

DEVELOPMENT FRAMEWORK MAY 2022 REV P06 ABERDEEN CITY COUNCIL ABERDEEN BEACHFRONT

DRAFT

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PROJECT TEAM

CLIENT

Aberdeen City Council



PROJECT DEVELOPMENT MANAGER

hub North Scotland Ltd



MASTERPLANNER - BEACHFRONT

Keppie Design Ltd



PLANNING CONSULTANT - BEACHFRONT

Keppie Design Ltd



ARCHITECT - BEACH BALLROOM

Keppie Design Ltd



ARCHITECT - BEACHFRONT STADIUM

AFL



ARCHITECT - BEACHFRONT LEISURE

AFL



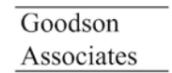
LANDSCAPE ARCHITECT - BEACHFRONT

Open



CIVIL & STRUCTURAL ENGINEER

Goodson Associates



MEP ENGINEER

Wallace Whittle



STAKEHOLDER ENGAGEMENT LEAD

Streets-uk



COST ADVISOR

Currie & Brown



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1.0 INTRODUCTION

The impact of the Coronavirus pandemic highlighted just how important accessible and good quality public space is to people's physical and mental health.

During this time, the citizens of Aberdeen rediscovered and fell back in love with the city's outdoor spaces and in particular the Beachfront area, understanding it's importance as a key public space for the city and wider area.

The aim of this Development Framework is to set a vision and key design principles for a world class sport, leisure and tourism destination which would revitalise the Beachfront area and reconnect it to the city centre.

OBJECTIVES OF THE DEVELOPMENT FRAMEWORK

The Framework has been developed in accordance with the guidance contained within Aberdeen City Council's 'Masterplanning Process' document in order to ensure an appropriate process of consultation and feedback is developed and is incorporated as the document evolves.

Due to the nature of masterplanning and the scale of the proposals, the detail of the individual elements of the design will inevitably evolve over time, however by establishing a clear structure these changes can be accommodated whilst retaining an overall clarity and coherence to the place. The Framework provides the basis for more detailed proposals to come forward in the future.

The Development Framework:

- Provides an overall vision for the area whilst also allowing for flexibility and differing approaches;
- Establishes a clear and coherent spatial structure which can accommodate change in the long term as detailed proposals emerge;
- Describes character areas and areas of potential intervention;
- Sets out strategic transport proposals in terms of access and connectivity; and
- Illustrates the general directions and phasing of development within the area.



Beachfront Masterplan Brief & Vision Collage

VISION

The Beachfront offers a unique opportunity to create a transformational new waterfront destination for the City of Aberdeen. The above collage illustrates elements of priority within the overall Vision for the Beachfront Development Framework, following several briefing sessions with key personnel at Aberdeen City Council. At the heart of the proposals is the redevelopment of the iconic Beach Ballroom – the 'jewel in the crown' of the Beachfront redevelopment. An enhanced public realm setting for the re-imagined Ballroom, integrated with a potential new Stadium and Leisure complex, will create a dynamic new Urban Park which connects back into the City Centre. This people-focused environment will be inclusive for all, creating a real community asset and bringing the 'Wow' factor back to the Beachfront.

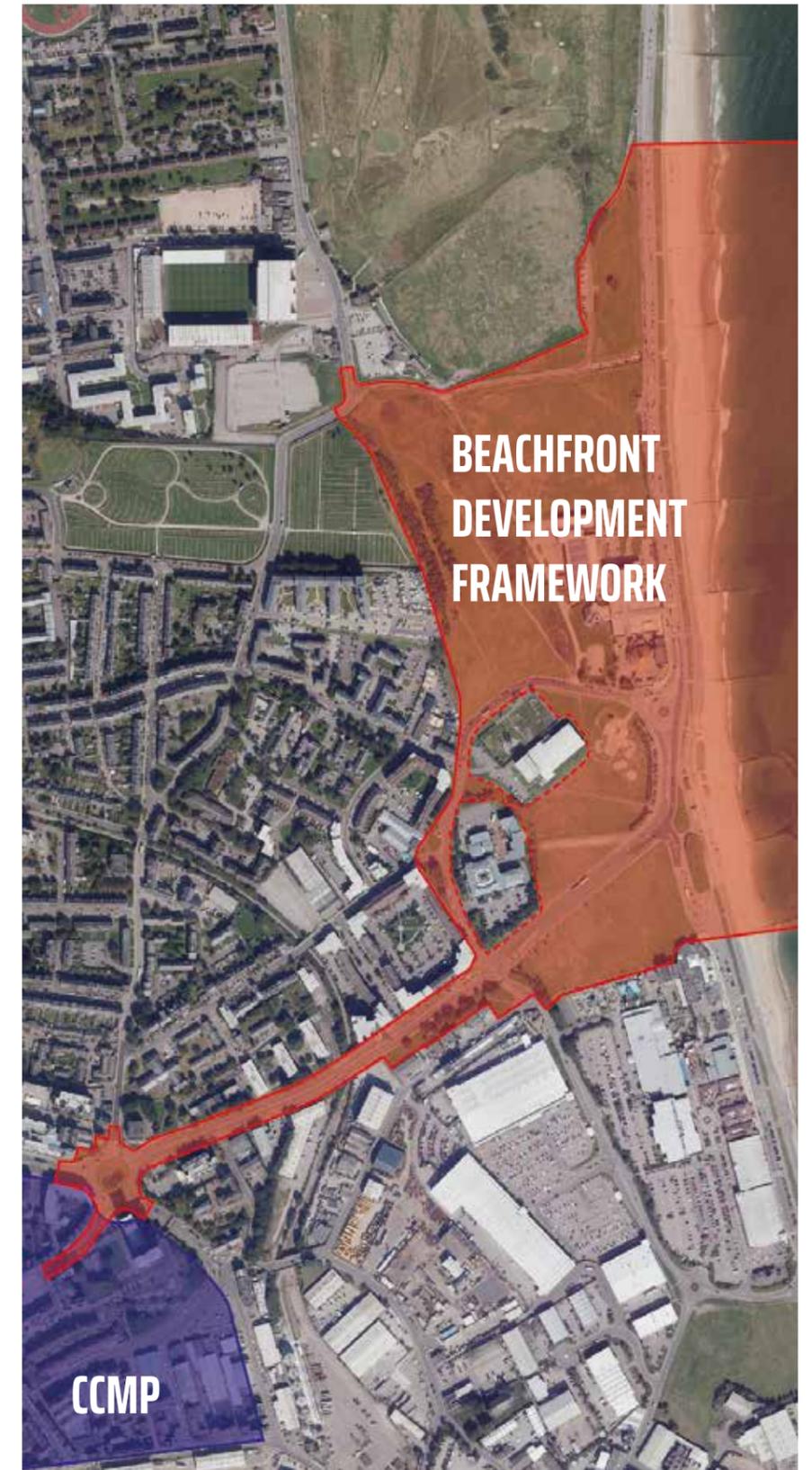
1.1 DEVELOPMENT FRAMEWORK

A Development Framework is one of the tools under the Council's 'masterplanning' umbrella and sets out a two-dimensional framework of development principles and parameters for the way in which the wider site is to be developed in the future. The Development Framework will serve as a strategy document used by Aberdeen City Council to guide the future development of the Beachfront. The Beachfront Development Framework will not be adopted as Supplementary Planning Guidance, but rather will be a Council-approved strategy, and will be assimilated into a recalibrated City Centre and Beach Masterplan. These documents will be material considerations in the assessment of any future planning applications for development at the Beachfront.

It is proposed that, following the approval of the Development Framework by the Council, detailed planning applications for the new buildings at the Beachfront would be submitted, while the public realm aspects will be progressed by the Council under statutory powers, as previously confirmed by Committees. It is important to stress that the Development Framework sets out principles and parameters to be followed and will not be 'set in stone' or represent a final design solution for the Beach or any of the constituent developments. The document will outline a potential phasing strategy for the prospective developments and interventions at the Beachfront.



Location Plan with Aberdeen Beachfront Development Framework Area



Site Plan with Aberdeen Beachfront Development Framework Area

-  Beachfront Development Framework Boundary
-  City Centre Masterplan (CCMP) Boundary

1.2 SEA (STRATEGIC ENVIRONMENTAL ASSESSMENT)

The Development Framework will be accompanied by a Strategic Environmental Assessment (SEA) SEA is an assessment of the likely effects that a proposal will have on the environment, if implemented.

A Strategic Environmental Assessment (SEA) is the systematic review of plans, programmes, and strategies to ensure that environmental issues are considered throughout the preparation, implementation, monitoring, and review of these key documents. The aim of SEA is to achieve better integration of environmental considerations at the heart of decision-making through a more rigorous and transparent planning process.

1.3 HRA (HABITAT REGULATION ASSESSMENT)

Due to the location of the proposed works, in proximity to the Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA) and River Dee Special Area of Conservation (SAC), a European designated (Natura 2000) site, a Habitats Regulations Appraisal (HRA) is also required.

The HRA will assess potential impacts to the sites' qualifying features associated with the proposed works, including identifying any mitigation measures necessary to avoid, reduce or offset negative effects. The assessment will be completed in accordance with the approach outlined in 'Habitats Regulations Appraisal of Plans Guidance for Plan-Making Bodies in Scotland.'



Aerial View looking west over the Beachfront



View looking towards Beach Ballroom



View of the beachfront with Esplanade and groyne

1.4 SITE HISTORY

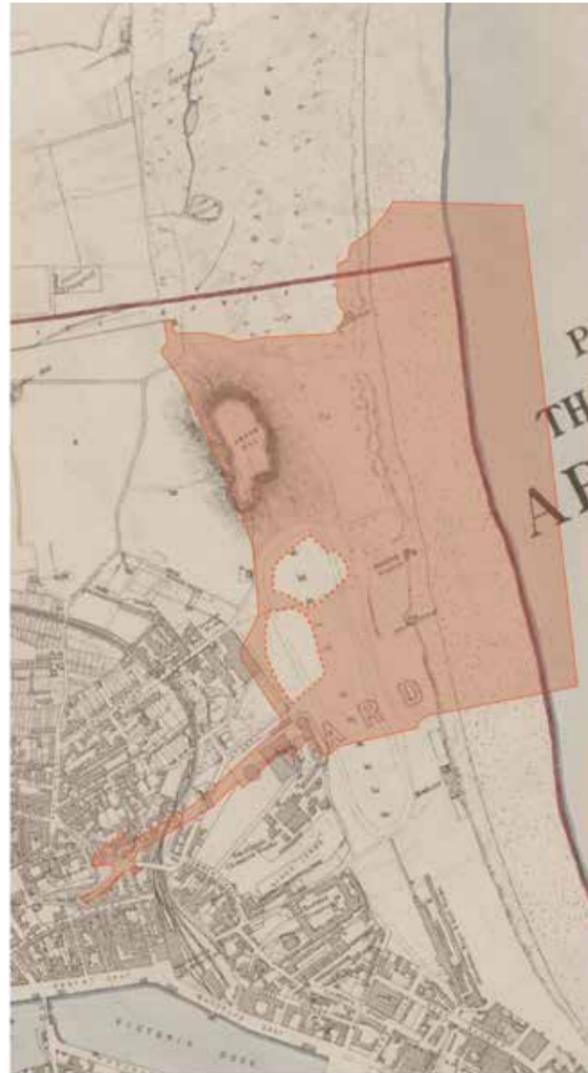
Aberdeen, Scotland's third city, developed over many generations as two separate burghs, Old Aberdeen at the mouth of the Don and New Aberdeen, a fishing and trading settlement where the Denburn entered the Dee estuary.

Port activities, trading links, fishing and shipbuilding saw the city and its harbour expand and develop. The first of Aberdeen's shipyards opened in the late 1700's concentrating initially on fishing and whaling boats then steamers, coal carriers and coasters. Aberdeen was also home to thriving industrial and commercial operations focussed on the maritime industry, these included sail-making, tanneries, nail factories, and ropeworks. One such ropeworks was located to the south of Queens Links. The 19th century was a time of considerable expansion; however, growth was organic and un-planned. By 1901 the population was 153,000 and the city covered more than 6,000 acres.

The discovery of North Sea Oil in 1969 marked a major and recent milestone in Aberdeen's evolution. Over the last three decades the city has become the Energy Capital of Europe, the focus of international investment and business enterprise, creating employment opportunities, attracting incoming population, and transforming the harbour from fishing port to a busy industrial hub supporting offshore oil and gas production.

Aberdeen is a city with a close bond to the sea, and the Beachfront area has served the people of Aberdeen and beyond as a key leisure and recreation space for decades. Although still popular today, it was once a thriving tourist destination in the early 1900s, drawing visitors from across the country. Picture postcards from that era term Aberdeen 'The Silver City by the Sea' and describe the Beachfront itself as 'The Finest Beach and Most Beautiful Holiday Resort in Britain'. The Beachfront also housed several well utilised leisure facilities and recreational activities, such as a bathing station, tennis courts, lawn bowls, in addition to the Beach Ballroom which serves as the last remnant of this thriving time.

Capturing the nostalgia of that bygone era, the celebration of what has gone before provides inspiration for the future development of the Beachfront. The vision for the redevelopment of the area is to rejuvenate the Beachfront and return it to its former glory creating a major waterfront destination for future generations to enjoy.



Historic Map - 1871



Historic Map - 1932



Current Map - 2022



The Dance Hall (Ballroom) and Promenade



Aberdeen Beach Historic Postcard

1.4.1 BEACH BALLROOM HISTORY

The Aberdeen Beach Ballroom, affectionately known as the finest dance hall in Scotland, adopts a prominent position along the City's Beachfront esplanade. Opened in 1929, this important Art Deco entertainment venue has experienced much change, not least the major development of the 1970s Star Ballroom which provided additional function space on the roof of the eastern side overlooking the coastline. The building boasts a wealth of cultural history, having hosted many of Scotland's leading bands over the decades and is held in high esteem amongst Aberdonians who share fond memories of their time at the venue.

The Ballroom is to be considered as a primary focal point in the new Beachfront development, due to its central position but also because of its cultural significance. The venue is category B-listed and recognised for its Art Deco styling and its octagonal ballroom with set-back pan tiled pyramidal roof which is crowned by an arcaded lantern.

Over the years, the Ballroom has made attempts to adapt to new cultural and business trends, which has led to areas of inefficiencies within the interior fabric and planning of the building. This, combined with the harsh coastal environment, cultural changes and underfunding for refurbishment, has led to a Ballroom in need of a holistic strategy for renewal.

The emerging proposals identify opportunities for development, from interventions such as upgrades to internal fit outs to high level re-imaginings of current and proposed revenue generating spaces. It is accepted that any opportunity for redevelopment must and will respect the heritage and memories defined by the Beach Ballroom to ensure it can continue to contribute to the lives of those who visit it.



Beach Ballroom as Existing



Historic Image of Ballroom Interior



Historic Illustration of Beach Ballroom and Esplanade



Aberdeen Beach Resort Postcard: Approach to the Beach and Dance Hall



Historic Image of Ballroom Event

POLICY CONTEXT

2.0

KEPPE

2.0 POLICY CONTEXT

The Development Framework area is covered by a number of relevant planning policies which have shaped the approach to the site. A summary of the policy context is outlined below:

2.1 LOCAL OUTCOME IMPROVEMENT PLAN 2016-2026 (LOIP) (INCLUDING LOCALITY PLANS)

The LOIP sets out Community Planning Aberdeen's plan for ensuring that everyone in Aberdeen, regardless of their background or circumstance, has access to the same opportunities.

The three key themes which are covered by the LOIP are: Economy, People and Place. The proposals within the Development Framework will:

- Contribute to the improvement of the 'Economy' through increasing employment opportunities.
- Provide a public focussed space which will aid in creating areas which have a positive impact on 'People's' health and well-being, in particular for children and young people, contributing to Aberdeen's goal of gaining UNICEF Child Friendly City Status.
- Aim for a net-zero operational development with active travel at its core which will create a key sense of 'Place' to the Beachfront.
- Protect a significant natural asset within Aberdeen and promoting biodiversity further adding to the 'Place'.

2.2 NET ZERO AND SUSTAINABILITY POLICIES

Aberdeen City Council's 'Net Zero Aberdeen Routemap: Towards becoming a net zero emissions city by 2045' sets out the approach, pathway and actions towards net zero and climate resilient Council assets and operations, by 2045. Energy-efficient design proposals will require to be incorporated within any design proposals and concept masterplan alongside renewable and low carbon energy sources, with consideration necessary to understand how further decarbonisation could be achieved in the future. In addition to the energy approach the development will seek to promote biodiversity and the protection of the natural assets found within the Beachfront area. Any development will require to be cognisant of the recommendations of the suite of Aberdeen City Council guidance.

2.3 CCMP CONTEXT

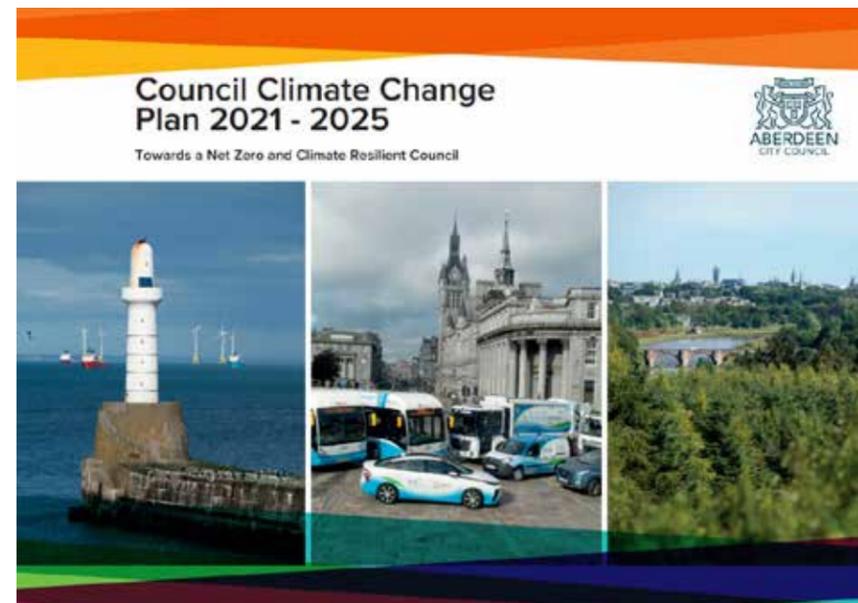
Aberdeen City Council have made a commitment to update the Aberdeen City Centre Masterplan (2015) to align with the Aberdeen economic policy panel report (November 2020) and other recent key strategic commitments. These strategies focus on the desire to develop a holistic Aberdeen City Vision to support economic recovery and growth (post Covid) and to support the continuing diversification from oil and gas-based industries to green infrastructure, emerging technologies and renewables alongside optimising the remaining off-shore opportunities.

Investment in skills, health and wellbeing and quality of life through the utilisation of "place based" strategies will also support the development of "Aberdeen the place" – a vibrant city where people choose to live, work, do business and invest.

The Beachfront Development Framework document will sit as a 'sister' document to the updated Aberdeen City Centre Masterplan document. The Beachfront proposals will align and complement the wider CCMP strategy.



Local Outcome Improvement Plan 2016-26



ACC Climate Change Plan 2021-2025



ACC CCMP 2015

2.4 ABERDEEN LOCAL DEVELOPMENT PLAN (2017) & PROPOSED ABERDEEN LOCAL DEVELOPMENT PLAN (2020)

The Aberdeen Local Development Plan was adopted by Aberdeen City Council on the 20th of January 2017 and a proposed new LDP is currently with Scottish Ministers for its 'Examination In Public'.

Both the adopted 2017 Local Development Plan and the Proposal Plan identify land within the Development Framework as Urban Green Space (Policy NE3), Green Space Network (NE1) and Beach and Leisure use (Policy NC9 – Beach and Leisure). Policy NE3: Urban Green Space aims to protect areas for recreation and sport, while Policy NE1: Green Space Network aims to “protect, promote, and enhance the wildlife, access, recreation, ecosystem services and landscape value of the Green Space Network”.

The Proposed Aberdeen Local Development Plan 2020 encompasses Green Space Network and Urban Green Space within one policy, Policy NE2: Green and Blue Infrastructure. The principle of the policy is to protect, support, and enhance Green Space Networks and Urban Green Space. Within the defined Beach and Leisure area it is noted that proposals will be permitted provided they:

- Contribute to the range and quality of the existing uses, facilities and activities of the wider beach area;
- Are of an appropriate scale;
- Do not have an unduly adverse effect on the character of the area, or cause negative visual or environmental impacts or affect the amenities of nearby residents; and
- Do not result in the significant generation of car borne journeys, nor additional pressure for car parking.

The proposed Aberdeen Local Development Plan 2020 Policy VC11: Beach and Leisure note the same caveats for proposals with the addition that there is a presumption against retail development.

The following key policies are likely relevant to the principle of development, with other policies of the plan to be taken into consideration at the detailed design stages. Provided below is a note of further policies which will need to be considered at future detailed design stages.

Aberdeen Local Development Plan 2017 - Key Policies:

- Policy NE1 - Green Space Network
- Policy NE3 - Urban Green Space
- Policy NE7 - Coastal Planning
- Policy NC9 – Beach and Leisure

Aberdeen Local Development Plan 2017 - Policies to be considered further:

- Policy NE6 - Flooding, Drainage and Water Quality
- Policy NE9 - Access and Informal Recreation
- Policy D1 – Quality Placemaking by Design
- Policy D2 – Landscape
- Policy D3 – Big Buildings
- Policy D4 - Historic Environment
- Policy NE8 – Natural Heritage
- Policy I1 - Infrastructure Delivery and Planning Obligations
- Policy T2 - Managing the Transport Impact of Development
- Policy T3 - Sustainable and Active Travel
- Policy T5 – Noise

Proposed Aberdeen Local Development Plan 2020 - Key Policies:

- Policy NE2 – Green and Blue Infrastructure
- Policy NE4 – Our Water Environment
- Policy VC11 – Beach and Leisure

Proposed Aberdeen Local Development Plan 2020 - Policies to be considered further:

- Policy WB1 – Healthy Developments
- Policy NE3 – Our Natural Heritage
- Policy D1 – Quality Placemaking
- Policy D3 – Big Buildings
- Policy D4 – Landscape
- Policy D6 - Historic Environment
- Policy I1 - Infrastructure Delivery and Planning Obligations
- Policy T2 – Sustainable Transport
- Policy T3 – Parking
- Policy WB3 – Noise

2.5 TRANSPORT POLICIES, PLANS, STRATEGIES AND PROJECTS

The Development Framework will deliver physical improvements to pedestrian, cycle and public transport networks and facilities in the vicinity of the Beachfront. This is consistent with local, regional and national policies, plans, strategies and projects which promote growth in active travel and a reduction in rates of car use. A summary of relevant policies and strategies is provided, as follows.

- Scotland aspires to be a 'net-zero' country by 2045, with new petrol and diesel cars and vans being phased out by 2030. In Aberdeen, targets have been set to reduce total car kilometres travelled by 20% by 2030, with a target that more than 50% of all journeys in the city by that time are made by non-car-based modes.
- Transport Scotland's National Transport Strategy is underpinned by a vision to develop a sustainable, inclusive and accessible transport system which helps to deliver a more prosperous Scotland for communities, businesses and visitors.
- Aberdeen City Council Local Transport Strategy - Five high-level objectives are set out in the 2016-2021 LTS; (1) the delivery of a transport system that enables the safe and efficient movement of people and goods, (2) a safe and more secure transport system, (3) a cleaner, greener transport system, (4) an integrated, accessible and socially inclusive transport system and, (5) a transport system that facilitates healthy and sustainable living.
- Aberdeen Active Travel Action Plan (ATAP) identifies the actions and interventions necessary to make walking and cycling safer and more attractive choices, and to increase the number of active journeys in the city. The vision is complementary to a number of ATAP projects; the City Centre Masterplan, Union Terrace Gardens redevelopment, King Street Active Travel Improvements, works to deliver improved active travel links between Parkway Roundabout and the city centre via the Esplanade corridor, Golf Road / Park Road active travel improvements, King Street active travel improvements and others. ATAP also includes Behaviour Change projects and initiatives such as the development of a city Bike Hire Scheme, development of the Go Abz App, development of the Aberdeen cycle map and others.
- A Low Emission Zone (LEZ), covering the city centre was introduced in 2022. Only vehicles which comply with specified emissions standards may enter the LEZ, helping to address air pollution in the city centre. Active and sustainable travel modes are prioritised

within the LEZ, the eastern extent of which is defined by the A956 / East North Street. Proposed enhancements to active travel connections between the city centre and the Beachfront contribute towards LEZ objectives.

- Aberdeen Sustainable Urban Mobility Plan (SUMP) promotes the city's transition to a low carbon / low emission future, measures to develop a safe and sustainable city centre, measures to uphold the revised Roads Hierarchy by discouraging through traffic and improving accessibility for people walking, cycling and using public transport and the identification of areas for the successful delivery of a bike hire scheme.
- City Centre Masterplan: A comprehensive regeneration project to transform the city centre area whilst conserving its heritage. The Masterplan will facilitate public realm improvements throughout the city centre whilst also prioritising sustainable transport modes to create an environment that offers greater prosperity and quality of life in Aberdeen. Through the incorporation of pedestrian and cycle links, delivery of enhanced public transport services and facilities and the creation of welcoming public spaces, the Beachfront vision is complementary to the city centre proposals and their objectives.
- Go Abz Journey Planner: A freely available journey planning application which allows users to plan and price their local travel options. The app provides advice on journeys by all travel modes and helps users plan a route which best suits their needs; by car, bus, rail, taxi, cycling, walking, wheeling or a combination of these.
- Park and Ride: A network of sites, providing more than 3,000 spaces, located to the south, east and north of the city centre served by a combination of high frequency local and express buses. Increased use of park and ride facilities will contribute towards a reduction in the number of cars travelling towards the city centre and beachfront area. Buses which serve the park and ride sites will benefit from increased priority and reduced journey times, opportunities for which are currently being identified via a series of Bus Partnership Fund corridor studies, and through the masterplan there is potential to enhance service levels directly to the beachfront. Park and ride, as part of a broader public transport offer, presents a real opportunity for those who wish to travel to and from the beachfront.
- Aberdeen Rapid Transit (ART): Emerging proposals, contained in Transport Scotland's Strategic Transport Projects Review 2 package and referenced in the National Planning Framework for high frequency public transport corridors between key park and

ride sites around the city, including services between Kingswells and Bridge of Don and Craibstone to Portlethen. These corridors will incorporate high-quality waiting and interchange facilities with priority measures to guarantee reduced journey times. ART will contribute towards an enhanced perception of local public transport as part of wider efforts to reduce rates of car use in and around the city. The Development Framework presents an excellent opportunity for ART to be extended to the Beachfront, or for enhanced public transport services to be designed to integrate with ART services in the city centre.

- Bridge of Don to City Centre Active Travel Corridor: A package of measures aimed at improving the quality of pedestrian and cycle links between the Bridge of Don area and Aberdeen city centre. It seeks to increase the number of people who can directly access the active travel network and aims to increase safety, comfort and personal security. The project will make a significant contribution towards the Beachfront, increasing the coverage and quality of local pedestrian and cycle networks to the north and encouraging access to the area by clean, healthy modes of transport.
- Car Clubs: A city-wide pay-as-you-go car hire initiative which, in Spring 2022, has a fleet of 47 vehicles, many of which are hybrid or electric. There are bays located on Pittodrie Street, School Road, Constitution Street and Frederick Street, all of which are within a walkable distance of the Beachfront area. Members can book a car hire by telephone or online and they pay thereafter on a charge-per-mile basis. Initiatives of this nature recognise that some trips do require access to a car but they help to reduce rates of car ownership and vehicle mileage overall. There is potential to incorporate additional Car Club bays throughout the masterplan area, balancing the requirement for proportionate car parking provision with wider objectives to reduce overall car use.
- A bike hire scheme for Aberdeen City has been approved and is currently under development with a view to it being implemented during 2022.

Through delivery of the Beachfront Masterplan, key transportation principles which underpin the City Centre Masterplan and associated corridor studies will be applied over an expansive catchment which extends between Castlegate, Beach Boulevard and the Esplanade. These measures will enhance trip making opportunities for those who already make trips in the area while strongly influencing the travel choices of those who choose to visit the area in the future.

2.5 OTHER KEY POLICIES, GUIDANCE & INFORMATION

Further key policies, guidance and information will be instrumental in developing the Beach area. An outline of some of the key documents is noted below:

Aberdeen City and Shire Strategic Development Plan (2020)

- ACC Supplementary Guidance
- ACC Core Paths Plan (2009)
- ACC Open Space Strategy 2011-2016
- Scottish Planning Policy 2014
- National Planning Policy Framework (NPF) 4
- Socio-economic Rescue Plan 2020/21
- Healthy Cities Agenda
- Regional Economic Strategy: Action Plan (2018-2025)
- Destination Aberdeen & Aberdeenshire Tourism Strategy (2018-2023)
- Historic Environment Policy for Scotland (HEPS)
- Planning Advice Notes (PANS)
- Aberdeen Beach Masterplan - April 2006
- Ellon to Garthdee Study
- Aberdeen Active Travel Action Plan

CONSULTATION & ENGAGEMENT

3.0



3.0 CONSULTATION & ENGAGEMENT

3.1 PROCESS

Key to the preparation and development of the Development Framework is the important contribution of public consultation and engagement with key consultees. The support of the local community, wider city, stakeholders, and other groups for the proposals set out within the Development Framework will be essential for its successful delivery.

3.2 WHAT HAS BEEN DONE SO FAR?

The concept masterplan work and the development optioneering that has been undertaken to date for the Beachfront has moved at a significant pace since summer 2021. This work to date, and the masterplan concepts and indicative development options that have subsequently emerged for consideration, have been directly influenced by the significant public engagement exercise undertaken between June-July 2021 on “The Future of Aberdeen City Centre and the Beach”, to which there were 7,697 responses, the largest response that the Council has received to any such consultation ([Link to the relevant committee paper](#)). A number of further engagement and consultation approaches have already been undertaken with key stakeholders. This consultation has been key in shaping the Development Framework proposals so far:

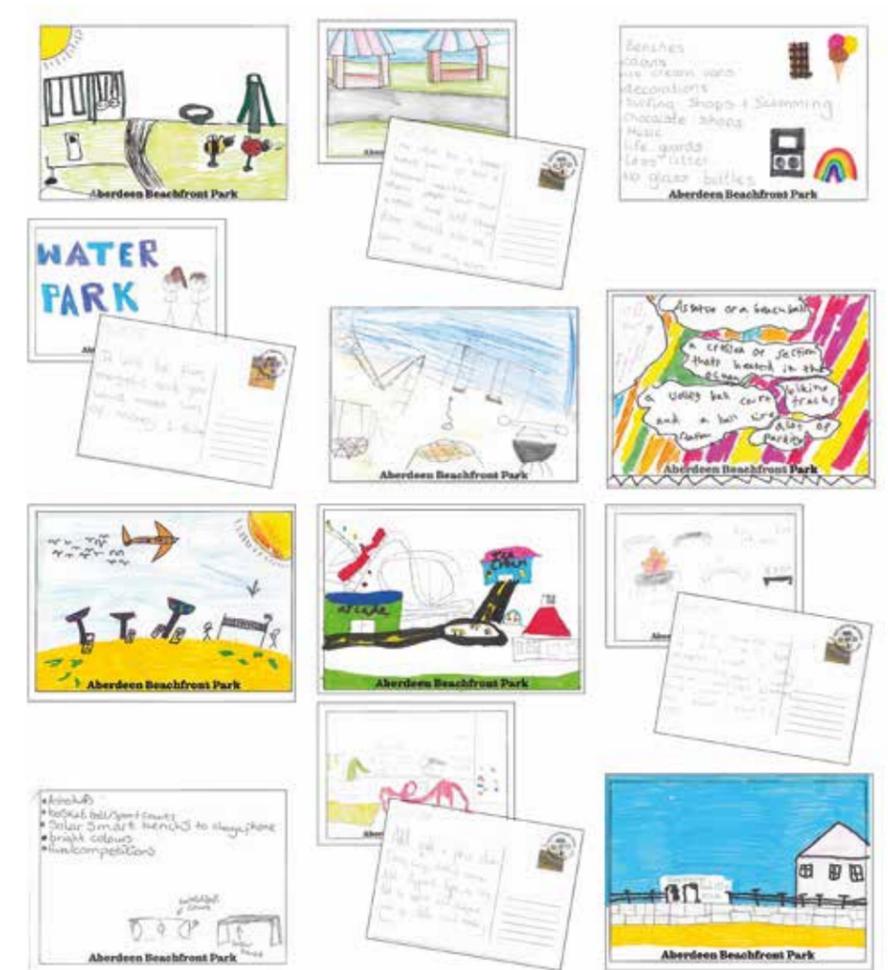
- A series of stakeholder engagements have taken place with those associated with the core Beachfront facilities – Beach Ballroom, Beach Leisure Centre, and Stadium.
- Discussions also took place with a range of organisations that use and/or have an interest in the Beachfront, including the Chamber of Commerce, the Cricket Club, and the Surf Club.
- Workshop sessions were also held with key stakeholders associated with the Beachfront facilities forming the basis of this review – the ballroom management, Sport Aberdeen, and Aberdeen Football Club. During these sessions’ outputs from the Option Appraisal exercise were presented and confirmed as an agreed recommendation.
- An extensive consultation and engagement exercise was undertaken with children and young people. Activities included the following:
 - o Workshops with P6 Primary School children followed by a presentation of their ideas to members of the design team.
 - o A ‘creative postcard exercise’ undertaken with secondary school students.
 - o Consultation through a QR code and online survey.
- Several technical workshops have been undertaken with ACC

technical teams in order for the Development Framework proposals to respond to their queries and feedback.

- Further consultation has also taken place with local bus operators, with taxi and cycle groups also approached.
- Stakeholder meetings with Accessible City Transport Users Partnership (ACTUP) and Disability Equity Partnership (DEP).
- HES, SEPA, Scottish Water, Marine Scotland, and NatureScot were also consulted as part of the initial consultation and engagement process.
- Further young persons’ engagement sessions were undertaken at the beginning of May 2022.

FLOWERS
CYCLE LANES
PETTING ZOO
CINEMA **PIER**
MODERN **WATER PARK**
CLEAN **BBQ AREA**
SKATE PARK
SUN LOUNGERS **FESTIVALS**
FOOD TRUCKS
ARTWORK AND SCULPTURES
CHANGING ROOMS
FOUNTAINS
TREES **MORE BINS**
CAFE AT ICE RINK
GRASS AND OPEN SPACE
LIGHTING
TELESCOPES

Engagement Word Map



Children and Youth Postcard Engagement Exercise

3.3 NEXT STEPS

Regardless of the success and level of engagement to the Summer 2021 consultation, it is acknowledged that significant future engagement with key stakeholders will be key to ensuring a successful project. In the months ahead, the Council and design team will undertake wider engagement with key stakeholders and end users of the Beachfront in order to have the discussions and ask the very questions which will make these projects the best they can be for all users of the Beach. A series of engagement sessions and activities with key stakeholders, end users and the public are proposed throughout 2022, with an initial focus on the Beachfront Development Framework.

THE SITE



4.0 THE SITE

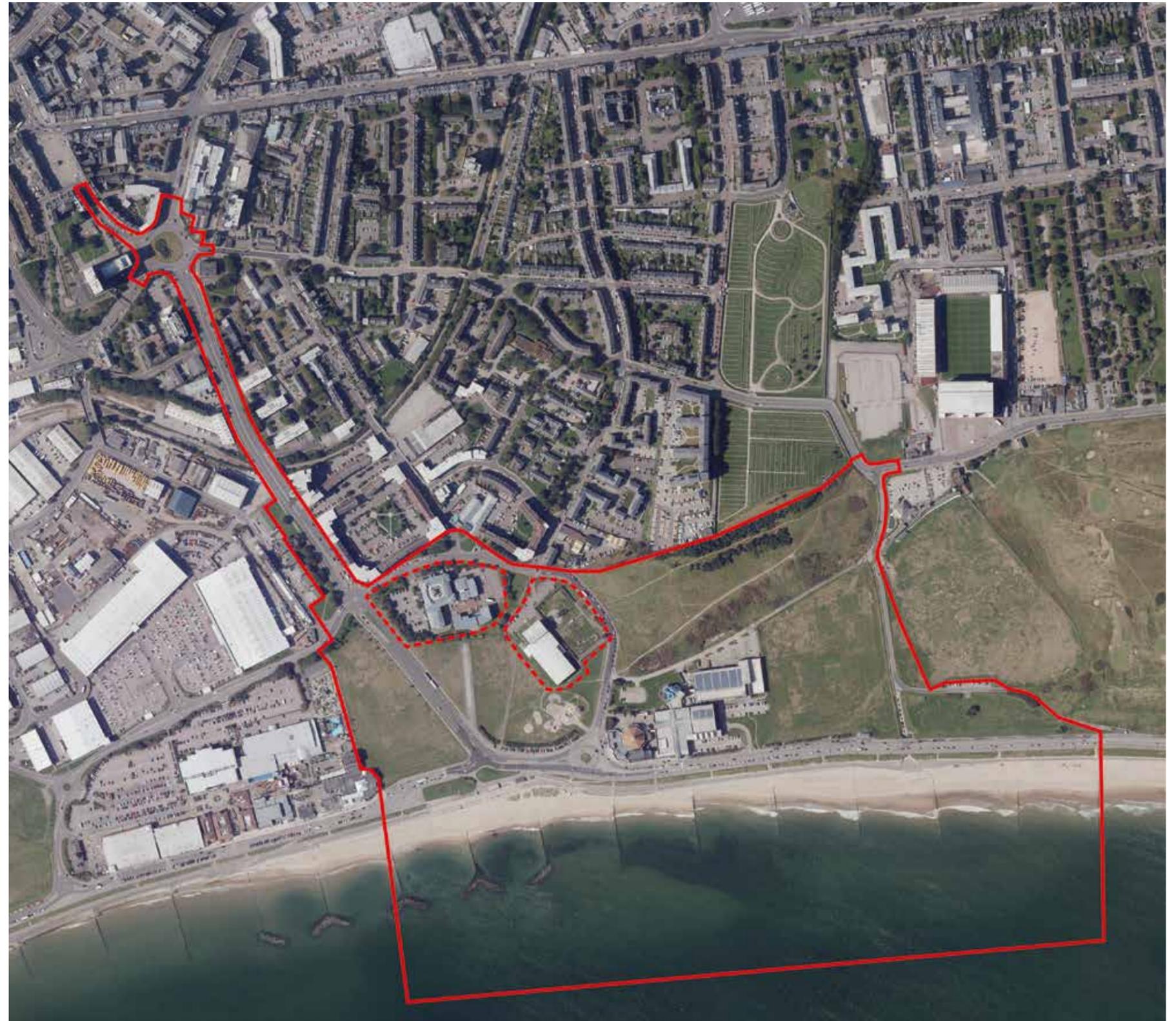
4.1 SITE DESCRIPTION

The Aberdeen Beachfront Development Framework Area is located to the north-east of the city centre connected by the primary route of Beach Boulevard which links the Beachfront to Justice Street and on to the Castlegate. The site is bounded to the east by the North Sea; to the south is Codona's amusement park and a mixture of commercial, hospitality and retail uses; to the west of the site there are existing hotel and leisure units with a mix of residential typologies beyond; and to the north is the Kings Links Golf Course. The area of the proposed red line boundary is approximately 30 hectares.

The site is currently occupied by existing entertainment and leisure facilities, namely Aberdeen Beach Ballroom, Linx Ice Arena, the Beach Leisure Centre; the public space of Queens Links including Queens Links Play Park and Crescent Cricket Club's Cricket Pitch; existing landscape features such as the beach and Broad Hill; and a series of existing vehicular routes including Beach Boulevard, Esplanade and Links Road.

There are a number of separate uses bordering the Development Framework area which will require consideration as part of the proposals: to the west of the area are two sites owned by Aberdeen City Council but on long term leases to a hotel operator and extreme sports venue; to the north is a site under separate ownership which is operating as golf driving range; to the south is an amusement park owned and operated by Codona's. There are a series of small-scale structures and pavilions situated across the Development Framework area which will also need to be considered as part of the proposals.

Aberdeen City Council's legal team has been instructed to undertake a full review of the defined Development Framework red line boundary to establish legal ownership of the areas included.



Development Framework Area

4.2 SITE IMAGES

The following images illustrate the journey from Aberdeen City Centre, down Beach Boulevard and around the Beachfront area. The images seek to provide a general overview of the existing site conditions and features.



1. View northeast along Justice Street towards Virginia Court



2. View northeast towards Justice Street roundabout



3. View east along Beach Boulevard



4. View east along beach Boulevard towards Queens Links



Key Plan



5. Panoramic view of Queens Links looking east

4.2 SITE IMAGES

The following images illustrate the journey from Aberdeen City Centre, down Beach Boulevard and around the Beachfront area. The images seek to provide a general overview of the existing site conditions and features.



6. View looking north over Queens Links to the Beach Ballroom



7. View towards south facing entrance of Beach Ballroom



8. View west over Queens Links towards city centre



9. View towards east facade of Beach Ballroom with Star Ballroom Extension



Key Plan



10. View south across Queens Links with city centre beyond from Broad Hill

4.2 SITE IMAGES

The following images illustrate the journey from Aberdeen City Centre, down Beach Boulevard and around the Beachfront area. The images seek to provide a general overview of the existing site conditions and features.



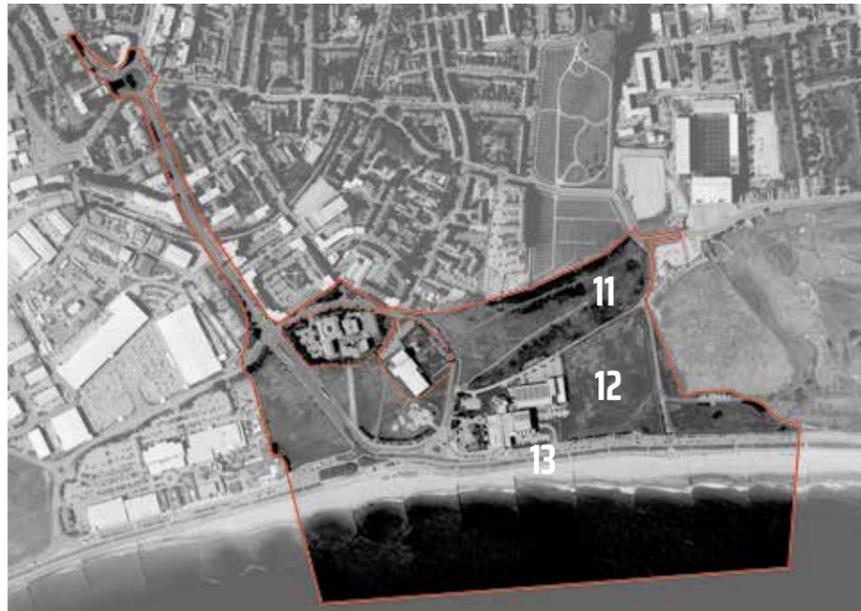
11.

View looking east across cricket pitch with North Sea beyond from Broad Hill



12.

View looking south from cricket pitch towards leisure centre/ice rink and Broad Hill



Key Plan



13.

View looking south along beach and Esplanade

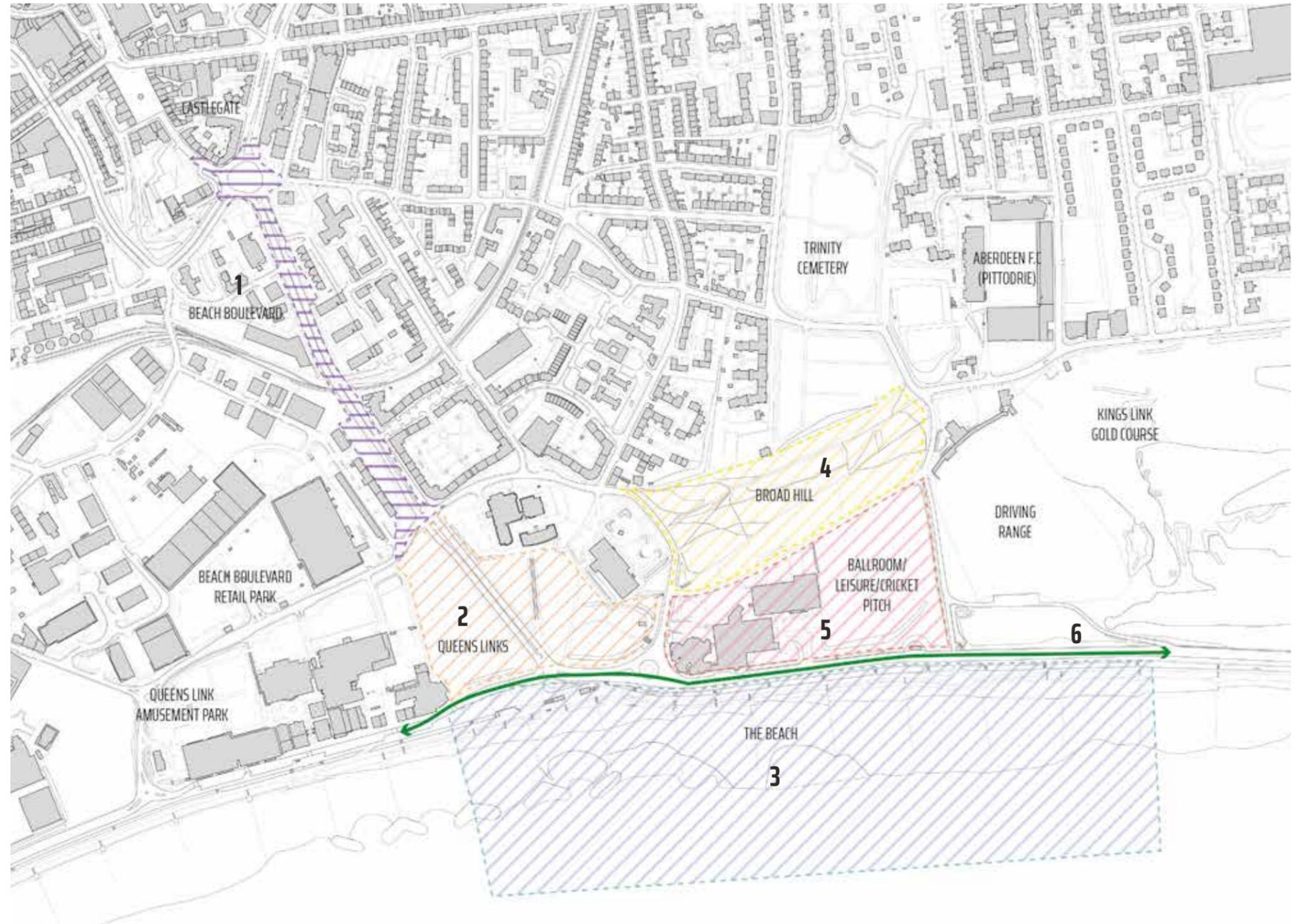
4.3 SETTING & EXISTING LANDSCAPE AREAS

The site is noted within Nature Scot's 2019 Landscape Character Assessment, 'Aberdeen City Landscape Evolution and Influences', as being part of the 'Coastal Character Type' which is one of the five-character types noted in relation to Aberdeen. The character assessment notes that the coast, along with valleys of the Don and Dee rivers, is the most distinctive character type in the city. The assessment notes that "The high contrast between the sea and the land that occurs anywhere along the coast is heightened in Aberdeen by the inclusion of a sandy beach and dunes near to a harbour city.

The setting and character of the Development Framework area is as much defined by its context as by what exists on site. The Development Framework area is relatively well defined to the south, west and east by adjacent land uses and to the north it has an open aspect across a links landscape. The site is approximately 30ha, is largely public open amenity space with a few notable building uses, such as the Beach Ballroom, Beach Leisure Centre and Linx Ice Arena.

In assessing the site further, it is convenient to recognise that there are a number of spatially distinct existing landscape areas that are evident, these are:

1. Beach Boulevard
2. Queens Links
3. The Beach
4. Broad Hill
5. Ballroom/Leisure/Cricket Pitch
6. Esplanade



Existing Landscape Areas Diagram



4.3 SETTING & EXISTING LANDSCAPE AREAS

Beach Boulevard

Beach Boulevard connects the beach to the city centre and is approximately 800m long in its entirety from the roundabout on Commerce Street/A956 to the Esplanade. On this route it passes through two main landscape areas; that from the roundabout to Links Road (500m) and from Links Road to the Esplanade (300m through Queens Links). It is the former section that is described in terms of setting and character here. Beach Boulevard is dominated by roadway and can essentially be described as a transport corridor, with two lanes in each direction although with some filter lanes and on street parking now taking up lane space. It is defined to the north by a range of mixed residential within the Constitution Street area, and some significant mature tree planting in places giving a green edge and is permeable to the pedestrian. To the south it is bound by a mixture of industrial type units generally backing on the street. The road area occupies most of the space between both sides of the street leaving little opportunity for a pedestrian friendly environment.

Queen's Links

The Queen's Links is the main green open space when arriving at the beach from the city centre via Beach Boulevard. It is approximately 5.5ha of relatively flat open amenity grass, bisected by the extensive roadway of Beach Boulevard. It is of open character and useful for large occasional events but with little other attraction other than an outdated play area to the north. It has a number of peripheral contextual uses that do not engage with the space – a hotel, Transition Extreme Sports and Codona's Amusements, all of which turn their back on the space. There is a limited amount of tree planting and earth mounding adjacent to some of the uses that adds to the separation. In areas where there are some level changes, such as in around the current play area, there is a feeling of shelter. The Esplanade roadway and Links Road generally site higher than the main open grass area which creates a distinct separation from the beach and historic Ballroom.

