

THE HOUSE THAT

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CAMPUS CROSSROADS EXPANDS ON THE LEGACY OF NOTRE DAME STADIUM



PHOTOS: MATT CASHORE PHOTOGRAPHY unless otherwise noted

For its first 87 years, the University of Notre Dame Stadium provided a spectacular venue on six gamedays each year. When those games ended, the stadium emptied, the gates were locked and this part of campus fell silent. The Indiana university sought to change that with Campus Crossroads; the project would bring academics and student life to the stadium while improving the game-day experience.

Four years in the making, the Campus Crossroads

project is the University of Notre Dame's (UND's) largest construction project in the school's 178-year history. Opening in fall 2017 and fully occupied by spring 2018, Campus Crossroads is made up of three new adjacent buildings anchored to the south, east and west sides of the stadium—O'Neill Hall, Corbett Family Hall and Duncan Student Center, respectively.

Working alongside a diverse team of industry partners, The S/L/A/M Collaborative (SLAM) was the executive architect for this

\$400 million endeavor and led the programming, planning and design through construction of the Campus Crossroads project. The project provides a vibrant new face to the southeast side of campus while inspiring a collaborative and multidisciplinary approach to education and research amongst students and faculty. These new buildings add more than 800,000 square feet to the campus, designed to attract students to the area year-round to participate in many activities, including

ROCKNE BUILT



academics, research, student life, fitness, digital media, performance, meetings, events and hospitality, strengthening the stadium's connectivity to the surrounding campus.

ENVISIONING CAMPUS CROSSROADS

SLAM's 20-year relationship with UND spans several groundbreaking projects that revived Notre Dame's heritage of signature collegiate gothic architecture, including the Eck Center, Coleman-Morse, Jordan Hall of Science and the Notre Dame Law School.

As a trusted partner of

UND, SLAM was selected to lead the design team for a feasibility study on the Campus Crossroads project that began in the summer of 2013. SLAM engaged university leadership, administration, faculty, athletics, academics and student affairs in determining what programs belonged in the Campus Crossroads project while ensuring the entities were reflected in the university's strategic goals. An initial list of 20 academic and non-academic departments, including student life, recreational sports and career services, were considered. SLAM helped to

identify the departments that would belong in the Campus Crossroads project.

The study rendered the "big idea" of successfully integrating academic and campus life with an enhanced gameday experience.

The three new buildings of the Campus Crossroads project bring together diverse disciplines to engage in an experience they couldn't achieve alone.

O'Neill Hall, on the south side of the stadium, is a 6-story, state-of-the-art music facility and includes performance halls, the Sacred Music

program, a music library, classrooms and rehearsal halls, music departmental offices, and practice and teaching studios. The Foley's Club provides hospitality space for gameday, as well as receptions and events throughout the year.

On the east side of the stadium is the 9-story academic building, Corbett Family Hall, which includes the Martin Digital Media Center; the departments of anthropology and psychology; facilities for press and radio; and the Downes Club hospitality space, which serves as a 100-seat classroom on non-gamedays.



THE DESIGN TEAM REUSED WEATHERED REDWOOD BENCHES FROM THE STADIUM BOWL—WITH ORIGINAL SEAT NUMBERS INTACT—ALLOWING VISITORS TO TOUCH 90 YEARS OF NOTRE DAME FOOTBALL HISTORY.

The Duncan Student Center, on the west side of the stadium, stands 9 stories and incorporates gameday with student life and hospitality spaces. It is the heart of the greatest concentration of daily academic activity for students and faculty. The Danhke Ballroom serves as a club on gameday and a student-affairs ballroom on non-gamedays and is juxtaposed to other student-life spaces within the Duncan Student Center, including the Student Center, the Smith Center for Recreational Sports and the Meruelo Family Career Center. A large commissary kitchen and trucking

garage support gameday and other events.

Year-round use is evidenced by non-gameday activities occurring in the hospitality and club spaces located within the new buildings, where they extend above the rim of the stadium bowl.

DESIGN

Knute Rockne, the great coach who established the national reputation of Notre Dame football, convinced the university to build the stadium, which was completed in 1930. Although the new buildings of the Campus Crossroads project did not replicate the elements

of the original stadium, they derived inspiration from that structure.

