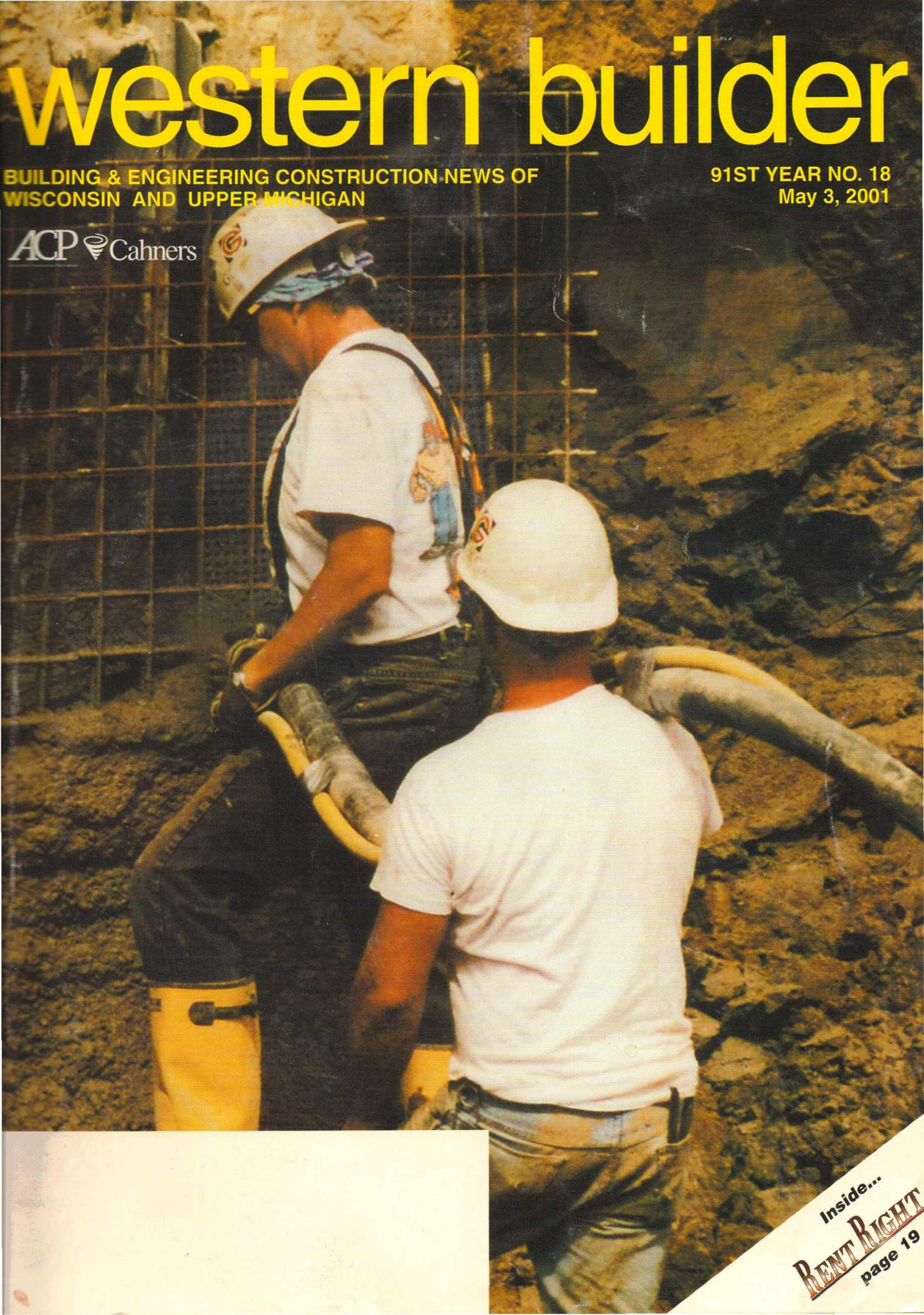


western builder

BUILDING & ENGINEERING CONSTRUCTION NEWS OF
WISCONSIN AND UPPER MICHIGAN

91ST YEAR NO. 18
May 3, 2001

ACP  Cahners



Inside...
RENT RIGHT
page 19

From boilers and turbines to cars and trucks;

Barthenheier Construction builds parking ramp in abandoned power plant

By Barry Gantenbein, editor, *Western Builder*

What had been the basement of an electric and steam power plant in Downtown Milwaukee for more than 90 years will

become a parking facility by the end of the summer.

