Halifax

Sports and Leisure

Feasibility Report

Initial Issue : March 2015

BUROHAPPOLD ENGINEERING

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Calderdale Council

GT Architects

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01. Executive Summary

Executive Summary

The future of Halifax Swimming Pool and North Bridge Leisure Centre ("NBLC") has been the subject of discussion for a number of years. Operating from two separate buildings, both with increasingly severe maintenance liabilities, the current town centre provision is in need of review to ensure that it will remain fit for purpose and financially viable for the future.

The Council has carried out a strategic review of the vision for the sports and leisure service together with an asset review that has considered current provision and future property needs, shaped around the needs of the service and the people of Calderdale.

The aims and objectives of the project are to:

- Determine the scope of Halifax town centre sports and leisure provision, ensuring any outcome contributes to Calderdale's wider sports & leisure ambitions.
- Deliver leisure facilities that meet the needs of an increasing population and address key health priorities within the borough.
- Contribute to the Health, Wellbeing and Ambition for Calderdale and support the delivery of Calderdale Joint Wellbeing Strategy (JWS).
- Contribute to the wider regeneration of Halifax town centre through increased footfall, including mitigation of retail spend leakage.
- Link with initiatives for growth, private and voluntary sector investment including exploring use of the Town Centre facilities on offer.
- Address current demand for activity, reducing unused spaces and achieving greater energy efficiency.
- Deal with a £12.2m maintenance/refurbishment backlog.
- Reduce health inequalities throughout the borough by providing leisure facilities which are more accessible to residents in areas with poor health statistics, notably Park ward which is close to Halifax town centre.
- To aspire to achieve a BREEAM Excellent rating with regards to sustainability.

Executive Summary

The following options are being considered in this Feasibility report:

OPTION 1

Demolish existing North Bridge Leisure Centre (NBLC) and build new facility (refer to design brief in following section).

OPTION 2

Retain existing NBLC and remodel and refurbish centre. This will include the incorporation of a new wet side facility.

OPTION 3

Demolish existing Cow Green multi-storey car park and build new wet and dry leisure facility (refer to design brief in following section.

OPTION 4

Build new wet and dry leisure facility on an alternative site (currently in non-Council ownership).

Consultations to date

The core brief has been developed following consultation with Sports Services for the existing North Bridge Leisure Centre and Halifax Swimming Pool sites respectively, and using feedback and lessons learned from the new combined leisure and pool facilities that have been developed elsewhere in the Borough. It is acknowledged that wider consultation will need to be undertaken at the next project stage, once a preferred site has been selected and the outline budget understood.

Executive Summary

Generally

The age of Halifax Swimming Pool and North Bridge Leisure Centre is becoming a pressing issue with regards maintenance cost and potential loss of revenue through downtime and newer private facilities becoming available.

Without urgent investment, it is considered likely that Halifax Pool in particular will need to be closed on safety grounds within the next two years.

Halifax Pool and NBLC drew over 587,000 visits in 2012/13 however they currently require an annual subsidy in excess of £290k each year. These two centres alone account for 9% of the total Council asset facilities team repairs budget (by comparison, leisure facilities across the borough (excluding The Shay) accounted for 18% of the total budget in 2012/13).

Further, spend on leisure facilities currently accounts for 19% of the revenue costs within the Council's asset maintenance budget. Both the Pool and NBLC are also amongst the Council's highest energy users.

Within the last 5 years, the Council has constructed new combined leisure and swimming pool facilities at Sowerby Bridge and Brighouse. Ongoing monitoring has demonstrated that these facilities have been able to support increased usage and generate additional income.

The Council has therefore recommended that leisure provision within the town centre is reviewed to determine the optimum solution in order to deliver a sustainable financial future.

Halifax Swimming Pool is located on Skircoat Road, Halifax HX1 2JN and comprises:

- 25m x 6 lanes (L shaped pool) with spectator gallery.
- Teaching pool.
- Diving facilities.
- Fitness suite – 30 stations.
- Two squash courts.
- Dance studio / spinning studio.

The site is 0.57Ha (1.42 acres), with the building comprising 5118m2 Gross Internal Area (GIA) over 3 floors.

Executive Summary

NBLC is the largest leisure centre in Calderdale and is located on North Bridge, Halifax HX3 6TE. NBLC comprises:

Indoor facilities

· Eight badminton court sports hall.
· One badminton court hall (ancillary hall).
· Two badminton court hall (projectile hall).
· Fitness suite – 38 stations.
· One squash court.
· Combat Room.
· Social facilities (bar, bookable meeting rooms)
· Staff accommodation / Office facilities.

Outdoor facilities

· 2 nr small-sided outdoor football pitches.

NBLC has traditionally provided space for events, exhibitions and competitions. The main use of the sports hall is for badminton, netball and five a side football, even though there are two outdoor multi use games areas (3rd generation pitches) on site.

Indoor bowls is currently provided on moveable mats and there are 43 aerobics sessions per week.

CMBC runs sessions at this site aimed at young disabled people and daytime activities for the over 50s. Mainstream sports activities occupy the centre most evenings.

Executive Summary

Cow Green Multi-storey car park

Cow Green multi storey car park is a pre tensioned concrete structure circa 1970. It is located at the junction of Lister Lane and the A629 Cow Green which forms the inner ring road for Halifax town centre. The entrance to the car park is off Gibbet Street at the rear of the structure. The structure is cut into a sloping site with the A629 at the lowest point.

Over recent years there has been a gradual deterioration of the structural elements and the integral structural topping. Following engineers' inspections in late 2012 and early 2013 a decision was taken close the car park.

The structure of the Car Park was built circa 1970 to an economical design, utilising a combination of cast in-situ and pre cast concrete sections. The general structure consists of long span pre stressed beams supported by cast column sections. About the external circumference and across the intermediate spans, the columns are restrained by lateral cast in-situ beams, holding up the car decks and ramps. The car deck flooring consists of thin, precast, wide plank floors incorporating a thin structural screed bonded to the upper surface of the planks to provide a cohesive, load bearing flooring element. The structure is a simple post and beam style construction, with long beams spanning between two lines of internal columns, over three bays.

Executive Summary

Alternative Site

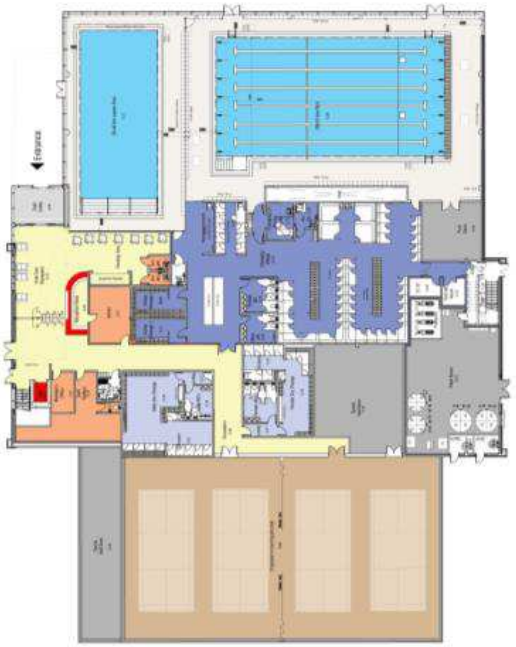
The Council also asked the team to look at an alternative site (Site 3) which was put forward for testing in this feasibility study.

The site has not been analysed any further than dropping the plan with facility mix onto the site as it is too tight with severe restrictions.

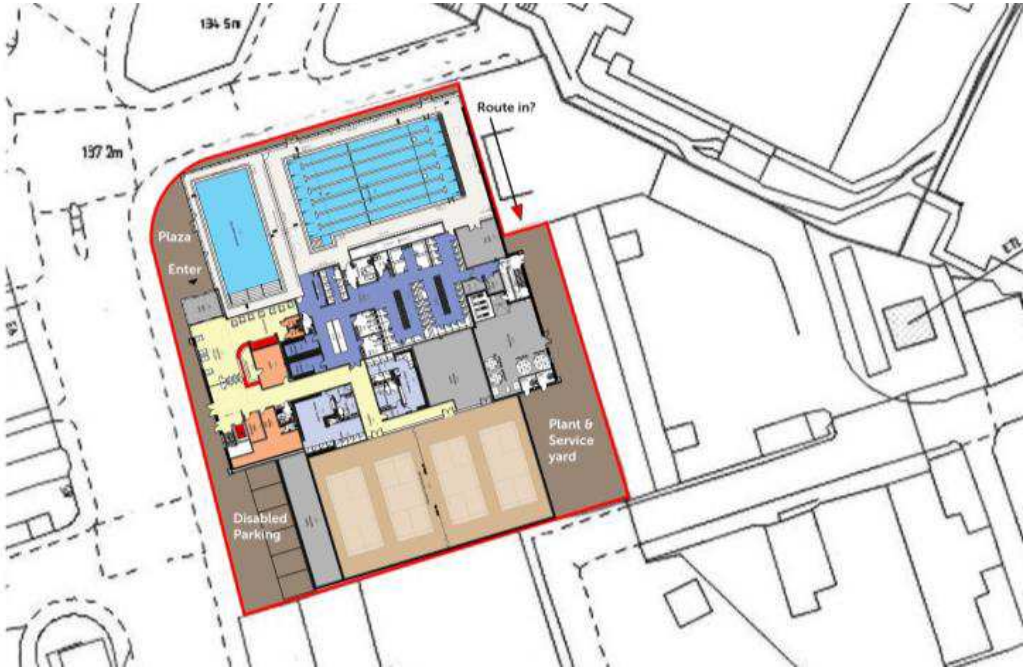
The facility mix cannot be delivered, with the following drawbacks:-

- Only a 4 court sports hall can be accommodated on the site
- No dedicated car parking can be provided
- Rear access to the plant area is not possible across land that is now owned by the council
- Tight building footprint means that construction will be difficult (i.e. compound area, scaffold, working around pedestrian and vehicle routes).

We presented the scheme to the project team and it was agreed that no further evaluation of this site should be made and has therefore been discounted.

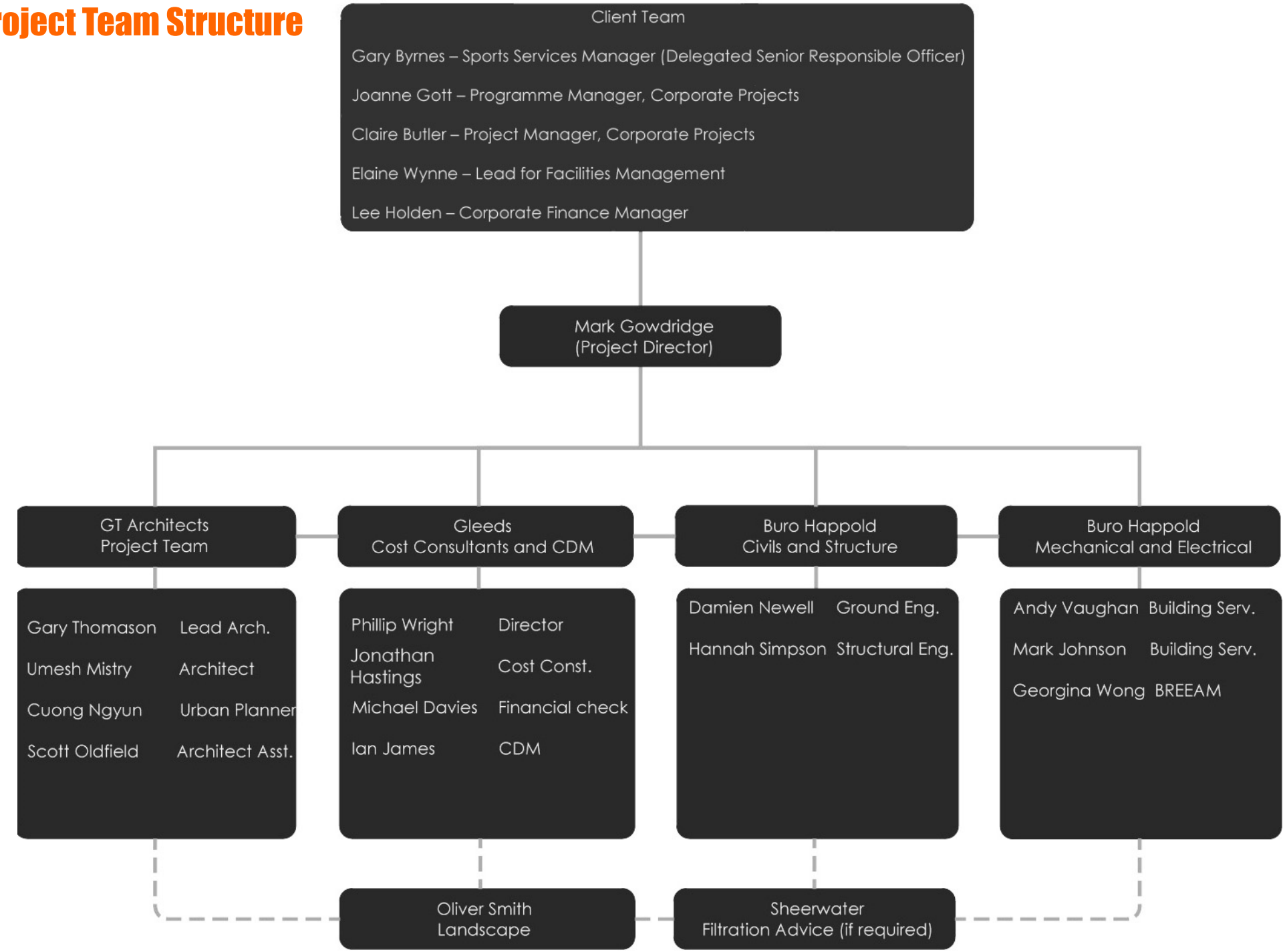


GROUND FLOOR PLAN 1:250



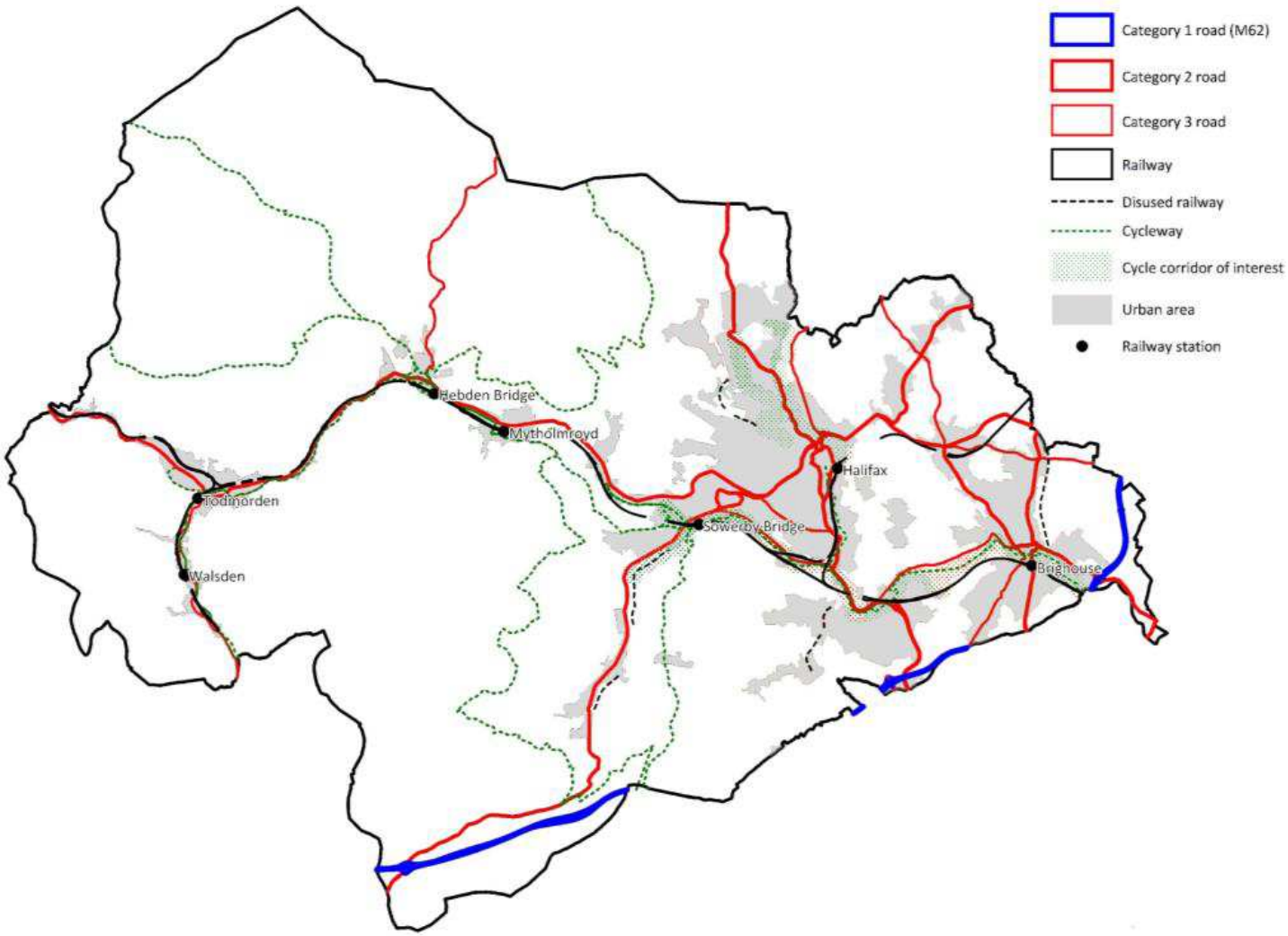
02. Project Team

Project Team Structure



03. Site Analysis

Accessibility



The scheme will adopt council aims to deliver a sustainable, safe and efficient transport system that;

- promotes economic growth by ensuring places are properly connected;
- works towards a low carbon transport system by encouraging modal shift away from the car; and
- minimises any adverse effect upon the environment and communities by providing greater opportunities for healthier lifestyles.

New developments will also need to consider linking developments with cycling and walking routes, wherever practicable. This will not only assist in limiting future congestion on our roads but also help deliver the health, air quality and sustainability benefits associated with these forms of travel.

For short trips local provision of alternatives to the car may include new and improved walking and cycling routes to local shops, schools, employment and local services.

For longer journeys the enhanced walking and cycling routes should integrate with the wider public transport network, including rail stations. These improvements need to be designed, delivered and maintained in conjunction with public transport operators to ensure they integrate with existing networks and within new developments.

By combining the advantages of the Metro, we can increase the number and patronage of buses, improve park and ride facilities particularly at train stations, increase the frequency, speed and capacity of rail, and improve the walking and cycling network to the leisure centre

Halifax Leisure Centre Context

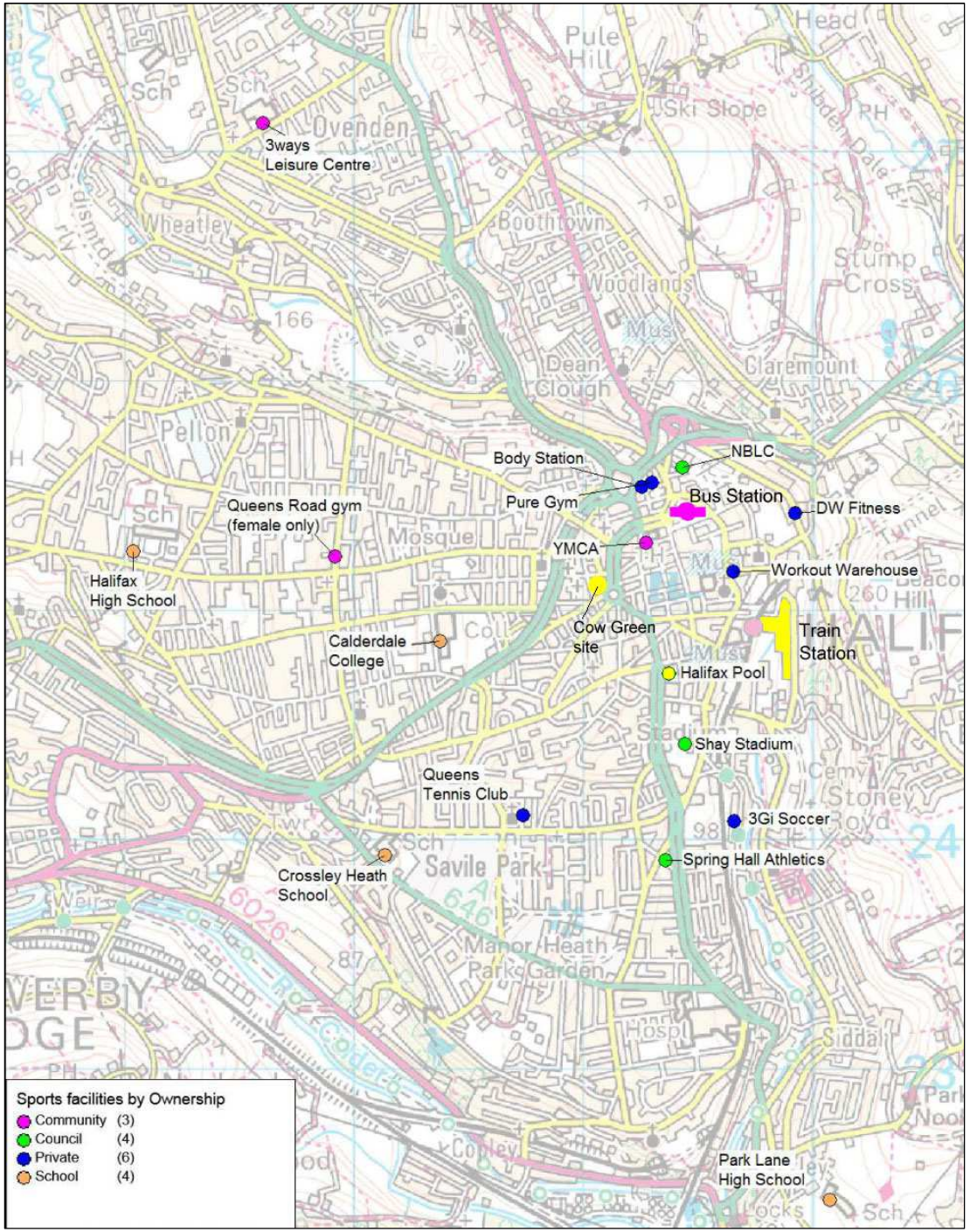
The plan opposite identifies the existing sports and leisure facilities within Halifax town centre. Of these, 4 are Council-operated facilities (North Bridge Leisure Centre, Halifax Swimming Pool, The Shay Stadium and Spring Hall Athletics track), 7 are school-based / community facilities and 6 are privately-operated.

The closest facilities to the proposed feasibility sites are Body Station, Pure Gym, DW Fitness (all privately-operated) and YMCA (community-operated), which offer the following facilities:

PRIVATE				
Body Station	Health & Fitness	Stations	160	£20-£25/month
DW Sports Fitness (Halifax)	Swimming Pool	Lanes	1	£28-£38/month + £10 joining
	Health & Fitness	Stations	100	£28-£38/month + £10 joining
Pure Gym (Halifax)	Health & Fitness	Stations	220	£15/month + £10 joining fee
COMMUNITY				
YMCA	Sports Hall	Badminton ct.	1	TBC

Halifax Swimming Pool is the only facility in the town centre to offer a 6-lane 25m swimming pool and learner pool.

Both the North Bridge and Cow Green sites are approximately the same distance from Halifax train station. In addition, the North Bridge site is located close to Halifax bus station.



North Bridge Leisure Centre Context

The North Bridge Leisure Centre, situated to the north of Halifax town centre, is on the site of the former railway goods shed and occupies the land between the iron North Bridge to the west, the embankment of Charlestown Road to the north, the Sainsbury's supermarket to the east and the main electricity sub station to the south. The NBLC was opened in the 1970's and has been extended to include squash courts and the projectile hall to the north side at which time the centre was re-configured to open the main car park with a central reception area.

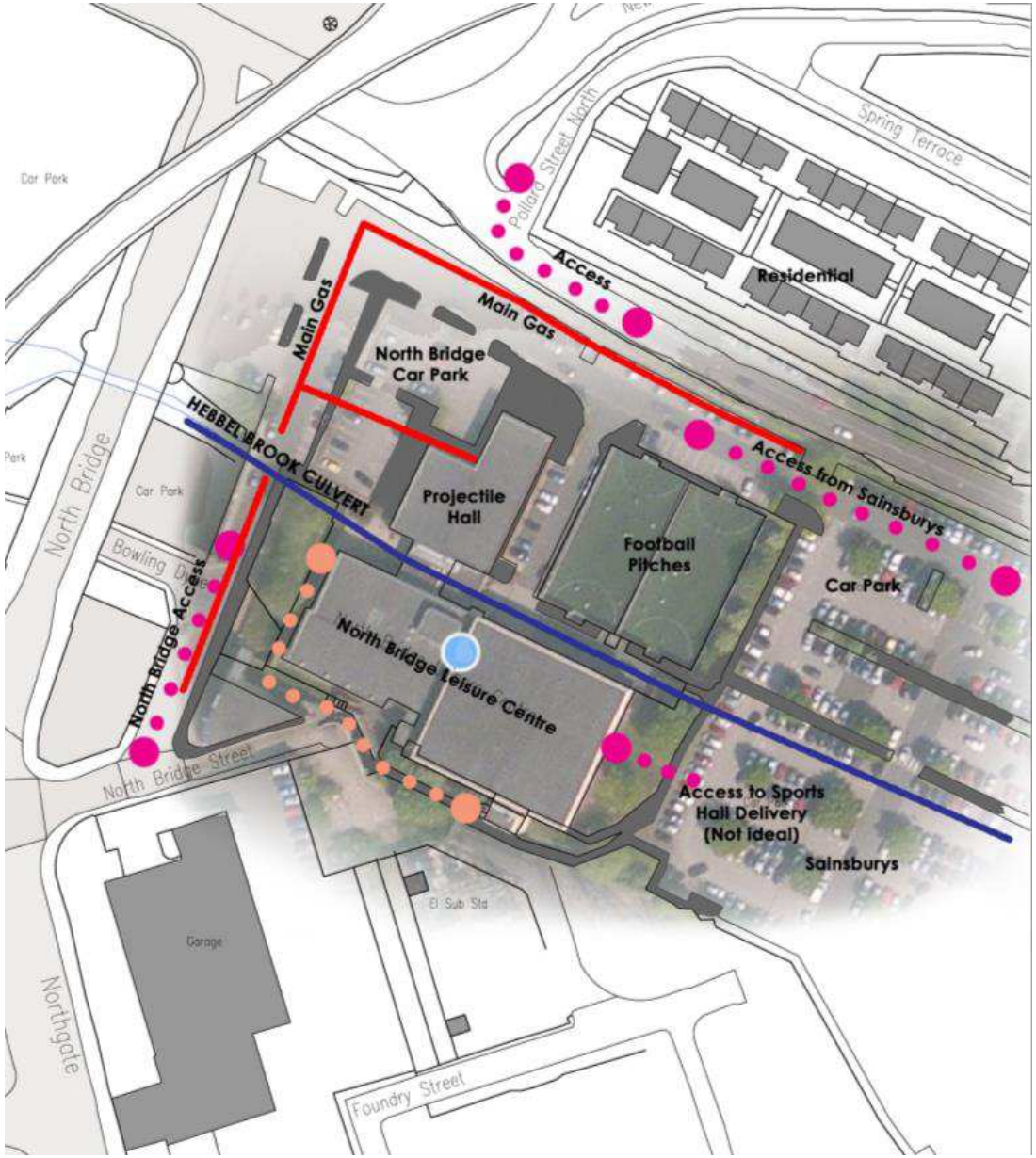
The following points are fundamental in the decision to either build new or refurbish and remodel the existing centre:-

Opportunities:

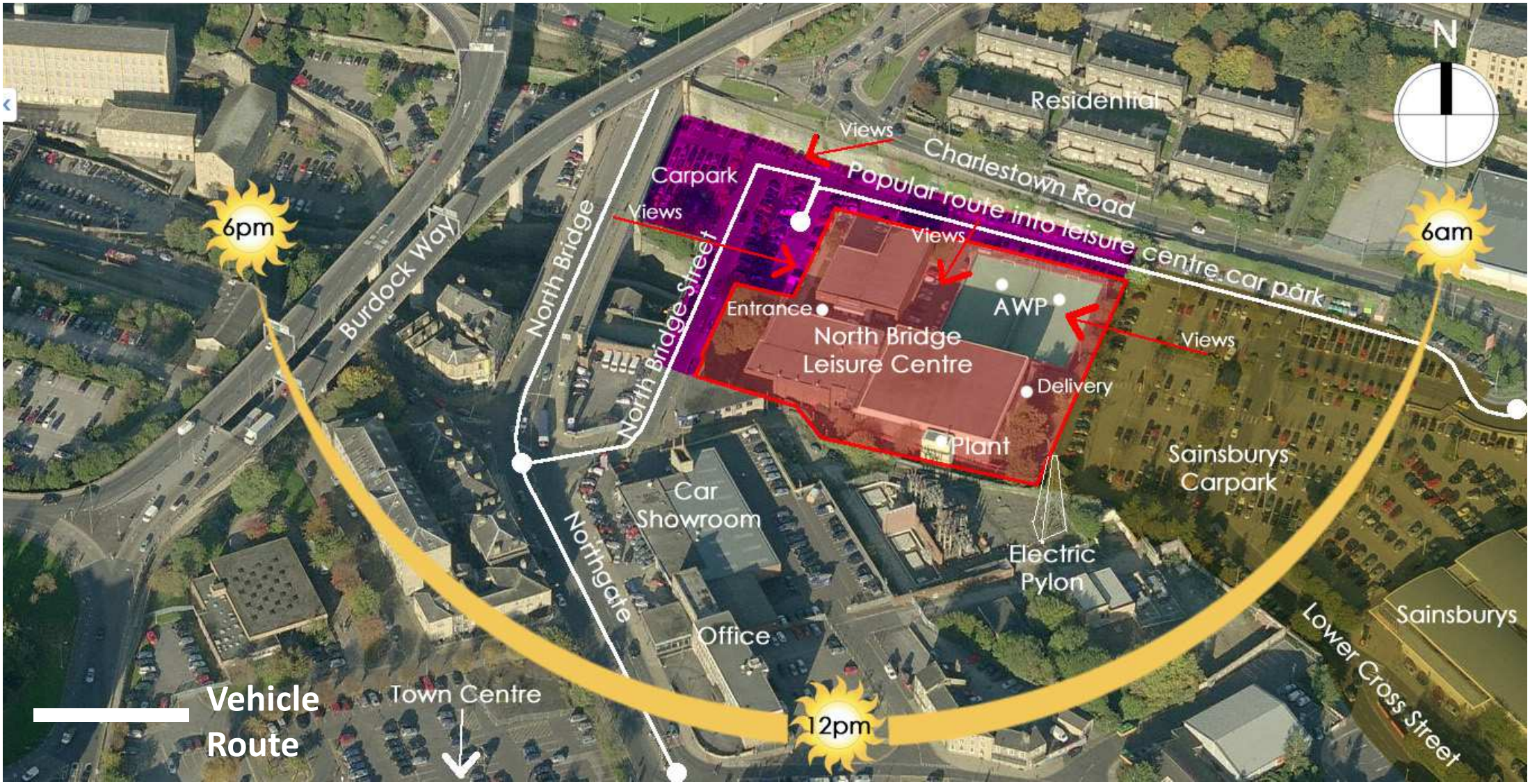
- Familiarity for leisure centre users
- The car parking provision is excellent
- Sport England have highlighted this site as a good option for an improved leisure offer
- The size of the site offers great scope for future flexibility
- Sports Hall is in good condition and its retention should be considered
- Good public transport connections
- Strong views into the site from high level on approach into Halifax
- Good footfall around the site due to the supermarket adjacent.

