

gleeds[®]



Feasibility Report

FOR MELTON BOUROUGH COUNCIL

BECKMILL COURT, MELTON MOWBRAY

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CONTENTS

1.0	EXECUTIVE SUMMARY	1	6.0	COMMUNAL CIRCULATION AREA	25
2.0	BACKGROUND	3	7.0	HEATING AND VENTILATION WORKS	27
2.1	Introduction	3	7.1	Introduction	27
2.2	Updated Condition Survey	4	7.2	Selection of Heating Solutions	27
2.3	Recommended Repairs	5	7.3	Gas Supply	29
3.0	STAKE HOLDERS ISSUES	8	7.4	Heating and Hot Water	32
4.0	EXTERNAL STRUCTURAL ENHANCEMENTS	9	7.5	Mechanical Ventilation	35
4.1	External Envelope Upgrades	9	8.0	STATUTORY CONSENT	37
4.1.1	Introduction	9	8.1	Section 278 Agreement – Adopted Roads	37
4.1.2	Proposals	9	8.2	Road Closures	37
4.2	Structural	17	8.3	Building Regulation and Consequential Improvements	38
5.0	LANDSCAPING	20	8.4	Leaseholders and Section 20 Notification	39
			9.0	PROGRAMME	40

Approved for Issue

Director: T R Shipman BSc (Hons) MRICS

Date: February 2015

Appendix A: Forecast Project Programme

Appendix B: Short Form Condition Survey

Appendix E: Heating and Hot Water Solutions Payback Periods (2012)

Appendix F: Indicative Structural Drawings



1.0 EXECUTIVE SUMMARY

Built in 1975 Beckmill Court is of cavity brick wall construction with concrete floors and pitched timber roofs with roof tiles. The site comprises of one and two bedroom flats arranged in multiple two and three storey blocks of flats with associated parking, soft landscaping and bin store.

In 2012 Melton Borough Council instructed Gleeds to undertake a condition survey report of Beckmill Court. This report highlighted issues with the antiquated electric heating systems coupled with condensation and subsequent black mould growth within flats. Following on from the condition survey Gleeds were instructed by Melton Borough Council to undertake a feasibility assessment of installing new gas fired heating systems and improving the appearance and thermal performance of the site to alleviate widespread issues associated with condensation whilst promoting the desirability of Beckmill Court to future residents.

This report re-visits the previous feasibility study and provides an update to the original condition survey. The report assesses the viability of installing new gas fired heating at the site (including new gas supply) and updates cost information for implementing external enhancements at the site to promote a sense of ownership, increase sense of security and enhance the desirability of Beckmill Court as a place to live. A summary of overall works considered within this report are as follows:

- **Installation of new gas fired heating systems.** Design philosophy – strip out existing electric heating system, install new gas fired boiler within flat store rooms and connect gas supply pipes from meters located at GF level, through electrical risers within the central core of the blocks and into existing meter cupboards off existing landings. New gas supply required and considered as part of this report.
- **New mechanical ventilation.** Existing flats have condensation issues caused partly by a lack of suitable ventilation and potential inadequate or irregular heating patterns (works above will assist with total mitigation). This report considers the installation of new mechanical extract ventilation within the kitchen and bathrooms of each flat to remove moisture at source.
- **External Building Enhancements.** The report assesses the feasibility of installing new insulated renders and cladding to the external facades of all flats from an aesthetic, structural, cost and programme perspective. The proposals include the replacement of the existing windows with aluminium or PVC windows and involve building out of central ‘drying’ areas to add architectural interest to the facades. Existing steel / wire mesh handrails / balustrades are to be replaced with stainless steel glazed replacements.

- **Improvements to Landscaping.** Existing landscaping is unattractive and worn with the site being used as a pedestrian walk through and town car park. The proposals consider the improvements of the perimeter fencing with defensive planting aimed at improving the security and enclosure of the site. Existing tarmaced areas are to be replaced with block pavers with an overhaul to the schemes parking philosophy. A seated area, children's play area and a new planting scheme aim to create a more pleasant place to live.
- **Condition Survey Related Work.** The buildings superstructure and individual flat issues are highlighted and addressed through the works proposed above with the exception of poor condition asphalt coverings and lack of lighting in the communal areas which require renewal.

A preliminary assessment of the project programme has been undertaken, see Appendix A, a summary of the key milestone dates are outlined below.

