



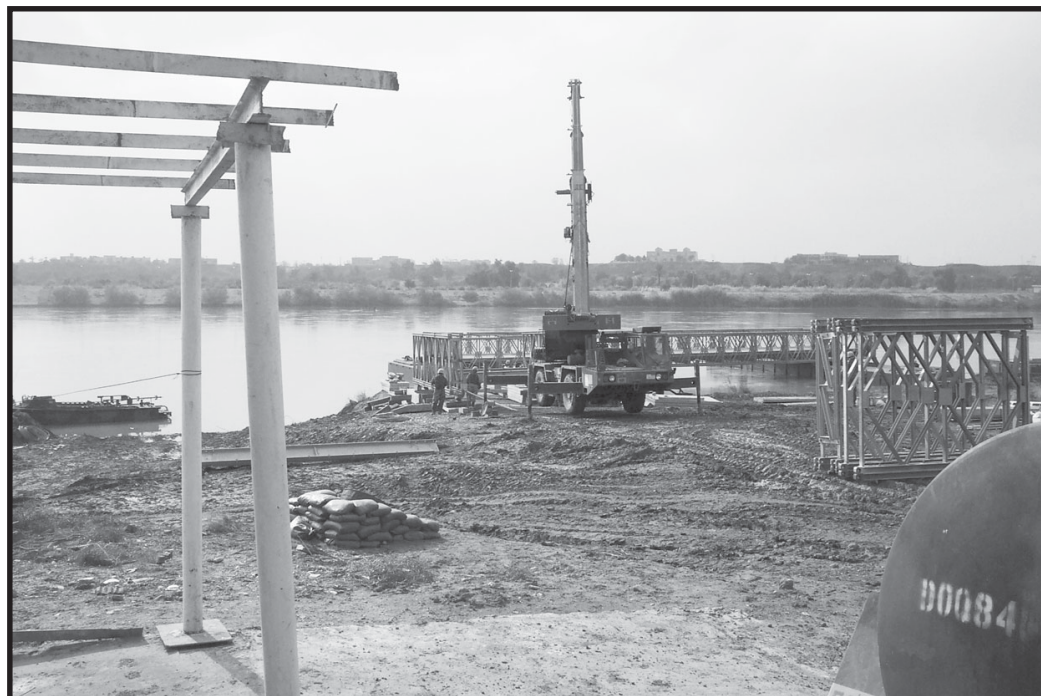
The Tikrit River Bridge

By First Sergeant Gary Fioretti

The Tikrit River Bridge project began on 13 October 2003. Another bridge across the Tigris River was needed to facilitate civilian traffic flow while the main bridge in Tikrit closed for reconstruction. Several engineer specialties worked closely on the project, each being responsible for a different role to complete the mission.

The task organization for the mission was made up of a platoon of combat engineers, a combat support equipment

(CSE) platoon, and a bridge platoon. Bravo Company, 5th Engineer Battalion, would provide security and work with the CSE platoon, from the 229th Engineer Company (CSE), to emplace force protection measures. The CSE platoon was to construct a 150-meter causeway with erosion control measures and assist with force protection. Bridge crewmen from the 74th Multirole Bridge Company would erect and launch a 350-meter double-single Mabey-Johnson float bridge.



Soldiers from the 74th Multirole Bridge Company use a crane from the 14th Engineer Battalion to install bays at the Mabey-Johnson bridge.



Hesco bastions topped with sandbags form a bunker and guard tower.


Force protection and security were the priorities for the sappers and the CSE platoon. The sappers hit the ground first from an assault float raft and immediately began to sweep, clear, and secure the land. Once security was established, the CSE platoon—with Class IV supplies—went to work immediately. The two elements worked together to emplace triple-standard concertina wire around the jobsite perimeter. The CSE platoon built earth berms around the area, as well as several equipment parks inside the perimeter, to protect equipment and personnel from small arms fire. Raised M-113 armored personnel carrier fighting positions, protected by berms around both sides and the front, were constructed for clear fields of fire above the earth walls. The last step of force protection for the platoon was to build mortar bunkers and Hesco® bastion guard towers.

Once force protection measures were completed, the causeway was built to facilitate the emplacement of the bridge. The causeway required more than 2,100 truckloads of fill, which was obtained within the perimeter. The fill was spread and compacted, and a 1-inch layer of soil stabilizer was emplaced and geotextile stretched from the headwall to the upstream side of the bank to control erosion. Concrete blocks were stacked atop each other with both layers folded slightly in between, and the roadway was lifted, graded, and compacted in preparation for asphalt that would be laid by Iraqi contractors. The nearshore preparation was contracted as well. The Iraqi scope of work included stripping away existing concrete from the levee wall and asphalt from the road. An excavator, loader, and compactor were used to create a slope to accommodate the end span of the bridge.

The bridge, which would accommodate traffic and remain in place for up to a year, was put together with cranes, forklifts,

and excavators. Piers were built by locking together 20- and 40-foot pontoons, on top of which were welded I-beams and winch trays for anchorage.

Bays were constructed in mass quantities to expedite the overall construction. Each bay consisted of four panels, a transom, vertical and sway braces, vertical and top brace frames, steel decking, and curbing. After each span was completed, it was pushed off the rollers and onto the floating pier or pontoon and bolted into place. Then bridge erection boats pushed the spans into place and bridge crewmen pinned each span junction together.

The Tikrit River Bridge was a joint effort. Iraqi contractors and locally hired civilians were an integral part of the project, with Iraqis contributing in several areas: asphalt, nearshore preparation, welding, road repair and widening, and even force protection. This project was a true representation of the U.S. Army helping Iraqis rebuild Iraq. 

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Photos by First Sergeant Gary Fioretti.