Constraints:

- No dedicated leisure car parking for the facility
- Current facility has too much circulation space (nett to gross) which infers large life cycle costing
- Poor entrance and a very inward design to the facility with very little advertising of key facilities internally
- Many of the large rooms and facilities are not used. This includes the external pitches which have limited use and are in poor condition
- Access to the sports hall is a problem (for deliveries)
- Plant access around the rear of the building (shown pink in the diagram across) is restrictive and would not provide for the replacement of plant
- Materials and general aesthetic condition of the facility are now tired and in need of replacement
- Hebble Brook runs through the site (blue line opposite)



North Bridge Leisure Centre Context



Cow Green Car Park Context

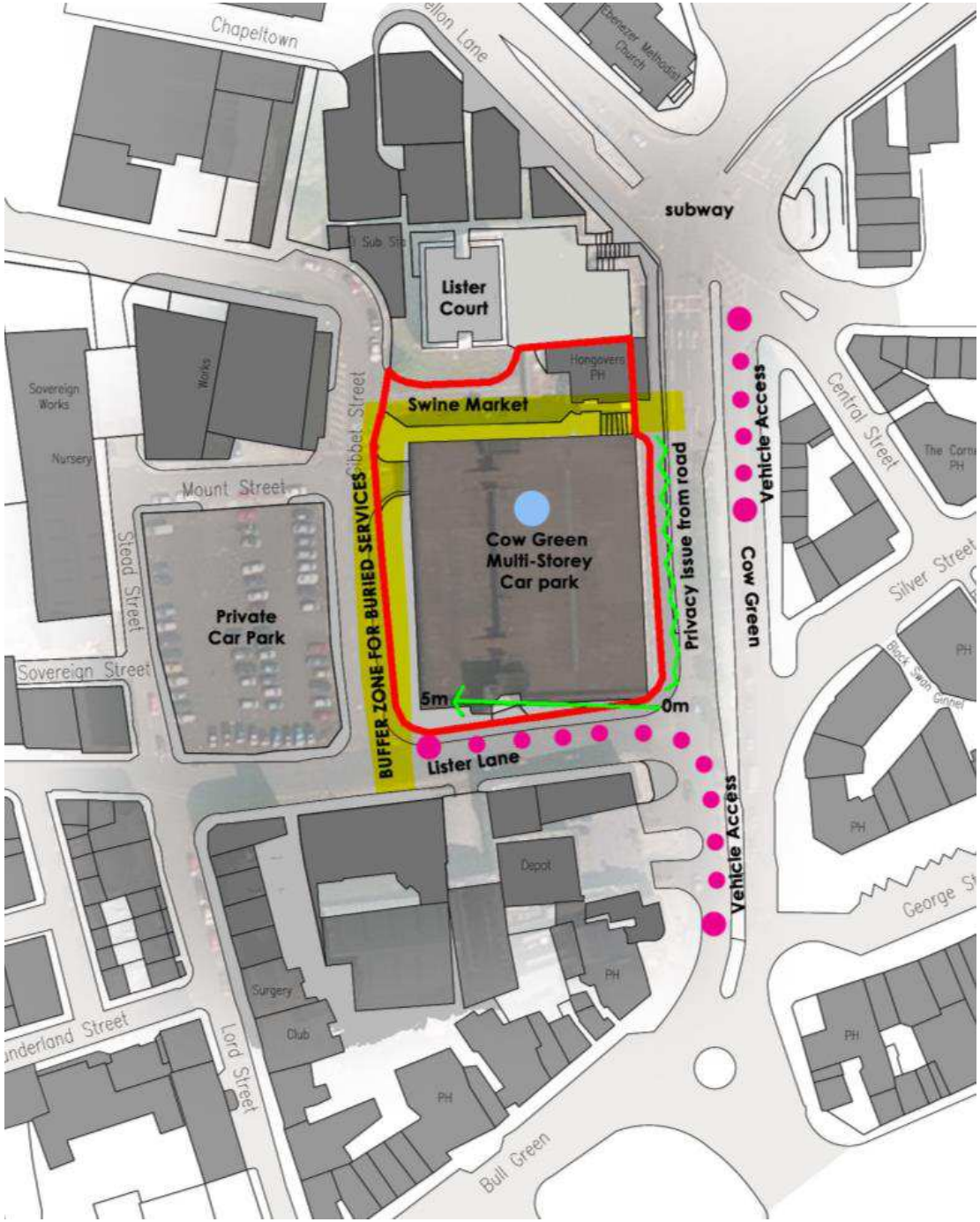
Cow Green car park has the following opportunities and constraints on the existing site:

Opportunities:-

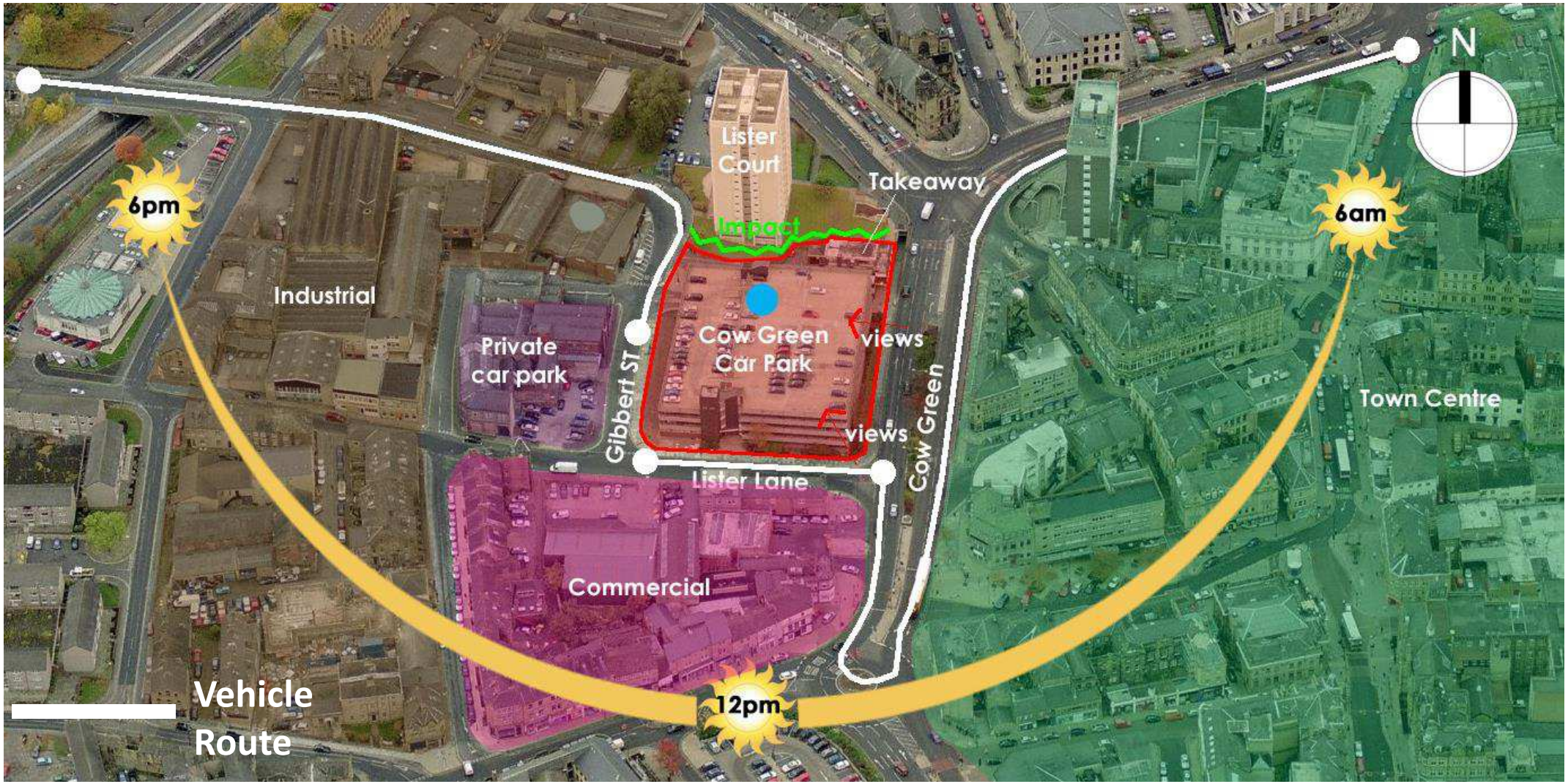
- Level change of 5m from Cow Green (0m) to Gibbet Street (+5m) allows for an exciting building layout
- The demolition of the car park provides for a ready made basement area which can be used for plant etc.
- Good gateway site in Halifax
- Major road frontage with massive opportunity for advertising
- Surrounding buildings are tired and the new centre provides the ability to create a regeneration catalyst

Constraints:-

- Services run along Gibbet Street and Swine Market
- Level differences usually lead to additional construction cost
- Site is tight and unlikely to achieve the required car parking numbers
- Lister Lane is tight for the amount of traffic expected
- Need to consider service access and where this is approached from
- Road frontage faces east. Given that this aspect may require glazing to advertise from the road.
- Coach drop off points (schools etc.) may be a problem



Cow Green Car Park Context



04. Design Brief

Design Brief – Essential Requirements

Leisure Brief : Essential Requirements -v- Options

Essential Requirement	Optional Requirement (dependent on consultation at the next stage)
WETSIDE FACILITIES	
25 metre swimming pool, min. 6 lanes	Diving (1, 3, 5m boards) / other deep-water facility (e.g. sub-aqua, synchro)
Separate 20 metre teaching pool (4 or 5 lanes)	Sauna / steam room
Pool spectator seating. Up to 200 seats	Pool spectator seating. Up to 300 seats
Child friendly fun factor elements	Slides / wave machines
DRYSIDE FACILITIES	
Sports Hall equivalent to existing (36m x 32m multi-purpose hall with Granwood tiled floor). To host annual elections, school sports, antique fairs etc. Flexible storage. Movable dividing central wall to support flexible use	Wow factor – e.g. cycling lanes around building?
	Ancillary hall to accommodate indoor bowls, roller skating etc
	Dedicated squash courts
FITNESS FACILITIES	
Adult gym, comprising 120 stations & 700 sq.m	2 lane running track in the space provided (probably to be designed in by equipment provider)
2 exercise studios for 50 people that can become one for 80/90 people plus a separate spin studio for 30 people	
Usable teaching space for RLSS / ASA courses (can be combined with spinning or fitness studio)	
CHILDREN'S FACILITIES	
n/a	n/a
CATERING FACILITIES	
Vending machines (drinks / snacks)	Café (NB to be franchised out. Anticipated that agreement would need to be in place prior to build).
SUPPORT SPACES	
Reception, including access systems (NB existing access kiosks and payment systems are transferable)	Automation, card based access to all areas.
Separate dry / wet side changing, gym changing	
Concession car parking system	Dedicated car parking
Office space for staff equipped with wifi & networked printers (NB existing equipment is transferable)	Space to support flexible working ('touchdown space')
Wifi for guests / users (NB existing equipment is transferable)	

Design Brief – Facility Requirements

COMMUNAL AND SUPPORT AREAS

Foyer and Reception

The entrance to the Centre shall be attractive and welcoming. The entrance foyer is the hub of the building and must provide sufficient space for people to circulate, view notices, wait for friends in comfortable surroundings.

The entrance shall be designed to meet heating, ventilation and disabled access requirements.

The location of the main facilities shall be clearly identifiable from the foyer to aid users understanding of the building layout.

The design of the reception desk shall ensure that wheelchair users and children are properly received. Induction loops shall be provided for those with impaired hearing and signage shall be appropriately located and designed for the visually impaired.

If a barrier entry system is proposed, it should be operated by "proximity card" and remote release entry system with a voice link to the health facility reception.

The design should provide sufficient convenient and secure storage space for pushchairs overlooked from reception. Provision should be made for a card operated public telephone with acoustic hood.

The reception should be positioned so as to allow the receptionist a view into the pool hall and main entrance approach. Entrance lobby to consider the effect of wind/ cold air entering the building and affecting key areas such as the reception desk / staff.

Vending and Viewing Areas

There shall be a vending area within the Centre able to accommodate a minimum of 20 persons seated at any time. The space should be able to accommodate a large throughput of people, including young children and wheelchair users. Appropriate ventilation, humidity and temperature control systems shall be provided to ensure users have a comfortable environment and that smells from the production of meals do not pervade other areas of the premises. This vending area shall be positioned so as to allow viewing into the pool hall for casual spectators and parents.

Lifts

Lift has been sized as minimum 8 person lift. Consider 17 person lift where ability to bring stretchers down from upper floors is required. All to be in line with Sport England standards

WCs

Wheelchair accessible male and female WCs both incorporating baby change facilities.

Support Accommodation

Support accommodation shall be required to maintain the function of the Leisure Centre. This will include plant rooms, first aid room, workshop/maintenance area, stores and cleaners cupboards. Access to storage and cleaning cupboards shall be restricted to staff only.

External Areas

All roadways, footways, external lighting, sewers and the like shall conform to the relevant authority's requirements to allow adoption wherever possible.

The design shall provide appropriate free car/coach parking and secure cycle park facilities for visitors and staff (including parking facilities for disabled users and staff). A delivery bay shall be provided for loading and unloading of supplies. An estimated (6) car parking spaces will need to be reserved for use by staff at all times.

All external spaces shall be well defined, their function clearly determined at the outset and designed accordingly. Pedestrian routes shall be clearly defined and segregated from vehicular traffic. A setting down point should be located close to the entrance for cars.

Public spaces shall be monitored by a digital security CCTV system linked to the site's main security station and to the reception. To help improve security, layouts shall be designed to encourage neighbourliness, natural surveillance and self-policing and to create an environment that makes unobtrusive access difficult.

Design Brief – Facility Requirements

SPORTS & LEISURE

Swimming Pool – Main Pool 25m x 6-lane x 1.0m to 1.8m deep: Learner Pool 20m x 8.5m x 0.75 to 0.9 deep

Swimming facilities shall be provided that are suitable to accommodate use by children learning to swim, swimming for fun, swimming for fitness and competition swimming to borough/district club standard. The facilities must be fully accessible to disabled users As a minimum, a 25m x 6-lane pool shall be provided suitably equipped for competition including lane ropes, starting blocks, electronic timing and touch pads.

Particular attention shall be given to pool gratings, wall finishes, lighting and the acoustic performance of the space. Signage shall be clear and instructive and comply with health and safety guidelines.

The use of natural light shall be maximised whilst minimising energy costs. Glare and spectral reflection across the pool shall be avoided, but at the same time views into and out of the pool hall shall be maximised where possible. It is important that the level of noise transmission to and from the pool hall to adjoining spaces is minimised.

Poolside finishes shall be hard wearing, bright, easy to clean and be particularly slip resistant.

Consideration shall be given to appropriate poolside seating being provided for the use of swimmers and swimming clubs.

Attention should be given to ensuring that the construction and specification of the pool hall comply with the noise levels as recommended by Sport England.

DDA considerations in line with current Sport England and British Standards should be met.

Any features, eg columns and pool covers, shall not restrict the minimum required pool surround dimensions, as set out in Sport England and ASA guidance. Pool stores shall be provided to accommodate the planned programme of activities with secure storage available for schools or swimming clubs as required.

Pool Spectator Areas
As a minimum, the swimming facilities shall be able to accommodate at least 100 spectators on those occasions when this is needed eg school, club galas.

Changing Facilities
High quality changing accommodation shall be provided by a mixture of group rooms and mixed "village" style changing cubicles. The capacity of changing rooms shall be carefully considered and allowance made for different ratios of males and females. The required level of toilet and shower facilities shall be provided, again allowing for different ratios of males and females. As a minimum, Sport England Guidelines must be met.

New cubicles shall be sized to accommodate single users, disabled users and families. Cubicles shall have at least one coat hook and a seat. The design of the cubicles shall ensure that there is no opportunity for a user in one cubicle to look into the next.

Post and Pre-swim showers to be provided, with post swim showers having dedicated cubicles, sized to Sport England standards.

Consideration shall be given to the width of aisles between facing cubicles to provide users with an open environment rather than an oppressive environment.

Within any "village" changing area provision shall be made for the required number of cubicles with baby change facilities. Areas shall be provided offering single-sex changing with toilet and shower facilities and screened access to the pool and other associated areas.

Adequate clothes storage lockers shall be provided. Designs shall enable users direct access to lockers from all cubicles and provided for easy staff supervision to ensure security. Lockers shall be of a high quality (Prospec or similar) and provide a high level of security.

Sanitary facilities shall be positioned suitably for both swimmers and people having changed. Separate vanity, hair drying, baby change and disabled changed facilities shall be provided.

Design Brief – Facility Requirements

Finishes generally shall be hard wearing, easy to clean and above all provide adequate non-slip surface to floors suitable for both bare feet and shod traffic. For the comfort and convenience of users, floors shall dry off as quickly as possible. There shall be no areas of standing water.

Consideration must be given to specific provision for young persons (eg height of urinals, toilets and wash basins) and for people with disabilities. Change facilities must also accommodate separate male and female group changing facilities for the use of Fitness users/Schools and/or Clubs. Each area to have lockers, benches, toilet cubicle and a small vanity unit.

Fitness Suite – capacity 120 workstations

The fitness suite and the following multi-purpose studio are envisaged as high quality facilities, comparable to the best private sector installations. The fitness suite shall be equipped with an appropriate mix of high quality cardiovascular and resistance machines (120 minimum pieces) in accordance with good practice, current guidelines and the anticipated "market" and trends. In particular, the studio should be suitably designed to accommodate and attract users with disabilities and GP referrals.

Accordingly, a proportion of the equipment (15% minimum) shall cater for people with limited movement in accordance with the guidelines from the English Federation of Disability Sport and should be suitable for fitness testing and GP referral. The fitness studio shall include a consultation room and a suitable reception.

Both the activity studio and the fitness suite shall have adequate comfort cooling, ventilation and humidity control as well as chilled drinking water etc.

Multi Purpose Studio (x2)

Two multi-purpose studios capable of accommodating a range of activities shall be provided and have external views / advert where possible.

This facility may also be used for a number of movement and dance activities.

The room shall be square or close to square in shape and offer a minimum area for 50 persons in each studio and minimum ceiling height of 3.5m. A moving wall should be provided between the two spaces to allow for flexibility and provide a room capable of 80 people.

It shall provide a light and open environment for users. Mirrors that can be curtained off shall be provided across one of the longer wall lengths. The floor shall be designed to be suitable for dance and movement activities.

The floor finish must be smooth, slip-resistant, warm to touch, easily cleaned, splinter-free and resilient. The room's walls shall be free of sharp edges or corners.

Consideration shall be given to the room's acoustic requirements. The room will need to achieve good music production and ensure clarity of speech. However, it is also important that the level of noise transmission to and from the room is minimised.

Spinning Studio

A separate spinning studio should be provided for a minimum of 30 bikes

Sports & Leisure Staff Offices
The offices shall have quick access to all public areas, including the reception area. There should be adequate power points and telephone points. The offices should be adequate to accommodate sufficient desks, chairs and cabinets for the number of staff required. There should be a separate confidential area for staff interviews.

Staff areas to be set out in line with the Council's corporate standards.

Plant Room
The main plant room should be located at ground floor. it should be designed with adequate space to facilitate easy and safe operation and maintenance of equipment.

Staff Room

Accommodation will be required for all the Sports & Leisure staff to rest and eat. There should be provided, a suitable fully fitted kitchenette, comfortable seating and a small eating area. Separate changing facilities should be provided with adequate lockers for all personnel on duty.

Design Brief – Facility Requirements

Sports Hall

A minimum 8 court sports hall should be provided which is sized to latest Sport England dimensions and court layouts.

The facility should cater for regional competition and have a clear height of 7.5m.

Floor finish should allow for both sport and non- sport events.

The hall should have the ability to be split into 2no. 4 court halls and will require separate access from the corridor / circulation into each half.

Adequate sports hall storage should be provided and be split to allow access to a store in each 4 court arrangement when the hall is divided.

05. Design Optioneering

Introduction

Before the option studies were considered, we applied the current GT Architects ARC model (Affordable Recreation Centre) on each site to test for Sport England compliancy, orientation on each site and also tested the design brief within each site boundary area provided.

ARC is a pre-designed solution that has been produced by GT Architects, alongside Sport England, Key UK operators and contractors. It is based on Sport England's own Affordable Sports Centre.

The design options moving forward were then based on the ARC base scheme solution which ensures that we can monitor compliancy against Sport England standards.

The following drawings illustrate the early studies on each site. We have also given a brief introduction to the ARC model on the following page.

Note the ARC base scheme on the Cow Green site, highlights that a sports hall is not possible if confined to the car park red line boundary. It proves that extra land is required to develop close to the essential design brief.

Introduction to ARC

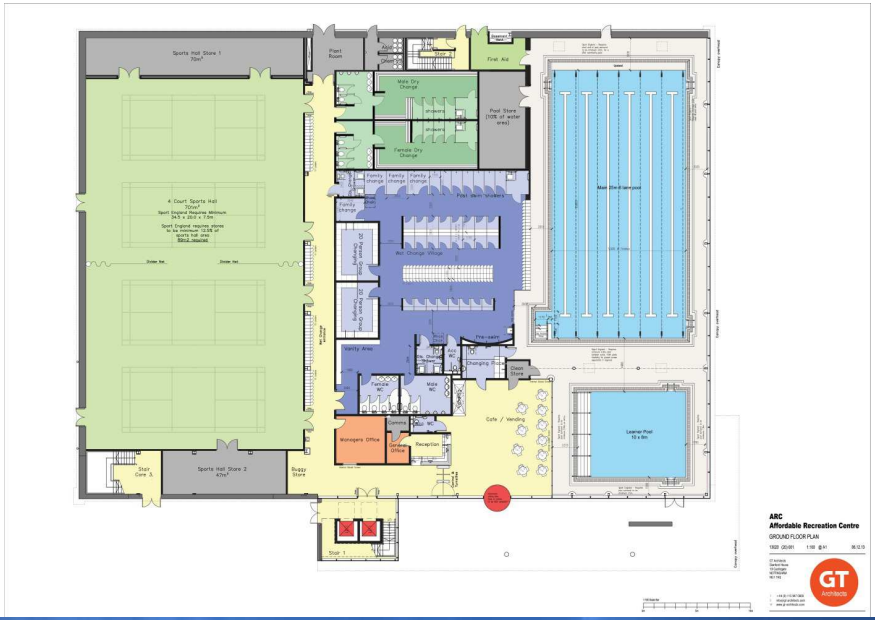
As part of our working with Sport England and the ASA, GT Architects have developed a pre-designed leisure solution alongside them and the key UK operators, which meets the Sport England Affordable Sports Centre targets.