Barthenheier Construction, Inc., Milwaukee, is constructing a two-

level parking facility in an abandoned power plant at 756 N. Milwaukee Ave. that is being converted to office use by Monroe Building, LLC.



To support concrete forms used to build the upper level of the parking facility, Barthenheier Construction used a shoring system rented from Safway Steel Products Inc.

With revitalization of Downtown Milwaukee, there's a need for parking, especially in buildings that are being redeveloped such as the old power plant, said Dennis Barthenheier, owner of Barthenheier Construction, Milwaukee.

"Parking is at a premium downtown, and people are willing to deal with cramped quarters for the opportunity to park in a warm, sheltered facility. We're landlocked in this location, and there is really no available property nearby to create a new parking structure," Barthenheier said.

So, Barthenheier Construction is converting the basement into a parking facility. With columns in a grid pattern across the entire basement, it took real skill to squeeze a parking facility into the power plant.

Barthenheier Construction has created parking facilities for a number of downtown buildings that have been redeveloped, including the Milwaukee Ale House.

"For that job we had to create an opening and a ramp system, and the column spacings were even tighter than this project. I've done tighter situations than this," Barthenheier said.

The construction of the parking facility in the basement of the power plant is a design-build job, with Barthenheier Construction doing both the design and the construction of the parking facility.

Before Barthenheier took the job, the Milwaukee engineering firm Computerized Structural Design was hired to do calculations to determine if the building was strong enough to support an additional

concrete slab that would be the second level of the parking facility.

With the OK of Computerized Structural Design, the project was a go.

Demolition began before Barthenheier arrived on the job in February, with the old boilers and turbines removed from the basement.

The crew from Barthenheier continued demolition work, removing walls that separated the boiler rooms from the turbine area, as well as pits and abandoned soleplates for boilers and turbines.

Equipment used by Barthenheier was lowered into the work site through an alcove of the building, which has access to the basement.

Crews removed a section of the existing concrete slab large enough

No Rock. Just Roll.

Lull's telescopic handlers, with the exclusive TransAction™ boom, roll material loads smoothly into place... up to 80 inches forward without driving a single inch.

Eliminate the rock. Add the roll. Choose a Lull.



An OmniQuip Textron Company

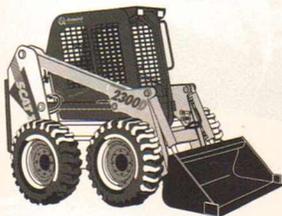


For the dealer nearest you,
please call (262) 284-5571
or visit us at www.omniquip.com

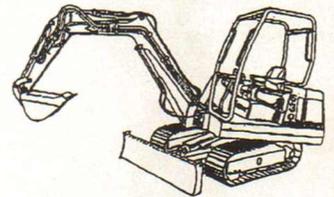
WBM_Lull (Reg)_DI_All

For information circle 6

The shoring system and plank system used on the job came in modular sizes that fit within existing structures in the basement of the old power plant where Barthenheier Construction is building the parking facility.



SCAT TRAK Skid-Steer Loaders



SCAT TRAK Mini-Excavators



- 8 Models from 1,350 lb. to 2,300 lb. Capacities
- Forward Tilting ROPS Cab – Ease of Maintenance
- Kubota & Perkins & Cummins Diesel Engines
- High Bucket Break-Out Force – Easy Digging
- Universal Quick Attach – Aux. Hyd. Flows to 33 GPM
- 4 Models – 3,500 lb. Class to 11,000 lb. Class
- Digging Depths from 7'9" to 13'6"
- Kubota Diesel Powered
- Full Featured Units Including Aux. Hydraulics
- Excellent Bucket Break-Out Force