Key Milestone	Date
Board Approval to Works	Friday 20th March 2015
Gleeds Appointment	Monday 23rd March 2015
New Gas Supply Application	Friday 6th April 2015
Design Development	Friday 22nd May 2015
Board Approval to Proceed to Tender	Friday 5th June 2015
Contractor Appointment	Friday 26th June 2015
Gas Supply Install	Friday 21st August 2015
Contract Start Date	Monday 20th July 2015
Contract Completion Date	Friday 1st January 2016

Gleeds welcome any further discussions or queries in connection with the advice given within this report.

2.0 BACKGROUND

2.1 Introduction

Gleeds Building Surveying Ltd were invited to a meeting with Melton Borough Council at Parkside, Melton Mowbray on Thursday 6th November 2014 to discuss the progression of works at Beckmill Court as previously assessed by Gleeds in 2013. At this meeting Gleeds were requested to prepare an updated concept development report in accordance with the following brief:

1. Update the previous condition survey for the site along with updated budget costs
2. Provide proposals for the implementation of the external insulated render systems and windows to improve the aesthetics of the development. Provide accurate budget costs for the proposed works, allowing to procure as-existing drawings of the site and to undertake preliminary structural appraisals to enable pricing.
3. Provide an indicative landscaping scheme along with proposed budget costs for repair works.
4. Progress with the assessment of previous recommendations to install gas fired heating at the site
5. Appraise the proposed scheme (external enhancements, building repairs, new boilers and landscaping) in terms of statutory consents, sequencing, health & safety and programme

This report evaluates the feasibility of implementing estate improvement works at Beckmill Court from various professional perspectives including architectural, building surveying, services engineering, cost management, and structural engineering.

This report has been prepared for the sole benefit of the person to whom it is addressed. No third party may rely on it unless Gleeds Building Surveying Limited has issued a letter to that third party referring to this report by date and reference number and stating that the third party may rely on it. Gleeds Building Surveying Limited will not unreasonably refuse a request to issue such a letter to a single third party (who may not assign it). Gleeds Building Surveying Limited will not have any liability to any such third party which is greater than its liability to the party to whom this report was originally addressed.

2.2 Updated Condition Survey

Built in 1975 Beckmill Court is of cavity brick wall construction with concrete floors and pitched timber roofs with roof tiles. The site comprises of one and two bedroom flats arranged in multiple two and three storey blocks of flats with associated parking, soft landscaping and bin store.

Appendix B contains the full updated condition survey with costed repairs.

A brief summary of issues highlighted within the report are as follows:

Building Superstructure

- Weathered brickwork noted to top of gable ends and around openings with numerous frost damaged bricks noted at low level beneath the DPC.
- Inadequate detailing to freestanding brickwork and parapet walls, leading to decay of mortar jointing.
- Missing lead covering and flashings noted to porch roofs at entrances to common areas.
- Vertical and diagonal cracking up to 10mm in width was noted within the common stairwell to flats 34-41 and 15-20 at the abutment between the stairwell and the adjoining building.
- Failed / failing and ill-fitting metal window casements where not previously replaced by u-PVC units, including blown gasket seals. DPC may also be missing or absent from sill level, contributing to the deterioration of brickwork below.

Communal Circulation Areas

- Poor condition of mastic asphalt covering to some open balconies, including crazing of the surface and damaged up stands leading to deterioration of the underlying concrete. Replacement of all asphalt coverings are to be anticipated within the next 10 years.
- Common areas found to be poorly lit generally, including an absence of emergency lighting within stairwells.
- Full height glazed screens to communal circulation areas show no evidence of collision resistance and should be replaced with full height glazed collision resistant screens complying with building regulations.



Example of vertical and diagonal cracking



Example of damaged and poor condition asphalt



Example of weathered brickwork

Individual Flats

- Widespread evidence of condensation and subsequent black spot mould growth within residential flats.
- Flats generally noted to have inadequate means of providing internal ventilation and are generally poorly insulated.
- Electric heating systems in poor condition and at the end of its economic lifespan.

2.3 Recommended Repairs

Recommended repair options have been included within the full condition survey. However the key items outlined can be summarised as:

- Cut out and replace frost damaged brickwork and repoint where needed.
- Remove failing lead flashing and redress.
- The diagonal and horizontal cracking should be monitored for further movement and an assessment made on its repair. If there is no further movement, the crack should be re-pointed.
- Replace existing metal framed windows and allow for new DPCs and cavity closers and jambs.
- Provide new upgraded lighting to the communal stairwells.

