D.H. CHARLES ENGINEERING, INC.

707.537.8282  |  www.Charlesengineering.Com

PE LICENSED IN ALL 50 STATES & VARIOUS CANADIAN PROVINCES

FALSEWORK, FORMWORK & RESHORE DESIGN

BRIDGE FALSEWORK
BUILDING FALSEWORK
MULTI-STORY RESHORE
FORMWORK DESIGN
WALL BRACING SYSTEMS

SITE INSPECTIONS
OVERHAND BRACKETS
SCAFFOLD DESIGN
REBAR CAGE STABILIZATION
OVERHEAD PROTECTION

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D.H. Charles Engineering, Inc.
is a civil/structural engineering firm specializing in providing construction engineering services to contractors throughout the United States and Canada. The firm, which was founded in 1992, is owned and managed by Jasper Calcara, P.E., who has design, consulting, and field inspection experience on thousands of projects since 1998.

We are distinguished from other engineering firms by the following:

- A professional and experienced staff of eleven engineers ensures projects are prepared efficiently and accurately by qualified personnel.
- PE stamp in all 50 states, Washington D.C., Ontario, Alberta, British Columbia, Manitoba, Saskatchewan, Newfoundland and Labrador.
- Focus on innovative solutions and problem solving, by relying on vast design experience and knowledge of state-of-the-art technologies.
- Dedicated to providing immediate and emergency response, with many critical designs turned around the same day.
- A one-stop-shop, offering a wide range of construction engineering services to satisfy all of our clients’ needs on even the largest projects.
- Services specifically tailored to satisfy clients in all time zones using electronic submittals, flexible hours, and prompt response to all inquiries.
- Onsite inspection, certification, coordination, and data collection services available.

More Project Photos and Details Online.

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Engineering Services Provided:

**Bridge Falsework**
- CIP Box Girder Bridges & Overpasses
- Mat Slab Bridges
- Traffic & Railroad Openings
- Timber, Steel, Scaffold & Custom Falsework Systems
- Inspection Services

**Building Falsework**
- Multi-floor Slab & Beam Falsework
- Timber & Steel Falsework Systems
- Scaffold & Proprietary Falsework Systems
- Climbing Form & FW Systems
- Wall, Column, Slab & Beam Formwork Design

**Building Reshoring**
- Multi-Story Buildings with Concrete Slabs
- Parking Garages
- Structural Evaluation of Concrete Structure

**Formwork Systems**
- Walls, Columns, Slabs, & Beams
- Timber Forms with Snap Ties
- Proprietary Formwork Systems
- Wind Bracing Designs

**Rebar Cage Support & Templates**
- Cable & Rigid Bracing Systems
- Custom Fabrication & Support Templates
- Rigging & Lifting Plans

**Structural Shoring**
- Scaffold Supports for Building Retrofit
- Emergency Support Systems for Structural Damage
- Wall Bracing & Lateral Load Supports

**Bridge Jacking/Transport**
- Custom Support Tower/Foundation Designs
- Scaffold Support Systems
- Hydraulic Jacking Schemes
- Transport Systems for Staged Demo/Construction

**Structural Evaluation**
- Highway Bridge Analysis
- Building Analysis & Retrofit Design
- Historic Structure Assessment
NOTABLE PROJECTS:

McCarran Airport Terminal 3 – Las Vegas, NV
Prepared bridge falsework design plan and calculation submittals for 20 cast-in-place concrete box girder bridge overpasses. Overpasses connected the new terminal to the new multi-story parking garage and the existing airport. DHC engineers provided on-site pre-pour inspections for each bridge during the construction process.

The Bravern – Bellevue, WA
Worked diligently with general contractor and subcontractors during the construction of the multi-use development to provide various engineering services. Engineering highlights included synchronized falsework and reshoring operations to allow for maximizing efficiency while floor slabs were poured for the main structure and high-rise towers.

WR Sage West – Houston, TX
Prepared reshore design plan and calculation submittals for a 22-story cast-in-place and post-tensioned concrete structure. Reshore was designed to correspond with falsework supporting the concrete pour of each elevated post-tensioned slab level and optimized for efficient use of reshore equipment.