

PROJECT LEADERSHIP AWARDS NOMINATION FORM

SECTION I - GENERAL PROJECT INFORMATION:

Name of Project:

Texas Children's Hospital North Austin Campus

Location of Project:

Austin, Texas, USA

Name and Address of Owner:

Texas Children's Hospital 9835 North Lake Creek Parkway Austin, TX 78717

Name and Address of Design Professional(s):

Page 200 W. 6th Street, Suite 1600 Austin, TX 78701

Name and Address of Construction Professional(s):

McCarthy Building Companies, Inc. 3800 Buffalo Speedway, Suite 250 Houston, TX 77098

Other Consultants or Professionals:

Civil Engineering: Civil & Environmental Consultants, Inc.

Landscape Architecture: TBG Partners Parking & Traffic: Walter P. Moore Structural Engineer: Walter P. Moore

MEP + Fire Protection: SSR

Telecom & Security: Combs Consulting Group

Helipad: FEC Heliports

Food Service: Worrell Design Group Elevator Consultant: Lerch Bates

Code Consultant: WSP



Acoustics: EEA Consulting Engineers

Signage: D|G Studios

Artwork: H. Marion Art Consulting

Building Enclosure: Morrison Hershfield

Furniture: McCoy Rockford

Photographer: Albert Vecerka/Esto

Photographer: Shaulin/Page

Door Hardware: Allegion, ASSA ABLOY

ADA Consultant: Winning Way

Type of Project:

(Commercial, Institutional, Industrial, Governmental, Medical, etc.)

Medical

Delivery Method:

(Design Bid Build, CM Agency, CM at-Risk, Design Build, Multiple Prime, etc.)

Design + CM at Risk (aka "IPD Light")



General Project Description:

(Provide a brief narrative of the project scope of work, not to exceed one (1) page.) Texas Children's Hospital, one of the top-ranked hospitals in America providing pediatric and maternal-fetal care, has opened a brand-new, greenfield hospital for children and women in Austin, Texas.

The campus was designed and constructed in less than 4 years—on time and under budget, despite the pandemic, supply chain interruptions, and the highest inflation in 40 years. The team attributes this to its early commitment to Lean practices and working together with the motto, "One Team, One Goal."

The four-building \$485 million facility brings the premier Texas Children's Hospital brand to Central Texas, with a local flare. The 52-bed, 365,000-square-foot hospital provides neonatal intensive care, pediatric intensive care, operating rooms, epilepsy monitoring, a sleep center, emergency center, state-of-the-art diagnostic imaging, acute care, on-site Texas Children's Urgent Care location, and a fetal center for advanced fetal interventions and fetal surgery with a special high-risk delivery unit. With the opening of the campus in Q1 2024, the lives of Central Texas families will be positively impacted as they will no longer have to travel outside of the city for specialized care.

An adjacent 170,000-square-foot outpatient building contains numerous subspecialties including, but not limited to: cardiology, neurology, pulmonology, plastic surgery, audiology, gastroenterology, rheumatology, fetal care, and dialysis.

By harnessing innovative technologies, including recycling condensate water for landscape irrigation, a landscape design that honors Central Texas ecology, efficient electrical and plumbing fixtures and a large retention wet pond, the campus has achieved an Austin Energy Green Building (AEGB) 3-star rating. AEGB is the nation's first and most successful local Green Building Program and was the precursor to the national LEED standard.



Project Duration:

(Calendar Days)

1452 (without excluding 6 weeks when all TCH projects were put on hold at the beginning of the pandemic.)

Project Start Date:

(Date)

Notice to Proceed with Design: 2/13/2020

Project Completion Date:

(Planned Completion Date, Actual Completion Date)

Planned Completion Date: 2/4/24

Actual Completion/Ribbon Cutting: 2/1/24

Changes in Schedule:

(Briefly Describe Reasons for Delay or Acceleration)

The completion date was originally targeted for November 2024, but Texas Children's Hospital asked the design & construction team if they could accelerate the schedule by nine months. The Ribbon Cutting was successfully held on Texas Children's Hospital's 70th Anniversary.

