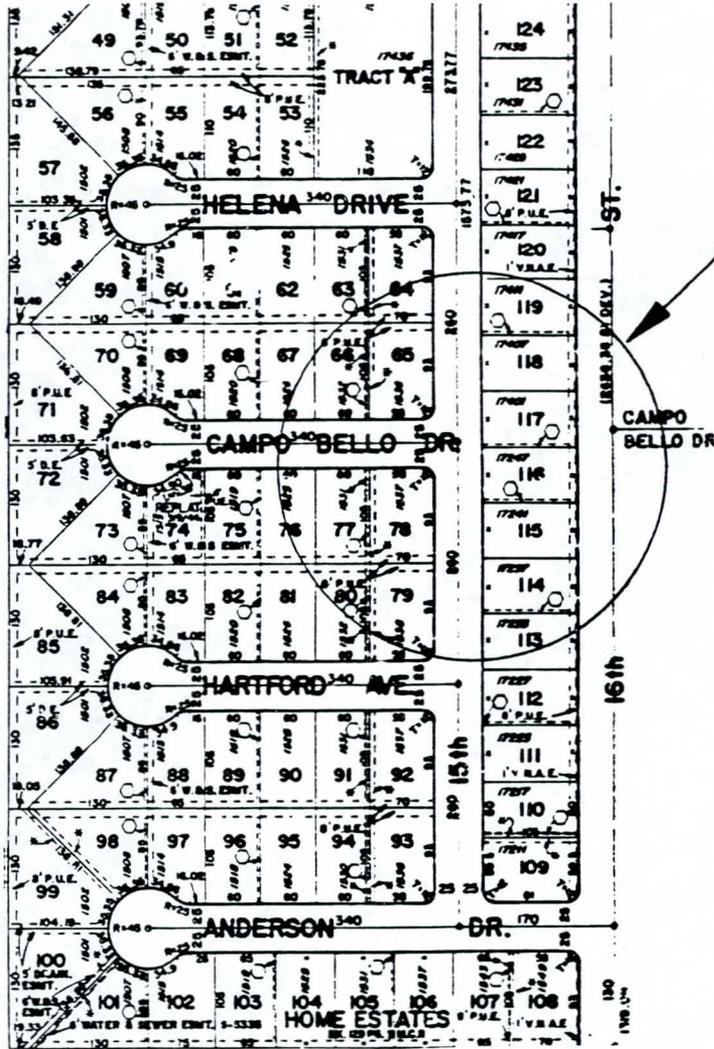


LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



**THIS
 PROJECT**

Property of
 Flood Control District of MC Library
 Please Return to
 2801 W. Durango
 Phoenix, AZ 85009

SUBDIVISION NAME: BELL CASAS MOBILE HOME
 ESTATES (COUNTY)
 DATE SUBDIVIDED: 03-23-70



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
16TH STREET & CAMPO BELLO DRIVE	37/30	06-05-91	1

PROJ. NO. 37/30-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Street and Campo Bello Drive

PROJECT NUMBER: 37/30-1

DESCRIPTION: Storm water has been blocked by Bell Casas Mobile Home Estates to the west. Upper East Fork Detention Basin (under design) may help this problem.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Inlet and box culvert under Bell Road.
Construct channel thru Bell Casas.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$15,000

FIELD INSPECTION DATE: 4/17/91/PK

LOCATIONS OF KNOWN FLOODING:

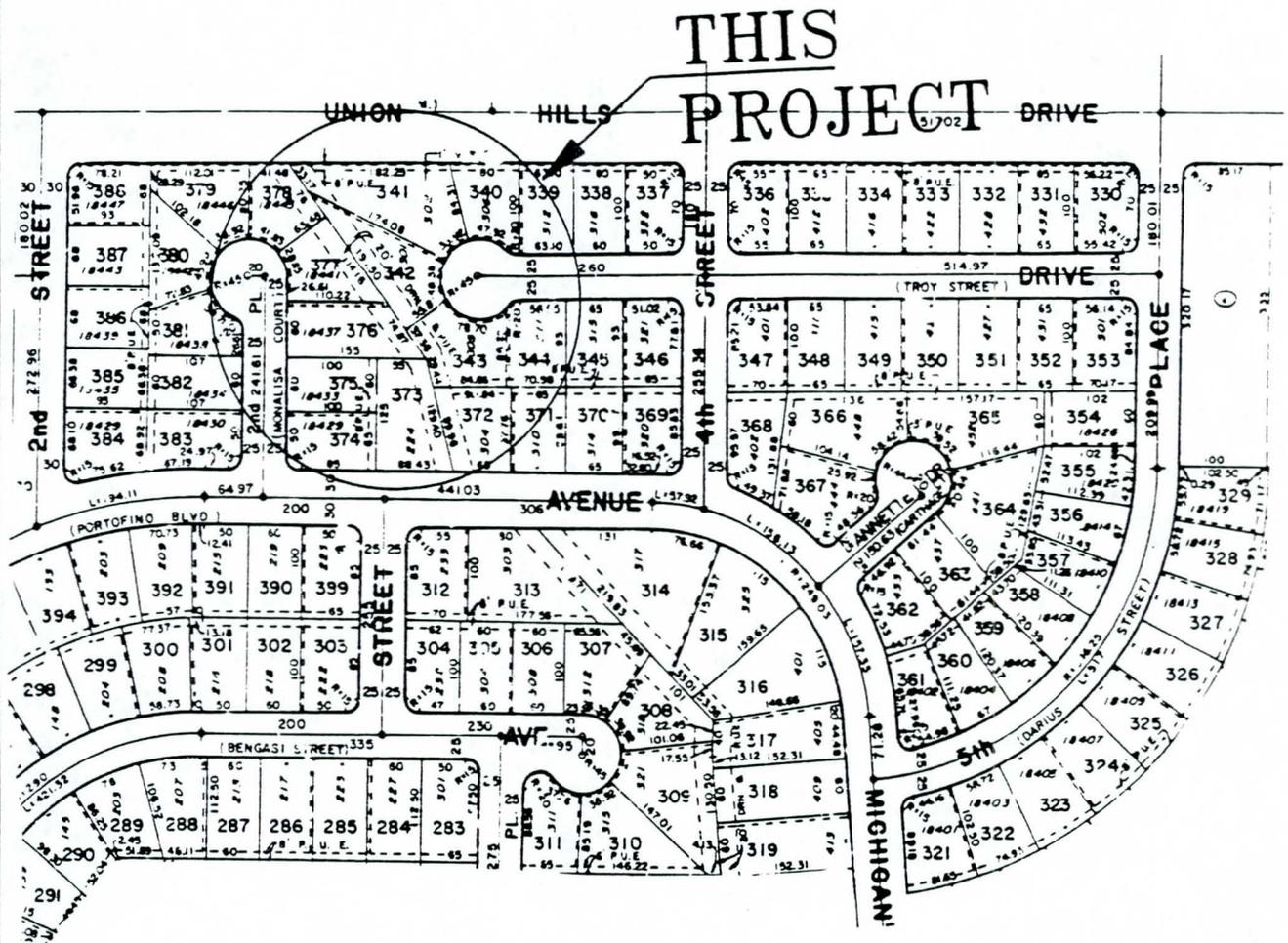
17601 North 16th Street
17607 North 15th Place

CONTRIBUTING FACTORS:

Floors too low
Major storm run-off exceeds street capacity
Structures constructed in natural drainage channels or drainage easements

LFMP94

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: SEVEN PALMS MOBILE HOME ESTATES
 UNIT TWO (COUNTY)

DATE SUBDIVIDED: 01-22-72



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
4TH STREET & UNION HILLS DRIVE	38/28	06-12-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 4th Street and Union Hills Drive

PROJECT NUMBER: 33/28-1

DESCRIPTION: Mobile homes and other encroachments have been allowed in drainage easement. This will cause flooding down streets.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Remove obstructions and pave/fence drainageway.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

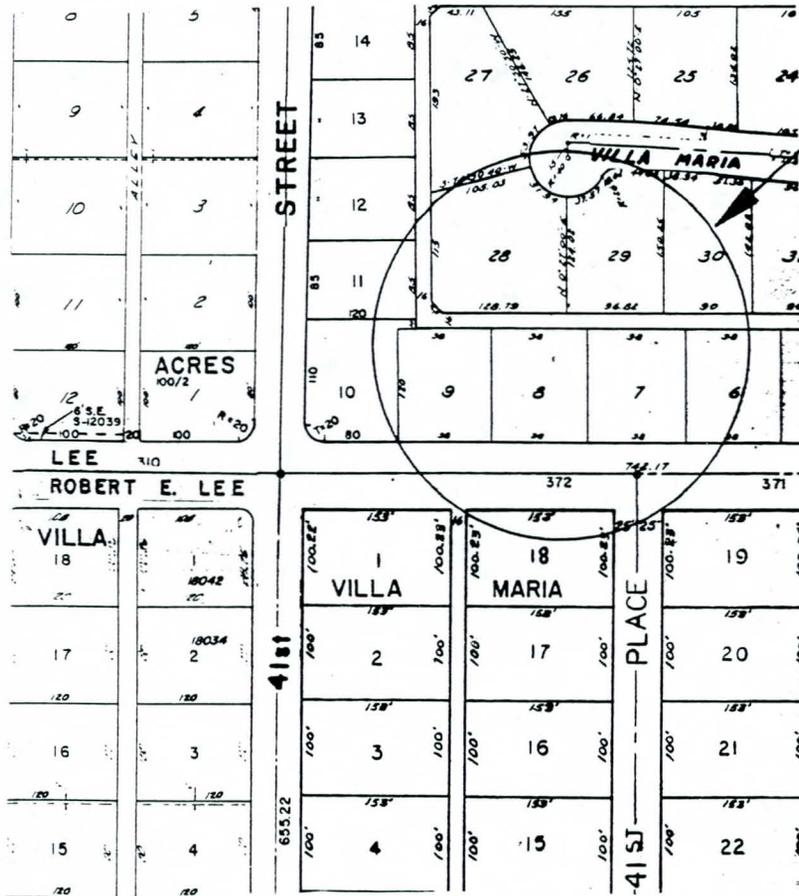
FIELD INSPECTION DATE: 6/5/91/PK

LOCATIONS OF KNOWN FLOODING:
NONE

CONTRIBUTING FACTORS:
Structures constructed in natural drainage channels or drainage easements

LFMP06

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: VILLA MARIA #2 (COUNTY)

DATE SUBDIVIDED: 06-19-57



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
41ST STREET & ROBERT E. LEE STREET	38/37	06-05-91	1

PROJ. NO. 38/37-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 41st Street and Robert E. Lee Street

PROJECT NUMBER: 38/37-1

DESCRIPTION: Storm water flows to end of Villa Maria Drive cul de sac. Easement is inadequate to drain to Robert E. Lee.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 6

SUGGESTED SOLUTION: Purchase right of way between streets to drain cul de sac.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$120,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 4/1/91/PK

LOCATIONS OF KNOWN FLOODING:
N/A

CONTRIBUTING FACTORS:

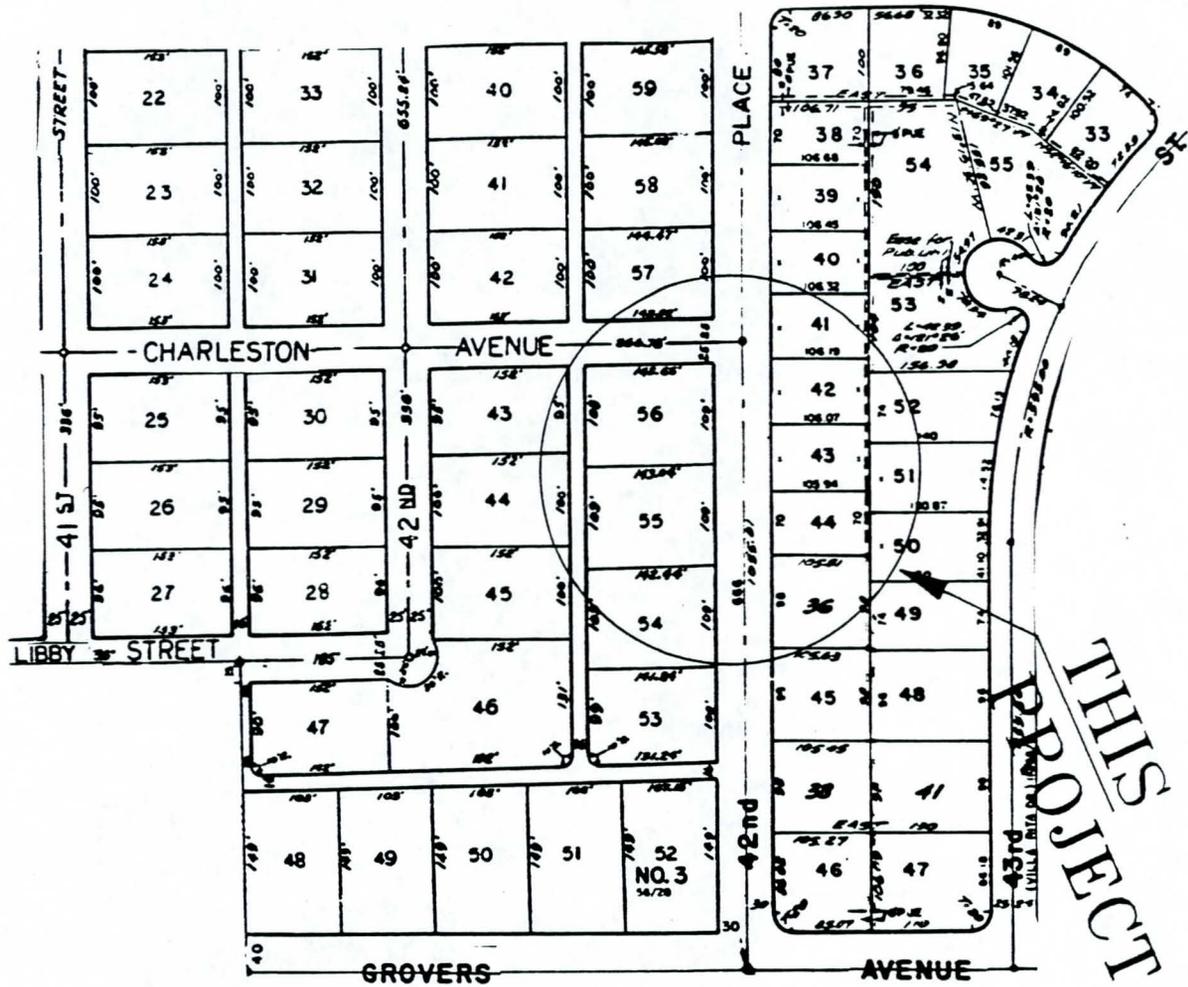
Constructed prior to Development Standards

Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

LFMP02

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: VILLA MARIA #3 (COUNTY)

DATE SUBDIVIDED: 02-03-54

NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
42ND PLACE & GROVERS AVENUE	38/37	06-05-91	1

PROJ NO 38/37-2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 42nd Place and Grovers Avenue

PROJECT NUMBER: 38/37-2

DESCRIPTION: Storm water exceeds local street capacity and floods homes which are at or below curb height.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 5,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

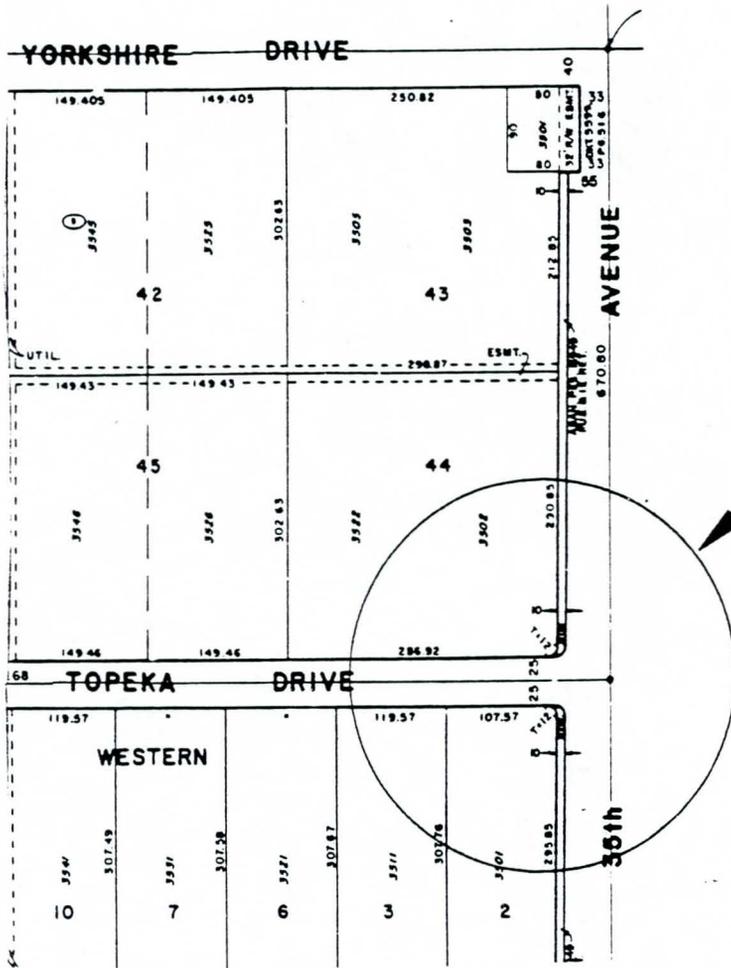
FIELD INSPECTION DATE: 6/4/91/PK

LOCATIONS OF KNOWN FLOODING:
17832, 17824 North 42nd Place

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP95

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: WESTERN MEADOWS (COUNTY)

DATE SUBDIVIDED: 03-24-65



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
35TH AVENUE & TOPEKA DRIVE	39/20	05-15-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 37th Avenue and Topeka Drive

PROJECT NUMBER: 39/20-1

DESCRIPTION: Storm water exceeds capacity of 35th Avenue, Topeka, and 37th Avenue. This is part of regional problem.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Two miles of inverted crown collector streets with storm drain, or major drain to ACDC.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
3501, 3701 West Topeka

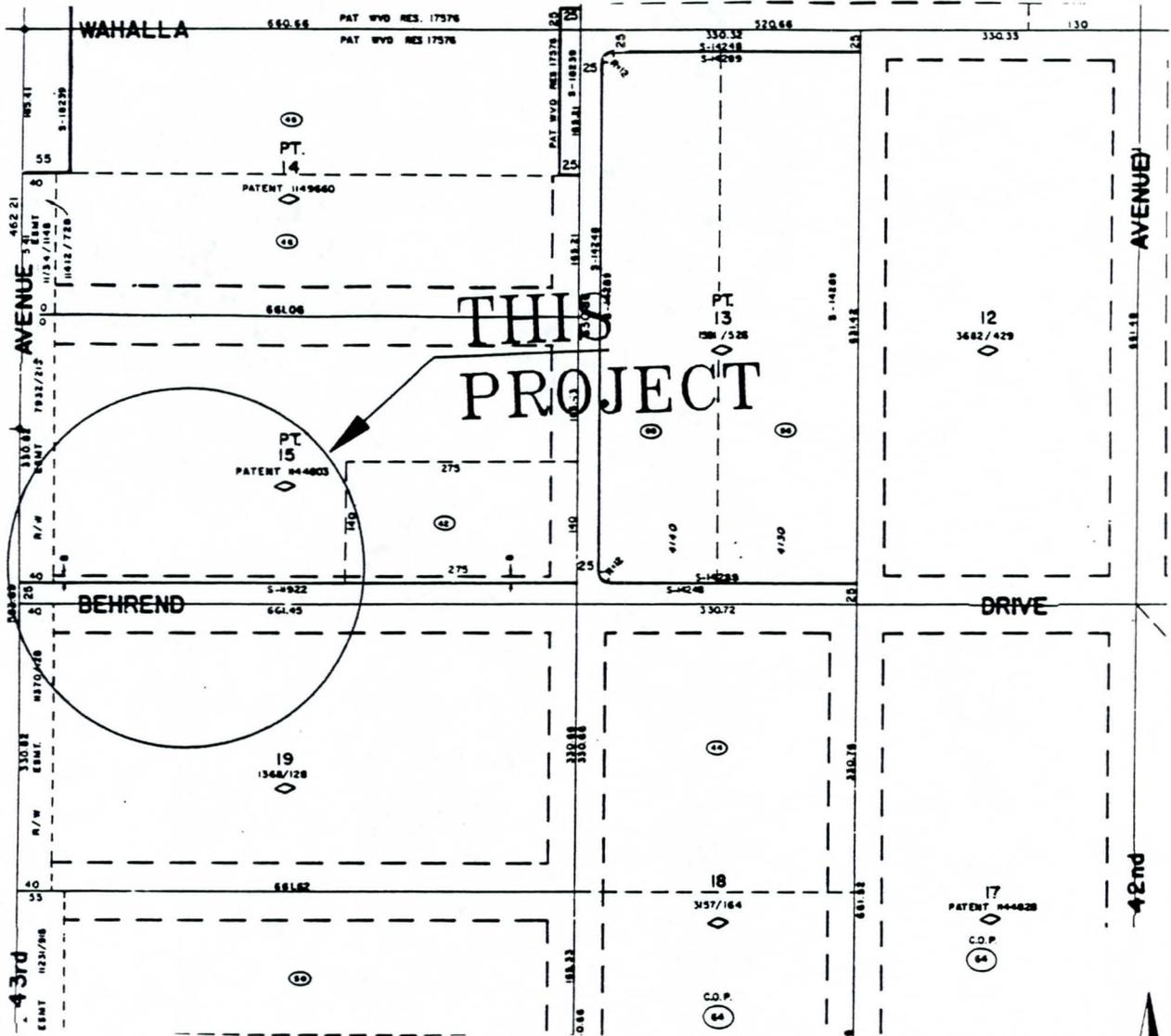
CONTRIBUTING FACTORS:

Floors too low

Failure to allow drainage through new projects

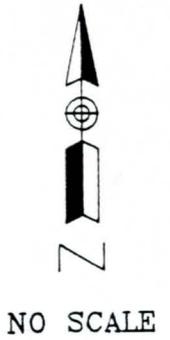
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-55



PROJECT NAME: 43RD AVENUE & BEHREND DRIVE	QS 40/19	DATE: 06-12-91	C.D. 2
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PROJ. NO. 40/19-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 43rd Avenue and Behrend Drive

PROJECT NUMBER: 40/19-1

DESCRIPTION: Homes are constructed in the Scatter Wash floodplain and are subject to flooding.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct channel from Beardsley Road to 43rd Avenue.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$5,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$500,000

FIELD INSPECTION DATE: 6/8/91/PK

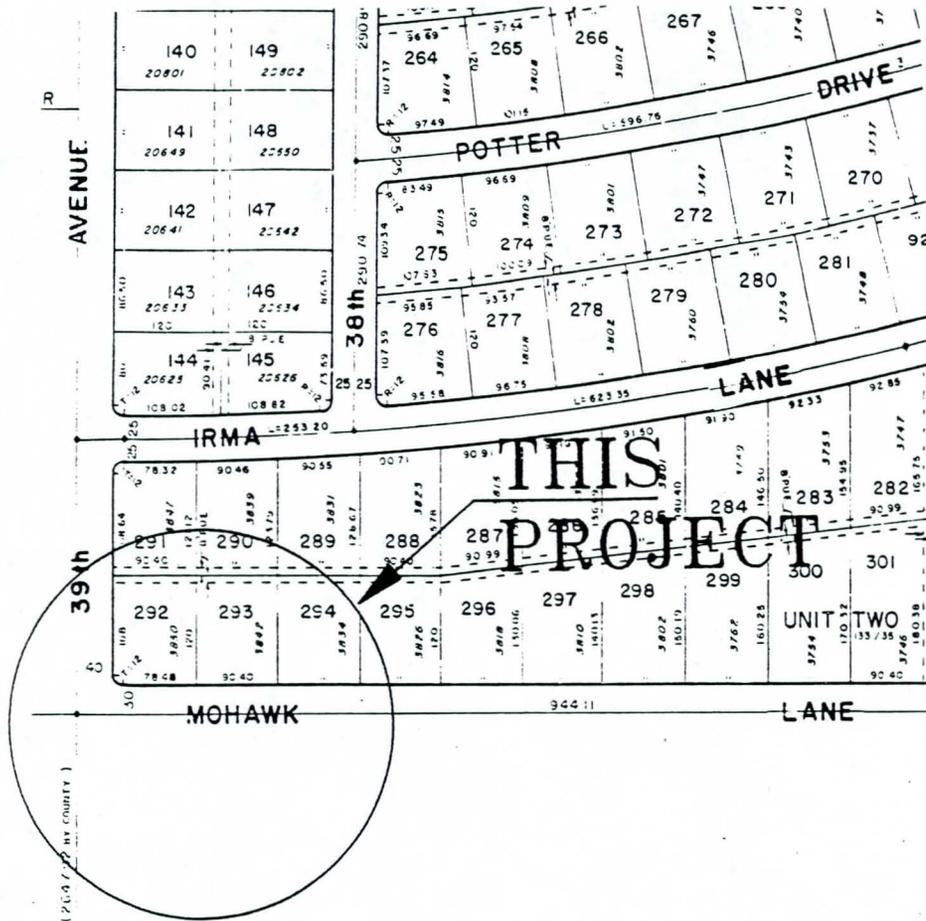
LOCATIONS OF KNOWN FLOODING:
19617 North 43rd Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Structures constructed in natural drainage channels or drainage easements

LFMP08

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: JADE PARK NORTH UNIT TWO (COUNTY)

DATE SUBDIVIDED: 04-13-70



NO SCALE

PROJECT NAME: 39TH AVENUE & MOHAWK LANE	QS 41/20	DATE: 05-20-91	C.D. 2
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PROJ. NO. 41/20-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 39th Avenue and Mohawk Lane

PROJECT NUMBER: 41/20-1

DESCRIPTION: Storm water from one half a square mile of small lots, without retention, drain to this intersection. It is a low point and was the channel for an old tributary to Scatter Wash which is 1500' south. Both 39th Avenue and Mohawk Lane are 1/2 streets. Flow will increase when development moves to the south and west.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: 39th Avenue and Mohawk Lane should be constructed with inverted crown and storm drains to Scatter Wash and/or Skunk Creek.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

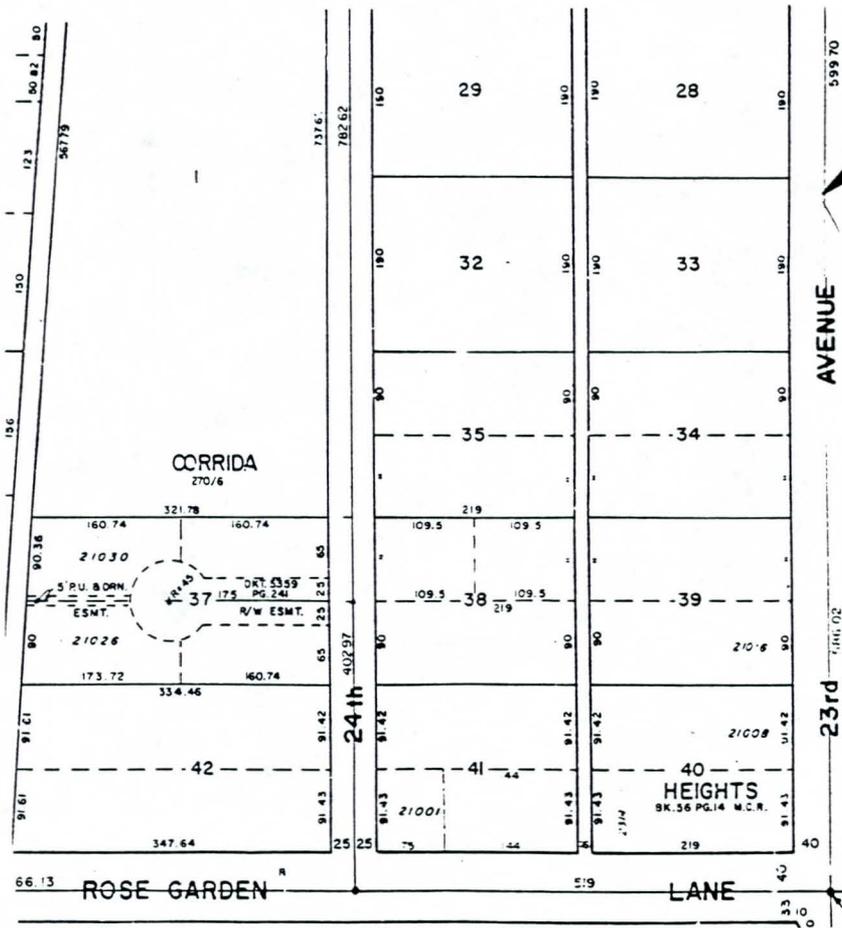
FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
3847 West Irma Lane

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Major storm run-off exceeds street capacity

LFMP29

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



**THIS
PROJECT**

SUBDIVISION NAME: BLACK CANYON HEIGHTS (COUNTY)

DATE SUBDIVIDED: 03-11-53



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
23RD AVENUE & ROSE GARDEN LANE	42/23	05-20-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 23rd Avenue and Rose Garden Lane

PROJECT NUMBER: 42/23-1

DESCRIPTION: Storm water from the north and east collects in 23rd avenue between Beardsley and Deer Valley Road. Lots along west side of 23rd Avenue are 1/2 foot below curb.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 23rd Avenue with storm drain and inverted crown from Beardsley to Deer Valley Road.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

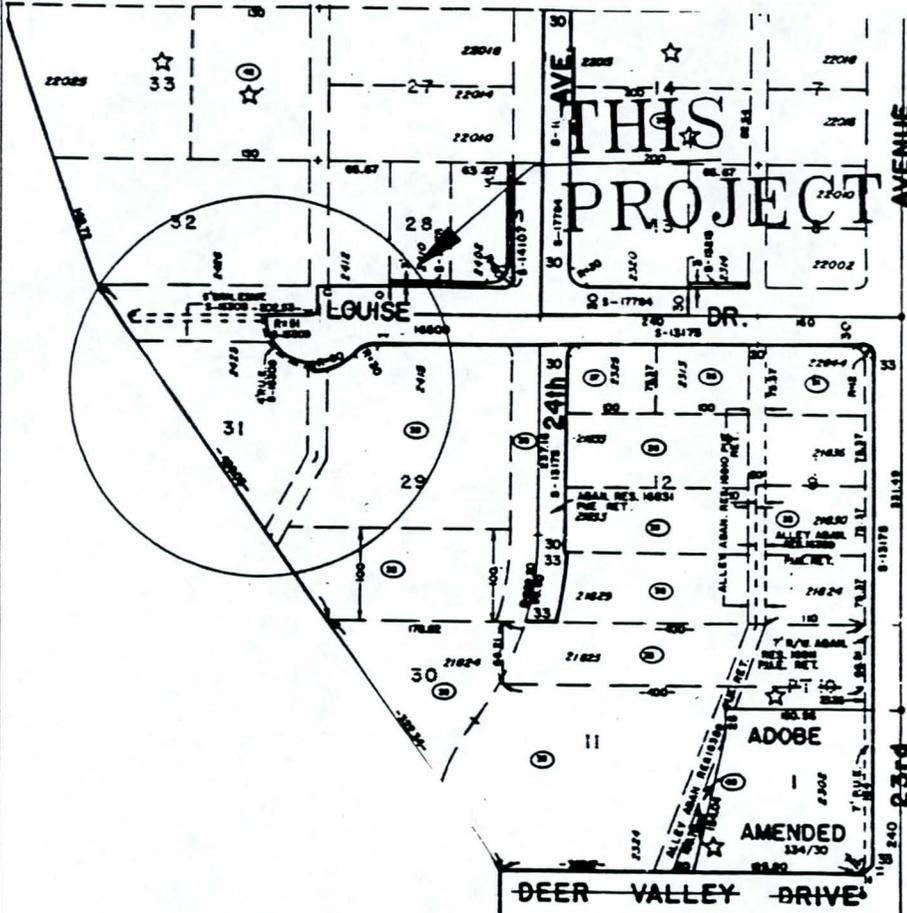
FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
21040 North 23rd Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP30

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-65



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
24TH AVENUE & LOUISE DRIVE	43/23	05-20-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 24th Avenue and Louise Drive

PROJECT NUMBER: 43/23-1

DESCRIPTION: Storm water ponds between Black Canyon Freeway, 24th Avenue, Deer Valley Drive, and Williams Drive. 24th Avenue and the alley to the west cannot drain because of no slope to north or south. Drainage is to west into pond (sump conditions). This is a Special Flood Hazard Area and flood insurance is mandatory.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 32

SUGGESTED SOLUTION: Construct Adobe Drive with inverted crown and storm drain to provide drain for the area. Install box culverts under I-17 and construct channel to Scatter Wash. Scatter Wash must be constructed for this flow of 1300 cfs.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$4,000,000 (not including Scatter Wash)

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$125,000

FIELD INSPECTION DATE: 3/8/91/PK

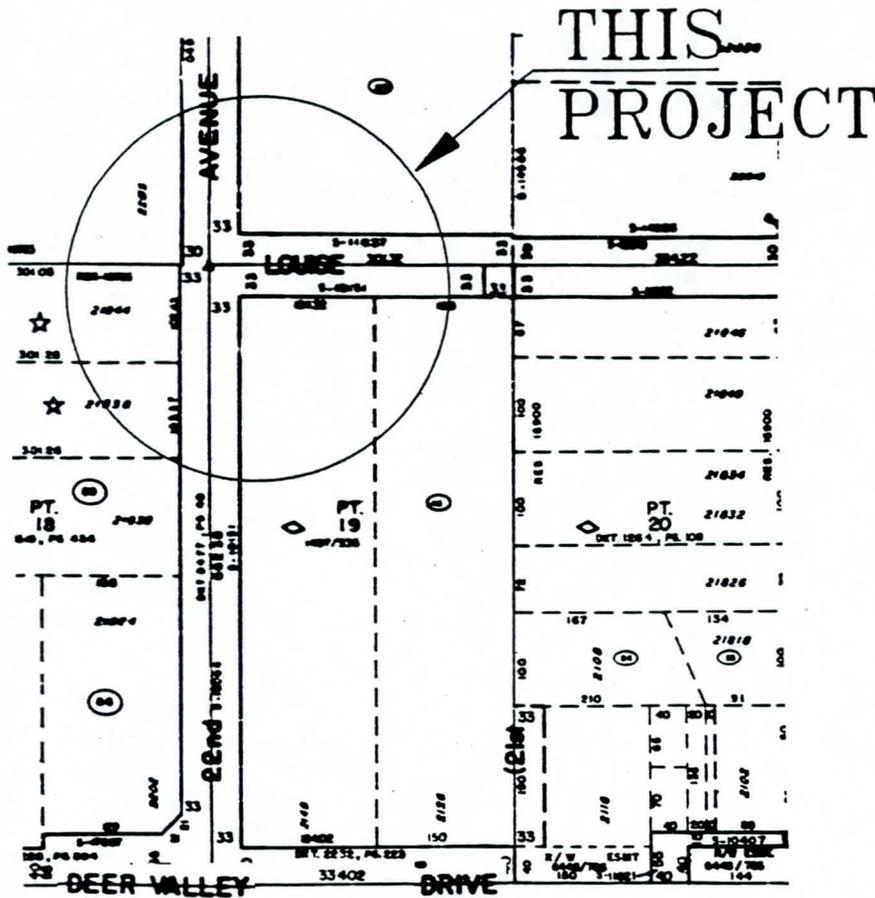
LOCATIONS OF KNOWN FLOODING:

22015, 22047 North Black Canyon Freeway (1984, 1988)
22010 North 24th Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects
Streets which drain to the end of a cul de sac or otherwise dead end
Structures constructed in ponding area along freeway

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (CITY)

DATE SUBDIVIDED: 01-01-85



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
22ND AVENUE & LOUISE DRIVE	43/24	05-20-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 22nd Avenue and Louise Drive

PROJECT NUMBER: 43/24-1

DESCRIPTION: Storm water flows west on Louise Drive to 22nd Avenue. 22nd Avenue is flat to north and to south so that water cannot drain off. Businesses are flooded on west side of 22nd Drive. NOTE: Louise Drive west of 22nd Avenue was abandoned over objections of the Engineering Department.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 5

SUGGESTED SOLUTION: Condemn right of way for Louise Drive and construct between 22nd and 23rd Avenues.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 3/8/91/PK

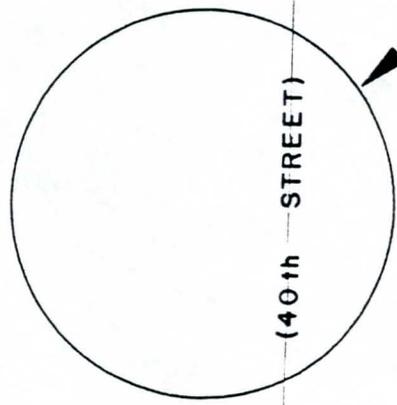
LOCATIONS OF KNOWN FLOODING:
21844 North 22nd Avenue
21830 North 22nd Avenue (1987)
2020 East Deer Valley Drive (1984, 1988)

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Streets abandoned so that drainage was cut off

LFMP26

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

PINNACLE PEAK ROAD
8/9 RD MAP



THIS
 PROJECT

SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-85



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
40TH STREET & PINNACLE PEAK ROAD	44/36	05-20-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 40th Street and Pinnacle Peak Road

PROJECT NUMBER: 44/36-1

DESCRIPTION: Mobile Home Park has been constructed which blocks sheet flow and several washes. Storm water has been routed around Mobile Home Park in 40th Street alignment. Channel is too steep and undersized causing flooding into Mobile Home Park.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Implement Paradise Valley Fan Terrace Drainage plan by constructing dike and channel along Pinnacle Peak Road (long term). Mobile Home Park owners will have to protect their property in the meantime.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$13,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$260,000

FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
3901 East Pinnacle Peak Road

CONTRIBUTING FACTORS:
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP27

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 47th Avenue and Greenway

PROJECT NUMBER: 34/17-1

DESCRIPTION: Storm run-off from north and east exceeds capacity of Greenway and side ditch. Flows onto properties on south side of Greenway. Greenway has good slope to west.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Construct Greenway with inverted crown, or large berms on each side, or large storm sewer to ACDC, or drainageways to the south.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

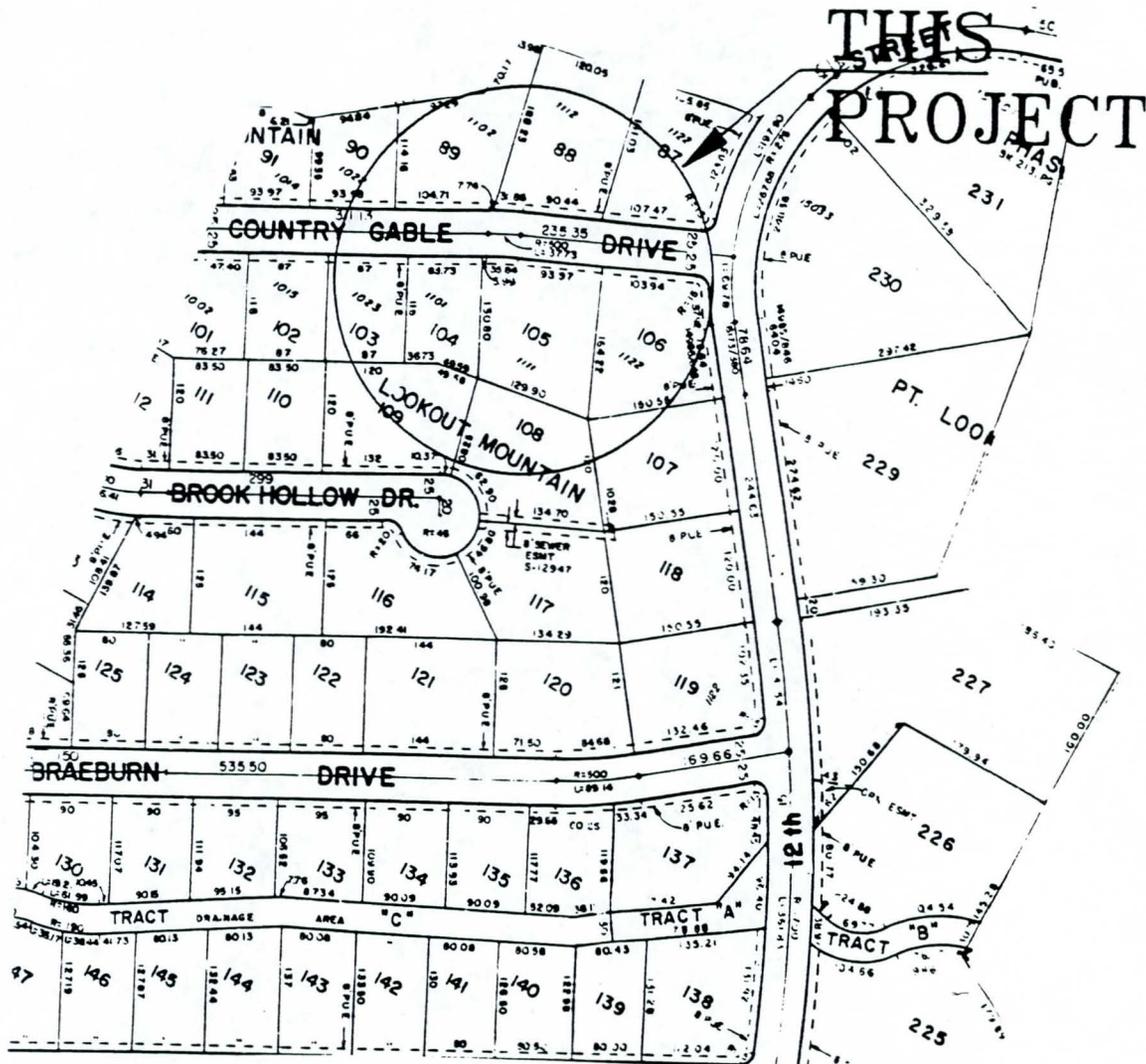
COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
4701, 4923, 5009 West Greenway

CONTRIBUTING FACTORS:
Floors too low
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: LOOKOUT MOUNTAIN PHASE 3 (CITY)

DATE SUBDIVIDED: 01-05-82



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
12TH STREET & COUNTRY GALES DRIVE	34/29	06-12-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 12th Street and Country Gables Drive

PROJECT NUMBER: 34/29-1

DESCRIPTION: Storm water exceeds capacity of Country Gables and flooded home which is below curb.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 4

SUGGESTED SOLUTION: Construct 500 feet of Country Gables Drive with inverted crown.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$25,000

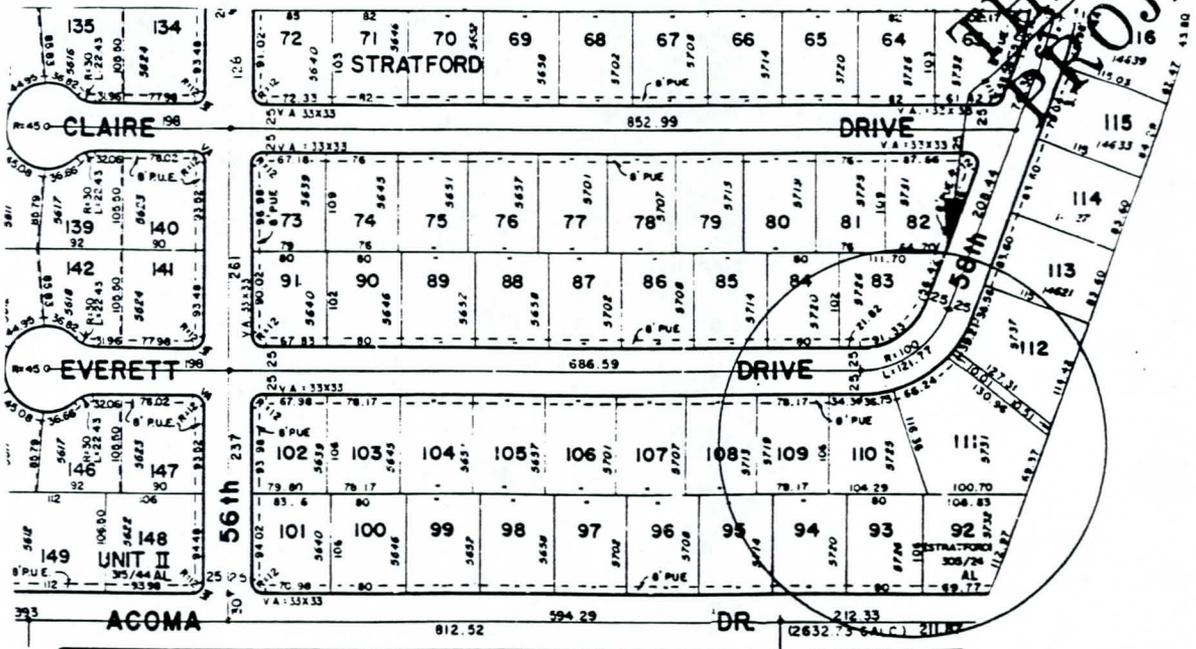
FIELD INSPECTION DATE: 6/4/91/PK

LOCATIONS OF KNOWN FLOODING:
1101 East Country Gables Drive

CONTRIBUTING FACTORS:
Major storm run-off exceeds street capacity

LFMP04

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: STRATFORD (CITY)

DATE SUBDIVIDED: 11-15-86



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
58TH STREET & EVERETT DRIVE	34/41	06-05-91	1

PROJ. NO. 34/41-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 58th Street and Everett Drive

