

PLAINS TALK

A Publication of West Plains Engineering, Inc.

Casper WPE: Casper Youth Crisis Center

• In September 2013 the Casper Youth Crisis Center opened its doors for teens around the city to a new 13,000 square foot facility. The Youth Crisis Center in Casper provides emergency shelter for more than 700 youth each year, who are runaways, abused, abandoned or need intervention with parents. Some of these teens call this their home for months at a time.

The construction of this new facility made it possible to bring three smaller older homes in need of updates and repairs to one centralized location. It consists of 32 beds in three wings as well as a centralized intake area, administration wing, and a full commercial kitchen. The separate wings are used to house boys, girls, and short-term crisis teens. Each of the living wings consists of large socializing or lounging areas with all-natural day lighting and state-of-the-art camera and security systems.

The \$3.2 million building was made possible by community support and several funds and donations



Casper Youth Crisis Center ready for teen recovery

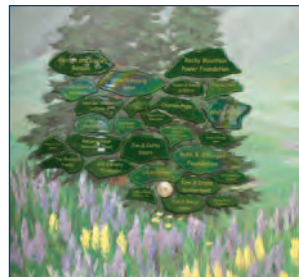
including \$1 million from the Natrona County Consensus Funds, \$250,000 from Natrona County Juvenile Justice Funds, \$240,000 from the City of Casper One Cent, and over \$1.3 million from numerous foundations, businesses, churches, and private donors.

The entrance of the new building features several colorful donor walls designed by local artist Janet Zambai.

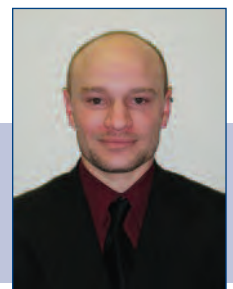
West Plains Engineering, Inc. teamed up with GSG Architecture of Casper, providing design services for the mechanical and electrical systems within the building.



colorful murals designed by local artist



About the Author:
Andrew Maxwell is an Electrical Engineer in the Casper Office.



Sioux Falls WPE: Sanford Pentagon

• Sanford Health has opened what has been nicknamed the ‘unique sports anchor’ to the new Sanford Sports Complex. The \$19 million Sanford Pentagon opened its doors in October to the public. The NBA’s Minnesota Timberwolves and Milwaukee Bucks highlighted the building opening. Engineers of West Plains Engineering are proud to be a part of the project by providing mechanical and electrical engineering services.

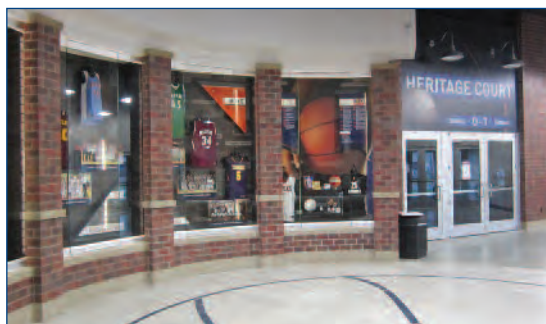
This new five sided 160,000 square foot building in Sioux Falls consists of six (6) outer high school/college length courts with three more courts in the middle of the pentagon for college/professional use. The main court, referred to as the ‘Heritage Court’, sits in the center of the building and it will be the center of the activities. The Owner and design team wanted the Heritage Court to be special. While walking down the ramps to the Heritage Court, iconic historical images of men’s and women’s basketball players and coaches set the mood for the center stage. Upon entering the Heritage Court, the fans are taken back to the 1950/1960’s basketball era but with modern amenities. The Heritage Court seats 3,200 people including four executive suites, twelve loge boxes, and two corner suites. The parquet wood floor and old style scoreboards are contrasted with two modern high-definition video boards.

Along with the main focus of basketball, the supporting areas include display areas for the South Dakota High School Basketball Hall of Fame, two VIP locker rooms, six meeting and activity rooms, three athletic training rooms, ticket booths, three concessions areas, a bar, and VIP entrances.

The facility will be the home of the Sioux Falls Skyforce (NBA D-League member), multiple youth and college tournaments, and basketball/volleyball academy clinics.



The impressive exterior of the Sioux Falls Sanford Pentagon



The entryway to Heritage Court

The facility was designed for television broadcasting including the ability to broadcast the game and replays internally to TV monitors around the building, but also with the ability to broadcast externally with accommodations for network broadcast trucks.

One of the unique design items in the Heritage Court is the lighting. It has light fixtures that allow for a black-out of the court. The light fixtures have a cover that is able to be electronically shut over the lens while the fixture is still on, to have the court in darkness for team introductions, etc. The covers can then be opened to be back to event lighting instantly.

The entire facility is heated and cooled by an air cooled chiller and a high efficiency hot water boiler heating system. The HVAC system is split into zones to allow for flexibility and partial use of the facility. This allows for tournaments on the outer courts while operating the center court area in an unoccupied state.

For fans to safely exit the building, the center courts are protected with a smoke evacuation system controlled in the fire command center. The command center is the main area for fire fighter control for this system along with a building wide fire alarm voice evacuation system, elevator control, and a monitoring point for the status of the emergency generator.

West Plains teamed up with Fiegen Construction, Architect of Record and JLG Architects the design architects.



About the Author:
Mike Fisher is an Electrical Engineer in the Sioux Falls Office.