SLAM studied the original building's drawings to understand the key design elements of the Rockne-era stadium. These characteristics include:

- A repetition of three-window bays marked with strong projecting vertical pilasters and deeply recessed windows, creating a lively shade and shadow effect on each element of the façade.

- In each bay, tall windows are capped with arches. Above the arched windows is a parapet that features a frieze of vertical niches, repeated along

the length of the façades.

- Contrasting stone details are used at the base, copings and windowsills. A distinctive geometric ornamental detail is located at the top of the projecting pilasters.

- The original stadium included tower elements marking key entrances with a subtle evolution of the typical bay details seen in the rest of the structure.

At Notre Dame, there is a characteristic campus palette created by a buff blended brick used on the university's original buildings (the brick was made of the clay dug from the lakes on campus). That blend

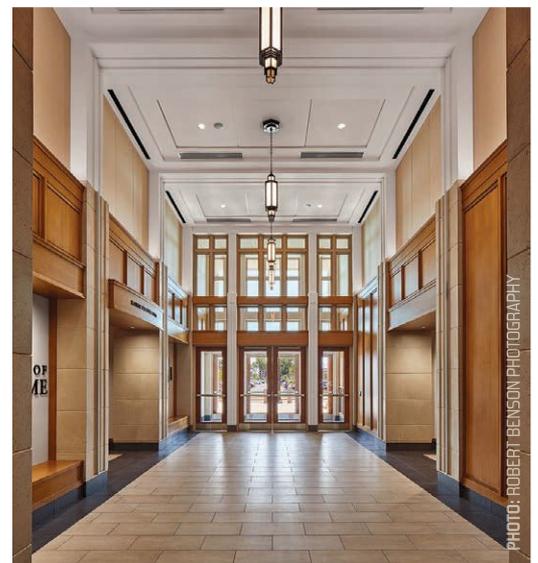
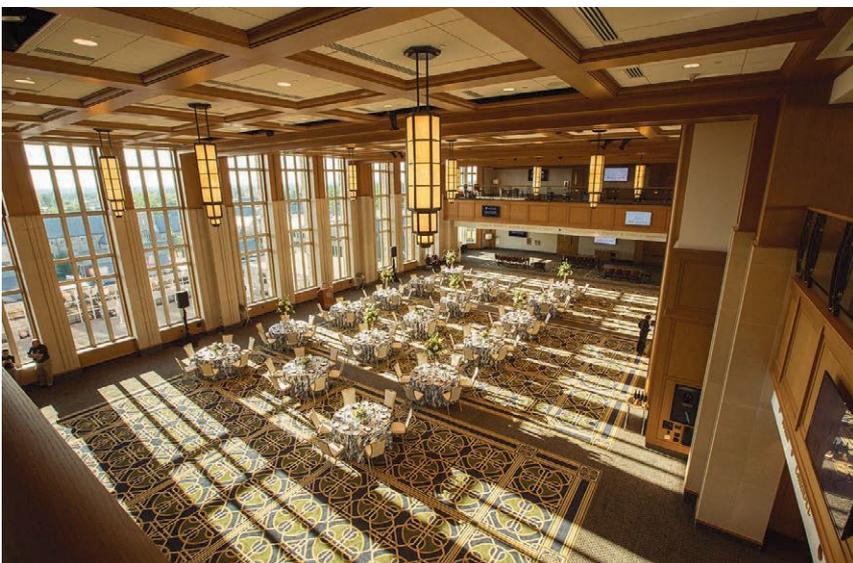
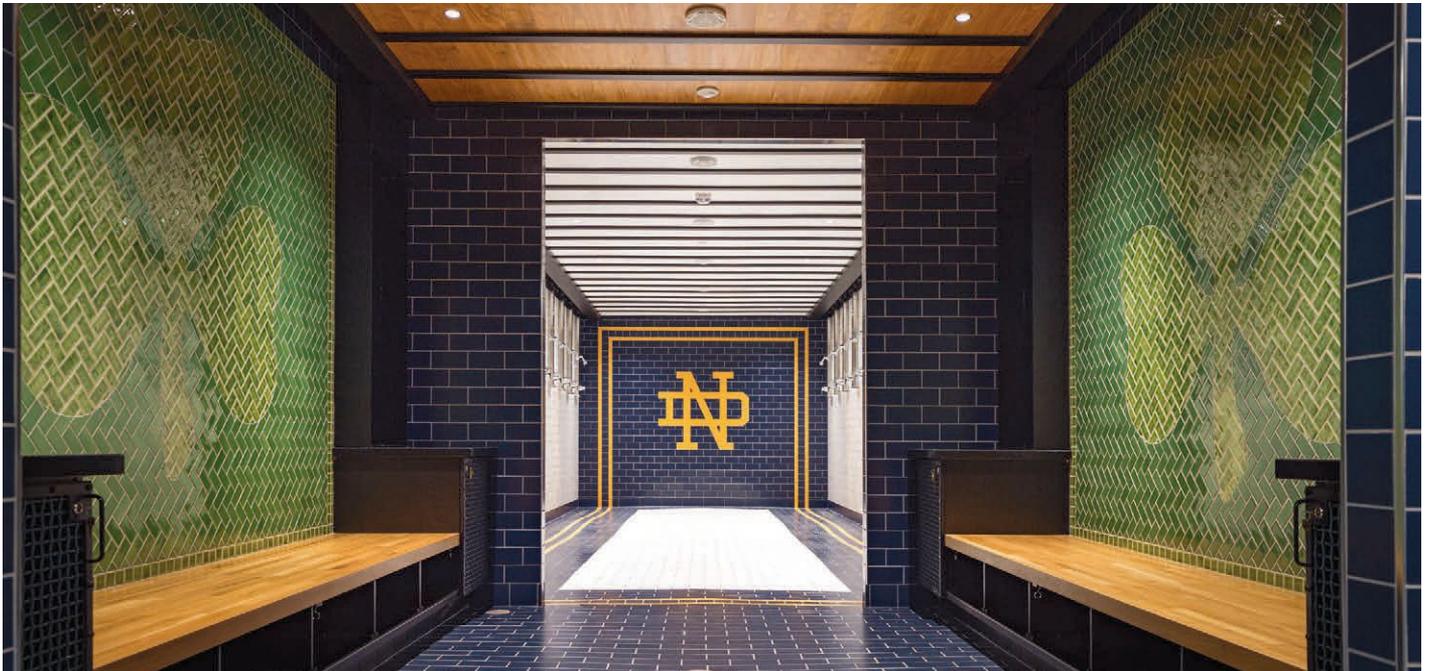


