Proposed Residential Development at Ledgard Bridge Mill,
Back Station Road, Mirfield

Design and Access Statement

Incl Crime Prevention Statement

November 2021

Rev B

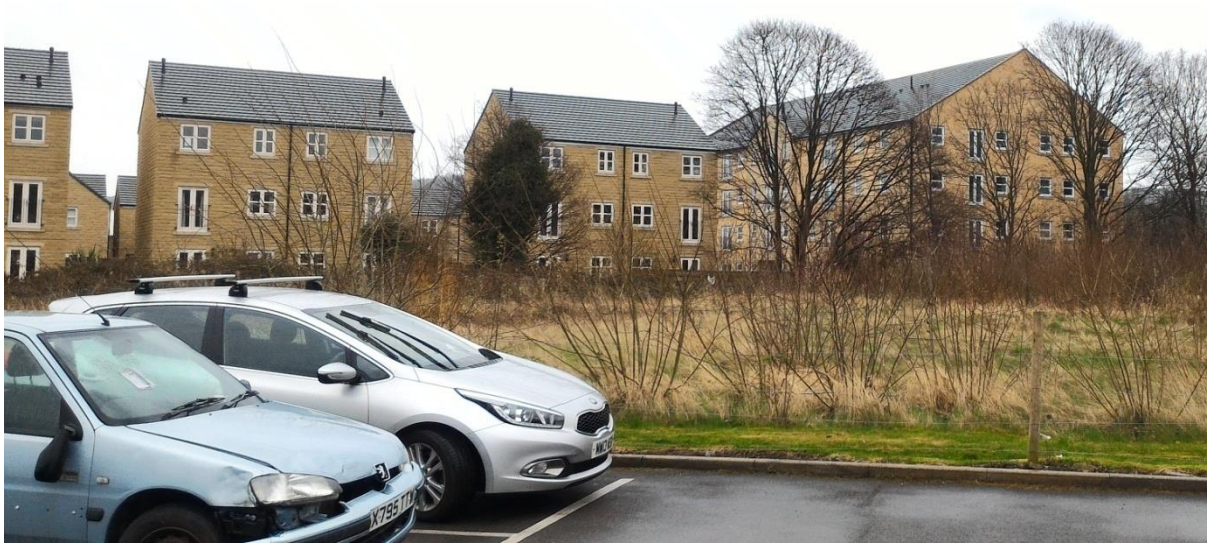
Site Appraisal

1.0_Level and lie of land:

1.1_Historic setting
The site sits between the River Calder and Calder and Hebble Navigation Canal, close to the centre of Mirfield and the Railway Station .
It was originally a small town, a parish and a sub-district in Dewsbury District which grew in the 19C to become a centre for woollen cloths, cottons, carpets and blankets, boat building and machine making.

1.2_Orientation of site and how it is approached
The site is approached from Back Station Road, accessed from both Hopton New Road and Newgate. It is orientated east-west with the River Calder to the south running parallel to it.

1.3_Skyline
The north of the site is dominated by the 5m high red brick retaining wall to the Railway lines which runs at the back of the footpath to Back Station Road. Within the site the existing Mill building features a square tower which rises above the stepped residential blocks, which rise from 3 storeys at the site entrance to four closer to the river and seven within the newer Boathouse extension. The neighbouring development has three/ four storey townhouses and apartment blocks whilst across the river Calder Road features two storey terraced properties.



1.4_Views into/ out of site
The River frontage affords views both across the river towards Calder Road and up and downstream. There are views into the site from the elevated Railway line, Ledgard Bridge and Calder Road.

1.5_Natural resources for generation
Southerly orientation of roof offers opportunity for PV panels.

1.6_Open spaces
Confined site with open aspect to river, car park court with wooded boundary to East.

1.7_Slope, shadows
Open southerly aspect to River with some broad leafed deciduous trees.

1.8_Natural daylight
Unobstructed skyline to south, existing Mill building to West.

2.0_Built Environment:

2.1_Relationship between buildings and spaces
The site occupies an enviable location bounded by a gentle bend in the River Calder and the straight line of the Railway embankment, flanked by converging residential developments.

