



bridge engineering

planning & funding assistance

feasibility & alternatives studies

load ratings & inspections

pedestrian bridges

retaining walls & culverts

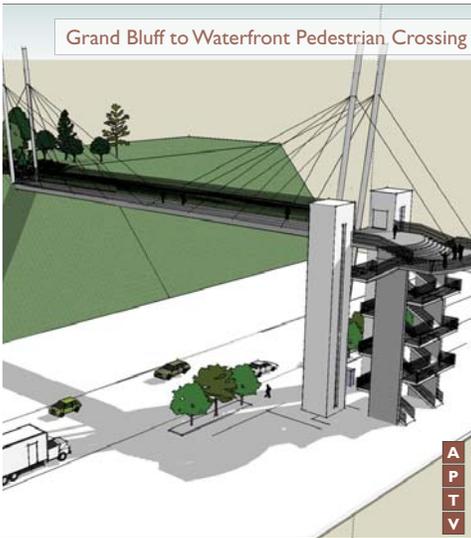
construction administration

bridge design

bridge rehabilitation & seismic retrofits



HanmiGlobal Partner



Grand Bluff to Waterfront Pedestrian Crossing

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PLANNING & FUNDING ASSISTANCE

All successful projects begin with solid planning and appropriate funding. Otak understands public and private needs, and we take an interdisciplinary approach to turning initial project needs into viable project options to realize our clients' goals. Our staff has a thorough understanding of federal and state funding processes and understands how to effectively assist clients with navigating these sometimes tedious processes.



McAndrews Road Bridge - Visualization

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FEASIBILITY & ALTERNATIVES STUDIES

Quality bridge design integrates the needs of the traveling public with the natural environment and contributes to the overall value of a community. Otak's engineers combine strong technical skills with context-sensitive training to consistently provide timely, innovative, and cost-effective engineering solutions.



London Road Bridges

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LOAD RATINGS & INSPECTIONS

As a part of a federal mandate to maintain and preserve bridges, all publicly accessible vehicle bridges must be routinely inspected and load rated in accordance with current Federal Highway Association and state guidelines. Otak has certified bridge inspectors on staff who have collectively performed bridge inspections and load ratings for hundreds of bridges throughout Oregon and Washington. We have evaluated many different types of bridges, including timber, reinforced concrete, prestressed concrete, concrete arch, steel girder and truss, timber truss, and complex cable-stayed.

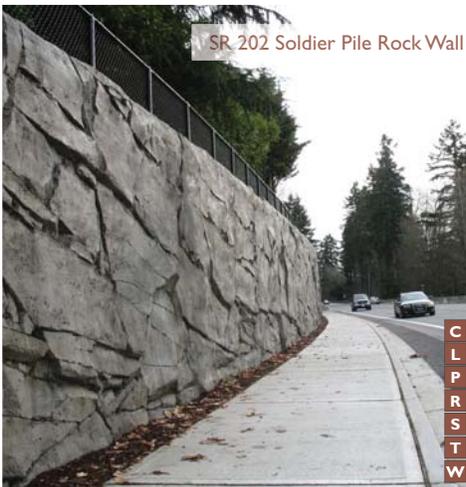


Spring Creek Pedestrian Bridge

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PEDESTRIAN BRIDGES

Otak's commitment to sustainable design is obvious in our work with pedestrian bridges. Many of these designs deal with context sensitivity issues within the community, as well as a desire for multimodal forms of transportation and natural resources conservation.

