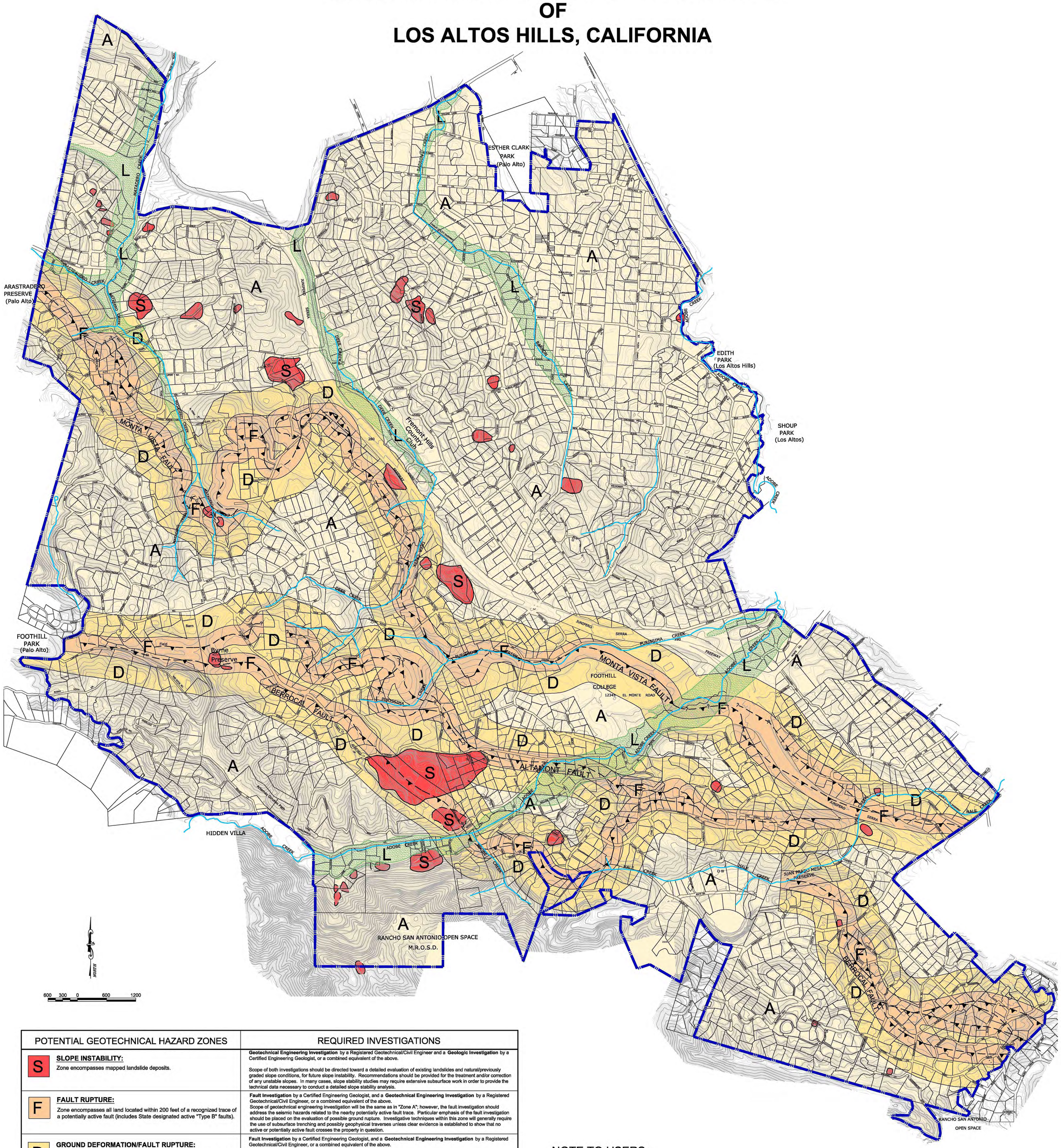
GEOTECHNICAL AND SEISMIC HAZARD ZONES
OF
LOS ALTOS HILLS, CALIFORNIA



POTENTIAL GEOTECHNICAL HAZARD ZONES	REQUIRED INVESTIGATIONS
S — **SLOPE INSTABILITY:** Zone encompasses mapped landslide deposits.	**Geotechnical Engineering Investigation** by a Registered Geotechnical/Civil Engineer and a **Geologic Investigation** by a Certified Engineering Geologist, or a combined equivalent of the above. Scope of both investigations should be directed toward a detailed evaluation of existing landslides and natural/previously graded slope conditions, for future slope instability. Recommendations should be provided for the treatment and/or correction of any unstable slopes. In many cases, slope stability studies may require extensive subsurface work in order to provide the technical data necessary to conduct a detailed slope stability analysis.
F — **FAULT RUPTURE:** Zone encompasses all land located within 200 feet of a recognized trace of a potentially active fault (includes State designated active "Type B" faults).	**Fault Investigation** by a Certified Engineering Geologist, and a **Geotechnical Engineering Investigation** by a Registered Geotechnical/Civil Engineer, or a combined equivalent of the above. Scope of geotechnical engineering investigation will be the same as in "Zone A"; however, the fault investigation should address the seismic hazards related to the nearby potentially active fault trace. Particular emphasis of the fault investigation should be placed on the evaluation of possible ground rupture. Investigative techniques within this zone will generally require the use of subsurface trenching and possibly geophysical traverses unless clear evidence is established to show that no active or potentially active fault crosses the property in question.
D — **GROUND DEFORMATION/FAULT RUPTURE:** Zone encompasses all land located within 660 feet of a recognized trace of a potentially active fault (includes State designated active "Type B" faults). The 660 foot distance has been selected from the dimensions prescribed by the State of California in compliance with the requirements of the Alquist-Priolo Special Studies Zones Act of 1972 (Chapter 7.5, Division 2, California Public Resources Code).	**Fault Investigation** by a Certified Engineering Geologist, and a **Geotechnical Engineering Investigation** by a Registered Geotechnical/Civil Engineer, or a combined equivalent of the above. Scope of geotechnical engineering investigation will be the same as in "Zone A"; however, the fault investigation should address the seismic hazards related to the nearby trace of the potentially active fault trace. Exploratory trenching is not necessarily required in this zone; however, local geologic conditions may warrant such levels of investigation in order to properly establish the level of risk associated with the potential seismic hazards. Potential seismic hazards in this area include: Ground shaking, ground rupture, ground failure (settlement and landsliding) and localized ground cracking and warping.
