

Spirit Lake Casino & Resort Renovation

St. Michael, North Dakota

Architect

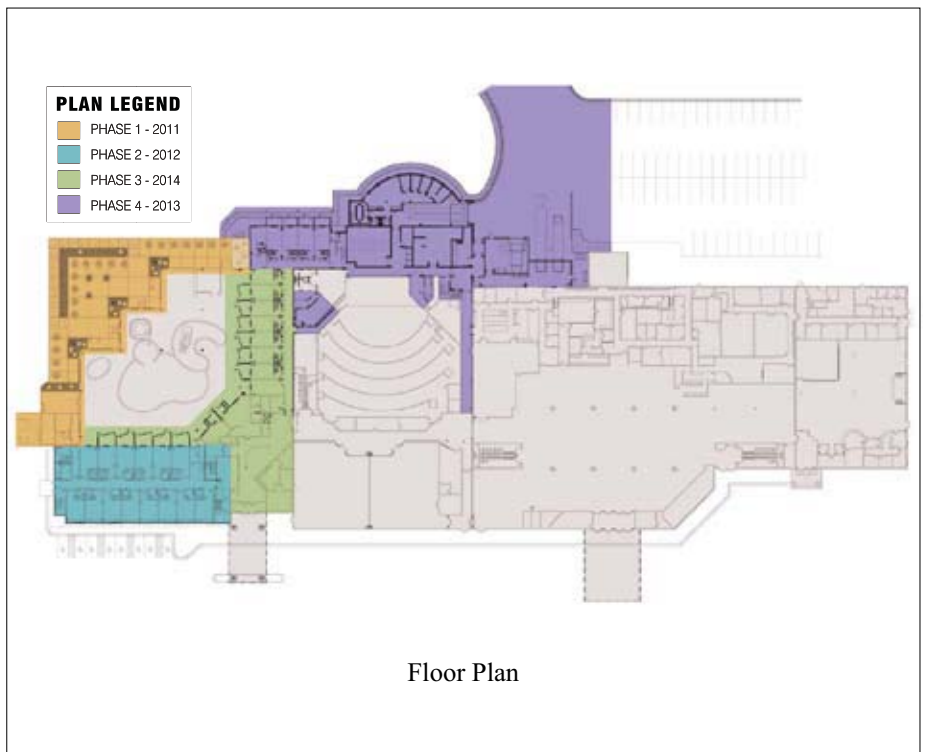
EAPC Architects Engineers



Photos Courtesy of EAPC Architects Engineers

The Spirit Lake Casino and Resort is a multi-story facility comprised of 82,000 square feet of Gaming & Entertainment Floor and 112,300 square feet of Resort and Hotel on a remote island connected by a 2-lane highway. It is located in St. Michael, North Dakota on the Spirit Lake Reservation nestled on the south shores of Devils Lake, known for one of the top walleye fishing lake in the country. The facility's grand opening in 1996 featured 19,160 square feet of gaming floor and 5,500 square feet of full service commercial kitchen and buffet dining. In 1997, the facility expanded by adding 62 hotel rooms and a 1,000 seat auditorium. Three years later, 72 more hotel rooms were added along with a four story aquatic center to round out the facility's resort amenities. In 2004, the gaming floor was expanded to include a 12,400 square foot bingo hall addition. In 2009, the facility added 8,300 square feet of banquet hall.

The facility saw the need to give the Resort a fresh face-lift and expand its Food and Beverage services. EAPC Architects Engineers was commissioned for the facility's multi-phase renovation and addition projects that would span a period of 4-years with a total construction



cost of \$14.6 million. The Client charged EAPC to come up with a design that gives the resort a crisp-clean, modern look while utilizing material that is durable and requires minimal maintenance. After careful study of the facility's existing structure, a rain screen, metal-clad system was determined to be the right choice for the exterior building envelop. EAPC worked with Dri-Design to incorporate over 40,000 square feet of coated aluminum panels system into the design.

During the day, the facility can be seen from miles away sitting on top of a bluff on the remote island. At night, the continuous red glow from the LED lights becomes a beacon for droves of vehicles making their way to the casino and resort.

Guests staying at the resort can enjoy a new 8,600 square foot outdoor patio that features three open flame fire pits with ample seating to take in the majestic lake view. Major hotel renovation brings new life into the 122 guest rooms for a relaxing and memorable night's stay. The bathroom remodel includes custom solid surface countertops with integral sinks, new ceramic tile on walls and floors and contemporary light fixtures. Other work includes replacing three 4-stops hydraulic elevators with the new generation of traction elevators from Otis, LED lighting upgrades and additions of office suite, bus garage, loading docks & trash room, new flooring and a fresh coat of paint throughout.

The latest addition to the resort is a 7,000 square foot upscale restaurant with full service commercial kitchen to enhance fine dining experience. Key design elements include two story curtain walls that maintain a 180-degrees lake view, self-tinting glass by Sage, custom woodwork, fireplaces that utilize high pressure steam with LED lighting from Faux Fire, metallic wave light fixture by Fire Farm and hypnotic LED lighting.

This case study refers to Phase 1 exterior renovation and outdoor patio and Phase 2 exterior and interior renovations of 66 hotel guest rooms. Phases 3 and 4 not included.



