

APPENDIX D – STADIUM & LEISURE

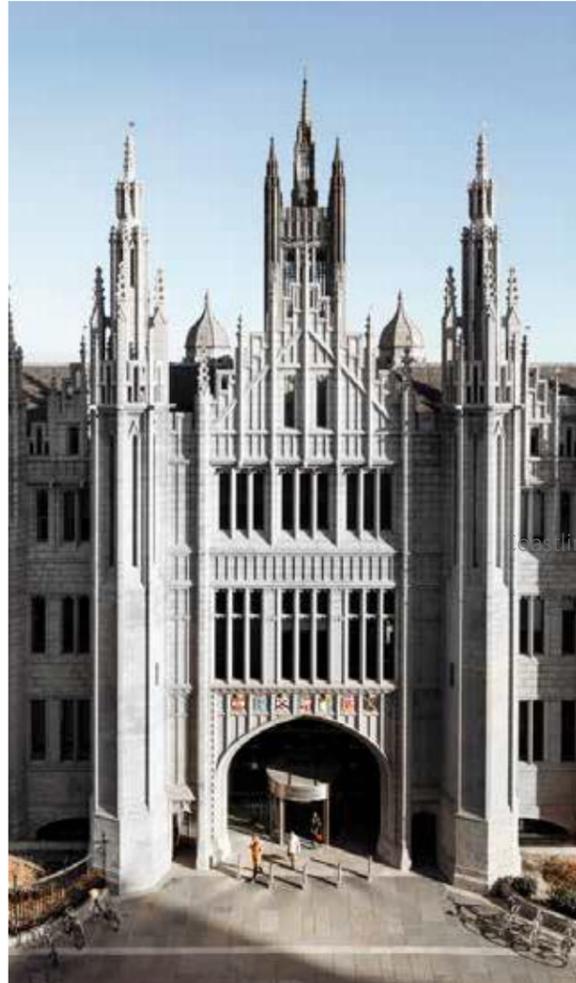
WIDER CONTEXT

The city of Aberdeen is a global brand. From its position high on the east coast of Scotland, Aberdeen has exerted its influence right around the planet. Its long and proud tradition of invention and discovery – from sub-sea technology and the discovery of insulin, to treatments for Cystic Fibrosis and even the first MRI scanner – demonstrates a fundamental element of the region's DNA: to blaze new trails and shape the future for all of humankind.

Aberdeen may be known as Europe's oil and gas capital, but it is so much more. Its impact is felt all around the globe. The city is at the forefront of a global energy transition to a lower carbon world. It is recognised as an important centre for life sciences. Its health research is world-leading. And it is home to food and drink brands that are enjoyed right across the planet.

Aberdeen has always been enterprising. Established way back in 1136, Aberdeen Harbour Board is Britain's oldest registered company. And now with a £350 million investment in their new harbour, they are reaffirming their place at the very heart of the economy.

Aberdeen is also home to one of the biggest football Clubs in Scotland, having won four league titles, six Scottish League Cups and seven Scottish Cups, including a record three in a row during the 1980's. They are also the only Scottish team to have won two European trophies: the European Cup Winners Cup and European Super Cup in 1983.



Granite Architecture - Marischal College



Coastline - Cransdale Vantage Point



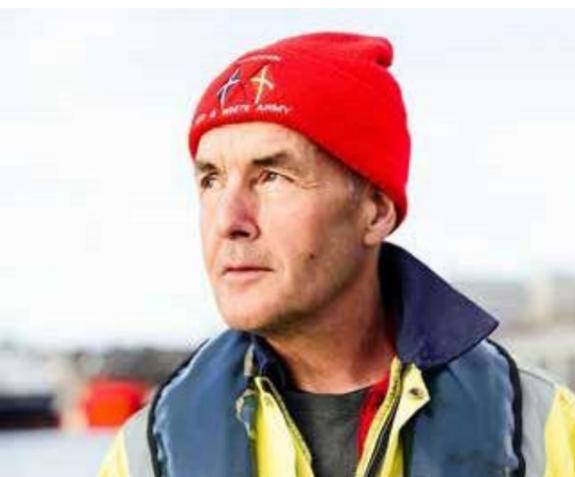
Beaches - Grass and dunes



Mountains - exploring and winter sports



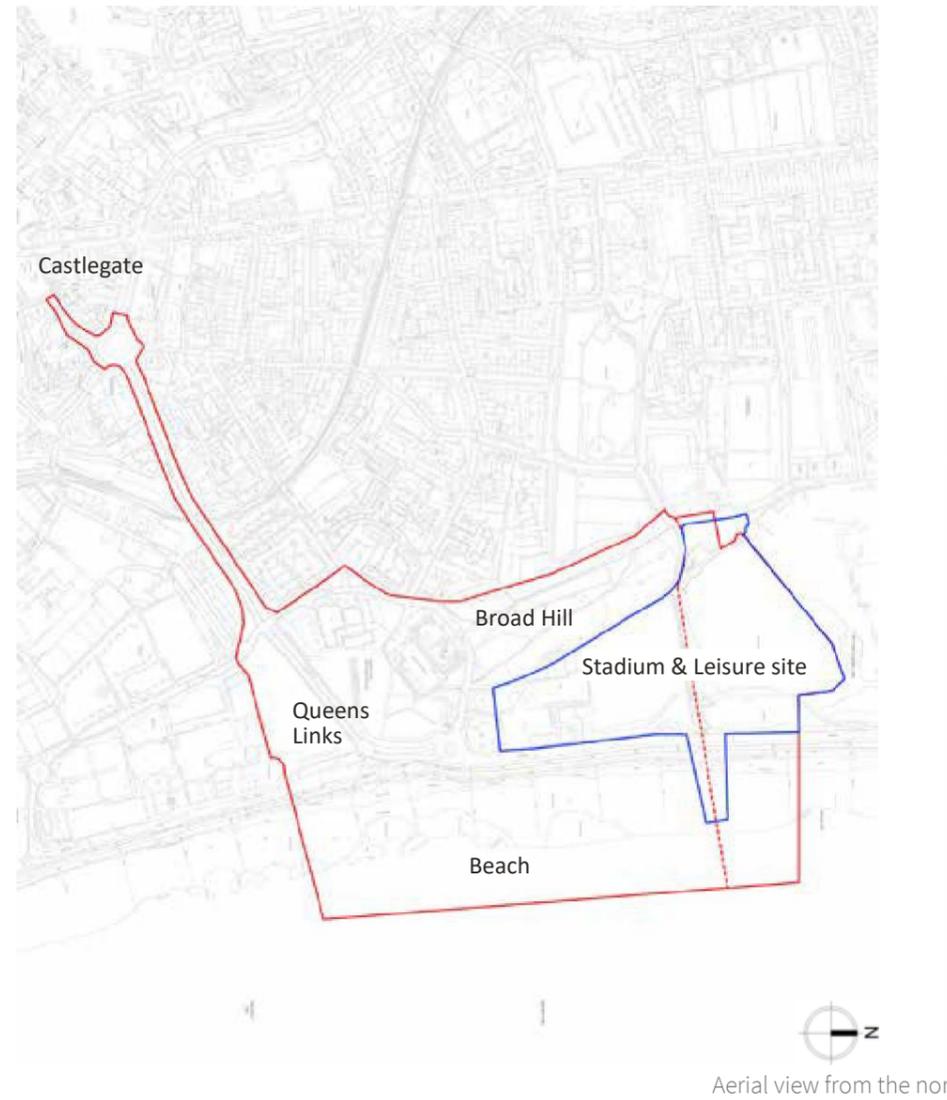
Energy based economy - Wind Turbines



LOCATION WITHIN MASTERPLAN

Following a previous visioning report carried out by AFL prior to this Feasibility stage ACC have concluded that the Stadium and Leisure location is to be the north part of the wider Beach masterplan. This extends from the north side of the Beach Ballroom through to and including the Golf Driving Range site and is delineated on the east by the sea front and on the west by Broad Hill.

Broad Hill may contain elements of outdoor leisure that are associated to the main stadium and leisure development but will essentially remain as an open space.



EXISTING LEISURE SITE - BUILDINGS

The existing site has a variety of disparate leisure facilities that are all owned and operated by the council. Though there is a physical link between the Ballroom and the Leisure centre this has been closed off for some years so each venue is completely independent. Each of these elements are discussed in greater detail but over the next two pages there is an overview.

Beach Ballroom - This is outside the scope of the Stadium and Leisure development but will link through so that its usage can be shared. It is a listed building and of great historical value to the City. Still used to this day as a flexible event space. This building is to be retained and refurbished stripping back the externals to the original octagonal rotunda at the rear and side. See earlier section in this report.

Leisure Centre - 30 years old and in much need of repair and replacement. Potentially doubles up with other facilities in the city.

Ice Arena - 30 years old. Home to Lynx Hockey team. Popular venue and although it could do with modernisation, potential increase in capacity and hospitality provision, it is in generally good order with a recent upgrade to the ice plant and mobile machinery.



EXISTING LEISURE SITE - EXTERNAL

Broad Hill - Popular for walkers and gives good views to the surrounding coastline and back to the City itself. Opportunity to enhance and create outdoor leisure activities as part of the Stadium and Leisure development.

Cricket Pitch - Open space with rudimentary wicket in an all weather surface. Used for football in winter months.

Golf Driving Range - Privately operated driving range coming to end of life. Landowned by ACC and can form part of this masterplan feasibility.

Esplanade - Sea wall and foot way is generally in good condition and is a well used promenade. The wide road dominates the highest level and as it is a busy cut though creates an effective barrier to pedestrian movement in this area.

Beach - Extensive sand but it suffers from coastal erosion and high tides reduce the usable area. Stone groynes have been added to the end of some break waters with some success in extending the beach life. Part of the beach on this coastline are used for water sports.



Tunnel to beach

Step free Beach Access point



Driving Range

Cricket Pitch

Ice Arena & Leisure Centre

Beach Ball Room

Broad Hill



Broad Hill

Ice Arena

Leisure Centre

Beach Ball Room

Broad Hill



Broad Hill

Pittodrie

Driving Range



EXISTING LEISURE CENTRE

The Leisure centre is a significant structure on the beach front but is very tired in appearance and outdated in functionality. Reference should be made to recent conditions surveys going forwards.