Initial Construction Cost (\$):

(In Dollars) \$294,829,295

Final Construction Cost (\$):

(In Dollars) \$292,563,322 (\$2.3M under budget)

Percent of Change Orders:

(Percentage of Final Construction Cost)

Short answer: 1% under budget

Long answer: Because the project was fast-tracked with multiple bid packages, technically, the project started with a \$0 contract and the entire project was built as an intentional series of change orders! Furthermore, since it was a phased GMP, the team was able to strategically capture the design and Owner changes as the packages were released, thus reducing the need for any significant change orders that might otherwise have added major scope to the project.



SECTION II - OVERALL PROJECT MANAGEMENT:

(Entire section should not exceed four (4) pages.)

Project Management:

(Provide two (2) examples which demonstrate project management excellence by the Owner's Project Manager.)

Texas Children's Hospital's Facility Planning and Development organization has an exceptionally good grasp on how to be "a good Owner." They understand—and often present publicly—the importance of the Owner's role in successful projects. Two specific examples of project management excellence:

- 1) At the very beginning of this project, the architect and contractor put together a presentation for the Owner about industry best practices, including Lean—most of which were new to Texas Children's. When asked how many of these new practices they were interested in taking on, many Owners might have been willing to try one or two new things. But to Texas Children's credit, their response was, "If this is the best way, then that's what we should do." That forward-thinking commitment led to training the entire OAC team in Lean, the Last Planner System[®], Target Value Delivery, and Getting Decisions That Stick. It meant scheduling time for people to take the CliftonStrengths assessment and to develop Conditions of Satisfaction. TCH leaders later admitted that in the early months they felt like saying, "We don't have time for this!"—but they trusted the team and the process. Once the team started using the new processes and tools, they recognized that they were now part of something exceptional. They had created a unified team culture like no other project they had experienced. And they were delivering a project ahead of schedule and under budget despite the pandemic, supply chain issues, and rampant inflation. After the Ribbon Cutting, the Senior Vice President of Facilities Planning and Development remarked, "This is the best project of my 30-year career." Thanks in large part to her leadership.
- 2) While establishing Conditions of Satisfaction, the OAC team agreed they wanted, "To have fun." This led to the creation of CFOs—Chief Fun Officers—a committee with at least one person each from the Owner, A/E, and construction manager. The Owner's Project Manager volunteered for this position herself, and together the CFOs organized events such as: playing music while people were signing on to the weekly Zoom-based OAC meeting; a Zoom-based Halloween party; and creating a booklet of all team members from all firms, including their CliftonStrengths and other personal tidbits. One of the Owner's executives, who joined the team sometime after the project had started, remarked how valuable this booklet was. He noted that the team was working so cohesively that for weeks he could not tell which companies individuals worked for. More recently, during a celebration dinner after the final Ribbon Cutting, everyone was reminded that we did have fun and finished the project as friends. None of this would have been possible without the leadership of the Owner's Project Manager.



Scheduling:

(Provide two (2) examples which demonstrate the Owner's expertise in managing the schedule; that is, identify some steps taken by the Owner which contributed to the management of the schedule.)

- 1) When the Owner asked the design & construction team to open the campus nine months earlier than originally planned, the team evaluated their options. One of the greatest constraints on the team was the site development permitting process in the City of Austin, which generally takes about a year to achieve. No construction can start without the site permit. Working backwards from the desired opening date, leaving just 30 months (instead of 36) to construct 4 buildings, then subtracting 12 months for site development permitting, left just weeks to program and master plan the campus and start the site development permitting process. This would normally take 6 months or more including all the meetings and Owner reviews and approvals. While the programmers and planners were willing and able to move quickly, it required significant effort on the Owner's part to work at the required pace. Getting Texas Children's Hospital employees, who already had full-time jobs at other campuses, to participate in back-to-back programming and planning meetings is hard enough with a normal schedule. Meeting the shortened schedule required extraordinary coordination and commitment on the part of the Owner. Thanks to these efforts, the team did submit the site development permit on schedule, which was essential to opening on schedule nearly four years later.
- 2) Beginning during design, the OAC team held Weekly Pull Planning sessions, which included multiple representatives from the Owner. The weekly commitments and follow-through by everyone—including the Owner—were essential to the project's success. The team tracked the Percent Planned Complete (PPC), and the OAC team had an extraordinarily high level of performance. In other words, if someone promised, "I will have that for you Tuesday," nearly 100% of the time they met that commitment. The activities that hurt the PPC were almost always the things we had the least control over, such as permitting or supply chain issues. Without the Owner's full participation in using the Last Planner System®, it is clear that the desired schedule would not have been achieved.