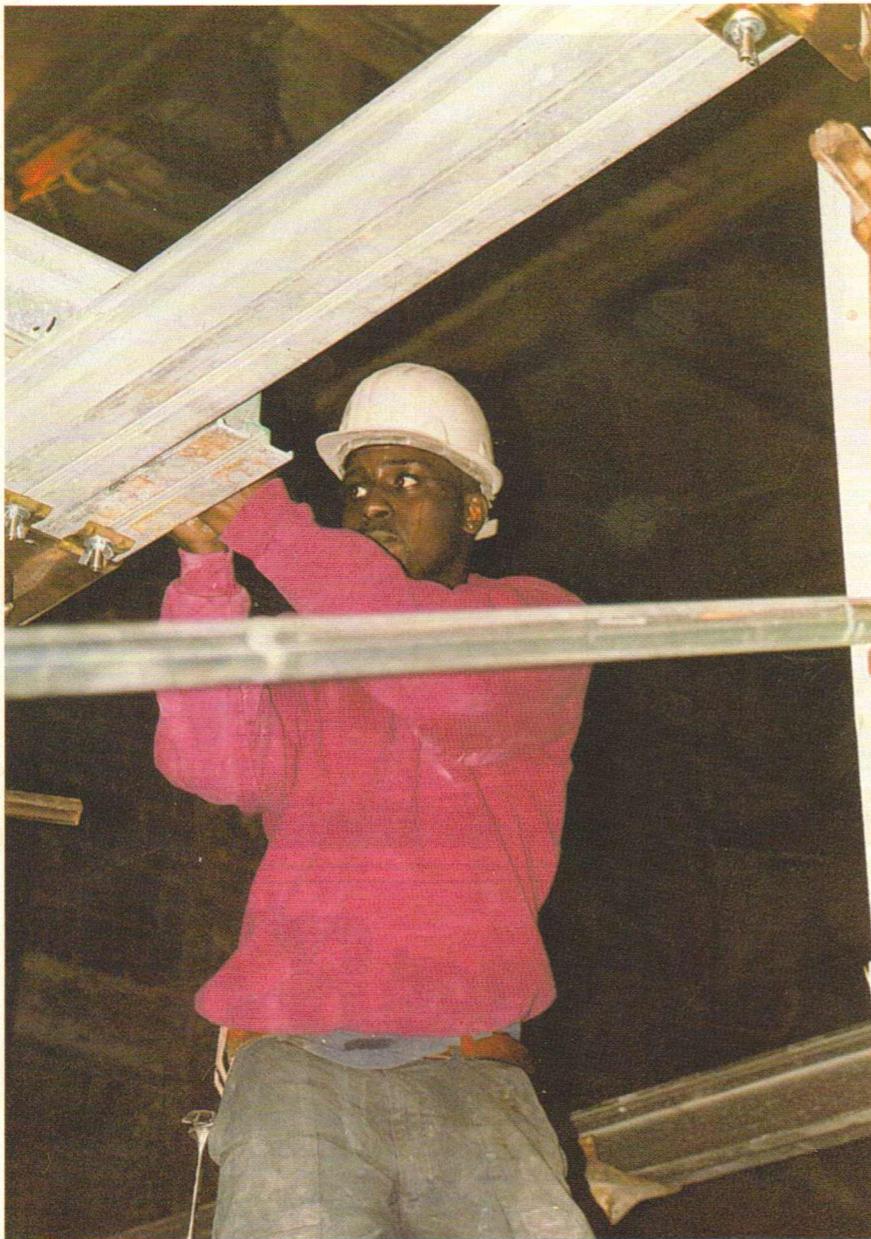
Distributor, Rental Yard and End-User Financing from Textron

Distributor Inquiries Welcome

WBM_Compact (Reg)_DI_All

Selected SCAT TRAK Territories Available. Call the SCAT TRAK Factory Sales Department (800) 716-3466.

For information circle 56



Portable Spot Cooling

when and where you need it

- A variety of sizes and styles
- Purchase or rental options
- 24 hour emergency service

RANKIN
PORTABLE COOLING

1-800-966-7100
www.rankinggroup.com

Mention this ad for additional savings.