Applying the guidelines (Mark Gowdridge worked with Sport England to develop the regulations), ARC has been delivered to provide a solution to the market that meets current guidelines, meets operators needs, is flexible (can be adapted to suit client brief), is attractive and is affordable. The base scheme (refer to Appendix section for full ARC solution) is **3820sqm and works out at £1950/sqm.**

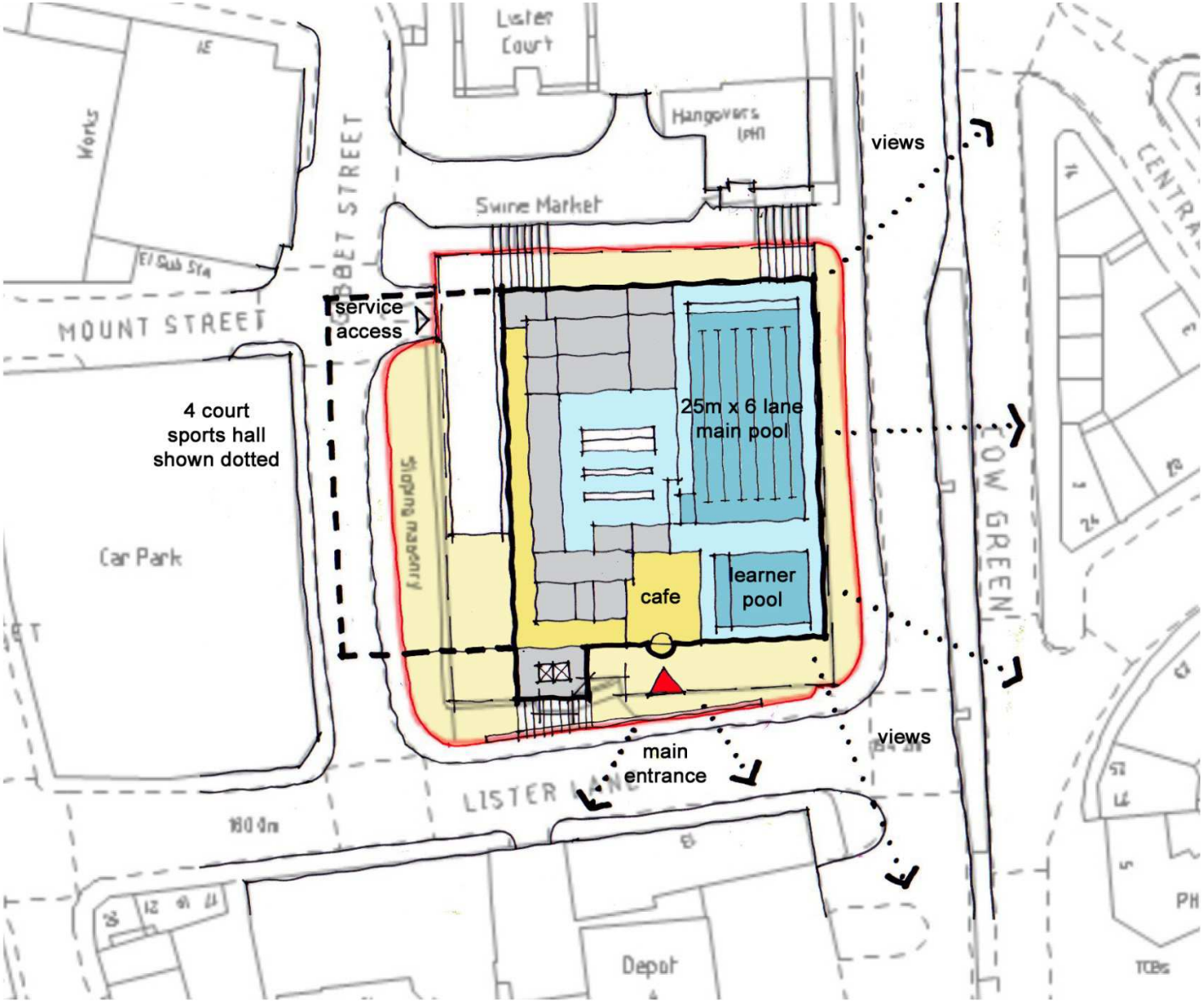
The base scheme is designed around Sport England's own Affordable Leisure Centre and includes for a 25m 6 lane pool, teaching pool, 4 court sports hall (with dedicated changing, wet changing village, 100 station gym, 2 studios, dedicated fitness change and admin suite. It can be enhanced and developed to provide Calderdale with a new build solution under budget. Whilst the solution has only recently become available to clients, it is already been taken on board by a number of councils in the UK to its value for money, appearance and its layout and supports feasibility studies.

The benefits to councils through adopting ARC, is that it saves time and is affordable compared to bespoke solutions. It can be delivered in 50 weeks (on site) and as it is already designed, fees are much more competitive.

Innovation is now being built in (which helps us with other bespoke centres) such as a moss product which removes the need for chemicals in the pool and half backwashing and re-heating pool water, using the gym equipment to heat the pool water, passive house principles applied to the façade build up, Myrtha pool technology to the pool tank, etc. All of the above (including ARC) is specific to GT Architects and our drive to look at innovation and new technologies in the leisure market.



Introduction

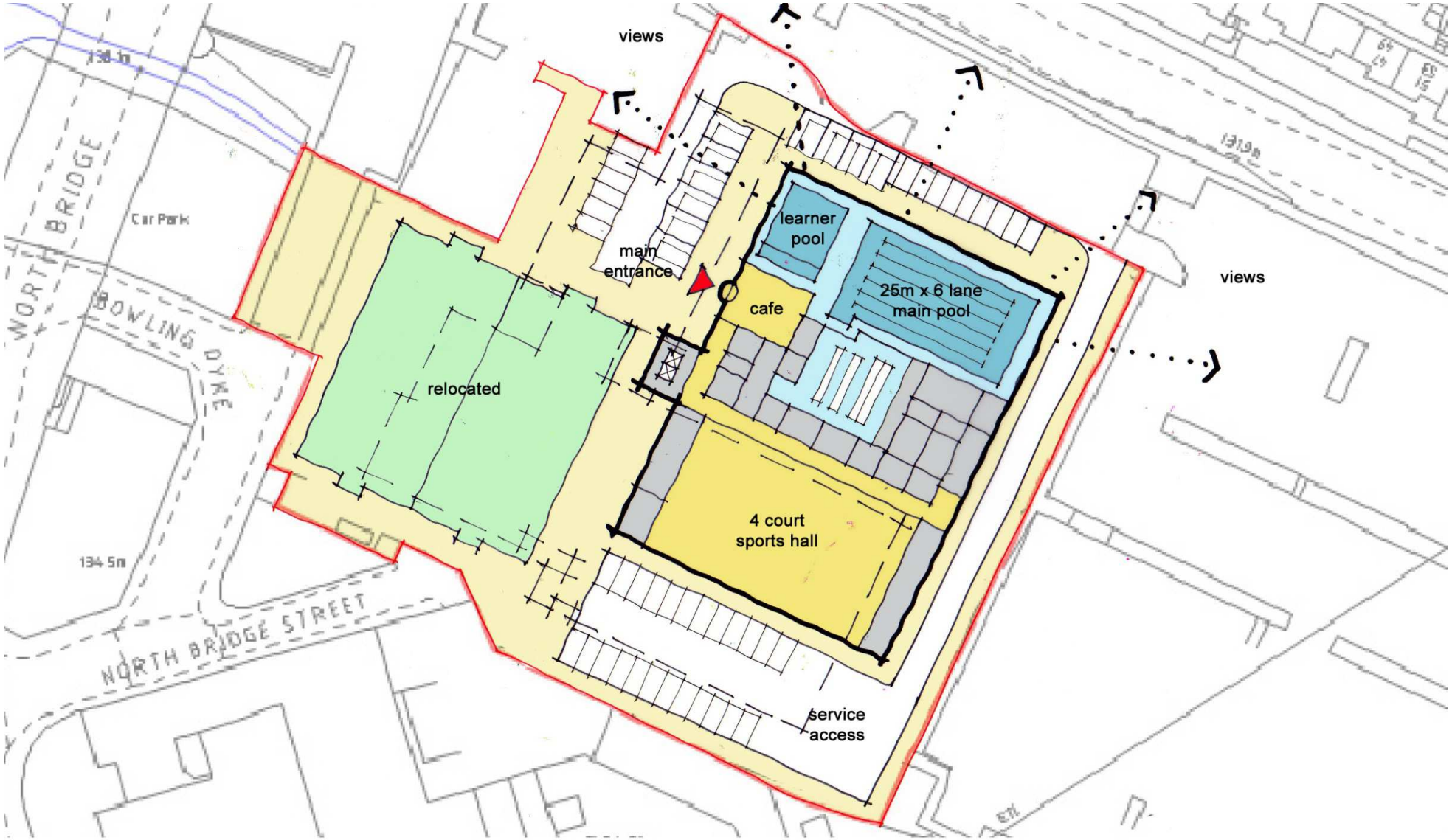


HALIFAX
COW GREEN CAR PARK SITE
PROPOSED LEISURE CENTRE
CONCEPT PLAN 1:500 (A3) 08.01.15

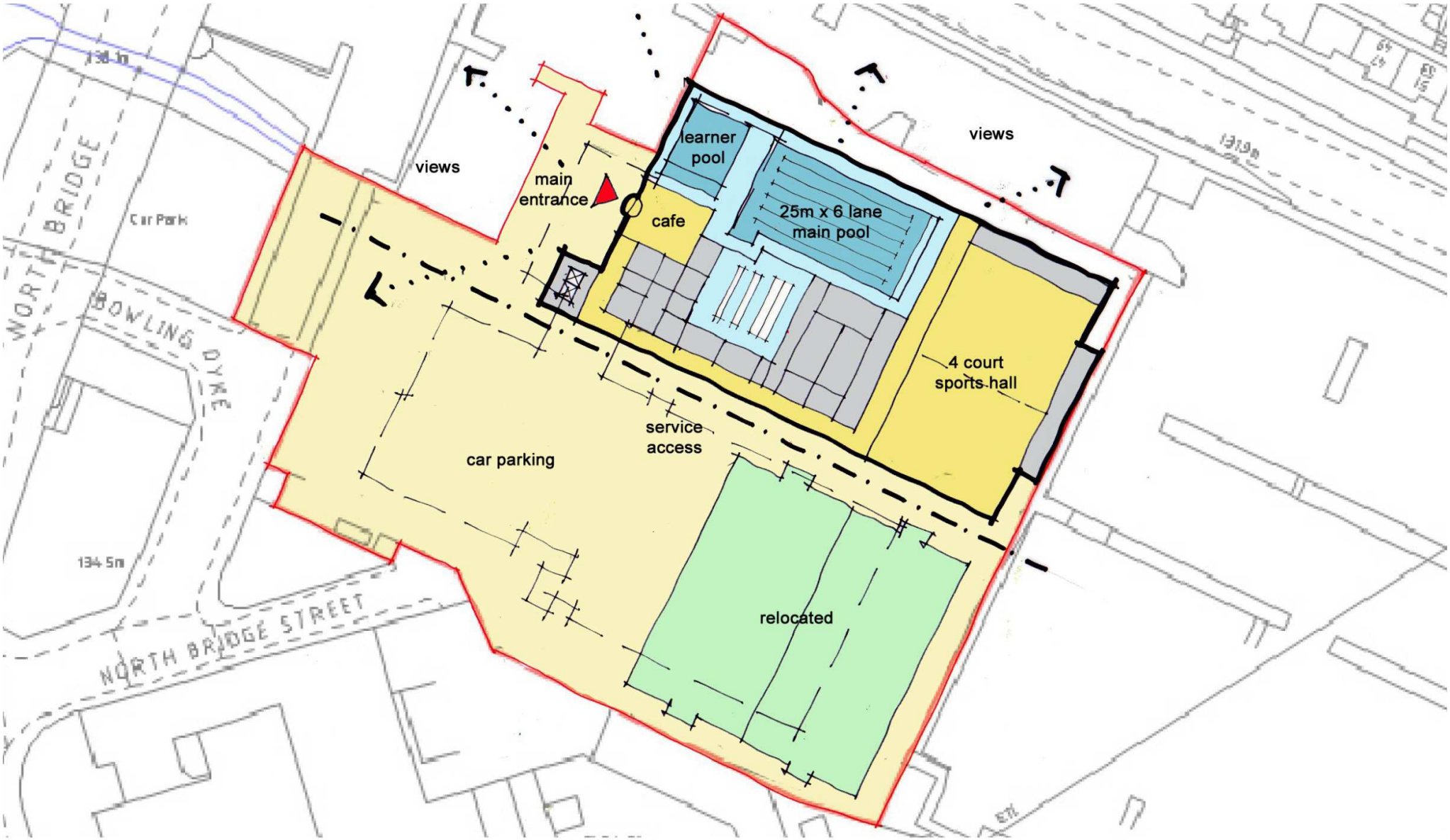
SK005

GT Architects

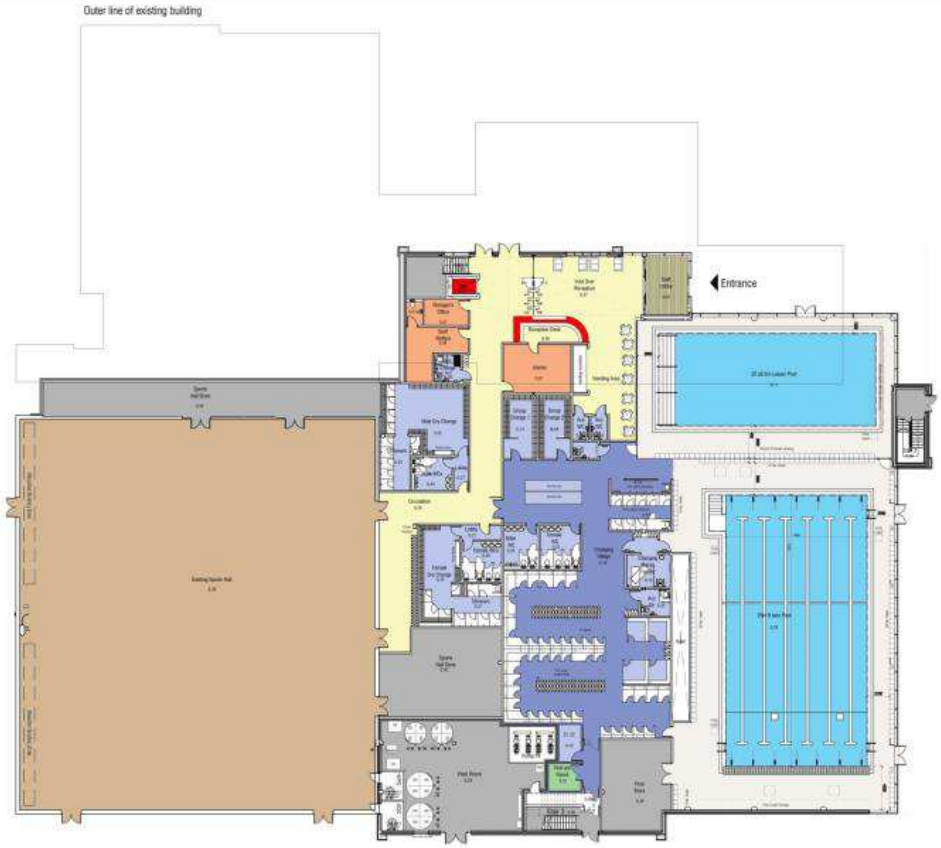
Introduction

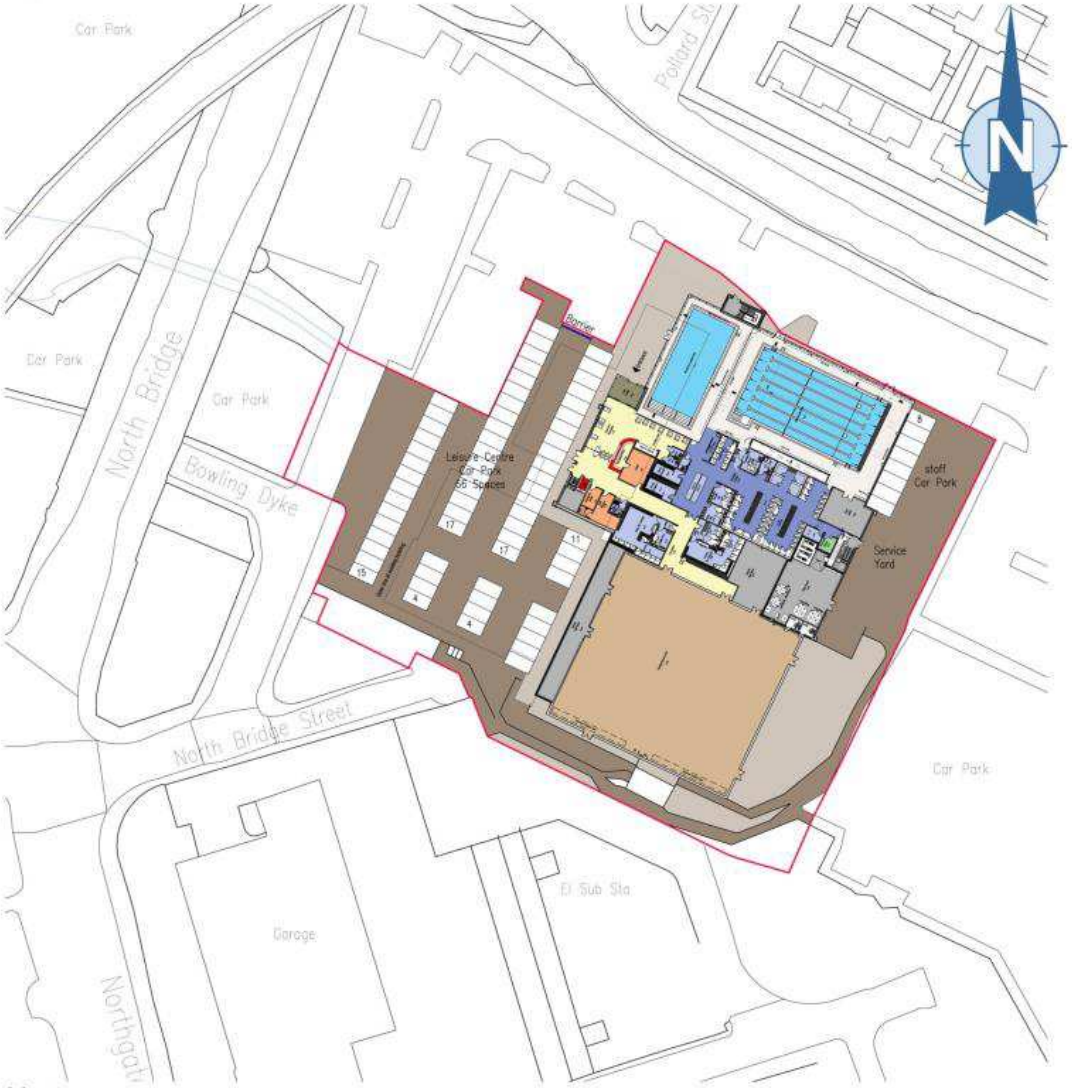


Introduction



Option 1 : North Bridge Leisure Centre
New Build





Advantages

1. Pools face north and advertise to road
2. Fitness above would advertise onto approach
3. Strong entrance and visual connection
4. Service road to rear away from pedestrians
5. Full client brief can be accommodated
6. Retaining the existing sports hall brings efficiencies
7. As well as existing public car park, design allows for dedicated leisure centre parking
8. Existing centre can remain in operation (other than projectile hall, whilst new centre is being built.

Disadvantages

1. Loss of projectile hall during construction

North Bridge Leisure Centre - New Build

HALIFAX LEISURE CENTRE

Site 1 - North Bridge Leisure Centre

1501 SK001 1:500 @ A1 25/01/15

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North Bridge Leisure Centre - New Build

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North Bridge Leisure Centre - New Build

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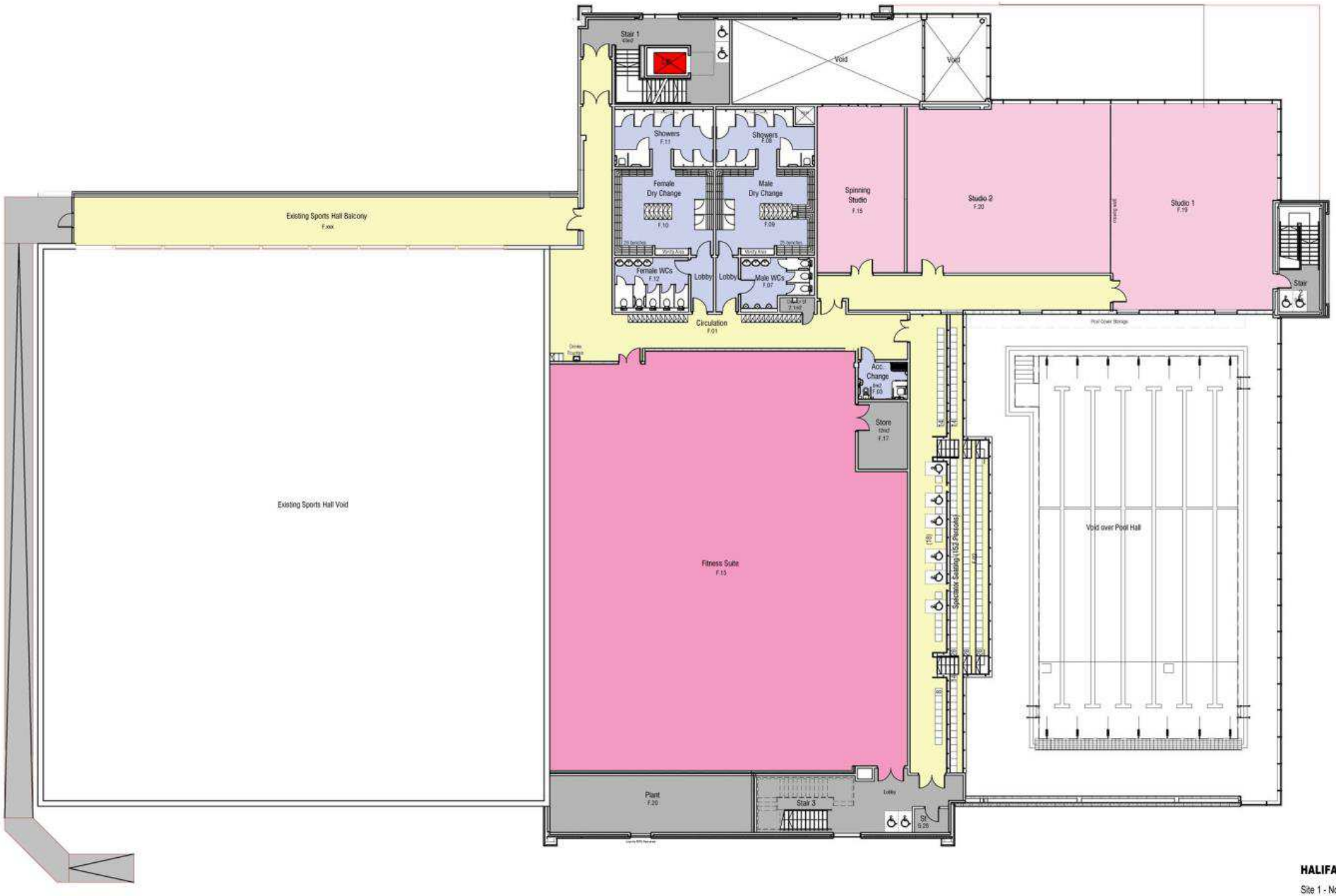

HALIFAX LEISURE CENTRE

Site 1 - North Bridge Leisure Centre

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North Bridge Leisure Centre - New Build


NORTH BRIDGE
LEISURE CENTRE

PHASING PLAN - GROUND FLOOR NEW BUILD

HALIFAX LEISURE CENTRE

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PHASING PLAN - FIRST FLOOR NEW BUILD

HALIFAX LEISURE CENTRE

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Summary

The North Bridge Leisure Centre – New Build Option

The scheme layout is based on the essentials design brief requirements, outlined in the previous section.

From the visual inspection of the current leisure centre, it is evident that the existing sports hall and viewing balcony is in good condition and we therefore suggest that this is retained (floor upgraded and new balcony treatment to balustrade and wall / floor finish). All FF+E will be new and a budget has been allocated within the cost plan.

The scheme has been arranged so that a new stronger entrance approach is made from the car park. The external visual demonstrates the intention of this.

The design is also focused on creating maximum transparency into the major public spaces (pool hall, fitness suite, studios, café) upon approach and also from the internal circulation. The exterior is therefore highly transparent. We may decide that the learner pool incorporates etched glass to create a degree of privacy from people passing the window, yet keeping the connection to outside.

Both the pools, café, reception and the fitness suite advertise onto the pedestrian and vehicle approach and also have a connection to the roads at higher level (North Bridge, Northgate and Charlestown Road). This will make for a lively and active frontage with plenty of people movement.

The circulation has been simplified, compared to the existing centre and is one central street which plugs into all other spaces, hence reducing the requirement for corridors. This circulation route also links to the current sports hall and first floor viewing balcony. Extending the circulation to the sports hall has allowed us to create two 4-court areas with a dividing screen between the spaces (which can't currently be achieved). With this in mind, sports hall stores have been positioned at two ends of the hall when this division is in place.

The design has been configured to allow the existing centre to remain in operation, other than the projectile hall, which would need to be demolished early on (refer to phasing plan).

The site plan has been arranged so that we can separate the visitors entering the main entrance from the new plaza, from plant and delivery traffic which occurs in its own service yard area. The service area also provides for a convenient access to the sports hall for large deliveries. A new wider door has been provided into the sports hall from this delivery area.

The orientation of the building has been designed to allow the pools to face due north, which allows for diffused natural light to enter the pool hall space, without creating glare issues. This will allow artificial lights to be used less frequently during the day and hence, saving energy.

The orientation of the building and its link to the existing sports hall has also allowed us to create a new dedicated leisure car park area (with barrier entrance) for 66 car park spaces, plus and extra 8 spaces for staff to the rear.

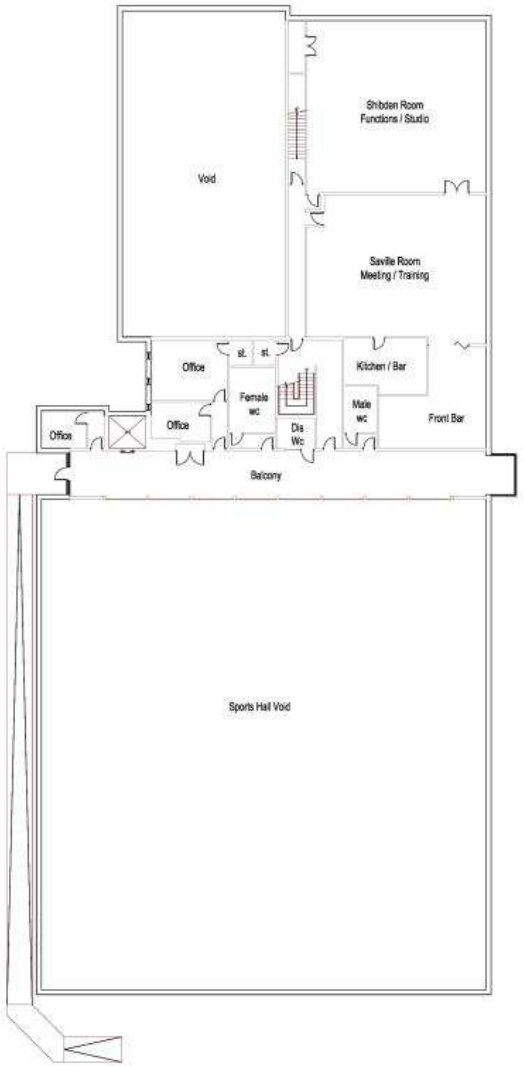
The materials have been chosen to allow for a striking palette from an aesthetics viewpoint, but also local supply. This allows preferred contractors to use local supply chain partners to Halifax.

This option fully delivers the design brief essential mix and in line with all sport guidance.

