

5. Evolution of Design

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5.1 Historic Influence

Whilst not ignoring the recent decades at The Kassam stadium, the design team have chosen to focus on the Manor ground for historical context and inspiration.

Everyone at the club speaks fondly of their time at The Manor Ground and we would like to recreate this feeling at the new stadium.

The Club have also identified five Icons that are intrinsically linked with the image of the city of Oxford. These are being used as inpiration for the project.

- The Manor Arch
- Ox on the Ford
- Radcliffe Camera
- The Headington Shark
- The Mini



Manor Arch

Ox on the Ford



Headington Shark



Radcliffe Camera

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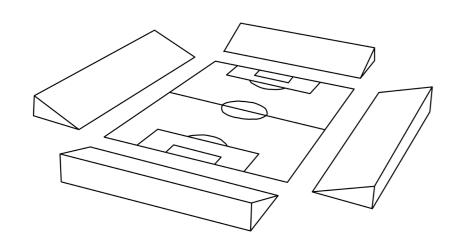
Mini

5.2 Design Principles

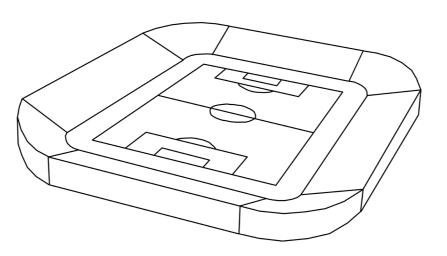
One key driver for the scheme was to provide Oxford United with a 360 degree seating bowl, something they have been without since their move to the Kassam Stadium.

In order to create a viable stadium that meets the needs of the club, and the community, there are certain spaces that are required; in particular, the hospitality/event spaces and the commercial provision.

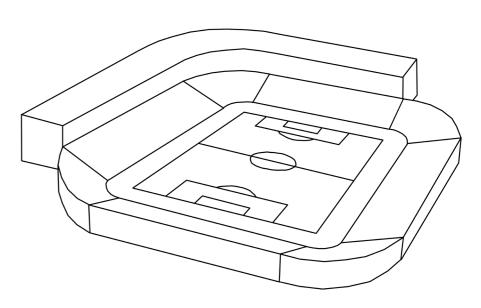
Due to conditions in the land ownership, the scheme must be one singular building, consolidating the match day and non-match day accommodation into one.







Enclosed 360 degree seating bowl



Enclosed seating bowl with incorporated mass

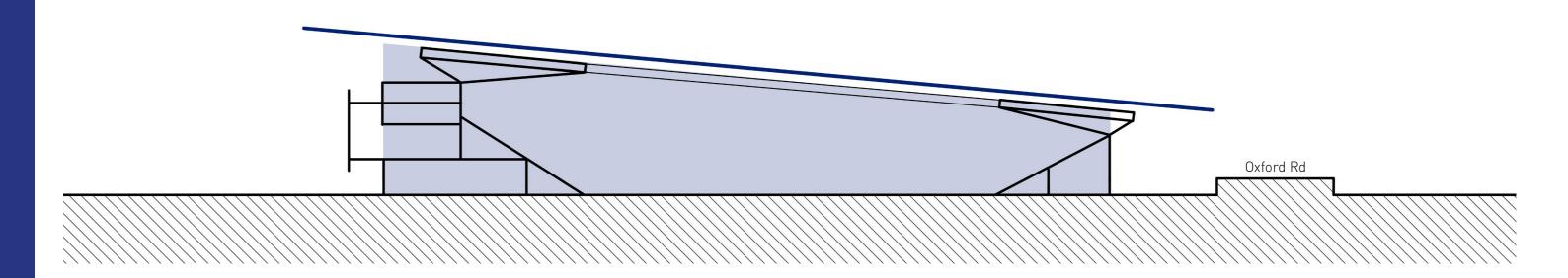


Due to the internal and external adjacencies, as well as the site limitations, the hotel and other commercial components of the project are integrated in the north and northwest of the development.

This has resulted in an imbalance when compared to the eastern and southern sides, where the building consists solely of a concourse and seating area.

To reduce the overall mass where possible and create a stadium atmosphere that isn't overshadowed by vast empty spaces beneath the roof, we have designed an angled roof which closely follows the accommodation below.