PROJECT NUMBER: 34/41-1

DESCRIPTION: Storm water from 58th Street and Everett Drive flows to a 10' drainage easement. Drainageway downstream is to capacity and water backs up 2-3 deep in these streets.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Improve channel and road crossings.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

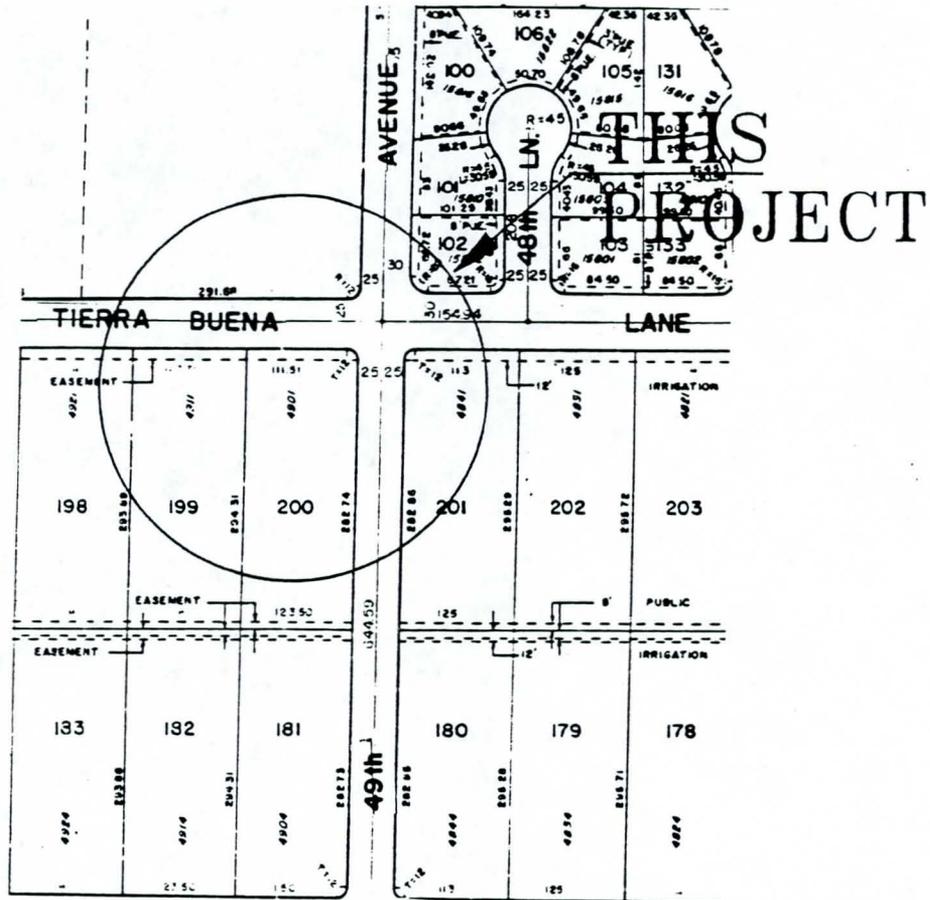
FIELD INSPECTION DATE: 6/4/91/PK

LOCATIONS OF KNOWN FLOODING:
5707, 5726 East Everett Drive

CONTRIBUTING FACTORS:
Major storm run-off exceeds channel capacity

LFMP96

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: SUNBURST FARMS SEVEN (COUNTY)

DATE SUBDIVIDED: 12-16-68



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
49TH AVENUE & TIERRA BUENA LANE	35/17	05-15-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 49th Avenue and Tierra Buena Lane

PROJECT NUMBER: 35/17-1

DESCRIPTION: Storm water flows 3-4' deep on Paradise Lane, down 49th Avenue and onto Tierra Buena and Greenway. This is part of regional problem.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Two miles of inverted crown collector streets with storm drain, or major drain to ACDC.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:

4847 West Paradise Lane

4841, 4921, 4931 West Tierra Buena Lane

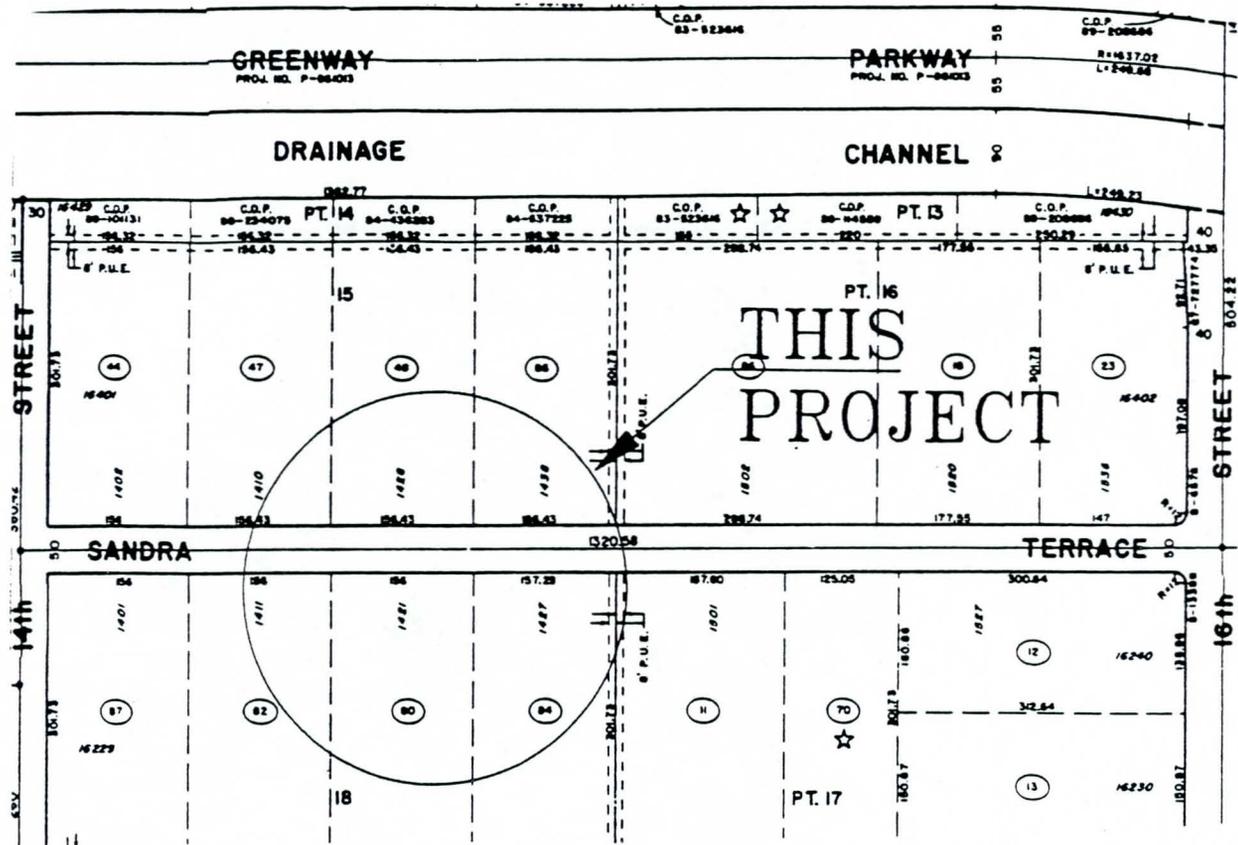
CONTRIBUTING FACTORS:

Floors too low

Failure to allow drainage through new projects

Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: DENHAM ESTATES (COUNTY)

DATE SUBDIVIDED: 02-27-53



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
16TH STREET & SANDRA TERRACE	36/30	05-08-91	1

PROJ. NO. 36/30-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Street and Sandra Terrace

PROJECT NUMBER: 36/30-1

DESCRIPTION: Storm water from mountains flows into Paradise Lane and spreads out between 16th Street and 14th Street. Subdivision was built in natural washes with no provision for drainage. See Improvement District Job P-888560 I.D.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct channel/pipes to convey water around subdivision.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 2/27/91/PK

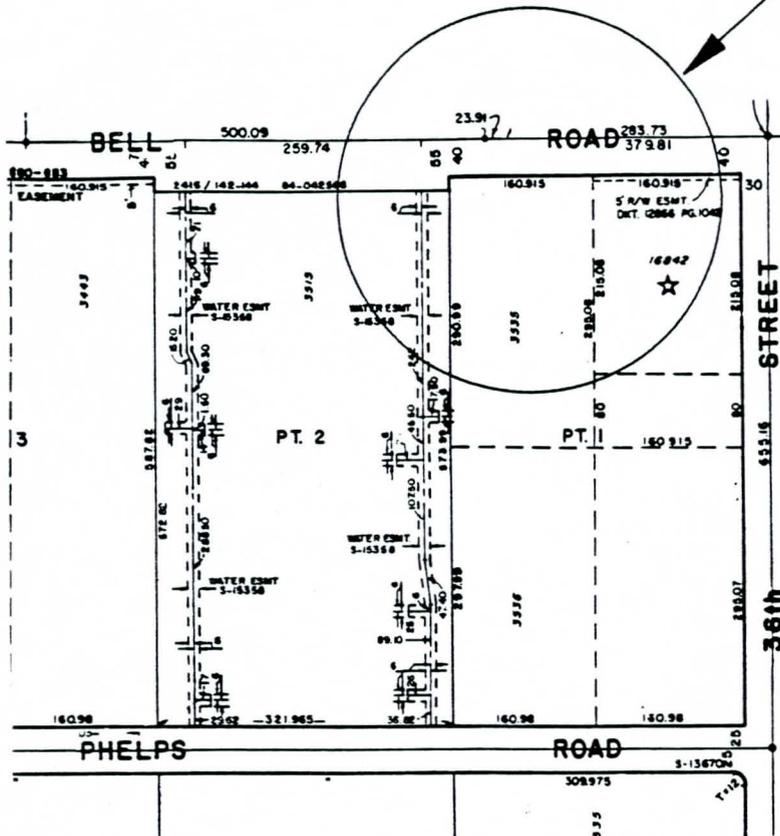
LOCATIONS OF KNOWN FLOODING:

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: PARADISE ACRES (COUNTY)

DATE SUBDIVIDED: 01-30-47



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
36TH STREET & BELL ROAD	36/35	06-05-91	1

PROJ NO 36/35-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 36th Street and Bell Road

PROJECT NUMBER: 36/35-1

DESCRIPTION: A large channel directs storm water to Bell Road. Below Bell Road no channel exists and floods one home and an apartment complex. Large mobile home complex blocks watershed below Aire Libre alignment.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct box culvert for Bell Road and channel downstream.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

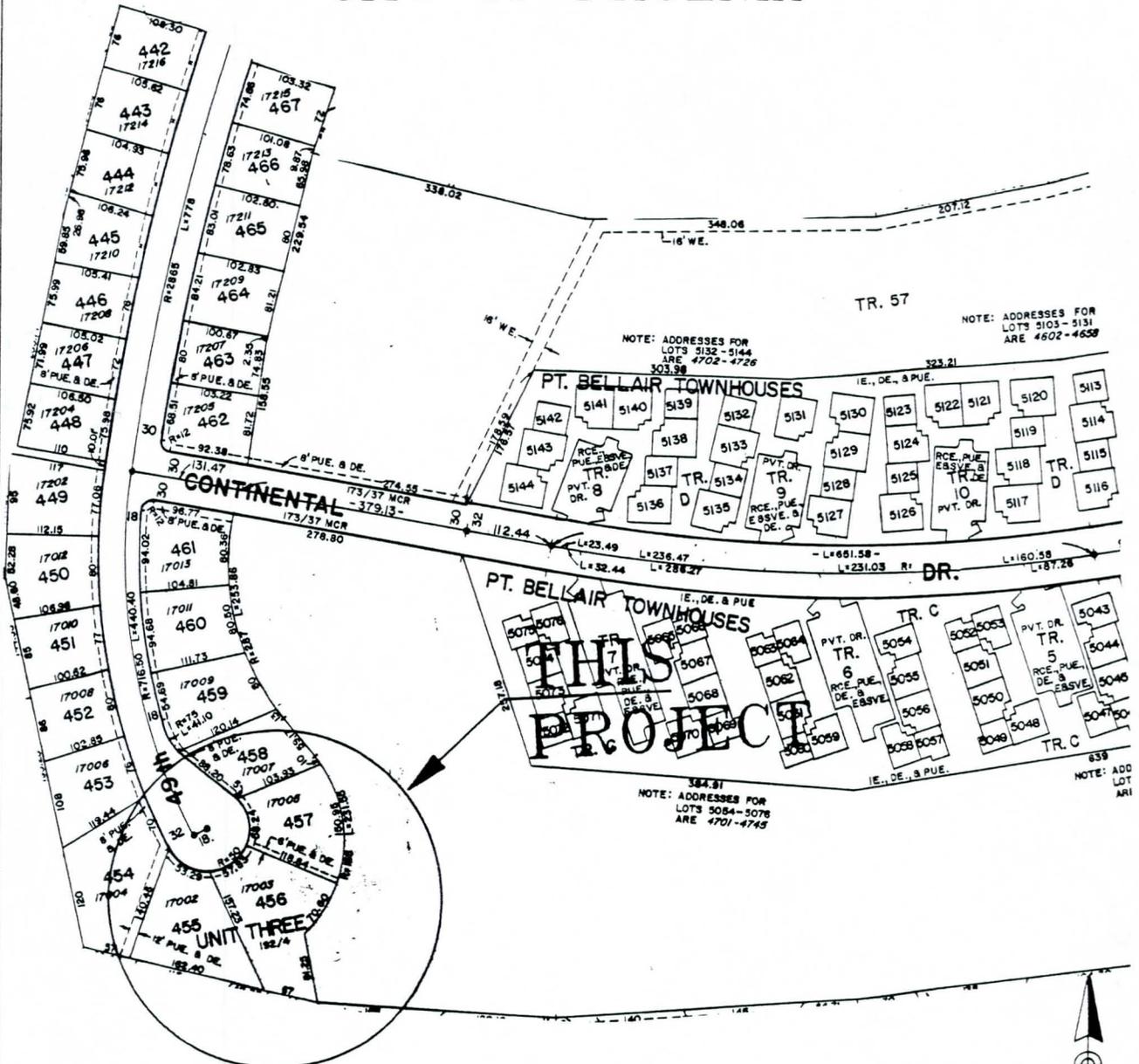
FIELD INSPECTION DATE: 4/9/91/PK

LOCATIONS OF KNOWN FLOODING:
3535, 3515 East Bell Road

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low

LFMP01

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: BELLAIRE UNIT 3 (COUNTY)

DATE SUBDIVIDED: 08-08-77

NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
49TH AVENUE & CONTINENTAL DRIVE	37/17-1	06-12-91	2

PROJ NO 37/17-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 49th Avenue and Continental Drive

PROJECT NUMBER: 37/17-1

DESCRIPTION: Storm water exceeds capacity of small 16' drainage easement at end of cul de sac and floods homes.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Purchase home and install proper drainageway.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 6/5/91/PK

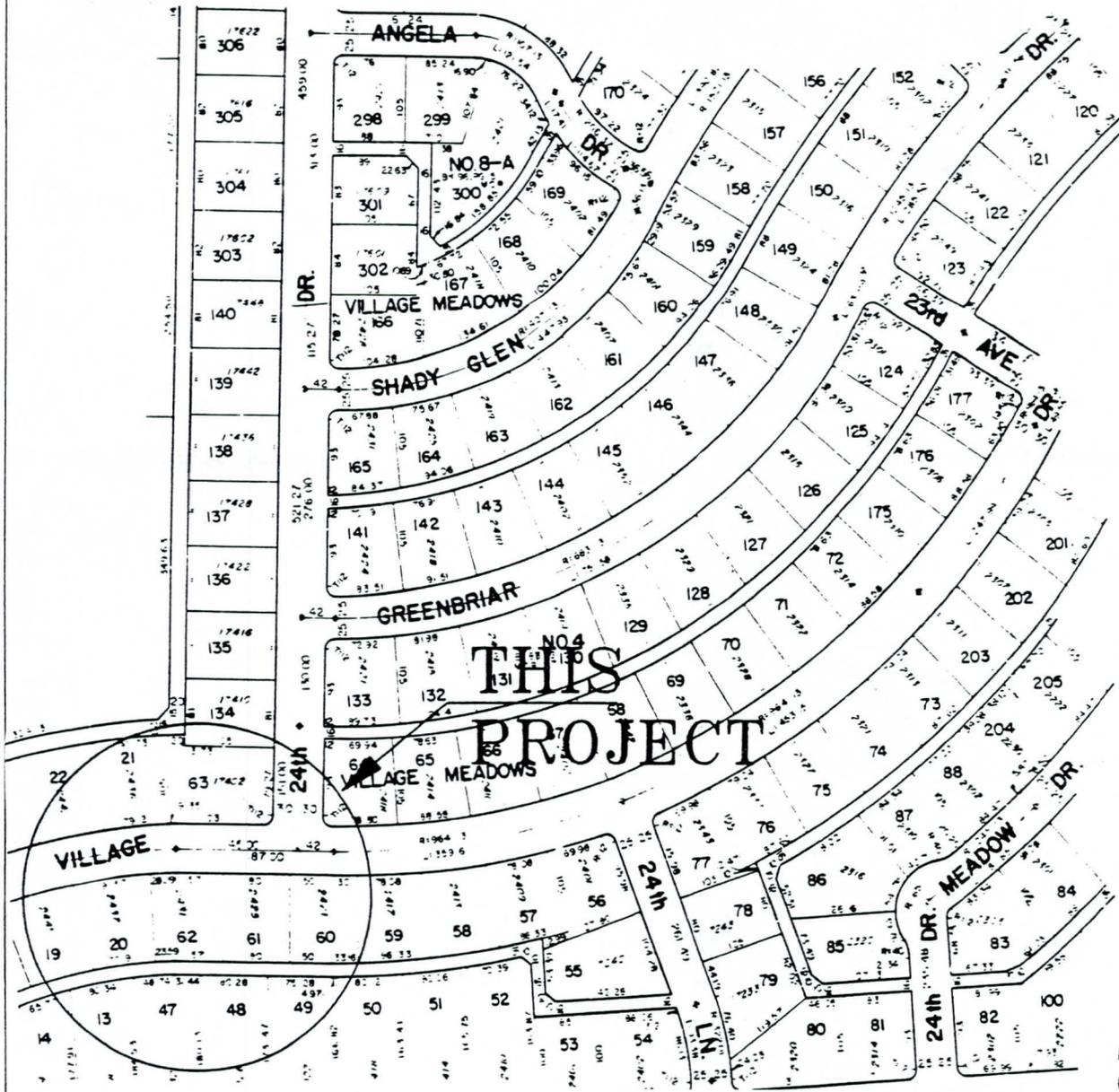
LOCATIONS OF KNOWN FLOODING:
17007 North 49th Avenue

CONTRIBUTING FACTORS:

Streets which drain to the end of a cul de sac or otherwise dead end

LFMP09

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: VILLAGE MEADOWS (COUNTY)

DATE SUBDIVIDED: 09-29-58

NO SCALE

PROJECT NAME: 24TH DRIVE & VILLAGE DRIVE	QS 37/23	DATE: 06-12-91	C.D. 2
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PROJ. NO. 37/23-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 24th Drive and Village Drive

PROJECT NUMBER: 37/23-1

DESCRIPTION: Interstate 17 obstructs drainage and causes ponding along Village Drive.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Arizona Department of Transportation must construct larger culvert to drain this area.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$200,000

FIELD INSPECTION DATE: 6/5/91/PK

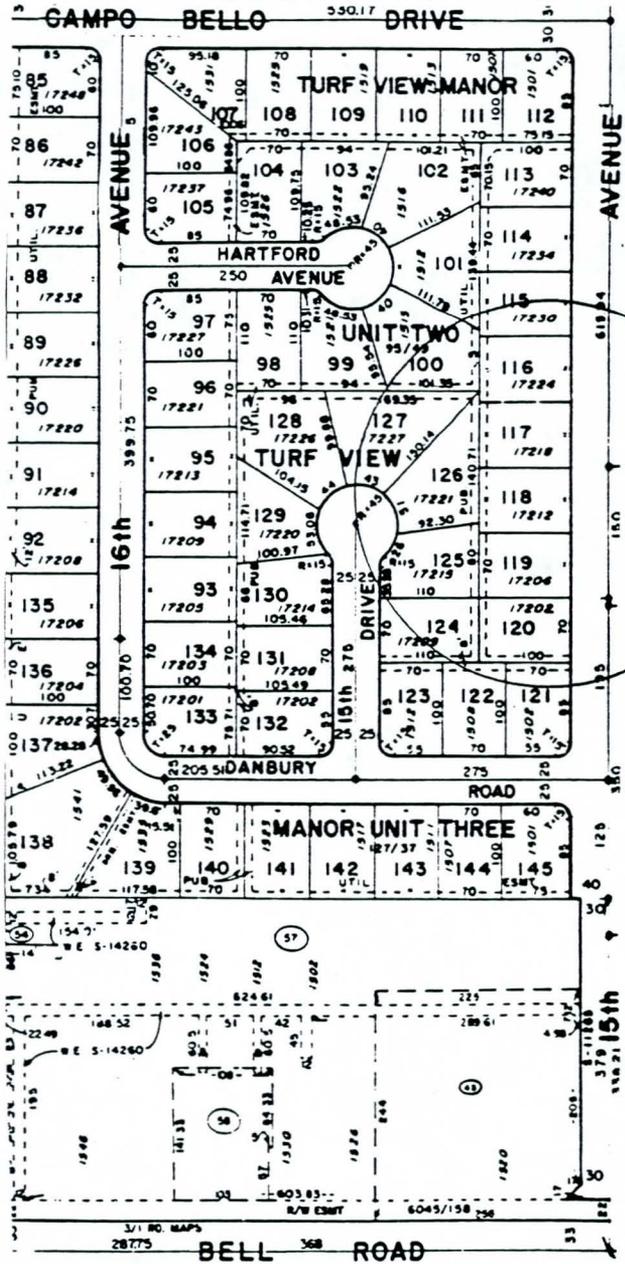
LOCATIONS OF KNOWN FLOODING:
2549, 2543 West Village Drive

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects

LFMP07

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: TURF VIEW MANOR (COUNTY)

DATE SUBDIVIDED: 03-21-60



NO SCALE

PROJECT NAME:

15TH AVENUE NORTH OF BELL ROAD

QS

37/25

DATE:

05-20-91

C.D.

2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 15th Avenue north of Bell Road

PROJECT NUMBER: 37/25-1

DESCRIPTION: Storm water from approximately 1 1/2 square miles is directed to 15th Avenue and Grovers Avenue. Flow south on 15th Avenue exceeds street capacity. Flows west into Helena Drive cul de sac and floods at least three homes.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Rebuild two miles of collector streets with inverted crown and storm drain. Includes Helena Drive.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

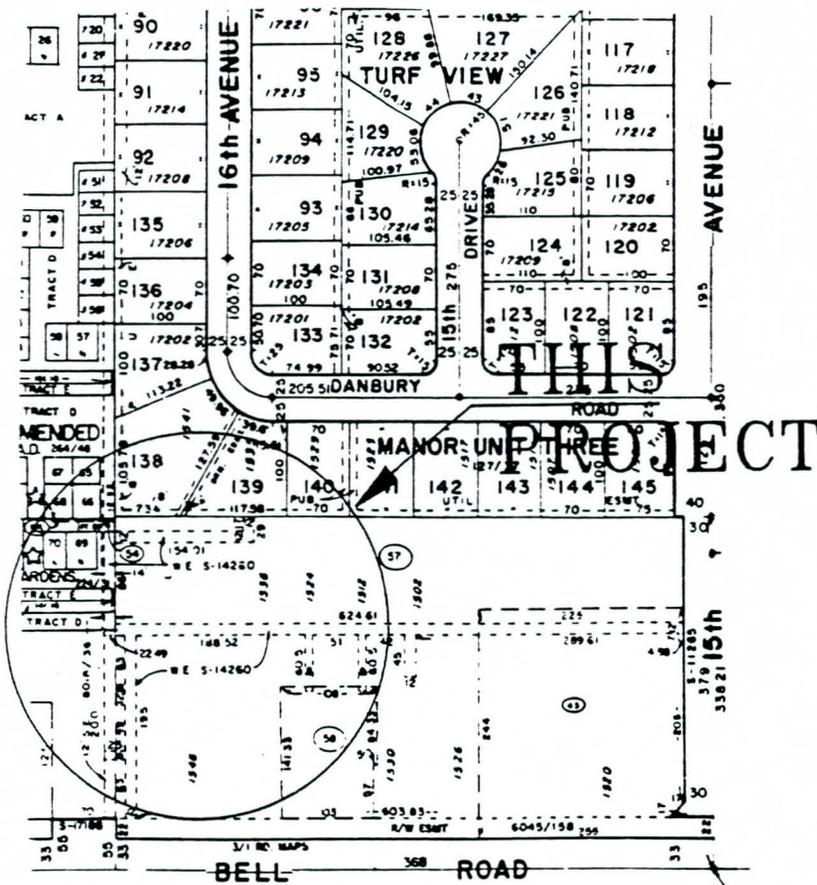
FIELD INSPECTION DATE: 8/2/90/PK

LOCATIONS OF KNOWN FLOODING:
17025, 17206, 17218, 17234 North 15th Avenue
17413, 17417 North 16th Avenue
1525 West Helena

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Streets which drain to the end of a cul de sac or otherwise dead end
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (CITY)

DATE SUBDIVIDED: 01-01-84



NO SCALE

PROJECT NAME: 16TH AVENUE & DANBURY ROAD	QS 37/25	DATE: 05-20-91	C.D. 2
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Avenue and Danbury Road

PROJECT NUMBER: 37/25-2

DESCRIPTION: Storm water flows to corner with 8' drainage easement. Outlet has been cut off by development to the south. Same problem with Persion Gardens project to west.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Condemn easements to Bell Road and construct drainageways.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

FIELD INSPECTION DATE: 8/2/90/PK

LOCATIONS OF KNOWN FLOODING:
1535 West Danbury Road (8/20/84)

CONTRIBUTING FACTORS:

Failure to allow drainage through new projects
Streets which drain to the end of a cul de sac or otherwise dead end

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 26th Street and Shea Boulevard

PROJECT NUMBER: 29/33-1

DESCRIPTION: Storm water exceeds the capacity of Shea Boulevard and floods homes at this corner.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Purchase two homes and connect Sahuaro Drive cul de sacs, or construct Shea Boulevard with an inverted crown.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

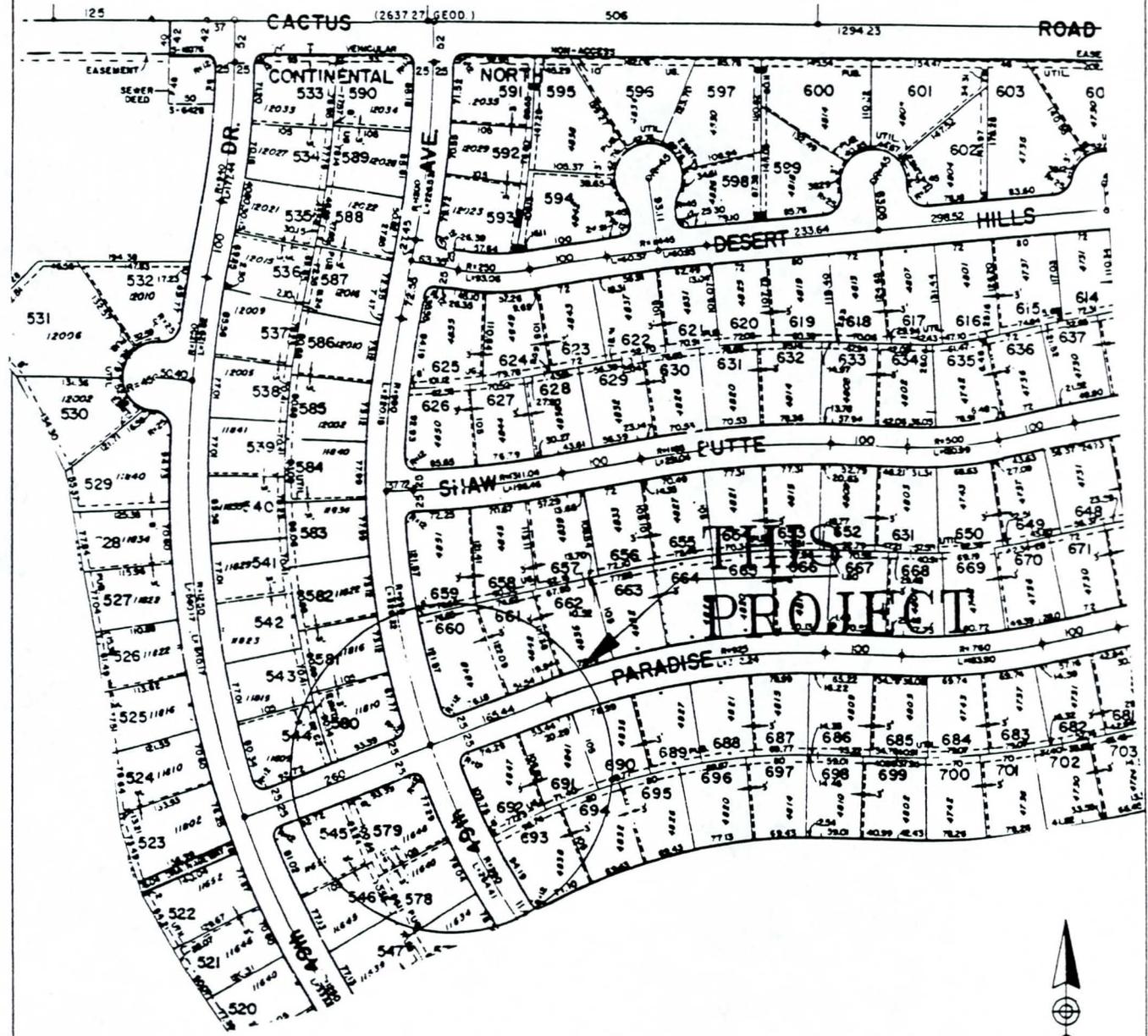
FIELD INSPECTION DATE: 6/4/91/PK

LOCATIONS OF KNOWN FLOODING:
10601 North 26th Street

CONTRIBUTING FACTORS:
Floors too low
Major storm run-off exceeds street capacity

LFMP99

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: CONTINENTAL NORTH UNIT 8 (CITY)

DATE SUBDIVIDED: 07-05-72



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
49TH AVENUE & PARADISE DRIVE	30/17	06-12-91	2

PROJ. NO 30/17-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 49th Avenue and Paradise Drive

PROJECT NUMBER: 30/17-1

DESCRIPTION: Storm water exceeds the capacity of streets and floods yards. Reports of water 3' - 4' deep. Houses are 1 foot above curb.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 4,000 feet of inverted crown local streets. Purchase right of way to ACDC which is inadequate.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

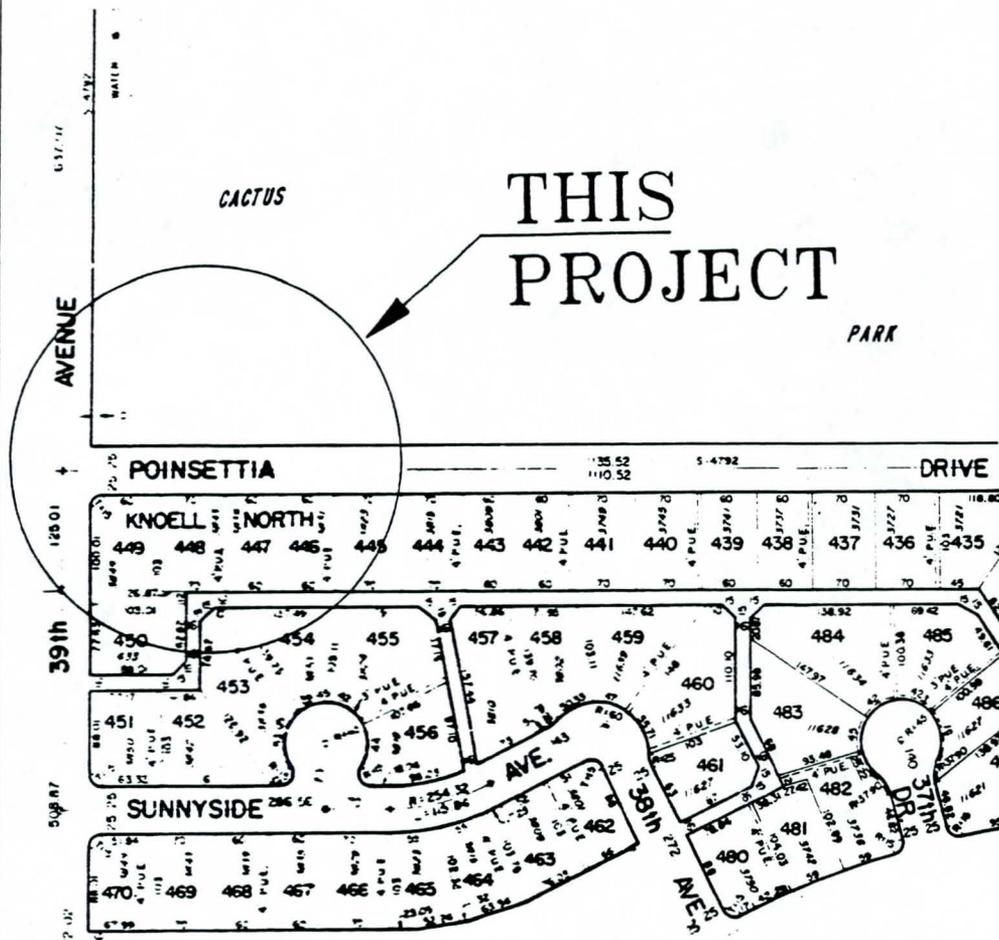
FIELD INSPECTION DATE: 6/5/91/PK

LOCATIONS OF KNOWN FLOODING:
NONE

CONTRIBUTING FACTORS:
Major storm run-off exceeds street capacity

LFMP13

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: KNOELL NORTH UNIT FIVE (CITY)

DATE SUBDIVIDED: 04-07-70



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
39TH AVENUE & POINSETTIA DRIVE	30/20	06-12-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 39th Avenue and Poinsettia Drive

PROJECT NUMBER: 30/20-1

DESCRIPTION: Storm water exceeds capacity of 39th Avenue and Poinsettia Drive and floods homes which are 2' above the curb. Storm water from Cactus floods Moon Valley High School.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 39th Avenue and Poinsettia Drive with inverted crown and storm drain. Rebuild Cactus with inverted crown.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$60,000

FIELD INSPECTION DATE: 6/5/91/PK

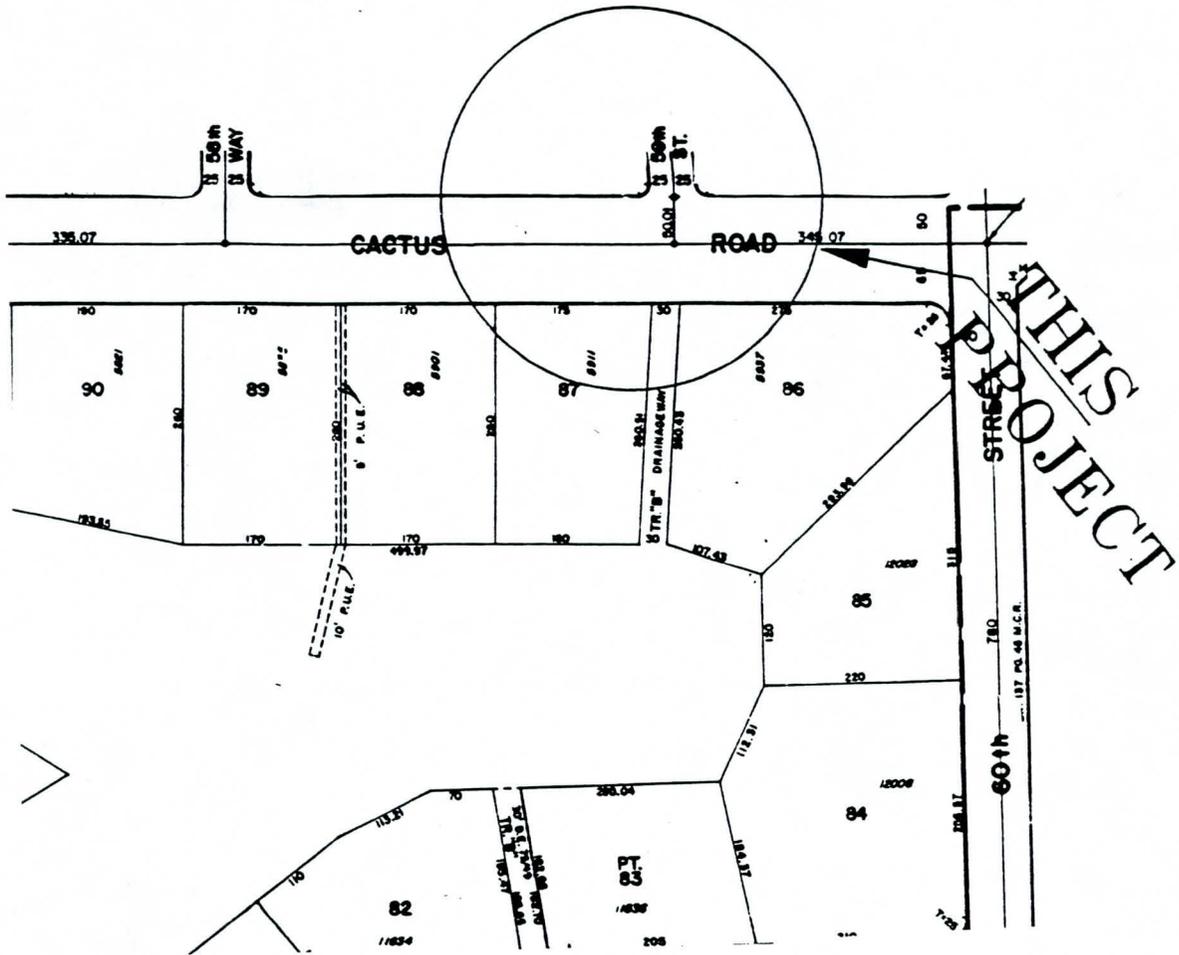
LOCATIONS OF KNOWN FLOODING:
Moon Valley High School

CONTRIBUTING FACTORS:

Floors too low
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LFMP14

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: CENTURY CLUB ESTATES (COUNTY)

DATE SUBDIVIDED: 09-19-57



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
59TH STREET & CACTUS ROAD	30/41	06-05-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 59th Street and Cactus Road

PROJECT NUMBER: 30/41/-1

DESCRIPTION: 59th and 57th Streets drain a large area into Cactus Road. Storm water overtops Cactus Road and floods homes on south side of Cactus.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct large grate inlets and box culverts at 57th and 59th Streets under Cactus Road.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 6/4/91/PK

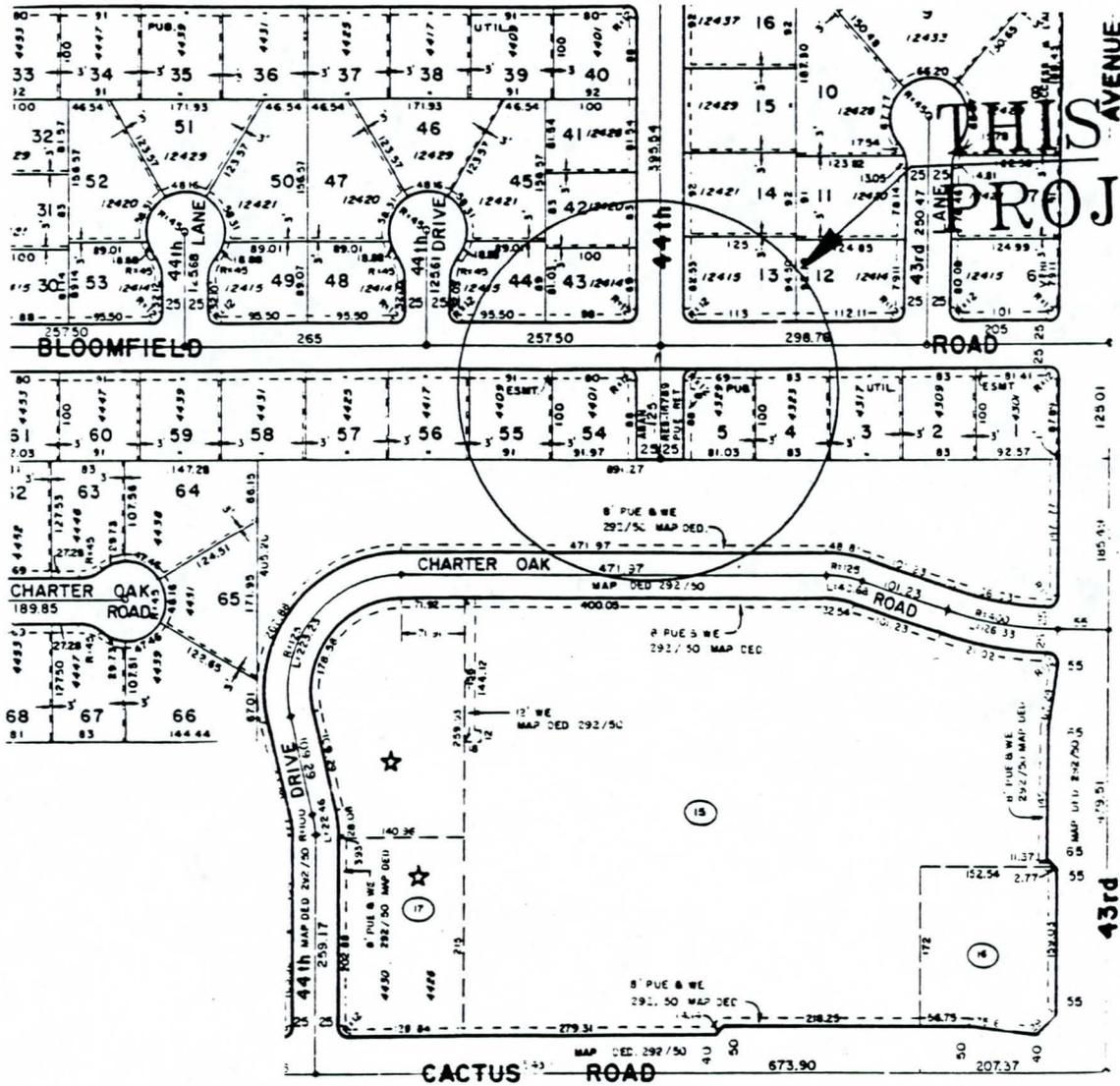
LOCATIONS OF KNOWN FLOODING:
5701, 5911 East Cactus Road

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP98

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: OFFICE ON CHARTER OAK (CITY)

DATE SUBDIVIDED: 01-18-89

NO SCALE

PROJECT NAME: 44TH AVENUE & BLOOMFIELD ROAD	QS 31/18	DATE: 06-12-91	C.D. 2
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PROJ NO 31/18-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 44th Avenue and Bloomfield Road

PROJECT NUMBER: 31/18-1

DESCRIPTION: Storm water flows from 43rd Avenue west and south on 44th Avenue to this location. Drainage to south has been cut off by new project with inadequate channel.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Construct 4,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

FIELD INSPECTION DATE: 6/5/91/PK

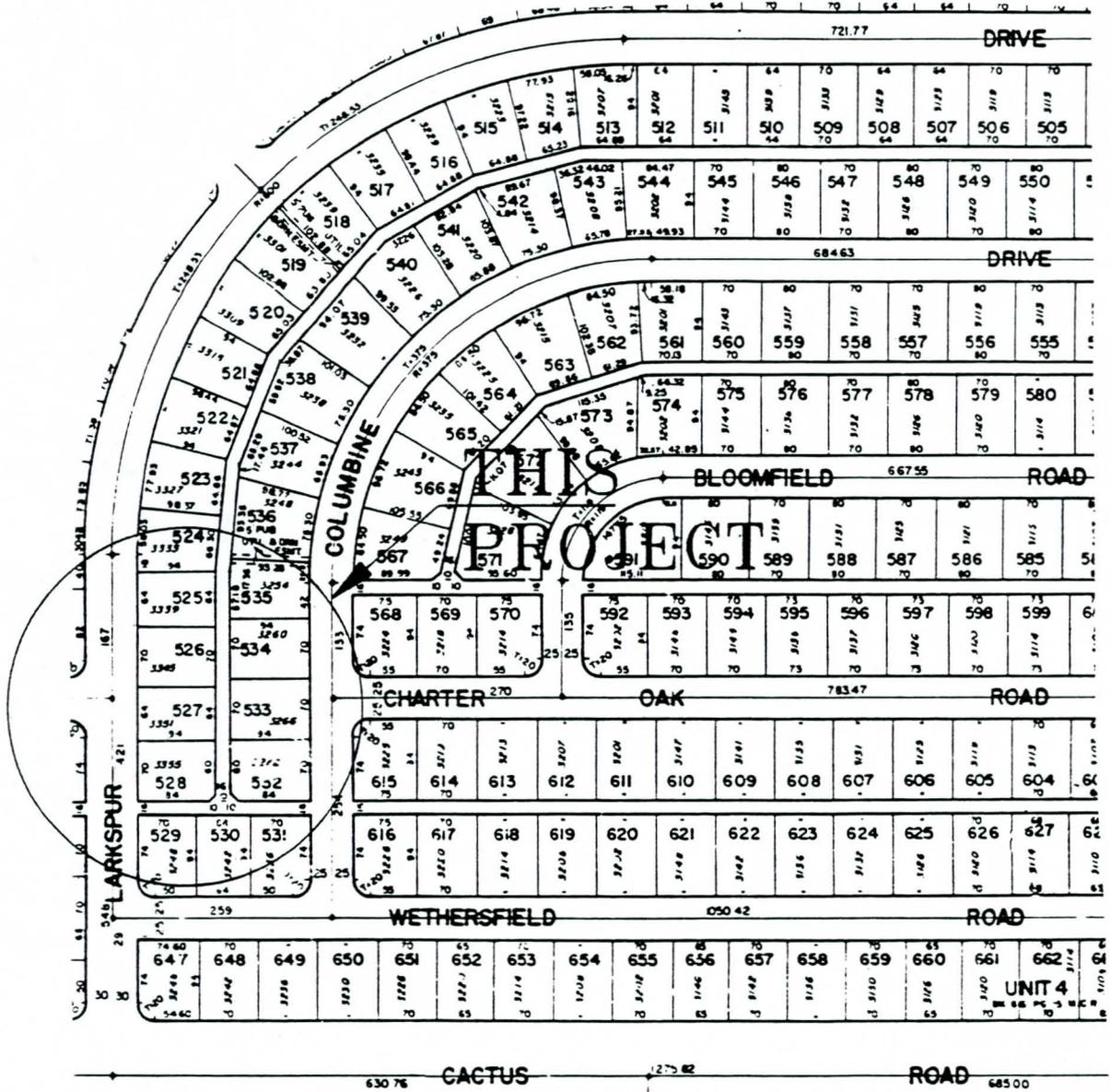
LOCATIONS OF KNOWN FLOODING:
NONE

CONTRIBUTING FACTORS:

Failure to continue existing street pattern
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LFMP11

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: WESTTOWN UNIT 5 (COUNTY)

DATE SUBDIVIDED: 01-25-60

NO SCALE

PROJECT NAME: 33RD AVENUE & CACTUS ROAD	QS 31/21	DATE: 06-12-91	C.D. 2
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 33rd Avenue and Cactus Road

PROJECT NUMBER: 31/21-1

DESCRIPTION: Storm water exceeds the capacity of Larkspur and floods homes which are at curb height. NOTE: Larkspur is on the alignment of 33rd Avenue and drains nearly the entire quarter section to this point.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 4,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

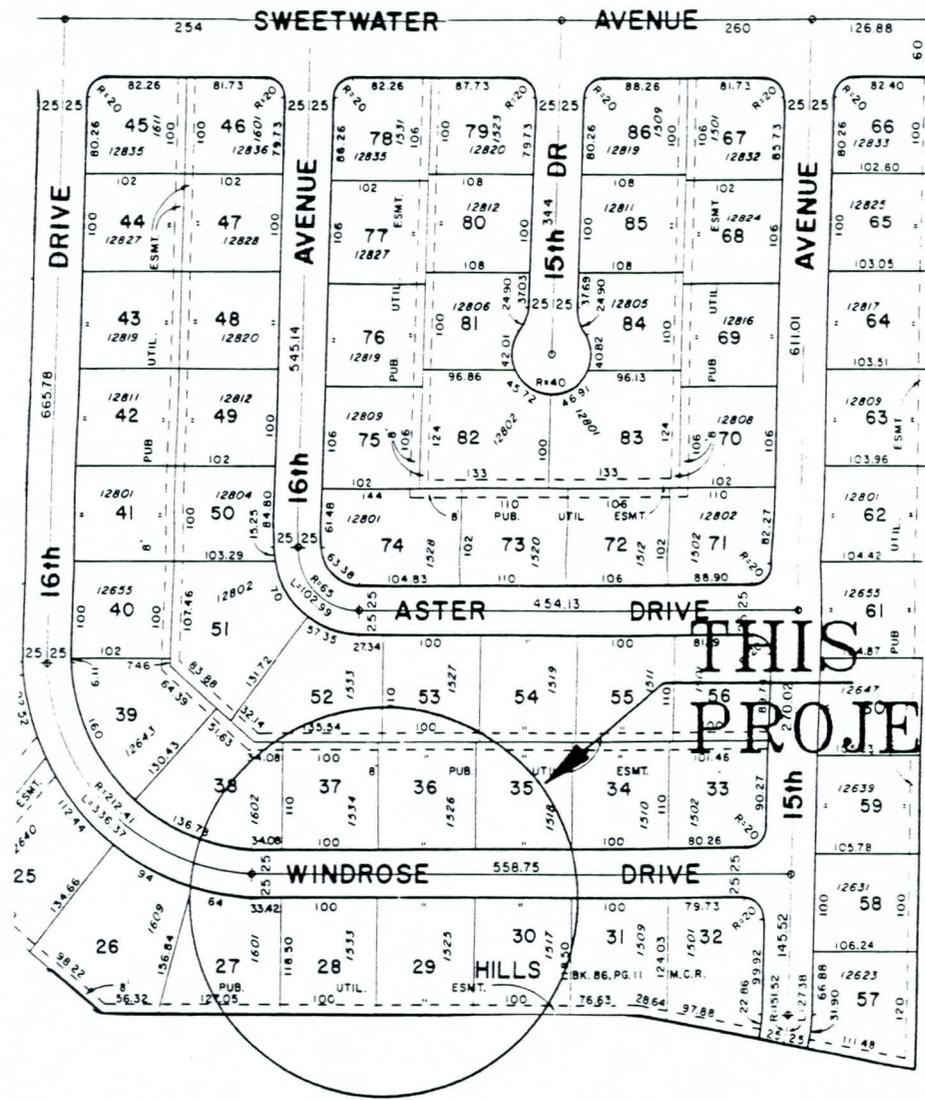
FIELD INSPECTION DATE: 6/5/91/PK

LOCATIONS OF KNOWN FLOODING:
3364, 3376, 3382 West Larkspur

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP05

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: MOON HILLS (COUNTY)
DATE SUBDIVIDED: 06-22-59



NO SCALE

PROJECT NAME: 15TH AVENUE & WINDROSE DRIVE	QS 31/25	DATE: 05-08-91	C.D. 3
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PROJ. NO 31/25-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 15th Avenue and Windrose Drive

PROJECT NUMBER: 31/25-1

DESCRIPTION: Storm water from north side of Shaw Butte flows through lots adjacent to the Mountain Preserve. Floods homes on Windrose Drive and Aster Drive.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct Windrose & Aster with inverted crown, and/or channel on Mountain Preserve.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 12/4/90/PK

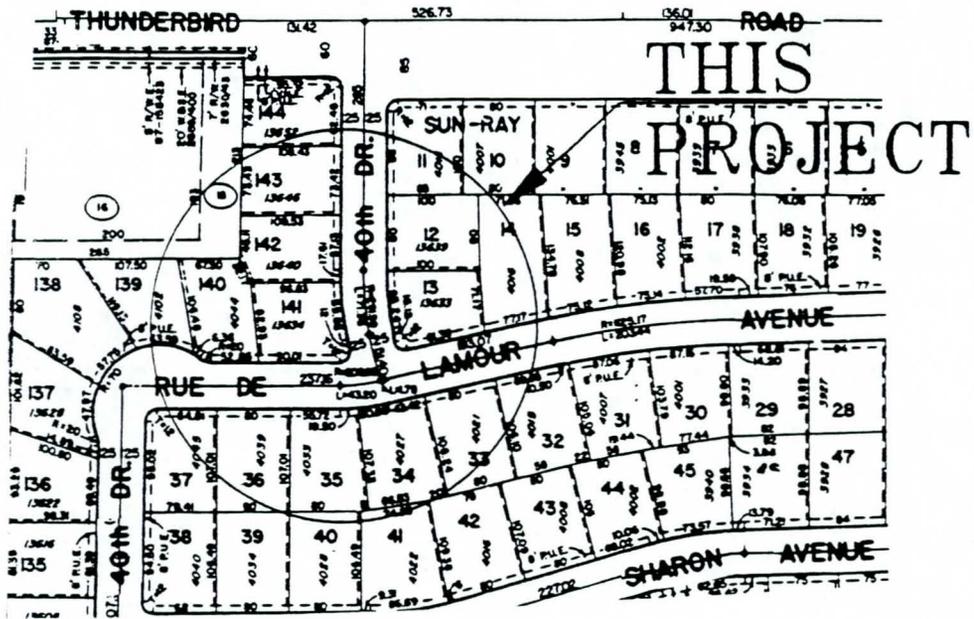
LOCATIONS OF KNOWN FLOODING:

1509, 1510, 1518, 1526 West Windrose
1511, 1519, 1527, 1533 West Aster Drive

CONTRIBUTING FACTORS:

Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: SUNRAY MANOR (CITY)

DATE SUBDIVIDED: 05-03-78



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
40TH DRIVE & RUE DE LAMOUR	32/19	05-15-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 40th Drive and Rue De Lamour

PROJECT NUMBER: 32/19-1

DESCRIPTION: Run off overflows from Thunderbird Road south on 39th Avenue and 40th Drive. It then overflows Rue De Lamour, Sharon & Voltaire Avenues. A drainage easement west from Voltaire Avenue is inadequate.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Reconstruct Rue De Lamour, Sharon & Voltaire Avenues and 40th Drive with inverted crowns. Secure easement through apartment project to the west.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

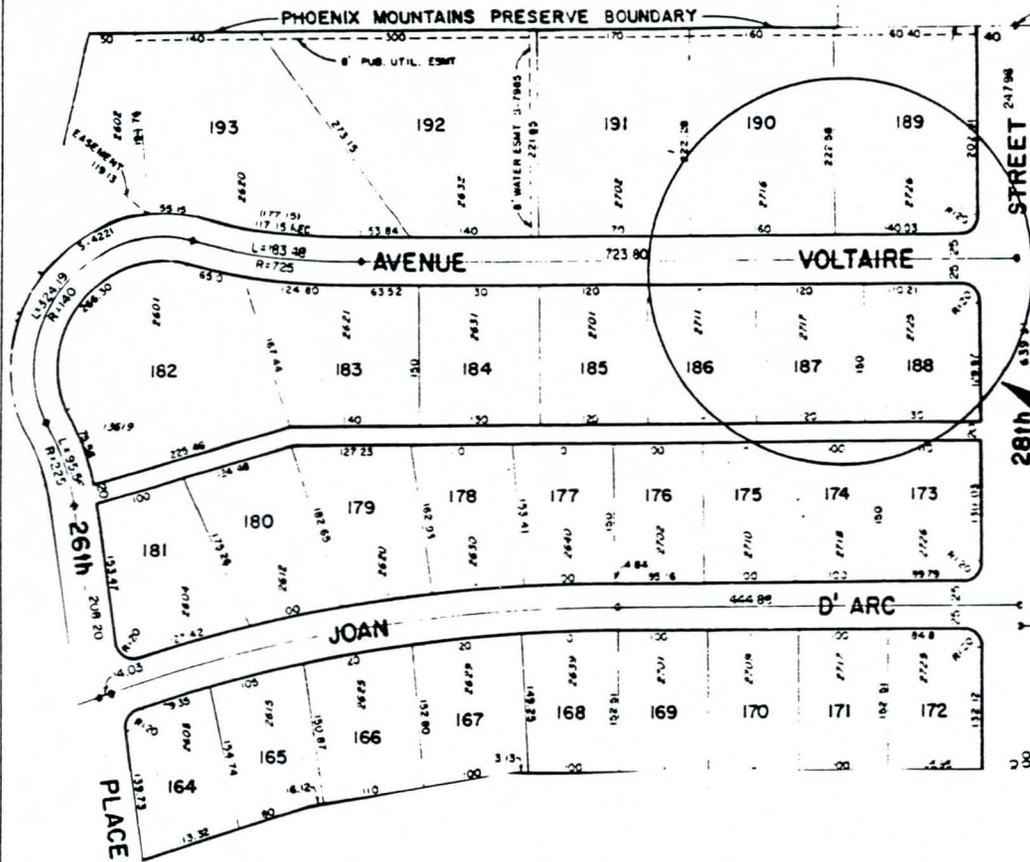
FIELD INSPECTION DATE: 3/19/91/PK

LOCATIONS OF KNOWN FLOODING:
13602, 13608 North 40th Drive
4027 West Rue De Lamour Avenue
4045 West Sharon Avenue

CONTRIBUTING FACTORS:

Floors too low
Failure to continue existing street pattern
Streets which drain to the end of a cul de sac or otherwise dead end
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: CHATEAU THIERRY (COUNTY)

DATE SUBDIVIDED: 04-08-53



NO SCALE

PROJECT NAME: 28TH STREET & VOLTAIRE AVENUE	QS 32/33	DATE: 06-05-91	C.D. 1
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 28th Street and Voltaire Avenue

PROJECT NUMBER: 32/33-1

DESCRIPTION: Storm water exceeded the capacity of Voltaire Avenue and 28th Street, flooding houses. A spillway was added to divert water to the natural wash. Homeowners believe this is silting up "their wash."

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 4

SUGGESTED SOLUTION: Construct 28th Street with inverted crown to take water to wash.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$25,000

FIELD INSPECTION DATE: 6/4/91/PK

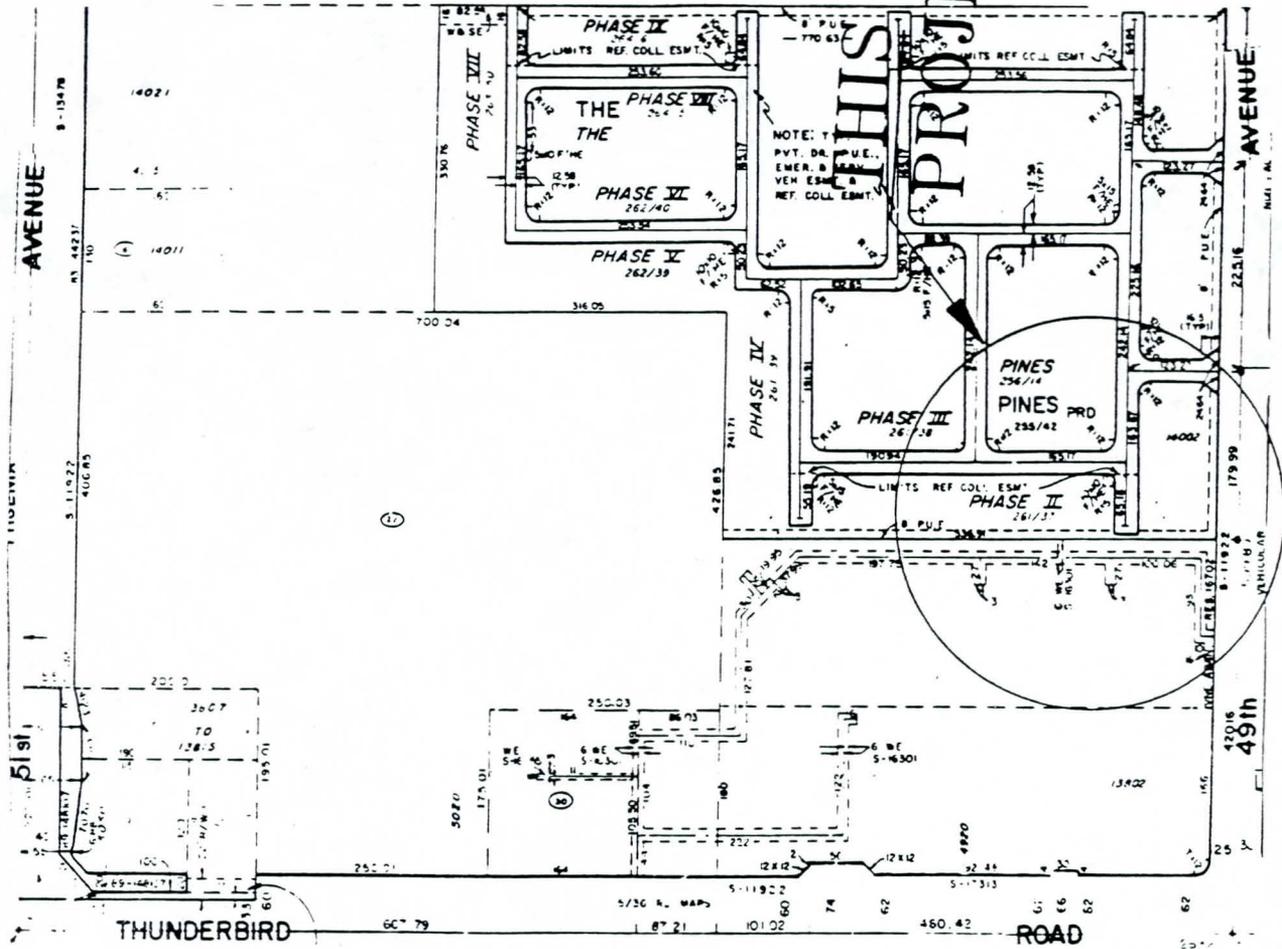
LOCATIONS OF KNOWN FLOODING:
2725 East Voltaire Avenue

CONTRIBUTING FACTORS:

Major storm run-off exceeds street capacity
Structures constructed in natural drainage channels or drainage easements

LFMP97

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: THE PINES (CITY)

DATE SUBDIVIDED: 07-19-83



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
49TH AVENUE & THUNDERBIRD ROAD	33/17	05-15-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 49th Avenue and Thunderbird Road

PROJECT NUMBER: 33/17-1

DESCRIPTION: Storm water flow is from east to west on Redfield Road and Dailey Street. This flow exceeds capacity of 49th Avenue to carry water to the south. 48th Avenue is flat.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct inverted crown on 49th & 48th Avenues, Redfield Road to Thunderbird Road.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$200,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

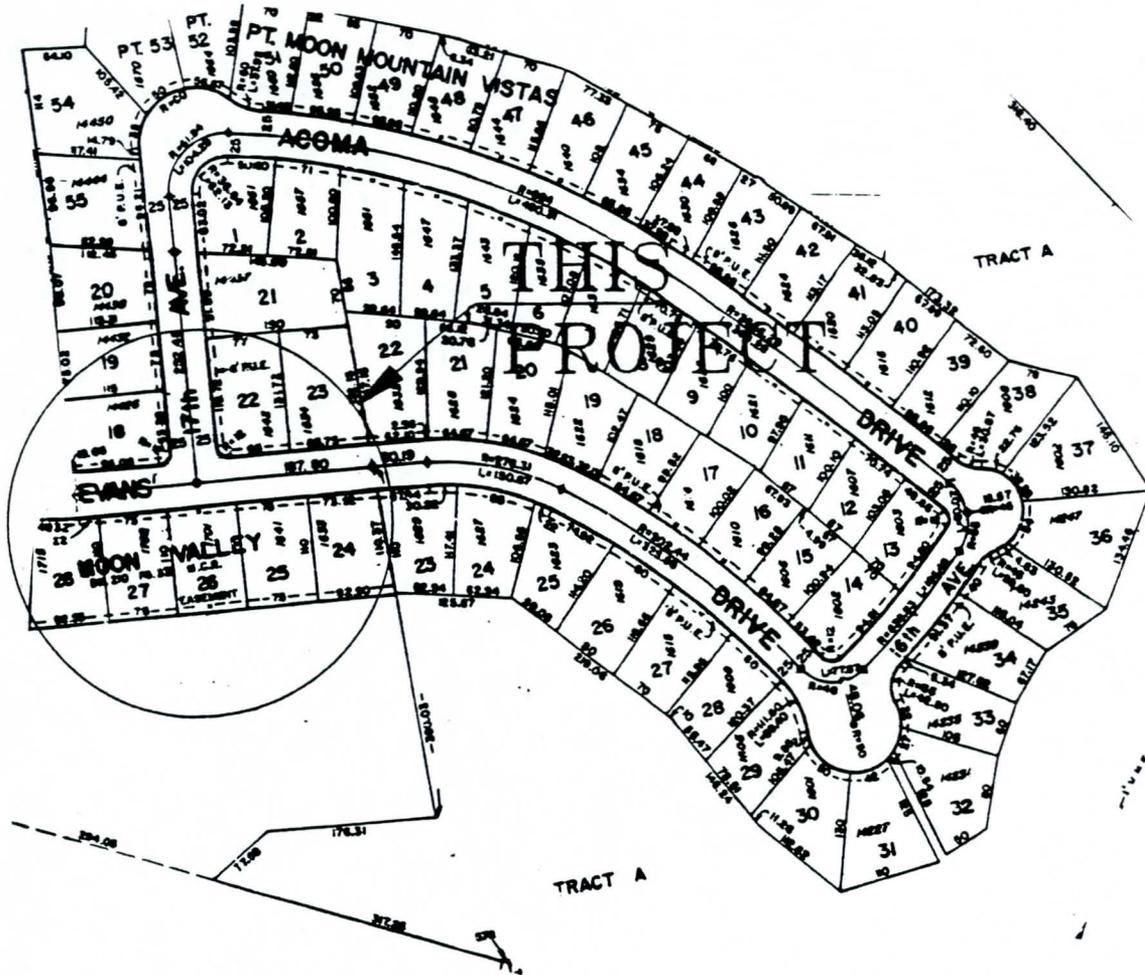
FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
14002 North 49th Avenue

CONTRIBUTING FACTORS:

Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: EATON MOON VALLEY (CITY)

DATE SUBDIVIDED: 04-03-79



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
17TH AVENUE & EVANS DRIVE	33/25	06-12-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Avenue and Evans Drive

PROJECT NUMBER: 33/25-1

DESCRIPTION: Storm water flows down Evans draining a large area.
Low spot at 1709 West Evans is always wet plus silt after rains.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 0

SUGGESTED SOLUTION: Construct Evans and 17th Avenue with storm
drain and inverted crown.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$N/A

FIELD INSPECTION DATE: 6/4/91/PK

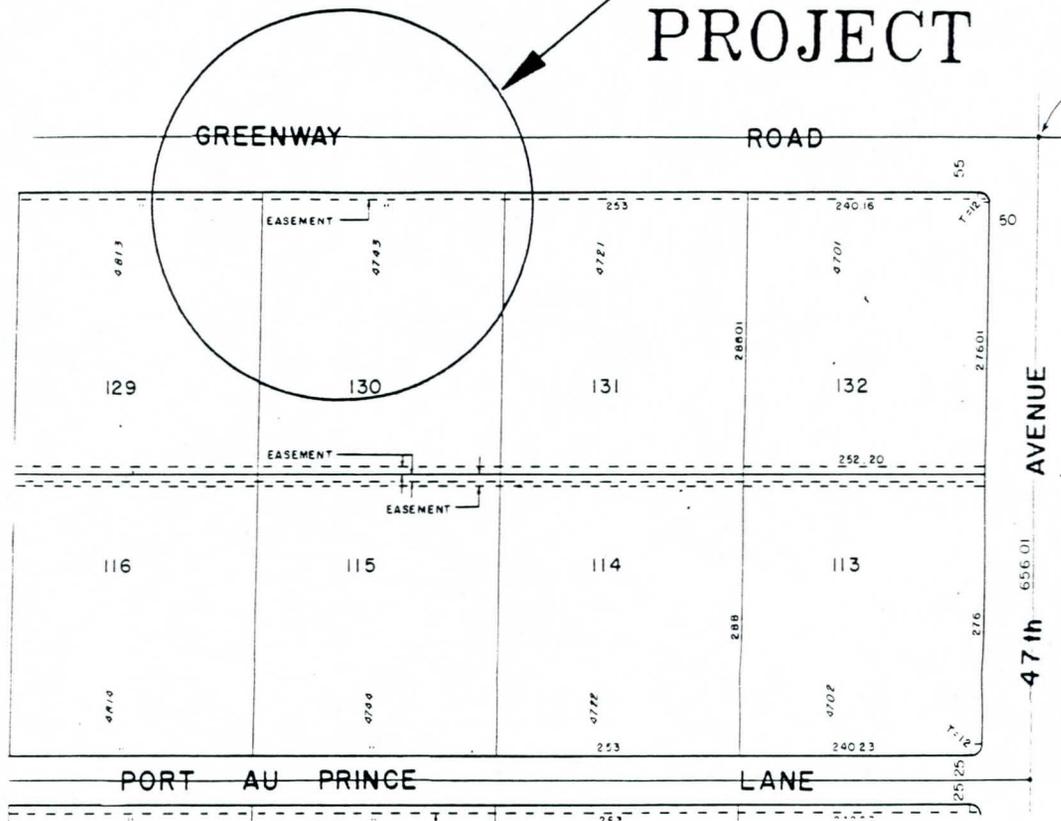
LOCATIONS OF KNOWN FLOODING:
NONE

CONTRIBUTING FACTORS:
Major storm run-off exceeds street capacity

LFMP03

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

**THIS
 PROJECT**



SUBDIVISION NAME: SUNBURST FARMS - FIVE (COUNTY)

DATE SUBDIVIDED: 06-07-68



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
47TH AVENUE & GREENWAY ROAD	34/17	05-08-91	2

PROJ. NO. 34/17-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 11th Street and Dunlap

PROJECT NUMBER: 27/29-1

DESCRIPTION: Tenth Street Wash between Dunlap Avenue and Mountain View Road, main branch. Nearly entire quarter section is floodplain.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 400

SUGGESTED SOLUTION: Construct Tenth Street Wash Channel.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$6,000,000 (This quarter section only)

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000 (This quarter section only)

COST PER STRUCTURE TO REDUCE FLOODING: \$15,000

FIELD INSPECTION DATE: 4/2/91/PK

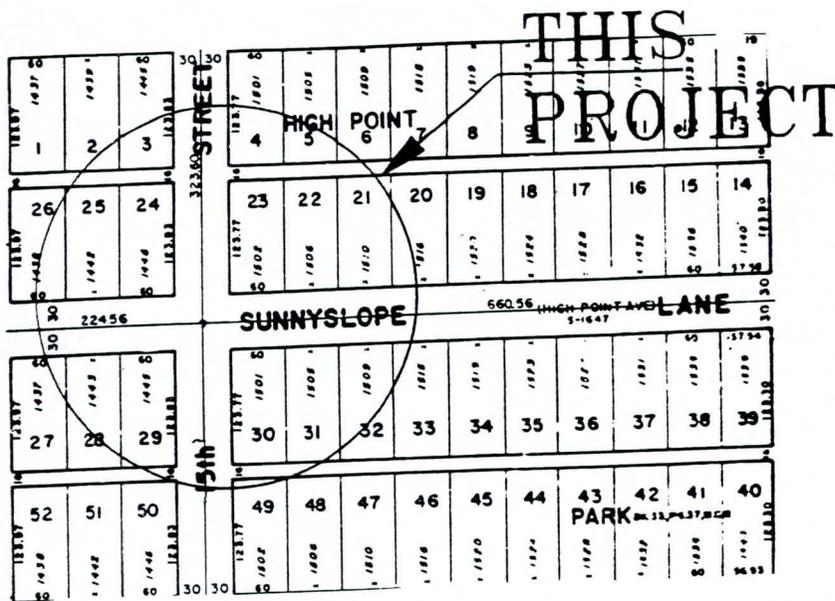
LOCATIONS OF KNOWN FLOODING:

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Structures constructed in natural drainage channels or drainage easements

LFMP40

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-45



NO SCALE

PROJECT NAME: 15TH STREET & SUNNYSLOPE LANE	QS 27/30	DATE: 05-30-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 15th Street and Sunnyslope Lane

PROJECT NUMBER: 27/30-1

DESCRIPTION: This quarter section contains 3 washes which are major tributaries to the Tenth Street Wash. Each of the washes has caused structures to be flooded. The washes are on the alignment of Malapai Drive, Carol Avenue, and Sunnyslope Lane. The washes have been encroached on by development and little or no room remains to carry storm water.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Purchase land and construct 7,000 L.F. of channel system. (Must be part of a Tenth Street Wash project.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$4,000,000 (This quarter section only)

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$80,000

FIELD INSPECTION DATE: 2/20/91/PK

LOCATIONS OF KNOWN FLOODING:

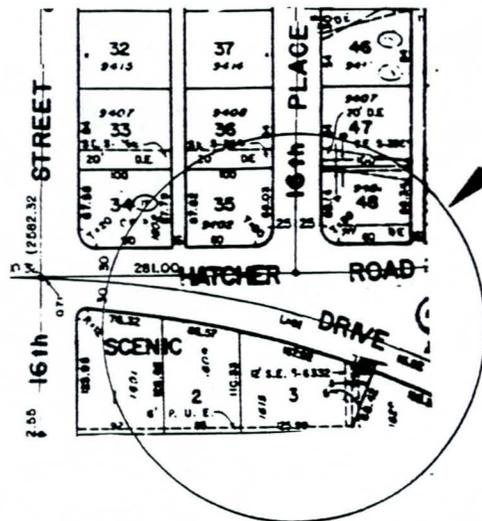
1244, 1506 East Mission Lane
1536 East Sunnyslope Lane
1238 East Vogel
9420 North 15th Street

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity
Structures constructed in natural drainage channels or drainage easements

LFMP46

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: OCOTILLO HILLS 2 (COUNTY)

DATE SUBDIVIDED: 10-19-55



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
16TH STREET & HATCHER DRIVE	27/31	05-30-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Street and Hatcher Drive

PROJECT NUMBER: 27/31-1

DESCRIPTION: This quarter section contains 4 washes tributary to Tenth Street Wash. They have been completely removed by constructing homes in them. Water has been rerouted down alleys where it remains until it finds its way into yards and homes. In many cases the homes being flooded are not the ones in the wash.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Purchase homes and construct channels.
(This should be part of a Tenth Street Wash project.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 5/20/91/PK

LOCATIONS OF KNOWN FLOODING:

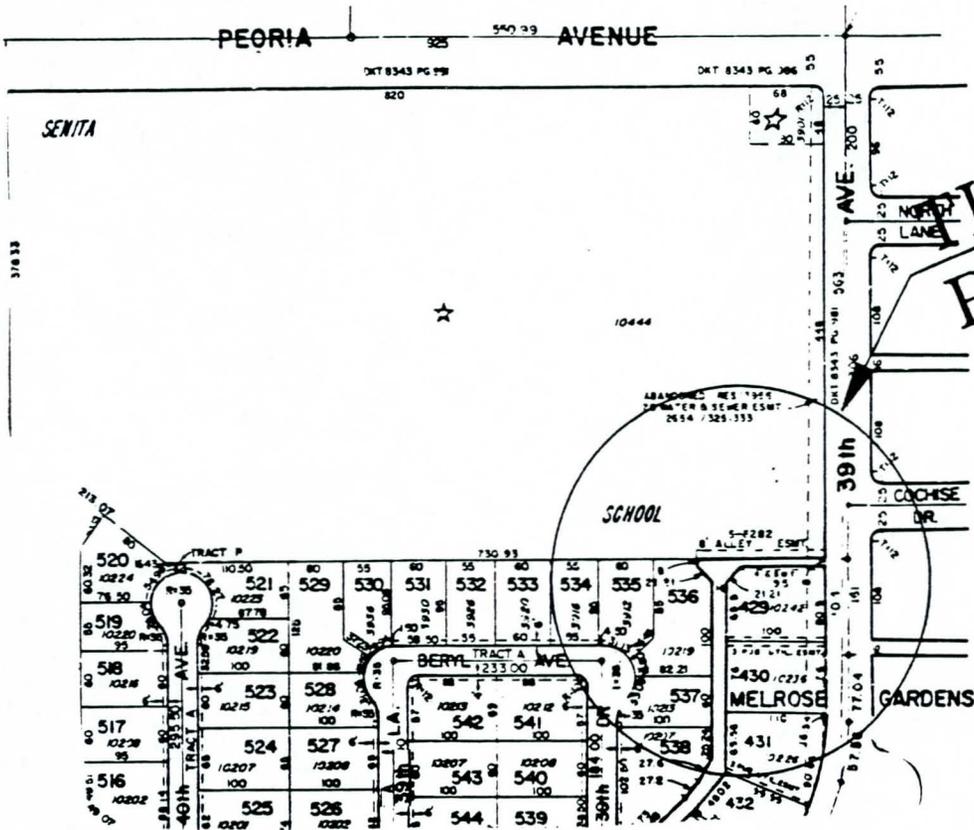
9401 North 17th Street
9602 North 17th Place
9421, 9615 North 16th Street

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP45

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: GARDEN VILLA (CITY)

DATE SUBDIVIDED: 08-01-72



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
39TH AVENUE & PEORIA AVENUE	28/19	06-12-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 39th Avenue and Peoria Avenue

PROJECT NUMBER: 28/19-1

DESCRIPTION: Storm water from 39th Avenue and Senita School parking lot floods rear of homes on 39th Drive and Beryl Avenue.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 39th Avenue with inverted crown. Obtain right of way into Arizona Canal Diversion Channel.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/5/91/PK

LOCATIONS OF KNOWN FLOODING:
10219 North 39th Drive

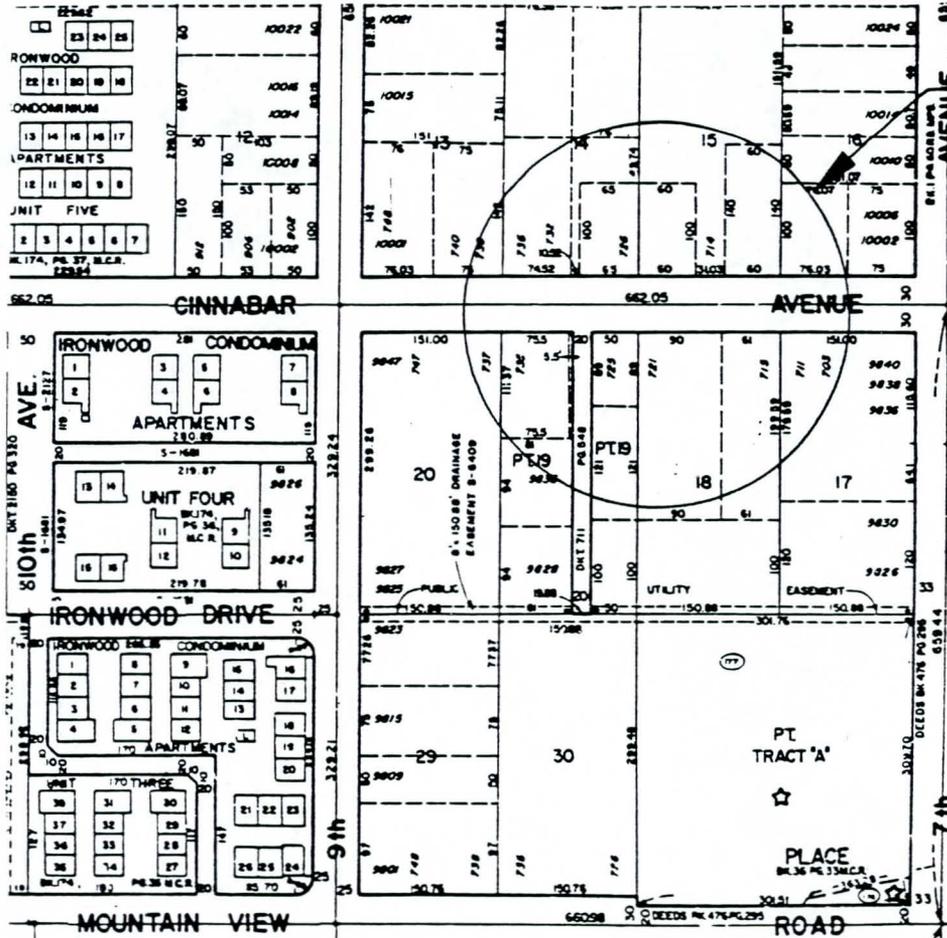
CONTRIBUTING FACTORS:

Floors too low

Major storm run-off exceeds street capacity

LFMP15

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: IRONWOOD PLACE (COUNTY)

DATE SUBDIVIDED: 12-06-46



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
7TH AVENUE & CINNABAR AVENUE	28/26	06-05-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Avenue and Cinnabar Avenue

PROJECT NUMBER: 28/26-1

DESCRIPTION: Three major washes and two minor washes in this quarter section have been blocked by development.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Purchase right of way and construct channels. Must be done with work in quarter section 27/26.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/3/91/PK

LOCATIONS OF KNOWN FLOODING:
9826 North 7th Avenue

CONTRIBUTING FACTORS:

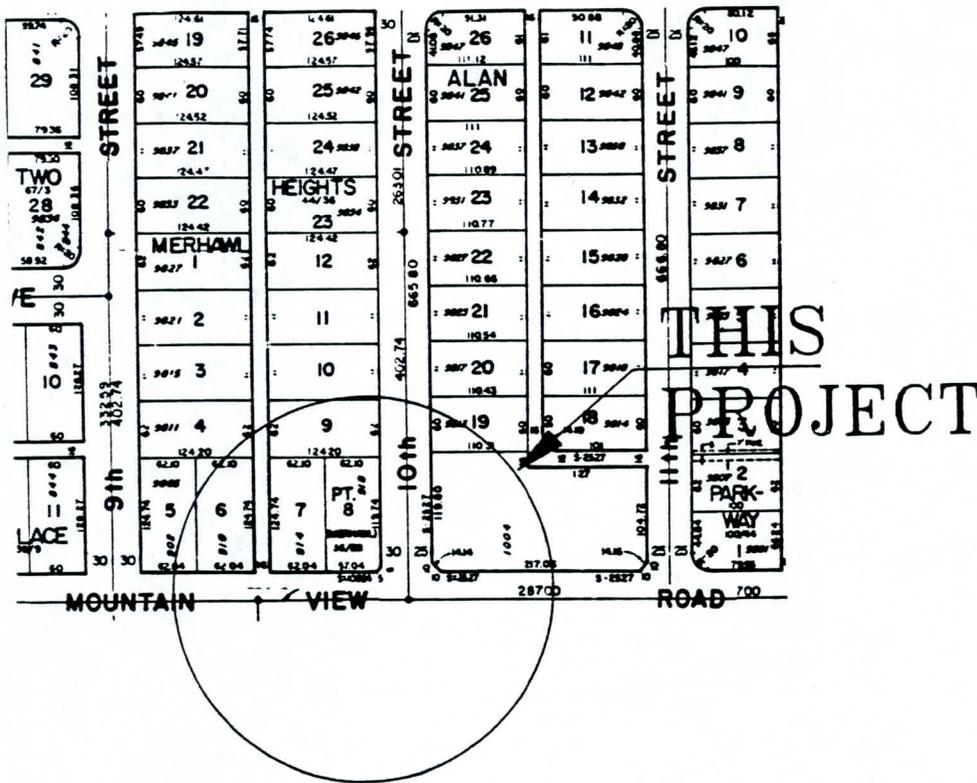
Constructed prior to Development Standards

Floors too low

Structures constructed in natural drainage channels or drainage easements

LFMP91

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: WORKMAN PLACE (COUNTY)

DATE SUBDIVIDED: 01-22-38



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
10th STREET AND MOUNTAIN VIEW	28/29	06-03-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 10th Street and Mountain View

PROJECT NUMBER: 28/29-1

DESCRIPTION: Four tributary washes to Tenth Street Wash and Sunnyslope area. All have been encroached upon by development.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Purchase land and construct channels. (Must be part of Tenth Street Wash system.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

FIELD INSPECTION DATE: 4/91/PK

LOCATIONS OF KNOWN FLOODING:
NONE

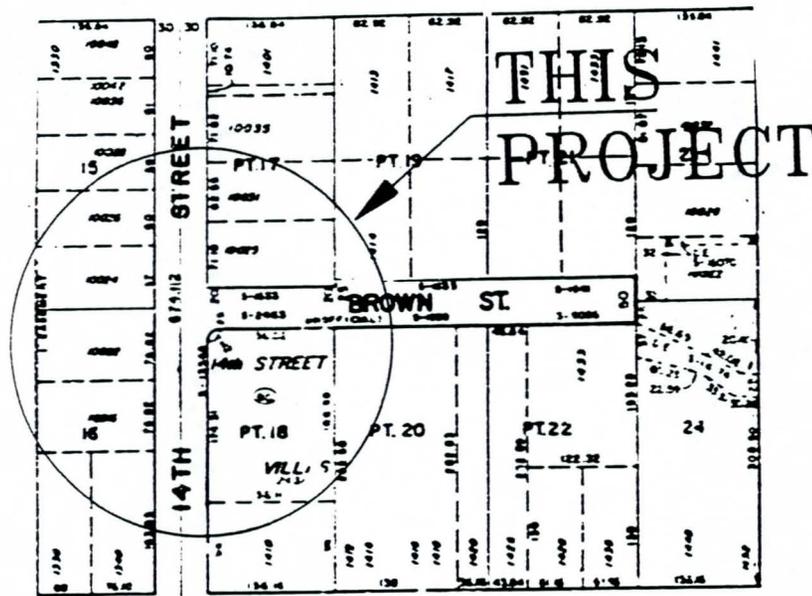
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low

Structures constructed in natural drainage channels or drainage easements

LFMP55

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-46



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
14TH STREET & BROWN STREET	28/30	05-30-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 14th Street and Brown Street

PROJECT NUMBER: 28/30-1

DESCRIPTION: This quarter section contains three tributaries to the Tenth Street Wash and the main stem of Tenth Street Wash. Two tributaries are along the alignments of Brown Street and Ironwood Drive. The washes have been encroached on by development and little or no room remains to carry storm water.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Purchase land and construct 7,000 L.F. of channel system. (Must be part of Tenth Street Wash project.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$4,000,000 (This quarter section only.)

