The Making of a Desert Masterpiece: Painted Hills Middle School

Palm Springs Unified School District

When first envisioning a new middle school in the Palm Springs Unified School District, school officials created the following vision statement: “Painted Hills Middle School will be an exemplary middle school that provides rigorous educational programs in a safe environment that embraces diversity and cultivates a culture of collaboration among all stakeholders – resulting in a well rounded young adolescent ready for high school.”

This early vision became a reality when Painted Hills Middle School opened to approximately 800 students and 35 faculty members on August 22, 2011. In addition to providing an optimal learning environment with ample academic and elective space, the new school’s design and construction team created an inviting, functional and environmentally friendly middle school capable of withstanding the harsh desert climate. Some would say that its design and purpose is as magnificent as the “painted hills” that grace the surrounding landscape.

“When we began construction on the new middle school, there were over 1,700 students at the existing Desert Springs Middle School which was built in 1990 for approximately 1,000 students,” said Julie Arthur, executive director of facilities planning for Palm Springs Unified School District. “Now that the new school is open, our students have a state-of-the-art learning environment as well as the space they need to flourish.”

Located on a 22-acre site in Desert Hot Springs, Painted Hills Middle School is the fifth middle school in the district and is the first middle school to be constructed since James Workman Middle School opened in 1995. A part of the Measure T bond, the $39.5 million project included construction of a 138,000-square-foot school as well as extensive infrastructure work for electrical, drainage and water and road access to the site.

“The vertical design of the two-level middle school provides a cost and environmentally efficient facility that promotes the physical, mental and social development of the students,” said Roger Clarke, principal with Ruhnau Ruhnau Clarke Associates, the architect for the new middle school.

Composed of classroom wings joined by the central administration and library/media center, the new school is situated on a sloped site that offers picturesque mountain and valley views. An earth tone color-scheme highlights the exterior of the school, while vivid base tones of blues and browns adorn the interior. Yellow, gold and orange tones at the entrances of the interior give a sense of orientation to those in the space. The school’s library/media center and its furnishings were designed to provide for a combination of collaboration, quiet learning and socialization. Further interior features include bright graphics denoting inspiration, discovery, appreciation and innovation which help to make the high traffic areas of the school not only energetic and pleasing, but also educational.

“Our new school is beautiful,” said Julie Arthur, PSUSD executive director of facilities planning. “The deep colors used on the walls, carpet and furniture
provide such a warm and inviting atmosphere. In my 20 years of experience in facilities, I have never seen so many parents who have wanted to stay and tour the campus on the first day of school.”

Every aspect of the school was designed for function and flexibility. A courtyard featuring an outdoor amphitheater and the covered lunch shelter is located in the center of the school. The classrooms and labs are organized into interdisciplinary grade-level learning groups. Each classroom area is adjoined by shared small group instruction spaces and prep rooms for collaborative teaching opportunities.

Anchoring the courtyard, the multi-purpose room is attached to food service and locker rooms. To be utilized by both the student and community for assemblies, performances, dances, and indoor sports, the multi-purpose room includes a basketball court, telescopic seating area for 660 people and platform stage that opens outdoors into the attached covered lunch shelter. Drama, band, and choir rooms are located nearby for direct access for performances. Food service functions can also be utilized for after hours events.

To successfully address the school’s digital media arts and drama elective programs, the facility houses infrastructure to support a large computer lab with 50 iMac computers used for digital media and other data intensive programs. Additionally, the drama department is located in a section of the facility that includes a stage with theatrical lighting and audio visual system, make-up and dressing rooms as well as storage for wardrobe and props.

The Painted Hills Middle School design is also environmentally efficient. Its sustainable features meet CHPS (Collaborative for High Performance Schools) certification requirements.

All of the colors, materials and finishes are environmentally friendly, thereby contributing to the health, efficiency, and overall comfort of its inhabitants. Other “green” features include: energy efficient plumbing and water systems; a cool roof with a single layer of thermoplastic membrane that provides a high level of solar reflectance; occupancy lighting sensors in all classrooms and offices; as well as energy efficient HVAC and lighting systems controlled by an energy management system (EMS) to minimize use during non-school hours.

In the desert climate of Southern California, extreme dry heat in summer along with torrential showers and afternoon wind are commonplace. Therefore, the building materials used on the new middle school had to be carefully chosen to withstand these extreme weather conditions.

According to McCarthy Project Manager, Michael Viveros, the project’s most significant weatherproofing challenge occurred in the gymnasium building. “The gym was constructed with 40-foot tall wood-framed walls surrounding the indoor basketball court,” said Viveros. “Because of the tendency for wood framing to bow or warp at longer lengths when exposed to the weather conditions in the desert, we used Glu-Lam studs in lieu of 3x and 4x dimensional lumber and laminated strand lumber. The walls were fabricated and assembled in composite units laid down on the slab and then raised into place. This solution reduced construction time and alleviated any rework to correct warping in the wood framing that would have likely occurred over time,” explained Viveros.

Construction work was also strategically scheduled to mitigate these weather challenges. For example, Viveros said that some of the construction activity such as the concrete pours was completed in the morning hours to alleviate the challenges caused by the intense wind and hot temperatures often occurring during the middle of the day.

“Although the project provided some challenges, McCarthy’s expertise was helpful in keeping the project moving seamlessly and our beautiful new school was completed on-time,” said Arthur.

To commemorate a successful project and to celebrate the new school, a dedication ceremony was held on October 14, 2011 with students, parents, school staff and community members in attendance.

“The students and staff are thriving in our new learning environment at Painted Hills Middle School,” said School Principal Ryan Saunders. “The level of pride in all stakeholders is evident on a daily basis. Parents are proud to send their students to Painted Hills Middle School, and the students are proud to be Panthers. The forward-thinking that went into every detail is bringing out the best in our students. The carpeted hallways, kinesthetic furniture, and ‘coffee house’ approach to the media center are just some of the reasons students, staff, and parents are full of pride in their new school.”

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Project Team:
District: Palm Springs Unified School District
Construction Manager: McCarthy Building Companies
Architect: Ruhnau Ruhnau Clarke Associates