

# New Sydney Fish Market

SSD-DA 8924 : Stage 1 Concept Proposal Design Report





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# 0.0 Executive Summary

The harbour is synonymous with Sydney. It is, perhaps, the city's most recognisable and beautiful feature. The harbour's edge is dotted with landmarks that showcase its rare beauty and reinforce its relevance around the world – Sydney Opera House, Sydney Harbour Bridge, Woolloomooloo, Jones Bay Wharf, and Darling Harbour. As a continuation of iconic destinations connected by the uninterrupted promenade along the water's edge, the new Sydney Fish Market will take its place at the head of Blackwattle Bay.

The existing Fish Market, currently housed in a series of old warehouses and post-industrial buildings, is one of the most significant communities and tourist destinations in the city. 3XN has approached this project with the specific goal of creating a fish market that is much more than just a fish market. The building will serve many purposes when it is finished - a working fish market, an amenity for the city, a cultural destination, an urban connector, and an inspiring icon along the legendary Sydney waterfront.

In designing this project, 3XN was inspired by the traditional market archetype, which appears throughout history and across cultures. The market is the social hub of cities around the world; it is generally comprised of a series of stalls that are open to the air but covered in a canopy and located in a large plaza. The new site of the new Sydney Fish Market is a 1.9-hectare site at the head of Blackwattle Bay. The design capitalizes on the opportunity to link the bay with Wentworth Park to the south, and the entire community with this cultural icon.

As a significant community and tourist destination, the new Sydney Fish Market will facilitate interaction by combining a vast amount of public space with an authentic market. As an operating seaport and wholesale market, the new Sydney Fish Market must support these functions in an uninterrupted way. The new Sydney Fish Market goes beyond its immediate role of the sale and distribution of fish, and provides an array of varied experiences that enable change and responsiveness to the future, creating a destination that is an integral part of the city fabric.

The existing Fish Market has a conflict of functions. Like all other fish markets in the world, visitors come to try to get a sense of the behind the scenes activities, but this interrupts the daily business. In response, some markets have had to limit visitors. For this building, 3XN has physically separated the operational aspects from the recreational ones, while allowing visual connections between the two. In the new building, the ground floor hosts all the functions traditionally associated with fish markets – the landing and loading of fish, the wholesale market, and the auction hall.

The staircases that lead from the plaza to the upper ground level are a continuation of the surrounding landscape and act as an invitation for people to enter the market. The landscape stairs also double as seating, creating a public space where people can enjoy their food and the view over the bay.

The upper ground houses fresh seafood retailers, restaurants and cafés. The design focuses on maintaining a human scale and create a true market atmosphere – just like historic marketplaces or bazaars with a series of small stalls that are connected. The aim is to create an intimate market atmosphere.

A sweeping timber and aluminium roof floats over the building like a canopy; it ties all the various program elements together in one elegant move, while giving the building an iconic presence along the harbour. The wavy structure is a response to the underlying functions; it rises and falls to correspond with the program below. Beyond design, the roof has five primary efficiency and sustainability attributes: shading, daylighting, ventilation, collection of rainwater, and the potential production of solar energy. The roof's triangular openings allow abundant natural light into the building, while their orientation shades the building from the harshest sun. The market has been designed to be as permeable as possible to maximise natural ventilation and minimise the need for air conditioning. The design intends to utilize the roof's geometry for potential energy production by incorporating photovoltaic cells, as well as rainwater collection and recycling.

The new Sydney Fish Market aims to be more than a fish market and will be a gathering place for Sydneysiders and visitors alike.

# 0.0 Executive Summary

This Design Excellence Design Report addresses requirements outlined in the SEARs. A summary of the issues addressed can be found on the following table.