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$80,000

FIELD INSPECTION DATE: 2/20/91/PK

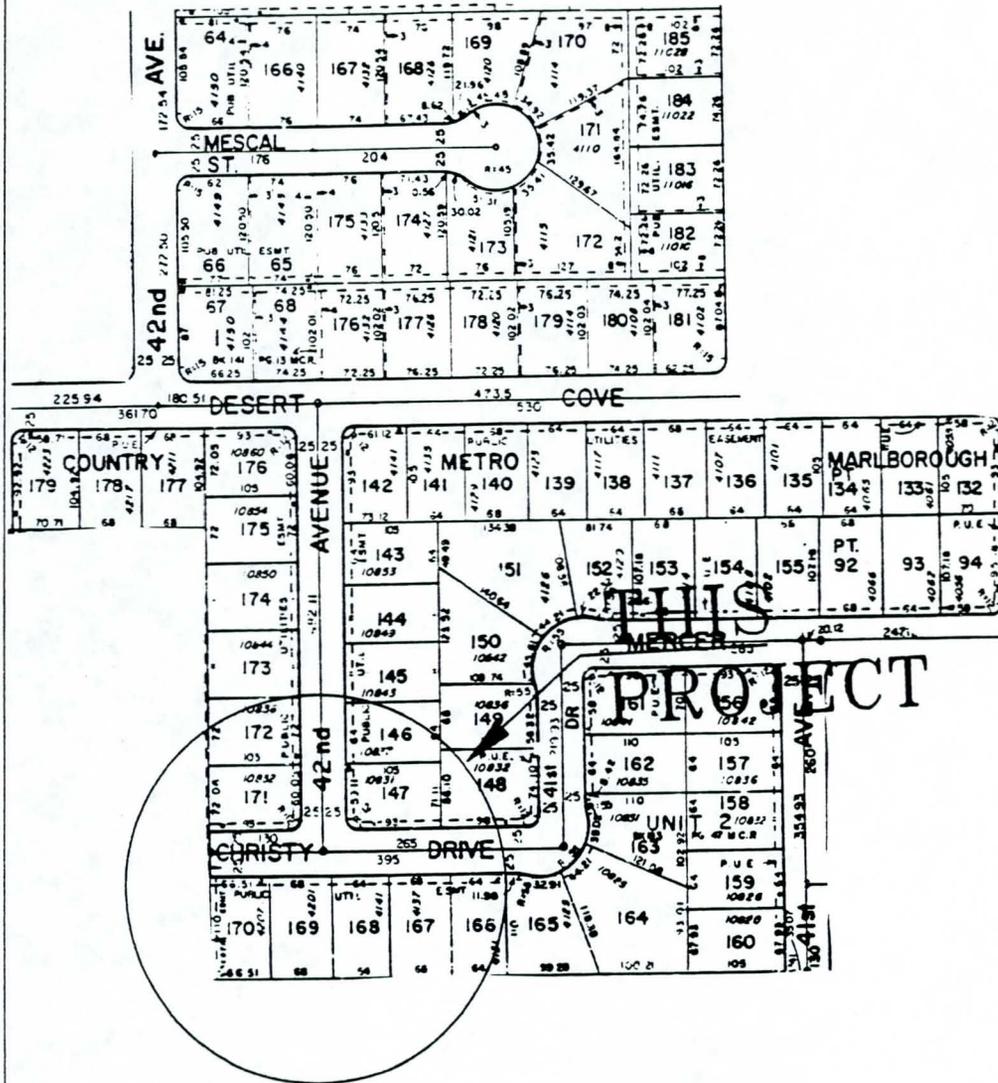
LOCATIONS OF KNOWN FLOODING:
10015 North 14th Street (Apartments)

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Structures constructed in natural drainage channels or drainage easements

LFMP49

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: MARLBOROUGH COUNTRY
METRO UNIT TWO (CITY)
DATE SUBDIVIDED: 08-02-77



NO SCALE

PROJECT NAME: 42ND AVENUE & CHRISTY DRIVE	QS 29/19	DATE: 06-12-91	C.D. 2
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 42nd Avenue and Christy Drive

PROJECT NUMBER: 29/19-1

DESCRIPTION: Most of this quarter section drains to this location. Christy Drive has been blocked by an apartment complex with inadequate channel dedicated.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Purchase 20 apartment units and obtain right of way for outlet. Construct 4,000 feet of inverted crown street with storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

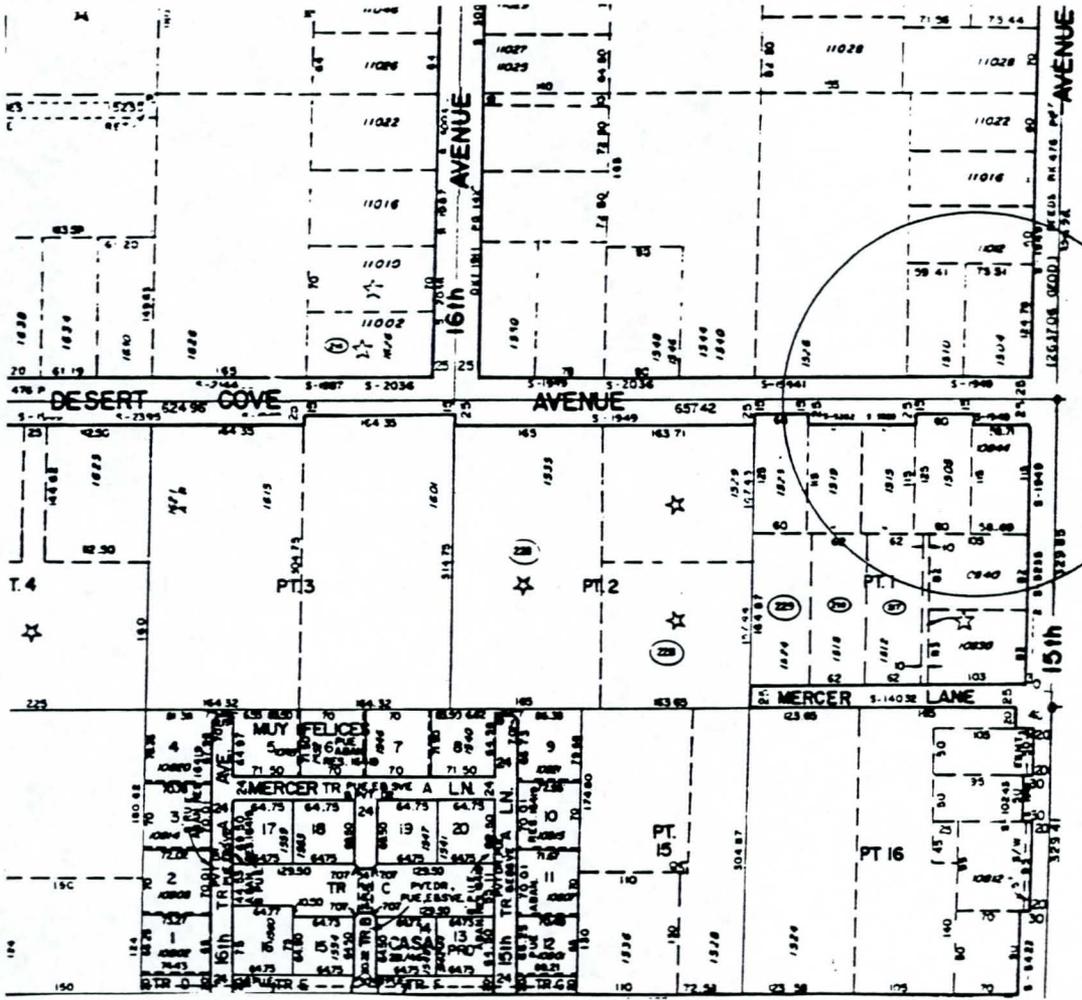
FIELD INSPECTION DATE: 6/5/91/PK

LOCATIONS OF KNOWN FLOODING:
4131 West Christy Drive

CONTRIBUTING FACTORS:
Failure to continue existing street pattern
Streets which drain to the end of a cul de sac or otherwise dead end

LFMP10

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT



NO SCALE

SUBDIVISION NAME: DESERT COVE EXTENSION (COUNTY)

DATE SUBDIVIDED: 05-29-45

PROJECT NAME:	QS	DATE:	C.D.
15TH AVENUE & DESERT COVE	29/25	06-05-91	1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 15th Avenue and Desert Cove Avenue

PROJECT NUMBER: 29/25-1

DESCRIPTION: Natural washes have been obstructed by development.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Purchase right of way and construct channels in this quarter section.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

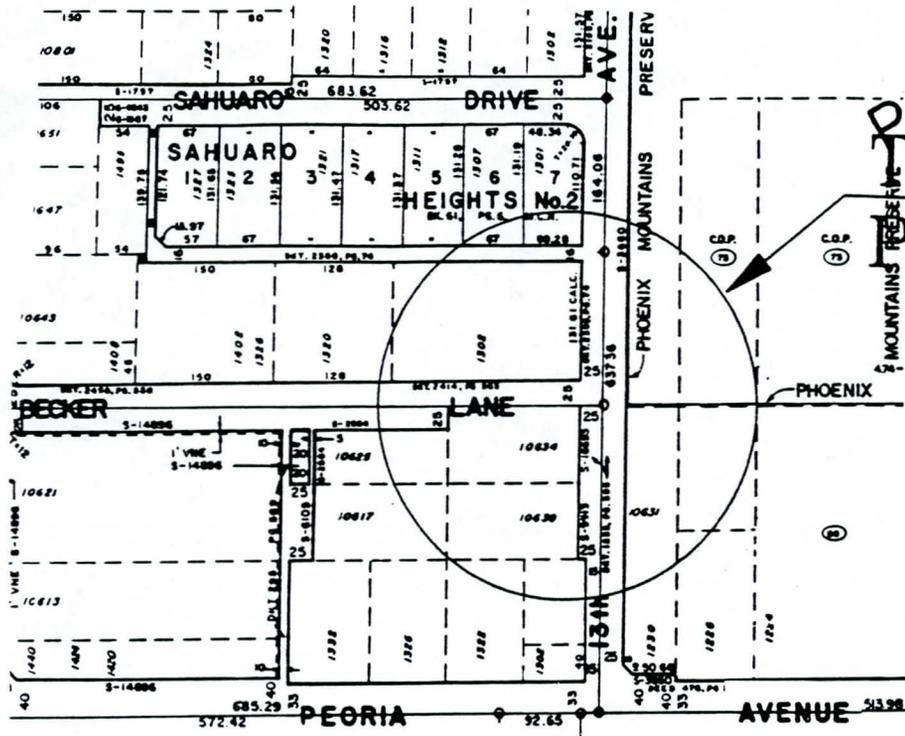
FIELD INSPECTION DATE: 6/4/91/PK

LOCATIONS OF KNOWN FLOODING:
1515, 1519 West Desert Cove Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Structures constructed in natural drainage channels or drainage easements

LFMP93

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-55



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
13TH AVENUE & BECKER LANE	29/26	06-05-91	1

PROJ NO 29/26-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 13th Avenue and Becker Lane

PROJECT NUMBER: 29/26-1

DESCRIPTION: Storm water exceeds capacity of 13th Avenue and floods apartments at 1302 West Becker Lane. Mountain Preserve land is across 13th Avenue. Very steep slopes.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct Becker with crown to carry more water.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$200,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/4/91/PK

LOCATIONS OF KNOWN FLOODING:
1302 West Becker Lane (apartments)

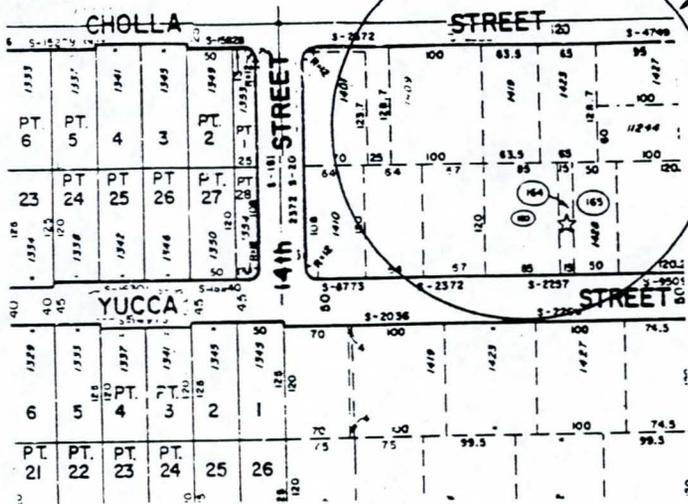
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Major storm run-off exceeds street capacity

LFMP92

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

**THIS
 PROJECT**



SUBDIVISION NAME: CACTUS HEIGHTS (COUNTY)

DATE SUBDIVIDED: 11-05-20



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
14TH STREET & CHOLLA STREET	29/30	05-30-91	1

PROJ. NO. 29/30-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 14th Street and Cholla Street

PROJECT NUMBER: 29/30-1

DESCRIPTION: This quarter section contains the headwaters of Tenth Street Wash. The washes have been encroached on by development.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Purchase land and construct 7,000 L.F. of channels. (Must be part of Tenth Street Wash project.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$40,000

COST PER STRUCTURE TO REDUCE FLOODING: \$60,000

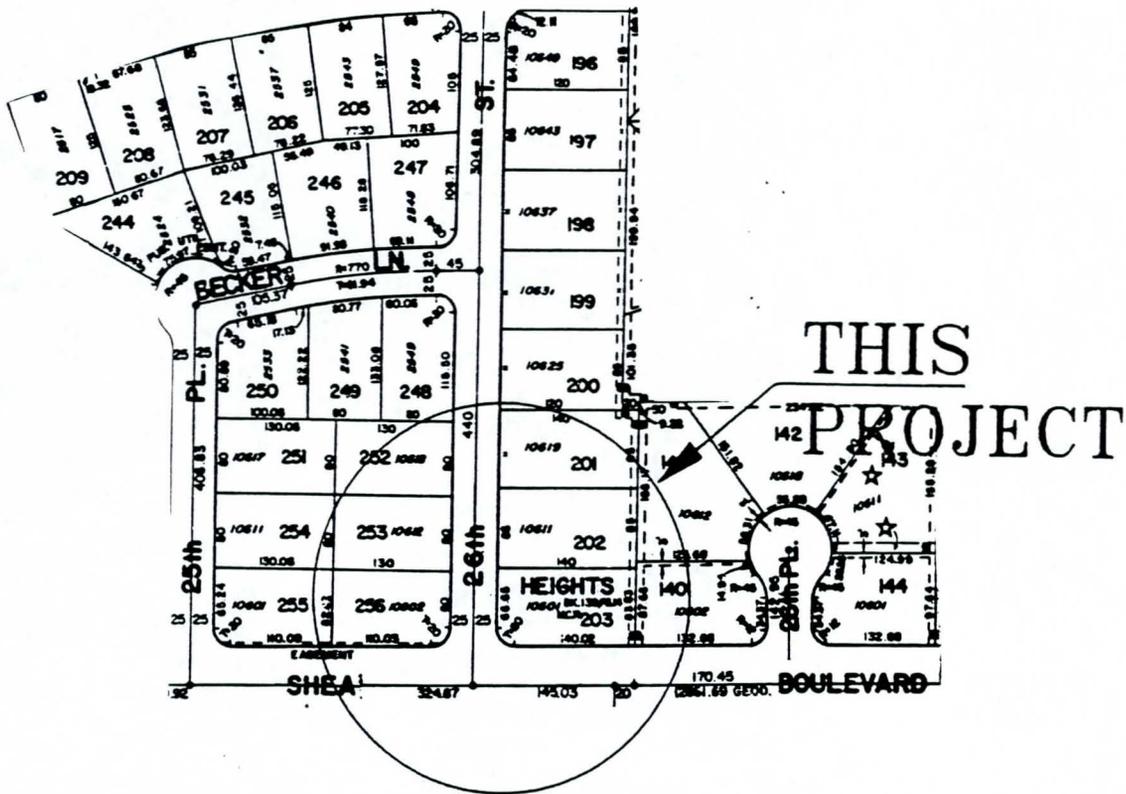
FIELD INSPECTION DATE: 3/29/91/PK

LOCATIONS OF KNOWN FLOODING:
1409, 1413, & 1419 East Cholla Street

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP50

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: SHEA HEIGHTS (CITY)

DATE SUBDIVIDED: 06-22-71



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
26TH STREET & SHEA BOULEVARD	29/33	06-05-91	1

PROJ. NO. 29/33-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 10th Street and Griswold Road

PROJECT NUMBER: 25/29-1

DESCRIPTION: 10th Street Wash is inadequate to carry 100-year storm creating large floodplain.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 150

SUGGESTED SOLUTION: Construct 10th Street Wash project.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,500,000 (This quarter section only.)

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

FIELD INSPECTION DATE: 3/1/91/PK

LOCATIONS OF KNOWN FLOODING:
8216 North 8th Place

CONTRIBUTING FACTORS:

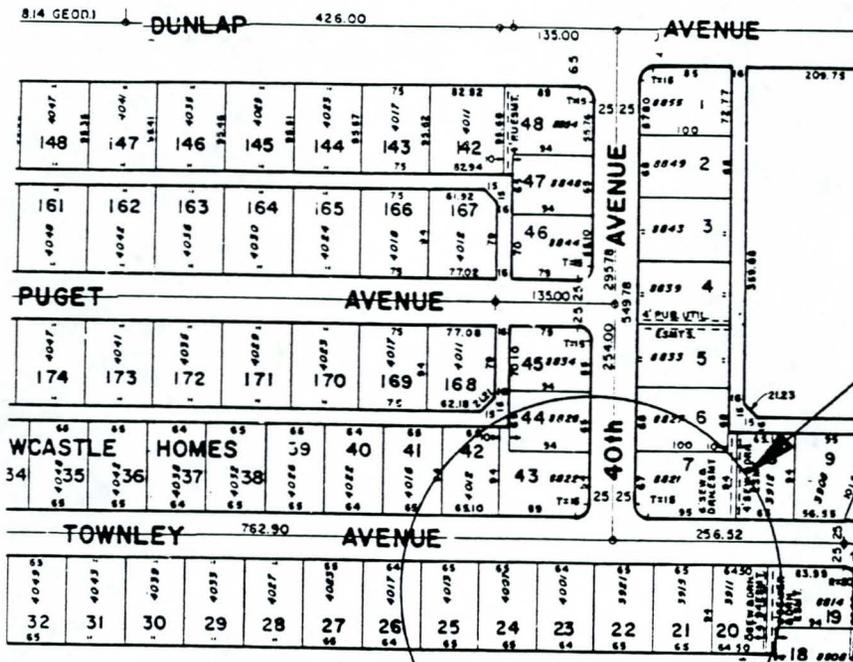
Constructed prior to Development Standards

Floors too low

Structures constructed in natural drainage channels or drainage easements

LFMP51

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: NEWCASTLE HOMES #4 (CITY)

DATE SUBDIVIDED: 06-06-61



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
40TH AVENUE & TOWNLEY AVENUE	26/19	06-04-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 40th Avenue and Townley Avenue

PROJECT NUMBER: 26/19-1

DESCRIPTION: Storm water flows off of vacant property at southwest corner of 39th Avenue and Dunlap Avenue. This floods the rear of lots which cannot drain through.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Purchase corner for retention basin or construct 5,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

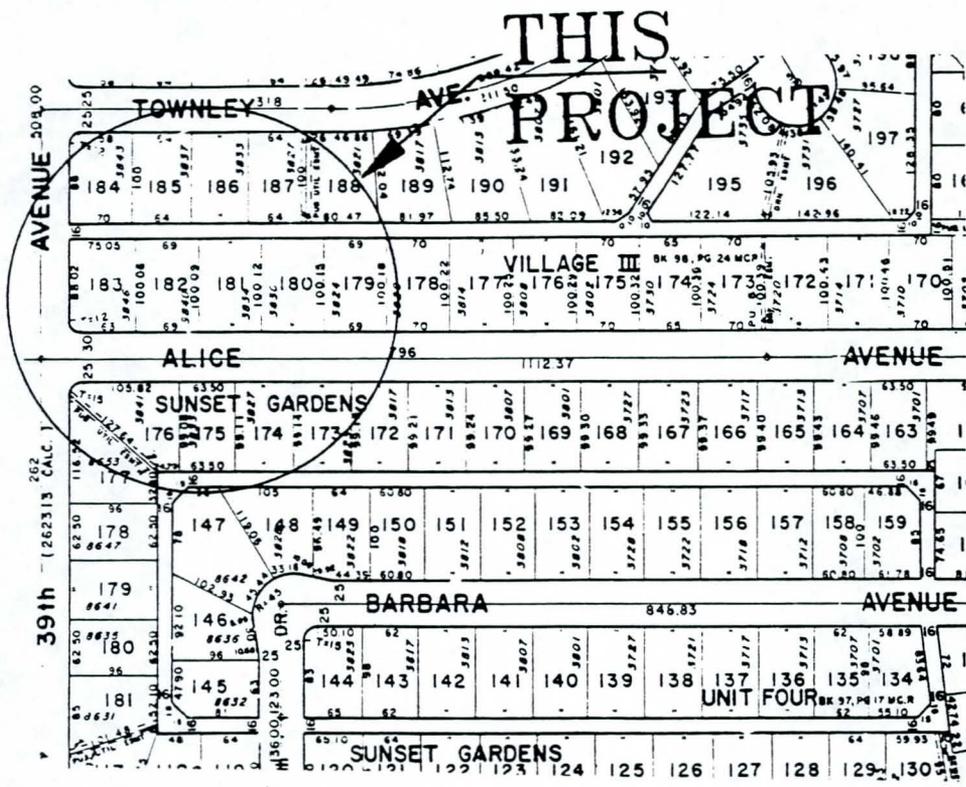
FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
8821 North 40th Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low

LFMP88

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: SUNSET GARDENS #4 (CITY)

DATE SUBDIVIDED: 11-28-61



NO SCALE

PROJECT NAME: 39TH AVENUE & ALICE AVENUE	QS 26/20	DATE: 06-04-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 39th Avenue and Alice Avenue

PROJECT NUMBER: 26/20-1

DESCRIPTION: Storm water exceeds capacity of Alice Avenue and floods homes which are at or below curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:

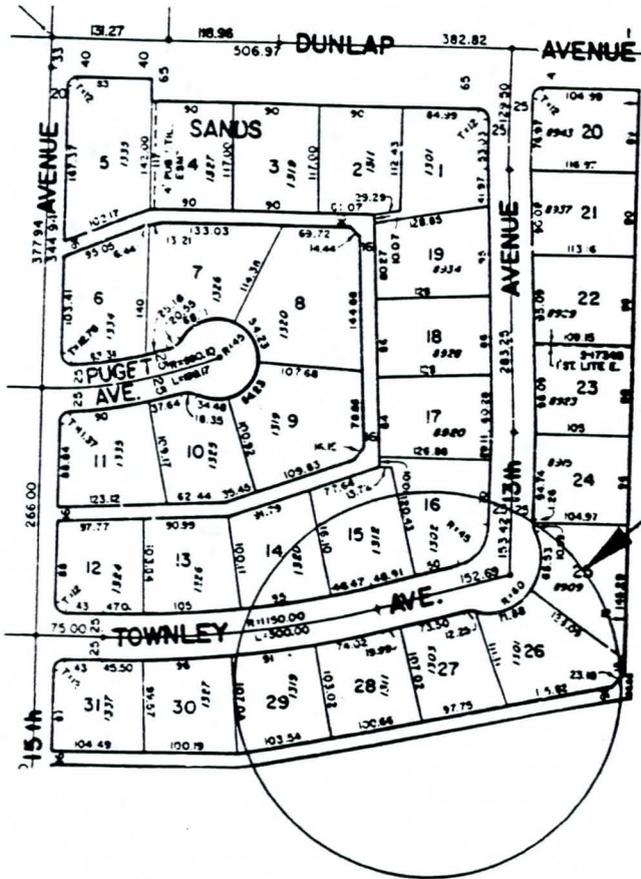
3833 West Alice
3616 West Puget

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP73

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: SANDS CENTRAL (CITY)

DATE SUBDIVIDED: 11-26-63



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
15th AVENUE & TOWNLEY AVENUE	26/26	06-04-91	3

PROJ. NO. 26/26-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 15th Avenue and Townley Avenue

PROJECT NUMBER: 26/26-1

DESCRIPTION: Storm water which drains the 1100 block of West Townley, which is a cul de sac, flows into alley and floods homes from rear. Outlet easement is blocked.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
1311 West Townley Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

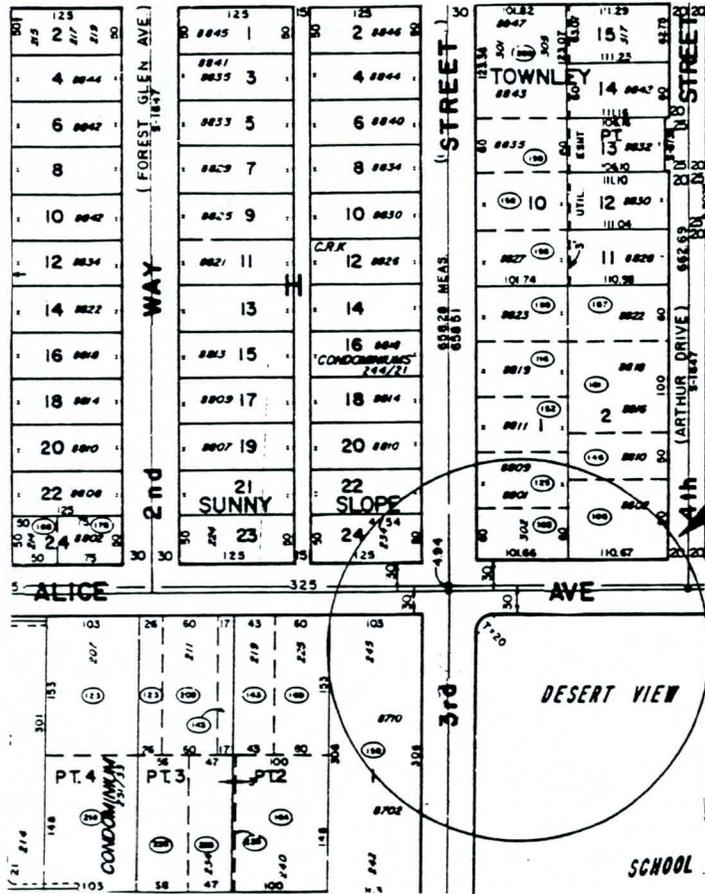
Floors too low

Failure to allow drainage through new projects

Streets which drain to the end of a cul de sac or otherwise dead end

LFMP78

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: SUNNYSLOPE (COUNTY)

DATE SUBDIVIDED: 01-04-11



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
3rd STREET AND ALICE AVENUE	26/28	06-03-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 3rd Street and Alice Avenue

PROJECT NUMBER: 26/28-1

DESCRIPTION: This project would be part of a Tenth Street Wash project although it does not drain to Tenth Street Wash. This would provide a drain system for the area bounded by Central Avenue, 7th Street, North Mountain & the Arizona Canal.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Develop a channel system or drain system to drain the area. (Must be implemented along with Tenth Street Wash improvements.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$4,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$80,000

FIELD INSPECTION DATE: NA

LOCATIONS OF KNOWN FLOODING:

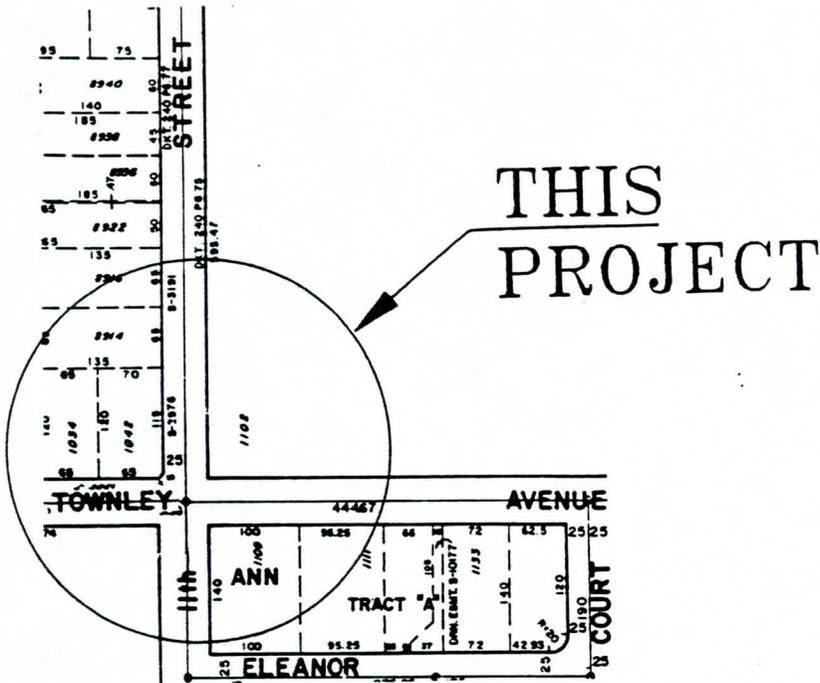
8819 North 1st Street
9202 North 6th Street
9204 North 7th Street
9601 North 3rd Street

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP54

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: ANN ACRES (COUNTY)

DATE SUBDIVIDED: 01-31-47



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
11TH STREET & TOWNLEY AVENUE	26/29	05-30-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 11th Street and Townley Avenue

PROJECT NUMBER: 26/29-1

DESCRIPTION: The main stem of Tenth Street Wash and one major tributary pass through this quarter section. Most of this quarter section is a floodplain. Channels severely encroached upon.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 500

SUGGESTED SOLUTION: Purchase land and construct 10th Street Wash project.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$4,000

FIELD INSPECTION DATE: 3/1/91/PK

LOCATIONS OF KNOWN FLOODING:

1133 East Townley
8824 North 11th Place

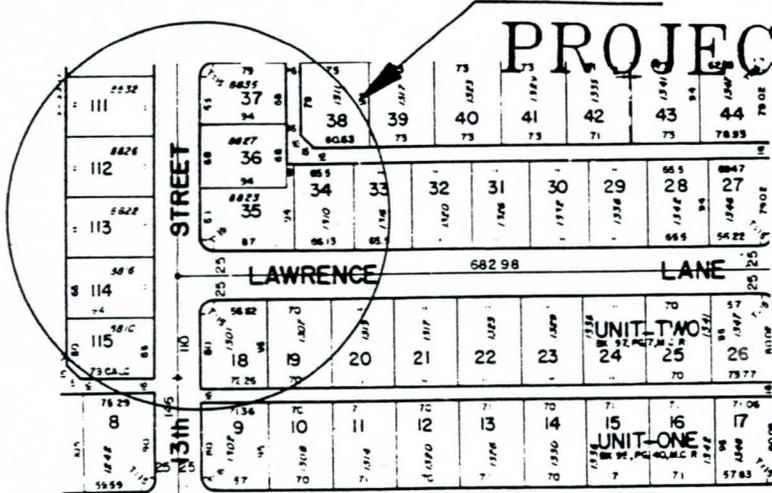
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP47

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: NORTHERN-AIRE ESTATES
 UNIT 2 (COUNTY)
 DATE SUBDIVIDED: 10-18-61



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
13TH STREET & LAWRENCE LANE	26/30	05-30-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 13th Street and Lawrence Lane

PROJECT NUMBER: 26/30-1

DESCRIPTION: A major tributary to Tenth Street Wash has been filled in by development.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Rebuild 13th Street with inverted crown with storm drain. Purchase land and construct channel to meet Townley Avenue channel at 12th Street. (Must be part of 10th Street Wash project.)

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 3/1/91/PK

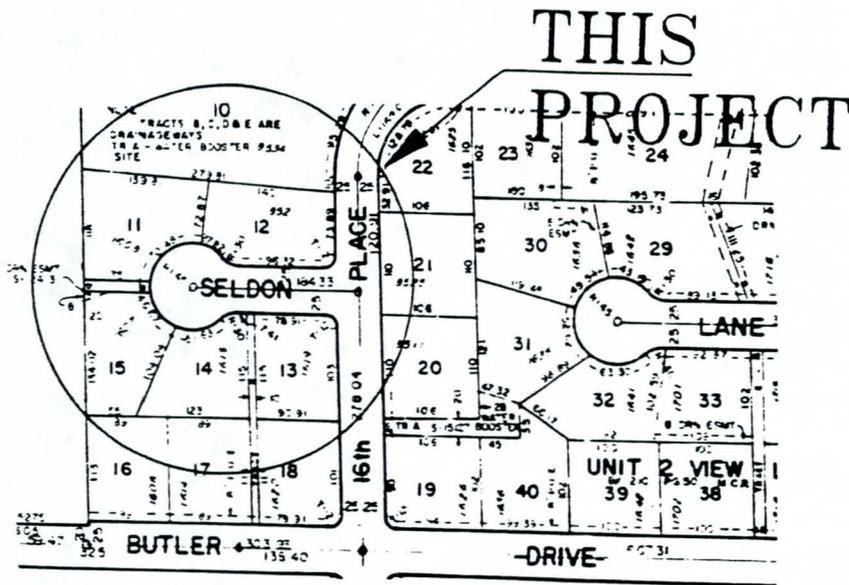
LOCATIONS OF KNOWN FLOODING:
8822 North 13th Street

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP48

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: VISTA CANDELAS UNIT 2 (CITY)

DATE SUBDIVIDED: 12-12-78



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
16TH PLACE & SELDON LANE	26/31	05-30-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Place and Seldon Lane

PROJECT NUMBER: 26/31-1

DESCRIPTION: Storm water from mountain enters end of cul de sac. After one lot it must turn 90 degrees into an 8' drainage channel. It cannot make the turn and floods two houses.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 2

SUGGESTED SOLUTION: Reconstruct streets and/or drainage system.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

FIELD INSPECTION DATE: 5/29/91/PK

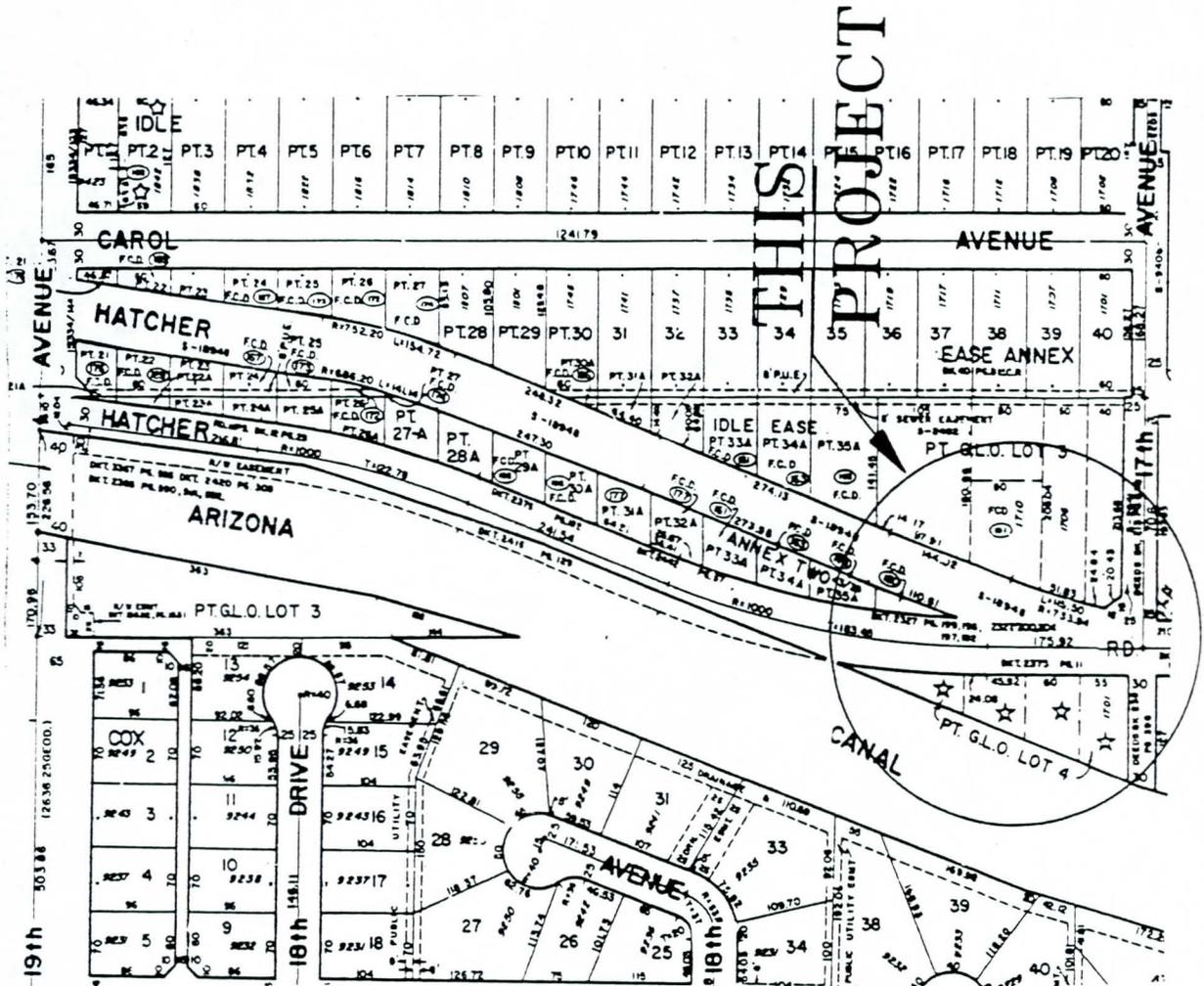
LOCATIONS OF KNOWN FLOODING:
1615, 1619 East Seldon Lane

CONTRIBUTING FACTORS:

Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LFMP53

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: IDLE EASE ANNEX (COUNTY)

DATE SUBDIVIDED: 10-15-47



NO SCALE

PROJECT NAME: 17TH AVENUE & ACDC	QS 27/25	DATE: 05-08-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 17th Avenue and ACDC

PROJECT NUMBER: 27/25-1

DESCRIPTION: Ponding along Arizona Canal. Storm water from Vogel to Carol cut-off. Miscellaneous problems due to unsubdivided parcels and lot splits.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Purchase lots for drainage right of way. Construct streets for drainage. Note: ACDC has corrected ponding along the canal.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 2/27/91/PK

LOCATIONS OF KNOWN FLOODING:

1814, 1742 West Carol

1514 West Palmer

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

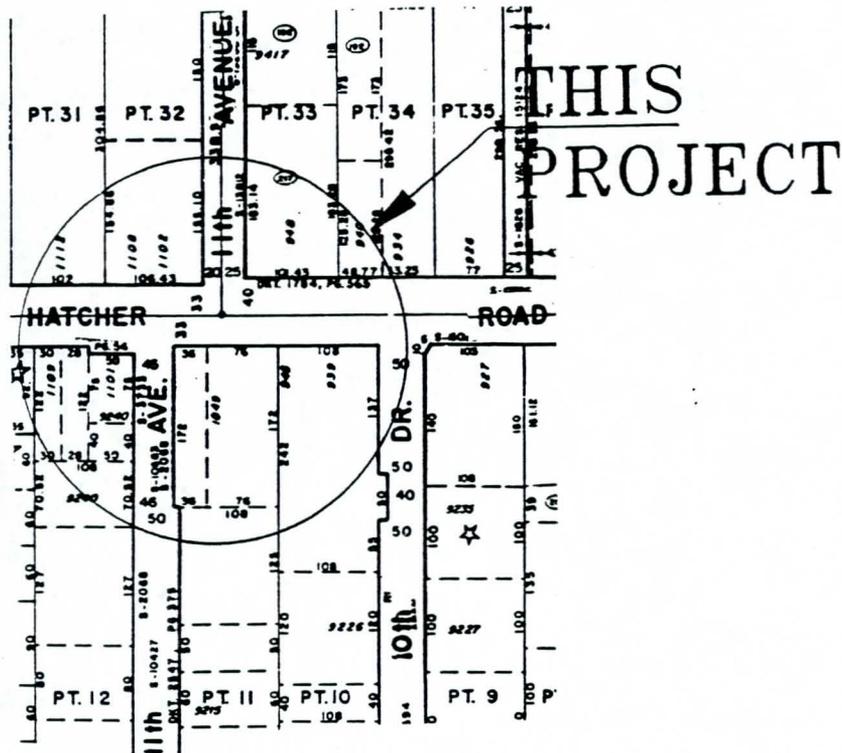
Streets abandoned so that drainage was cut off

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

Structures constructed in ponding area along canal

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: FOOTHILL ACRES (COUNTY)

DATE SUBDIVIDED: 12-29-42



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
11TH AVENUE & HATCHER ROAD	27/26	05-30-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 11th Avenue and Hatcher

PROJECT NUMBER: 27/26-1

DESCRIPTION: Development has eliminated a large wash which was located along the 12th Avenue alignment between Mountain View Road and Hatcher Road.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Condemn properties and construct 12th Avenue between Vogel Avenue and Hatcher Road. Extend 10th Avenue, 10th Drive, and 12th Avenue to ACDC.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 5/20/91/PK

LOCATIONS OF KNOWN FLOODING:
1112, 1217 West Hatcher Road

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

Failure to continue existing street pattern

Failure to allow drainage through new projects

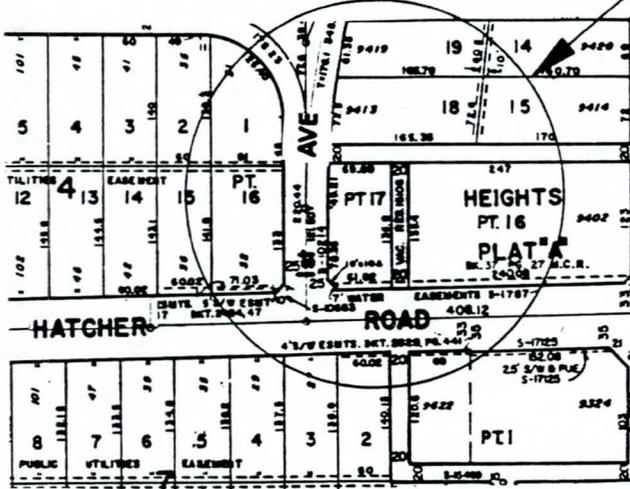
Streets which drain to the end of a cul de sac or otherwise dead end

Structures constructed in natural drainage channels or drainage easements

LFMP42

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: NORTH CENTRAL HEIGHTS
 PLAT "A" (COUNTY)
 DATE SUBDIVIDED: 01-20-47



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
1ST AVENUE & HATCHER ROAD	27/27	05-30-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 1st Avenue and Hatcher Road

PROJECT NUMBER: 27/27-1

DESCRIPTION: Large wash flows between 1st Avenue and Central Avenue north of Hatcher Road. Wash is not continued through Lot 16 thereby flooding businesses located there. Businesses are lower than alley with minimum set back.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10
(1 structure)

SUGGESTED SOLUTION: Improve wash for 1200 feet.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

FIELD INSPECTION DATE: 5/20/91/PK

LOCATIONS OF KNOWN FLOODING:
9402 North Central Avenue (No. 8)

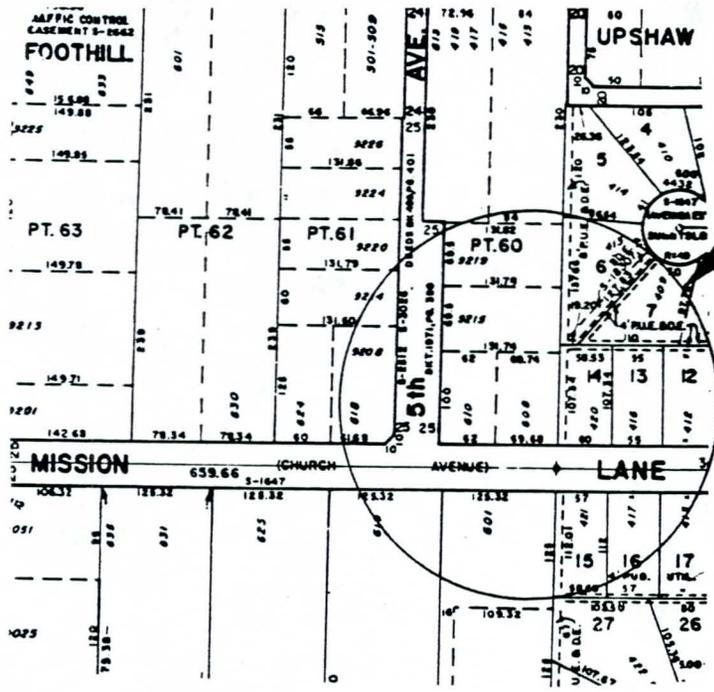
CONTRIBUTING FACTORS:

Floors too low

Failure to allow drainage through new projects

LFMP43

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: UPSHAW DESERT GARDENS (COUNTY)

DATE SUBDIVIDED: 04-11-50



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
5th AVENUE AND MISSION LANE	27/27	06-03-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 5th Avenue and Mission Lane

PROJECT NUMBER: 27/27/-2

DESCRIPTION: Storm water exceeds drainage easement capacity from
Sunnyslope Lane cul de sac to Mission Lane

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Remove one house and purchase easement to
Arizona Canal Diversion Channel.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 5/20/91/PK

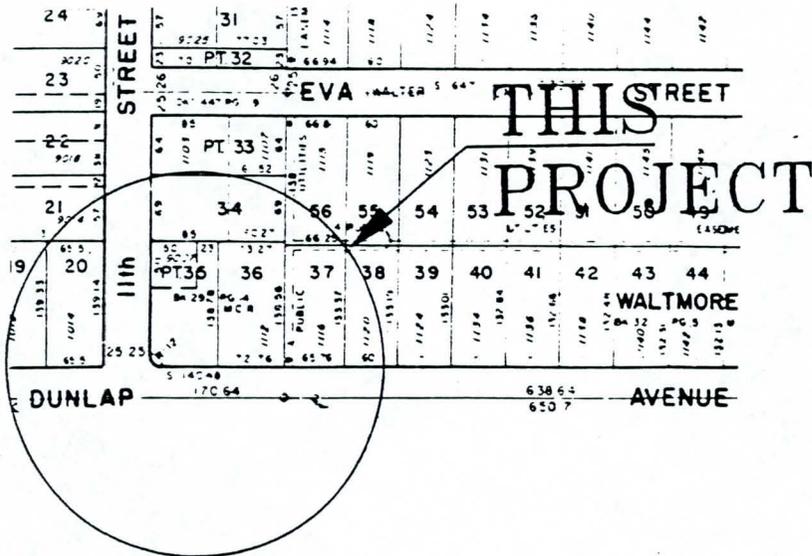
LOCATIONS OF KNOWN FLOODING:
608 West Mission Lane

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Streets which drain to the end of a cul de sac or otherwise dead
end

LFMP44

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX

PROJ. NO. 27/29-1



SUBDIVISION NAME: WALTMORE (COUNTY)

DATE SUBDIVIDED: 01-29-44



NO SCALE

PROJECT NAME: 11TH STREET & DUNLAP AVENUE	QS 27/29	DATE: 05-30-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Street and Myrtle Avenue

PROJECT NUMBER: 23/31-1

DESCRIPTION: Apartment building constructed in Myrtle Avenue Wash. This is a large wash and is a Special Flood Hazard Area according to the Flood Insurance Rate Map.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct channels and bridges for Dreamy Draw Wash and Myrtle Avenue Wash.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$60,000

FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
7141 North 16th Street

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

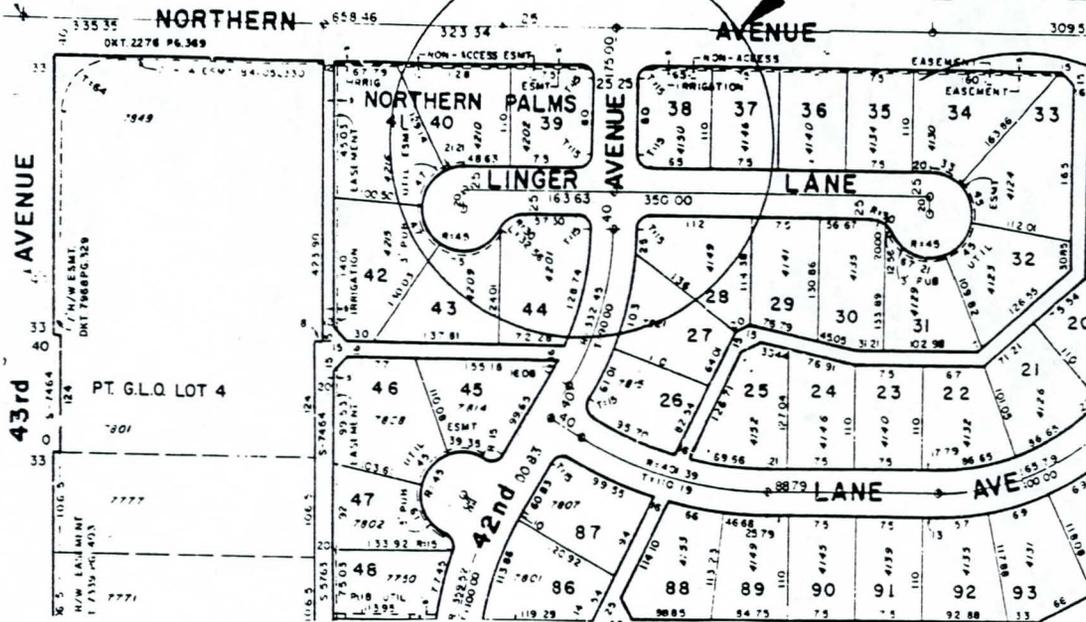
Floors too low

Structures constructed in natural drainage channels or drainage easements

LFMP82

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: LORI HEIGHTS (CITY)

DATE SUBDIVIDED: 03-09-62



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
42ND AVENUE & NORTHERN AVENUE	24/19	06-04-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 42nd Avenue and Northern Avenue

PROJECT NUMBER: 24/19-1

DESCRIPTION: Storm water exceeds capacity of Northern Avenue and flows down 42nd Avenue. It exceeds the capacity of the local streets and floods homes at or below curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of local streets with inverted crown and storm drains. Property may have to be purchased to provide an adequate route.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/1/91/PK