2.2_Building types, scale, height, styles and density
South of the site, across the River Calder, the original Victorian stone built terraced residential properties remain largely intact, although there is some retail towards the bridge. Although only two storey, the buildings benefit from generous proportions and are set well back from the roadway. Immediately west of the site is the original Ledgard Bridge Mill and its later Boathouse extension which creates an L-shape in part wrapping the site. At the site entrance the original building is three storey which rises to four with a square tower at its midpoint projecting above the roofline whilst the newer addition features seven levels of accommodation within the same envelope as the mill. To the south Back Station runs behind the mill with the retaining wall to the railway beyond whilst east of the site the new residential development at South Brook Gardens features recon stone townhouses of three storeys and a four storey apartment block.

2.3_Historical appraisal
Although Ledgard Bridge Mill is an important local landmark it is just one of a number of mills, both large and small, that grew up in Mirfield during the second half of the nineteenth century to deal with various aspects of the textile industry and has no special status.

2.4_Boundary treatments – walls, fences, planting and verges
Site defined by neighbouring properties, banking to River Calder and the extended courtyard car park.

2.5_Important local detailed design elements such as materials, corner treatments, horizontal or vertical rhythms, windows and doors, roof lines and roof pitches, eaves heights and elevational treatments.
Ledgard Bridge Mill features unadorned natural stone walling with a regular rhythm of punched openings. The Boathouse extension adopts elements of the original to create a modern palette with stone coloured rainscreen cladding, large expanses of glass and lead clad dormer windows.

3.0_ Pattern of Streets and Movement Appraisal

3.1_Surrounding street pattern, public rights of way and bridle ways
The site is defined by Back Station Road and the river. Access to the existing courtyard car park also accesses the developable area.

3.2_Existing pedestrian or cycle desire lines across or around the site
The redevelopment of Ledgard Bridge Mill saw the creation of a short riverside walk although it leads from Ledgard Bridge to a point 200m further down river and stops. Although there is an aspiration to extend the route its path further down river is blocked by the channel to the eastern boundary.

3.3_Local provision of public transport
The A644 Huddersfield Road offers a direct link to Dewsbury, the M62 and the wider transport network. It enjoys a regular bus service and Mirfield Train Station <100m from the site.

3.4 _Access provision – cars, pedestrians, cyclists, horse riders and people with disabilities
Movement through the site is restricted by the River and surrounding Buildings - and any potential route to River would be destination rather than thoroughfare.

4.0_Constraints:

4.1_Utilities, easements, rights of access and public rights of way that cannot be built on
A riverside walk has been created looping round Ledgard Bridge Mill and finishing opposite the new site. Flood water also moves from the river into the flood storage area from the river and Back station road when river levels rise.

4.2_Watercourses to be retained and any flood risk areas
The site has been evaluated by EWE Consultants and a flood strategy has been presented to the EA.

4.3_Areas of sensitivity where community pressure may require additional consultation
The waterfront setting will invoke the Canal and River Trust as a consultee to the process.

5.0_Opportunities:

5.1_Mix of uses and intensification
The site has been suggested for housing and a local demand has been confirmed by Agency Advice.

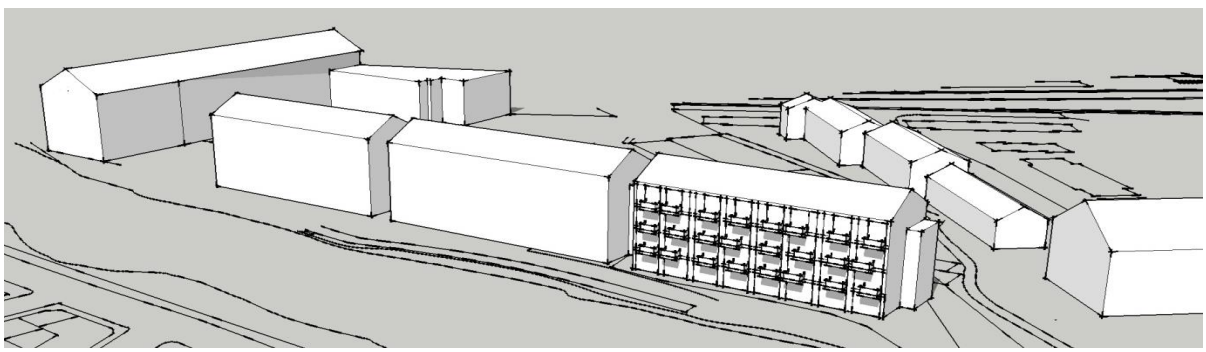
5.2_Location of the site relative to local and main centres, public transport, health services, schools, etc.
The site is located close to the major through route A644 giving access to Mirfield Centre, Huddersfield and Bradford, M62 motorway, public transport.
Mirfield Health Centre <300m away and Hopton Primary School <200m away.