SSD8924 SEARs REQUIREMENTS	REFERENCE
<p><b>3. Design excellence</b></p> <ul style="list-style-type: none"> <li>A design excellence strategy is to be provided which has been prepared in consultation with the NSW Government Architect and the City of Sydney, demonstrating how the Stage 2 proposal will achieve design excellence.</li> </ul>	<p><b>p6 - 8</b> 3XN's methodology and process outlined</p>
<p><b>4. Built form and urban design</b></p> <ul style="list-style-type: none"> <li>Provide an outline of the design process leading to the proposal, including justification of the suitability of the site for the proposed building envelope.</li> <li>Provide an urban design analysis of the proposed development with reference to the building envelope, height, setbacks, bulk and scale in the context of the immediate locality, the wider area, and the desired future character, including development options for the remainder of the BMD.</li> <li>Include justification for the height, bulk and scale of the proposed building envelope within the context of the locality, its impacts on amenity, views and vistas, and how it would successfully relate to the existing and future character of the surrounding area, including development options for the remainder of the BMD.</li> <li>Identify the proposed land uses, including a schedule of gross floor area calculations.</li> </ul>	<p><b>p12 - 32</b> Existing conditions and site analysis outlined</p> <p><b>p39 - 53</b> Indicative massing and envelope</p>
<p><b>6. Public Domain and public access</b></p> <ul style="list-style-type: none"> <li>Demonstrate how the proposed development will achieve enhanced public access to the site during operation.</li> <li>Identify the proposed public domain areas and linkages, including key vehicular, bicycle and pedestrian access points and links to other public domain spaces, including integration with Wentworth Park, Sydney CBD and the existing and future harbour foreshore.</li> </ul>	<p><b>p76 - 85</b> Public Domain Chapter</p>
<p><b>7. Amenity</b></p> <ul style="list-style-type: none"> <li>Provide a solar access analysis and shadow diagrams outlining impacts on adjoining developments and spaces (including Wentworth Park).</li> <li>Identify and assess potential overshadowing, privacy and view impacts.</li> <li>Provide a wind impact report that includes the following detail:                             <ul style="list-style-type: none"> <li>demonstrate existing wind characteristics of the precinct</li> <li>advise on measures to ensure the suitability of areas for their intended use with regard to the impact of wind on comfort and safety, in particular this is to focus on outdoor public space areas</li> <li>advise on placement, orientation, shape and external design of the building envelope and future wind mitigation devices</li> <li>identify areas surrounding the development that will be wind affected because of the development.</li> </ul> </li> </ul>	<p><b>p86 - 98</b> Shadow diagram analysis</p>

# 1.0 Design Excellence

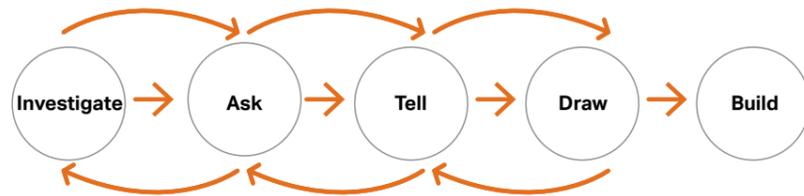
For the design of the new Sydney Fish Market, a Design Excellence Strategy was established by the Government Architect of New South Wales in conjunction with Infrastructure New South Wales (INSW). Part of this process involved the selection of a lead design team through a two stage competitive process, from which 3XN were selected.

Moving forward, the Design Excellence Strategy outlines a process comprising of the following to achieve design excellence for the new Sydney Fish Market:

- Scenario testing to establish the preferred site
- An Urban Design Framework for Blackwattle Bay
- A reference design for the preferred site
- Selection of the lead design team by using design within a competitive process\*
- Design review panel\*
- Design integrity beyond Development Application\*
- Integration with the Blackwattle Bay master planning process\*

Note: \* denotes collaboration with the City of Sydney.

# 1.0 Design Excellence



## Our Design Process: Investigate, Ask, Tell, Draw, Build.

3XN employs a working method - Investigate, Ask, Tell, Draw, Build – as a way to achieve design excellence but also as a way to communicate our design process with the client and stakeholders. It is a working method and approach where 3XN investigates site, function, and brief; asks community about the project; tells the story of people and place in the conceptual design; draws the functions and details of the project; and finally builds – not just the building, but the building as home and space for a community and its users.

