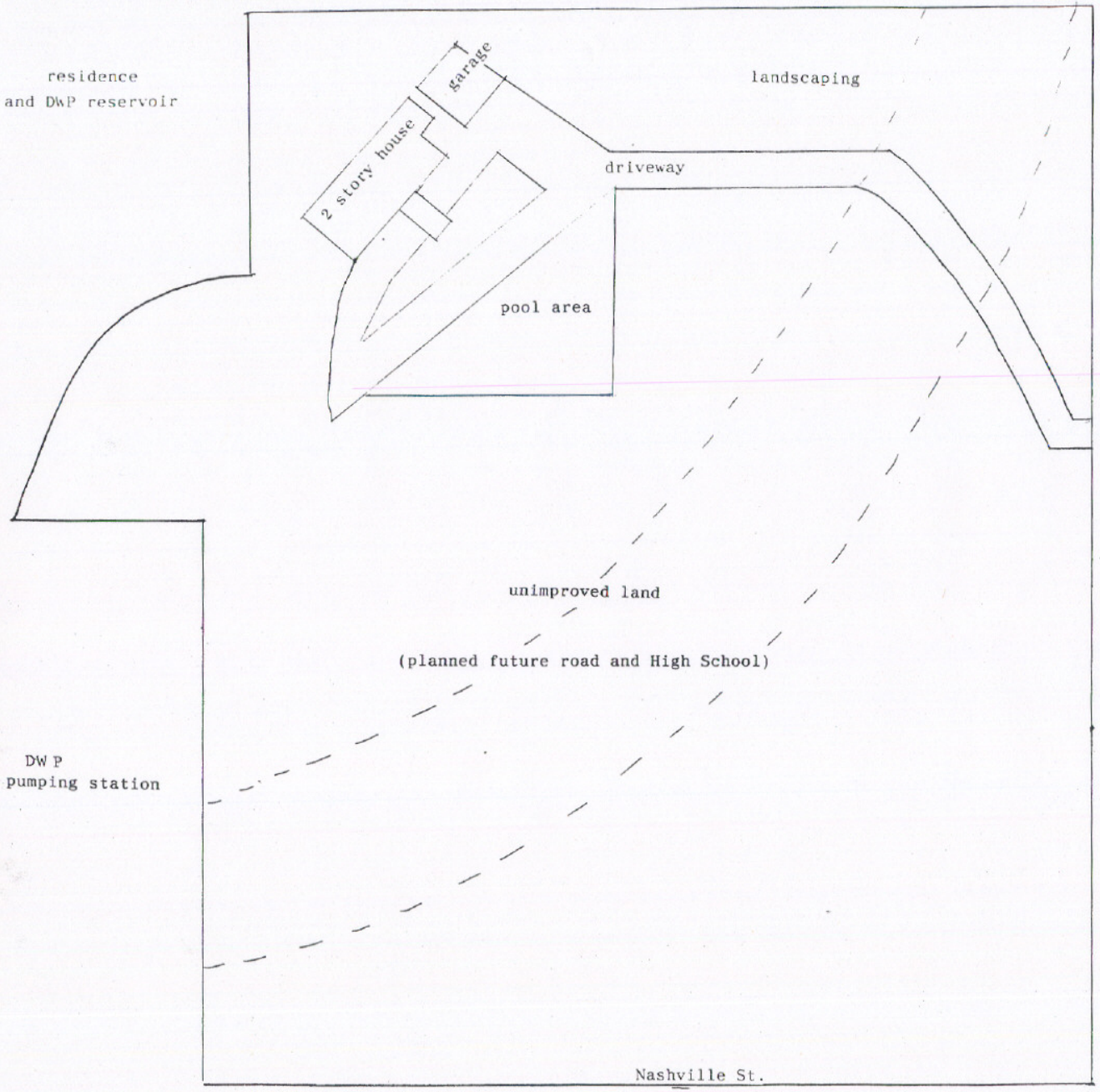
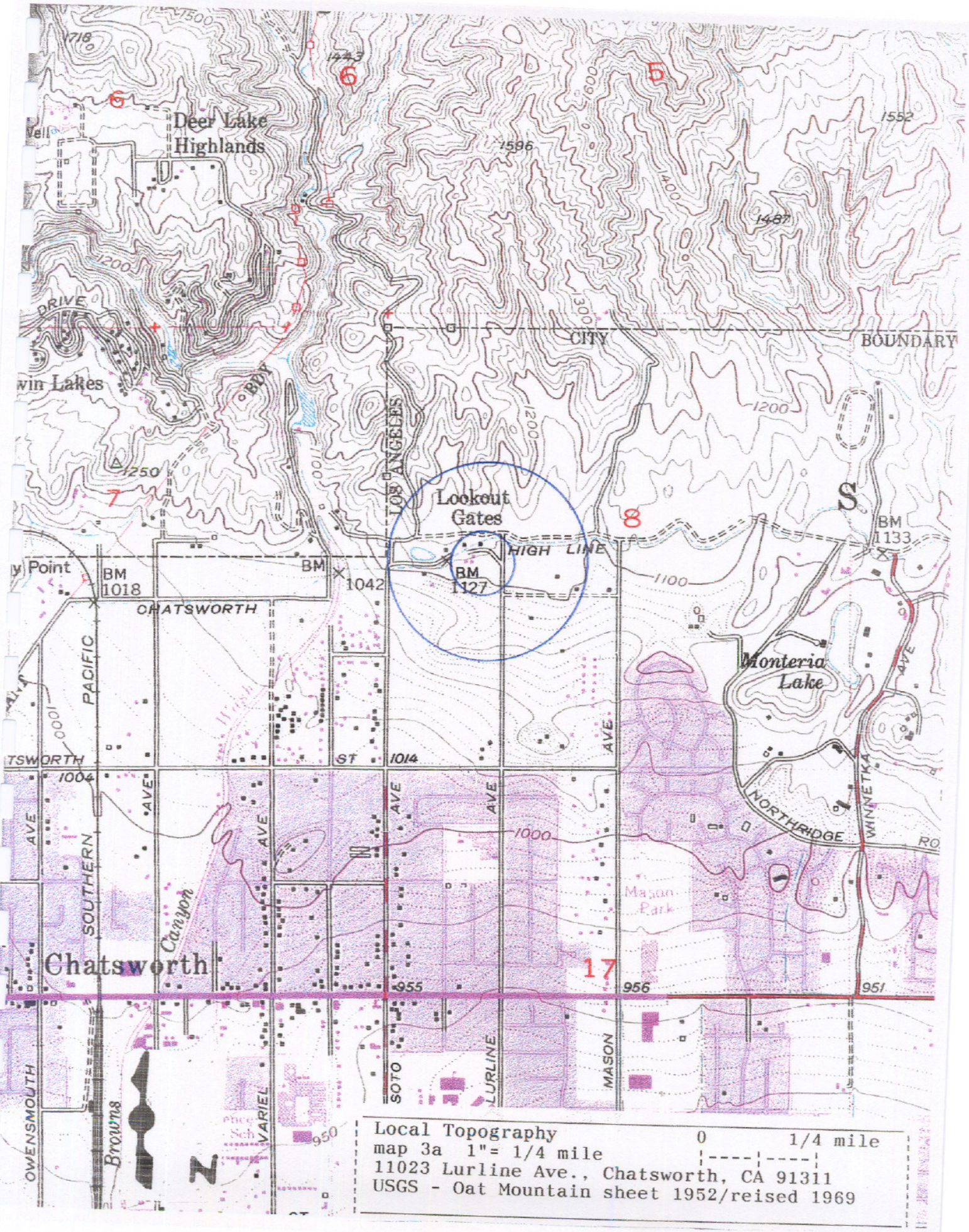
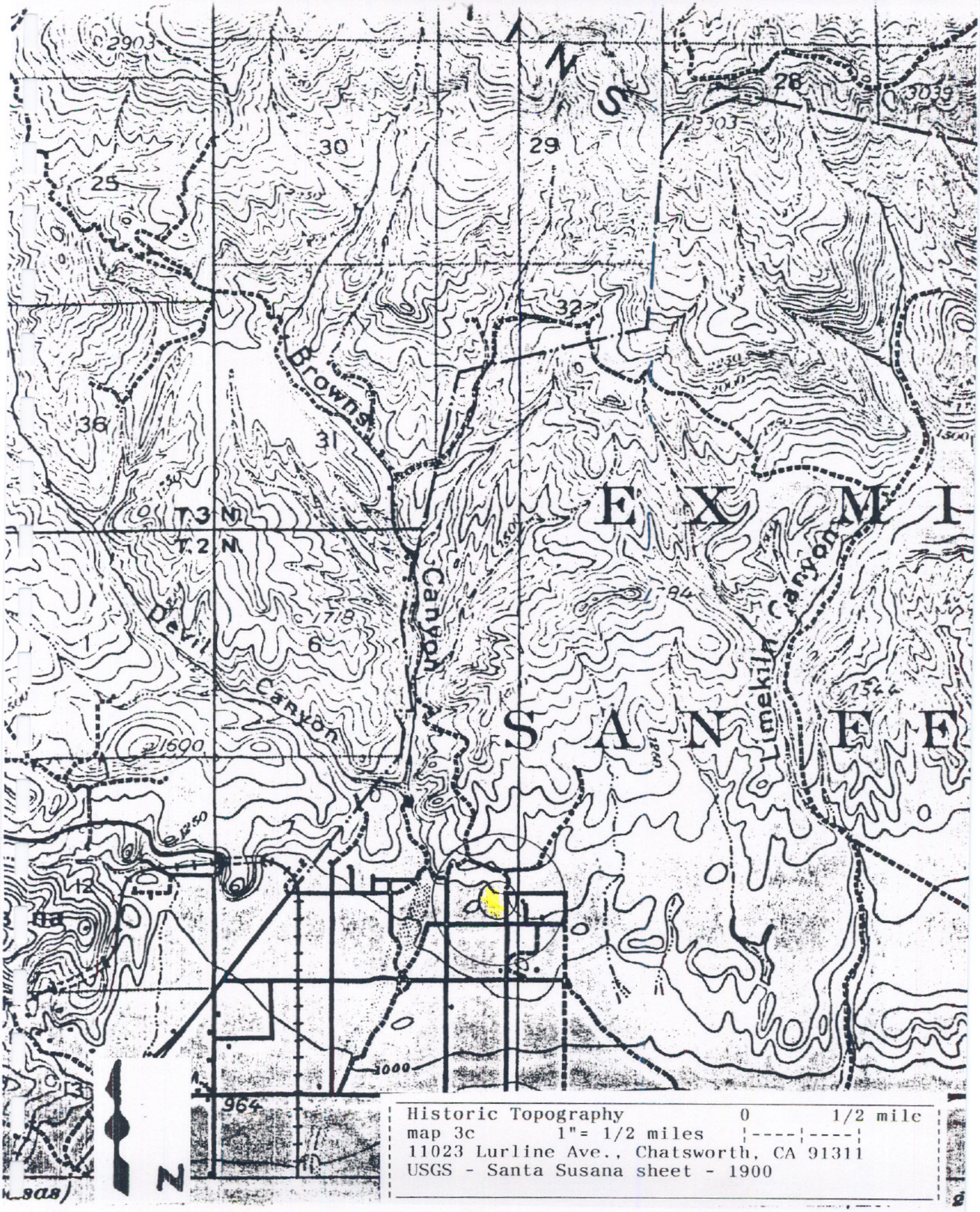

