



C A L I F O R N I A

COLLINS
ENGINEERS INC.



Since 1996, Collins has provided underwater inspection and assessment services of over 200 bridge structures for the Washington State Department of Transportation. Most recently, the bridges inspected have included multi-span structures with up to 15 spans, as well as floating bridges. Inspection efforts have included diving to water depths of up to 145 feet, and the use of ROVs with real time video documentation at greater water depths.



In 2004 and 2005, under separate contracts, Collins was retained by the Idaho Transportation Department to perform field inspections on over 1,000 sign and signal structures located throughout Districts 1, 2, and 3 in the state of Idaho. The different types of structures inspected include sign bridges, cantilever signs, bridge mounted structures, cable spans and signal mast arms.



Collins' California office was responsible for the design of a welded wire retaining wall to replace a failed timber wall in Telluride, Colorado for San Miguel County. The structure measured 24 feet high at its maximum.

COLLINS ENGINEERS, INC. AUBURN, CALIFORNIA

Collins Engineers, Inc. is a structural engineering firm providing design and analysis services to the transportation, marine, and construction industries. Collins' Auburn, California office has extensive experience in earth retention structures for the transportation and mining industries. We bring to the table a unique blend of professional engineering services coupled with hands-on experience gained in the field.

Throughout the years, Collins' insistence on gaining firsthand knowledge through site inspections, both above and below water, has provided unique insights into the needs of the nation's aging infrastructure, authoring operations manuals and assisting in the implementation of industry protocol. Continually on the leading edge of standards and methodology, Collins provides engineering ingenuity and solutions to complex problems, and realistic, honest answers.

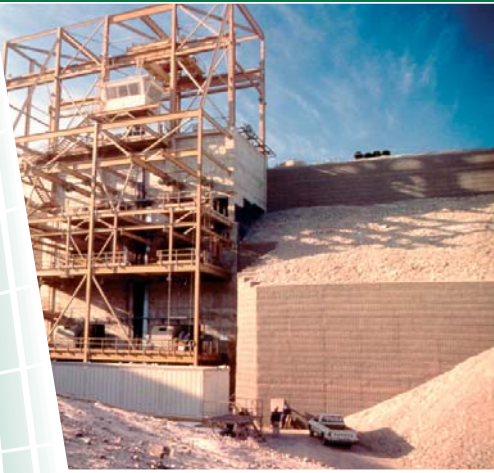
Collins is proud of the quality of work we produce and believe our high percentage of repeat clients attests to the caliber of our project staff.

UNDERWATER ENGINEERING

Collins pioneered the use of engineer-divers in the evaluation of underwater structures. National and local facility owners appreciate the valuable knowledge gained by the hands-on assessments of Collins' engineer-divers. Today, underwater structural evaluations performed by engineer-divers are the preferred method of ensuring the integrity of underwater structures. Since 1979, Collins has performed over 10,000 underwater facility evaluations, which have also included design of repairs or replacements. Collins is currently under contract with Caltrans to perform underwater inspections of bridges throughout California.

STRUCTURAL ENGINEERING

Collins' team of registered Professional Engineers includes veterans of such industry sectors as heavy manufacturing, maritime, railroad and transit, consulting, and construction. These diverse qualifications provide Collins with the flexibility to tackle small and unusual assignments, as well as mainstream structural design projects. Collins' engineers are active participants in local, national, and international technical organizations and are registered engineers in 43 states, as well as Canada and Ireland.



Collins' California office was responsible for the design of a welded wire retaining wall at the Santa Barbara Mine in Antofagasta, Chile, South America. The structure measured 74 feet high at its maximum.



Collins, as a subconsultant to DMJM Harris, provided above and underwater structural inspection and assessment services at Shell's waterfront facility at the Port of Los Angeles. The inspection, performed in accordance with MOTEMS guidelines, was accomplished with a team of four inspectors/divers. Level I, II, and III inspections were conducted to provide an overall condition assessment of the structures, including coring of the timber piles to evaluate the potential deterioration caused by internal marine borers.



Collins was retained to design a transition detail for a tower crane to be used in the construction of a condominium complex in downtown Los Angeles. The design included steel plate compression and tension checks, bolt and weld design.

EARTH RETENTION STRUCTURES - TRANSPORTATION & MINING

Collins offers extensive experience in the design of earth retaining structures having completed design of more than 3,000 retaining walls with an approximate surface area of 2,000,000 square feet and wall heights ranging from 4 feet to 106 feet. We have provided our services for numerous Departments of Transportation, building developers, contractors, mines, and other industrial uses throughout the United States, Canada, Mexico, and South America. We also have completed projects in Indonesia, Russia and Africa.

Applications have included support of light rail, commercial development, and highway embankments, truck dumps supporting 500-ton trucks, bridge abutments, and slide repairs, as well as all types of temporary excavation support systems.

Collins understands the need for practical, custom answers to our clients' unique problems; we 'custom fit' solutions.

WATERFRONT FACILITIES

Collins' staff of civil and structural engineers have developed experience worldwide in waterfront facility inspection, construction support, analysis, design and rehabilitation, working in both private facilities and military installations. Collins delivers a cost-effective match of structural engineering, site development and underwater / coastal inspection expertise on diverse projects ranging from planning and site investigation to design and construction inspection. Diverse qualifications and an awareness of special client needs allow Collins the flexibility to tackle small and unusual assignments and site work, as well as large structural design projects. We can even assist in the development of maintenance guidelines for facilities. Collins performed a marine oil terminal audit as a case study upon which the new Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) are based.

COLLINS ENGINEERS INC.

Collins Engineers, Inc. is an ENR Top 500 Design Firm providing design and analysis services to the transportation, marine, and construction industries.

Founded in Chicago in 1979, Collins pioneered the use of engineer-divers in the evaluation of underwater structures. At the time, such a service was rare. As years passed, national and local facility owners began to appreciate the valuable knowledge gained by the hands-on assessments of Collins' engineer-divers.

Today, underwater structural evaluations performed by engineer-divers are the preferred method of ensuring the integrity of underwater structures.

Throughout the years, Collins' insistence on gaining firsthand knowledge through site inspections, both above and below water, has provided unique insights into the needs of the nation's aging infrastructure, and brought in-depth understanding when authoring professional publications and assisting in the implementation of industry protocol. Continually on the leading edge of standards and methodology, Collins provides engineering ingenuity and solutions to complex problems, and realistic, honest answers.



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