INDOOR SWIMMING POOL
FOR
BOURNE END JUNIOR SPORTS CLUB, NEW ROAD, BOURNE END, SL8 5BW

DESIGN & ACCESS STATEMENT

Ref: BEJS 2 TP DAS 01
09.12.2021
Circ: M Storr
BEJS
Academy
Neil Bailey Sports
DPA

dp architects
design | planning | architecture

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Note: Full List of Drawings and Consultants Reports in Planning Statement

1. INTRODUCTION

DP Architects were appointed to support Storr Architecture in preparing and submitting a detailed application for a new indoor swimming pool to provide a major extension to the existing Bourne End Junior Sports Club Building on the Bourne End Academy site, to broaden and underpin the existing extensive sporting activities facilitated by the club.

Embryonic in the 1970's, the current building was applied for in 1980 built shortly afterwards, and extended under a 1995 permission (planning history in Planning Statement). The club is now a vital resource for Bourne End and surrounding community for sporting and leisure activities, has charitable status, and is run by a Board of trustees. The activities of the club are supported by an army of volunteers. And since its inception there have been over 20,000 members, many of whom have had their basic sporting abilities enhanced to project them into local and national sporting participation.

Currently onsite provision includes; badminton, gymnastics, table tennis, judo, dance, aerobics, climbing, volley ball, indoor football etc.

The club have also facilitated from this base; swimming, canoeing, football, tennis and athletics.

2. CLIENT'S BRIEF

2.1 The confirmed brief is to provide a pool hall building enclosing a 25m 6 lane main pool to SPATA standards; a subsidiary 4 lane training pool 10 x 10m, 4 separate fully equipped changing rooms with lockers, showers and toilets and plant room on the ground floor. The pool hall will be full height, but at one end of the building above the changing facilities there will be a viewing gallery, café, staff and support facilities.

2.2 **Relationship of BEJSC, Academy and Neil Bailey Swimming**
Neil Bailey Swimming are sponsoring this proposal; have been consulted and support the concept and detail of the proposals. A potted history of Neil Bailey Swimming is included in the parallel Planning Statement, but they have a track record of facilitating and support swimming activities throughout the locality. They have been involved in the briefing and fund raising, nevertheless, Bourne End Junior Sports Club are the sole applicants and will be owners and operators of the facility.

2.3 Similarly, Bourne End Academy have been integrally involved in the preparation of this proposal. The school is one of the 28 E-ACT Academies in England. The Head Teacher, Louise Cowley is supported by a Senior Leadership Team of 10 and the school teaches from aged 11 to 18, having a full 6th form. Awaiting its first OFSTED report since joining the Academy, the school is nevertheless well established and an integral part of the community.

2.4 The school site is heavily constrained by surrounding residential development and protected areas, and it is vital, to cope with expanding numbers, to use the available recreation space as efficiently as possible. There are few secondary schools of this size, certainly within the County, that do not already have their own swimming facility and currently pupils have to use one of the neighbouring pool facilities for swimming education (see planning statement for locations). This is expensive time consuming and involves motorised travel to and from the facility in every case. It is planned that the 2 pools will be available for extensive use for school pupils, mainly during the day, with community use tending to be concentrated on after school hours; there is a natural relationship between optimised timings which will allow the pool to be used extensively during the day and evening, and at weekends. Indeed, this concentrated use is essential in order to justify the funding for the project which has to be completed.

Some preliminary details of the proposed use of the facilities is included in the covering letter submitted by BEJSC.

2.5 The Academy and BEJSC share the proposed access for the new facility, and it will be seen that the proposals overlap and dovetail with the schools use of the external spaces; the proposals can only be realised with the Academy's active support and engagement. In exchange for generous access to the pool facilities, the school will be surrendering the 4 currently underused tennis courts behind the sports club, but will replace this facility with a new floodlit MUGA providing space for 3 courts on an unused open piece of land known as the chicken field identified on Figure 4. There will be a sharing of some parking spaces as set out on the plans and Transport Statement; peak demand for school parking is during school hours; for the club outside of school hours. The swimming pool will use the school waste and recycling facilities. On gala days, the school will make their playground available and the plans indicate how both this facilitates for access, parking and turning for coaches, but also for overspill parking (as illustrated on the plans).