residence
and DWP reservoir
garage
landscaping
2 story house
driveway
pool area
Lurline
Ave.
unimproved land
(planned future road and High School)
DW P
pumping station
Nashville St.
N
8/25/04
Facility Plot Plan
map 2
1"= 60'
0
60 ft.
11023 Lurline Ave., Chatsworth, CA 91311



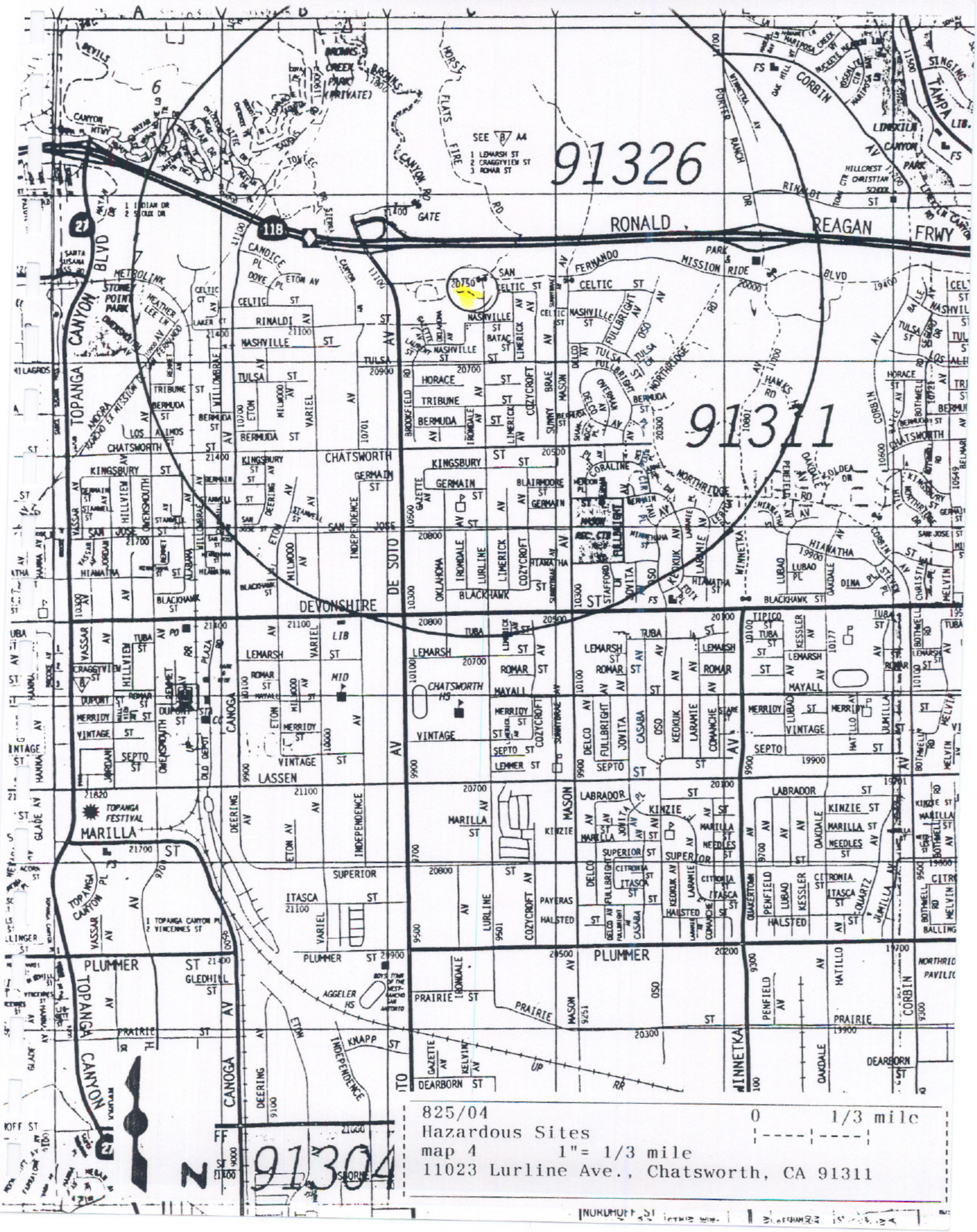
Local Topography
map 3a 1"= 1/4 mile
11023 Lurline Ave., Chatsworth, CA 91311
USGS - Oat Mountain sheet 1952/reised 1969