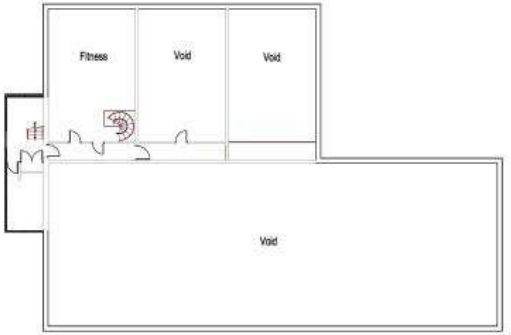
Option 2 : North Bridge Leisure Centre
Refurbish and Re-model

Existing Floor Plans

Existing Ground floor plan - Scale 1:200



Existing First Floor plan - Scale 1:200



HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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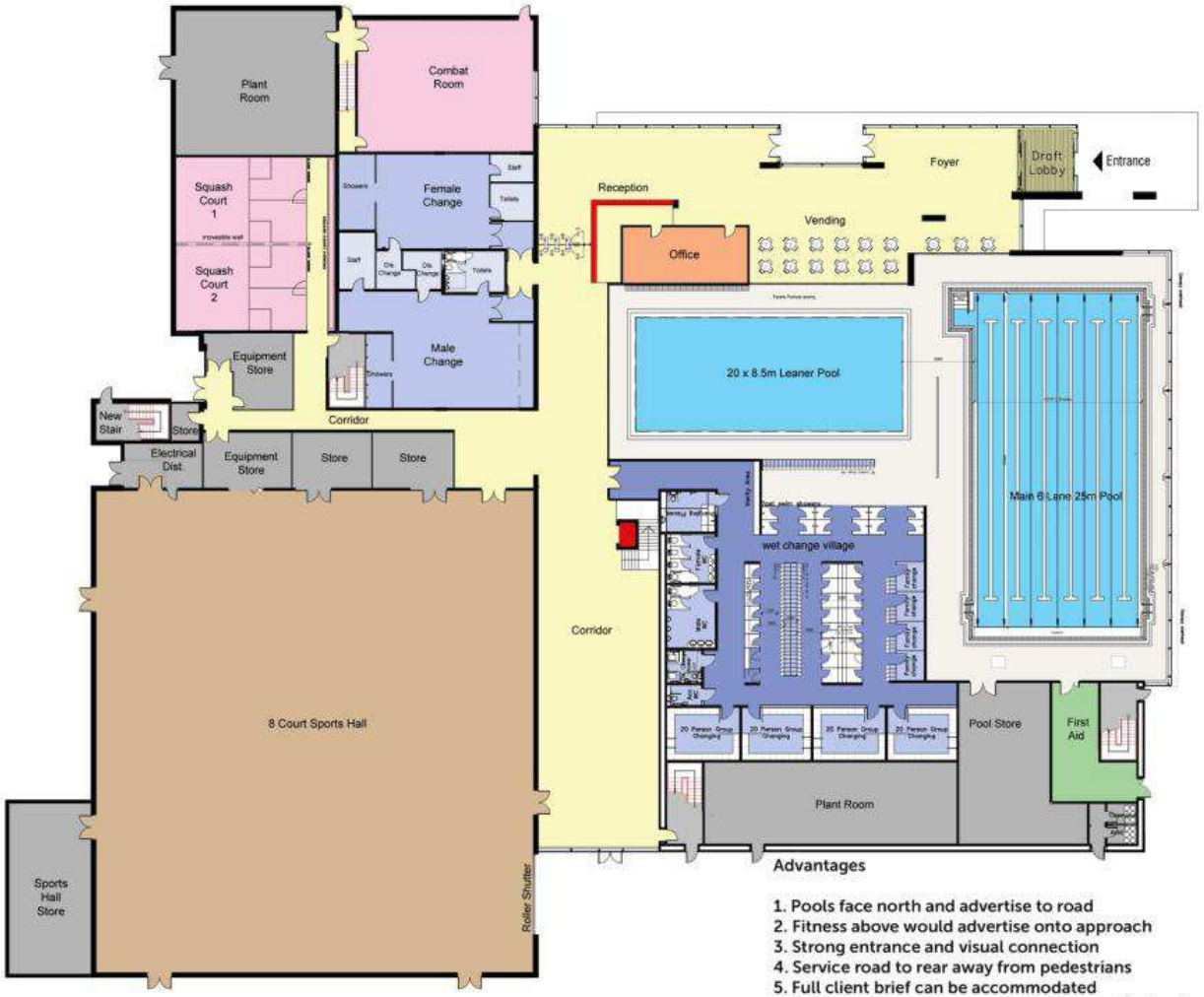
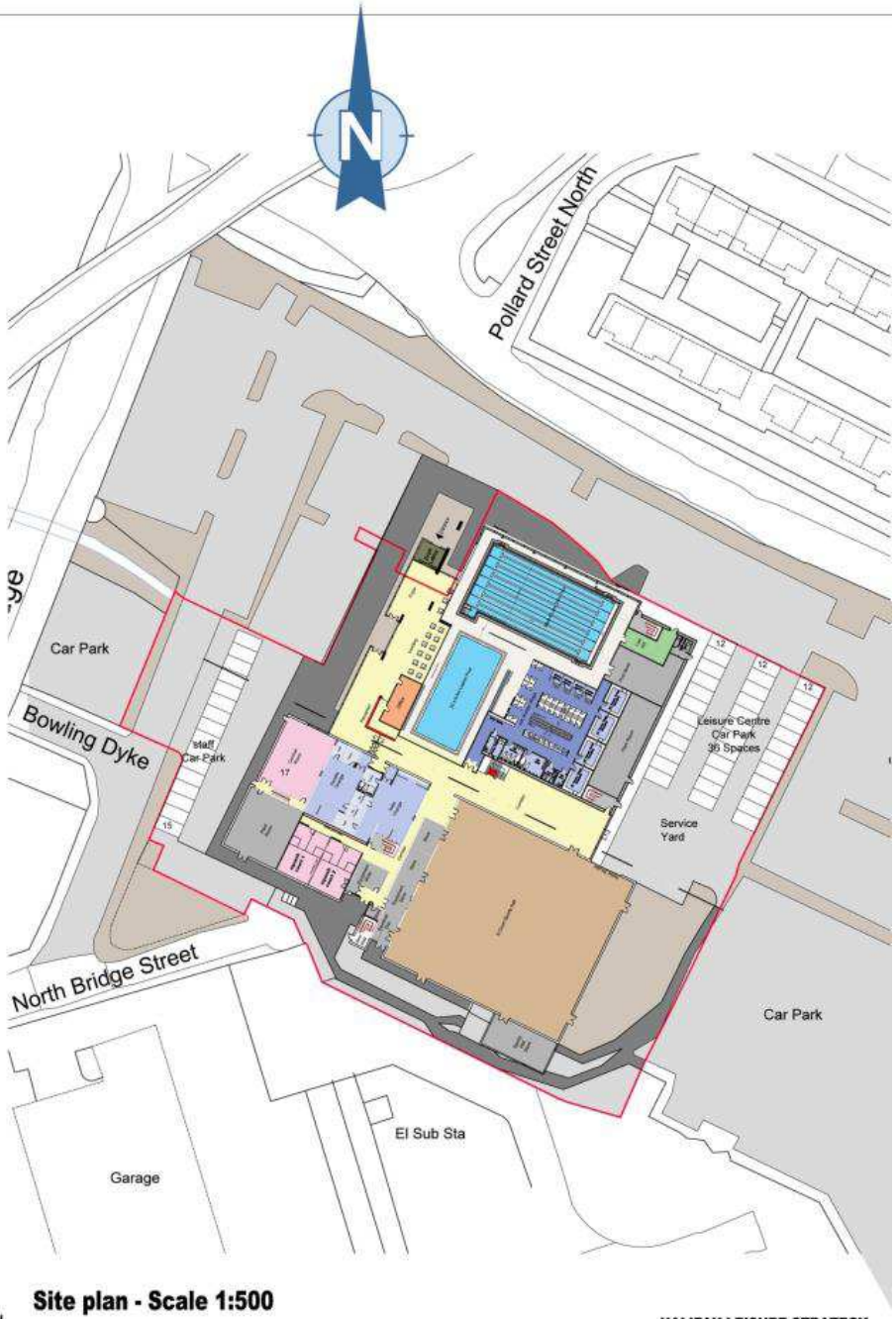


Ground floor plan - Scale 1:200



Site plan - Scale 1:500

Advantages

1. Pools face north and advertise to road
2. Fitness above would advertise onto approach
3. Strong entrance and visual connection
4. Service road to rear away from pedestrians
5. Full client brief can be accommodated
6. Retaining the existing sports hall brings efficiencies
7. As well as existing public car park, design allows for dedicated leisure centre parking
8. Existing centre can remain in operation (other than projectile hall, whilst new centre is being built.
9. All larger studio spaces can be retained and refurbished (more studio space than new build option)

Disadvantages

1. Loss of projectile hall during construction
2. Learner pool is 19m long rather than 20m

HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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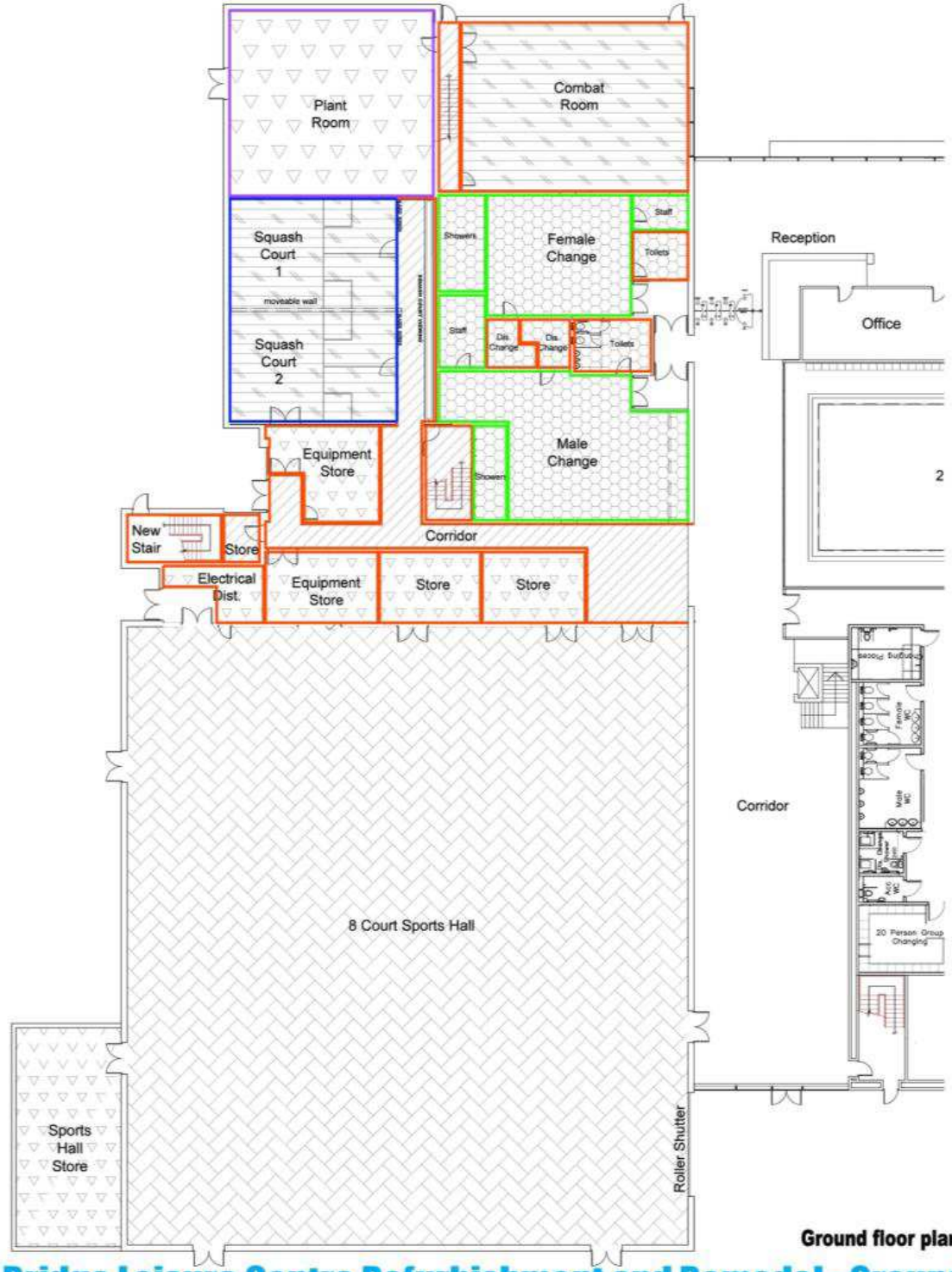
North Bridge Leisure Centre Refurbishment and Remodel - Ground Floor Plan and Site Plan



Key for Refurbishment materials

- Existing wall to be removed
- Repaint and re-plaster to walls
- New tiling to walls - Assume 500 x 200mm tile
- Armoured coated plaster finish with paint finish and line marking
- Dust inhibitor paint to fair-faced blockwork wall
- New Carpet Finish
- Existing sports hall floor to be re-laqured and new line markings
- New semi-sprung timber floor
- New tiling to floors (assume 300 x 300mm Category C tile
- Altro Safety Floor with coved skirting - Colour TBA

Ceilings generally:-

- Rockfon Sonar DB 600 x 600mm suspended ceiling tile to first floor studios, combat room and squash courts
- Rockfon Sonar 600 x 600mm suspended ceiling tile to changing areas and toilets
- Rockfon Scholar 600 x 600mm suspended ceiling tile to admin spaces and stores
- Gypsum Rigitone ceiling to all corridor spaces (pattern TBA)
- Fire rated Plasterboard ceiling to staircores and plant room to give 60 mins FR

HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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Ground floor plan Refurbishment treatment - NTS

North Bridge Leisure Centre Refurbishment and Remodel - Ground Floor Plan Finishes to Refurb

North Bridge Leisure Centre Refurbishment and Remodel - First Floor Plan

HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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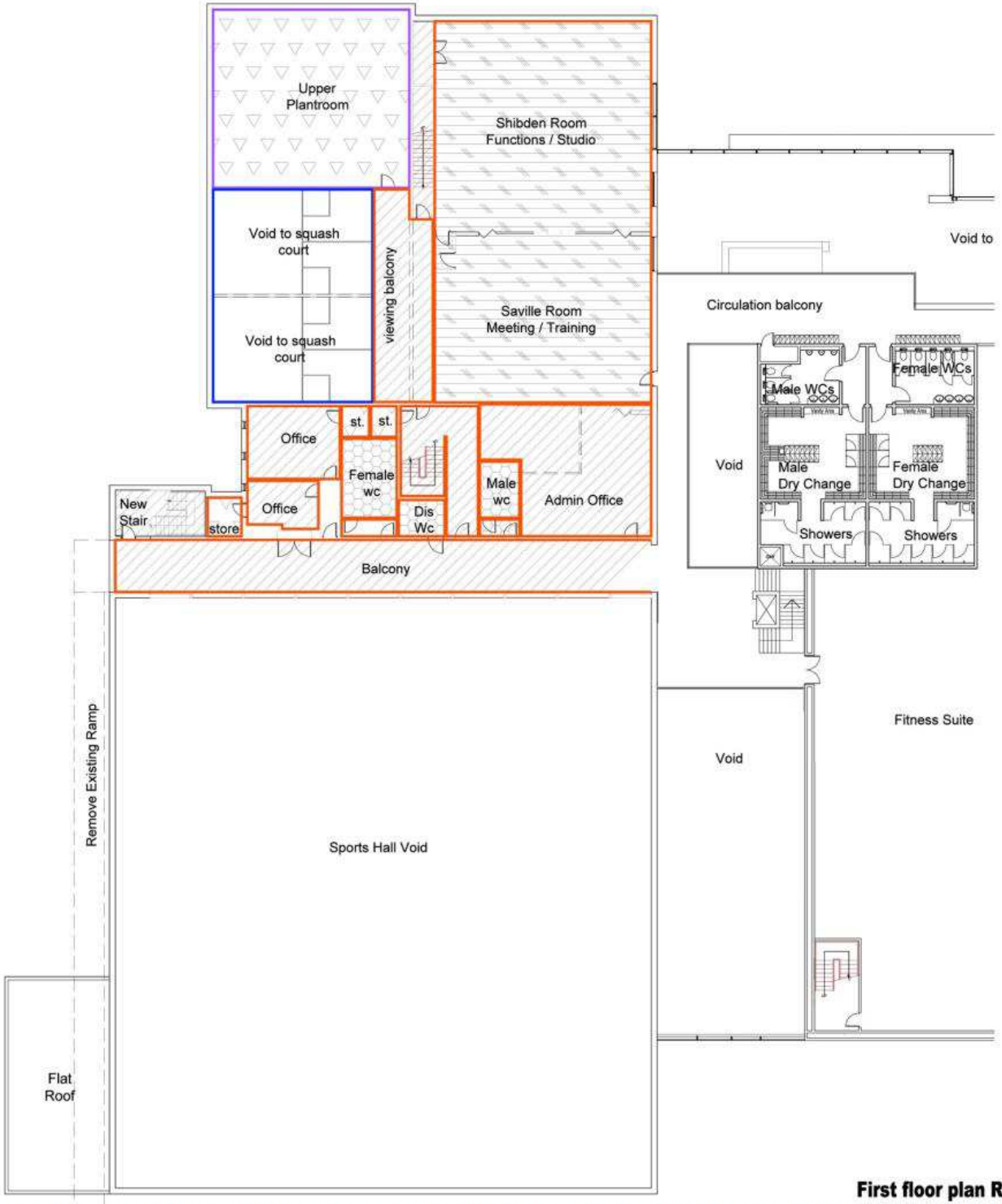

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First floor plan Refurbishment treatment - NTS

North Bridge Leisure Centre Refurbishment and Remodel - First Floor Plan Finishes to Refurb

HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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Temporary refurb of ancillary hall to fitness suite, once new build is built, convert to squash courts and plant as plans

Temporary conversion of combat room into new reception. Once new build is built, convert room to new spinning studio as plans

Demolish existing projectile hall, squash and Fitness suite and reception / foyer

Refurbish existing rooms - all as plans

Build new wet side facility and fitness suite, plus new sports hall store and main entrance / cafe

NORTH BRIDGE LEISURE CENTRE REFURBISH OPTION - GROUND FLOOR PHASING PLAN

HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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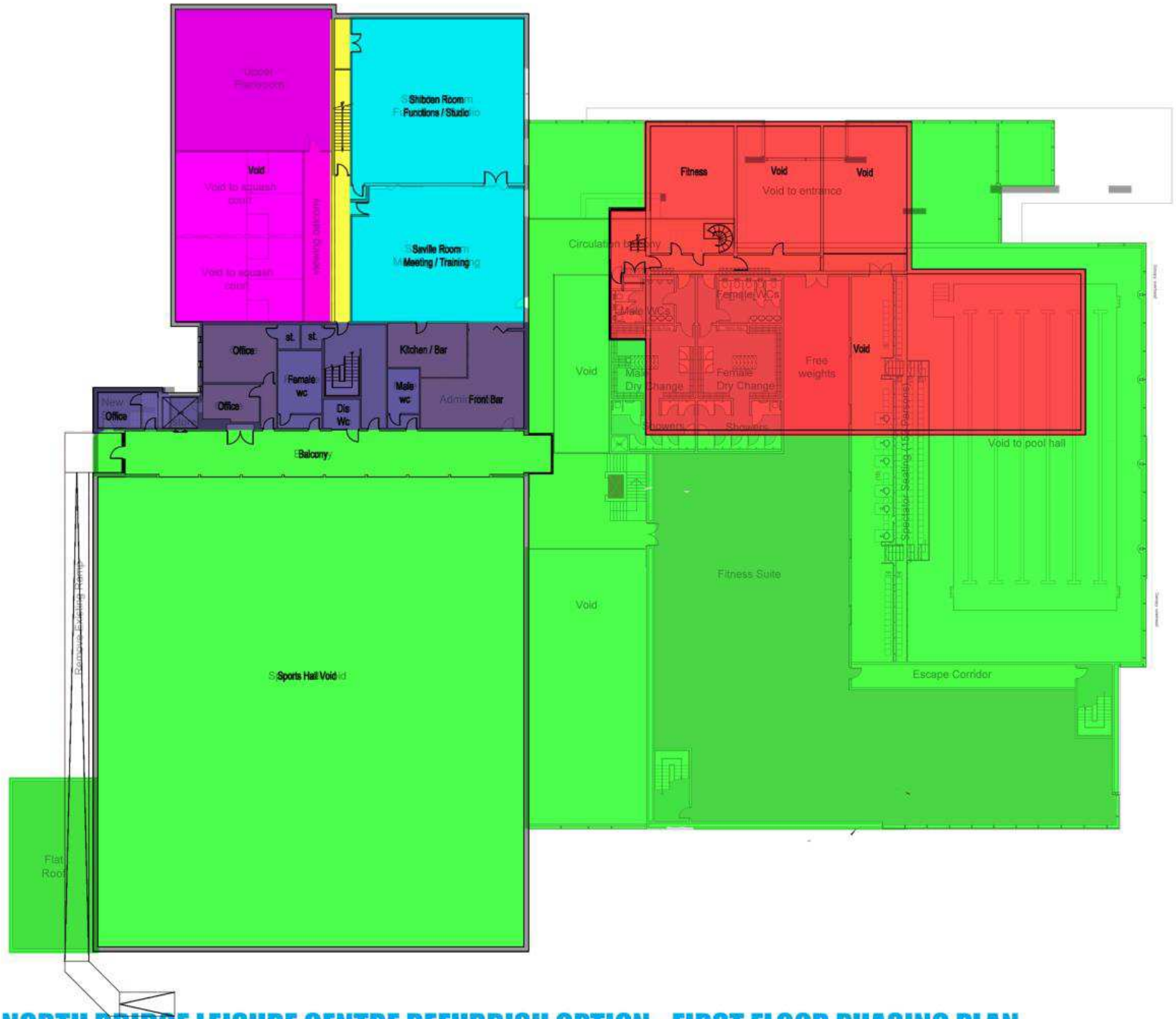

Convert studios into new studio space with moving wall system

Temporary refurb of ancillary hall to fitness suite, once new build is built, convert to squash courts and plant as plans

Temporary conversion of combat room into new reception. Once new build is built, convert room to new spinning studio as plans

Demolish existing projectile hall, squash and Fitness suite and reception / foyer

Refurbish existing rooms - all as plans

Build new wet side facility and fitness suite, plus new sports hall store and main entrance / cafe

NORTH BRIDGE LEISURE CENTRE REFURBISH OPTION - FIRST FLOOR PHASING PLAN

HALIFAX LEISURE STRATEGY

NORTH BRIDGE LC - REFURBISHMENT

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north
bridge
centre

Summary

The North Bridge Leisure Centre – Re-build and Re-model Option

The refurbish and re-model option retains the existing building except for the projectile hall (including the squash courts and small fitness suite). To achieve the essential facility mix, we have to create a new build facility which is essentially wet space, incorporating 6 lane swimming pool, teaching water and a first floor fitness suite.

The remainder of the building is refurbished and re-modelled. The remodelling includes for the alteration of the ancillary hall into two squash courts and the new facility plant room (on two levels). The plant room and ramped exit at the rear of the building is removed to make way for the new plant room that provides for much better access to and from the space. The first floor corridor above the space, creates a viewing gallery to the squash courts.

In addition to the above, the existing combat room has been altered to form a new spinning studio. This space has created new glazing externally to create views into the space from the entrance plaza. Glazing has also been added to the upper studio space, which also gives it a new identity from the approach to the new main entrance.

The drawings illustrate the alterations and new finishes applied to the refurbished and remodelling side of the centre.

The new build element is arranged to create a new entrance approach and plaza to the facility, which is highly transparent and sells the pool hall, fitness suite, studio and café / foyer on approach. The central street concept connects the main entrance foyer to the existing facility and attempts to reduce the excessive corridor space found in the existing layout.

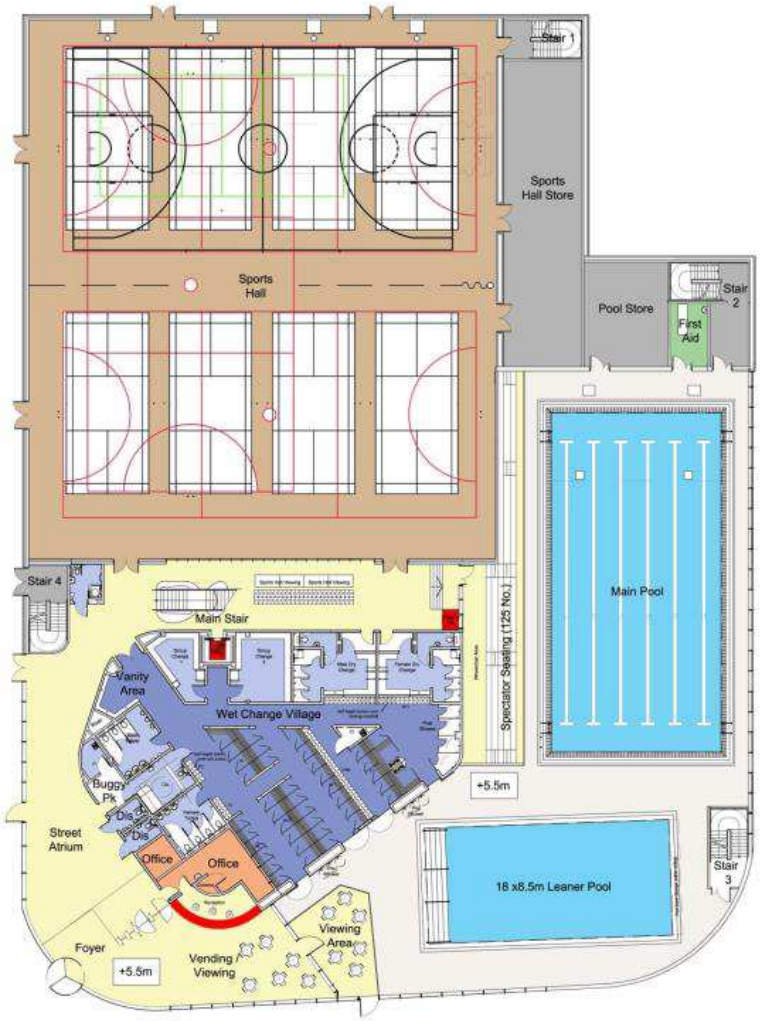
The central street picks up views internally over the learner pool and also creates two entrances into the sports hall. Currently the sports hall has one entrance to the 8 courts. Using the central street, the extra entrance allows for the sports hall to be divided into two and create two 4 court hall spaces to allow for variety in the programme. To help this split, sports hall stores have been located at either end of the hall.

Externally , the new plaza links into the surround public car parking space and creates a new frontage for the centre.

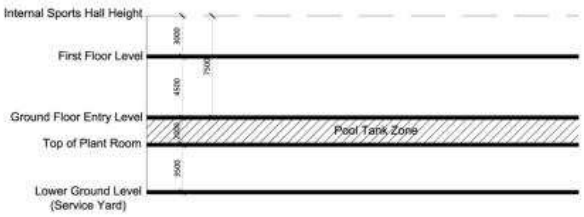
The existing building will be over-cladded with a metal cladding system to match the new build element (refer to visual) which ties the scheme together.

We have allowed for as much dedicated leisure parking in the space left available, however this only allows for 36 spaces (compared to 66 in the equivalent new build scheme).

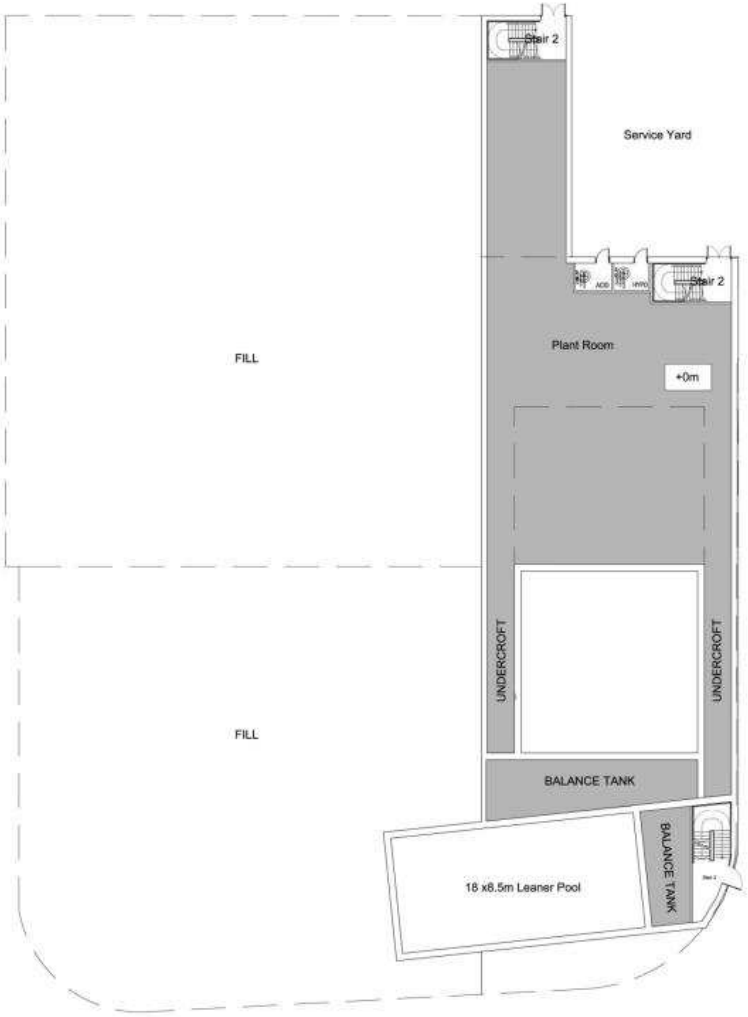
Option 3 : Cow Green Car Park Site



GROUND LEVEL (ENTRANCE)



LEVELS



BASEMENT (LOWER ROAD LEVEL)

Advantages

1. Pools face the road at +5m and have good advert with privacy at the same time
2. Blank box spaces kept to rear of the site
3. Introduces building form on a prominant corner
4. Design will make good use of the levels.

