

Flood Insurance Study

for

Southern Pacific Railroad Queen Creek Area



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FLOOD INSURANCE STUDY FOR SOUTHERN PACIFIC RAILROAD
QUEEN CREEK AREA, MARICOPA COUNTY

Field Reconnaissance Summary

A field investigation was conducted for the study reach defined as the upstream area of the Southern Pacific Railroad within the Queen Creek area on September 3, 1989. The purpose of the investigation was to observe floodplain characteristics and obtain photographic documentation.

It was observed and noted that flooding events would pond upstream of the raised Southern Pacific Railroad and drain northwesterly into the East Maricopa Floodway prior to overtopping the railroad tracks. It was also observed and noted that there are two (2) drainage structures located in the Southern Pacific Railroad, a bridge crossing the East Maricopa Floodway and a bridge crossing Queen Creek. No other structures, such as culvert crossings were observed in the study reach. The enclosed photographs were taken at each road crossing over the Southern Pacific Railroad and at the two bridges within the study reach.

The ponded area upstream of the railroad is characteristic of a wide shallow floodplain. Since there are no well defined channel banks, a floodplain depth of one (1) foot will be selected as the channel banks. It appears that the majority of the area within the railroad easement is undeveloped desert terrain. The areas adjacent to the easement are primarily undeveloped desert terrain or cultivated row crops. In addition, adjacent to the Ellsworth Road intersection exists commercial/industrial development.

The following tabulation represents estimation of Manning "n" values selected for the 100-year floodplain delineation:

Manning "n" Value Estimation

<u>River Mile Cross Section</u>	<u>Left Overbank</u>	<u>Channel</u>	<u>Right Overbank</u>
RM 0.000	0.040	0.040	0.050
RM 2.342	0.040	0.040	0.035
RM 4.132	0.040	0.040	0.100
RM 4.705	0.040	0.040	0.035

NOTE: MANNING "n" VALUE SELECTED FOR ALL PAVED ROAD
CROSSINGS = 0.015



SOUTHERN PACIFIC RAILROAD
BRIDGE AT EAST MARICOPA FLOODWAY
LOOKING NORTHWEST



SOUTHERN PACIFIC RAILROAD
BRIDGE AT EAST MARICOPA FLOODWAY
LOOKING SOUTHEAST



SOUTHERN PACIFIC RAILROAD
POWER ROAD CROSSING
LOOKING NORTHWEST



SOUTHERN PACIFIC RAILROAD
POWER ROAD CROSSING
LOOKING SOUTHEAST



SOUTHERN PACIFIC RAILROAD
GERMANN ROAD CROSSING
LOOKING NORTHWEST



SOUTHERN PACIFIC RAILROAD
GERMANN ROAD CROSSING
LOOKING SOUTHEAST



SOUTHERN PACIFIC RAILROAD
ELLSWORTH ROAD CROSSING
LOOKING NORTHWEST



SOUTHERN PACIFIC RAILROAD
ELLSWORTH ROAD CROSSING
LOOKING SOUTHEAST



SOUTHERN PACIFIC RAILROAD
OCOTILLO ROAD
LOOKING NORTHWEST



SOUTHERN PACIFIC RAILROAD

OCOTILLO ROAD

LOOKING SOUTHEAST



SOUTHERN PACIFIC RAILROAD

BRIDGE AT QUEEN CREEK

LOOKING NORTHWEST



SOUTHERN PACIFIC RALROAD
BRIDGE AT QUEEN CREEK
LOOKING SOUTHEAST



SOUTHERN PACIFIC RAILROAD
RIGGS ROAD CROSSING
LOOKING NORTHWEST



SOUTHERN PACIFIC RAILROAD

RIGGS ROAD CROSSING

LOOKING SOUTHEAST