This design choice is particularly advantageous since the larger mass of the structure faces the bustling Frieze Way, while the shorter corner of the building engages with Oxford Road, the primary pedestrian route to the site.

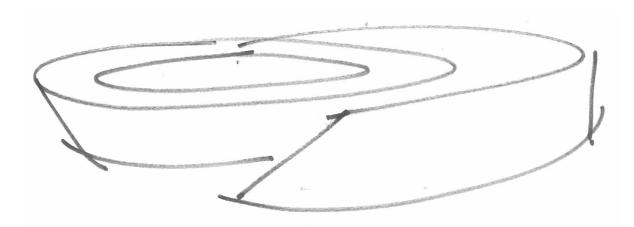


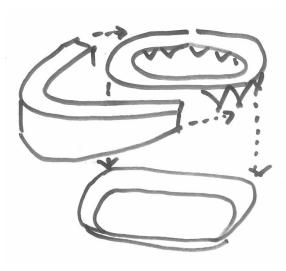


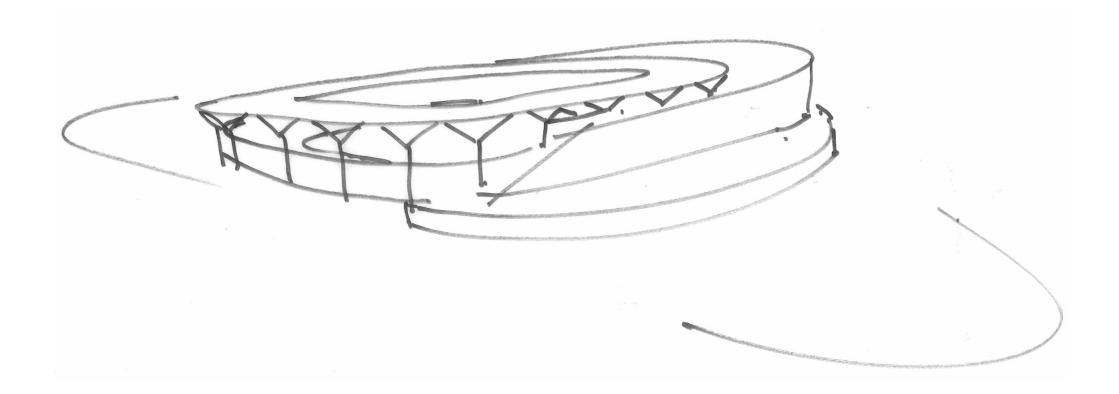
Once we had finalized the massing and zoning of the project, we turned our attention to the building's aesthetics. When it comes to designing stadiums, there is often the option to envelop the entire structure in a skin that unifies all the elements as one. However, we believed that this approach wouldn't properly showcase the distinct spaces underneath and wouldn't harmonize well with the chosen site.

Given the juxtaposition of the building's various elements and functions, we aimed to celebrate this diversity and emphasize each component individually.

The stadium is designed to look and feel like a stadium, featuring a continuous 360-degree seating bowl with a concourse beneath. The spacious hospitality areas and the hotel, on the other hand, create a different mass, height and required aesthetic, which will wrap around the stadium on two sides.





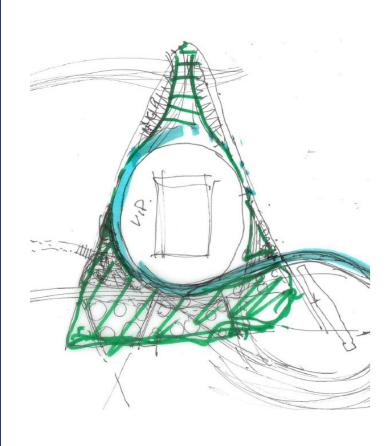




5.3 Massing Development

We explored a variety of massing on the site and found that a more organic shape could work on the site but that a North South orientation would be most efficient in terms of public realm and designing around the pinch points of the site.

The Stage 1 site plan shown serves as the groundwork for the subsequent development studies.