Disadvantages

1. Levels of the site mean additional cost
2. Learner pool is 18m long rather than 20m
3. Car park will be in basement (numbers will be around 50no.)
4. Entrance at the top of the site is largely hidden
5. Pools will be suspended at first floor level (consider Myrtha)

Cow Green New Build Leisure Centre - Ground Floor and Basement

HALIFAX LEISURE STRATEGY

COW GREEN CAR PARK - NEW BUILD

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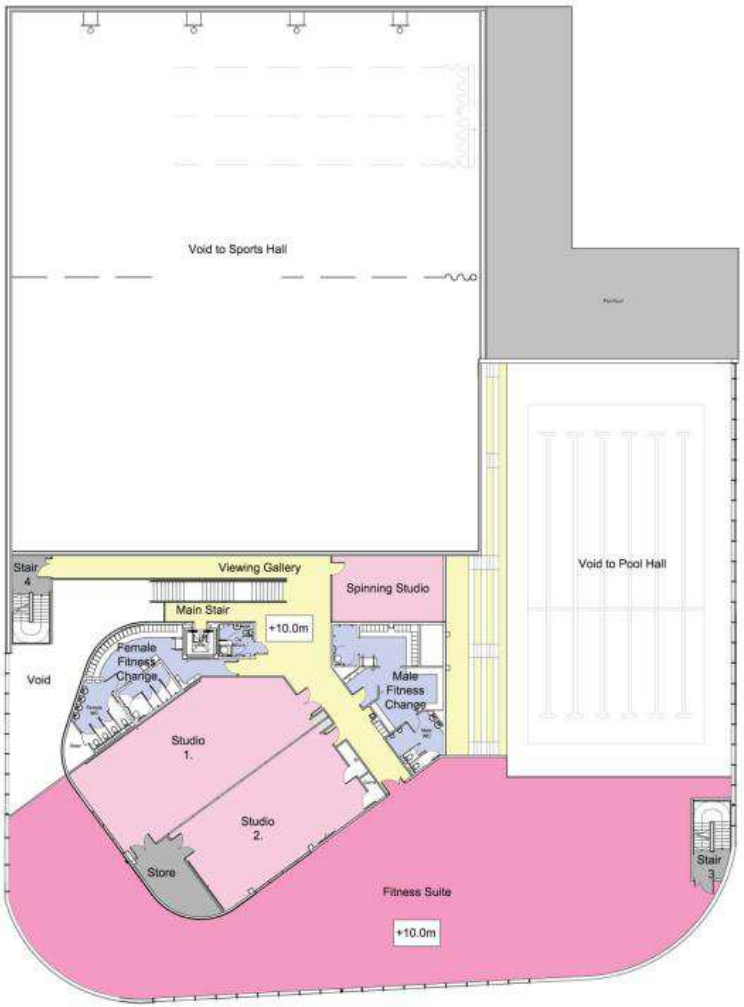
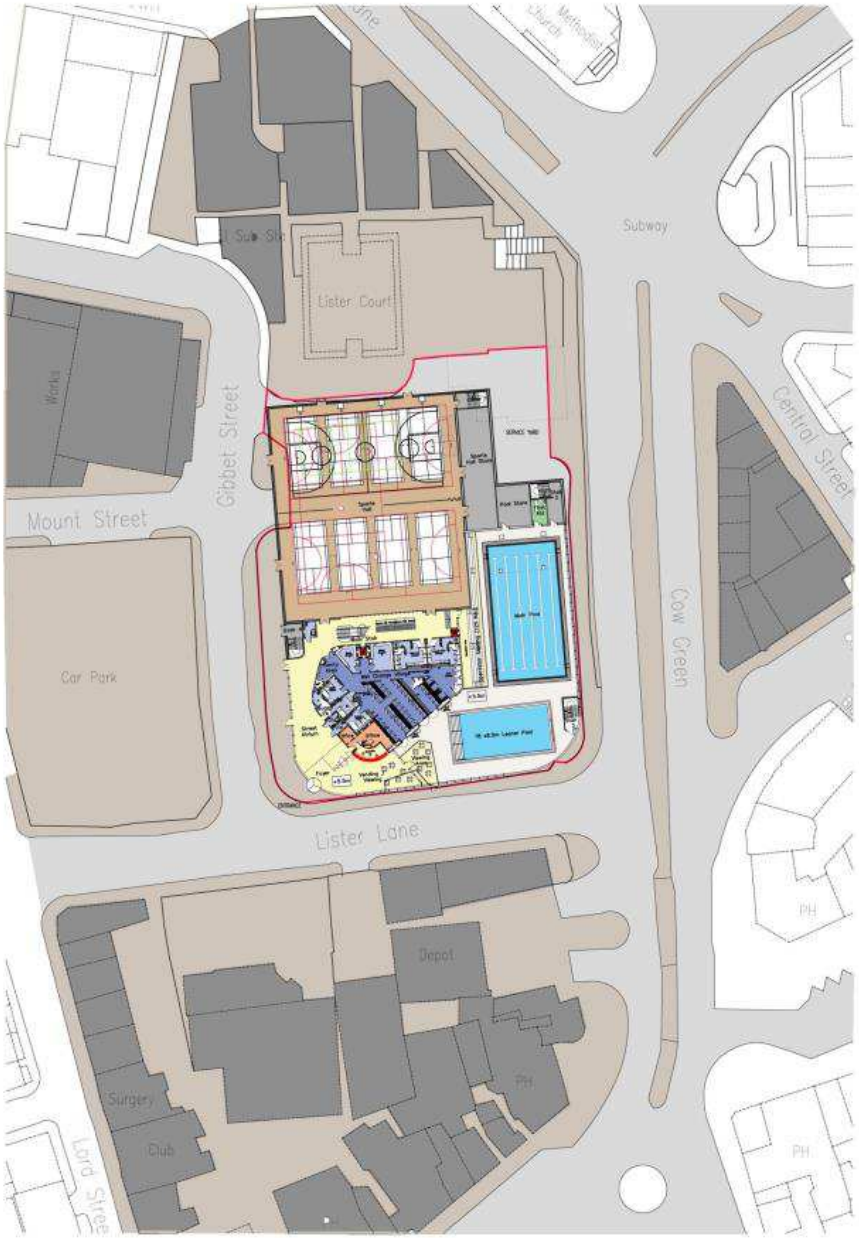


FIRST FLOOR LEVEL



HALIFAX LEISURE STRATEGY

COW GREEN CAR PARK - NEW BUILD

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Cow Green New Build Leisure Centre - First Floor and Site Plan


fit
Leisure
SIRIS
ENVIRONMENTAL
SIRIS

Summary

The Cow Green car park site is complex because of its level difference across the site. The site slopes from road level to the proposed entrance at the top of Lister Lane by approximately 5m. In addition to the gradient, the utilities search has illustrated that there are a multitude of buried services that we cannot build over or disturb, which travel down Gibbet Street and the Swine Market area.

We have used the slope of the site and services location to determine the layout of the design. This has created a layout where the visitor enters at the top of the site, essentially at first floor level. This entrance foyer is also the pool level. The pools are suspended, using the void below to the front of the site to build off the slab at road level. This creates a basement plant area and undercroft zone.

Having the pools at first floor level, allows them to respond to the Cow Green road frontage, but with them being higher, allows for a degree of privacy and drama. The visual illustrates how this might look.

As the pools face due east, we would expect a certain degree of glare through the glass. Therefore the design has allowed for an over-sailing roof which creates a solar canopy and an entrance boulevard along the street. The visitor will then be guided up Lister Lane, via a façade that is highly transparent, advertising the pools, fitness suite and café. The adjacent buildings on Lister Lane, should create natural shading onto this glass façade.

The major drawback of having this entrance arrangement, is that the main entrance is largely hidden from Cow Green. As the site has no dedicated leisure car parking (without the acquisition of third party land), most visitors will be approaching from Lister Lane.

As the undercroft / basement area has been built from Cow Green road level, this allows a service area to come in from Cow Green into the site and service the plant room areas easily. This keeps servicing away from key pedestrian areas.

All key facilities (pool, fitness suite, studios and café) have road frontage and therefore the key public facilities are well advertised.

The image shown, illustrates that this site can provide a striking façade onto Cow Green approach, which creates in itself a key gateway building into the town.

The current North Bridge Leisure Centre is able to remain in operation until the new building is complete and requires no phasing.

The major drawback with this site is the building on a slope (this is reflected in the cost plan), the entrance is hidden at the top of the site, and there is currently no dedicated leisure car park provided.

The buildability of the development will be difficult as to achieve the facility mix, we have to maximise the red line boundary area (refer to the site plan). This creates problems for compound areas, delivery vehicles, scaffold, working above pedestrian zones. Whilst this is not unsurmountable, it does add to the cost of the project and will impact on the programme delivery.

The full facility mix cannot be accommodated on just the Cow Green car park boundary and requires the ownership of the Swine Market area, including the Thai restaurant. Also the site can only accommodate a 18m learner pool (rather than 20m).

The sports hall cannot be divided and allow for separate access to the courts (i.e. it only allows one entrance to the sports hall and not in accordance with Sport England recommendations) which may have an impact on funding.

Statutory Compliance

Statutory Compliance

General Standards

The new centre will be completed to high standards of construction and specification. The facilities shall be technically and functionally suitable to meet the Council's objectives and those of its health partners and shall:

• provide an appropriate physical environment for all facility users

• make efficient use of space, buildings and land

• exploit site features such as slopes, trees, footpaths and views to the full

• integrate with and complement adjoining environments, enhancing them where possible

• enable the accommodation to be maintained to a standard acceptable to the Council

• provide an environment that is acoustically treated to ensure noise disturbance is minimised. This is particularly important in areas such as the Sports Hall, Swimming Pool and Multi-purpose Studio. Wherever possible, noise should be controlled at source. In areas where external noise is likely to be a concern, a specialist sound survey shall be commissioned by the Contractor and the building designed to minimise the impact of such noise. External envelopes, particularly flat roofs, shall be designed to minimise the transmission of sound arising from inclement weather.

Sound insulation to separating floors shall exceed the sound insulation performance for similar constructions given in the latest Building Regulations (when tested by completion) by at least 10 per cent. Walls not otherwise covered by Regulation but which separate designated specialist rooms from other rooms shall be designed to achieve an airborne sound insulation value of at least 50dB.

• provide a safe and secure environment for staff and visitors, but with the minimum possible impact on the openness and accessibility of the building. A well-managed and designed building with a pleasant ambience will help to reduce tension and latent security risks.

Security should allow for sharing of common facilities between user groups and is to be considered from a series of criteria:
- Against unauthorised entry from outside
- Against unauthorised access within the building
- Personal security and safety of staff working in the building
- Ease of operation

• be energy efficient and environmentally friendly

• be imaginative and innovative and afford easy movement and full access to persons with restricted mobility including those with wheelchairs or other frailty, who are visually or hearing impaired, the mentally ill (including those with a high level of elderly mental infirmity), staff, visitors, children and parents/carers with babies or toddlers

• provide clear signage giving name and directional details enabling visitors, service users, staff and the emergency services to easily locate the required destinations (internally and externally). Signage for Halifax Leisure Centre shall be required to comply with national format/colour guidance

• use suitable colour schemes and colour coding to aid orientation and assist service users, staff and visitors with visual and/or cognitive impairment

• provide an entrance hall that is welcoming and non-institutional in style. Stairways shall be free of obstructions throughout their length. Handrails proud of the walls shall be provided along all corridors and circulation areas on both sides.

• provide 'fluidity' and integration of design to maximise flexibility and encourage cross participation by users

• feature natural light and ventilation for those rooms that are likely to be occupied for any length of time and, where appropriate, window sills shall be low enough to allow small children and wheelchair users to look out. Artificial lighting shall be non-institutional in style with suitable colours and intensity for service users with visual impairments or dementia.

• offer flexibility in future layout of areas within the building in response to changing patterns of demand and community needs – e.g. able to accommodate alterations to the layout without significant structural or organisational disruption

Statutory Compliance

• the quality of workmanship shall be no less than that set out in the latest appropriate European and British Standards Institute Specification, British Standards Codes of Practice, CIBSE guides, Building Energy Codes and Technical Memoranda trades suppliers, manufacturers, representative bodies Codes of Practice and recommendations of BRE Digests and Good Building Guides, the Chartered Institute of Building Services Engineers and Local Authorities and good common practice.

Where no standards, codes or guidance documents exist, the best current practice shall be assumed to be required. Deviation from this requirement shall be drawn to the Council's attention at the time of submission.

Statutory, Industry and Local Standards

The following standards shall apply unless otherwise stated:

• the standards set out in British Standard 8000
• the Building Standards Regulations as interpreted by the relevant Authority and local by-laws
• the Disability Discrimination Act
• RNIB and RNID guidelines and audit assessment for use of the new facilities by visually and hearing impaired staff and service users
• the Registration Authorities standards
• The Health and Safety at Work Act
• Recommendations of the Health and Safety at Work Executive
• Electricity Acts
• Electricity at Work Regulations
• Building Research Establishment Digest Recommendations
• Requirements of the local Water Supply Company, Electricity Supply Company, Gas Supply Company
• Requirements of the Building Control and Planning Officer, Fire officer and Environmental Health Officer of the Local Authority
• Requirements of 'Secured by Design' as determined by the Local Police Architectural Liaison Officer
• The Institution of Electrical Engineers Regulations for Electrical Installations [16th] Edition, including all amendments and Appendices – BS 7671
• Control of Substances Hazardous to Health (COSHH)
• All documentation, recommendations, guides, etc, produced by the Chartered Institution of Building Services Engineers, including:

  - Commissioning Codes
  - Technical Memoranda
  - Practice Notes
  - Energy Notes
  - Code for Interior Lighting Design
  - Code for Exterior Lighting Design
  - Lighting Guide 3

• BS 5839 – Fire Detection and Alarm Systems for New Buildings Pt 1: 1988
• BS 5266 – Emergency Lighting Pt 1: 1988
• Sport England design guidance where available and appropriate
• All other bodies and authorities having jurisdiction
• ISRM Report Managing Health and Safety in Swimming Pools.
• The Construction Design & Management Regulations (2007). *[Note that these are to be updated in April 2015]*
• The Site Waste Management Plans Regulations 2008.
• BREEAM standards, including the Council's policy (Very Good for Refurbishment and Excellent for New Build)

Design Life Strategy

Design Life Strategy

Overview

During the design process it will be necessary to understand the design life of the varying materials of the building structure and façade. This in turn has helped the team understand a little more about the life cycle costing of the project.

The term 'materials' refers to all of the physical substances that are assembled to create the interior and exterior of the building. Today, most buildings are constructed from a multitude of materials, each with very specific functional demands and complex assembly requirements. For example, an exterior wall assembly contains materials that keep the rain and wind out, thermally insulate the inhabitants from exterior temperatures, structurally support the building and provide desired interior and exterior finishes.

The choice of materials based on their appropriate properties for the building's location and function will be fundamental to its long term success. The following tables illustrate the design team's current thinking with regards to the life span and material choice.

Component Design Life

The contractor's design should take account of the building's design life both in terms of durability and long term maintenance. It should be accepted as a matter of principle that there will be changes in the pattern of use of the building over time. Whilst it is anticipated that the major public spaces need to have a particular architectural character which endures, it is likely that accommodation will be refined or altered over time in response to changing needs. Materials chosen for the project should have been proven in service. Any intention to use alternative materials must be authorised by the client before they are used. Refer to BS 7543 for definitions and further data on design and service lives. The design lives specified here are the minimum acceptable. Overall the minimum design life of the building will be 50 years.

Cladding

Component	Proposed Design Life (years)
All aluminium components	40
Aluminium panels	30
All zinc components	25
Fixings	40
Insulation	40
Inaccessible seals	40
Int. aluminium coatings	40
Glass vision panels	30
Glass spandrel panels	30
Glass coatings	30
Gaskets	20
Fittings	20
Ext. aluminium coatings	20
Timber soffits	20

Structure

Structural design life - The design of the structure (including sub-structure) shall be 50 years.

Structural service life - Servicing of structural components shall be limited to painting of structural metalwork. Apart from painted finishes, all structural components shall have a service life of 60 years.

Component	Proposed Design Life (years)
Pool tank structure	50
Frame, upper floors and stairs	50
Roof structure	50

Design Life Strategy

Envelope

Roofing design life - The design life of the roofing shall be 60 years.

Component	Proposed Design Life (years)
Single ply membranes	25
Myrtha Pool Membrane	25
Decking and internal framing	50
Fixings	50
Insulation	40
Inaccessible seals	40
Int. aluminium coatings	40
Fittings	25
Ext. aluminium coatings	25
Sealants	25
Syphonic rainwater system	25

Internal Finishes

Component	Proposed Design Life (years)
Dry lining	25
Paintwork to steel structure	20*
Paintwork generally	7
Ceramic tiling	25
Pool tank tiles	25
Pool tank grout	15
Floor screeds	25
Carpet tiles	10
Stone	50
Rubber/ vinyl/ PVC floor finishes	7
Epoxy floor paints	25
Render system	25

Fittings

Component	Proposed Design Life (years)
Staircases	50
Balustrades	25
Ironmongery	15
Internal doorsets	20
Plasterboard construction	25
Blockwork construction	25
Metal panels	25
WC etc . panels	12.5
WC cubicles and access panels	15
Glazed internal positions	25
Raised floor system	25
Signage	15
Timber fittings generally (eg. skirtings)	25
Kitchen fittings	15
Mirrors	15

External Works

Component	Proposed Design Life (years)
Precast concrete slabs	50
Asphalt and bitmac	25
Clay pavers	15
Stone cubes and sets	20
Natural flagstones	25
External road construction	25
Drainage installation	25
Hard landscaping areas	12.5
Street furniture	15

Sustainability Overview

Sustainable Development

Required Outcome
The facilities shall be designed and constructed, so far as is reasonably possible, to deliver benefits to the environment.

Scope
Sustainable development and environmental good practice should be considered in the following aspects of the design and operation of the facilities:-

- Building orientation
- Façade Design
- Layout of Buildings
- Building form
- Insulation
- Energy efficient fixtures and fittings
- Contribution to minimising ozone depletion, global warming, air and water pollution and non-renewable resource depletion
- avoidance of use of ionising and electromagnetic radiation and any design features associated with sick building syndrome
- maximising the opportunity for recycling
- enabling maintenance regimes to be used to maintain optimum performance
- the use where possible of natural resources such as daylight and passive solar energy

Standards
The Council wishes to ensure that Contractors properly address the issues of environmental sustainability and intends to assess this by utilising criteria based upon the Building Research Establishment's Environmental Assessment Methodology (BREEAM). This will assess the performance of the designs.

For each of the categories set out above, the building is assessed against performance criteria set by the Building Research Establishment (BRE) and awarded "credits" based on the level of performance. The percentage of credits achieved under each category is then calculated and environmental weightings are applied to produce an overall score for the building.

The overall score will be then translated into a BREEAM rating of PASS, GOOD, VERY GOOD or EXCELLENT.

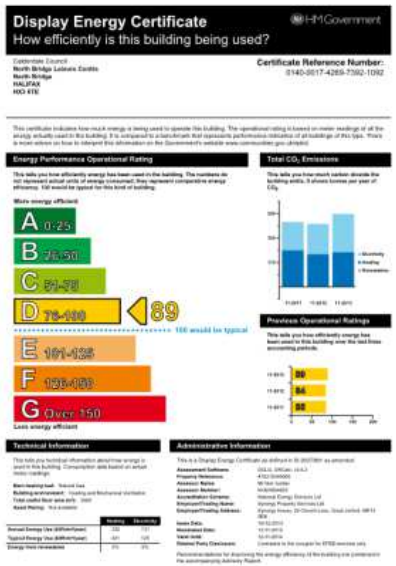
The Council's policy is that the newly designed facilities will as a minimum meet the "VERY GOOD" BREEAM rating for refurbished elements and "EXCELLENT" for the new build design.

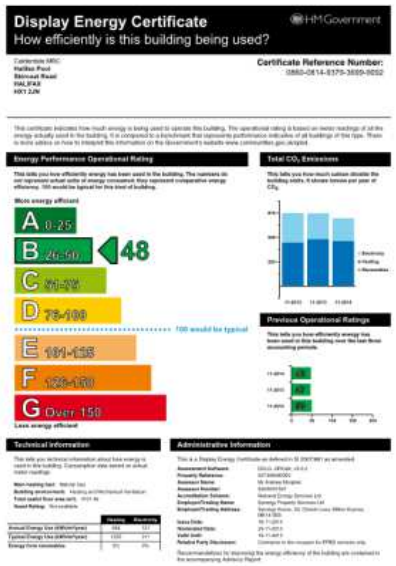
Energy Cost Implications

Energy Costs Implications

Introduction

Energy consumption data has been issued by Calderdale Council for review and assessment against anticipated running cots of the new facility. The DEC data has been obtained and further verifies the energy consumption figures.



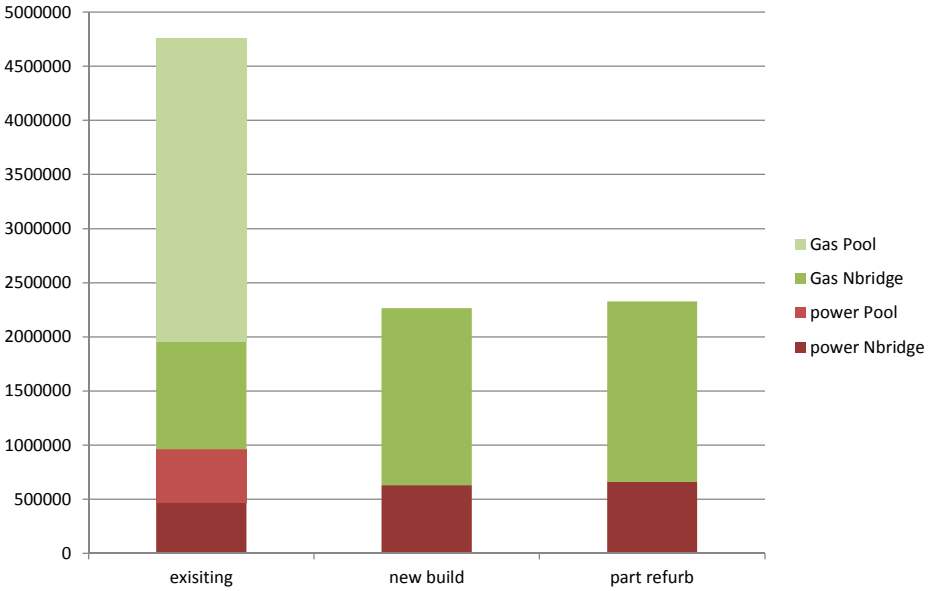


Anticipated energy consumption for a modern sports and leisure facility, built to current regulations, has been obtained through the use of benchmark figures given in the Energy Efficiency Best Practice Guide 51 published by BRECSU.

Cost analysis has been based on the current unit rates for power and gas currently paid for both North Bridge and Halifax Pool and are **11p** and **3p** per kWh respectively (average).

Running Cost estimates

The graph below illustrates the anticipated energy savings (expressed in kW hours per annum).



The anticipated annual cost this represents are presented below:

Current facilities total annual cost	**£230k** / year
Option 1 – new build	**£123k** / year
Option 2 – Part refurbishment at Northbridge	**£127k** / year

06. Ground Conditions and Services Summary

North Bridge Leisure Centre Site - Utilities

Electricity

There are a large number of 33kV and 11kV cables running down North Bridge Street to the Primary Substation located to the south of the site. There are also 11kV cables running along the Eastern Perimeter of the site along the boundary with the Sainsbury Car Park. These cables appear to be outside of the site boundary and therefore do not pose a concern. There are also overhead lines nearby crossing from the Primary substation to the North East corner of the Sainsbury Car Park.

A low voltage 400v TPN supply enters the site at the end of North Bridge Street and then runs parallel to the Ancillary Hall, entering the building adjacent the lift shaft and old main entrance. The supply is then assumed to run internally to the store adjacent the main sports hall where the main incomer, metering and main distribution switchboards are located.

Gas

Existing gas mains serves the site from North Bridge Street. The 200mm Ø main at low pressure enters the site at the bottom of North Bridge Street and feeds the meter housing at the south of the Ancillary Hall. Another 63mm Ø mains is shown entering the site off Bowling Dyke. It is assumed that the gas supply for the existing building is provided by one of these two mains, running along the pathway adjacent the Ancillary Hall and entering the main plantroom adjacent the sports hall. No other gas mains run within the site boundary, however, a medium pressure mains does run to the north along the access road to pay and display parking and then down the West flank of the site.

Water

The existing site is served by a 3" Ø cast iron main running down North Bridge Street to a buried meter location adjacent the lift shaft and old main entrance. The supply appears to enter the building at this point where it distributes throughout the building.

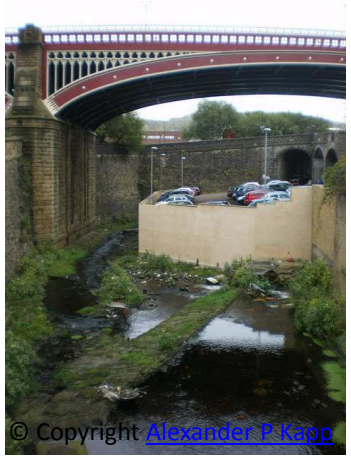
BT/Telecoms

BT records show a service to the building from North Bridge Street to the south side of the building where it appears to enter via the old main entrance, a second feed appears to run to the plant room and a third runs around to the East façade of the sports hall where an external telecoms cabinet is located.

Drainage

Two large diameter combined sewers are shown in record drawings as running below the site. Other record information show a pumping station and easement to the West of the site adjacent Hebble Brook, the brook appears to run through the site in the form of an underground culvert reappearing to the east of the Sainsbury Supermarket.

Further more detailed information on the utilities can be found in the Appendix C.



Hebble Brook, North Bridge


3 Storey Plantroom


Gas Meter Enclosure

North Bridge Leisure Centre Site – Constraints Plan

North Bridge Leisure Centre Site - Ground Conditions

BuroHappold Engineering have reviewed the existing data for the Site and a summary of the ground conditions, constraints, abnormals and design requirements in relation to the Proposed Development for Halifax Leisure Centre – North Bridge Site is provided below.

The Site is located in Halifax Town Centre approximately 680 m NNW of Halifax Railway Station. From available data, it is understood that the site comprises the existing North Bridge Leisure Centre. Former foundations are likely to be present on site (to be removed). The Site is bounded by North Bridge Street, Old Lane & an electricity substation to the south, Bowling Dyke, existing car parking and North Bridge (elevated) to the west, existing car parking and Charlestown Road (elevated) to the north and existing car parking to the east.

The historical exploratory holes (British Geological Survey) in the vicinity of the Site indicate the ground conditions to comprise a variable depth of Made Ground (proven to 7 m BGL) which is underlain by Rough Rock bedrock (sandstone) proven to 20 m BGL. Alluvial deposits may also be present on Site in the area of Hebble Brook. Based on the available information, it is likely that piled foundations (with a 5-7 m rock socket) are feasible for the Proposed Development. This will need confirming during the next phase and subject to ground investigation.

Key Risks/Constraints:

- Hebble Brook – culverted beneath the Site.
- Active / constrained Site bounded by roads/services. Access / buildability issues.
- Relic Foundations /obstructions may underlie the Site.
- Historical GI data only – scheme specific GI to be completed.
- UXO risk requires more detailed assessment.

Key Opportunities:

- Targeted scheme specific ground investigation allows a risk managed approach to be adopted.
- Management of site levels and earthworks to be balanced as far as practicable to achieve design levels.
- Future proof proposed service routes - dedicated 'clean' service corridors if necessary.
- Redevelopment allows masterplanning of layout and all service requirements to be rationalized.

Please also refer to BuroHappold Design Note 033875_GE_DN_001_NB for further details on the above.

Information required:

- Ground conditions, groundwater & ground gas monitoring information (scheme specific GI required).
- Topographical survey (3D).
- CCTV survey.
- Confirmation of FFL.
- Clarification of new service routes (particularly new drainage runs) required.
- Confirmation of land ownership boundaries/public rights of way.

