

Condition Report
for
HARRAL BUILDINGS, 32-38 ELDON STREET, BARNLSLEY, SOUTH
YORKSHIRE S70 2JB



Prepared for

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in

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Fig 01. (Cover photo) Front of the Harral Buildings (taken across Eldon Street from the south).

1.0 A GENERAL DESCRIPTION OF THE BUILDING

- 1.1 The building lies mid-way down and on the north side of Eldon Street in the centre of Barnsley (**Fig. 02**). The Civic Hall lies just north of the building and the new Library, the redeveloped Market and its newly landscaped public plaza lie across Eldon Street towards the south-east. The redevelopment of the town centre around the Market has made the Harral Building more visible and prominent and its poor condition more noticeable.
- 1.2 The building comprises three distinct blocks along the Eldon Street frontage which extend through and open onto the Victorian Arcade on the north side of the building.

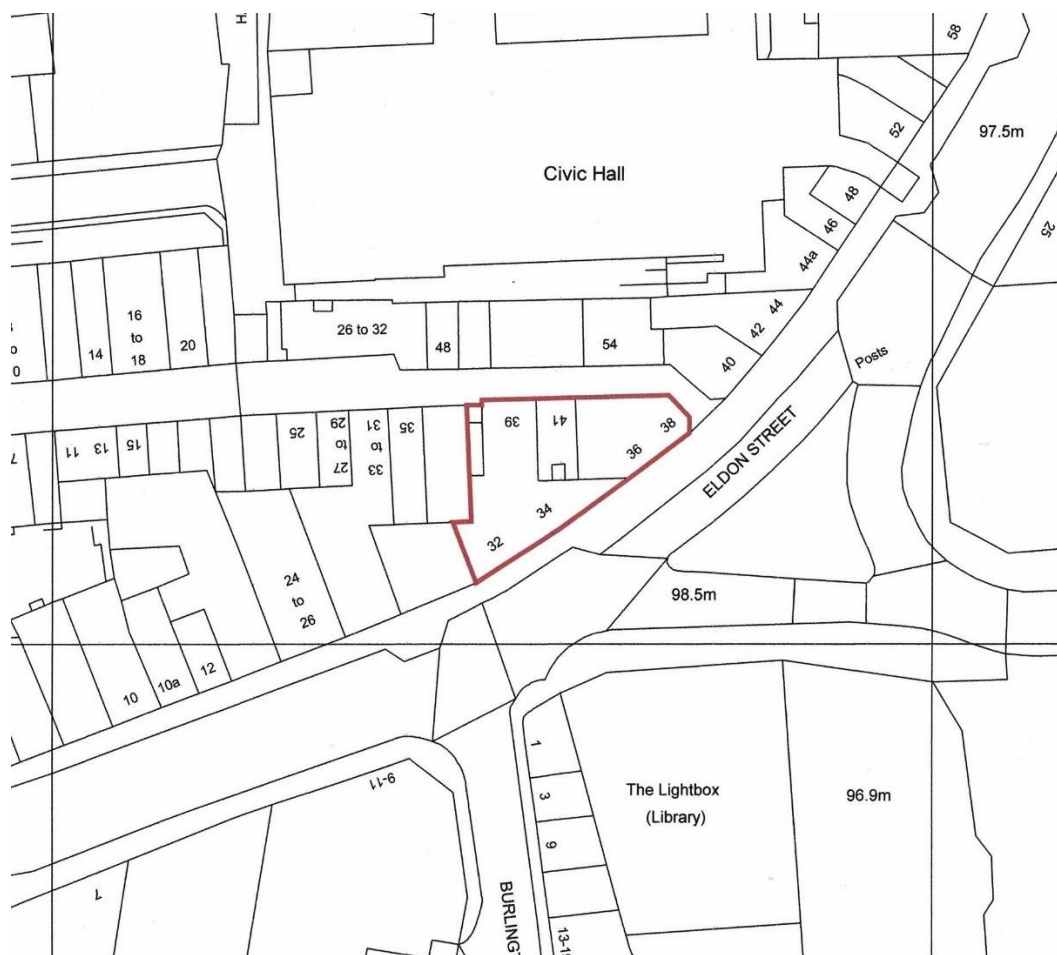


Fig 02. OS map of Harral building (identified by the red line).

- 1.3 The block occupying no. 32 at the western end of the Harral Buildings (the Eldon Street side) (**Fig. 01**) is three storeys constructed in faience (glazed terracotta blocks) with a linear Art Deco bronze shopfront at ground floor level, four plate glass sliding sash windows at first floor level and central to these at second floor level are four multi-paned arched casement windows.

- 1.4 At the eastern end of this block is an additional bay which has a projecting curved narrow window which originally contained a dropping timepiece which struck on the hour and central to and above this is a slender casement with a top hung opening light.
- 1.5 The second-floor windows have a deep projecting moulded cill band which forms the top of a decorative plinth which originally contained the lettering 'Jeweller' on the left-hand side, 'Benj Harral' in the centre and 'Watchmaker to the Admiralty' on the right-hand side (**Fig. 03**). The ghost of the lettering remains visible though unfortunately the letters themselves have been ground flush. Beneath this is the wonderful clock and below that is a small pediment containing the words 'EST'D 1898' (**Fig. 03**).



Fig 03. Historic photograph of the Harral Building covered with bunting and flags for the Chamber of Trade Shop Decoration Competition on the 29th May 1953 (reproduced with kind permission of the Barnsley Archives).

- 1.5 Above the second-floor windows is an arched pediment which contained the words 'Ring Shop' and again this lettering has been ground flush, but the ghosted form (**Fig. 04**) is still discernible.



Fig 04. Historic photograph of the Harral Building from the 1920s showing the faience lettering to the arched pediment (reproduced with kind permission of Barnsley Archives).

