



Application No.6 for Listed Building Consent

for

Reroofing and Energy Enhancement Work to 12 properties

at

Hawthorn Terrace

New Earswick, York

SUPPORTING STATEMENT

(INCORPORATING DESIGN AND ACCESS STATEMENT)

June 2023

BSB
Architecture

Introduction

This statement is submitted in support of the application for Listed Building Consent for the replacement of existing roofs to various properties in New Earswick, York.

12 properties are included in the application (see attached schedule for addresses)

Relevant Policy

Council policy on alterations to listed buildings is set out in the York Development Control draft Local Plan, approved for development control purposes in April 2005.

Policy HE4: Listed Buildings, states: With regard to listed buildings, consent will only be granted for the following types of development where there is no adverse effect on the character, appearance or setting of the building:

Development in the immediate vicinity of listed buildings;

- Demolition;
- Internal or external alterations;
- Change of use;
- Erection of satellite antenna

Policy HE3: Conservation Areas states that: Within conservation areas, proposals for the following types of development will only be permitted where there is no adverse effect on the character and appearance of the area:

- Demolition of a building (whether listed or not);
- External alterations;
- Changes of use which are likely to generate environmental or traffic problems

Historical Background (see also Heritage Statement)

The garden village of New Earswick was established by Joseph Rowntree, the chocolate manufacturer in 1902. Development of the village in the succeeding years was carried out initially by the Joseph Rowntree Village Trust and more recently by the Joseph Rowntree Housing Trust.

About 80% of the homes in the village are rented, the remainder have been fully or part sold under various home ownership initiatives.

The Joseph Rowntree Housing Trust maintains the village infrastructure and open spaces, except where these have been adopted by the local authority.

The master planning for the village and designing of the early houses in the Arts and Crafts style was done by the partnership of Barry Parker and Raymond Unwin, who were actively involved in the garden city movement.

In 1986 a large number of properties in the village were included in the statutory list of buildings of special architectural or historic interest as grade 2 listed buildings. In 1991, New Earswick was designated as a conservation area.

Excluding non-residential buildings (the Folk Hall and Primary School) and shops with living accommodation above (17 to 20 Hawthorn Terrace), 222 self-contained family homes in the village are listed and are therefore subject to the constraints listed building status imposes. Most of the listed homes are located in the area to the east of Haxby Road and compromise a large number of pairs or terraces.

The properties that are the subject of this application for listed building consent, are grade 2 listed buildings of special architectural or historic interest located in the New Earswick Conservation Area.

The Current Position

In 2007 extensive modelling was carried out to identify the energy performance of the Trust's housing stock and this work showed that the solid walled homes were the poorest performing of all. Typical SAP scores in the high thirties and low forties were recorded; equivalent to Energy Band E/F. For comparison, properties built in this century, to current energy standards will typically achieve scores in the high eighties. (The maximum score achievable is 100/Energy Band A)

As many of the occupiers of these properties are on low incomes, or are elderly and living on state pensions, a number are inevitably already experiencing fuel poverty and may not be able to run their heating systems optimally (or to do so may have to make savings elsewhere, for example, food).

As part of its longstanding and ongoing modernisation programme the Trust carries out a basic package of energy improvement to its rented dwellings; this includes fitting a high efficiency condensing boiler, improved heating controls (programmers, wall thermostats and thermostatic radiator valves, etc.), pipe insulation, upgrading of some loft insulation and draught stripping. This package improves the average SAP score by 12 points, reduces the typical fuel bill by about £200 per annum and the CO2 emissions by about 1.5 tonnes per year. In addition to this, internal solid wall insulation (dry lining) has been installed wherever possible, and where residents request it. (Where residents do not want it, it is installed when the property becomes vacant).

The Trust set a target of raising the SAP score of its stock from the average of 65 (band D) as assessed in 2007, to 81 (band B). It was acknowledged that additional work would be necessary to improve the poorest performing dwellings by a greater amount, if the target was to be achieved.