Though used by the general public the facility struggles to run at cost neutral and is heavily subsidised by ACC. There are many pools and leisure centres across the City region. The University nearby has an Olympic sized training pool. Reference should be made to Aberdeen City Council's Leisure Needs Assessment reports going forward.

- **Leisure Pool with wave machine and flumes**

Reasonably used but expensive to operate and maintain Dwell time

poor beyond usage in the pool

Minor Glare issues

- **Gym**

No external connection to the sea view

- **Eight Court Sports Hall**

Unique facility in the city region

No retractable seats to use the hall for events

- **Climbing Wall**

Climbing wall is covered over due to H&S issues – which is behind the wall in the lower right image

- **Changing Facilities**

- **Children's Party Centre**

- **No active frontage**

- **Dominated by road and car parking**

Car Parking	45 spaces (2 acc.)
Sports Building Total	2427
Sports Hall (8 court)	1150
Gym	215
Support accommodation	1062
Water Leisure Total	4542
Leisure Pool	1552
Gym	423
Support accommodation	2567
TOTAL AREA	6969



Leisure



Existing Entrance and external facade



One of the Gym areas

EXISTING ICE ARENA

Popular venue and is used regularly as the home of the Lynx Ice Hockey Team. It is available for use as a leisure ice rink for lessons and general use by the public. Any future development on the site would need to incorporate an ice arena either refurbished or newly constructed.

- Ice Pad – Home of Lynx Ice Hockey Team

Popular venue

1100 Capacity – regular crowds of 800+

- Small Hospitality Lounge
- Changing Facilities
- Shop
- No active frontage
- Not linked to Leisure Centre
- Frontage dominated by car parking



Existing Ice pad and seating



Lynx Hockey Team

Rink & Circulation around	1697
Team Changing Area	511
Seating (1034 seats)	671
Support accommodation to rink	608
Hospitality and support	335
Support accommodation near reception	1316
Car Parking	39 spaces (2 acc.)
Gym	423
Support accommodation	2567
TOTAL AREA	5230



Existing Entrance and external facade



Entrance foyer

EXISTING OUTDOOR SPORTS

There are extensive open areas available for various sports on what is the start of the Kings Links. These are of varying quality but popular with locals.

- **Open Cricket Pitch**

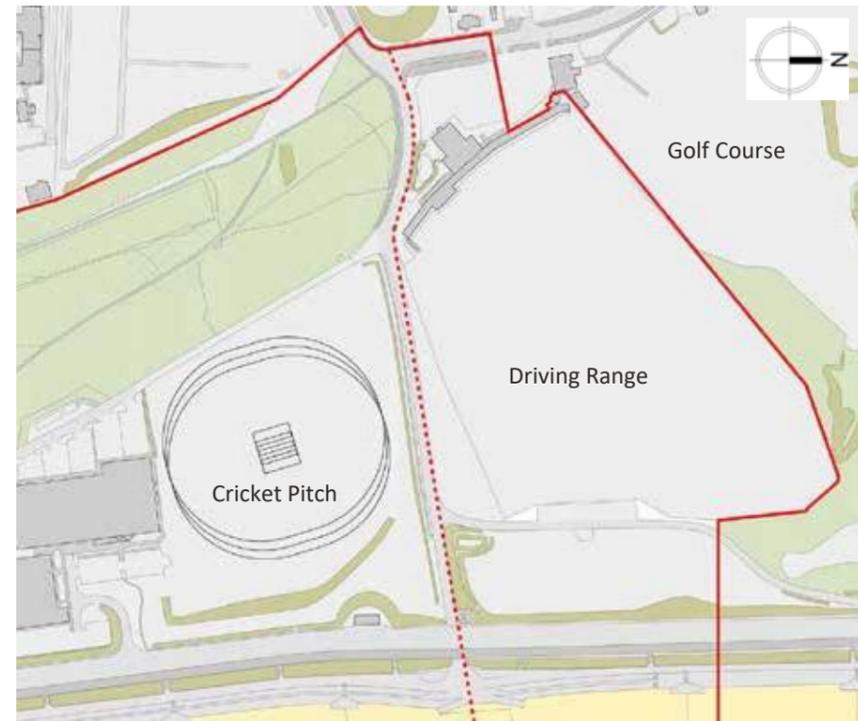
Used for school/community football in winter season
Wicket in poor state

- **Space used for community football in winter months**
- **Driving Range**

Potential to integrate all or part of this site into the new development
Retain as driving range or reduce/remove and introduce new sports uses

- **Golf Course - Kings Links**

Not part of this masterplan but there is potential to create synergies between the retained golf course and any new uses in the Masterplan.



Plan view of the existing outdoor sports areas



Aerial view across the open sports areas with cricket pitch in the foreground



View down to the Driving Range from the top of Broad Hill



View down to the Cricket Pitch from the top of Broad Hill

ABERDEEN FC & PITTODRIE STADIUM

Pittodrie Stadium

The current stadium is in need of major modernisation and repair, and in terms of main stand hospitality facilities is woefully inadequate compared to many of their rival teams in both the Scottish Premier and English Premier Leagues.

Retaining Aberdeen FC in the City

Aberdeen Football Club are one of the key brands of the City and retaining their event venue, with its associated 20k footfall, close to the beach and city centre will continue to bring social and economic benefits for generations to come. Furthermore with a modern fit-for-purpose venue the non-match day utilisation of the venue will bring the opportunity for all year round activation of the new Community Stadium and its surroundings.

AFC have plans to build a new stadium on an out of town site at Kingsford adjacent to their new Training Facility however this is being reviewed in light of this new site becoming available for review.

Existing site released for much needed housing

The current stadium sits at the corner of a residential area and would lend itself to future residential development with a desirable corner outlook to the Kings Links. One of the most interesting stadium site redevelopments is Highbury Square, London, the old home to Arsenal FC. The listed main stand facade was retained and four primary blocks were created around the pitch area which was made into a communal garden. Brentford FC moved to AFL Architects' new Community Stadium and likewise Griffin Park is due to be created into a new residential street pattern using the memory of the old stadium.

Key data

	Pittodrie	Kingsford	Beach
Stadium Capacity	20,866	19,852	18,000 (+/- 2000)
Hospitality Capacity		2064-2211	2200
On site Car Parking	680	1116	800-1200
On site Coach Parking	45	60	60
On site OB Parking		60	60



Aerial view of Pittodrie Stadium from the north east



Andrew Considine - AFC



Aberdeen - winners of the Scottish League cup in 2014



Highbury Square London - Arsenal FC's old stadium converted to apartments with the pitch retained as a legacy garden

POSSIBLE NEW ACTIVITIES - INDOORS

With a wealth of Council run traditional leisure centres in Aberdeen there is an appetite to create a new unique destination on the prime beach front. The public generally have more disposable income and there is a move to a leisure time based economy in the city with the growth of online shopping. The nature of this type of venue has to become more sophisticated and encourage longer dwell times for visitors. For example the new concept of a thermal spa complex with a mixture of highend relaxing pools through to water activities could create a whole day out for both adults and families rather than a quick visit to the pool with the kids.

Potential concepts have been discussed previously as part of the initial visioning report but some of the key indoor experience type leisure is highlighted on this page:

Therma Spa and leisure complex

- Relaxing atmosphere
- Tropical theming
- Lazy rivers and water play for families of all ages
- Some of the valuable facilities in the existing leisure centre could also be replicated such as an eight court sports hall with retractable seating etc.

Ice Centre of Excellence

- State of the art ice pad and arena
- Created for ice shows and spectaculars as well as the existing uses
- Ice Climbing

Water Sports Centre of Excellence

- Diving with sharks
- Deep Dive tank
- Indoor Surfing
- Endless swimming training pools
- Indoor sailing training rigs
- Indoor rowing classes

THERMAL



Thermal Spa Concept

ICE SPORTS



Ice Climbing walls

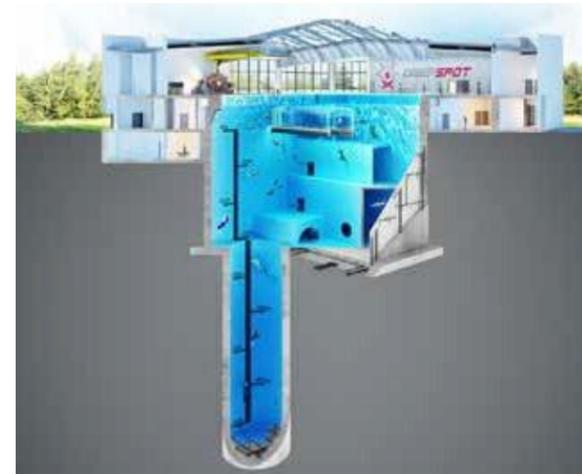


New state of the art Ice arena



Indoor Ski slope

WATER SPORTS



Deep diving tanks - training and extreme sports



Indoor Surfing - training and ex

POSSIBLE NEW ACTIVITIES - OUTDOORS

Along with the indoor experiences the Queens Links, Broad Hill and the start of the Kings Links could form the basis of a multitude of both free to use and paid for activities.

- Zipline from Broad Hill
- Mountain Bike trail across Broad Hill and throughout the site
- Outdoor running route through scheme
- Dry Ski Slope of similar scale to the Garthdee slope near to the city
- Alpine Coaster on Broad Hill



Dry Ski Slope on roof of building - Copenhagen

Outdoor Running route



CREATING A SINGLE DESTINATION

Vision

Our vision is for the site to become a destination where people will spend the day using the restaurants and Leisure facilities as well as attending events by activating the site to enhance the experience and therefore increase footfall and retention of visitors, as the graph to the right shows. The offering and interrelationship of uses is critical to this.

