

# 2013 Exhibition of School Planning and Architecture

## JOHN F. MILLER SCHOOL

Las Vegas, Nevada

PROJECT TYPE: SPECIAL NEEDS SCHOOL

PROJECT of DISTINCTION AWARD: NEW BUILDING

# JOHN F. MILLER SCHOOL



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## An Extended Family

### Community Environment:

At a time of reduced capital improvements and increased funding challenges, the School District faced an uncertain solution with how to appropriately spend limited remaining funds from the 1998 Bond Measure.

Thanks to the collective voice of concerned parents and committed community members, through a series of town hall meetings a collective vision and shared interest was established for a specialized new school.

Serving medically fragile students in a newly constructed facility that would not impact the learning opportunities for these students was now within reach.



## A Special Client

### Community Environment:

This anchor for Special Education is a one-of-a-kind teaching facility serving children in need of its expertise.

The new 68,875 square-foot facility is designed to provide the highest levels of both education and medical treatment possible to a group of highly medically fragile students, ages 3 – 22.

Serving as a vital resource for both parents and students throughout the county, this school establishes a new standard for specialized education programs for children, of which:

- 95% are non-ambulatory
- 75% are visually impaired
- 80% have seizure disorders





## Individualized Learning

### Learning Environment:

The building is comprised of a series of interior and exterior learning environments surrounding a centralized Health Center. Both indoor and outdoor spaces are designed to support the unique curricular goals of the school, while maintaining a healthy and carefully monitored environment.

All students are non-verbal and require total adult support for all activities for daily living. Given the relatively small student population, each academic and social space throughout the building provides vibrant visual opportunities and comfortable areas of respite. The layout of these spaces are very regular in order to assist with student way-finding and adult supervision.



## Medical Assistance

### Learning Environment:

Student health and well-being are at the core of daily activities throughout the school. The student's sensitivity to environmental conditions were quite difficult to accommodate at the previous location. Balanced daylighting and appropriate exterior shading help to enhance the treatment practices, offering an extended method of learning by engaging the students with their surroundings via tactile experiences.

The core medical center is staffed with full-time nurses who administer medications and food via GI-tubes. While this experience can be stressful, the design sought to reduce such emotions by providing a variety of light conditions, color and texture. Since opening, student absence due to illness has reduced significantly.





## Protected Environment

### Physical Environment:

The daily arrival and departure sequence is a highly-coordinated event that includes well-being assessments, medical triaging and physical mobilization activities.

Given the sensitivity of the students to a variety of external environmental conditions, there are multiple points of entry to the building along the bus drop-off area for expedited building access.

By taking advantage of the sites cross-slope, the loading zone allows for direct platform access to the bus interior without any delays due to raising/lowering each student. The overall process has seen a 75% reduction in transfer time from the original school.





## Interactive Explorations

### Physical Environment:

Each student requires special communication devices and other learning aides to help with their daily activities. Given the student's sensitivity to environmental conditions and other contaminants, indoor hygiene and waste management was a critical challenge for the Design Team.

In response, each classroom features a shared hygiene room with direct waste removal via the courtyards, anti-microbial surfaces and fresh-air supply with enhanced filtration.

Throughout the facility, a variety of colors and textures identify each corridor, classroom and zone of the school, thus allowing the students to use a variety of senses for way finding.



## Existing Challenges

### Planning Process:

Designed to be a full-replacement of the existing 1958 structure, decisions regarding student well-being in relationship to the indoor and outdoor environment was of primary importance throughout the planning process.

Existing classrooms were undersized (approximately 600s.f.) and lacked adequate storage, access to hygiene areas, acoustic isolation, access to daylight and allowed any outdoor contaminants to enter via the entry doorway.

Accessibility and security underlined the overall planning strategy and layout of the campus, reducing additional unnecessary distractions to staff and volunteers.





## Design | Build Benefit

### Planning Process:

This expedited project was completed in 19 months from RFP competition to Occupancy.

Serving as the District's first Design-Build project, the team was tasked to provide a high-level of service, while ensuring the maximum value was provided on a narrow in-fill site under a limited construction timeline.

Our team understood the challenges and perceptions associated with D|B projects and actively worked through the process with the client, ensuring that our intents were clear:

*All students have the ability to learn and as such, we believe that all spaces have the ability to teach.*



# Floor plan – Level 1





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## Project Data

Submitting Firm :	TATE SNYDER KIMSEY
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Construction Firm:	CORE CONSTRUCTION SERVICES of NEVADA
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# Exhibition of School Planning and Architecture

## Project Details

Project Name	JOHN F. MILLER SCHOOL
City	LAS VEGAS
State	NEVADA
District Name	CLARK COUNTY SCHOOL DISTRICT
Supt/President	PAT SKORKOWSKY
Occupancy Date	FEBRUARY 2013
Grades Housed	AGES 3 - 22
Capacity(Students)	144
Site Size (acres)	5.8 ACRES
Gross Area (sq. ft.)	68,875 SQ. FT.
Per Occupant(pupil)	478 SQ. FT. / PUPIL
gross/net please indicate	GROSS
Design and Build?	YES
If yes, Total Cost:	\$16.8 MILLION
Includes:	SITE IMPROVEMENTS & BUILDING CONSTRUCTION
If no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	



# Supporting Images



## Sensory Courtyards

Tactile surfaces in the intermediate courtyards provide individual learning spaces accessible from each classroom.

# Supporting Images



## Health Center

This central programmatic component serves each student daily, providing easy flow and accessibility.

# Supporting Images



## Health Center Connection

Providing a connection between the interior | exterior facilitates a more positive medical treatment environment.



# Supporting Images



## Main Courtyard

The variety of colors, textures, massing and shade provide a stimulating environment for outdoor learning.

# Supporting Images



## Bus Drop-Off

As students arrive, they are welcomed with a variety of sensory cues which also serve as elements of protection.