- 1.6 The central block on the Eldon Street side is stone built (this has, more recently, been painted white) and again has a linear Art Deco bronze shopfront at ground floor level (**Fig. 05**). The exact date of the Art Deco bronze shopfront is not certain, however, the original shopfront is still visible behind the flags and bunting on the 1953 photograph so presumably it was introduced soon after that.
- 1.7 Above this at first floor level is a triple Venetian window comprising pilasters with decorative capitals and moulded semi-circular arched lintels which contain three round-headed sliding sash windows.
- 1.8 At second floor level there is a similar triple Venetian window, again with pilasters and moulded semi-circular arched lintels containing similar plate glass, round-headed sliding sash windows. Above this is a deep, moulded cornice which is dentiled and bracketed at either end.
- 1.9 The easternmost block on Eldon Street (**Fig. 06**) forms an acute angle at the entrance to The Arcade and has a very different character. The ground floor shopfront is a modern replacement which is topped by visually intrusive signage zone which covers

the lower half of a projecting dentiled cornice. The original shopfront is visible on photograph from the Barnsley archive (**Fig. 07**).



Fig 05. The central stone block on the Eldon Street frontage

- 1.10 The Eldon Street frontage above this is constructed in faience (glazed terracotta) to replicate Portland stone. This elevation is symmetrical and comprises four two storey flat-faced pilasters and triple Venetian metal framed windows central to the first and second floors which are flanked by single metal framed windows.
- 1.11 The pilasters are topped by a substantial projecting dentiled cornice and a parapet with a central shield motif.
- 1.12 The faience and classical detailing continues on two facets forming the acute angle as the block turns into The Arcade but along The Arcade elevation (**Fig. 08**). The building character along The Arcade becomes much more utilitarian and is faced with cream/pale yellow bricks.



Fig 06. The easternmost block at the junction of Eldon Street and The Arcade.



Fig 07. Historic photograph of the Harral Building from the 1930s showing the original shopfront of 36-38 Eldon Street (far right) (reproduced with kind permission of Barnsley Archives).



Fig 08. The Arcade elevation of the easternmost block (looking towards Eldon Street)



Fig 09. The windows along the Arcade elevation are triple grouped in a Venetian style

- 1.13 The first and second floor windows are grouped in a Venetian style (**Fig. 09**) comprising a central metal framed (Crittall) window flanked by two narrower metal-framed (Crittall) windows with a common projecting faience cill and segmental faience lintel.
- 1.14 The roofs of all three blocks are flat (**Fig. 10**) (apart from a small concrete tiled pitched roof formed over half the central block, possibly as a weatherproofing measure) and are finished with a variety of coverings.
- 1.15 The former yard, which occupied the space enclosed by the three blocks, has been infilled with two extensions, one two storey and one single storey, leaving a substantially diminished yard which opens onto The Arcade at the western end of the rear (Arcade) elevation.

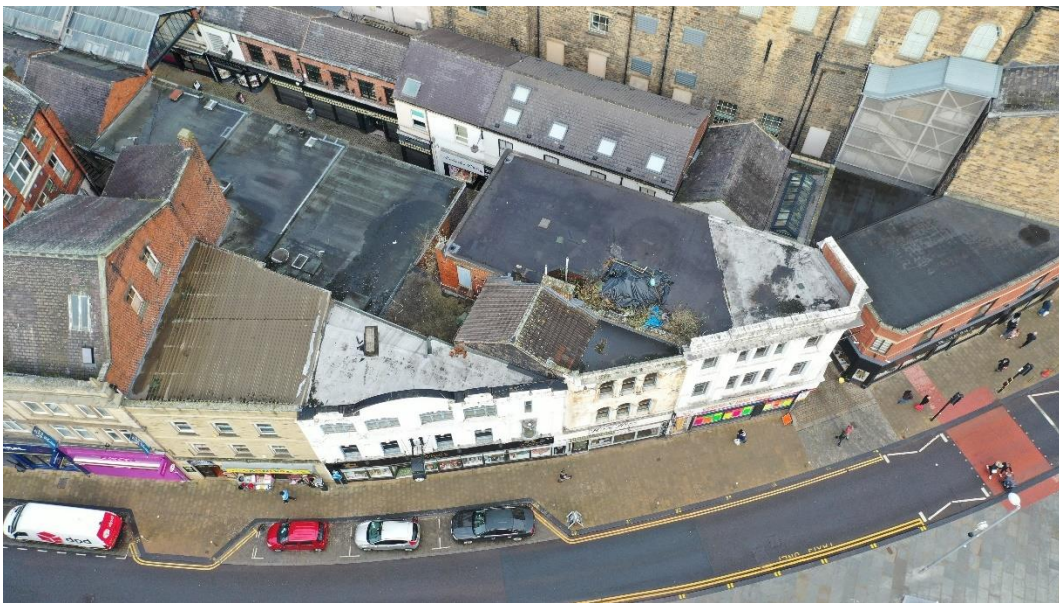


Fig 10. The Harral Building roofs (taken by drone from the south).

2.0 CONDITION REPORT

2.1 ROOF

- 2.1.1 **The westernmost block (32 Eldon Street):** The flat roof of 32 Eldon Street (**Fig. 11**) is finished with green bitumen-based roofing felt which appears to have been painted with some type of 'water-proof' paint and there are widespread Flashband patch repairs, both in the body of the flat roof and in particular along the upstands at the abutments with the parapet and the adjoining building. (no. 30 Eldon Street). There is widespread creep and cracking of the roof covering visible.
- 2.1.2 At the back of the building (on the yard side) there is a length of pitch roof (rather like a mansard) which empties into a plastic half round gutter and downpipe. This is also covered with the green bitumen-based roofing felt and paint and again there is widespread creep and cracking of the roof covering.

- 2.1.3 Bitumen-based roofing felt is a cost-effective DIY product commonly used for shed roofs and does not have the lifespan or robustness for this situation and significance of building. The maximum lifespan of the material is max. 10 years (for roofing felt at the top end of the product range) and certainly is not guaranteed in situations like this where there is likely to be regular standing water and ponding. Therefore, its replacement, if grant funded, should be a material/system with a minimum 25 year guarantee which can accommodate this.



Fig 11. The roof of no. 32 Eldon Street (taken by drone from the north).

