Project Description/Narrative

In a maximum of 300 words, describe the basic program requirements, special site problems and how the design process and solution satisfies these. Please also state any technical, environmental or social advancements regarding your project. (The minimum font size should be 10pt/Arial.) DO NOT change the background of this slide.

The name of the project can be mentioned generically. For example entrants can say "The education center was designed for the university." Instead of "the John Johnson Educational Research Center was designed for the university."

The transformation of a former parking garage into a cutting-edge maternity care facility was an ambitious undertaking. Spanning 60,000 square feet across three floors, this project involved meticulous programming, planning, and design to relocate the hospital's obstetrics service line. This included labor and delivery, post-partum care, OB/ED triage, cesarean operating rooms, and a state-of-the-art Neonatal Intensive Care Unit (NICU).

One of the primary challenges was maintaining critical adjacencies to ensure optimal patient care while also reducing clinician fatigue. The existing obstetrics unit, previously housed on one floor, had to be effectively distributed across two levels without compromising efficiency. To achieve this, the design team collaborated closely with clinicians and hospital stakeholders, analyzing extensive programming data and incorporating the latest evidence-based research on patient care models.

A key decision was the implementation of the Single Room Maternity Care (SRMC) model. Under this approach, mothers would remain in one room throughout labor, delivery, recovery, and post-partum, eliminating the need for transfers and enhancing the overall patient experience. To support this, all Labor, Delivery, Recovery and Post-partum (LDRP) rooms were strategically placed on the same floor as the cesarean operating rooms. The reduction in post-partum room requirements also allowed for a more integrated NICU design, with some private rooms enabling parents to stay with their newborns.

Further enhancing the patient experience, the design introduced the INIC model, allowing postpartum mothers to recover in the same room as their stable NICU infants. Staff well-being was also a priority, with dedicated respite spaces and circadian lighting to reduce burnout. To create a calming and restorative environment, spa-like interiors and a rooftop lounge were incorporated, making this hospital the premier choice for maternity care in the region.

AIA's Framework for Design Excellence

As we are less than a decade away from the AIA 2030 Commitment, AIA Rochester continues to include a focus on sustainability in our annual Design Awards this year and into the future.

Please choose a minimum of three of the ten measures of the AIA's Framework for Design Excellence. In 300-500 words, please explain how your project addresses these three measures. You may duplicate this slide to accommodate your responses. (The minimum font size should be 10pt/Arial.) DO NOT change the background of this slide.

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The ten measures in the Framework for Design Excellence are:

- 1. Design for Integration: What is the big idea behind this project and how did sustainability inform the design concept?
- 2. Design for Equitable Communities: How does this project contribute to creating a walkable, human-scaled community inside and outside the property lines?
- 3. Design for Ecology: In what ways does the design respond to the ecology of its place?
- 4. Design for Water: How does the project relate to the regional watershed?
- 5. Design for Economy: How does the project efficiently meet the program and design challenges and provide "more with less"?
- 6. Design for Energy: Is the project energy-efficient and sustainable while improving building performance, function, comfort, and enjoyment?
- 7. Design for Wellness: How does the design promote the health of the occupants?
- 8. Design for Resources: How did the design team optimize the amount and makeup of material used on the project?
- 9. Design for Change: Is the building resilient, and able to easily accommodate other uses in 50-100 years?
- 10. Design for Discovery: What lessons for better design have been learned through the process of project design, construction, and occupancy, and how have these been incorporated in subsequent projects?

Response on next slide.

AIA's Framework for Design Excellence

Design for Energy: Is the project energy-efficient and sustainable while improving building performance, function, comfort, and enjoyment?

