

North Memorial Medical Center: ERA has been designing projects at **North Memorial Medical Center** in **Robbinsdale, MN** since 1991. The projects have included remodels, expansions, and inspections to the medical buildings as well as the ramps.

The Atrium and canopy addition provided a dramatic new entrance to the existing hospital.





In 2003 we designed an 87,000 square foot, four-story inpatient expansion above the existing 1993 addition.

The hospital was fully operational during the expansions and remodels of this facility.

North Memorial's new - Maple Grove medical facility located in Maple



ERA began design on the 245,000 square foot; three-level hospital in 2007. The hospital was designed for both vertical and lateral future expansions. Maple Grove Hospital had its grand opening in December of 2009. **Grove, MN** was constructed in phases; however when it was complete all of the buildings were connected at all levels. In 2005 ERA began design on the first phase of the project which included the Medical Office Building, the Outpatient Ambulatory Care Center and a ramp. The Phase one structures were all completed before the construction began on the Hospital phase.





Allina West Health Emergency Department



ERA provided structural engineering services for the 22,000 SF (181' x 122') Emergency Department addition adjacent to the north side of the existing **Allina West Health Emergency Department** facility in **Plymouth, MN**. The building has the main entry to the east side, an ambulance garage to the north side

and a 1,200 SF basement with access stairs and a building exit at the northwest corner.

The economical, lightweight structure required additional sound and vibration attention and mechanical rooftop equipment. ERA proposed a concrete slab on the metal roofdeck, roof sheathing and waterproofing to resolve the problem.

Minneapolis Children's Hospital:



Children's Hospital in **Minneapolis, MN** has recently undergone a major expansion. The entire hospital was able to remain operational during this expansion and renovation project.

ERA is the structural engineer responsible for 421,000 square feet of additions; including tunnel and skyway connecting links

and the addition of a new 780 car parking ramp.

This 116.7 million dollar project celebrated it's grand opening in October 2010.



ERA provided the structural design for **Park Nicollet's new Frauenshuh Cancer Center**. The Cancer Center is a 75,000 square foot addition to Methodist Hospital in **St. Louis Park, MN**. The project also included a five-level parking ramp on the north end of the hospital campus. Construction work began in October 2007 and was completed in late 2009.

Methodist Hospital:



West Lakes Medical Campus: ERA recently provided the structural design for the new seven-story, 230,000 square foot, **Mercy Medical Center Hospital** located in **Clive**, **Iowa**.





This project also included the design of the 24 acre **West Lakes Wellness Campus**. This

six building campus is anchored by the YMCA Healthy Living Center with support buildings for radiation oncology, ambulatory surgery, orthopedic/sports medicine, a sleep lab, home respiratory care and weight loss. A power plant and a parking ramp are also part of the campus.

Avera St. Luke's Therapy Addition:



Avera St. Luke's decided to add onto its outpatient rehabilitation services building in **Aberdeen**, **SD**. This \$3 million, 14,000 SF, single-story, steel addition is located between the one-story Therapy Building and the two-story Dakota medical Square Building.

As the structural engineer, ERA utilized the wind force resisting system of the adjacent (adjoining) structure for the new structure where possible. This saved the client considerably in structural costs. Construction completed in the spring of 2012.



Gillette Children's Specialty Healthcare:



The Gillette Children's Specialty Healthcare Expansion in Minneapolis, MN was completed in separate phases. The 10-bed Pediatric Intensive Care Unit (PICU) was finished first, in the summer of 2010 and the new Ambulatory Care Center with an enclosed Skyway and fourthfloor renovations opened in late 2010.

ERA provided the structural design for the three story 51,000 square foot **Ambulatory Care Center** with an estimated construction cost of \$14 million. This building was designed for a future vertical expansion of five



additional levels and horizontal expansion to the east and west.

Saint Joseph's Hospital:



Healtheast's Saint Joseph's Hospital in Saint Paul, MN recently completed a \$52.5 million dollar expansion and renovation project. The entire project was completed without interfering with the daily operations of the existing hospital facility.

ERA provided structural design for the five-story, 175,000 square foot new patient tower. The tower which opened in 2008 was built on a

vacant parking lot adjacent to an existing ramp. It spans over the street and directly connects to the existing hospital on the third floor and also provides a direct connection to the adjacent parking ramp. Private patient rooms occupy the top two floors, outpatient services are on the third floor with a direct connection (spanning the street) to the existing hospital as well as a two-story lobby/main entrance. Support space is available on both the first and second levels.

In addition to the tower expansion, ERA was also part of the design team for the Emergency Department expansion, interior renovations and a new 300 car parking structure.



Fairview Southdale Campus:

ERA enjoys an ongoing long term relationship with **Fairview Southdale Hospital** in **Edina**, **MN**. We have provided the structural design services for new facilities, additions to existing buildings and numerous remodels for the medical buildings as well as the parking ramps and skyways.

This \$39 million, 160,000 square foot addition completed in 2002 included a new main entrance, a lower level public concourse, new operating rooms with pre- and post- op areas and a 60,000 square foot Integrated Care Facility on top of the hospital expansion to house offices for physicians practicing in the heart and vascular center below. To support the increased volume, a new 1,035-car parking ramp across a major traffic route, linked by a 200-foot skyway, connects to the hospital at the





second level above the ground floor, which is the first level of the Integrated Care Facility.

ERA provided the structural design for the 39,000 square foot, \$18 million Operating Room Addition and Renovation which was completed in 2007.