- 2.1.4 The curved pediment on the Eldon Street frontage appears to have a lead flashing but this is not correctly welded and there are no drips (front of back) to help shed rainwater away from the faience/masonry. The parapet is not flashed. The back of the pediment and parapet appears to have been covered with an adhesive/bonded black bitumen sheet material which is trapping moisture within the faience and preventing its ability to naturally evaporate and regulate moisture. The bitumen material should be carefully removed to allow the condition of the faience/masonry to be fully inspected and to reinstate its vapour permeability.
- 2.1.5 There is a stone chimney with a moulded coping mid-way along the junction between the pitched and flat roofs. This has been capped with concrete paving slabs and this is preventing stack effect ventilation in the flues, causing in all likelihood a build-up of condensation and internal damp problems manifest through the plaster. The chimney pots should be reinstated, flanchued with a hot mixed lime mortar and cowls added to prevent rainwater and birds from entering the flue. Vents should also be incorporated internally at the bottom of each stack to encourage stack effect ventilation.
- 2.1.6 **The central block (34 Eldon Street):** The central Eldon Street block (**Fig. 12**) comprises a pitched roof finished with concrete tiles and a small triangular area of

flat roof finished with a black LSFR (low slope fire retardant) synthetic rubber membrane.



Fig 12. The roof of no. 34 Eldon Street (taken by drone from the south).

- 2.1.7 The membrane turns up at the abutments (back of the parapet and the abutment with the easternmost Eldon Street block) and has been (poorly) cover flashed with Flashband (the top of this has then been buttered with mortar, possibly because the joint was leaking). Flashband is a temporary adhesive material used to repair small leaks along lead gutters. It should not be used in such quantities as a replacement to lead flashings and has no place on a building of this significance.
- 2.1.8 The flat roof looks relatively newly installed, however, there is a substantial build-up of debris, leaves and moss and ponding water visible. Clearly the flat roof substrate has not been laid to an adequate fall and it is also possible the outlet is blocked.
- 2.1.9 The concrete tiling covering the pitched roof has been patch repaired with tiles of a red rather than grey colour and some of these appear to be delaminating or have cracked on the lower edges. This indicates the concrete tiles are nearing the end of their lifespan. There is moss and green algae on the east facing pitch and one of the concrete ridge tiles has been replaced with what looks like a black plastic ridge tile.
- 2.1.10 There is a raised gablet where the pitched roof meets the adjoining parapet of the easternmost Eldon Street block and the concrete tiles are finished along this abutment with Flashband. Again, this is not a robust enough material and should be replaced with lead soakers and a stepped lead flashing.
- 2.1.11 The timber gutter serving the pitch facing the yard is filled with debris, moss and vegetation and at one end has completely rotted. This should be replaced in its entirety.

2.1.12 Internally the full extent of damage caused by recent failure of the flat roof covering (now replaced by the synthetic rubber membrane) is evident, the entire lath and plaster ceiling having collapsed (**Fig. 13**).



Fig 13. The collapsed ceiling under the flat roofed section of the central block.

2.1.13 **The easternmost block** (36 & 38 Eldon Street and 39 & 41 The Arcade): The flat roofed block containing no's 36 & 38 Eldon Street and no's 39 & 41 The Arcade (**Fig. 14**) is finished with black bitumen/asphalt which has substantially cracked (the cracks have weeds growing in them) and there are widespread patch repairs with green bitumen-based roofing felt indicating failure of the material. At the eastern end of the roof an area has been finished with 'water-proof' paint. In places the roof covering has been damaged and there are patch repairs and creep visible.

2.1.14 Along the upstand/abutment with the parapet the junction between the two has been finished with Flashband, indicating potential leakage. Again, this is not a long-term solution and should be replaced with a more robust and appropriate material.

2.1.15 There are buddleia's and other vegetation growing along the parapet at the abutment with the central block, along the southern side of the glazed lantern (this has been temporarily covered with black visqueen sheeting) indicating long term rainwater ponding and possibly standing water caused by a blocked outlet. The

vegetation and debris should be cleared to allow the condition of the roof covering to be fully inspected.



Fig 14. The roof of all three Haral Building roofs (the flat roof of the block containing no's 36 & 38 Eldon Street and no's 39 & 41 The Arcade is the large flat roof top and central).

- 2.1.16 There are repairs visible around the two outlets at the western end of the roof (**Fig. 15**), again indicating possible leaks. The LH hopper and downpipe have been replaced with white PVC-u alternatives but the RH cast-iron hopper and downpipe appear to be cracked/corroded as there is substantial vegetation growing in the brickwork or on the window cills corresponding with the uppermost section of downpipe. The cast-iron hopper and downpipe should be replaced with like for like.
- 2.1.17 This entire flat roof should be stripped, the substrate inspected and repaired with like for like and the roof covering replaced with a more effective long-term material which needs to be robustly flashed along all parapets and abutments in the correct manner
- 2.1.18 The parapets throughout this block do not have lead flashings (**Fig. 16**) and this is allowing rainwater to wash the mortar from the joints and has the potential to enter the wall core and damage the faience infill. There is vegetation growing the joints of the blocks forming the parapet and areas of pitting visible indicating over-saturation and failure of the tops of the blocks. Long term rainwater ingress in this way will cause frost damage as the face of the faience blocks crack or the protective glaze delaminates. A cover flashing should be incorporated to all parapets and pediments following repair of the pitting using small white glazed terracotta tiles (use a specialist terracotta and faience manufacturer to establish an exact match).
- 2.1.19 There appears to be a parapet gutter around the perimeter of the flat roof at the corner of the building above no. 38 Eldon Street (**Fig. 16**) though the outlet

(presumably at the western end – top right of the picture - of the Eldon Street run) is not visible on the drone photographs. Presumably, judging by the vegetation and buddleia's growing in this area, the outlet is blocked.



Fig 15. The roof above 39 & 41 The Arcade. Note the fresh paint around the outlets and the quantity of cracks in the bitumen/asphalt roof covering (taken by drone from the west).