Installation of new high performance, softwood double glazed windows, the fitting of wall insulation to the inside faces of the external walls (dry lining) and low energy light fittings were identified as the means to achieve a significant improvement to the energy performance of these dwellings. The average SAP score of the solid walled properties would be increased by a further 13 points, average fuel costs reduced by a further £210 per annum and CO2 emissions reduced by a further 1.4 tonnes per annum if this package was implemented compared with the position after the standard modernisation package is carried out.

In order to facilitate the proposed improvements, the Housing Trust secured Listed building Consent to replace the existing windows and doors with new energy efficient double-glazed windows and doors and to install insulated dry lining. Installation of these improvement works has now been completed.

The aim of the Trust is to continue improving the energy performance and affordability of their properties. One area that has been a source of concern for some time has been the inability to properly insulate the whole roofspace because of the sloping ceilings and this application seeks to remedy that problem during the reroofing work.

Resident Consultation

The Trust has consulted the residents of the properties over time, as it has done for previous phases of the energy enhancement programme. The desire from residents is for the work to be done as soon as possible as these homes are expensive to heat and have a long history of leaking roof coverings.

Access

The proposals have no implications for access to, or within the property.

Heritage

Please see separate Heritage Statement

Detailed Scope of Work

This application for LBC applies to numerous residential properties (houses) within the garden village setting of New Earswick which is located c.2.2 miles north from York City Centre and is within the Historic Landscape Character Area 46: New Earswick.

Most of the listed residential properties and their tiled outbuildings are in need of general improvement to ensure that the fabric of the buildings are protected against further decay and can also provide the residents with wind and water proof housing which is also energy efficient and free of defects.

JRHT have identified that certain properties are in need of immediate roofing replacement because they are not watertight and this is affecting the health safety and welfare of the residents. On an annual basis JRHT are spending a significant amount on roof repairs on the New Earswick estate and this is not sustainable or desirable given the consequential damage caused by a roof leak.

The existing roof coverings generally across the area are well past their originally intended serviceable lifespan and are showing signs of wear and tear. The roofs do not have an underlay material and the roof spaces of the houses are not clean or healthy insofar as there has been years of fine debris accumulation and infestation.

The main roofs and outbuildings of the properties are covered in a Gaelic single roman clay tile with a large flat pan and a delicate single roll. Some roof tiles have been replaced in the past and are not the original tiles from the early part of the 20th Century through to the mid 20th Century. Later 20th Century specialist clay tiles have been fitted to allow for roof ventilation, extract and heating appliance flues.

It has been noted that some porch and bay roofs are roofed in plain clay tiles and these are to be replaced. The loft spaces to the bay windows can be insulated as part of this work.

The porch roofs which are covered in timber lap boarding are not to be replaced at this time unless they are found to be rotten.

The clay ridge and hip tiles are of two main types i) an angular shape and ii) a half round type. The bedding and pointing used for the tiles generally has been a cement mortar suitable for the level of exposure. Smaller scale hip tiles are used on the bay windows.

The roof spaces have been insulated at various points in time to a lesser or greater extent. The design of the majority of house types limits the opportunity to insulate the loft spaces completely. The presence of low eaves and vaulted first floor ceilings with low internal headroom means that the skimming (sloping ceiling section) cannot be insulated from the underside and can only be insulated from above. The existing roof spaces would be re-insulated with a mineral fibre quilt to a much improved standard and ventilated to comply with the Building Regulations.

From inspection it is also noted that the lead roofing accessories such as valleys, flashings, pipe collars, and leadwork in general are in need of replacement to extend the life of the properties and maintain the serviceability of the new roofing as a whole.

From inspection it is noted that the existing rooflights are a variety of design and age. Some have been replaced with a later style of rooflight but in all cases the glazing is single and not energy efficient causing condensation issues especially in the bathroom locations where some of the rooflights are located. Consequently the rooflights are to be replaced with the same size 'conservation style' rooflights.

No roof timbers are to be replaced unless they are found to be rotten.

No fascia, verge or barge boards are to be replaced unless they are found to be rotten

No CI gutters or downpipes are to be replaced unless they are broken. Any leaking gutters or downpipes will be carefully dismantled and reassembled with new seals and bitumastic coating inside for watertightness.

All replacement of tiles, hips, ridges and roofing accessories, battens, leadwork etc would be like for like. New underlayment would be a breathable type used in accordance with good roofing practice for additional wind and watertightness combined and to prevent condensation.