The Beach

The beach sits to the east of the Esplanade roadway, which in effect separates any direct connection to the Beachfront from the Queens Links. The beach itself has several distinctive features which give it a unique and well-defined character. The beach is characterised by large expanses of sand held in position from longshore drift by a regular rhythm of groynes and rock barriers set distinctively perpendicular to the coastline, at approximately 100m intervals. The composition of the setting gives a distinctive character to the whole beach front, providing some protection for bathing and other water activities within defined areas. The beach itself is separated from the Queen's Links by not only the infrastructure of the Esplanade but also by a height difference of approximately 6-8m. This is because of the engineered sea defences in this area of the city, as the presence of multi-level sea walls essentially maintain the level difference, providing challenges to accessibility down on to the beach itself. There are two hard landscaped pathways



Aerial View looking west over the Beachfront showing Existing Landscape Areas

at varying levels which extend along the Beachfront defined by the sea walls with connections between the Esplanade and the beach being generally via steps. However, close to the end of Beach Boulevard, around the interface with Queen's Links, a number of ramps systems allow easier access, but these are now dated and not compliant with modern accessibility standards. The natural dune back drop experienced elsewhere along the coastline, in particularly north of the River Don (Donmouth), does not exist. It is noticeable that in areas between the two-layer sea wall, where sand has been allowed to collect, that primary grass species have colonised giving a glimpse of what would have been a more natural shoreline. The separation and isolation of this space created by the Esplanade roadway from the wider site is a key issue of the existing area.

4.3 SETTING & EXISTING LANDSCAPE AREAS

Broad Hill

Broad Hill is approximately 5ha of green natural space, and one of the most distinctive landscape features within the Development Framework area and indeed along this stretch of coastline. The landform, of a sand and gravel morainic type, creates a defined boundary to the north and western edge of the site and offers views out across the North Sea and back across the city as it rises from Links Road to a high point and plateau to the northwest of the site boundary. A network of formal and informal paths criss-crosses this natural character area, illustrating that it is a popular spot in the coastal area, with a viewpoint at its summit. Recent tree planting (pine trees) on the leeward side (west), has been partially successful in adding further character and shelter to this area and offering a buffer to the Trinity Cemetery. The eastern slope, down to the cricket pitch and leisure buildings, is prone to erosion, possibly due to adventurous public and the abundance of burrowing rabbits. This area requires remedial natural stabilisation.

Ballroom/Leisure Buildings/Cricket Pitch

This area is the most spatially defined in terms of landform due to the presence of Broad Hill and the Esplanade which effectively enclose this space. It is occupied by a number of leisure buildings, notably the historic B listed Beach Ballroom, the Leisure Centre and Linx Ice Arena. These buildings represent the only major built development within the Development Framework area. To the north of these facilities is what is known as the cricket pitch, a large open area (approximately 3.5ha) of flat ground laid to grass, to the north of which is Accommodation Road and an open aspect north along the links landscape. Although partially sheltered due to the elevation of the Esplanade on the east and height of Broad Hill to the west, the northern aspect is somewhat exposed. The B listed Ballroom is the most architecturally significant of the buildings and sits prominently to the south overlooking the Queens Links and beach area although separated from both by road infrastructure. The overall spatial character of this area is somewhat disjointed with the collection of buildings, although it is the most spatially defined in terms of landform.

Esplanade

The Esplanade has been included as a landscape area since it principally provides a landscape (albeit urban) interface between the beach and the coastal links. Under a natural circumstance this area would have been more like the dune landscape that characterises the coast north of Donmouth, but with the introduction of the Esplanade roadway, engineering works in the form of the coastal sea defence wall have been necessary to protect the infrastructure and the encroaching development of the city over the years. This has influenced the overall character of the entire area. The Esplanade is a broad roadway with an adjacent footway/cycleway, with much of the space dominated by vehicles. In total the 'hard' esplanade is approximately 20m in width which is almost the entire width of the Esplanade. The Esplanade offers uninterrupted views in all directions due to its elevated position,



Aerial View looking south over the Beachfront

looking out to sea there is the offshore wind farm and numerous shipping vessels journeying in and out of Aberdeen Harbour, with contrasting views back to the city; however, there is little opportunity for shelter from the elements.

4.4 ENVIRONMENTAL BASELINE

This Environmental Baseline provides a ‘snapshot’ of Aberdeen Beachfront’s urban and natural environments and allows appropriate draft Objectives and Indicators

The Environmental Report will identify the current environmental issues that impact on Aberdeen Beachfront, utilising the information that has been identified through an analysis of the baseline environmental data to determine the potential environmental implications. When undertaking the assessment of the Framework, Aberdeen City Council will be capable of predicting whether the identified environmental issues will worsen, stabilise, or improve through the implementation of the Framework.

Fundamental to the environmental assessment, and as specified by the SEA Directive, data is required in order to establish the relevant baseline conditions. Data has principally been sourced from publicly available sources and Aberdeen City Council. Such data provides the basis upon which the potential impacts of the development can be predicted.

The section below presents preliminary information on the baseline environmental conditions for the proposed Development Framework area and opportunities. The preliminary appraisal of the development has been undertaken to identify the potential for significant environmental effects.

4.4.1 BIODIVERSITY

The Development Framework area is of intrinsic low ecological and nature conservation value. Loss of the land within the area for the Development Framework will not be significant. The Development Framework proposal will have a positive impact by providing new green networks, particularly SUDs which will benefit biodiversity.

Special Protection Area

SPAs are areas which have been identified as being of national and international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds.

The Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA) are located 100m to the east of the site. It supports bird populations including Sandwich tern (*Sterna sandvicensis*), common tern (*Sterna hirundo*), little tern (*Sterna albifrons*), pink-footed geese (*Anser brachyrhynchus*), eider (*Somateria mollissima*) and provides a foraging zone for these species. It is ecologically connected to the site via the North Sea.

Special Area of Conservation

Special Areas of Conservation (SACs) are strictly protected high-quality conservation sites that will make a significant contribution to conserving the habitats and species.

The River Dee Special Area of Conservation (SAC) is located 1.5km south of the site. It contains populations of Otter (*Lutra lutra*), Freshwater pearl mussels (*Margaritifera margaritifera*) and Atlantic Salmon (*Salmo salar*). It is ecologically connected to the site via the North Sea to the east and the green residential garden habitats to the south and west of the site.

Other Natura 2000 Sites

Due to the projection of the boardwalk and slipway into the marine environment there may be effects on mobile species and other more distant sites may require to be included, including:

- Moray Firth SAC;
- Fowlsheugh SPA;
- Montrose Basin SPA;
- Isle of May SAC; and
- Berwickshire and North Northumberland Coast SAC.

National Nature Reserves

National Nature Reserves (NNR) to protect sensitive features and provide suitable areas for research, managing habitats, rare species and significant geology. No NNRs will be affected by the Beachfront Development Framework.

Local Nature Reserves

The Donmouth Local Nature Reserve 2km north of the site supports waterfowl and seal populations. It is connected to the site via the parkland and green residential garden habitats to the north of the site and the North Sea to the east.

The Aberdeen - Inverness - Kittybrewster Railway Line, a Local Nature Conservation Site, crosses under the Beach Boulevard in the west of the site. It helps provide a green corridor through the city as it contains grassland, tall ruderal, scrubs and woodland. It is ecologically connected to the site via the green residential garden habitats found to the west of the site.

Ancient Woodland

No areas of ancient woodland are present within the site or within close proximity. The nearest ancient woodland to the site is the long-established (of plantation origin) woodland at Seaton Park 2km northwest of the site. It is ecologically connected to the site by the parkland and green residential garden habitats present to the north and west of the site.

UK Habitat Classification (UKHAB) Survey

A Preliminary Ecological Appraisal (PEA) was carried out by EnviroCentre Limited in April 2022 which included a desk study, UK Habitat Classification and Protected and Notable Species Survey.

UKHab is a hierarchical system for rapidly recording and classifying habitat via satellite imagery and field survey.

The information is used to identify ecologically sensitive features/habitats, inform relevant species surveys and, aid in the recommendation of mitigation and enhancement measures in connection with a proposed development.

The UKHab Survey indicates the site comprises the following habitats:

- g3c – Other neutral grassland;
- g4 – Modified grassland;
- h3 - dense scrub;
- u1b – Developed land; Sealed surface;
- u1b5 – Buildings;
- u1e - Built linear features;
- s3a – coastal sand dunes;
- t2 – litoral sediment; and
- w1g6 - Line of trees.

Faunal Interest

Faunal interest within the development framework area is limited to the presence of badger and bat roost potential. The potential impact on these species will be reported in the SEA Environmental Report and mitigation measures included as required. The development framework includes landscaping proposals for woodland planting to provide screening and ecological enhancement. These measures will have beneficial impacts and will assist in increasing biodiversity interest of the area in the long term.

The badger sett and foraging area needs to be protected and disturbance kept to a minimum.

Carefully designed planting should be considered for both badgers and bats to create natural screens and buffer zones to minimise disturbance, whilst providing a green network corridor

Confirmed roost sites should be identified along with important commuting lines and foraging areas. Any lighting should avoid bat roosts and commuting lines. Transport and active travel links should be sited well away from areas used by bats to avoid any conflict with lighting.

Carefully designed planting should be considered for both badgers and bats to create natural screens and buffer zones to minimise disturbance, whilst providing a green network corridor.

4.4.2 SOIL

The Scotland’s Soil Website indicates that the majority of the Development Framework area incorporates immature soils with the dominant soil group being regosols formed of windblown sand. The western portion of the Development Framework area does not have an identified classification. The soil is identified as mineral soil with no peatland vegetation.

With respect to land capability considerations the majority of the Development Framework area is identified as having an agricultural capability of 4.1 (Land capable of producing a narrow range of crops,

primarily grassland with short arable breaks of forage crops and cereal) with a small area of 5.1 (land capable of use as improved grassland. Few problems with pasture establishment and maintenance and potential high yield.) The remainder is classified as Urban.

The whole of the development area is not identified as having significant capability with respect to forestry.

The majority of the Development Framework area is identified as having an average topsoil organic content concentration of 2.1% and is noted to range from extremely vulnerable to very vulnerable with respect to risk from subsoil compaction and a moderate risk of topsoil compaction.

The Development Framework area is identified as Class H2 with respect to potential risk from leaching of contaminants impacting ground or surface water (deep, permeable, coarse textured soils with little ability to retain potential pollutants).

4.4.3 WATER

As noted in Goodson Associates Report “AECC City Vision - Aberdeen Beach Regeneration, Drainage Strategy Plan (2022)” the site forms part of the catchment of the River Don/North Sea confluence.

From the available Ordnance Survey data the following geographical features have been identified as important to the existing and proposed drainage of the site:

1. The development area occupies a gently sloping, slightly dished, plateau adjacent to the shoreline that sits at approximately 5m Above Ordnance Datum (AOD).
2. A narrow, steep-sided, sand hill, known locally as Broad Hill, alters the fall along the western boundary. Rising to 28m AOD, the feature separates the site from the residential and commercial areas associated with Park Street.
3. A steep-sided berm running along the backshore elevates the Esplanade above the level of the site and the shoreline.

From the publicly available borehole data published by the British Geological Survey and the Geological Survey of Scotland map series, the following sequence of strata is anticipated:

1. Topsoil – Ranging in thickness from 0.15m to 0.40m.
2. Made ground –Typically silty sand, ash, and gravel, with fragments of burnt shale. Where encountered depths vary from 1.5m to 4.1m.
3. Sand and Gravel – Dense, becoming very dense, fine to coarse sand and fine to coarse angular to subrounded gravel.
4. Bedrock – conglomerate and sandstone bedrock.

The Hydrogeological Map of Scotland shows that the quaternary sands and gravels that underlie the site are locally important aquifers. The yields are significant and can range from 10l/s to 15l/s in exceptional circumstances, although it should be noted that the site is an area

where the chloride ion concentration within the groundwater exceeds 100mg/l.

Because of the coastal location and the permeable sub-soils it is anticipated that groundwater will likely be shallow and affected by the tidal system.

An intrusive site investigation will be required to confirm the findings of the preliminary desk study and inform the development of the detailed drainage management plan.

Given the topography of the site and the prevailing ground conditions, it is likely that run-off from the undeveloped parts of the development site drain to the natural water environment through groundwater percolation.

The developments adjacent to the western and southern boundaries are generally served by a combined sewerage system that feeds into the trunk sewer that flows through the site – although, some of the more modern developments have separate systems internally.

A combined sewer overflow, discharging to the River Dee at adjacent to the Abercromby Jetty, provides relief to the combined sewerage network during periods of intense rainfall.

The Development Framework surface water management strategy will be based on the principles of Sustainable Urban Drainage Systems (SUDs) and green infrastructure to incorporate best management practices for the treatment of surface water. The design of the SUDs scheme and green infrastructure will be developed closely with the environmental engineers and landscape architects to ensure that, as well as creating an efficient and sustainable drainage system, the landscape quality and opportunity for habitat enhancements in the area form an integral part of the Beachfront Development Framework.

Flood Risk

SEPA flood risk maps were reviewed to ascertain whether the site was located in an area at risk from flooding.

Rivers

With reference to SEPA flood maps, there is no specific likelihood of river flooding identified for this area.

Surface Water

The SEPA flood maps show that parts of the site have a probability of surface water flooding of between 0.1% and 10%.

It is anticipated that this will be alleviated by:

1. Designing the proposed drainage system to cope with the range of rainfall events prescribed by the ACC supplementary planning guidance, which will reduce overland flow.
2. Designing the drainage system to cope with overland flow from the

surrounding higher ground.

A Flood Risk Assessment will be undertaken, and the findings submitted with planning applications as supporting documents.

Coastal

SEPA flood maps indicates each year that the Esplanade area has a 10% chance of coastal flooding. The SEPA flood map shows coastal flooding limited to the east of the road corridor.

4.4.4 LANDSCAPE & VISUAL

There will be a permanent change to the landform in the area as a result of the Development Framework proposals. The longer-term landscape impacts will be determined by the nature, scale and extent of development submitted as part of future planning applications.

This is an area of small scale commercial development and recreational open space where the quality of the scenery ranges from the western edge classed as having low scenic quality, through to medium, medium high and high quality in the east.

The beach is an important asset for the City of Aberdeen and is a popular location with both local residents and tourists as a recreational attraction for activities such as surfing, swimming, running, walking and cycling (amongst others).

Groynes and blockwork revetments were installed perpendicular to the shoreline of the coast, to reduce longshore drift to limit sediment movement and trapping sediments thus protecting the beach from coastal erosion. The shoreline has hard engineered bank protection which varies in type and scale.

Built development in the form of new buildings and infrastructure may cause change to the existing landscape character and quality.

A key aspect of the Development Framework will be the provision of green networks which will strengthen the linkages to the surrounding area. These will complement existing landscape features and provide connections between new areas of formal / informal open space. This will have a positive impact by providing quality path networks and habitats and in turn meet the objective of sustainable places.

The Development Framework and Environmental Report will set out measures to improve the quality / quantity of publicly accessible open spaces and protect and enhance biodiversity in the area.

There will be an overall impact on visual amenity which will range from disturbance of an already changing urban environment, enhancement of existing habitats and creation of open spaces within the development framework area.

4.4.5 AIR QUALITY

Aberdeen City Council has declared three Air Quality Management Areas (AQMA):

- Aberdeen City Centre AQMA
- Anderson Drive AQMA
- Wellington Road AQMA

The closest AQMA to the boundary of the Aberdeen Beachfront Development Framework is the Aberdeen City Centre AQMA.

Nitrogen Dioxide (NO₂)

The NO₂ levels at the continuous monitor at Union Street continues to exceed the annual mean air quality objective of 40 µg/m³. However, the level of 43 µg/m³ is the lowest recorded in the last 5 years. Diffusion tubes located along Union Street and the top end of Holburn Street also suggest exceedances of the objective throughout this area of the city centre AQMA. Levels recorded in these locations are generally lower than the previous 5 years and it appears the downward trend of levels towards the objective continues.

The continuous monitor at Market Street located within the city centre AQMA, recorded its lowest level since 2012 and is below the annual mean objective. However, diffusion tubes DT9, DT10 and DT16 located in the Market Street area recorded levels above the objective suggesting exceedances of the annual mean continues at more congested or enclosed areas. Levels at these sites are the lowest since 2012 and there is downward trend towards objective levels.

Particulate Matter (PM₁₀)

There were no exceedances of the annual mean or 24 hour mean objective at any of the continuous monitoring sites in 2016. Measured concentrations are the lowest recorded since 2012 and there is a downward trend in concentrations at measurement locations across the city. The fitting and advancement of diesel particulate filters fitted to diesel vehicles may be a contributory factor in reducing emissions. Reasonably mild winter weather in the last few years may also have contributed to the downward trend due to less likelihood of congestion that can occur during episodes of bad weather.

Due to the nature of the aims of the proposed Development Framework, there is potential to decrease traffic volumes on the road network. The Development Framework aims to encourage infrastructure, including traffic management that reduces the impact of the existing road network to promote alternative forms of travel, including walking and cycling, whilst improving public realm.

4.4.6 NOISE

There are no Candidate Management Areas (closest being, 8- Littlejohn Street, Mealmarket Street, King Street) or Candidate Quiet Areas (closest being 4 - Seaton Playing Field), within the proposed development boundary.

The Development Framework proposals have the potential to change the noise levels compared to the existing situation due to changes in traffic flow on existing roads. Detailed noise assessments of the effects the development framework proposals will be undertaken during the detailed design. Mitigation measures to minimise the effects of possible increases in noise will be provided, for example, environmental barriers, such as earth mounding or acoustic fencing.

4.4.7 CLIMATIC FACTORS

Climate change has taken a prominent position within policy and legislation at a national level, with the Climate Change (Scotland) Act 2009 creating a long-term framework for ensuring reduction in Scottish greenhouse gas emissions of 80% by 2050.

Opportunities for renewable energy provision and low/zero carbon technologies will be explored during the implementation of the Development Framework. This may include small scale renewables/micro generation and the identification of sites for local energy generation.

Further opportunities will be explored and overall, where possible the development will be future proofed to meet the requirements of Aberdeen City Council Climate Change Plan 2021-25: Towards a Net Zero and Climate Resilient Council.

The area has good access to bus, walking and cycling routes and will provide an excellent opportunity for the provision of new infrastructure. The enhancements will benefit the wider area. Viewed in the context of conventional appraisal techniques and when compared to many other UK cities, Aberdeen Beachfront is not physically distant from the city centre or the key transport corridors that serve it.

Contemporary journey planning software shows the Beach Ballroom, a prominent feature of the Beachfront area, to be 1.7km from the junction of Union Street and Union Terrace Gardens – a location that may be judged to represent Aberdeen city centre. At typical walking speed, a distance of 1.7km equates to a journey time of 24 minutes, matching the journey time on foot from Aberdeen railway and bus stations at Union Square. A wider accessibility appraisal shows that the Beachfront is located within 700m of the King Street corridor, equating to a journey time on foot of approximately 15 minutes.

All of the above have the potential to benefit Council climate change policies and strategies.

4.4.8 CULTURAL HERITAGE

The Development Framework area has a complex pattern of overlapping use that reflects the establishment, development, and growth of the adjacent burghs.

World Heritage Sites

A review of Pastmaps and Scotland's Environment identified there were

no World Heritage Sites within the proximity of the area covered by the Aberdeen Beachfront Development Framework.

Scheduled Monuments

A review of Pastmaps and Scotland's Environment identified there were no Scheduled monuments within the proximity of the area covered by the Aberdeen Beachfront Development Framework.

Conservation Areas

There are eleven Conservation Areas in Aberdeen with two of these (Old Aberdeen/Balgownie Conservation Area and City Centre Conservation Area) located in close proximity but outwith the boundary of the area covered by the Aberdeen Beachfront Development Framework.

Garden & Designed Landscapes

There are no 'Garden & Designated Landscapes' within the proximity of the area covered by the Aberdeen Beachfront Development Framework.

Battlefields

There are no battlefields within the proximity of the area covered by the Aberdeen Beachfront Development Framework.

Historic Marine Protected Areas

There are no 'Historic Marine Protected Areas' within the proximity of the area covered by the Aberdeen Beachfront Development Framework.

Protected Military Remains, Wrecks

There are no 'Protected Military Remains, Wrecks' within the proximity of the area covered by the Aberdeen Beachfront Development Framework.

Listed Buildings

There is one Category B listed building within the area covered by the Aberdeen Beachfront Development Framework. The Beach Ballroom is an Art Deco large, single storey and raised basement, octagonal ballroom with set-back pantiled (vernacular) pyramidal roof crowned by arcaded lantern, and 3 projecting flat-roofed single storey wings with main entrance to south, bowed bay at southeast and Northern Lights Suite below later Star Ballroom to the east. Prominently sited on the Esplanade overlooking Aberdeen Bay. Brick and stone construction with buff faience cladding; harled with raised margins to lesser elevations. Deep contrasting granite base course, mutuled eaves cornice and stepped blocking course raised into block pediment over Ionic columned door pieces; stylised Ionic capitalled dividing pilasters and architraved keystone windows.

The Aberdeen Ballroom (Category B Listed Building) will be sympathetically renovated, as highlighted in the draft Development Framework. Significant impacts on historic buildings from the Development Framework proposals will be reported further in the Environmental Report.

In close proximity to the western end of the Development Framework area are the Category A listed Virginia Court Buildings. These buildings are outwith the defined Development Framework area.

Other Points of Interest

The following items have also been identified as points of interest on the Aberdeen City Council HER map and Canmore:

- Boundary stones and battery gun remains on Broad Hill
- Large proportion of Queens Links used as late 19th to early 20th century bottle dump and tip.
- Lighthouse / rocket house
- Remains of a tramway.
- Site of gunpowder magazine
- Queen's Links, Bathing Station
- WW2 heavy anti-aircraft gun battery

Archaeology

Prior to commencement of work, discussions will take place with Aberdeen City Council's Archaeological service to determine whether the ground breaking locations require any mitigation.

4.4.9 POPULATION

The Development Framework proposals will provide long term significant benefits for the area that will arise through the provision of high-quality amenities. The development principle is to develop a world class sport, leisure and tourism destination which would revitalise the Beachfront area and reconnect it to the city centre.

Other benefits include the provision of employment and community facilities, integrated transport links, environmental improvements, and contributions to the regeneration of related areas. This will ensure the key elements of a sustainable community are looked at holistically.

4.4.10 MATERIAL ASSETS

The land on which the site is situated is a material asset. It has been zoned for development through the appropriate Development Plan process and as such the use of this material asset in a manner compatible with the zoning designation and the Development Framework, is entirely appropriate.

Other material assets in terms of water services, electricity, and other utilities are locally and the proposed developments within the Development Framework can readily connect to same.

The construction and operation of the proposed development elements will utilise material assets (access road and construction materials) but given the scale of the development this will be considered at the project level.

Significant progress has been made in recent years with regard to waste management in Aberdeen. The Zero Waste Plan and the European Council Landfill Directive establish a framework for reforming the waste



Aerial View looking southwest over the north side of the Beachfront area

management system in Scotland and sets targets for improving the sustainability of waste management up until the year 2025. In 2013 Aberdeen recycled 37% of waste. By 2020 this figure had risen to 45.6%. In addition, Aberdeen City Council area also generates 192,155 tonnes of business waste. This is selected businesses waste in Scotland, including factories, utility and transport companies, shops, offices, hotels, restaurants, schools and hospitals. As there is no statutory duty for businesses to report to SEPA on the waste they generate, SEPA derives the information from statutory waste data received from

operators of licensed and permitted waste management sites, and from operators of activities exempt from full waste management licensing.

4.5 EXISTING DRAINAGE

Natural Drainage

The site forms part of the catchment of the River Don/North Sea confluence, which lies approximately 2km to the north of the site. Given the topography of the site and the prevailing ground conditions, it is likely that run-off from the undeveloped parts of the development site drain to the natural water environment through groundwater percolation.

Existing Drainage Infrastructure

Scottish Water's record plan shows that a 1170mm diameter combined sewer, of brick construction, is present within the development site boundary. The sewer traverses the site, running from north-west to south-east. It is believed that the discharge from the pumping station is transferred to the St Fitticks Wastewater Treatment Works.

The developments adjacent to the western and southern boundaries are generally served by a combined sewerage system – although, some of the more modern developments have separate systems internally. A combined sewer overflow, discharging to the River Dee at adjacent to the Abercromby Jetty, provides relief to the pumping station during periods of intense rainfall.

Initial contact has been made with Scottish Water however further consultation, including submission of a formal Pre- Development Enquiry (PDE), is required once a more definitive set of proposals is available.

Coastal erosion and aging and deterioration of sea defences is an ongoing issue which may present risk of coastal flooding. River flooding is not an issue for this area. Localised surface water flooding occurs within the site due to lack of capacity within the existing drainage network.

Wastewater

There are existing Scottish Water assets currently located on the proposed site for development. These can be summarised as follows:

- There are multiple combined foul and surface water drainage that converge into the Queens Links area from the service road behind the leisure centre, Urquhart Road, and Constitution Street, prior to crossing Beach Boulevard and heading south.
- There is a combined sewer located within links road and connects to the sewers from Urquhart Road and Constitution Street.
- There is surface Water drainage from the Residential Flats that is routed in to Links Road.
- There is foul drainage from buildings at the bottom of Beach Boulevard/Esplanade that cross the road and connect into the combined sewer.

4.6 EXISTING UTILITIES & INFRASTRUCTURE

A high-level review of the existing utilities services has been carried out through a desk top study by obtaining utility records. The desktop study has identified the following services within the proposed area to be developed:

- District Heating Distribution.
- High Voltage and Low Voltage Electricity networks as owned and operated by Scottish & Southern energy.
- Natural Gas networks, operated by several network operators including ESP GTC, and SGN.
- Network Rail assets.
- Street Lighting, operated by Aberdeen City Council.
- Telecommunication, operated by several providers including City Fibre, Concept Solutions People Ltd, Neos Networks, Openreach and Scottish Southern Energy.
- Water Distribution, as owned by Scottish Water.
- Foul and Surface Water Drainage as owned by Scottish Water.

District Heat Distribution

There are existing Aberdeen Heat and Power assets currently on the site. This can be summarised as follows:

- The ice rink has an Aberdeen Heat & Power CHP heating plant network which is connected to the site wide network. District heating pipes are routed from Golf Road through the service access road to the leisure centre. A connection is provided to the ice rink plant room and then continues to Link Road and on to Constitution Street.

Electricity

There are existing Scottish & Southern Energy electricity utility assets currently on the site. These can be summarised as follows:

- There is an existing 11kV 3C 150mm cable located below the ground on the eastern footpath, routed from the North on Esplanade. The cable crosses over the existing Esplanade Road adjacent to the Beach Ballroom and connects on to existing HV circuit to the West of the beach Ballroom.
- There are 2nr existing 11KV 3C185mm sq cables located below ground and routed on the North footpath on Links Road. The cables serve the existing HV supply to the Leisure centre substation located to the rear of the leisure centre.
- There are six substations within the proposed area used for either distribution of low voltage supplies or direct connections to the buildings.

Natural Gas

There are existing natural gas assets owned and operated by multiple parties within the vicinity of the site as follows:

- There is an existing low-pressure gas main assets owned by GTC which is located off Links Road and the junction of Urquhart Road.
- There is an existing low-pressure gas main assets owned by ESP, which is located off Beach Boulevard.
- There is an existing low-pressure gas main owned by SGN that is distributed from the gas governor located at the junction of Links Road and Cotton Street.
- From the rear of the leisure centre the gas main serves Beach Ballroom, Leisure Centre, and the Ice rink.

Water

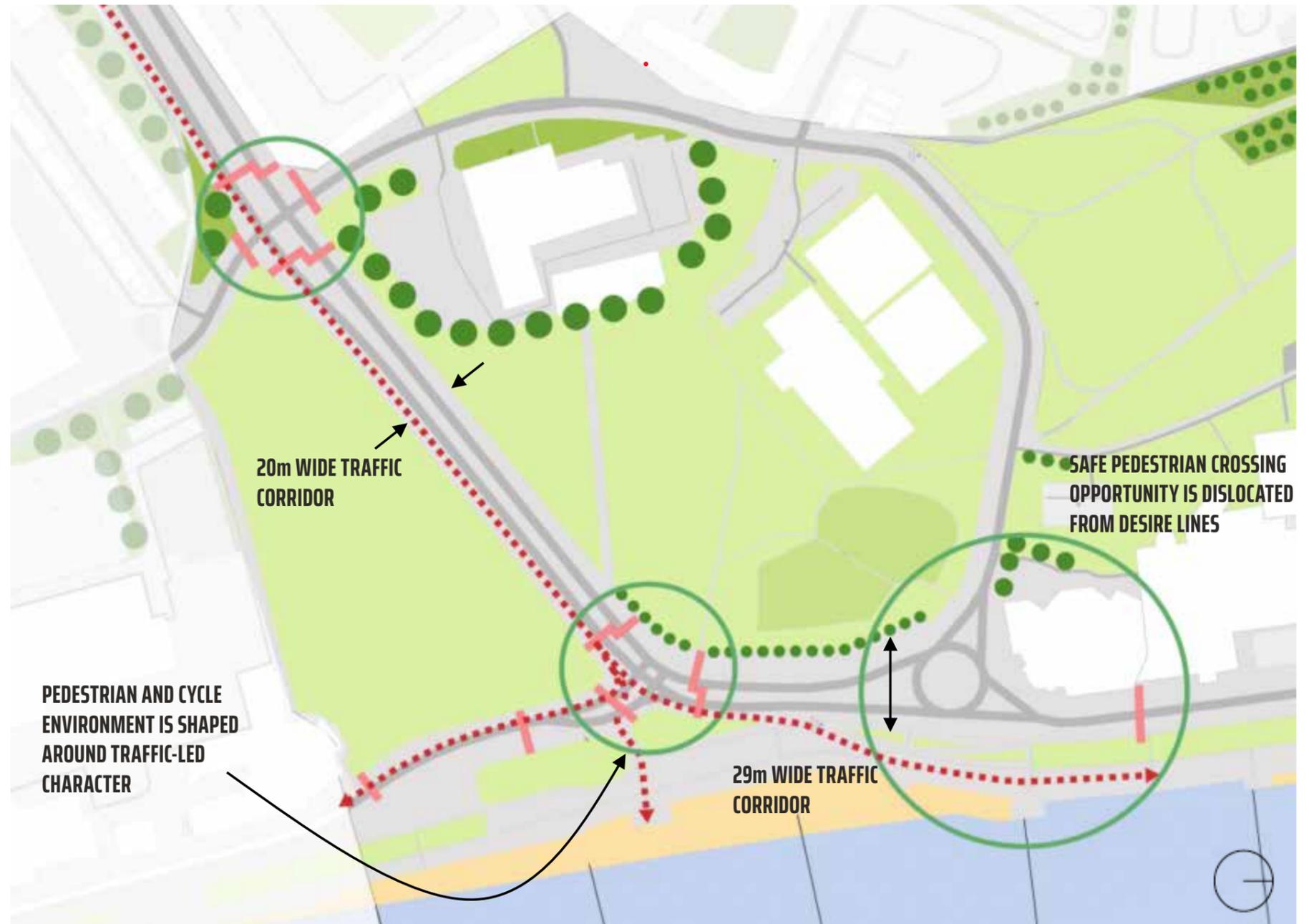
There are existing Scottish Water assets currently located on the proposed site for development. These can be summarised as follows:

- The main distribution would appear to be from the junction of Urquhart Road/Links Road.

4.7 EXISTING MOVEMENT NETWORK

The Beach Ballroom, which serves as a focal point within the wider beachfront area, is located approximately one mile from the junction of Union Street and Market Street in Aberdeen city centre. For most pedestrians, this distance equates to a walking trip of approximately twenty minutes. Under current circumstances, the beachfront can be accessed on foot, by bike, by public transport and by car, with many residents and visitors in the city already incorporating the beachfront into their routines. The Beachfront is located close to residential catchments to the east and west of the King Street corridor and it is located adjacent to established retail and commercial uses which are found to the south of the Beach Boulevard. There is a plentiful supply of on and off-street car parking in and around the Beachfront, with many people choosing to park in the area before walking the short distance to the city centre. Key features of the local transport network are summarised, as follows.

- Primary traffic routes to the Beachfront area include the Beach Boulevard, a link of some 500m length which extends eastwards from East North Street towards the Esplanade. Under current circumstances, the character of the Beach Boulevard is largely a vehicle link, with four traffic lanes and little in the way of frontage development. While sections of kerbside car parking are incorporated to both sides of the road, the capacity is under-utilised. Bus stops, cycle lanes and pedestrian facilities are provided over the length of the Beach Boulevard but these are very much set within the context of an environment which is dominated by vehicular traffic.
- The Esplanade is a north / south traffic link which extends between Bridge of Don and Footdee. In the vicinity of the Beachfront, the Esplanade serves as a through traffic link and an area where parking associated with established leisure and recreational uses is provided. Like the Beach Boulevard, the Esplanade has a largely traffic-led character, with a large supply of parking spaces provided over its length. Existing pedestrian links in the vicinity of the Esplanade, including the lower promenade, form part of the local Core Path network and are of generous width, creating a spacious environment.
- Beach Boulevard and the Esplanade are traffic dominated corridors of approximately 20m width. Their layout and character promotes traffic throughout but is prohibitive to pedestrian and cycle activity. Users who wish to travel on foot or by bike between Queens Links towards the Beachfront are required to make lengthy and indirect crossings.
- Links Road extends westwards from the Esplanade before looping to the south and intersecting the Beach Boulevard, approximately 280m from the junction of Beach Boulevard and the Esplanade. To the east of Beach Boulevard, Links Road serves as the primary traffic route for vehicles accessing the Beach Boulevard retail park and Queens Links leisure park



Mapping highlighting Existing Severance and Constraints to Active Travel at Beachfront

Beach Development Framework - Severance and Constraints

--- Pedestrian and Cycle Desire Line

— Formal Crossing Point

- The southern end of Beach Boulevard forms one arm of a five-arm roundabout junction where Commerce Street, Park Street, East North Street and Justice Street all meet. Traffic moving through this junction comprises a combination of local and strategic movements, with key flows being between East North Street, which leads to the King Street corridor, and Commerce Street, which extends south towards the harbour area and beyond to meet the strategic road network.

While pedestrian and cycle facilities are incorporated to the local transport network, the overall appearance and feel of the links and junctions described above is of a space which favours traffic movements over the requirements of active travel modes. While the Beachfront is not physically distant from Aberdeen city centre and adjoining areas, this sense of traffic domination contributes towards the sense that the Beachfront is severed from key city centre spaces and facilities, particularly for those who do not travel by car.

4.7.1 EXISTING PEDESTRIAN SITUATIONS

Provision for pedestrians within the wider beachfront area is generally good, with wide, spacious footways and paths provided along the length of the Esplanade. The upper and lower promenades offer attractive pedestrian spaces, albeit stepped level changes between the Esplanade and beach front present challenges for those using wheelchairs, pushchairs or those with reduced mobility. Links Road and Beach Boulevard all incorporate pedestrian links, with good integration to adjoining side streets.

Controlled pedestrian crossings are incorporated to the Esplanade, north and south of the Beach Ballroom and at traffic light junctions along the length of the Beach Boulevard. The placement of crossings is largely determined by the road geometry and, in many cases, does not reflect actual pedestrian desire lines.

Despite their close proximity, the Beach Boulevard, Links Road and Esplanade are not well-integrated to the city centre. For pedestrians, there is a sense that Castlegate and Justice Street represent the ‘end’ of the city centre environment, with on-street bin storage on Castlegate and the large roundabout junction at East North Street creating the impression that the city centre and Beach Boulevard are two very separate environments. The Development Framework proposals present a clear opportunity to better link these locations together. The roundabout requires pedestrians to deviate from the natural desire line towards the Beachfront and heavy traffic flows present delay and a degree of intimidation to those walking or wheeling within the area. Safety barriers create a sense that the pedestrian environment is enclosed and constrained.

A pedestrian bridge provides an alternative route over the A956 but for those travelling from the city centre towards the Beachfront, the route is indirect and involves unwelcome gradients.

In the western-most section of Beach Boulevard, column-mounted street lighting is positioned in the central reserve, with no direct provision over footways to the side of the carriageway.

Totem signage, with local area mapping is provided on Castlegate, the Beach Boulevard and on the Esplanade.

Significant opportunity exists to enhance the environment for those who choose to walk and wheel in the local area, simplifying their journeys and making the area more pleasant to spend time in.



Mapping highlighting Existing Pedestrian Situations

Beach Development Framework - Existing Pedestrian Situation



4.7.2 EXISTING CYCLING SITUATION

Cycling is an affordable, healthy and environmentally-friendly travel choice which is available to most users. In line with Council objectives, the Beachfront vision will maximise the role of cycling for more and more short to medium distance journeys. Monitoring undertaken by the Council between September 2020 and September 2021 examined cycling activity at 41 sites across the city, highlighting that the Beach was comfortably the most popular location for cyclists.

The Beachfront is not physically remote from Aberdeen city centre, the key transport corridors that feed it or adjoining residential catchments. While some cycle facilities are incorporated into the local transport network, they generally take the form of in-carriageway links whose design and alignment is defined by the local road network. Consultation with Aberdeen Cycle Forum highlights that the local area is not currently viewed as being attractive or safe.

- Cycle links between the east end of the city centre are interrupted by the traffic links which cross the King Street corridor. While Justice Street is identified in local cycle maps as a 'recommended route', it directs cyclists towards the roundabout junction at East North Street. The roundabout is not welcoming for cyclists and is likely to discourage cycle movements on this route.
- Links which are identified as 'recommended' in local mapping do not follow the most direct route between the city centre and the Beachfront. Recommended routes typically involve side streets where traffic flows are lighter, but where other hazards, such as parked cars, and priority junctions are present.
- Beach Boulevard represents the most direct route between the city centre and the Beachfront, with cycle priority being limited to in-carriageway marked lanes. Cyclists using this route have to pass between general traffic and parked cars, with the link intersecting various side access roads and bus stop bays.
- Advance cycle stop lines are incorporated to the traffic light junctions of Beach Boulevard / Links Road and Beach Boulevard / Esplanade, with marked cycle lanes incorporated at the kerbside. Cycling activity within the northern position of the Beach Boulevard generally takes place within a trafficked environment and is set within a wide road geometry which may appear intimidating to some users.
- The Esplanade is a spacious environment which forms part of the Core Path network, facilitating north to south cycle movements. Cycling is also permitted on the Lower Promenade, an environment which is separated from general traffic but which creates the potential for conflict with pedestrians.
- Many of the existing facilities comprise 'Spaces for People' initiatives which will have emerged or been strengthened during lockdown periods of 2020/21. These routes appear temporary in nature and all place cyclists directly alongside parked cars and general traffic.
- While proficient cyclists may be comfortable navigating the current arrangements, there is an absence of off-road or segregated cycle facilities.



Mapping highlighting Existing Cycling Situation

Beach Development Framework - Existing Cycling Situation

- Suitable for On-Street Cycling
- On-Road Cycle Lane
- Advance Cycle Stop Lines at Signal
- Suitable for On-Street Cycling
- On-Road Cycle Lane
- ▲ Advance Cycle Stop Lines at Signal

- Secure cycle storage facilities are limited in number. A small number of cycle lockers are located adjacent to the Linx Leisure Centre entrance on the Esplanade, with some un-covered hoop storage provided in the vicinity of shop and café frontages on the southern Esplanade, outside of the study area.

Viewed in the context of present-day Scottish Government cycling design guidance, existing provision falls short of the standard expected.

Overall, cycle facilities are shaped by the geometry of established traffic routes, with suggested routes indicating how users travel through the area, but not within it.

Significant opportunity exists to improve cycle access to the overall area by addressing severance, promoting segregation from other modes and incorporating routes and facilities which are more conducive to recreational use.

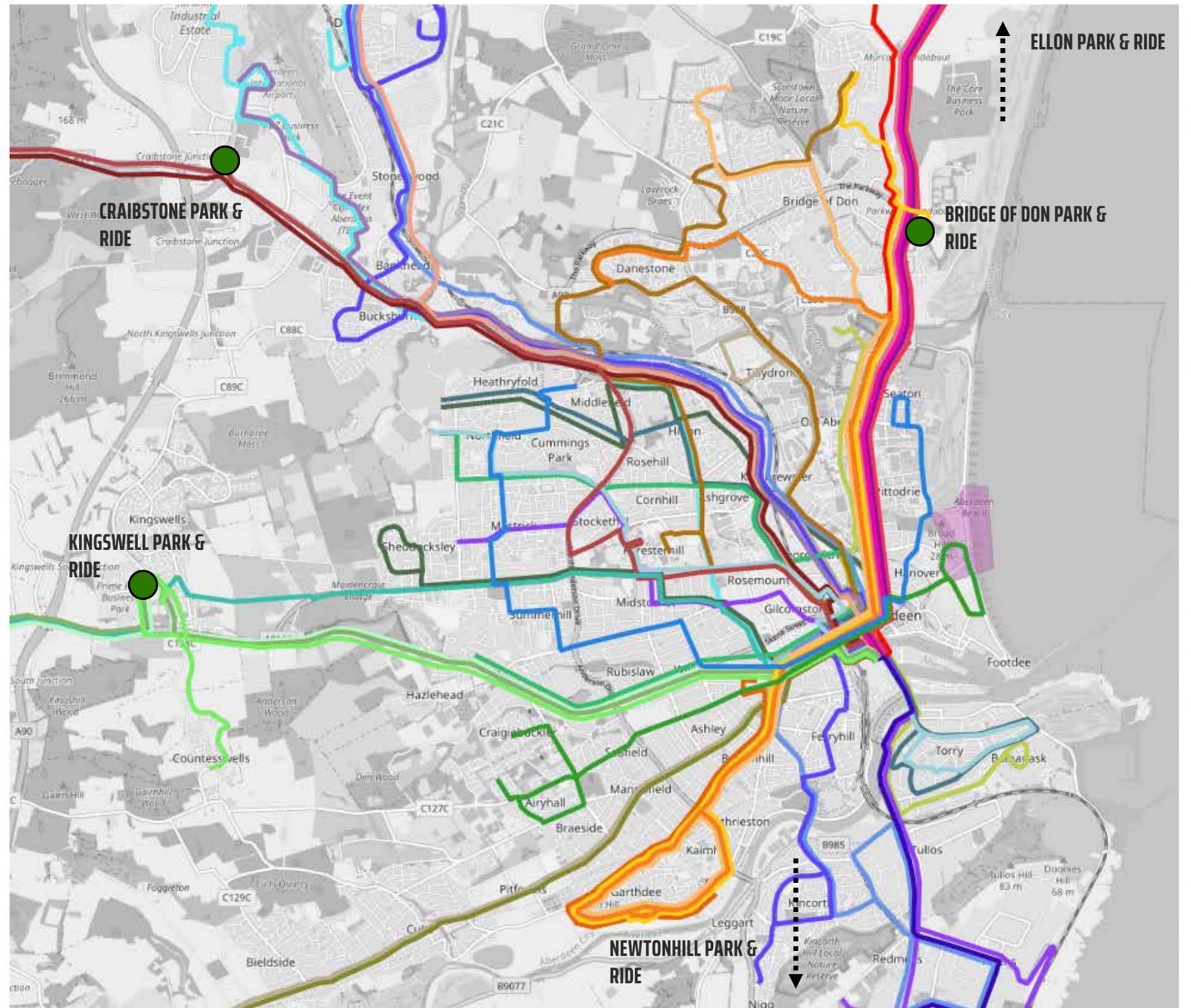
4.7.3 EXISTING PUBLIC TRANSPORT, SERVICES, AND FACILITIES

The Beachfront is integrated into Aberdeen's local bus network, with bus stops located on Beach Boulevard, Esplanade and Links Road (east and west of Beach Boulevard). These stops are served by First Aberdeen service 15 which operates to a daytime frequency of 30 minutes. Buses on First Bus service 13 operate via Park Street and Park Road towards Pittodrie and Seaton at a daytime frequency of 15 minutes. The current service pattern reflects the residential nature of the catchment between Beachfront and King Street but suggests that present-day passenger demand between the city centre and the Beachfront is not significant. While in distance terms, the placement of bus stops ensures key buildings and spaces can be defined as being accessible, the level of service falls below that which might be regarded as 'frequent'. Historically, the Beachfront and Beach Boulevard formed a key part of Aberdeen's bus network but changes to travel behaviour and the abundance of largely unrestricted car parking in the area have contributed to an overall decline in service provision, albeit the Beach remains a very popular attraction. The masterplan vision provides significant potential to reverse this decline through the incorporation of new and improved services and facilities, including potential integration into Aberdeen Rapid Transit (ART) proposals.

The accompanying image shows the Beachfront in the context of key bus routes, including those that directly serve the King Street and Union Street corridors and those which provide a direct connection between one of Aberdeen's park and ride sites and the city centre. The image shows services which provide a direct connection to, or east of, the King Street corridor, to highlight the potential user catchment that can access the western part of the study area in a single bus journey, without the need for interchange.

There is an overall sense that the Beachfront is detached, but not distant from the city centre. It can be accessed on foot within fifteen-minutes of King Street – one of the city's Bus Partnership Fund corridors, significantly broadening public transport opportunities from across the city. The walking distance from Aberdeen bus and railway stations to the Beachfront is just over 1 mile, equating to a walking journey time of approximately 25 minutes for most users. Mainline rail services, express coaches and regional bus services all serve these terminals, increasing the catchment that can be accessed using public transport.

The public transport network includes park and ride facilities at Bridge of Don, Craibstone and Kingswells, with further sites located in Ellon and Newtonhill in Aberdeenshire. Combined, the park and ride sites provide capacity for nearly 3,000 cars. Given the potential for each of those spaces to accommodate a car with multiple occupants, the role that park and ride sites have to play, particularly in the context of large-scale events at the Beachfront, is significant.



Mapping highlighting Existing Public Transport, Services and Facilities

Beach Development Framework - Existing Public Transport, Services and Facilities

- Site Boundary
- Park & Ride Sites
- Bus Route 13 (Park Road - Golf Road - Seaton)
- Bus Route 15 (Beach Boulevard / Beach Ballroom - Esplanade - Retail Park)

4.7.4 TRAFFIC MODELLING

Road traffic implications which arise from the masterplan vision are the subject of ongoing technical assessment using the wide-area Aberdeen Sub Area Model (ASAM) to determine the strategic rerouting and wider impacts of the masterplan, and the Aberdeen City Centre Paramics Microsimulation Model to test the detailed implications around The Esplanade, Beach Boulevard, King Street and Aberdeen City Centre. The models enable detailed evaluation of the changes to traffic priority, road closures and alterations to road space that are being considered as part of the proposals, and they take account of other relevant local transport policies and interventions.

The masterplan vision places emphasis on high-quality public transport, proportionate access for car parking and delivery and servicing movements. It is important to distinguish between 'through trips' and those whose destination is within the wider Beachfront area.

The overall traffic and transport strategy reasonably assumes that the delivery of complementary strategies, including the City Centre Masterplan, Low Emission Zone and Bus Corridor studies lead to a reduced reliance on car-based trips to and through the city centre area. The strategy will identify a proportionate package of measures to mitigate the impact of the Beachfront development while ensuring that local connectivity is maintained, where required.

A key part of the approach at a local level will be to carefully balance the performance of the road network with the delivery of an environment which is conducive to greater rates of pedestrian, cycle and public transport activity.

Mindful of the aspiration to grow rates of active travel and to promote effective public transport, it is considered unwelcome for 'through' traffic displaced from the Esplanade to divert onto adjoining local roads.

The transport strategy proposes the following measures

- A suitable form of traffic restriction on Golf Road, preventing the reassignment of through trips onto adjoining local roads.
- A restriction to prevent through traffic on Accommodation Road between Esplanade and Golf Road
- Incorporation of a new one-way eastbound road at Queens Links, connecting Links Road to the Esplanade, facilitating access to areas of disabled parking and providing a means of access for public transport.
- Modifications to the character of the roundabout junction at A956 / Park Street / Beach Boulevard to better cater for increased active travel demands and to facilitate an uplift in public transport movements between the city centre and Beachfront.
- A package of traffic signal alterations is proposed at key junctions on the King Street corridor.