Fig 16. The roof above 38 Eldon Street. Note the lack of a flashing along the faience parapet and the presence of vegetation and pitting (taken by drone from the north – looking towards Eldon Street).

2.1.20 **The flat roofed extensions** (within the former yard): The flat roof of the two-storey extension (**Fig. 17**) is finished with a black bitumen-based roofing felt. Where the downpipe from the roof of no. 32 Eldon Street empties onto this flat roof the

aggregate (which protects the bitumen material from UV damage) has been washed away and there is widespread build-up of moss, algae and vegetation indicating long-term ponding caused by either an undersized or blocked outlet or an inadequately constructed substrate (i.e. the substrate is not laid to an adequate fall towards the outlet).



Fig 17. The flat roof of the two-storey extension within the former yard.

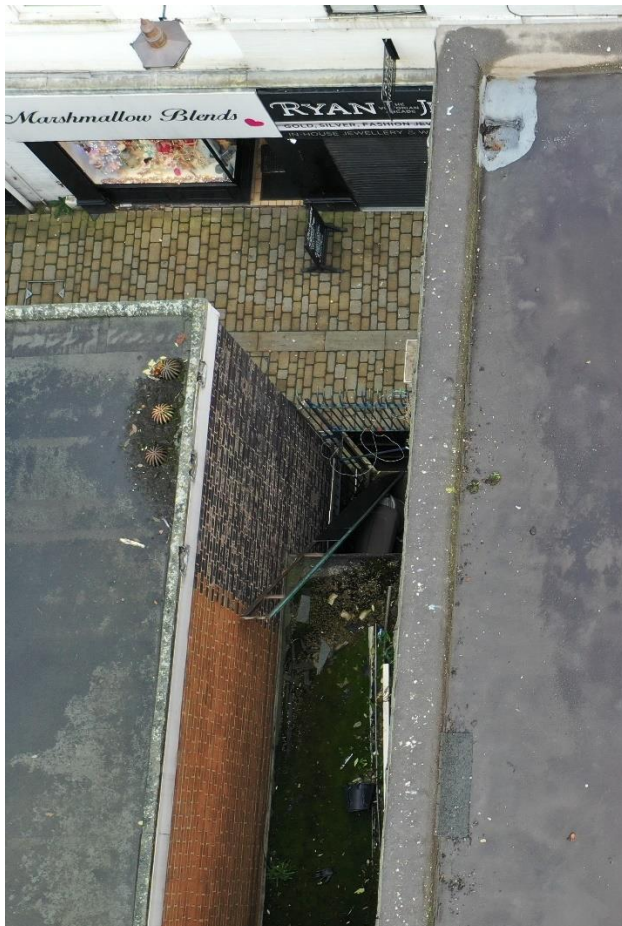


Fig 18. *The flat roof of the single storey extension within the former yard.*

- 2.1.21 There is damage visible to the underlying bitumen material in other areas where rainwater goods are leaking. The roof covering has reached the end of its life and should be stripped and replaced with a more appropriate and robust flat roofing material.
- 2.1.22 The roof of the single storey extension (**Fig. 18**) (containing a small kitchen serving the café at 39 The Arcade) is covered with a carpet of moss indicating long-term rainwater ponding or standing water with inadequate or undersized outlets. Given the downpipes and outlets from the back of all the roofs empty onto these two extension roofs, there is a substantial capacity of water that needs to be accommodated as the water makes its way to the ground.
- 2.1.23 Clearly the current system is not performing efficiently and should be reassessed, and its capacity increased to help better cope with current and future anticipated rainfall.
- 2.1.24 **The glazed lantern:** There is a Georgian-wired glazed lantern lighting the internal stair well which provides direct access to the first and second floors from a door on the Eldon Street frontage (between no. 34 and no. 36 shopfronts).
- 2.1.25 Internally there is evidence of long-term rainwater ingress (**Fig. 19**) which is manifest in flaking paint and friable plaster, and cracked panes (caused by vandals on the roof) have allowed pigeons to enter the building.

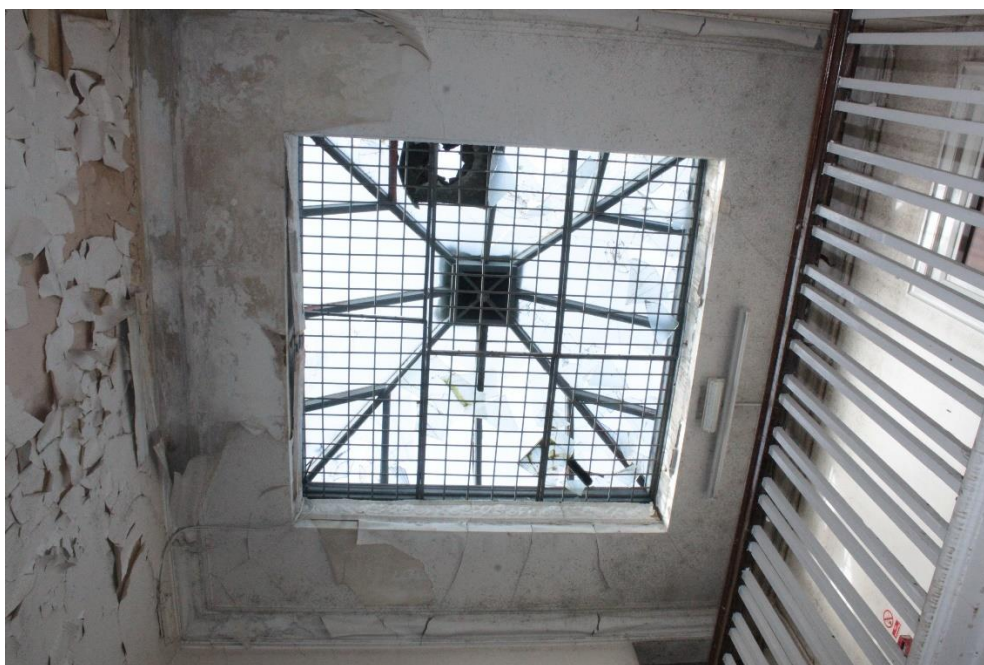


Fig 19. *The damaged glazed lantern over the internal stair well.*

- 2.1.26 Since **Fig. 19** was taken, the lantern has been temporarily covered with black visqueen sheeting (**Fig. 20**).