The integration of energy recovery systems and sustainable heating and cooling solutions significantly enhances the hospital's maternity care facility by improving efficiency, functionality, comfort, and overall experience. By utilizing energy recovery in the HVAC system, the hospital pre-conditions incoming ventilation air using exhaust air, reducing energy consumption and increasing efficiency. This minimizes heating and cooling demands, lowers operational costs, and enhances indoor air quality. The existing steam-fired domestic hot water system, powered by waste steam and a cogeneration system, eliminates the need for fuel-fired equipment, further reducing the hospital's carbon footprint. Additionally, a 25% reduction in chilled water load improves overall building performance while ensuring a stable, comfortable environment. Strategic mechanical room placement reduces building openings, preventing air leakage and uncontrolled airflow, which strengthens infection control and thermal insulation. This precise temperature and humidity control are crucial for maternity and neonatal units, ensuring safe and optimal conditions for newborns, mothers, and staff. Enhanced air quality and stable indoor temperatures create a more comfortable and healing environment for patients and families. The filtered and dehumidified air reduces contaminants, benefiting NICU infants and recovering mothers. Staff members also experience reduced fatigue in a well-ventilated workspace, allowing them to focus on patient care. By combining efficiency with comfort, the hospital fosters a welcoming and stress-free experience for patients, families, and healthcare professionals. These innovations ensure better health outcomes, improved staff well-being, and a sustainable future, reinforcing the hospital's role as a leader in maternity care.

Design for Wellness: How does the design promote the health of the occupants?

Although the project was not formally designed for WELL certification, the design team embraced WELL building standard principles to enhance the patient and staff experience. These principles influenced key design decisions that improve well-being, comfort, and efficiency within the facility. A water-focused design was incorporated to create a calming environment for patients, reinforcing the connection between nature and healing. This approach helps reduce stress and anxiety, promoting a peaceful recovery experience for mothers and their newborns. The project also prioritized staff well-being by incorporating dedicated conference spaces away from patient rooms and administrative areas. This strategic separation minimizes disruptive noise, fostering improved clinician focus and a quieter, more restful atmosphere for patients. A crucial aspect of the design was the integration of circadian lighting, which mimics natural daylight cycles by adjusting light levels and color temperatures throughout the day. Research has shown that circadian lighting improves patient recovery rates and reduces staff fatigue, creating a healthier and more productive work environment. By incorporating these WELL-inspired principles, the facility ensures an optimal healing environment, enhances staff efficiency, and elevates the overall patient experience—all without the need for formal certification

Design for Equitable Communities: How does this project contribute to creating a walkable, human-scaled community inside and outside the property lines?

To ensure equitable access, the facility is designed to accommodate individuals with diverse needs, including physical disabilities, language barriers, and varying technological literacy. It will offer translation services and resources in multiple languages, making educational content accessible to all. Flexible scheduling for sessions, including evenings and weekends, as well as virtual parenting and birthing classes ensures it meets the needs of working parents.

The facility will host programs such as prenatal workshops and parenting classes at no cost or on a sliding scale, breaking down financial barriers to health education. By creating a space for consistent community engagement, it fosters trust and collaboration between healthcare providers and the community, ultimately improving health outcomes for families of all backgrounds in the community they serve.

AIA Rochester Community Impact Award

As architects and designers our focus and priority are the pure aesthetics and functionality of the buildings and spaces we design. The color, materials, scale, and functionality of the client's needs drive the projects. After the pencils are put down and the construction dust has cleared, there sits a building/structure/space that now impacts the community where it has been placed. While the design may be added to, subtracted from, and ultimately give way to another, its impact is a permanent part of the community and site's history.

In that spirit, as part of the 2023 Design Awards, we are requesting that you include with each submission a brief summary explaining its "community-impact goals". Projects can affect communities in many ways: improving the housing stock, rejuvenating a neighborhood, adding a pedestrian or biking route, filling a gapped-tooth "street smile" with a parklet, steering the life of a business district in a previously unforeseen path, adding beauty and functionality, and more.

This information is intended to be used during and following the Design Awards event in promotion of the Design Awards via AIA Rochester's social, news outlets, and in promotion of AIA Rochester.

Community Impact Award summary (500 words or less):

