Pervious Concrete Projects: SD—MN

Woodlawn Cemetery- Sioux Falls, SD
Installed: Spring 2010
Contractor: Brooks Construction
Producer: Concrete Materials
Project type: 6” PCC Pavement on 12”+ Aggregate Base
Project Notes: Pervious concrete was selected to assist with drainage in front of the maintenance building/office located off of 26th Street and Cliff Ave. The pavement serves as parking stalls.

Parking Pads, GCC Terminal- Sioux Falls, SD
Installed: Summer 2009
Contractor: SDRMCA Members
Producer: Concrete Materials
Project type: 6” PCC Pavement on 8” Aggregate Base
Project Notes: Pervious concrete was installed by certification course participants and SDRMCA members. Two pads were poured with two different aggregate sizes. The pad poured with 3/8” chip is utilized as a parking stall next to the main office.

Camp Rapid Distinguished Visitor’s Quarters- Rapid City, SD
Installed: Fall 2008
Contractor: Corr Construction, J Scull, RCS Construction
Producer: Pete Lien & Sons
Project type: 6” PCC Pavement on 8-12” Aggregate Base with 4” drainage piping through center of parking lot
Project Notes: Pervious concrete was installed by contractors working with a research team. The team consisted of local contractors, engineering firms, architecture firms, SDSM&T civil engineering department, SDRMCA and staff at the Department of Military and Veterans Affairs. The project was a winner of the Portland Cement Association’s Leadership in Sustainability award. Maintenance of the pavement includes annual vacuuming and is plowed in the winter as needed. (Contact: Dale Ludens)

Western Dakota Tech Sidewalk- Rapid City, SD
Installed: Summer 2010, Concrete Producer: Pete Lien & Sons. A 6” sidewalk on an 8” aggregate base was poured by Kurtz Construction as part of the Pervious Certification Course. The demo pavement will stay in place and be utilized as a sidewalk from the parking lot to the exterior gathering patio.
Edgewater Park- Minneapolis, MN

This project was constructed in 2006. It is a zero run-off park along the Mississippi River near downtown Minneapolis. The park utilizes pervious concrete for paths and trails and is intermixed with pavers. The blue architectural feature is a stain applied after the concrete was cured.

Residential Street—City of Shoreview, MN

Installed: Summer 2009
Residential Pavement: 21 ft wide, 7” pavement, 18” agg base – No storm drains
Low curb each side – approx 3800 LF of pervious concrete street
Joints were saw cut the next day
Triple Roller Paver used for installation
Approx 1800 cy, Total Project Cost = 1.4 million

Producer: Cemstone, Concrete Contractor: North Country Concrete, General Contractor: Viet

Project Notes: The project was designed by the City of Shoreview. A traditional storm water system was evaluated, however, they did not have the capacity for a 10 year event and would have increased excavation costs. The project was completed 6-8 weeks sooner than a conventional project, ie: pipes and asphalt paving. The pervious concrete system was a 10% premium. The pavement was cured with a McTech-Ultra Cure blanket for 7 days.

LATI Pervious Parking- Watertown, SD

This pervious concrete in this project will be added to a reconstructed parking lot. In this design, existing storm water piping is in place and will remain on the project. The pavement will be a 6”– 8” pervious concrete pavement under car parking stalls. A clean aggregate base will be installed as subbase. Header curbs will be used to separate pavement types. This project has was installed with a roller screed in late summer 2010 by Brooks Construction and Concrete Dakota. For more project information, contact Dakota Land Surveying and Engineering- Paul Clinton.
Mary Jo Wegner Arboretum-Phase 1- Sioux Falls, SD

Installed: Completed Summer 2011  
Contractor: Buskerud Construction  
Producer: Concrete Materials  
Project type: 6" PCC Pavement over 12" Aggregate Base  
Design Team: Confluence  
Owner: City of Sioux Falls  

This project was bid by the City of Sioux Falls to be constructed in the summer of 2011. The project is phase I of improvements at the Mary Jo Wegner Arboretum. The parking stalls on one side of the driveway will be poured using pervious concrete.

Police Station and Uptown Parking Lots– Watertown, SD

Installed: Completed Summer 2011  
Contractor: Brooks Construction  
Producer: Concrete Dakota  
Project type: 8" PCC Pavement over 22" Aggregate Base  
Design Team: Aason Engineering and City of Watertown  
Owner: City of Watertown  

This project will be completed in the summer of 2011. The project received grant funding from the DENR for stormwater management. Existing stormwater system drainage system remains in place.

SDACC Parking Lot—Pierre, SD:

Installed: Completed Summer 2011  
Contractor: Midwest Construction  
Producer: Morris  
Project type: 5" PCC Pavement over 12" Aggregate Base  
Design Team: Brosz Engineering  
Testing/Mix Design: Aaron Swan  
Owner: SDACC  

This project was completed in the summer of 2011.
It is the mission of the SDRMCA to provide promotional, technical and educational support to its membership as well as any corporation, organization, other business enterprise or individual having an interest in ready mixed concrete within South Dakota.

For more information, contact the SDRMCA at 605-274-0145 or info@sdrmca.org.

Founder’s Park—Rapid City, SD

Installed: Completed Summer 2012  
Contractor: RCS Construction  
Producer: Pete Lien & Sons  
Project type: 6” PCC Sidewalk over Aggregate Base, 720 SF  
Design Team: Cetec Engineering Services  
Owner: City of Rapid City  
This project was completed in the summer of 2012.  
From Bid Tab—$9.78/SF Low Bidder to $15.41 Ave Bid.

Additional Pervious Concrete Resources:

- www.perviouspavement.org
- www.concreteanswers.org
- www.pavements4life.com
- www.rmc-foundation.org
- www.greenconcrete.info
- www.concretethinker.com

Design Software Available:

- Hydrological Design Software and Resources CD—www.cement.org
- PerviousPave—www.acpa.org

For more information or design assistance, contact SDRMCA: info@sdrmca.org, www.sdrmca.org