What was the challenge you set out to solve?

Many times, riprap needs to be placed beneath bridges near the abutments or piers to prevent erosion. This is often very challenging due to clearance and slope issues. Sometimes benching of the slope is required which is both time consuming and disturbs stable vegetated areas.

The bucket extension allows for the placement of riprap beneath bridges from the top or deck portion of the bridge reducing time and additional slope disturbances.

How did you develop and implement your solution?

The Bridge Crew staff developed and fabricated the device out of a basic desire to improve a difficult process.

What did it take to make this solution a reality?

The bridge crew staff utilized a used section of heavy boilerplate pipe and fabricated it in their shop to fit the bucket of the CAT 323F Excavator.

What was the cost of implementation?

Less than $500

What was the impact and results of your efforts?

The end result is a very cost effective and efficient tool to use when placing riprap beneath existing bridges. This can be particularly useful and important after flood events.