In this way, it can demonstrate that the activities of the Academy and Sports Club will be mutually supportive and beneficial.

Figure 1 – Site Location and Setting.

Figure 2 – Princess Anne opening the BEJSC Sports Hall & Sir Steve Redgrave cutting the ribbon.

3. SITE DESCRIPTION AND SETTING

3.1 BEJSC is located southeast side of New Road. It effectively shares a site with Bourne End Academy which includes the school buildings complex, the sports club itself, 4 existing hard tennis courts which is the proposed site for the new building and car park extension; its sports field, all weather pitch and a further open area known as the chicken field to the south.

3.2 Immediately to the north on rising ground is the east ridge residential development consisting of substantial detached and semi-detached properties with rear gardens. Opposite the site is the extensive residential development of Bourne End including West Ridge and Isis Way; established residential development of low to medium density and predominantly 2 storey.

3.3 To the southeast is the Wye River Valley and separating the applications side from an extensive area of residential development to the south of the old Bourne End High Wycombe railway arranged around the A494, is a protected area of of green space identified in the Local Plan and protected by policy.

3.4 That the part of the Academy and club site to which the application relates is identified by a red line on the site location plan and necessarily includes service areas to be shared, including the existing playground which will be used as an overspill parking facility on swimming gala days.

The area directly affected by the proposal, consisting of the new pool hall building, extended parking area and associated landscaping works and access are coloured yellow on the site location plan; site areas for both are given.

3.5 New Road itself, and the site, is on gently rising ground to the northeast. Bourne End Academy includes a prominent 3 storey teaching block set behind a frontage hedge which is manicured and contrasts with the overgrown hedgerow fronting the Sports Club.

3.6 At this point, the residential area is fairly sylvan in appearance with frontages mainly consisting of mature hedgerows intermittent substantial trees, with the buildings behind consisting mainly of interwar and early post-war housing stock, much of it originally single storey in form.

3.7 The existing site access is not affected. The school site is protected with a security fence and with a controlled gateway the location is identified on the plans, and this gate access affords views of the open countryside in open ground beyond the railway/river corridor. The prominent suppresses trees separating the existing car park from the tennis courts would be removed in its entirety, as would be green containers.

Site approach, Sports Club roof visible above hedge.

Site Access: The fencing and gates are not affected, the distant view will be preserved.

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Existing building.

New Road, frontage to right protected.

Figure 3A – Site Images: Street, Access and Buildings

General view of site towards Academy Building.

Rear wall of Sports Club becomes green wall.

The green space – view towards green infrastructure.

Setting down the slab level as the courts will recess the building in the landscape.

A combination of the low slab level, bank and hedge will protect the amenities of adjacent East Ridge houses.

Playground court becomes overspill parking for Gala days.

Figure 3B – Site images: Tennis court site and setting.

4. SITE SELECTION AND DESIGN DEVELOPMENT

4.1 Site Selection

BEJSC carried out a comprehensive search for sites for the pool within a 5 mile radius of Bourne End during 2020, drawing on their contacts and strong local knowledge. Seriously considered where sites are 4 locations; Wooburn Park; Little Marlow Running Track; Glory Park in Wooburn Green, and land between the A40 and M40 at Holtspur, HP10 0AA. Ultimately none were practicable. A table of the considerations; pros and cons, is included from their project Thunderbirds Promotional Brochure as Appendix 1.

4.2 Although the current site is not allocated (Item 4 of Planning Matrix), the selected site obviously has the following clinching advantages:

- Built adjacent the existing sports club, it can share facilities and staff and the activities can be better integrated.

- Immediately adjacent Bourne End Academy, it can serve the needs of pupils without the need for transportation.

Figure 4 - Aerial view of site identifying pool footprint, car park, and future MUGA.

4.3 **Design Development**

Every pound spent on the building has to be raised by sponsorship and grants. Therefore, the building has to deliver the facilities as efficiently as possible, and this will inevitably result in a functional building. All the design parameters; functionality and legibility; efficient circulation; containment of energy loading; reducing impact upon green space and residential amenities; constraining use of building materials to minimum necessary; militate in favour of a square footprint.