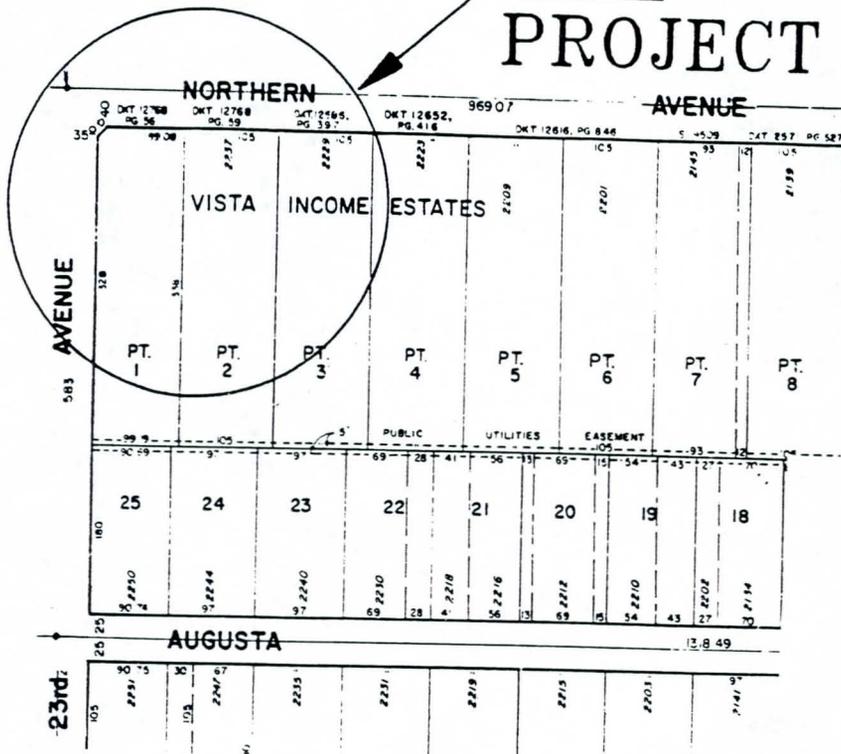
LOCATIONS OF KNOWN FLOODING:
4263, 4259 West Morten Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP86

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

**THIS
 PROJECT**



SUBDIVISION NAME: VISTA INCOME ESTATES #2 (COUNTY)

DATE SUBDIVIDED: 07-09-28



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
23RD AVENUE & NORTHERN AVENUE	24/24	06-04-91	3

PROJ. NO. 24/24-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 23rd Avenue and Northern Avenue

PROJECT NUMBER: 24/24-1

DESCRIPTION: Storm water exceeds capacity of Northern Avenue and other streets flooding homes which are at or lower than curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of local street with inverted crown and storm drain to carry water.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:

2130, 2134 West Augusta
2118 West Hayward
2145 West Northern
2236 West Orangewood

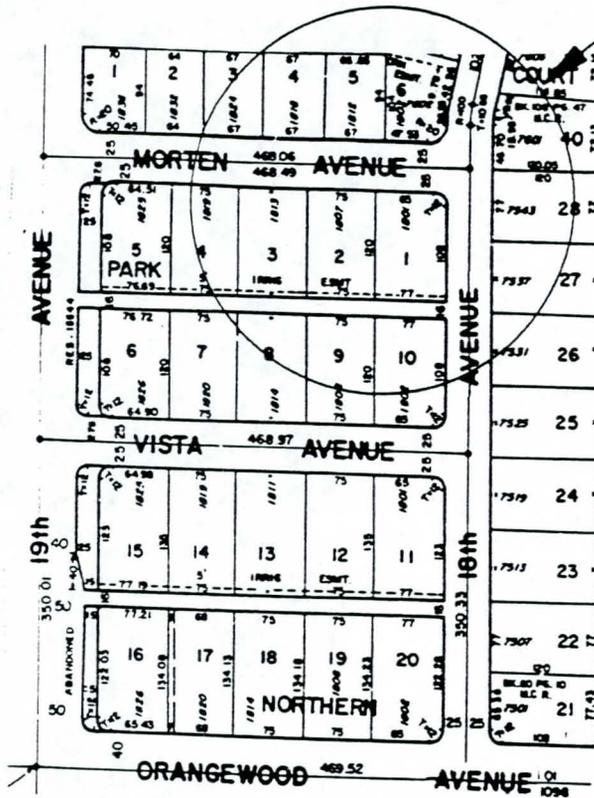
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP89

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: PARK NORTHERN (COUNTY)

DATE SUBDIVIDED: 06-27-54



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
18TH AVENUE & MORTON AVENUE	24/25	05-08-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 18th Avenue and Morten Avenue

PROJECT NUMBER: 24/25-1

DESCRIPTION: Storm water flows from 19th Avenue east to 17th Avenue; and from 15th Avenue west to 17th Avenue. It also flows south from Northern.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct inverted crown streets with storm drain under for Augusta, Frier, Morten, Vista, Orangewood, 17th Avenue, 18th Avenue, 17th Drive, 16th Lane including 17th Avenue to Glendale.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 4/5/91/PK

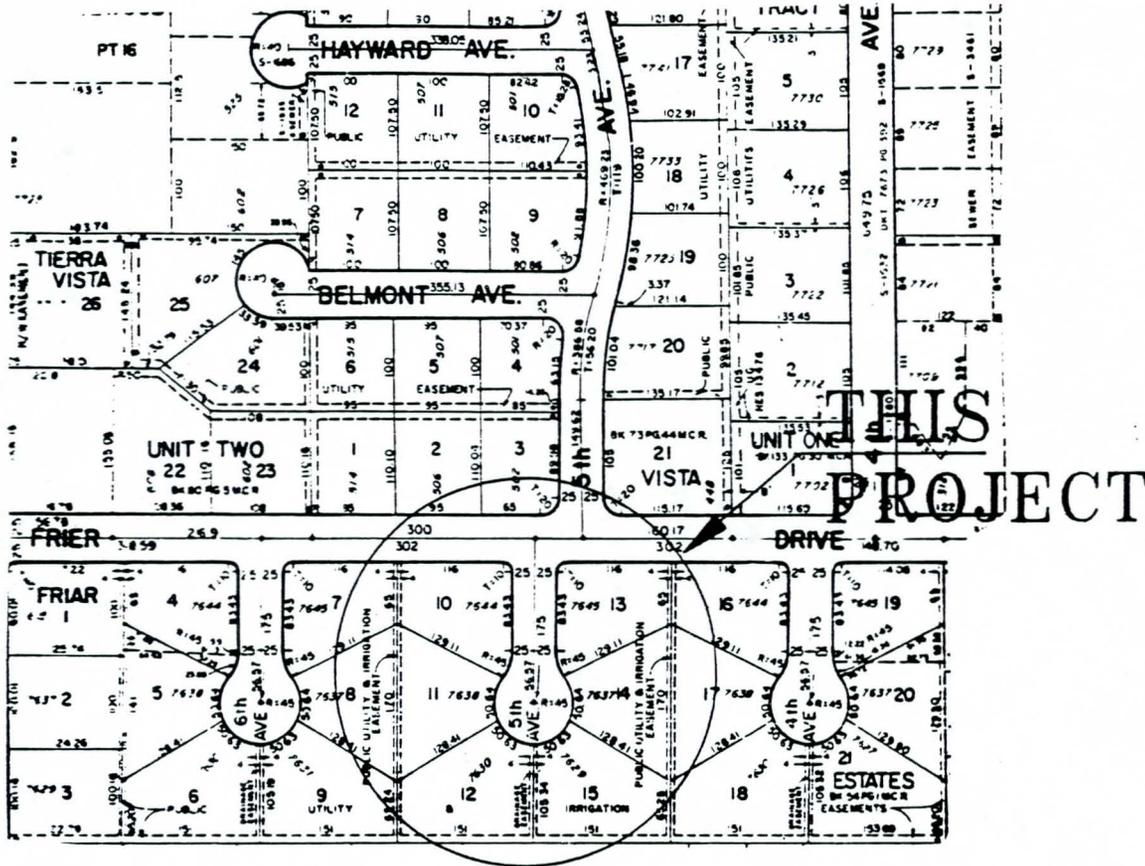
LOCATIONS OF KNOWN FLOODING:

1801 West Morten
7543 North 18th Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects
Streets which drain to the end of a cul de sac or otherwise dead end
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: FRIER ESTATES (COUNTY)

DATE SUBDIVIDED: 05-27-52



NO SCALE

PROJECT NAME: 5TH AVENUE & FRIER DRIVE	QS 24/27	DATE: 06-12-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 5th Avenue and Frier Drive

PROJECT NUMBER: 24/27-1

DESCRIPTION: Fourth, Fifth, and Sixth Avenue cul de sacs all drain to a dead-end with inadequate drainage easements which are blocked.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Construct channel to street to south (Kaler). Obtain right of way.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$200,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

FIELD INSPECTION DATE: 6/5/91/PK

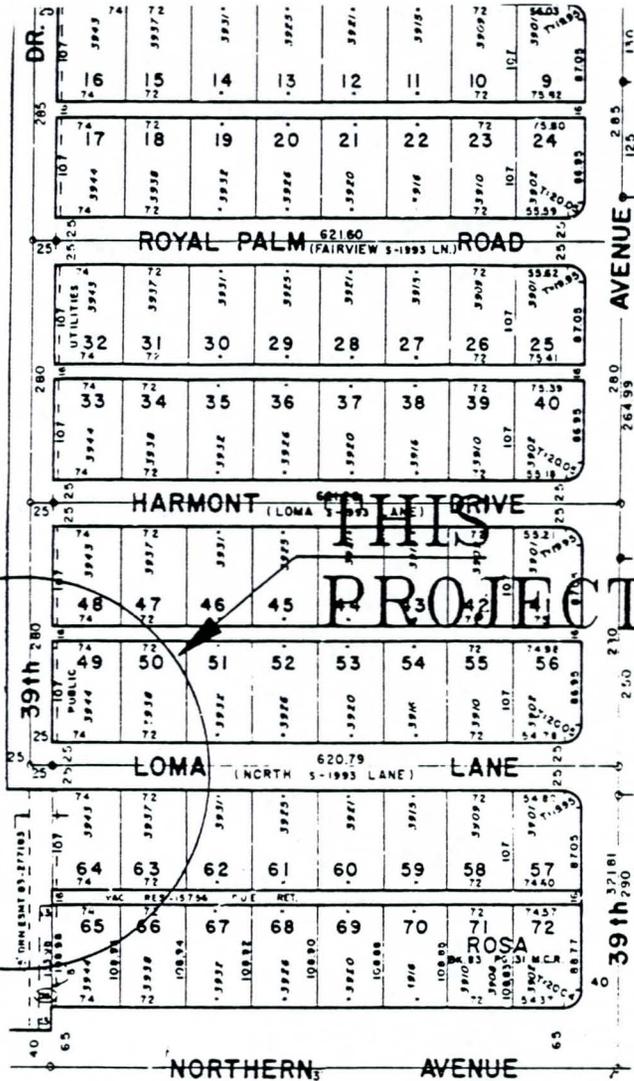
LOCATIONS OF KNOWN FLOODING:
7630 North 5th Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Streets which drain to the end of a cul de sac or otherwise dead end

LFMP12

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: WEST ROSA (CITY)

DATE SUBDIVIDED: 03-19-59



NO SCALE

PROJECT NAME: 39TH DRIVE & LOMA LANE	QS 25/19	DATE: 05-15-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 39th Drive and Loma Lane

PROJECT NUMBER: 25/19-1

DESCRIPTION: 39th Drive and Loma Lane drain to a corner with inadequate out fall. Area is very flat to south and west.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Extend 39th Drive south to Northern. Rebuild 39th Drive and Loma Lane.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$200,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

FIELD INSPECTION DATE: 3/7/91/PK

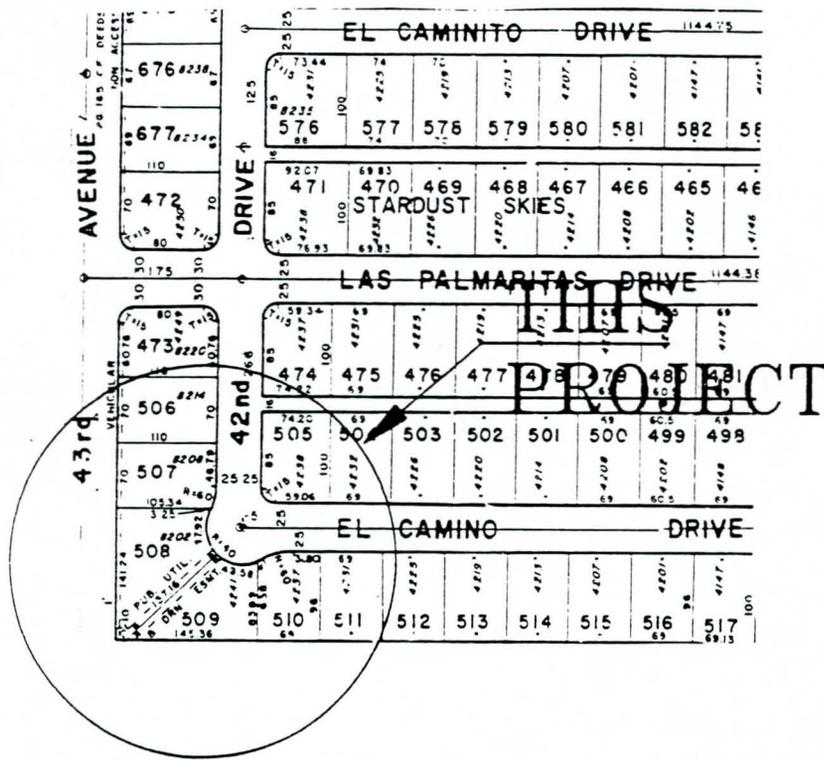
LOCATIONS OF KNOWN FLOODING:

3943 West Loma Lane
3938 West Northern Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Streets which drain to the end of a cul de sac or otherwise dead end
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: STARDUST SKIES (COUNTY)

DATE SUBDIVIDED: 05-10-66



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
42ND DRIVE & EL CAMINO	25/19	05-08-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 42nd Drive and El Camino

PROJECT NUMBER: 25/19-2

DESCRIPTION: Run off flows south on 42nd Drive and West on El Camino to a corner with inadequate out fall.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Clear easement and construct drainage channel to 43rd Avenue.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$40,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$4000

FIELD INSPECTION DATE: 3/7/91/PK

LOCATIONS OF KNOWN FLOODING:
4219 West Camino

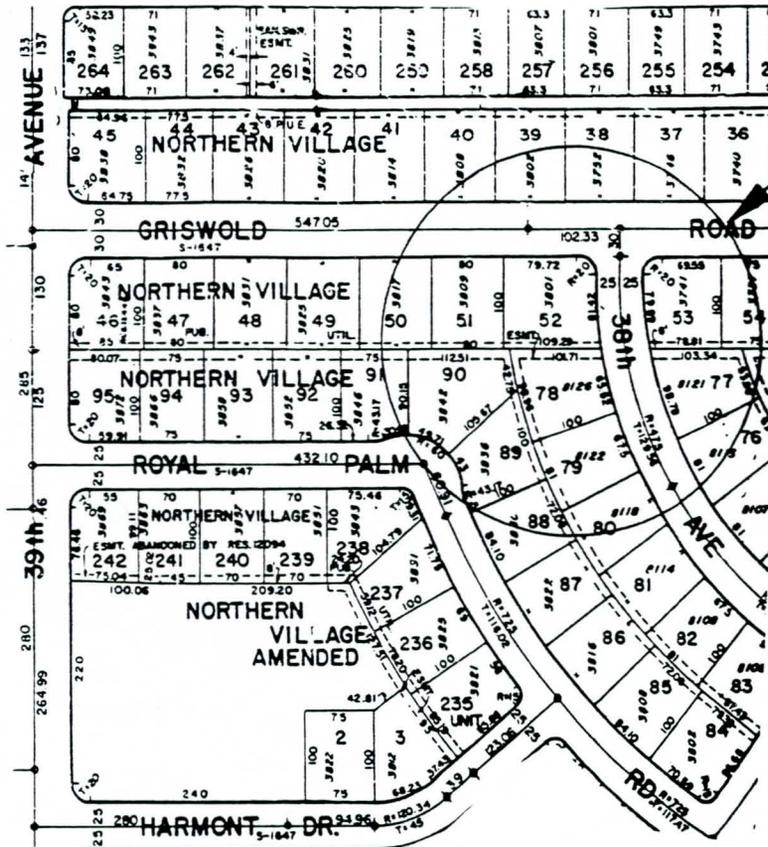
CONTRIBUTING FACTORS:

Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: NORTHERN VILLAGE EXTENSION #3
(CITY)

DATE SUBDIVIDED: 03-28-67



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
38TH AVENUE & GRISWOLD ROAD	25/20	06-04-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 38th Avenue and Griswold Road

PROJECT NUMBER: 25/20-1

DESCRIPTION: Storm water exceeds capacity of local streets and floods homes at or below curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/1/91/PK

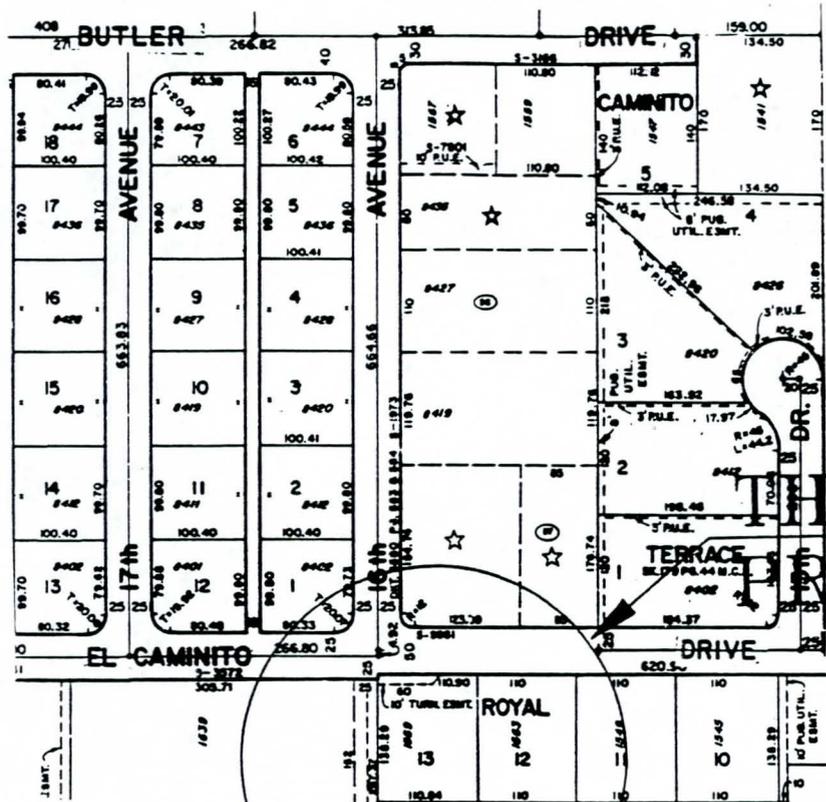
LOCATIONS OF KNOWN FLOODING:
8118 North 38th Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP87

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: ROYAL ESTATES (COUNTY)

DATE SUBDIVIDED: 11-15-55



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
16TH AVENUE & EL CAMINITO DRIVE	25/25	06-04-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Avenue and El Caminito Drive

PROJECT NUMBER: 25/25-1

DESCRIPTION: Storm water exceeds capacity of El Caminito and floods homes at or below curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

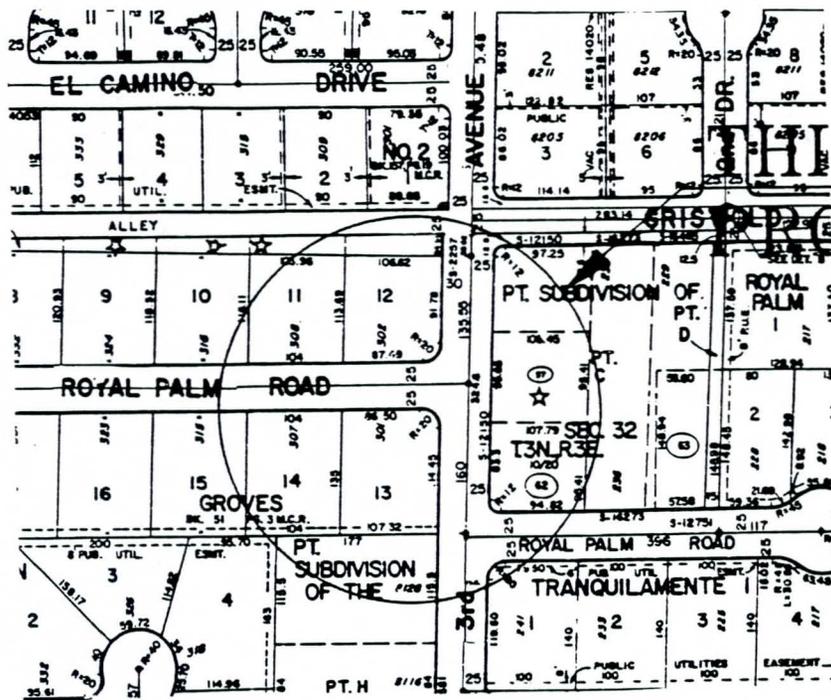
FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
1569 West El Caminito Drive

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern

LFMP74

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: SUNKIST GROVES (COUNTY)

DATE SUBDIVIDED: 07-12-51



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
3RD AVENUE & ROYAL PALM ROAD	25/27	06-04-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 3rd Avenue and Royal Palm Road

PROJECT NUMBER: 25/27-1

DESCRIPTION: Storm water exceeds the capacity of 3rd Avenue and floods homes which are at or below curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 feet of local street with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
301 West Royal Palm Road

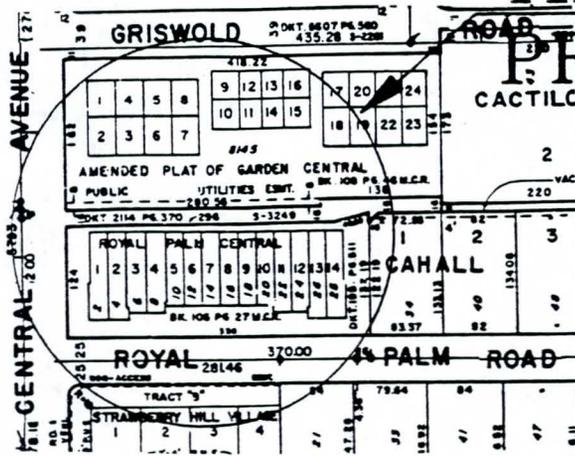
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP90

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: ROYAL PALM CENTRAL (COUNTY)

DATE SUBDIVIDED: 08-18-64



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
CENTRAL AVENUE & ROYAL PALM ROAD	25/28	05-30-91	3

PROJ NO 25/28-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: Central Avenue and Royal Palm Road

PROJECT NUMBER: 25/28-1

DESCRIPTION: Storm water from Central Avenue and land to the northeast floods 14 unit condominium project.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Construct flood protection wall around project.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$10,000

FIELD INSPECTION DATE: 5/29/91/PK

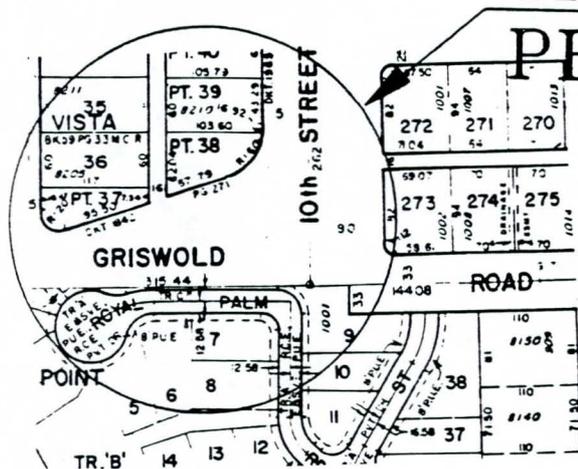
LOCATIONS OF KNOWN FLOODING:
8135 North Central Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low

LFMP52

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: SKYLINE VISTA (COUNTY)

DATE SUBDIVIDED: 05-19-54



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
10TH STREET & GRISWOLD ROAD	25/29	05-30-91	3

PROJ. NO. 25/29-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 28th Drive and Glendale Avenue

PROJECT NUMBER: 22/22-1

DESCRIPTION: Storm water exceeds capacity of Glendale Avenue and 27th Avenue and floods properties below curbs.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Purchase right of way and construct 23rd Drive from Glendale to Maryland.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 6/1/91/PK

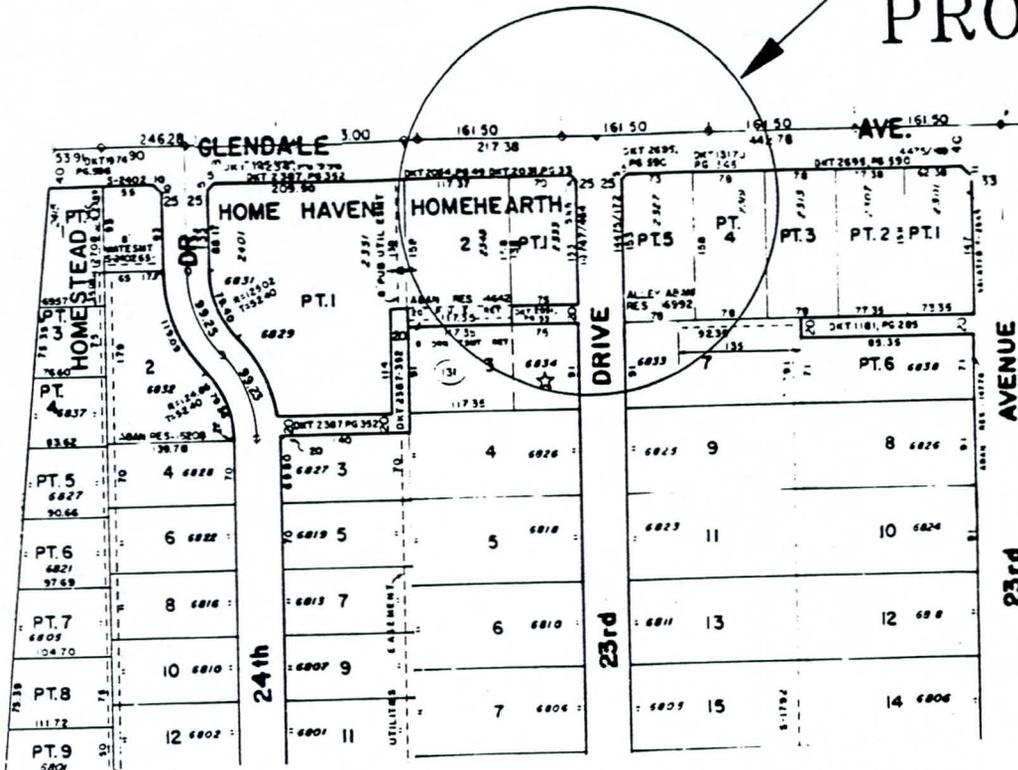
LOCATIONS OF KNOWN FLOODING:
2801 West Glendale Avenue
6824 North 27th Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Major storm run-off exceeds street capacity

LFMP85

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: HOMEHEARTH ADDITION (COUNTY)

DATE SUBDIVIDED: 01-23-46



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
23RD DRIVE & GLENDALE AVENUE	22/23	06-04-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 23rd Drive and Glendale Avenue

PROJECT NUMBER: 22/23-1

DESCRIPTION: Storm water exceeds street capacity and floods homes lower than curb elevation.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 5,000 L.F. of inverted crown streets with storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

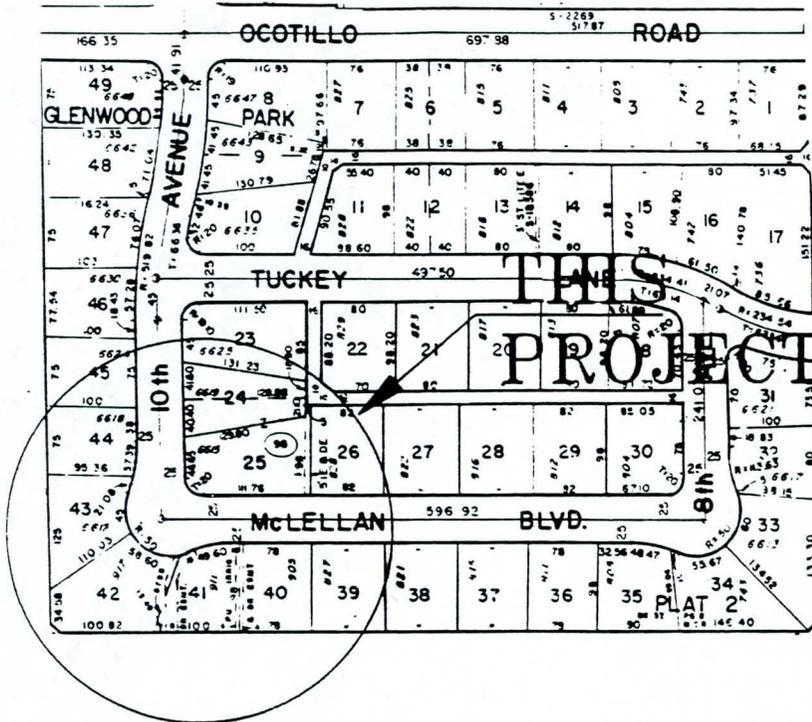
FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
6805 North 23rd Drive

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP84

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: GLENWOOD PARK PLAT #2 (COUNTY)

DATE SUBDIVIDED: 12-04-51



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
10TH AVENUE & MCLELLAN BLVD.	22/26	05-30-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 10th Avenue and McLellan Boulevard

PROJECT NUMBER: 22/26-1

DESCRIPTION: Storm water from 7th Avenue flows west on Ocotillo Road and Tuckey Lane, thence south on 10th Avenue and 8th Avenue into dead-end corner formed by 10th Avenue and McLellan Boulevard. Drainage easements exist south to 11th Avenue but no path exists for surface drainage. Small pipe for nuisance water.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Purchase Lot 41 of Glenwood Park Part 2 (Book 52, Page 8). Construct channel through to 11th Avenue.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$200,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 8/10/90/PK

LOCATIONS OF KNOWN FLOODING:
905, 911, 917 West McLellan Boulevard
6612 North 10th Avenue

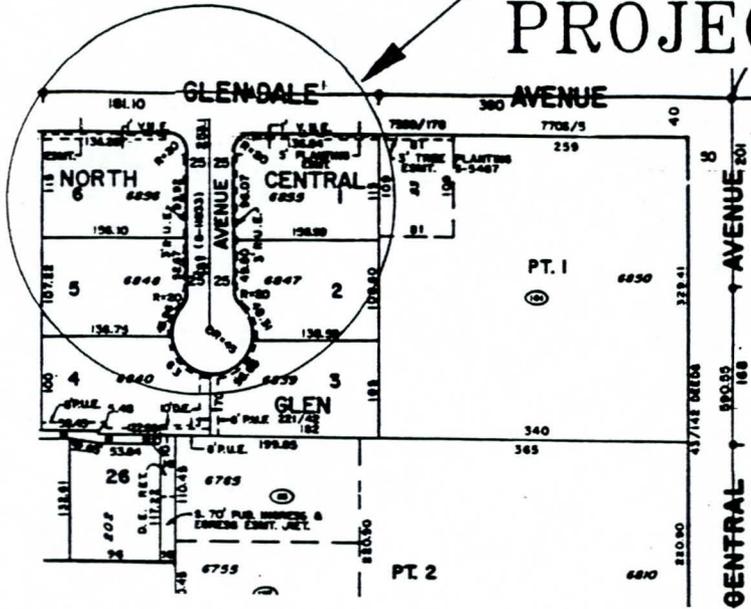
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Streets which drain to the end of a cul de sac or otherwise dead end

LFMP41

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: NORTH CENTRAL GLEN (CITY)

DATE SUBDIVIDED: 02-19-80



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
1ST AVENUE & GLENDALE AVENUE	22/27	06-04-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 1st Avenue and Glendale Avenue

PROJECT NUMBER: 22/27-1

DESCRIPTION: Storm water exceeds the capacity of Glendale Avenue and flows into cul de sac without an outlet for drainage. 16' drainage easement is blocked.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct outlet for cul de sac, and reconstruct 3rd Avenue with inverted crown and storm drain from Glendale to Maryland to drain water south.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
6840 North 1st Avenue

CONTRIBUTING FACTORS:

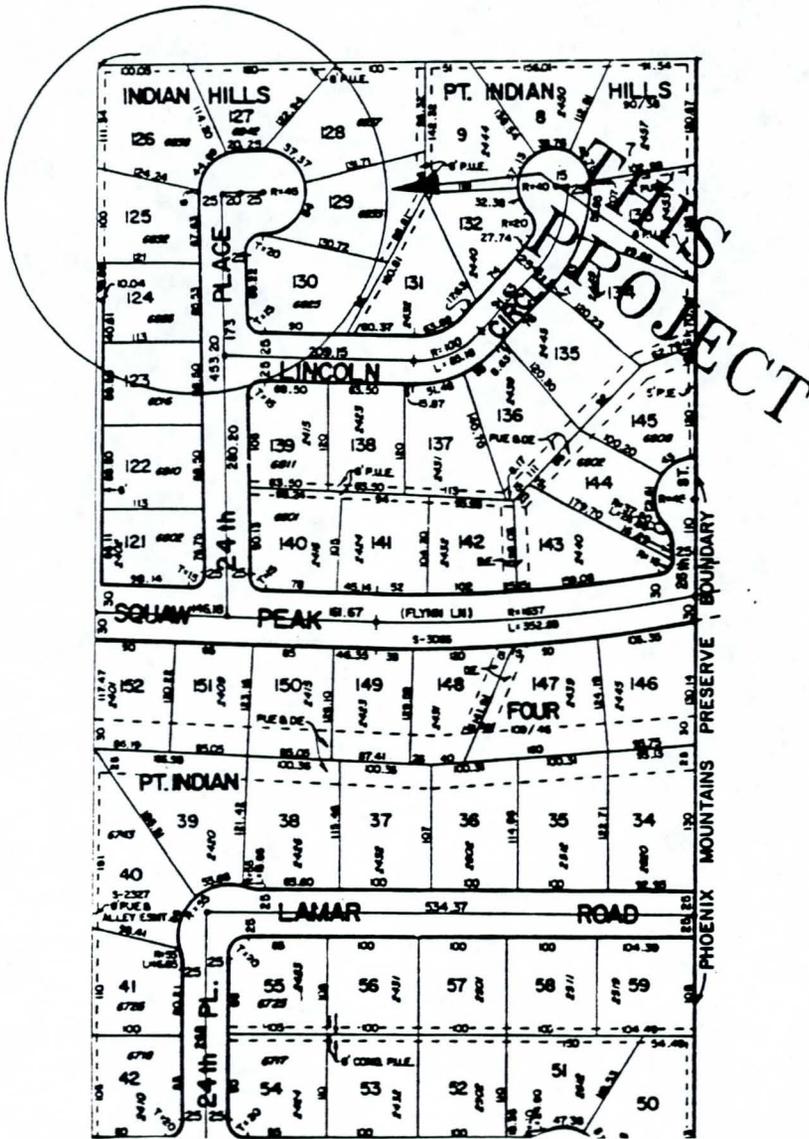
Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Structures constructed in natural drainage channels or drainage easements

LFMP83

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: INDIAN HILLS FOUR (CITY)

DATE SUBDIVIDED: 10-13-65



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
24TH PLACE & SQUAW PEAK DRIVE	22/33	06-12-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 24th 54th Place and Squaw Peak Drive

PROJECT NUMBER: 22/33-1

DESCRIPTION: Home at 6838 North 24th Place is built against mountain on Mountain Preserve. Lot has been blasted out of the mountain and is at risk from falling boulders, rocks, mud, and water.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: -0-

SUGGESTED SOLUTION: This is not a City problem. Homeowner must take action to protect the house.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$-0-

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$-0-

COST PER STRUCTURE TO REDUCE FLOODING: \$-0-

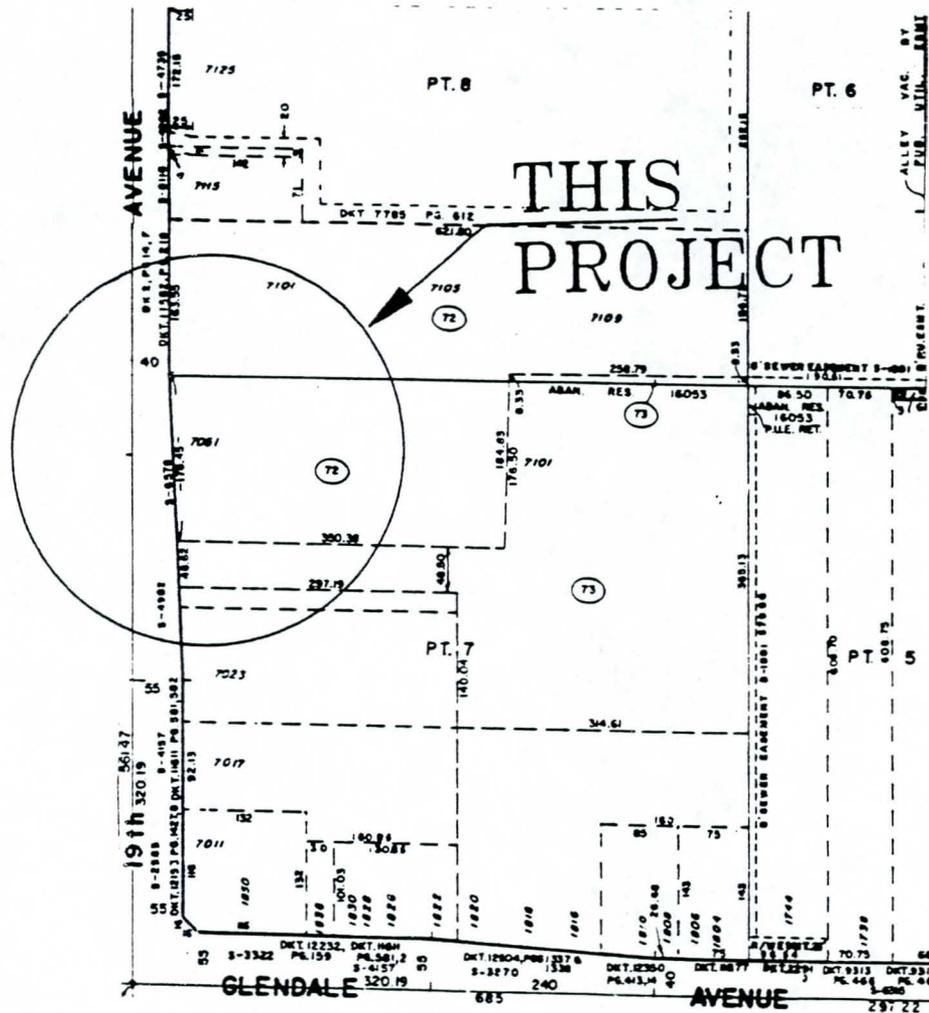
FIELD INSPECTION DATE: 6/1/91/PK

LOCATIONS OF KNOWN FLOODING:
N/A

CONTRIBUTING FACTORS:
Structure built too close to mountain.