0 1/4 mile

Historic Topography 0 1/3 mile
map 3b 1"= 1/3 miles
11023 Lurline Ave., Chatsworth, CA 91311
USGS - Zelzah sheet - 1941

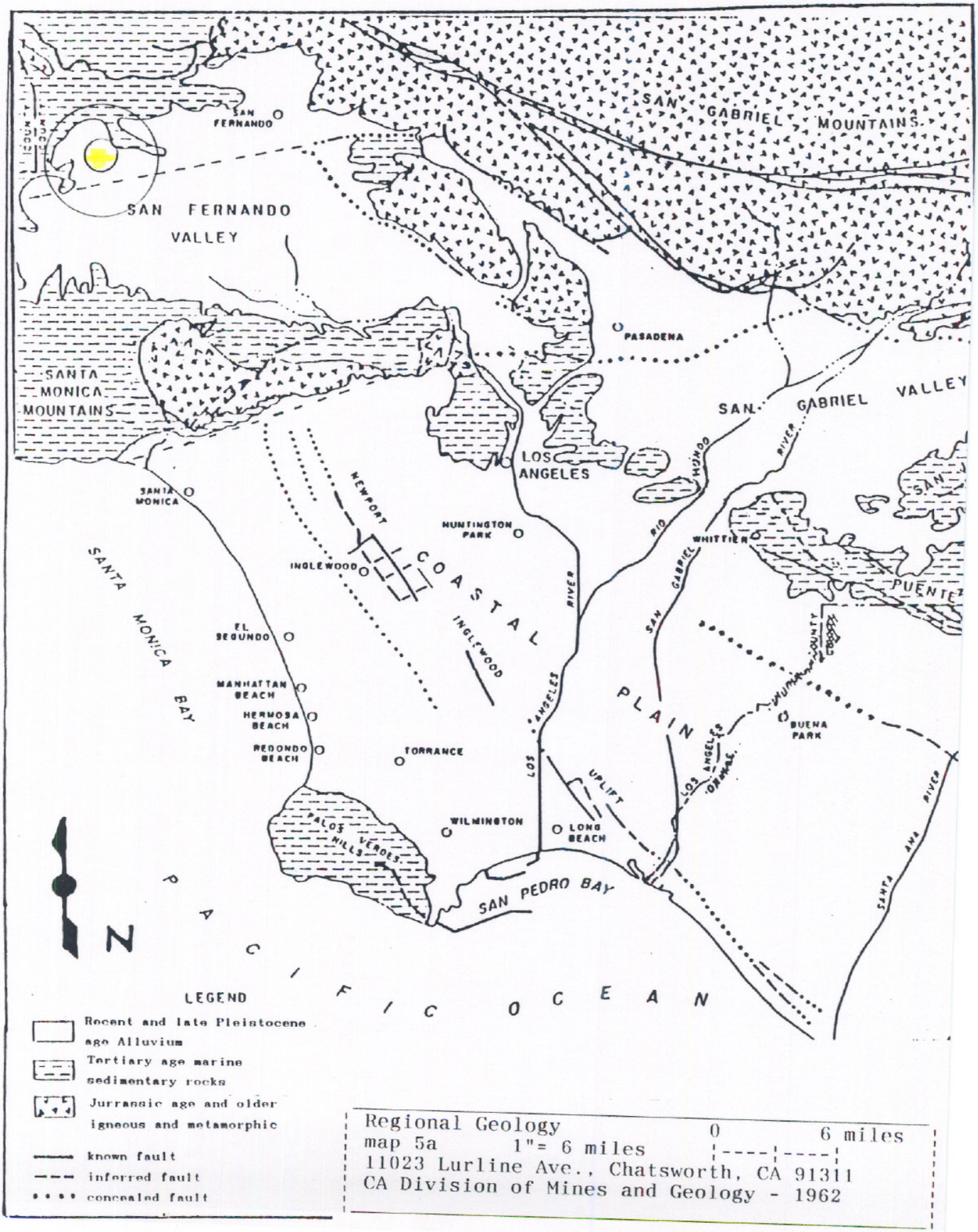


Historic Topography
map 3c
1"= 1/2 miles
0 1/2 mile
11023 Lurline Ave., Chatsworth, CA 91311
USGS - Santa Susana sheet - 1900