3.0 STAKE HOLDERS ISSUES

During the stakeholders meeting held with MBC a number of issues were identified with the scheme which they wish to address. These issues can be summarised as;

- The scheme suffers from anti-social behaviour. This causes residents to feel unsafe.
- Communal areas are unattractive and unwelcoming.
- Residents are complaining to MBC that they have condensation issues within their properties.
- Residents are unhappy that non-residents park at Beckmill Court when going into the town centre, thus leaving nowhere for residents to park.
- The site needs to look and feel nicer.
- There is a lack of a feel safe atmosphere throughout the scheme.
- The stairwells and communal areas are dark and cold.

All of the above issues contribute to Beckmill Court having a negative reputation locally. This has meant the properties are difficult for MBC to let. This has had the added effect of increasing MBC's management cost of the scheme, for example through increased repair costs.

This report will look at the feasibility of implementing the proposed works outlined in Section 2.1 to address the issues listed above.

4.0 EXTERNAL STRUCTURAL ENHANCEMENTS

4.1 External Envelope Upgrades

4.1.1 Introduction

In 2012 Melton Borough Council instructed Gleeds to procure initial 3D visuals for improving the aesthetic appearance of Beckmill Court. These visuals were provided along with a high level budget cost. In order to ascertain an accurate budget cost for the scheme Gleeds have been instructed to procure as-existing elevation drawings of the flats and proposed elevation drawings for the purpose of formulating an accurate forecast project cost.

4.1.2 Proposals

The existing external buff brickwork has limited articulation and is looking tired. A pallet of materials has been considered and selected to improve the overall appearance of the accommodation whilst also ensuring that energy is conserved through the installation of a cladding and render system with improved insulation properties.

3D visuals overleaf clearly show the proposed external works and are followed by differing material options considered.

Option A – Insulated renders / Corium Brick Cladding (Vantage Point 1)

Option A – Insulated renders / Corium Brick Cladding (Vantage Point 2)



Option B – Insulated Renders and Timber Cladding (Vantage Point 1)

Option B – Insulated Renders and Timber Cladding (Vantage Point 2)

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Option A - Before and After (Vantage Point 1)



Option B – Before and After (Vantage Point 2)

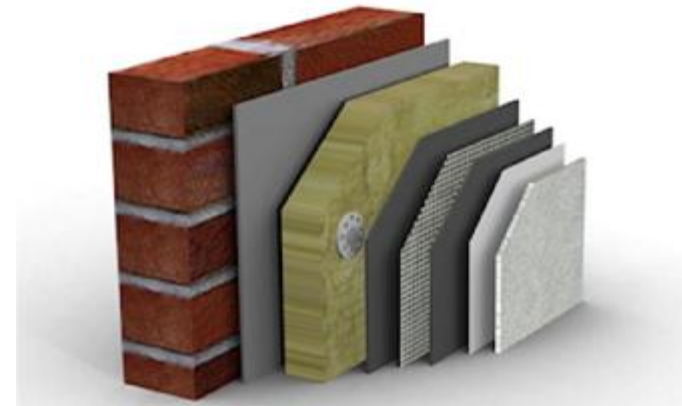


Insulated render systems – PermaRock insulated acrylic render system

PermaRock provide an extensive range of protected insulation systems, providing significant thermal benefits and improving comfort levels within the home environment. The system incorporates rigid insulation boards which are mechanically fixed, ready to receive a PermaRock base coat and glass fibre reinforcing mesh followed by another base coat and the chosen through colour decorative render finish, as seen adjacent and highlighted below. With a minimum life expectancy of 30 years, the product provides longevity whilst greatly improving the aesthetics of the brickwork. Differing colour and finish option can be selected to suit the scheme requirements.

Option A – PermaRock Insulated Render (Vantage Point 1)

Visual showing potential of render.