4.4 From the outset, this is seen as a prestige project, and therefore an alternative architectural form to a simple box, introducing a curved roof, was selected (see Figure 5 for design references).

This form has several advantages over a square form:

- It is structurally more efficient.
- It softens the appearance and facilitates the use of a green roof.
- By reducing the buildings height at the long edges; particularly the edge facing out onto the green space, it substantially reduces the impact of the building upon that green space and views of it from the Wye Valley direction.
- It provides greater height above the centre of the pool internally, and a curved shape is inherently more attractive as well as facilitating practical advantages, such as more efficient air circulation within the pool which in turn will reduce energy loading.

4.5 The Architect also wanted to avoid the building having the appearance of a commercial shed or office building, so it was decided to use natural/soft external materials such as timber, planting, and to impose an irregular pattern of vertical external fins over the floor to eave glazing as this will both serve to break up the external appearance with shadows and reflections, and counter the large regular scale by introducing modules much closer to human scale. The overall resulting effect of this is shown in Figure 6; proposed coloured elevations.

Figure 5 – Selected design development images.

5. FINAL PROPOSALS

5.1 Schedule of Accommodation

- 6 land main pool SPATA standard 25m x 15.6m
- Training pool 10m x 10m
- Full pool surrounds 2.5m min; 4m max to both pools
- Plantroom and chemical store 14.7 x 11.2m
- Pool equipment sore 14.7 x 3.6m
- 4 self-contained “changing zones” with individual cubicles, showers, lockers and WC’s
- Changing room access circulation
- Lobby/Vending area; office; first aid, disabled WC/baby change on the mezzanine level above Ground Floor
- Full height curved ceiling above both pools
- Water services plant areas
- Kitchen/café preparation and serving with space for 36 seated covers
- 126 seat viewing gallery with 6 separate disabled spaces

5.2 Circulation

From the existing new road access, and the existing club forecourt, shared access pavements will provide separate access to all car park spaces with safe pedestrian access being assured.

- The manoeuvring bays are extra wide at 6.5m.
- Contrasting paving will pick up pedestrian ‘zones’.
- There will be a 10mph maximum speed limit which will be enforced by signage and speed tables.

The legibility issue identified in the pre-application is resolved because the pool now has a front elevation facing the public realm, with the entrance emphasised by the curve of the roof and an attractive weather canopy sheltering the main entrance which is now immediately evident.

The use plan generally involves small groups of swimmers. As it is “free entry”, people do not need to queue to pay and therefore the entrance foyer in circulation areas can be smaller than would be the case for a public pool.

5.3 Pool Design and Services

BEJSC have identified Mythra Pools as a development partner. Once planning permission is granted and funding secured, it is intended to open negotiations with them for a contract to design and supply the pool and its services.

BEJSC in conjunction with consultant have produced a 20 page matrix of pool design considerations which is exhaustive, but at this stage contains only provisional signposts for the detailed design; it isn’t appropriate these matters are considered in detail at planning stage.

A large plant room space has been identified which should be sufficient for; the pool water which will be a recirculating system probably using ozone purity control; with gases and recirculation providing heat exchange recovery and electrical power being supplied by an extended array of PV panels on the existing sports club roof. Space heating will be with recirculated ducted air design to maintain comfort conditions, prevent condensation, and conserve energy as much as possible. Design temperatures have not been set, nor will be until the pool envelope design has established insulation levels and heating loads required.

Consultants will be employed to provide a high quality internal artificial lighting system which will provide safety, avoids reflections, emphasises the warmth and attractiveness of the internal space, and it is envisaged that the lighting will also make the building look extremely attractive by night when viewed through the external timber fins.

Figure 6 – Proposed colour elevations.

5.4 Security and Disabled Access

The pool will be outside the school secure perimeter, but the whole of the external parking area, is open to surveillance from the street; from inside the school enclosure, from the existing sports club, and from the front elevation of the proposed pool.

The pool will be professionally staffed at all times that it is open, and mainly volunteer staff will provide lifeguard and safety cover inside the building.

The matrix envisages extensive CCTV coverage and this will be monitored from the reception/office.