LFMP81

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-54



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
19TH AVENUE & GLENDALE AVENUE	23/25	05-15-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 19th Avenue and Glendale Avenue

PROJECT NUMBER: 23/25-1

DESCRIPTION: Storm run-off from 19th Avenue overtops curb south of Myrtle and floods vacant property at 7101 North 19th Avenue. This floods the rear of apartment located at 1744 West Glendale Avenue. There is a 4' drop across the property to the apartments.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 7

SUGGESTED SOLUTION: Flood walls or elevate structures.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$210,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

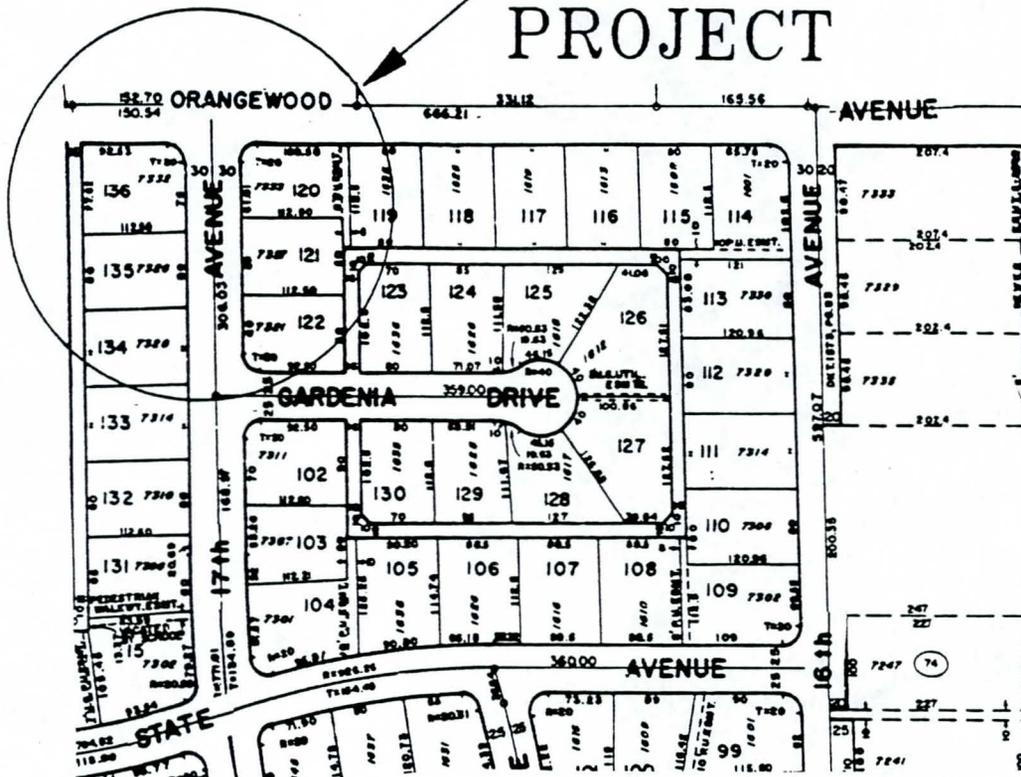
FIELD INSPECTION DATE: 3/10/91/PK

LOCATIONS OF KNOWN FLOODING:
1744 West Glendale

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

THIS
PROJECT



SUBDIVISION NAME: WESTWOOD HEIGHTS (COUNTY)

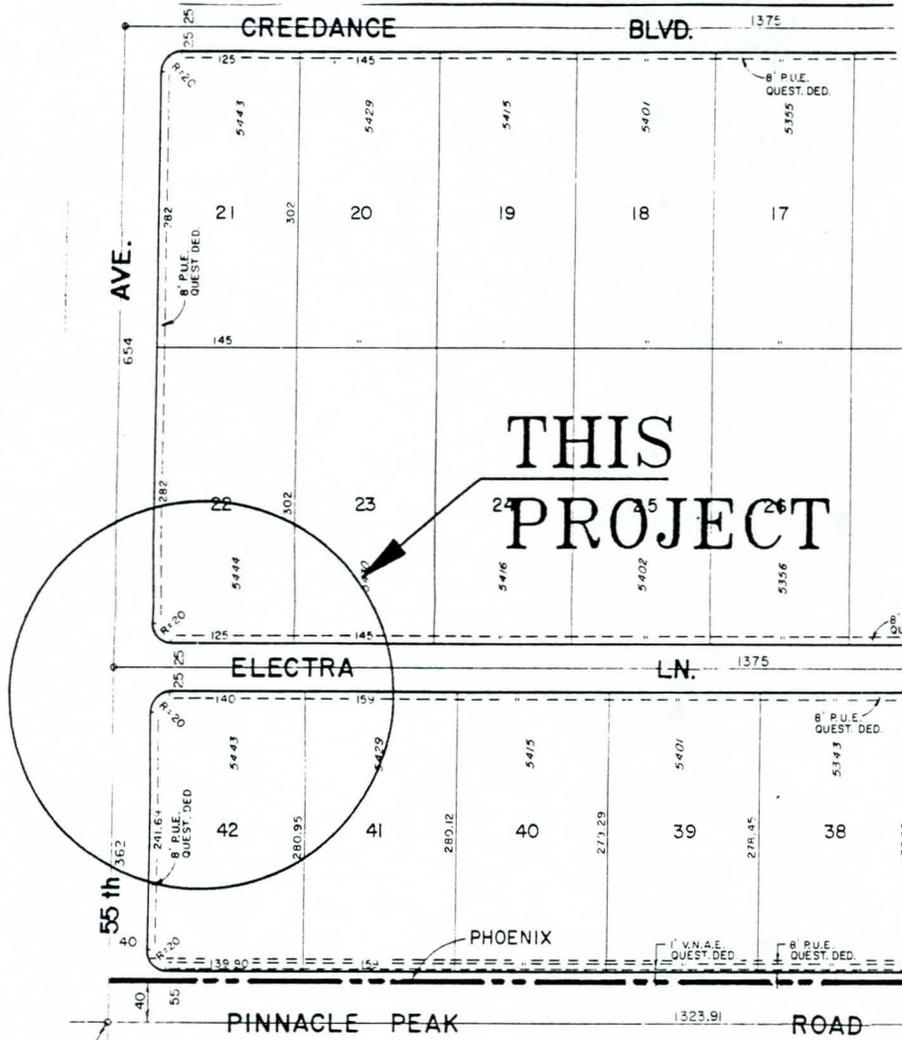
DATE SUBDIVIDED: 12-02-54



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
17TH AVENUE & ORANGEWOOD AVENUE	23/25	05-15-91	3

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: SADDLEBACK HILLS (COUNTY)

DATE SUBDIVIDED: 10-29-79



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
55TH AVENUE & PINNACLE PEAK ROAD	45/16	05-08-91	2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 55th Avenue & Pinnacle Peak Road

PROJECT NUMBER: 45/16-1

DESCRIPTION: Creedance Boulevard, one block north of Electra, has many homes with low finished floors and apparent flood walls. This entire quarter section will be subject to shallow flooding and needs some special attention. Particular attention should be paid by the Design Engineer when the north/south streets in this area are improved. That would include every 1/2 mile street from 55th Avenue east. All of these streets will have to be designed to carry a 100-year flow to Pinnacle Peak Road in some manner. Most likely by a roadside channel. If the streets are improved by installing curbs, extending them to six lanes, and doing away with the roadside channel system that exists, major flooding could increase. Electra lies in an improved subdivision with rolled curb and paved streets, however homes on the south side of the street could be at or below curb height. Some indication of berm and flood protection exists although it may only be ornamental. Many of the homes on the south side of the street could be subject to flooding because of low finished floors. Large amounts of water flow down 55th Avenue from the north. A roadside ditch has been bladed in on the west side of the street to intercept water off of the hills beginning there and the street is a 1/2 half street sloped to the east. This only confirms the earlier comments concerning low finished floors and high flow rates down all the north/south streets in this valley which is formed by the hills to the north and the Adobe Recreational Area to the south.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Channels along 55th & 51st Avenue to carry 100 year flow. See Little Deer Valley Area Drainage Master Study.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING: 5444 West Electra Lane

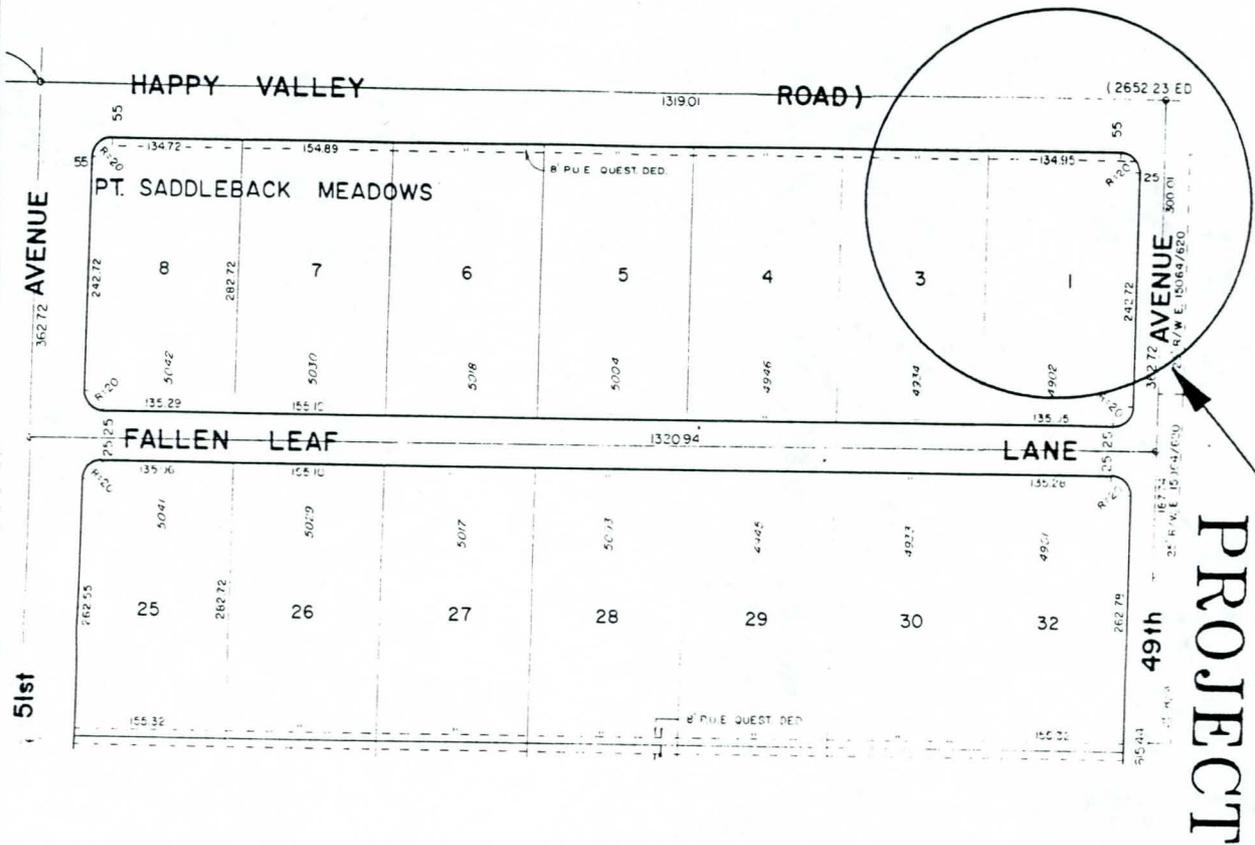
CONTRIBUTING FACTORS:

Floors too low

Failure to allow drainage through new projects

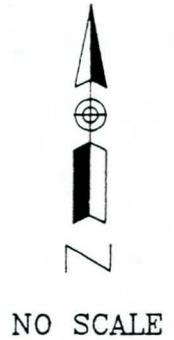
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: SADDLEBACK MEADOWS (COUNTY)

DATE SUBDIVIDED: 04-03-73



PROJECT NAME:	QS	DATE:	C.D.
49TH AVENUE & HAPPY VALLEY ROAD	46/17	05-08-91	2

PROJ. NO. 46/17-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 49th Avenue and Happy Valley Road

PROJECT NUMBER: 46/17-1

DESCRIPTION: 49th Avenue is paved to the north of Happy Valley Road with curb, and drains a large subdivision. Flow will increase as the subdivision is built out and adds water to the intersection of 49th Avenue and Happy Valley Road. Happy Valley Road also carries drainage from 51st Avenue easterly to 49th Avenue. At the intersection of 49th Avenue and Happy Valley Road the flow splits and some flows south of 49th Avenue and some flows east on Happy Valley Road to 43rd Avenue and the channel and culvert located there. There is evidence of berms and flood walls along 49th Avenue south of Happy Valley Road. This problem can be expected to increase as development in the subdivision north of Happy Valley Road progresses. Homes flood on east side of 49th Avenue (unsubdivided). Finish floors are at grade. County subdivisions have ignored natural drainage system.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: This situation has been identified in the Little Deer Valley Area Drainage Master Study. A 100-year drainage facility has been planned east on Happy Valley Road to the 43rd Avenue channel (2-48" pipes). Property owners on 49th Avenue will have to continue to provide protection for their homes with berms and flood walls until the improvement has been made.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

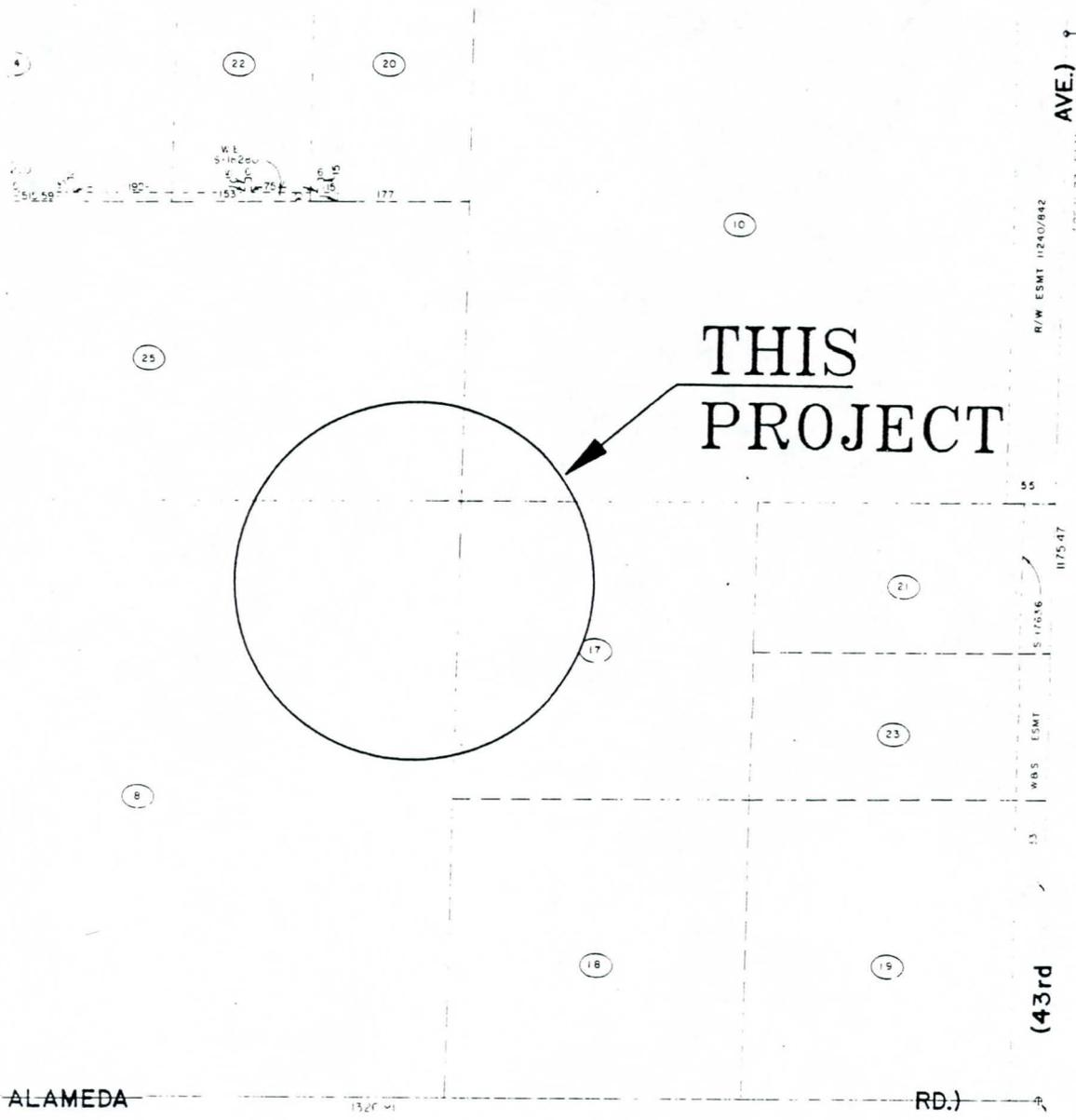
FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:
24817, 24807 North 49th Avenue

CONTRIBUTING FACTORS:

Floors too low
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)
 DATE SUBDIVIDED: 08-08-80



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
43RD AVENUE & SAGUARO PARK LANE	46/18	05-08-91	2

PROJ. NO. 46/18-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 43rd Avenue and Saguaro Park Lane

PROJECT NUMBER: 46/18-1

DESCRIPTION: This is an unsubdivided area without dedicated streets (according to the Quarter Section Map). Homes were constructed at grade in a major wash area under County jurisdiction.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 8

SUGGESTED SOLUTION: Dedicate and pave streets. Construct channel #44 identified in Little Deer Valley Area Drainage Master Study.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$37,500

FIELD INSPECTION DATE: 3/8/91/PK

LOCATIONS OF KNOWN FLOODING:

4414 West Saguaro Park Lane

24432 North 45th Avenue

Homes on 43rd Avenue south of Saguaro Lane

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

Structures constructed in natural drainage channels

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 17th Avenue and Orangewood

PROJECT NUMBER: 23/25-2

DESCRIPTION: This is the low point for old Cave Creek Wash. See 24/25-1. Water flows from north, west and east to this intersection.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 17th Avenue, 17th Drive, and Myrtle with inverted crown for detention and conveyance.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

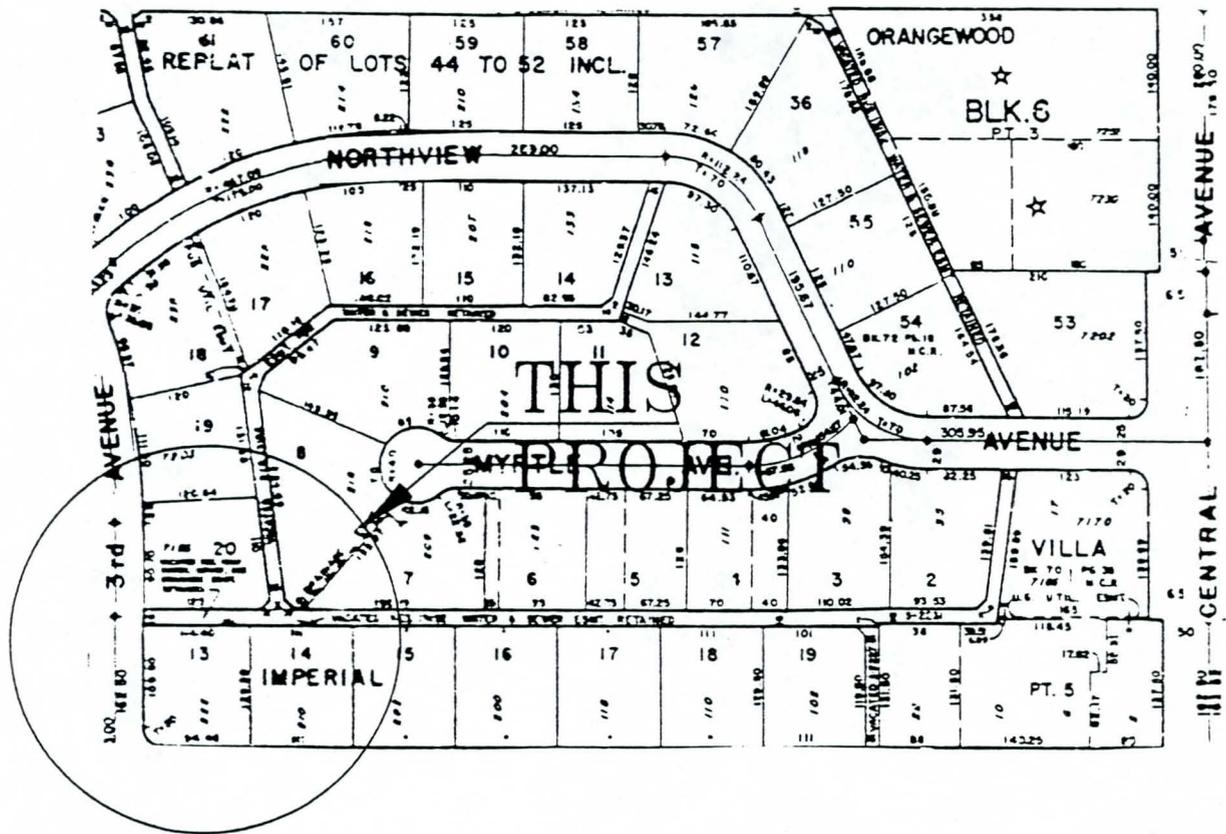
FIELD INSPECTION DATE: 3/10/91/PK

LOCATIONS OF KNOWN FLOODING:
1635 West Orangewood (1984)

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: NORTH CENTRAL VILLA (COUNTY)

DATE SUBDIVIDED: 01-23-57



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
3RD AVENUE WEST OF MYRTLE AVENUE	23/27	05-08-91	3

PROJ. NO. 23/27-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 3rd Avenue west of Myrtle Avenue

PROJECT NUMBER: 23/27-1

DESCRIPTION: Rainfall run-off from Central Avenue, Northview Avenue and Myrtle Avenue drains to the end of the Myrtle Avenue cul de sac in the west 200 block. There is a steep grade west from Central Avenue onto Northview Avenue. The 4' wide drainage easement between lots 7 & 8 is inadequate. The drainage easement behind 210 & 222 West Palmaire Avenue is blocked by walls and vegetation. A small pipe has been installed to drain the cul de sac after a rain. The same problem probably exists at 7030 & 7029 North 2nd Drive.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Obtain larger easement between lots 7 & 8. Construct channel to 3rd Avenue. Reconstruct Palmaire Avenue, Glenn Drive, 2nd Drive, and 3rd Avenue with inverted crowns. Obtain easements to drain 2nd Drive.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$400,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 4/24/91

LOCATIONS OF KNOWN FLOODING: 163 (209), 215 West Myrtle Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

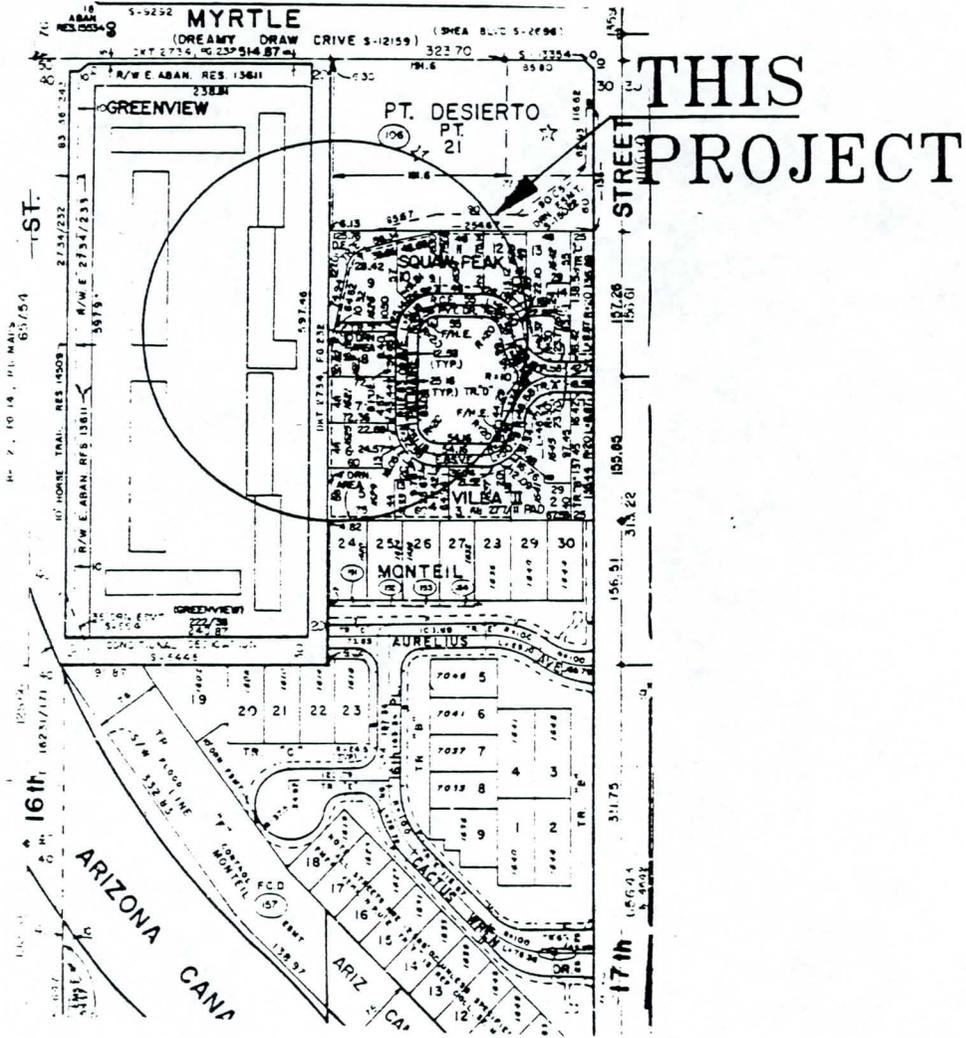
Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

Structures constructed in natural drainage channels or drainage easements

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: GREENVIEW (CITY)

DATE SUBDIVIDED: 04-23-80



NO SCALE

PROJECT NAME: 16TH STREET & MYRTLE AVENUE	QS 23/31	DATE: 06-04-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 20th Avenue and Georgia Avenue

PROJECT NUMBER: 19/24-1

DESCRIPTION: Storm water flows south and east on 20th Avenue and Georgia Avenue. It exceeds street capacity. Also some dead end intersections.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct 21st Avenue with storm drain and inverted crown from Missouri to Camelback. Also Georgia and 20th Avenue. Maybe connect Vermont and Georgia on 20th alignment.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:

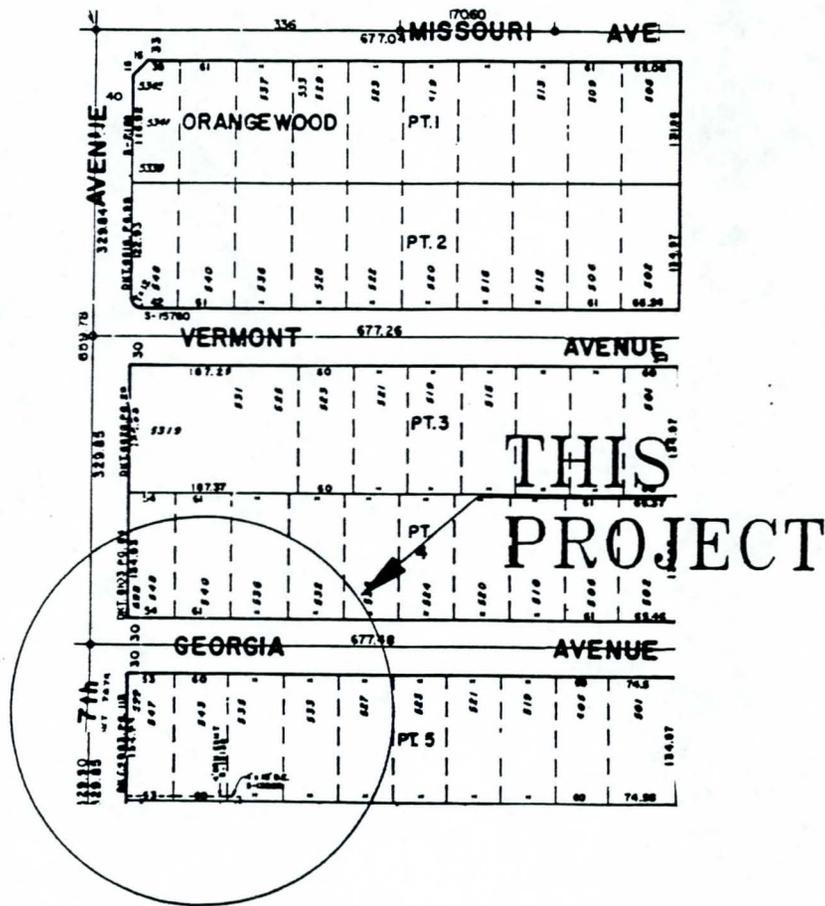
2009 West Colter
5237 North 20th Avenue
2010 West Georgia Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Streets which drain to the end of a cul de sac or otherwise dead end
Major storm run-off exceeds street capacity

LFMP68

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: ORANGEWOOD ESTATES (COUNTY)

DATE SUBDIVIDED: 09-25-28



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
7th AVENUE AND GEORGIA AVENUE	19/27	06-03-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Avenue and Georgia

PROJECT NUMBER: 19/27-1

DESCRIPTION: Storm water exceeds street capacity. Georgia is lower than 7th Avenue. This is a Special Flood Hazard Area according to the Flood Insurance Rate Map.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 200

SUGGESTED SOLUTION: Construct local street with inverted crowns and storm drains.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$6,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$100,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

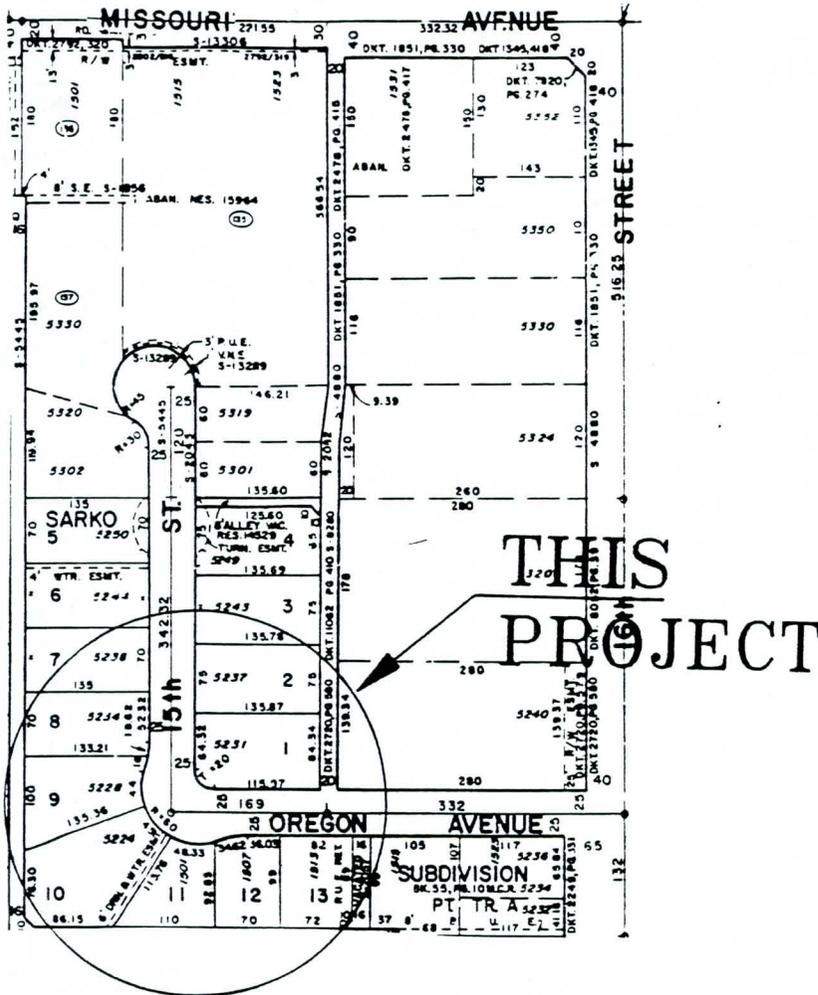
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
527 West Georgia Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP71

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS PROJECT

SUBDIVISION NAME: SARKO SUBDIVISION (COUNTY)

DATE SUBDIVIDED: 01-26-53



NO SCALE

PROJECT NAME: 15TH STREET & OREGON AVENUE	QS 19/30	DATE: 06-05-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 5th Street and Oregon Avenue

PROJECT NUMBER: 19/30-1

DESCRIPTION: Storm water flows to corner of 5th Street and Oregon Avenue. There is no outlet for the drainage other than a 12" pipe for nuisance water.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Purchase right of way and construct street or channel to the west or south.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

FIELD INSPECTION DATE: 5/31/91/PK

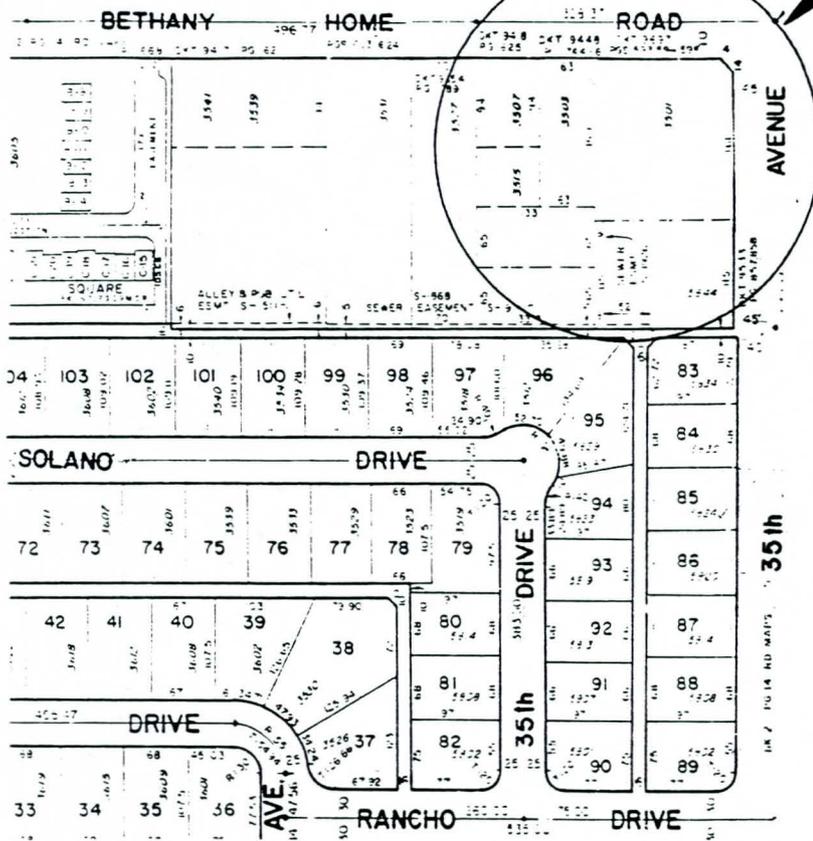
LOCATIONS OF KNOWN FLOODING:
1501 East Oregon Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Streets which drain to the end of a cul de sac or otherwise dead end

LFMP75

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: LISTEL VISTA (COUNTY)

DATE SUBDIVIDED: 01-12-55



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
35th AVENUE AND BETHANY HOME ROAD	20/20	06-03-91	3

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 35th Avenue and Bethany Home Road

PROJECT NUMBER: 20/20-1

DESCRIPTION: Storm water exceeds capacity of Bethany Home Road. No outlet to south. Floods apartments and homes south of Bethany Home Road. Bethany Home is very flat here.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Purchase land and extend 37th Avenue 500' north to Bethany Home Road. Construct 1/2 mile 37th Avenue with storm drain and inverted crown.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

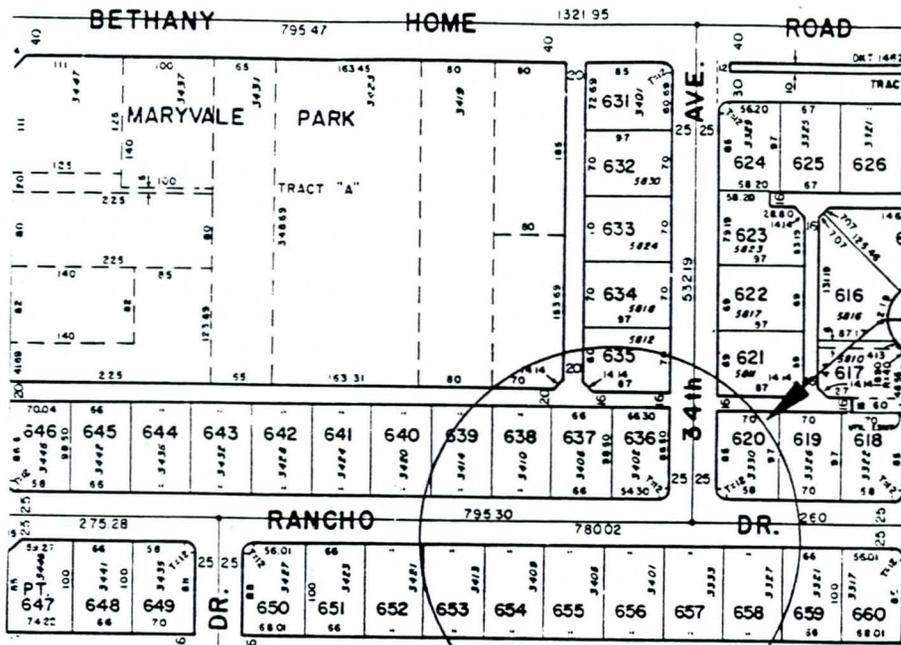
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
3625 West Bethany Home Road

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Major storm run-off exceeds street capacity

LFMP67

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: MARYVALE PARK #3 (COUNTY)

DATE SUBDIVIDED: 04-22-53



NO SCALE

PROJECT NAME: 34TH AVENUE & BETHANY HOME ROAD	QS 20/21	DATE: 06-04-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 34th Avenue and Bethany Home Road

PROJECT NUMBER: 20/21-1

DESCRIPTION: Storm water exceeds capacity of Bethany Home which is flat (E/W). Floods homes below curb on south side of street.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct inverted crown and storm drain for 33rd Avenue to Missouri.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

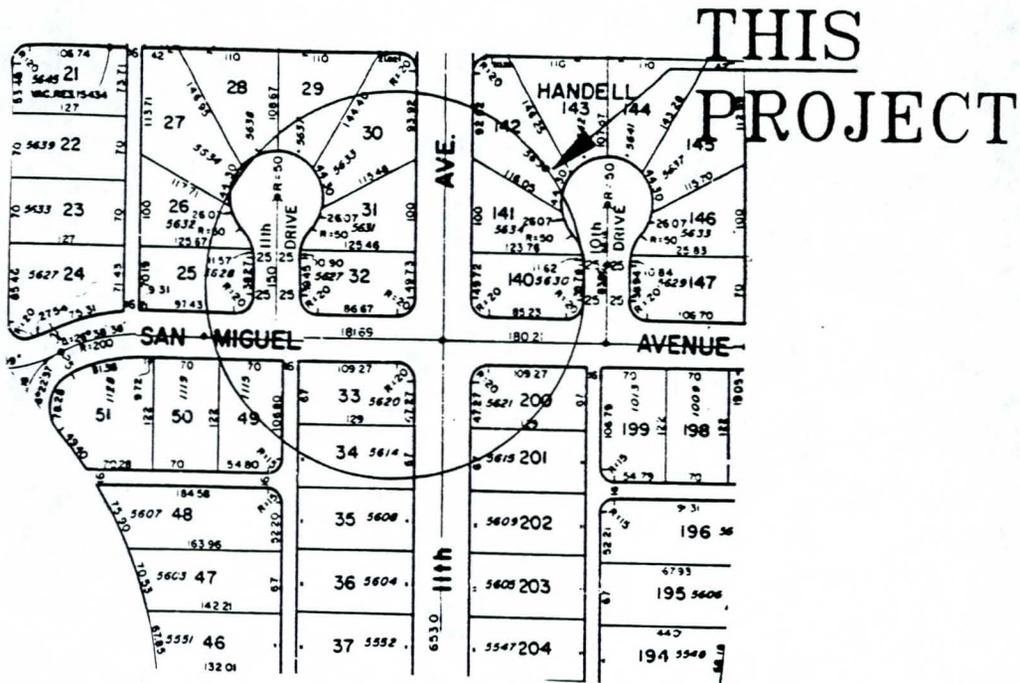
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
3329 West Bethany Home Road

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Major storm run-off exceeds street capacity

LFMP65

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: HANDELL VILLA ANNEX (COUNTY)

DATE SUBDIVIDED: 09-05-50



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
11TH AVENUE & SAN MIGUEL AVENUE	20/26	06-04-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 11th Avenue and San Miguel Avenue

PROJECT NUMBER: 20/26-1

DESCRIPTION: Storm water exceeds capacity of 19th Avenue, 11th Avenue, and 7th Avenue. Flows into local streets which overflow into homes. This is a Special Flood Hazard Area according to the Flood Insurance Rate Map.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 200

SUGGESTED SOLUTION: Inverted crown streets with storm drains for 15th Avenue and 11th Avenue. Open up bottleneck at 10th Avenue and Montebello Avenue.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$6,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$100,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

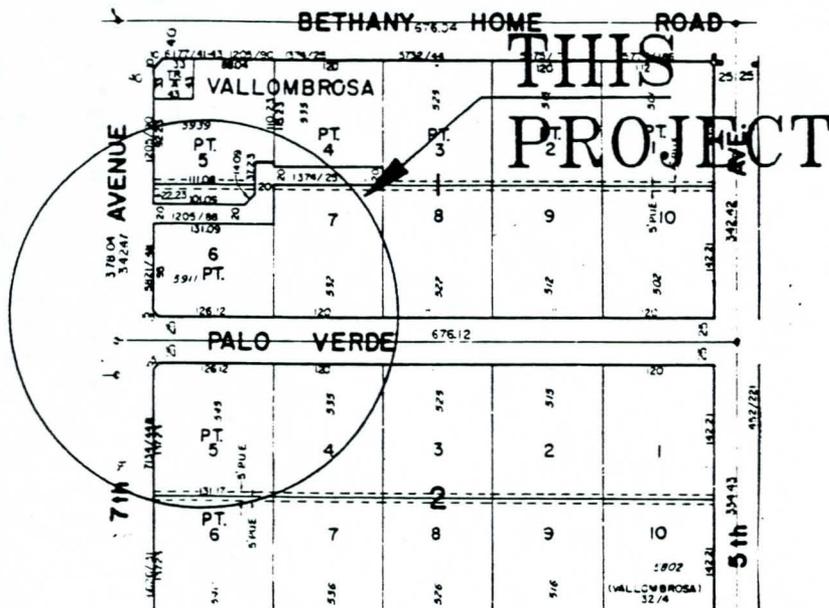
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
719 West San Miguel
5633, 5629 North 10th Drive
1309 West Marshall Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP70

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: VALLOBROSA (COUNTY)

DATE SUBDIVIDED: 09-17-47



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
7TH AVENUE & PALOVERDE DRIVE	20/27	06-04-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Avenue and Palo Verde Drive

PROJECT NUMBER: 20/27-1

DESCRIPTION: Storm water exceeds street capacity. This is a Special Flood Hazard Area according to the Flood Insurance Rate Map.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 200

SUGGESTED SOLUTION: Construct local streets with inverted crowns and storm drains.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$6,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$100,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:

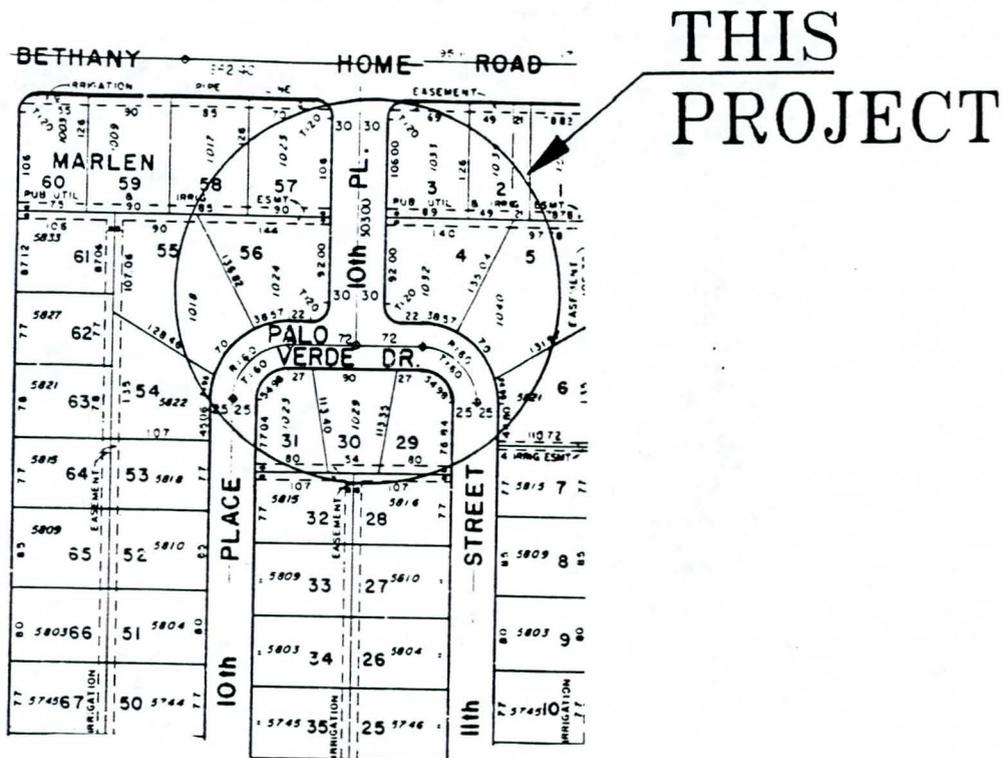
5802 North 5th Avenue
526 West Rancho Drive
119 West Marshall Avenue
525 West Bethany Home Road
525 West Palo Verde Drive
547 West San Juan

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP72

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: MARLEN GROVE (COUNTY)

DATE SUBDIVIDED: 05-11-50



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
10TH PLACE & BETHANY HOME ROAD	20/29	06-04-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 10th Place and Bethany Home Road

PROJECT NUMBER: 20/29-1

DESCRIPTION: Storm water exceeds capacity of Bethany Home Road
and floods home to south.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 10th Street and Rose Lane with
inverted crown and storm drain to bleed water off major street
and to provide retention.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

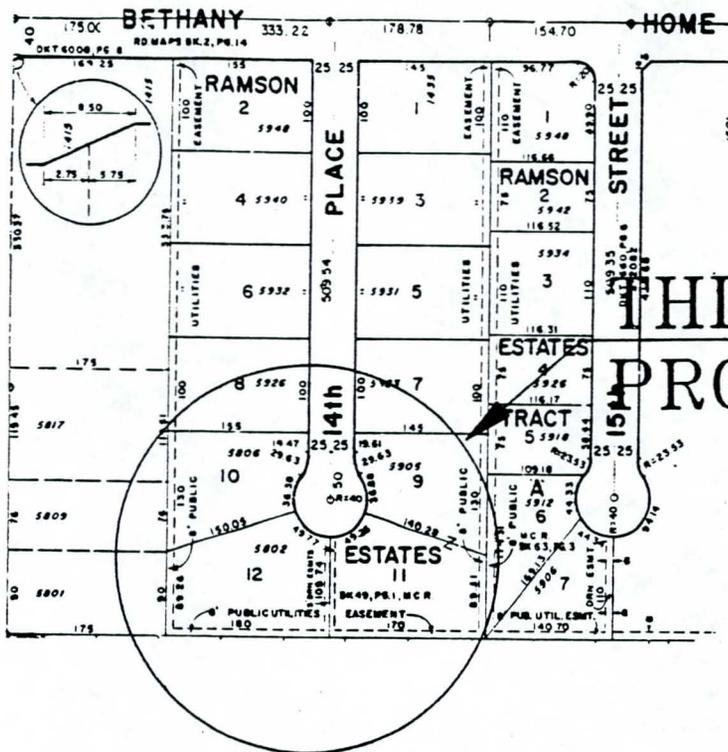
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
1033 East Bethany Home Road

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP76

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: RAMSON ESTATES (COUNTY)

DATE SUBDIVIDED: 09-21-50



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
14TH PLACE & BETHANY HOME ROAD	20/30	06-04-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 14th Place and Bethany Home Road

PROJECT NUMBER: 20/30-1

DESCRIPTION: Storm water exceeds capacity of Bethany Home Road and floods homes on south side which are below curb height.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Construct 14th Street and Montebello Avenue with inverted crown and storm drain. Purchase right of way to complete 14th Street. Purchase four houses and construct drain for 14th Place & 15th Street cul de sacs.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$40,000

FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
5940 North 14th Place

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

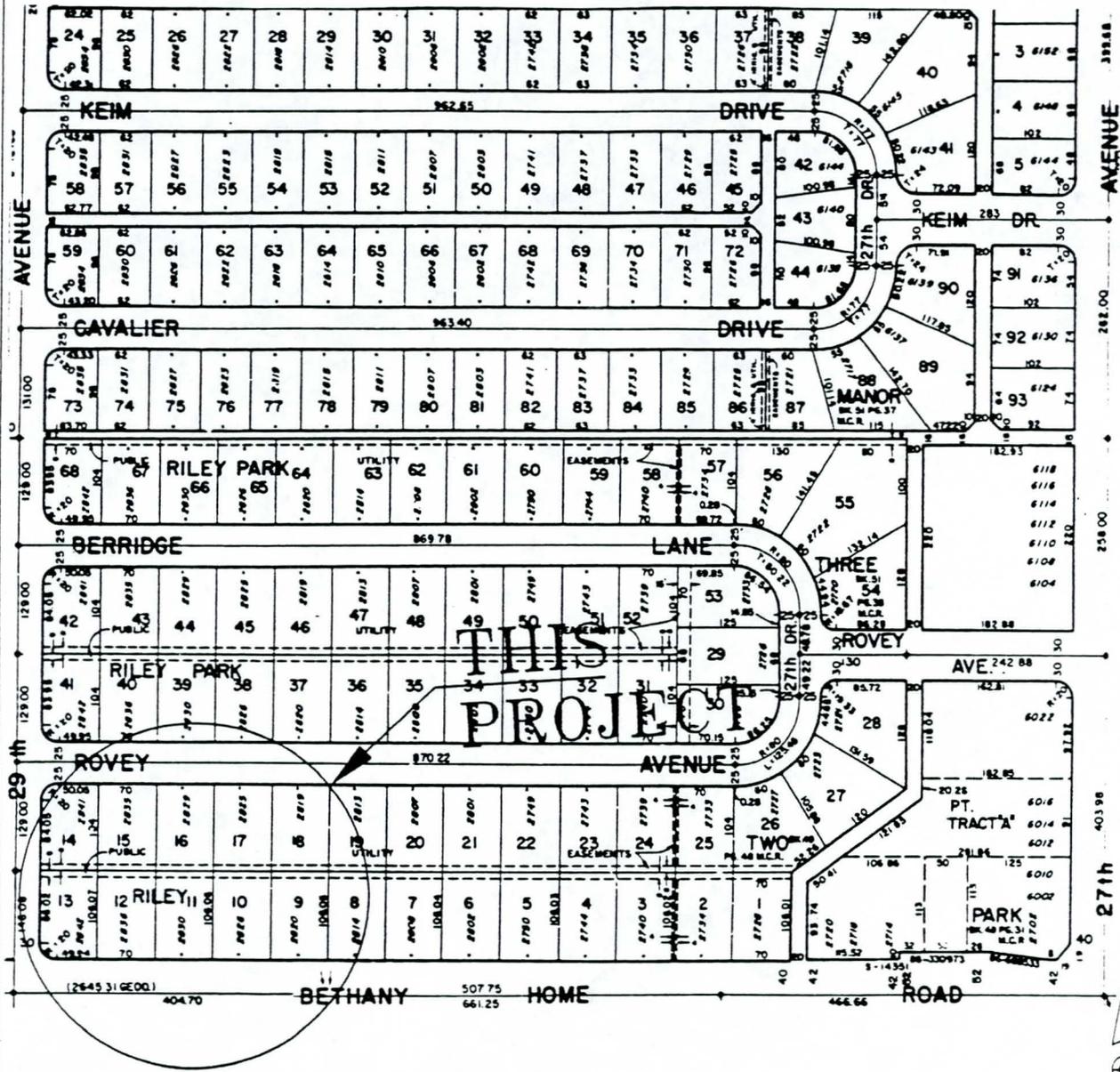
Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

LFMP79

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: RILEY PARK (COUNTY)

DATE SUBDIVIDED: 01-22-51



NO SCALE

PROJECT NAME: 29TH AVENUE & BETHANY HOME ROAD	QS 21/22	DATE: 05-08-91	C.D. 3
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 29th Avenue and Bethany Home Road

PROJECT NUMBER: 21/22/-1

DESCRIPTION: Water from north floods from 29th Avenue onto Keim Drive, Cavalier Drive, Berridge Lane, Rovey Avenue, and Bethany Home Road.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Reconstruct Rose Lane, 29th Avenue, and Bethany Home Road with inverted crowns.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,500,000.