2.1.27 The lantern glazing bars, cap and seals are to be repaired/replaced (using like for like) along with any rot or damage to the upstand at the base of the lantern where it meets the flat roof. The cracked/broken panes of Georgian wired glass are to be replaced with like for like.



Fig 20. The glazed lantern has been temporarily covered with black visqueen sheeting.

2.1.28 In order to improve the thermal performance of the glazed lantern two strategies are being considered. First, a secondary double-glazed lantern could be introduced to cover the historic lantern or second, as part of the repairs to the historic lantern, and provided the glazing bar sections are deep enough, toughened double glazed units could be used to replace the Georgian-wired panes. The feasibility of this repair approach is subject to a closer inspection of the historic lantern and is subject to the approval of Barnsley Council Conservation Team and Historic England.

2.2 MASONRY

2.2.1 ELDON STREET ELEVATION

2.2.2 **The westernmost block** (32 Eldon Street): As mentioned in earlier in the general description, the faience (glazed terracotta) forming the first and second floors of the Eldon Street frontage of the westernmost block (32 Eldon Street), has been painted

with a white modern masonry paint and this is compromising the ability of the faience to naturally evaporate and regulate moisture (**Fig. 21**).

- 2.2.3 The reasoning behind the paint application is likely to be an attempt to regulate the frontage when the raised Harral lettering and swags were ground flush with the face of the adjoining blocks. This single act has compromised the fire glaze of the faience blocks, allowing rainwater to enter the core of the block and the subsequent potential to cause expansion of the fill material. There is no apparent blowing of the surface of the blocks visible, however, once safe access has been erected and the paint finish removed, the condition of the blocks can be more closely inspected.



Fig 21. The Eldon Street frontage of no. 32 at the western end of the Harral Buildings.

2.2.4 ARCHITECTURAL TERRACOTTA & FAIENGE FROM 1870

- 2.2.5 A revival in the use of architectural terracotta on commercial buildings blossomed in the 1880s, influenced early in the period by the principles of the Arts and Crafts Movement. By the turn of the century terracotta and faience were being used on a wide variety of more work-a-day buildings such as tube stations and pubs. Terracotta became imbued with late-Victorian values of civic improvement, *“Few doubted that impressive architecture encouraged good behaviour, that cleanliness was the highest of virtues and that municipal and commercial investment should closely complement each other.” (1)*

- 2.2.6 Manufacturers produced catalogues which were used by building designers to produce eye-catching unique designs. Designers, *“were not reusing sets of plaster moulds but were respecting the ethics of high architecture (and Arts & Crafts principles) by designing a unique series of details for each contract.” (2)*

2.2.7 Frontages were commonly in the Renaissance style, *“and three-dimensional in their decoration, using faience blocks and panels to form pilasters, capitals and arches.”* (3) inset with decorative and sculptural tiling.

2.2.8 There were three manufacturers of faience who dominated production in the north of England, Burmantofts in Leeds, Hathern near Loughborough and Shaw’s of Darwen. In the inter-war years steel and concrete began to be used, concrete as an alternative core fill and steel as embedded reinforcing bars and link rods within projecting elements such as cornices. Mild steel T-section brackets or iron S ties also came into common use to tie the faience blocks back to a brick inner leaf or steel frame, though these often complicated the process as manufacturers had to, *“take care to incorporate air-spaces between beams and stanchions to allow for differential thermal expansion.”* (4)

2.2.9 CAUSES OF FAILURE IN TERRACOTTA & FAIENCE

2.2.10 *“Faults may have their origin in mistakes in manufacture or may arise through lack of maintenance, though the precise cause may be difficult to isolate. Temperature fluctuations can lead to glaze-crazing if the glaze and the clay body have different thermal coefficients of expansion...allowing water to enter the clay body. Subsequent frosts may result in spalling. Of the British variants of terracotta, only buff and pink ware of the 1870s and 80s are likely to suffer from spalling, usually as a result of being underfired.”* (5)

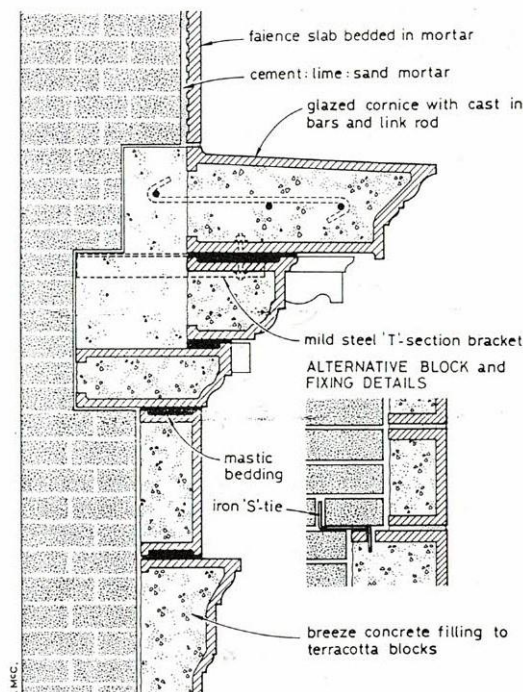


Fig 22. Cross-section of a typical faience construction in inter-war Britain (English Heritage) reproduced from p129, *The Terracotta Revival* (refer to List of Quotations & Bibliography).