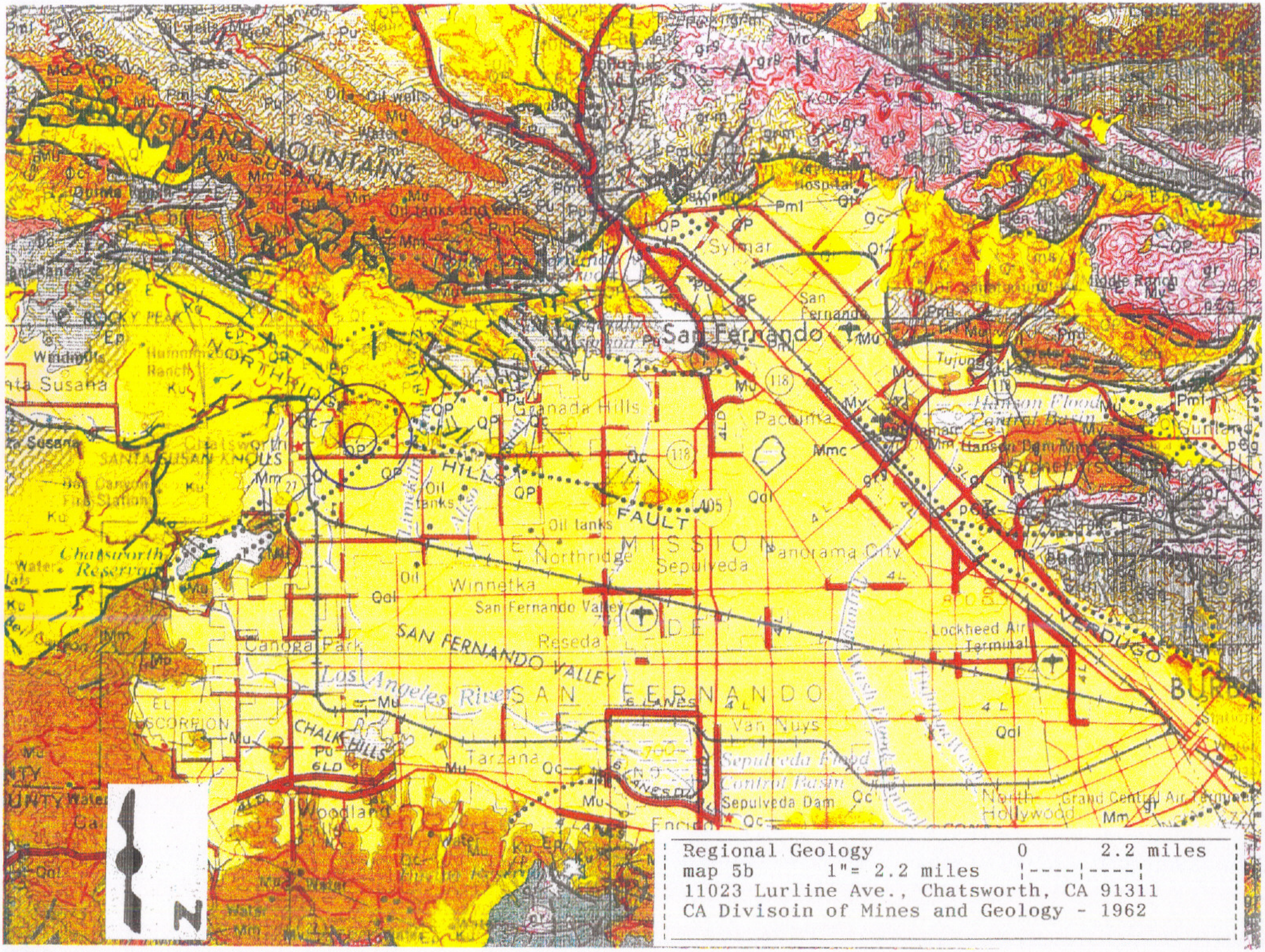


825/04
Hazardous Sites
map 4 1"= 1/3 mile
11023 Lurline Ave., Chatsworth, CA 91311

0 1/3 mile

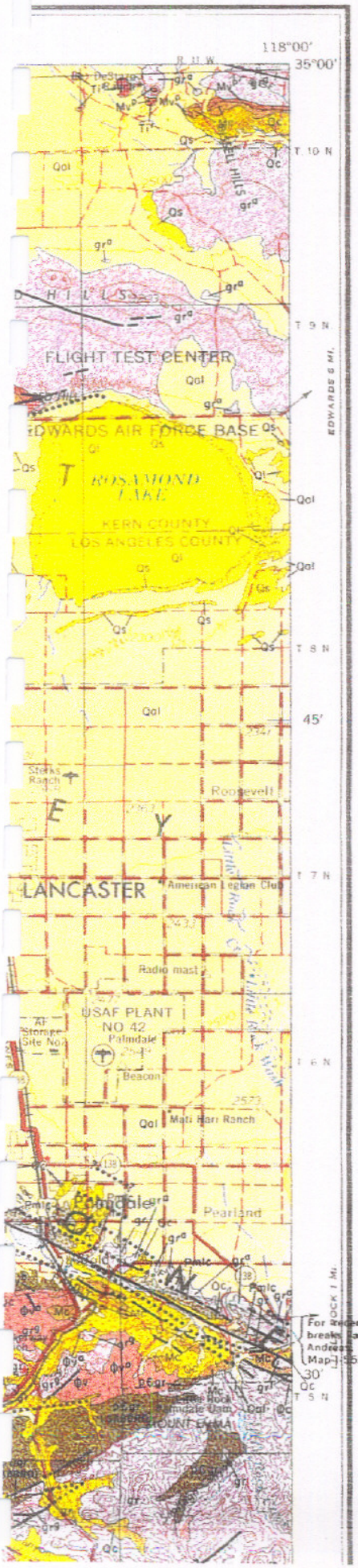


Regional Geology
map 5a 1"= 6 miles
0 6 miles
11023 Lurline Ave., Chatsworth, CA 91311
CA Division of Mines and Geology - 1962



Regional Geology 0 2.2 miles
map 5b 1"= 2.2 miles
11023 Lurline Ave., Chatsworth, CA 91311
CA Divisoin of Mines and Geology - 1962

LOS ANGELES SHEET



SEDIMENTARY AND METASEDIMENTARY ROCKS

CENOZOIC

QUATERNARY

Recent

- Qs — Dune sand
- Qal — Alluvium
- Qsc — Stream channel deposits
- Qf — Fan deposits
- Qb — Basin deposits

(Qsc, Qf, Qb: GREAT VALLEY)

- Qst — Salt deposits
- Ql — Quaternary lake deposits
- Qg — Glacial deposits
- Qt — Quaternary nonmarine terrace deposits

Pleistocene

- Qm — Pleistocene marine and marine terrace deposits
- Qc — Pleistocene nonmarine
- QP — Plio-Pleistocene nonmarine

TERTIARY

Pliocene

- Pc — Undivided Pliocene nonmarine
- Puc — Upper Pliocene nonmarine
- Pu — Upper Pliocene marine
- Pmlc — Middle and/or lower Pliocene nonmarine
- Pml — Middle and/or lower Pliocene marine

Miocene

- Mc — Undivided Miocene nonmarine
- Muc — Upper Miocene nonmarine
- Mu — Upper Miocene marine
- Mmc — Middle Miocene nonmarine
- Mm — Middle Miocene marine
- Ml — Lower Miocene marine

