



1.0 FINDINGS

As per the Standards governing this evaluation, PML is a user-defined term. A 475-year return period was used to identify expected ground shaking at the property. In accordance with client-determined protocols, the PML has been defined as the Scenario Expected Loss in the event of ground shaking with a 10% chance of exceedance in 50 years, the Design Basis Earthquake.

PML (SEL)	9%
Seismic Zone (UBC 1997)	Zone 4
Alquist Priolo Special Study Zone	No
Nearest Fault:	Chino-Central Ave (Elsinore)
Return Period:	475
Magnitude (Richter):	6.7
Distance to Site:	1.2 miles
Local Intensity (MMI ¹):	X
Peak Ground Acceleration (pga):	Average pga: 0.39 (g)
Damage Ratio:	$d = 0.001(b m) a^{0.630}$
Scenario Expected Loss (PML50)	\$
b = 0.24; ms = 1.25	

¹ MMI refers to the Modified Mercalli Scale, a commonly accepted method of characterizing ground shaking intensity. A copy of the MMI scale is provided in the appendix.

2.0 INTRODUCTION

National Due Diligence Services (NDDS), a division of American Surveying & Mapping, Inc. (ASM) was engaged to provide a Probable Maximum Loss (PML) assessment of the Office Building located at 1234 Due Diligence Lane, Any City, Any State 12345 (Property).

Site reconnaissance was conducted at the property by Mike Stewart, NDDS Project Manager on June 26, 2013. This work was performed in accordance with ASTM Standard E2026-07 Standard Guide for the Estimation of Building Damageability in Earthquakes. This report was prepared and written by Peter D. Chang, S.E. and reviewed by Gregory A. Tan Vice President of NDDS.

Purpose

This assessment is intended to provide an evaluation of potential damage to the identified structures to facilitate consideration of related risks by the client. The assessment is a statistical study which is not intended to conclusively determine the maximum possible ground shaking or damage which may occur at the property.

Scope of Work

An assessment of Scenario Expected Loss (SEL) was conducted in accordance with ASTM E2026-07¹ and ASTM E2557-07², the PML Standards. The assessment is based upon site reconnaissance conducted by

¹ ASTM E2026-07, Standard Guide for Seismic Risk Assessment of Buildings, Approved May 1, 2007.

² ASTM E2557-07, Standard Practice for Probable Maximum Loss (PML) Evaluations for Earthquake Due-Diligence Assessments, Approved May 1, 2007.