The reroofing will be carried out in a pepper-pot fashion insofar as those addresses needing an urgent reroof will be prioritised first. Using an identical tile to that being removed it will be possible to use the same coursing gauge to ensure that there are no straight joint when adjoining a roof that isn't to be reroofed at the same time. Having the benefit of a LBC for the whole block will ensure re-roofing can be carried out in a logical phased manner thereafter.

JRHT are applying for LBC on behalf on the owner occupiers so that they have permission if they want to replace their roof too.

Specification

1. All existing main and secondary roof coverings are to be removed including tiled bays, porches and outbuildings, including all roofing accessories such as hip and ridge tiles, ventilation tiles, svp pipe penetrations and the like. Care is to be taken to not damage any tiles on any adjacent buildings that are not being reroofed at the same time.
2. All existing cement fillets, verges, bedding or flaunching at edges, ridges, abutments etc. are to be removed.
3. All existing leadwork to dormer cheeks and dormer tops, lead valleys, stepped, abutment, and cover flashings, lead hoppers, pipe collars etc. is to be removed.
4. All existing rooflights are to be removed including all associated flashings.
5. All existing insulation in the roof spaces is to be removed and roof spaces generally cleaned.
6. Existing main timber roofs including outbuildings are to be re-covered with new Wienerberger Gaelic Single Roman Clay Tiles (342 x 255 mm) in Natural Red with a minimum headlap of 75 mm (the actual headlap is to be determined by the existing tile coursing to create an exact match). Wienerberger roof tiles must be laid and fixed to comply with BS 5534: the British Standard Code of practice for slating and tiling, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. New tiles are to be fixed to tanalised timber roofing battens to match existing and at least 38 x 25 mm for rafters up to 450 c/c or 50 x 25 for rafters up to 600 c/c. Nail size and type shall be 50 x 3.35 mm aluminium ring shank clout head. The minimum pitch of all roofing is 30 degrees and tiles shall be clip fixed to battens as manufacturers recommendations.
7. NB. Clay tiles are subject to small variations in size because of drying and firing shrinkage in the manufacturing process. Before deciding on the batten gauge and linear coverage, the roof tiler should inspect each batch of tiles to ensure that the correct minimum headlap and sidelap are achieved.
8. Existing porch and bay timber roofs are to be re-covered with new Wienerberger Humber Plain Rosemary tiles in Natural Red with a minimum headlap of 65 mm (the actual headlap is to be determined by the existing tile coursing to create an exact match). Wienerberger roof tiles must be laid and fixed to comply with BS 5534: the British Standard Code of practice for slating and tiling, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. New tiles are to be fixed to tanalised timber roofing battens to match existing (100 mm spacing approx.) and at least 38 x 25 mm for rafters for rafters up to 600 c/c. Nail size and type shall be 50 x 3.35 mm aluminium ring shank clout head. The minimum pitch of all roofing is 35 degrees and tiles shall be clip fixed to battens as manufacturers recommendations.
9. The timber roofing battens supporting the tiles are to be laid on a Tyvek Supro (or similar) breathable roofing membrane with minimum 150 mm horizontal laps and 300 mm vertical laps fixed to rafters.
10. At all eaves a proprietary over fascia ventilation strip (10 mm) is to be fitted to provide effective resistance to large insects and driving rain.