Relationships

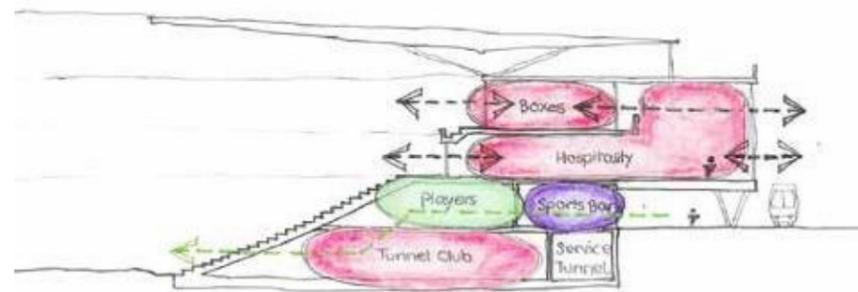
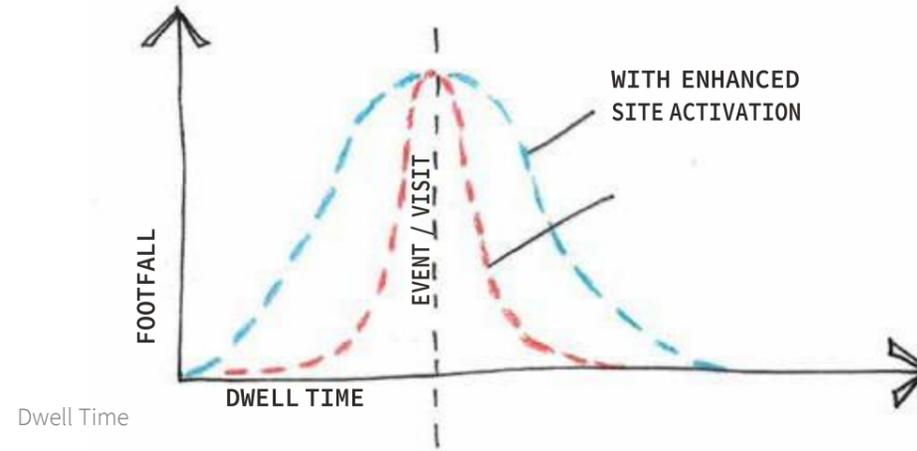
The links between the site uses need to allow easy access. The bubble diagram on the right highlights the key relationships. One of the key relationships is the link with the ballroom which must link through to the stadium Hospitality via the entrance to the Ice Arena and leisure facilities to enable the Ballroom to be used as an exciting hospitality offering. A shared entrance reception located off Esplanade with strong links to the Ballroom, Ice Arena and Leisure Box is a key strategy for making efficient use of the facilities provided and reducing cost. Hospitality bars, restaurants, concourses and facilities can also be shared between the Ice Arena and the Stadium. Hospitality suites and boxes have dual aspect frontages overlooking the pitch and sea front or pitch and Ice Arena. Bars and restaurants activate the Esplanade under a covered frontage, covered by the upper levels overhanging the Esplanade.



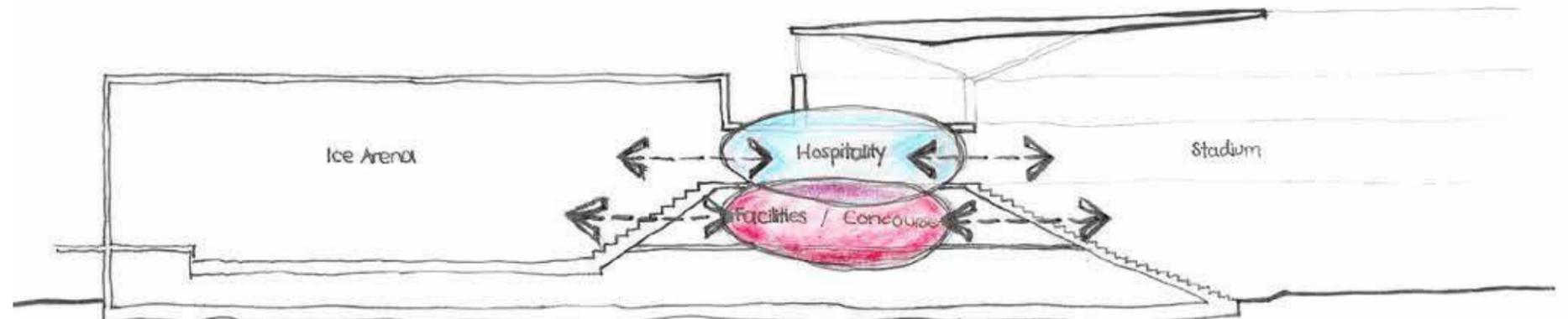
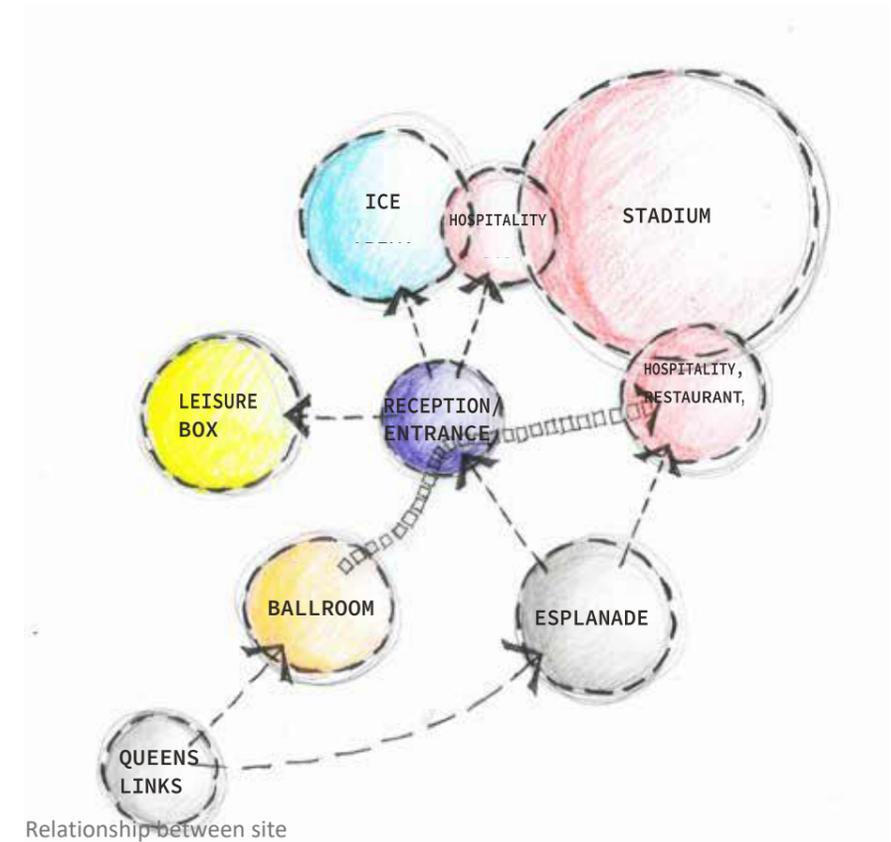
Precedent of interesting linkage to inform Ballroom link



High quality precedents of activated and engaging link plaza.



Section through Stadium and Esplanade - active frontage and dual aspect hospitality



Section through Ice Arena and Stadium - shared hospitality and

SITE CONFIGURATIONS POSITIONING THE STADIUM

Key Link

A key requirement of the brief is to link the stadium and its hospitality facilities with the Ballroom. However site constraints restrict the position of the stadium as the diagrams here show. An existing sewer easement on site along with the steep escarpment of Broad Hill prevents the stadium being located adjacent to the ballroom.

Using form to create more space on site.

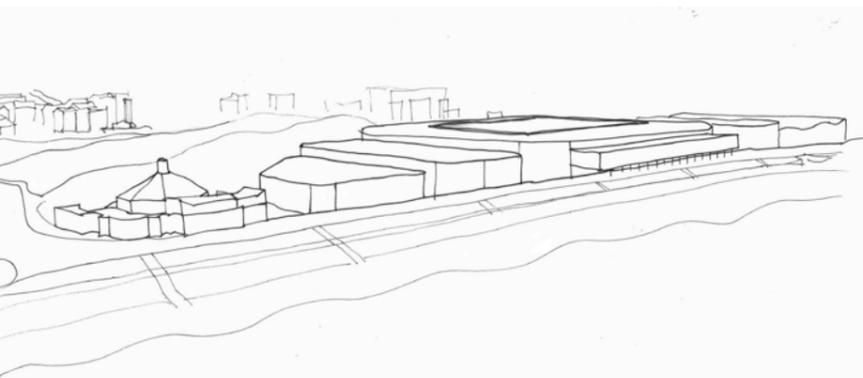
The section to the right shows how we can manipulate a typical stadium form to gain more space on site by moving the stadium to the east (towards the Esplanade). The dotted line shows a more traditional line for the external wall. By pushing the lowest floors in and the upper floors out we can create more space on site whilst activating the frontage and engaging with the Esplanade, providing shelter for pedestrians in the process.

Pushing the Stadium further toward the Ballroom

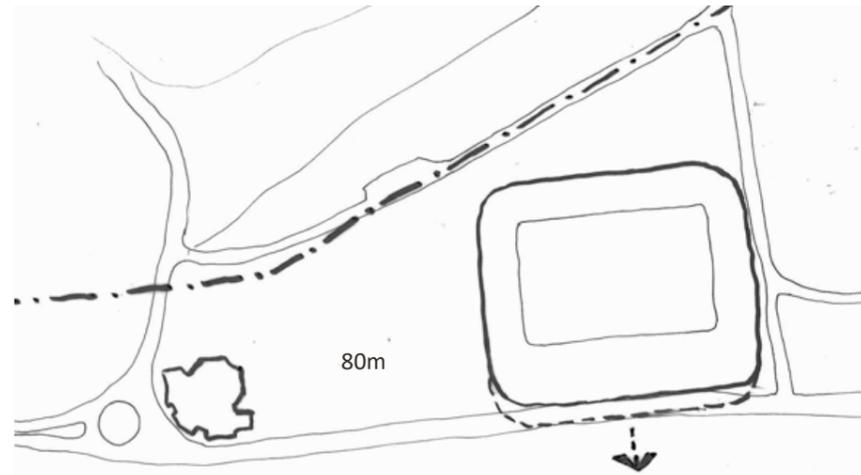
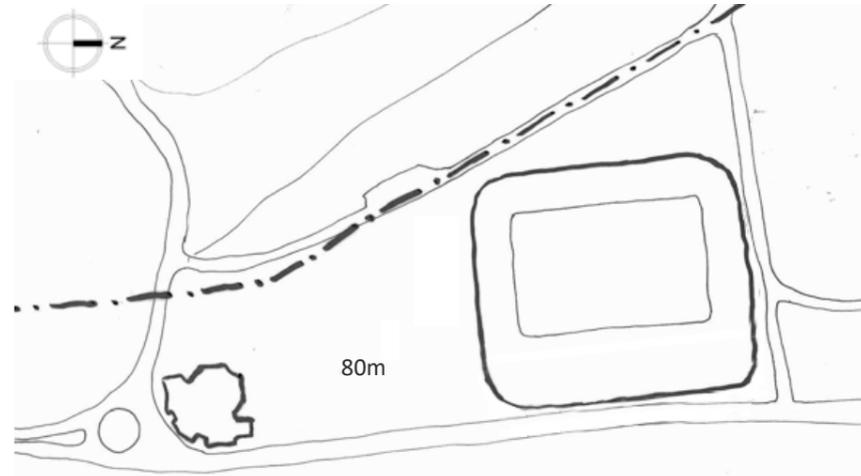
We can also shift the stadium further south by reducing the ground floor area or adjusting the shape of the west stand so that it suits the angle of the site. However the stadium is always distanced from the Ballroom and these diagrams show that there is not much to gain from changing the shape of the stadium.