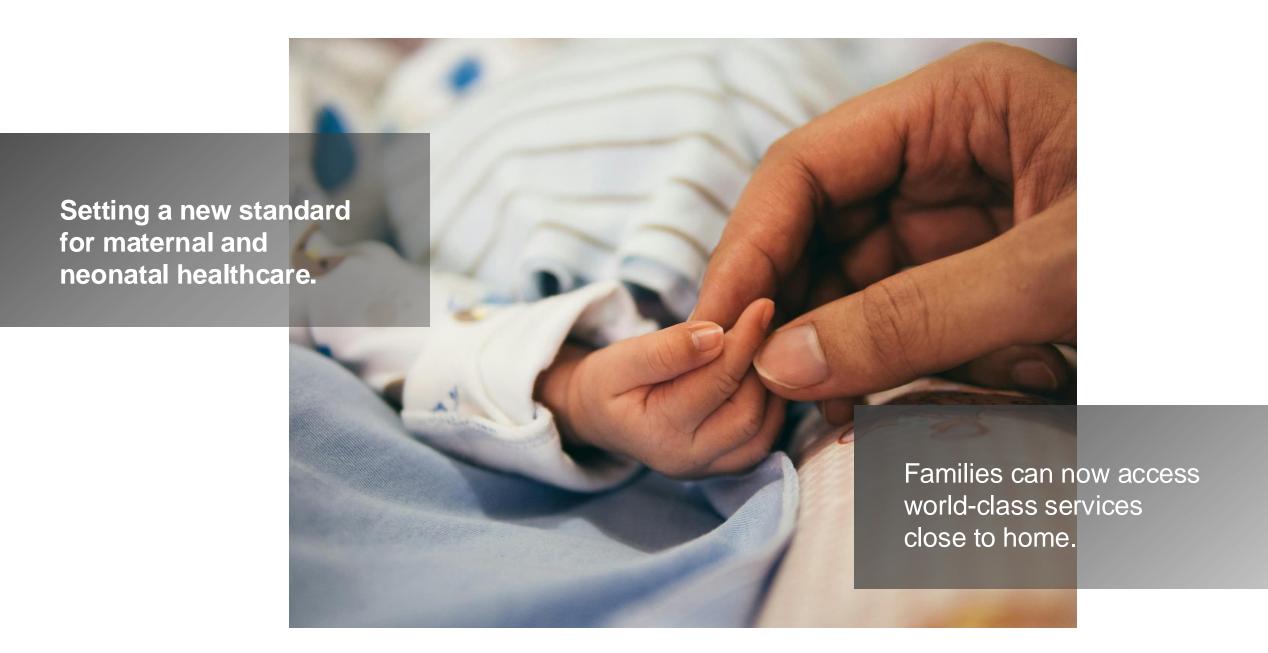
The transformation of a former parking garage into a state-of-the-art maternity care facility represents more than just a hospital expansion—it is a vital investment in the well-being of the community. By prioritizing patient-centered care, improving clinical efficiencies, and creating a supportive environment for both families and healthcare providers, this project significantly enhances the quality of maternity services available to local residents.

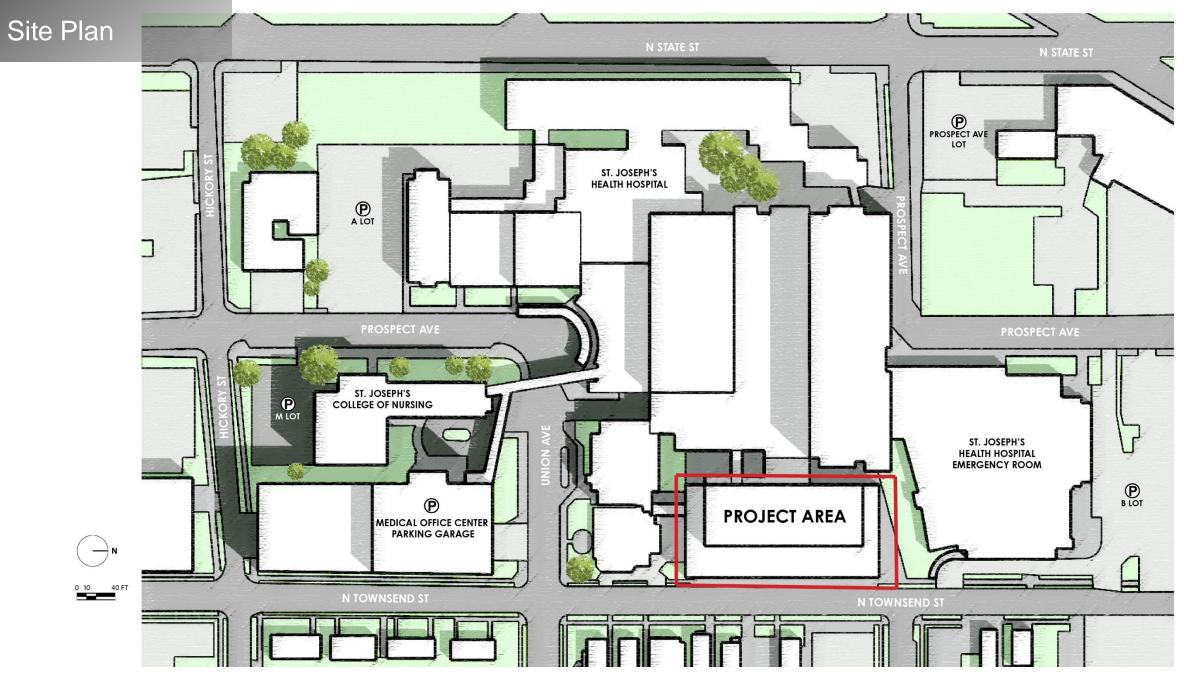
One of the most profound impacts is increased access to high-quality maternity and neonatal care. With the relocation and expansion of labor and delivery, post-partum, OB/ED triage, cesarean operating rooms, and the Neonatal Intensive Care Unit (NICU), the hospital is now better equipped to meet the growing needs of expectant mothers and newborns. The integration of the Single Room Maternity Care (SRMC) model ensures that mothers remain in the same room for labor, delivery, recovery, and post-partum care, reducing stress and improving outcomes. This approach not only enhances the patient experience but also shortens hospital stays, allowing more patients to receive timely care.

