The rehabilitation of Berth 5 at Port Manatee in Palmetto Florida required a large trench drain system to remove surface water with minimal grades. The trench drain and grate would also need to meet the large hydraulic capacities required and withstand the heavy duty traffic.

A 24” wide cast-in-place trench drain was originally specified, but hydraulic calculations using ACO’s ‘Hydro’ software showed that equivalent hydraulic performance could be achieved using an 18” wide trench.

This narrower solution would result in lower grate costs and significantly lower labor cost due to less time, excavation and concrete required during installation.