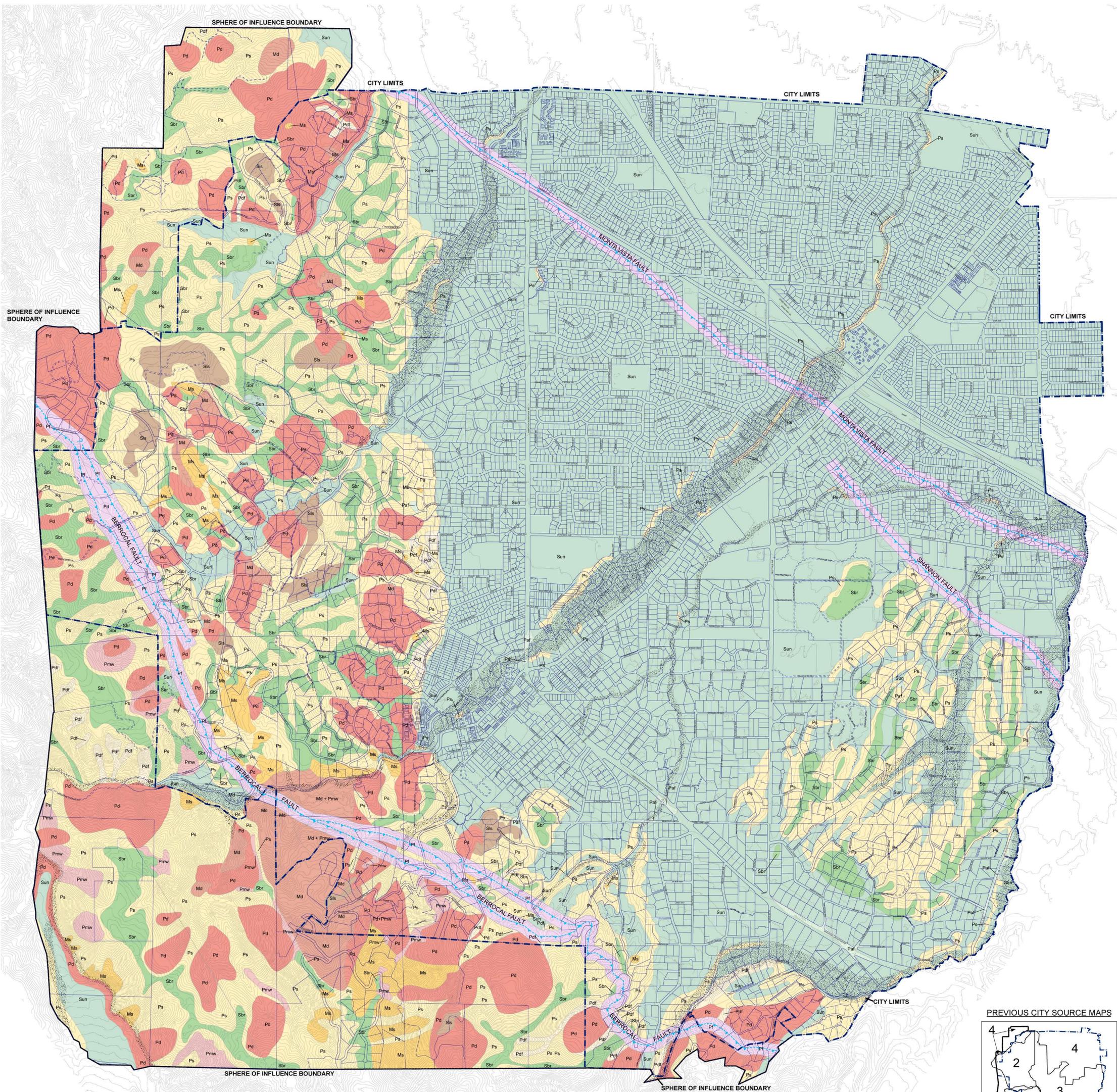
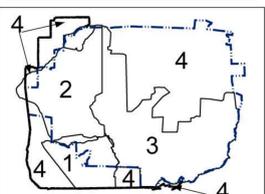