Cost Management:

(Describe what action the owner took with the project team to manage the project costs.)

It is common practice for a team to identify a list of long lead Items for the contractor to begin procuring early. In this case, given the many other large construction projects in the area, compounded by supply chain issues during and after the pandemic, the construction manager recommended procuring a significantly longer list of items than usual. They felt it would be important to lock in prices early and get in the queue for various materials and systems. This required the design team and Owner to make many decisions earlier than



a normal process. This required tight coordination and commitment to previous decisions. Given the supply chain shortages and rampant inflation that followed, this was a hugely important strategy in completing the project under budget. The Owner's active participation in this was essential.

During the design phase, the construction manager's estimators developed a cost model along with a running list of alternatives that had been developed with the design team. As these were evaluated and accepted or declined by the Owner, the CM produced a graph of the running estimate over time. The Owner found this very helpful to be able to see at a glance how the current estimate compared with the budget, which helped them evaluate which options could be accepted.

Quality Management:

(Provide a brief narrative describing the methods of quality control/quality assurance and the Owner's participation in this area.)

This project started in February 2020, just before everyone went home for the pandemic. Together, we all figured out how to design a campus using Zoom, Mural, Bluebeam Studio, and many other tools that were new to most members of the OAC team. This team embraced these tools and found them very beneficial. They were so beneficial that even when we were allowed to return to face-to-face meetings, this team kept virtual meetings for most interactions. Some of the key benefits that the Owner noted included:

- **Getting more people reviewing** "In the old days," there were only so many people who could cluster around a 30x40 board to review physical drawings. But with Zoom, the Owner was able to get more reviewers involved sooner, and they had a chance to zoom in, highlight areas to ask questions, and get a better understanding of the design.
- **Better coordination** One Texas Children's Hospital executive noted that this project did a better job of fully integrating all aspects of the project than any other project she had been involved in. The master plan concept, site planning, drainage, landscaping, exterior building design, interior circulation patterns, flows of people and materials, interior design, signage, artwork, etc. They were better-integrated because everyone involved had a better understanding of what the other disciplines were planning. This was thanks to both the technology (Zoom) but also to the collegial collaboration and coordination that happened across all disciplines throughout the project. To be sure, the Owner's participation in that was essential to having everything work in concert.
- Realtime QC Using Bluebeam Studio, preliminary drawings from all disciplines were made available to the entire team including the Owner, and the full team was trained in and encouraged to create mark ups. Representatives from the Owner had their own mark-up color for leaving questions and comments in the drawings, and participants were viewing



the same live drawings that the architects, engineers, consultants, and contractors were reviewing and marking in. This was not only efficient (for example, only one person needs to mark up a typo), it also fostered collaboration and reduced conflicting directions. The Owner was an important participant in these reviews, which happened at multiple stages throughout the design for multiple construction packages (site, central plant, parking garage, core & shell, outpatient build-out, hospital build-out).

Once vaccinations were available and people felt comfortable with in-person meetings, there were two categories of meetings that the team found were best done in-person:

- Selection of Certain Materials While photorealistic renderings and 3D walk-throughs viewed on-screen were extremely effective in communicating most of the proposed materials, the decision-makers learned that renderings were inadequate in conveying the quality of certain materials such as large expanses of carpet or the transparency of stained glass. For these, in-person meetings allowed the decision-makers to be very comfortable in their selections.
- Clinical Mock-ups and Simulations It is common practice in healthcare to build mock-ups of key clinical spaces during design so the users can better understand the proposed design in three dimensions. Clinical simulations allow them to "put the room through its paces" at full scale using real world—and sometimes unanticipated—scenarios. These exercises provided valuable feedback and input at a critical point in design. They helped to ensure that the quality and functionality of the spaces were vetted out completely by all users and stakeholders. Active participation by the Owner is essential to the success of these activities.