We acknowledge that the new Sydney Fish Market is one the most important redevelopment project for the city; and more importantly, its goals to transform and strengthen the Blackwattle Bay into a landmark area that supports Sydney’s position as a world-class tourist destination and a diverse city with high quality of life. This project is essentially about placemaking as well as it is about placing Sydney on the world map through ambitious architecture.

With our Investigate, Ask, Tell, Draw, Build approach, we will ensure that the project objectives and visions set forward by Infrastructure New South Wales (INSW) are achieved in the final design.

## INVESTIGATE

- Understanding the project objectives.
- Understanding the site and project conditions.
- Understanding the operational and functional requirements.
- Understanding the scale and fish market typology.
- Understanding the climatic and cultural context.

Our approach has been to understand the possibilities of the development from a cultural and functional perspective. We've sought to understand how the new development can transform and add value to the cityscape and studied the programmatic and operational needs of a typical fish market building to identify requirements that go beyond function.

At 3XN, we like to say that the architecture springs out from the challenge of each site. It is the site, the context, the community that shapes it. Yet in order to understand these parameters we intend on building a strong partnership with INSW early in the investigation phase.

Furthermore, we will work closely with our sub-consultants team, BVN, Aspect Studios and WallnerWeiss, to ensure that all project considerations and perspectives are covered and investigated.

From the listed investigations, the team has then identified key challenges, potentials and a number of questions to be addressed during the design process. These are about the operation versus leisure, about connectivity, about scale and user experience and last but not least about adaptability and sustainability. What was presented of investigations and challenges at the interim workshop will be adjusted as we progress in our design creation process.

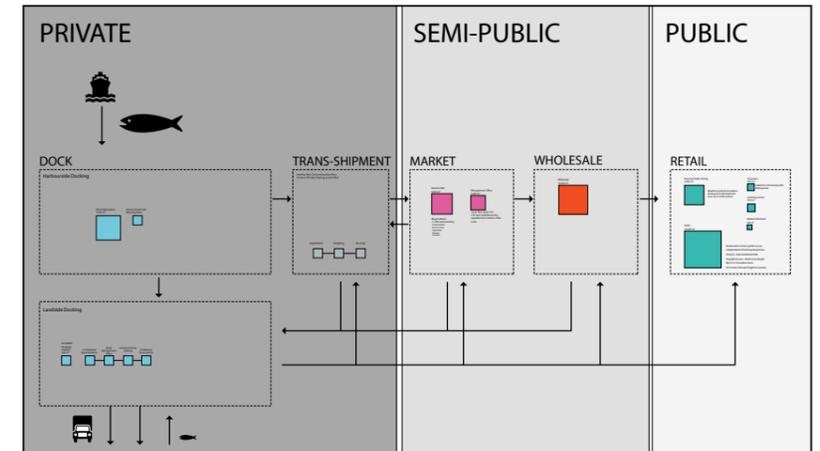


Diagram: Analysis of the spatial and functional requirements of a fish market.

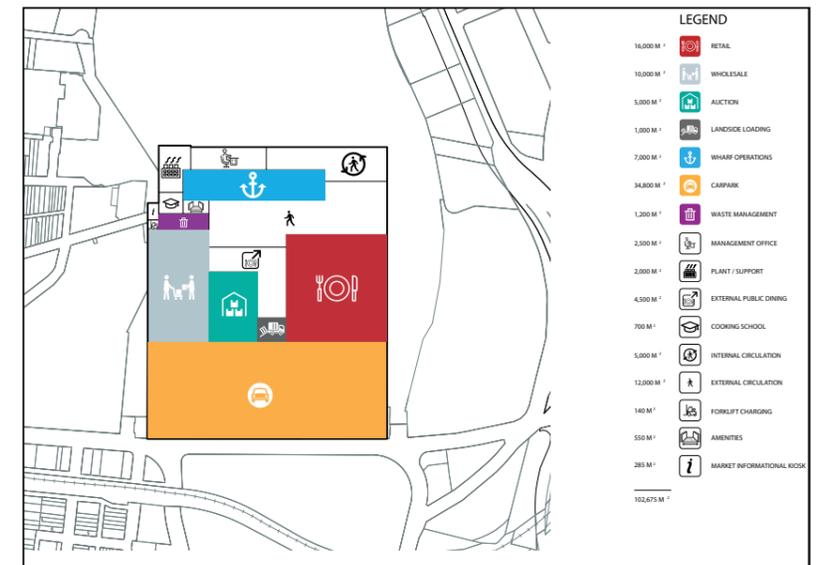


Diagram: Example of our scale comparison for the entire program of the fish market.

