



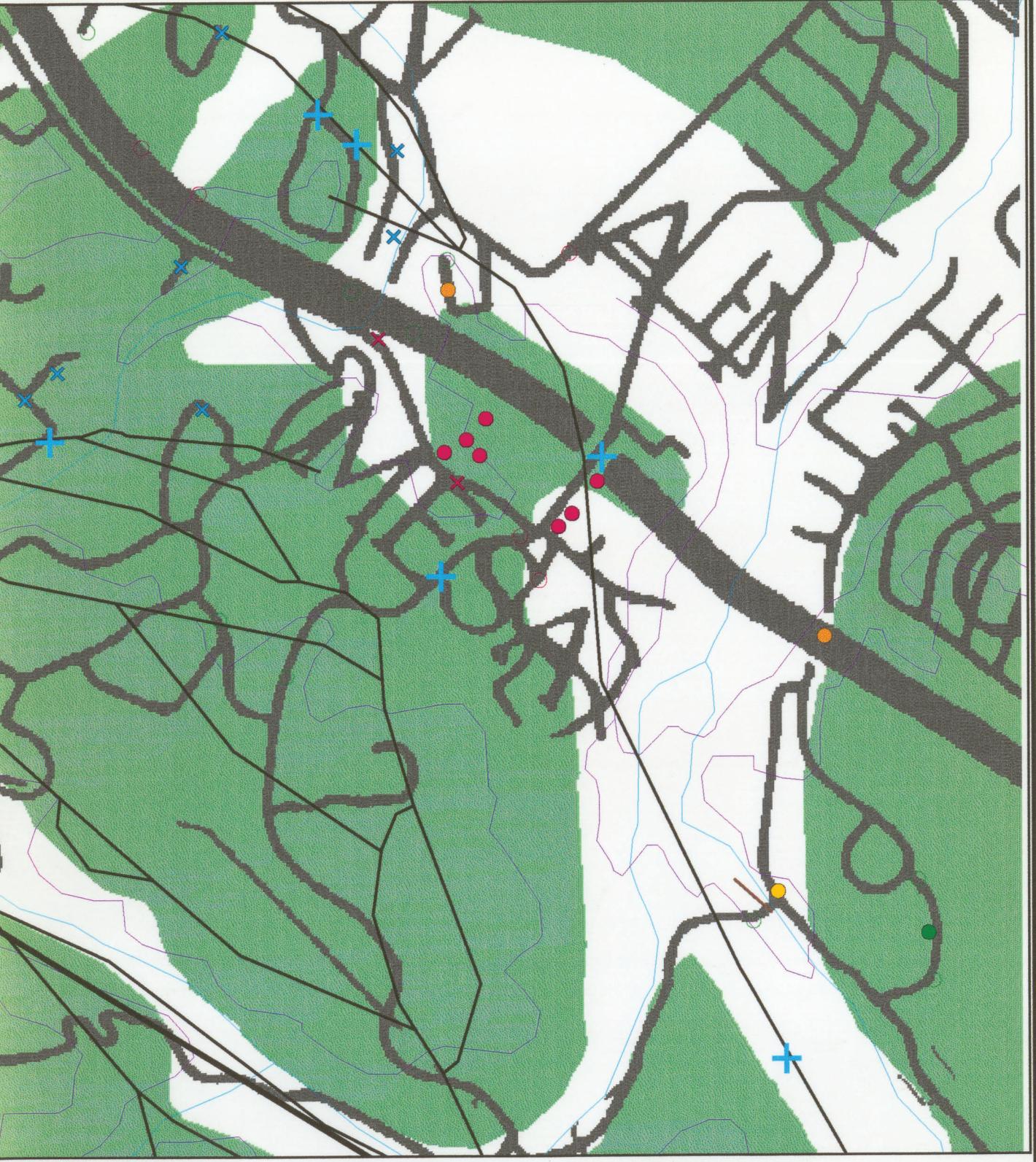
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Map of Pavement and Pipe Breaks
As Indicators of Range-Front Faulting
Resulting From the 1989 Loma Prieta Earthquake

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contour interval 50 meters

1995



CATEGORIES OF DAMAGE
Number of damage sites shown in brackets [].
See accompanying text for explanation.

COSEISMIC PAVEMENT BREAKS

IN ASPHALT

- Linear zone of complex rupture; denotes area of severe damage (Reported by USGS) [8]
- Fresh break or buckle suggestive of contractional deformation (Reported by USGS and JCP Engineers and Geologists, Inc.) [11]
- Fresh break with unspecified sense of deformation (Reported by USGS and local governments) [25]

IN CONCRETE

- Fresh or contractional break in channel lining of Los Gatos Creek (Reported by USGS) [8]
- Fresh break or buckle suggestive of contractional deformation (Reported by USGS; some also reported by local governments) [364]
- Apparently fresh or with unspecified sense of deformation (Reported by USGS; some also reported by local governments) [171]
- Break with unspecified sense of deformation (Reported by local governments) [273]

IN BOTH ASPHALT AND CONCRETE

- (Reported by USGS and local governments) [7]

EXTENSIVE RUPERTURE IN BOTH PAVEMENT AND NATURAL SOIL
(Reported by R.F. Cole of William Cotton & Assoc. and D.N. Sorg of USGS) [7]

COSEISMIC PIPE BREAKS

- Underground water line (Reported by local governments, utility companies, and USGS) [280]
- Underground natural-gas distribution line (Reported by utility companies and local government) [47]
- Above-ground natural-gas distribution line (Reported by utility company) [60]
- More than one type of pipe (Reported by utility companies, local governments, and USGS) [3]

OTHER BREAKS

- In both pipe and pavement (Reported by USGS, utility companies, and local governments) [9]
- Pavement break that pre-dates the earthquake (Reported by USGS) [6]
- Combination of pre-existing and coseismic break in pavement (Reported by local governments) [4]
- Contractional deformation that post-dates the earthquake (Reported by USGS) [4]

OTHER SYMBOLS

- Fault (from Brabb and others, in progress; and Wentworth and others, in progress)
- Limit of investigation - Within this boundary, all agencies responsible for the kinds of breaks listed above contributed available information
- Hillside area underlain by bedrock (from Wentworth, 1993)

Schmidt and others (1995)

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