GROUND MOVEMENT POTENTIAL MAP Town of Portola Valley, California Sbr **EXPLANATION Relatively Stable Ground** 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. Unconsolidated granular material (alluvium, slope wash, and thick soil) on level ground and gentle slopes; subject to Sun settlement and soil creep; liquefaction possible at valley floor sites during strong earthquakes. Naturally stabilized ancient landslide debris on gentle to moderate slopes; subject to settlement and soil creep. Generally highly expansive, clay-rich soils and bedrock. Subject to seasonal shrink-swell, rapid soil creep, and Sex settlement. May include areas of non-expansive material. Expansive soils may also occur within other map untis. NOTE TO USERS: **Areas with Significant Potential for Downslope Movement** Steep to very steep slopes generally underlain by weathered This is an interpretive map derived both from the Geologic Pmw and fractured bedrock subject to mass-wasting by rockfall, Map of the Town of Portola Valley and from additional field slumping, and raveling. observations and geologic experience in the Portola Valley Unstable, unconsolidated material, commonly less than 10 feet region. All boundaries between zones are located Ps in thickness, on gentle to moderately steep slopes subject to shallow landsliding, slumping, settlement, and soil creep. approximately. Information on this map is NOT sufficient to serve as a substitute for detailed, site-specific geologic Unstable, unconsolidated material, commonly more than and geotechnical investigations necessary for 10 feet in thickness, on moderate to steep slopes; construction. It illustrates the relative stability or subject to deep landsliding. movement potential, in the Portola Valley area, of ground in its natural undisturbed state. Works of man may seriously Debris flows, (shallow, rapidly moving landlsides) including a;ter the natural stability of ground. Potential impacts recognized source areas, flow paths and depostional runout of graded cut and fill slope are not addressed movement MAP SYMBOLS potential interpretations. COTTON, SHIRES AND ASSOCIATES, INC. CONSULTING ENGINEERS AND GEOLOGISTS **Areas with Potential for Primary Ground Rupture from Active Faults** Traces of the San Andreas fault, dashed This map is an update of the initial Movement Potential of where approximate. En-echelon rupture Undisturbed Ground Map prepared by J.D. Rodine (1975) behavior depicted by series of diagonal Zone of potential primary surface rupture. revised by William Cotton and Associates, Inc. (1984), and slashes. GROUND MOVEMENT POTENTIAL MAP revised by Cotton, Shires and Associates, Inc. (2010). Fault (other than San Andreas) of Town of Portola Valley For additional information about this map and the Geologic undetermined activity, dashed where _ 🔺 ? _ 🔺 ? _ 🛧 ÷ _ _ _ _ _ Unstable Ground Characterized by Seasonally Active Downslope Movement San Mateo County, Calfornia Map of the Town of Portola Valley, see: Geology and approximate, dotted where concealed, barbs • • • • • • • • • • • • • • and Movement Potential within the Town of Portola Valley, are located on upthrown Moving shallow landslides, commonly less than 10 feet in SCALE PROJECT NO. **GEO/ENG BY** side of fault. California, February 1975, by J.D. Rodine thickness. 1"= 500' G0088 **Inactive Fault** Please see Town website at www.portolavalley.net for

1906 Ground Cracks

gc

Moving deep landslides, commonly more than 10 feet in

thickness.

latest map revisions.

APPROVED BY

JW

SHEET NO.

1 OF 1

DATE

JUNE 2017