

NEW ODENSE STADIUM

THESIS PROGRAM

Mads Primdahl Rokkjær

Urbanism & Societal Change
The Royal Danish Academy, School of Architecture



Thesis Program

Spring 2023

Mads Primdahl Rokkjær

Student ID: 160394

Tutor: Carlos Ramos Tenorio

Program Director: Deane Alan Simpson

Urbanism & Societal Change

The Royal Danish Academy, School of Architecture

CONTENT

| | |
|---|----|
| Executive Summary | 04 |
| Societal Theme | |
| The role of sports in society | 06 |
| Societal initiatives in professional football | 06 |
| The deficiency of stadiums | 07 |
| Communities in social housing | 08 |
| Site | |
| Social housing in Odense | 10 |
| Bolbronx | 10 |
| Odense Idrætspark | 14 |
| Program | |
| Ambitions for a national stadium | 16 |
| Urban and communal integration | 18 |
| Agglomeration of programs | 20 |
| Deliverables / Key drawings | 22 |
| UN Sustainable Development Goals | 23 |
| CV - Mads Primdahl Rokkjær | 24 |
| Bibliography | 25 |

EXECUTIVE SUMMARY

Societal Theme

Sports can unite people with vastly different backgrounds and beliefs. The positive impact thereby transcends the physical practitioners of the sport and extends through the spectators of the sport into the general society. This also means that the spaces surrounding the sport activities not only facilitates the physical activities but have a greater societal impact and role as public meeting points and spaces of cultural exchange.

Social campaigns (e.g. against racism) are usually taking place in connection to professional football matches and shows the potential for football to exceed its realm of impact beyond the stadium. Stadiums are mostly enclosed structures that serve solely the purpose of watching a game. This mono-functionality leave stadiums unused and empty most of the time.

Could stadiums have a catalytic effect on local communities with a programmatic composition that inhabits the building more consistently?

Site

Bolbro is known as the diverse working-class neighborhood of Odense. Historically, it is one of the poorest neighborhoods in Denmark. Currently, the area is going through a large urban development project. A new tramline will bring the neighborhood closer to the city center and the rest of Odense.

With Odense Idrætspark ('Sports Park' translated), there are many sports facilities in Bolbro, forming a strong foundation for communities to develop. Odense Stadium is located in the sports park.

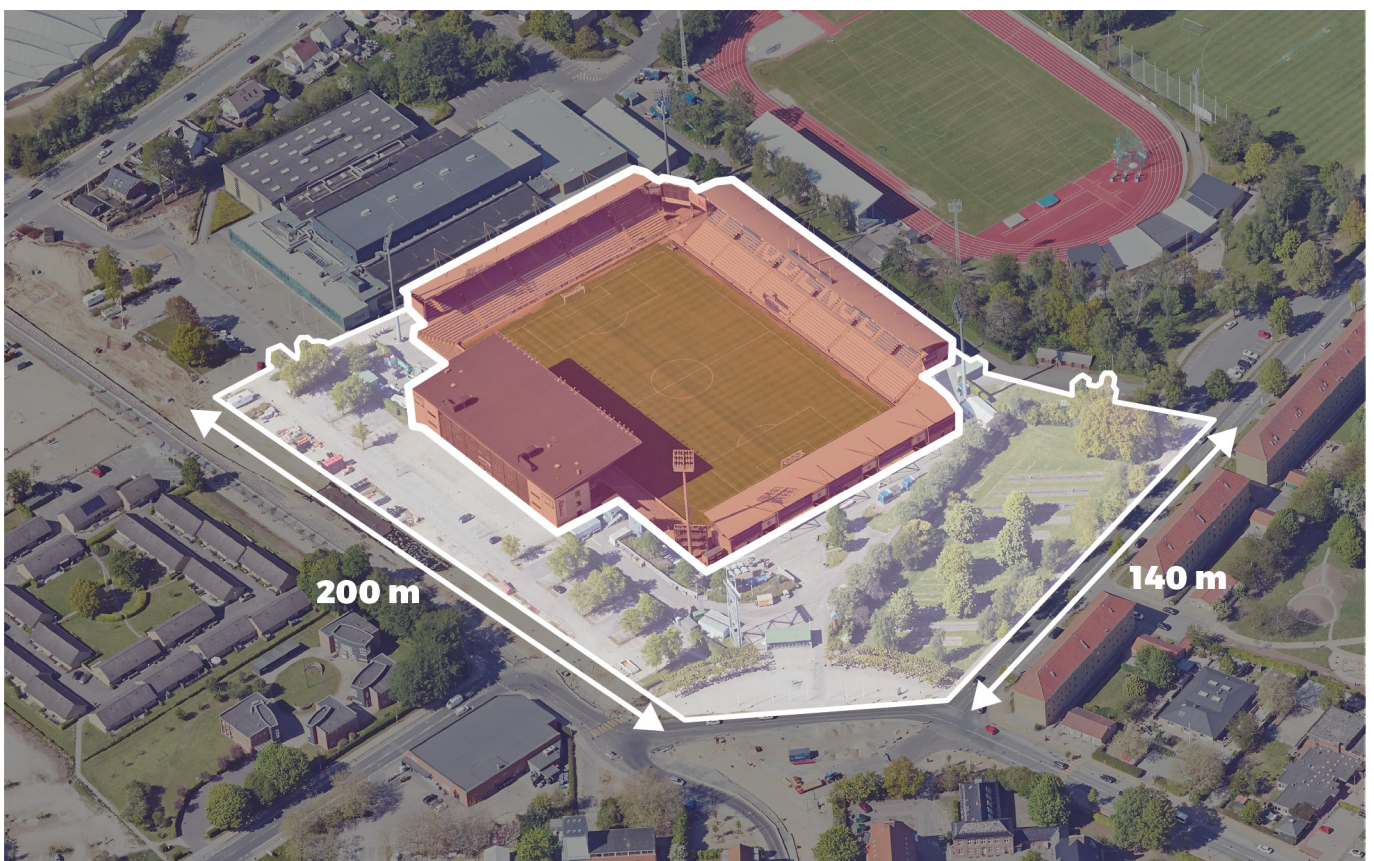
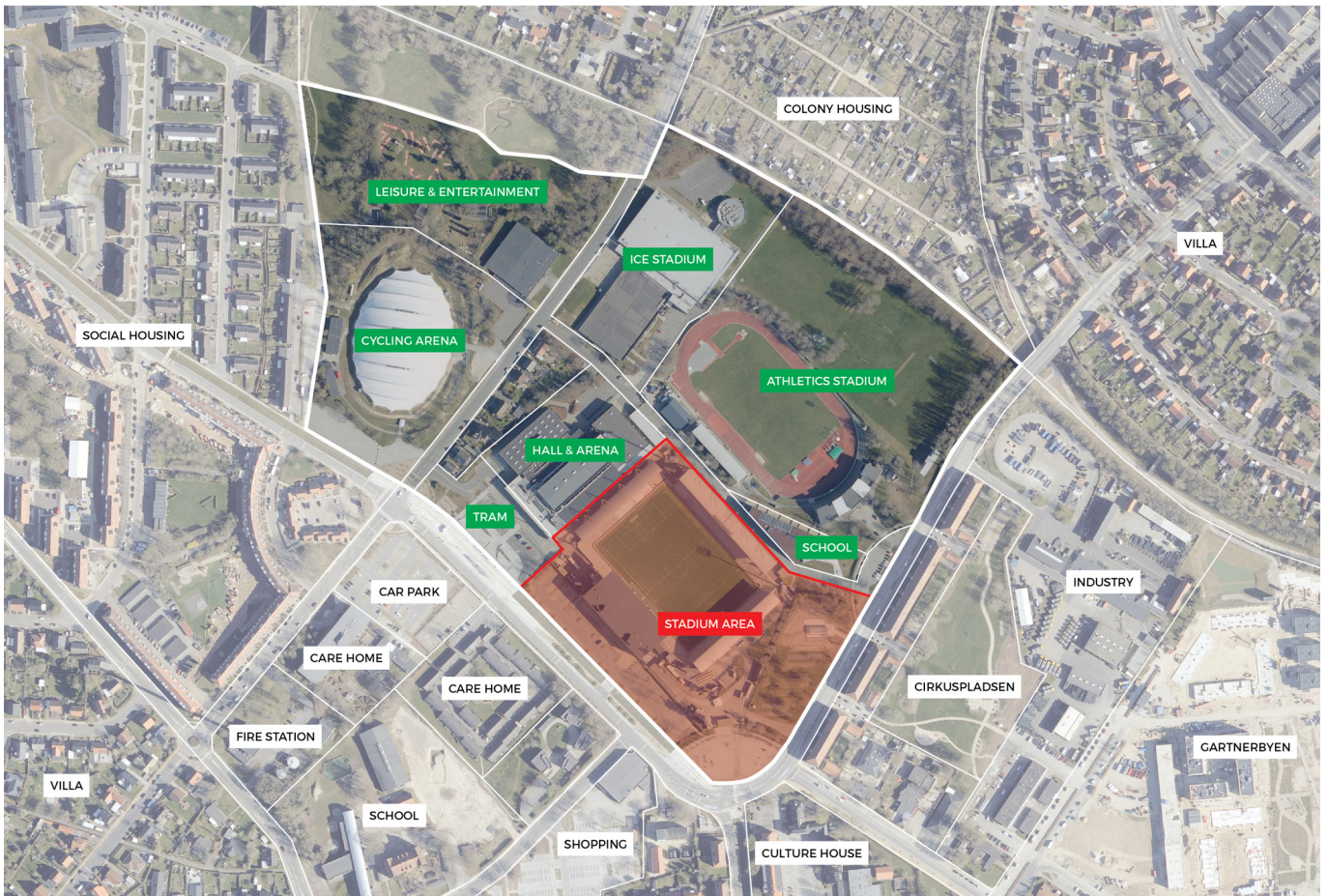
With the newly inaugurated tramline station in front of the stadium and the development ambitions for Bolbro, the site of Odense Stadium has a unique potential to become the beating heart of the neighborhood. To adhere to new stadium regulations of 2028 Odense will have to upgrade its Stadium.