L — **LIQUEFACTION:** Zone encompasses valley floor terrain mapped by the California Geological Survey as prone to potential liquefaction and subject to settlement, lateral spreading or sand boils in response to seismic ground shaking. Hazard boundaries are dotted where the zone may not be accurate based on improved Town topography resolution.	**Liquefaction Investigation** by a Geotechnical Consultant and a **Geotechnical Engineering Investigation** by a Registered Geotechnical/Civil Engineer, or a combined equivalent of the above for proposed living structures. Detailed liquefaction investigation procedures are outlined in State Special Publication 117 prepared by the California Geological Survey (Revised September 2008) and associated implementation guidelines. Typically, appropriate subsurface data must be collected by advancing exploratory borings through the entire interval of potentially liquefiable earth materials (up to a maximum of 50 feet in depth). Basic components of a geotechnical engineering investigation are outlined below.
A — **STANDARD CONSTRAINTS:** Zone encompasses all hillside terrain and flatland regions that are not included in the areas described above (S,F, D and L).	**Geotechnical Engineering Investigation** by a Registered Geotechnical/Civil Engineer, and in hillside terrain where potential slope instability hazards are present, a **Geologic Investigation** by a Certified Engineering Geologist, or a combined equivalent of the above. Scope of investigation should be directed toward a detailed evaluation of site earth material conditions and providing geotechnical design criteria for project improvements and the treatment of any unstable slopes if present. Scope of investigation should include site-specific subsurface exploration, and determination of appropriate earth material engineering index properties. Slope stability studies may require extensive subsurface work in order to provide the technical data necessary to conduct a detailed slope stability analysis.

NOTE TO USERS:

This map is derived from the data presented on the Geologic Map of Los Altos Hills and divides the Town into four zones on the basis of similar conditions of soil, geology, and topography. Consequently, the terrain within each individual area is considered to have similar potentials and constraints for residential development.

All boundaries between zones are located approximately. Topographic base map prepared by Cartwright Aerial Survey dated April 2001. Depicted topographic contour lines are at five feet vertical intervals. Information on this map is NOT sufficient to serve as a substitute for detailed, site-specific geologic and geotechnical investigations necessary for construction purposes. The map includes modifications to reflect the results of unpublished, site-specific fault investigations submitted to Cotton, Shires and Associates prior to July 2004.

Los Altos Hills and Cotton, Shires and Associates, Inc. make no representation of warranties regarding the accuracy of the data from which this map was derived. Depicted Town boundaries are approximate and based on preliminary information. Absence of appropriate symbols (i.e., landslides, faults, etc.) from any part of this map may not be used to prove the absence of these features.

COTTON, SHIRES & ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

GEOTECHNICAL AND SEISMIC HAZARD ZONES

LOS ALTOS HILLS, CALIFORNIA

GEO/ENG BY	SCALE	PROJECT NO.
TS	1" = 600'	G0104A
REVISION DATE	DATE	PLATE NO.
MARCH 2009	DECEMBER 2004	1 OF 1