# **RETRACTABLE TRUCK BED EXTENSION**

Scotts Bluff, Nebraska

### **Problem Statement:**

With limited truck bed length, delivering material to a job site was always a challenge. Delivering corrugated metal pipes which can be damaged with too much unsupported length being transported was also an issue. A longer bed could have been a solution but a short bed in many instances is more manageable on a day to day basis.

## **Discussion of Solution:**

Truck with an extendable flat bed Using existing flat bed, Scotts Bluff County built a retractable truck bed extension that will allow an additional four feet of support for over-length materials. When dumping materials the extension allows the material to be supported closer to the ground. The extension can then be slid back into the bed frame when not needed. Since the extension was built in the frame, the bed height was not altered.

## Labor, Equipment and Materials Used:

The extension was built in the County shop by Scotts Bluff County employees and took about fifty man hours to fabricate. Much of the material used was on hand. The extension will provide an extra four feet of support for over length materials. The rails that ride inside the existing frame are ." x 4 ."  $x 10^{\circ}$  cold rolled steel. The rails are held in place in the frame as shown in the photos with 3/16" in the middle of the frame and." gussets at the rear end of the frame. The tubes in the center are 1 ." o.d. square and 2" o.d. square mild steel. The function of the tubes is to help with the alignment and to provide a way to secure the extension in the open or closed position with the use of a 5/16" lynch pin. The end support was made of 3" x 6" x 6' heavy tubing. The end support sits on top of the rails to align with the bed of the truck. The end support has the ends closed with 3/16" steel and is attached to the rails with 3/16" gussets. A 1" diameter tube was welded between the rails to keep the rails from twisting in the open position.

## Savings & Benefits:

- \_Two bed lengths on one truck.
- When in use the extension will add four feet of additional bed length.
- Since the extension was built in the frame, the bed height was not altered