Program

The programmatic composition can be split into two main groups: the spectator focused program, and the urban integration program.

The ambitions for a new stadium includes a closed stadium with 15.000 covered seats. There is a wish to add space for commercial offices and short-term housing. Additionally, supporting functions of the stadium need improvements.

The communal program is developed based on the already existing community functions of the area, and the potentials of creating an interface between guests and locals. This could be cafes, shops, co-working, gyms and short-term homes. An incorporation of the community activity association Beboerhuset Bolbro could cement the stadium as the community hub of the area.



- The stadium site consist of the current stadium building and public space towards the roads.

COMMUNITY ENHANCEMENT THROUGH SPORTS

The role of sports in society

Modern sports exist in many different formats and is known to improve both the physical and mental health of people. The benefits of a sports-involved population dribble through society and can be an important factor in cities as an economic and social regenerator¹ and therefore has an important role in society.

The benefits occur both as a result of a physically healthy and active population, but also through the mental health that the social life and communities around the sport entail. Sports can unite people with vastly different backgrounds and beliefs. The positive impact thereby transcends the physical practitioners of the sport and extends through the spectators of the sport into the general society. This also means that the spaces surrounding the sport activities not only facilitates the physical activities but have a greater societal impact and role as public meeting points and spaces of cultural exchange. The recognition of this role of sport is occasionally visible in urban planning policies:

“A community-based approach to sport and leisure has developed as local authorities have sought to address the economic and social problems of deprived inner-city areas on the assumption that sport and leisure activities can have a real impact on such problems.”

– (Gratton & Henry, Sport In The City (2001) p.188)

Cities that are planning new sports facilities are therefore looking to create communities by providing groups of the population with opportunities for participation and inclusion in society. The spaces surrounding the activities thereby becomes important as local landmarks that can sustain and develop a sense of community.

¹Chris Gratton & Ian P. Henry. Sport In The City: The role of sport in economic and social regeneration (London, Routledge, 2001), p. 310.

Societal initiatives in professional football

In Denmark the national sport and the most popular sport in terms of both practice and spectatorship is football². Also globally, football is the most popular sport in spectatorship³. This cements the social and cultural responsibility of the sport. No other sport has a broader cultural penetration, and it is therefore also recognized as a medium for inducing positive societal change outside of the realm of sport. This can be seen in various campaigns planned by the different governing bodies in football and the clubs. Examples of these top-to-bottom social projects could be the ‘No Discrimination’ by the international football federation FIFA, the ‘No More Red’ by British football club Arsenal FC, and the ‘Antibulli’ anti-bullying campaign from the Danish ballgame union DBU.