Insulated brick cladding system – Corium brick cladding

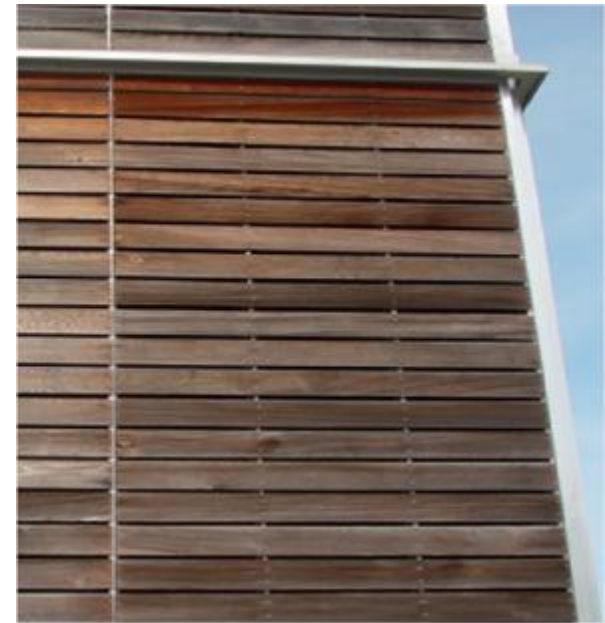
Corium brick cladding comprises brick tiles clipped into a proprietary galvanised steel backing section, seen below right. The bricks are then mortared into place to provide a traditional finish. The design offers a wide variety of brick facings, with a grey finished brick shown below, giving a life expectancy of over 60 years. Through careful design selection, the existing brick work can be transformed to compliment other elements improving the overall appearance of the building.

Option A – Corium Brick Cladding (Vantage Point 1)



Alternative insulated timber cladding – western red cedar or equivalent

As an alternative to the corium brick cladding described previously it is also proposed that a timber cladding could be used. The use of a timber such as Western Red Cedar or European Larch would be best suited due to their natural resistance to insects, moisture and rot. Species such as these don't have a need to be treated with preservatives, and have a natural lifespan of over 50 years keeping future maintenance costs to a minimum. One of the additional advantages of timber cladding is the reduced carbon footprint and its improved sustainability through responsible procurement, such as the certification of sourcing. However, as will be shown in the budget costs in Appendix D timber is a more expensive cladding option.

Option B – Timber Cladding (Vantage Point 2)

Western Red Cedar after 13 years exposure



Larch Cladding

Aluminium windows – powder coated by Metal Technology

Metal technology provide a wide range of thermally enhanced powder coated aluminium windows that provide structural integrity, weather performance, thermal enhancement and security. Powder coated aluminium is a very durable window material and should not rust, discolour or peel giving a long lasting attractive appearance. These windows would be more energy efficient than the existing.

**PVCu windows – coloured profiles by Rehau**

REHAU PVCu window systems offer a comprehensive range of window styles with an improved level of energy efficiency and a wide range of colour finishes, including grey, improving the overall appeal of the scheme. This PVCu system is a more expensive option, with a budget costing of £63,700 more than the aluminium option.

Below, the comparison of existing and proposed highlights the impact the new glazing would have to the overall feel of the scheme, utilising them as a positive design feature as opposed to a necessity.



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Balcony Balustrades – Neaco Elan glass and steel

The Elan semi-structural glass system is a stylish and minimalist alternative to traditional balustrades. The glass element is supported by a small floor channel below and secured by a top rail above. Compared to the existing metal handrail, it provides a maintenance free modern balcony with a 'clean' feel to it. It also improves the safety of the area for children, making it harder to climb. The visual benefits can quite clearly be seen below.

The existing asphalt walkways are approaching the end of their economic life and replacement has been considered and costed within this report. A like-for-like finish has been allowed for within this report.