The introduction of private NICU rooms and the INIC (Integrated Neonatal Intensive Care) model further strengthens family-centered care. In traditional NICU settings, parents often have limited time with their newborns, creating emotional and logistical challenges. By designing private NICU rooms where parents can stay overnight and implementing the INIC model, the hospital fosters stronger parent-child bonding and promotes better long-term developmental outcomes for premature and at-risk infants. These innovations help alleviate some of the anxiety and stress that families face during difficult medical situations.

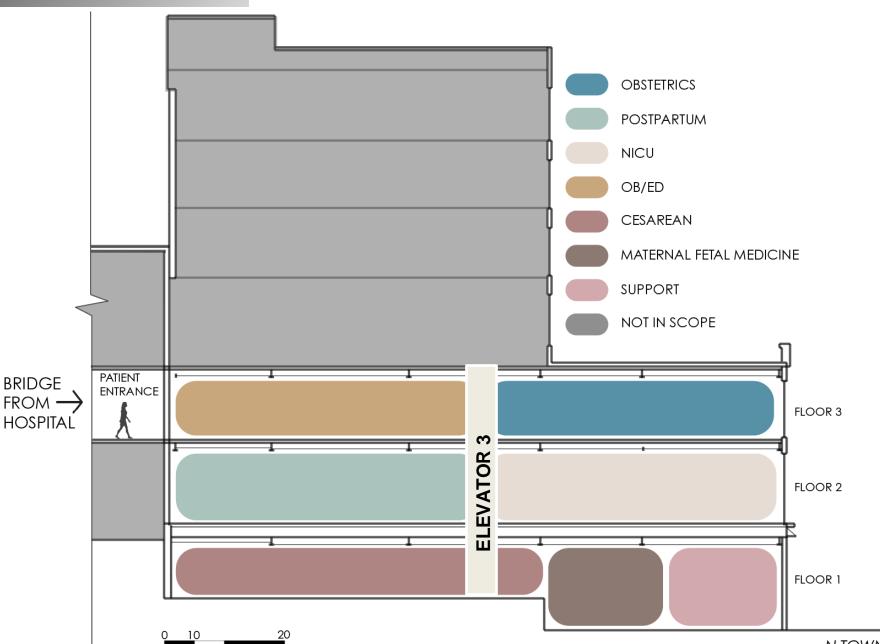
Beyond patient care, this project has a significant economic and social impact on the community. The expansion has created job opportunities for healthcare professionals, administrative staff, and support personnel, strengthening the local economy. Additionally, with improved facilities and a reputation for excellence, the hospital is likely to attract more expectant mothers from surrounding areas, further boosting the regional healthcare network.