Bottom-to-top initiatives arranged by the fans and spectators of the sport are also commonly seen. For example, the Fan-laden St. Pauli is a fan-founded organization originally supporting fans in non-violent behavior. Another example is the Real Betis and Rayo Vallecano tradition of fans donating toys to disadvantaged children among many other beautiful community gestures. On a much smaller scale, local sports associations function as places of community creation for the children and families involved in the sport.

The larger campaigns are usually taking place in connection to professional football matches and shows the potential for football to exceed its realm of impact beyond the stadium. The stadiums themselves become places of cultural exchange. Since the sport has taken upon itself this societal role, how do the stadiums relate to their potential urban and societal impact?

² <https://www.dbu.dk/om-dbu/dbu-s-strategi/for-taellingen/>

³ <https://worldpopulationreview.com/country-rankings/most-popular-sport-by-country>

The deficiency of stadiums

The sports hall typology in urban environments has gradually changed through the past two centuries. In the latest typological development, sports buildings are adopting other cultural programs that are not directly related to sports and cities are introducing urban planning policies where sports buildings have the role



- Soldiers from both sides of the opposition playing football during the Christmas Truce in 1914 during WWI



- FIFA 'No Discrimination' armband



- Stuffed toy toss. Real Betis fans throwing toys on the pitch as a donation to disadvantaged children.

of social catalysts for local communities. There is an increased focus on community development and integration in the urban fabric. Community enhancement is achieved by increasing the interaction with the public realm, and offering a greater variety of programs that engages a wider audience. The over-arching approach is thereby to embed the sports buildings in the urban areas both physically and programmatically.⁴

Most football stadiums are situated within urban areas, but despite their location fail to inscribe themselves in the daily lives of the surroundings. Stadiums are mostly enclosed structures that serve solely the purpose of watching a game. A monotonous, impenetrable façade blocks the wind and the views of the outside. Within the enclosure of the façade a series of concourses and amenities serve the spectators of the event taking place. This creates a black-box environment cut-off from the surrounding world and realm of the urban context and community. This mono-functionality leave stadiums unused and empty most of the time. Could inspiration be taken from the programmatic composition of modern sports halls to include programs that engage the local community and inhabit the building more consistently? Could stadiums have a catalytic effect on local communities, in the same way strong fan-based communities form around a local football club?

⁴Mads Rokkjær, *Interactional Sports Buildings In Urban Areas* (2022), p. 2.

Communities in social housing

The sense of community is particularly beneficial for challenged and vulnerable housing areas where inhabitants are more reliant on help from each other and where issues like crime can be reduced and prevented with strong and supportive communities. The sense of community and belonging in the society is vital for the positive development of challenged neighborhoods.

In Denmark, social housing is the housing format with the lowest average income pr. resident. With The Parallel Societies Act from 2018, the Danish government has created a system evaluating the most challenged social housing compounds according to certain criteria. In the document, the government is also proposing different plans for renewing and improving the conditions of the areas across many different parameters. Some of the proposed initiatives are to form strong and diverse communities through increased participation in communal leisure activities and associations⁵, and to open up the urban public space of the areas to the rest of the city⁶. It is therefore interesting to investigate how the existing communities could benefit from a sports stadium, and if the communities around the sports activities could enrich the urban development.

⁵The Danish Government, *Ét Danmark Uden Parallelsamfund* (2018), p. 24

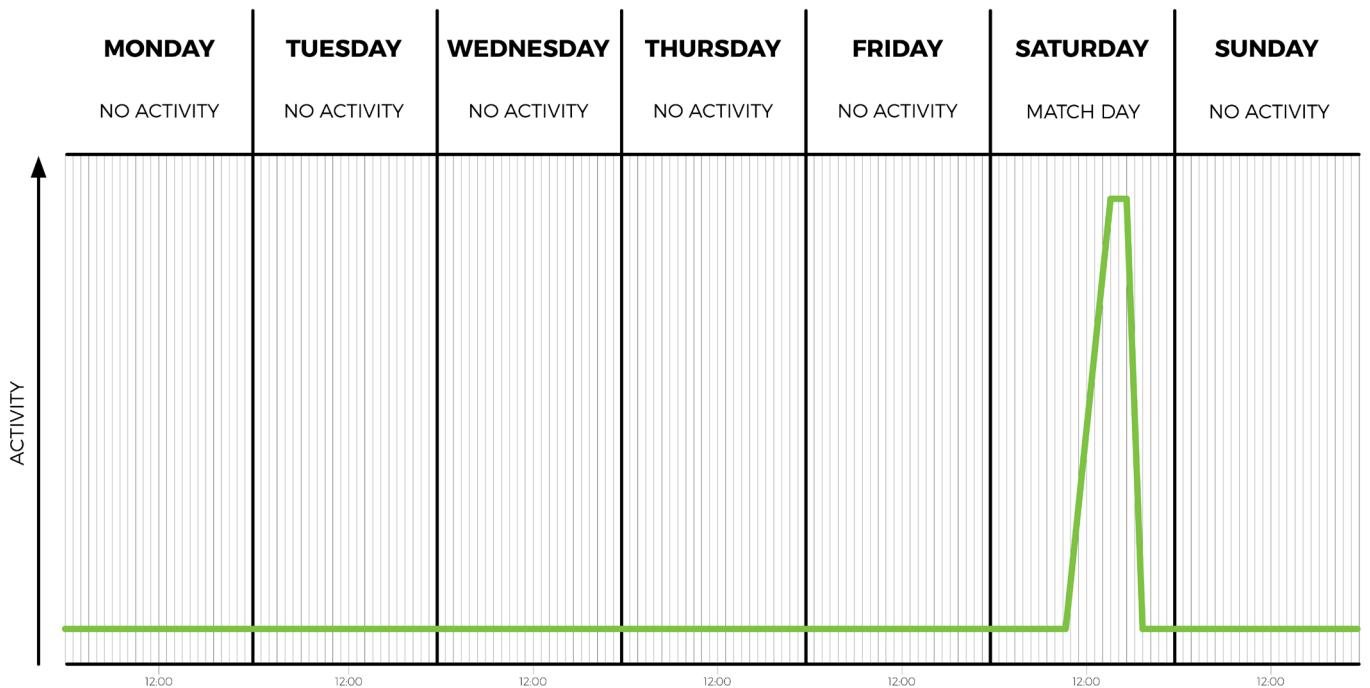
⁶The Danish Government, *Ét Danmark Uden Parallelsamfund* (2018), p. 13



- SESC Pompeia in Brazil combines community sports with other cultural programs such as e.g. a theatre



- BBVA Bancomer Stadium in Mexico: an example of a mono-functional stadium secluded from the urban context



- Typical schedule of a stadium on a match-week: activity level spikes on match days and remains very low otherwise.

