

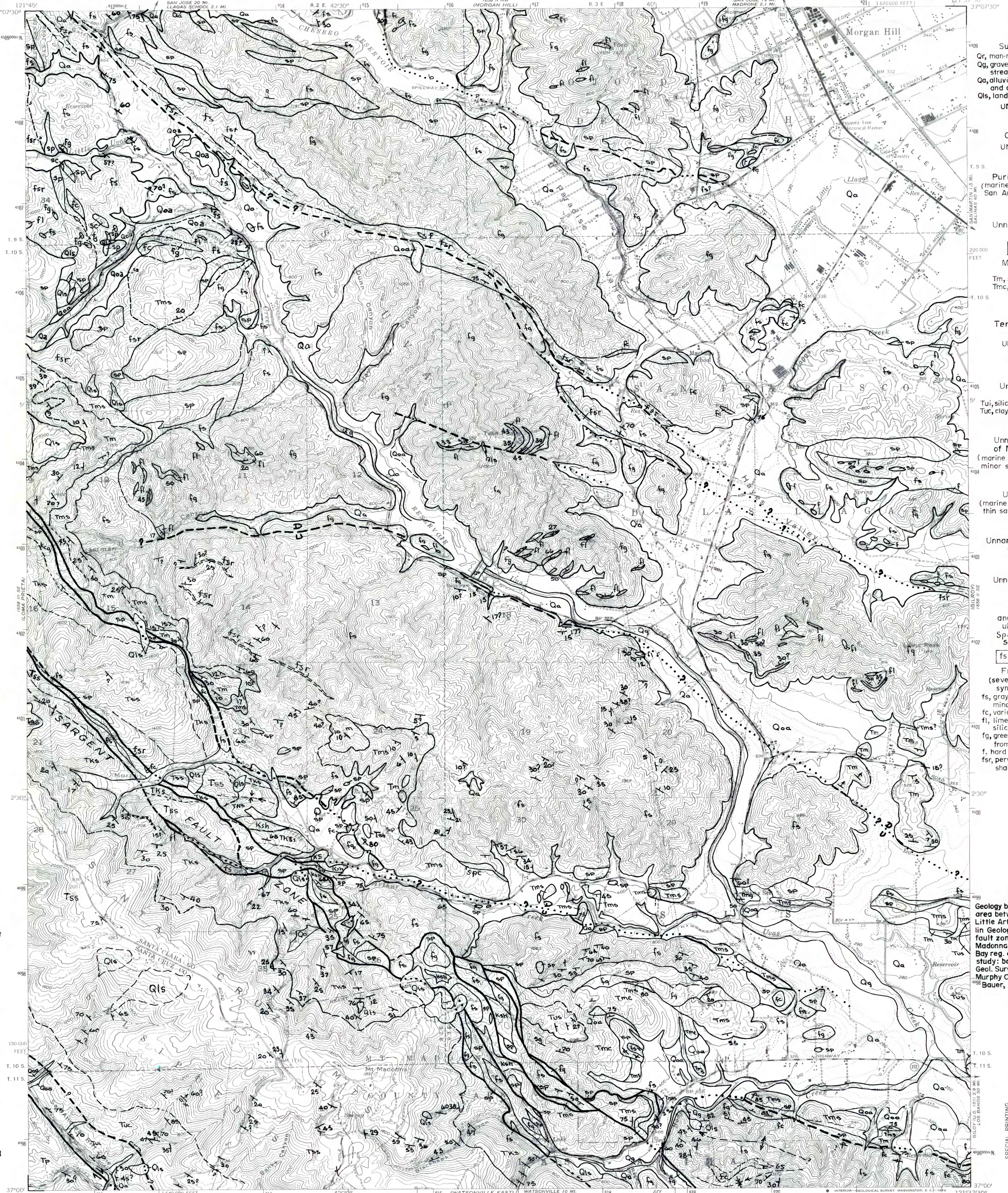
**U.S. GEOLOGICAL SURVEY  
OPEN FILE MAP**