Mass

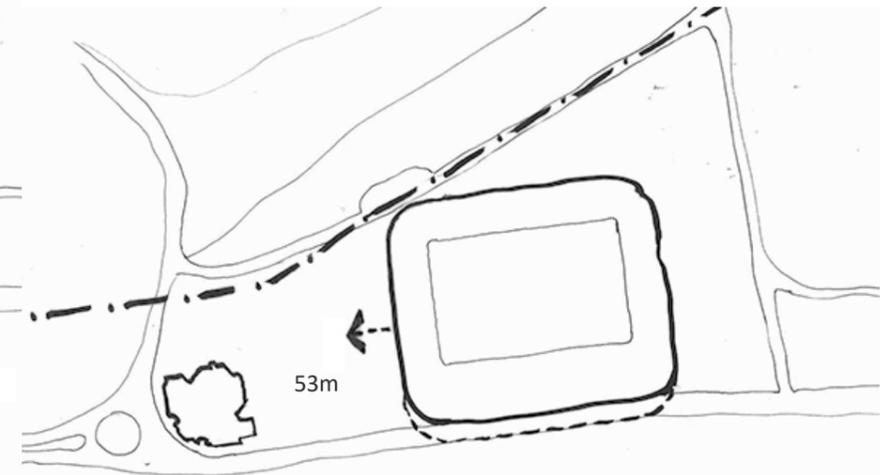
It is also critical that the Mass of the stadium does not dominate the Ballroom so a gap between the Ballroom and Stadium helps prevent this. The massing sketch below helps to show how buildings between the Ballroom and the Stadium help to respond to the Ballroom by stepping up in size along the Esplanade frontage. Therefore managing the distance between Stadium and Ballroom and rationalising the link between them is a delicate balance and will need to be considered carefully.



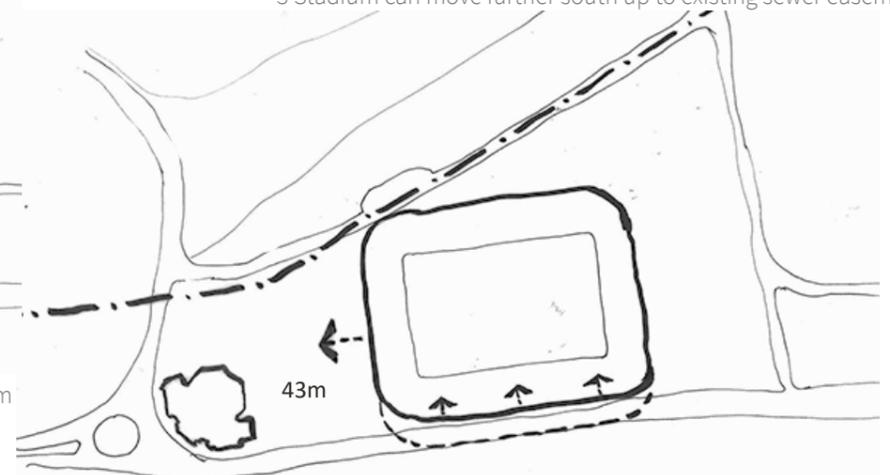
Massing Sketch - intermediate buildings between the Stadium and Ballroom help to step up the mass to rationalise their difference in mass.



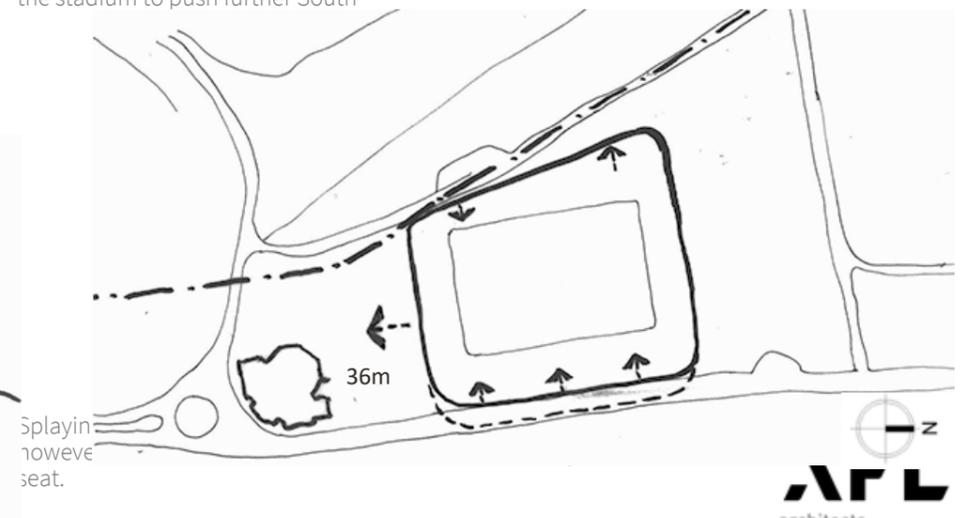
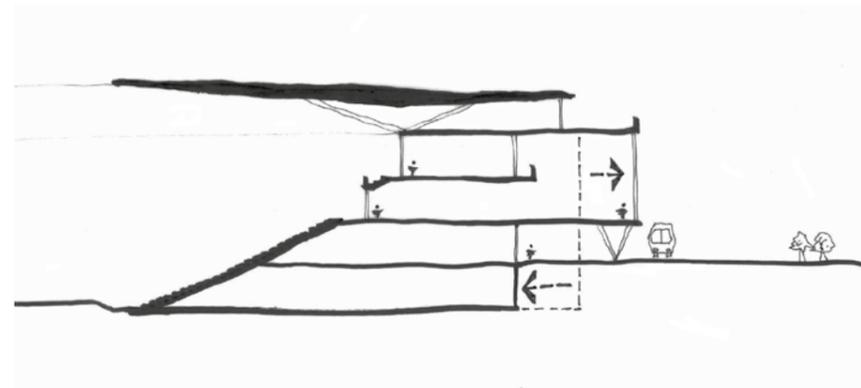
2 Overhanging the upper levels of the stadium over the Esplanade allows the stadium to push further east on site and therefore makes more efficient use of the site.



3 Stadium can move further south up to existing sewer easement and Broad Hill



4 Further reduction of the ground floor area with expansion of the upper levels allows the stadium to push further South



VARIANT OPTION 1B - LEISURE CENTRE REMOVED -
ICE ARENA RETAINED AND UPGRADED

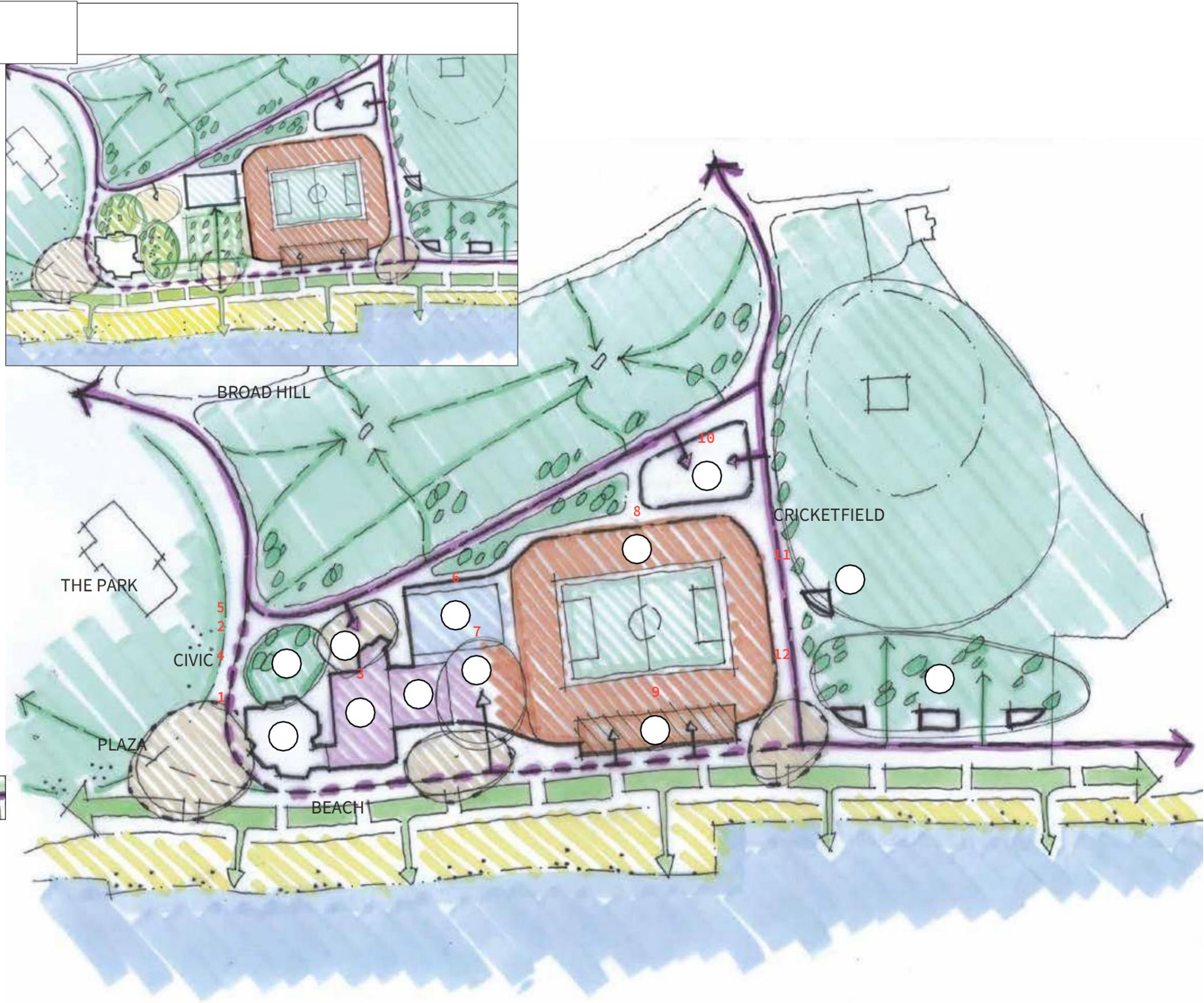
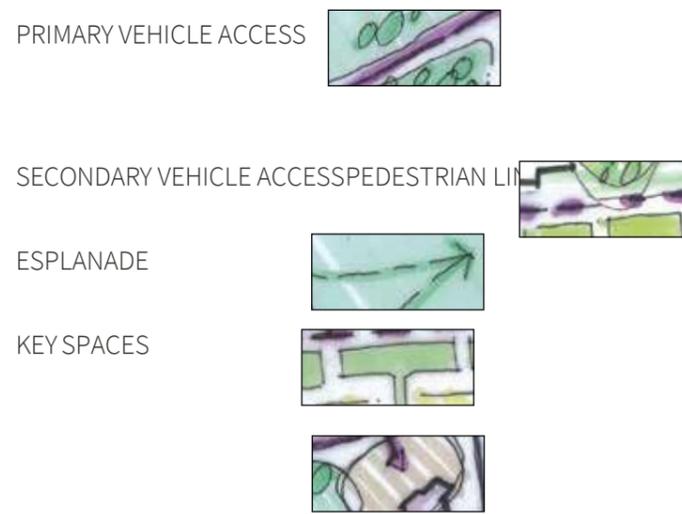
SITE CONFIGURATIONS