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000.

COST PER STRUCTURE TO REDUCE FLOODING: \$25,000.

FIELD INSPECTION DATE: 4-18-91

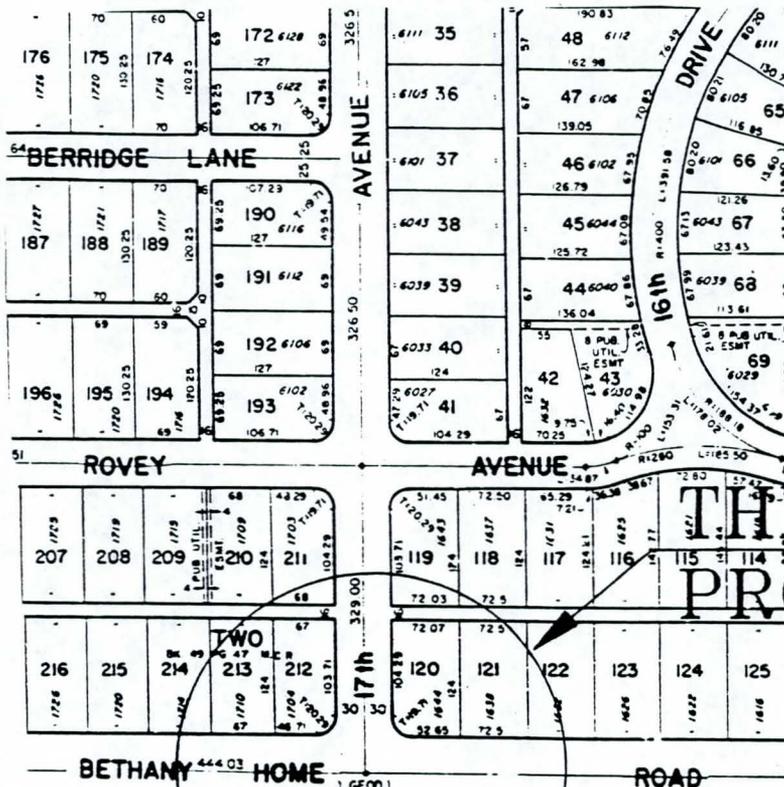
LOCATIONS OF KNOWN FLOODING:

2810 West Keim Drive
2813, 2820, 2825, 2829, 2830, 2835, 2836, 2841 West Rovey Ave.
2820, 2826, 2830, 2836, 2842 West Bethany Home Road

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
100 year flow exceeds street capacity
Floor too low

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: HOFFMAN TOWN (COUNTY)

DATE SUBDIVIDED: 12-18-50



NO SCALE

PROJECT NAME: 17TH AVENUE & BETHANY HOME ROAD	QS 21/25	DATE: 06-05-91	C.D. 5
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PROJ. NO. 21/25-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 17th Avenue and Bethany Home Road

PROJECT NUMBER: 21/25-1

DESCRIPTION: Storm water exceeds capacity of streets in the area including Bethany Home Road. Chris Town Shopping Mall cuts off drainage to south. This is low point of Old Cave Creek Wash.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 200

SUGGESTED SOLUTION: Construct streets with inverted crowns and storm drains. Rose Lane, 17th Avenue and 15th Avenue south of Bethany Home Road.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$6,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$100,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

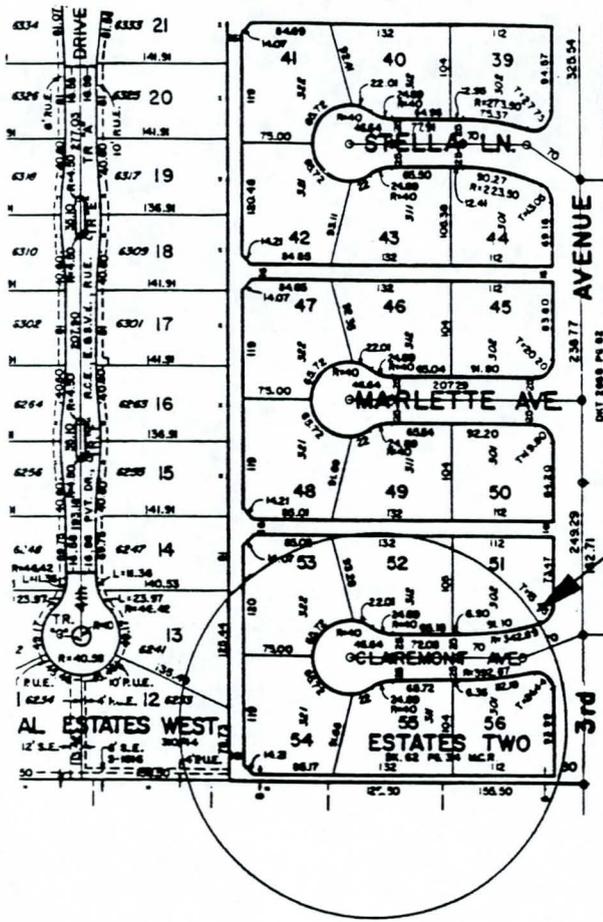
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
1720, 1616 West Bethany Home Road
1619 West Keim Drive

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP69

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: AMBASSADOR ESTATES TWO (COUNTY)

DATE SUBDIVIDED: 03-10-55



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
3RD AVENUE & CLAREMONT AVENUE	21/27	06-04-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 3rd Avenue and Claremont Avenue

PROJECT NUMBER: 21/27-1

DESCRIPTION: 3rd Avenue is discontinuous to south. Only a small channel exists. Claremont is a cul de sac which drains to dead end (or is nearly flat). Storm water overflows street and floods homes which are below curb.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Purchase right of way and construct 3rd Avenue and Rose Lane with inverted crown and storm drain. Construct Claremont cul de sac to drain to east.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
303, 311, 312, 321, and 322 West Claremont Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

Failure to continue existing street pattern

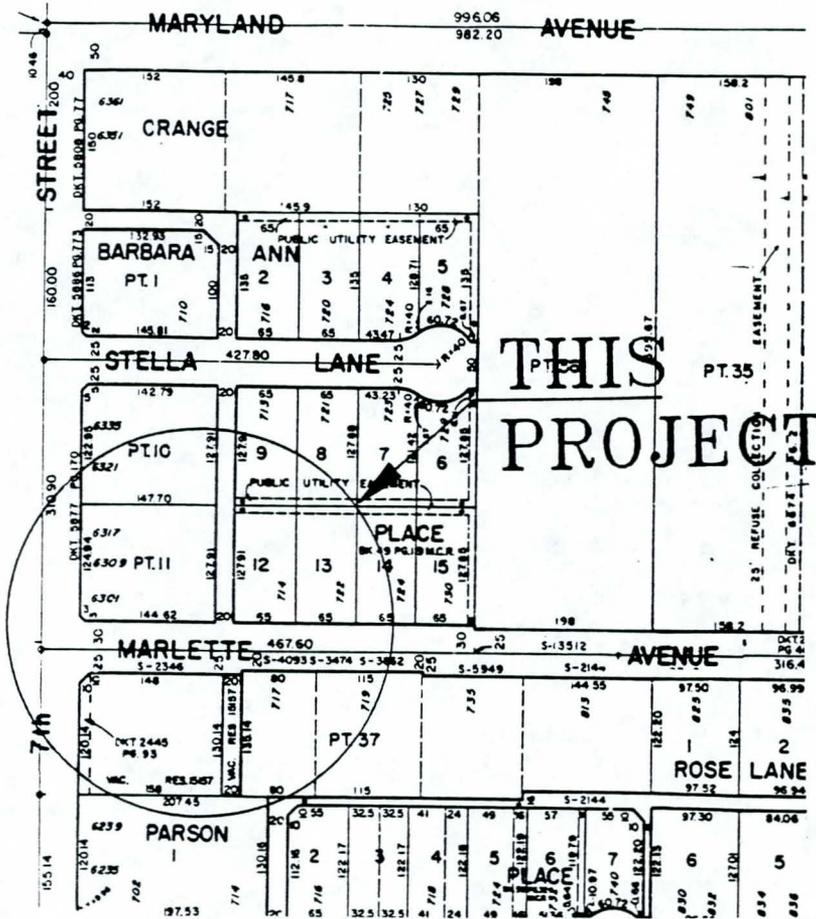
Failure to allow drainage through new projects

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

LFMP77

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 08-12-11



NO SCALE

PROJECT NAME: 7TH STREET & MARLETTE AVENUE	QS 21/29	DATE: 06-04-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Street and Marlette Avenue

PROJECT NUMBER: 21/29-1

DESCRIPTION: Storm water exceeds capacity of Marlette Avenue and floods homes and apartments which are below curb height.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Reconstruct Rose Lane, 10th Street, Marlette Avenue, and Claremont Avenue with storm drain and inverted crown.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

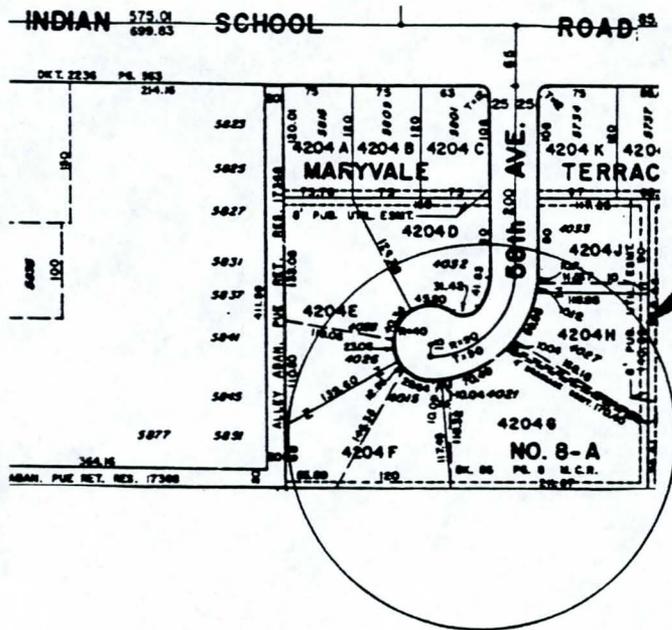
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
812 East Marlette Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP80

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: MARYVALE TERRACE #8A (COUNTY)

DATE SUBDIVIDED: 12-07-59



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
58TH AVENUE & INDIAN SCHOOL ROAD	16/15	05-31-91	4

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 58th Avenue and Indian School Road

PROJECT NUMBER: 16/15-1

DESCRIPTION: Storm water exceeds the capacity of Indian School Road and flows to the south. Homes are 3' below Indian School Road. This is a cul de sac without an outlet for surface drainage.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Purchase 3 lots and connect 58th Avenue and 57th Drive to 58th Avenue to the south.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$400,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 5/30/91/PK

LOCATIONS OF KNOWN FLOODING:

4021, 4026 North 58th ~~Drive~~ Ave

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

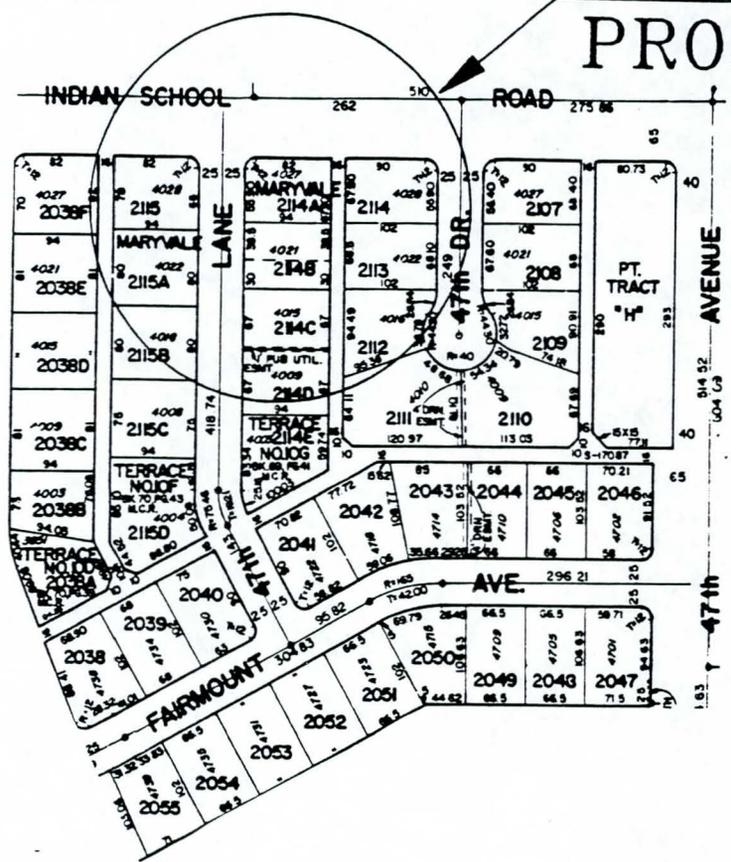
Failure to allow drainage through new projects

Streets which drain to the end of a cul de sac or otherwise dead end

LFMP62

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: MARYVALE TERRACE NO. 10G (COUNTY)

DATE SUBDIVIDED: 10-25-56



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
47th LANE AND INDIAN SCHOOL ROAD	16/17	06-03-91	4

PROJ NO 16/17-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 47th Lane and Indian School Road

PROJECT NUMBER: 16/17-1

DESCRIPTION: Storm water exceeds capacity of Indian School Road and floods homes on south side which are 3' below Indian School Road.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Flood walls along Indian School Road. Purchase land and construct drainageway through 47th Drive cul de sac.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$400,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 5/30/91/PK

LOCATIONS OF KNOWN FLOODING:
4027 North 47th Lane

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

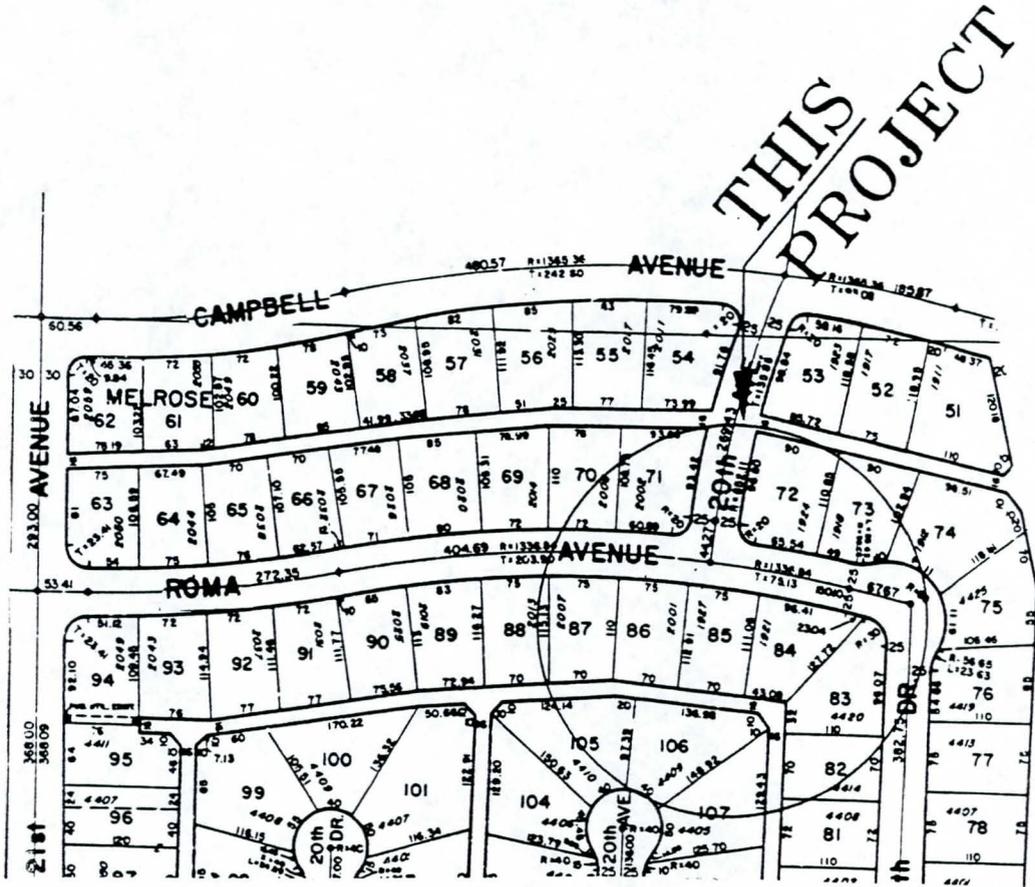
Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

LFMP63

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: MELROSE ESTATES (COUNTY)

DATE SUBDIVIDED: 02-18-55



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
20TH AVENUE & ROMA AVENUE	17/24	05-15-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 20th Avenue and Roma Avenue

PROJECT NUMBER: 17/24-1

DESCRIPTION: Storm water from 20th Avenue flows into Roma Avenue. Roma Avenue is flat and water overtops curb.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Reconstruct 20th Avenue, Roma Avenue, and Turney Avenue with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

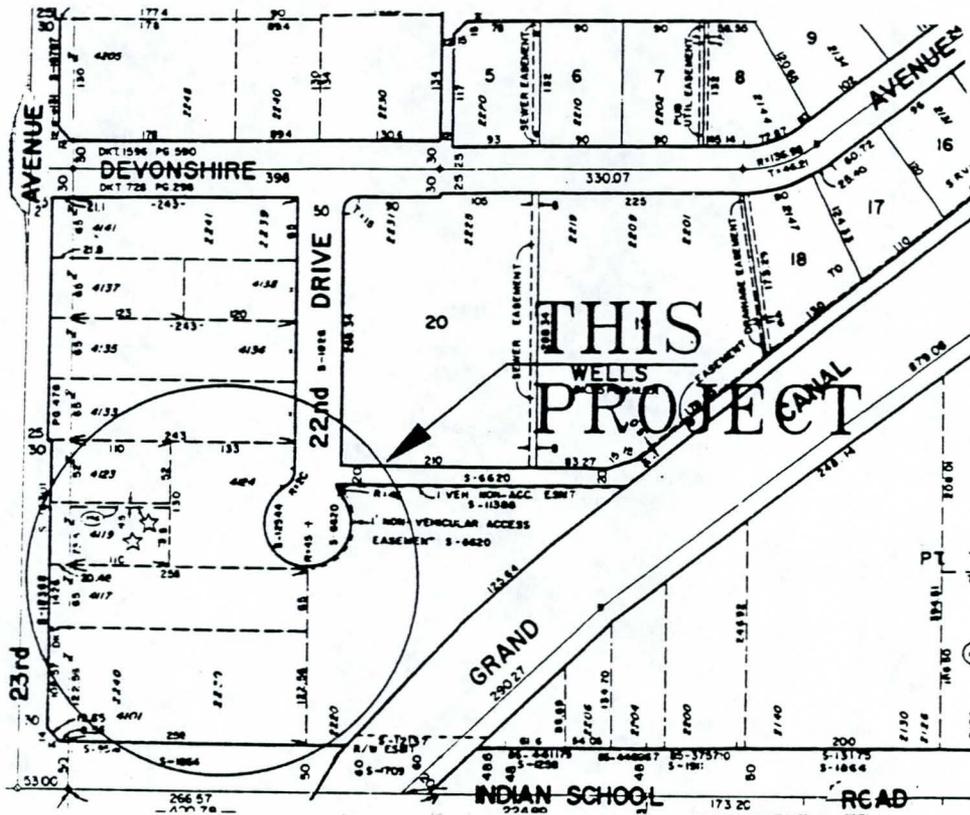
FIELD INSPECTION DATE: 5/8/91/PK

LOCATIONS OF KNOWN FLOODING:
2025 West Roma Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (COUNTY)

DATE SUBDIVIDED: 01-01-54



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
22ND DRIVE SOUTH OF DEVONSHIRE	17/24	05-15-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 22nd Drive south of Devonshire

PROJECT NUMBER: 17/24-2

DESCRIPTION: Storm water in 22nd Drive floods property to the west. West side does not have curb and gutter. Ground rises to the south. This is a cul de sac. This is a Special Flood Hazard Area along the Grand Canal and flood insurance is mandatory

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 6

SUGGESTED SOLUTION: Reconstruct 22nd Drive with inverted crown. Purchase right of way south to Indian School Road and construct channel.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$120,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 5/8/91/PK

LOCATIONS OF KNOWN FLOODING:

4133 North 23rd Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

Failure to allow drainage through new projects

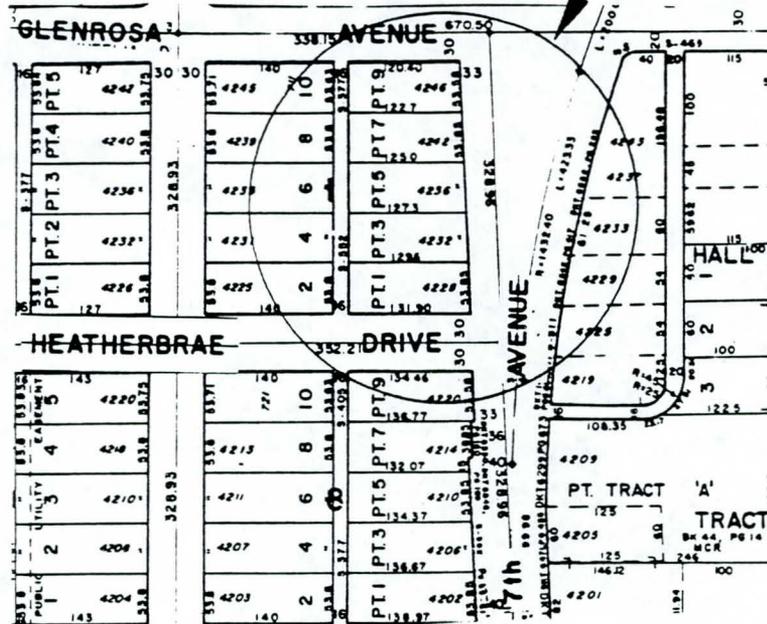
Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

Ponding along canal

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX

THIS
PROJECT



SUBDIVISION NAME: WOODLEA NORTH (COUNTY)

DATE SUBDIVIDED: 12-05-28



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
7TH AVENUE & NORTH OF HEATHERBRAE	17/26	05-08-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Avenue north of Heatherbrae Drive

PROJECT NUMBER: 17/26-1

DESCRIPTION: Run off in 7th Avenue exceeds curb depth. Floods structures at or below curb height.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Floodproofing, elevate structures, rebuild some interior streets.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000.

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

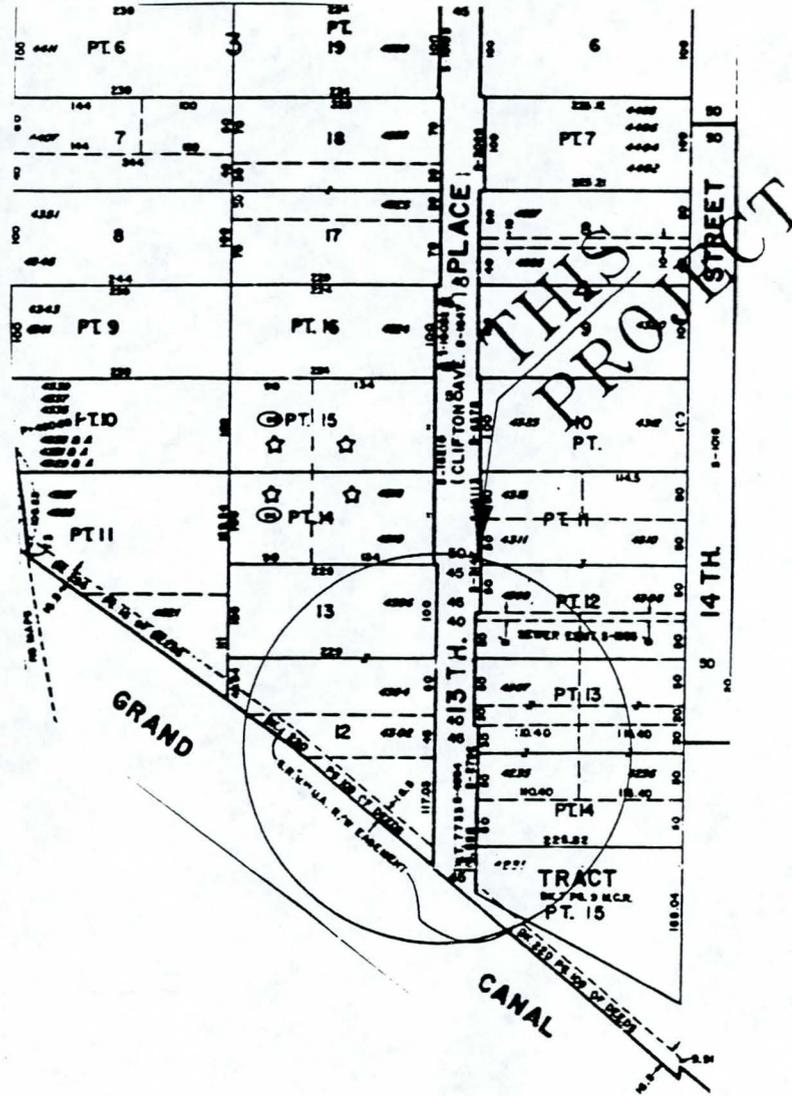
FIELD INSPECTION DATE: 3/7/91/PK

LOCATIONS OF KNOWN FLOODING:
4232 North 7th Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



SUBDIVISION NAME: MEADOWBROOK TRACT (COUNTY)

DATE SUBDIVIDED: 04-22-14



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
13TH PLACE & GRAND CANAL	17/30	05-08-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 13th Place north of the Grand Canal

PROJECT NUMBER: 17/30-1

DESCRIPTION: Water ponds along the north side of the Grand Canal and flood structures. This is a Special Flood Hazard Area and flood insurance is mandatory.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Elevate buildings or construct flood walls.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 3/1/91/PK

LOCATIONS OF KNOWN FLOODING:
4306 North 13th Place

CONTRIBUTING FACTORS:

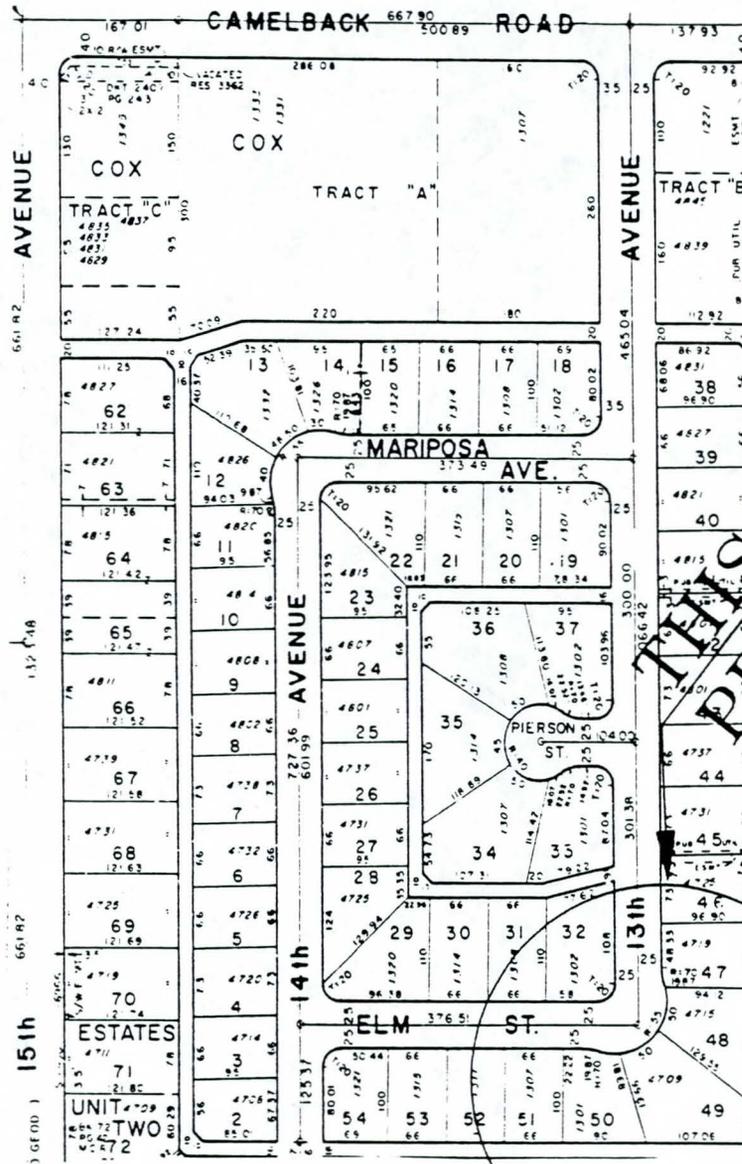
Constructed prior to Development Standards

Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Structures constructed in ponding area along canal

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: COX ESTATES (COUNTY)

DATE SUBDIVIDED: 01-12-55



NO SCALE

PROJECT NAME: 13TH AVENUE & ELM STREET	QS 18/26	DATE: 05-08-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 13th Avenue and Elm Street

PROJECT NUMBER: 18/26-1

DESCRIPTION: Run off flows south to a corner formed by 13th Avenue and Elm Street.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Extend 13th Avenue to Highland.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$260,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$26,000

FIELD INSPECTION DATE: 3/7/91/PK

LOCATIONS OF KNOWN FLOODING:
1219 West Elm (4709 North 13th Avenue)

CONTRIBUTING FACTORS:

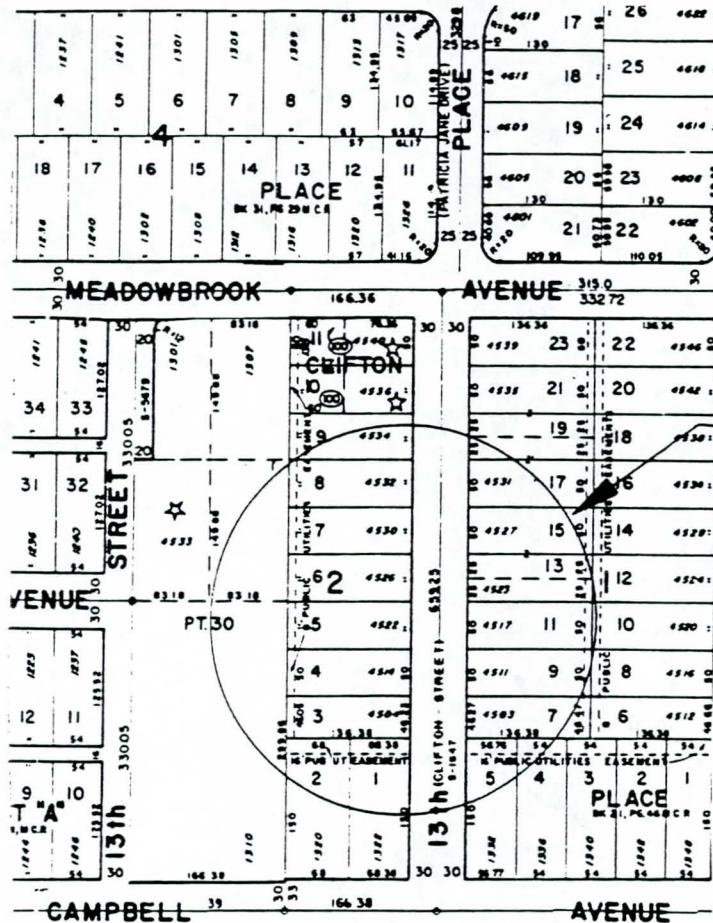
Constructed prior to Development Standards
Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX

PROJ. NO. 18/30-1



THIS
PROJECT

SUBDIVISION NAME: CLIFTON PLACE (COUNTY)

DATE SUBDIVIDED: 07-29-29



NO SCALE

PROJECT NAME: 13TH PLACE & MEADOWBROOK	QS 18/30	DATE: 05-08-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 13th Place and Meadowbrook Avenue

PROJECT NUMBER: 18/30-1

DESCRIPTION: Drainage from the north exceeds street capacity.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Reconstruct 13th Place with inverted crown & catch basins.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$15,000

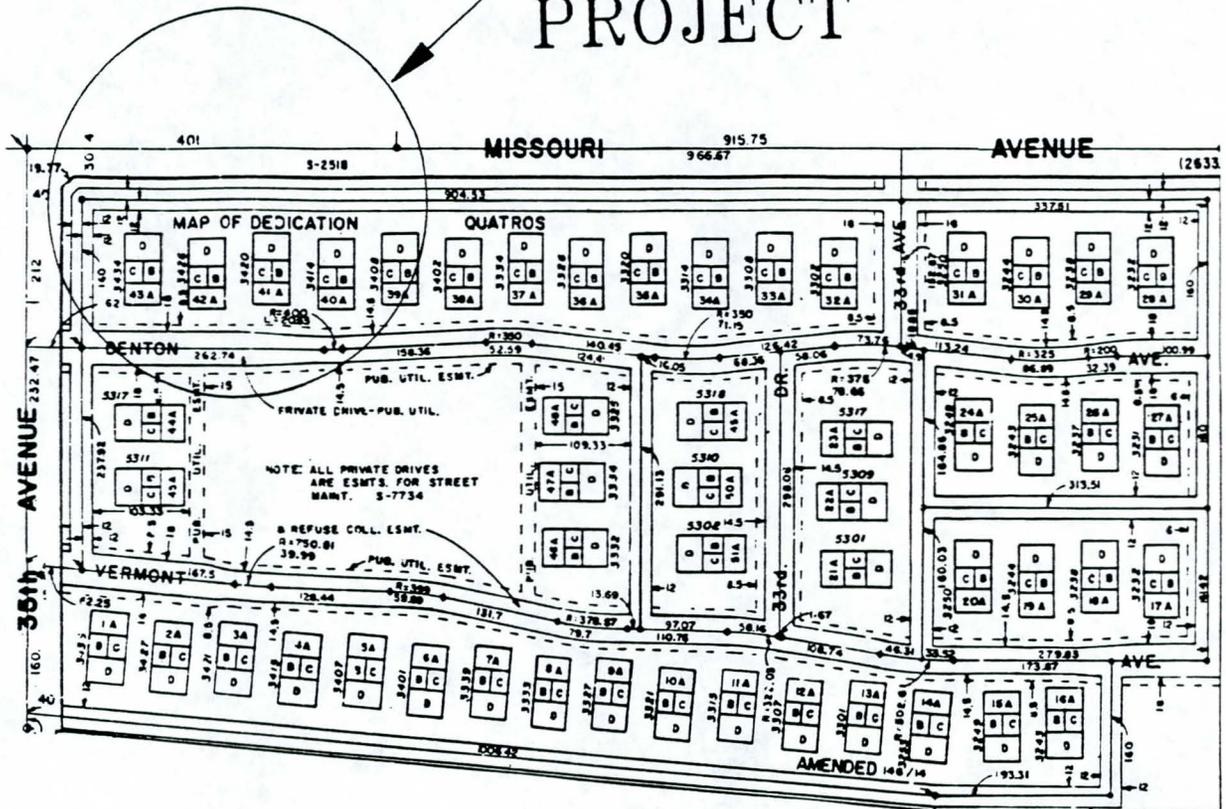
FIELD INSPECTION DATE: 3/7/91/PK

LOCATIONS OF KNOWN FLOODING:
4500 North 13th Place

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: QUATROS (CITY)

DATE SUBDIVIDED: 01-01-73



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
35th AVENUE AND MISSOURI AVENUE	19/21	06-03-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 35th Avenue and Missouri Avenue

PROJECT NUMBER: 19/21-1

DESCRIPTION: Storm water exceeds capacity of Missouri Avenue and floods condominium complex to south. There are no streets from Missouri south from 30th Drive to 35th Avenue.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Purchase right of way and construct 31st Avenue with inverted crown and storm drain from Missouri to Camelback.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

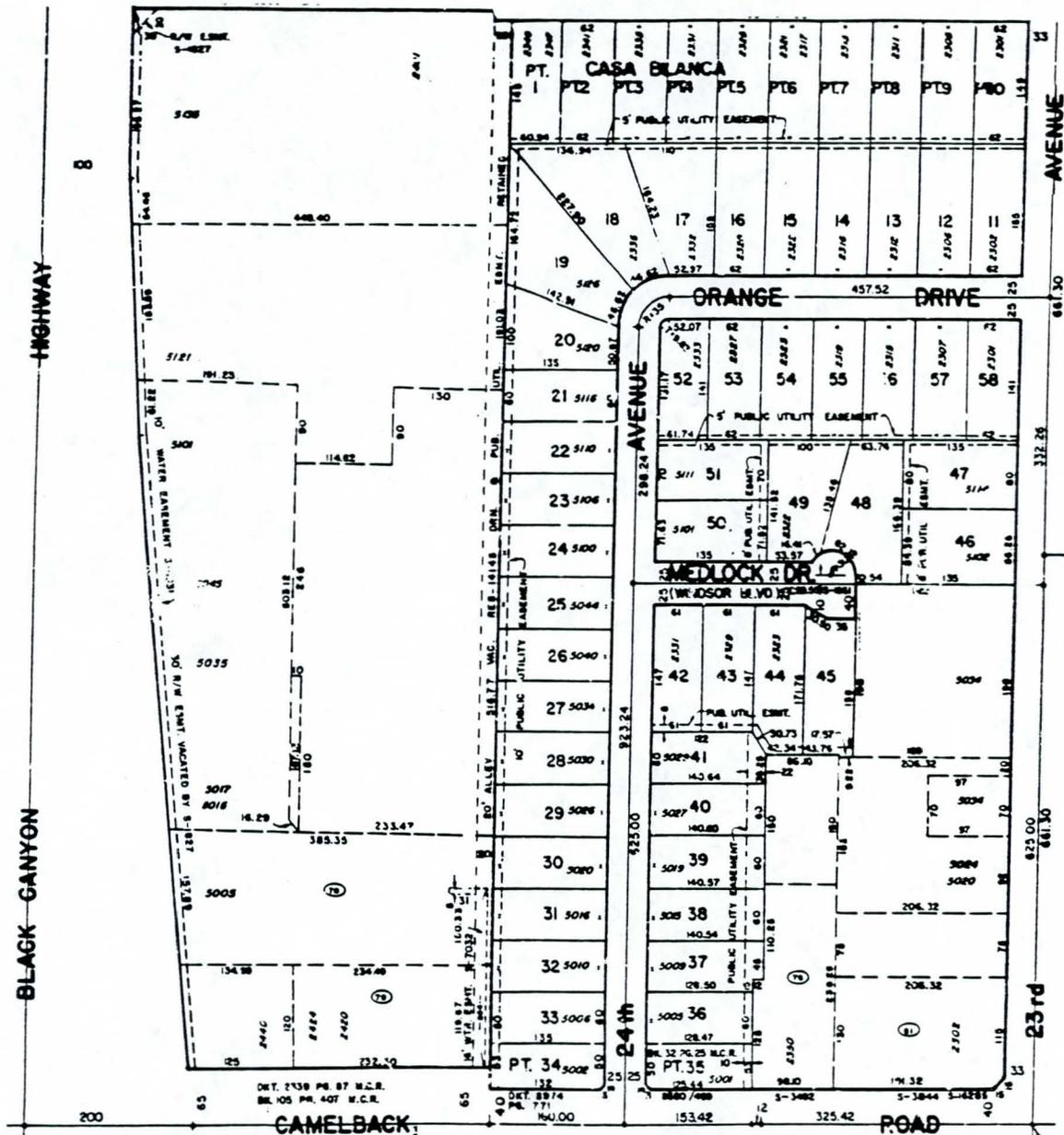
FIELD INSPECTION DATE: 5/31/91/PK

LOCATIONS OF KNOWN FLOODING:
Quatros Condominiums (7 units)
Southeast corner

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Major storm run-off exceeds street capacity

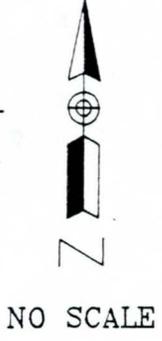
LFMP66

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (CITY)

DATE SUBDIVIDED: 1-1-69



PROJECT NAME: 24th AVENUE & CAMELBACK ROAD	QS 19/23	DATE: 7-1-91	C.D. 4
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 24th Avenue and Camelback Road

PROJECT NUMBER: 19/23-1

DESCRIPTION: This intersection is a low area which cannot drain. Water ponds to 2' - 3' of depth before flooding car dealerships to south. Drainage is cut off south of car dealerships. There is a three foot rise to 23rd Avenue.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Purchase 20 homes and construct a detention basin, or owners construct flood walls. NOTE: Drain to south is blocked by numerous condominiums, apartments, and businesses.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 6/14/91/PK

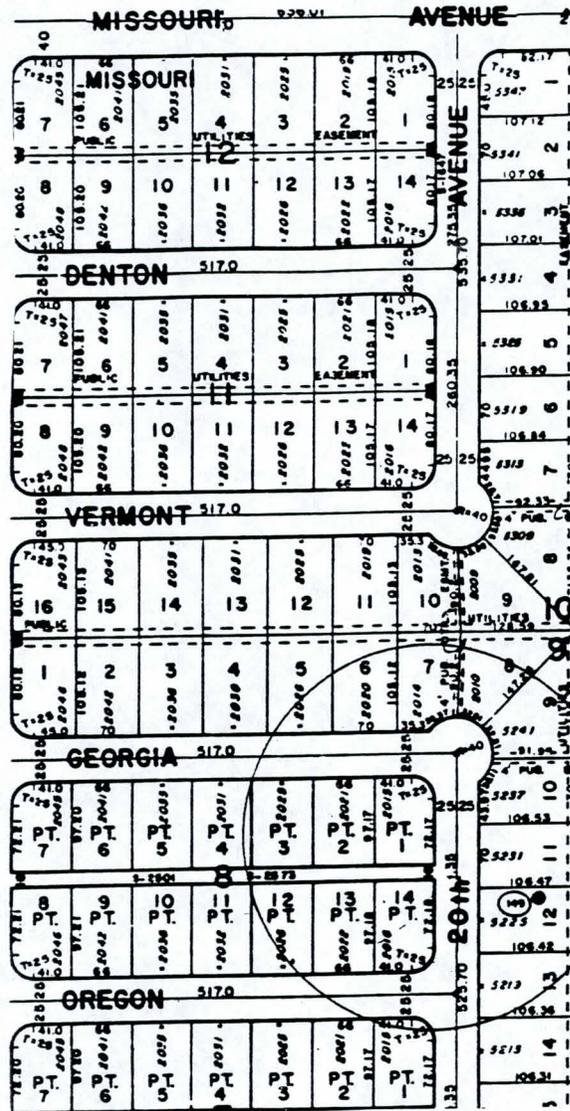
LOCATIONS OF KNOWN FLOODING:
5015, 5002 North 24th Avenue
2331 West Camelback Road

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects

LFMP16

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



THIS
PROJECT

SUBDIVISION NAME: MISSOURI PARKWAY (COUNTY)

DATE SUBDIVIDED: 05-29-50



NO SCALE

PROJECT NAME: 20th AVENUE AND GEORGIA AVENUE	QS 19/24	DATE: 06-03-91	C.D. 5
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 31st Avenue and Lincoln Street

PROJECT NUMBER: 9/21-1

DESCRIPTION: Storm water overflows Lincoln Street and floods businesses which are constructed at ground elevation. 31st Avenue is lower than Lincoln. Railroad embankment is one block to north. Street does not have curbs.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Flood walls, develop streets

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$400,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

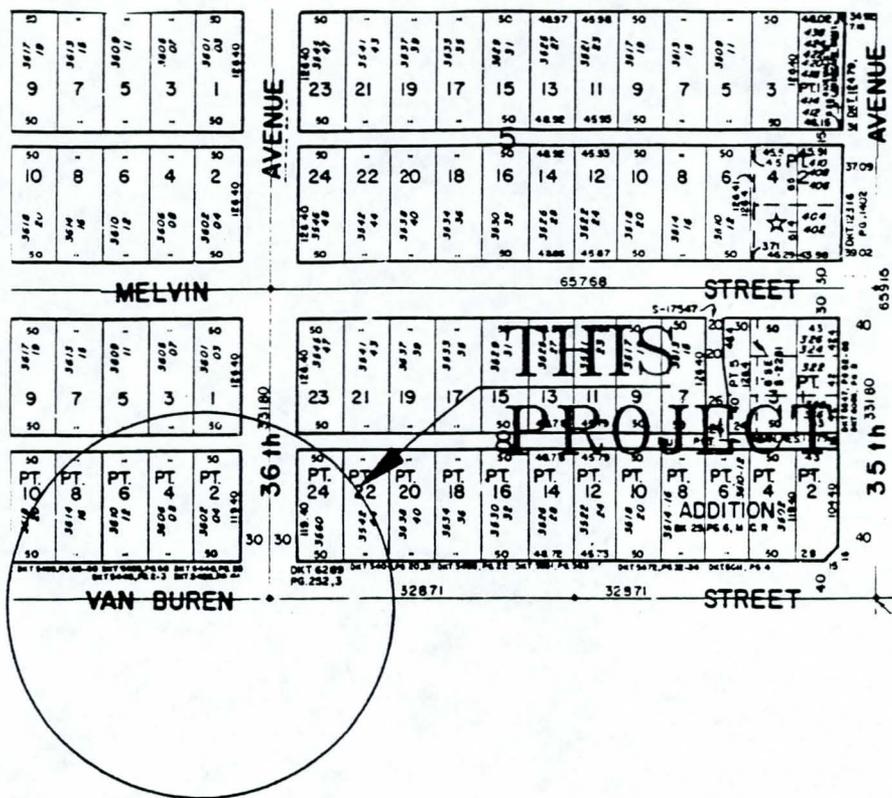
FIELD INSPECTION DATE: 5/13/91/PK

LOCATIONS OF KNOWN FLOODING:
3112 West Lincoln Street

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Streets abandoned so that drainage was cut off

LFMP38

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: WEST PHOENIX ADDITION (COUNTY)

DATE SUBDIVIDED: 09-09-43



NO SCALE

PROJECT NAME: 36TH AVENUE & VAN BUREN STREET	QS 11/20	DATE: 05-20-91	C.D. 7
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LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 36th Avenue and Van Buren Street

PROJECT NUMBER: 11/20-1

DESCRIPTION: Storm water overtops curb in Van Buren flooding businesses. Many low homes on streets to north. Freeway is 3/4 mile north and intercepts water. Building at, or below curb. Development is pre-1952.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Retention basin or flood walls.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$ 1,500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$ 25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$ 15,000

FIELD INSPECTION DATE: 5/13/91/PK

LOCATIONS OF KNOWN FLOODING:
3602 West Van Buren Street

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity

LFMP32

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: WEST LAWN ANNEX (CITY)

DATE SUBDIVIDED: 03-04-11

NO SCALE

PROJECT NAME:

16TH AVENUE & TAYLOR STREET

QS

11/25

DATE:

05-15-91

C.D.