GROUND MOVEMENT POTENTIAL MAP

CITY OF SARATOGA, CALIFORNIA



PREVIOUS CITY SOURCE MAPS



- 1: Congress Springs Study Area
William Cotton and Associates (1977)
- 2: Upper Calabasas Creek Watershed
William Cotton and Associates (1980)
- 3: Lower Saratoga Hillside Area
Terratech (1985)
- 4: Saratoga Map Update Areas
Cotton, Shires and Associates, Inc. (2013)

EXPLANATION

Relatively Stable Ground	Areas with Potential for Primary Fault Rupture
Sbr Level ground to moderately steep slopes underlain by bedrock within approximately three feet of the ground surface or less; relatively thin soil mantle may be subject to shallow landsliding, settlement, and soil creep	Pf Zone of potential primary surface fault rupture
Sun Unconsolidated granular material (alluvium, slope wash, and thick soil) on level ground and gentle slopes; subject to settlement and soil creep; liquefaction possible at valley floor sites during strong earthquakes	FA Potentially active fault traces
Sls Naturally stabilized ancient landslide debris on gentle to moderately steep slopes; subject to settlement and soil creep	U Unstable Ground Characterized by Seasonally Active Downslope Movement
PMW Steep to very steep slopes generally underlain by weathered and fractured bedrock subject to mass-wasting by rockfall, slumping, and raveling	Ms Moving shallow landslides, commonly less than 10 feet in thickness
PAF Areas of artificial fill materials subject to localized settlement and/or potential landsliding on moderately steep to steep ground and where placement may not have met engineering specifications	Md Moving deep landslides, commonly more than 10 feet in thickness
Ps Unstable, unconsolidated material, commonly less than 10 feet in thickness, on gentle to moderately steep slopes subject to shallow landsliding, slumping, settlement, and soil creep	
LHZ Liquefaction hazard zones as mapped by the California Geological Survey depicted by stipple	
Pd Unstable, unconsolidated material, commonly more than 10 feet in thickness, on moderate to steep slopes; subject to deep landsliding	
Pdf Debris flows (shallow, rapidly moving landslides) including recognized source areas and flow paths. Depositional runout areas may not be fully depicted	

NOTE TO USERS:

This is an interpretive map derived both from the Geologic Maps of the City of Saratoga and from additional field observations and geologic experience in the Saratoga region. All boundaries between zones are located approximately. Information on this map is NOT sufficient to serve as a substitute for detailed, site-specific geologic and geotechnical investigations necessary for construction. Mapping illustrates the relative stability or movement potential, in the Saratoga area, of ground in its natural undisturbed state. Works of man may seriously alter the natural stability of the ground.

This map is an update and expansion of the Initial Movement Potential of Undisturbed Ground Maps prepared by Terratech (1985), William Cotton and Associates, Inc. (1977), and William Cotton and Associates, Inc. (1980). Alignment of the Berrocal Fault reflects results of site specific fault investigations submitted to the City and cracking of ground observed after the Loma Prieta Earthquake (1989). Alignments of the Mont Vista and Shannon Faults reflect consideration of mapping by Rogers and Williams (1974) and Herd (1980) and Bedrossian (1980a).

City limits and parcels are approximate and should not be used to determine property boundaries or relied upon for topographic purposes. Approximations of road alignments are indicated as dashed lines and were added to the City Parcels and Street base layer (2005) for illustrative purposes. The map utilizes a 2006 topographic base map with depicted contour intervals of 20 feet.



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

GROUND MOVEMENT POTENTIAL MAP

City of Saratoga, California

GEO/ENG BY JN/PJ	SCALE AS SHOWN	PROJECT NO. G5042
APPROVED BY TS	DATE APRIL 2013	PLATE NO. 1 of 1