We have been asked to look at three core options for redeveloping the leisure facilities on the existing site. They all involve retaining and refurbishing the Beach Ballroom and building a new stadium for Aberdeen FC. However there are withvarying ideas for retention or rebuilding new facilities for the leisure and ice arena components.

OPTION 1

**OPTION 1 - LEISURE CENTRE RETAINED:
BUILDINGS, USES AND ACCESS**

1. BALLROOM
2. HIDDEN GARDEN
3. NEW LEISURE
4. EXISTING LEISURE
5. ACCESS AND PARKING
6. EXISTING ICE ARENA
7. ENTRANCE AND HOSPITALITY
8. STADIUM
9. PLAYERS ENTRANCE AND BARS
10. MULTI-STOREY CAR PARK 800 CAPACITY
11. PAVILION
12. NEW BEACH-FRONT LEISURE



SITE CONFIGURATIONS OPTION 1

OPTION 1 - LEISURE CENTRE RETAINED: CHARACTER AREAS

NATURALISTIC CHARACTER - PAVILIONS, CYCLE PATHS,
RUNNING TRAILS



BALLROOM, PLAZA AND GARDEN



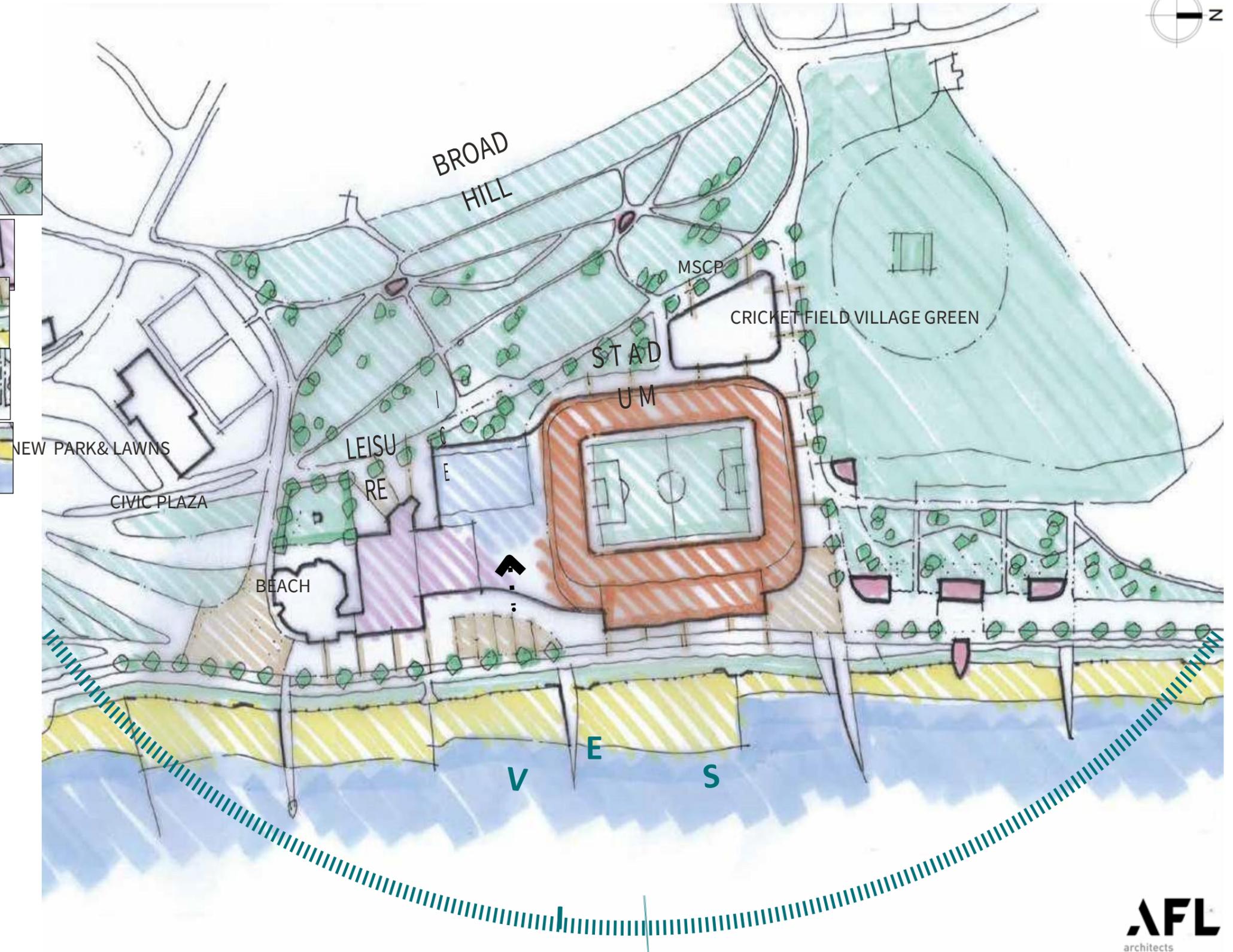
FORMAL ESPLANADE WITH LINKED SQUARES



NEW BEACH-FRONT LEISURE USES & PUBLIC GARDEN



PIERS & JETTIES FOR WATER SPORTS





SITE CONFIGURATIONS OPTION 1

LEISURE CENTRE RETAINED

- Leisure Centre retained and upgraded
- Possible re-imagining of wet leisure
- Ice Arena retained with single story element demolished
- New Linking entrance and hospitality area created
- Re-skinning of all existing
- New Stadium circa 18-20k
- Main Stand located on East with views over the sea
- Opportunity for a new location for the Cricket pitch and other outdoor sports on the current Driving Range
- Car parking in MSCP behind the sports buildings or limited amount only at grade



Retained but re-skinned ice arena

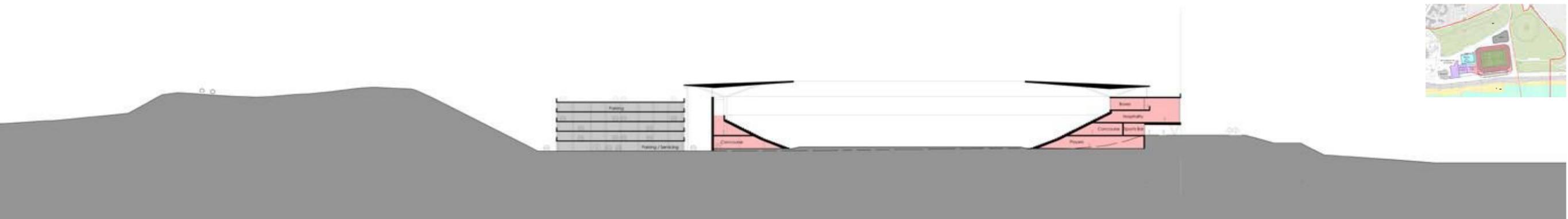
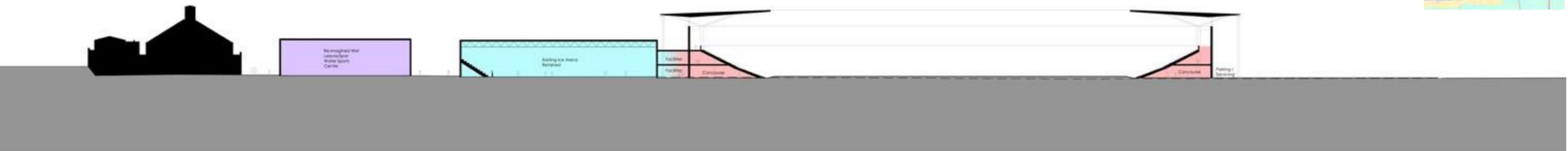


Brentford FC's new Stadium as example



Potential nature of new entrance and hospitality hub New Hospitality lounge/ dining with views over the beach and sea beyond

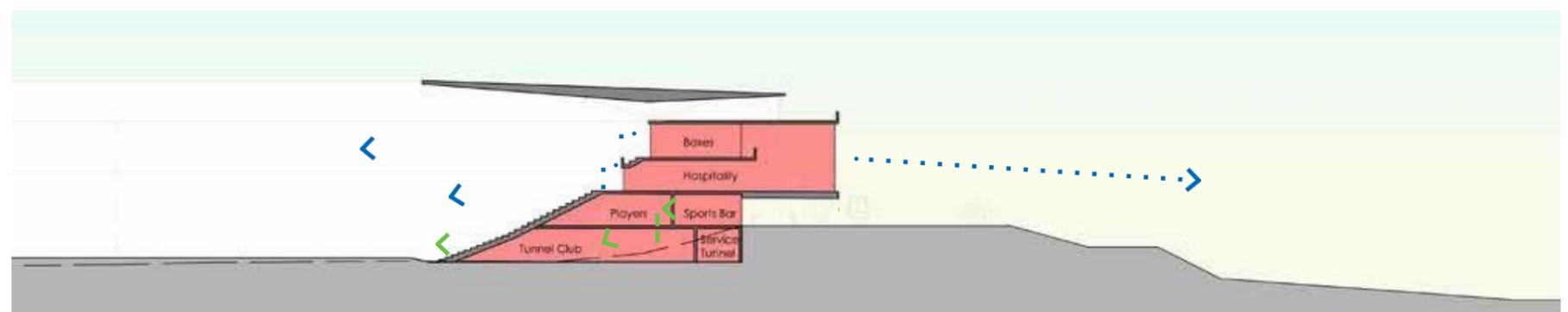
CROSS-SECTIONS OPTION 1



By positioning the main stand hospitality lounge on the sea frontage this creates an ultimate USP unique to this location. Sea views as well as pitch views makes this a stunning location for both match day entertaining as well as non match day usage:

- Restaurant
- Conferencing
- Exhibitions etc.