11. At all eaves a proprietary underlay support tray is to be fitted to prevent sagging of the underlay behind the fascia and eliminate the problem of long-term deterioration of the underlay at the eaves.
12. At all eaves a proprietary spacer tray is to be fitted over the rafters to provide a clear air path over the insulation irrespective of soffit width and roof pitch.
13. At all eaves a proprietary bird comb filler is to be fitted.
14. The new roofing is to include all new traditional style accessories such as clay ridge tiles, hip tiles, ventilation, and flue tiles to replace existing. It should be noted that both angular and half round ridge and hip tiles are present across the site and replacement is to be strictly like-for-like. NB the bay window hip tiles are smaller in size.
15. The new roofing is to include traditional methods such as cement pointing and bedding where required for example on ridge tiles, hip tiles, valleys, verges and any making good to party walls ready to receive firestopping. Any verges are to include fibre cement undercloak with a 50 mm projection to support the cement pointing. Any hip irons are to be replaced with new to match existing.
16. New insulation to roof spaces is to include the following:
 17. 300 mm of mineral fibre quilt in two layers, with the first layer of 100 mm laid between the ceiling joists and the second layer of 200 mm laid across first layer at 90 degrees. K value 0.044 W/mK
 18. 50- 100 mm of Kingspan Kooltherm K107 pitched roof insulation board laid between existing rafters with sloping soffit. Thickness varies depending on depth of rafters leaving a 50 mm clear gap above the insulation to the underside of the roofing underlay.
 19. Firestopping over party walls is to be provided by a 50 mm compressible mineral fibre quilt laid over the sarking felt and between the battens.
 20. Firestopping at boxed eaves is to be provided by a 50 mm compressible mineral fibre quilt.
21. All existing leadwork is to be replaced with new leadwork (code 3, 4 and 5 as dictated by the LDA). This includes dormer cheeks and dormer tops, lead valleys, stepped, abutment, and cover flashings, lead hoppers, pipe collars etc.. All leadwork is to be carried out in accordance with the LDA by qualified tradesmen.
22. All existing rooflights are to be replaced with new double glazed 'conservation style' rooflights. The new units are to match the existing in terms of size and profile but the glazing shall comprise of 4 mm toughened outer / 16 mm argon cavity / 4 mm Low E toughened inner giving a u value of 1.4 W/m²K. The frames are to be made in steel and polyester powder coated finished in black (white internally). All flashings are to be supplied in lead to match existing.
23. All CI gutters are to be inspected and repaired as necessary. All gutters are to be cleaned and given a coat of rubberised or bitumen paint internally.

Materials

All the main materials are to be replaced to match existing.

1. Wienerberger Gaelic Single Roman Clay Tiles (342 x 255 mm) in Natural Red
2. Wienerberger Humber Plain Rosemary tiles in Natural Red

See over for data sheets

Gaelic

Product Technical Information Sheet

Minimum roof pitch	30°
Headlap	75 mm
Batten spacing (fixed gauge) ¹	267 mm
Size of tile ¹	342 x 255 mm
Covering capacity	17.0 tiles per m ²
Cover width	220 mm
Profile depth	43 mm
Hanging length	315 mm
Weight as laid	40.8 kg per m ²
Weight per 1000 (including pallet & packaging)	2.577 tonnes
Weight per tile	2.4 kg
Weight per pallet (including pallet & packaging)	0.670 tonnes
Quantity per pallet	260
Quantity per row/band	Bottom: 43, centre: 43, top:44
Quantity per layer	Bottom: 86, centre: 86, top:88
Battens per m ²	3.7 m
Batten size - up to 450 mm rafter centres	38 x 25mm
Batten size - up to 600 mm rafter centres	50 x 25mm
Nail size/type for tiles	50 x 3.35 mm aluminium ring shank clout head



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¹Clay tiles are subject to small variations in size because of drying and firing shrinkage in the manufacturing process. Before deciding on the batten gauge and linear coverage, the roof tiler should inspect each batch of tiles to ensure that the correct minimum headlap and sidelap are achieved. Unless otherwise stated, data is based on the tiles laid at minimum headlap.

Tile Fixing - Sandtoft roof tiles must be laid and fixed to comply with BS 5534: the British Standard Code of practice for slating and tiling, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. To ensure compliance with these Standards we strongly recommend that a calculated fixing specification be obtained from Sandtoft Technical Support or using Sandtoft's online FixSPEC tool at <https://roofspec.wienerberger.co.uk/FixSpec/Default.aspx>

Product specification is subject to change and will be updated accordingly. Date of this data sheet publication; 08/09/2020