Mapping highlighting Existing Severance between City Centre and Beach Boulevard

Beach Development Framework - Severance and Constraints

- Pedestrian and Cycle Desire Line
- Existing Pedestrian Footway
- Formal Crossing Point

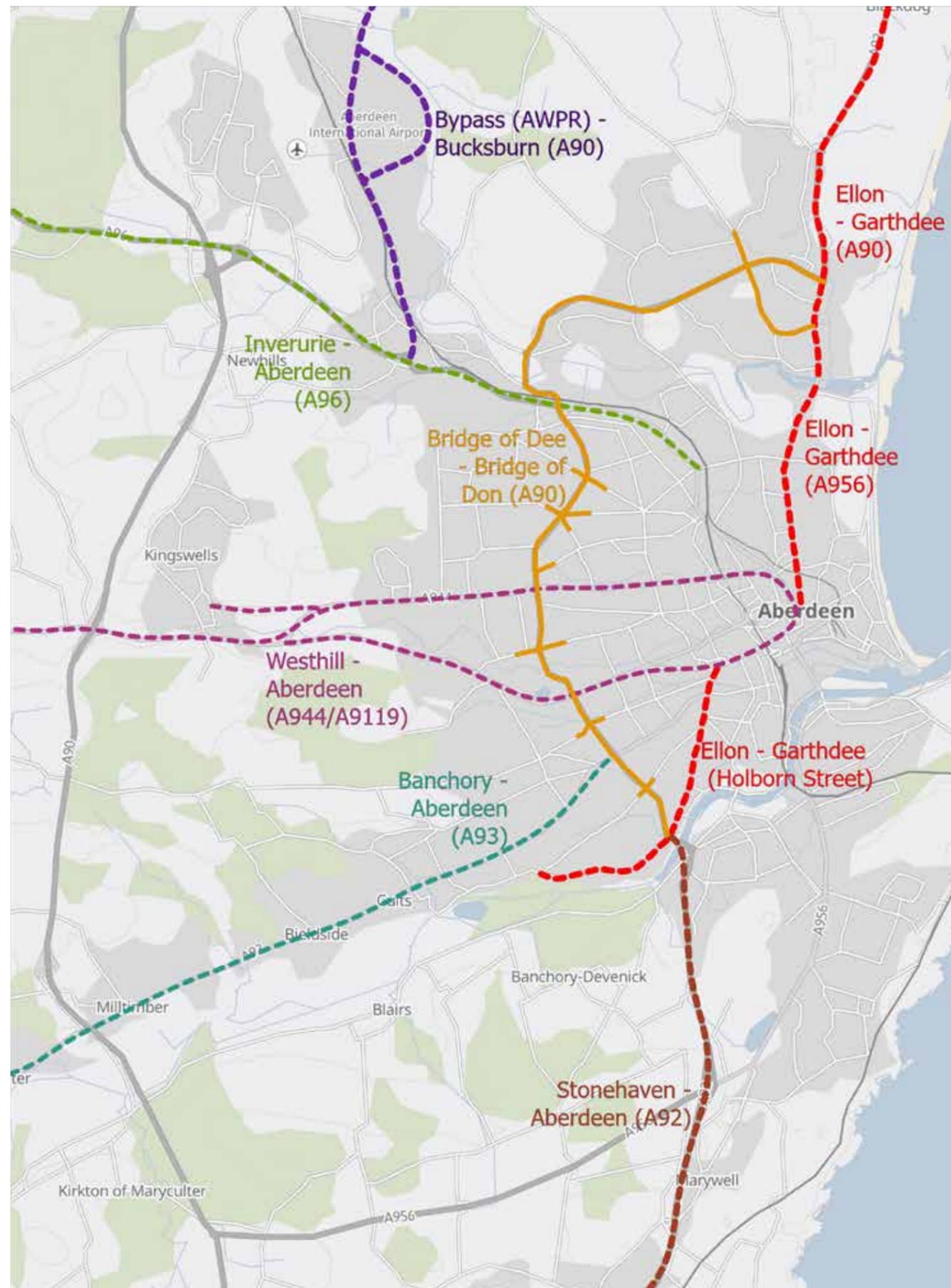
- Large footprint of traffic-led junction
- Pedestrian and cycle connectivity is indirect and unattractive
- Formal crossing points are dislocated from desire lines
- Pedestrian environment is constrained and intimidating

4.7.5 ASSOCIATED TRANSPORT PROJECTS

The Beachfront vision is consistent with local and national policies, as follows:

- Transport Scotland's National Transport Strategy which is underpinned by a vision to develop a sustainable, inclusive and accessible transport system which helps to deliver a more prosperous Scotland for communities, businesses and visitors.
- Aberdeen City Council Local Transport Strategy - Five high-level objectives are set out in the 2016-2021 LTS; (1) the delivery of a transport system that enables the safe and efficient movement of people and goods,(2) a safe and more secure transport system, (3) a cleaner, greener transport system, (4) an integrated, accessible and socially inclusive transport system and, (5) a transport system that facilitates healthy and sustainable living.
- Aberdeen Active Travel Action Plan (ATAP) which identifies the actions and interventions necessary to make walking and cycling safer and more attractive choices, and to increase the number of active journeys in the city. The vision is complementary to a number of ATAP projects; the City Centre Masterplan, Union Terrace Gardens redevelopment, King Street Active Travel Improvements, works to deliver improved active travel links between Parkway Roundabout and the city centre via the Esplanade corridor, Golf Road / Park Road active travel improvements, King Street active travel improvements and others. ATAP also includes Behaviour Change projects and initiatives such as the development of a city Bike Hire Scheme, development of the Go Abz App, development of the Aberdeen cycle map and others.
- Aberdeen Sustainable Urban Mobility Plan (SUMP) which promotes the city's transition to a low carbon and low emission future, measures to develop a safe and sustainable city centre, measures to uphold the revised Roads Hierarchy by discouraging through traffic and improving accessibility for people walking, cycling and using public transport and the identification of areas for the successful delivery of a bike hire scheme.

These policies share common objectives to promote an increase in rates of active travel and public transport use. Mode split targets promoted by Aberdeen City Council propose that at least 50% of all trips are made by active travel modes, including public transport. Those objectives lie at the heart of the Transport Strategy which will support delivery of the Beachfront Masterplan vision.



Beach Development Framework - Associated Transport Projects

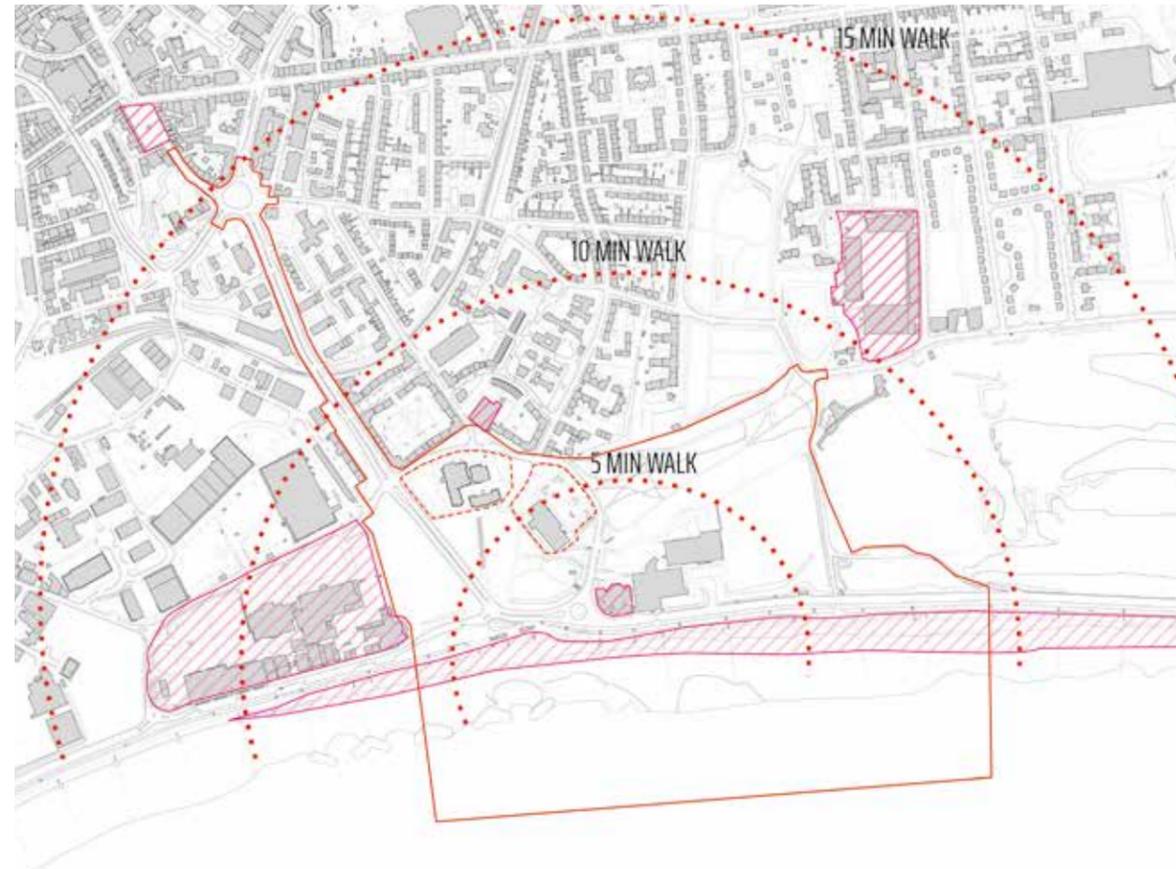
- A944 Westhill to Aberdeen City Centre Bus Partnership Fund Study
- Ellon to Garthdee via City Centre Bus Partnership Fund Study
- Inverurie to Aberdeen City Centre Bus Partnership Fund Study
- Stonehaven to Aberdeen City Centre Bus Partnership Fund Study
- Bridge of Don to City Centre Active Travel Study
- A947 Multi-modal Study - AWPR Junction to Bucksburn Roundabout
- A93 Banchory to City Centre (College Street)

Aberdeen City Ongoing Independent Studies Mapping

4.8 SITE INVENTORY & ANALYSIS

Landmarks

There are a number of key landmark features on the site which help to orientate visitors to the area. Within the site itself these include the route of Beach Boulevard linking the city centre with the beach; the Beach Ballroom building and its distinctive roof form; the landscape form of Broad Hill. Prominent landmarks bordering the site include Codona's Amusement Park and it's iconic Grampian Eye ferris wheel; Pittodrie football stadium home to Aberdeen FC; and the towering forms of Virginia Court housing block located at the top of Beach Boulevard.

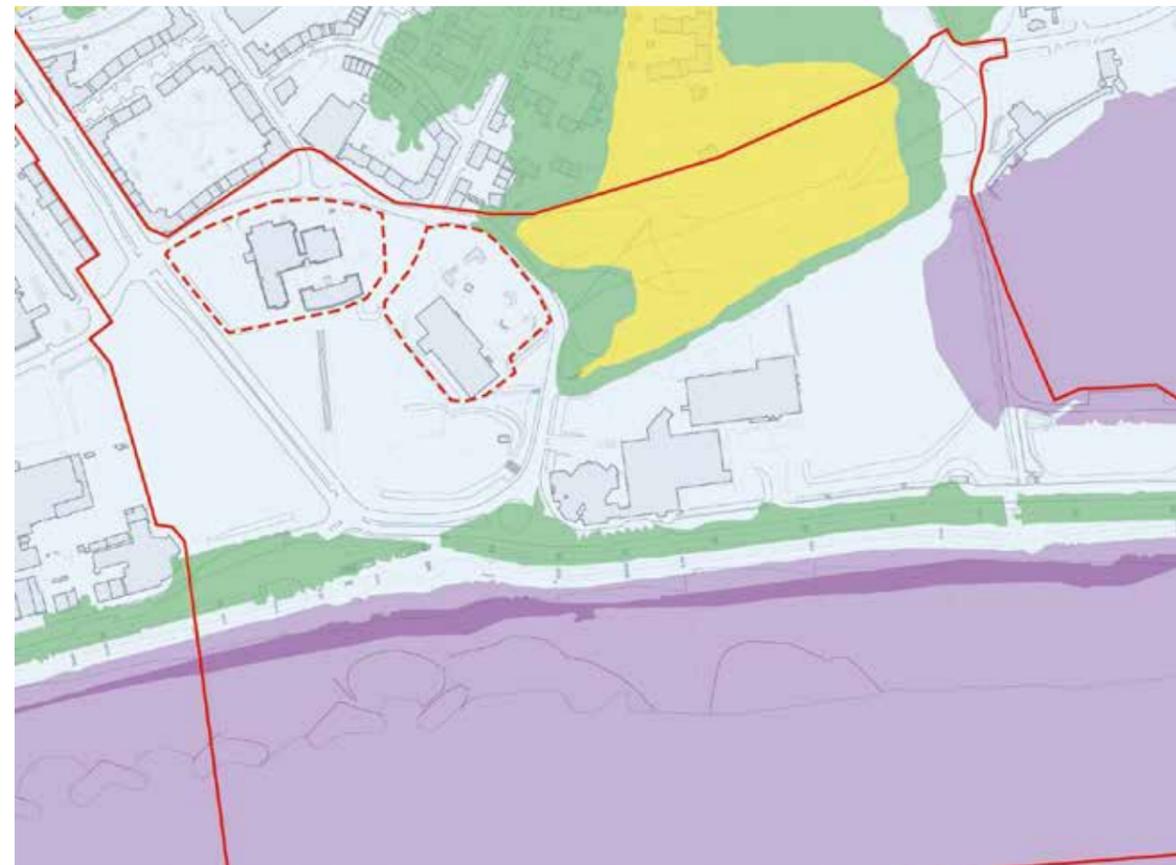


Site Inventory & Analysis - Landmarks

Topography

Available data suggests that the existing topography can be considered in two parts. The Kings and Queens Links areas of the site are relatively level, except for some engineered bunds associated with the commercial land uses. Both areas can be considered basins which sit at a lower level than the roads that surround them.

The remainder of the site, known as Broad Hill, forms a localised high ridge running north/south at approx. 28m above sea level at the highest point.



Site Inventory & Analysis - Topography



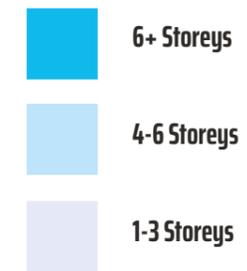
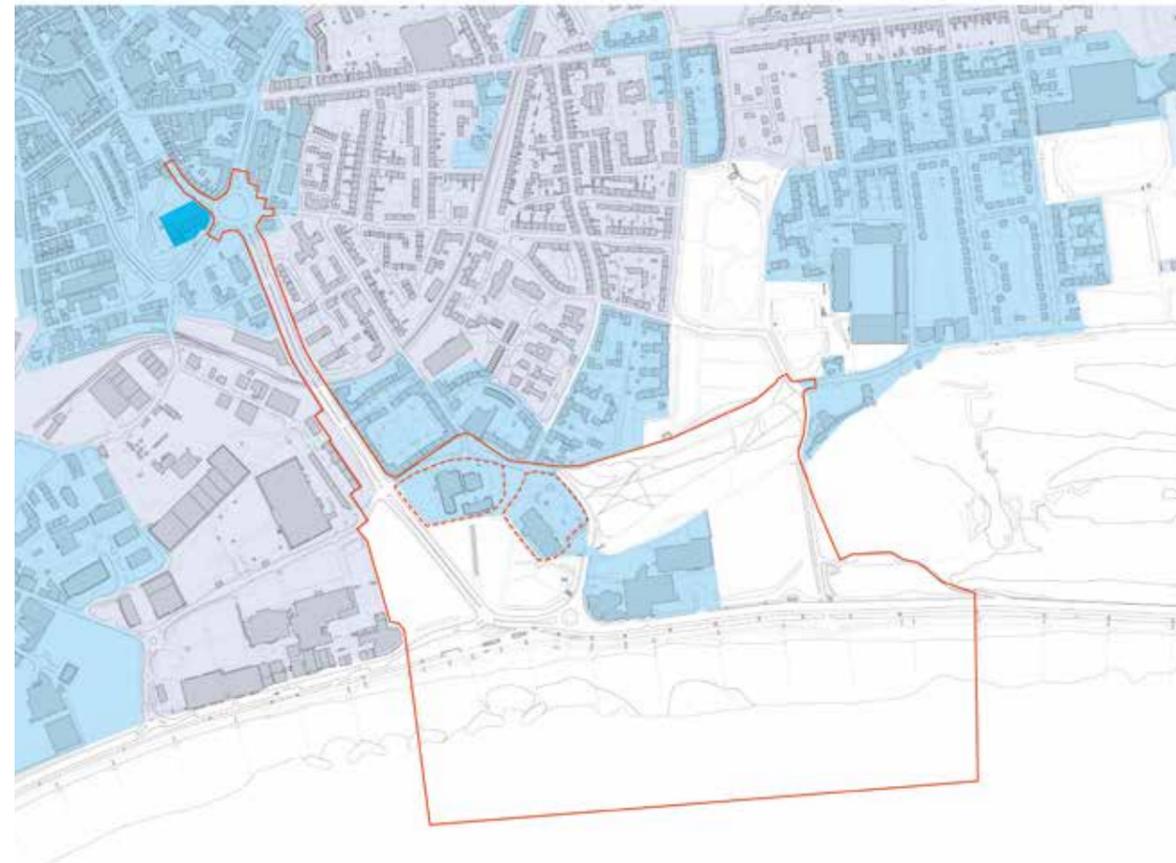
4.8 SITE INVENTORY & ANALYSIS

Building Heights

Beach Ballroom is three storeys in height with a semi-submerged lower ground floor level which sits below the street level. Its large roof structure extends beyond the general first floor roof level and providing a large domed space to the main ballroom space.

The Beach Leisure Centre and Linx Ice Arena are two to three storeys in height however due to their siting within a drop in the topography they sit lower than the Esplanade street level which reduces their visual impact in relation to the Beachfront.

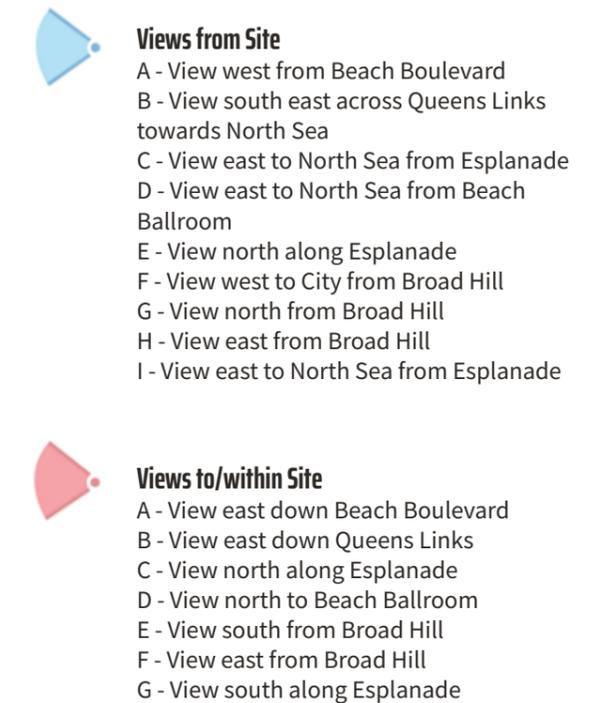
The hotel and extreme sports venues are approximately three storeys in height.



Site Inventory & Analysis - Building Heights

Visual Analysis

Visual analysis of the site as part of the assessment and design process has been an ongoing task. The views highlighted opposite are just some of those considered through the process so far in gaining an understanding of the spatial configuration of the site. Further dialogue is ongoing as part of the Landscape and Visual Impact Assessment/ Sea Scape Visual Assessment in terms of determining and refining the key assessment views that will inform the emerging designs within the Development Framework area. It is likely that the discussion on visual impact will consider views from long distance both from the land and the sea. The final filtering of the view selection is being done as part of a dialogue with ACC, NatureScot and other key stakeholders.



Site Inventory & Analysis - Key Views



4.8 SITE INVENTORY & ANALYSIS

Visual Analysis - Views from Site



A - View west from Beach Boulevard



B - View south east across Queens Links towards North Sea



C - View east to North Sea from Esplanade



D - View east to North Sea from Beach Ballroom



E - View north along Esplanade



F - View west to City from Broad Hill



G - View north from Broad Hill



H - View east from Broad Hill



I - View east to North Sea from Esplanade

4.8 SITE INVENTORY & ANALYSIS

Visual Analysis - Views To / Within Site



A - View east down Beach Boulevard



B - View east down Queens Links



C - View north along Esplanade



D - View north to Beach Ballroom



E - View south from Broad Hill



F - View east from Broad Hill



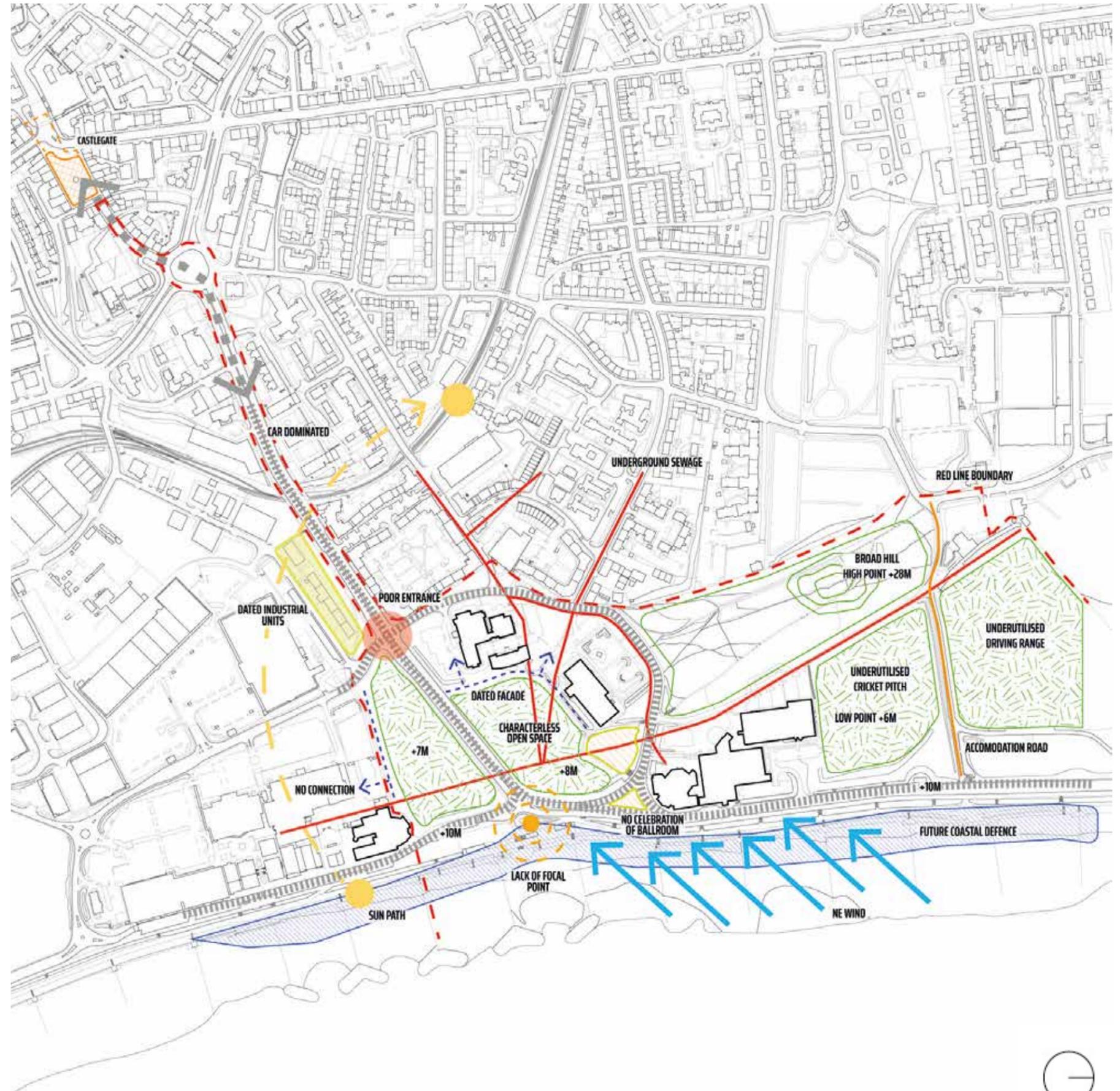
G - View south along Esplanade

4.9 CONSTRAINTS

The approach from Beach Boulevard is rather uninspiring with no real focal point or sense of arrival at Queen's Links. The Beachfront also lacks a sense of place and is dominated by a four-lane vehicular route. Apart from the Beach Ballroom, the surrounding architecture is quite industrial, with a number of existing Sports & Leisure buildings which are generally tired and of poor quality.

Following the initial site walk-round and workshop session, the Design Team analysed the Beachfront Development Framework area as existing, identifying a number of additional site constraints and project challenges:

- Lack of sense of place
- Poor accessibility to beach
- Characterless open space
- Car dominated environment
- Lack of relationship of existing buildings with waterfront
- No celebration of entrance / lack of grand public realm setting for iconic ballroom
- No real sense of arrival
- Lack of focal point
- Exposure to the elements / lack of shelter
- Disconnect with Beachfront
- Hostile / rear elevation of amusements / fairground
- Limited places to stop and rest
- Uninspiring approach from Beach Boulevard
- No celebration of entrance to Queens Links
- Dated industrial units / poor quality industrial architecture
- Underground Sewage Pipe running through centre of site
- Current and future coastal defences to be considered
- Tired / dated esplanade and uninspiring public realm
- Dated aesthetics of existing sport & leisure elements
- Awkward relationship of existing leisure to ballroom
- Underutilised cricket ground and golf driving range



Beachfront Constraints Diagram

VISION, OPPORTUNITIES

&

DESIGN DEVELOPMENT



5.0 VISION, OPPORTUNITIES & DESIGN DEVELOPMENT

5.1 VISION

The Beachfront proposals will seek to revitalise and renew the area to maximise the potential of this unique space and create an exceptional asset for the city of Aberdeen. Due to the special location of the site, its overall connection to the natural environment the approach to design has been collaborative and landscape led in order to set an appropriate broad range of leisure uses, events and nature-based environment which will be a focal point for the local community whilst aiming to position the area as a key visitor location and reconnect the beach with the city centre.

A Dynamic Waterfront

The current area is lacking in the character and distinctiveness which would be expected of such a unique location. The proposals will seek to create a dynamic waterfront destination which the city can be proud of, and which will reconnect the city with the beach. The main route from the city via Beach Boulevard will be renewed with a focus on public transport, pedestrians, and cyclists. The Beachfront itself will be activated through potential dedicated play and events spaces, improved accessibility, a potential stadium, and leisure facility as well as supporting facilities such as changing accommodation / beach huts and a potential landmark pier structure, all connected by an enhanced green infrastructure network.

Beach Ballroom

The importance of the re-imagined Beach Ballroom is key to the proposals, with a desire to return this architecturally and culturally significant building to its former glory when it was known as the 'People's Ballroom'. Any renovation proposals will recognise the buildings heritage and historic significance whilst equipping it for the future as a modern events venue. This, coupled with an improved public realm, will make this a key focal point of the redevelopment of the area.

Connecting the Beach and the City

Currently the beach suffers from a lack of connection with the city centre, with the key route from the city being one which is car dominated and unattractive. With the potential renewal of Beach Boulevard and works to the major roundabout to the southwest end of this route, the proposals will reconnect the city and Beachfront through an attractive pedestrian and cycle focussed public realm. Proposed pedestrian and cycle routes will also seek to connect into the wider travel network to ensure viable and sustainable connections between the beach and the city are created.



Aspirational CGI Image of Potential Development

High Quality Public Realm

The site as it exists is car dominated and suffers from a lack of good quality public space. The Beachfront proposals will invest the area with a well-considered and high-quality public realm scheme which prioritises pedestrians and cyclists. The public realm approach will allow for public spaces to flow and reconnect the beach with the wider Beachfront area ensuring that the design is accessible and inclusive.

Developed Infrastructure

Proposed infrastructure, including traffic management would be introduced that reduces the impact of the existing road network to promote alternative forms of travel, including cycling, whilst improving public realm. Furthermore, infrastructural works which would be

co-ordinated with potential flood/sea defence works planned for the area would ensure the longevity of the Beachfront.

Potential New Stadium and Leisure Facilities

A potential new stadium and leisure facility could form part of the Beachfront Development Framework. Noted as a preferred option within this document, these world class facilities would become another key element to the revitalisation of the area. The potential stadium would provide a new home to Aberdeen FC and would share common facilities with a potential new state of the art leisure centre which would replace the existing Beach Leisure Centre and Linx Ice Arena.

5.2 APPROACH

The landscape led design approach to the Development Framework has been based on a careful assessment of the existing site characteristics and constraints to understand the most appropriate means to renew and revitalise the Beachfront area. The site analysis, including the investigation of the site's historic importance to the city, provides a deep understanding of the existing site and context allowing for appropriate design solutions to be proposed. The key steps are set out below:

Defined Character Areas

- Assess existing character areas to establish constraints and opportunities
- Identify clear character areas with design approach to establish quality and accessibility of spaces along with proposed uses.
- Highlight links between character areas and understanding of overall concept masterplan and how spaces interact.

Key Building Development and Supporting Facilities

- Identify existing buildings and proposed development to understand what is key to retain and what buildings and facilities can be proposed which will support and enliven the Beachfront.
- Understand location of retained and proposed development in relation to character areas.
- Develop understanding of potential use and how retained and proposed buildings and facilities will contribute to the wider area.

Revived Public Space

- Assess the limitations and challenges of the existing public space and public realm.
- Understand potential user requirements through extensive consultation to ensure public space and connections are fit for purpose and allow accessibility and usability for all.
- Propose public space and public realm approaches which enhance the public's experience of the Beachfront and create an asset for the city and wider communities.

Access and Connectivity

- Undertake assessment of existing network and various travel routes between the beach, the city and wider Aberdeenshire area
- Propose a variety of connections to the existing network which promotes the use of public transport; are attractive to pedestrians and cyclists; and which reduce reliance on car use.



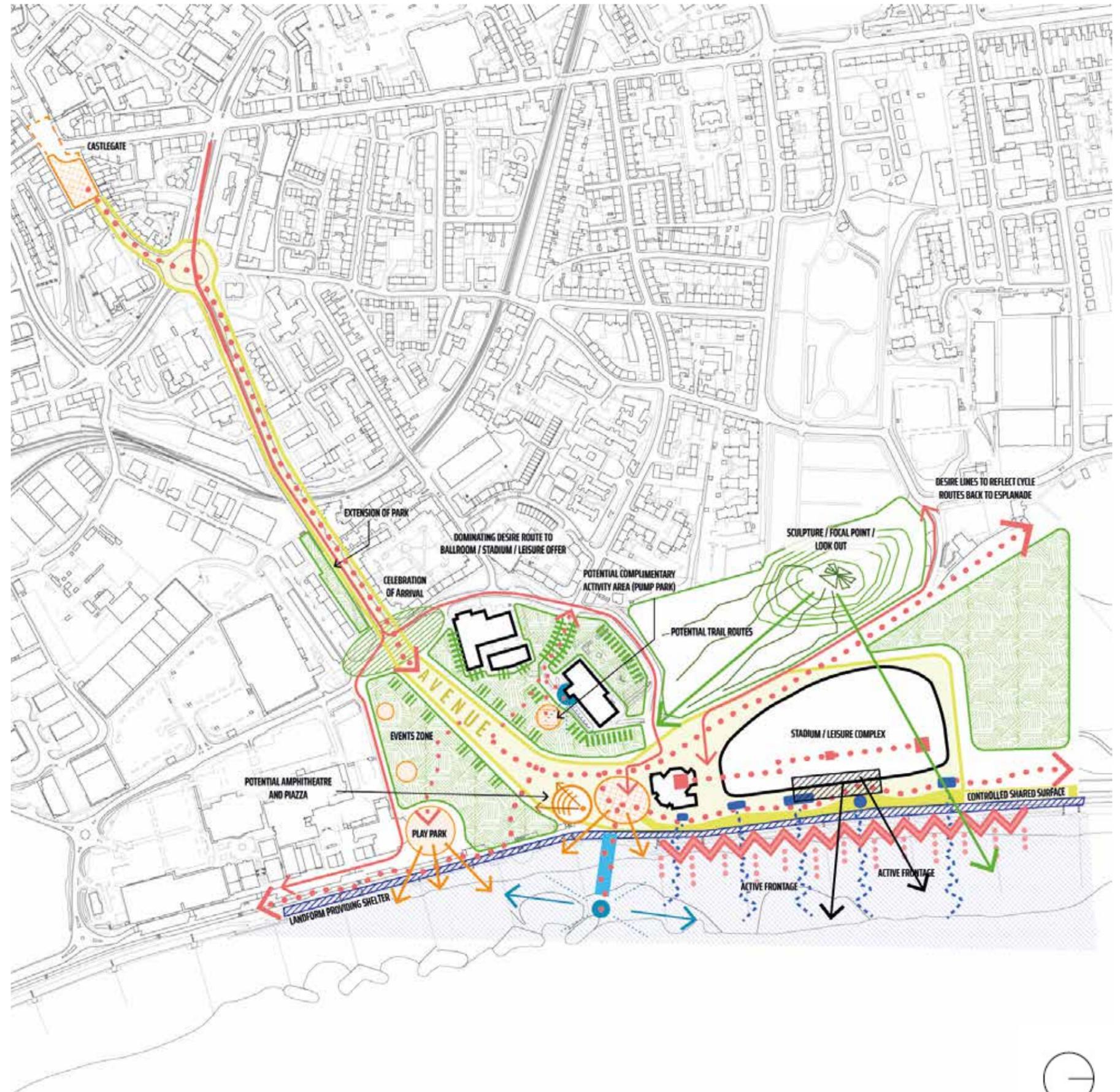
Aspirational CGI Image of Potential Development



5.3 OPPORTUNITIES

Following on from the site analysis, the design team identified several opportunities which capture the initial ideas explored during early design workshops, these include:

- The potential for an attractive desire route from Beach Boulevard down towards the enhanced Ballroom/Stadium/Leisure offer.
- Opportunity for celebration of arrival to the Beachfront / Queens Links.
- Creating an enhanced setting for the iconic Beach Ballroom with a more formal Public Plaza and grand entrance to the Ballroom.
- Potential for Integrated Stadium/Leisure complex with active frontage to the Beach esplanade.
- An enhanced public realm connecting Ballroom/Leisure/Stadium elements.
- Utilising level changes for amphitheatre type spaces.
- Re-imagined play park for all ages including potential for water play.
- Facilitating a large capacity outdoor events zone with appropriate space and facilities.
- The creation of landforms to provide shelter from the elements.
- Consideration of integrated coastal defence opportunities.
- Harness water space activities and facilitation of.
- Potential feature pier structure and focal viewing point to take advantage of those spectacular beach views.
- New enhanced cricket pitch and multi-use sports fields.
- Potential redevelopment of industrial units on Beach Boulevard.
- Structure planting / screening opportunities/enhanced green networks.
- Extension of Castlegate/enhanced Public Realm towards Roundabout/potential new Civic Space.
- Extension of an enhanced Beach Boulevard towards the City Centre enhancing the active travel experience between the beach and the city centre.



5.4 INITIAL DESIGN CONCEPTS

The creation of a transformational new Beachfront destination will rely on progressive and innovative design solutions, alongside a respectful acknowledgement to the heritage of the site. As the proposed Beachfront development will be centred around the iconic Beach Ballroom as the main focal point of the redevelopment, the history of the Beachfront is intrinsic to the character of the wider area.

The vision for the development is to rejuvenate the Beachfront back to its former glory as a major waterfront destination for future generations. The component parts of previous successes can be re-imagined to create a contemporary new design solution which establishes Aberdeen Beachfront as a world-class leisure destination once more.

Initial design concepts drew upon the history and heritage of the Beachfront in an innovative, forward-thinking way.



Design Collaboration Workshop



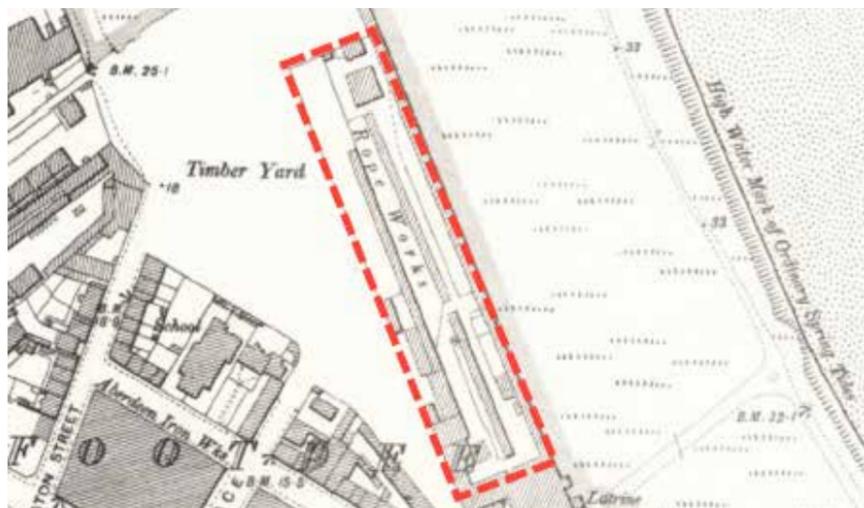
Design Sketch for Rope Works Concept



Design Sketch for Tram Lines Concept



Design Sketch for The Groynes Concept



Historic Map showing the location of the Rope Works near Queens Links



Historic Image showing the former trams on the Beachfront



Image of the Groyne structures which are positioned along Aberdeen Beach

5.5 EXPLORATION & TESTING

Given the scale and importance of the site, a number of options were developed to test out initial thoughts for the concept masterplanning approach for the Beachfront. This testing process has been crucial in allowing the development of a preferred Development Framework approach, along with alternative options, which is viable, deliverable and will maximise the potential of the area. This iterative process was undertaken by the design team alongside Aberdeen City Council to ensure the benefits and drawbacks of the potential design solutions were understood and the most appropriate proposal agreed by consensus.

5.5.1 OPTION 1: ROPE WORKS

Rope Works is inspired by Aberdeen's shipbuilding industry. Historically, the Rope & Sail Making Works that were located on the site at the South of Queen's Links. The Rope Works concept uses the formation of the rope itself to inspire a masterplanning design approach for the main character area of the site. The Rope Works concept takes the organic form of the rope to create a network of footpaths and desire routes, extending down from Beach Boulevard and opening up towards the Beach Ballroom at the heart of the proposed design.

5.5.2 OPTION 2: TRAM LINES

Tram Lines uses the linearity of the historic tram routes to organise the central features of the concept masterplan, alongside influences such as the octagonal geometry of the Beach Ballroom and Bandstand. The Tram Lines concept is centred around the existing remnant of physical tram line located at the North of Queen's Links. The historic lines would be retained and enhanced to form an organizing geometry from which to build a re-imagined Urban Park.

5.5.3 OPTION 3: THE GROYNES

The Groyne concept is inspired by the existing shore protection structures built perpendicular to the shoreline of the Aberdeen coast. These linear structures are an integral part of the unique Aberdeen seascape, creating a strong organising geometry from which the concept masterplan builds. The 2 central Groyne form the basis of an overall design language for the Links character area, extending out into the sea to form a new pier structure which loops back round to create an amphitheatre-style external gathering space.



Rope Works Conceptual Masterplan



Tram Lines Conceptual Masterplan



Groyne Conceptual Masterplan

5.6 ROPE WORKS DESIGN DEVELOPMENT

The Rope Works Concept Masterplan option was selected by the Beachfront team as the preferred solution as, in summary, it had the following qualities:

History & Heritage

This option celebrates the historical character of the site and the previous Rope Works which supported Aberdeen's Shipbuilding heritage. The key pathways and routes are created in an organic manner simulating the unravelling of a rope.

Free Play

This concept masterplan generates a multitude of zones and opportunities for free play for all ages. The layout creates zones for a range of activities such as a pump park, child play, teenager play and water-based play areas together with water sports and other outdoor Leisure experiences associated with the beach. The child and young person focused areas drawing on Aberdeen's ambition to obtain UNICEF Child Friendly City status. An amphitheatre, mounding, a variety of paths and walkways culminating in a the boardwalk /pier structure also added an additional dynamic to the visitor experience.

Natural Environment

The organic design characteristics of Rope Works creates a natural geometry of sinuous footpaths and routes linking seamlessly with Broad Hill and appears in harmony with the topography of the site. This geometry allows all elements to flow together and is consistent with the emerging natural organic form of the potential Stadium and Leisure buildings. The proposals will also seek to protect and promote the existing natural habitats and biodiversity found on the site. Additionally, these will be supplemented by a developed green/blue network.

Boardwalk & Pier

The design of the Rope Works Pier structure and associated Boardwalk has the potential to provide an affordable design solution and would greatly improve accessibility to various levels within the network of pathways on the beach.

Aberdeen City Council subsequently approved Option 1: 'Rope Works', as their preferred masterplan concept at the meeting of the City Growth & Resources Committee in November 2021.



Rope Works Conceptual Masterplan



Site Definition

Developing Strands

Defining Routes

Potential Interventions

Potential Boardwalk

5.7 ROPE WORKS KEY PRINCIPLES

The concept masterplan is centred around the re-imagining of the iconic Beach Ballroom, integrated with state-of-the-art Sport and Leisure facilities within an Urban Parkland setting, creating a transformational and vibrant new Beachfront destination for the City of Aberdeen.

The main features of the Rope Works conceptual masterplan are outlined below:

- An organic network of pedestrian-focussed desire routes and meandering pathways.
- An outdoor gathering area for large scale events (such as fireworks)
- Potential water features
- Relocated & upgraded play park
- Potential canopy features with opportunities for PV panels for solar power.
- A potential Reflection pool to create a grand setting for the re-imagined Beach Ballroom.
- Potential integrated Stadium, Leisure & outdoor sports facilities.
- Upgraded Esplanade with active frontage along the beach
- High quality hard/soft landscape opportunities.
- Natural landforms to offer protection from the elements, with proposed dune formations providing shelter from north easterly winds.
- Integration with Broad Hill and links to existing footpaths.

Key:

1. Beach Ballroom
2. Hidden Garden
3. Potential Stadium & Leisure
4. Public Plaza
5. Urban park
6. Public Space
7. Amphitheatre
8. Mounding
9. Pavilion
10. Water Feature
11. Pedestrianised Boulevard
12. Pier
13. Esplanade
14. Slipway
15. Surf Pavilion



Rope Works Conceptual Masterplan



5.8 ROPEWORKS - POTENTIAL STADIUM & LEISURE

Three options for the potential stadium and leisure elements of the proposals have been identified with the ropeworks concept, one preferred and two alternatives.

Preferred Stadium & Leisure Option

Potential New build leisure centre / ice arena with potential new build football stadium.

Alternative Option A

Retain and refurbish existing leisure centre / ice arena with potential new build football stadium.

Alternative Option B

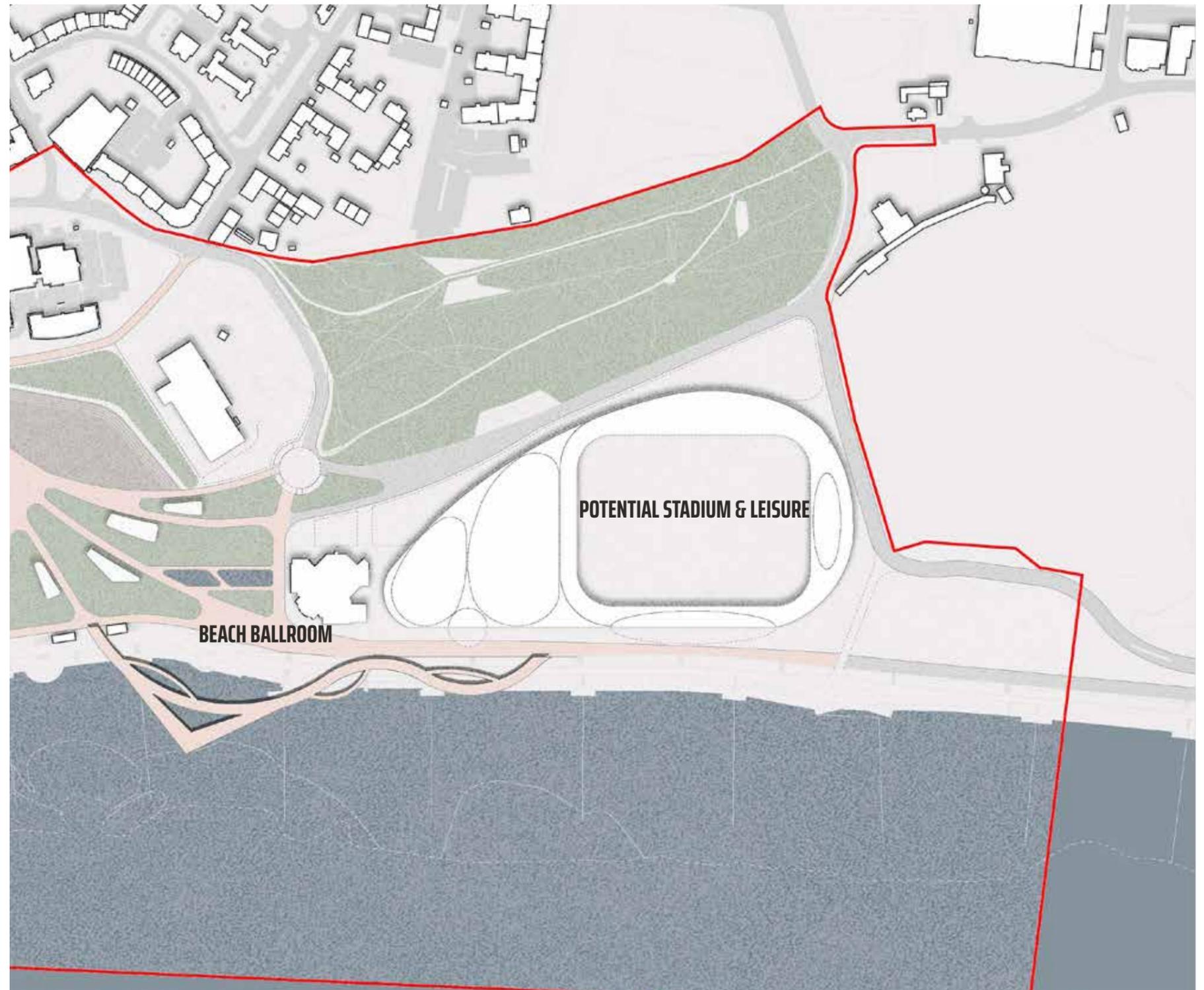
Potential new leisure centre / ice arena with potential football stadium excluded.

Further work has been undertaken by the design team on reviewing these options including their aims, objectives, and outline project brief.

All options were evaluated against the same criteria as the concept masterplans under the headings of accessibility and social value, vision and culture, urban design, and planning, commercial, adaptability, and sustainability. The scoring favoured a potential new build leisure centre / ice arena with potential new build football stadium (Preferred Stadium & Leisure Option), principally due to the ability to deliver a coordinated and integrated sport and leisure development within a transformational new waterfront destination for the City of Aberdeen.

5.8.1 PREFERRED POTENTIAL STADIUM & LEISURE OPTION

The preferred option assumes that the existing leisure centre and ice arena are demolished and would be replaced with a new facility that integrates leisure centre, ice arena, and football stadium uses as part of the development. The potential mix and integration of facilities would be in line with the Council's aspiration to make the most of the beach area as an opportunity and tourism asset as well as to generate new visits and spend. Furthermore, the potential to retain the stadium and it's footfall close to Aberdeen city centre would be an ideal outcome for all concerned.



Preferred Potential Stadium & Leisure Sketch

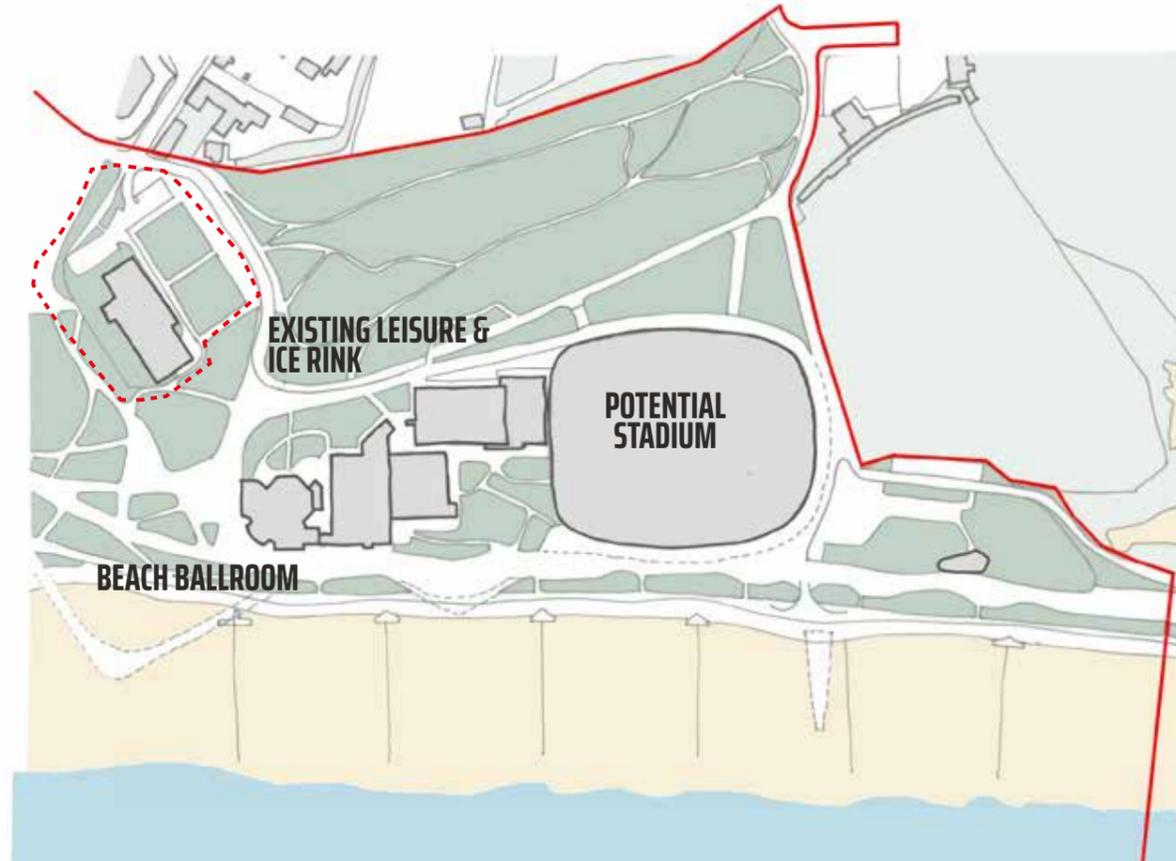
5.8 ROPEWORKS - POTENTIAL STADIUM & LEISURE

5.8.2 ALTERNATIVE OPTION A

Alternative Option A assumes that the existing leisure centre and ice arena are retained and upgraded as part of the development alongside a potential standalone new football stadium.

The refurbishment of the existing leisure centre would be based on work already undertaken by Sport Aberdeen with the aim of improving the condition and utilisation of the facility, to increase participation, provide new revenue streams and to create a destination venue.

The refurbishment of the ice arena would be based on a light touch refresh focusing on redecoration, replacement of seats, fixtures, and fittings, and dealing with outstanding maintenance to the building fabric and building services installations. The proposals do not seek to link the existing leisure centre and ice arena.