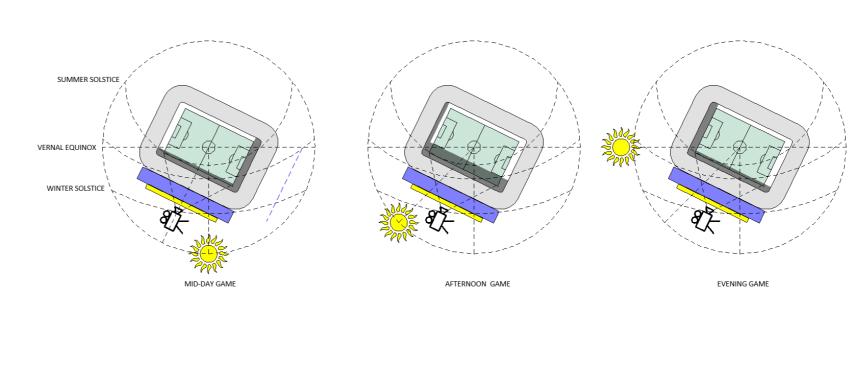
5.4 Massing Refinement & Orientation

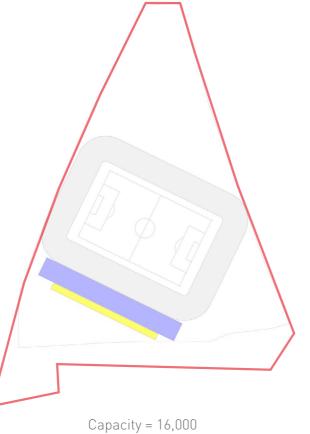
The massing and orientation of The Triangle development is critical and influenced by a number of factors. To ensure an optimal design and access strategy, we must account for the following:

- Hotel Rooms: Maximizing scenic vistas and reducing the need for heating and cooling to ensure an efficient design and a pleasant experience.
- Commercial Proximity and Visibility: The viability of the scheme is reliant of the commercial spaces. Their proximity to the carpark and visibility from the main access routes will heavily impact their success or failure.
- Connection to Surrounding Transport Links: With Oxford Parkway in such close proximity, the development must integrate and connect to the existing transport infrastructure. The site strategy must also take into account the most efficient vehicle routes on and off the site.
- Site Constraints and Fixed Dimensions: With a triangular site comes complexities in locating the mass on the site, especially when dealing with the fixed dimensions that arise when designing a football stadium. If fully optimised, the development will still have ample space to house the logistic and social spaces planned.

In addition to these considerations, there are other stadium-specific requirements we must address. Hospitality seats and camera locations would always be facing away from the evening sun, this in turn dictates where the main stand is located.

Our preferred orientation for The Triangle development is angled to run parallel with Oxford Road. If the main accommodation was to wrap around from West to North this could take into account all the points listed above.

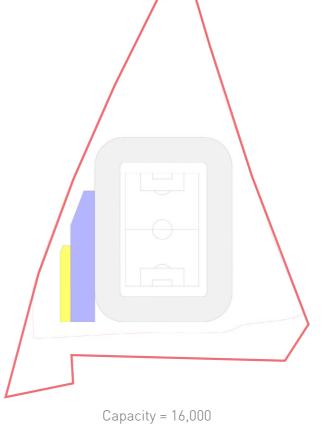




Capacity = 16,000

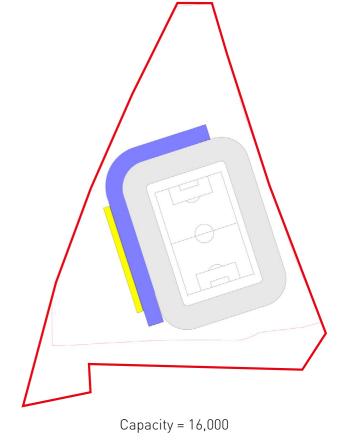
Angled Orientation

Doesn't fit



North-South Orientation

Fits with off-centre hospitality



NW-SE Orientation

Hospitality wraps round West and North



5.5 Hotel Massing Efficiency

As the project evolved during RIBA Stage 2, the plans underwent a more thorough examination, focusing on the efficiencies of specific spaces. In particular, the 180-key hotel underwent an option study, considering various massing locations and forms. The decision revolved around whether to integrate the hotel into the stadium structure or pursue a stand-alone mass.