SITE

Social housing in Odense

In Denmark, 20% of the total housing stock is social housing. The relative majority of social housing exist in the large cities. In all of the four largest cities the percentage of social housing exceeds 25%. The third largest city in Denmark, Odense, stands out as it is the city in Denmark with the poorest social housing population and the 4th most ethnically diverse social housing population⁷. Odense also stands out on the Parallel Societies Act, with 5 housing areas on the list of vulnerable housing areas compared to only 2 in the fourth largest city in the country, Aalborg.

In Odense the largest social housing areas exist in the outskirts of the urban area. The highest concentration of social housing is found in the eastern parts of Odense such as for example Vollsmose but also the western neighborhood of Bolbro has a high concentration of social housing.

⁷Landsbyggefonden, Beboere i den almene boligsektor 2020, Statistik, p. 70-78

Bolbronx

Bolbro is known as the diverse working-class neighborhood of Odense⁸. It is characterized by the large and ambitious social housing projects from the second half of the 20th century with many small apartments with large green areas

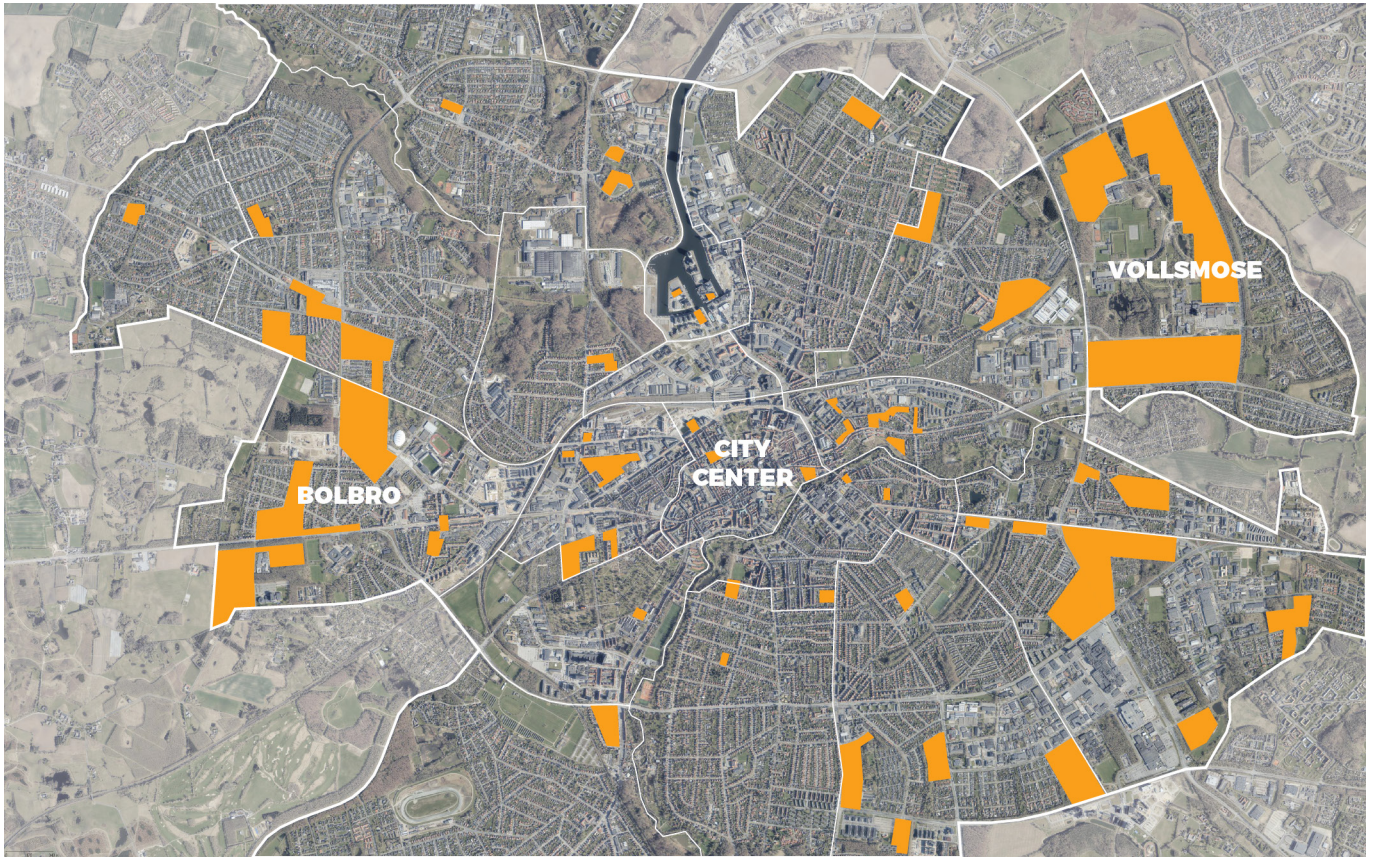
in-between the buildings. Historically, it is one of the poorest neighborhoods in Denmark, with a reputation for empty streets, earning Bolbro its nickname: 'Bolbronx'⁹.

Currently, the area is going through a large urban development project where the new residential area, Gartnerbyen, will be established. A new tramline will bring the neighborhood closer to the city center and the rest of Odense. This will bring more potential for urban development to the area. Evidently, the municipality is investing heavily in the development of Bolbro and the urban renewal project 'Dit Bolbro' aims to involve local residents in the planning of the future of the area with a focus on strengthening communities and the local identity.