The well-being of medical professionals was also a key consideration in the project's design. Burnout and fatigue are major concerns in maternity care, where long shifts and emotionally demanding situations can take a toll on clinicians. To address this, the hospital incorporated staff respite spaces and circadian lighting systems, which help regulate natural sleep cycles and reduce fatigue. By investing in the well-being of its staff, the hospital ensures that healthcare providers can continue delivering high-quality, compassionate care. The broader community benefits from the hospital's commitment to wellness-focused design. Spa-like interiors, a rooftop lounge, and other amenities create a healing environment that extends beyond the traditional clinical setting. These features not only support patients but also serve as a model for future healthcare developments that prioritize holistic well-being. Ultimately, this project solidifies the hospital's role as the leading choice for maternity care in the region. By combining innovative design, evidence-based medical practices, and a commitment to community needs, the hospital is setting a new standard for maternal and neonatal healthcare. Families can now access world-class services close to home, ensuring healthier outcomes for mothers, babies, and the community as a whole.





Building Section



Patients and visitors will access the facility from the main hospital at the new third floor. They are immediately greeted with a comforting waiting area and reception, with access to the OB triage suite. If patients are admitted from triage, they will move to an LDR also located on the third floor. Visitors to the postpartum or NICU will find those accessible on the second floor.

The design team worked closely with the hospital to locate services to be easily accessible by using Elevator 3. This helps to eliminate confusion, and consolidates circulation through the building.

Virtual Reality Walkthrough

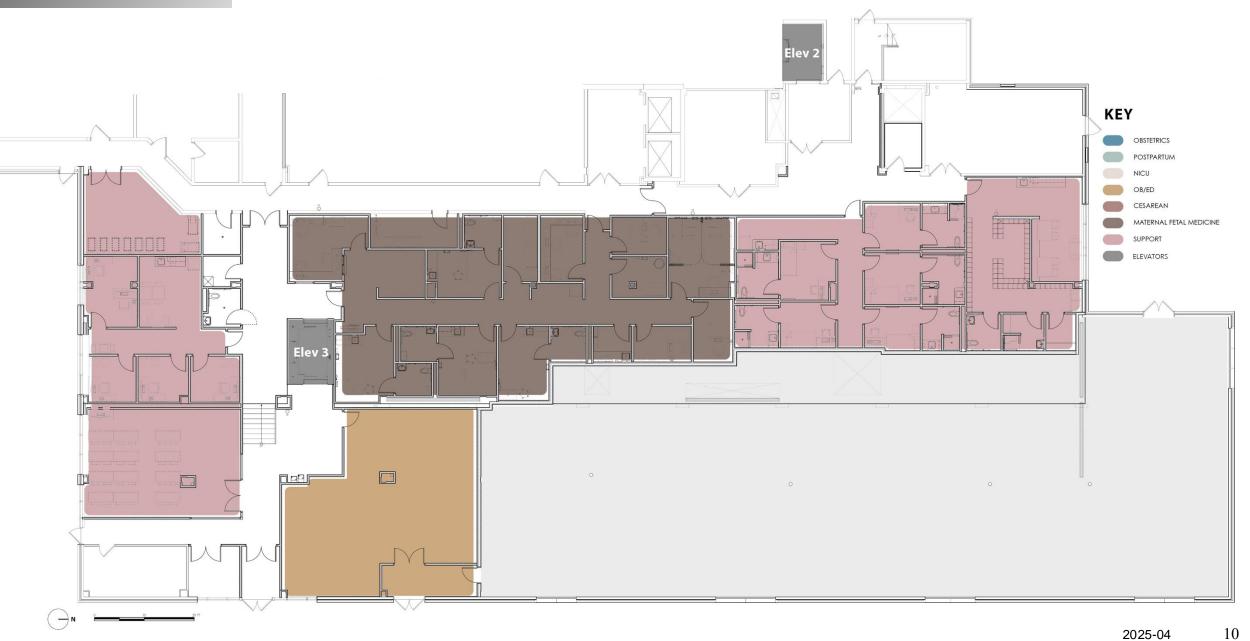






During our design process we hosted an open house for Hospital administrators, nursing staff, and doctors to use virtual reality goggles and "walkthrough" proposed spaces, write comments on floor plans, and provide feedback on some initial design ideas. It was an interactive, collaborative, and inclusive design process.

First Floor







Construction photos





Pictured here are progress photos of the project, demonstrating the transformation of the existing parking garage into the shell space and future home of Women's and Infant Services.