# 1.0 Design Excellence

## ASK

- Engaging the community and stakeholders.
- Giving the users ownership of the project.
- Informing the city and neighbourhood.

Over the past 30 years, 3XN has used a variety of methods to effectively make use of client, sub-consultant, stakeholder and user input. We have learned that public consultation extends much further than simply gathering people to voice their opinion – it is about conversations – asking and listening to what people from the community think and aspire. INSW has already started this process and the project has gained majority citywide support from stakeholders and users.

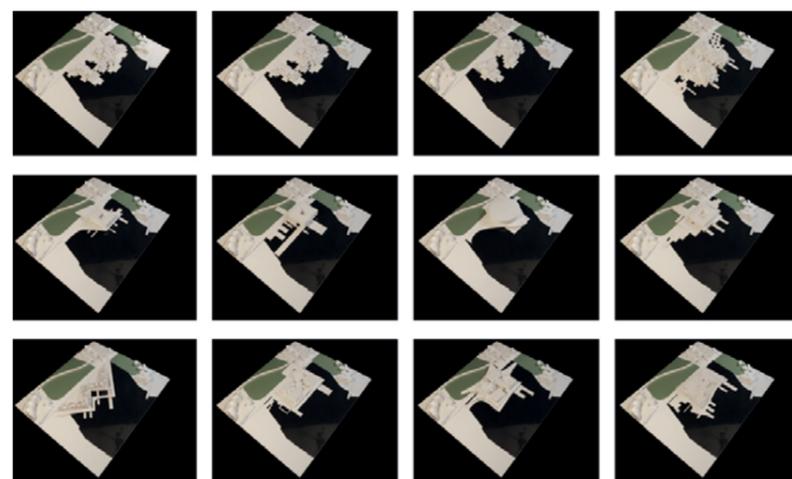


Image: Example of our model making process of design options.

## TELL

- Respond to the context.
- Demonstrate sensitivity to user.
- Re-think the fish market experience.

One definition of good architecture is when you can see that the building literally grabs the site upon which it is located – connecting different parts of its urban and natural environment. By investigating and ‘ask’ing we can use the conclusions to form the basis of a ‘story’ that 3XN will shape and tell through architectural expression.

Our ambition is to anchor the project to its context - it will be Sydney’s own story and reflect the unique conditions of the local condition and the client’s vision. Due to the project’s central location in Sydney, we will also strive to create a unique development that positively shapes the behaviour of users by giving them a different and authentic fish market experience.

## DRAW

- Communication of design.
- Collaborative spirit between the project team, specialists consultants and client.
- International perspective combined with local knowledge.

How can an architecture firm based in Denmark design a building in Sydney? Over 30 years, 3XN has built up a specialism – one we feel sets us apart from other architecture firms. We see design as a process and a collaborative effort. When ‘draw’ing we work with cardboard models, sketches process log and 3D modelling as they help us to share, discuss and evaluate different spatial solutions and give a sense of the totality of our projects. This way of working has proven successful in many projects and our visionary design concept has been realized without significant modifications. In a sense what you see in the concept is also what you get in the final building. With over 80% of our business outside of Denmark we also appreciate collaborations with a local partner, in this case BVN, as it informs and levitates the design in many ways.

## BUILD

- Capability to create distinctive design.
- Track record of delivering innovation.
- Design for buildability.