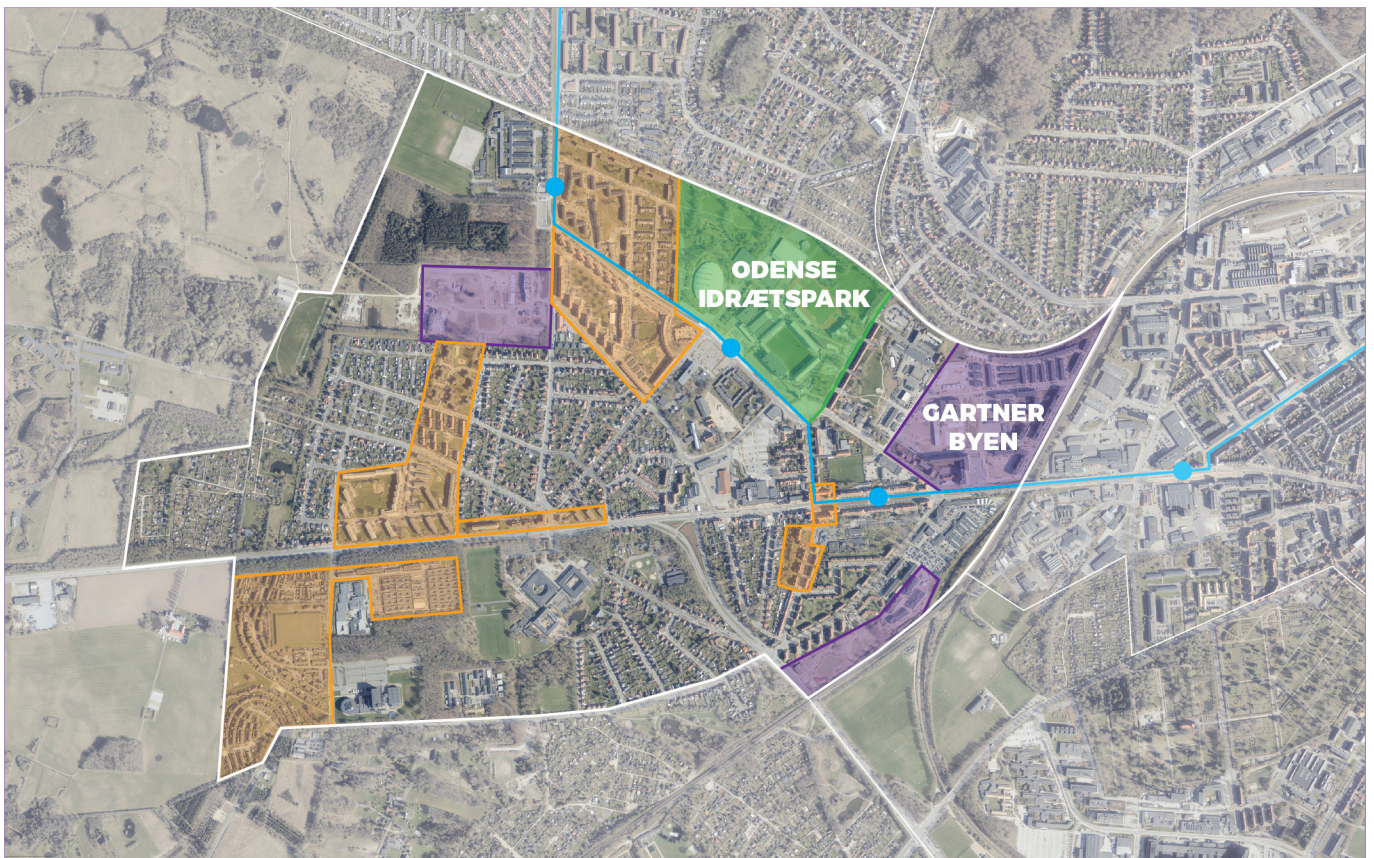
With Odense Idrætspark ('Sports Park' translated), there are many sports facilities in Bolbro both for practitioners and spectators, forming a strong foundation for communities to develop and creating a potential for Bolbro to stand out and be identified through sports rather than socioeconomics. Odense Stadium is located in the sports park, attracting people from all over Odense to visit Bolbro during match days.

⁸<https://www.odense.dk/borger/bolig/bydele/bolbro>

⁹https://opned.com/portfolio_page/ungepark-i-odenses-bolbro/



- Social housing in Odense



- Bolbro: Social housing and new development zones

Odense Idrætspark





Odense Idrætspark

Odense Idrætspark consists of an athletics stadium, ice stadium, a leisure & entertainment center including bowling and mini-golf, a cycling arena with indoor athletics facilities, gymnastics hall, sports arena, a small hotel and the Sport Academy Denmark School. The sports park is surrounded by different housing types to the west, north and east. Bordering the park to the south are different institutions and a small shopping complex. The institutions are a mix of elder-care homes, schools, a fire station, and most notably a community and culture house for local associations. Being located in the sports park, the stadium is adjacent to many other sports and cultural functions, but it is quite secluded from the urban fabric surrounding it.

Odense Stadium 'Nature Energy Park' is home of the national-league football club Odense Boldklub, OB. It is the 5th largest stadium in Denmark with a capacity of 15.790 spectators. In 2028 new demands for the national-league stadiums will be enforced. The stadiums are required to have all seats fully covered from above and closed corners. Currently, Odense Stadium consist of four separate grandstands with only partially covered seating. To adhere to the stadium regulations of 2028 these grandstands would have to be connected and fully covered¹⁰. This has prompted the main leaseholder of the stadium, Odense Sport & Event, to investigate the options for building a brand-new stadium to compete on a national level¹¹. The city of Odense owns three of the four grandstands and the football pitch itself. The main grandstand

and VIP area is owned by Odense Sport & Event. Currently, negotiations of ownership and funding for a new stadium is on-going.

With the newly inaugurated tramline station in front of the stadium and the development ambitions for Bolbro, the site of Odense Stadium has a unique potential to become the beating heart of the neighborhood. Odense Stadium sits lifeless for the 342 non-game days each year¹² and therefore has the capacity to enrich the urban development of Bolbro with additional and appropriate programming.

