# Heyworth Expansion Project

Client: Magellan Midstream Partners, LP

Location: Heyworth, IL Start Date: December 2015 Completion Date: November 2016

Magellan Midstream Partners wanted to relocate and upgrade ethanol offloading and install a third truck loading bay at their Heyworth Terminal in Illinois.

Resolute provided engineering and design for a third truck loading spot at the Heyworth facility. Resolute also provided engineering and design for a new ethanol offloading area with new skid and control building, and for tank pump replacements, refurbishments and control system upgrades for supply to the expanded loading rack.





### **RELATED SERVICES AND TASKS**

Engineering and design services: Civil and mechanical engineering, and E&I engineering

- Prepared civil, mechanical and electrical design drawings
- Expanded loading rack with additional four-arm loading bay
- Modified and upgraded control building to incorporate control system for new loading spot
- Modified and refurbished tank pumps and tank pump controls
- Relocated and upgraded ethanol offloading
- Expanded driveway for access to third loading bay
- Designed retaining wall to accommodate expansion of the driveway
- Prepared site for additional loading rack skid: concrete work, extended product lines, diking
- Additional site prep and concrete work for the ethanol facilities relocation and upgrade



## UNIQUE PROBLEMS / SOLUTIONS

The Resolute Engineering team provided engineering and design to expand the existing rack drive to accommodate a third spot. Required installing the third spot to match the existing spots and expanding the canopy and concrete drive and concrete retaining wall. Resolute relocated and upgraded ethanol offloading to allow the new rack exit. A new pump was installed on one of the tanks and an existing pump was positioned as backup. Work included adding a new tank pump and refurbishing three other tank pumps

that allowed for higher rates. Pump power wiring and control systems were modified and upgraded to accommodate the tank pump upgrades with existing switchgear.

When complete, Magellan put the third bay of their truck rack into operation and increased their loading capacity. Updates to tank pumps and tank pump controls also allowed for higher rates.



#### **Tulsa Office**

321 S. Boston Ave. Suite 300 Tulsa, OK 74103

#### **Denver Office**

999 18th Street Suite 3000 Denver, CO 80202

#### **Houston Office**

Pennzoil Place 700 Milam St, Ste 1300 Houston TX 77002

# **Calgary Office**

10 Floor Bankers Hall Wes 888 3rd Street South West Suite 1000 Calgary, Alberta T2P 5C5 403-861-6302

#### **North Dakota Office**

Kenmare, ND



(918) 505-7880

website@resolute-engineering.com