It is also envisioned that the players would arrive by coach on the esplanade in front of the public and enter via a sports bar into their changing facilities. When entering the arena they would pass a new concept in hospitality known as the Tunnel Club where a glass wall would be the only thing separating the players tunnel from the paying guests.



SITE CONFIGURATIONS OPTION 2

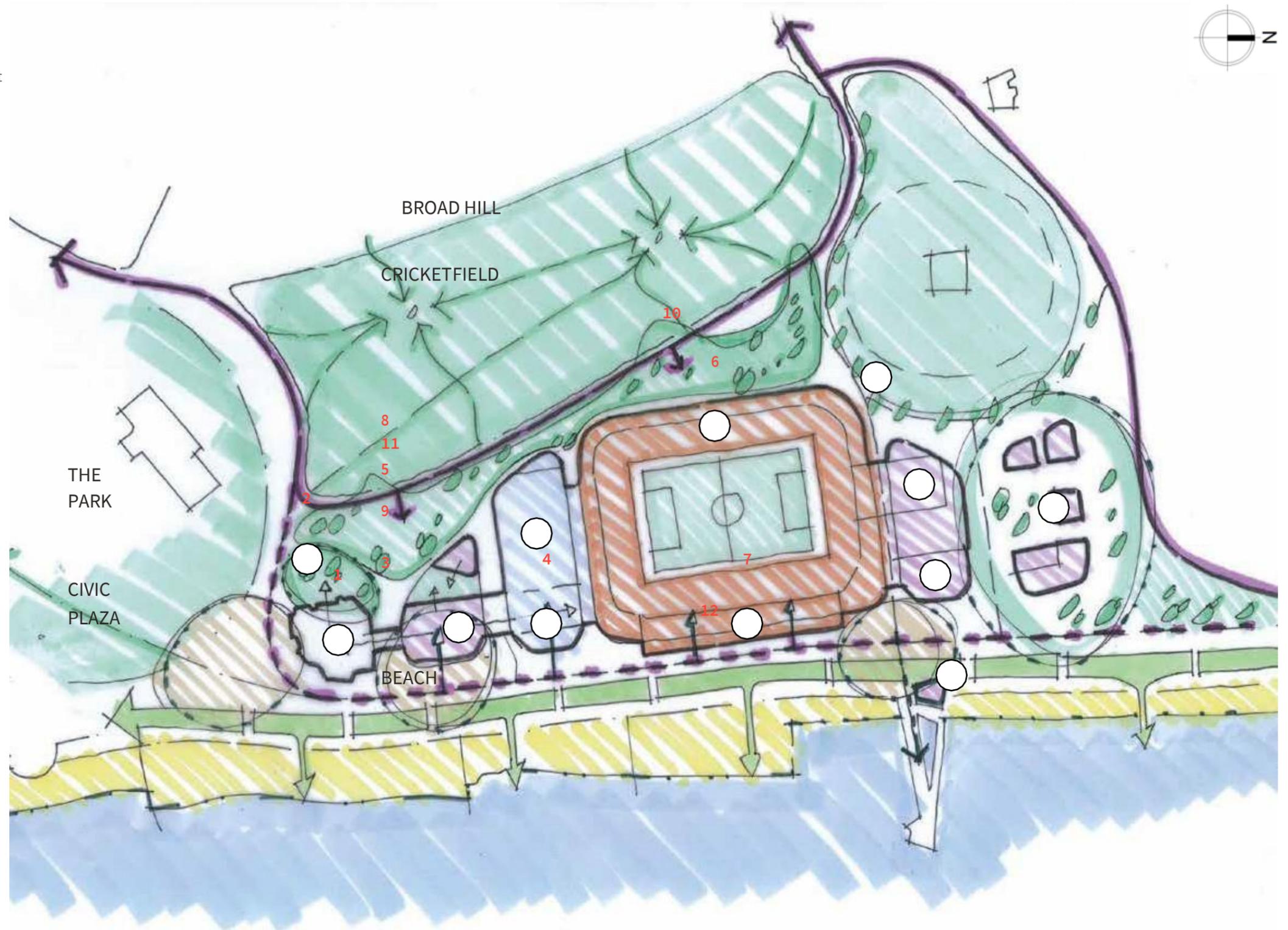
This option investigates demolishing all the existing facilities apart from the Beach Ballroom and creating a whole new leisure and stadium development. As part of this option we have investigated spanning a podium deck extending from the rear of the Esplanade through to close to Broad Hill to contain hidden parking and servicing freeing up the space for pedestrians and coastal landscaping.

WHOLE SITE PODIUM DECK: BUILDINGS, USES AND ACCESS

1. BALLROOM
2. HIDDEN GARDEN
3. NEW LEISURE
4. RESTAURANTS AND BARS
5. ICE ARENA
6. STADIUM
7. PLAYERS ENTRANCE AND HOSPITALITY
8. LEISURE BOX
9. WATER SPORTS CENTRE
10. PAVILION AND CHANGING FACILITY
11. POTENTIAL NEW LEISURE/THERMAL SPAR
12. NEW BEACH-FRONT WATER SPORTS FACILITY
13. PODIUM DECK WITH CAR PARKING BELOW (1200)

PRIMARY VEHICLE ACCESS SECONDARY VEHICLE

ACCESS PEDESTRIAN LINKS ESPLANADE



SITE CONFIGURATIONS OPTION 2

WHOLE SITE PODIUM DECK: CHARACTER AREAS

NATURALISTIC CHARACTER - PAVILIONS, CYCLE PATHS, RUNNING TRAILS



BALLROOM, PLAZA AND GARDEN



FORMAL ESPLANADE WITH LINKED SQUARES



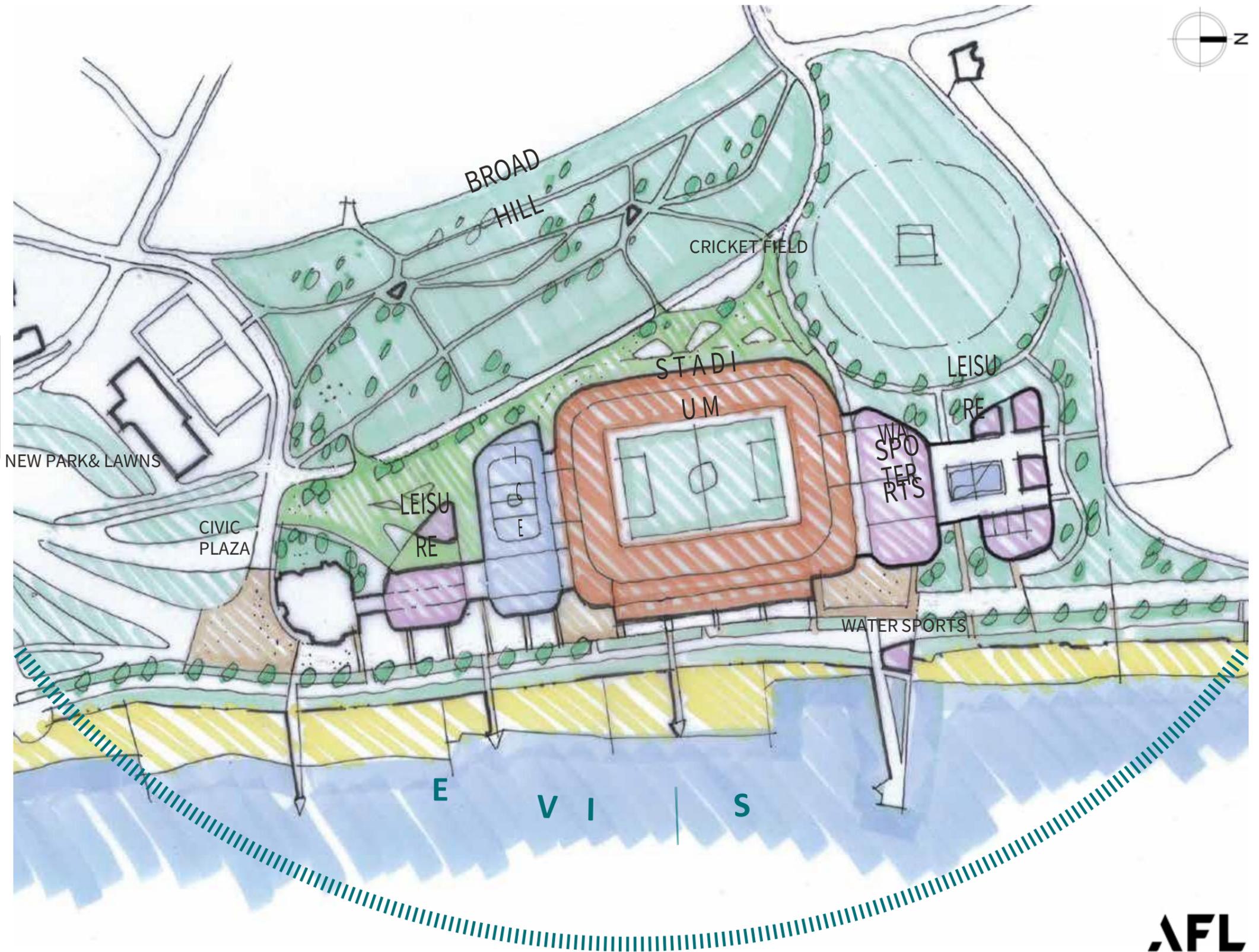
NEW BEACH-FRONT LEISURE USES & PUBLIC GARDEN