Example of Neaco Elan Glass Balustrade



Example of asphalt walkway

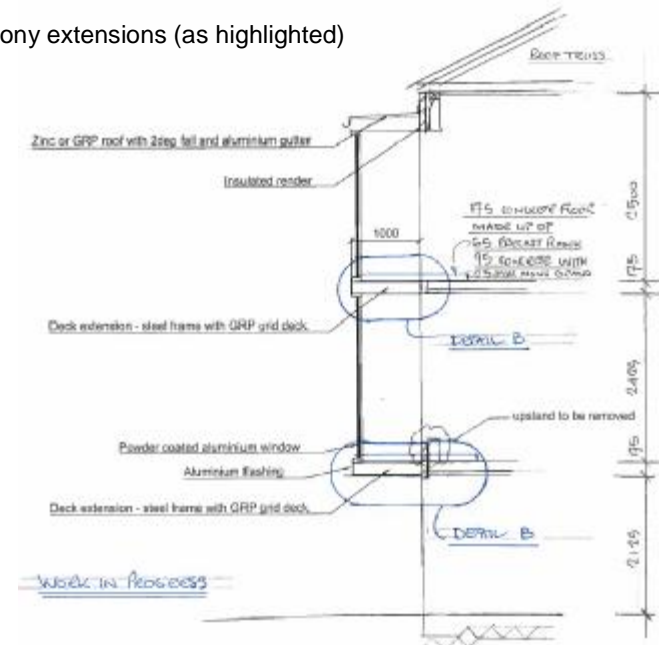
Option A - Before and After (Vantage Point 1)

4.2 Structural Works

Structural engineers Howard Ward Associates have been engaged to provide proposed drawings for the balcony area extensions shown on the architectural visuals, to ensure that these works are feasible and to aid the formulation of robust budget costs. Two separate details have been provided for these works to account for all proposed areas within the scheme. These can be described as cantilevered balcony extensions fixed to the building and full height balcony extensions constructed off new foundations. These details have been highlighted for reference on the visual below.



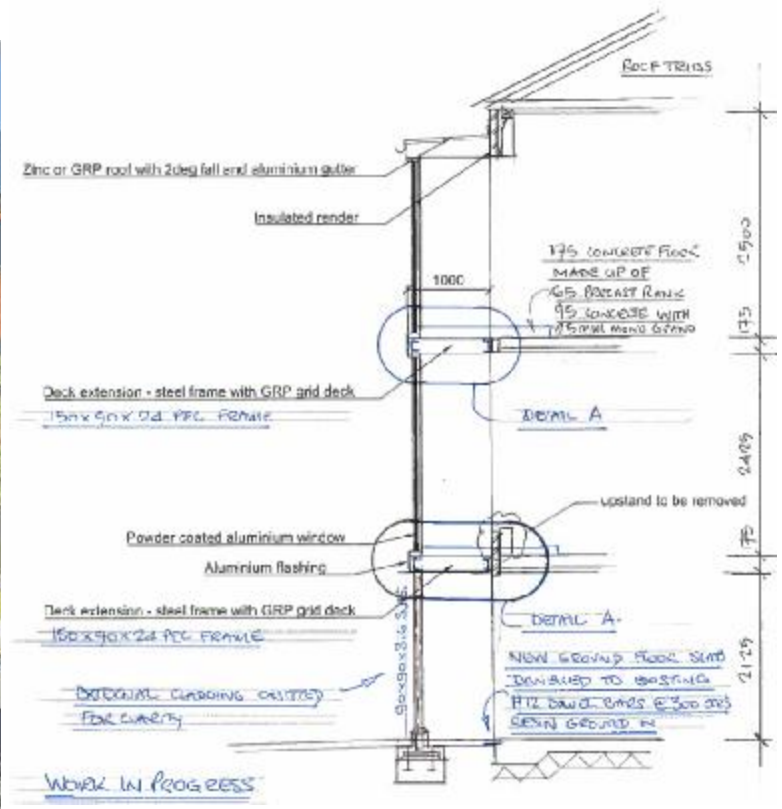
Cantilever balcony extensions (as highlighted)



It is proposed that the cantilevered balcony would be formed by a proprietary fixing rail system, based around parallel flange channels fixed directly to the internal brickwork of the building. The floors within the balcony areas would then be extended using a steel frame with a timber infill, finished with a GRP grid deck. Powder coated aluminium windows and external cladding would then be fixed to the newly formed framework of the balcony area to provide its external wall finishes. A zinc or GRP roof would then be installed to the top of the balcony extension to ensure it is watertight, while maintaining the overall concept of its design.

Feasibility Report for Beckmill Court, Melton Mowbray

Full height balcony extensions (as highlighted adjacent)



The full height balconies would be based on a similar system to the cantilevered balconies described. However rather than being fully cantilevered the extended balconies would be partly supported by a newly constructed foundation at ground level. A new concrete ground floor slab would be laid and connected to the existing buildings foundation.

The concept of these structural details could be extended to include for further architectural details such as the finial shown on these visuals.