PHOTO: ROBERT BENSON PHOTOGRAPHY

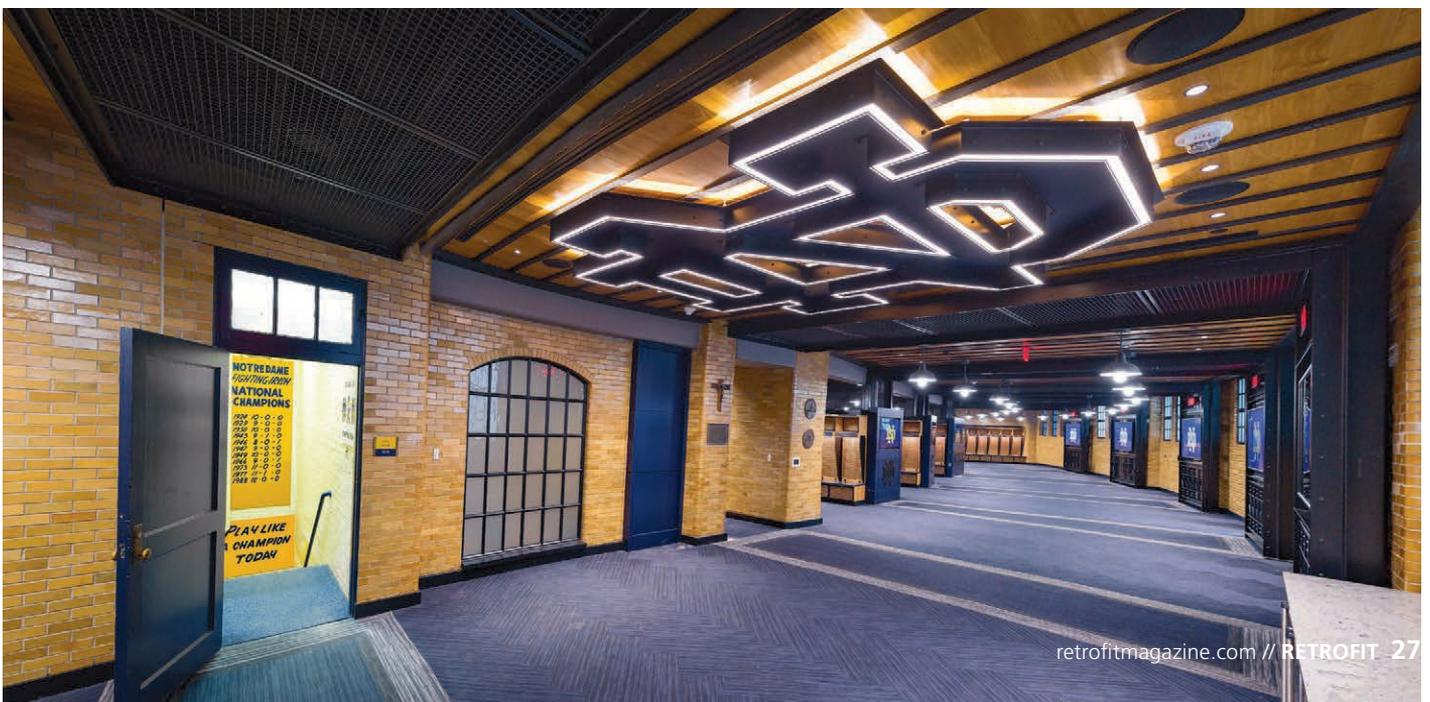
THERE ARE MANY INTERIOR SPACES THAT SOUGHT INSPIRATION FROM NOTRE DAME'S HERITAGE AND ARE ALSO MEANT TO UNIFY WITH THE NEW EXTERIORS. THESE RANGE FROM THE MONUMENTAL DANHKE BALLROOM (LEFT) TO MORE INTIMATE SPACES, SUCH AS THE O'NEILL HALL LOBBIES (RIGHT).