Cow Green Site - Utilities

Electricity

There are both 11kV and LV 400v TPN cables bounding the proposed site buried in the road along Gibbet Street, Lister Lane and Cow Green. There are no significant cables within the proposed site, however, there is a substation located to the West of Lister Court albeit outside the site boundary. The disused car park is served by a 400v TPN supply which will required disconnection and removal.

Gas

The site is bounded by a myriad of gas mains. Gibbet Street has a 12" Ø Cast iron mains at low pressure running its length with a 63mm Ø branch in PE feeding the Thai Style restaurant. There are also 18" Ø low pressure mains running along Lister Lane and 20" Ø up Cow Green, all outside of the site boundary. There are no gas mains crossing the site.

Water

A 9" Ø asbestos cement mains runs down Pellon Lane and Cow Green from there a 6" asbestos cement mains runs along Lister Lane and Gibbet Street. A private mains runs from Gibbet Street towards Pellon Lane via Lister Court, this is outside of the site so should not be of concern.

BT/Telecoms

Cables run in the road along Gibbet Street, Lister Lane and Cow Green. There are branch cables running along Swine Market to serve Lister Court and the Thai Style restaurant. These appear to run close to the site boundary so may require some local diversion works to accommodate Lister Court.

Drainage

A combined sewer runs from the car park east of Gibbet Street up towards Lister Court where it combines with a sewer to run across Swine Market and out to Cow Green. This run would need bridging or diverting as it lays within the proposed site (sports hall).

Others

From site observation and record drawings there are street cabinets associated with Virgin cable which are in close proximity to the site boundary along Gibbet Street. These should not require moving which could prove very costly but they will need protection during the construction works and will sit close to the new building.

Further more detailed information on the utilities can be found in the Appendix D.

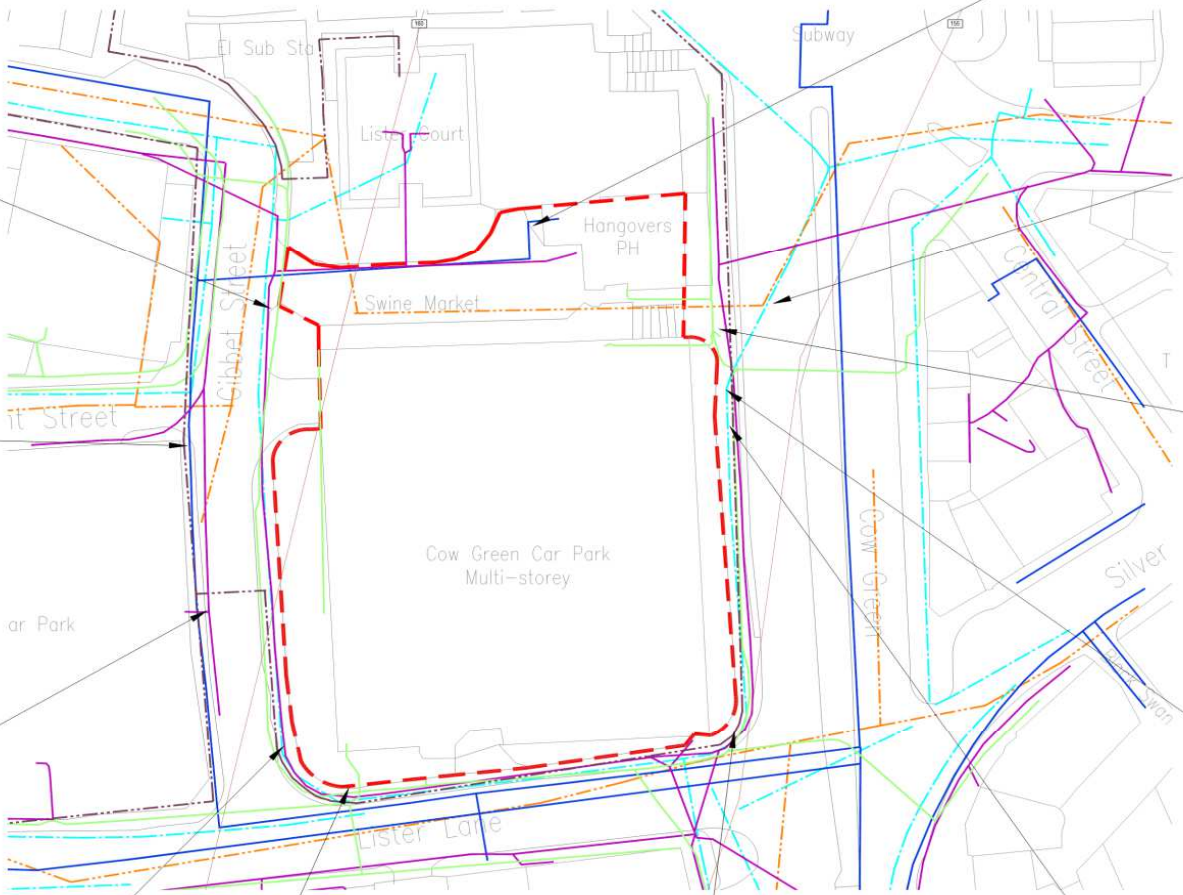
Cow Green Site – Constraints Plan

Evidence of gas suppply to adjacent property down Swine Market

Evidence of gas supply in Gibbet Street

Virgin Media cabinets on Gibbet Street

BT Chamber Covers in Gibbet Street



Evidence of gas suppply to adjacent property down Swine Market

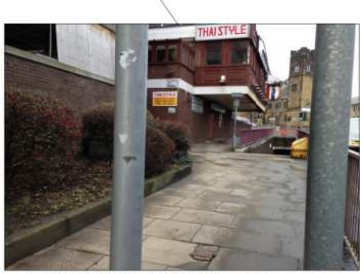
Evidence of sewer crossing through Swine Market - chamber lid in Cow Green

Steps from Cow Green - CATV draw chamber

Evidence of water supply valve in Cow Green

View down Lister Lane - Service s/n footpath close to site boundary

View of corner on Cow Green - several utilities can be seen



View of footpath up Cow Green - several can be seen

Cow Green Site - Ground Conditions

BuroHappold Engineering have reviewed the existing data for the Site and a summary of the ground conditions, constraints, abnormals and design requirements in relation to the Proposed Development for Halifax Leisure Centre – Cow Green Site is provided below.

The Site is located in Halifax Town Centre approximately 680 m WNW of Halifax Railway Station. From available data, it is understood that the Site comprises an existing multi-storey car park (derelict). Former foundations are likely to be present on Site (to be removed). The Site is bounded by Lister Lane to the south, Gibbet Street to the west, Mount Street and Swine Market to the north and Cow Green to the east.

The historical exploratory holes (British Geological Survey) beneath the Site indicate the ground conditions to be Made Ground (typically 0.30-1.00 m BGL) which is underlain by Rough Rock bedrock (sandstone) proven to 20 m BGL. Given the terraced nature of the development, it is possible that shallow foundations may be feasible for the Proposed Development although a piled foundation may be more efficient – TBC following scheme specific ground investigation (GI).

Key Risks/Constraints:

- Constrained Site bounded by roads/services. Access / buildability issues.
- Existing topography changes (drop of ~5 m W – E). Retaining walls likely to be required.
- Relic Foundations /obstructions may underlie Site.
- Net export of material from Site may be avoided due to existing lower car parking levels (subject to topographic survey).
- Historical GI data only – scheme specific GI to be completed.
- UXO risk requires more detailed assessment.

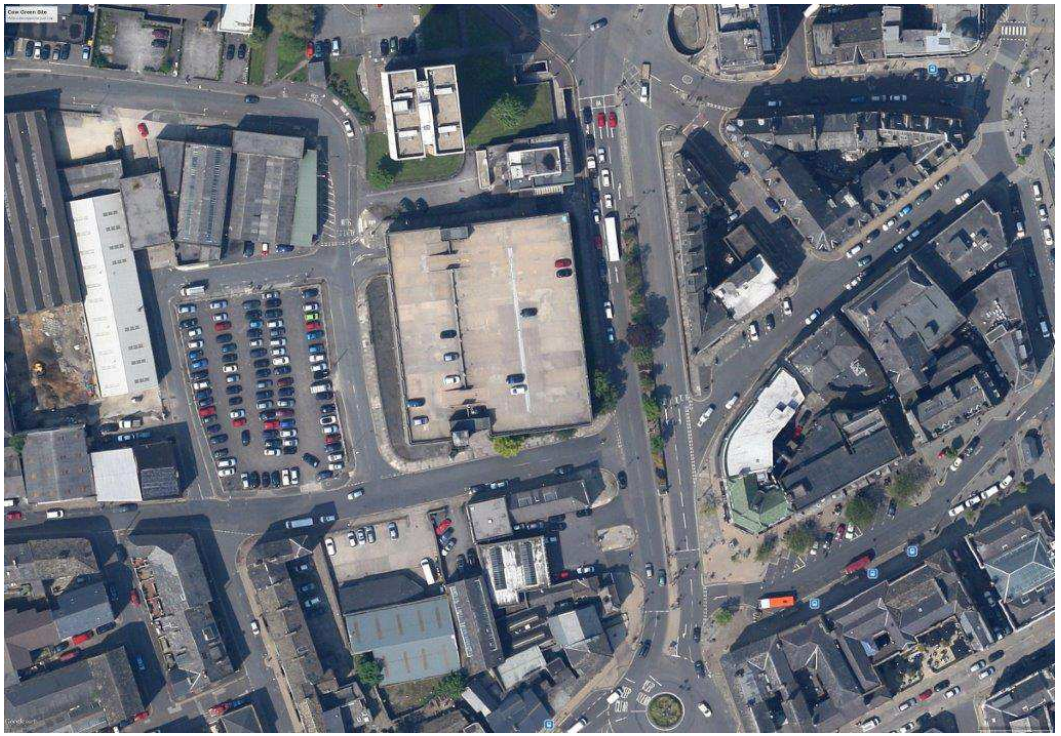
Key Opportunities:

- Targeted scheme specific ground investigation allows a risk managed approach to be adopted.
- Management of site levels and earthworks to be balanced to achieve design levels as far as practicable.
- Future proof proposed service routes - dedicated 'clean' service corridors if necessary.
- Redevelopment allows masterplanning of layout and all service requirements to be rationalized.

Please also refer to BuroHappold Design Note 033875_GE_DN_001_CG for further details on the above.

Information required:

- Ground conditions, groundwater & ground gas monitoring information (scheme specific GI required).
- Topographical survey (3D).
- CCTV survey.
- Confirmation of FFL.
- Clarification of new service routes (particularly new drainage runs) required.
- Confirmation of land ownership boundaries/public rights of way.



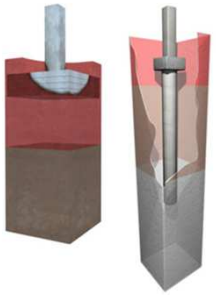
07. Structural & Civils Considerations

Structural and Civils Summary

Structure

Foundations

Preliminary assessment of the ground conditions suggests that reinforced concrete pad footings and/or piled foundations are viable foundation solutions.



Retaining Walls

Due to the level changes on the Cow Green site retaining walls are likely to be required. As the site is heavily constrained it is unlikely there will be space to batter the slope on most sides thus temporary sheet piling is likely to be required.

Pool Tank

There are three commonly adopted methods for forming pool tanks:

1. In-situ reinforced concrete tank.
2. Stainless steel tank.
3. Sprayed concrete reinforced tank.

In-situ tanks are durable and flexible, the main disadvantages being the slow construction and also the need for construction joints which are potential weak points.

Stainless steel tanks can be erected quickly and within good tolerance, however they can be more expensive due to the limited number of suppliers.

Sprayed concrete tanks require formwork to one side only and provides a durable watertight structure with no construction joints, it is however difficult to control the tolerance and finish to the non formed surface.

Superstructure

Due to the architectural form and size of the building required the development will certainly be a framed structure. It is generally accepted that steel framing is more appropriate for long span structures e.g. the roof(s) over the pool and sports hall areas. (image, Liverpool FC Academy)

Depending on spans there is the option to use glulam for some of these elements to increase aesthetic appeal. (image, Aqualibrium, Cambletown, Scotland).

The fitness suite is likely to be located on a suspended upper floor, as such due consideration must be given to vibration effects. Closer column positions below and heavy concrete floors can help to limit dynamic effects to within appropriate tolerance.

Civils

The utility plans for both sites indicate that surface water and foul water utility runs are present in the immediate vicinity. It is anticipated that these will have the capacity to accept drainage from the sites but this will need to be confirmed as part of the pre-development enquiry process which will be undertaken as part of the design process once a preferred site has been selected.

A drainage survey including CCTV inspection will be required to confirm the exact locations, levels and condition of the drainage network in the vicinity of the proposed connection points prior to detailed design being undertaken.

As part of the planning process an Flood Risk Assessment is likely to be required but given that both development sites are currently developed and are exclusively hard cover, it is envisaged the degree of surface water discharge is unlikely to change significantly although the water authorities typically require betterment (a reduction in discharge) for new developments.

08. Mechanical and Electrical considerations with each option

North Bridge Leisure Centre – New Building

Mechanical

Heating

The existing boilers and associated pipework and plant located in the 3 storey conjoined plantroom would be replaced by new boilers/Combined Heat and Power (CHP) plant once the new building is completed. Temporary modifications will be required to the Ancillary Hall and Combat room for the Fitness Suite and Studio. Consideration should be given to refurbishing and reusing the existing radiant panels in the sports hall, this will entail reconfiguring the pipework feeding the panels. There will be a requirement for the sports hall to be temporarily unavailable during the latter period of the new build construction.

Domestic Water Services

The existing domestic water services will be abandoned as part of the demolition works, they will be retained and maintained operational until the new building is completed and the existing building is vacated and demolition commences.

Ventilation

The existing air handling unit serving the sports hall will be replaced during the construction of the new building, the new air handling unit serving the sports hall will be located in roof top plant area adjacent the sports hall. Re-use of the existing ductwork serving the sports hall should be considered by adapting it to be fed from the new air handling unit. This work will require the sports hall to be temporarily unavailable during the latter period of the construction.

Cooling

The existing cooling systems provided to the Gym will be reused to provide temporary cooling to the temporary Fitness Suite created from the Ancillary Hall. Once the new building is completed the system can be decommissioned as part of the demolition works.

BMS/Controls

The new building will be provided with a new BMS control system meeting the council's requirements regarding compatibility with other systems used within their estate, it is recommended that a true open protocol system is adopted.

Electrical

Power

The electrical supply to the existing building feeds a switchboard and distribution/metering equipment located in a room off the main sports hall. The new building will be provided with a new dedicated supply from the local infrastructure, this may require the provision of a new substation at the perimeter of the site in the proposed service yard/staff car park. The sports hall will require rewiring from a new distribution board fed from the new building during the final stages of the new build construction, this will involve a period of unavailability of the sports hall. On completion of the new building the existing power supply can be disconnected and electrical services within the existing building prepared for demolition.

Data/Comms

Based on record information it would appear that there are incoming telecommunications/data lines to the original main entrance area, plant room and the external cabinet at the south east corner of the sports hall. The main entrance and plant room services can be disconnected once the new building is completed and new services provided to the new building. The service to the external cabinet is likely to be required by BT and therefore should be assumed to be retained. Care will need to be taken regarding any works in the vicinity of these cables as level changes may require works to divert or deepen the cables.

Lighting

Lighting to the existing building will remain operational during the construction of the new building. Consideration should be given to retaining the existing lighting in the sports hall. The sports hall will require rewiring from a new distribution board fed from the new building during the final stages of the new build construction, this will involve a period of unavailability of the sports hall. On completion of the new building the existing lighting elsewhere can be disconnected and prepared for demolition. It is assumed that lighting to the surrounding external areas outside of the site are fed from the external infrastructure and not the existing building. External lighting to the new car park will be provided once this is constructed after demolition of the existing building.

North Bridge Leisure Centre – New Building

Electrical (cont'd)

Fire Alarm

The existing building fire alarm system will be maintained operational during the construction of the new building, a new fire alarm system will then serve the new building. It will be necessary to provide a temporary arrangement for the sports hall to ensure coverage of this retained space is maintained during the transition from old to new fire alarm system.

Public Address & AV systems

Existing systems will be maintained operational until the new building is completed when the systems will be decommissioned in readiness for the demolition of the existing building. The new building will be provided with PA and AV systems where appropriate.

Security

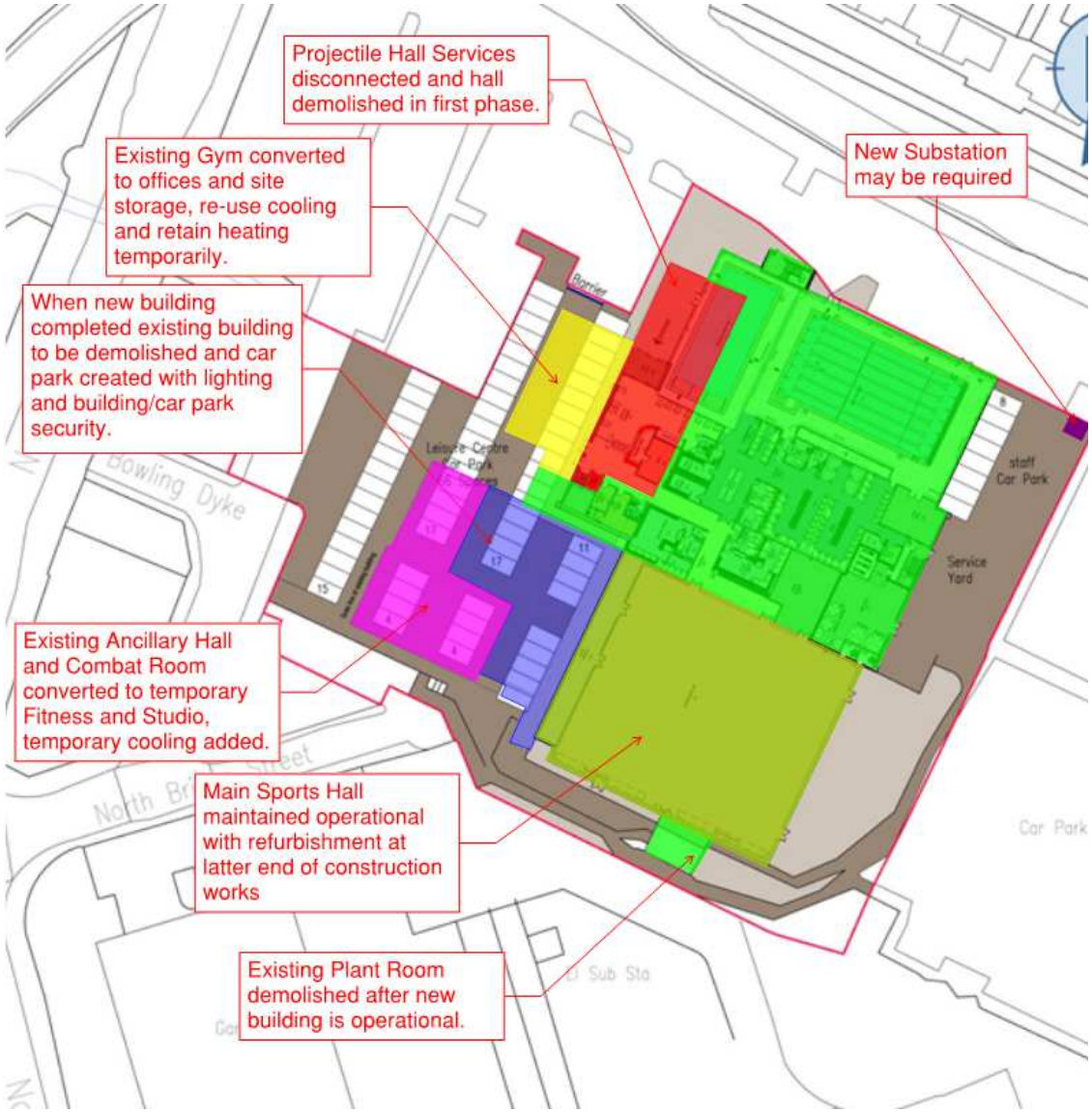
Existing CCTV, access control and intruder alarm systems will be maintained operational during the construction of the new building. It will be necessary to adapt the external security along the Northern and Eastern areas of the site to allow the construction of the new building. Once the existing building is demolished it will be necessary to provide further security measures to the west of the new building and new car park area once created post demolition.

Lift

Operation of the existing passenger lift will be maintained during the construction of the new building, it will be decommissioned and form part of the demolition works. The new building will be provided with a lift suitable for passengers and Fitness Suite equipment.

Other Systems

Disabled alarm systems and refuge systems in the existing building will be kept operational until the new building is occupied and the existing is demolished. The new building will be provided with new alarm systems including a pool alarm system for use by staff supervising the pools.



North Bridge Leisure Centre – Refurbish and remodel

Mechanical

Heating

The existing boilers and associated pipework and plant located in the 3 storey conjoined plantroom would be replaced by new boilers/Combined Heat and Power (CHP) plant once the new building is completed. Consideration should be given to refurbishing and reusing the existing radiant panels in the sports hall, this will entail reconfiguring the pipework feeding the panels. There will be a requirement for the sports hall to be temporarily unavailable during the latter period of the new build construction. The heating to all other refurbished areas should be fully replaced.

Domestic Water Services

The existing domestic water services will be replaced as part of the refurbishment works, they will be retained and maintained operational until the new building is completed and the existing building is vacated and refurbishment commences. New plant for this system will be provided in the ancillary hall conversion.

Ventilation

The existing air handling unit serving the sports hall will be replaced during the construction of the new building, a new air handling unit will be provided to serve the sports hall located on roof space adjacent the hall. Re-use of the existing ductwork serving the sports hall should be considered by adapting it to be fed from the new air handling unit. This work will require the sports hall to be temporarily unavailable during the latter period of the construction. The remaining refurbished areas will have their ventilation systems completely replaced during the refurbishment.

Cooling

The existing cooling systems provided to the Gym will be reused as temporary cooling for the temporary Fitness Suite. Once the new building is completed and the existing building is refurbished the system will be fully removed . New cooling will be provided to the new spinning studio and modified studios.

BMS/Controls

The new building will be provided with a new BMS control system meeting the council's requirements regarding compatibility with other systems used within their estate, it is recommended that a true open protocol system is adopted.

Electrical

Power

The building will be provided with a new dedicated supply from the local infrastructure, this may require the provision of a new substation at the perimeter of the site in the proposed service yard/staff car park. The electrical supply to the existing building feeds a switchboard and distribution/metering equipment located in a room off the main sports hall, this will be disconnected and removed as part of the refurbishment. The refurbished areas will require rewiring throughout with new distribution boards and sub mains cabling fed from the new building main distribution switchboard.

Data/Comms

Based on record information it would appear that there are incoming telecommunications/data lines to the original main entrance area, plant room and the external cabinet at the south east corner of the sports hall. The existing incoming services will be retained in their current location if possible. The service to the external cabinet is likely to be required by BT and therefore should be assumed to be retained. Care will need to be taken regarding any works in the vicinity of these cables as level changes may require works to divert or deepen the cables.

Lighting

Lighting to the existing building will remain operational during the construction of the new building. Consideration should be given to retaining the existing lighting in the sports hall. The sports hall will require rewiring from a new distribution board fed from the new building, this will involve a period of unavailability of the sports hall. On completion of the new building the existing lighting elsewhere can be disconnected and refurbished as part of the rewire. It is assumed that lighting to the surrounding external areas outside of the site are fed from the external infrastructure and not the existing building. External lighting to the new car park will be provided during the new construction work.

North Bridge Leisure Centre – Refurbish and remodel

Fire Alarm

The existing building fire alarm system will be maintained operational during the construction of the new building. On completion of the new building the new fire alarm system will then serve the new construction whilst the existing building is refurbished. During the refurbishment the new fire alarm system will be extended to serve the refurbished areas of the building.

Public Address & AV systems

Existing systems will be maintained operational until the new building is completed when the existing system will be decommissioned in readiness for the refurbishment of the existing building. The new and refurbished building will be provided with new PA and AV systems where appropriate.

Security

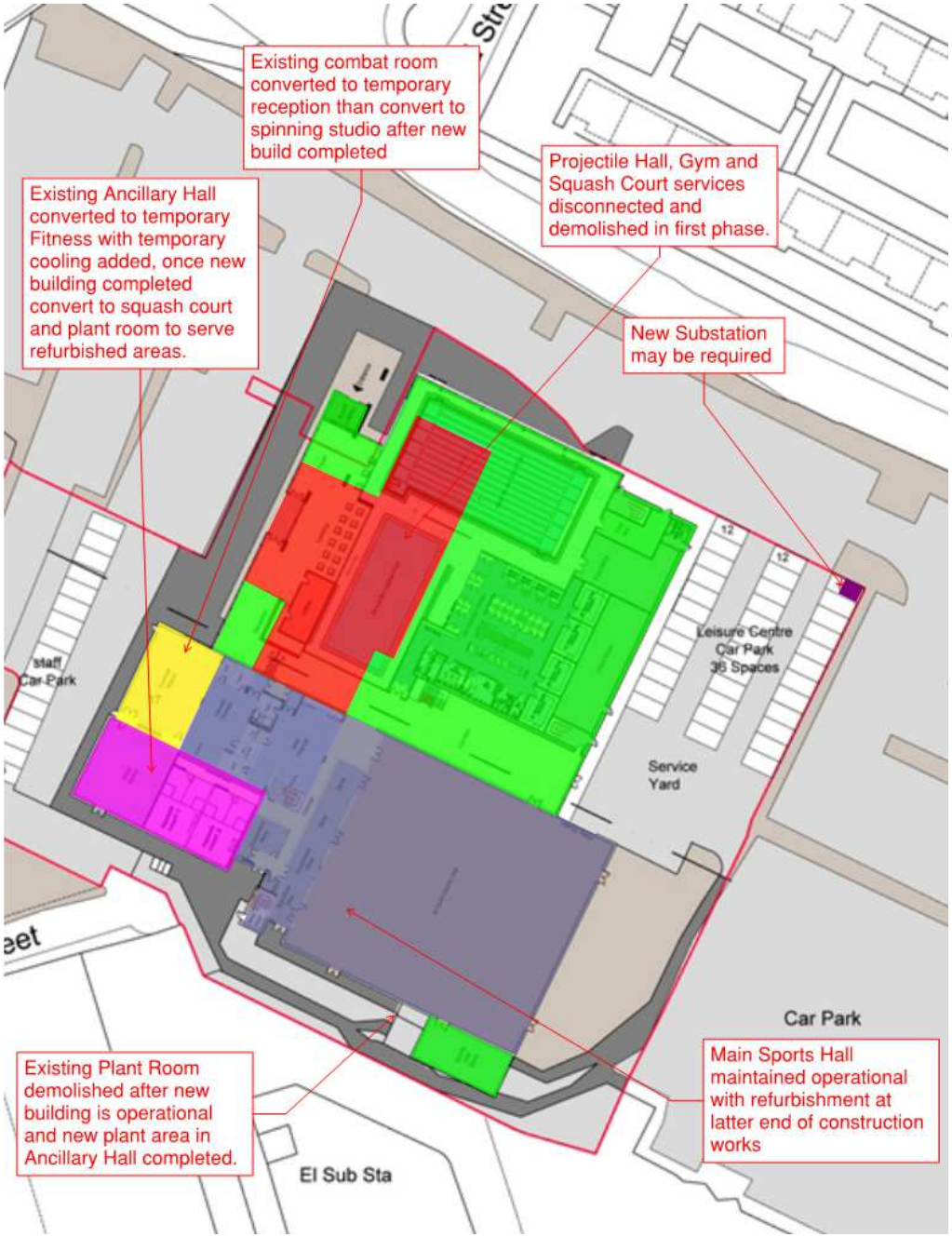
Existing CCTV, access control and intruder alarm systems will be maintained operational during the construction of the new building. It will be necessary to adapt the existing systems to link to the temporary reception and the external security along the Northern and Eastern areas of the site to allow the construction of the new building. Once the new building is completed with new systems operational within it the systems in the existing building will be decommissioned and new will be installed as part of the refurbishment integrating into the new systems.