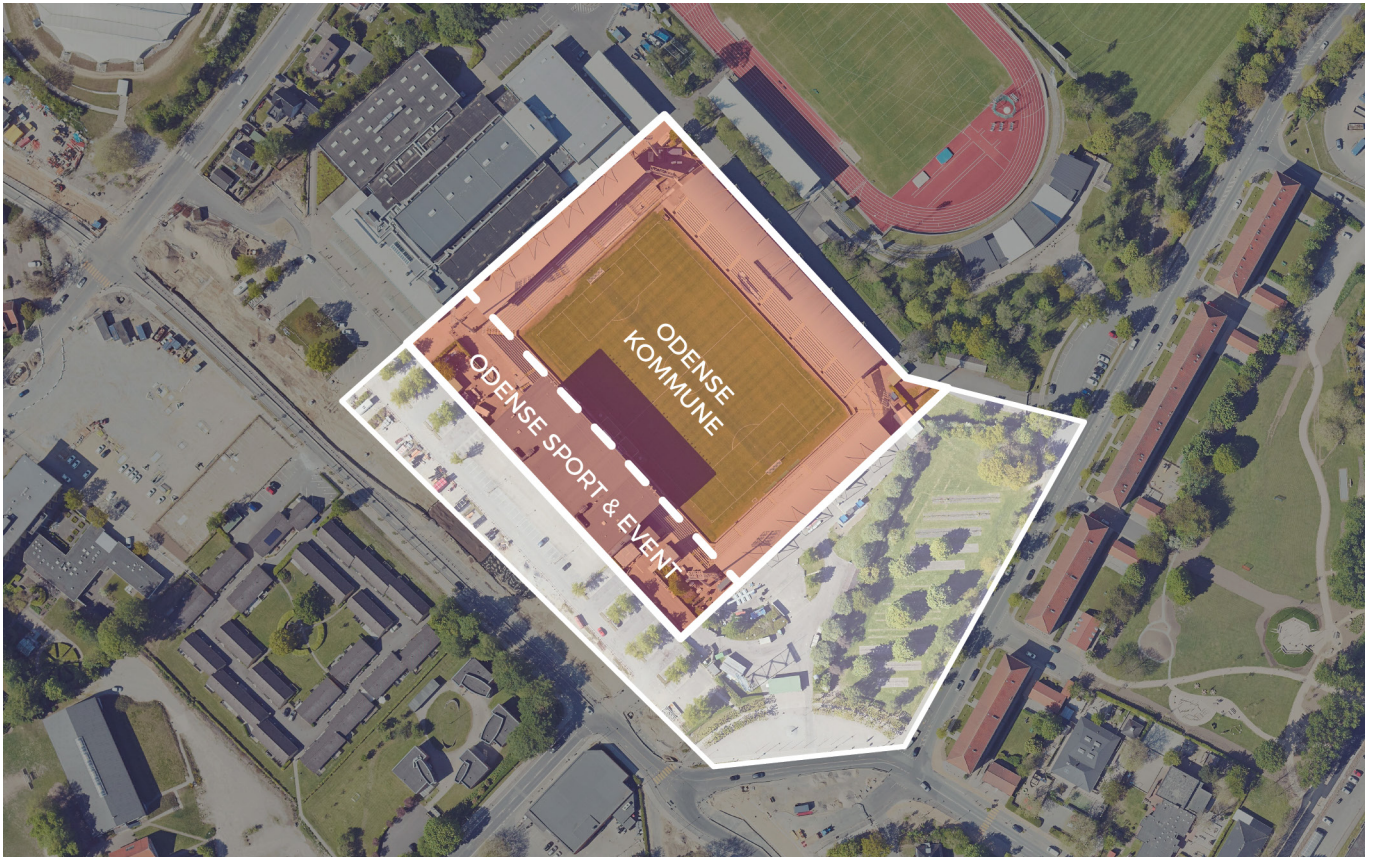
¹⁰ <https://dansk-byudvikling.dk/de-stoerste-stadionprojekter-i-danmark/>

¹¹ https://www.building-supply.dk/article/view/781331/hummelmillardaer_klar_til_at_hjaelpe_ob_med_stadionprojekt

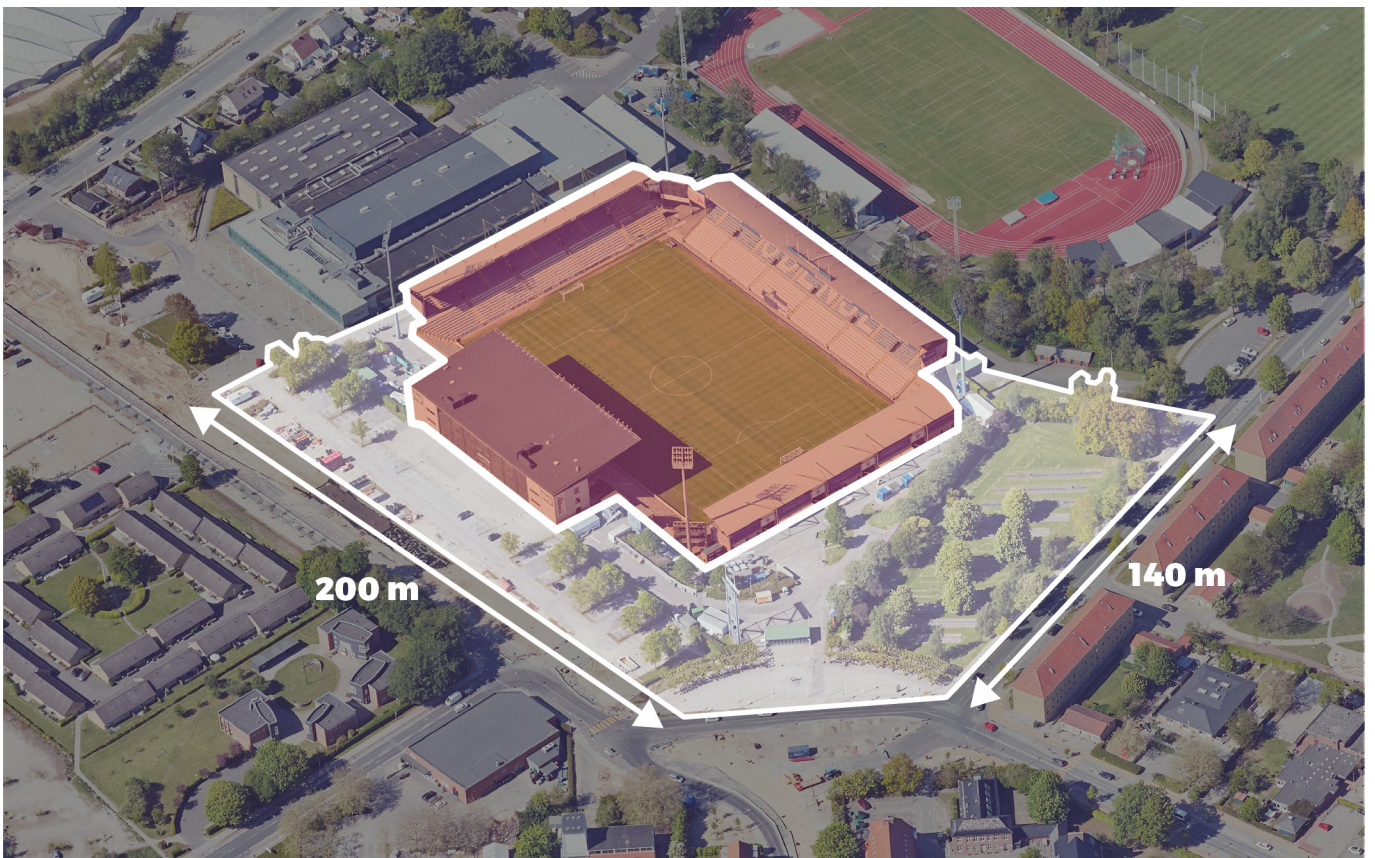
¹² <https://www.tv2fyn.dk/odense/odense-kommune-bruger-naermest-aldrig-sit-eget-stadion>