- 2.2.11 *“Moisture is the prime agent of destruction; once absorbed into the fabric of a wall it can cause supports to rust, and clay bodies to expand and hence buckle or split. Moisture that enters terracotta from its face or that runs behind the blocks may corrode supporting metal anchors. The pressure created by the rust will, in turn, crack the blocks. Moisture can also wreak havoc by carrying airborne chemicals, transporting salts and encouraging biological growth in joints and crazing-lines. Only from the 1920s were terracotta schemes likely to be designed with weep holes to drain away any water that had penetrated the wall-surface, or with expansion joints to absorb compressive stresses generated by expansion of the blocks.” (6)*
- 2.2.12 *“Poor repairs can compound these problems. The indiscriminate use of sealants may trap moisture, unsuitable cleaning agents can attack mortar, and abrasive cleaning will damage the fire skin or the glaze and hence encourage water penetration. Epoxy paints also act as traps and may result in both the paint finish and the underlying glaze spalling away.” (7)*
- 2.2.13 *“Rust is one of the most frequent causes of problems with terracotta; determining the location of embedded girders and hooks is usually a vital prelude to any conservation work.” (8)*
- 2.2.14 The repair strategy, therefore, is (once a scaffold has been erected) to carefully removed the modern masonry paint (using a Doff steam-based system or poultice) to allow the condition of the damaged faience blocks to be fully assessed. It will be essential to minimize the quantity of water during the paint removal to reduce the potential of encouraging corrosion of any metal anchors or expansion of the fill material (often clinker was used and this material is particularly susceptible to expansion in the presence of moisture).
- 2.2.15 There are three main areas of concern with regards condition. The first is the plinth below the second-floor windows where the Harral lettering and the swags containing the words ‘*Jeweller*’ and ‘*Watchmaker to the Admiralty*’ were removed.
- 2.2.16 In addition to this more visible intervention, another area of damage is along the chamfered skirting of this plinth where a significant number of chips are visible. It is likely these chips can be repaired without the need for the faience units to be replaced.
- 2.2.17 In the centre of this block lettering spelling out ‘*Ring Shop*’ was also removed from the arched pediment, again causing the associated blocks and metal anchors to be susceptible to moisture ingress. Advice is to be sought from a specialist faience and terracotta manufacturer/conservator to help establish whether the blocks have been made relatively weathertight, whether any additional repairs are necessary or whether the blocks will need to be cut out and replaced, potentially with the lettering reinstated if the budget allows.
- 2.2.18 The final area of concern is on the eastern bay of this block, between the narrow first and second floor windows (**Fig. 23**) where two vertical cracks are visible. Further

investigations will be necessary to ascertain the source of the movement/moisture, however, it may be necessary to cut out and replace the associated blocks if tile repairs are not practical or would compromise the weathertightness of the blocks.



Fig 23. The cracked faience blocks between the narrow first and second floor windows.

- 2.2.19 **The central block (34 Eldon Street):** As mentioned in the general description, this block is constructed in coursed sandstone with quoins, cill bands, a dentiled and bracketed cornice and semi-circular headed triple windows to the first and second floors (**Fig. 24**). The masonry has been painted with white masonry paint which is trapping moisture and causing over-saturation of the stonework. There is extensive brown staining where moisture is present, and this paint should be carefully removed (using a Doff steam-based or poultice system) as a matter of urgency to allow the stonework to dry out.
- 2.2.20 Whilst the quality of the coursed stonework and the quoins visible through the paint is undeniable, in the historic photographs (**Fig's 04 & 07**) the stonework does not appear to be exposed, instead the walling stone around the decorative window surrounds is lime rendered. This helps regulate the three blocks along the Eldon Street frontage visually, and there is some debate to be had, therefore, as to

whether the lime render should be re-applied or the stonework re-pointed and left exposed.



Fig 24. The Eldon Street frontage of no. 34 in the centre of the Herral Building.

- 2.2.21 The high moisture levels in the masonry are most likely caused by failure of the flat roof covering along the back of the cornice described previously (refer to **Fig's 12 & 13**) or by blocked outlets causing long-term standing water or ponding which has breached the cover flashing at the abutment.
- 2.2.22 The staining along the top of the cornice is the result of lack of an adequate flashing incorporating drips to help shed rainwater away from the masonry beneath.
- 2.2.23 Once the roof has been finished with a longer term and more robust material, the outlet capacity increased, the abutment flashings correctly fitted and the impermeable masonry paint removed, the masonry can dry out. Any disaggregated or delaminated stone can then be attended to, by consolidation or piecing-in in the worst affected areas.
- 2.2.24 **The easternmost block** (36 & 38 Eldon Street): As mentioned previously, the easternmost block (36-38 Eldon Street) is constructed in faience (terracotta blocks) with a matt white glazed intended to replicate Portland stone (**Fig. 25**).

2.2.25 The faience continues around the two facets forming the acute angle as the block turns into The Arcade.

2.2.26 The faience looks to be in reasonable general condition, though along the shopfront cornice there is moss and algae visible and evidence of peeling paint in some areas where the faience has been overpainted with white masonry paint. Again, this is to be carefully removed (using a Doff steam-based or poultice system) to allow the condition of the faience to be fully inspected.



Fig 25. The Eldon Street frontage of no. 36-38 at the eastern end of the Herral Building.

2.2.27 There are two vertical cracks visible on the third of the giant pilasters from the LHS which appear to extend the full height of the second storey. There also appear to be indents or holes in the centre top of all four giant pilasters and this may be the result of signage or lighting fixings which have then allowed rainwater to breach the fire glaze and caused expansion of the fill which has led to the cracking aforementioned.

2.2.28 Once safe access has been erected and the masonry paint removed, the condition of the faience can be more accurately assessed and a detailed repair schedule

prepared, however, a reasonable assessment/allowance has been made at this stage to allow the works to be tendered to enable a realistic budget to be set aside for the specialist repair/replacement.