SECTION III - OVERALL PROJECT SUCCESS:

(Identify and briefly explain the factors that contributed to the success of the project such as the selection of the A/E, Prime Contractor and Subcontractors, approach to decision-making, handling end user requests, etc. Entire section should not exceed two (2) pages.)

Texas Children's Hospital had previously built multiple campuses, and the main campus in the Texas Medical Center has multiple buildings spanning many blocks. As a serial builder, they are a knowledgeable Owner with many seasoned professionals. Some of the key factors that contributed to the success of this project include:

- A sound initial plan for the scope, schedule, and budget for the project, based on internal research.
- Texas Children's Hospital has found great success over many decades using what some people call "IPD Light"—selecting the architect and contractor separately but nearly simultaneously. Using conventional Owner-Architect and Owner-CM agreements, the team is encouraged to work together as trusted partners from the beginning.
- As detailed above, the team's commitment to using Lean practices was a
 defining element in the team's success. It dialed up the level of respect and
 engagement of the entire team. And we had fun!
- Using the most recent campus as a baseline helped everyone understand most expectations, freeing up time to focus on the many areas that would be unique at this campus.
- The OAC team was also trained in Getting Decisions That Stick. Texas Children's Hospital found this so beneficial that they had put the rest of the Project Managers in the Facility Planning & Development group through the course as well.
- End user requests are handled collaboratively. Starting with the baseline assumptions from the most recent campus helped to build consensus. If there was a newer standard, such as an operating room at the main campus, decisions made elsewhere were given extra weight. For new department or unique aspects, the end users generally understand the Texas Children's standards, so they were easily adapted where needed.



SECTION IV - PROJECT COMPLEXITY:

(Provide a brief narrative (i) in bullet form and (ii) maximum of one page; describing the complexity of the project including challenges, constraints and the solutions.)

Building a new greenfield hospital campus in record time is highly complex, by any standard. Challenges include:

- Any greenfield healthcare campus requires a specialized team that understands the wide range of design and construction needs and how to navigate and integrate: business strategy, vision & goals, evidence-based design, patient & family satisfaction, sustainability, zoning, campus planning, site planning, helicopter glide path, traffic planning, civil engineering, wetlands, landscape architecture, site lighting, signage, central plant, parking garage, coordinating with neighbors, authorities having jurisdiction, programming, medical planning, medical equipment, engineering systems, building design, detailing, specifications, interior design, furniture, accessories, wayfinding, graphics, artwork, IT/AV, security, door hardware, permit expediting, cost estimating, scheduling, site mobilization, procurement, construction, commissioning, punch lists, inspections, licensing, activation, move-in, etc.
- Since time to market was important, shortening the schedule also required a team that was experienced in fast-track/multiple construction packages, design assist, prefab, and making durable decisions.
- This is Texas Children's Hospital's first inpatient facility in Austin. Most of the decision-makers and surrogate users were in Houston, 150 miles away.
- And of course the pandemic, working from home, learning new technologies (Zoom, etc.), supply chain issues, shortages of many building materials or components, and the worst inflation in 40 years.

Constraints included:

- Early commitment to deliver a specific scope, schedule and budget
- Healthcare projects have multiple Authorities Having Jurisdiction. This project required separate approvals for site development, state health department, building permitting, fire marshall, multiple state licenses (e.g. pharmacy, lab), food service, Texas Accessibility Standards (ADA), Austin Energy Green Buildings (sustainability), etc.
- The site was narrow, with wetlands and large protected heritage trees.
- Overhead power lines conflicted with multiple helicopter glide paths.

Solutions included:

- Selection of a qualified A/E team and CM that had a good track record working together. They knew TCH standards and how to build in Austin.
- Committing to use Lean processes and tools, training the entire OAC team in Lean tools, and on-boarding newcomers about the team culture.
- Early trade partner involvement for estimating and design assist.
- Early commitment to pre-purchase long lead items and using select prefab.
- Extensive communication and coordination among all stakeholders.