What has defined 3XN as a firm is our ability to deliver complex and challenging projects on time and on budget (and sometimes under budget). Together with INSW, it is 3XN’s belief that a fruitful partnership with BVN, Aspect Studios and the specialist consultants will set up targets for limiting environmental impact for builders, users, and surroundings pro-actively in all phases; design, planning, construction, and operations. Cultural and public buildings comprising both urban and commercial premises that take account of the context, require planning and project management at several levels. Over the years 3XN has built up expertise in handling complex building projects – and so has BVN. A current collaboration is the 100,000 m<sup>2</sup> Quay Quarter Tower in Sydney that not only showcase our ability to deliver as a team but also our capability in creating distinctive and innovative design solutions.

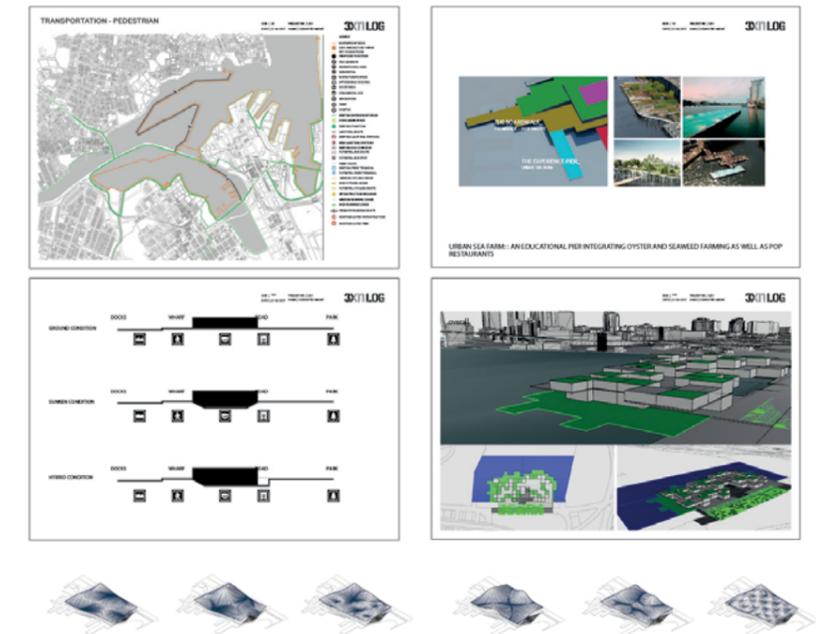


Image: Example of our working methods and rain water collection study.



Indicative view of the new Sydney Fish Market from Blackwattle Bay. Artist's impression only. Not to scale.

