

## Revision Log for Seismic Design of ERS

Implementation Date: January 2026

- To align with the updated *Geotechnical Design Reports* and *Foundation Reports* modules, the Reporting section was updated to include:
  - Reporting specifics for the Recommendations section of the PGDR, GDR, PFR, and FR.
- Editorial updates to the Investigations section to achieve consistency among all design modules.

Implementation Date: May 2023

- Standard Plan Retaining Wall section revised.
- Fault Rupture section revised to refer to the Fault Rupture module.

Implementation Date: January 2021

- Updated references and appropriate sections to reflect the latest ARS online tool (v.30) and 2017 AASHTO and accompanying CA amendment.
- Changed from a seismic displacement of 7 inches (for kh of 1/3 HPGA) to a mean seismic displacement of about 4 inches (for kh of 1/3 HPGA) per 2020 Structure Technical Policy (STP) 11.29.
- Added “Standard Plans ERS” section to provide a guidance for the standard walls with a HPGA of greater than 0.6 g
- Revised “Seismic Permanent Displacement” section to provide separate equations for  $T_s < 0.05$  second and  $T_s \geq 0.05$  second per Bray et al. (2010) and Bray and Travarasrou (2009).

Implementation Date: January 2020

- First Version