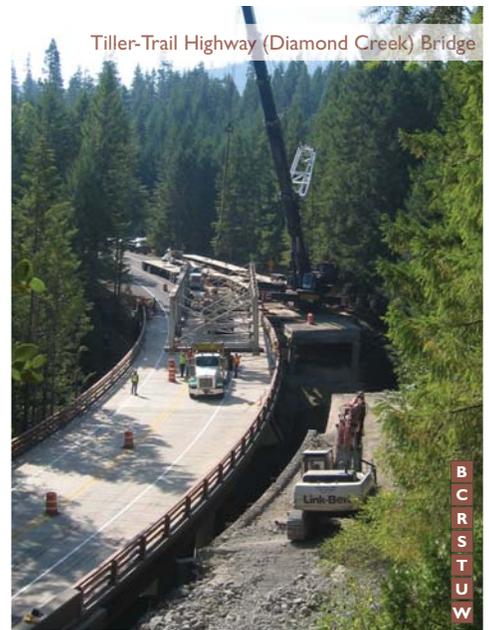


SR 202 Soldier Pile Rock Wall

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RETAINING WALLS & CULVERTS

Otak has extensive experience with designing a variety of wall types for retaining walls, which helps minimize environmental and land use impacts while maximizing cost-effectiveness and constructability. We work with our clients to achieve the desired balance. Some of the wall types we commonly use include reinforced concrete, structural earth, soldier pile, tie-back, spaced/tangent/secant pile, soil nail, bio-engineered, rockery, and sound walls.



Tiller-Trail Highway (Diamond Creek) Bridge

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CONSTRUCTION ADMINISTRATION

Otak provides a full range of construction management, inspection, and engineering services to guide our clients' projects through completion. From small culverts to large highway interchanges, our construction staff has the skills and experience necessary to deliver quality projects on time and within budget.

“Otak’s commitment to teamwork enabled the entire design team to achieve a high level of cooperation and respond quickly to resolve issues as they develop.”

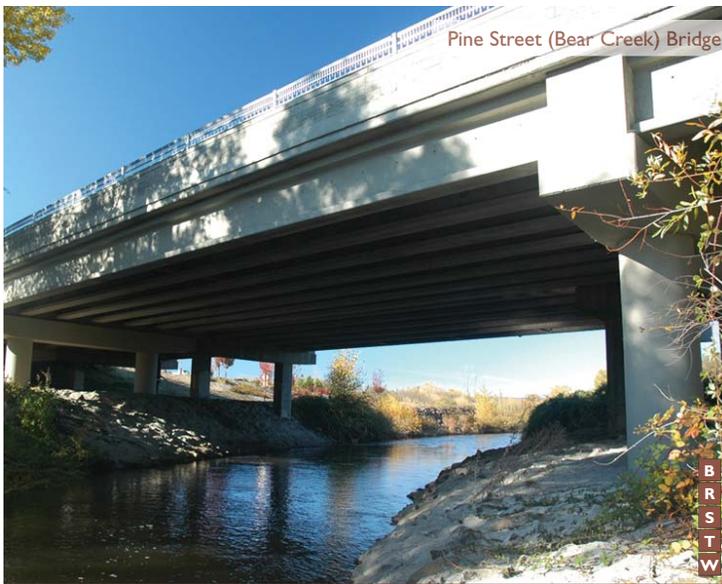
— Heather McLoren, ODOT Construction Project Manager

Bridging the Community

From planning, to design, to construction services, Otak is here to help clients achieve their transportation infrastructure project objectives. Our cost-effective, efficient, safe, and flexible solutions are tailored to the communities we and our clients serve.

Our commitment to serving the needs of clients and communities alike affords us an understanding of the technical, environmental, economic, and social demands of each project. Bridge engineering is not only important to current businesses, residents, and schools, but also to the future growth of the community and how well its transportation system can support that growth.