Alternative Option A Sketch

5.8.3 ALTERNATIVE OPTION B

Alternative Option B assumes that the existing leisure centre and ice arena are demolished and would be replaced by an integrated facility that links a potential new leisure centre and ice arena but that the potential stadium does not form part of the development and is re-provided elsewhere in the city. The aim of the integrated leisure centre and ice arena would be to provide an efficient building plan and form that can be operated as a single entity and avoid the duplication of café and management spaces that occurs at the existing leisure centre and ice arena.

It has been assumed that it is desirable to keep both the existing leisure centre and ice arena in operation during construction of the new facilities. This allows the leisure centre and ice arena to continue to meet local and regional demand for the facilities, continue swimming lessons, support local clubs, and maintain staff at both buildings.

5.8.4 FURTHER ALTERNATIVE OPTIONS

As there will be future consultation and design development in relation to the potential stadium and leisure facilities, the Development Framework allows for further alternative options to be explored and developed as required to respond to the evolving brief.



Alternative Option B Sketch

THE DEVELOPMENT FRAMEWORK



6.0 THE DEVELOPMENT FRAMEWORK

6.1 INTRODUCTION & PURPOSE

The Beachfront Development is a landscape led approach to setting a framework and structure for a re-organisation of the beach area, allowing existing and new buildings, structures, infrastructure, and spaces to come together within a new framework. When complete, this area will be a unique and world leading leisure destination and as such it's important strategic location, with relation to the emerging delivery of the City Centre Masterplan (CCMP), must be considered and a long-term vision for the area created.

Key to the process has been the creation of a clear organisational principle, The Rope Works, based on a clear vision for the development of the area.

The image opposite sets out an aspiration, allowing more detailed proposals to be tested and come forward in the future. The following pages set out the key principles of the development framework structure which in turn will be further explored later in the document.



6.2 DEVELOPMENT STRUCTURE

The Development Framework provides a basis for more detailed proposals to come forward in the future, however one of the principle aims of the Development Framework is to set out the key development structure to allow a coordinated and coherent approach for further design evolution over time. The key development structure is set out as a series of layers setting an appropriate level of spatial guidance to ensure the future development of the Beachfront area maximises its potential and responds best to its context. The identified layers are listed below and have been further explained in the following sections.

Development Framework - principal layers

- Arrival and Connections
- Character Areas
- Architectural Interventions
- Internal Movement Network
- Landform
- Green Network
- Blue Network
- Civic Orientation

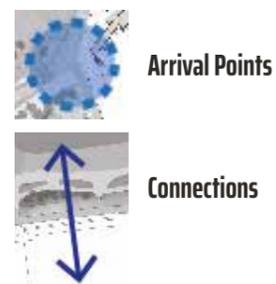
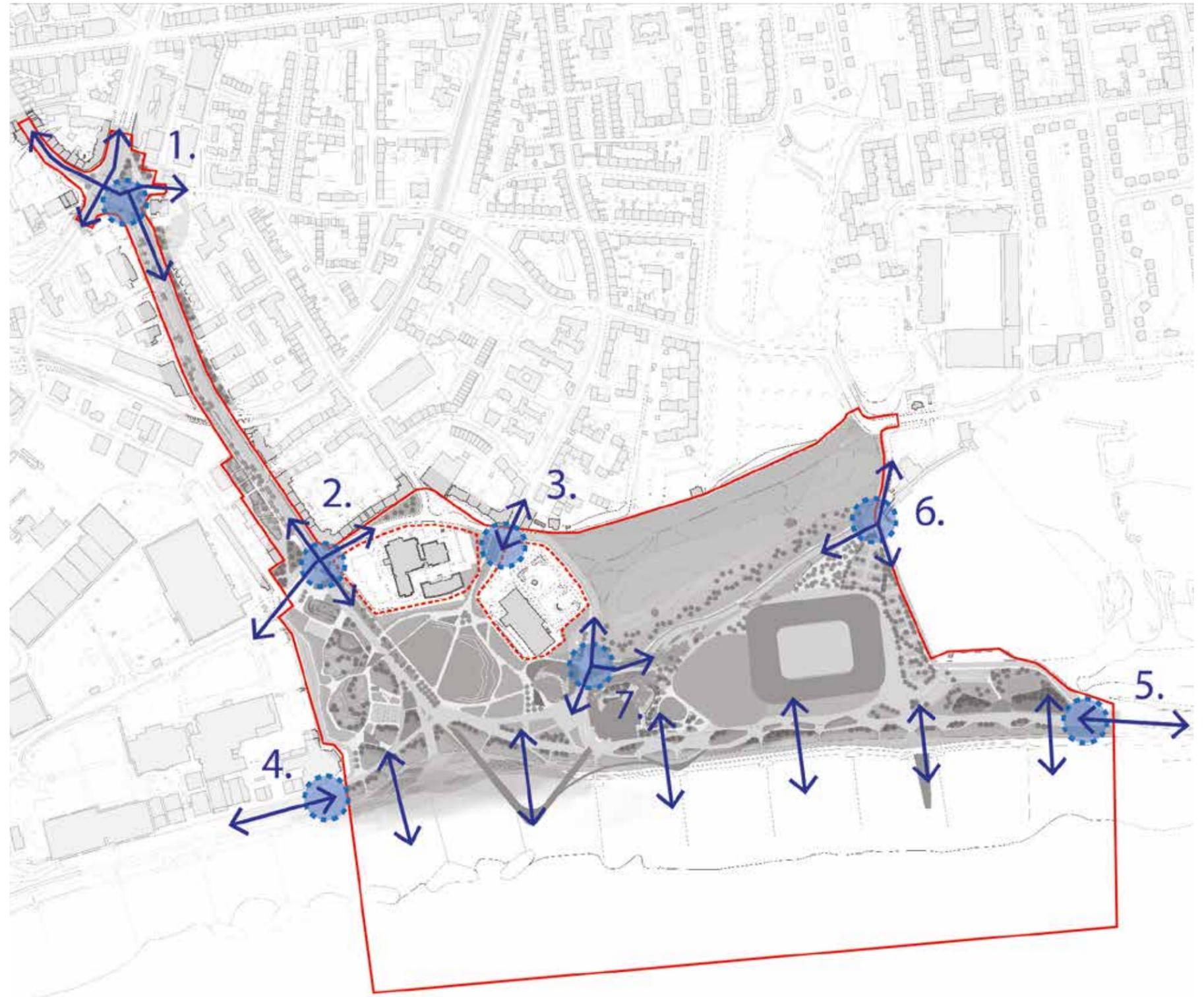
6.2.1 ARRIVAL & CONNECTIONS

The concept proposals look to improve the connectivity from the Beachfront to the city centre; from the Beachfront to the wider area in particular the surrounding neighbourhoods; and between the beach itself and the Beachfront area. The proposals seek to establish existing connections and supplement these with improved links and permeability from the local network into the site with the promotion of a pedestrian and cycle focused approach.

The removal of vehicles from the east section of Beach Boulevard across Queens Links to the Esplanade, and from the Esplanade between Codona's and Accommodation Road will allow for improved permeability across the Beachfront site. The removal of these two sections of roadway will also allow for ease of access to the beach which currently feels quite isolated.

The way people move to and from the site will change, which will ensure there is a more inviting and safer atmosphere for those arriving and using the Beachfront area, encouraging a sense of health and wellbeing. It is recognised there are several key arrival points to the Development Framework area, each of which has a role to play in being welcoming, clearly orientating, and facilitating the best active travel experience. These include:

1. Beach Boulevard west – Justice Street/City Centre
2. Beach Boulevard east – Links Road/Queens Links
3. Urquhart Road
4. Esplanade (from the south)
5. Esplanade (from the North)
6. Accommodation Road
7. Broad Hill South



6.2.2 PROPOSED CHARACTER AREAS & OPEN SPACES

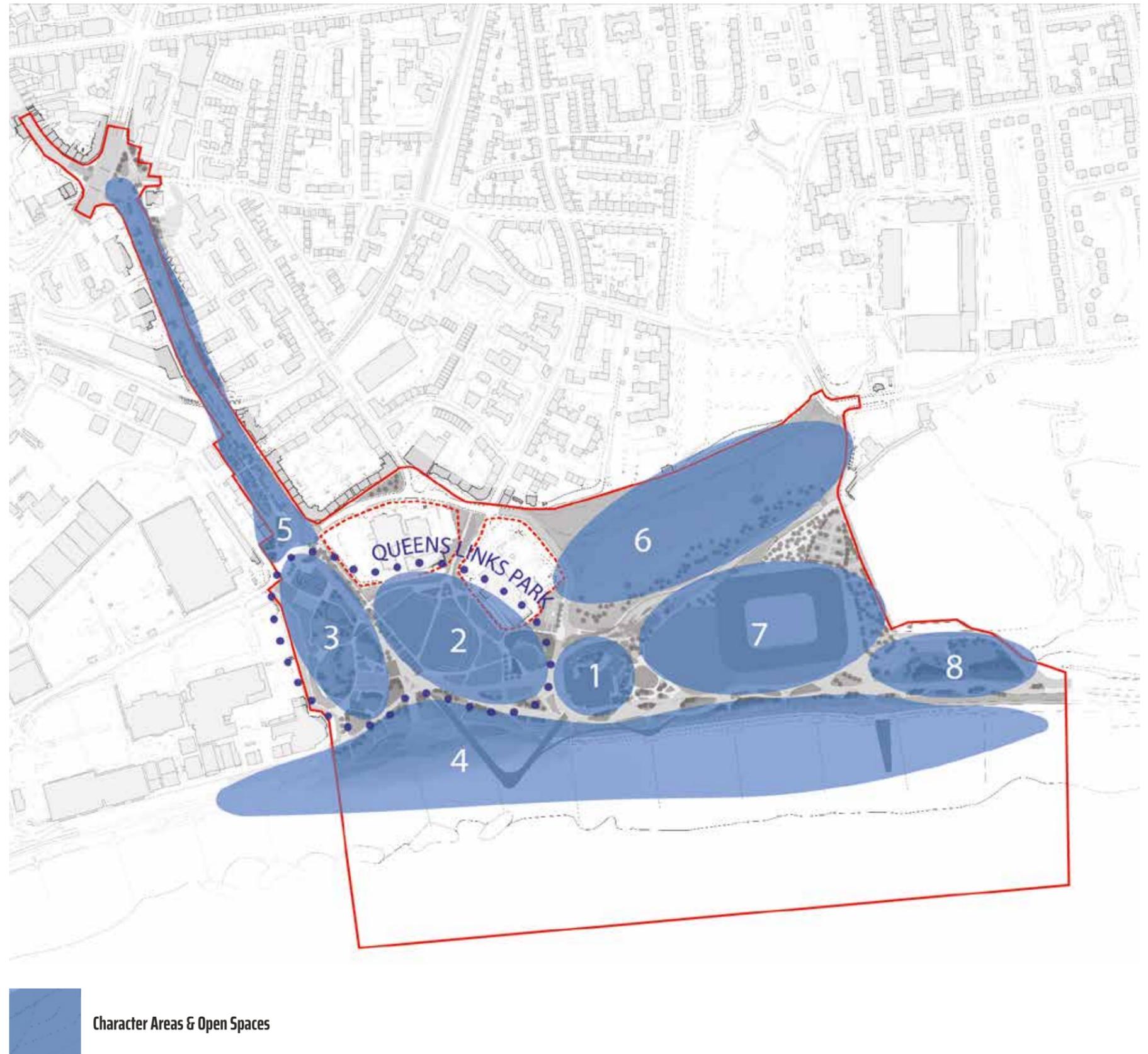
The proposed reconfiguration of the Development Framework area has resulted in a reorganisation of the open space provision within the masterplan area. These spaces have been developed with the aim of creating different characters and opportunities for people to enjoy the site. Whether this be a relaxing walk along the promenade surrounded by grasses waving in the breeze on the proposed dune landforms, a visit to the vibrant, colourful, and exciting play park or arriving at the grand and civic Beach Ballroom Plaza; the overall masterplan design aims to provide a variety of characters and spatial experiences.

It should also be recognised that the character of the park will change from day to day and at different times of year. Events or match days will change the character of some spaces, particularly spaces such as the Central Square, Beach Ballroom Plaza, and the Events Field area.

Each proposed character area will be expanded on further in section 6.6.

Key

1. Events Park & Field
2. The Beach and Esplanade
3. Core Play Park
4. Broad Hill
5. Beach Ballroom
6. Beach Boulevard
7. Potential Stadium and Leisure
8. Beach Village



6.2.3 ARCHITECTURAL INTERVENTIONS

The Beach Ballroom renovation and extension; and the potential Stadium & Leisure facilities are the key architectural works within the design proposals however the Design Team have also explored a number of complementary architectural opportunities within the wider Masterplan area, with the potential for flexible structures to be integrated into the design. The below represents the key architectural works proposed for the Beachfront area:

1. Beach Ballroom

The B-listed Beach Ballroom will sit at the heart of the concept masterplan and will be revitalised through the addition of potential extensions and a full renovation.

2. Potential Stadium & leisure

The potential new leisure centre, ice arena and football stadium will be a vibrant, accessible, and welcoming building.

3. Gateway Building

The Gateway Building acts as a sculptural landmark offering an enhanced sense of arrival to the Beachfront.

4. Hub Building

The Hub Building is located in the central plaza area at the heart of the new Urban Park.

5. Beach Pavilion

The Beach Pavilion offers active frontage to the Beach Esplanade within a flexible structure which could be used for a variety of activities.

6. Lightweight Canopy Structures

A number of Lightweight Canopy Structures are located at key nodal points within the Urban Park offering shelter.

7. Amphitheatre

The Amphitheatre offers a flexible external events space.

8. Boardwalk

The Boardwalk structure follows the sinuous route of the Rope Works and extends out to the North Sea.

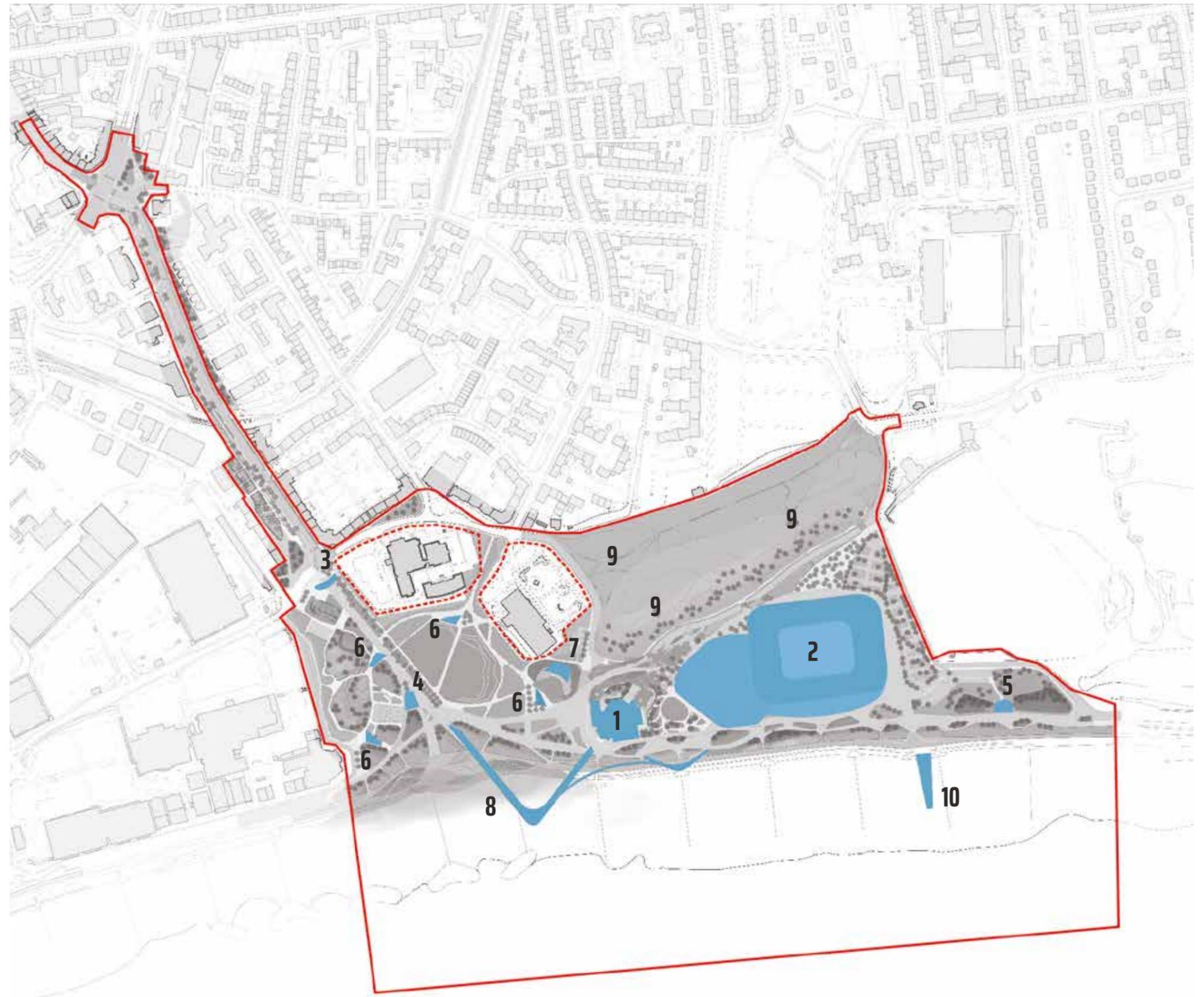
9. Broad Hill Viewing Structures

Geometric viewing platform structures taking advantage of views across the Beachfront.

10. Slipway

Providing access to the Beachfront below the Esplanade.

The conceptual Masterplan encourages a common architectural language applied across all development opportunities within the wider Parkland area, creating a cohesive scheme that has been considered and designed as a whole.



 Architectural Interventions



6.2.4 INTERNAL NETWORK

The park design aspires to provide an accessible, connected network of paths that will allow movement and exploration. A main aim being to facilitate permeability to the surrounding context, prioritising pedestrian, and cycle movement over vehicular. Depending on location and route the path network design will be sized appropriately to accommodate larger flows of people (for example on a match day) or to provide a more intimate scale for exploring the park, therefore a clear path/route hierarchy will be evident.

Suggested improvements to Justice Street, the roundabout, and Beach Boulevard aim to provide a direct, attractive and welcoming pedestrian environment from the City centre to the Beach. A key element of this will be the provision of appropriate controlled or priority crossings.

Connections and crossings into the park from the other arrival points should also be a key consideration to ensure safe pedestrian access, as well as integrated wayfinding and associated information.



-  Primary Routes
-  Secondary Routes
-  Tertiary Routes
-  Vehicular Routes



6.2.5 LANDFORM

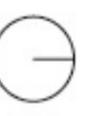
Landform can play a key role in creating usable spaces, helping to provide shelter and improve the microclimate across the site, increasing the comfort of visitors and dwell time. Enhanced microclimatic conditions can also assist with biodiversity and the creating of new habitats. Strategically across the Development Framework area new landscape mounding will aim to spatially redefine parts of the site, assisting with shelter and microclimate creation, while also adding significantly to the visual experience of the place, with new landform providing an opportunity to interact with the landscape. These mound features will also help to define and enclose spaces within the park, creating 'rooms' of different sizes which can accommodate the various programs of use.

The landforms will be carefully sited to frame and create views of existing and new interventions in and around the area. This could be creating choreographed views to the sea from the esplanade level in the park or setting up vistas to sculptures or interventions within the park. Through revealing and blocking views the mounds will also provide increased opportunities for exploration and discovery within the park.

Some of the landforms may be developed to contribute directly to the play value of the site. This may vary from informal elements such as mounds to run up and roll down or more formal elements such as the incorporation of slides or viewing points.



-  Landform Mounds
-  Sunken Areas / 'Rooms'
-  Existing Landform (Broad Hill)
-  High Points



6.2.6 GREEN NETWORK

The green network within the site plays a key role in creating attractive spaces for people, as well as providing essential habitat for wildlife and increasing biodiversity.

Through the addition of strategic landform mounding, enough shelter is created to grow a variety of plant species. Additional tree planting is proposed throughout the site, and the green network aims to incorporate a variety of textural planting such as shrubs, wildflowers, and longer grasses. Large areas of lawn are proposed only where needed for amenity and events and should be species rich.

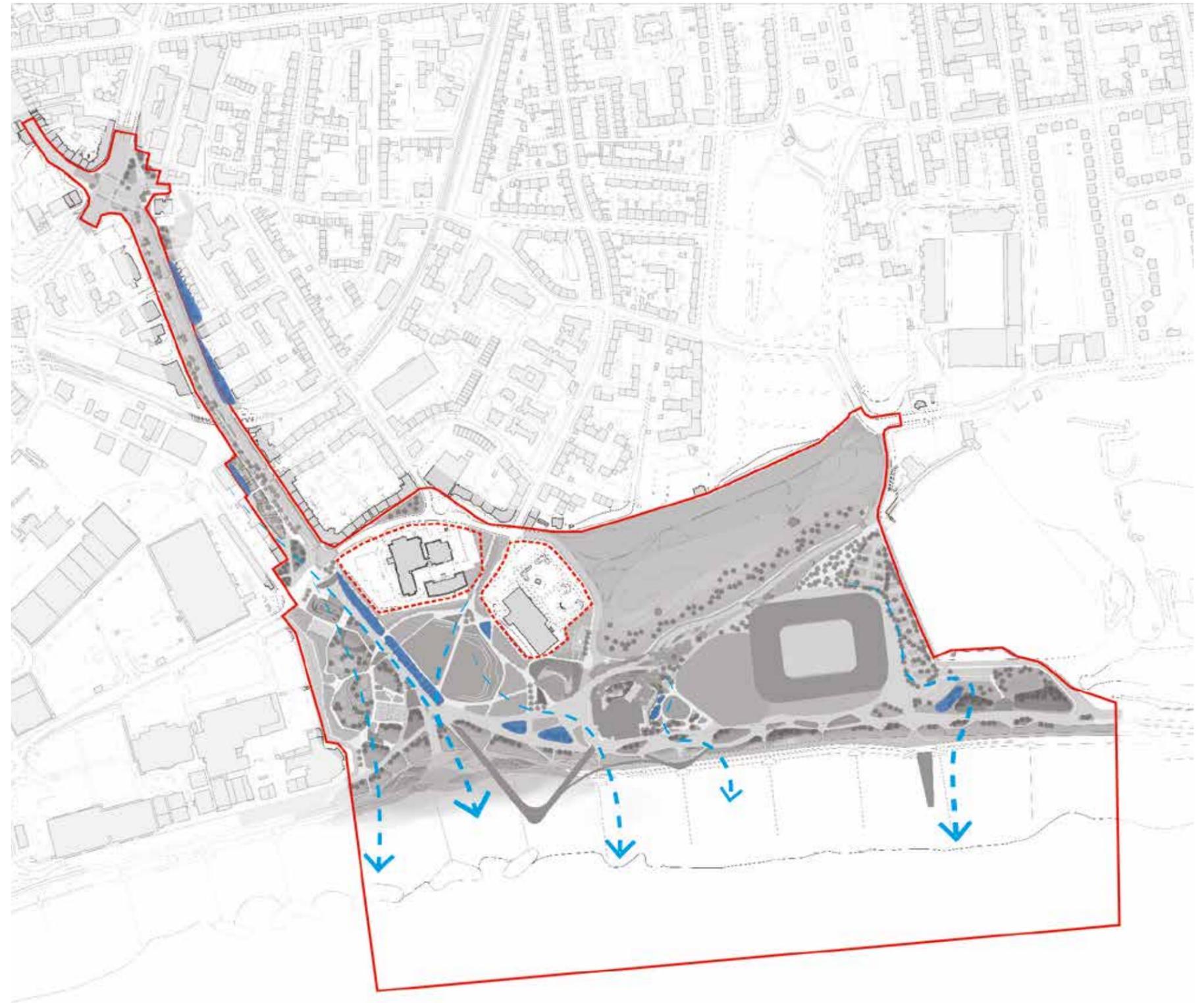
Consideration has been given to how the green network within the site connects outward into the wider landscape, creating green corridors for wildlife and overall enhancing biodiversity.



6.2.7 BLUE NETWORK

Areas have been identified where rain gardens could be created within the site, to sequester and filter water during heavier rainfall events. These can be developed as attractive landscape features, enhancing the overall landscape design, and increasing biodiversity in the area, ensuring blue and green infrastructure work together.

All surface water from the site will drain to the sea.



-  Potential Rain Gardens
-  Site Drains to Sea



6.2.8 CIVIC ORIENTATION

Civic orientation spaces lie between the character areas of the site and are a key element in the definition and organisation of the core park area. These are large public plazas which form gathering spaces and key junctions in the internal network.

All these spaces relate to an architectural intervention or existing architectural feature, which acts as a landmark and assists in wayfinding.

These spaces are activated by water features, planting, furniture, and framed views, creating social spaces where people can come together. Some are large enough to host small scale events such as markets or pop-up food stalls.



6.3 PROPOSED TRANSPORT NETWORK

The Masterplan will deliver physical improvements to pedestrian, cycle and public transport networks and facilities in the vicinity of the Beachfront. This is consistent with established regional and national policies which promote growth in active travel and a reduction in rates of car use.

- City Centre Masterplan: The Masterplan will facilitate public realm improvements throughout the city centre whilst also prioritising sustainable transport modes to create an environment that offers greater prosperity and quality of life in Aberdeen. The Beachfront vision is complementary to the city centre proposals and their objectives.
- Go Abz Journey Planner: A freely available web-based journey planning application which allows users to plan and price their local travel options. The app provides advice on journeys by all travel modes and helps users plan a route which best suits their needs; by car, bus, rail, taxi, cycling, walking, wheeling or a combination of these.
- Park and Ride: A network of sites, providing more than 3,000 spaces, located to the south, east and north of the city centre served by a combination of high frequency local and express buses. Increased use of park and ride facilities will contribute towards a reduction in the number of cars travelling towards the city centre and beachfront area. Through the masterplan there is potential to enhance service levels directly to the beachfront.
- Aberdeen Rapid Transit: Emerging proposals for high frequency public transport corridors between key park and ride sites around the city, including services between Kingswells and Bridge of Don and Craibstone to Portlethen. The development framework presents an excellent opportunity for ART to be extended to the Beachfront.
- Bridge of Don to City Centre Active Travel Corridor: A package of measures aimed at improving the quality of pedestrian and cycle links between the Bridge of Don area and Aberdeen city centre. It seeks to increase the number of people who can directly access the active travel network and aims to increase safety, comfort and personal security. The project will make a significant contribution towards the Beachfront.
- Car Clubs: A city-wide pay-as-you-go car hire initiative which, in Spring 2022, has a fleet of 47 vehicles, many of which are hybrid or electric. There are bays located on Pittodrie Street, School Road, Constitution Street and Frederick Street, all of which are within a walkable distance of the Beachfront area. There is potential to incorporate additional Car Club bays throughout the masterplan area.

Through delivery of the Beachfront Masterplan, key transportation principles which underpin the City Centre Masterplan and associated corridor studies will be applied over an expansive catchment which extends between Castlegate, Beach Boulevard and the Esplanade.



Mapping highlighting Indicative General Traffic Access Strategy

6.3.1 POTENTIAL STADIUM STRATEGY

If taken forward, a new stadium would be located less than 500m from Pittodrie Stadium, equating to less than a ten-minute walk. Established travel patterns associated with Pittodrie can be built upon without the creation of additional car-based trips. Aberdeen Football Club has set out ambitious sustainability targets and aims to be net-zero by 2040 and reflecting its role within the wider city context, the club seeks to reduce emissions by 50% by 2030. These objectives will play a key role in shaping a future stadium access strategy.

Examination of the 2016 Pittodrie supporter travel survey demonstrates that just less than half of Aberdeen Football Club (AFC) season ticket holders travel to Pittodrie on foot, by bus or by taxi. Of all the supporters who arrive in the city centre by coach or train, more than 90% walk the 2.2km distance to access the stadium. While many supporters revealed that they travelled to the stadium by car, they typically do so in groups of 2, 3 or 4 and that they are prepared to walk up to 30 minutes to access the stadium.

Season ticket holders were also asked about how their match-day travel patterns might change in the event that AFC relocated to Kingsford. Car and pedestrian trips were forecast to fall by 6% and 12%, respectively, but bus use was expected to increase by 18%. While these values relate to the Kingsford site, they demonstrate that supporters are willing to change their travel behaviour if a new stadium was built. The Beachfront offers considerable potential to grow both pedestrian and bus-based trips while reducing car use.

A new stadium will help to change match and event-day travel behaviour through the creation of new and upgraded active travel links between the stadium and the city centre and a step-change in public transport provision. Alongside conventional public transport, additional services can be delivered to support larger events, connecting the Beachfront to established park and ride facilities in and around Aberdeen.

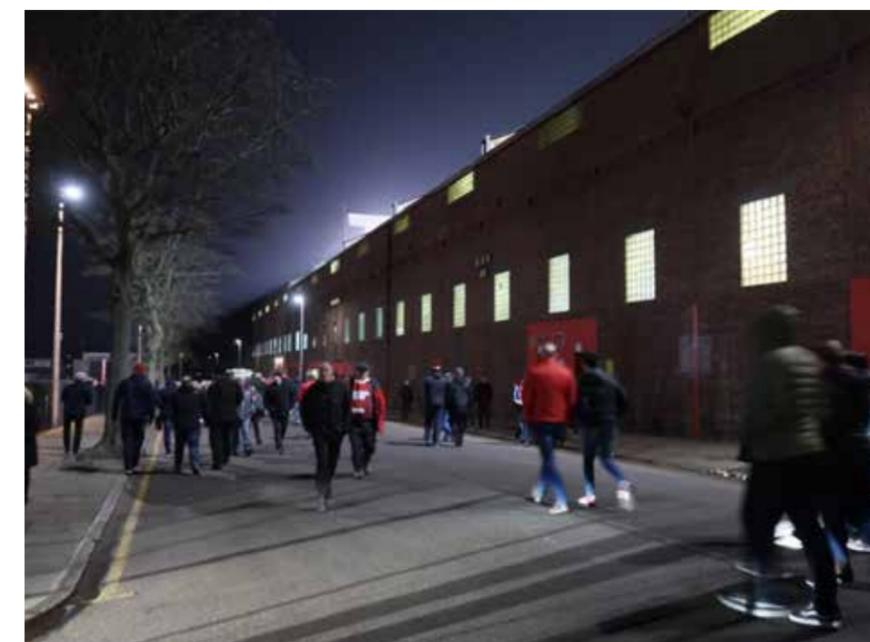
Successful incorporation of the stadium will depend upon the influence of travel behaviors through well designed public space, the incorporation of effective and attractive public transport and a well-considered package of strategies to manage and coordinate activities.



Conceptual Plan of Potential Stadium & Leisure Facility



Aberdeen Team Bus (Image courtesy of The Press and Journal)

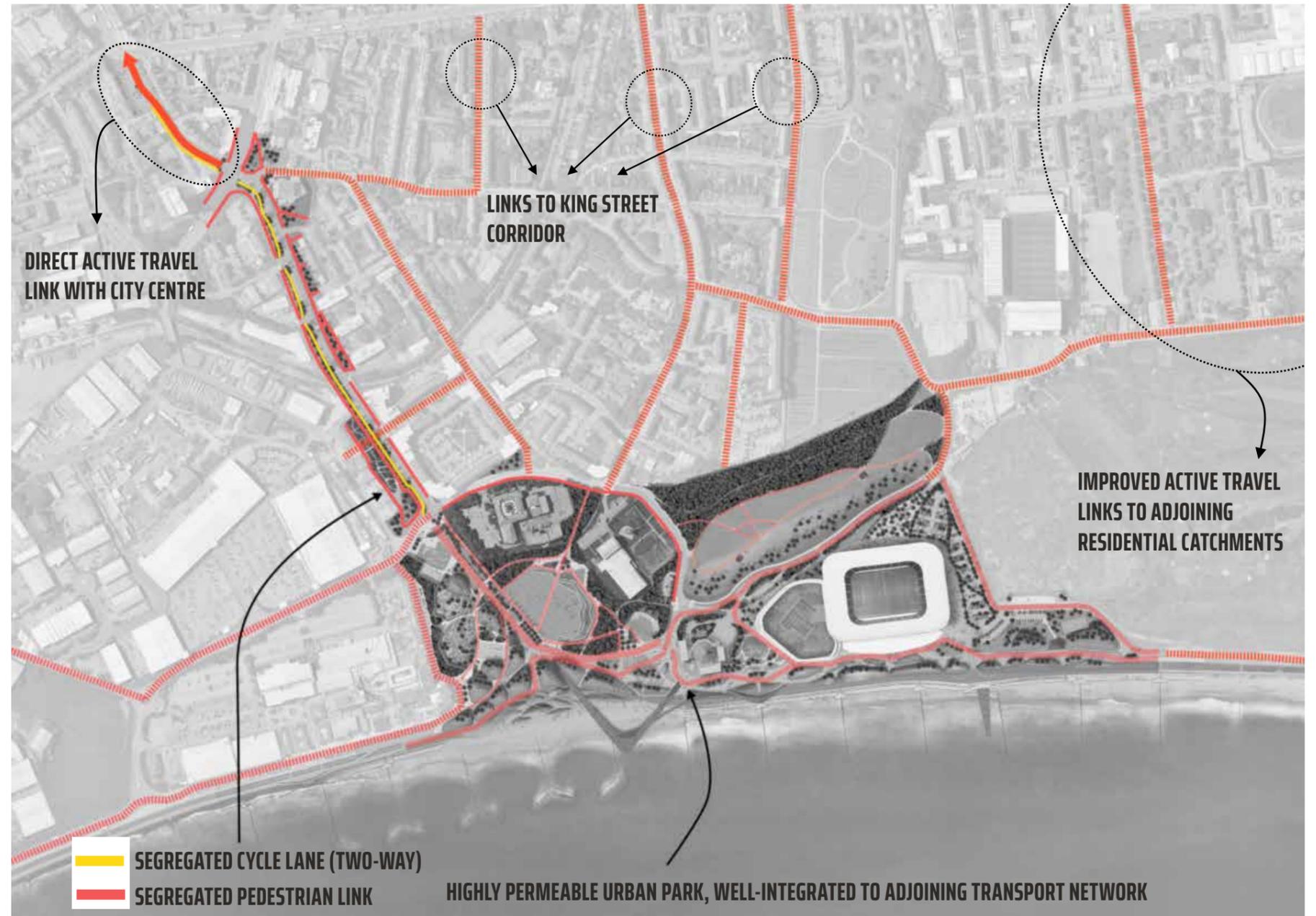


Walking to stadium (Image courtesy of Hans Henrik Appel)

6.3.2 ACTIVE TRAVEL STRATEGY

The Development Framework proposes expansion and upgrades to the active travel network, capitalising on the proximity of the Beachfront to the city centre, adjoining residential, retail and leisure land uses and the adjoining King Street transport corridor. It promotes an environment where the needs and requirements of pedestrians and cyclists are prioritised, representing a step-change from the current situation where opportunities for walking and cycling are shaped around a largely traffic-led environment. Specific measures and recommendations include:

- Reconfiguration of the A956 / Beach Boulevard roundabout junction to overcome severance experienced by pedestrians and cyclists and to reduce the dominance of vehicular traffic overall. This may include installation of ‘toucan-style’ traffic light crossing facilities to better reflect the active travel desire line between the city centre and the Beachfront. This is compatible with the City Centre Masterplan and consistent with the recent reclassification of the A956 corridor to a ‘secondary’ route, as defined by the Roads Hierarchy.
- Reallocation of road space along Beach Boulevard. A two-way traffic link would be incorporated to the existing northbound carriageway, calming traffic and reducing vehicle speeds. This would allow considerable additional space to be reallocated to active travel modes, enabling the incorporation of segregated pedestrian and cycle links which could be integrated into the improved crossing facilities at the A956 / Beach Boulevard junction. Improved active travel links would be set within the context of a landscaped and well-lit environment, further increasing the appeal of active travel. Safe crossings will enhance connectivity over the Beach Boulevard, better connecting the retail and industrial areas to the south with the residential catchment to the north.
- A wayfinding strategy will be developed, delivering signage and mapping to aid users with planning and making their journey between the city centre and the Beachfront, within the redeveloped area and between the Beachfront and adjoining catchments.
- The new urban park will lead to the closure to traffic of the Beach Boulevard north of its junction with Links Road removing through-traffic from the area. This measure will lead to a considerable reduction in traffic flow, contributing towards an environment which promotes and welcomes active travel. Changes to local traffic priority present further opportunities to ensure safe and direct connections towards the urban park and beachfront.
- Pedestrian and cycle links will be incorporated around the periphery of the urban park area to ensure the delivery of a space which is well-integrated to the adjoining streetscape. New and improved links within the park area will promote connectivity with the beachfront retail park, Constitution Street, Urquhart Road and Broad Hill, better connecting these areas to the urban park, the waterfront, and the redeveloped Beach Ballroom and leisure uses located to the north.



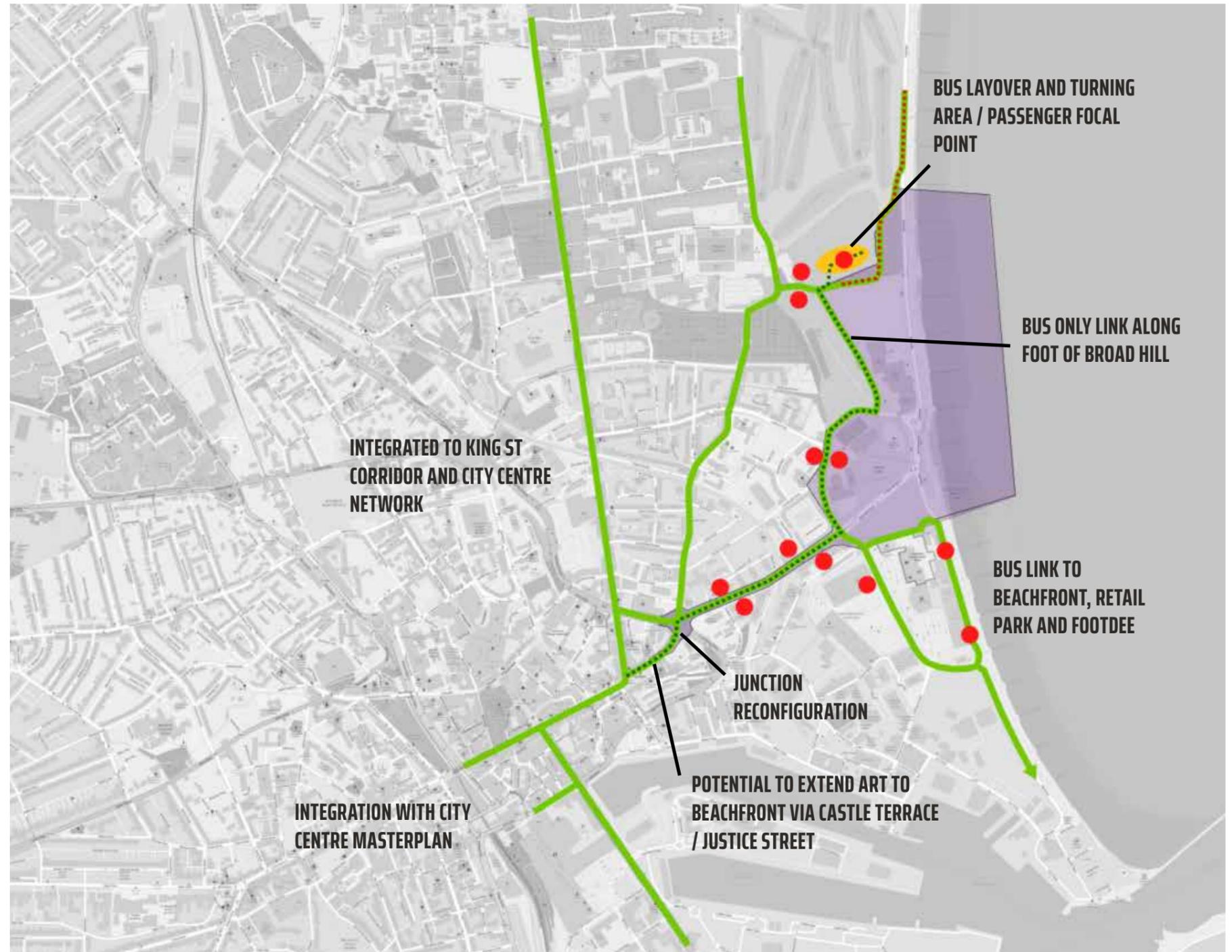
Mapping highlighting Indicative Active Travel Strategy

- Active travel hubs will be incorporated to the urban park, presenting opportunities to provide information and aid wayfinding, offering rest and changing facilities, serving as cycle hire outlets and providing safe spaces for cycle storage.
- The active travel strategy promotes the incorporation of ‘park-mobility’ initiatives to ensure that all users are able to enjoy and feel safe within the spaces provided within the park. This could potentially include short-term hire of mobility aids.
- The proposals involve the removal of traffic from the Esplanade, reallocating space to pedestrians and cyclists and eliminating the sense of severance between the Beach Boulevard, Queens Links and the Beachfront.
- A new minor road will be provided at the southern edge of the urban park, creating a one-way (northbound) link between Links Road and the southern portion of the Esplanade. Pedestrian and cycle links will be provided adjacent to this link.
- New and improved active travel links will be incorporated to the northern part of the masterplan area, facilitating better connectivity between Park Road / Golf Road and the Esplanade and significantly improving transport links between Pittodrie, Seaton area and the Beachfront.

6.3.3 PUBLIC TRANSPORT STRATEGY

The Beachfront will become a local, regional and national destination and the incorporation of efficient and attractive public transport is central to its success - the public transport strategy mirrors aspirations to improve bus services across the city and throughout the region. The accompanying diagram shows the Beachfront public transport strategy, which is summarised as follows.

- The primary access route for buses will be via Beach Boulevard and Links Road, with sensibly placed bus stops to promote integration with key pedestrian links throughout the masterplan Development Framework area.
- The public transport network will be composed of routes which pass through the area and those which terminate at the Beachfront. This combination will allow a balance between the differing needs of adjoining residential catchments and the provision of fast, direct services between the beachfront and the city centre.
- There is potential for the Beachfront to be integrated into the emerging Aberdeen Rapid Transit (ART) network either by extending ART services to the masterplan Development Framework area or by delivering high quality services which integrate to ART on the King Street corridor and in the city centre.
- A new bus waiting and turning facility will be provided within the northern part of the masterplan Development Framework area, accessed via Accomodation Road. The facility will include comfort facilities for drivers, space for buses to layover and suitable waiting facilities for passengers.
- A new 'bus-only' link will be provided along the foot of Broad Hill, connecting Links Road to Accomodation Road. Bus gates incorporated at both ends of the link will prevent access to general traffic.
- The transport strategy promotes a material increase in the number and frequency of bus services operating to and within the wider Beachfront area, including the retail park and Footdee.
- An emphasis should be placed on high quality services which are fully-integrated to the wider city bus network, including services which connect the Beachfront with park and ride sites.
- Service frequency should be maintained at a high level, helping to build user confidence and increasing the overall visibility of buses in the wider area.
- Consideration should be given to the creation of a brand identity for buses which serve the beachfront area, helping to market the destination overall and contributing towards increased patronage levels.



Mapping highlighting Indicative Public Transport Strategy

Beach Development Framework - Public Transport Strategy

- Indicative Bus Stop Location
- Bus Layover and Turning Area
- Public Transport Link
- - - Potential ART Link
- Stadium and Event Coach Access

6.3.4 TRAFFIC AND NETWORK INTERVENTIONS

Road traffic implications which arise from the Development Framework vision are the subject of ongoing technical assessment using the wide-area Aberdeen Sub Area Model (ASAM) to determine the strategic rerouting and wider impacts of the masterplan, and the Aberdeen City Centre Paramics Microsimulation Model to test the detailed implications around The Esplanade, Beach Boulevard, King Street and Aberdeen City Centre. The models enable detailed evaluation of the changes to traffic priority, road closures and alterations to road space that are being considered as part of the proposals, and they take account of other relevant local transport policies and interventions.

While the Development Framework vision proposes the creation of new space which is not dominated by traffic, it places emphasis on high-quality public transport, proportionate access for car parking and delivery and servicing movements. It is important to distinguish between ‘through trips’ and those whose destination is within the wider Beachfront area, including the established retail and leisure parks.

The overall traffic and transport strategy reasonably assumes that the delivery of complementary strategies, including the City Centre Masterplan, Low Emission Zone and Bus Corridor studies lead to a reduced reliance on car-based trips to and through the city centre area. The strategy will identify a proportionate package of measures to mitigate the impact of the Beachfront development while ensuring that local connectivity is maintained, where required.

A key part of the approach at a local level will be to carefully balance the performance of the road network with the delivery of an environment which is conducive to greater rates of pedestrian, cycle and public transport activity.

Mindful of the aspiration to grow rates of active travel and to promote effective public transport, it is considered unwelcome for ‘through’ traffic displaced from the Esplanade to divert onto adjoining local roads. The transport strategy proposes the following measures

- A suitable form of traffic restriction on Golf Road, preventing the reassignment of through trips onto adjoining local roads.
- A restriction to prevent through traffic on Accommodation Road between Esplanade and Golf Road
- Incorporation of a new one-way eastbound road at Queens Links, connecting Links Road to the Esplanade, facilitating access to areas of disabled parking and providing a means of access for public transport.
- Modifications to the character of the roundabout junction at A956 / Park Street / Beach Boulevard to better cater for increased active travel demands and to facilitate an uplift in public transport movements between the city centre and Beachfront.
- A package of traffic signal alterations is proposed at key junctions on the King Street corridor.



Mapping highlighting Indicative Mitigation to the Transport Network

Beach Development Framework - Mitigation

- Proposed Bus Gate
- Proposed Traffic Signal Alteration
- Proposed Junction Upgrade for Active Travel
- Proposed New Junction
- Development Area
- Bridge of Don Park & Ride
- Access Restriction

The interventions, which are summarised in the image above, should be delivered in a manner which balances increased rates of active travel and public transport use with ongoing access to local residential and commercial land uses, including the beachfront retail park.

6.3.5 PARKING STRATEGY

The adjoining figure summarises the Development Framework parking strategy with key aspects summarised below.

- While the Framework vision promotes active travel and public transport modes over general traffic, a limited and managed supply of public car parking will be incorporated around the periphery of the urban park. These spaces will be allocated for use by users with reduced mobility, reducing the distance they must travel to enjoy the park environment. Signage and enforcement strategies will be developed to prevent misuse.
- Electric vehicle charging points and potentially a car-charging hub will be incorporated within the development area, contributing towards local and national carbon reduction targets.
- City car club bays will be incorporated at strategic positions throughout the development area.
- Public parking will be retained on the Esplanade north and south of the central Beachfront area. These will include disabled and general public spaces, with disabled bays located closest to the urban park. While parking bays are already present on the southern part of the Esplanade, they are not subject to any charges. To the north, while the kerbside capacity is used for parking, no bays are defined and there are no restrictions or charges in place. The proposals will add legibility to parking on the Esplanade, with suitable parking restrictions being introduced to manage demand.
- Some vehicles will be permitted to pickup and drop-off in the public realm area outside the Beach Ballroom and along the frontage of the leisure and stadium buildings. These movements would only occur under limited and managed circumstances, with suitable access control mechanisms being employed to prevent misuse.
- Taxi and private hire vehicle bays will be sensibly placed throughout the Development Framework area, contributing to overall site accessibility and helping to reduce the number of private car trips made to the area.
- Defined areas for coach parking will be identified, supporting group travel associated with the facilities and events within the development area.
- Parking which is associated with the stadium and leisure arena will be subject to travel planning and management strategies specific to those facilities, with the expectation that they promote themselves as largely car free attractions.



Mapping highlighting Indicative Parking Access Strategy

Beach Development Framework - Parking Strategy

- Indicative Parking Location
- Primary Traffic Access Route

6.3.6 SITE SERVICING STRATEGY

Delivery and servicing functions associated with the Development Framework area will be fulfilled according to the following outline strategy.

- A park management strategy would be developed, setting out the parameters within which goods and servicing movements may take place.
- In line with activities in the city centre, there will be a general expectation that delivery and servicing functions are fulfilled outside of core opening hours; either early in the morning or in the twilight hours.
- A signing strategy will direct vehicles accessing the wider park area to approach via Beach Boulevard, with access restrictions preventing larger vehicles from using adjoining residential streets.
- Some larger vehicles will be required on site infrequently to facilitate event set-up and removal. During these periods, it is likely that access will be required to parts of the park which are subject to vehicle access restrictions. Such activities will only take place under managed circumstances.
- Innovative on-site waste storage solutions should be sought to minimise the number of vehicle movements which take place throughout the day. Where activities are permitted during daylight hours, they would only occur under managed circumstances.



Mapping highlighting Indicative Delivery and Servicing Strategy

Beach Development Framework - Delivery and Servicing Strategy

- Suggested Access Route
- - - Time Controlled Access under Managed Circumstances

6.3.7 FUTURE TRAVEL DEMANDS

The Development Framework proposals seeks to rejuvenate Aberdeen beachfront through a combination of new development and high-quality public spaces, with enhanced links to the city centre and adjoining catchments. From a transportation perspective, the vision is underpinned by an objective to grow rates of pedestrian, cycle and public transport activity while reducing rates of car use, consistent with local and national policy.

Formation of the urban park will require the closure of Beach Boulevard between Links Road and the Esplanade, and the removal of traffic from the central sections of the Esplanade. Local and area-wide traffic implications of this change to the local road network have been evaluated in a traffic model, the key outcomes of which are summarised in Section 6.3.8.

The framework is informed by a high-level forecast of the trip making characteristics of new and redeveloped buildings at the beachfront. These forecasts consider the absolute number of people who might visit the beachfront, with the expectation that individuals' travel choices will be influenced through the incorporation of well-designed, high-quality transport links and facilities and the adoption of innovative strategies. Central to the success of the framework is the requirement to maximise rates of pedestrian, cycle and public transport activity.