Lift

Operation of the existing passenger lift will be maintained during the construction of the new building, it will then be decommissioned during the refurbishment having been replaced by a new lift in the construction of the new building. The new building will be provided with a lift suitable for passengers and Fitness Suite equipment.

Other Systems

Disabled alarm systems and refuge systems in the existing building will be kept operational until the new building is occupied. The new building will be provided with new alarm systems including a pool alarm system for use by staff supervising the pools. During the refurbishment new systems will be provided which shall integrate with the new building systems where necessary.



Cow Green – New Building

Mechanical

Heating

New boilers/Combined Heat and Power (CHP) plant will be provided to heat the building and generate hot water. This plant shall be supplied from a new gas supply taken from the surrounding infrastructure.

Domestic Water Services

As stated above the domestic hot water will be provided via the boilers/CHP plant and buffer vessels. Cold water services will be provided via a boosted system providing potable and non-potable cold water service.

Ventilation

Air handling plant will be provided to the new building with separate air handling plant for the pool hall, fitness suite, changing areas, studios and offices. The Atrium, Foyer and Sports hall will be naturally ventilated.

Cooling

Cooling will be provided to the Fitness Suite, Spinning Studio and two Studios.

BMS/Controls

The building will be provided with a BMS control system meeting the council's requirements regarding compatibility with other systems used within their estate, it is recommended that a true open protocol system is adopted.

Electrical

Power

The new building will be provided with a new dedicated supply from the local infrastructure, this may require the provision of a new substation at the perimeter of the site in the proposed service yard. A main switchboard will be located in the plant room to serve distribution boards throughout the building.

Data/Comms

Based on record information it would appear that there is existing infrastructure to provide incoming telecommunications/data lines to the building. Incoming services will be distributed to data outlets and wireless access points throughout the building.

Lighting

Lighting to the new building shall be provided using LED luminaires where appropriate and lighting controls to promote the energy efficient use based on occupancy and daylight availability. The external area is already well lit from surrounding street lighting although some additional external lighting will be required to the service yard and to enhance parts of the building façade.

Fire Alarm

A new fire alarm system will be provided to serve the new building. The system will comprise call points, detection, sounders and visual alarm devices.

Public Address & AV systems

The new building will be provided with PA and AV systems where appropriate, including AV to the fitness Suite, Studios and Spinning Studio.

Cow Green – New Building

Electrical (cont'd)

Security

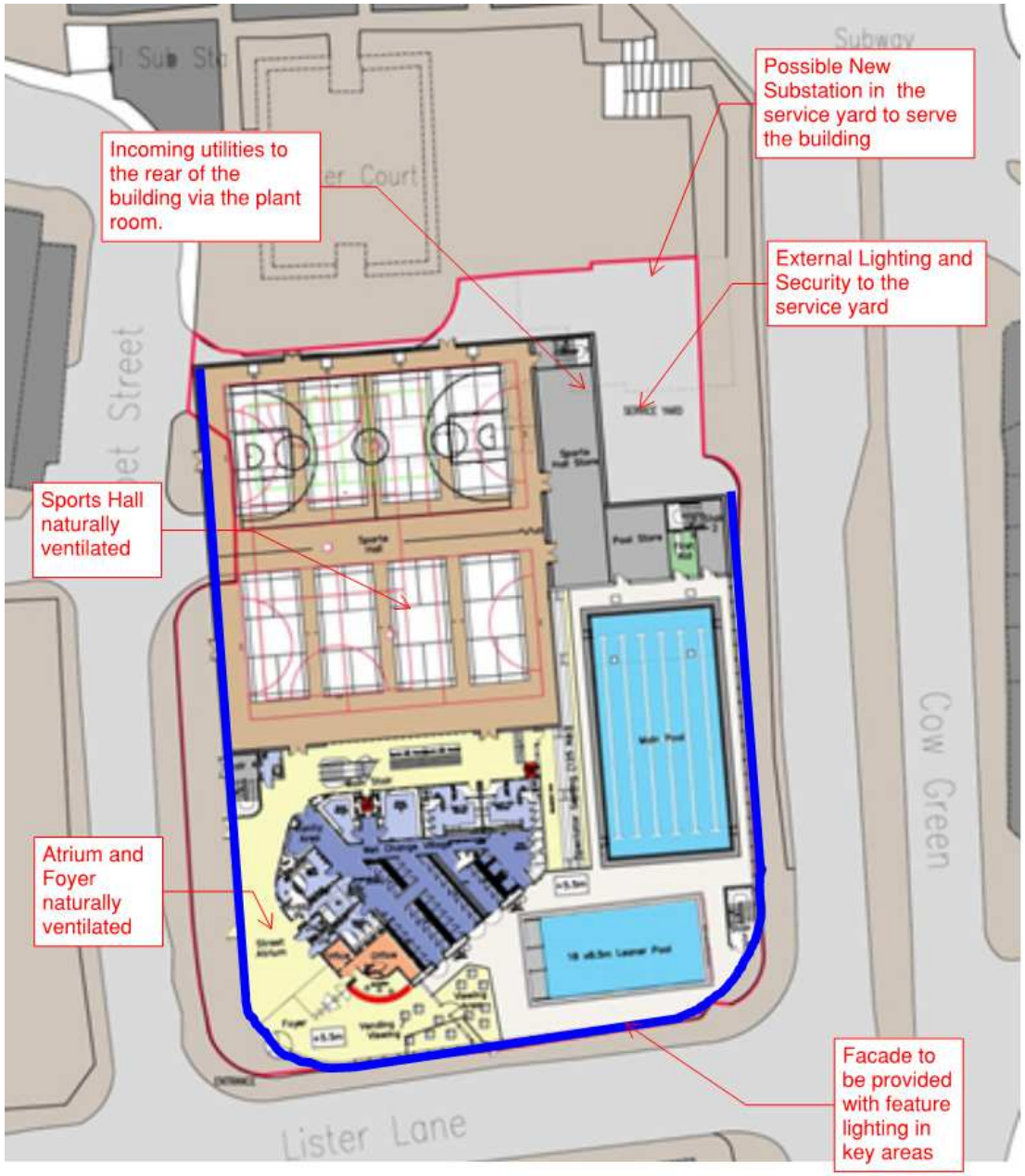
A comprehensive CCTV system will be required to cover key internal areas and the building exterior. Consideration shall be given to how this can integrate with the town centre CCTV coverage. The building will be secured using an access control system, it may be based around proximity card technology. The building perimeter and other vulnerable areas can be protected using an intruder detection alarm system which can be configured with several zones to allow partial occupancy.

Lift

The new building will be provided with a lift suitable for passengers and Fitness Suite equipment, a platform lift will also be provided for the level change to the spectator area.

Other Systems

The new building will be provided with new alarm systems including a pool alarm system for use by staff supervising the pools, disabled alarm system to accessible showers and toilets and refuge intercom system..



Summary of works

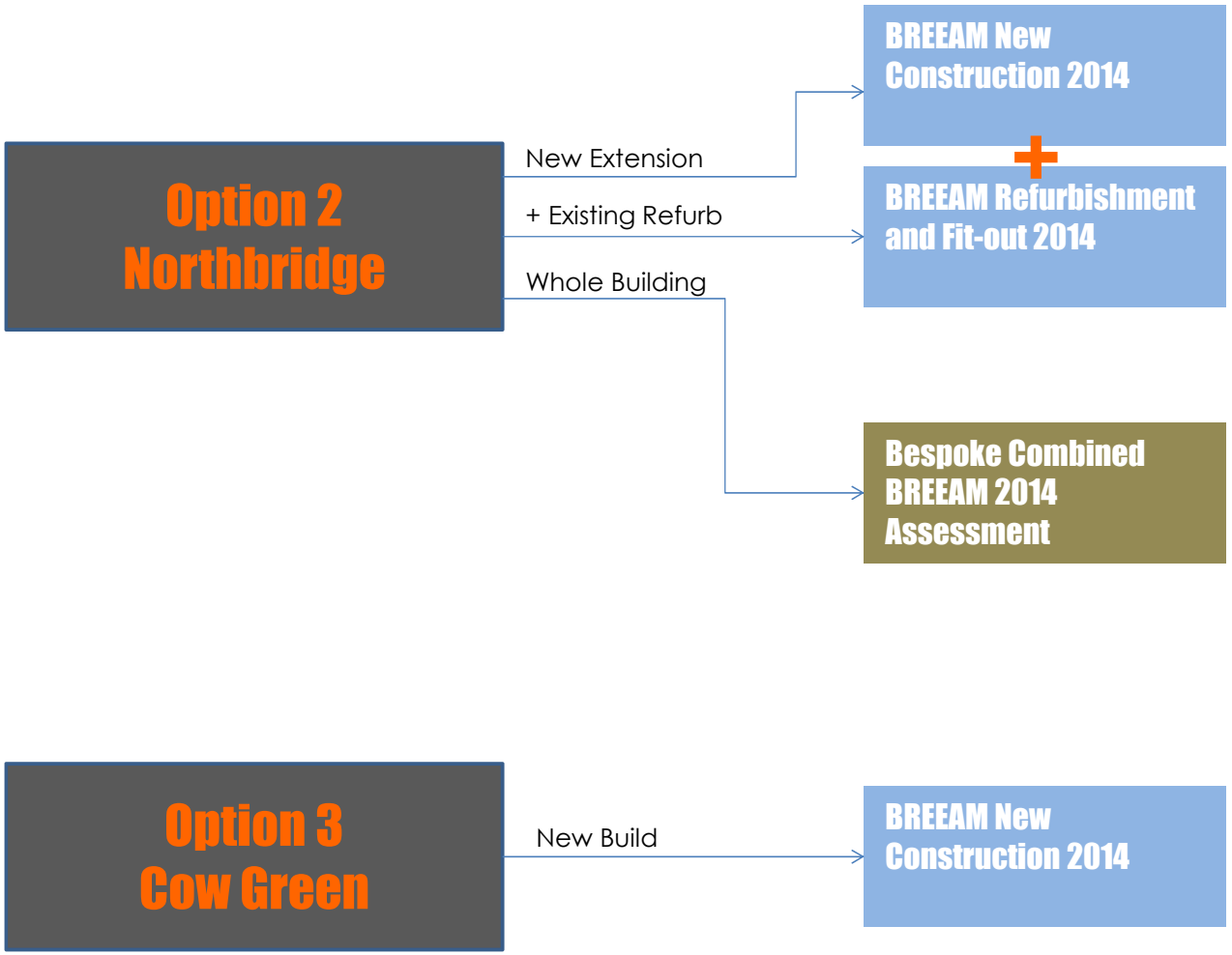
System	North Bridge New	North Bridge Refurb	Cow Green New
Electrical Power	Potential new substation	Potential new substation	New substation required
Drainage/Watercourse	Existing culvert remains	Existing culvert remains	Existing sewer bridged/diverted
Comms/BT	Existing replaced. Existing street cabinets retained.	Existing service retained. Existing street cabinets retained.	Existing street cabinets retained. New service to building.
Ventilation	New except sports hall reconfigured (new AHU)	New except sports hall reconfigured (new AHU)	New, natural vent to sports hall and atrium
Heating	New except sports hall	New except sports hall	New
Domestic Water	New	New	New
Cooling	New (some temp works)	New (some temp works)	New
Lighting	New except sports hall	New except sports hall	New
Power/Data	New	New	New
Fire Alarm	New (some temp works)	New (some temp works)	New
PA/AV	New (some temp work)	New (some temp work)	New
Security	New (some temp work)	New (some temp work)	New
Lift	New	New	New

09. BREEAM – Initial Report Summary

BREEAM Strategy

BREEAM requirements, assessments routes and key considerations are summarised below. See BREEAM Design Notes for details:

- Design Note 1: Early BREEAM considerations
- Design Note 2: BREEAM Opportunities and constraints for both sites



BREEAM Opportunities and Constraints

The table to the left presents a high level summary of how each site option is expected to perform under each BREEAM environmental section.

Key:

● Expected to perform well

● Opportunities to perform reasonably well

● Performance likely to be restricted by cost or technical complexities

As can be seen, BREEAM on both sites are fairly comparable. Key differences as follows:

- Good performance under **Health & Wellbeing** for the refurbished areas could be subject to physical restrictions.
- Good performance under **Energy** for Northbridge is subjected to costs of upgrading the existing building fabric and investment in low carbon technologies.
- Good performance under **Ecology** for Northbridge would require appointment of an Ecologist.
- Good performance under **Waste** for Cow Green subject to careful site waste management of demolition and excavation waste.

BREEAM Section	Northbridge Refurb + New Extension	Cow Green New Build
Target Rating	Very Good (>55%)	Excellent (>70%)
Management	●	●
Health & Wellbeing	●	●
Energy	●	●
Transport	●	●
Water	●	●
Materials	●	●
Waste	●	●
Land-use & Ecology	●	●
Pollution	●	●
Innovation	●	●

10. Financial Report

Financial Report

FINANCIAL REPORT

Order of Cost Estimates

We have costed the three options provided by GT Architects, namely:-

- Cow Green New Build Leisure Centre
- North Bridge New Build Leisure Centre (Retaining Sports Hall)
- North Bridge Leisure Centre Refurbish and Remodel

The tables below summarise and compare the three options from both a floor area and cost perspective, a more detailed breakdown of the three 'order of cost' estimates are contained within Appendix H

Floor Area Summary

	North Bridge New		North Bridge Refurb		Cow Green New	
	m²	ft²	m²	ft²	m²	ft²
Leisure Centre	3,131	33,703	4,546	48,935	2,352	25,318
Sports Hall *	1,187	12,777	1,187	12,777	1,384	14,898
Swimming Pool	934	10,054	874	9,408	1,040	11,195
Total excl. undercroft	**5,252**	**56,534**	**6,607**	**71,120**	**4,776**	**51,411**
Undercroft	-	-	-	-	709	7,632
Total incl. undercroft	**5,252**	**56,534**	**6,607**	**71,120**	**5,485**	**59,045**

* North Bridge New and North Bridge Refurb areas include the existing sports hall

Order of Cost Estimate Summary

	North Bridge New		North Bridge Refurb		Cow Green New	
	£	£/m²	£	£/m²	£	£/m²
Building Cost	7,371,913	1,404	7,958,462	1,204	8,427,690	1,536
Abnormals/External Works	405,500	77	380,500	58	1,840,850	336
Preliminaries, oh&p	1,785,694	340	2,268,198	343	2,575,350	470
Sub-total	**9,563,107**	**1,821**	**10,607,160**	**1,605**	**12,843,890**	**2,342**
Professional fees	1,147,573	219	1,272,859	193	1,541,267	281
Contingencies	535,534	102	594,001	90	719,258	131
Total excl. FF&E	**11,246,214**	**2,141**	**12,474,020**	**1,888**	**15,104,415**	**2,754**
FF&E (Direct cost)	800,000	152	800,000	121	800,000	146
Total incl. FF&E	**12,046,214**	**2,293**	**13,274,020**	**2,009**	**15,904,415**	**2,900**

The estimated costs and floor areas can be summarised as follows:

In terms of capital cost, the projects are ranked as follows:

North Bridge	-	New Build	-	Cheapest
North Bridge	-	Refurb	-	Mid cost
Cow Green	-	New Build	-	Most expensive

The Gross Internal Floor areas (GIAs) generated by the designs are ranked as follows:

North Bridge	-	Refurb	-	Largest area provided
North Bridge	-	New Build	-	Mid size
Cow Green	-	New Build	-	Smallest area*

*Note – area is based on the area excluding the undercroft

The costs per metre squared are ranked as follows:

North Bridge	-	Refurb	-	Cheapest
North Bridge	-	New Build	-	Mid cost
Cow Green	-	New Build	-	Most expensive

From the above, the cheapest solution in terms of capital cost is the New Bridge New Build option with a total estimated cost of £12,046,214. The mid value solution is the New Bridge Refurb option at £13,274,020 and most expensive is Cow Breen New Build at £15,904,415.

The estimated cost for the North Bridge New Build option is cheaper than the New Bridge Refurb proposal due to the benefit of design efficiencies that are possible from the development of an entirely new layout rather than attempting to fit the new build elements around parts of an existing structure. This has resulted in a much reduced area being produced by the North Bridge New Build option which is based on a GIA of only 5,252 m2, compared with the North Bridge Refurb option that has a GIA of 6,607 m2.

When the floor areas are taken into account, as expected, the costs per metre squared for the New Bridge Refurb option is the cheapest at £2,009/m2 which is £284/m2 less than the North Bridge New Build option which equates to £2,293/m2.

The Cow Green New Build Solution, as expected, is the most expensive solution in terms of both estimated total capital cost of £15,904,415 and cost per metre squared of £2,900/m2.

Financial Report

This is due to the abnormal and constrained site conditions at this existing steeply sloping multi storey car park site which has resulted in a three storey design utilizing an undercroft/basement plantroom floor, ground and first floor.

Due to the nature of the site, additional costs would be incurred due increased preliminary costs, extra earthworks, greater building envelope wall areas, additional structural frame requirements and enhanced foundations etc. As a consequent of the constrained site, it is also worth noting that the Cow Green New Build solution provides the least 'useable' leisure centre floor space and necessitated the need for undercroft circulation areas.

Within each estimate, we have included a Scope and Basis section to detail the information used and provide a summary of our assumptions and exclusions. These should be taken into account when reviewing each option and will require greater examination in future design studies and cost exercises. A few of the key elements which are generic to all the reports are provided below for ease of reference:

Assumptions:

Local Authority Standard leisure centres being provided, not International Standard Foundations are based on 'standard' strip footings and pad foundation solutions Utility diversions not required (except where stated) There is sufficient infrastructure within the surrounding utility network to support the new service requirements (except where stated).

- £800,000 has been included 'below-the-line' for FF&E
- 6 % - Main Contractor's Overheads and Profit (OH&P)
- 12% - Professional Fees
- 5% - Client Contingency

Exclusions

- VAT
- Inflation beyond 1st quarter 2015
- Abnormal ground conditions e.g. contamination, mine shafts, obstructions, soft spots etc
- Site Investigations
- Works beyond the boundary of the site including highway works
- Works to surrounding buildings or part wall agreements
- Land costs, finance costs, legal costs, running costs, maintenance costs
- Off site utility reinforcements, upgrades, diversions, restrictions on working etc (except where stated)
- Works associated with flood risk, ecological or archaeology
- Out of hours working and restrictions on working conditions
- Planning constraints
- CCTV installations
- Calderdale Council's costs / fees

Life Cycle Costings and Considerations

From the Whole Life Costing exercise undertaken, based on BCIS, we estimate the following would accrue over a 25 year period, at current prices,

North Bridge	-New Build	-	£13,764,325
North Bridge	-Refurb	-	£17,315,509
Cow Green	-New Build	-	£12,516,860

However, within the Whole Life Costing exercise results, there are a number of cost heads which you or others will be better placed to estimate and which will be covered elsewhere in the report. Limiting the costs to lifecycle related elements only (decorations, building fabric maintenance and services maintenance), BCIS suggests the following costs over 25-years at current prices:

North Bridge	-	New Build	-	£3,174,178
North Bridge	-	Refurb	-	£3,993,106
Cow Green	-	New Build	-	£2,886,496

As discussed, at this stage, the above figures were generated using the BCIS Life Cycle Costing software, based on 'Sports Centres/Recreation Centres Including Swimming Pools'. It should be noted that the accuracy of results provided is limited by the high level nature of the costs available at this time and the method in which the BCIS system calculates values based on area and without recognition of buildings age. It should also be noted, that as we have allowed new M&E and finishes, cladding and doors etc to the North Bridge Refurbishment option, we are effectively treating the works as a new building for the purpose of Life Cycle Costing.

We would recommend that further Life Cycle Costing studies are undertaken once elemental cost plans have been prepared to enable more accurate data to be analysed.

Financial Report

Cost of Decommissioning and Demolition of Existing

Within the Order of Cost Estimates, the following provisional allowances have been included for demolitions:

£150,000	-	North Bridge New Build
£125,000	-	North Bridge Refurbishment
£180,000	-	Cow Green New Build

The above allowances have been included to reflect the estimated extent of demolition works. At North Bridge, for the new build proposal, the existing leisure centre would be demolished in its entirety, whereas it would require careful partial demolition for the refurbishment option. At Cow Green the existing multi-storey car park would require demolition.

As the design develops, we would recommend that quotations are obtained from local demolition subcontractors to obtain more accurate prices. This should also include the removal of asbestos and consider whether demolition materials can be recycled for use in the new works (e.g. crushed brickwork to be used as filling or capping material)

Cost of Utility Diversions

High level provisional allowances for required works identified within Buro Happold's reports have been incorporated for utility diversion works, comprising the following:

North Bridge – New Build and Refurbishment options
- No services diversions are known, so excluded

Cow Green – New Build
- £250,000 provisional allowance for services diversions / alterations

We assume that Buro Happold's details have been based on desk stop studies of historic data, plus above ground visual inspections from the site visits.

It should be noted that the costs associated with utilities are notoriously difficult to forecast due to the 'monopoly' control held by utility companies and to date, no cost information has been provided from the respect utility suppliers. We would, therefore, recommend that during later pre-contract stages, the appropriate utility companies are approached to supply quotations for any diversions works and new supply charges.

Impact of Different Phasing Options

Due to the inherent nature of works and site constraints, we have included varying percentages for Main Contractor's preliminaries to reflect current market conditions. These are summarised as follows:

16%	-	North Bridge	-	New Build
20%	-	North Bridge	-	Refurbish
18%	-	Cow Green	-	New Build

At present the market is currently hard to predict with rising material prices and many contractors having busy order books. For preliminaries, typically, we are receiving preliminary percentages in the order of 15% - 16% which we have reflected in the New Bridge New Build Option.

For the New Bridge Refurb option, we have increased this percentage to reflect the greater co-ordination and phasing requirements which in turn could result in a greater on site construction period.

With regards to the Cow Green New Build option, 18% has been included which is again higher than the typical 'standard' allowance to take account of the more difficult site constraints that would be encountered on this proposal. This site provides little working space (i.e. space beyond the footprint of the building) which will cause issues in terms of location for the contractor's site compound areas, space for storage, deliveries, loading / unloading and crane operation, access constraints and traffic management commitments etc. All of these matters would increase the contractor's preliminary costs.

Financial Report

Additional Costs

In addition to the costs identified earlier in this section of the report, as well as the metre squared rates for the internal building elements, the following additional costs have been included within the estimates:

North Bridge – New Build

- £33,600 - Entrance canopy
- £45,600 - 152 Nr spectator seats
- £111,000 - 74 Nr car parking spaces
- £12,000 - New service yard area
- £37,500 - 150 m3 surface water attenuation
- £25,000 - Allowance for landscaping
- £20,000 - Signage
- £50,000 - Protection to underground culvert

North Bridge – Refurbishment

- £43,750 - Entrance canopy
- £45,600 - 152 Nr spectator seats
- £111,000 - Car parking spaces
- £12,000 - New service yard area
- £37,500 - 150 m3 surface water attenuation
- £25,000 - Allowance for landscaping
- £20,000 - Signage
- £50,000 - Protection to underground culvert

Cow Green – New Build

- £187,350 - Allowance for groundwork
- £100,000 - Site services generally, including allowance for new substation
- £111,000 - Car parking spaces
- £38,500 - New service yard area
- £37,500 - 150 m3 surface water attenuation
- £2,500 - External lighting
- £25,000 - Allowance for landscaping
- £20,000 - Signage

Many of the above elements relate to external works for which the design information remains limited. During the next stages of design development, these elements would be designed in more detail permitting the calculation of more accurate costs.

Fees

Within each estimate, a 12% allowance has been included for the Design Team's professional fees. This allowance is cover the following professional services:

- Architect's Fees
- Project Management
- Cost Management
- M&E Design series
- Structural and Civil Engineers fees
- BREEAM advice
- CDM Co-ordinator

The percentage has been benchmarked against other projects of a similar nature and is reflective of current market conditions.

Should the current design team be retained, we would be seeking to achieve an overall reduction in the fee allowances where possible due to the greater knowledge and understanding of the project already established.

11. Option Viability & Affordability

Funding and Option Viability

Introduction

The report to this point has been concerned with design and costs. This section will cover whether or how the options can be afforded both in terms of the works and also the impact on the Leisure Service and Council's revenue budget position.

Financially, a leisure service is likely to be under pressure for two principal reasons:

1. Historically many councils (and especially recently given the current "age of austerity"), will have diverted funds to more "mission critical" front line services from arguably more "discretionary" services such as leisure – as a result, facilities and services will have been under invested, and
2. In addition, it is likely that a leisure service which includes both wet and dry side facilities will not cover its costs. This places pressure on the council financially and can often lead to decisions to divest in centres and services.

It is of paramount importance then, that the leisure strategy project be made viable, or as close as possible to viable within the confine of existing budgets and any allocated new funds.

Methodology

We have adopted the following methodology in assessing funding requirements and option viability:

- We have established the current level of revenue subsidy of the existing facilities – this becomes our costs saving benchmark;
- As the physical options crystallise we capture not only the cost of the works, but also the lifecycle and revenue implications;
- The revenue implications of the options are compared with the current subsidy to assess whether there is any surplus which could be used to support new borrowing (i.e. invest to save), and
- Any supported borrowing created as a result of the previous bullet point is combined with any other capital funds to assess whether the initial capital works can be afforded.

On completion of the above, there will be a clear result of whether any option can be afforded within current budget restraints. Whether this is the case or not we will assess whether there are any other funding routes which could improve the position.

Funding and Option Viability (Continued)

Context

There has been a general under investment in the maintenance and upkeep of leisure facilities in Calderdale.

Although these savings have had a positive impact on other general fund services, this is not a cost which can be avoided ad infinitum. At current prices the maintenance and refurbishment backlog stands at £12.2m. If this is not addressed this will inevitably have the following consequences:

- Construction inflation is high – any continued delay in addressing this issue will see this cost magnify and quickly – it is very much the case that a £ spent today will save many £'s tomorrow, and
- We have not assessed the drivers for the £12.2m cost and the criticality of the underlying items, however, over time these may lead to a public safety/compliance issue which will lead to further cost, loss of income and reputational issues.

In overall terms as can be seen, the backlog maintenance is now at a level equivalent to the cost of a new build – this will need to be considered in any final decision making process.

Forthcoming Slides and Information

The remainder of this section contains the following slides:

- **Key Assumptions:** These slides set out the key differences in cost/revenue between the options and any underlying assumptions;
- **Summary Revenue Position**: This sets out the net trading position, compares this with the current deficit and provides a view of the borrowing capacity that could be supported on current assumptions to be used to support a capital project; (Note – a detailed schedule is available)
- **Capital Position**: This shows, based on the calculated costs of the options, whether the funding sources are sufficient to make the project affordable;
- **Site Valuations**: Indicative valuations for any sites assumed surplus as a result of the options;
- **Potential Other & Third Party Funding**: This describes what additional sources of funding could be made available which could have a positive impact, and
- **Loss of Income**: What contributes to the income loss and what is the duration.

Key Assumptions - Income

Income Head	Source	Do Nothing £000's	Option 1 Cow Green £000's	Option 2 NB New £000's	Option 3 NB Refurb £000's	Notes
Memberships	MBC	610	915	915	915	+50% uplift on current position
Swimming / Activities	MBC	395	435	435	435	+10% uplift to current
Clubs	MBC	162	162	162	162	Assumed the same
Courses	MBC	240	252	252	252	+5% uplift to current
Other Income	MBC	112	112	112	112	Assumed the same
Option 3 Assumption	MBC	0	0	0	50	Assumed the same
Total Income		**1,764**	**1,876**	**1,876**	**1,926**	

The analysis shows that based on Leisure Services' estimates, all options are expected to deliver additional income when compared with that offered by the current facilities at North Bridge and the Halifax pool.

At this stage of maturity, the overall assumption is that the new build options will be broadly similar in terms of their ability to generate additional income.

However, out of all of the potential "intervention" options, Option 3 – North Bridge Refurbishment is expected to produce additional income reflective of the additional area this offers over the other options. This will need to be viewed in terms of the overall impact of the option in terms of the extra over build costs and the potential revenue costs to see whether this option results in net betterment and a more sustainable position.