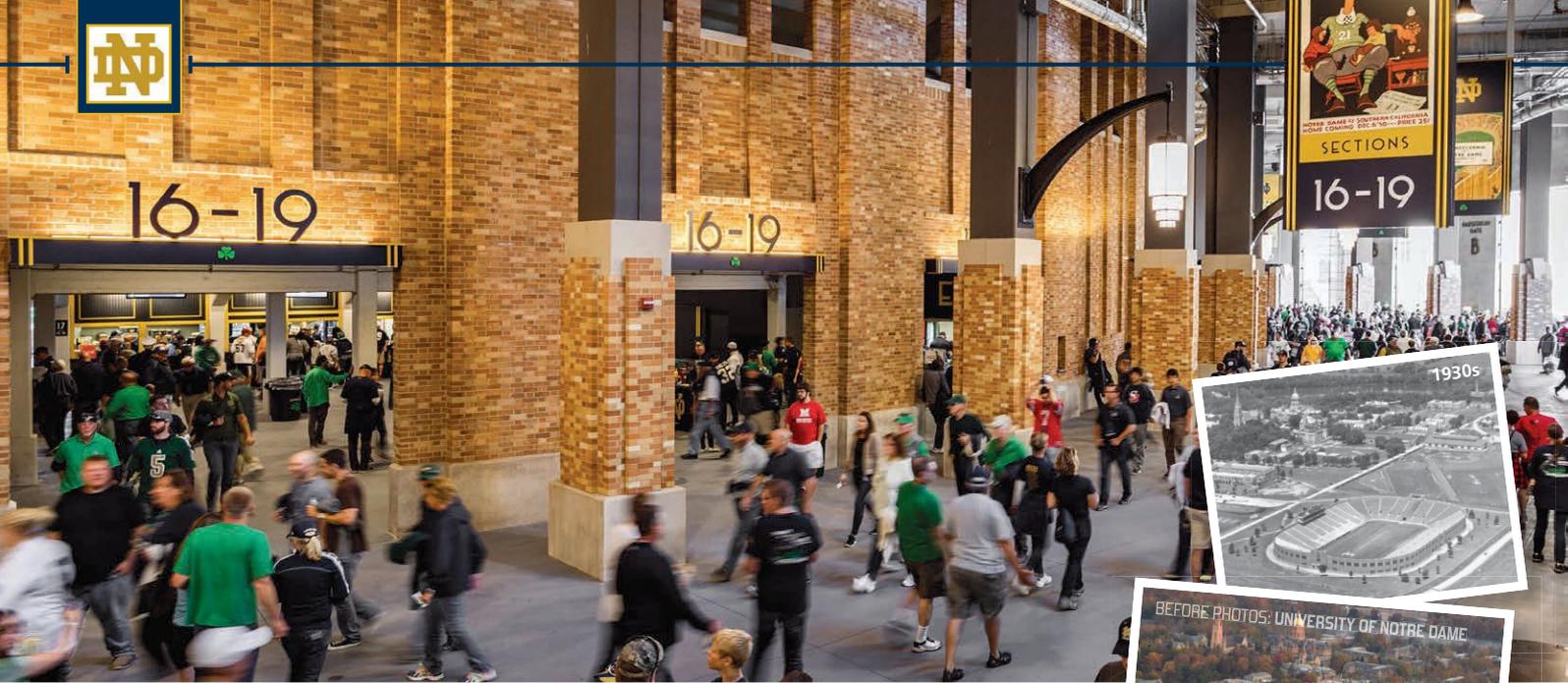


GREEN ROOFS ADORN THE NEW BUILDINGS THAT ARE ANCHORED TO THE SOUTH, EAST AND WEST SIDES OF THE STADIUM.

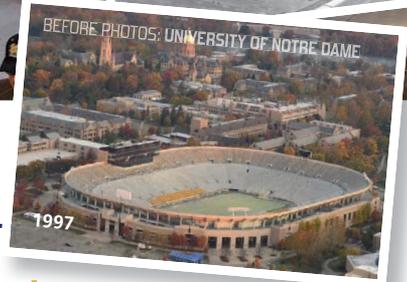


ORIGINAL 1930S GLAZED BRICK WAS METICULOUSLY SALVAGED AND USED THROUGHOUT THE RENOVATED HOME TEAM LOCKER ROOM. CUSTOM MILLWORK, LOCKERS, FLOORING AND WALL PANELS WERE DESIGNED TO EVOKE THE ROCKNE ERA.





NOTRE DAME FANS HOLD A SPECIAL PLACE IN THEIR HEARTS FOR THE ORIGINAL ROCKNE-ERA STADIUM. WHILE IT IS STILL THERE, THE ORIGINAL FAÇADE WAS OBSCURED BY AN EXPANSION IN 1997 AND ONLY EXISTS AS A PART OF THE CONCOURSE TODAY.



YEAR-ROUND USE OF CAMPUS CROSSROADS IS EVIDENCED BY NON-GAMEDAY ACTIVITIES OCCURRING IN THE HOSPITALITY AND CLUB SPACES LOCATED WITHIN THE NEW BUILDINGS, WHERE THEY EXTEND ABOVE THE RIM OF THE STADIUM BOWL.



PHOTO: ROBERT BENSON PHOTOGRAPHY

has evolved over the decades to become a rich combination of colors that gives an overall tan to buff color. A warm color is added to trim and details; historically, it has been limestone and, in recent decades, cast stone.

With new buildings up to 9-stories tall, the challenge was finding a way to maintain human scale appropriate to a campus of mostly 3- and 4-story buildings. To respect the original stadium and campus, a similarly scaled base was developed for the new buildings, which include tower elements to mark entrances.