WPE COMPANY NEWS • WPE COMPANY NEWS

• **Congratulations...Kenny & Nicole** Thelen welcomed baby boy Klayden Dale on October 11, 2013. Klayden weighed 6 lbs. 5 oz. at birth and was 19.5 inches long.

• **Recognizing Our Employees:** West Plains would like to recognize employees and their years of tenure. The following is a consolidation of 2012 and 2013 awarded employees.

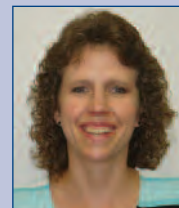
5 Year Employees: Brian Ames, Isaac Anderson, David Dowling, Lenn George, Kevin Groves, Scott Isenock, Becky Kramer, Andrew Maxwell, Blake Pauls

10 Year Employees: Chris Kost, Melanie Raap, Jeff Reinhart, Darlene Weber

15 Year Employees:



Duane Evert



Julie Morton



Neal Schmid



Mike Sigman



Vicki Stephens

Rapid City WPE: Your Partner in Aquatics

• You may know that West Plains Engineering has a long and successful history of designing mechanical, electrical, plumbing, and fire protection (MEPFP) systems for many Aquatics Facilities in our Region. West Plains Engineering has designed MEPFP systems for Splash Parks, Leisure Pools, Community Pools, Short Course (25yd/25m) Competition Pools, and Long Course (50m) Competition Pools – both indoor and outdoor.



Rapid City Swim Center

What you may not know is that West Plains Engineering's expertise and experience goes much deeper in the Aquatic world.

Aquatics Facilities are a highly specialized environment requiring highly skilled aquatics programming, design, and construction team members. A successful aquatics project always has programming preceding design, and design preceding construction. Aquatics programming and design professionals must establish the true current needs of the client, anticipate the future needs of the client, and implement these needs seamlessly with the design team. It requires envisioning all the multiple needs and uses of an Aquatic Facility and how to best meet those needs and uses in an economic manner. Most modern aquatics facilities are programmed in the vein of an "Aquatic Wellness Center" versus a Swimming Pool. This is due to the fact that aquatics is a unique sport and activity and that at its core it is really one of the few true life-time sports. In other words, individuals can participate in aquatics from cradle to grave.

West Plains Engineering is well versed and experi-

enced in aquatics programming and design. We understand how Aquatics Facilities optimally function and have a deep knowledge base with Aquatics activities and events, with particular focus on the sport of competitive swimming and competitive swim meets. Further, we have the ability

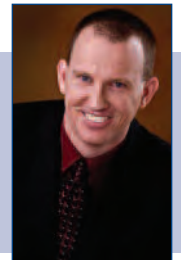
to tap into national level resources and specialized consultants as a client's unique needs arise. We think outside of the box for the best solutions.

As a firm, West Plains Engineering possesses the following credentials:

- Multiple licensed professional engineers (both mechanical and electrical) with Aquatics Facilities experience on staff.
- USA Swimming Professional Provider firm.
- Staff members stay current with USA Swimming Continuing Education courses (Regional Build-A-Pool conference, Club Leadership and Business Management School, etc).
- USA Swimming Member Coach on staff.

Let West Plains Engineering be your partner in Aquatics!

About the Author:
Chris Green, P.E., LEED AP is an Electrical Engineer in the Rapid City Office.



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20 Year Employees:



Mark Grebner



Harlan Osterloo

West Plains Engineering is pleased announce an addition to the Sioux Falls Office. When Ulteig Engineering (a regional consulting firm) decided to close their Building Services Division, Gary was one of the employees who became available. We are excited to have him join our professional staff. Others to recently join our team are Mike Fisher, Wade Myrabo, Dustin Torguson and Stuart Oster (see Plains Talk Summer 2013, Vol X, Issue III, page 4.)



Gary Lyngen

Electrical Designer

Gary.lyngen@westplainsengineering.com

Gary is an Electrical Designer with over 35 years experience in all aspects of electrical designing for all types of commercial, institutional, industrial, educational and religious projects. He has extensive experience in the design of power distribution, lighting, communication wiring, fire alarm and sound systems. Call or email Gary to congratulate him on his new opportunity with West Plains Engineering.

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Cedar Rapids WPE: City Hall Renovation

• During the revitalization of its flood damaged downtown, the city of Cedar Rapids decided to move its city hall from the badly damaged building on May's Island, to the former federal courthouse that was also damaged during the flood of 2008. With Ament Design, who provided architectural services, West Plains Engineering

was chosen to be on the historical preservation design team for this project and provided the mechanical, plumbing, electrical, communications, and fire protection design. The design team worked with the State Historical Preservation Office to maintain the original design features of the building.

All of the historical features of the 1931 building, exterior and interior, were photographed and documented prior to the renovation. The council chamber was assigned to what had once been the main courtroom space. A key feature of this room was a 75 year old mural covering the entire length of the west wall. Special consideration was given to this space during



Council Chamber preserved with its historical features

the design process in order to achieve the required temperature and humidity control.

Preservation efforts required unique solutions for the mechanical and electrical systems. The existing doors along the main corridors were left in place, but the return air system was modified to eliminate the outdated corridor

return air concept. New piping spaces were designed near the main restrooms in order to conceal new piping and to not disturb the existing marble paneling. Overall, mechanical systems were consolidated to minimize the amount of equipment installed on roofs which would be visible to the public.

About the Author:
David Clark is a Mechanical Engineer
in the Cedar Rapids Office.