PIERS & JETTIES FOR WATER SPORTS



PODIUM LANDSCAPE AND GREEN LINKS



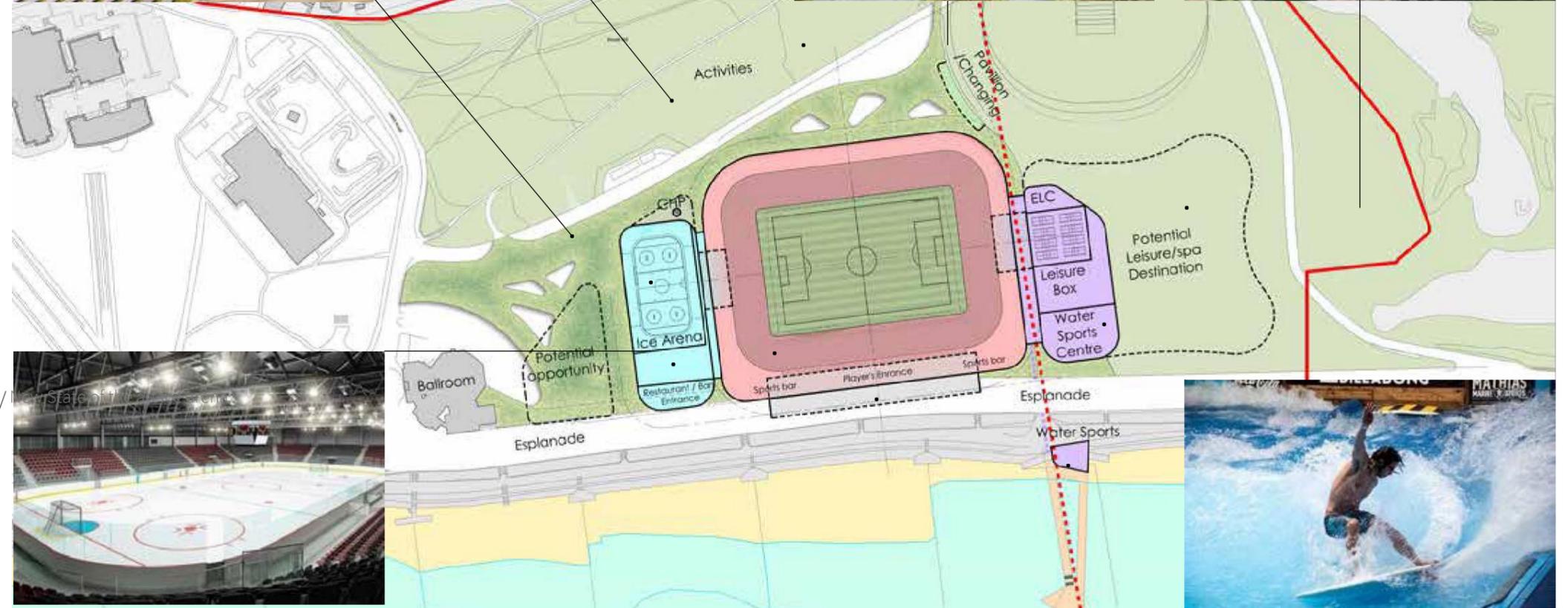


SITE CONFIGURATIONS OPTION 2

WHOLE SITE PODIUM DECK

This option creates the optimum viable solution for the Beach site rather than making the existing facilities work less efficiently. Dual use of three of the stands helps with funding the stadium element. However the Net-Zero carbon approach takes into account the whole life cycle of carbon output in a building's lifetime and therefore the balance will need to be evaluated between more efficient operating costs against the embodied carbon and costs retaining the existing structures.

- Podium deck across whole site at Esplanade Level
- Coastal Park landscaping
- Car parking and servicing below new Ice Arena
- Physical link between the Beach Ballroom and Ice Arena/ Stadium, either at esplanade level or below with stunning roof lights and spacious planning
- Ice sports experience centre Arena & Ice Climbing wall
- Hospitality lounge overlooking Ice Arena and stadium
- Hydrogen Powered CHP
- New Stadium circa 18-20k
- Main Stand located on East with views over the sea
- Early Learning Centre & use by AFC Community Trust
- New Leisure Box
- Potential for major Leisure Spa destination
- Water Sports Centre linked through tunnel to new pier
- New outdoor extreme sports
- Opportunity for a new location for the Cricket pitch and other outdoor sports on the current Driving Range



Brentford FC's new Stadium as example (AFL)

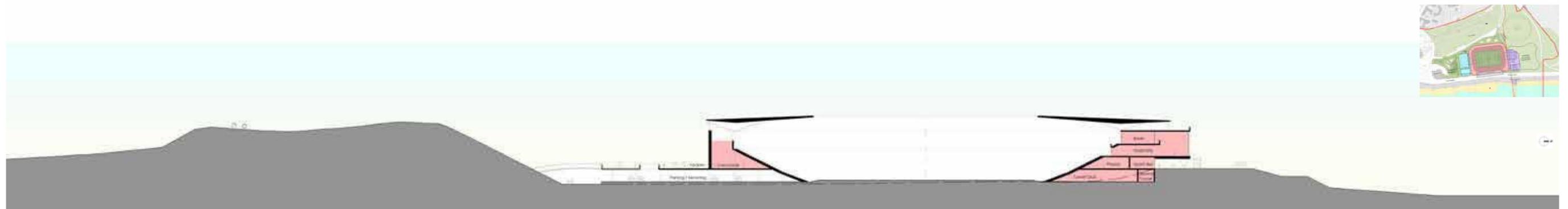
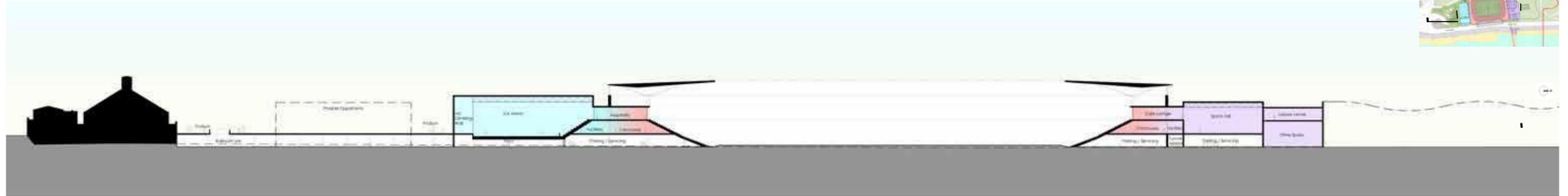
New Hospitality lounge/dining with views over the beach and sea beyond