With a lot of hard work and sweat, eight Barthenheier Construction employees pieced together a 9,000-square-foot shoring system in one week.

to drop heavy equipment into the basement, and a crane lowered equipment, which included a high reach lift, skid steers, backhoe, and a fork lift.

"They're smaller tools, and they can do the work, just a little slower," Barthenheier said. "With the attachments that go along with the skid steer loaders, you can do a lot of work with one piece of equipment."

**FOR MORE
INFORMATION ON
BOBCAT CALL:**

BOBCAT EXPRESS

Chippewa Falls, WI (715) 836-7199

BOBCAT PLUS, INC.

Butler, WI (262) 781-1199

BOBCAT OF JANESVILLE

Janesville, WI (608) 756-0000



Bobcat
One Tough Animal

Besides demolition, which included the removal of the existing slab, Barthenheier crews also graded, compacted, formed and poured a new ground floor concrete slab in the basement.

Support system

To support the concrete forms used to build the upper level of the parking facility, Barthenheier Construction used a shoring system rented from Safway Steel Products Inc., headquartered in Waukesha, Wis.

Barthenheier Construction used the shoring system to hold forms for a 17,000-square-foot suspended slab, which was done in four pours.

"We construct the shoring, crawl spaces and aluminum planks sufficient to hold the weight of the 7-1/2-inch reinforced concrete slab," Barthenheier said.

After a concrete pour had cured, sections of the system supporting

the pour were removed and re-assembled for the next pour.

"The shoring is easily adaptable for variations in construction, so it could be removed after the pour has cured properly, and then re-used in a new area," said Barthenheier. "That's what makes the system the most economical and easy to work with."

Staff at Safway worked with Barthenheier to select a system to build the deck.

"Safway has a system that works quite easy and fast to form a suspended slab off of their shoring towers," said Barthenheier. "We're very comfortable with their systems. They work quite smooth and are easy to work with."

Using preliminary plans and visiting the site, a Safway staff member worked with Barthenheier to create a system strong enough to support forms used to pour a sus-

pending slab 12-feet off the basement floor.

"When you work with Safway on a job of this magnitude, they come on the job site and we discuss and plan how we'll approach this. They provided me with drawings of the shoring system, we made some modifications we thought were necessary, and then we go for it," Barthenheier said.

The shoring system and planks were placed around the grid of columns in the basement.

"That's why we plan and review before we start anything. The shoring system and the plank system they provided are modular sizes that fit within existing structures.

"All the things we're working around are already anticipated and figured in as we go into the project. It's all calculated out, and we get the right shapes and sizes for the

OmniQuip Sky Trak INTERNATIONAL
An ISO 9001 Registered Company

SKY TRAK

TELESCOPIC HANDLERS

Millennia Series
(low & high pivot)

Legacy Series
(high pivot)

You can look high and low and you won't find a better telehandler... or a better dealer.

SkyTrak offers nine models to choose from with capacities from 5,000 to 10,000 lbs. and boom heights from 28' to 54'.

Featuring:

- Easy operation
- Excellent maneuverability
- Low cost maintenance
- Long term durability
- Maximum up-time

See your authorized SkyTrak sales and service dealer.

For information, circle 138

For the dealer nearest you, please call (262) 284-5571 or visit us at www.omniquip.com

WBW_Sky Trak (Reg)_DI_All



The Barthenheier Construction crew posed for a photo in front of a section of the shoring system.

job. After that it goes together pretty easy," said Barthenheier.

Safway transported the materials to the site, using a crane to lower planks, shoring, and other materials into the basement.

In just one week, eight Barthenheier employees pieced together a shoring system covering 9,000 square feet.

"It's no different than when you were five or 10 years old working with your erector set at home. I used to love doing that when I was a kid, and I guess that's how this came about," Barthenheier said of piecing together the shoring system for the job.

The materials used to construct the shoring system are relatively light weight.

"Two people work together as a team, and the pieces go together quite easily," Barthenheier said.