- 2.2.29 There is extensive moss and algae along the parapet and pediment and dark staining in the joints between the faience blocks caused by lack of a lead flashing which has allowed rainwater to run into the joints and down the face of the blocks. Once the moss and algae have been cleaned off (using a PH neutral soap and stiff bristled brush) the condition of the parapet and pediment blocks can be fully inspected.
- 2.2.30 A cover flashing incorporating a drip on both sides to help shed rainwater away from the building should be introduced along the parapet and pediment along with cover flashings (again incorporating a drip) along both projecting cornices.
- 2.2.31 THE ARCADE ELEVATION:
- 2.2.32 **The easternmost block** (back of 36 & 38 Eldon Street and 39 & 41 The Arcade): The Arcade elevation of the easternmost block (*Fig's 08 & 09*) is faced with cream/pale yellow bricks. As mentioned previously the first and second floor windows are triple group in the Venetian style and have common projecting faience cills and segmental lintels.
- 2.2.33 The condition of the brickwork is reasonable with no obvious damage or staining. It would be prudent to make some allowance for re-pointing where the mortar may have been washed out of the joints.
- 2.2.34 **Elevations facing the former yard:** The elevation of the easternmost block facing the former yard is constructed in smooth-faced red brick (*Fig. 26*). As mentioned previously the RH hopper and downpipe (in the internal corner formed by the chimney stack) are broken/corroded and have been causing rainwater to shed down the brickwork causing vegetation, moss and algae growth. Once the rainwater goods have been replaced, the vegetation removed and the brickwork allowed to dry out, any missing mortar can be attended to and any frost damaged bricks cut out and replaced with like for like.
- 2.2.35 The rear elevations of the no. 32 and no. 34 blocks (*Fig. 27*) are again constructed in smooth-faced red brick, but these have been finished with black masonry paint. Carefully remove the black masonry paint (using a Doff steam-based or poultice system) to allow the condition of the brickwork to be fully inspected. Allow to re-point these elevations entirely using a hot mixed quicklime mortar.

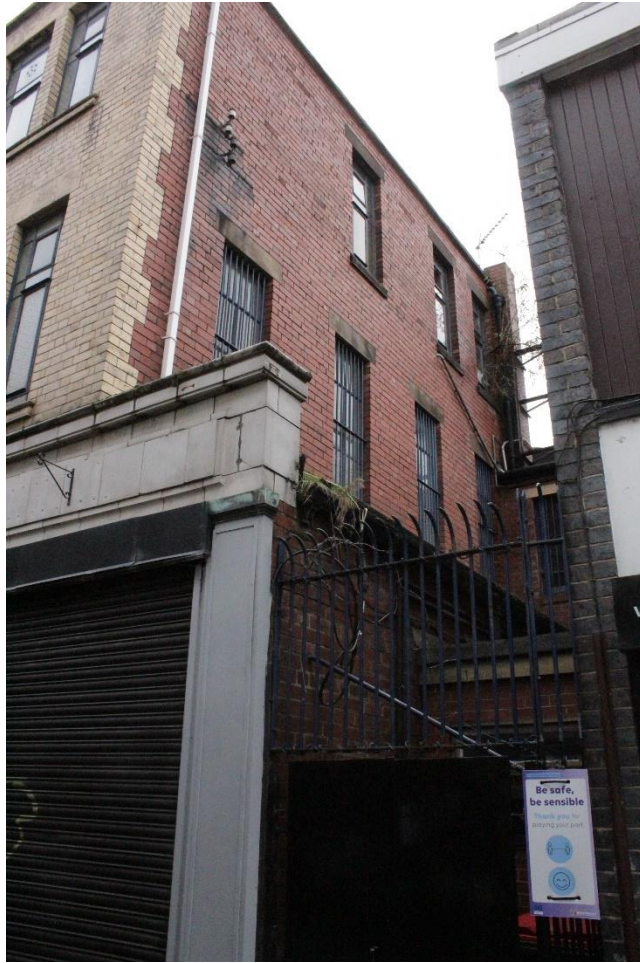


Fig 26. The western gable of the easternmost block (facing up The Arcade)



Fig 27. The rear elevations of no. 32 and no. 34 blocks which have been painted with black masonry paint.

2.3 WINDOWS, DOORS AND SHOPFRONTS

2.3.1 ELDON STREET ELEVATION

- 2.3.2 **Westernmost block** (32 Eldon Street): The bronze 1950s shopfront has been the subject of structural investigations due to the substantial undulation visible to the windows on the RHS of the entrance into Prisco's (**Fig. 28**). The opening up confirmed the movement was not caused by structural failure of the underlying steel beams and columns supporting the masonry above the shopfront but were most likely damage caused by a vehicle mounting the pavement.



Fig 28. Distortion of the bronze window to the RHS of the Prisco's entrance (32 Eldon Street).

- 2.3.3 The solution proposed is to incorporate a steel transom (universal I section or C channel) along the line of the bottom of the clerestory which will be bolted to the steel columns at either end. This will provide support for the shopfront mullions/transoms and help arrest any further deflection.
- 2.3.4 This bronze shopfront extends along the entire frontage of no's 32 and 34 and incorporates 6 no. awnings with ribbed bronze fascia's which are to be repaired, brought back to full working order and re-covered with black fabric.
- 2.3.5 The green and gold floor mosaic at the Prisco's entrance (which spells out 'Harral Jewellers' is to be carefully repaired by a specialist conservator. The black marble beneath the modern metal signage is to be revealed, repaired and new off-set lettering introduced for each unit using the original 1950s Harral font.
- 2.3.6 The 4 no. first-floor windows above the shopfront are plate glass sliding sashes which have areas of rot along the lower rails, cills and the bottoms of some of the stiles. These are to be repaired by cutting back to sound timber and splicing in new ends. If the cills and lower rails have rotted beyond practical repair, replace these

elements using like for like, taking care not to damage the glass in the process. Bring the sashes back to full working order and incorporate draft brushes between and around the sashes to help improve their thermal performance.