7

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 16th Avenue and Taylor Street

PROJECT NUMBER: 11/25-1

DESCRIPTION: Intersection is low point. Catch basins with drywell installed in 1926. Drywell no longer drains. Water ponds on Taylor from intersection to 1/2 block east. No structures flooded but this is a nuisance to residents.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 0

SUGGESTED SOLUTION: Replace drywell with modern drywell (short term). Reconstruct Taylor from 15th Avenue to 17th Avenue (long term).

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$100,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$15,000

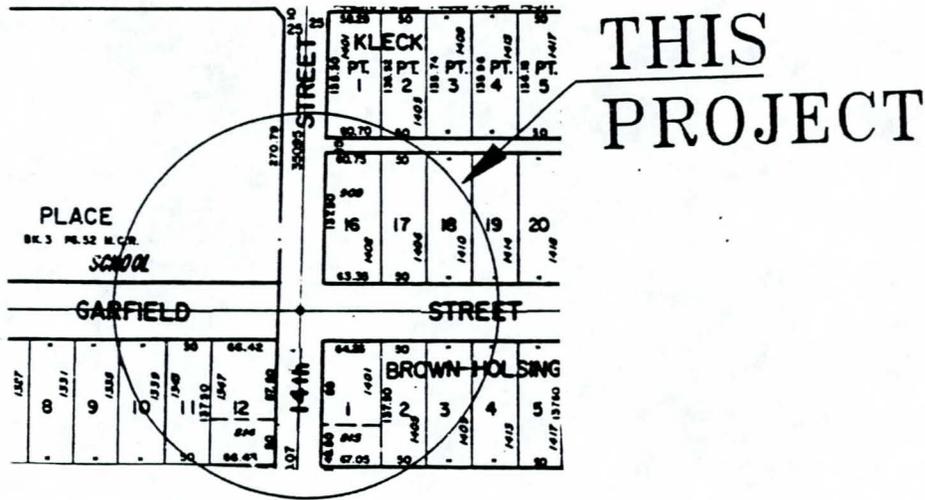
COST PER STRUCTURE TO REDUCE FLOODING: N/A

FIELD INSPECTION DATE: 4/8/91/PK

LOCATIONS OF KNOWN FLOODING:
None

CONTRIBUTING FACTORS:
Constructed prior to Development Standards

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: GERMANIA PLACE (CITY)

DATE SUBDIVIDED: 02-18-09



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
14TH STREET & GARFIELD STREET	11/30	05-31-91	8

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 14th Street and Garfield Street

PROJECT NUMBER: 11/30-1

DESCRIPTION: Storm water on 14th Street overtops curb and floods restaurant at northeast corner. Restaurant entrance is at sidewalk elevation. This was caused by the abandonment of Garfield between 13th Street and 14th Street for school construction.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 2

SUGGESTED SOLUTION: Construct 14th Street and McKinley Street to west with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$250,000

FIELD INSPECTION DATE: 4/26/91/PK

LOCATIONS OF KNOWN FLOODING:

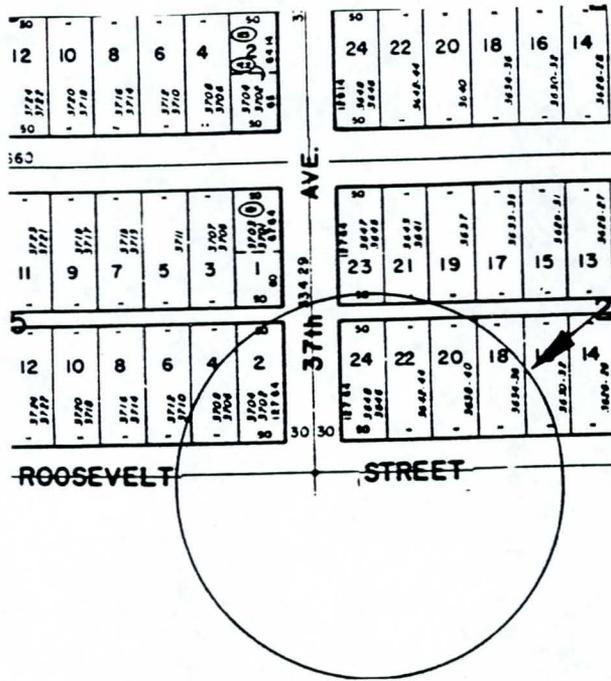
909 North 14th Street
1402 East Garfield Street

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Streets abandoned so that drainage was cut off
Major storm run-off exceeds street capacity

LFMP60

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



**THIS
PROJECT**

SUBDIVISION NAME: WEST PHOENIX #4 (COUNTY)

DATE SUBDIVIDED: 02-21-45



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
37TH AVENUE & ROOSEVELT STREET	12/20	05-31-91	7

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 37th Avenue and Roosevelt Street

PROJECT NUMBER: 12/20-1

DESCRIPTION: Storm water flows south to Roosevelt Street. There is little or no slope to the east or west and Roosevelt Street has a high crown. Homes on the north side (uphill) are flooded.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 40

SUGGESTED SOLUTION: Reconstruct Roosevelt with an inverted crown (for retention) and storm drain. This will allow water to flow to the south at a lower elevation.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$20,000

COST PER STRUCTURE TO REDUCE FLOODING: \$12,500

FIELD INSPECTION DATE: 5/30/91/PK

LOCATIONS OF KNOWN FLOODING:
3616 West Roosevelt Street

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low

LFMP57

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 27th Lane and Willetta Street

PROJECT NUMBER: 12/22-1

DESCRIPTION: Storm water drains down 27th Lane and Willetta to a corner without an outlet. Storm drain in place for nuisance water.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 4

SUGGESTED SOLUTION: Purchase right of way to south and construct channel.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$200,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$50,000

FIELD INSPECTION DATE: 2/22/91/PK

LOCATIONS OF KNOWN FLOODING:
2721 West Willetta Street

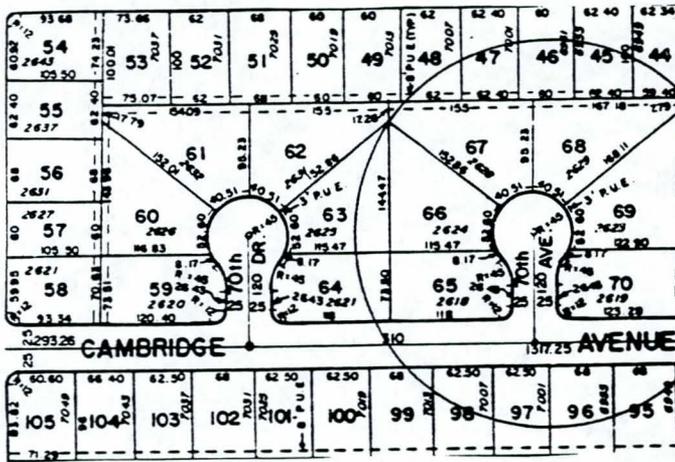
CONTRIBUTING FACTORS:

Floors too low

Streets which drain to the end of a cul de sac or otherwise dead end

LFMP59

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX



THIS
 PROJECT

SUBDIVISION NAME: MARYVALE TERRACE #58 (CITY)

DATE SUBDIVIDED: 03-03-79



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
70TH AVENUE & CAMBRIDGE AVENUE	14/12	05-31-91	7

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 70th Avenue and Cambridge

PROJECT NUMBER: 14/12-1

DESCRIPTION: Irrigation tailwater flows into street creating a driving hazard and nuisance.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: NONE

SUGGESTED SOLUTION: Install 600 L.F. of new storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$50,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$5,000

COST PER STRUCTURE TO REDUCE FLOODING: \$N/A

FIELD INSPECTION DATE: 5/7/91/PK

LOCATIONS OF KNOWN FLOODING:
NONE (Street only)

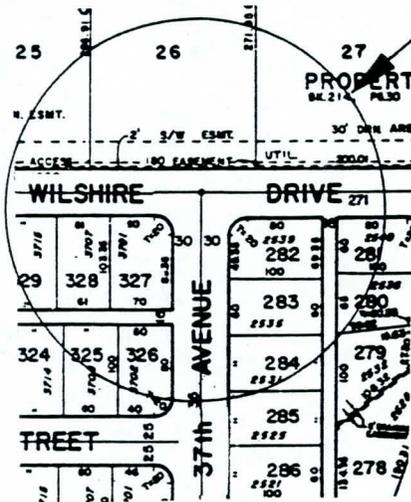
CONTRIBUTING FACTORS:

Failure to allow drainage through new projects
Structures constructed in natural drainage channels or drainage easements

LFMP56

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

THIS
 PROJECT



SUBDIVISION NAME: THOMAS ROAD PROPERTIES (CITY)

DATE SUBDIVIDED: 07-03-79



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
37TH AVENUE & WILSHIRE DRIVE	14/20	05-31-91	4

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 37th Avenue and Wilshire Drive

PROJECT NUMBER: 14/20-1

DESCRIPTION: Storm water from 60 acre industrial project drains to a retention area across street. Water exceeds retention area and flows east on Wilshire and south on 37th Avenue. It exceeds street capacity and floods homes.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Construct Wilshire and 37th Avenue with inverted crowns and storm drains.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$600,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 5/30/91/PK

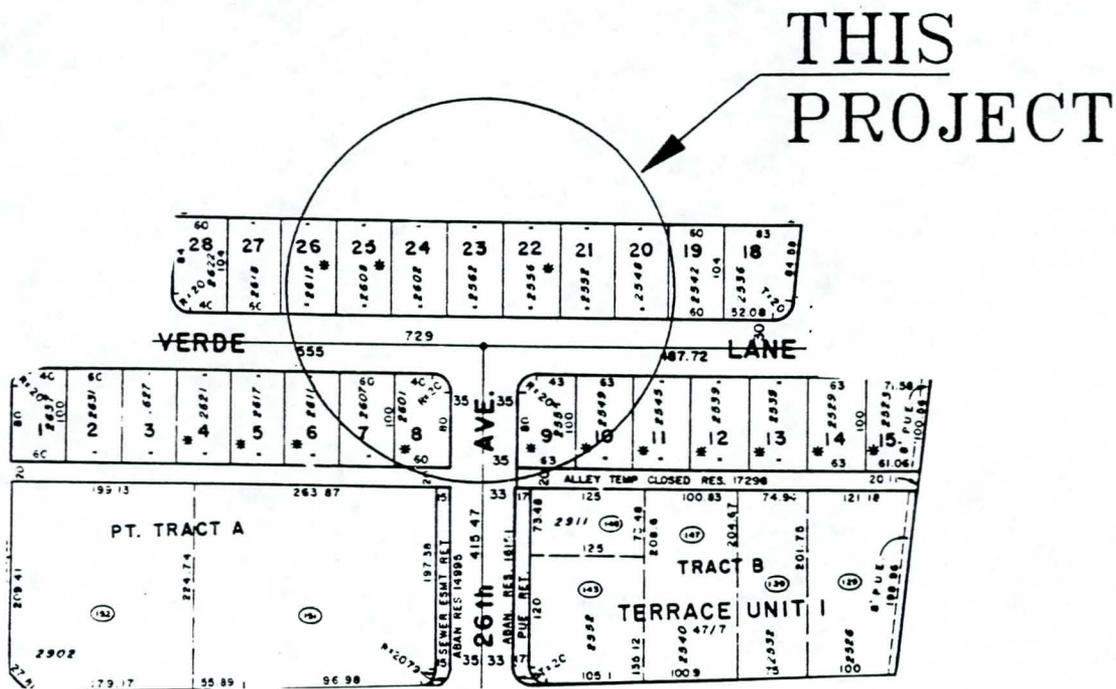
LOCATIONS OF KNOWN FLOODING:
3721, 3735 West Wilshire

CONTRIBUTING FACTORS:

Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects

LFMP58

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: TISDALE TERRACE (COUNTY)

DATE SUBDIVIDED: 01-23-50



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
26TH AVENUE & VERDE LANE	15/23	05-31-1	4

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 26th Avenue and Verde Lane

PROJECT NUMBER: 15/23-1

DESCRIPTION: Site inspection was made on March 26 for the area bounded by Earll Drive, Verde Lane, 26th Drive, and 27th Avenue. All of the homes have been built about the same time and are the same style. They all have floor elevations at or near top of curb level. The homes on the south side being lower than the homes on the north side, therefore more subject to flooding. There had been showers earlier on this date and standing water on most of the streets indicates very little slope between 26th Drive and 25th Drive. There is also very little slope along 25th Drive from Avalon to Verde Lane. Verde Lane is a low area created by the elevation of McDowell Road which is designed to meet Interstate 17, Grand Avenue, and the Santa Fe Railroad Tracks. All of the homes in this area are subject to flooding with the most severe flooding being Verde Lane. This would be the first to flood and will flood on the lower frequency events.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Provide an outlet at 26th Avenue and 27th Avenue for all of this water or prevent water from entering the area up at Osborn. Purchase 50 homes and create a detention basin.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$20,000

FIELD INSPECTION DATE: 3/26/91/PK

LOCATIONS OF KNOWN FLOODING:

Earll Drive, Avalon Drive, Catalina Drive, Verde Lane, 25th Avenue, and 26th Avenue.

CONTRIBUTING FACTORS:

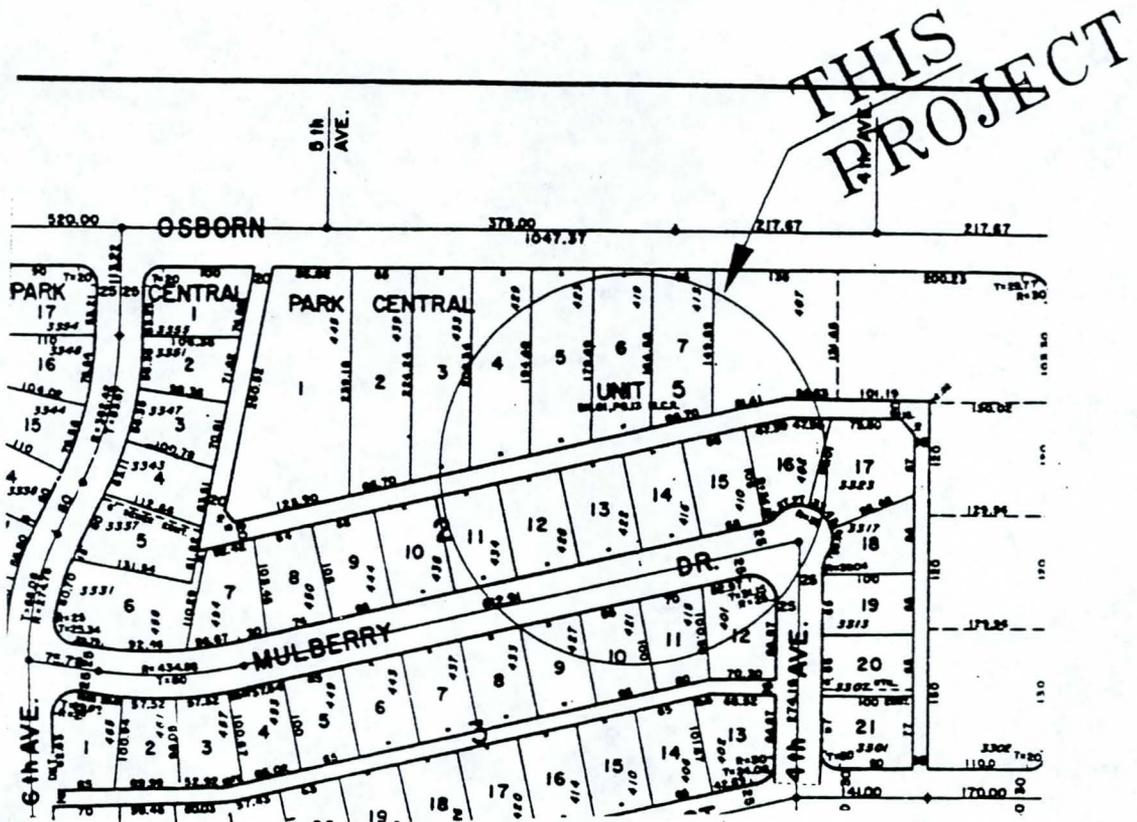
Constructed prior to Development Standards

Floors too low

Structures constructed in ponding area along railroad

LFMP64

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: PARK CENTRAL - UNIT ONE (CITY)

DATE SUBDIVIDED: 10-29-53



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
4TH AVENUE & MULBERRY DRIVE	15/27	05-08-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 4th Avenue and Mulberry Drive

PROJECT NUMBER: 15/27-1

DESCRIPTION: Drainage north of Osborn Road from 4th and 5th Avenues is cut off by Osborn Road which is very flat. Therefore it can carry little water. Water overflows Osborn Road to the south, flowing through apartment complexes and homes. Many homes have constructed flood walls.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 32

SUGGESTED SOLUTION: Reconstruct Osborn Road, Mulberry Drive, alley, and 6th Avenue; or, flood walls and berms.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$1,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$31,250

FIELD INSPECTION DATE: 4/25/91/PK

LOCATIONS OF KNOWN FLOODING:

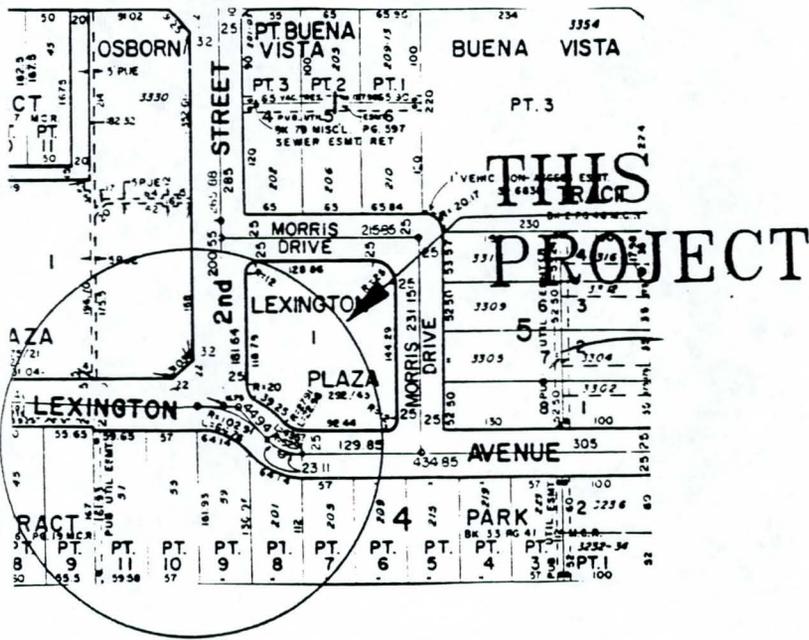
439, 445 West Osborn Road
410, 458 West Mulberry Drive
3337 North 6th Avenue

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Major storm run-off exceeds street capacity

LFMP40

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: BUENA VISTA PARK (COUNTY)

DATE SUBDIVIDED: 03-14-46



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
2ND STREET & LEXINGTON AVENUE	15/28	05-31-91	5

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 2nd Street and Lexington Avenue

PROJECT NUMBER: 15/28-1

DESCRIPTION: Lexington does not have curb on south side. Storm water flows south on Morris Drive and into house, which is at grade.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 5

SUGGESTED SOLUTION: Construct Lexington Avenue, 1st Place, and Monterey Way with an inverted crown and storm drain from 3rd Street to Central Avenue.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$60,000

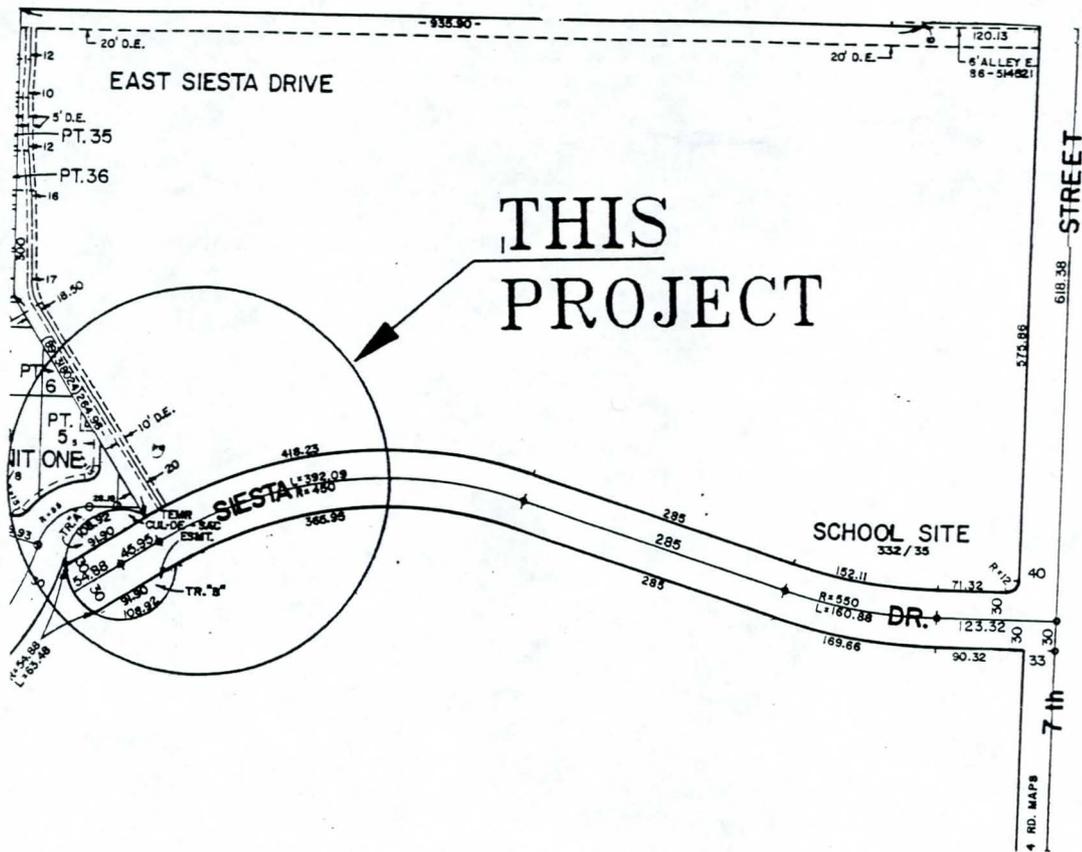
FIELD INSPECTION DATE: 4/26/91/PK

LOCATIONS OF KNOWN FLOODING:
209, 215 East Lexington Avenue

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LFMP61

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: THUNDERBIRD COUNTRY CLUB
ESTATES UNIT 5 (COUNTY)

DATE SUBDIVIDED: 08-03-59



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
7TH STREET & SIESTA DRIVE	02/28	05-20-91	8

PROJ. NO. 02/28-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Street and Siesta Drive

PROJECT NUMBER: 02/28-1

DESCRIPTION: Storm water from undeveloped land to the south sheet flows north and west to Siesta Drive. It overtops the curb and floods Bush School retention areas flooding homes along Euclid Avenue. To the west of the school a small ditch is all that protects 12 homes. All homes are at or below alley grade. Homes flood west of Central Avenue also.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 100

SUGGESTED SOLUTION: Construct flood wall along north side of alley (south of Euclid) from 7th Street to Central Avenue. Construct 20 acre detention basin west of school. A regional drain is needed in this area.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

FIELD INSPECTION DATE: 4/1/91/PK

LOCATIONS OF KNOWN FLOODING:

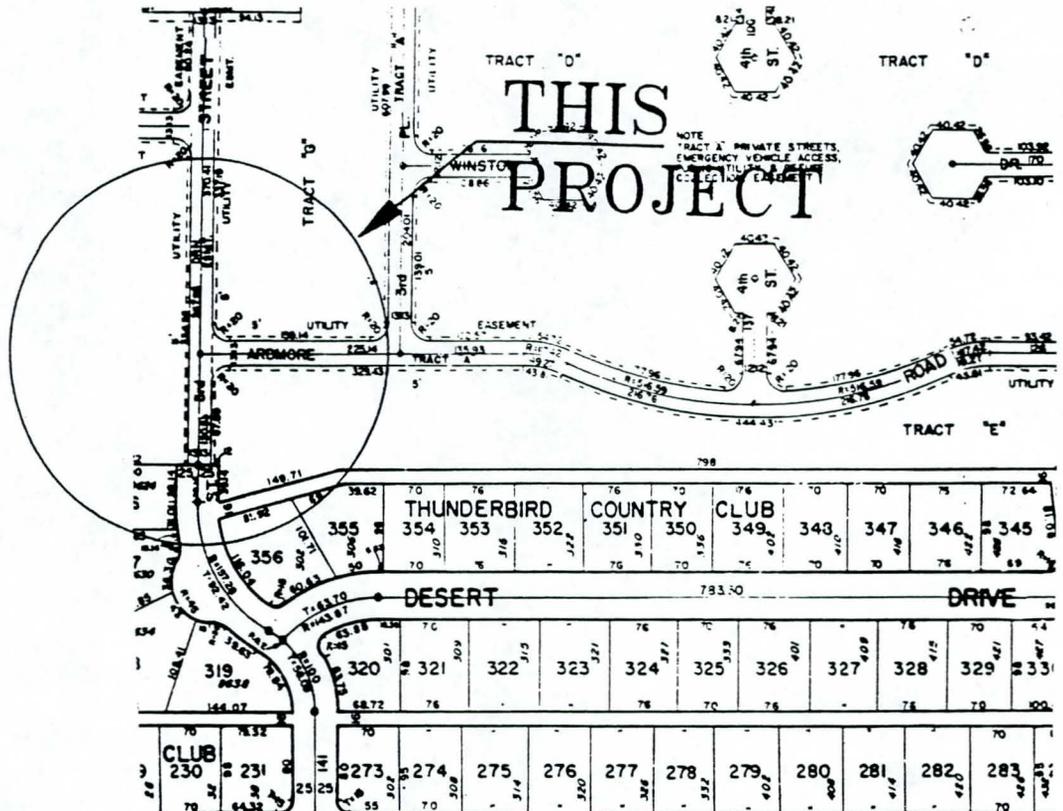
314, 311, 323, 329, 415, 421 East Euclid Avenue
301, 309 East Desert Drive

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LFMP28

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: CASA DE FRANCISCO
MOBILE HOME PARK (CITY)

DATE SUBDIVIDED: 10-26-71



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
3RD STREET & DESERT DRIVE	02/28	05-20-91	8

PROJ NO 02/28-2

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 3rd Street and Desert Drive

PROJECT NUMBER: 02/28-2

DESCRIPTION: Storm water from south flows through Casa De Francisco Mobile Home Park.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 30

SUGGESTED SOLUTION: Rebuild Euclid Avenue with inverted crown and storm drain to carry water to 7th Street and Central Avenue. Rebuild 7th Street and Central Avenue with inverted crown and storm drain.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$50,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

FIELD INSPECTION DATE: 5/17/91/PK

LOCATIONS OF KNOWN FLOODING:
NONE

CONTRIBUTING FACTORS:
Failure to continue existing street pattern
Failure to allow drainage through new projects
Major storm run-off exceeds street capacity

LFMP36

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 7th Street and Baseline Road

PROJECT NUMBER: 1/29-1

DESCRIPTION: Storm water exceeds capacity of Baseline Road and floods properties to north which are 3' below Baseline Road top of curb.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 10

SUGGESTED SOLUTION: Flood proof buildings

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$300,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$30,000

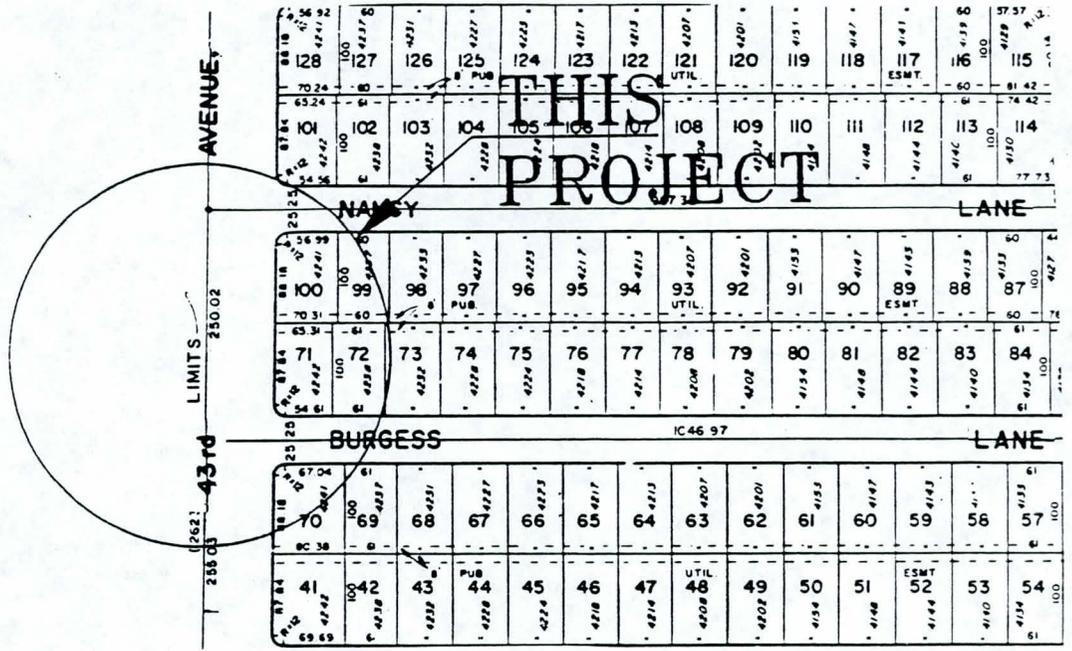
FIELD INSPECTION DATE: 5/17/91/PK

LOCATIONS OF KNOWN FLOODING:
740 East Baseline Road

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Major storm run-off exceeds street capacity
Structures constructed in ponding area along canal

LFMP35

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: LAS CASAS GRANDES (COUNTY)

DATE SUBDIVIDED: 03-15-71



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
43RD AVENUE & BURGESS LANE	2/19	05-20-91	7

PROJ. NO. 2/19-1

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

FCD PROJECT
43rd Ave S.D.
(6C1175)

FY 92/93 →

PROJECT NAME: 43rd Avenue and Burgess Lane

PROJECT NUMBER: 2/19-1

DESCRIPTION: Storm water ponds to a depth of nearly 3' in Burgess Lane and 2' in Alta Vista Road because 43rd Avenue is 3' higher than land to the east. This is about 1' higher than drainage channel to the north. (Alignment extended). This is in the location of an old drain which flowed to the southwest. Problem is complex because of irrigation ditch and tailwater rights. No drain exist to south and west (downhill) per Salt River Project.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: 20 acre retention area and 96" storm drain 1 1/2 miles north on 43rd Avenue to Salt River.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$3,500,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$75,000

COST PER STRUCTURE TO REDUCE FLOODING: \$70,000

FIELD INSPECTION DATE: 5/13/91/PK

LOCATIONS OF KNOWN FLOODING:

4241 West Burgess Lane
4229 West Alta Vista

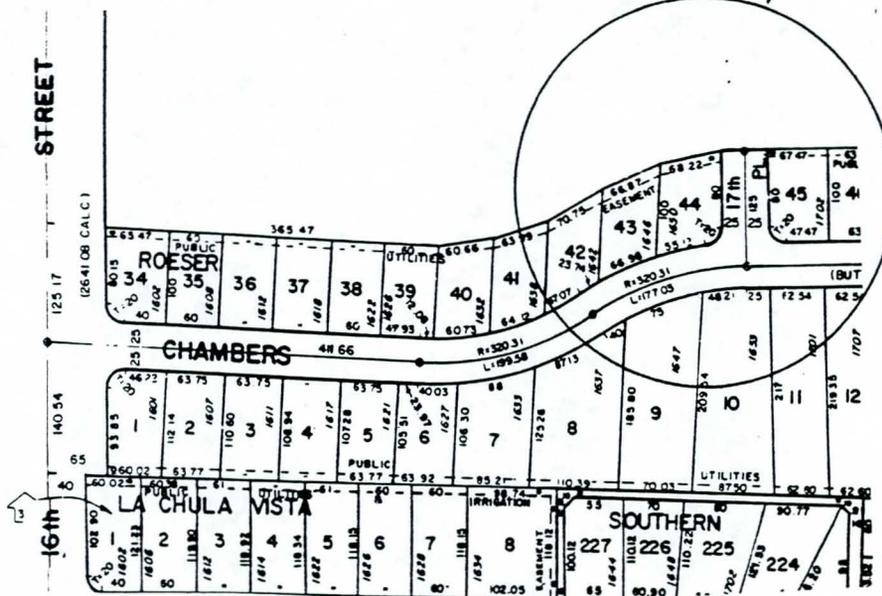
CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Structures constructed in natural drainage channels or drainage easements
Structures constructed in ponding area along canal

LFMP37

LOCAL FLOODING MITIGATION PROGRAM
 STREET TRANSPORTATION DEPARTMENT
 CITY OF PHOENIX

**THIS
PROJECT**



SUBDIVISION NAME: ROESER PARK (COUNTY)

DATE SUBDIVIDED: 08-07-58



NO SCALE

PROJECT NAME:	QS	DATE:	C.D.
17TH STREET & CHAMBERS STREET	3/31	05-20-91	8

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 17th Street and Chambers Street

PROJECT NUMBER: 3/31-1

DESCRIPTION: Storm water from subdivision drains to this location. 17th Street is a dead end to irrigated farm land. Farmer has constructed a 3' high dam to prevent drainage from subdivision from entering farmland. This same condition exists at 18th Street. Bowker and 17th Place drain to a corner above this location. NOTE: 17th Street is labeled 17th Place on plat and quarter section.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 50

SUGGESTED SOLUTION: Condemn land and complete 17th Street to Roeser Road (1300 L.F.). Construct 18th Street half street to Roeser Road (Right of Exists-Resolution S-2661), also 1300 L.F. Farmer is using this R/W. Purchase two homes (1712 East Bowker & 1711 East Chambers and construct drainage channel from Bowker to Chambers.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$600,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$25,000

COST PER STRUCTURE TO REDUCE FLOODING: \$12,000

FIELD INSPECTION DATE: 5/16/91/PK

LOCATIONS OF KNOWN FLOODING:

1702 East Chambers

CONTRIBUTING FACTORS:

Constructed prior to Development Standards

Floors too low

Failure to continue existing street pattern

Streets which drain to the end of a cul de sac or otherwise dead end

LFMP39

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 3rd Place and Illini Street

PROJECT NUMBER: 5/28-1

DESCRIPTION: Storm water sheet flows through neighborhood.
Streets are not paved, nor in many cases dedicated.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 20

SUGGESTED SOLUTION: Create Neighborhood Improvement project to
dedicate and pave streets.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$2,000,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$100,000

COST PER STRUCTURE TO REDUCE FLOODING: \$100,000

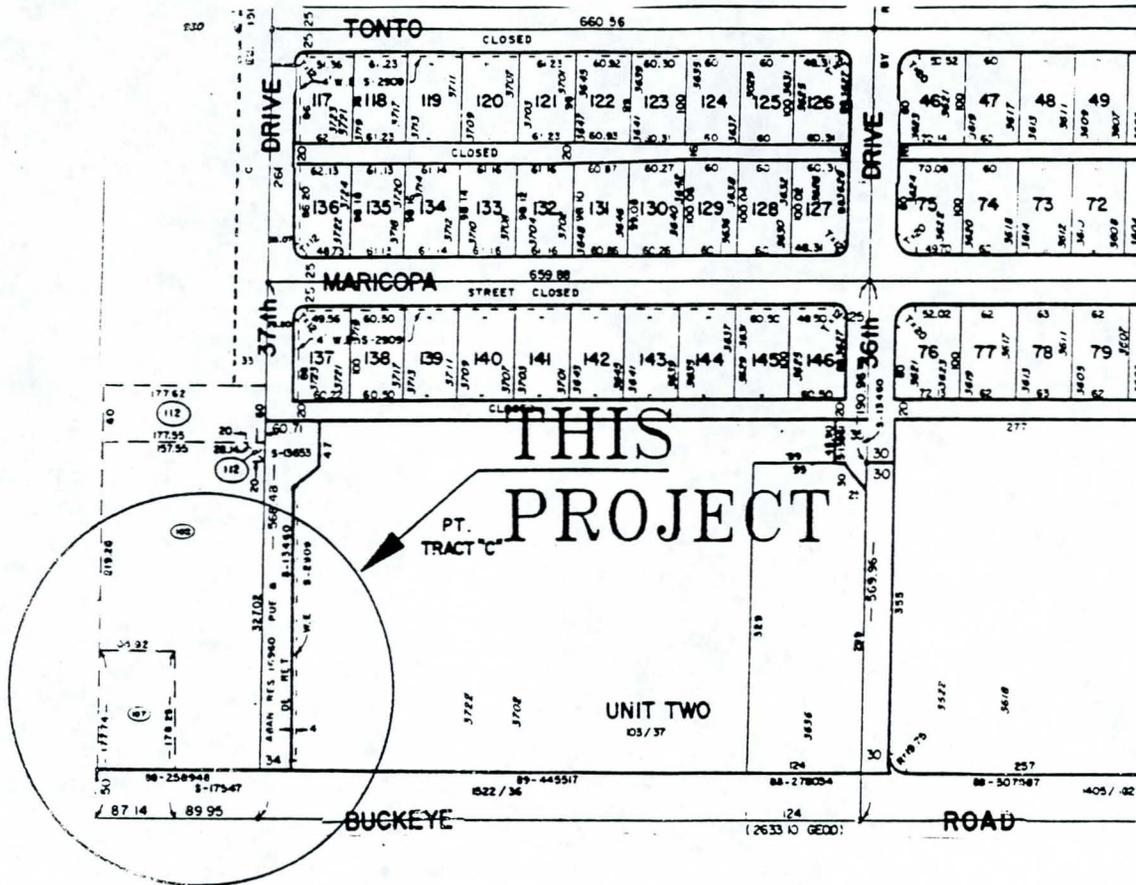
FIELD INSPECTION DATE: 5/17/91/PK

LOCATIONS OF KNOWN FLOODING:
312 East Illini (could not locate)

CONTRIBUTING FACTORS:
Constructed prior to Development Standards
Floors too low
Failure to continue existing street pattern
Streets which drain to the end of a cul de sac or otherwise dead
end
Major storm run-off exceeds street capacity

LFMP33

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: UNSUBDIVIDED (CITY)

DATE SUBDIVIDED: 01-01-85



NO SCALE

PROJECT NAME:

37TH DRIVE & BUCKEYE ROAD

QS

9/20

DATE:

05-15-91

C.D.

7

LOCAL FLOODING MITIGATION PROGRAM
STREET TRANSPORTATION DEPARTMENT
CITY OF PHOENIX

PROJECT NAME: 37th Drive and Buckeye Road

PROJECT NUMBER: 9/20-1

DESCRIPTION: This quarter section drains to the southwest corner (39th Avenue) and Buckeye Road. Industrial development and the abandonment of 36th and 37th Drive have obstructed drainage to the south. Water flows west along closed alley south side of Westward Homes and south into easement on 37th Drive alignment. Easement is flat and cannot carry water so it flows onto property at 3740 West Buckeye Road flooding one residence on commercial lot.

ESTIMATED NUMBER OF STRUCTURES SUBJECT TO FLOODING: 1

SUGGESTED SOLUTION: Construct lined channel (400 L.F.) for 100-year storm from end of 37th Drive to Buckeye Road. Remove encroachment from east and curb on Buckeye Road. Provide berm on west side of channel. Purchase easement and construct channel on 36th Drive alignment.

PRELIMINARY COST ESTIMATE THIS SOLUTION: \$60,000

FEASIBILITY STUDY COST BY ENGINEERING CONSULTANT: \$10,000

COST PER STRUCTURE TO REDUCE FLOODING: \$60,000

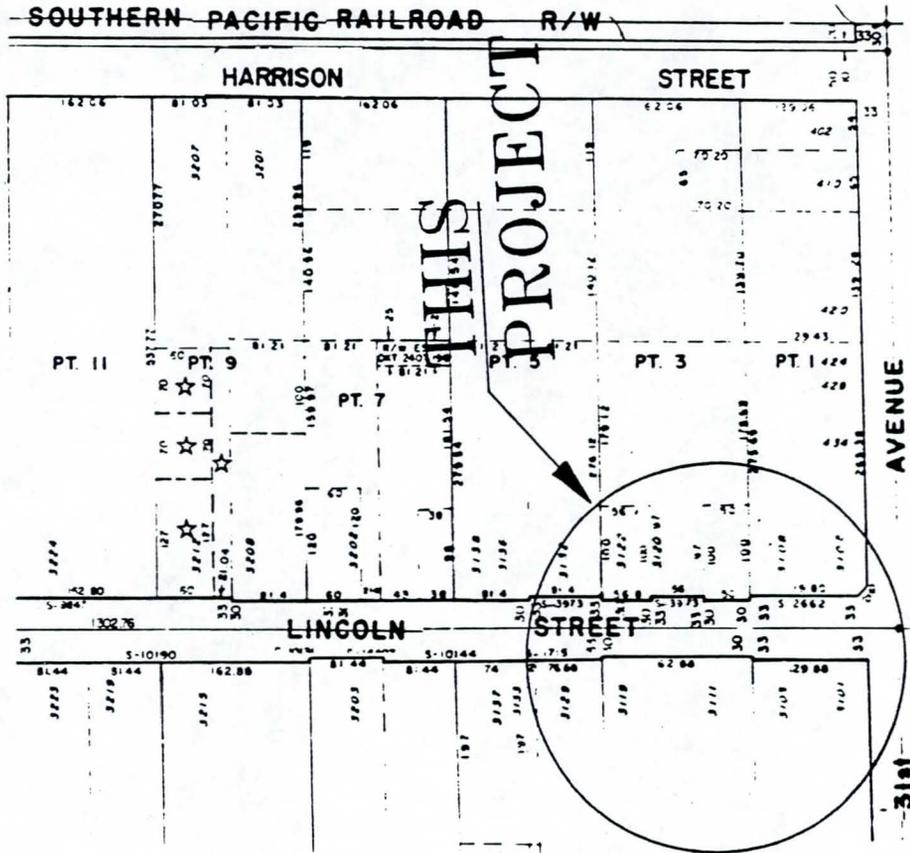
FIELD INSPECTION DATE: 4/18/91

LOCATIONS OF KNOWN FLOODING: 3740 West Buckeye Road

CONTRIBUTING FACTORS:

Constructed prior to Development Standards
Floors too low
Streets abandoned so that drainage was cut off
Failure to continue existing street pattern
Failure to allow drainage through new projects

LOCAL FLOODING MITIGATION PROGRAM STREET TRANSPORTATION DEPARTMENT CITY OF PHOENIX



SUBDIVISION NAME: CAPITOL HEIGHTS (COUNTY)

DATE SUBDIVIDED: 03-23-28



NO SCALE

PROJECT NAME: 31ST AVENUE & LINCOLN STREET	QS 9/21	DATE: 05-20-91	C.D. 7
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Project No. 10-6-5
C.S. Parks and Rec Dept

LOCAL FLOODING MITIGATION PROGRAM