Car use in Aberdeen typically accounts for 63% of all trip-making (53% car driver and 10% car passenger) and data reveals that of all employment trips in the Hanover South ward, which includes the Beachfront, 72% are car-based. While it is important to acknowledge that mode split varies according to location, land-use category and trip purpose, it is clear that the successful implementation of the Development Framework vision depends on a material reduction in rates of car use. The beachfront strategy recognises that the perpetuation of present-day travel patterns is not sustainable and would prevent the delivery of upgrades to pedestrian, cycle and bus facilities.

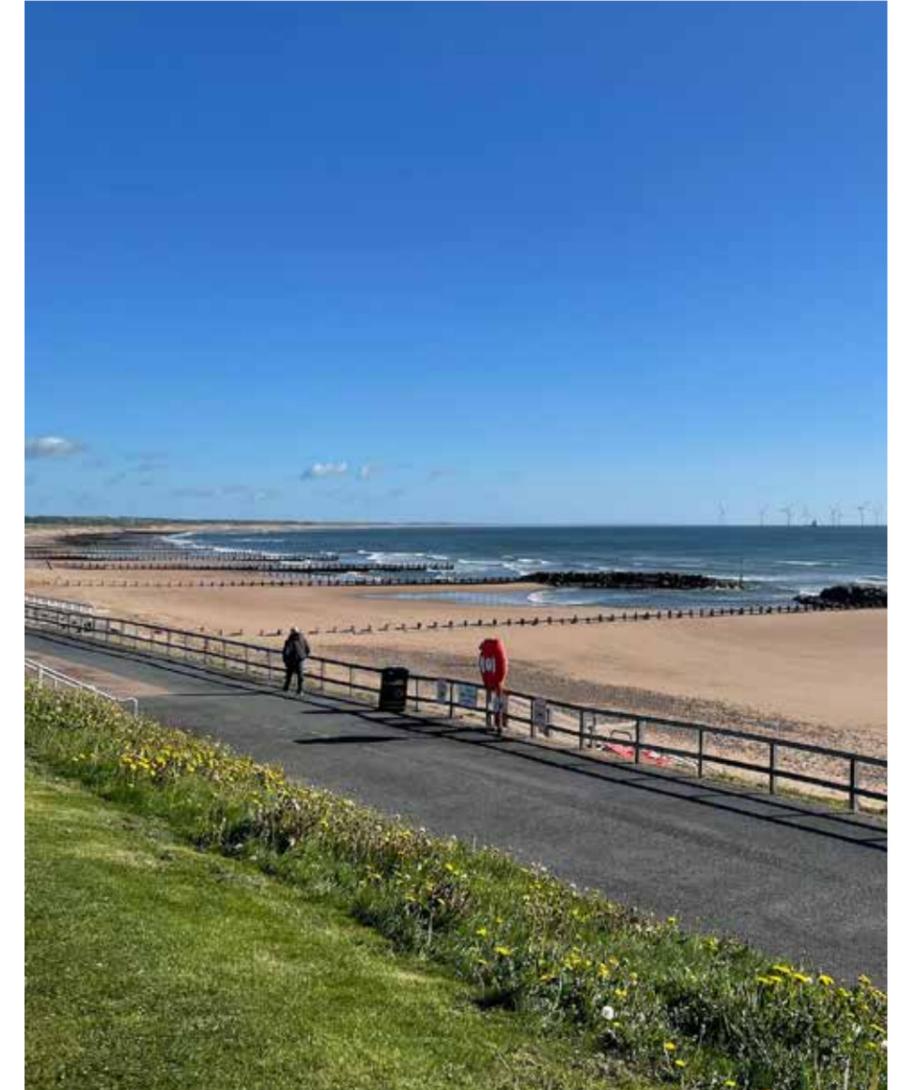
While the framework seeks to reduce rates of car use, it acknowledges the importance of equity and accessibility. The masterplan therefore proposes a balanced approach to car use and access, with parking provision designed and managed in a way that prioritises disabled access.



Aberdeen Hydrogen Powered First Bus



Electric Vehicle Charging Points



Promoting Pedestrian Movement

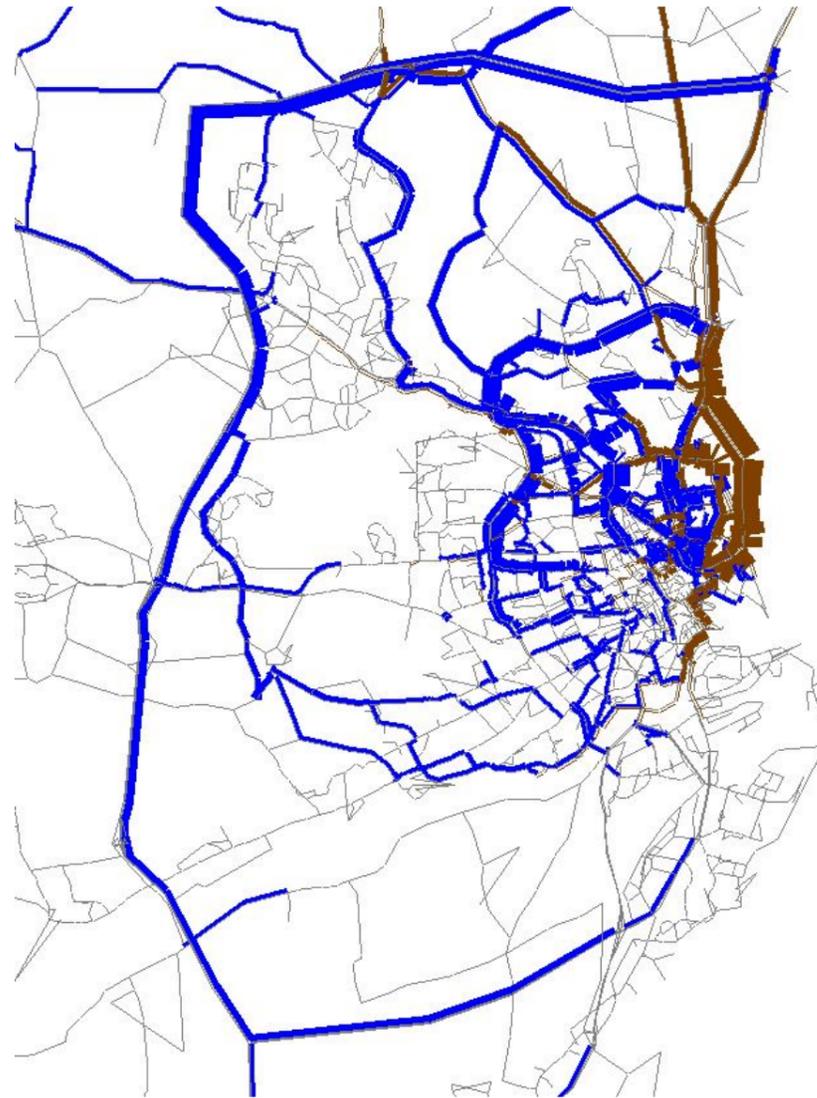


Cycling in Aberdeen (Image courtesy of The Press and Journal)

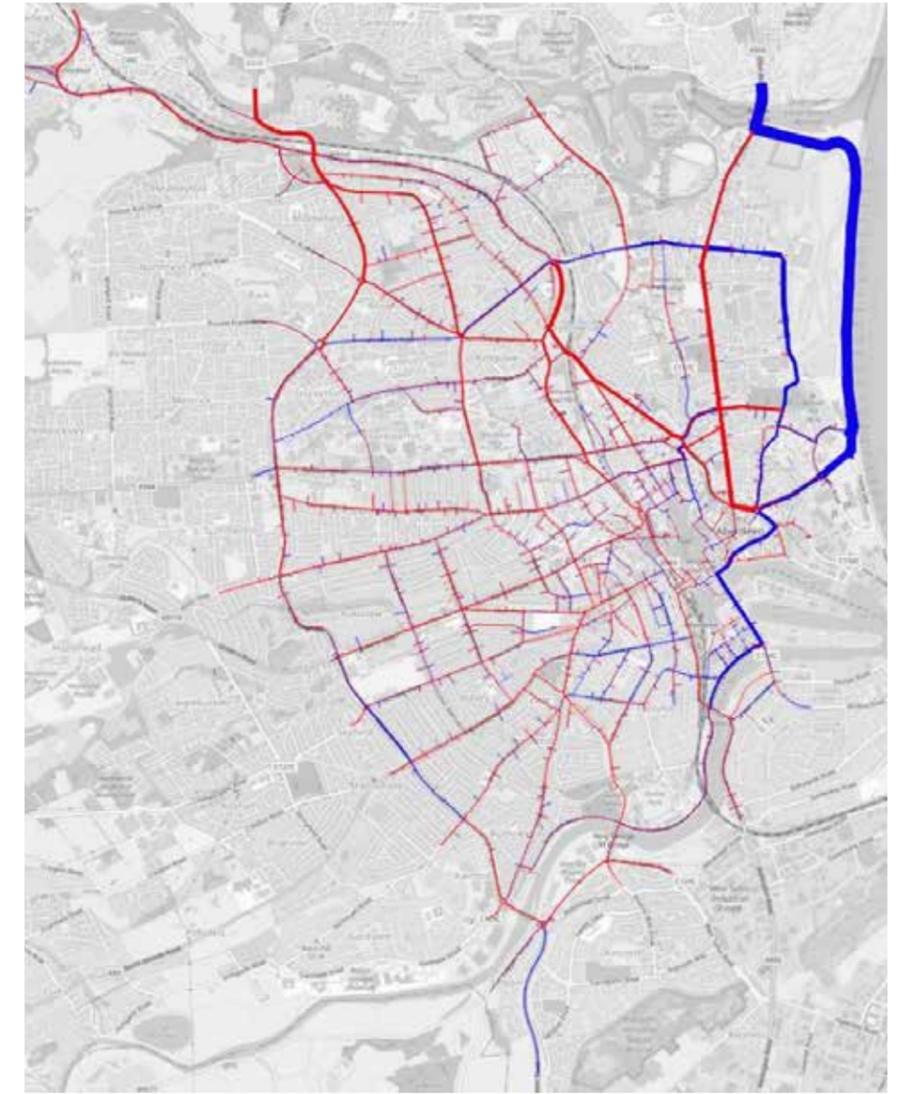
6.3.8 TRAFFIC MODELLING OUTCOMES

Outputs from ASAM strategic modelling and Paramics microsimulation are presented in the left and right of the adjacent figure, respectively.

The outputs demonstrate that through a combination of suggested Beachfront interventions and separate measures being progressed by the Council, reductions in traffic flow can be anticipated in the vicinity of the Beachfront study area. As vehicles respond to changes to the local road network, they are shown to reassign over a more strategic distance, with increases in traffic flow anticipated on corridors to the west, namely Anderson Drive and the Aberdeen Western Peripheral Route (AWPR).



ASAM Strategic Modelling



Paramics Microsimulation

Beach Development Framework - ASAM Strategic Modelling

-  Increase in Flow
-  Decrease in Flow

Beach Development Framework - Paramics Microsimulation

-  Increase in Flow
-  Decrease in Flow

6.5 LANDSCAPE, ECOLOGY, NATURE & CONSERVATION

We are living in a time where public awareness of our natural environment is heightened like never before. Climate change is a very real threat to our planet. Around the world this is no more acute than in our coastal regions.

Aberdeen needs to lead by example.

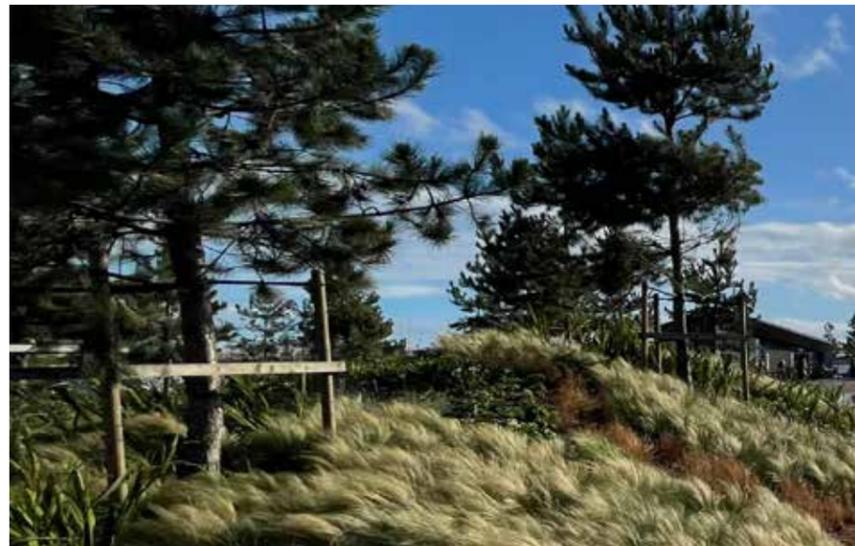
The design of the overall Beachfront Development Framework looks to harness the natural environment and enhance it. The aim of this is multiple and interlinked just like nature itself. Firstly, we need to work with coastal influence in a more harmonious way, using natural systems to protect the beach area while allowing people to enjoy the unique environment.

Secondly, we need to create shelter and develop micro-climates that not only offer usable spaces but create conditions for a more naturally diverse landscape, allowing new species to colonise and enhance biodiversity. Shelter and adaptive microclimates can be formed by natural topography and landform (much like Broad Hill does now), and by creating the right conditions for tree planting and in particular afforestation by pioneer species. As a whole for the betterment of our environment we need to plant more trees. The images opposite highlight aspirational planting which could help create this micro-climate. With enhanced landscape and increased biodiversity, we can start to respond to one of the toughest challenges we have in connection to our cities and development and that is flooding and drainage. With the 'working with nature' approach we can truly integrate sustainable drainage systems that become part of the landscape. 'Working with nature' will showcase the Beachfront concept masterplan as a working example of how to work harmoniously with our environment.

Proposals will be developed in partnership/consultation with Aberdeen City Council Operations, Coastal and Flooding teams.



View from Aberdeen Beach towards North Sea



Tree planting



Wildflower planting



Planting for pollinators



Photograph by Göran Ekeberg, Addlight AB.
(Image courtesy of Karavan landskapsarkiter)



Sustainable drainage

6.6 PROPOSED CHARACTER AREAS

As identified earlier in Section 6.0, the proposed reconfiguration of the Development Framework area has resulted in a reorganisation of the open space provision within the masterplan area, reflecting the new priority of uses both in terms of open space and built. This has resulted in the definition of a new series of distinct character areas across the Development Framework area which reflect a variety of anticipated approaches and identities. These will be progressed and refined at subsequent masterplan phases. The following character areas have been established:

1. Beach Ballroom
 2. Events Park + Field
 3. Core Play Park
 4. The Beach and Esplanade
 5. Beach Boulevard
 6. Broad Hill
 7. Potential Stadium and Leisure
 8. Beach Village
- } Queens Links Urban Park

Each character area is set out in the following sub sections, in order to describe the key attributes of each in terms of design principles and approaches giving definition to the spaces whilst retaining flexibility to allow for the brief of each area to evolve with any future refinement or adaptation of the Development Framework document.

Through this refinement of the character areas, it is important to acknowledge that the overall Development Framework area has an overriding aim of being cohesive and a joined-up piece of urban and landscape design delivering an identifiable and exciting new place of the city of Aberdeen and the wider region.



Proposed Character Areas



6.7 BEACH BALLROOM CHARACTER AREA

The Beach Ballroom is to be considered as a primary focal point in the new Development Framework proposals, due to its central position and its cultural significance.

6.7.1 BEACH BALLROOM CONCEPT

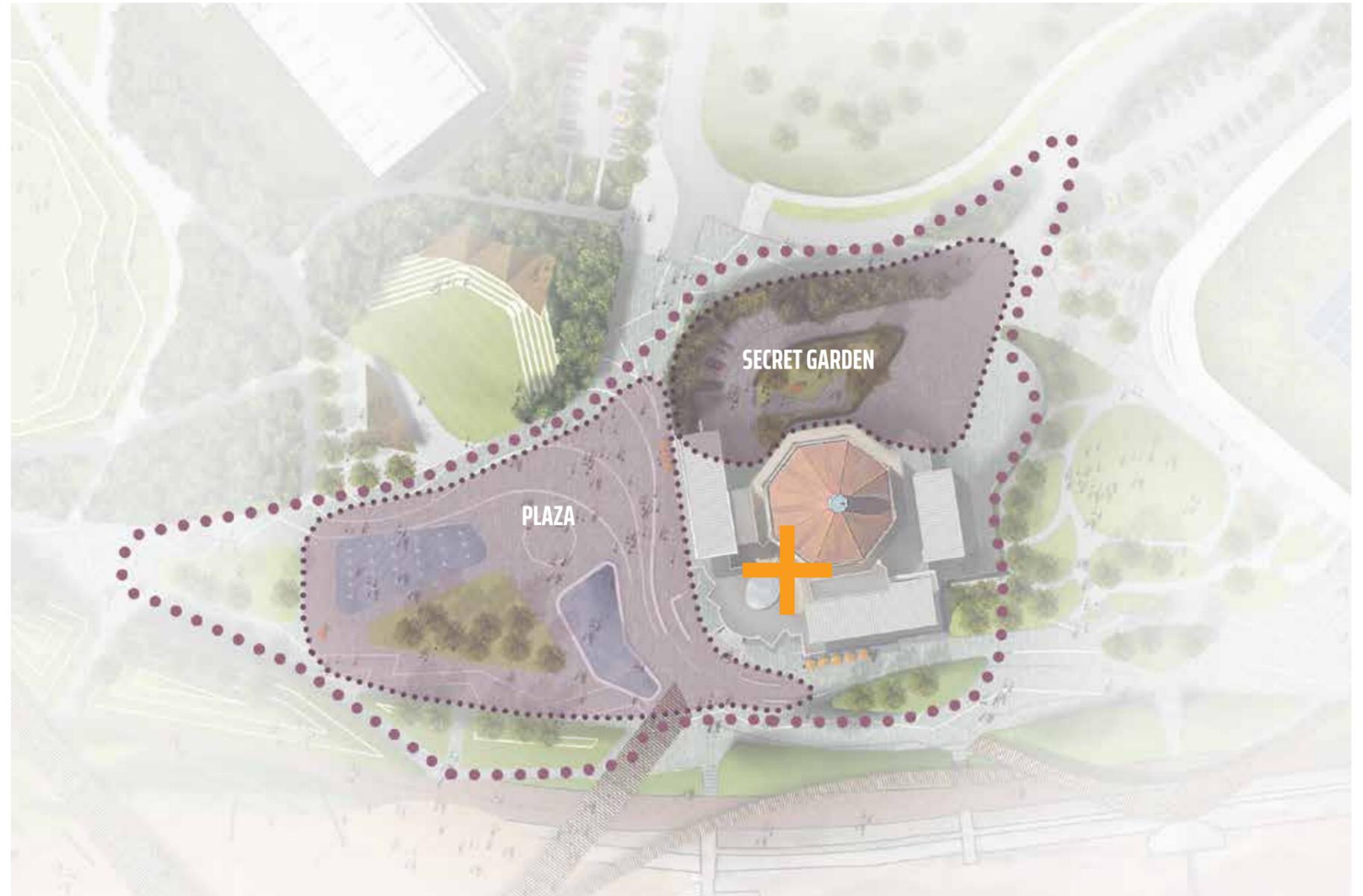
In addition to the renovation and reworking of the ballroom, there is the potential to create improved public spaces in the immediate vicinity, for example:

- A potential plaza space with water features forming a grand setting for the building and ensuring the buildings prominence on the main pedestrianised route through the site from Beach Boulevard to Esplanade.
- A potential sunken garden area to the rear of the ballroom which would provide a dedicated external space for use by the ballroom and serve to link the wider public space between the ballroom and a potential leisure facility adjacent.

Any opportunity for the regenerating the Beach Ballroom and its environs would respect the heritage and memories to ensure it can continue to contribute to the lives of those who visit it.

Several site visits to the existing building including conversations with operation staff to understand the day-to-day requirements and mechanics of the ballroom have already been undertaken to inform the evolving design. Concurrently, the design would respond to business case studies which would allow the Beach Ballroom to become a self-sustainable, flexible and revenue positive component of the wider beach front area.

It should be noted that statutory approvals and discussions with relevant authorities, consultees and stakeholders have not yet been completed and these will contribute to the design direction moving forward. As part of any future planning applications, a heritage statement will be prepared to support the planning and Listed Building Consent submissions.



Concept Plan - Beach Ballroom

+ POTENTIAL ARCHITECTURAL INTERVENTIONS



Plaza



Ballroom



Secret Garden



6.7.2 BEACH BALLROOM PROPOSED WORKS

The proposed renovation and extension of the B-listed Beach Ballroom will seek to respect the heritage and memories defined by this iconic space to ensure to can continue to contribute to the lives of those who visit it. Those historic aspects of the interior and exterior of the building will be retained and revitalised through an extensive programme of renovation. As part of this renovation, an interior design strategy which promotes the buildings Art Deco heritage will bring a sense of grandeur back to the property. Potential new extensions to the building will be considerate and of an appropriate scale and style to compliment the Ballroom.



Spanish City, Whitley Bay - Precedent Image



Chrysler Motors Building, Chicago - Precedent Image



Spanish City, Whitley Bay - Precedent Image



The Reel House, Glasgow - Precedent Image

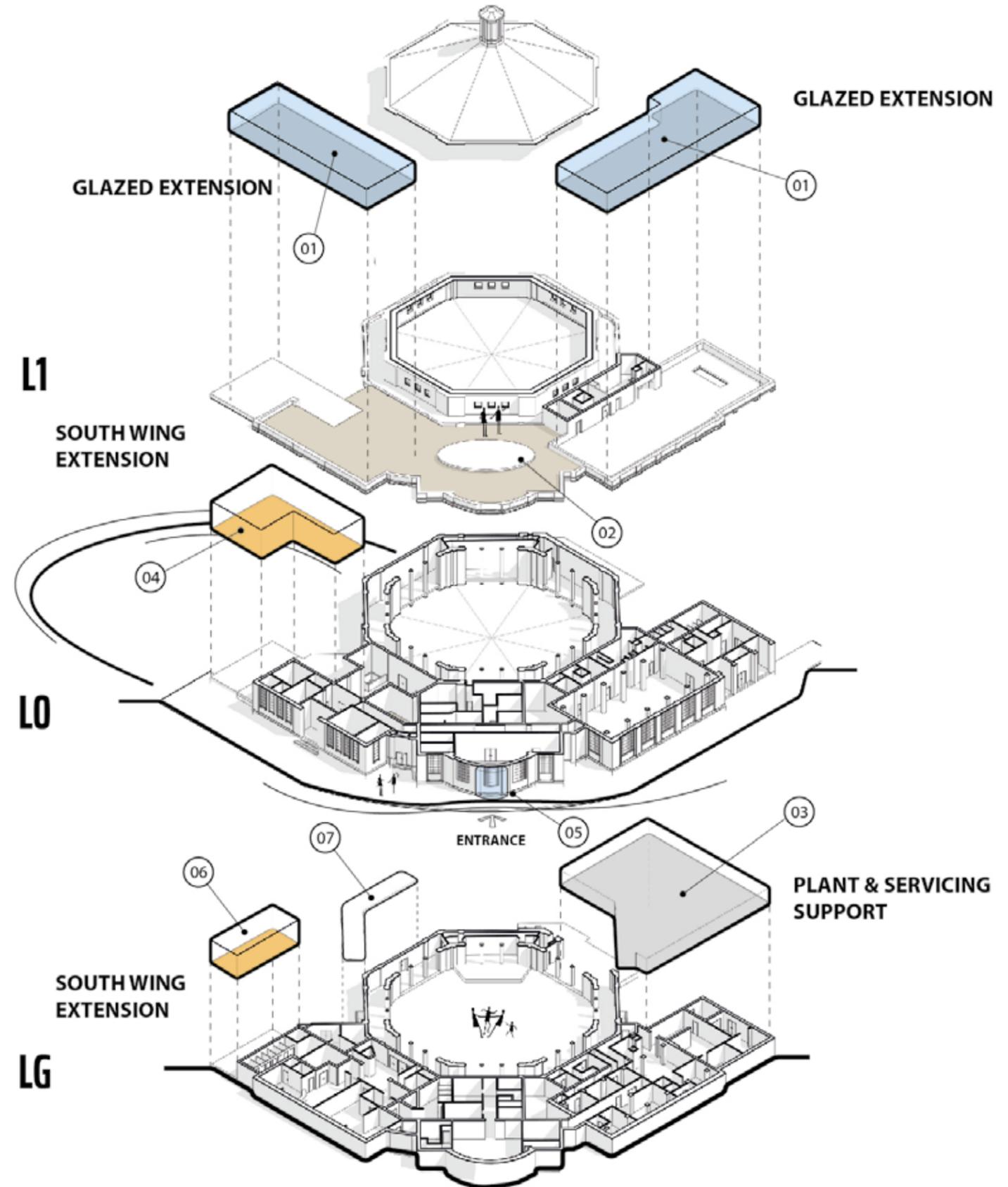


Architecture and materiality precedents

6.7.2 BEACH BALLROOM PROPOSED WORKS

The Design Team have suggested a number of potential improvements/ study areas for the Beach Ballroom that will be explored in more detail moving forward:

- Celebration of Entrance - creating a grand setting for the building with a real sense of arrival and enhanced public realm
- Improve accessibility / wheelchair access and install lift core
- Upgrade & restoration of external impressive Art Deco façade
- Dome restoration / expose and enhance original feature ceiling
- Improved viewing gallery & enhanced hospitality offer (VIP / Premium seating)
- Utilise external balcony / roof areas to create bar / terrace taking advantage of spectacular views of Aberdeen Beach
- Potential for external break-out space, creating more intimate / sheltered private external space (Secret Garden)
- External feature lighting opportunities to showcase unique Art Deco architectural features on building façade
- Potential to remove star ballroom extension and replace with more complementary and lighter roof extensions



Key

1. Glass Box' extension with lift access, dedicated stores and toilet facilities
2. Shared external terrace with skylight
3. Connecting support accommodation (LG)
4. Extension to existing south wing (L0)
5. Ramped accessible entrance to 'glass portal' entrance
6. Extension to existing south wing (LG)
7. Lightweight cantilevered canopy structure

6.7.2 BEACH BALLROOM PROPOSED WORKS

The below images provide design inspiration for the Beach Ballroom and are indicative only.



Ballroom approach along beachfront



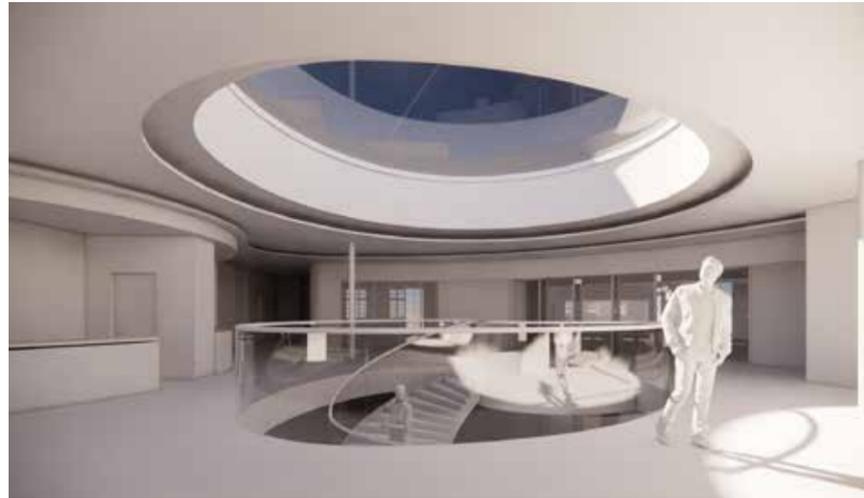
View towards new main entrance



Entering the Ballroom



First impression of new central foyer



Circumnavigating the public reception area



Descending down the spiral staircase towards the Soda Bar



Soda Bar looking towards the ballroom floor entrance



Approaching the ballroom floor



The renovated dome ceiling of the main ballroom

6.7.3 BEACH BALLROOM - PLAZA

The Beach Ballroom Plaza will create a grand setting for the building. The main circulation routes of the site pass either side of the space ensuring that pedestrian movement to the Stadium on match days is accounted for and that the Beach Ballroom is a key landmark and part of this journey.

The plaza space will not only frame the setting of the Beach Ballroom, the space itself will be defined to the east by earth mounding, integrating soft landscape while providing a sheltering interface to the beach and onshore winds. To the west it will be partly defined by the location of the amphitheatre and integrated woodland planting and other soft landscape opportunities. This integration of soft landscape within a civic plaza offers the opportunity to enhance biodiversity in this key area, while still providing a distinctive civic function. The inclusion of the water features will add an additional level of interest and setting, bringing sound and animation to the space, providing opportunities of play whilst enhancing the grandeur of the building.

Public realm materials will be of high quality, preferable natural, ensuring durability. Due to the highly public function of the building all the public realm will be designed to be level access and step free, with plenty of opportunities for seating and longer dwell time in the space. A more open hard space will be designed to the north and west as approaching from the foot of Broad Hill, allowing for controlled VIP drop off to the front of the building and to allow controlled VIP access through to the front of the stadium.



Concept Montage [All elements of detailed design and materials are indicative and for illustrative purposes only]



Plaza Conceptual Plan

6.7.4 BEACH BALLROOM SECRET GARDEN

The Secret Garden is a sunken formal space to the west side of the Beach Ballroom, between the building and Broad Hill. It carefully integrates accessible parking and centres on an enclosed garden area. This garden space could be utilised for outdoor drinks receptions or wedding photography, as well as providing a calm and sheltered setting to the accessible entrance at the lower ground level.

Although discreet and clearly part of the Beach Ballroom environs, the Secret Garden is part of the wider public space which links the Beach Ballroom to the proposed Leisure facility. The proposed landscape intervention works with the level differences to create an attractive southwest facing terrace, providing accessible pedestrian access to the Leisure facility.

The landscape itself will knit together with the materiality and colour strategies of the wider proposals to create a sense of drama and arrival. By its very nature, the soft landscape element of the garden will be dominant, providing a greener and more natural interface with the Beach Ballroom than the south facing civic plaza which sits up at Esplanade level. The soft and hard landscape materials will be of high quality, with the soft landscape being of suitable scale to create instant impact and allow appropriate related Beach Ballroom events from day one. The soft landscape also allows the potential to enhance the biodiversity in this part of the site, close to the diverse Broad Hill, enhancing green network connection to the wider Queens Links and Esplanade area.



The Secret Garden wraps around the existing Beach Ballroom



Outdoor extension of ballroom events



Outdoor extension of leisure facility

6.8 QUEENS LINKS URBAN PARK CHARACTER AREA

The heart of the open space provision within the Development Framework is focussed on the urban park, a central landscape space, approximately 5.5ha, designed to accommodate multiple uses. The Urban Park is composed of two main character areas, the Core Play, Park and the Events Park + Field, joined by the Pedestrian Spine (former Beach Boulevard east).

6.8.1 QUEENS LINKS URBAN PARK CONCEPT

A public park must be accessible for everyone, such is the egalitarian existence of true public spaces. The richness of the park will come in its form and uses. Play and games are an obvious part of this mix and creating the physical environment for this to flourish is key. The whole park should be seen as incorporating elements of play opportunity, with areas that are more focused and defined along with the more natural and incidental play integrated throughout the park. Potential insertions within the urban park space include:

- An external Amphitheatre with canopy located adjacent to the Beach Ballroom.
- A large events field capable of hosting events and day-to-day use.
- A gateway building located at entrance to Beachfront area giving sense of arrival.
- A hub building located at centre of site offering a place to engage and refresh.
- Canopy features offering shelter and seating across the site.
- Water features to bring drama and animation to spaces.

There are many other uses to be considered, and careful analysis of what is best is important as flexibility will be key in the evolution of a public park along with its functionality and flexibility to cater for yet unforeseen city uses.

The park must create a strong sense of place which becomes a destination within the city. It should be unique and special, respecting its coastal location. The park should be inclusive and with activities for all to use.

The design must consider micro-climate and the provision of shelter so that it can be used 365 days a year. It must also be comfortable and welcoming for different sizes of groups including individuals, families, small gatherings, and large events. A variety of scales of space will be required to meet these requirements.

Movement through the park, whether to reach the Beach, the Stadium or the Arcades must be a key consideration, ensuring that the park can cope with the movement of large groups of people. In designing these routes, desire lines must be catered for.



Concept Plan - Urban Park

-  **POTENTIAL ARCHITECTURAL INTERVENTIONS**
-  **KEY ARRIVAL POINTS**
-  **DROP OFF POINTS**



6.8.2 CORE PLAY PARK

The Core Play Park is approximately 2.5ha and sits between the Events Park + Field area and Codona's. Although this area has been termed the play and games zone it is not intended that opportunities for play will be constrained to this area of the site. The intention is that informal play opportunities will be present throughout the park. Equally the intention is that this area is a fully integrated part of the park landscape and is permeable and able to be explored as part of a visit to the park.

The Core Play Park will be enclosed to some degree by landform/ tree planting to help create a suitable micro-climate and provide a comfortable year-round space. Equally the aim has been to provide some shelter from the wind which is particularly important for games such as table tennis and volleyball. The landform in particular will be of such a scale to offer furthermore natural opportunities for play as well be a key component in spatial definition and character of the area.

A structure for the play and games zone has been developed which can accommodate a variety of play. At this point the content of the play parks is still being developed however approximate areas have been set aside for separate younger and older children's play areas. Recently undertaken consultation with children and young people is helping to inform this process and refine the types of play which should be included within these areas.

Other uses with a larger footprint have been included within the development of the plan to ensure space is allowed for these uses within the plan, these include a pump track/skate park, a basketball court and volleyball courts all of which were raised during youth engagement.

Other smaller uses have been indicated on the plan such as chess tables, table tennis tables etc. the final location of these elements is more flexible due to their smaller size.

The Core Play Park is a tremendous opportunity to create a significantly sized outdoor destination for the city in a unique context. The Core Play Park is part of the wider landscape masterplan that binds together many of the proposed and existing buildings and uses in the area, and importantly facilitates connections back to the city centre.

Furthermore, abundant elements of play and child/youth focussed spaces will assist to provide a public space worthy of Aberdeen's ambition to become a UNICEF Child Friendly City.



Concept Plan - Play Park



6.8.2.1 CORE PLAY PARK - ASPIRATION

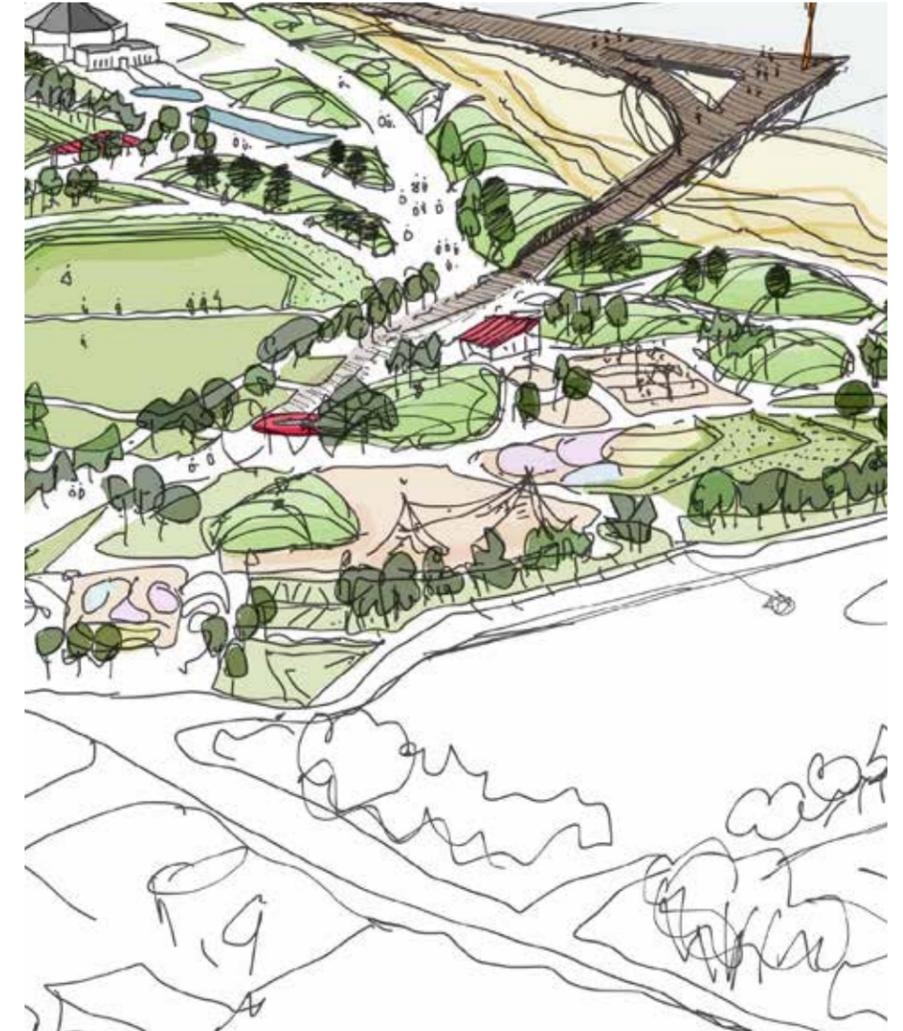
The below images provide visual inspiration for the Core Play Park and are indicative only.



Slide down landscape mounding features



Play and Games Space (Photo courtesy of Karavan landskapsarkiter)



Sketch aerial of Core Play Park



Play and Games Space (Photo courtesy of Karavan landskapsarkiter)



Architectural Interventions



Play and Games Space (Photo courtesy of Karavan landskapsarkiter)



Pump Track

6.8.3 EVENTS PARK & FIELD

The Events Park + Field is an area of approximately 2.5ha and has been designed as a flexible space capable of holding events, festivals, larger concerts etc. but also to provide a large, grassed area for day-to-day use including informal sports and games such as football, touch rugby, ultimate frisbee, and passive recreation such as picnicking.

It is currently bordered to the west by adjacent land uses that effectively turn their back on the area. It is proposed that this interface is further reinforced by additional mounding and tree planting, creating a strong green, ecologically rich edge to the overall Events Park + Field, enhancing the green network opportunities from Broad Hill further in and around the overall site. Between the two adjacent land uses an enhanced pedestrian connection to the residential Urquhart Road should be facilitated, allowing an entrance into the middle of the wider events area, giving a visual envelope focused on the east and the wider core park. This gives a backdrop of trees and landform, focussing attention away from adjacent land uses and out into a wider events and performance area.

The wider Events Park + Field will not only include large grass areas (both amenity and wildflower), but also utilise natural landform in the location of the existing play area, where the landform lends itself to an amphitheatre type setting where smaller more intimate events/concert, theatre and outdoor cinema could occur. Its location closer to the Beach Ballroom offers opportunity for co-joined activities. The amphitheatre creates the opportunity to embed localised accessible toilet facilities adjacent to the accessible parking on the West part of the site into its mounding.

Taking advantage of the existing site topography/ levels, the location for the Amphitheatre naturally shields the adjacent buildings to the West, whilst the orientation of this space provides natural screening and acoustic benefits which can be enhanced with strategic planting to provide an additional level of privacy to the space.

Although the overall Events Park and Field covers 2.5ha, additional space is also provided by the adjacent hard landscaped public spaces, such as the repurposed Beach Boulevard forming a new Pedestrian Spine and Esplanade sections, which provide high quality natural based materials, making them suitable for more intensive 'street' and civic type uses both independently and in support of any programmed events with the Park + Field.



Concept Plan - Events Park & Field



6.8.3.1 EVENTS PARK & FIELD - ASPIRATION

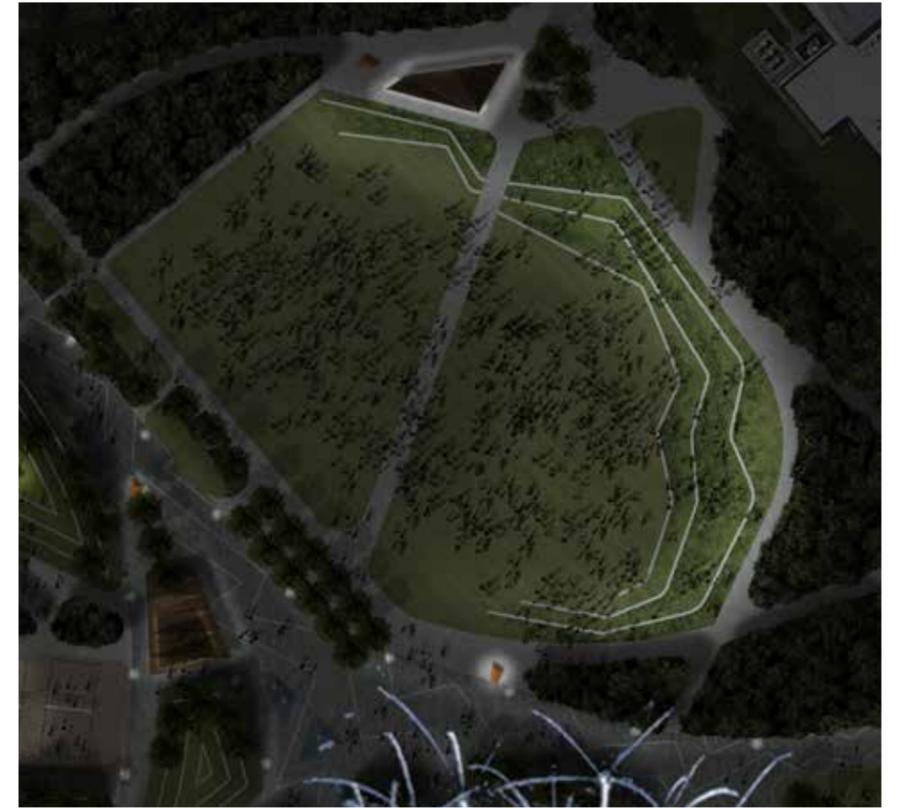
The below images provide visual inspiration for the Events Park & Field and are indicative only.



Concept events plan: Festival



Concept events plan: Market



Concept events plan: Fireworks



6.8.4 GATEWAY BUILDING

The Gateway Building, positioned at the foot of Beach Boulevard, would act as a landmark to signal arrival from the city to the Beachfront. A flexible building footprint acts as a base from which an angular canopy structure would span across the main pedestrian route from Beach Boulevard into the heart of the Beachfront proposals. The building and canopy form will increase the visibility of the Beachfront from Beach Boulevard and will draw people down towards the new waterfront destination from the City Centre approach.

The building footprint within the gateway would be formed from a lightweight glass façade and will provide space for a reception and information point which will provide users with information and wayfinding throughout the site. Additionally, accessible toilet / changing facilities will be housed within the proposed structure.

The canopy structure would be similar in construction to the amphitheatre, being formed from a robust structural system and lightweight cladding finish.

The building form would be single storey with the gateway canopy arching above the pedestrian route to between one and two storeys. This increased height of the gateway canopy would be sized to allow for potential vehicular access for HGVs, emergency vehicles, and vehicles associated with maintenance and the organisation of potential events.

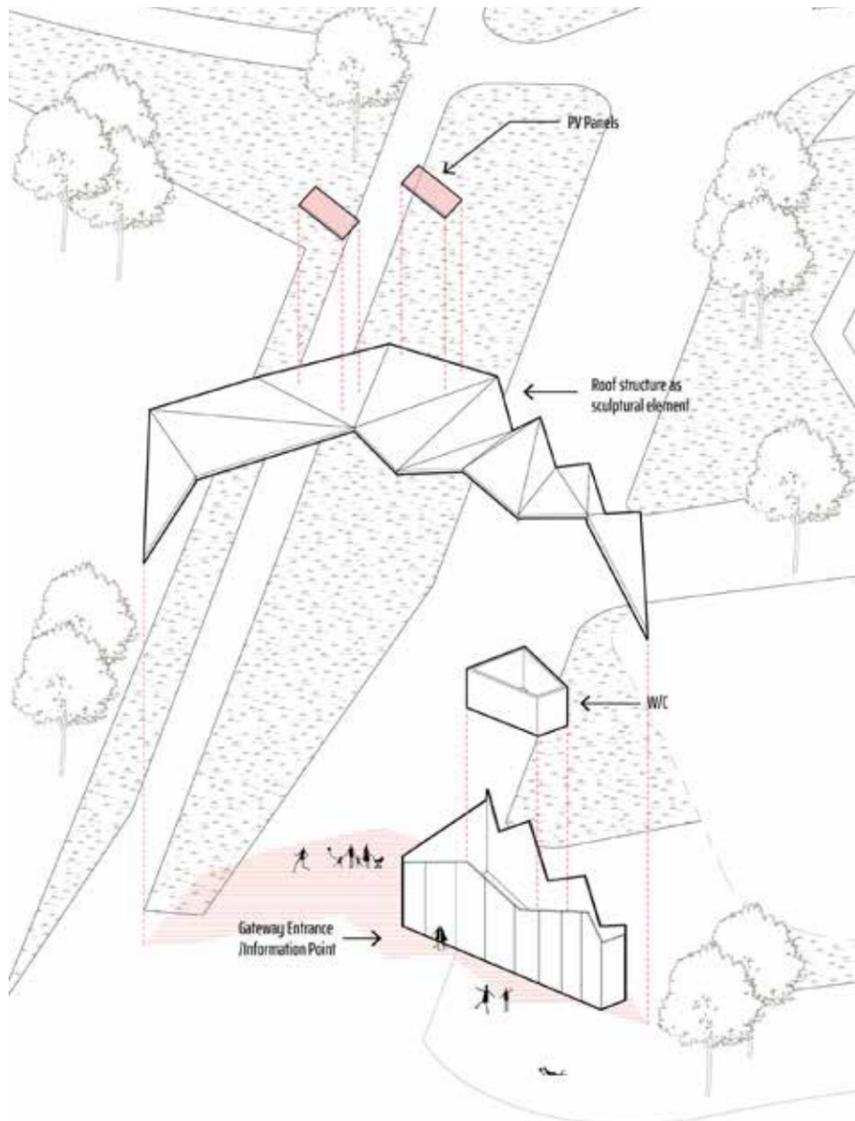
The Gateway proposal also offers the opportunity to explore more sculptural building elements, feature lighting and opportunities for public art within the design, adding the wow factor upon arrival to the Beachfront.



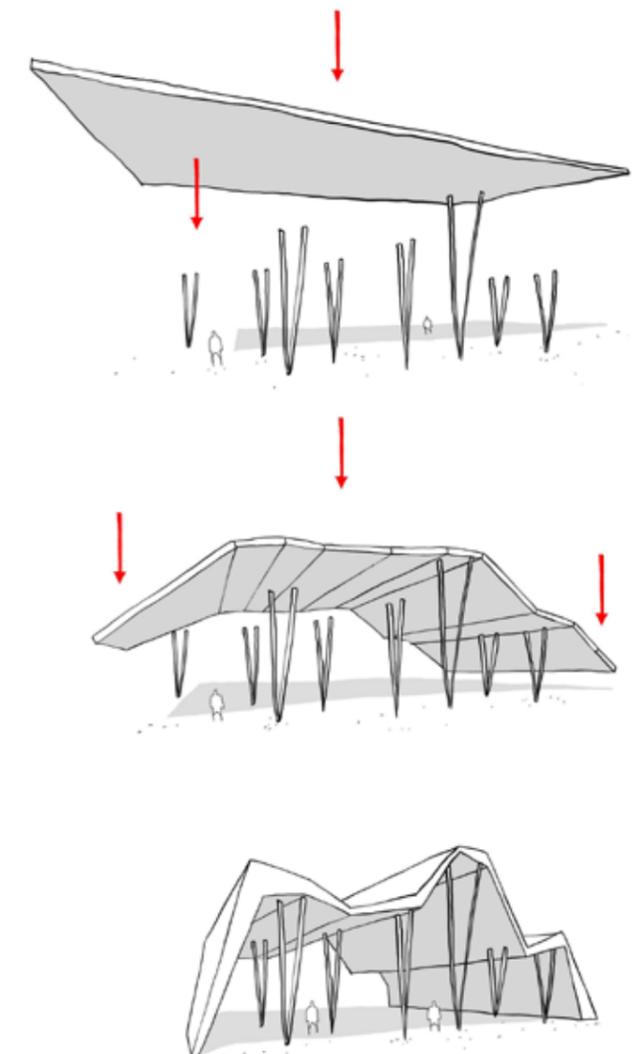
Key Plan



Concept 3D View



Concept Isometric View



Concept Diagram

6.8.4.1 GATEWAY BUILDING

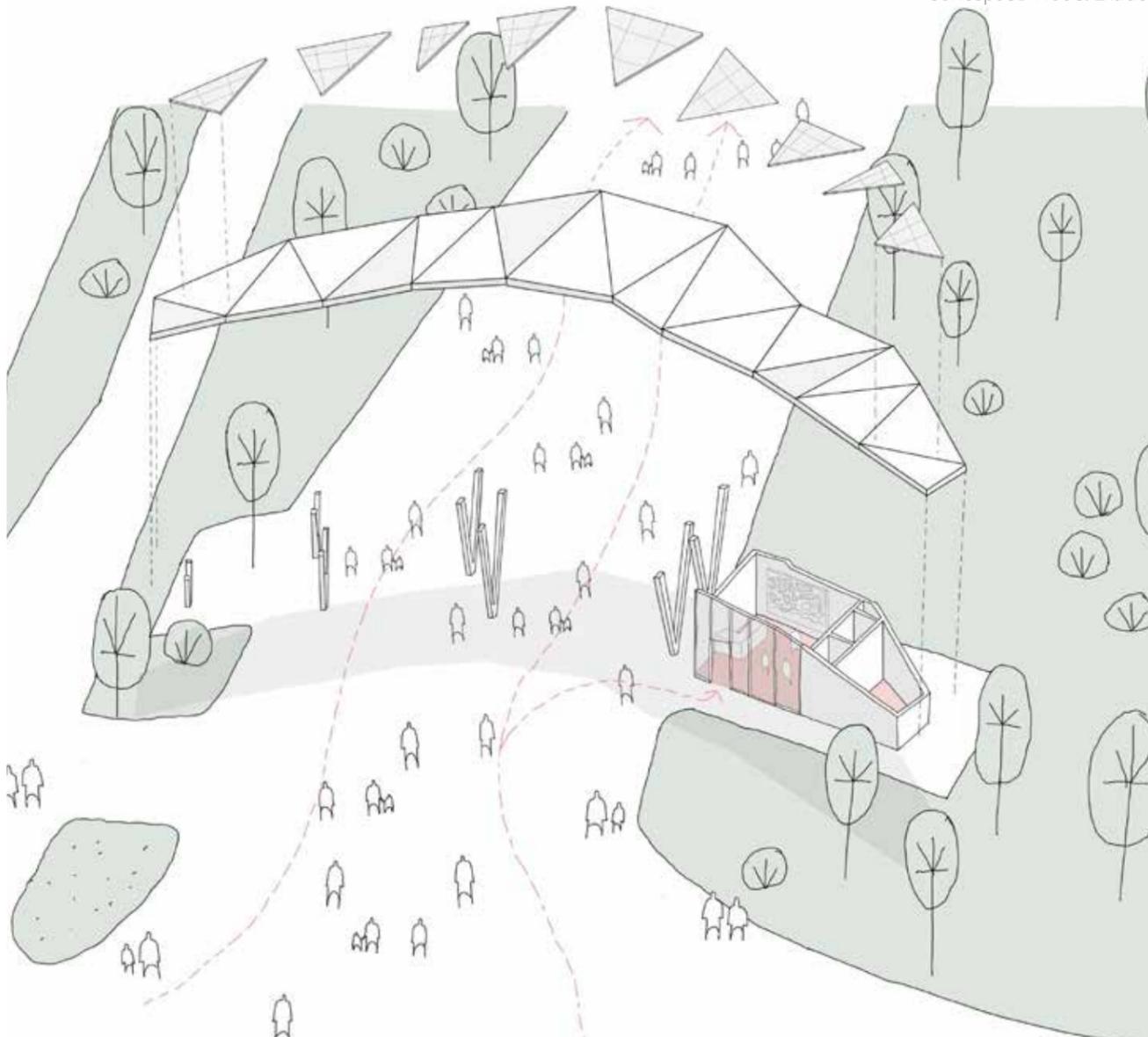
The below images provide visual inspiration for the Gateway Building and are indicative only.