The site layout and design generally follow the precepts set out in **Secure by Design**.

Although the site gently slopes, the reduced ground slab level of the pool will facilitate level access to it from the car parking area. The setting down area is clear, will be well lit, and supervised. The site plan includes 3 disabled parking spaces within 10m of the pool entrance.

Internally separate provisions are made for disabled changing and access, and there will be a disabled platform lift to take wheelchairs to the first floor café and viewing area.

5.5 Building Envelope Design

The structural roof will consist of a metal deck supported on laminated timber beams which will be partially contained within the construction zone but with the bottom on the beams exposed internally.

It is proposed to use a Bauder green roof system consisting of a grass and wildflower mixture as figure 7. The system includes an understory of surface water drainage collection and surplus runoff to a traditional guttering and rainwater pipe system which will be integrated into the SuDS design. This system is ideally suited for the curved roof, will be attractive in all seasons, and the gentle sloping form will create attractive variations of external appearance through the seasons. It creates a natural habitat for flora and fauna, is an integral part of the bio-diversity proposals, and given the low eave on the southeast facing elevation combined with the reduced slab levels and existing banking to the sports field, and additional landscaping, the building will be virtually invisible in views from the protected green space and open countryside beyond.

Walls will consist of responsibly sourced UK larch or cedar which will, untreated, season naturally to a silver colour. The profile finish, combined the eave overhand and timber fins will ensure that any pattern staining caused by differential weathering will be limited, and it will maintain an attractive natural appearance in use.

We anticipate triple solar reflective glazing will be required to meet the energy requirements, and the glazing will be protected by brise soleil which will maintain views out while protecting the building from solar gain or glare.

The overall scale of the building is similar to the existing form of development on the club and school site; in fact when viewed from this direction the building will have a softer more attractive appearance.

Figure 7 – Bauder Green (grass and wildflower mix) system.

5.6 Formal Design Guidance

The Pre-App matrix flagged Wycombe's **residential design guidance 2017.** This is an excellent guide with which this practice is thoroughly familiar. However this building form does not relate directly to residential design and therefore has limited relevance. However, the underlying principals of; legibility, appropriateness, attractiveness, security and utility have been applied and is submitted have been shown to be adequately addressed in this document and the sister Planning Statement.

5.7 Residential Amenity

The only adjacent residential development directly relating, are nos. 2 to 7 East Ridge to the north of the site. It is recognised many of these houses are single storey in form. They have 20m+ rear gardens and are separated from the site by a fairly unnatural unmanaged hedgerow with intermittent trees, off general height about 3m. The existing grass bank to the tennis courts will be maintained, but the bottom of the bank will be increased so that along this northern edge of the building, the building will be recessed approximately 2.5m below natural ground level. The existing situation is illustrated on view 9 of Figure 3B. The apex of the roof is approximately 6.6m above ground floor slab level reducing to only 3.5m at eaves. Even the apex will only be level with the top of the existing screening hedge, and for this reason it is submitted the building will all but invisible from these properties and all artificial lighting and noise will be screened by the bulk of the building, with the noise associated with access and vehicle movements 100m away. Therefore the residential amenities are adequately protected.

6. ENERGY CONSERVATION

6.1 The club aspire to providing a facility which has the lowest possible carbon footprint, both because this will constrain running costs, but also because it is the right thing to do in view of the climate emergency. However, the detailed design for this cannot proceed until planning permission is granted and full funding acquired. Therefore it is proposed that this issue should be controlled by a suitably worded pre-commencement condition.

6.2 The current design and aspirations include the following features to limit energy consumption:

- The building has been designed to be as compact and efficient as possible.
- As far as possible, natural materials from sustainable sources are proposed for the external envelope.
- Triple glazing proposed.
- The existing solar array on the sports club will be expanded to provide base load electrical consumption for the pool, with peak load energy being imported from the grid and minimum load being exported to the grid.
- Internal ventilation will be strictly controlled with recirculated air, and treatment.
- The highest possible standards of insulation will be incorporated, including to the underside of the pool.
- Pool plant and pool water heating will be designed to meet the highest possible environmental standards and lowest heating requirement.
- Low energy lighting will be designed by consultant.