Oligocene

- Oc — Oligocene nonmarine
- O — Oligocene marine

Eocene

- Ec — Eocene nonmarine
- E — Eocene marine

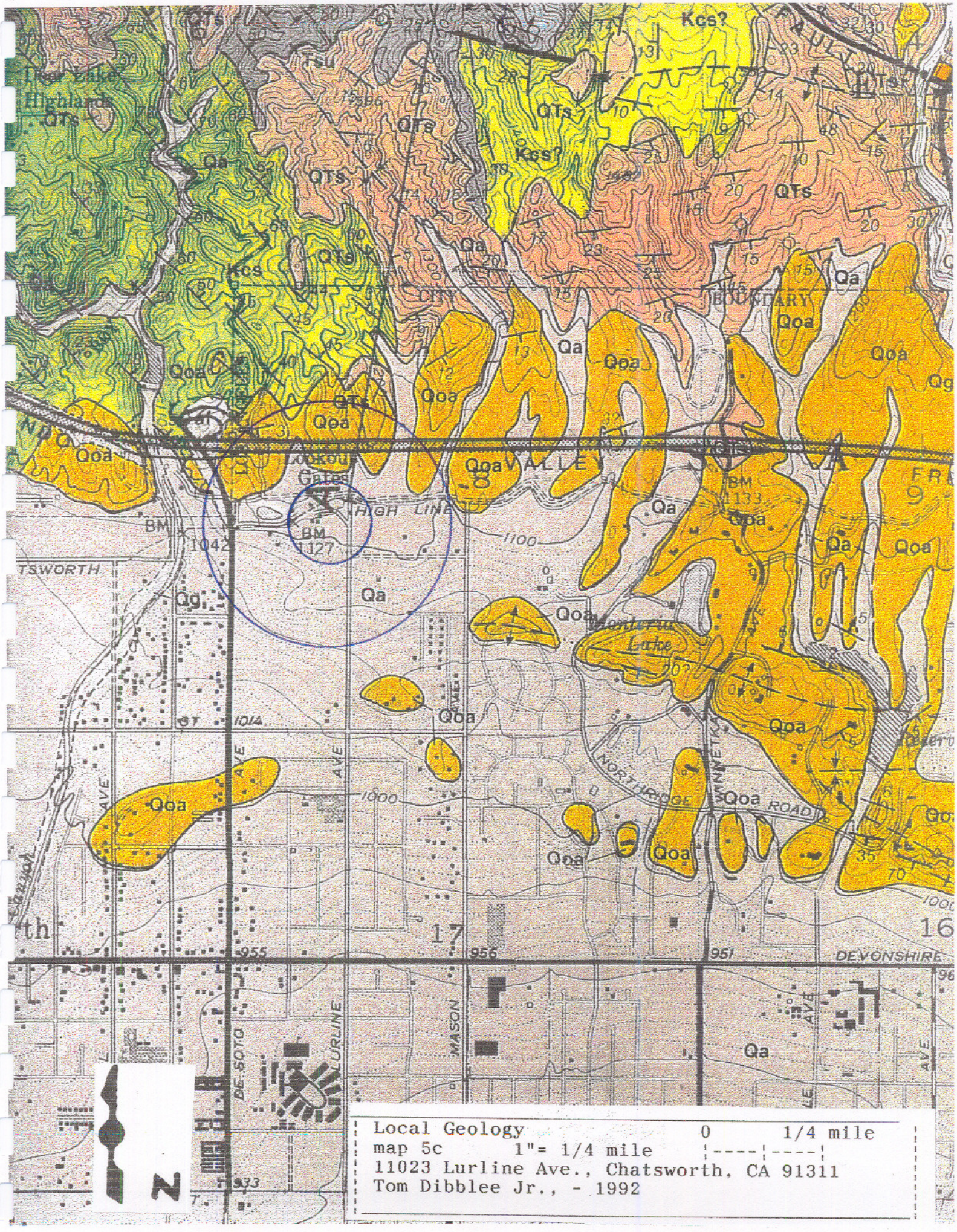
Paleocene

- Epc — Paleocene nonmarine
- Ep — Paleocene marine

- QTc — Cenozoic nonmarine

IGNEOUS AND META-IGNEOUS ROCKS

- Qrv — Recent volcanic: Q_{rv}^{r} —rhyolite; Q_{rv}^{a} —andesite; Q_{rv}^{b} —basalt; Q_{rv}^{p} —pyroclastic rocks
- Qpv — Pleistocene volcanic: Q_{pv}^{r} —rhyolite; Q_{pv}^{a} —andesite; Q_{pv}^{b} —basalt; Q_{pv}^{p} —pyroclastic rocks
- Quaternary and/or Pliocene cinder cones
- Pv — Pliocene volcanic: P_{v}^{r} —rhyolite; P_{v}^{a} —andesite; P_{v}^{b} —basalt; P_{v}^{p} —pyroclastic rocks
- Mv — Miocene volcanic: M_{v}^{r} —rhyolite; M_{v}^{a} —andesite; M_{v}^{b} —basalt; M_{v}^{p} —pyroclastic rocks
- Ov — Oligocene volcanic: O_{v}^{r}—rhyolite; O_{v}^{a} —andesite; O_{v}^{b}—basalt; O_{v}^{p}—pyroclastic rocks
- Ev — Eocene volcanic: E_{v}^{r} —rhyolite; E_{v}^{a}—andesite; E_{v}^{b} —basalt; E_{v}^{p} —pyroclastic rocks
- QTv — Cenozoic volcanic: QT_{v}^{r}—rhyolite; QT_{v}^{a}—andesite; QT_{v}^{b}—basalt; QT_{v}^{p} —pyroclastic rocks

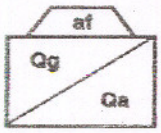


Local Geology
map 5c 1"= 1/4 mile
11023 Lurline Ave., Chatsworth, CA 91311
Tom Dibblee Jr., - 1992

0 1/4 mile

OAT MOUNTAIN—CANOGA PARK (North 1/2) QUADRANGLES

LEGEND



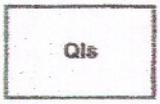
SURFICIAL SEDIMENTS

unconsolidated alluvial deposits; generally undissected

af *artificial cut and fill*

Qg *gravel and sand of major stream channels*

Qa *alluvial gravel, sand and clay of valley and floodplain areas*



LANDSLIDE DEBRIS

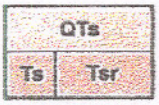
OLDER SURFICIAL SEDIMENTS

dissected, weakly consolidated alluvial deposits

Qos *older sandy alluvium, including slope wash, derived from Chatsworth Formation (Kcs)*

Qoa *older alluvium composed largely of angular pebble-size fragments of Miocene shale and some of sandstone (Tm, Tsq, and Ttos) in light gray to tan silty matrix in part indurated by calcareous caliche; crudely bedded to massive; about 200 ft (60m) thick; blends northward upslope in Browns Canyon drainage area into old debris-flow landslides (Qls); slightly deformed and much dissected where elevated; but at Horse Flats top surface of deposition preserved; late Pleistocene age; mapped as slope wash, older alluvium, and Saugus Formation (upper member) by Barrows 1975; Evans and Miller 1978; and Saul 1979; probably in places equivalent to Pacoima Formation of Oakeshott 1958; Barrows et al. 1975; and Dibblee 1991*

—UNCONFORMITY—



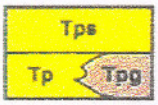
SAUGUS FORMATION

mostly terrestrial, weakly consolidated; Pleistocene and Pliocene age

QTs *light gray to brown pebble-cobble conglomerate, sandstone and lesser amounts of grayish to reddish brown, soft siltstone/claystone; conglomerate composed of granitic, gneissic, metavolcanic, quartzitic, gabbroic and anorthositic detritus in sandy matrix; deposited by westward-flowing streams; Pleistocene age; south of Santa Susana fault mapped as middle member of Saugus Formation by Barrows et al. 1974, Evans and Miller 1978, and Saul 1979 [in adjacent San Fernando quadrangle (Dibblee 1991) QTs west of Elsmere Canyon should be shown as Ts]*

Ts *(in Newhall area) similar to QTs, but correlative in age with units Tsr and Tps in part; probably Pliocene age*

Tsr *Sunshine Ranch Member (of Hazzard 1940, in Treiman 1987; Barrows et al. 1974; Evans and Miller 1978; and Saul 1979; type area extends eastward from lower Aliso Canyon to Van Norman Reservoir, Hazzard 1940); terrestrial deposits similar to QTs, but south of Santa Susana fault composed largely of more indurated greenish gray claystone, siltstone, and fine grained sandstone, and contains in lower part brackish marine layers of oyster shells; in exposures northwestward from San Fernando Pass, consists mostly of interbedded conglomerate and fine grained sediments that locally contain few thin layers of peat, unit intertongues westward into Tps; mostly Pliocene age*



PICO FORMATION

marine clastic; mostly Pliocene age

Tps *south of Santa Susana fault: Pico sandstone (included in Saugus Formation by Kew 1924; Pico Formation by Butler 1977, Lant 1977, Yeats 1987; Pico and Saugus Formations by Evans and Miller 1978) mostly light gray to nearly white, soft friable sandstone, locally pebbly, contains abundant whole and fragmented bivalve shells west of Browns Canyon; deposited under marine to lagoonal conditions; grades upward into terrestrial Saugus Formation; unconformable on Miocene formations*

Tpg *conglomerate in lower Limekiln Canyon: gray massive conglomerate of cobbles of granitic and metavolcanic rocks in sandstone matrix; nonmarine (?), unconformable on Monterey Shale (Tml), overlain by Saugus Formation*

Tp *and* **Tps** *north of Santa Susana fault: Pico Formation of Kew 1924, Winterer and Durham 1958, 1962; Tps mostly light gray semi-friable sandstone, locally pebbly; upper beds contain bivalve shell fragments; intertongues into Saugus Formation (Ts); Tp mostly gray micaceous siltstone-claystone, bedded to massive, includes few thin sandstone layers*

TOWSLEY FORMATION

marine clastic; early Pliocene age (Repettian Stage)

