## NEWELL RECYCLING SHREDDER REPLACEMENT

118 PROJECTS THROUGHOUT UNITED STATES

Prime Engineering replaced Newell Recycling's outdated 4,000-hp shredding system with a larger, more modern 6,000-hp model. This increased capacity necessitated the replacement of the equipment foundations, engine house, hydraulics and support equipment, electrical power and distribution, and control system. Furthermore, the new shredder had to be installed in the same location as the existing shredding system. Because the installation process would shut down the facility's whole-car shredding capability while work took place, it was crucial to install the new shredder system in the minimum time possible. Thus, all project work had to be performed on an accelerated schedule of 16 weeks.

Prime Engineering oversaw all aspects of the complex project, including:

- Surveying
- Full civil and site design
- Design of the 6,400-square-foot, two-level engine and personnel building
- Design of the conveyance foundations, hydraulic systems, and miscellaneous equipment
- Electrical/controls design
- PLC design
- Assistance in permitting and procurement
- Construction administration services for the demolition of the existing system and installation of the new, larger system

In total, this work entailed managing six subconsultants, 11 design trades, and 42 contractors.

The project exceeded benchmarks in numerous parameters. Permitting for the project was completed in four weeks rather than the allotted six, while design was completed a week early despite the fast-track schedule. Additionally, contractor bids for construction came in under the estimated amount.





Construction of shredder.



Final fremework.

## SERVICES

Surveying, design engineering, permitting assistance, procurement assistance, and construction administration

COST \$5 million (construction)



Shredder control room



The completed shredder.