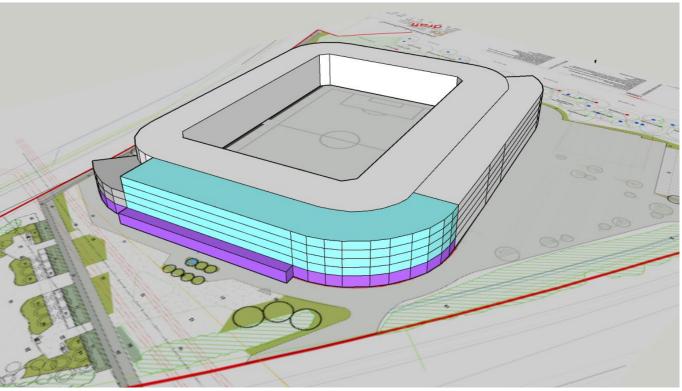
The choice to incorporate the hotel was advanced for several reasons:

- Optimization of the stadium structure and envelope
- Creation of unique pitch-facing bedrooms
- Reduction in building height
- Preservation of a consolidated commercial provision









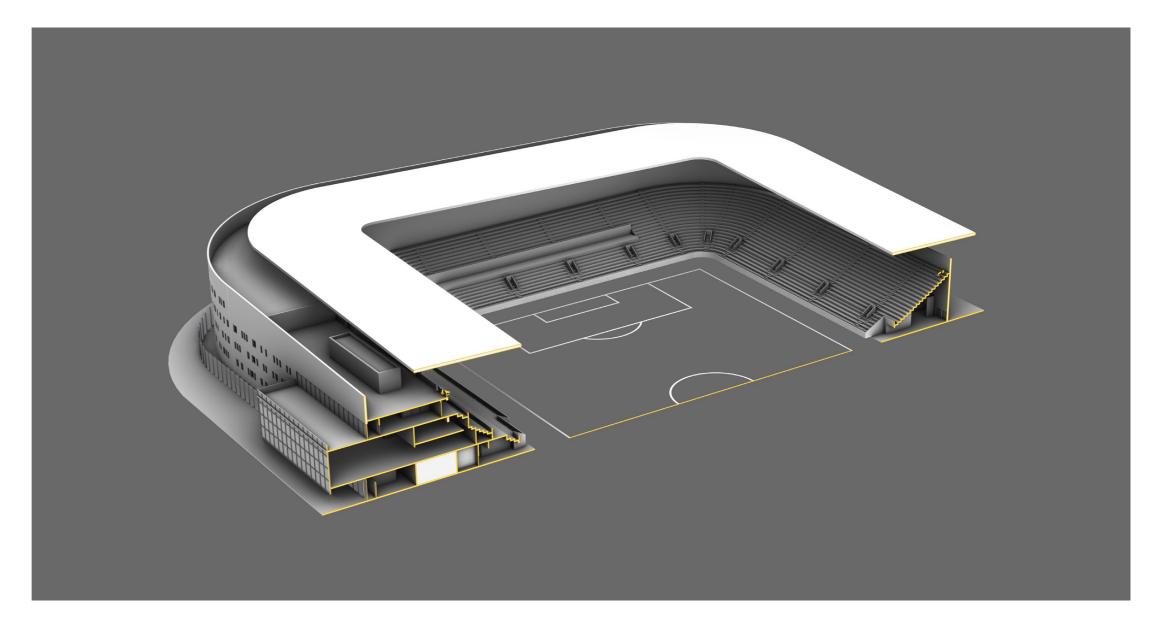


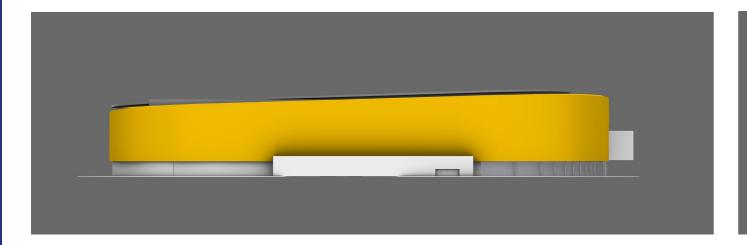
5.6 Further Massing Development

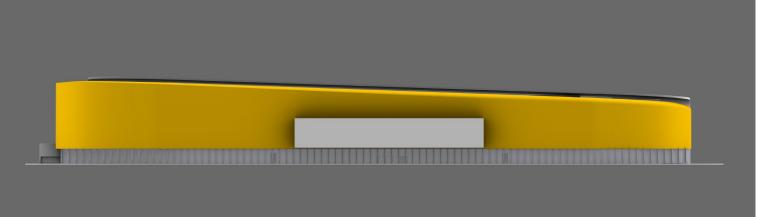
As the internal space planning progressed, especially with the decision to position the Premium GA concourse on the ground floor, it became apparent that we would need to incorporate the larger spaces by protruding out from the main mass/elevations.