SECTION V - SUSTAINABILITY ELEMENTS/EFFORTS:

(Provide a brief narrative (i) in bullet form and (ii) maximum of one page; describing sustainability elements/efforts, if any.)

- The campus was designed to achieve a two-star rating from the Austin Energy Green Building program (AEGB). Though this was a stipulation in the local Planned Unit Development, Texas Children's Hospital was committed to being a good steward of the community.
- AEGB, which was founded in 1991, is the precursor to the LEED rating system and "cultivates innovation in building the community's enrichment" via environments and human well-being. At construction end, the facility was awarded a three-star rating. (This is roughly equivalent to LEED Silver.)
- Exceeding the two-star goal was largely due to a significant wet pond at the south end of the campus. This pond both serves as retention for the area's scant rainfall and captures mechanical condensate to fill the pond which provides most of the site's irrigation.
- The building roof is designed to accommodate future photovoltaic panels.

SECTION VI - CONFLICT RESOLUTION:

(Provide a brief narrative (i) in bullet form and (ii) maximum of one page, describing the owner's role in minimizing and resolving conflicts.)

- The Owner was an integral team member throughout the project—leading but not micro-managing. Texas Children's Hospital understands the importance of the Owner's role in the three-legged OAC stool. The Owner's Project Manager was the daily point person and liaison between the design/build team and all of the Owner's representatives from dozens of departments.
- Texas Children's Hospital has a well-understood process regarding who gets to make which decisions. This fosters collaboration because people generally understand which decisions they can influence and which ones are made by others. While the vast majority of decisions were harmonious, for the few that were not, it was clear who in the organization could be called on to resolve it.
- During the team's periodic retrospectives looking for opportunities to improve the process, the Owner was an important contributor. Without the Owner helping to proactively resolve potential conflicts, improvements would likely have been hampered.



SECTION VII - THE COAA WAY:

(Provide a brief narrative (i) in bullet form and (ii) maximum of one page, describing how the project team embodies The COAAWay.) The COAAWay is a mindset for completing projects successfully, a desire to continuously improve, and a belief that working collaboratively will lead to greater success.

This project team embodies the COAA Way completely. Nearly word-for-word.

- "The COAA Way is a 'way' for completing projects successfully..." This project was completed very successfully. Finishing the project on time and under budget during the pandemic and unexpected inflation would have been considered by most to be a success. But this team further set Conditions of Satisfaction to "have fun" and "finish the project as friends." On all counts, this project was a roaring success.
- "A desire to continuously improve..." The team's commitment to Lean processes and tools was exceptional, including continuous improvement. Many meetings ended with Plus/Deltas (using Chat in Zoom), the team was encouraged to continue to look for ways to improve, and they held periodic retrospectives at various stages of design and construction.
- "Working collaboratively..." began with the selection of the A/E and CM. Part of the selection criteria was their track record working together and with Texas Children's Hospital. Virtual Big Room meetings, having the CM as an active contributor during design, and countless coordination meetings between disciplines are all evidence of the team's collaborative spirit.
- "A team of PEOPLE led by a 'Good Owner'..." As previously noted, Texas Children's Hospital is a very "Good Owner." The Facilities Planning & Development group is made up of Project Managers who have been trained in a culture that embodies the COAA Way.
- "Sharing BEST PRACTICES..." At the beginning of this project, the A/E and CM teams prepared a presentation of industry best practices for Texas Children's Hospital's consideration. Even though the hospital had very successful practices in place, they agreed to learn about and use the newly recommended practices. These have been so successful that this OAC team has been sharing their best practices at many industry conferences.
- "In a CULTURE built on trust & respect..." This team embraced its Lean training and Respect for People. After the very first project team meeting in early 2020, the team immediately followed it with a Ripple Intent meeting that explored the topic of trust. Some believe that that meeting was a turning point, when they could feel that this team was going to be different. More unified. "Culture" is the very word that the team used over and over to describe to others what made this team better, and what made this a "BETTER PROJECT."