Humber Plain Tile

Product Technical Information Sheet

Roof Tiling

Material	Clay
Minimum roof pitch	35°
Headlap	65 mm
Batten spacing (fixed gauge) ¹	100 mm
Size of tile ¹	265 x 165 mm
Covering capacity	60 tiles per m ²
Cover width	165 mm
Profile depth	13 mm
Hanging length	245 mm
Weight as laid	63.0 kg per m ²
Weight per 1000 (including pallet & packaging)	1.123 tonnes
Weight per tile	1.05 kg
Weight per pallet (including pallet & packaging)	0.606 tonnes
Bond	Cross / Broken
Quantity per pallet	540
Battens per m ²	10 m
Batten size - up to 600 mm rafter centres	38 x 25 mm
Nail size/type for tiles	38 x 3.35 mm aluminium ring shank clout head

Vertical Tiling

Material	Clay
Minimum roof pitch	75°
Headlap	38 mm
Batten spacing (fixed gauge) ¹	114 mm
Size of tile ¹	265 x 165 mm
Covering capacity	53 tiles per m ²
Cover width	165 mm
Profile depth	13 mm
Hanging length	245 mm
Weight as laid	55.7 kg per m ²
Weight per 1000 (including pallet & packaging)	1.123 tonnes
Weight per tile	1.05 kg
Weight per pallet (including pallet & packaging)	0.606 tonnes
Bond	Cross / Broken
Quantity per pallet	540
Battens per m ²	8.8 m
Batten size - up to 600 mm rafter centres	38 x 25 mm
Nail size/type for tiles	38 x 3.35 mm aluminium ring shank clout head



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Tile Fixing - Sandtoft roof tiles must be laid and fixed to comply with BS 5534: the British Standard Code of practice for slating and tiling, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. To ensure compliance with these Standards we strongly recommend that a calculated fixing specification be obtained from Sandtoft Technical Support or using Sandtoft's online tool at www.all4roof.co.uk

Product specification is subject to change and will be updated accordingly. Date of this data sheet publication; 29/09/2022

Schedule of Properties

LBC Application No. 6 (12 Dwellings)

- 1 Hawthorne Terrace
- 2 Hawthorne Terrace
- 3 Hawthorne Terrace
- 4 Hawthorne Terrace
- 5 Hawthorne Terrace
- 6 Hawthorne Terrace
- 7 Hawthorne Terrace
- 8 Hawthorne Terrace
- 9 Hawthorne Terrace
- 10 Hawthorne Terrace
- 11 Hawthorne Terrace
- 12 Hawthorne Terrace

NOTES

Do not scale from this drawing. All proposed alterations are to be taken from this drawing. Contractor must verify all dimensions as shown on drawings before commencing any work or stop drawings. Report any discrepancies to the architect before commencing work. If this drawing exceeds the quantity shown in any way the architect is to be informed before the work is finished. Work with the Construction Design & Management (Regulations 2015) in mind to start work. Pre-Construction Health and Safety Formwork has been produced by the Principal Designer and a Principal Contractor has produced a Construction Phase Health and Safety Plan. This drawing is copyright and must not be reproduced without consent of BSB Architecture. This drawing is derived from the CAD file: S:\2022\22810_Replacement Roofs, New Earswick\030_BSB Documents\010_030_Drawing\02_Current.dwg
 Drawing: 02_Current
 Author: 030_April2022
 030_030_030_April2022

REVISIONS

Rev	Description	Date	By	Checked
P1	Final Issue	13-06-23	jm	13-06-23

SCHEDULE OF PROPERTIES

1	Hawthorne Terrace
2	Hawthorne Terrace
3	Hawthorne Terrace
4	Hawthorne Terrace
5	Hawthorne Terrace
6	Hawthorne Terrace
7	Hawthorne Terrace
8	Hawthorne Terrace
9	Hawthorne Terrace
10	Hawthorne Terrace
11	Hawthorne Terrace
12	Hawthorne Terrace

- Green shaded properties are or adjacent to application site - tenant occupied
- Red hatched properties are or adjacent to application site - owner occupied



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RIBA
 CLIENT
Joseph Rowntree Housing Trust
 PROJECT
**Replacement Roof Programme
 New Earswick, York**

Acclaim Constructionline
 Drawing Status: For Information_S2
 Scale: 1:1250
 Drawing Date: 30/01/23
 Checked Date: 30/01/23
 Drawing No.: 22810-BSB-00-XX-DR-A-0026
 Revision: P1