Holocene

Pleistocene

Pliocene

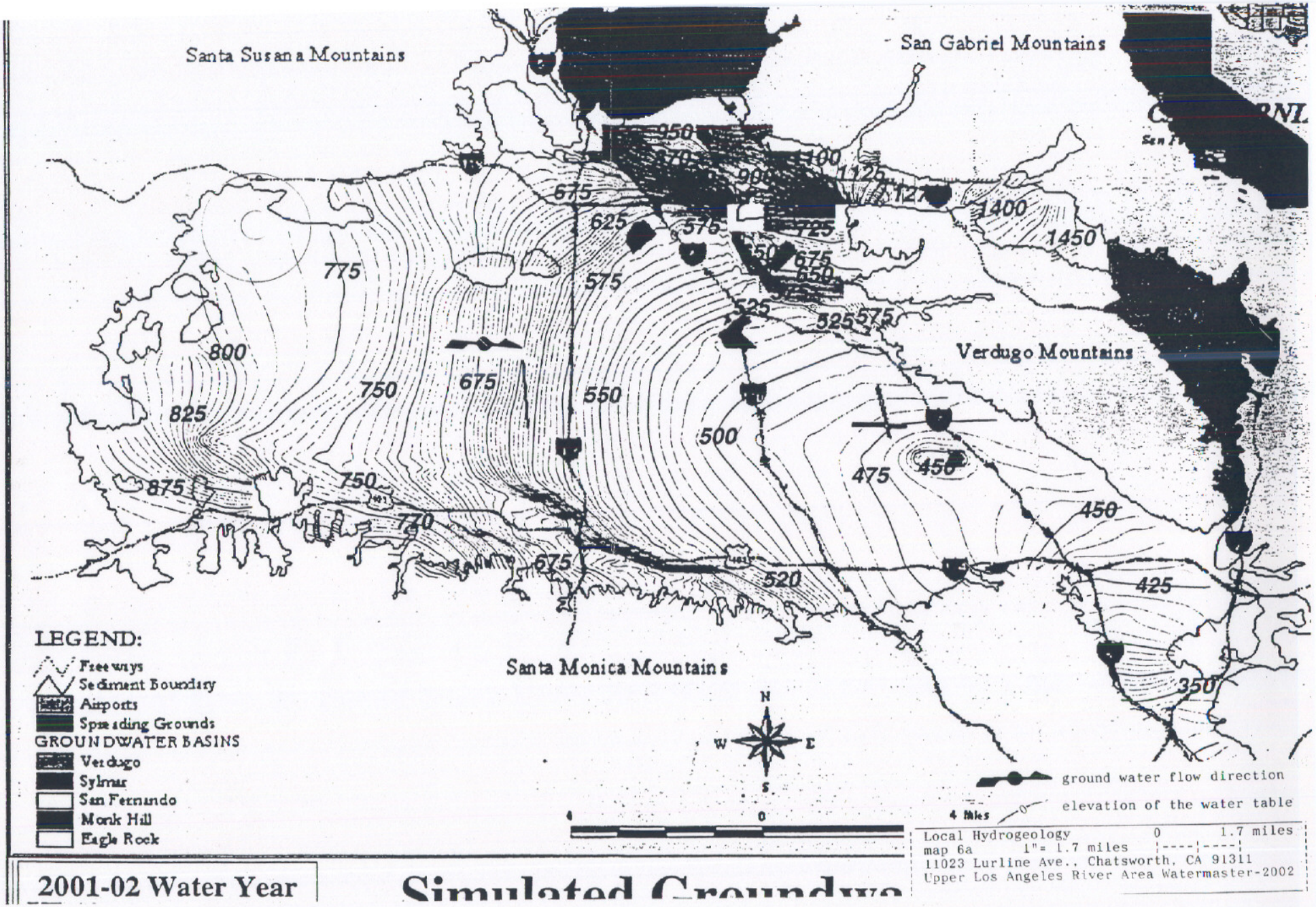
QUATERNARY

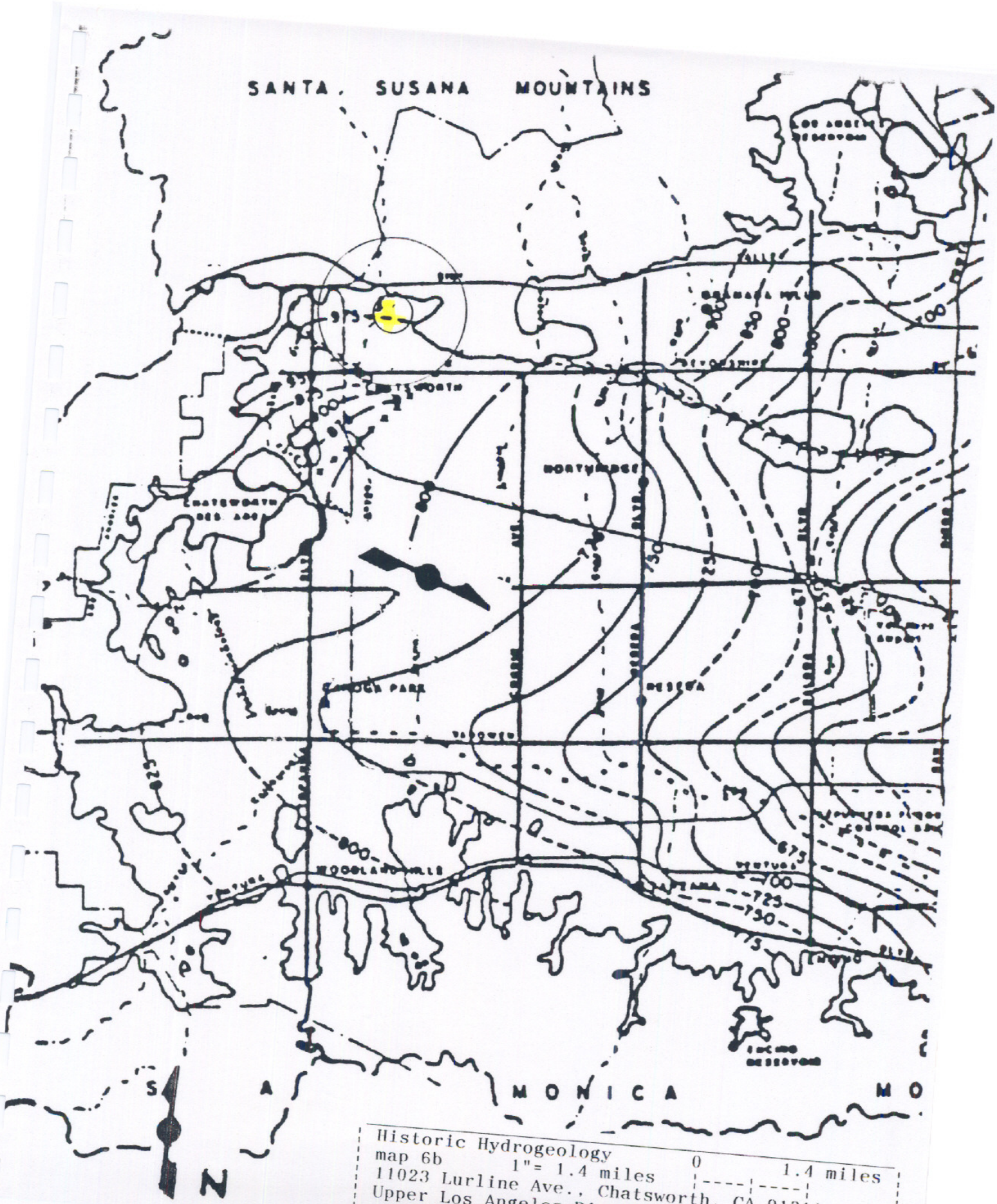
?

?

?