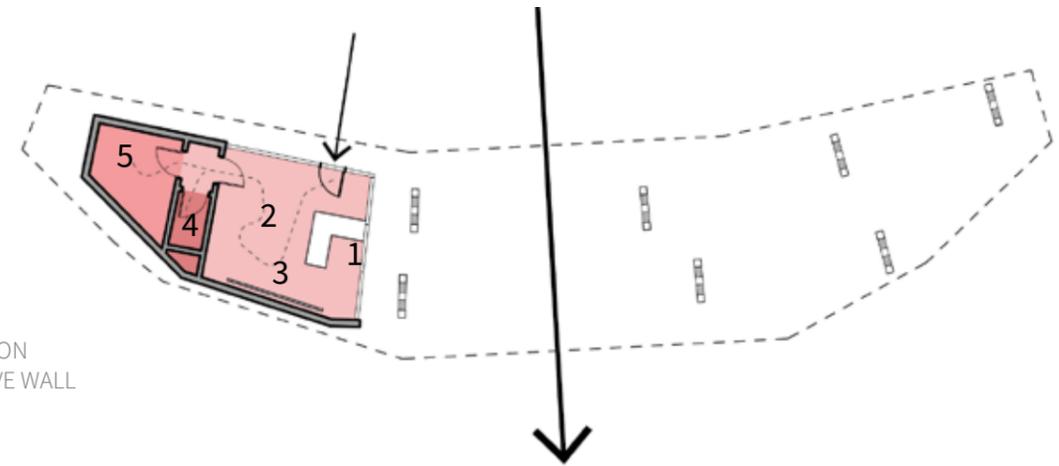
Concept 3D Model Extract



Precedent Imagery

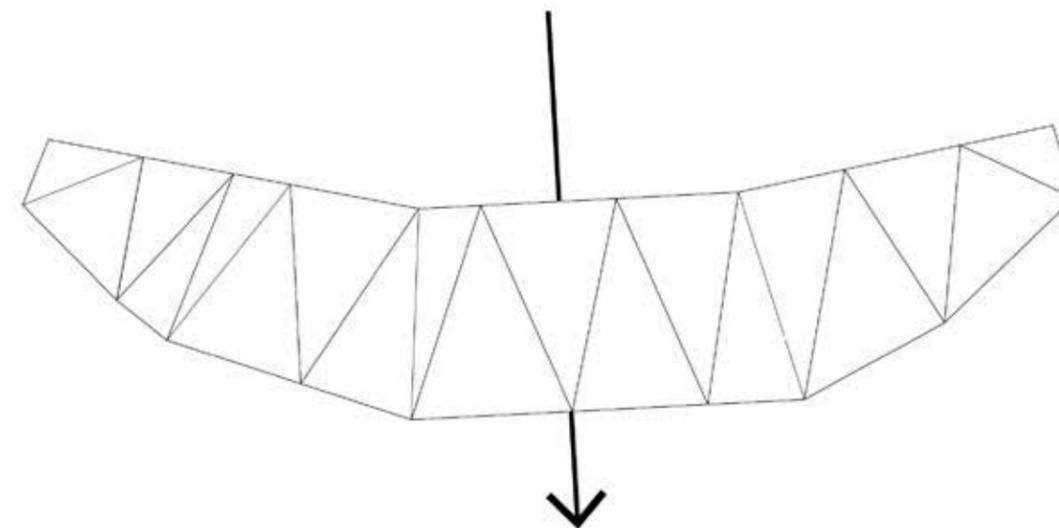


Isometric Sketch View



- 1 - RECEPTION
- 2 - INFORMATION
- 3 - INTERACTIVE WALL
- 4 - WC
- 5 - CPT

Plan Diagram



Roof Diagram

6.8.5 HUB BUILDING

The Hub Building, positioned centrally within the Beachfront proposals, will create a focal point at the heart of the new Urban Park. The positioning of the building at a key nodal point on the main pedestrian route from Beach Boulevard, will capitalise on footfall from visitors to the site heading through the revived landscape.

The primary purpose of the Hub Building is a place to meet, therefore a coffee shop is proposed to be incorporated. The flexible footprint of the building could also support a variety of community and social uses for the local community. Additionally, toilets and changing facilities would be provided including centrally located accessible facilities.

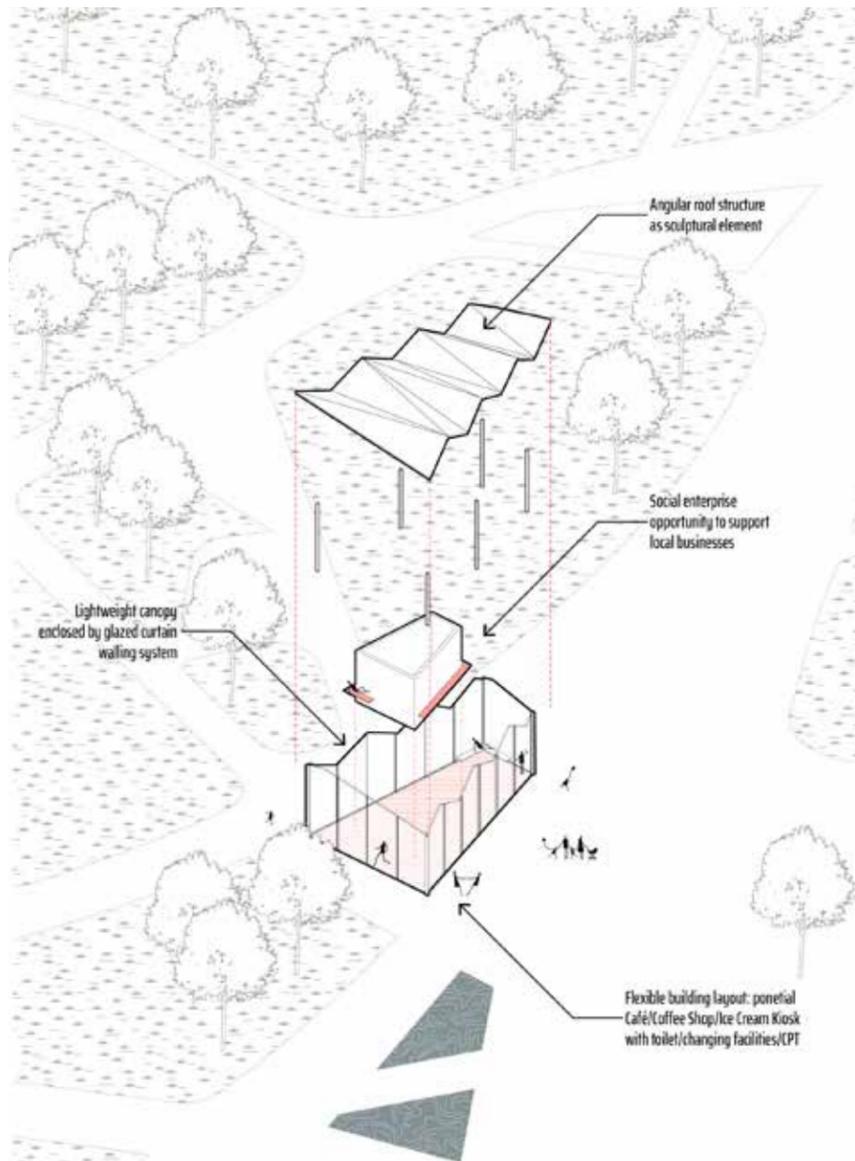
The building, single storey in height, utilises an angular roof structure positioned atop a lightweight partially glazed box. The angular roof provides visual interest to the building whilst referencing the geometric forms used within the other architectural interventions such as the Amphitheatre and Gateway Building. The roof form projects past the line of the external walls to also serve to provide shelter and active frontage areas around the building footprint. The floor to ceiling glazed elevations enables views out from the building into the park and surrounding public realm to connect inside and outside. Secondary elevations would be clad in locally sourced timber which would be treated to be suitable for a coastal/marine environment.



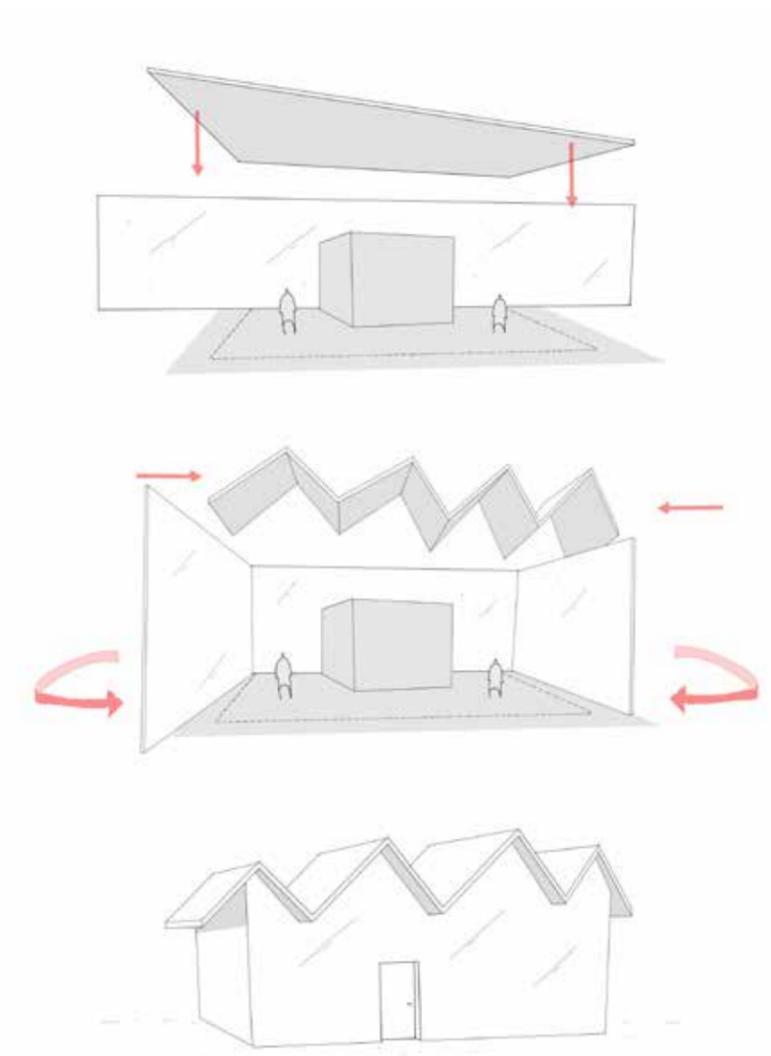
Key Plan



Concept 3D View



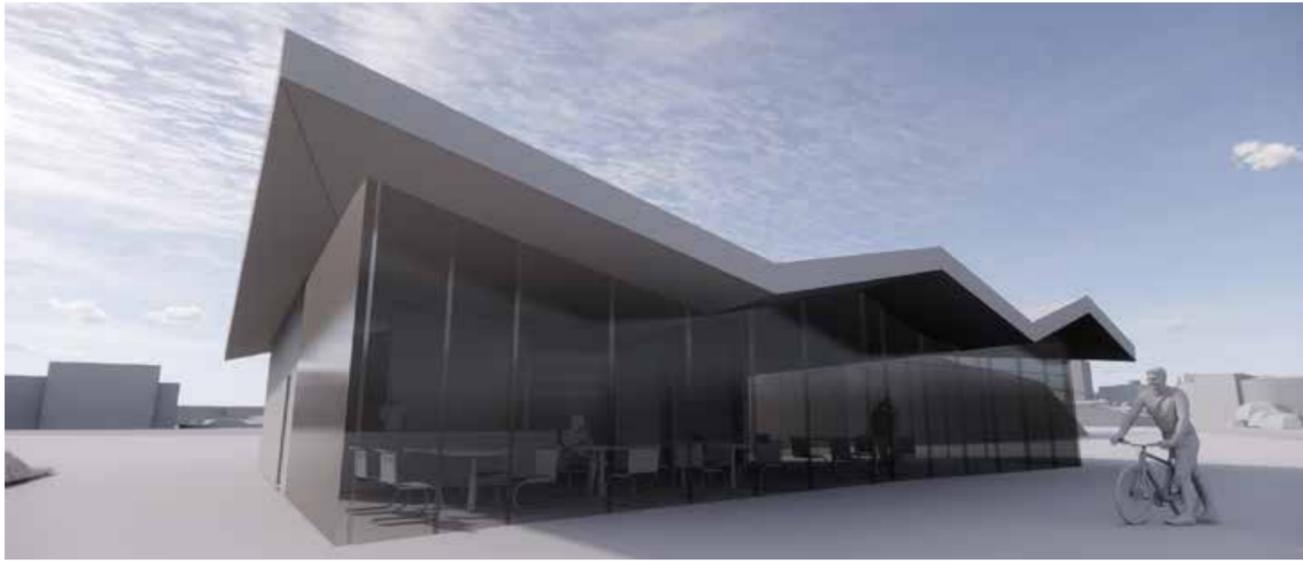
Concept Isometric View



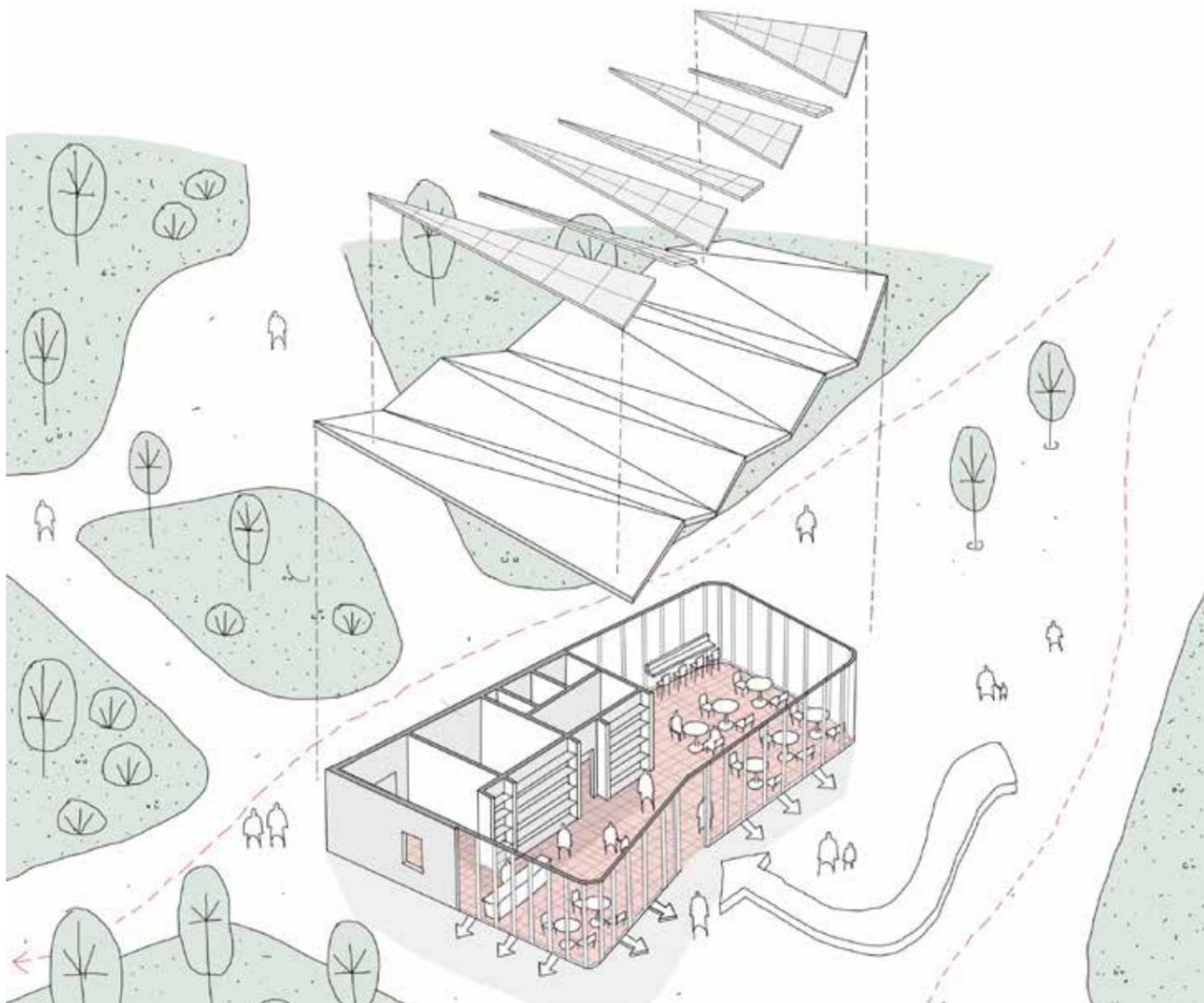
Concept Diagram

6.8.5.1 HUB BUILDING

The below images provide visual inspiration for the Hub Building and are indicative only.

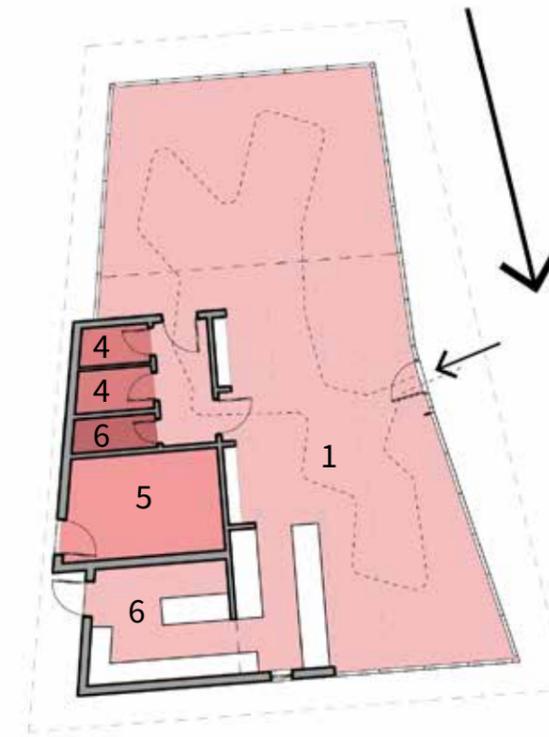


Concept 3D Model Extracts

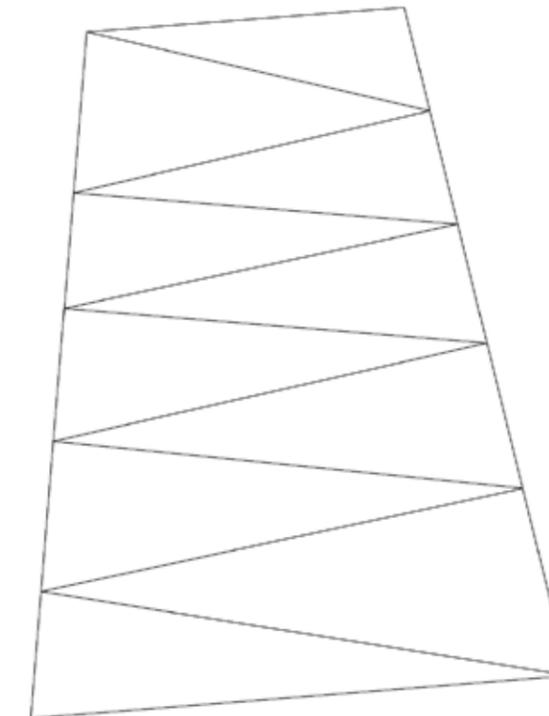


Isometric Sketch View

- 1 - CAFE
- 2 - FLEXIBLE SPACE
- 3 - BOH
- 4 - WC
- 5 - CPT
- 6 - STORE



Plan Diagram



Roof Diagram

6.8.6 LIGHTWEIGHT CANOPY STRUCTURES

Several canopy structures, approximately 4m in height, are proposed at key nodal points within the Urban Park to aid orientation on the Beachfront journey. The angular roof structures proposed will provide shelter from the elements and seating areas for rest and reflection.

A variety of seating, including back and arm rests will be provided, as well as accessible spaces for wheelchair users. These flexible structures offer opportunity for social/meeting points, picnic areas, recycling points, individual seating, and quiet areas.

Feature structural columns are proposed as sculptural elements, supporting an angular roof form with opportunities for integrated PV panels to provide solar energy to potentially illuminate the public realm areas, with feature up-lighting of the canopy forms.

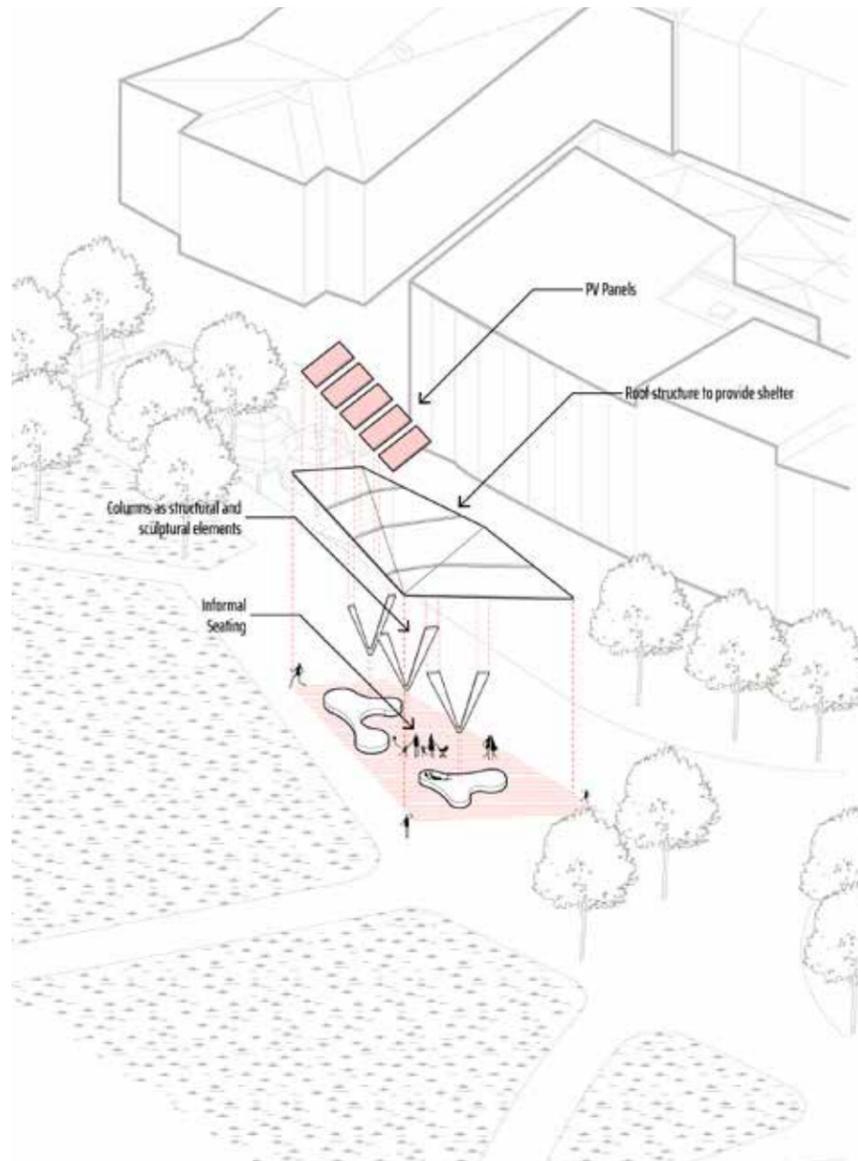
Durable, locally sourced, sustainable materials will be incorporated, creating a family of structures which follow a common architectural language and materiality to tie through with wider Masterplan interventions.



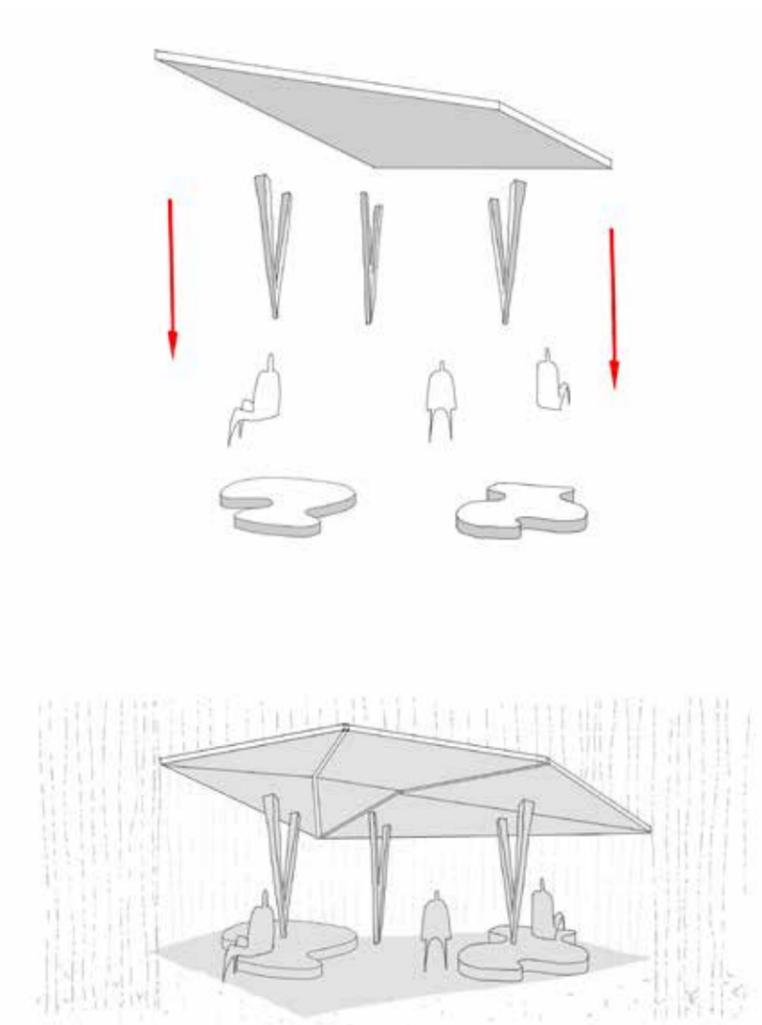
Key Plan



Concept 3D View



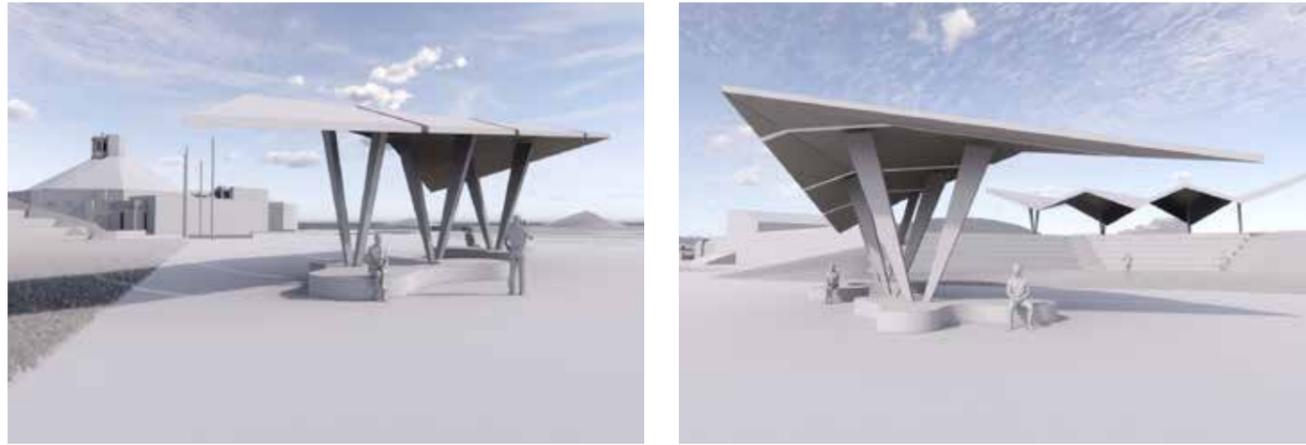
Concept Isometric View



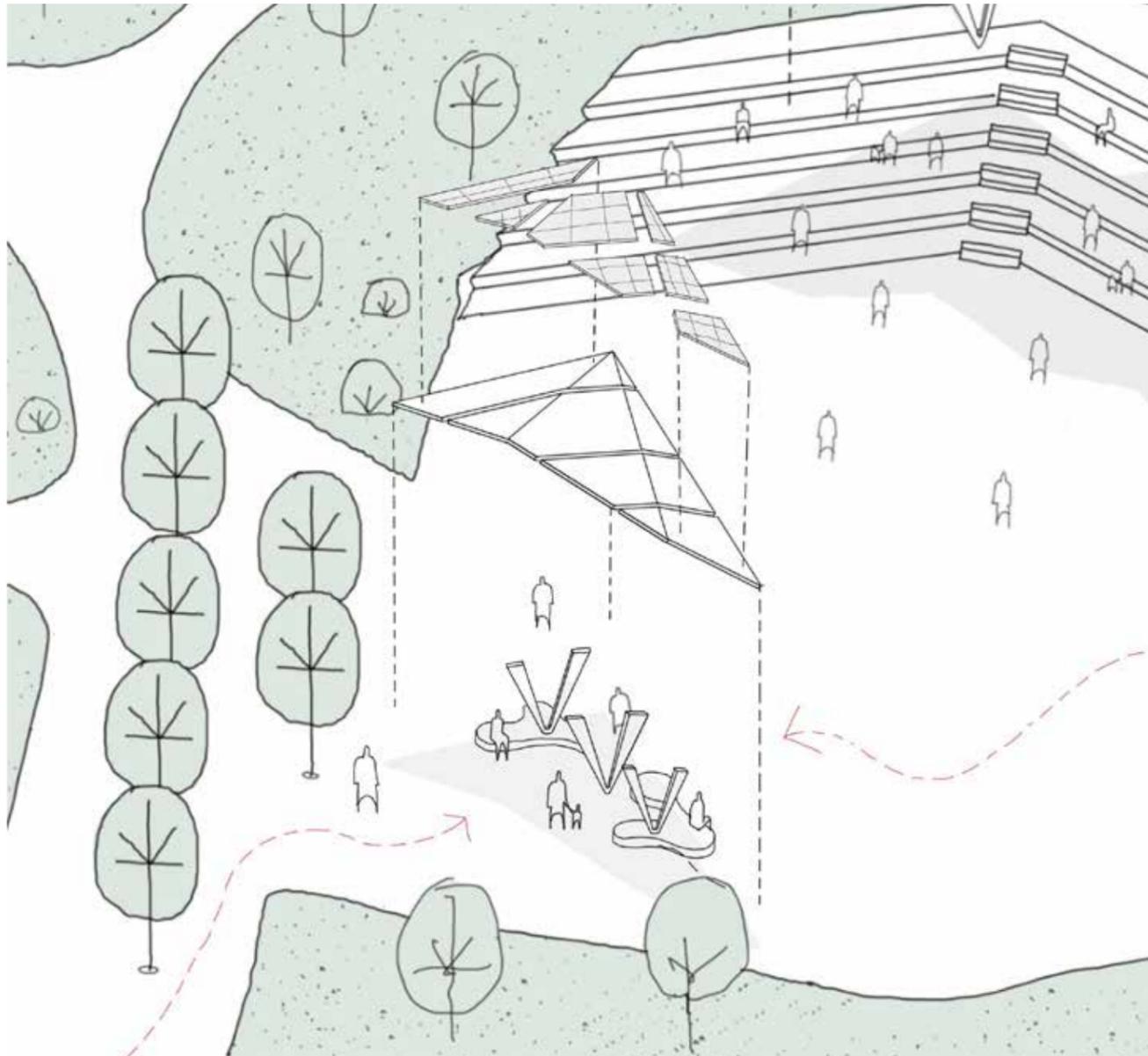
Concept Diagram

6.8.6.1 LIGHTWEIGHT CANOPY STRUCTURES

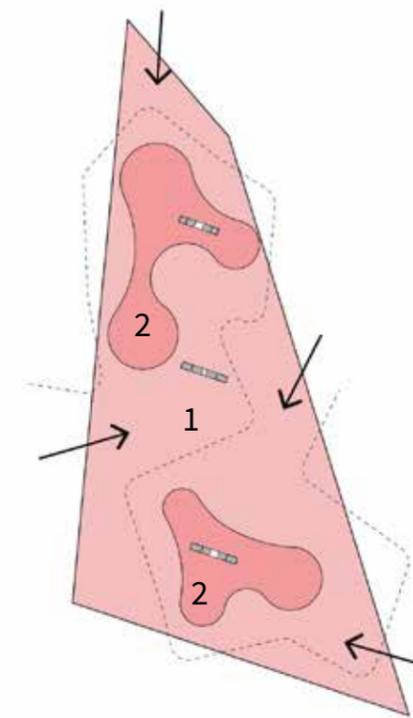
The below images provide visual inspiration for the Lightweight Canopy Features and are indicative only.



Concept 3D Model Extracts

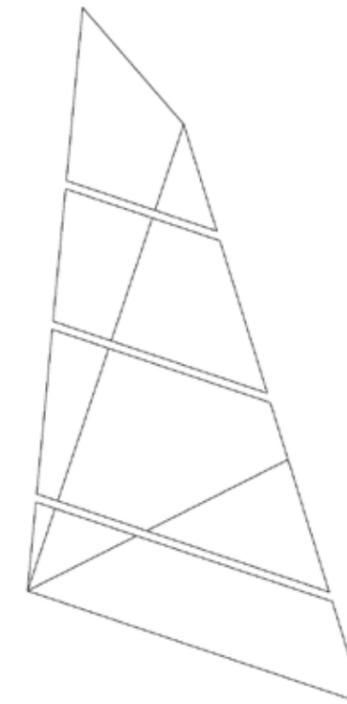


Isometric Sketch View



- 1 - COVERED AREA
- 2 - SEATING

Plan Diagram



Roof Diagram

6.8.7 AMPHITHEATRE

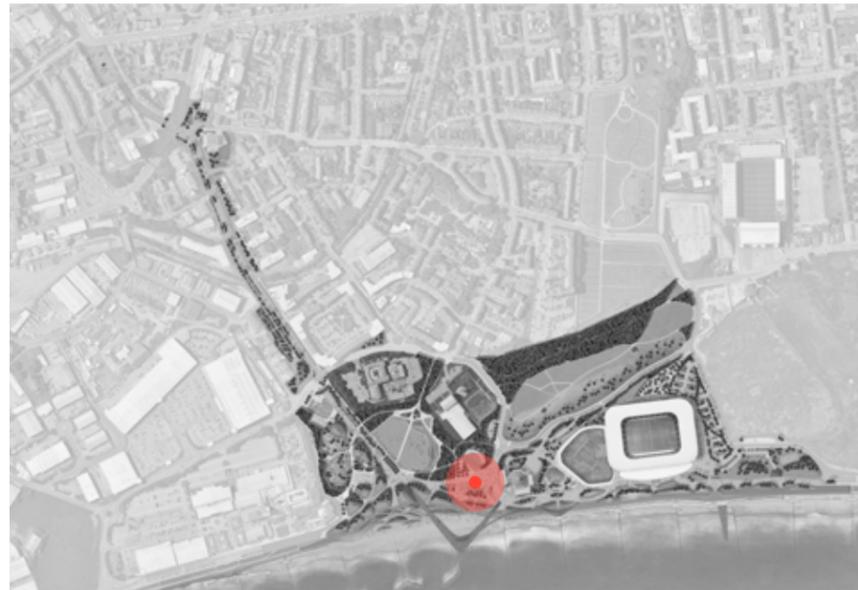
Within the Urban Park area, the opportunity to create a more intimate outdoor venue, suitable for music, theatre, outdoor cinema, or screenings is provided with the creation of a small external amphitheatre located adjacent to the Beach Ballroom.

The proposed Amphitheatre, approximately one to two storeys in height, is supported with a lightweight angular canopy structure, tying in with the sculptural roof forms of the wider Masterplan. This roof form provides an element of shelter to the seating area. Below the tiered Amphitheatre there is the opportunity for localised accessible toilet facilities adjacent which would be sited close to the accessible parking to the north of this space.

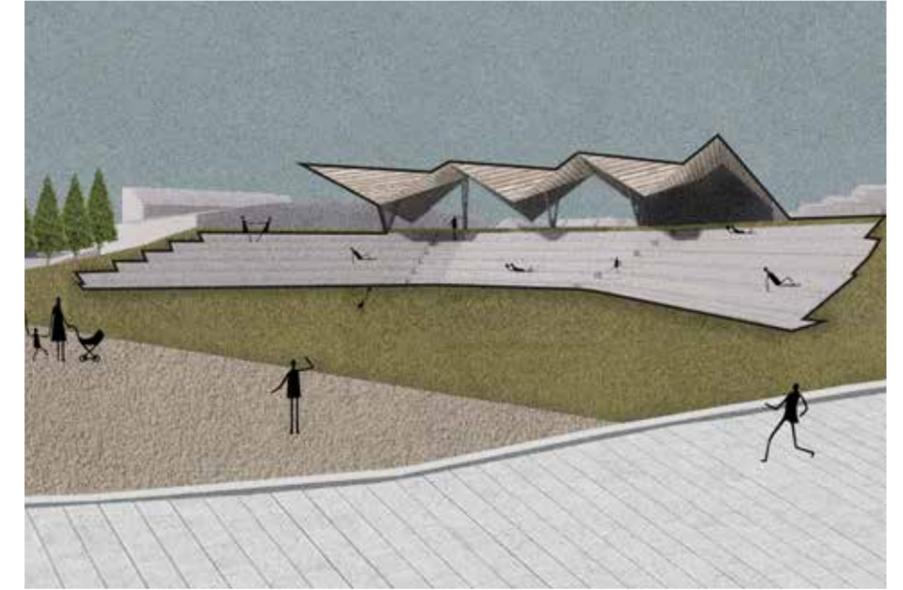
Taking advantage of the existing site topography/ levels, the location for the Amphitheatre naturally shields the adjacent buildings to the West, whilst the orientation of this space provides natural screening and acoustic benefits which can be enhanced with strategic planting to provide an additional level of privacy to the space.

The amphitheatre tiered seating would be formed from a high-quality durable material, such as concrete or stone, whilst the angular canopy would require a robust structural system and a lightweight cladding finish to form the roof.

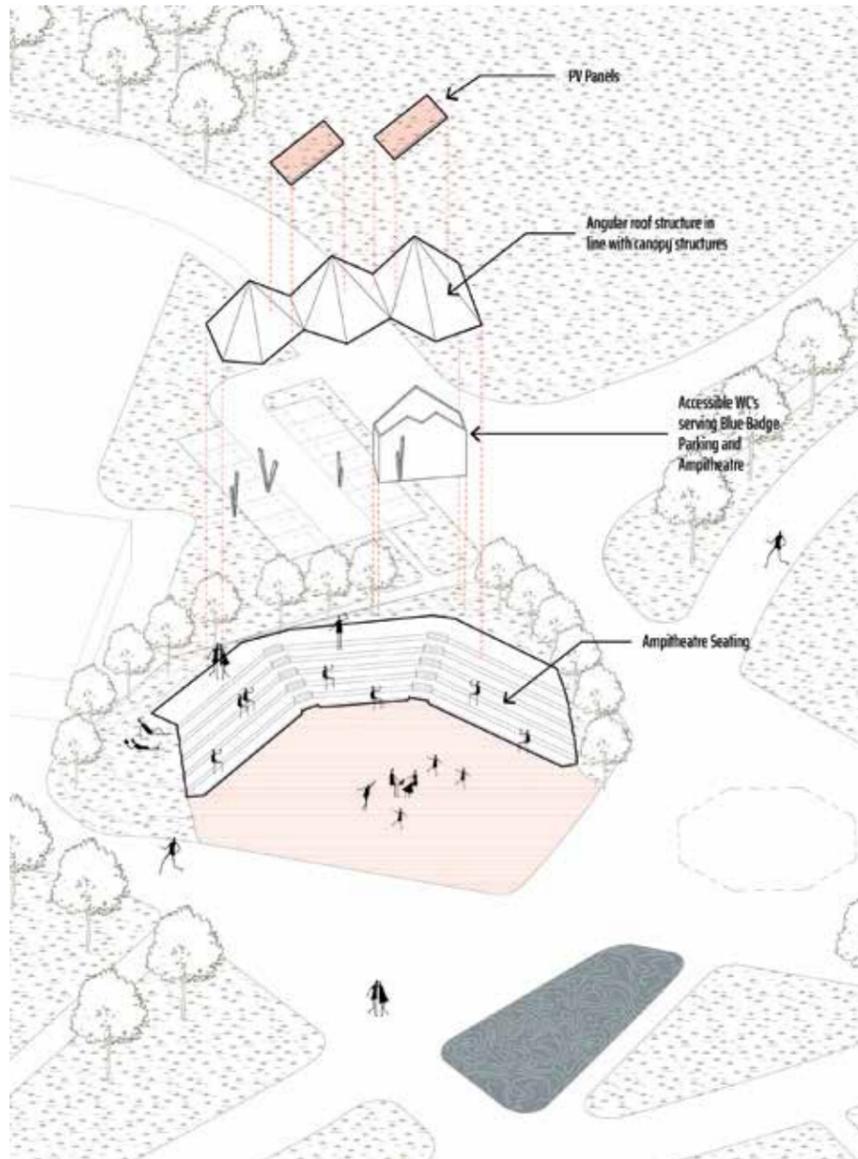
The vision for this space is to create a flexible, intimate external events space with the potential to tie in with larger events hosted at the Beach Ballroom/Stadium and Events Field which is located adjacent.



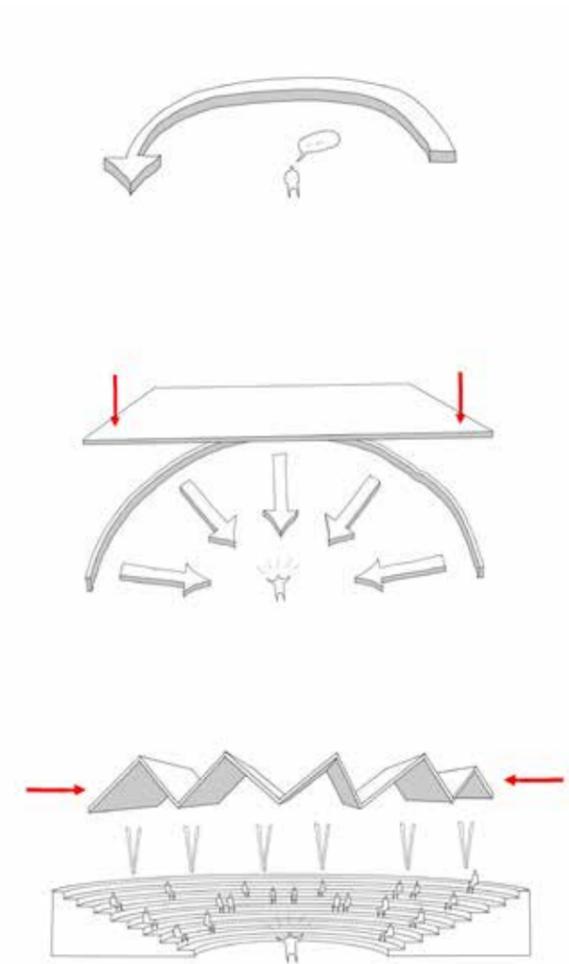
Key Plan



Concept 3D View



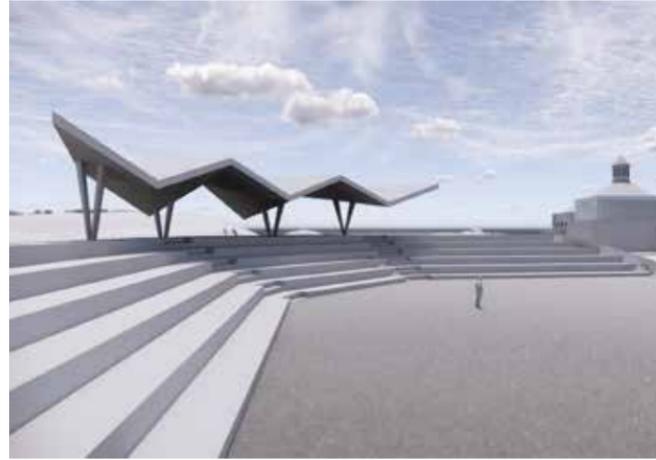
Concept Isometric View



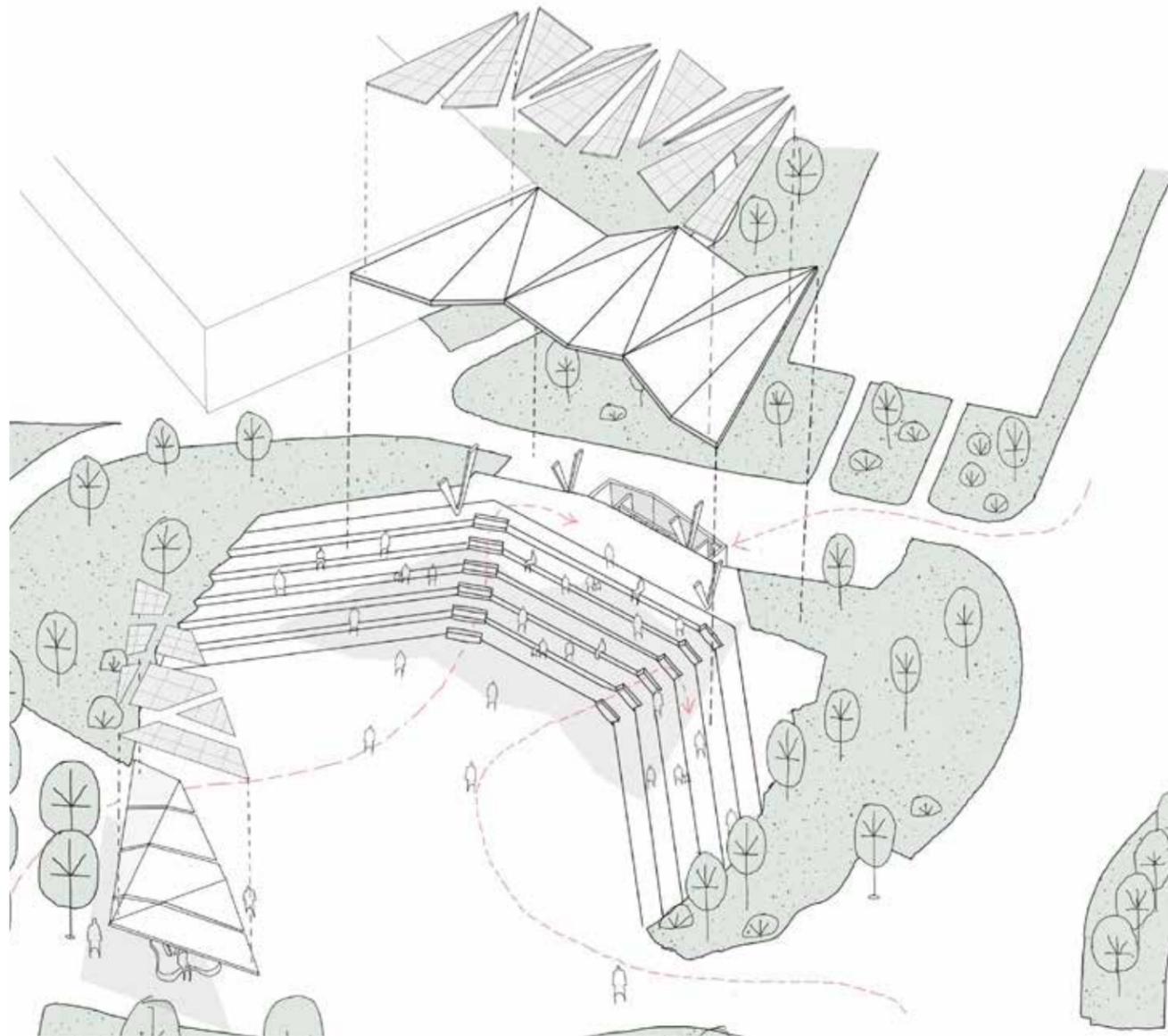
Concept Diagram

6.8.7.1 AMPHITHEATRE

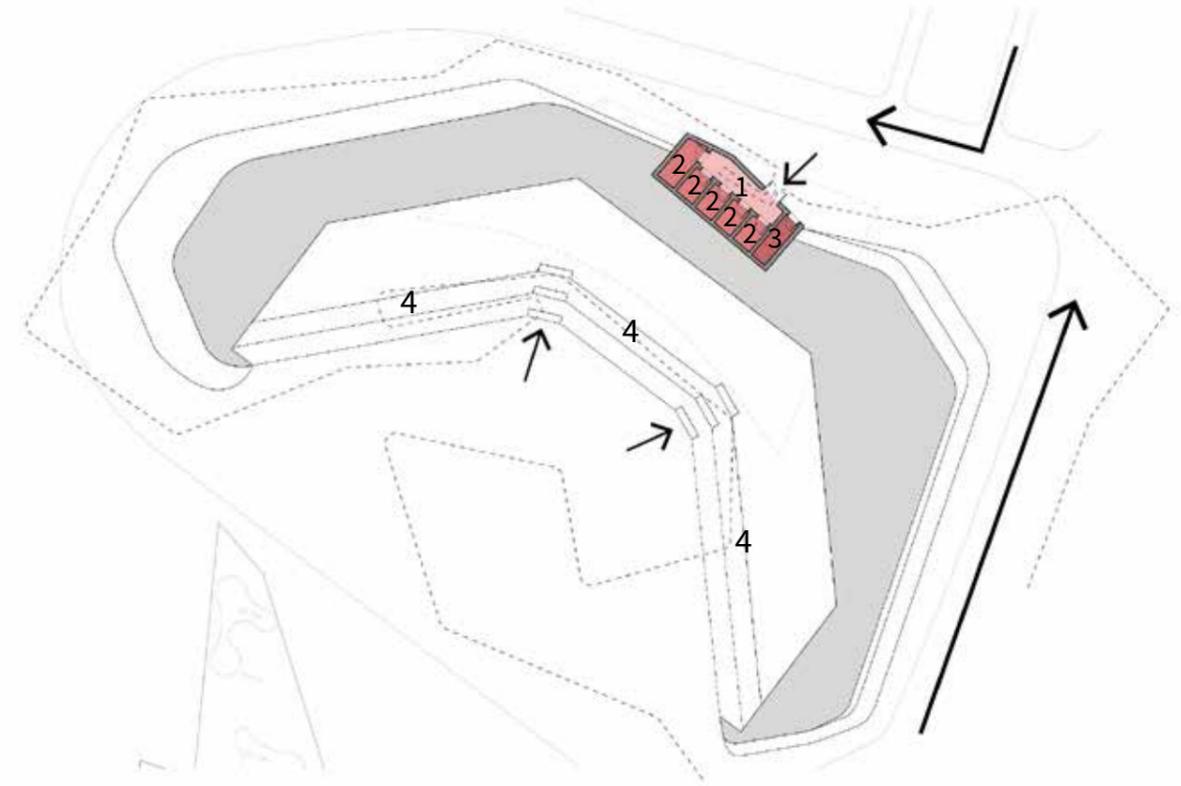
The below images provide visual inspiration for the Amphitheatre and are indicative only.