5.3_Potential entry points to the site
As previously noted the site is accessed by Back Station Road which has two separate entry points from the wider highway network.

5.4_Potential for improving safety and security in the area
The site is currently overspill space from the existing car park and unsuitable for public use.

6.0_Proposed Development

6.1_Use
As described the site is a former industrial site which is now semi-improved grassland alongside the existing car-park serving the adjacent residential development. Bringing a prominent brownfield site back into meaningful use is seen as a major boost to the town.



6.2_Amount
The application scheme suggests 76 two bedroom duplex apartments with associated surface parking spaces, marketing suite, gym and rooftop terracing.

6.3_Layout
The proposed layout follows the prompt provided by the site appraisal - a linear form following the line of the River Calder with surface car parking behind. Glazed entrance vestibules are proposed at the break points, linked to ramped jetties projecting into the adjoining car parking with glazed escape stairs to the blank gables.

6.4_Scale
The proposed scheme has been sized based on the constraints of the site and the adjacent mill building. Four levels of 'over height' accommodation benefiting from the southerly vista to the river provide primary living space served by six levels of ancillary accommodation to the northern, car park elevation. Corridors at mid level are linked by vertical circulation cores to the blocks which stop at the upper corridor level whilst internal stairs within the apartments reconcile the duplex arrangement.

6.5_Landscaping
As previously noted, the site forms part of the flood defence strategy for the River Calder and the landscaping has been conceived around flood routes with a gentle swale around the building projecting into the car parking area below the entrance steps. A central hub feature providing cycle and refuse storge is defined with elements of hard landscaping including casual seating softened with indigenous planting. Native tree and hedge planting enclose the parking area, linking to the extended riverside walk - all as detailed within the Smeedon Foreman layout.
An overflow car park is also proposed within the scheme, offering additional parking for the mill complex with a similar landscaping strategy.

6.6_Appearance
Binks Vertical Limited have an enviable record for creating stunning mill style apartments along the River Calder - both new build and refurbishment schemes - which are invariably based on a traditional architectural language of the local mill vernacular. The proposed residential scheme at Ledgard Bridge Mill is inspired by the existing buildings taking reference from both the original 19th century stone building and the later 20th century terracotta rainscreen clad building.

As previously described, the scheme envisages a linear block broken into three elements with glazed circulation cores with links to a landscaped hub within the car park. Vertical circulation only rises to fourth floor level so the skyline is broken at each core reducing the mass of the scheme. Common spaces are attached to the core areas with marketing space accessible at ground floor with office space above and a gym space split over two levels all with glazed elevations to the river. Above both blocks of circulation accommodation a rooftop terrace is proposed to offer residents external recreational space. The two gables feature similar escape stairs which follow the same architectural language as the core.

The residential blocks all follow the same principle - two layers of duplex apartments served by a common corridor. The primary, southerly elevation is broken into four levels with living accommodation benefitting from full height glazed doors and an outboard balcony, kitchen and dining spaces. The associated secondary accommodation is located above or below the corridor with service facilities at the common entry level. Externally the accommodation blocks are clad steel framed structures with openings reflecting the triptych nature of the boathouse fenestration and windows of the original mill - paired doors/ windows sit alongside a feature panel with recessed courses to add shadow and relief. The framed nature of the design is further reinforced by jointing

with simple stretcher bonding to field areas/ pilasters contrasted with vertical jointing to beams. Gable elevations repeat the same rationale although on a single plane.The block sits below a simple pitched slate roof to match the neighbouring buildings.