# 2.0 Built Form & Urban Design

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## New Sydney Fish Market

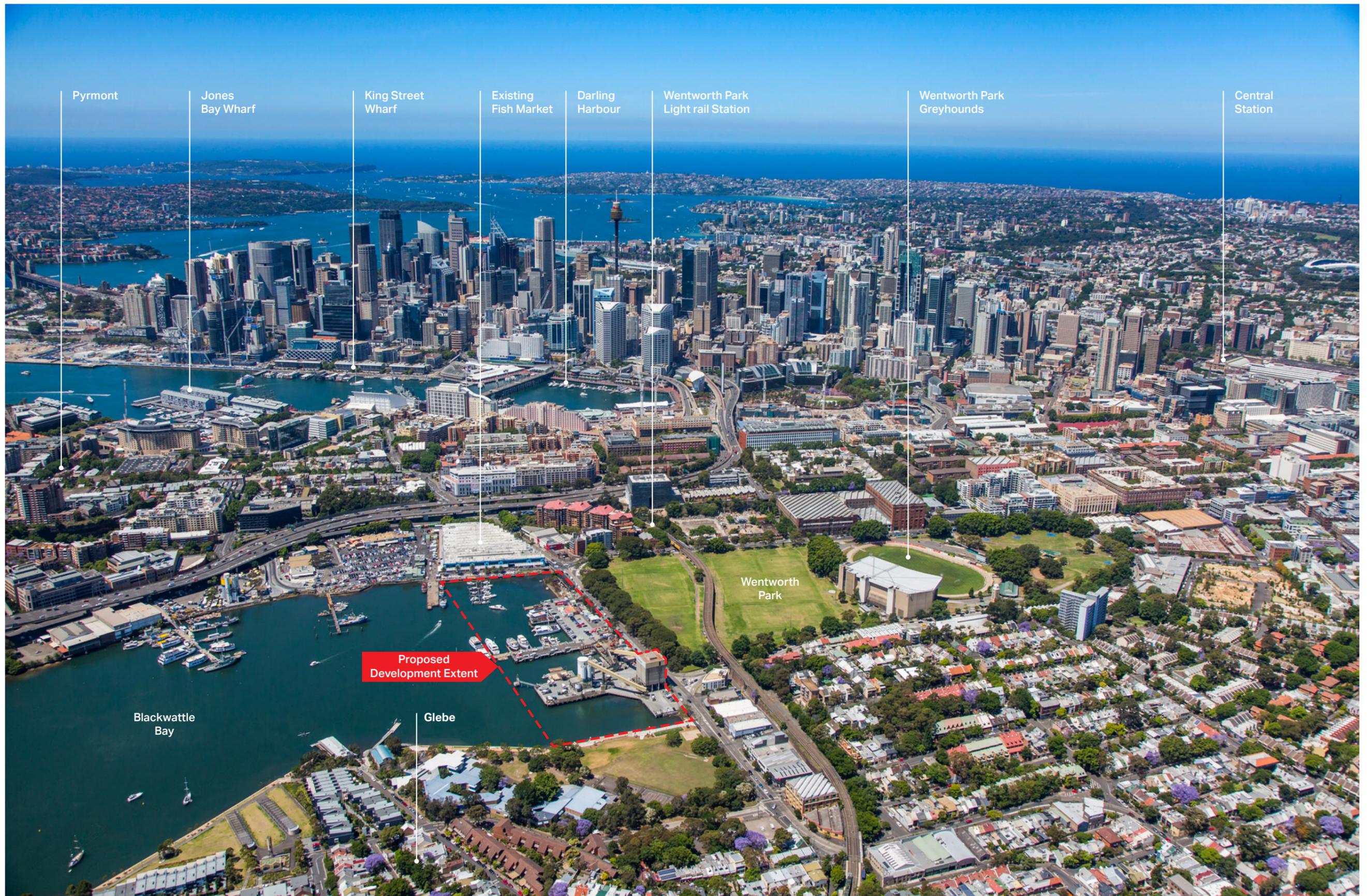


Indicative eastern promenade view of the new Sydney Fish Market. Artist's impression only. Not to scale.

# 2.1 Built Form & Urban Design Analysis

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## **Blackwattle Bay - Existing Character**



Existing Context: The proposed development is located at the head of Blackwattle Bay. View looking east to CBD.

## 2.1 Built Form & Urban Design Analysis

# Site Location - Wider Context Proximity to the City

Sydney's harbour foreshore is dotted with landmarks. With its proximity to public transport and the Sydney CBD, the site for the new Sydney Fish Market at the head of Blackwattle Bay will add another destination along the water's edge and extend the foreshore promenade.