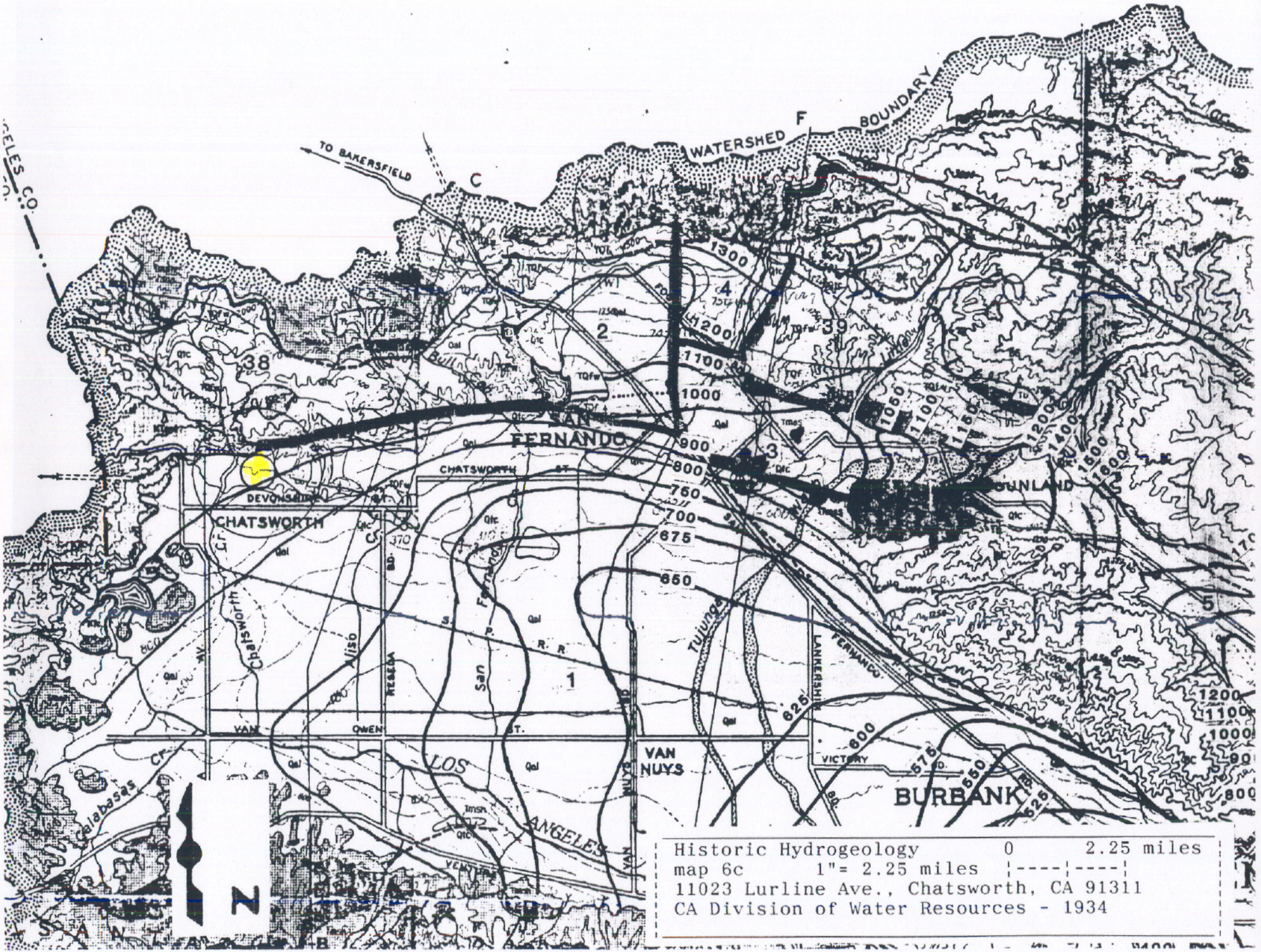
?

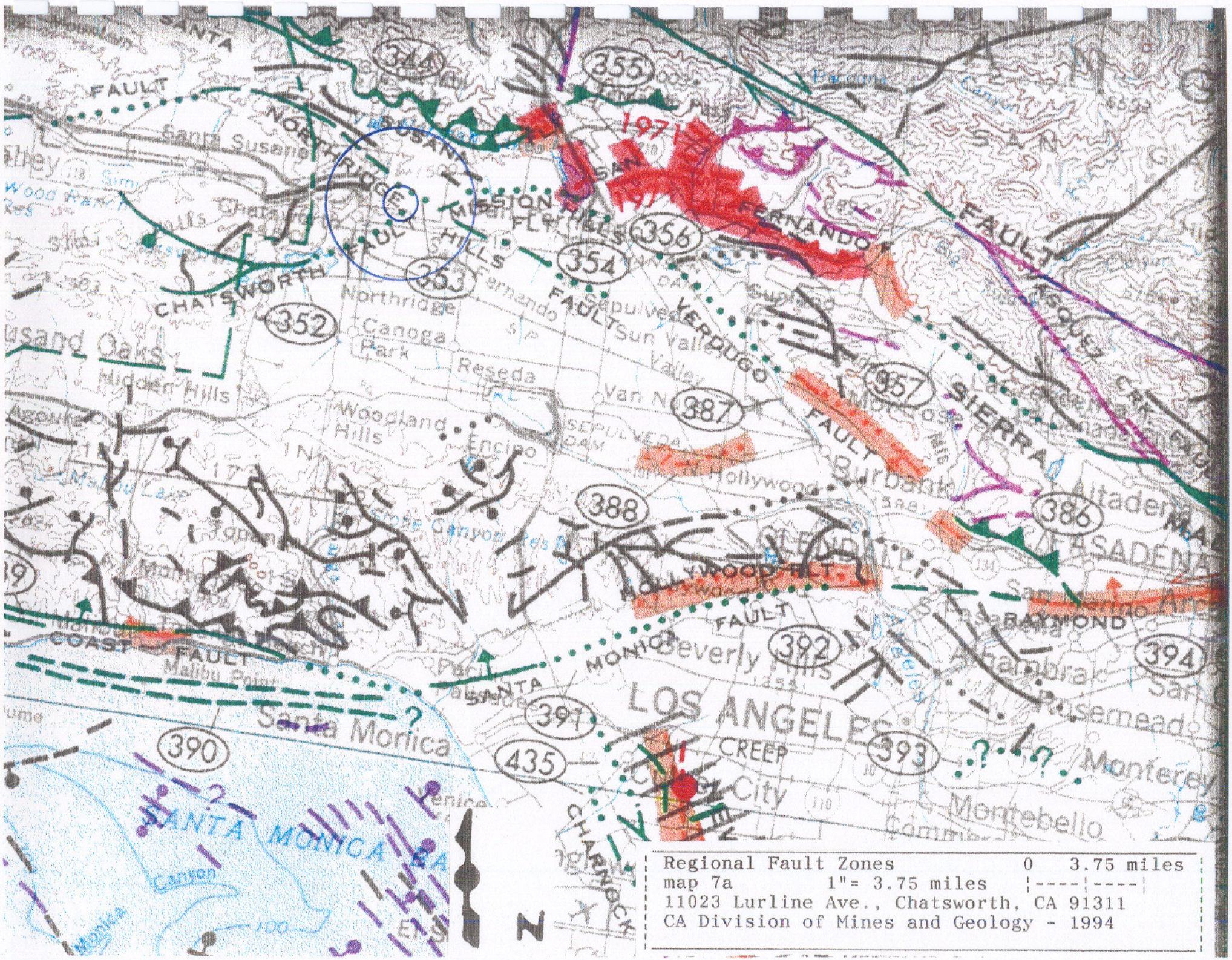

Santa Susana Mountains
San Gabriel Mountains
Verdugo Mountains
Santa Monica Mountains
950
700
900
1100
1125
1400
1450
675
625
575
775
575
800
750
675
550
825
500
875
750
770
675
520
475
450
450
425
350
525
575
LEGEND:
Freeways
Sediment Boundary
Airports
Spreading Grounds
GROUNDWATER BASINS
Verdugo
Sylmar
San Fernando
Monk Hill
Eagle Rock
N
W
E
S
4 Miles
0
ground water flow direction
elevation of the water table
Local Hydrogeology
map 6a
1"= 1.7 miles
0
1.7 miles
11023 Lurline Ave., Chatsworth, CA 91311
Upper Los Angeles River Area Watermaster-2002
2001-02 Water Year
Simulated Groundwa