- A** Architecture
- B** **Bridge Design**
- C** Construction Management
- L** Landscape Architecture
- P** Public Involvement
- R** Roadway Design
- S** Surveying and Mapping
- T** Structural Engineering
- U** Utility Coordination
- V** Visualization
- W** Water and Natural Resources

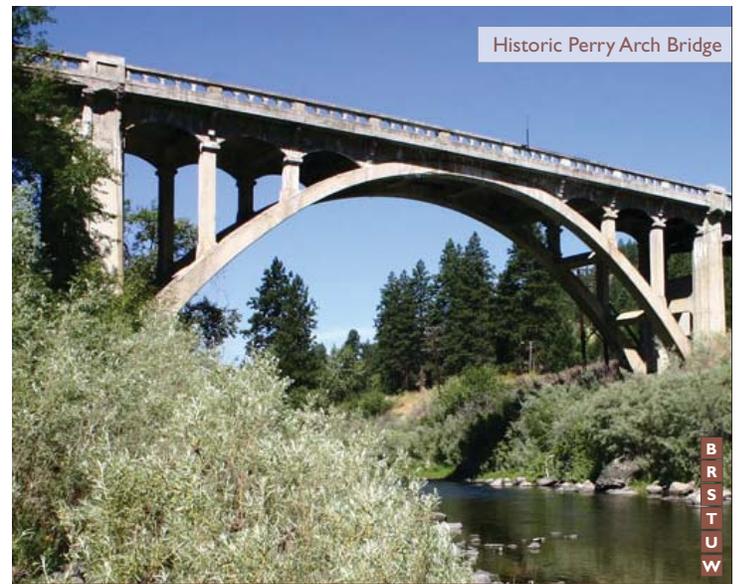


Pine Street (Bear Creek) Bridge

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BRIDGE DESIGN

Otak has built a strong reputation for leadership in bridge design over the decades. Our engineers have strong technical backgrounds and are dedicated to providing bridge designs that are cost-effective, accurate, and timely—and that cater to our clients’ needs. We have designed numerous bridges of varying types and configurations for the Oregon and Washington departments of transportation, in addition to local agencies and private developers.

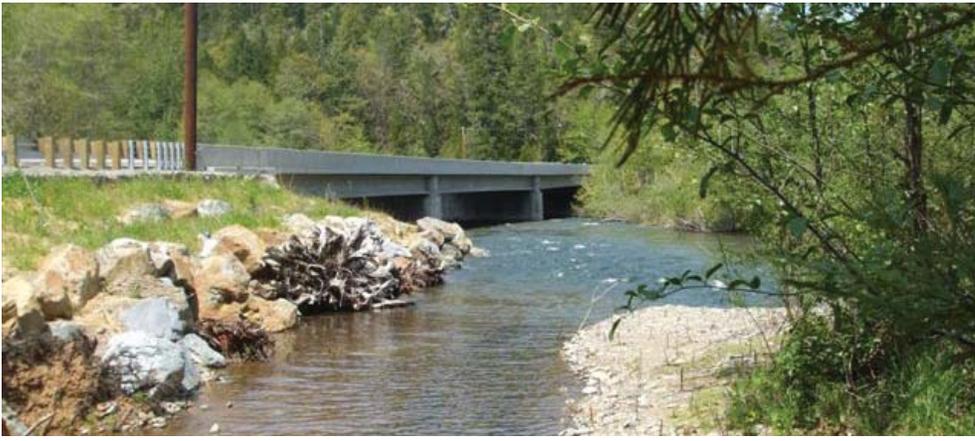


Historic Perry Arch Bridge

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BRIDGE REHABILITATION & SEISMIC RETROFITS

With limited transportation funds, agencies are forced to protect their investments by widening, strengthening, and rehabilitating existing bridges to last longer while safely meeting traffic volume and loading demands. Otak has extensive experience with bridge rehabilitation, which includes the following services: bridge widening, bridge rail retrofitting, substructure repair and retrofitting, seismic retrofitting, structural deck overlay, bridge strengthening, bridge conversion (rails to trails), deteriorated concrete reparation, bridge painting, and scour protection.



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- 1 Holland Loop Road (Sucker Creek) Bridge and Streambank Enhancement; Josephine County, Oregon
- 2 Crooked River Bridge; Prineville, Oregon
- 3 Swamp Creek Improvements; Kenmore, Washington
- 4 Stanton Boulevard Interchange; Malheur County, Oregon
- 5 Winnifred Street Bridge; Ruston, Washington



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