MT. MADONNA QUADRANGLE  
CALIFORNIA  
7.5 MINUTE SERIES (TOPOGRAPHIC)  
SW/4 MORGAN HILL 15' QUADRANGLE

73-59

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

STATE OF CALIFORNIA  
REPRESENTED BY THE  
DIRECTOR OF PUBLIC WORKS



- |              |   |                           |
|--------------|---|---------------------------|
| Qr           | Surficial deposits  | Quaternary                |
| Qg           | Qr, man-made rock fill  |                           |
| Qs           | Qg, gravel and sand of stream channels  |                           |
| Qa           | Qa, alluvium-gravel, sand and clay  |                           |
| Qls          | Qls, landslide debris   |                           |
| Qoa          | UNCONFORMITY  |                           |
| Qoa          | Older alluvium  | Pleistocene               |
| UNCONFORMITY |   |                           |
| TP           |   |                           |
| TP           | Purisima Formation (marine sandstone, SW of San Andreas Fault)                | Pliocene                  |
| Tus          |   |                           |
| Tus          | Unnamed sandstone (marine)  |                           |
| Tm           |   |                           |
| Tmc          | Monterey Shale (marine)   | Miocene                   |
| Tm           | Tm, semi-siliceous shale  |                           |
| Tmc          | Tmc, clayey to semi-siliceous shale   |                           |
| Tms          |   |                           |
| Tms          | Temblor? Sandstone (marine)   | Tertiary                  |
| UNCONFORMITY |   |                           |
| Tui          |   |                           |
| Tuc          | Unnamed shale (marine)  | Oligocene or L. Mio.      |
| Tui          | Tui, siliceous and clay shale   |                           |
| Tuc          | Tuc, clay shale, minor sandst   |                           |
| Tss          |   |                           |
| Tss          | Unnamed sandstone of Mt. Madonna area (marine arkosic sandstone, minor shale) | Eocene                    |
| TKs          |   |                           |
| TKs          | Unnamed shale (marine clay shale, minor thin sandstone)                       | Upper Cret.               |
| Kcg          |   |                           |
| Kcg          | Unnamed conglomerate and sandstone  | Upper?                    |
| Ksh          |   |                           |
| Ksh          | Unnamed dark shale  | Lower?                    |
| sp           |   |                           |
| sp           | Serpentine and serpentinized ultramafic rocks                                 |                           |
| spc          | spc - alteration to silica-carb rock  |                           |
| fs           |   |                           |
| fc           |   |                           |
| fl           |   |                           |
| fg           |   |                           |
| f0           |   |                           |
| fsr          |   |                           |
| fsr          | Franciscan rocks (severely shattered eugeosynclinal marine rocks)             | JURASSIC ? AND CRETACEOUS |
| fs           | fs, graywacke sandstone, minor claystone                                      |                           |
| fc           | fc, varicolored chert   |                           |
| fl           | fl, limestone, locally silicified   |                           |
| fg           | fg, greenstone (altered from basaltic rocks)                                  |                           |
| f0           | f0, hard monolithic masses  |                           |
| fsr          | fsr, pervasively sheared shale and sandstone                                  |                           |

- Contact**  
dashed where gradational or approximately located
- Fault**  
dashed where inferred; dotted where concealed;  
U-upthrown block  
D-downthrown block, relatively;  
single arrow indicates observed dip of fault;  
double parallel arrows indicate lateral movement
- inclined**    **vertical**  
**overturned**
- Strike and dip of bedding**  
anticline    syncline
- Axis of fold**  
end arrow indicates direction of plunge
- molluscan foraminiferal**  
**Fossil localities**

Mapped, edited, and published by the Geological Survey  
Control by USGS and USCGS  
Topography from aerial photographs by multiplex methods and by planimeter surveys 1955. Aerial photographs taken 1953  
Polyconic projection. 1927 North American datum  
10,000 foot grid based on California coordinate system, zone 3  
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue  
Revisions shown in purple compiled from aerial photographs taken 1968. This information not field checked  
Purple tint indicates extension of urban areas

SCALE 1:24,000  
1 MILE  
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET  
1 0 1 2 3 4 5 6 7 8 9 10 KILOMETER  
CONTOUR INTERVAL 40 FEET  
DASHED LINES REPRESENT 10-FOOT CONTOURS  
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

**ROAD CLASSIFICATION**  
Heavy-duty    Light-duty  
Medium-duty    Unimproved dirt

U.S. Route    State Route

MT. MADONNA, CALIF.  
SW/4 MORGAN HILL 15' QUADRANGLE  
N 37°00' - W 121°37.5' 7.5

1955  
PHOTOGRAPHED 1968  
AMS 1658 II SW - SERIES V895

**PRELIMINARY GEOLOGIC MAP OF THE MT. MADONNA QUADRANGLE, SANTA CLARA AND SANTA CRUZ COUNTIES, CALIFORNIA**

By Thomas W. Dibblee Jr., 1973

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey standards and nomenclature.