The upper stories of the Campus Crossroads buildings progressively step back from the base and are meant to appear as if they unfold from those lower stories. The repetition of vertically organized window bays, each with deeply articulated masonry façades emphasize shade and shadow and provide a rich exterior without over-reliance

on applied ornament.

There are many interior spaces that sought inspiration from Notre Dame's heritage and are also meant to unify with the new exteriors. These range from the monumental Danhke Ballroom to more intimate spaces, such as the O'Neill Hall lobbies and Recital Hall. Millwork and stone details recall the composition and forms of the building exteriors while providing warmth and human scale.

An interesting historic artifact applied to many interior spaces was the reuse of salvaged benches from the stadium bowl. The weathered redwood benches—with original seat numbers intact—allow visitors to touch 90 years of Notre Dame football history.

All these elements are intended to recall the heritage of the iconic stadium while providing a powerful new presence on the Notre Dame campus.

(continues on page 30)

Retrofit Team

- EXECUTIVE ARCHITECT //** The SLAM Collaborative, www.slamcoll.com
- SPORTS ARCHITECT //** HOK Architects, www.hok.com
- EARLY-PHASE DESIGN //** RATIO, www.ratiodesign.com
- DUNCAN HALL STUDENT CENTER DESIGN //** Workshop Architects, www.workshoparchitects.com
- INTERIOR DESIGN //** Champalimaud, www.champalimaud.design
- ORIGINAL STRUCTURE RENOVATION //** Integrated Design Solutions, www.ids-michigan.com
- ORIGINAL STRUCTURE RENOVATION //** Cardosi Kiper Design Group Inc., www.ck-dg.com
- ENGINEER //** BVH Integrated Services, www.bvhis.com
- STRUCTURAL ENGINEER //** SDI Structures, www.sdistructures.com
- CULINARY DESIGN //** Ricca Design Studios, www.ricca.com
- DESIGN-BUILD CONSTRUCTION MANAGER //** Barton Malow, www.bartonmalow.com



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Belden Brick and The University of Notre Dame – Building upon the foundations of our past for the dreams of generations to come.

When it came time for the University of Notre Dame to realize their dream of bringing academics, athletics and student life together in the most ambitious building project in Notre Dame history, Belden Brick was chosen to meet their needs. Belden Brick supplied thousands of hours and millions of bricks to bring to life the colors, shapes and design inspired by Knute Rockne's original Notre Dame Stadium style. Belden Brick is proud to be a part of Notre Dame's Campus Crossroads Project of more than 750,000 square feet of classroom, research, student facility, digital media, performance, meeting, event, and hospitality space, all attached to the University's iconic football stadium.



■ Materials

BRICK // The Belden Brick Co., www.beldenbrick.com

CAST STONE // Southside Precast Products, www.southsideprecast.com

TERRACE PAVERS // Hanover, www.hanoverpavers.com

GLASS FIBER REINFORCED GYPSUM // Plasterform from Armstrong Ceiling & Wall Solutions, www.plasterform.com

WINDOWS // Wausau Window and Wall Systems, www.wausauwindow.com

EXTERIOR DOORS // The Cook & Boardman Group, www.cookandboardman.com

INTERIOR DOORS // Masonite, architectural.masonite.com

ROOFING // Fibertite, www.fibertite.com

GREEN ROOFS // LiveRoof, www.liveroof.com

HARDWARE // Allegion, www.allegion.com

CARPET // J+J Flooring, www.jjflooringgroup.com, and Mohawk and Durkan, www.mohawkgroup.com

CERAMIC TILE // Garden State Tile, www.gstile.com

EPOXY FLOORING // Stonhard, www.stonhard.com

SPORTS FLOORING // Connor Sports, www.connorsports.com

CEILINGS // Armstrong Ceiling & Wall Solutions, www.armstrong.com

MILLWORK // Imperial Millwork, www.imperialmillworkinc.com

LABORATORY CASEWORK // Kewaunee Scientific, www.kewaunee.com

WATER CLOSETS, URINALS, FLUSHOMETERS, FAUCETS AND SOAP DISPENSERS // Sloan, www.sloan.com

