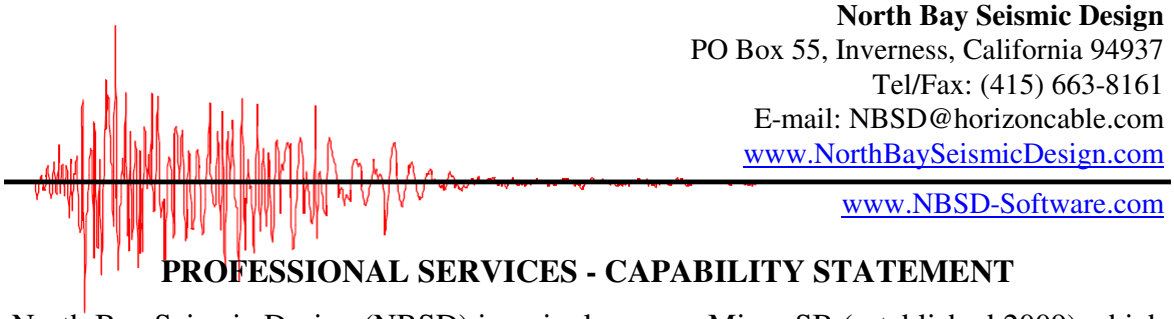
North Bay Seismic Design
PO Box 55, Inverness, California 94937
Tel/Fax: (415) 663-8161
E-mail: NBSD@horizoncable.com
www.NorthBaySeismicDesign.com
www.NBSD-Software.com



PROFESSIONAL SERVICES - CAPABILITY STATEMENT

North Bay Seismic Design (NBSD) is a single person Micro SB (established 2009) which works on analysis and design of bridge and building structures in earthquake regions (or the software tools to do the work), and provides the following professional services:

- Evaluation and retrofit of existing **Building** or **Bridge** structures.
- Design of new **Building** or **Bridge** structures.
- Design of **Earth Retaining Systems**.
- Implementation of Capacity Based Design methodologies as adopted into design criteria (Caltrans, BART, IBC, ASCE, AISC, etc) into construction documents.
- Reliable analytical evaluation of structural systems as required (soil structure interaction, system deformations, etc) to determine seismic behavior and response.
- Independent verification/ Peer Review of design/retrofit construction documents.

Sample Projects:

- *1914 Labor Council Union Hall, 2940 16th Street, San Francisco (Redstone Bldg)*: Performed retrofit (analysis, design, detailing, drawings) of exterior 2' thick URM brick walls facing two streets, doweled to new 8" perforated interior full height ductile RC Shear Walls in existing 4-5 story steel frame historic building (2022).
- *Misc Soft Story Retrofits:* Performed analysis and design of nearly 100 3-4 story buildings (Tiers 1,2, 3) with ground level soft stories in San Francisco (2015-2023).
- *Doyle Drive Replacement*: Worked on the Independent Check of 1,200' of retaining walls of various heights, supported by closely spaced CIDH piles and various tieback arrangements, immediately adjacent to US 101 between two tunnel segments leading to the Golden Gate Bridge (2009).
- *Berryessa BART Station:* Project engineer (as employee) for the design of elevated concrete Guideway (bridge) and separate isolated two-story steel frame Station building (2 separate phases). Developed elastic analysis finite element models and performed lateral load analysis and member sizing/selection; helped assemble construction drawings for project (2006).

North Bay Seismic Design has the following **Certifications**:

- BART Micro Small Business Entity, Certification No. 1040
- State of California Micro Small Business, Certification No. 1263640

UNSPSC Codes:

81101505 Professional Engineering Services – Civil Engineering – Structural Engineering
81102502 Professional Engineering Services – Building consent and permit engineering review
72101500 Building Facility Maintenance and Repair Services

Key Words :

Structural, Bridge, Building, Earthquake, Seismic, Evaluation, Analysis, Retrofit, New Design, Steel, Concrete, Timber, Lateral, Force, Resisting, System, LFRS, Footings, Foundations, Walls, Shear Walls, Columns, Beams, Calculations, Drawings, Details.