Concept 3D Model Extracts

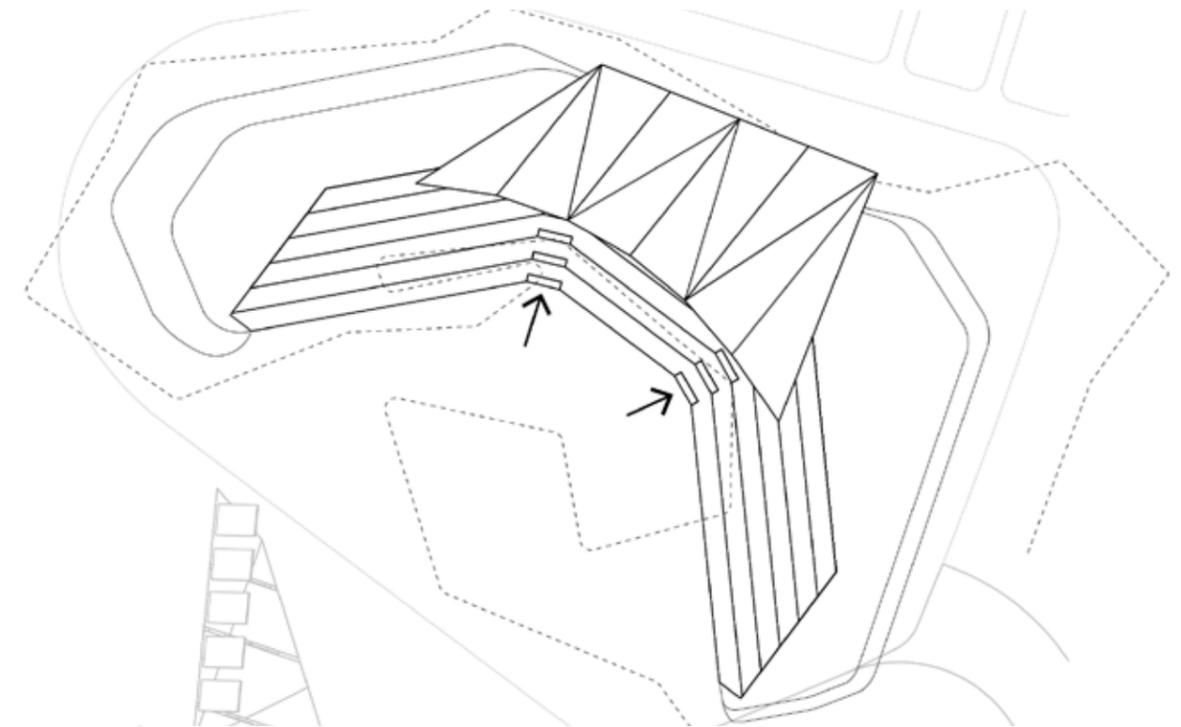


Isometric Sketch View



Plan Diagram

- 1 - LOBBY
- 2 - WC
- 3 - STORE
- 4 - SEATING



Roof Diagram

6.9 THE BEACH & ESPLANADE CHARACTER AREA

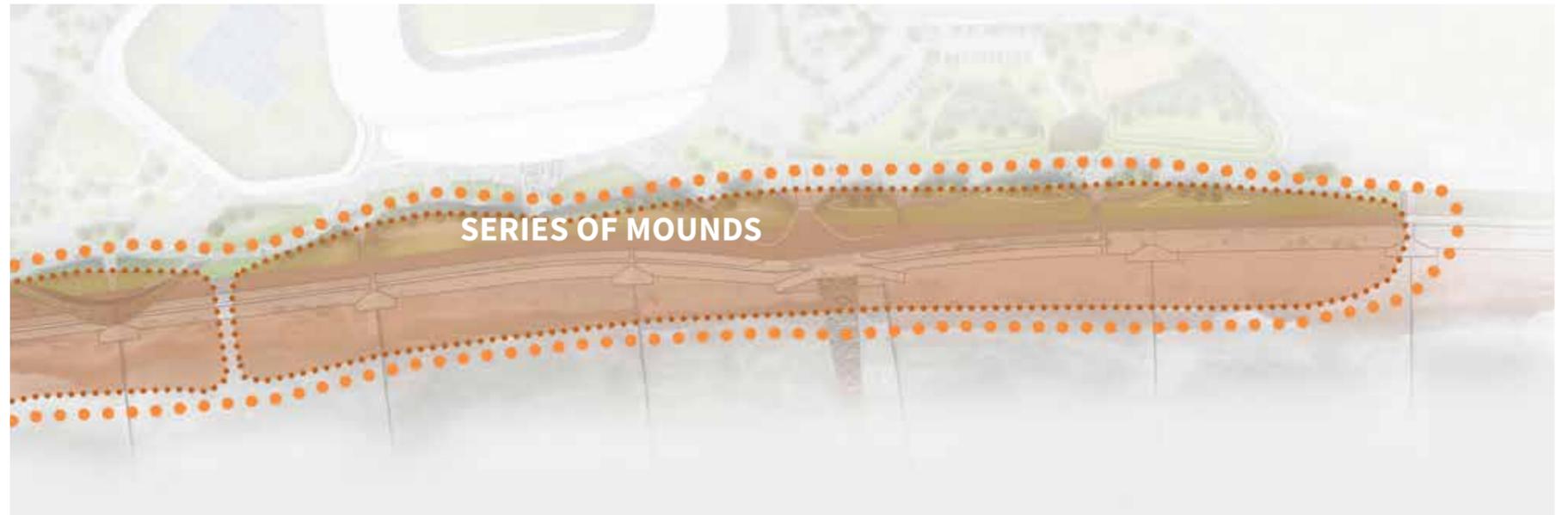
A key aspiration of the Development Framework is the removal of vehicles (except maintenance/ emergency/ permitted vehicles) along a section of the Esplanade between Codona's and Accommodation Road. This would seek to create a people-focussed environment and would allow the park to connect directly with the beach and to improve the association between the two.

6.9.1 THE BEACH & ESPLANADE CONCEPT

The intention at the Beachfront is to modify the beach edge, pulling this back into the site and creating better visual and physical connectivity between the park and the sea. Behind this modified edge, dune landforms will help provide shelter to the park and will frame views out to sea. The modification of the landform in this area, due to the removal of the road, will play a key role in heightening the relationship between the beach, the park, and the city. It is important that the humanising of this interface is a priority, while maintaining the necessary coastal defences by investigating more natural flood defence systems which can afford to utilise a greater area therefore introducing a distinctive and unique environment. One of the outcomes will be making access down to the beach easier and convenient enhancing the perception of access to the sand and beach environment.

A potential Boardwalk/Pier structure could allow for the creation of an enhanced beach frontage with opportunities for views towards the sea and back to the city. The Boardwalk would become a focal point on the area's periphery, forming a new key public space and creating a threshold between Beach Boulevard, the Esplanade, and the North Sea. The form of the Boardwalk would align with the Rope Works Concept to create an organic and intuitive journey, linking the key elements within the Urban Park to the new activate frontage of the Esplanade.

Proposals in this area are being developed in partnership /consultation with ACC Operations / Coastal / Flooding Teams.



Concept Plan - Esplanade North - Existing esplanade and sea wall are enhanced with planting and landform



Concept Plan - Esplanade South - Reshaped Beach and Sea Wall

+ POTENTIAL ARCHITECTURAL INTERVENTIONS



6.9.2 BOARDWALK

The proposed Boardwalk allows for the creation of an enhanced beach frontage with opportunities for views towards the sea. This new structure will become a focal point at the Masterplan's periphery, forming a new key public space and creating a threshold between Beach Boulevard, the Esplanade and the North Sea.

Formed as an extension of Beach Boulevard, the Boardwalk enhances the fundamental relationship between the boulevard and Beach Ballroom. These two principal paths are joined through the creation of a centrepiece at the nose of the Boardwalk in the form of a sculpture with a key light element to symbolise Aurora (Northern Lights). This sculpture is to be designed by a local artist in cohesion with the Masterplan concept.

To ensure protection of the elements, the structure slopes up outwards towards the sea. It further provides the opportunity for level change in order to ensure accessibility to the beach.

Structural support elements are located at 10m centres to ensure robustness, with the columns and structure designed in a similar architectural language to other interventions within the Masterplan for the purpose of continuity and consistency.

There is an opportunity for animation along the Boardwalk through the incorporation of landscaping and seating. Perforated mesh or glazed balustrades will also be considered in order to create a sense of openness towards the sea.

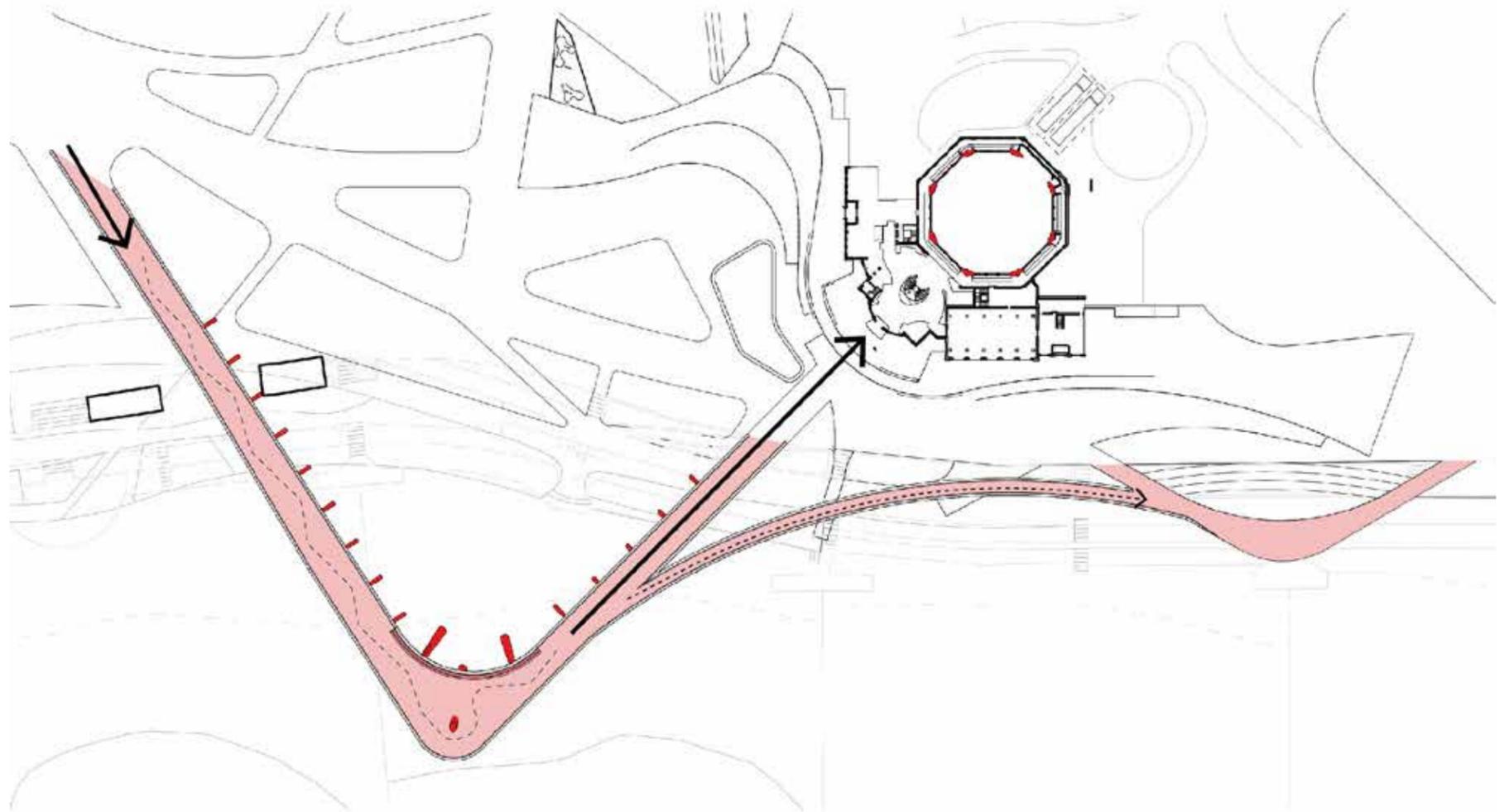
Locally sourced materials, such as larch species native to Aberdeen will be used for the purpose of sustainability and consciousness of the location.



Key Plan



Precedent Imagery



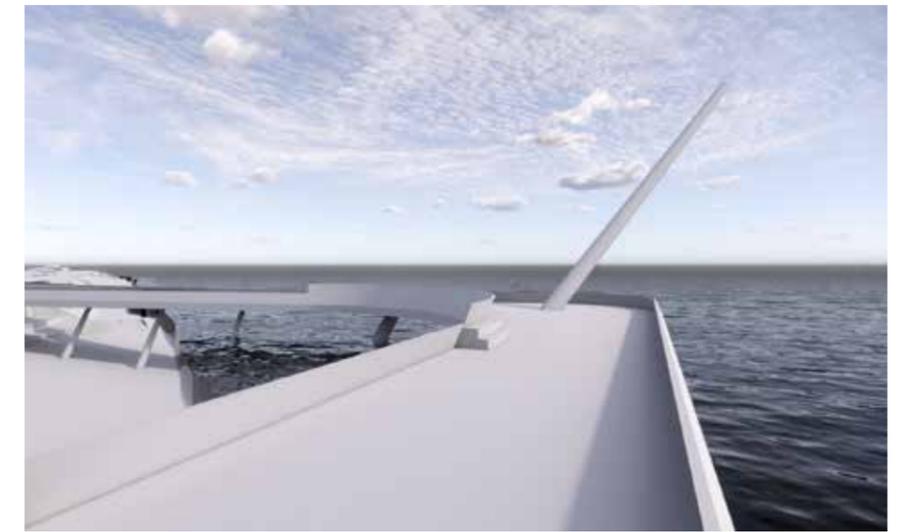
Plan Diagram

6.9.2.1 BOARDWALK

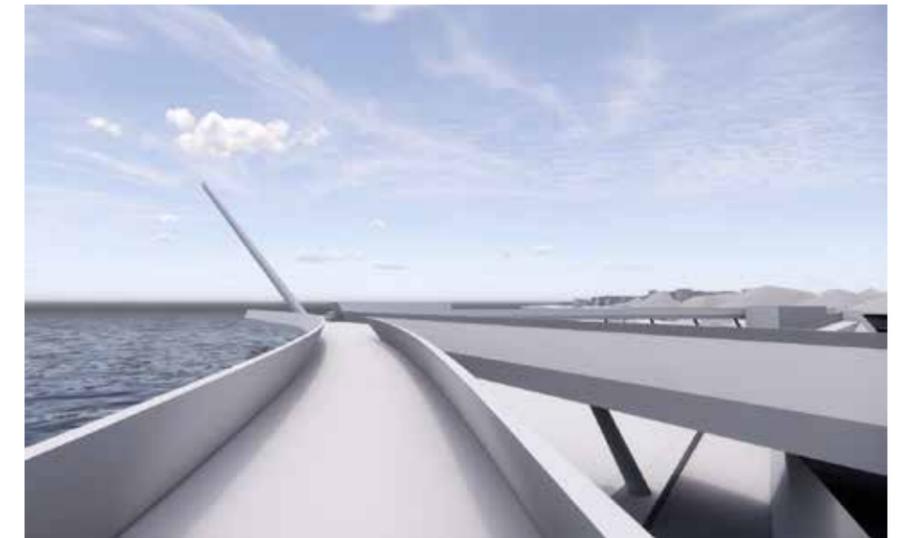
The below images provide visual inspiration for the Boardwalk and are indicative only.



Isometric Sketch View



1.



2.



3.

Concept 3D Model Extracts

6.9.3 THE BEACH & ESPLANADE - ASPIRATION

The below images provide visual inspiration for the The Beach & Esplanade and are indicative only.



Potential Boardwalk Pier Structure (Photo courtesy of Wilkinson Eyre)



Coherent Landscape Approach to Beachfront (Photo courtesy of Jaime Lerner Arquitectos Associados)



Renewed Landscape next to the Beach (Photo courtesy of Piet Niemann)



Links to the Beach (Photo courtesy of Ozer/Urger Architects)



Flowing Beachfront Landscape (Photo courtesy of Jaime Lerner Arquitectos Associados)



Activated Beachfront (Photo courtesy of Henning Stuben)



Variety of Routes (Photo courtesy of Steven Kroodisma)

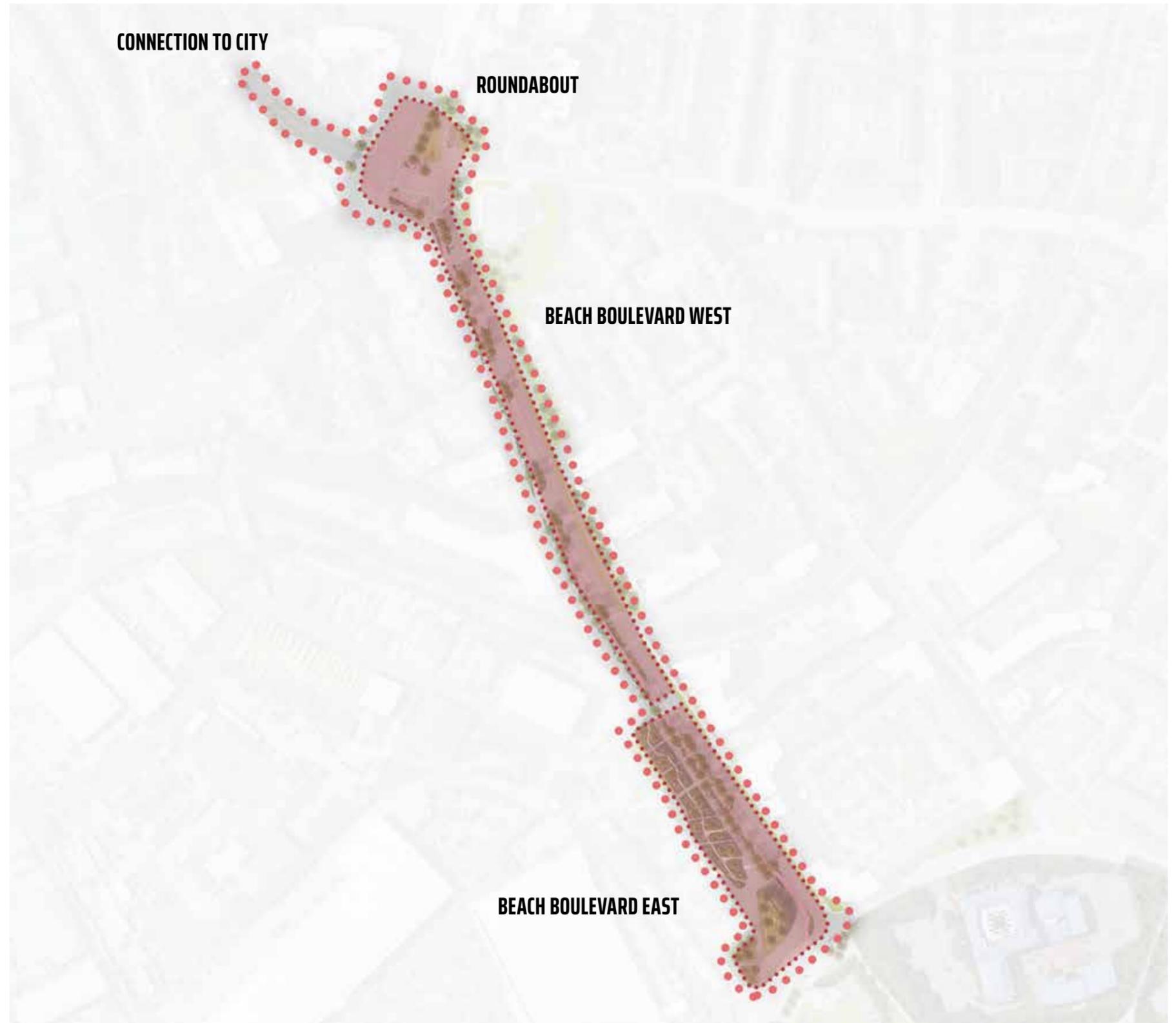
6.10 BEACH BOULEVARD CHARACTER AREA

The Beach Boulevard main character area runs from Links Road to the roundabout on the A956/Commerce Street and will be reconfigured to provide the main active travel between the beach and the city centre, prioritising pedestrian, and cycle movement, while incorporating vehicles.

6.10.1 BEACH BOULEVARD CONCEPT

This section of Beach Boulevard is approximately 500m long and is approximately 27.5m wide. Roughly 67% of this is currently dedicated to vehicles therefore reconfiguration is a key aim within the Development Framework to allow the redistribution of available space to increase the allocation for pedestrians, cycles, SUDS, planting, and seating whilst maintaining vehicle and public transport access. The reallocation of space along Beach Boulevard would improve both the ease and the quality of the journey between the city centre and the beach area, making it more attractive to pedestrians and cyclists and would provide environmental improvements through increased planting and improved water and air quality.

Traffic surveys and detailed layouts are required to develop and test these proposals further in relation to their possible impacts on the wider network.



Concept Plan - Beach Boulevard



6.10.2 BEACH BOULEVARD WEST - ACTIVE TRAVEL

The section (right) illustrates the current space allocation along Beach Boulevard. Most of the space is currently allocated to cars and does not contribute to a pleasant pedestrian or cycle environment.



Beach Boulevard as Existing

The section (right) shows an indicative section illustrating what could be achieved where car parking was not provided along Beach Boulevard. This could provide space for bus stops, additional soft landscape or seating and cycle parking.

The north side of the corridor is defined by a range of mixed residential within the Constitution Street area, and some significant mature tree planting in places giving a green edge and is permeable to the pedestrian. These connections into the surrounding neighbourhood, along with the mature trees, should be maintained and enhanced if possible.

The interventions illustrated on Beach Boulevard have still to be tested in relation to geometries and traffic modelling. The aim here however is to illustrate an aspiration for how these spaces could be transformed enhancing a memorable journey to and from the Beach and city centre utilising the following aims:

- Increasing pedestrian and cycle connectivity between the city and the Beach
- Improving the appearance and experience of walking or cycling to the beach
- Improving legibility of the journey
- Providing a segregated cycle route
- Increasing soft landscape and biodiversity
- Accommodating SUDS



Beach Boulevard as Proposed

6.10.2.1 BEACH BOULEVARD WEST (ACTIVE TRAVEL)

The below images provide visual inspiration for the Beach Boulevard and are indicative only.



A potential view of Beach Boulevard with a new segregated cycleway and soft landscape.



Mix of Planting (Photo courtesy of Sheffield City Council)



Activated streetscapes (Photo courtesy of Sheffield City Council)



Hard and Soft Landscaping and Wayfinding (Photo courtesy of Sheffield City Council)

6.10.3 BEACH BOULEVARD COMMUNITY GARDEN

At the bottom of Beach Boulevard, the space widens. This could be an opportunity to create community gardens with a smaller, more intimate scale than within the main body of the park.

These gardens could include sensory elements such as herb gardens, coloured light and sound features and promote use and enjoyment of the gardens by all. They could incorporate small elements of play and interaction as well as opportunities for social seating arrangements and quieter areas to relax. They could include community growing and fruit trees.



Key

- 1. Aromatic garden
- 2. Sound garden
- 3. Light garden
- 4. Orchard garden



6.10.3.1 BEACH BOULEVARD EAST (COMMUNITY GARDENS)

The below images provide visual inspiration for the Beach Boulevard (Community Gardens) and are indicative only.



Sound and light within a community garden



Aromatic planting within a community garden



Social seating arrangements



Fruit trees in step over form



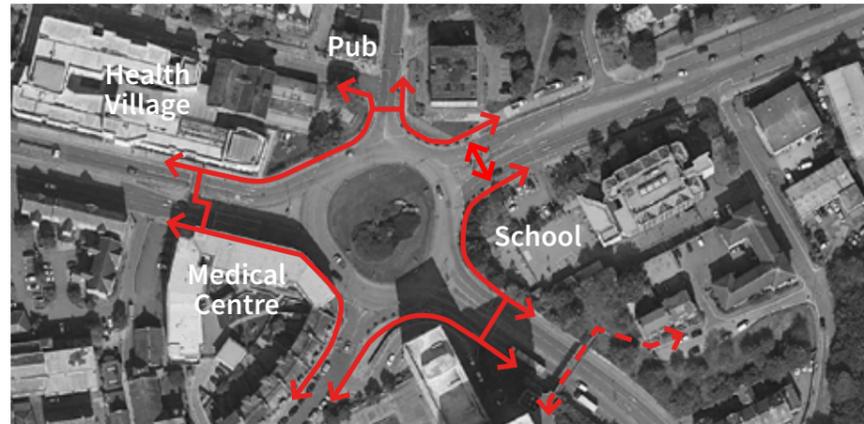
Intimate parklets created with a variety of colour, smell and sound



Social seating arrangements

6.10.4 BEACH BOULEVARD ROUNDABOUT

The diagram opposite illustrates the current pedestrian crossing opportunities around the roundabout and highlights how the road infrastructure dominates this part of the city.



Existing crossing points and adjacent uses.

Several different concept options have been investigated to determine how best to improve the connection from the city to the Beach. Of the options developed it is believed that an 'At Grade' solution has the potential to create the most effective solution.

The options illustrated opposite illustrate a potential reconfiguration of the roundabout for further exploration. These concept options have not been tested in relation to geometries or traffic modelling however aim to illustrate an aspiration for how the roundabout could be transformed improving pedestrian and cycle connectivity, extending the character of the city centre, and creating a new into a new public space.

Further studies will be undertaken in line with Scottish Transport Appraisal Guidance (STAG) to identify a future junction arrangement. Detailed STAG evaluations will be underpinned by a range of objectives, including the Council's Road User Hierarchy, helping to arrive at a layout which facilitates increasing rates of sustainable and active travel trip making.

Key

1. New crossroad replacing roundabout
2. New direct pedestrian/cyclist crossing points
3. Cyclists rejoin carriageway on Justice Street
4. New public square
5. New junction onto Beach Boulevard
6. New segregated cycleway
7. Reduced carriageway
8. Parking
9. Seating opportunities
10. Artwork/interventions creating interest on the trail from the city to the beach

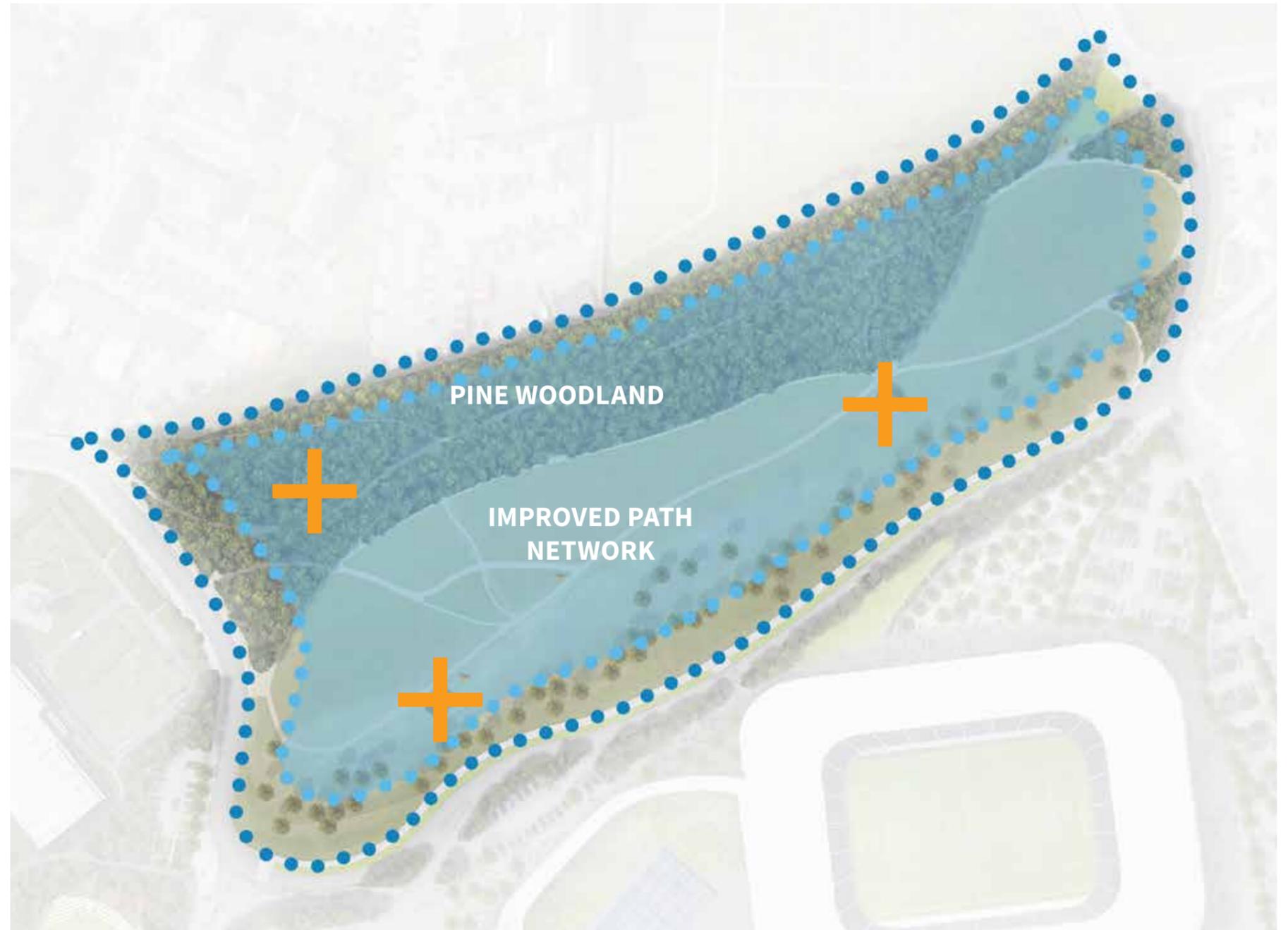


6.11 BROAD HILL CHARACTER AREA

6.11.1 BROAD HILL CONCEPT

The conceptual approach to Broad Hill is one that looks to conserve the natural form and condition of this environment. This could be described as a lighter touch nature-based intervention approach. It is likely that Broad Hill is already the most biodiverse part of the Development Framework area, however the aim will be to further look for ecological enhancements through additional tree planting especially along the leeward side of the hill, expanding the pine woodland, grassland management and providing a nature led stabilisation program for the steeper eroding east slopes. This enhancement of the ecological resource will offer a key biodiverse catalyst and generator for the rest of the Development Framework area and the creation of wider green networks.

Other interventions on Broad Hill will look to be light touch, with improvements to the existing path network that criss-crosses the hill at present, with 2 or 3 opportunities explored for viewpoints/resting places, possibly sculptural in form but with minimal impact on the land. These interventions will maximise the expansive views available to the sea and city, as well as commanding views of the new Beachfront park, leisure, and stadium, offering opportunities for wayfinding and educational interpretation.



Concept Plan - Broad Hill

 **POTENTIAL ARCHITECTURAL INTERVENTIONS**



6.11.2 BROAD HILL VIEWING STRUCTURES

Three geometric viewing platform structures, single storey in height, are proposed on Broad Hill, taking advantage of spectacular unobstructed views across the Beachfront. The indicative material palette explored consists of a concrete base slab structure with integrated timber seating areas to pause, rest and reflect along the popular walking route.

To coincide with other Masterplan interventions and create a common aesthetic throughout the Urban Park, proposed timber finishes will be locally sourced Scottish larch, suitable for a marine environment. To offer shelter from the elements, integrated timber canopy structures are also proposed.

Informative directional signage and/or sculptures pointing to specific landmarks are proposed, with accompanying observational stand binoculars. There are also opportunities for public art installations in collaboration with local artists, potentially being integrated within the hexagonal concrete structures, subject to artist's detail design.



Key Plan



Materiality



Canopy Shelter Concept



Precedent Imagery



Location Plan

6.12 POTENTIAL STADIUM & LEISURE CHARACTER AREA

Aberdeen City Council will require the Beachfront developments to become a new destination in their own right, be of exceptional architectural quality and have the 'wow factor'.

The proposals will also embrace the principles of active design that promote activity, health, and stronger communities through the way we design and build our towns and cities.

There are three key functions to be provided within the Stadium and Leisure Character Area:

- Leisure facility
- Ice Arena
- Stadium

The aims and objectives of the potential stadium and sport and leisure facility are to place sport, physical activity, health, and wellbeing at the very heart of the community in Aberdeen. Each facility would help activate the city, increase opportunities for people to participate in physical activity and sport, invest in the City's infrastructure of people and places and be inclusive to provide the opportunity to become and stay active, as well as helping to improve physical and mental wellbeing.

The potential new facilities would offer the opportunity to participate in sport, leisure, recreation, and community activities within a comfortable, modern, and safe environment. The potential leisure facility would be open to casual visitors to the beach area who simply wish to enjoy the seafront and observe rather than participate in the wide range of activities. The facility would be an attraction in its own right and act as a hub for visiting other parts of the beach area.

The potential stadium would provide a new home for Aberdeen Football Club that the supporters, players, and staff could be proud of. The potential stadium would offer a great experience for both home supporters and away fans, wherever they are sitting and in line with current initiatives and expectations within the sport. The stadium would also seek to support the local, national, and international strategies that the Aberdeen FC Trust are involved with that address the importance of increasing physical activity, and tackling issues such as poverty, inequalities, and wellbeing.



POTENTIAL ARCHITECTURAL INTERVENTIONS

Concept Plan - Potential Stadium & Leisure



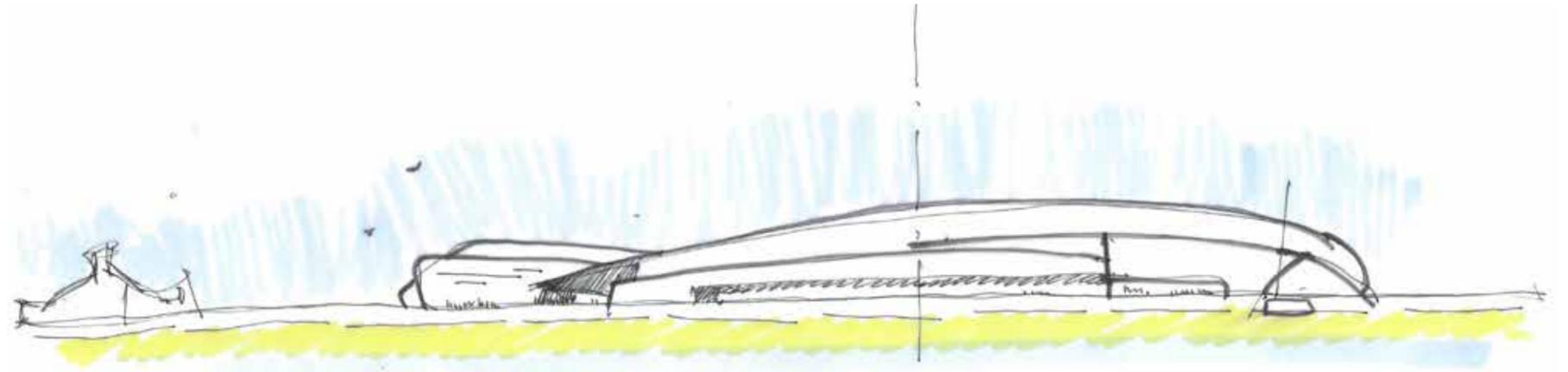
6.12.1 POTENTIAL STADIUM & LEISURE CONCEPT

Setting

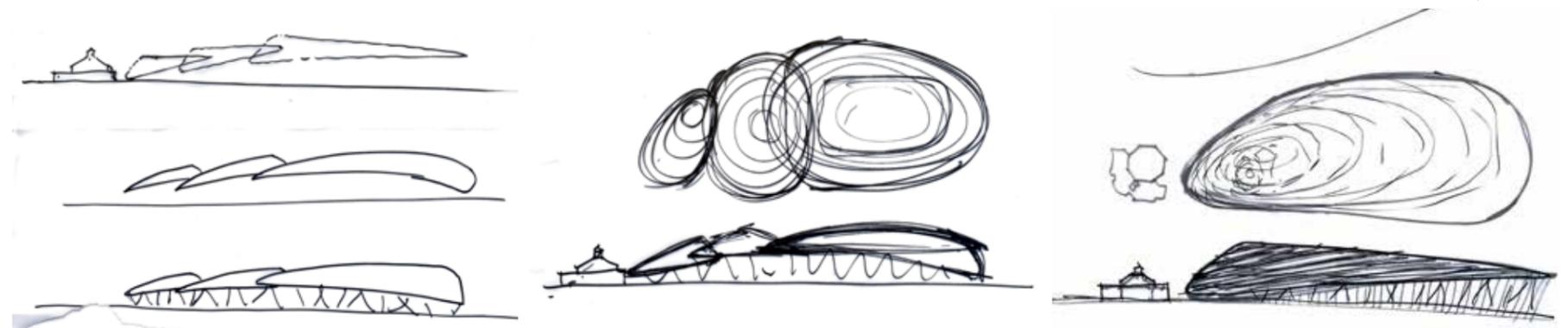
This Character Area benefits from a flat open area set at a lower level than the raised beach Esplanade to the east. The level difference is circa 3.5m. Behind the site to the west is Broad Hill. Rising to 25-30m this is a striking escarpment in an otherwise relatively flat coastline. The ambition for development in this zone is to express the forms of the functional space wrapped in a single or multiple envelopes rather than applying a form to fit the elements into.

Broad Hill provides a backdrop to the rear of the development and a great vantage point for views across the coastline. The height and massing of development in this Character Area must ensure these important views, particularly to the North Sea, are protected and not obstructed. The public realm between the Stadium and Leisure building must also be carefully considered and created as a 'valley' park encouraging public access and community use rather than being limited to a back of house / service corridor.

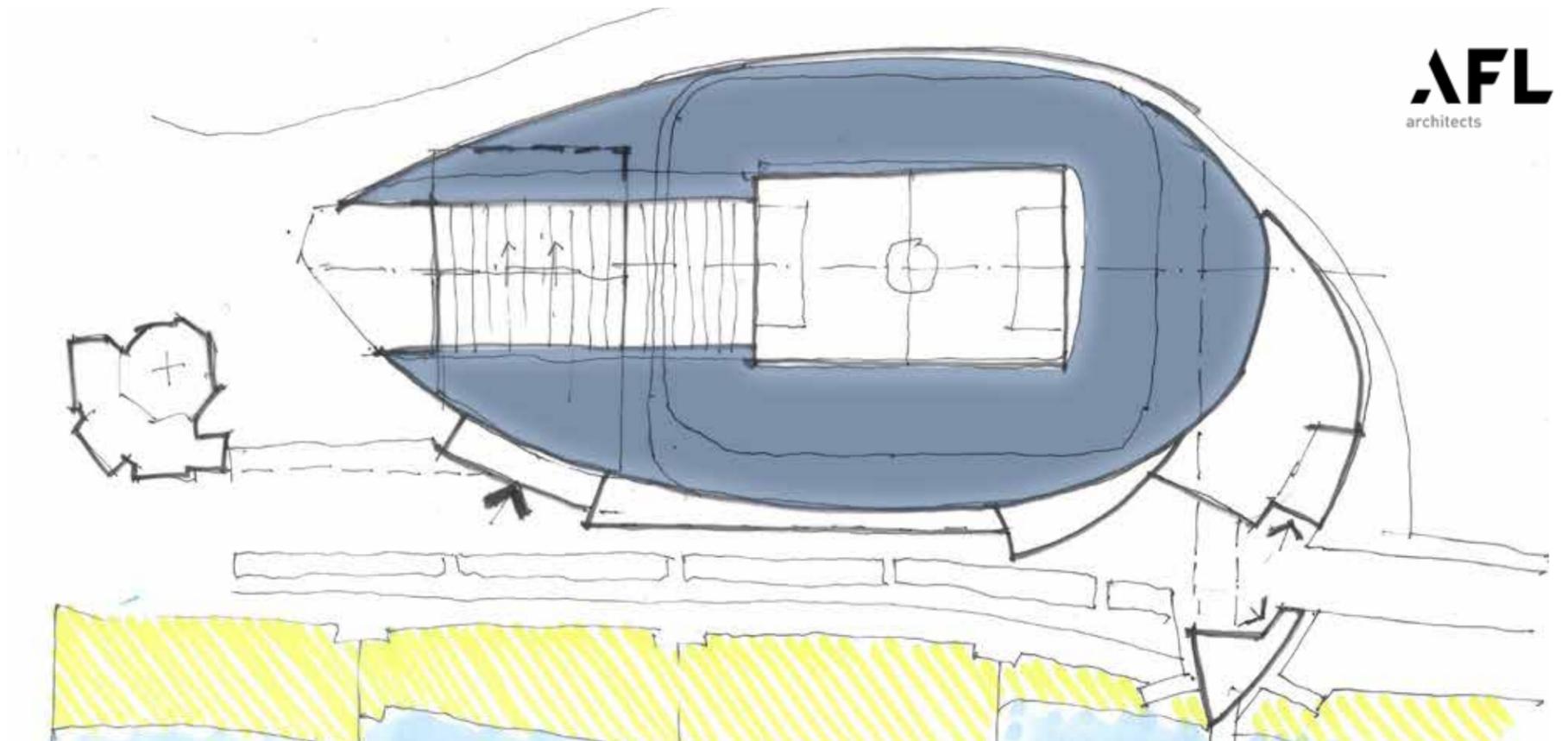
The Beach Ballroom sits at the southern edge of this Character Area. The existing Leisure facility and Ice Arena are also located here but are in need of modernisation and repair. It is intended that these facilities be replaced by the new sport and leisure development. It is proposed that the existing cricket pitch provision would be relocated elsewhere in the city, at a location more convenient and desirable for its users, should the potential stadium & leisure facility be realised as shown.



Concept Sketch



Concept Sketches



Concept Sketch

AFL
architects

6.12.1 POTENTIAL STADIUM & LEISURE CONCEPT

Design Principles

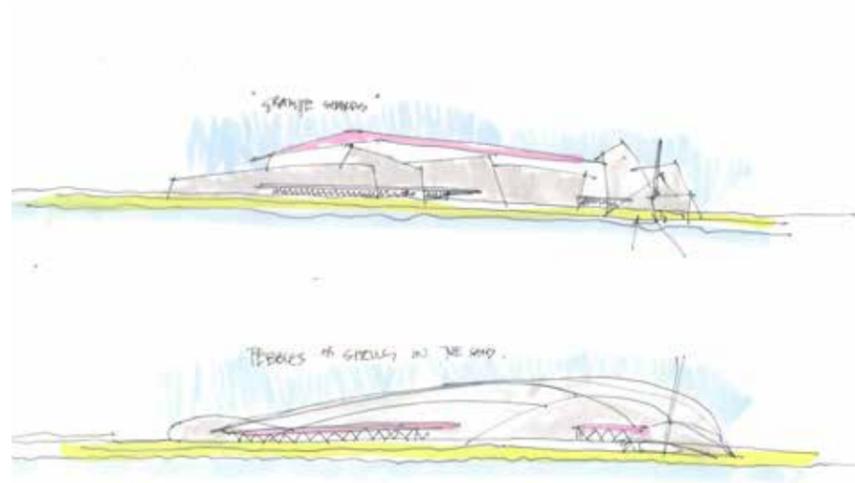
The design inspiration for the developments in this Character Area comes from a group of shells found on the Aberdeen coastline such as mussels. The shell-like forms lend themselves to roofing the large span spaces as well and adding a visual interest to the form of the vertical cladding.

The proposed sport and leisure development will be designed as one singular development with interconnected elements, whilst still allowing for independent operation of separate uses within. This approach will also extend to the Beach Ballroom which, although will continue to stand as a separate structure, will operate together with the new sport and leisure facilities. The key interrelationships are as follows:

- Stadium - Ice Arena: Potential for shared concourse, food and beverage, toilets and a shared use of a hospitality lounge. Interconnection is essential.
- Stadium - Leisure: Spaces within the stadium could provide additional break out rooms for services offered by the Leisure operator, such as an indoor running track in the main concourse or classes in one or more of the hospitality function spaces. Likewise, the Gym and Health Spa could provide facilities for the Stadium staff to use. Interconnection is essential.
- Stadium - Beach Ballroom: The Ballroom and Stadium will both offer high quality function and food and beverage facilities. By seeing these as one group of interrelated hospitality, this offers an optimised match day and non-match day operation and revenue stream can be achieved. Close proximity is very important, but direct interconnection is not essential. It is critical that the mass of the stadium does not dominate the Ballroom so a gap between the Ballroom and Stadium helps prevent this. The creation of a landscape area between the Ballroom and Stadium/Leisure will also serve to link the two buildings whilst forming an external buffer space for the different building users.

It is recognised that the Beach Ballroom is a Category B- listed building and has significant historical and emotional importance in the city. The stadium, sport and leisure developments will balance their heights, massing, and form so as not to overpower the Ballroom and to ensure its setting is not detrimentally affected.