Product Information

Exterior Sheathing:

Georgia Pacific Dens-Glass

Exterior Metal Panels: **Dri-Design**

Roofing: GenFlex

Curtain Wall: CMI Architectural

Glazing: OldCastle BuildingEnvelope™;

Sage Electrochromic

Extended Product Information

Exterior Sheathing:

Georgia Pacific Dens-Glass

See advertisement on page 7.

Exterior Metal Panels: **Dri-Design .080**

Aluminum Panels finished in Macadamia and Hopsack. Horizontal band around the building and at the cornice Dri-Design Shadow Swerie

See advertisement on page 9.

Architect

EAPC Architects Engineers
 112 N. Roberts Street, #300, Fargo, ND 58102
 www.eapc.net

Project Team

Structural & MEP Engineer, Cost Estimator:

EAPC Architects Engineers
 112 N. Roberts Street, #300, Fargo, ND 58102

General Contractor:

ICS, Inc.
 2500 State Mill Road, Grand Forks, ND 58203

Project General Description

Location: St. Michael, North Dakota

Date Bid: Phase 1 Oct 2011; Phase 2 July 2012

Construction Period: Sep 2011 to July 2013

Total Square Feet: 112,277 **Site:** 15 acres.

Number of Buildings: One.

Building Size: First floor, 47,000; second floor, 22,000; third floor, 25,400; fourth floor, 17,877; total, 112,277 square feet.

Building Height: First floor, 9'; second floor, 8'; each additional floor (floors 3 & 4), 8'; floor to floor, 9'8"; total, 43'10".

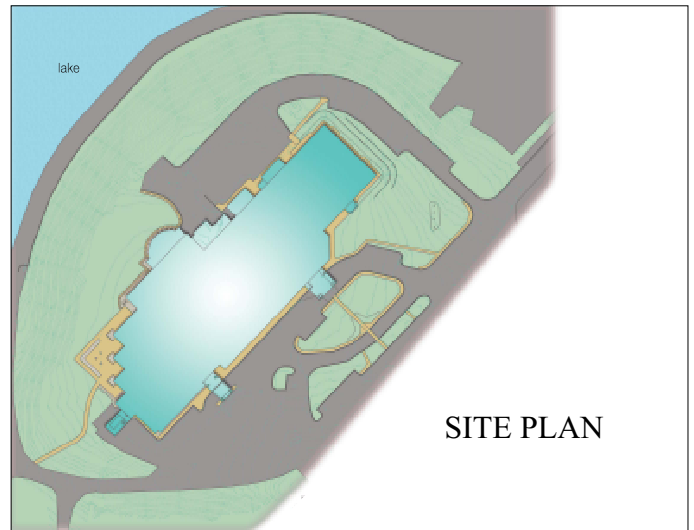
Basic Construction Type: Combination of V-A & II-A

Foundation: Cast-in-place, pier & grade, reinforced concrete, slab-on-grade.

Exterior Walls: CMU, curtain wall, metal panel, precast.

Roof: Genflex TPO. **Floors:** Concrete, wood.

Interior Walls: CMU, wood stud drywall, metal stud drywall.



SITE PLAN



DIVISION	COST	% OF COST	SQ.FT. COST	SPECIFICATIONS
PROCUREMENT & CONTRACTING REQ.	72,203	1.52	0.64	—
GENERAL REQUIREMENTS	918,212	19.27	8.18	—
CONCRETE	14,053	0.29	0.13	Cast-in-place.
WOOD, PLASTICS & COMPOSITES	149,762	3.14	1.33	Rough carpentry, architectural woodwork, finish carpentry.
THERMAL & MOISTURE PROTECTION	919,039	19.29	8.19	Dampproofing & waterproofing, insulation, roof & wall specialties & accessories.
OPENINGS	535,567	11.24	4.77	Doors & frames, curtain wall, glazing, hardware.
FINISHES	673,764	14.14	6.00	Plaster & gypsum board, tiling, ceilings, flooring, wall finishes, acoustic treatment, painting & coating.
SPECIALTIES	44,581	0.94	0.40	Toilet & bath accessories, wall protection.
SPECIAL CONSTRUCTIONS	272,759	5.72	2.43	Outdoor patio.
MECHANICAL	648,460	13.61	5.78	—
ELECTRICAL	517,116	10.85	4.61	Medium-voltage distribution, low-voltage transmission, electrical & cathodic protection, lighting.
TOTAL BUILDING COSTS	4,765,516	100%	\$42.44	
EXISTING CONDITIONS	86,500			Demolition.
EXTERIOR IMPROVEMENTS	29,963			—
TOTAL PROJECT COST	4,881,979			(Excluding architectural and engineering fees)

UPDATED ESTIMATE TO APRIL 2014: \$43.57 PER SQUARE FOOT

Regional Cost Trends

This project, updated to April 2014 in the selected cities of the United States.

EASTERN U.S.	Sq.Ft. Cost	Total Cost	CENTRAL U.S.	Sq.Ft. Cost	Total Cost	WESTERN U.S.	Sq.Ft. Cost	Total Cost
Atlanta GA	\$46.61	\$5,233,523	Dallas TX	\$45.09	\$5,062,865	Los Angeles CA	\$60.29	\$6,769,449
Pittsburgh PA	\$58.77	\$6,598,790	Kansas City KS	\$60.80	\$6,826,335	Las Vegas NV	\$55.23	\$6,200,587
New York NY	\$74.99	\$8,419,146	Chicago IL	\$63.33	\$7,110,765	Seattle WA	\$60.29	\$6,769,449

For more information on this project and similar projects visit www.dcdarchives.com