- On average, Odense Stadium is only active for 23 days each year



- Currently, the ownership is split between Odense Kommune and Odense Sport & Event.



- The stadium site consist of the current stadium building and public space towards the roads.

PROGRAM

Ambitions for a national stadium

With the intention of making the new stadium in Odense a meeting place that can be enjoyed throughout the year, there is an ambition to include programs that activate both the stadium and the neighborhood. These programs come in addition to the requirements for stadiums set by the national and European football federations. The programmatic composition can be split into two main groups: the spectator focused program, and the urban integration program.

The Odense Boldklub and Odense Kommune ambitions for a new stadium includes a closed stadium with 15.000 covered seats. For sustainability and economical reasons, existing concrete structures should be retained if possible. To supplement the financial model of the stadium, there is a wish to add space for commercial offices and short-term housing. The commercial space could be something that benefits from the surrounding sports park such as e.g. a fitness center, health clinic etc. Additionally, the supporting functions of the stadium need improvements. This includes toilets for spectators, dressing rooms for sports teams, press room for journalists, food & beverage facilities, and the family zone. Specifically, a fan street with shopping, food and beverages should be considered¹³.

¹³ <https://www.tv2fyn.dk/odense/bilag-afsloerer-ob-og-odense-kommunes-millionplan-er-nyt-odense-stadion>



"The corners are very open - the atmosphere is difficult to maintain. Undoubtedly, we have one of the most out-dated stadiums in Denmark, and we are no-where near the level of the clubs we would like to compare ourselves with."

- OB-fan Kim Thiillborg Petersen to TV2Fyn



Urban and communal integration

The main ambition for the communal and urban integration program is to enhance the original purpose of the sport as the natural meeting place for the local community.

With diverse program embedded within and around the stadium, it is manifested as an active and welcoming place, even on the non-game days. Thereby, the stadium extends the urban fabric with the surrounding park and programs to be enjoyed all year around. The new stadium should tend towards urban integration and create amenities for both the fans and the local community.

The communal program is developed based on the already existing community functions of the area, and the potentials of creating an interface between guests and locals. Odense Sport & Event have proposed a number of functions that could benefit the community such as e.g. cafes, shops, co-working, gyms and short-term homes. In addition to this, a youth club could be beneficial as a supplement to the available activities for the students of the near-by schools.

Not only could the stadium building itself be activated, but also the public space around the stadium is under-utilized. Here, the park could extend around or maybe even through the stadium and be activated with art, kid's activities, an outdoor auditorium or food markets.

A series of smaller functions encircling the stadium could help break down the monumentality of such a large building

and bridge the gap of scale between the stadium building and the surrounding buildings in the context. The stadium becomes integrated and inscribed in the urban context programmatically and potentially also spatially and architecturally. In this sense, the stadium becomes un-alienated from the city and more inviting for different demographics.

Aligning with the Bolbro urban development wishes, an incorporation of the community activity association Beboerhuset Bolbro could cement the stadium as the pride-giving and identity-creating community hub of the area. With this agglomeration of functions, the stadium will increase its permeability, be active throughout the year and serve the local community. Beboerhuset Bolbro becomes the cornerstone of the community focused programming in the stadium and has a special focus in the development of the new stadium.

"A poor use of the capacity results in a poor economy for the stadium. It is up to the city to ensure that the stadium is used optimally (...) It is therefore advantageous to use the stadium for other events than football matches. I think it is a fantastic idea to unite more users in the stadium. Soon, a new Sport School will open nearby. One could perceive the entire stadium area as a recreational area for Bolbro to the benefit of many other users than OB"

