

Knik Arm Crossing

Essential
infrastructure
for Alaska

By MICHAEL L. FOSTER

Artist rendering courtesy of Knik Arm Bridge and Toll Authority

An artist rendering of a two-lane Knik Arm Crossing and approach from the west side of Cook Inlet looking toward Anchorage.

Alaska's infrastructure shapes our lives—from where we work to where we make our homes. Alaska's infrastructure supports our communities—allowing industry and business to flourish, providing a means of commerce, and a way home. Former U.S. Sen. Christopher Dodd said: "America's highways, roads, bridges, are an indispensable part of our lives. They link one end of our nation to the other. We use them each and every day, for every conceivable purpose."

Alaska's population is growing, but our infrastructure is not keeping pace. According to the U.S. Census Bureau, we are among the five fastest growing states in the nation. And the Alaska Department of Labor expects the area of the strongest growth to be the Anchorage and Mat-Su Borough region. However, despite our rapid growth, and more on the way, Alaska ranks 45 in the United States for public road miles. The Knik Arm Crossing will be an indispensable part of our lives—it is essential infrastructure that Alaskans need and it is ready to build.

Our design uses conventional construc-

tion methods—pipe pile substructure for the bridge piers utilizing a drilled shaft method. This type of foundation and technology is not new and, in fact, has been used in thousands of bridge projects locally, regionally and nationally.

Additionally, site conditions were considered and investigated. Extensive borings were taken along the bridge alignment to ensure that soil conditions can support the pipe pile foundation and bridge superstructure given the area's earthquakes, ice flows, tides and other aspects of the environment.

But what really sets the Knik Arm Crossing apart from other large public works projects in Alaska is the fact that the project is being delivered as a public-private partnership under a performance-based contract. The winning proposer will finance, design, build, operate and maintain the bridge for 35 years. And as a result, cost and schedule overruns will be the responsibility of the private partner. The private partner will maintain and operate the bridge to high contract standards. If it does not,

our availability payments to them will be reduced.

The Knik Arm Crossing will support Alaska's people and economy by creating a more efficient link between Anchorage and points north, lowering freight costs. The Crossing will improve access to land for commercial, industrial and residential development. It will also create a second northern link to and from Anchorage that can be used in emergencies and as an evacuation route. Quite simply, the bridge will shape our lives and become indispensable infrastructure for generations of Alaskans. To paraphrase Dodd: The bridge will be used every day for every conceivable purpose. ⚙



Michael L. Foster, Chairman of KABATA, has more than 30 years of engineering and construction experience in Alaska.