Water Sports Pier

Indoor Water Sports Centre - Surfing training



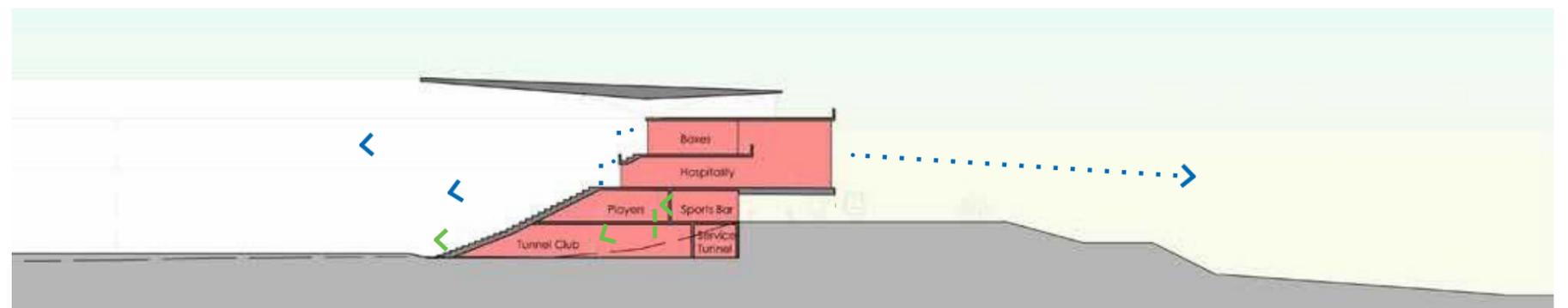
CROSS-SECTIONS OPTION 2



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SITE CONFIGURATIONS

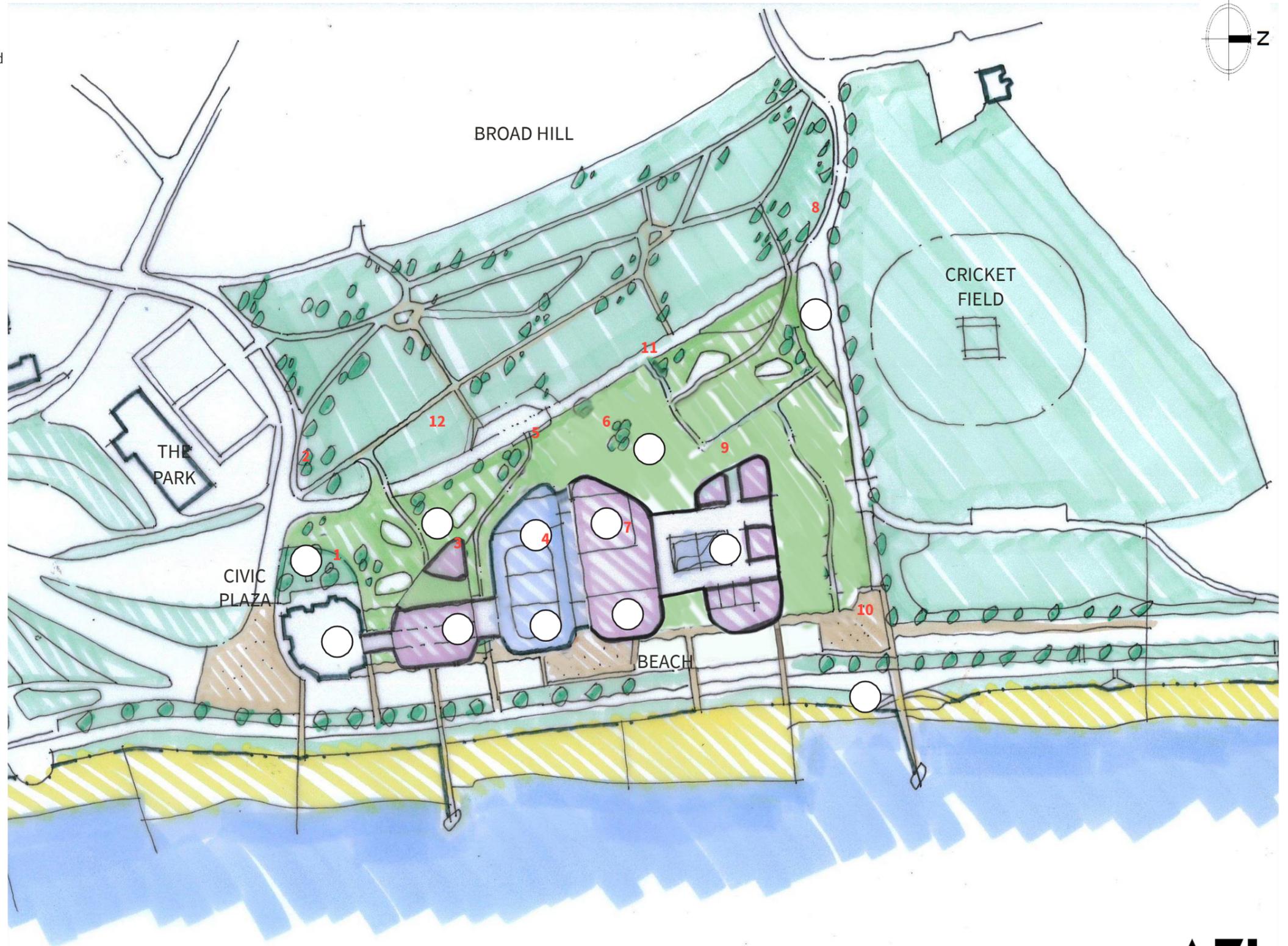
OPTION 3

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4. RESTAURANTS AND BARS
5. ICE ARENA
6. LEISURE BOX
7. WATER SPORTS CENTRE
8. CRICKET PAVILION AND CHANGING FACILITY
9. POTENTIAL NEW LEISURE/THERMAL SPA
10. NEW BEACH-FRONT WATER SPORTS FACILITY
11. PODIUM DECK WITH CAR PARKING BELOW (1200)
12. HYDROGEN POWERED CHP

-  PRIMARY VEHICLE ACCESS
-  SECONDARY VEHICLE ACCESS
-  PEDESTRIAN LINKS
-  ESPLANADE
-  KEY SPACES



SITE CONFIGURATIONS

OPTION 3

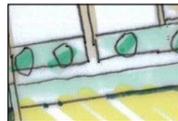
WHOLE SITE PODIUM DECK: CHARACTER AREAS



NATURALISTIC CHARACTER - PAVILIONS, CYCLE PATHS, RUNNING TRAILS



BALLROOM, PLAZA AND GARDEN



FORMAL ESPLANADE WITH LINKED SQUARES



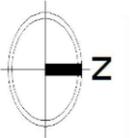
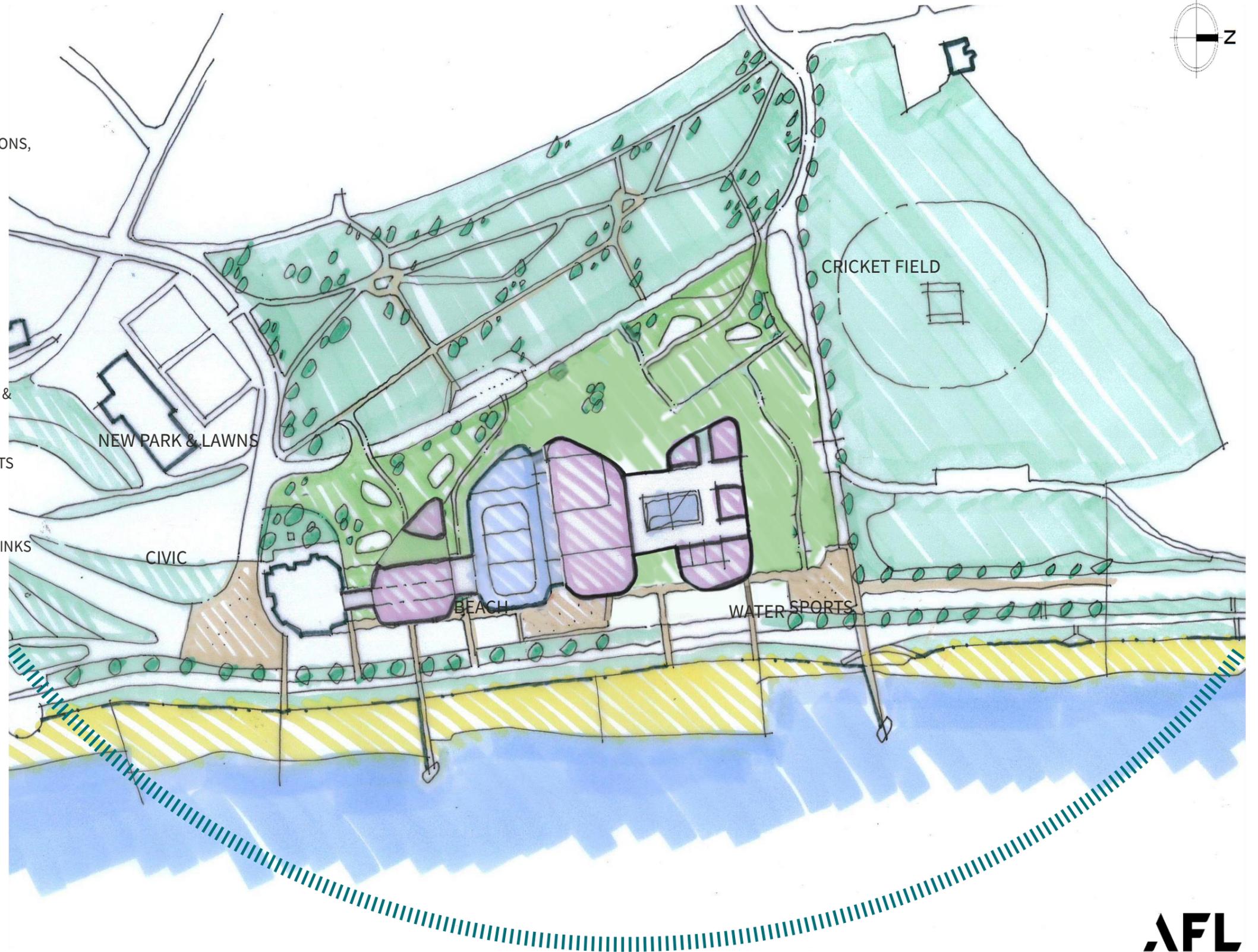
NEW BEACH-FRONT LEISURE USES & PUBLIC GARDENS



PIERS & JETTIES FOR WATER SPORTS



PODIUM LANDSCAPE AND GREEN LINKS



SUSTAINABILITY & NET ZERO

There is an aspiration to create a sustainably sourced, carbon-neutral venue which places visitor well being, safety and comfort at the heart of design. The design will allow Aberdeen City Council to positively contribute to the local environment, reinventing the Leisure offer at the Beach for a sustainable audience.

ACC wish to aspire to the following sustainability measurement systems:

- BREEAM Excellent
- WELL Building
- Designing to Net Zero

Net Zero - buildings with a resultant net zero amount of carbon emissions based on construction, materials, operational annual energy demand. ZCBs achieve this by: Using low carbon materials and construction techniques, Implementing high levels of energy efficiency; Meeting energy needs with on- or off-site renewable energy sourcing.



Copr Bay Arena with bio-diverse coastal park on a podium - AFL



Wind Power



Locally sourced Aberdeenshire Granite



Bamboo - high self generation rate and strong



Green wall and local pennant stonewalling - Copr Bay Arena



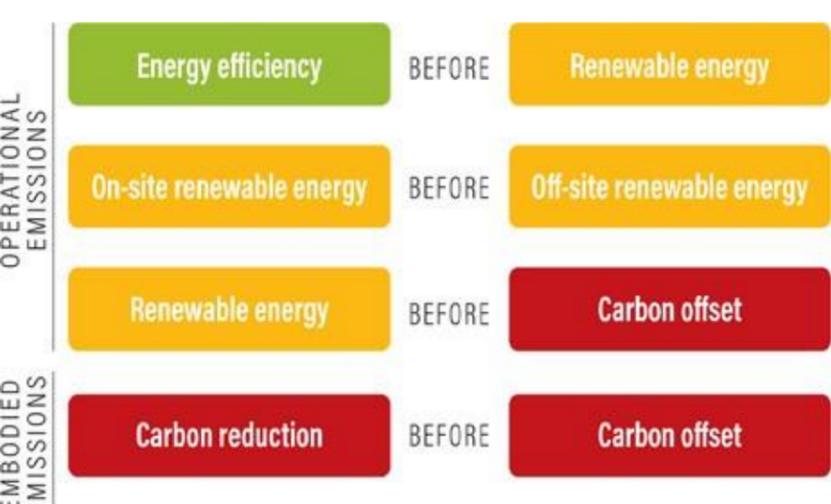
Hydrogen Power



Timber Construction - Starts Carbon negative if sourced from sustainably grown forests



HempCrete - woody inner fibres of Hemp plant bound with Lime



Green Wall Systems



Wave Power



Recycled steel



renewable alternative to chemically laden insulation



Bio-diverse roof and Dry Ski-slope - SKI_Copenhill



Tidal Power



Precast concrete slabs - excellent way of controlling heat. Pre-casting involves less energy.



Rammed Earth