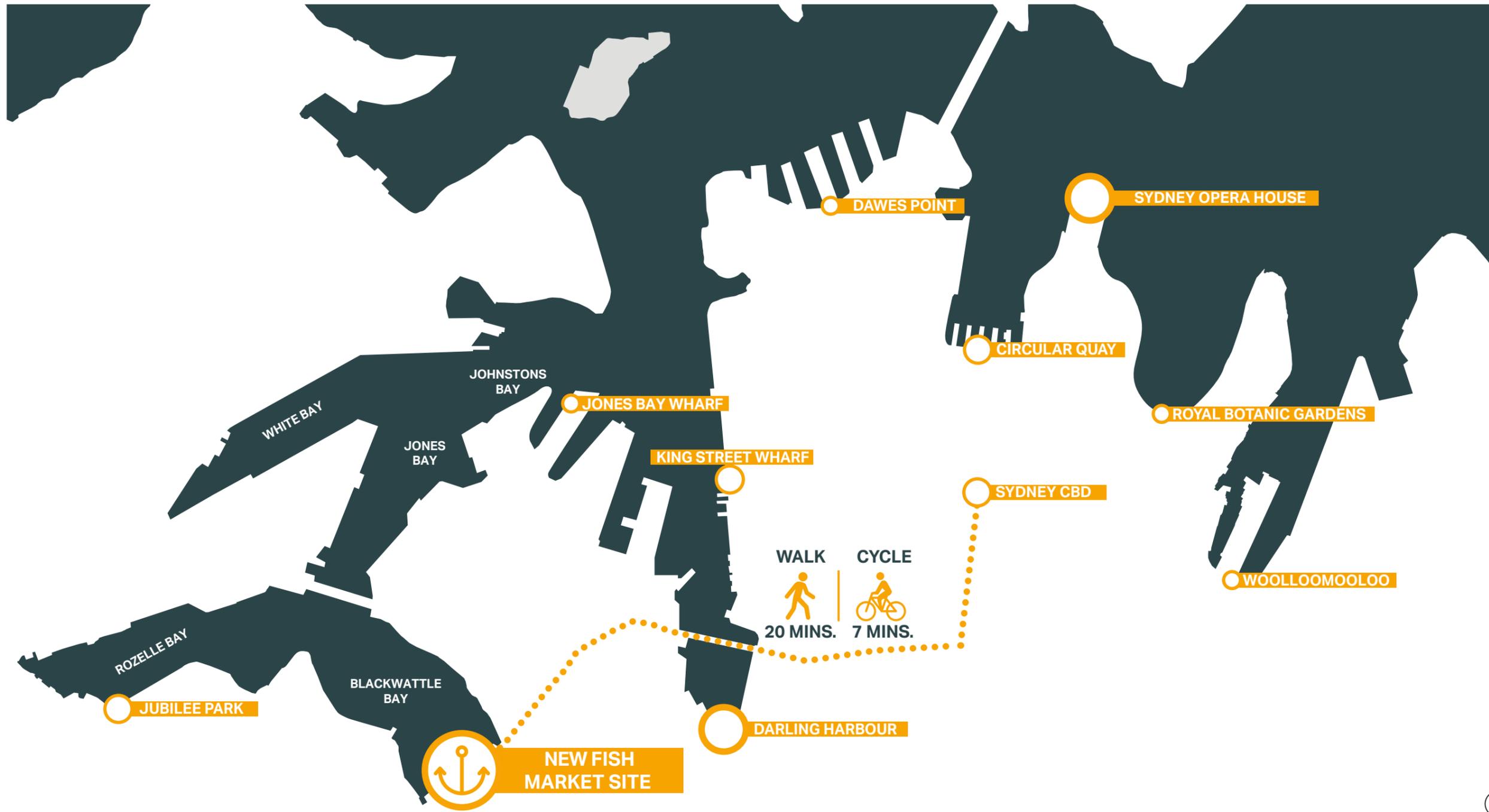


Diagram - The new Sydney Fish Market site location to wider Sydney context.

## 2.1 Built Form & Urban Design Analysis

# Site Location - Public Transport Proximity

The proposed development area is serviced by three Light Rail stations: Glebe, Wentworth Park and Fish Markets stations. The closest bus stops from CBD direction are within walkable distance to site, with high frequency bus routes running down Harris Street (Pyrmont) and Glebe Point Road (Glebe).