Although Barthenheier Construction has until the end of August to complete the work, Dennis Barthenheier expected

to have the job finished by the end of July.

"We've been working an average of eight hours a day, five days a week. With the proper, efficient crews, we've been making great headway," he said.

Family business

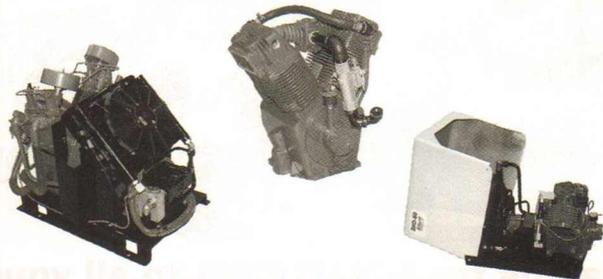
Three generations of the Barthenheier family are at work on the job. Besides Dennis, the crew includes Dennis Barthenheier's father, Charles, 73, as well as Dennis's son, Eric, 24.

All three are cement finishers, masons and carpenters by trade. Between the three Barthenheiers, they have more than 100 years of construction experience. Charles has been working construction since 1946, Dennis got his start in construction in 1962 when he was 12 years old, and Eric has been working construction for the past 10 years.

Stellar Air Systems Over 30 Models Available

Rotary screw
Underhood

Water-cooled
Direct Hydraulic driven



Hydraulic-drive side-mounted PTO

Hydraulic-drive above deck

Air-cooled hydraulic driven

Complete line ranging from 12 to 150 cfm
and pressures from 90 to 190 psi

280 West 3rd Street
Garner, IA 50438
PH: 800-321-3741
Fax: 641-923-2812

STELLAR
INDUSTRIES INC.

www.stellar-industries.com

For information circle 144



Barthenheier Construction employees worked as a team to piece together the shoring system.

Barthenheier Construction is a general contractor specializing in structural concrete, carpentry, and masonry. Another line of work done by the company is pile reconstruction and foundation work.

"We come into existing buildings, and do pile foundation repair

work," Dennis Barthenheier said.

Dennis Barthenheier started the family business in 1974, and it was incorporated in 1980. The firm got its start doing residential work, and now does mostly commercial work. Barthenheier Construction is a union contractor. ♦

R
E
N
T
A
L
S



Call us for **SOLUTIONS** to all your lifting and access problems.

You'll be glad you did!

MILWAUKEE
(800) 264-1593
GREEN BAY
(800) 261-4900

EAU CLAIRE
(800) 445-2603
MADISON
(888) 477-5438

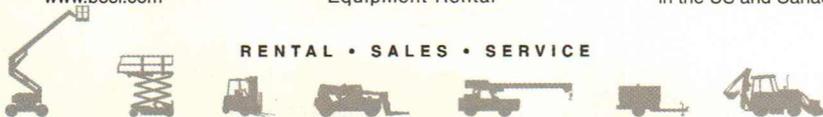
BRAMBLES

Equipment Rental

See our new website
www.besi.com

Over 40 Locations
in the US and Canada

RENTAL • SALES • SERVICE



See a Wacker Dealer Near You

LINCOLN CONTRACTORS SUPPLY INC
www.lincolncontrsup.com

Milwaukee, WI (Main & Corporate)
(414) 541-1327 • (800) 242-1255

Milwaukee, WI (North)
(414) 357-7111 • (800) 533-7113

Kenosha, WI
(262) 652-6890 • (800) 638-3448

Madison, WI
(608) 249-6476 • (800) 521-2331

Oshkosh, WI
(920) 231-3501 • (800) 451-4551

Wausau, WI
(715) 359-6111 • (800) 537-3778

Green Bay, WI
(920) 432-8697 • (800) 242-5626

FABCO RENTS

Eau Claire, WI
(715) 874-6440

Green Bay, WI
(920) 429-1098

Madison, WI
(608) 327-7777

Menasha, WI
(920) 731-4444

Racine, WI
(877) 888-RENT

Waukesha, WI
(414) 513-6666

WACKER

RENT RIGHT