- 2.3.7 The 4 no. second-floor windows are multi-paned casements with leaded upper opening lights. A number of the panes are cracked or broken and should be replaced with cylinder (or horticultural) glass which has an undulating surface and will not stand out when sunlight reflects off the surface. The opening lights should be eased and brought back to full working order. Any rot along the cills and lower rails should be repaired by cutting back to sound timber and splicing in new ends.
- 2.3.8 All windows are to be sanded back and finished with linseed oil paint (petrol blue) Chatsworth by Brouns & Co.
- 2.3.9 The narrow bay window to the eastern bay of the no. 32 block (at first floor window) which contained the timepiece, has rotted in places and, as elsewhere, is to be repaired by cutting back the rot to sound timber and splicing in new sections. It is important that all the historic glass which still exists is retained (and is protected or carefully removed during the repair process) and that the missing curved pane (LH upper light) is replaced with like for like.
- 2.3.10 The narrow casement with the top hung opening light to second floor level, above the narrow bay window, is to be brought back to full working order and repaired in the same manner described in 2.3.4
- 2.3.11 **Central block** (34 Eldon Street): The 6 no. first and second floor windows of the central block are round-headed plate glass sliding sashes which again have areas of rot along the lower rails, cills and the bottoms of some of the stiles/sash boxes. These are to be repaired by cutting back to sound timber and splicing in new ends. If the cills and lower rails have rotted beyond practical repair, replace these elements using like for like, taking care not to damage the glass in the process. Bring the sashes back to full working order and incorporate draft brushes between and around the sashes to help improve their thermal performance.
- 2.3.12 All windows are to be sanded back and finished with linseed oil paint (petrol blue) Chatsworth by Brouns & Co.
- 2.3.13 **Easternmost block** (36-38 Eldon Street): The shopfront along the Eldon Street frontage of this block and the adjoining door giving access to the first and second floors, are modern softwood replacements which pays little reference to the historic arrangement and are to be replaced with more historically referential alternatives.
- 2.3.14 The easternmost block is fitted with Crittall metal framed windows. There are 10 no. windows to the Eldon Street frontage (4 no. of which are narrow) and 4 no. windows to the two facets forming the acute angle where the building turns into The Arcade.

2.3.15 The larger format windows have rectangular central opening lights to the bottom and smaller square opening lights to the top of each window. These are to be eased and brought back to full operation.

2.3.16 Any corrosion or metal fatigue is to be carefully cut out and repaired by brazing/welding in new like for like sections. Once a scaffold has been erected the full extent of any corrosion can be more accurately ascertained.

2.3.17 Again, great care should be taken to remove and replace any sound historic glass, only replacing cracked or broken panes with cylinder or horticultural glass which replicates the surface undulation of the historic glass.

2.3.18 THE ARCADE ELEVATION

2.3.19 Along the Arcade elevation the historic bronze framed shopfront (back of no. 36-38) with its black granite stall riser and decorative clerestory has been retained (**Fig. 29**). This is to be brought back to full working order and the missing bronze elements along the clerestory reinstated with like for like.



Fig 29. The historic bronze shopfront (far left) on the back of no. 36-38 and the bronze clad pilaster between this shopfront and that of no. 41 The Arcade which is a modern softwood replacement.

2.3.20 The modern shopfront to no. 41 The Arcade is to be replaced with a bronze shopfront that matches the existing historic shopfront to no. 39 The Arcade, with a central single recessed door, black granite stall riser, symmetrical bronze shop windows set at a slight angle from the line of the street and mosaic/terrazzo threshold to match those to the no. 39 and no. 32 entrances.

- 2.3.21 At no. 39 The Arcade the historic shopfront was also retained with its central single recessed door, black granite stall riser, symmetrical bronze shop windows set at a slight angle from the line of the street and mosaic/terrazzo threshold containing the lettering 'Ring Shop'. However, during recent shopfitting works this shopfront and the terrazzo was damaged and, therefore, as part of the grant funded works, is to be reinstated in its original form and the terrazzo repaired/conserved.
- 2.3.22 Above the shopfronts, the Crittall metal frame windows continue along the Arcade elevation, as mentioned previously, in a triple Venetian form. There are four sets of triple windows to the first and second floors, the central wider window of each has a lower rectangular opening light and the narrower side windows have both lower and upper opening lights. At the eastern end of this elevation there the triple form has been replaced by two single windows, presumably because the width of this bay could not accommodate the width of the full triple arrangement. There are 28 windows in total to this elevation, 12 no. wide and 16 no. narrow.
- 2.3.23 As elsewhere, the opening lights are to be eased and brought back to full operation. Any corrosion or metal fatigue is to be carefully cut out and repaired by brazing/welding in new like for like sections. Once a scaffold has been erected the full extent of any corrosion can be more accurately ascertained.
- 2.3.24 Again, great care should be taken to remove and replace any sound historic glass, only replacing cracked or broken panes with cylinder or horticultural glass which replicates the surface undulation of the historic glass.
- 2.3.25 ELEVATIONS FACING THE FORMER YARD
- 2.3.26 The end of the easternmost block which faces up The Arcade has 4 no. first floor and 3 no. second floor windows. Those to the second floor are fitted with the same Crittall metal framed single windows as elsewhere and should be repaired in the same manner previously described. There is a broken pane visible to the upper opening light of one of these windows and the adjoining window has lost all its glass and this is to be replaced with cylinder or horticultural glass to replicate the non-reflective finish of the historic glass.
- 2.3.27 The first-floor windows are protected with vertical security bars which somewhat hinders full operation of the opening lights. Again, the opening lights are to be eased and brought back to full operation and the windows repaired in the same manner described previously.
- 2.3.28 The location of these windows, in the proximity of the single and two storey flat roofs of the extensions in the former yard and in a less over-looked position, makes them susceptible to vandalism, particularly those which are not fitted with security grilles/bars.

2.3.29 The rear elevation of the no. 34 block (**Fig. 29**) has 2 no. 2-over-2 timber sliding sashes which have been damaged by vandals and are in a poor condition. They are to be replaced with new painted hardwood 2-over-2 sliding sashes.



Fig 29. *The rear elevation of the no. 34 block.*

2.3.30 **Improvements to thermal efficiency:** All the repaired historic first and second floor windows (where the flats are to be introduced) are to be fitted with double glazed secondary glazing which will open to provide full access to historic opening lights to provide natural ventilation during the summer months but improve the thermal performance of the building during winter.

2.3.31 All sliding sashes (whether historic or new) are to be fitted with draught brushes (between the upper and lower sash and between the retaining beads and both sashes) again, to help improve the thermal performance of the building and the comfort of building users.