The images showcase how the conference and events space projects from the west elevation, mirroring the approach taken with the commercial mass to the north.

This initial decision started to shape our architectural language and guide our approach in subsequent developments.









5.7 Facade Development

After deciding to apply distinctive aesthetic treatments to the various components of the development, we explored several different design concepts.

These ranged from a stadium roof structure that reflects the site's surrounding woodland, to a cladding treatment that visually connects with the willow trees that have been harvested on-site for many years.

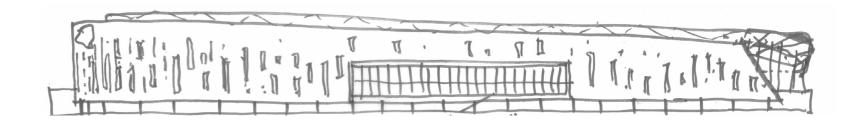
It became evident that the ground floor should also have a unique treatment and that it is to serve as a robust base for the striking structure above it. This base should possess both physical and aesthetic strength, and it will require enough height and presence to ensure it won't be overshadowed by the mass above.

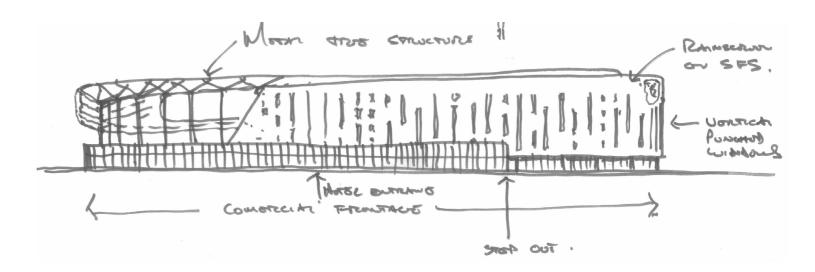
Owing to the specific layout requirements of a hotel and the predetermined number of rooms outlined in the brief, we anticipated that there would be a degree of regularity in the placement of windows and openings across the main facade.

In an attempt to mitigate this regularity and introduce a sense of visual diversity, we started to break up the facade into a pattern that created the illusion of randomness through variety.

However, by allowing the internal layout to break through the outer facade, we thought the elevations were beginning to appear overly chaotic.

The proposal addresses this by maintaining regularity along its primary elevations in the form of vertical strip openings.















The scheme aims to embrace the regularity of the internal layout in its fenestration while embodying a sincere architectural style that allows the building elements to assert themselves or blend in where needed.

The most prominent aspect of the building onsite is at the northwest corner. This corner will serve as the public face of the project for the countless motorists traveling along Frieze Way and for those arriving by car or coach.

In response to this, we plan to celebrate the scale of the building in this particular corner and gradually reduce the facade's height as it extends east and south - this in-turn will dictate the spacial planning of the top floor to allow the building to fall in height as it approaches the stadium structure.











5.8 Materiality Precedents

The heart of Oxford boasts an abundance of buildings constructed from beautiful buff stone, with the Radcliffe Camera serving as one of the finest exemplars of the classical architecture that characterizes the University campuses. The utilization of lead, zinc, and slate roofs featuring blue-grey hues represents another significant material choice in this locale.

Modern buildings in the area, such as the Sultan Nazrin Shah Centre, have successfully reinterpreted and incorporated the local stone.

In a deliberate contrast to these traditional materials and colors, we drew inspiration from contemporary design elements, including glass, metal, and anodized blue fins, which can be observed in the architecture of 'Home' Theatre in Manchester. As well as the exposed structural aesthetic of the Bao'an Stadium, built in Shenzhen for the World University Games.



SULTAN NAZRIN SHAH CENTRE - OXFORD



BAO'AN STADIUM - SHENZHEN



HOME THEATRE - MANCHESTER



THE RADCLIFFE CAMERA - OXFORD



5.9 Early Materiality Studies

From the materials chosen on site all the way up to the roof, our aim was to incorporate a design language and materials palette inspired by the local environment and Oxford's architectural heritage.

These initial development renders served as a catalyst for the design proposed in the subsequent chapter.