OPERABLE PARTITIONS // Modernfold, www.modernfold.com

WINDOW BLINDS // Mecho, www.mechoshade.com

THEATRICAL RIGGING // JR Clancy, www.jrclancy.com

ELEVATORS // Otis, www.otis.com

STADIUM SEATING // Irwin Seating Co., www.irwinseating.com

AUDIOVISUAL // New Era Technology, www.neweratech.com

VIDEO BOARDS // ANC, www.ancsports.com

STADIUM LIGHTING // Musco, www.musco.com

GAMEDAY AND BEYOND

Concurrent to the design and construction of the three new buildings were enhancements to the stadium that combine history and innovative technology, making an already spectacular gameday for 80,000 Fighting Irish fans an even more memorable experience.

The two sideline buildings extend the length of the field and rise 3 stories above the stadium bowl. In these structures are indoor and outdoor hospitality seating and clubs.

Dramatic views of the playing field and campus are now possible from the terraces atop each of these buildings; fans and alumni can gather on these terraces for a more intimate sporting experience. In addition, there are necessary accommodations for press, broadcast, coaches and gameday management, including the NBC broadcast facilities.

Notable improvements for gameday include new stadium technology—video and ribbon boards, stadium sound and field lighting. Broadcast-quality, energy-efficient LED stadium lighting has been installed, providing exceptional visibility of the field and dramatic lighting of the seating bowl.

A first for the Notre Dame Stadium is the addition of a video board at the south end of the field, measuring 54-feet high and 95-feet wide with a 4.7-million-pixel high-resolution image. New sideline ribbon boards along the east and west sides of the stadium display key game statistics. This upgrade in technology facilitated removal of the previous scoreboard at the north end of the bowl, providing improved sightlines

to the famous mural on the Hesburgh Library, affectionately known as Touchdown Jesus.

STADIUM RENOVATIONS

Notre Dame fans hold a special place in their hearts for the original Rockne-era stadium. While it is still there, the original façade was obscured by an expansion in 1997 and only exists as a part of the concourse today.

Different from other buildings on campus, the original façade has a brick blend that is much more orange in hue and incorporates art deco stone detailing in lieu of the more common collegiate gothic. To celebrate this difference, the renovated concourse leans heavily into the history of Notre Dame football and borrows from those details, emphasizing that this stadium is the “House that Rockne Built”.

Art deco-inspired brick and limestone column enclosures support custom light fixtures that march the entire length of the concourse, creating an ambiance that didn’t exist before. Period-correct fonts were used to create new wayfinding signage that incorporates historic program covers from the team’s 133-year history. Original wood concession façades, nearly 90-years old, were restored and are highlighted throughout the original stadium.

The renovations were more than just aesthetic. For years, the stadium’s plumbing was drained after the final game of the season to prevent freezing. A new system of recirculating pumps, along with other methods of heating, keep toilet rooms and concessions operational when temperatures drop below freezing,

allowing the stadium to operate year-round. In 2019, this enabled the university to host the Winter Classic, the annual NHL hockey event.

Gameday improvements weren’t limited to fan amenities. The north end zone entry tunnel, being mostly exposed concrete from the 1997 addition, was renovated with the same art deco detailing of the concourse. Acting as the entry point for the home team, this zone houses new media rooms, officials’ locker rooms, equipment storage, the visiting team locker room and Schivarelli Players’ Lounge.

The preservation of history is capped off within the renovated home team locker room. Original 1930s glazed brick was meticulously salvaged and used throughout. Custom millwork, lockers, flooring and wall panels were designed to evoke the Rockne era. This theme extends to the smallest of details from the selection of mirrors to the tile patterns in the showers.

The stadium renovations allow future generations to create their own experience in this iconic structure while recalling the greatness of Notre Dame football history.

The entire Campus Crossroads project was a monumental undertaking for the University of Notre Dame, as well as for the design and construction team. The most rewarding part of this experience was seeing Campus Crossroads come alive—on gameday with 80,000 cheering fans and on each day of the academic year with thousands of students and faculty using the new buildings. A once quiet part of Notre Dame campus now is filled with the life of a great university. 