6.7_Materials

The choice of material has been the subject of intense discussion amongst the design team. The original mill building features uniformly coursed punched face natural stone with discontinuous string courses at sill level. The boathouse extension (2005-93375) reflects the rhythm of the host building in a modern palette of curtain walling and honed terracotta rainscreen. The preliminary brief for the new apartment building was to take elements of both to match client aspirations - informed by an ongoing involvement with the existing buildings which has allowed the client to benefit from both their own experiences and the feedback of tenants (small openings in the mill can make spaces seem dark, expanses of glass to the boathouse can lead to overheating). The resulting elevational treatment with a considered balance between solid and void places emphasis on the texture of the walling material and although extensive research was undertaken exploring natural stone finishes the neighbouring new housing development provided a constant reminder of the potential blandness of split faced modern stone. The requirement for a Warranty scheme precluded the use of salvaged material and as the scheme developed the need for a small format walling product to allow detail to be added at different scales inevitably lead to brickwork.

Although brickwork surrounds the site - with the retaining wall to the railway and river, industrial units to Hopton New Road and housing to Calder Road - it is exclusively a red brick which was considered inappropriate for the new building against the yellow of the Terracotta cladding. Research identified London Stock as a fitting accompaniment to stone exhibited by brickwork within Kings Cross and a local brick agent has provided suitable alternatives which are available on site to view.

7.0_Climate Change Mitigation

7.1_Principles

The issue of Climate change will be addressed through the construction of the new buildings. The proposed envelope will exceed the current Building Regulations in terms of Part L and Thermal Performance. Lights will be energy saving and will be fitted with timers whilst water saving devices will be fitted to all sanitaryware.

It is proposed to use the same team that undertook the site in Batley to deliver the scheme and they will use local materials where suitable and recycle waste as far as possible. Recycling provision will also be provided.

Discussions will be held with renewable energy providers to explore possible technologies including pv panels to the roof which subject to funding may be introduced.

8.0_Access

8.1_Fundamentals

Although the scheme was originally conceived with a level of accessible apartments at car park level, the results of the detailed flood appraisal has pushed the ground floor 1800mm above existing ground levels. Within the car park pedestrians will move through a landscaped assembly feature to the building entrances will have platform lists to podium level. Oversize entrance screens will lead to glazed circulation cores with stair and lifts to the upper levels. Corridors at first and fourth floor levels will provide access to the individual apartments. Internally all doors will achieve a minimum clear width of 800mm in the open position.

Any protection and/or fixed objects on circulation routes will not reduce the effective width of the clear space below 750mm.

The position of all accessible switches and socket points are to comply with the requirements of Approved Document Part M2, Section 8, diagram 29 - set between the zone of 400mm minimum above finish floor level and a maximum of 1200mm above finish floor level.

9.0_Crime Prevention

9.1_Security Measures

The existing site access from Back Station Street will also serve the proposed new development. Street lighting will link to low level illumination within the site compliant with BS 5489-1:2020 guidance for both pedestrian and vehicle users. Way finding lighting will lead to the central hub feature where increased lighting levels will serve cycle and refuse stores. Bedroom and circulation spaces will have full oversight of parking courtyard and it will be covered by a cctv system accessible to all residents.

Spaces will be defined with hot applied thermoplastic line markings and numbered. EV charging spaces will not be allocated. Motorcycle parking bays will be provided with ground anchors to Sold Secure gold standard.

Resident cycle storage will be within a secure brick built enclosure with access controlled gates <20m from the building entrance. Tensile roof coverings will provide weather protection, cycle stands will be certified and covered by cctv linked to resident's home app. Certified short stay cycle stands will be positioned alongside primary pedestrian thoroughfares, visible from the building entrances to provide natural surveillance.

Primary building entrances will be fitted with access controlled PAS 24:2022 doorsets. Residents will be provided with a video link to allow remote access. Lobby spaces will have lockable letter/ parcel delivery boxes.

Resident access corridors and communal spaces will be provided with proximity readers, apartment entrance doors will be PAS 24:2022 and Eurocylinder locks.

All apartment windows are >1.8m above external ground levels but will be certified to BS 4873:2016.

10_Precedent Images