6.3 Once the project is designed, there has to be a balance between capital investment, income and funding; a pragmatic balance may need to be struck, but a swift planning consent unencumbered by unnecessary conditions will help the club meet the above aspirations.

7. ACCESS AND PARKING

7.1 The provisional design prepared by Storr Architecture has been reviewed and modified, and is now fixed in accordance with Lime Transport; **Transport Statement;** and **Draft Travel Plan December 2021.**

The existing parking for the club will be extended across the tennis courts. All new parking spaces will comply with the new larger standard. A one way circulation pattern will be imposed by signage and surface markings, anti-clockwise, to the deliveries and drop-off point. Traffic speeds will be strictly limited, and pedestrian zones within the shared access pavements will be picked out in contrasting paving materials.

7.2 A total of an additional 29 parking spaces are proposed.

7.3 The extensive analysis of travel carried out by the club and reviewed by Lime Transport demonstrates that the very local nature of the users generates an exceptionally high (above 50%) walking or cycling mode; only staff will in the main use cars, and the overall anticipated car parking requirement will be less than a third of users. Especially as the use of the pool is planned over a long working day, and mainly consisting of small groups (except for school swimming which does not entail travel at all) results in a predicted surplus of parking spaces for normal operations.

7.4 To raise the profile of the club, promote swimming generally, and provide aspirational goals for swimmers, the club will run swimming galas as from time to time and on these occasions servicing the 120 plus viewers gallery in addition to staff and participates will result in higher parking requirements. On these days, by arrangement, overspill is to be provided in the playground court as indicated on the drawings, with swept path analysis demonstrating that coaches and other large vehicles will be able to access the site, park and turn to emerge in forward.

FOR A FULL LIST OF SUPPORTING TECHNICAL AND ENVIRONMENTAL INFORMATION SEE SECTION 4 OF THE PLANNING STATEMENT

8. ENGINEERING

8.1 Compliance with policy is dealt with in the planning statement. Existing utilities infrastructure is adequate to supply; energy requirements, water, IT and foul drainage. There is a full FRA and SuDS assessment including skeleton design produced by Norton and Associates which itself is based on an adequate geotechnical site investigation. The aquafer will be protected.

8.2 Subject to survey, new foul drainage will connect by gravity beneath the extended forecourt area into the existing foul drains for the sports club.

9. ECOLOGY AND ENVIRONMENT

9.1 Comparison of the existing and proposed site plans demonstrate there is scope, even in the limited area available, to provide some enhanced ecological planting. Comparison also demonstrates that there is no incursion into the frontage hedge which may need managing, but essentially can be protected in its current form.

9.2 Norton and Associates have produced a preliminary ecological assessment and a nett gain calculation which are part of the submission.

9.3 The wildflower blanket system by Bauder proposed for the roof, combined with the additional site shrub and tree planting shown indicatively on the site proposals will ensure a nett biological gain and an attractive environment. In the detailed landscaping design it is proposed to introduce tree planting in the car parking areas to provide shade as a precaution against the climate emergency.

10. CONCLUSIONS

10.1 The LPA must weigh and balance the proposals against policy constraints to ensure that, on balance, the proposals can be supported.

10.2 We submit that the final proposals submitted, read with in conjunction with all the supporting consultants information; this statement and the planning statement, demonstrate that all relevant policy issues have been adequately addressed and that principal issues flagged up in the pre-consultation (see 1 to 7; section 2.3 of Planning Statement) have been addressed.

1. The proposal meets a proven need which otherwise is not met and which is of huge importance for the local community especially enabling children to gain swimming life-skills.
2. There is no better viable alternative.
3. The proposal complies in full with all the planning policies identified, and responds to the results of the Pre-Application.
4. Where the policy requirements have not been met in full (parking; loss of tennis court, impact on Green Space), the proposals have demonstrated adequate mitigation; less than significant harm, sufficient to justify the overwhelming public interest of approval.
5. The application demonstrates best practise with regard to Community Involvement and coordination of commissioning and user bodies, and has strong local support.
6. Within reasonable material and financial constraints, the proposals are well designed, address current guidance on sustainability and the environment.

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