Barricade Trailer

For more information:
Agency: Cherokee County Secondary Roads
Name: Kelly Puhrmann
Phone: 712.225.6712
Email: kpuhrmann@co.cherokee.ia.us

What was the challenge you set out to solve?

Cherokee County’s old barricade trailer was not meeting staff’s expectations when setting up closures for maintenance projects and flooding events. The old trailer’s design required two staff members to physically flip the barricades upside-down for transport and had limited space for the barricade legs, sandbags, fence posts, safety fencing and cones. This really slowed down the crews setting up and tearing down closures.

How did you develop and implement your solution?

A group of our staff members decided they wanted to have a trailer with hanging barricades (which they saw online) but with separate places to put barricade legs, fence posts, safety fencing and cones. Two of our top fabricators worked with the Road Superintendent and Sign Foreman on the layout of the trailer but no formal plans were ever used. Our fabricators built the trailer from scratch using a spare axle we had on hand and steel we had stocked in the shop.

What did it take to make this solution a reality?

Labor – Roughly 80 man-hours; Equipment – Basic shop equipment (welder, drill, grinder, etc.); Plans – Our fabricators worked with the Road Superintendent and Sign Foreman on what they wanted the trailer to look like; No formal plans were used to build the trailer; Materials – Used steel and a 7,000 lbs. axle we had on hand. We ordered lug nuts, tires, trailer hitch, light set, and fenders; The painting of the trailer was done by a local company. An itemized list is available from Iowa LTAP if needed.

What was the cost of implementation?

The total cost of this project was $9,492.

What was the impact and results of your efforts?

The new barricade trailer gives our staff better accessibility to the signage equipment when loaded on the trailer compared to our old one. This allows for a more efficient set up and tear down of closures. Efficiency is key when setting up closures for flood events to protect the traveling public on our roadways. Ergonomically, the design of the trailer is better for our staff due to the ease of loading and unloading signage equipment on and off of the trailer. The design of the trailer also allows for more equipment to be hauled at once (compared to our old trailer) and allows for all necessary equipment to be stored on the trailer at all times ready to set up a closure when needed.