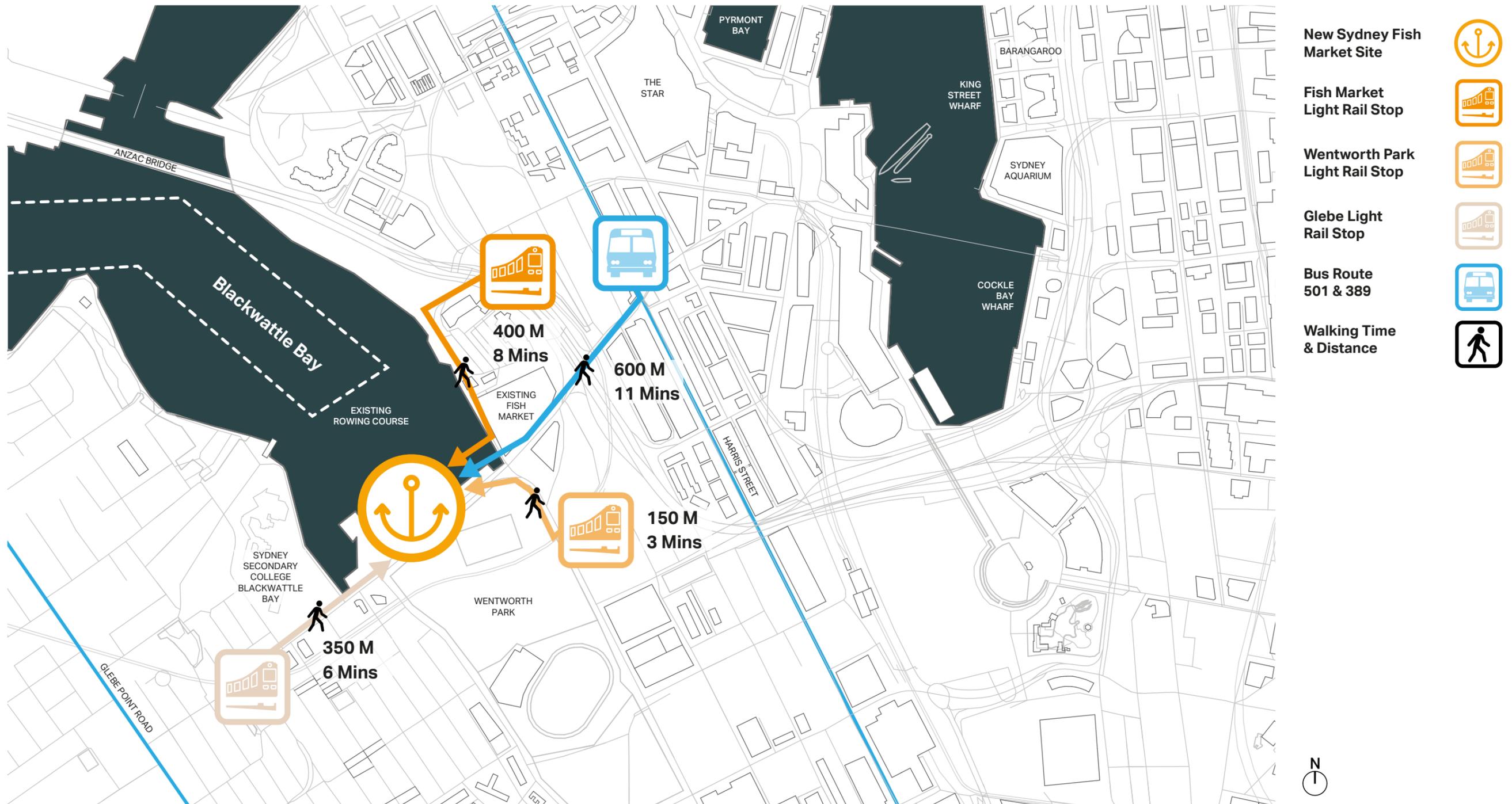


Diagram - The new Sydney Fish Market site location & public transport proximity.

## 2.1 Built Form & Urban Design Analysis

# Site Conditions - Existing Context

### Existing Context: Bridge Road

The existing Bridge Road footpath width is narrow. The existing distance from road to fence / wall line is between 2.1 and 2.8m. This is insufficient to allow for safe pedestrian movements, cycle lanes, cycle parking and drop-off zones for the new Sydney Fish Market and future proposed development. To promote safe movement between public domain conditions and Bridge Road, the existing footpath will be widened to become a public promenade.



View of existing Bridge Road northern footpath looking west with coal bin loader on right side.



View of existing footpath looking west at concrete batching tower.