Key Assumptions - Expenditure

Expenditure Head	Source	Do Nothing £000's	Option 1 Cow Green £000's	Option 2 NB New £000's	Option 3 NB Refer £000's	Notes
Staffing Costs	MBC	1,034	934	934	934	New options save 3 x S01 Posts
Other OPEX	MBC	162	130	130	130	Related to floor area
Response Repairs	MBC	122	61	61	61	Assumed half of now
Lifecycle	Gleeds – BCIS		143	137	172	£2,600 / 100m2
Energy	Buro Happold	249	123	123	152	
Water	MBC	42	42	42	42	Assumed the same
Rates	MBC	108	250	250	250	New options are pro rata Brighouse Pool
Cleaning	Gleeds – BCIS	34	74	71	89	£1,350 / 100m2
Other Premises	MBC	13	13	13	13	Assumed the same
Total Expenditure		**1,764**	**1,770**	**1,761**	**1,875**	

Summary Revenue Position

Description	Do Nothing £000's	Option 1 Cow Green £000's	Option 2 NB New £000's	Option 3 NB Refurb £000's
Operating Income	1,519	1,876	1,876	1,926
Less: Operating Expenditure	-1,764	-1,770	-1,761	-1,875
Net Surplus/-Deficit	-245	106	115	51
Less: Current Subsidy	-245	-245	-245	-245
Surplus/-Deficit to Annual Subsidy	0	351	360	296
Borrowing Supported by Surpluses (C/F to Capital Positon)	0	5,398	5,537	4,546

The "Do Nothing" option reflects the current position in that not only is there no investment in the facilities, but the revenue position is unchanged. Currently the existing facilities make an operating loss of £245k per annum (i.e. the Council's Council Tax base supports these facilities to the amount of £245k). This deficit position is the benchmark as:

- All other options will be judged against this figure, and
- A betterment of this figure will indicate a level of borrowing which can be supported.

All three new options deliver a solution which is profitable in revenue terms (pre finance costs) with both of the new build options being close at around a £100k per annum profit or an overall betterment of around £350k per annum compared to the current position.

Despite having the highest income figures of the three options, option 3 – North Bridge Refurbishment actually has the worse operating performance. This is due to the additional running costs more than exceeding the additional income.

Capital Position

Description	Do Min (NB & HX) £000's	Option 1 Cow Green £000's	Option 2 NB New £000's	Option 3 NB Refurb £000's
Works Costs	0	15,904	12,046	13,274
Land Acquisition Costs	0	500	0	0
Total Cost / Finance Requirement	**0**	**16,404**	**12,046**	**13,274**
Borrowing Supported by Surpluses	0	5,398	5,537	4,546
Capital Programme Contribution	0	2,000	2,000	2,000
Receipts from Halifax Pool site	0	250	250	250
Receipts from North Bridge site	0	1,000	0	0
Sport England Grant	0	0	1,000	1,000
Funding for Demolition	0	180	0	0
Total Financing	**0**	**8,828**	**8,787**	**7,796**
Surplus/-Deficit (Capital)	**0**	**-7,576**	**-3,259**	**-5,478**
Borrowing Impact of Deficit (PA)	**0**	**492**	**212**	**356**

Capital Position (Continued)

Do Nothing

As previously discussed, this option carries a high risk of increased costs, potential health & safety/compliance issues and reputational impact for the Council. To put the costs in perspective, at the last condition survey undertaken the costs of backlog works over the next 10-years equate to £12.2m in aggregate for Halifax Pool and North Bridge Leisure Centre with further items (tiling, public areas, sauna and steam room and squash courts) not being costs – including these will likely increase costs to being at or above all of the other options under consideration.

These costs do not add value or increase user enjoyment – they are merely the cost of "standstill" and do nothing to improve service or to facilitate net operational savings as:

- Day to day repairs are likely to be greater in the aging facilities when compared with the new build/remodelled;
- New build/refurbished facilities will be more energy efficient leading to utility cost savings, and
- A similar looking facility will not result in an increased user base or increased income.

For the reasons above we recommend the "Do Nothing" option be immediately discounted.

Option 1 – New Build at Cow Green

The new build option at Cow Green at 5,485m2 is 233m2 or 5% larger than its new build comparator at North Bridge (5,252m2). However, due to the land acquisition, demolition and site difficulties the development of this site leads to, there is a disproportionate impact on build costs being some £4.4m or 37% more expensive than the North Bridge New build.

This option will allow North Bridge to be sold with an estimated receipt value of £1m, however, as the site will not attract the Sport England grant of £1m that North Bridge is likely to attract, the difference in capital funding this option draws is negligible, and despite being profitable in revenue terms, this does not offset the additional capital cost and as a result produces a capital funding shortfall of £7.6m, which, were this to option be pursued would require further unsupported borrowing with an annual revenue cost of approximately £500k per annum.

Providing the worse financial evaluation results and, we understand, having qualitative issues around ease of development and car parking, we would not recommend taking this option forward.

Capital Position (Continued)

Option 2 – New Build at North Bridge

The new build option at North Bridge at 5,252m2 is the smallest build of the three remaining options. At £2,293 a m2 for build costs, it is the least expensive of the two new build options (Cow Green being the other at £2,900/m2). It is also the least expensive option overall as although the North Bridge refurbishment is less expensive in £/m2 terms, the additional area built under that option negates the favourable build cost.

Unlike Cow Green, the redevelopment of North Bridge is on message for Sport England and as a result it is more likely that a grant application would be viewed favourably.

The option is also the most efficient and therefore profitable in revenue terms with an expected annual surplus of £360k which would support a loan of £5.5k at current rates. However, this is not sufficient to raise all of the funding necessary but with a shortfall of £3,259, this is the lowest of the options which of borrowed would cost the Council an additional £212k per annum in unsupported debt service costs.

Of all the options, option 2 has the best results in financial terms.

Option 3 – Refurbishment of North Bridge

The refurbishment option at North Bridge at 6,607m2 offers significantly more area than the new build option (1,355m2 or 25%). As previously reported, it is less expensive in cost per m2 terms, however, the reduction cannot overcome the impact of the increased area and is therefore more expensive.

Again, like the North Bridge Refurbishment Option – Option 2, this option is also more likely to be viewed favourably by Sport England.

Like the capital costs, the extra area negates any additional income that the additional space can generate which has a consequential impact on the amount of borrowing that can be supported. As a result, the option provides a capital funding shortfall of £5.5m, which if borrowed, would have an annual impact in revenue terms of £350k.

Unless a case for utilising the additional area this options provides for expansion space and this space results in increased operating profits, there is little case for selecting this option over and above the new build option at North Bridge (£144k income per annum would be required to offset its deficiencies).

Site Valuations

Current Valuations

In undertaking our work we have used Calderdale's assumptions for sale values in the appraisals of the relevant options. These are:

- Halifax pool site - £250,000, and
- North Bridge leisure centre site - £1,000,000

Our understanding is that these are historic values and have not been refreshed recently. To give the Council additional comfort the consortium has been asked to provide a high-level assessment of potential value. This is set out in the remainder of this section

We ask that the Council review the basis upon which this is provided as ordinarily this would be provided by a RICS qualified valuation agent. For additional comfort, this would be calculated on a residual value calculation basis based on a masterplan design, regional market costs and income.

Site particulars

The assumptions upon which we have based our assessment of potential value are set out below:

- Halifax pool site:
  - Central Halifax / HX1 location
  - Redline area of 1.42 acres
  - No abnormal costs assumed, and
  - Pre and post planning

- North Bridge leisure centre site:
  - North Bridge / HX3 location (discount of 20% to HX1 assumed)
  - Redline area of 2.47 acres (approximately)
  - No abnormal costs assumed
  - Pre and post planning

The indicative valuations are set out over the page.

Site Valuations (Continued)

Benchmark Valuations

Our benchmark valuations are:

- Halifax pool site:
  - Pre planning:
    £110,000/acre x 1.42 acres = **£156,200**
  - Post planning:
    £200,000/acre x 1.42 acres = **£284,000**

- North Bridge leisure centre site:
  - Pre planning:
    £110,000 acre x 80% x 2.47 acres = **£217,360**
  - Post planning:
    £200,000/acre x 80% x 2.47 acres = **£395,200**

Comparison to Calderdale Valuations

Based on the benchmarks, we would comment that the estimate used for the Halifax Pool site is potentially achievable.

The figure for North Bridge looks high, however, this does not take account of the marriage value of the adjacent supermarket or the fact that they may wish to expand which is likely to have a positive impact on value.

Disclaimer - The lead consultant and its sub-contractors are not qualified valuation agents and are therefore not qualified to give "red book" valuations of land and property. The figures used in this section have been provided to Gleeds by one of its Strategic Alliance Partners, Innes England outside of contract and for no consideration.

In determining benchmarks we have found there to be relatively few recorded land and property transactions which makes it difficult to form a balanced view. The lack of activity combined with the comments above mean that the sums should be treated as purely indicative.

Neither Gleeds nor Innes England accept any liability for loss direct or otherwise as a result of relying on these values and would recommend that the Council obtain the appropriate valuation advice before entering into any arrangements.

Other and Third Party Funding Opportunities

Unsupported Prudential Borrowing

As prudential borrowing is not specifically linked to an asset or the performance of that asset, as long as the overall level is reasonable it can be entered into quickly and easily on the assumption that the aggregate Council borrowing is within the control totals set. It also has other advantages:

- It is likely to provide a competitive rate of interest;
- It is flexible in terms of concession length (which can impact on affordability);
- It has a "flat" profile (which will reduce in real terms due to other inflating cashflows), and
- It has little or no applicable fees.

There are a few disadvantages, for example, given the underperformance of some asset classes and the ability for certain structures to attract other (tax) allowances, other funding sources can be at least as competitive.

As set out in the previous slides, to the extent it can be afforded in budget terms, this is by far the easiest way of meeting any funding deficit will be to borrow the additional funds prudentially.

Sale and Lease Back

Sale and lease back would involve the Council "front-funding" the planned works (this is not expected to be an issue given its prudential borrowing powers – see left). At this point, the Council would enter into an agreement to sell the asset and lease it back to ensure continuity of use. This option has some advantages:

- Investment performance and available cash in the market could result in reduced cost of finance;
- Combined with the Council's covenant, it may be possible to generate a capital receipt (after repayment of Council loan) based on a "market" rent, and
- It will allow other funds to be used for other projects.

However, there are disadvantages:

- To be investment grade, the lease is likely to be index linked meaning there is no long term benefit as would be the case with prudential borrowing (see left);
- Even of there is a secondary term at a reduced rate, the finance is not finite with a repayment in perpetuity, and
- There will be arrangement/procurement costs involved in establishing the arrangements.

Other and Third Party Funding Ops (Continued)

Third Party Finance Structures

We are seeing a number of structures in the market which will "front fund" expenditure on the proviso that the Council enter into a long lease for the asset constructed. Although there are subtle differences, these such structures have similar advantages and disadvantages. Advantages include:

- The "constructor" and finance provider may have a more advantageous tax position which can be passed on to the Council;
- Like sale and leaseback:
  - There is potential reduced finance cost;
  - There may be a capital receipt, and
  - It would potentially release funds for other projects.

However, there are disadvantages:

- Again, as sale and leaseback:
  - The lease is likely to be indexed;
  - The lease will continue in perpetuity, and
  - The arrangement will result in arrangement/ procurement costs.

Concessions, Sponsorship and Grants

Concessions

The Council may wish to explore if there is any potential to create and let a concession for more commercial activities such as a café/coffee shop. To the extent this provides an income stream which is advantageous when compared with the in-house provision, this will have a positive impact on subsidy levels and therefore the level of borrowing that can be supported.

As option 3 creates additional space over and above the level of space required by the brief with no discernible improvement in profitability, this option may lend itself better to this approach.

Sponsorship and Grants

There is also the potential for sponsorship at some level to be received. In addition, although certain options attract Sport England funding, there may be more availability of grants that should be explored (for example, towards clean energy/environmental sustainability – these may have a beneficial impact on running costs).

To the extent that further sponsorship or grants are received, this will have a direct effect on the level of funding deficit.

Loss of Income

Option 1 – New Build at Cow Green, being a new build on a "new" (in Calderdale terms) site will not impact on income and the ongoing viability of the Leisure Service as memberships and activity will merely decant upon opening thus having no impact on the facility's users.

Both option 2 and option 3 (new build at North Bridge and refurbishment of North Bridge respectively), are likely to lead to some loss of the "dry side" amenity (facilities at Halifax pool are not impacted). Although the phasing plan suggested will minimise disruption as far as possible, this has been prepared in vacuum of what your Construction partner may suggest in order to balance:

- The net income lost (both direct and a consideration of longer term lost business, and
- The potential to reduce prelims, inflation and other construction costs through a more disruptive phasing and construction programme.

Phasing

Each option has been accompanied by an assumed works / phasing plan which is set out to demonstrate a logical route through the site to completion of the works – for options 2 and 3, this is respectively:

Option 2 – New Build of North Bridge:

1. Ancillary hall and combat room converted into temporary fitness suite and studio;
2. Projectile hall and reception area demolished;
3. Existing fitness suite and squash courts etc become contractor compound;
4. Main build and sports hall refurbishment, and
5. Demolish temporary fitness suite and studio.

Option 3 – Refurbishment of North Bridge:

1. Ancillary hall converted into temporary fitness suite;
2. Convert upper studio into studio space with moving wall system;
3. Combat room converted into temporary reception;
4. Projectile hall, reception area, existing fitness suite and squash courts etc are demolished
5. Build wet side facility and related spaces, and
6. Refurbish sports hall and changing rooms etc.

These phasing places are set out in plan form in pages 38 & 38 and 47 & 48 of this report for options 2 and 3 respectively.

Loss of Income (Continued)

The impact of the phasing plans are set out in the following tables:

Option 2 – New Build at North Bridge

Phasing Element	Impact	Duration
1. Ancillary hall and combat room converted into temporary fitness suite and studio	• Loss of ancillary hall and combat room until new studio facilities are available, and • Reduced fitness facility until new available	40 Weeks 40 Weeks
2. Projectile hall and reception area demolished	• Loss of projectile hall (Never reinstated)	Throughout
3. Existing fitness suite and squash courts etc become contractor compound	• Loss of squash courts (Never reinstated)	Throughout
4. Main build and sports hall refurbishment	• Loss of sports hall	20 Weeks
5. Demolish temporary fitness suite and studio	• No impact as previously reprovided	N/A

Loss of Income (Continued)

Option 3 – Refurbishment at North Bridge

Phasing Element	Impact	Duration
1. Ancillary hall converted into temporary fitness suite	• Loss of ancillary hall until new studio facilities are available	40 Weeks
2. Convert upper studio into studio space with moving wall system	• Minimal impact on upper studio	N/A
3. Combat room converted into temporary reception	• Loss of combat room	40 Weeks
4. Projectile hall, reception area, existing fitness suite and squash courts etc are demolished	• Loss of projectile hall (Never reinstated) • Loss of squash courts • Reduced fitness facility	Throughout Throughout 40 Weeks
5. Build wet side facility and related spaces	• No impact	N/A
6. Refurbish sports hall and changing rooms etc	• Loss of sports hall	20 Weeks

12. Procurement Options

Procurement Options

Procurement issues to consider include:-

- Traditional or Design & Build
- Single or two stage
- Design Team procurement

Traditional or Design & Build

The two main procurement routes to consider for the delivery of the chosen option are either 'Traditional' or 'Design & Build' and the reasons for choosing one over the other will be dictated by Calderdale MBC's attitude towards risk as well as priorities as far as time, cost and quality are concerned.

The potential impact on time, cost and quality of the two procurement routes does differ in that one route may be more suited to a Client who prioritises cost over quality rather than one who prioritises cost and quality over time for example. It is generally accepted that a D&B procurement route would normally transfer more of the potential risk to the Contractor.

The table below provides a high level view of the pros and cons of the two different procurement routes for a typical project.

	Procurement Route			
	Traditional		Design & Build	
	Benefits/Features	**Disadvantages**	**Benefits/Features**	**Disadvantages**
SUMMARY	Benefits in **COST** and **QUALITY**	But at the expense of **TIME**	Benefits in **COST** and **TIME**	But potentially at the expense of **QUALITY**
COST	Cost certainty before commitment to construction Bill of quantities provide for positive cost control Tenders obtained in competition.	Client requirements must be completely defined at tender stage to avoid claims Design problems encountered during construction may cost more	Cost certainty before commitment to contract Difficult to analyse proposals which include cost and design Tenders obtained in competition. Possible cost premium for risk.	Client requirements must be completely defined at tender stage to avoid claims/cost penalties

	Procurement Route			
	Traditional		Design & Build	
	Benefits/Features	**Disadvantages**	**Benefits/Features**	**Disadvantages**
DESIGN	Fully pre-planned design providing client with control over detail design	Contractor takes responsibility for tendering and construction only Design must be fully pre-planned before contractor is appointed Contractors construction experience/expertise excluded from development of the design	One contractor warrants entire detail and construction Contractors resources and expertise in buildability Shortest construction periods	Once the contract is signed – changes are to the contractor's advantage Client has no direct control over detail design Design must be fully planned before contractor is appointed
PROGRAMME	Completion date certainty Programme based upon detailed project definition Not the fastest, desirable to have all information at tender stage	Fully pre-planned design delays start on site. Access for other tradesman must be negotiated in advance with the main contractor	Relatively fast, design and build phases run in parallel Early start on site Completion date certainty	Access for other tradesman must be negotiated in advance with the D&B contractor

Procurement Options

	Procurement Route			
	Traditional		Design & Build	
	Benefits/Features	**Disadvantages**	**Benefits/Features**	**Disadvantages**
QUALITY	Through professional team, client has control on quality Contractor wholly responsible for attaining the standards described	Main contractor is motivated by profit and may attempt to sacrifice quality	Client has no direct control over the contractor's performance Novation of team ensures continuity of design and specification	Quality can suffer as contractor attempts to maximise profits Client has little say in the choice of specialist sub-contractors
OTHERS	Single monthly payment to contractor Tenders viewed on identical basis No early commitment to a single contractor	Flexibility for changes limited, the MC is in strong position to negotiate favourable mark-ups on sub-contract prices Can be adversarial	Single monthly payment to D&B Contractor Simple lines of communication Minimises disputes and claims as professional team employed direct by contractor	Less flexibility for changes – the D&B contractor is in strong position to negotiate favourable mark-ups on sub-contract prices Architect sometimes reluctant to be novated Difficult to compare tenders if clients requirements left open

One of the most important aspects of any project is ensuring the Contract is set up correctly, is robust and leaves little room for interpretation. Despite the potential quality risks associated with a D&B Contract for example, ensuring that both the design and specification is sufficiently detailed will ensure any potential Contractor has little scope to 'value engineer' the scheme to the detriment of quality of finished product.
Based on discussions with Calderdale MBC so far, we believe there is a desire to quickly progress with the project, to be on site as soon as possible to negate the impact of a rising market (Tender prices) whilst ensuring the majority of the risk is taken by the Contractor.
The perceived disadvantages of a Design and Build Contract, namely lack of quality control and inflexibility relating to changes, can both be overcome with a 'tight' set of Contract Documents in which the design and specification required can be sufficiently detailed with little scope for 'watering down' and the implementation of a robust and rigorous change control procedure which will ensure Client changes can be incorporated at market rates.
The above combined with the advantages relating to time and cost would point to a Design and Build procurement route being the most suitable for this project.

Single or Two Stage
A two stage tender is sometimes used on complex projects where there is a need or desire to engage with a Contractor at an early stage, the Client can then benefit from the expertise of the Contractor who will feed into the design moving forward.
The chosen Contractor will have been appointed based on his tendered cost of preliminaries, overheads and profit and his specific expertise, once the design is completed (With Contractor's input) he will then price the work packages through a negotiation with the cost consultant.
The downside to a two stage option is that the preliminaries, overheads and profit are the only cost elements that are fixed at the end of the first stage so you end up appointing a Contractor on the strength of his price which only equates to 15% – 20% of the overall project value. There is also the potential that a Contractor may hold a Client to ransom at the end of the second stage knowing that they are the 'only show in town'.
The current design team for the Halifax Leisure Strategy has industry leading experience for this type of project, there is no need for specialist input from a Contractor and we need to optimise the chances of obtaining best value so we recommend going down a single stage route.

Design Team Procurement
The other aspect to procurement is the process via which the design team are appointed.
Subject to Calderdale MBC's processes, the design team can be appointed either via OJEU process or utilisation of an existing framework. The OJEU process can take between three and six months to arrive at the point whereby a design team is in place, the process itself can be managed either internally or through an external Consultant, both of which will obviously attract a cost.

Procurement Options

Design Team Procurement
The other aspect to procurement is the process via which the design team are appointed.

Subject to Calderdale MBC's processes, the design team can be appointed either via OJEU process or utilisation of an existing framework. The OJEU process can take between three and six months to arrive at the point whereby a design team is in place, the process itself can be managed either internally or through an external Consultant, both of which will obviously attract a cost.

A direct framework appointment such as via the Eastern Shires Purchasing Organisation (ESPO) framework would ensure an immediate appointment at no cost to Calderdale (The framework cost is paid by the design team), the knock on effect of this would mean that in theory a Contractor could be appointed some three to six months sooner thus negating the effect of tender price inflation which is currently running at circa 1½% per quarter.

- Key points of ESPO* include:-
- Available to Local Authorities.
- EU Compliant.
- Direct appointments available.
- No charge for using.

The current capital costs identified in section 10 range from circa £12,000,000 to circa £16,000,000 and are based on 1Q2015 pricing levels.

Having to follow a full OJEU procurement process could have a significant financial impact on the project based on the above costs.

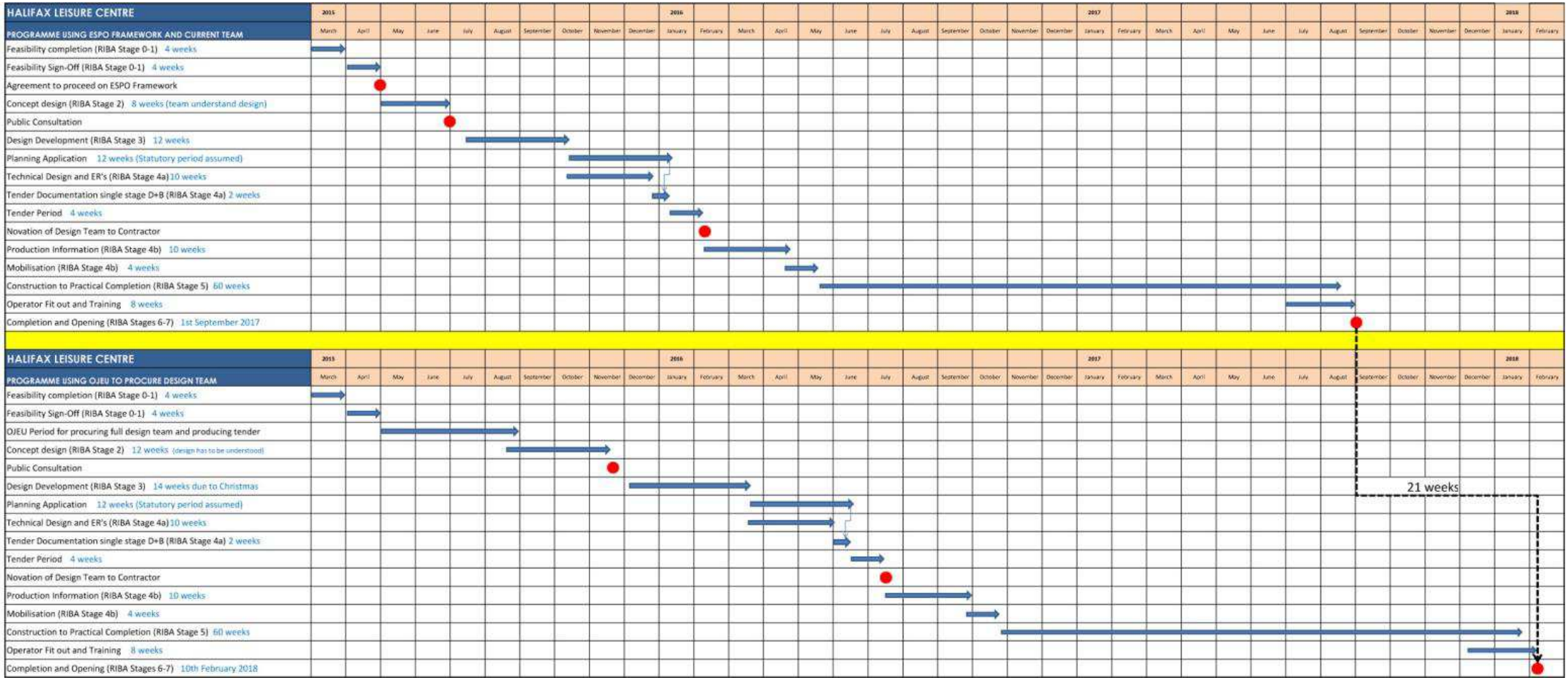
Taking the average construction cost of £14,000,000 and assuming a full OJEU procurement route we would anticipate the additional cost of construction to be circa £420,000 (£14,000,000 @ 3%), assuming fees associated with the process of circa £50,000 the total cost could be between £450,000 and £500,000.

The current design team appointed for the feasibility stage could be appointed via ESPO to deliver the project should Calderdale MBC so wish.

*Additional ESPO information is contained within Appendix L

13. Outline Project Timetable

Project Timetable



14. Conclusions and Recommendations

Conclusions and Recommendations

Site Assessment Matrix

Option	Site location	Fit on site		Compulsory Purchase of Land required		In Council Ownership		Site / Option buildability and construction programme		Site Constraint impact including existing services		Ability to advertise key facility mix from site aspects		Car Parking can be provided		Overall design aesthetics		Accessibility by Public Transport		Design Layout Impact to layout due to site		Town Centre Links / Interdependencies		Facility Costs (Capital Costs)		Ability to keep existing leisure centre open during construction		TOTAL SCORE	RANK
		Pass	Fail	Pass	Fail	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
						1 to 4	3	1 to 4	2	1 to 4	3	1 to 4	2	1 to 4	2	1 to 4	2	1 to 4	2	1 to 4	2	1 to 4	2	1 to 4	3	1 to 4	3		
1	Cow Green Leisure Centre	✓ **			✓	4	12	2	4	2	6	4	8	1	2	3	6	3	6	2	4	4	8	2	6	4	12	105	3
2	North Bridge Leisure Centre New Build	✓		✓		4	12	3	6	3	9	3	6	4	8	4	8	3	6	4	8	3	6	4	12	3	9	128	1
3	North Bridge Leisure Centre Refirb and Remodel	✓		✓		4	12	2	4	3	9	3	6	4	8	3	6	3	6	4	8	3	6	3	9	2	6	114	2

* Planning comments made on a "broad in principle" basis and subject to detail and a highway impact assessment
** Desired mix of facilities cannot be achieved in full

NOTES
Every site has been scored against each assessment factor
Key to raw scores (A):
1 = Poor
2 = Some issues
3 = Acceptable
4 = Excellent
Each assessment factor has been given a weighting
Key to weighted scores (B):
x 1 Desirable
x 2 Important
x 3 Crucial
Fit on site is assumed to be a pass or a fail - this tests the fit of the baseline facility mix with 8 lane swimming pool

Taking the above matrix into consideration, which identifies the key criteria that allows us to assess each site, **we would recommend the new build option on the North Bridge Leisure Centre site.**

Not only does the New build option have cost and programme advantages, but it also allows us to create a far better layout and design aesthetic. There is a limited disruption to the existing leisure centre operation, however the phasing plan demonstrates how this can be mitigated.

The Refurbish and Remodel option shares many of the benefits of the New build, however the design and layout is compromised and the cost plan illustrates the impact the refurbishment, demolition and remodelling has on the budget. Although the structure is currently sound, the design life of the existing elements would not be as long as the new build option. This option also has more of an impact on the operation / phasing of the existing elements during the build.

The Cow Green site has the benefit of a strategic road position in Halifax (from a advertising viewpoint), however the sloping site, buried services and tight site boundary (which creates compromises in the layout and facility mix) makes choosing this site a difficult decision. In addition the above constraints results in a high construction cost.

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GT Architects