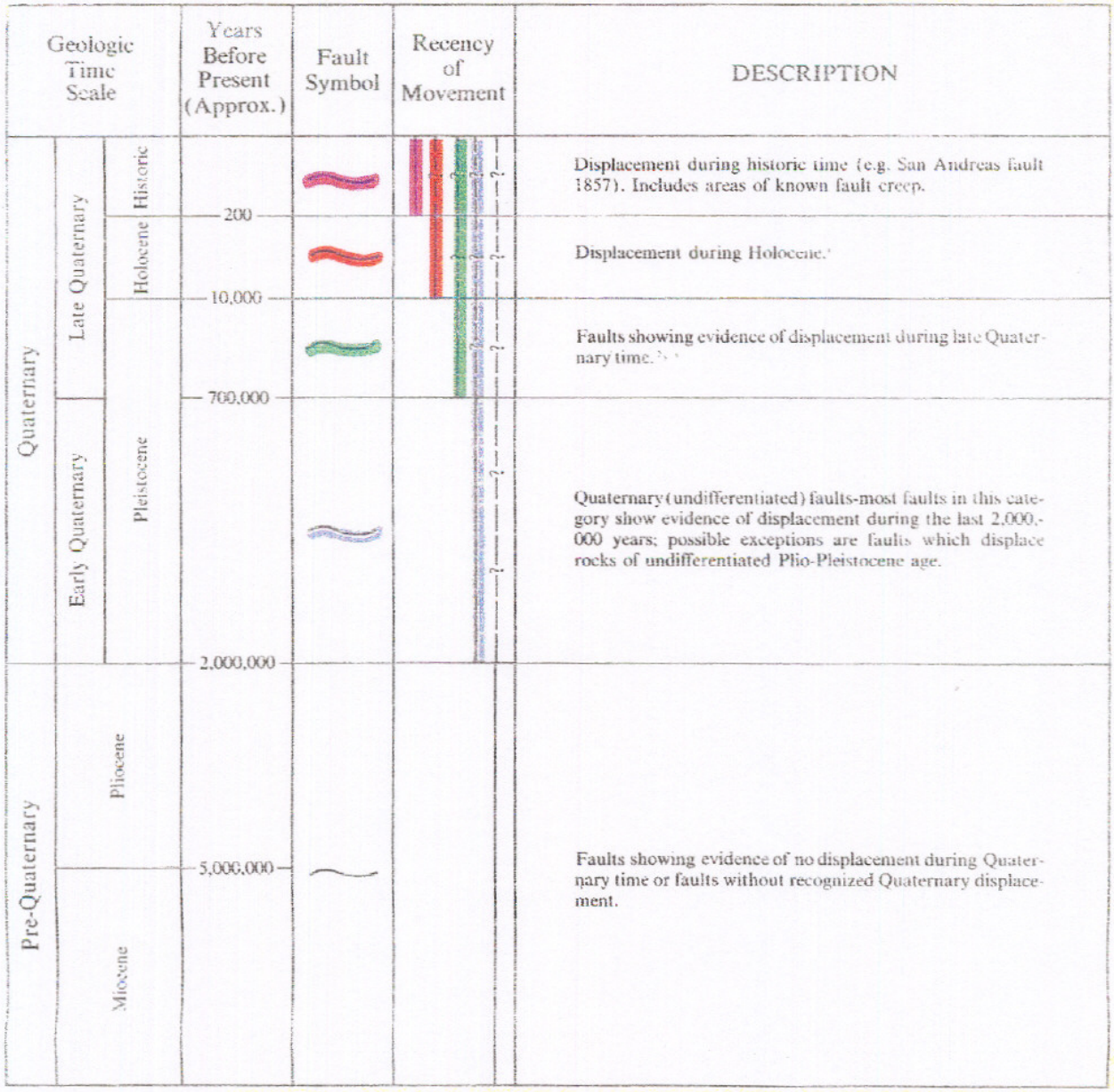


Historic Hydrogeology
map 6b 1"= 1.4 miles
11023 Lurline Ave., Chatsworth, CA 91311
Upper Los Angeles River Area Watermaster- 1993

0 1.4 miles


TO BAKERSFIELD
WATERSHED BOUNDARY
SAN FERNANDO
CHATSWORTH
DEVONSHIRE
GLENDALE
BURBANK
VAN NUYS
LOS ANGELES
Chatsworth Cr.
San Fernando
Tujunga
Calabasas
1300
1200
1100
1000
900
800
750
700
675
650
625
600
575
550
525
1050
1150
1400
1500
1600
1200
1100
1000
800
Historic Hydrogeology
map 6c
1"= 2.25 miles
0
2.25 miles
11023 Lurline Ave., Chatsworth, CA 91311
CA Division of Water Resources - 1934


SANTA
FAULT
NORTHRIDGE
Santa Susana
SAN
FERNANDO
FAULT
MISSION
HILLS
CHATSWORTH
Northridge
Canoga
Park
Reseda
Sepulveda
Sun Valley
Van N
Woodland
Hills
Encino
Hollywood
Burbank
Altadena
PASADENA
RAYMOND
HOLLYWOOD
FAULT
COAST
FAULT
Malibu Point
SANTA
MONICA
Beverly
Hills
LOS ANGELES
CREEP
Santa Monica
City
Montebello
Monterey
Rosemead
CHARNOCK
SIERRA
MADRE
344
355
356
354
353
352
387
388
957
386
392
394
391
390
435
393
N
Regional Fault Zones
map 7a
1"= 3.75 miles
0 3.75 miles
11023 Lurline Ave., Chatsworth, CA 91311
CA Division of Mines and Geology - 1994



FOOTNOTES

[1] Geomorphic evidence for Holocene faulting includes: sag ponds, or the following features in Holocene deposits: offset stream courses, linear scarps, and triangular faceted spurs.

[2] Geomorphic evidence for late Quaternary faulting includes such features as offset stream courses, linear scarp, shutterridges, and triangular faceted spurs.

[3] Faulting may be younger but lack of younger overlying deposits precludes more accurate age classification.

RECENCY OF FAULTING

This map is a synthesis of data from a large body of literature, published and unpublished, regarding faulting in the eastern Transverse Ranges and a part of the Mojave Desert, California. The faults shown are identical to those on the accompanying Geologic Map of the San Bernardino Quadrangle, however, the purpose of the fault map is to depict what is known about the recency of displacement along these structures. Future studies may find additional faults, require relocation of faults, or, in some cases, change the age classification as shown here.

The age classifications are determined by examining geologic evidence indicating the youngest faulted unit and the oldest unfaulted unit along each fault or fault segment. If Quaternary displacement is indicated, the fault is classified into one of the three categories within Quaternary time (Holocene, late Quaternary, Quaternary undifferentiated). Faults with reported surface rupture during