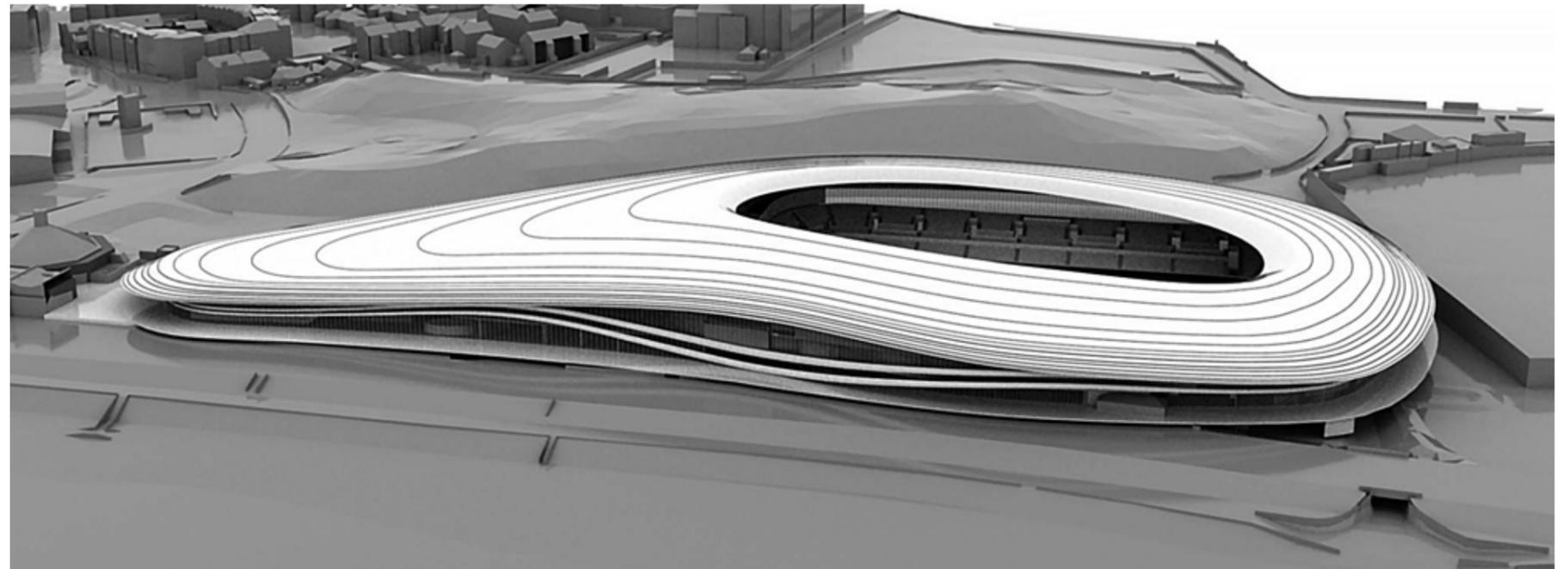
The intent for the massing of the new development is twofold: firstly, to align the seaward side of the new development with the front façade of the Beach Ballroom forming a notional building line to create much needed active frontage to the Esplanade; and secondly, respecting the scale of the Beach Ballroom to step up the massing of the forms from the lower height and narrower footprint of the leisure facilities up to the higher roof and wider footprint of the stadium.



Early Concept Sketches



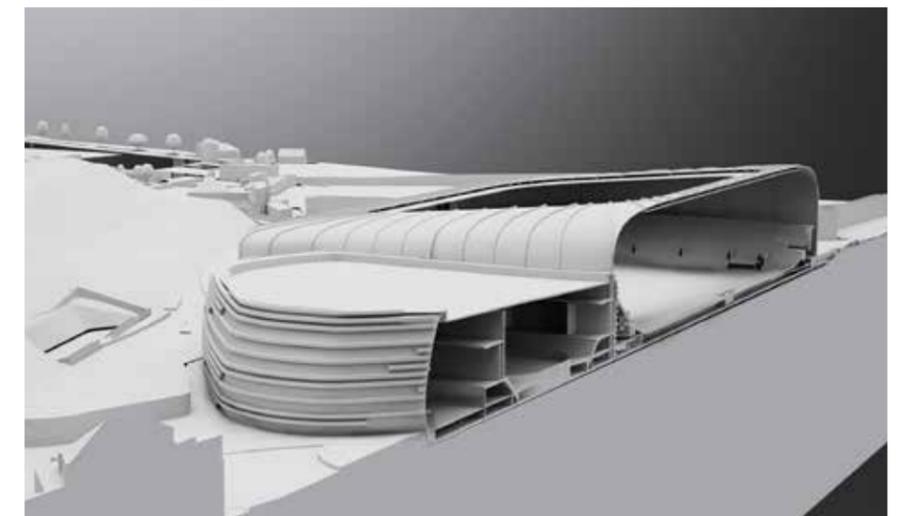
Mussle Form Concept CGIs



Developed Mussle Form Concept CGIs



Developed Concept South East Aerial View



Developed Concept North West aerial - Sectional View

6.12.1 POTENTIAL STADIUM & LEISURE CONCEPT

Materials / Operations

The Harsh coastal environment means that high quality yet robust materials and detailing will be essential. The scheme must look to choose metal elements and fixings that don't easily corrode in the salty damp air. Any painting of steelwork equally needs to be marine grade and considered on the longevity. Precast concrete or GRC could be considered due to its ability to be designed to a high quality and, with the inclusion of a surface treatment, withstand the harsh climate. Overall the choice of materials that will weather well in this location avoiding regular cleaning or painting will be important.

Although glazing will be an essential part of the project for the amazing views out over the sea, this should be optimised at higher levels due the need to regularly clean and should include easy access strategy. Glazing at street level will be readily easy to access on a day-to-day basis so will be more liberally distributed. Glazing at street level will contribute to active frontages.

The split level of the site allows the servicing to the development to be located at the lower less prominent area behind the Esplanade. It is also the ambition to have one main goods access and marshalling yard for the whole sport and leisure development. Goods in and waste out can all be managed at the single point. Horizontal circulation and vertical goods lifts will then allow for distribution throughout the complex.

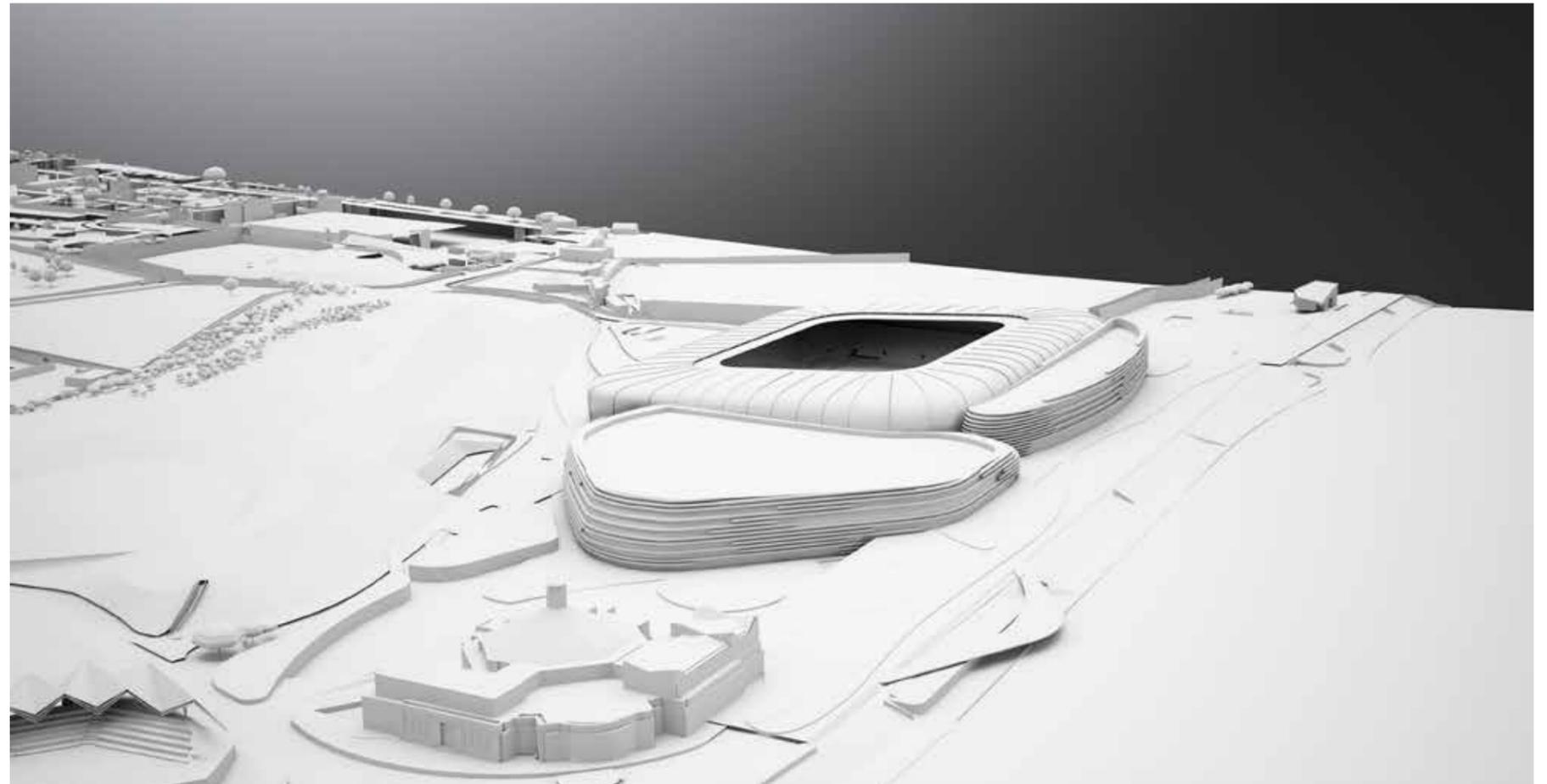
A Central Production Unit (CPU) kitchen is also to be considered which could serve the food and beverage outlets in the leisure and stadium as well as the local finishing kitchens adjacent to hospitality areas.

The external façade of the building will need to be fully accessible by means of mobile access platforms by means of a perimeter hard landscaped surface. The roofscape should be fully accessible where regular maintenance is required. It is recommended to build all parapets to a minimum 1.1m height rather than adding handrails or man safes. The latter should be kept to relatively inaccessible areas such as the stadium roof of the seating areas.

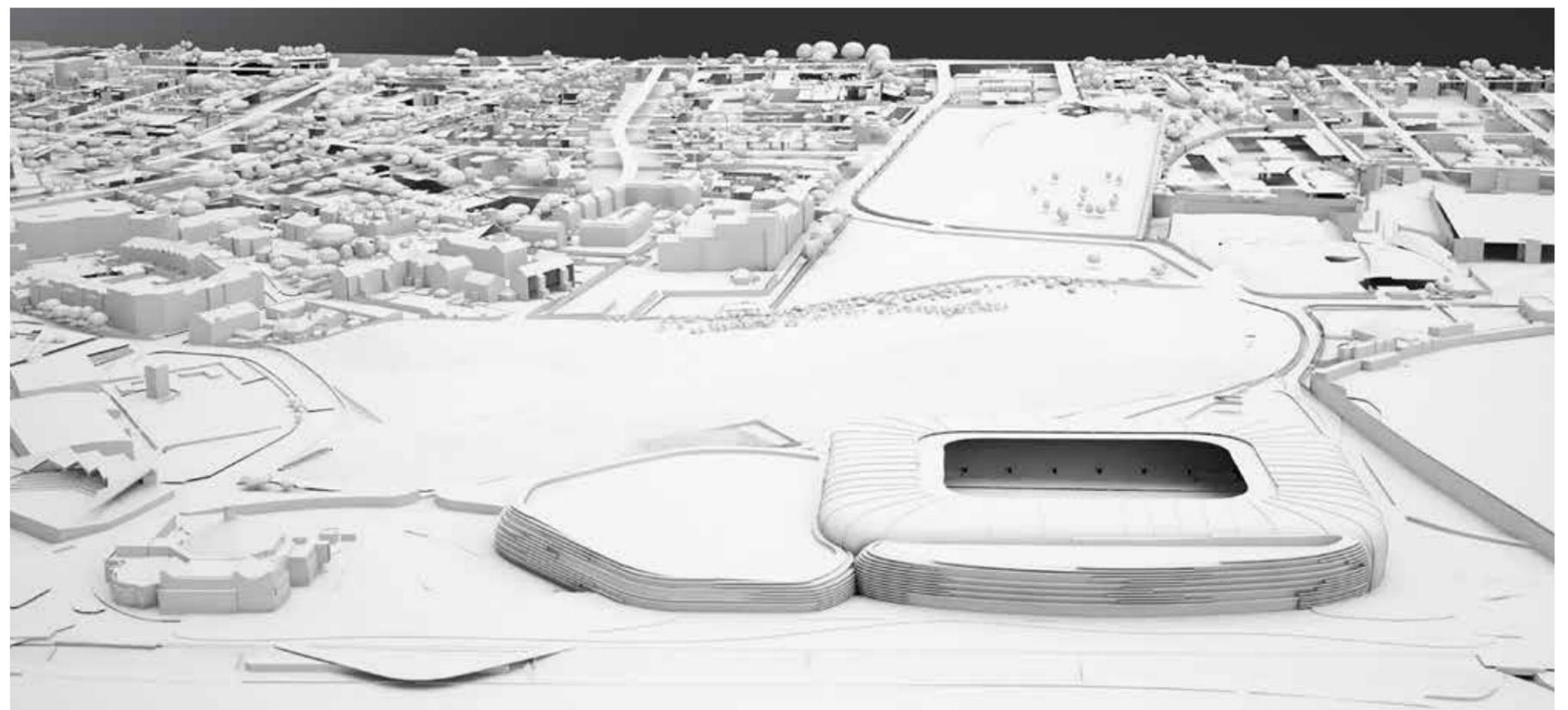
All internal plant areas should have stair access and additionally lift access to at least the level below but ideally to the same level.

All lighting and AV systems over the large span areas, where it will be difficult to always access from mobile platforms from below, will require access gantries to provide safe regular access. Exterior lighting to the new developments will also be considered.

As noted in Section 6.3 active travel, public transport and existing parking opportunities surrounding the site will be optimised rather than the creation any large new dedicated car parking areas for these facilities. Additional well-located accessible parking spaces will be provided.



Conceptual South West Aerial View



Conceptual South East Aerial View

6.12.1.1 POTENTIAL STADIUM & LEISURE - ASPIRATION

The below images provide visual inspiration for the Potential Stadium & Leisure character area and are indicative only.



Public Realm Tied to Potential Stadium (Photo courtesy of Marg von Gerkan and Partners)



Potential Stadium Internal (Photo courtesy of Everton FC)



Potential Stadium as Landmark (Photo courtesy of Mies Architects)



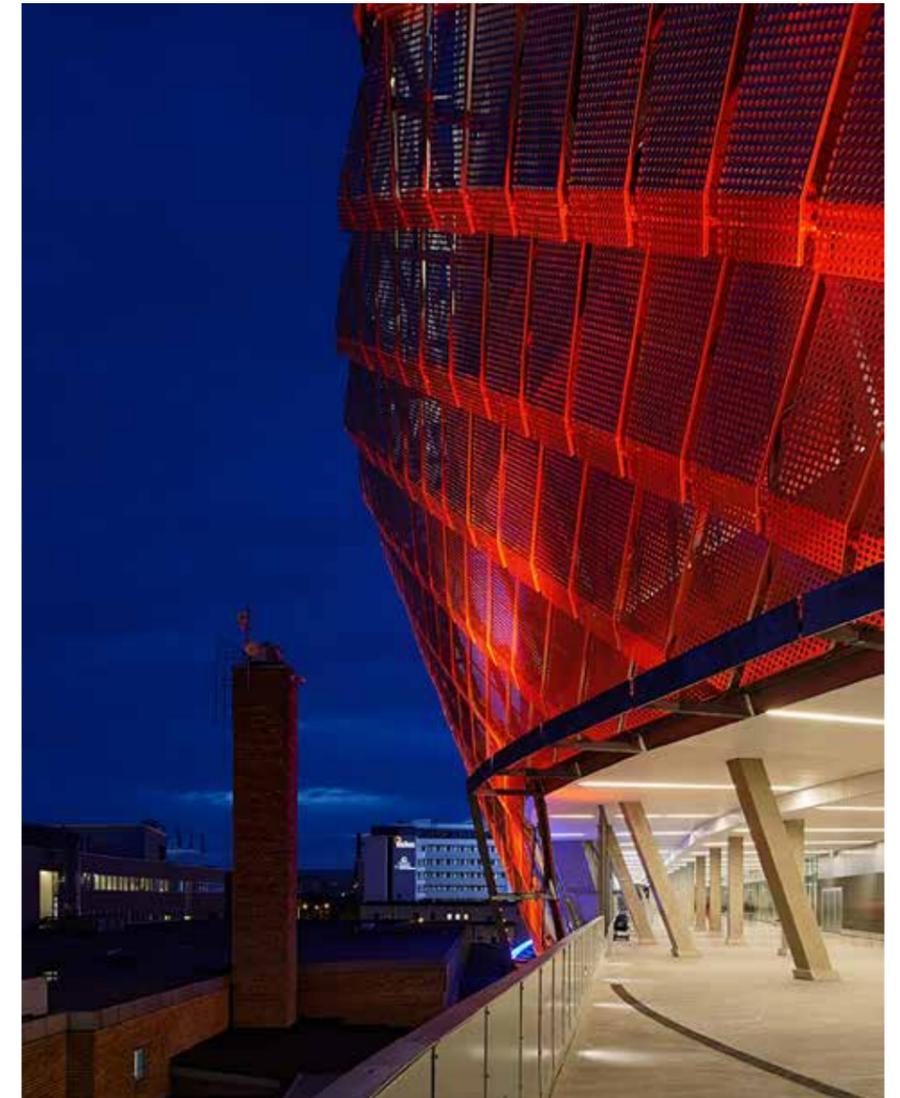
Potential Stadium Internal (Photo courtesy of FC Ausburg)



Potential Stadium Surrounding Public Realm (Photo courtesy of First Row Sports)



Potential Stadium Internal (Photo courtesy of UK News Group)



Potential Stadium Facade (Photo courtesy of White Arkitekter)

6.13 BEACH VILLAGE CHARACTER AREA

The potential Beach Village is envisaged as an area which can form a centre for a variety of Beachfront activities, such as surfing, wild swimming, sailing, and kayaking, by providing facilities for hire, changing, general welfare and include areas for parking.

6.13.1 BEACH VILLAGE CONCEPT

A potential Beach Pavilion building would offer a flexible layout that can be used to support these different Beachfront activities.

An associated Slipway to assist in facilitating a wide range of uses within the Beach Village, would be accessible via the existing underpass route which would be maintained and enhanced, giving direct access to the Beach. The slipway proposal will require to be assessed in relation to its impact on the natural coastal processes and beach development.

The Beach Village could also serve as an extension of the potential Stadium and Leisure proposals to allow an expanded offer of activities to be developed.



Concept Plan - Beach Village

+ POTENTIAL ARCHITECTURAL INTERVENTIONS



6.13.2 BEACH PAVILION

The Beach Pavilion building is located to the north of the Beachfront area in a position which provides an ideal location to improve accessibility to the beach in order to assist in promoting a growth in activities along the beach.

The Beach Pavilion offers a flexible layout that can be used for a variety of different Beachfront activities. The building provides active frontage to the Beach Esplanade which could potentially house a Surf Pavilion, Sports Clubhouse, and other complementary uses such as retail, Beach Café or Juice Bar. Changing/Toilet Facilities, First Aid provision and equipment storage areas would also be accommodated.

The building will be in close proximity to suggested accessible parking and will be fully accessible with ramped access integrated into the landscape design. The proposed associated Slipway will be accessible via the existing underpass route which we be maintained and enhanced, giving direct access to the Beach. The Pavilion could form part of a wider Beach Village or potentially be utilised for future extreme sports facilities, linking into the new Stadium and Leisure complex.

In line with proposals for other lightweight structures located within the Masterplan vicinity, locally sourced larch timber cladding is proposed – a species native to Aberdeen. This will offer a durable, natural, and cost-effective cladding solution, with appropriate fixing/ weathering details to suit the coastal/marine environment. The building will be single storey and will have an angular roof form which coincides with the architectural language of the other architectural interventions.

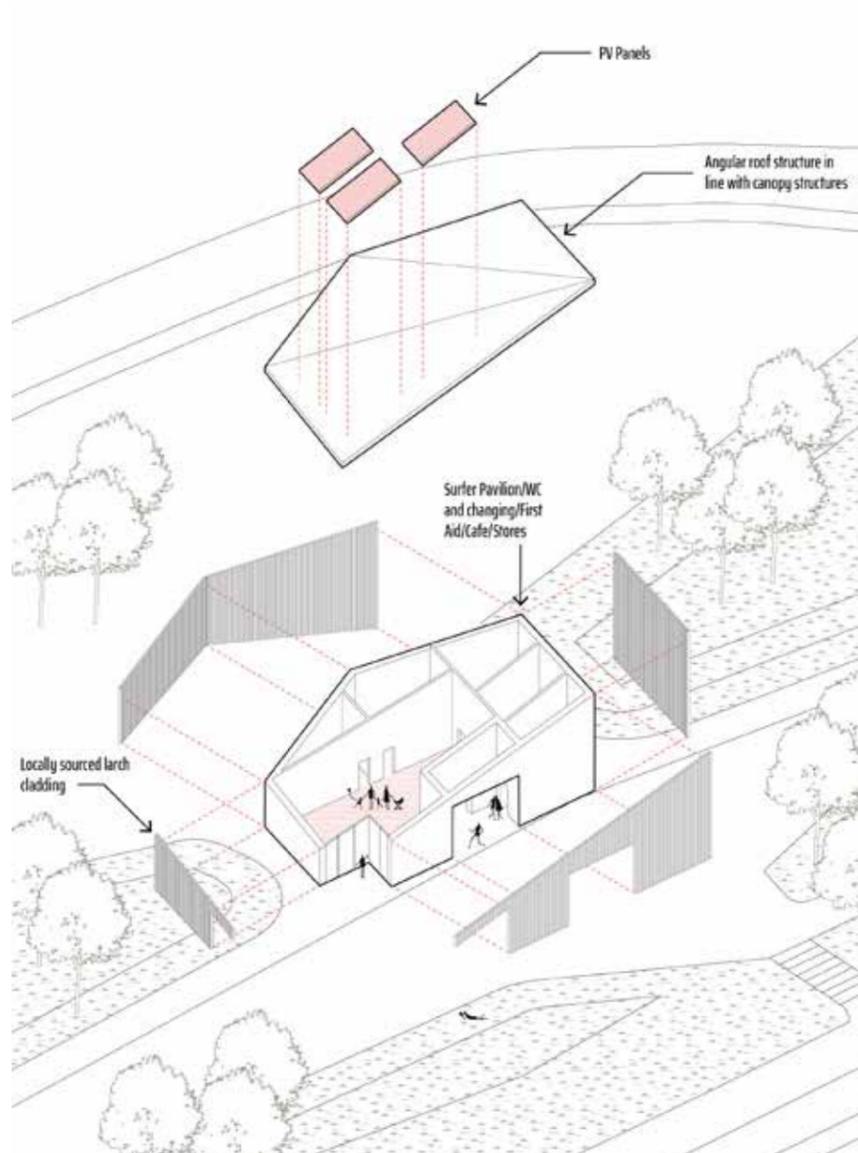
PV panels will also be explored on the angular roof form to generate solar power, in conjunction with other lightweight canopy structures offering solar collection through the concept masterplan area.



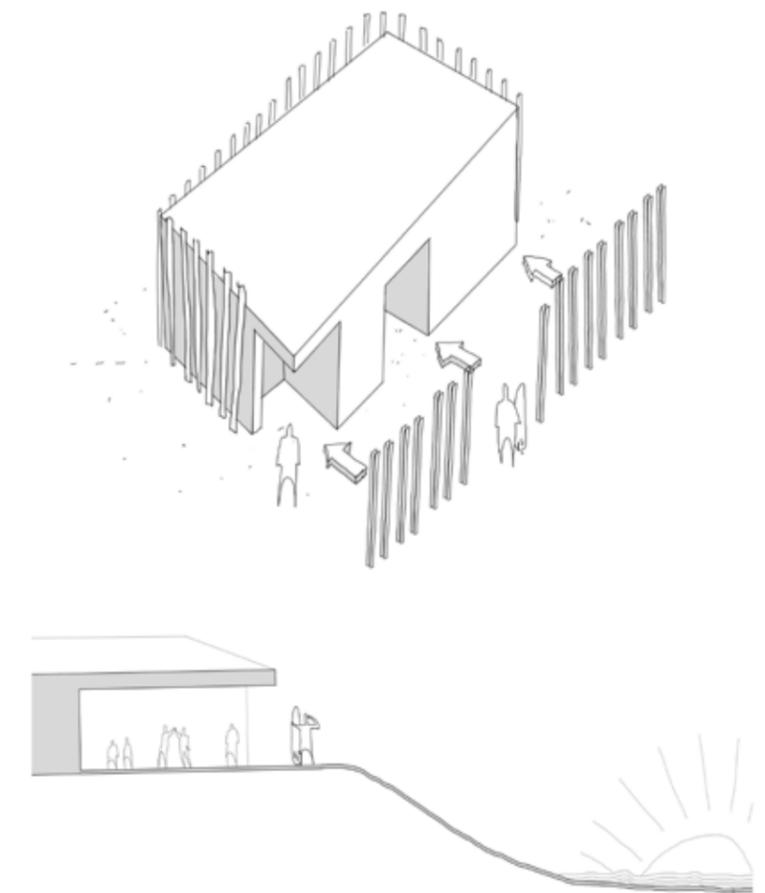
Key Plan



Concept 3D View



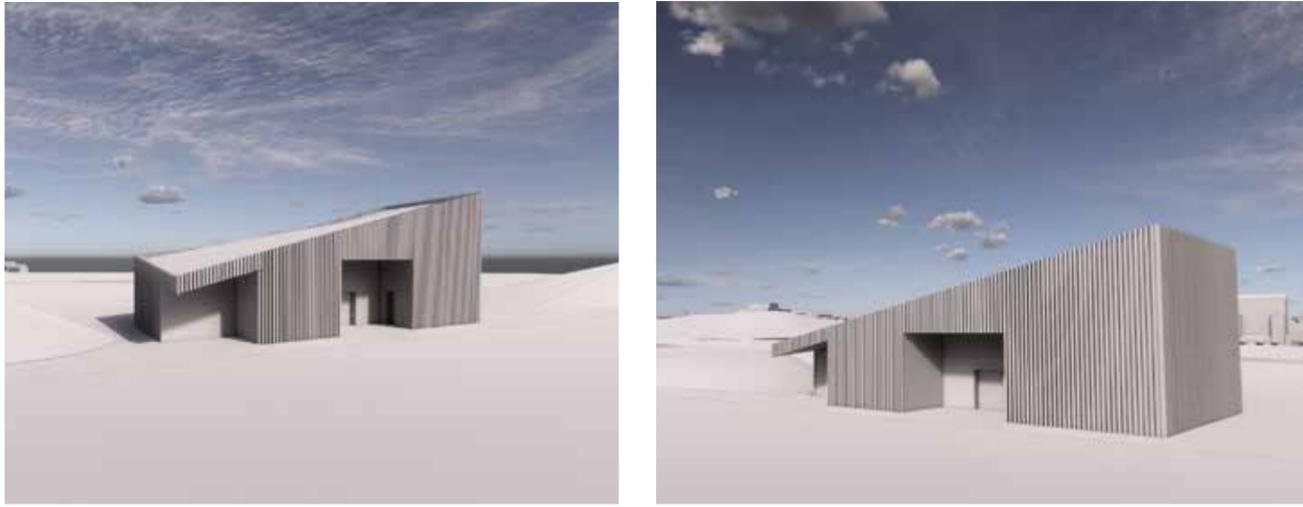
Concept Isometric View



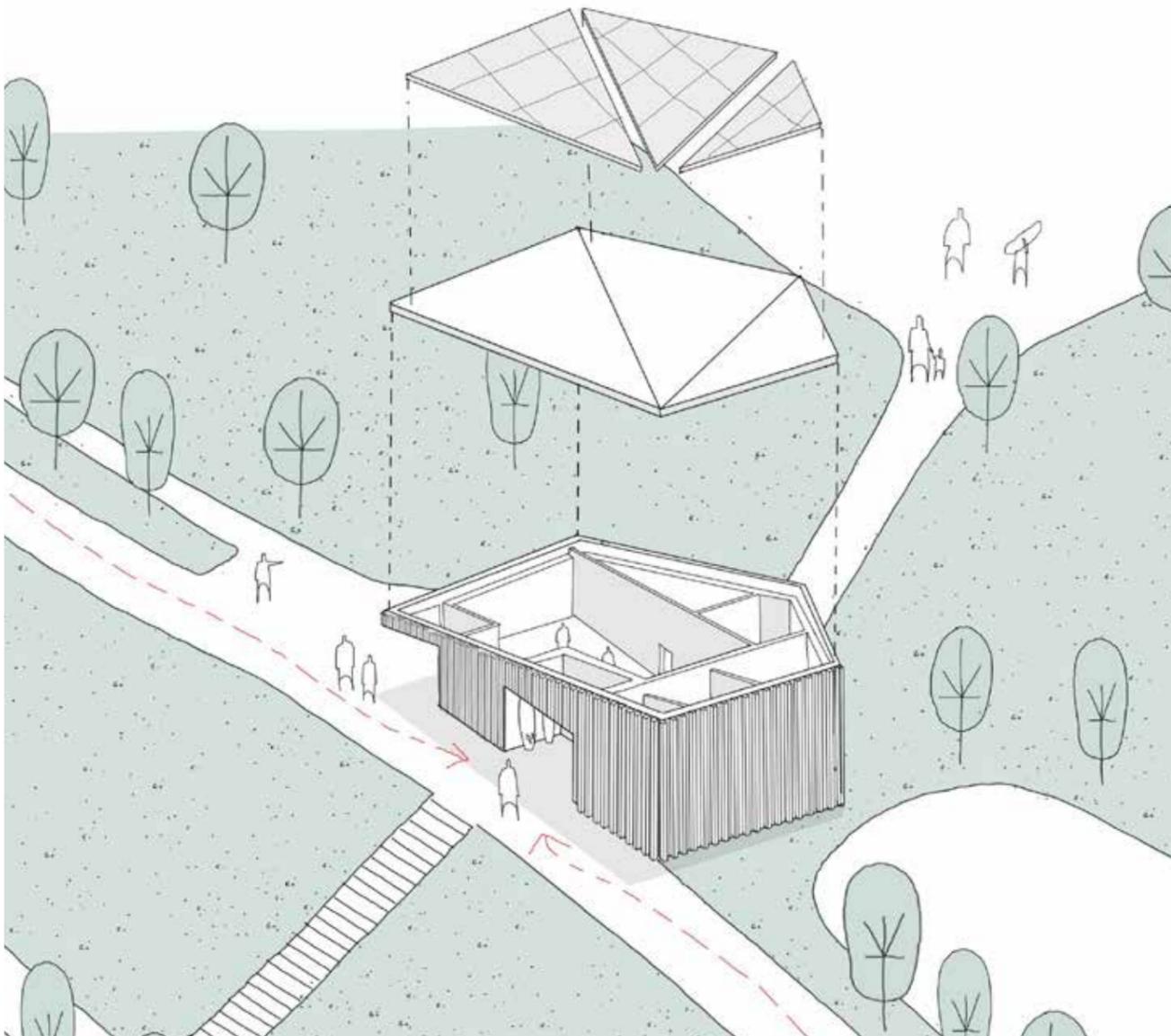
Concept Diagram

6.13.2.1 BEACH PAVILION

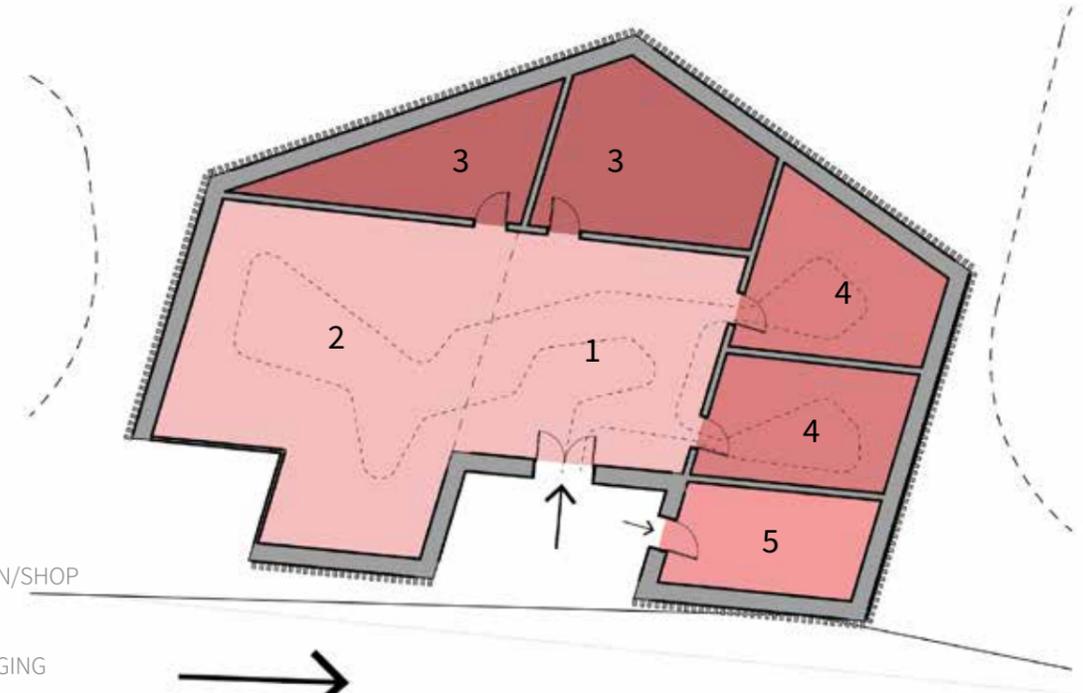
The below images provide visual inspiration for the Beach Pavilion Building and are indicative only.



Concept 3D Model Extracts

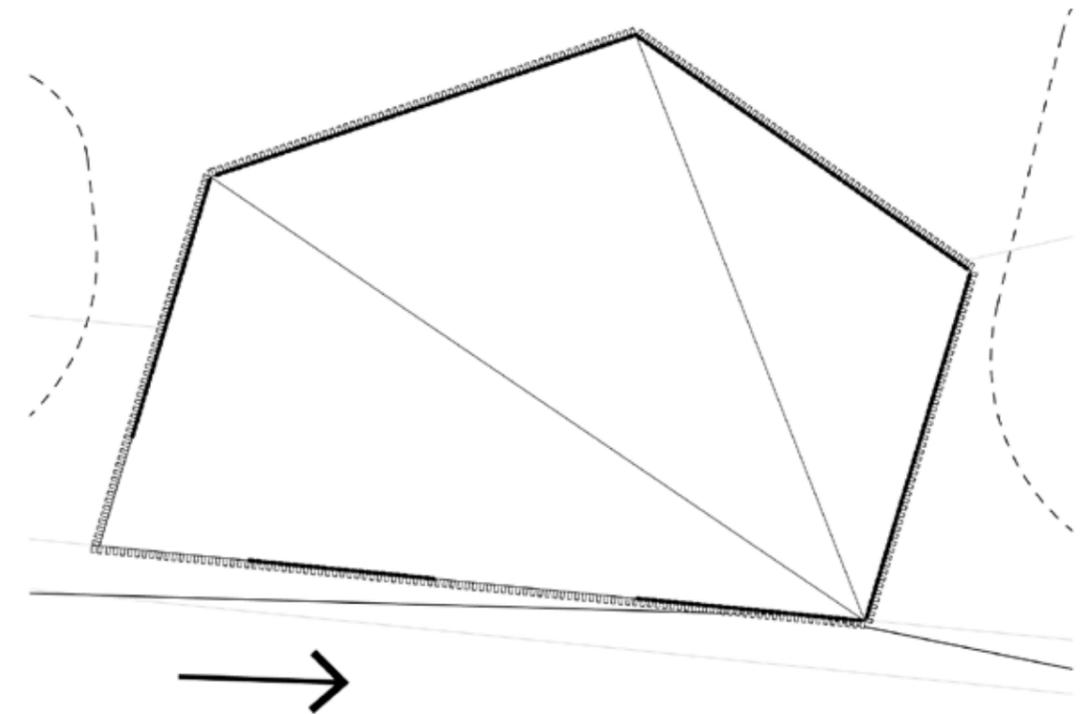


Isometric Sketch View



- 1 - RECEPTION/SHOP
- 2 - CAFE
- 3 - STORE
- 4 - WC/CHANGING
- 5 - FIRST AID

Plan Diagram



Roof Diagram

6.13.3 SLIPWAY

Located in close proximity to the proposed Beach Pavilion, the associated Slipway will be accessible via the existing underpass route which will be maintained and enhanced, giving direct access to the Beach. The Slipway could form part of a wider Surf/Sports Village, potentially being utilised for future extreme sports facilities, linking into the new Stadium and Leisure complex.

In line with proposals for other structures within the wider Masterplan, locally sourced larch timber could be utilised, suitable for a marine environment.



Key Plan



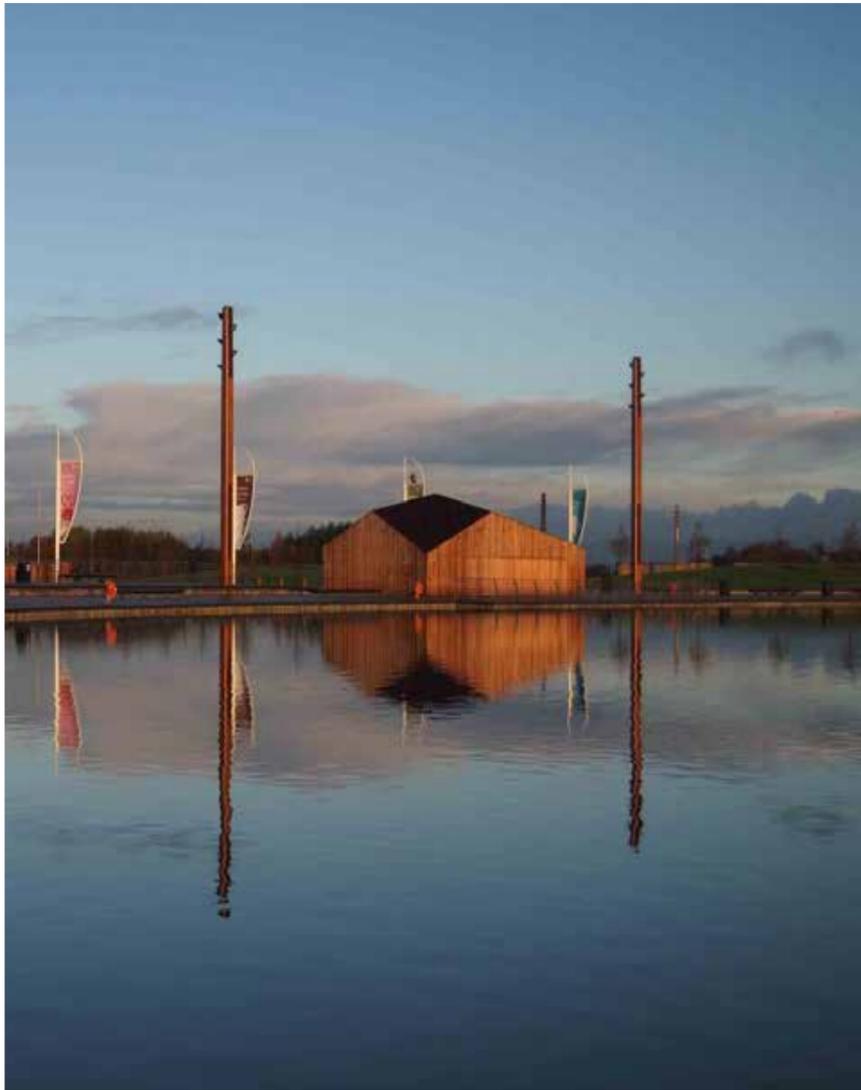
Materiality



Location Plan

6.13.4 BEACH VILLAGE - ASPIRATION

The below images provide visual inspiration for the Beach Village and are indicative only.



Potential Beach Pavilion (Photo courtesy of Ben Williams)



Beach Village Activities



Landscape Design (Photo courtesy of Houzz)



Beachfront Seating (Photo courtesy of Photodune)



Wild Swimming (Photo courtesy of Stylist)



Active Water Activities (Photo courtesy of Polkerris Beach)

PHASING & DELIVERY



7.0 PHASING & DELIVERY

7.0 PHASING & DELIVERY

The proposals documented within the Development Framework are still at an indicative stage however the adjacent phasing diagrams illustrate the desired direction of growth as currently envisaged. As advised in the Introduction, there are elements of the Development Framework proposals that can be progressed by the Council under their statutory 'permitted development' powers, mainly the public realm and urban park areas. That is because these are works which are for the maintenance, improvement and alteration of Council land for the existing purposes of function of that land, namely existing public parks and open recreational spaces. However, any buildings within these areas would likely still require planning and associated permissions. As such, it is anticipated that the public realm-related developments will be the items to come forward first.

Phase 1 - Queens Links Park

Phase 2 - Broad Hill

Phase 3 - Beach Boulevard

Phase 4 - Beach Ballroom

Phase 5 - The Beach & Esplanade

Phase 6 - Potential Stadium and Leisure

Phase 7 - Beach Village

A key consideration of the developing phasing & delivery strategy will be attempting to mitigate any disruption to the Council's existing events schedule and the current on site or neighbouring facilities operation as much as possible.

This phasing is only indicative and there are likely to be elements of work, be that Character Area-specific or across a number of Character Areas, which will be carried out concurrently or to enable certain other works to be undertaken.



Proposed Beachfront Development Framework Proposals

7.0 PHASING & DELIVERY

Phase 1 - Queens Links Parks

Phase 1 of the Beachfront proposals would see the following elements developed:

- A large core play park area with diverse range of play and games opportunities.
- An external Amphitheatre with canopy located adjacent to the Beach Ballroom.
- A large events field capable of hosting events and day-to-day use.
- A gateway building located at entrance to Beachfront area giving sense of arrival.
- A hub building located at centre of site offering a place to engage and refresh.
- Canopy features offering shelter and seating across the site.
- Water features to bring drama and animation to spaces.



Phase 1 - Queens Links Park

Phase 2 - Broad Hill

Phase 2 of the Beachfront proposals would see the following elements developed:

- Additional tree planting and nature-based intervention.
- Improvements to the existing path network.
- Two or three opportunities explored for viewpoints/resting places.



Phase 2 - Broad Hill

7.0 PHASING & DELIVERY

Phase 3 - Beach Boulevard

Phase 3 of the Beachfront proposals would see the following elements developed:

- Reconfiguration of available space to increase the allocation for pedestrians, cycles, SUDS, planting and seating whilst maintaining vehicle and public transport access.
- Community gardens located at the bottom of Beach Boulevard where the streetscape widens.
- A potential reconfiguration of the Justice Street roundabout to improve pedestrian and cycle connectivity.



Phase 3 - Beach Boulevard

Phase 4 - Beach Ballroom

Phase 4 of the Beachfront proposals would see the following elements developed:

- Proposed renovation and potential extensions of the B-listed Beach Ballroom.
- A potential plaza space with water features forming a grand setting for the building.
- A potential sunken garden area to the rear of the ballroom which would provide a dedicated external space for use by the ballroom.



Phase 4 - Beach Ballroom

7.0 PHASING & DELIVERY

Phase 5 - The Beach & Esplanade

Phase 5 of the Beachfront proposals would see the following elements developed:

- Modifications to beach edge improving visual and physical connectivity between the park and the sea.
- New dune landforms created.
- Potential boardwalk/pier structure formed.



Phase 5 - The Beach & Esplanade

Phase 6 - Potential Stadium & Leisure

Phase 6 of the Beachfront proposals would see the following elements developed:

- Potential stadium and leisure facility developed.
- Associated landscaping works installed.



Phase 6 - Potential Stadium and Leisure

7.0 PHASING & DELIVERY

Phase 7 - Beach Village

Phase 7 of the Beachfront proposals would see the following elements developed:

- Formation of the Beach Village landscape and forms.
- Creation of Beach Pavilion building.
- Creation of potential new slipway.



Phase 7 - Beach Village

APPENDICES



A PROPOSED DRAINAGE

A.1 PROPOSED FOUL DRAINAGE

It is proposed to collect all wastewater and foul discharges from the development into a traditional gravity system that discharges to the publicly adopted combined sewerage network.

The proposed foul water sewerage system is to be designed, in accordance with the latest edition of Sewers for Scotland, to operate without surcharge and achieve self-cleansing. It is anticipated that the foul sewerage system will be prospectively adoptable from the disconnecting manhole on each plot to the connection to the Scottish Water network. It should therefore be noted that the detailed design of any pumping station will have to be in accordance with the latest edition of Sewers for Scotland.

A.2 PROPOSED SURFACE WATER DRAINAGE

A preliminary sewerage network has been developed using the masterplan developed by Keppie Architects and OPEN. It consists of a traditional gravity network to collect the storm water-run-off from the various development plots and convey it, via a new outfall, to the North Sea. It should be noted that the sewer connecting the site to the headwall would penetrate the existing sea wall. Consequently, it is anticipated that consultation with the Local Authority's Flood Control Officer will be required to finalise the construction details – including the number, location relative to the planned pier and non-return valve arrangement.

Although the need for a SUDS treatment train is not anticipated, given the low-risk land-uses proposed, the system is compatible with introduction of treatment devices.

It is anticipated that the surface water sewerage system will be prospectively adoptable from the disconnecting manhole on each plot to the connection to the receiving watercourse. The design of the proposed system must therefore take account of the latest edition of Sewers for Scotland and the SUDS Design Manual (CIRIA C753).

B PROPOSED UTILITIES & INFRASTRUCTURE

A high-level review of the utility services has been carried out to provide an outline strategy for the utility services to serve the site.

District Heating

Depending on the outcome of the energy strategy appraisal then an option would be to serve the Beach Ballroom, Leisure facility and stadium from the established Aberdeen City Council's Heat and Power network. A new energy centre would need to be located for the provision of with a Gas fired CHP, Green Hydrogen CHP, or a Hybrid between Gas/Hydrogen. The connection to the district heating system with a new energy centre would assist to provide resilience back into the established network, particular during period where energy demand at the Beachfront was not high.

The overall heat demand on the existing would increase and a detailed appraisal would be required to review the capacity for connection on the district heating network.

Provision of an Energy centre with a CHP unit would provide electricity for connection to meet some of the buildings, with the option to either export and surplus to the grid or used to produce hydrogen.

Electricity

At this stage it is too early to assess the electricity demand requirement for the buildings, however this would be developed as the design progresses, along with the energy strategy appraisal. New electricity connections will be required from the existing 11KV network to the energy centre and would be connected in parallel with the electricity produced by the CHP to serve the buildings. It is likely that the electricity distribution would be high voltage with local private substations provided to serve each of the buildings

Natural Gas

Depending on the outcome of the energy strategy appraisal then an option would be to serve the Beach Ballroom, Leisure facility and stadium from an energy centre powered via a natural gas CHP that had the potential to be converted to a hydrogen fuel source in the future. The overall heat demand on the existing connection is unlikely to be suitable for the new energy centre load and a detailed appraisals would be required to review the capacity of the gas network to determine the connection point. It is worth noting that the main disadvantage of this option initially would be the heat and power is still derived from a fossil fuel.

Public Street Lighting

Public street lighting shall be developed as the design progresses, however consideration at this stage should be given to the where the electricity is to be derived from and an option would be to provide power from the Combined Heat and Power Unit within the energy centre. Depending on the final energy strategy then this could be

provided from green electricity.

Telecommunications

Digital Connection would be key to the functionality of the leisure and stadium facilities, and it is vital the connectivity of the buildings exceed the current availability and is future proofed. Details and proposal would need to be appraised and discussed further with the providers; however, consideration would be given to serve the buildings with multiple providers from diverse routes to provide added resilience to the facilities. Connections are available locally to Openreach, City Fibre and or CSP networks.

Consideration should also be given to provide the facilities with a Wired Score Digital accreditation

Water

At this stage it is too early to assess the water demand for the Beach Ballroom, Leisure, and Stadium facilities. It is reasonable to assume that the service provided to the existing would meet most of the demand and a new connection is likely to be local, however a Predevelopment/ Water impact assessment would need to be carried out to determine infrastructure upgrades and identify the likely connection point on to the existing Scottish Water Network.

Waste Water

The requirements of the foul and surface water drainage shall be carried out by the Civils and Structural Engineer.

C NET ZERO & SUSTAINABILITY

Energy Strategy

The energy strategy for the proposals still requires to be fully developed but is likely to include one Energy Centre located at the Potential Leisure Centre to serve the entire development. Architectural interventions are proposed to adopt some Passivhaus style construction principles such as super insulated building envelopes, high performance glazing and mechanical ventilation with heat recovery. They will also likely feature the use of smart controls, an off-site sourced 'green electricity' supply and some on-site renewable technologies including Photovoltaic Panels with associated battery storage. Distribution of heating & cooling is likely to be via an Ambient Loop system with water-to-water heat pumps connected to terminal units throughout. For added resilience back up heating & power could be sourced from the existing Aberdeen Heat & Power District Heating System which it is anticipated will switch to a green hydrogen fuel source in the future.

Net Zero Carbon Aspirations

The project gives a platform to incorporate new & innovative technologies and systems, to provide a net zero carbon, electricity, heating, and cooling solution to serve the load demands of the development. Additionally, there is scope for a solution which aligns with Aberdeen City Council's hydrogen strategy, to generate demand and interest in hydrogen as a power source in order to achieve their climate goals and to capitalise on the unique skills-base of the region. Following a Net Zero workshop with the design team and ACC we understand the project is seeking to achieve Net Zero Carbon in Operation status.

Futureproofing

The energy centre solution will need to meet the requirements of Aberdeen City Council Climate Change Plan 2021-25: Towards a Net Zero and Climate Resilient Council. The Plan sets out the approach, pathway, and actions towards net zero and climate resilient Council assets and operations, by 2045. As such, energy-efficient designs will be incorporated alongside renewable and low carbon energy sources, with consideration provided on how further decarbonisation could be achieved in the future.

Resilience

Given the scale and importance of the facilities planned within the development, the energy demands will be significant and critical to function. Consideration should therefore be given to added robustness and security of energy supplies so the energy centre solution should incorporate a degree of redundancy and back-up. This integrates smoothly with renewables-powered electrolysis or CHP (Combined Heat and Power) units adapted to support hydrogen, either partially or as the sole fuel source.

160 WEST REGENT STREET GLASGOW G2 4RL
KEPPIEDSIGN.CO.UK 01412040066