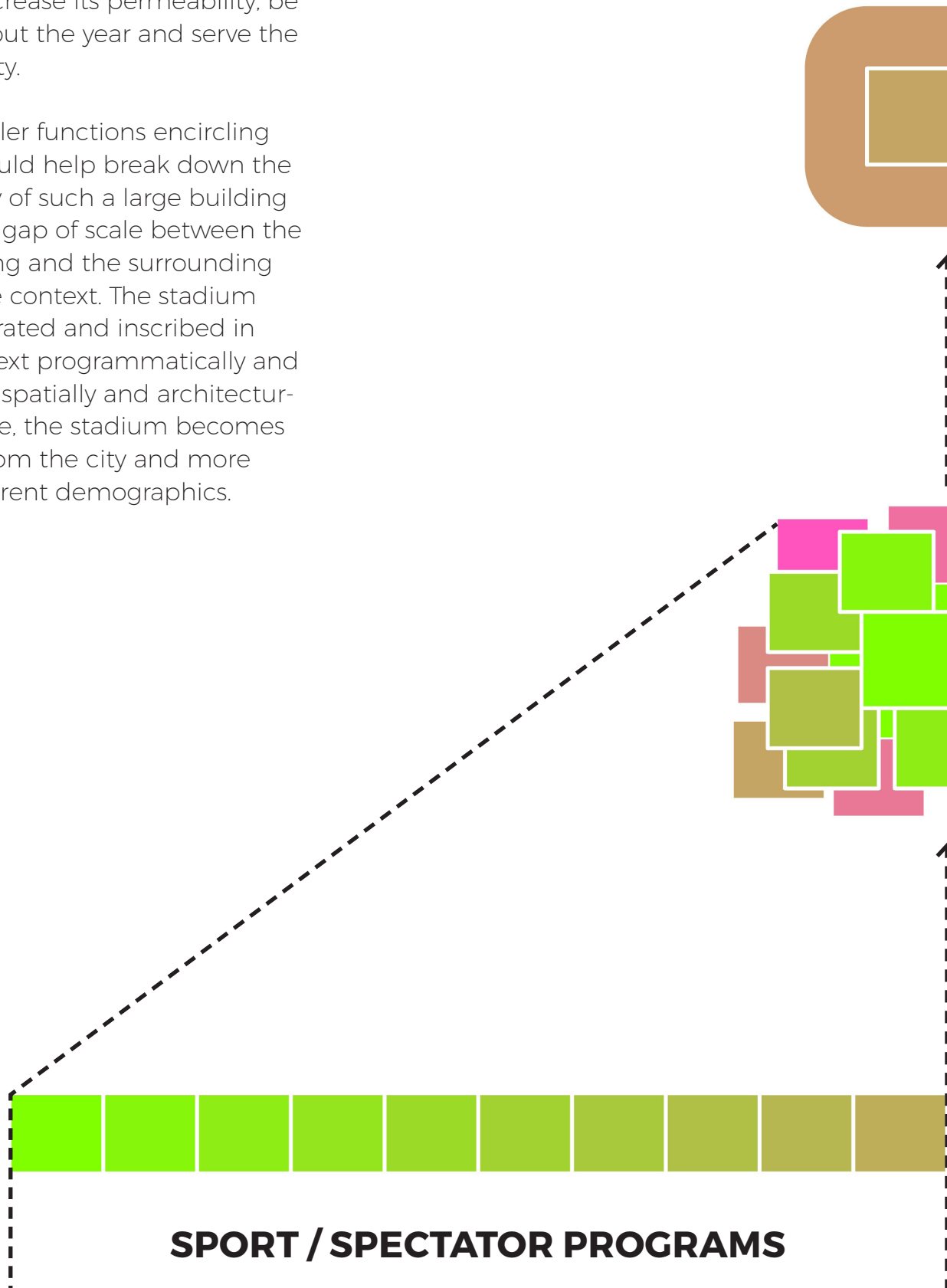
- Henrik Schmidt, Chairman of SIKO (United Sports Clubs of Odense), to TV2Fyn



Agglomeration of programs

With this agglomeration of functions, the stadium will increase its permeability, be active throughout the year and serve the local community.

A series of smaller functions encircling the stadium could help break down the monumentality of such a large building and bridge the gap of scale between the stadium building and the surrounding buildings in the context. The stadium becomes integrated and inscribed in the urban context programmatically and potentially also spatially and architecturally. In this sense, the stadium becomes un-alienated from the city and more inviting for different demographics.





NEW ODENSE STADIUM



URBAN / COMMUNITY PROGRAMS

DELIVERABLES / KEY DRAWINGS

Overall: Stadium

- Siteplan 1:500
- Groundfloor plan 1:200
- Sections 1:200
- Elevation 1:200 from Højstrupvej
- Program layout diagrams
- Axonometric diagrams of volume study

Detail: Beboerhuset Bolbro

- Floor plans 1:50
- Section 1:50
- Elevation 1:50
- Exploded axonometric with materials

UN SUSTAINABLE DEVELOPMENT GOALS



- The new stadium promotes health through sports and community creation. The location in the sports park and the inclusion of community program ensures emphasis on both physical and mental health.



- With the ambition of serving a wider audience with services and amenities, the stadium aims to create a space for all people to feel welcome without pre-
sumptions.



- Unlike other stadiums, the new stadium in Odense will be integrated in the surrounding context, both architecturally and programmatically. The stadium aims to reconnect football to its roots: connecting people as the meeting space for the local community.

CV - MADS PRIMDAHL ROKKJÆR

Education

MA in Architecture

The Royal Danish Academy, USC
2021-2023

BA in Architecture

The Royal Danish Academy, IBD
2016-2019

Other

MADE-Scholarship

The Sydney Opera House
2022

Summer Intensive Program

Parsons School of Design, SCE
2016

Employment

Junior Architect

Bjarke Ingels Group, Copenhagen
2020-2023

Design Assistant

Bjarke Ingels Group, Copenhagen
2019-2020

Model Builder

COBE, Copenhagen
2017-2018

Office Assistant

Bertelsen & Scheving Architects, CPH
2015-2016

BIBLIOGRAPHY

Books

- Chris Gratton & Ian P. Henry, *Sport In The City: The role of sport in economic and social regeneration*, London, Routledge, 2001
- Mads Rokkjær, *Interactional Sports Buildings In Urban Areas*, 2022
- The Danish Government, *Ét Danmark Uden Paralelsamfund*, 2018
- Landsbyggefonden, *Beboere i den almene boligsektor*, 2020

Websites

- DBU, Accessed 20/02-23
<https://www.dbu.dk/om-dbu/dbu-s-strategi/fortaellingen/>
- World Population Review, Accessed 20/02-23
<https://worldpopulationreview.com/country-rankings/most-popular-sport-by-country>
- Odense, Accessed 20/02-23
<https://www.odense.dk/borger/bolig/bydele/bolbro>
- Opened, Accessed 20/02-23
https://opned.com/portfolio_page/ungepark-i-odenses-bolbro/
- Dansk Byudvikling, Accessed 20/02-23
<https://dansk-byudvikling.dk/de-stoereste-stadionprojekter-i-danmark/>
- Building Supply, Accessed 20/02-23
https://www.building-supply.dk/article/view/781331/hummelmillardaer_klar_til_at_hjaelpe_ob_med_stadionprojekt
- TV2Fyn, Accessed 20/02-23
<https://www.tv2fyn.dk/odense/odense-kommune-bruger-naermest-aldrig-sit-eget-stadion>
- <https://www.tv2fyn.dk/odense/bilag-afsloerer-ob-og-odense-kommunes-million-planer-nyt-odense-stadion>



New Odense Stadium
Thesis Program

Mads Primdahl Rokkjær
Spring 2023

Urbanism & Societal Change
The Royal Danish Academy, School of Architecture