This project included the removal of the one-story, 8,300 square foot 1983 addition.

Ridgeview Medical Center:

Ridgeview Medical Center Vertical Expansion – Waconia, MN

Ridgeview expanded its' Waconia facility with a 12,000 square foot

Heart/Cardiology Center built on the 2nd floor directly above the emergency room department and a 22,000 square foot Women's and Children's Center which was built above the 3rd floor.

Both existing and new



construction utilized Concrete Pan and Joint construction. Stone and brick were used for exterior wall framing with glass curtain wall at the main rotunda.



Heart of the City:



Grand Rapids, MI recently opened the new **Heart of the City Health Care Center**. The health center which was completed in 2011, includes medical exam rooms, dental care suites, mental health consultation and treatment rooms, vision care services, x-ray facilities, laboratory services, physical therapy and rehabilitation services, a pharmacy and a single electronic medical records (EMR) system that will be shared by all providers.

The project incorporates two levels of underground parking with two levels of office space above and a plaza at grade level. The office framing above grade is structural steel and the structural system for the parking will consist of precast concrete.

The 79,300 square foot, \$30 million facility is $\text{LEED}^{\circledast}$ certified, and cleaned up an existing brownfield site.

Lakewood Health Systems:

Lakewood Health

Systems recently opened a new Hospital in **Staples**, **MN**. The three-level, 139,000 square foot medical center is an exciting addition to this outstate, rural community. Before construction on the hospital was complete, the design had already started for a new clinic addition.

ERA designed the entire facility for future vertical expansion at all levels.





Westfield Hospital:

The Cancer Center of Western Wisconsin which is located on the campus of Westfields Hospital in New Richmond, WI was a joint venture of five local hospitals and features the first and only linear accelerator in the region.



The Cancer Center is a 30,000

square foot stand alone facility connected to the existing Westfields Hospital by a hallway link. The main floor level includes the main entry, exam rooms, chemo patient areas, procedure rooms, nurse's stations, storage rooms, and associated support areas and the basement level is occupied by offices, exam rooms, the linear accelerator, CT machine, a break room and locker area, mechanical, electrical, support areas, and a large shell space

Lakeview Medical Center:

Lakeview Medical Center in Rice Lake, WI is a three-story 140,000 square foot hospital that opened its doors in 2010. The new facility is an energyefficient, environmentally friendly replacement of the old Lakeview Medical Center and initially will provide 40 beds; however the structure has been designed for a future vertical expansion when necessary.

The new center includes medical & surgical care, intensive care, obstetrical services, a 24-hour emergency department & Urgent Care, diagnostic &



ancillary services, a **Regional Center for** Joint Replacement and a Sleep Center.

ERA detailed this entire project using BIM Revit Software.

District One:

ERA have been working with District One Hospital in Faribault, MN for over



fifteen years. Our projects have ranged in size from remodels and additions to a new Medical Office Building.

The connecting link/pharmacy addition, gave this rural hospital an updated contemporary appearance.



Mayo Clinic Health Systems - Austin Medical Center



ERA is currently in the design process for an addition to **Mayo Clinic Health Systems – Austin Medical Center** in **Austin, MN**. This 86,500 square foot, three-story expansion project began in July of 2011. The \$28 million project is scheduled to last 20-24 months, with most of the construction taking place in 2012, followed by the remodeling of 32,000 square feet and completion by February of 2013.

Jamestown Regional Medical Center:



ERA provided the structural design of the new **Jamestown Regional Medical Center** in **Jamestown**, **ND**. Ground was broken in November of 2009 on a fifty-five acre tract of cornfield located ten minutes west of the city center.



The building is L- shaped with a walkout basement level, a main level and a second level. The new 110,000 square foot state-of-the-art critical access, 25 bed hospital opened in August of 2011. The hospital was designed for future expansion and the addition of a Medical Office Building.



Medical Office Buildings:

Mercy Hospital MOB:

ERA is currently providing the structural engineering services for the **Mercy Specialty Center** in **Coon Rapids, MN**. The project consists of a new four story, Class A, 115,000 square foot ambulatory care center located on the Mercy Hospital Campus. Mercy Specialty Center will open in early 2014.



Edina Crosstown Medical Office Building:



Ground was broken in April of 2009 for the \$23 million **Crosstown Medical Office Building** in **Edina**, **MN**. The four story office building has an attached five level, 125,000 square foot above ground parking ramp which was designed to look like a second office building. All of this was fit on a 2-acre site.

This 80,000 square foot medical office building is home to the eighty doctors that comprise **Twin Cities Orthopedics** and provides clinic space, an MRI and an outpatient surgery center, along with physical therapy, hand therapy and neck and back therapy operations.

United Family Health:

In March of 2009 **United Family Health Center** opened its 32,000 square foot, two-story facility, at Randolph Avenue and West 7th Street in **Saint Paul**, **MN**. The new facility is built with patient comfort, privacy and ease of use in mind as well as to blend with the historical integrity of the West 7th Street neighborhood.

ERA provided the structural design for the clinic and a 250 car parking ramp. Both the ramp and the clinic were designed for future



expansion. The clinic includes exam rooms, a registration/waiting area, an imaging area, offices and associated support areas. The estimated construction cost for the clinic was \$6 million and \$2.1 million for the ramp.

United Family Medicine, located in the Peter J. King Family Health Center, has been awarded LEED[®] Silver Certification by the U.S. Green Building Council. United Family Medicine is the first clinic in the state to receive this level of certification.