4.3 Costs and External Works Conclusion

To carry out the works described it will also be necessary to carry out the following incidental works:

- Extend the existing roof structure to allow for the new wall finish.
- Re-site external services such as communal television aerial.
- Renew all rainwater goods.
- Box out of existing window openings to accommodate new wall finish.

5.0 Landscaping

The overall aim of the landscaping works is therefore to encourage a sense of ownership of the communal areas by the residents, whilst addressing their existing security fears. At the same time the opportunity will be taken to improve the external appearance of the scheme which will share the same philosophy as the external works described previously. When Gleeds previously met with the residents and stakeholders of the scheme the following specific issues were raised:

- There are no sitting areas.
- Car park used by town centre shoppers.
- The scheme is a walk through area for all and sundry.
- Entrance areas lack identity.
- Poor signage on scheme.
- Lack of lighting.

The following landscaping proposals have been designed to address these concerns.

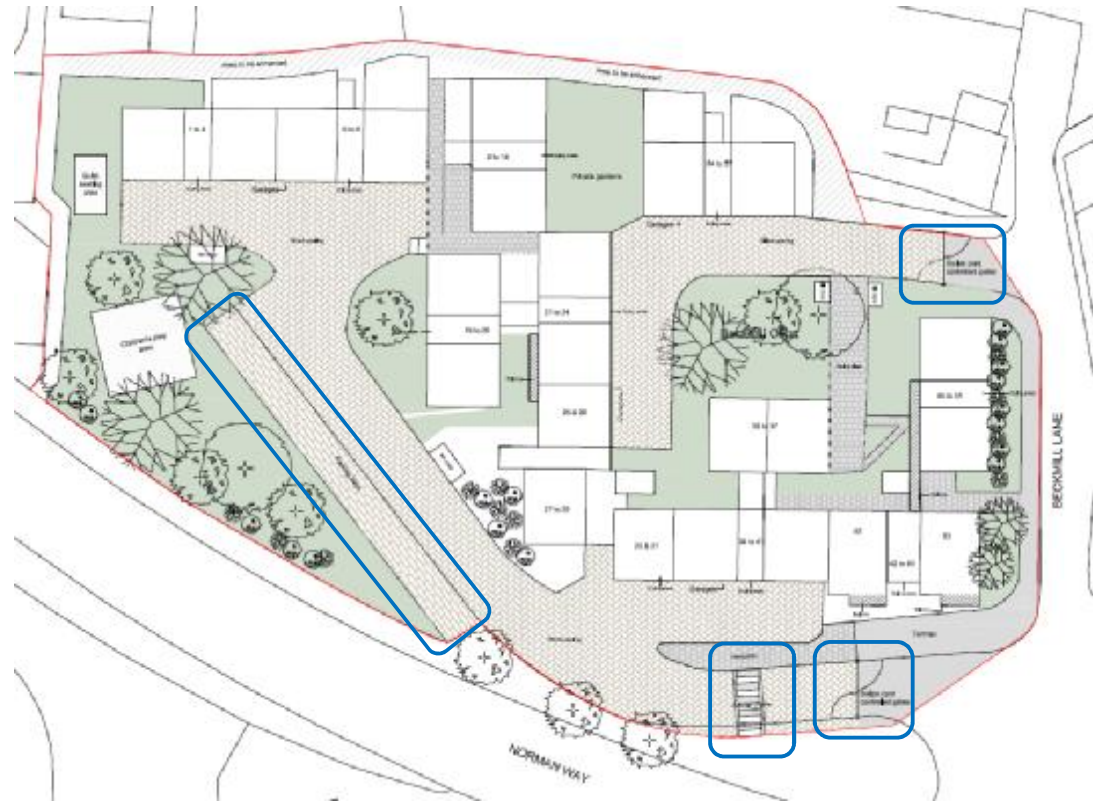
Car Parking and Traffic Management

The existing car parking philosophy will be altered. It is proposed that access controlled entrance barriers are installed which will prevent parking, other than by authorised people, such as residents. This will address the issue of un-authorized parking by non-residents.

The design approach is intended to calm traffic and improve safety, a particularly important issue given the presence of children living in the scheme. A pedestrian crossing has been added to improve accessibility to the scheme. Marshalls 'Charnwood' range of block pavers and paving slabs offer an attractive value-for-money solution and are shown as the proposed paving material.



Example of Marshalls 'Charnwood' Pavers

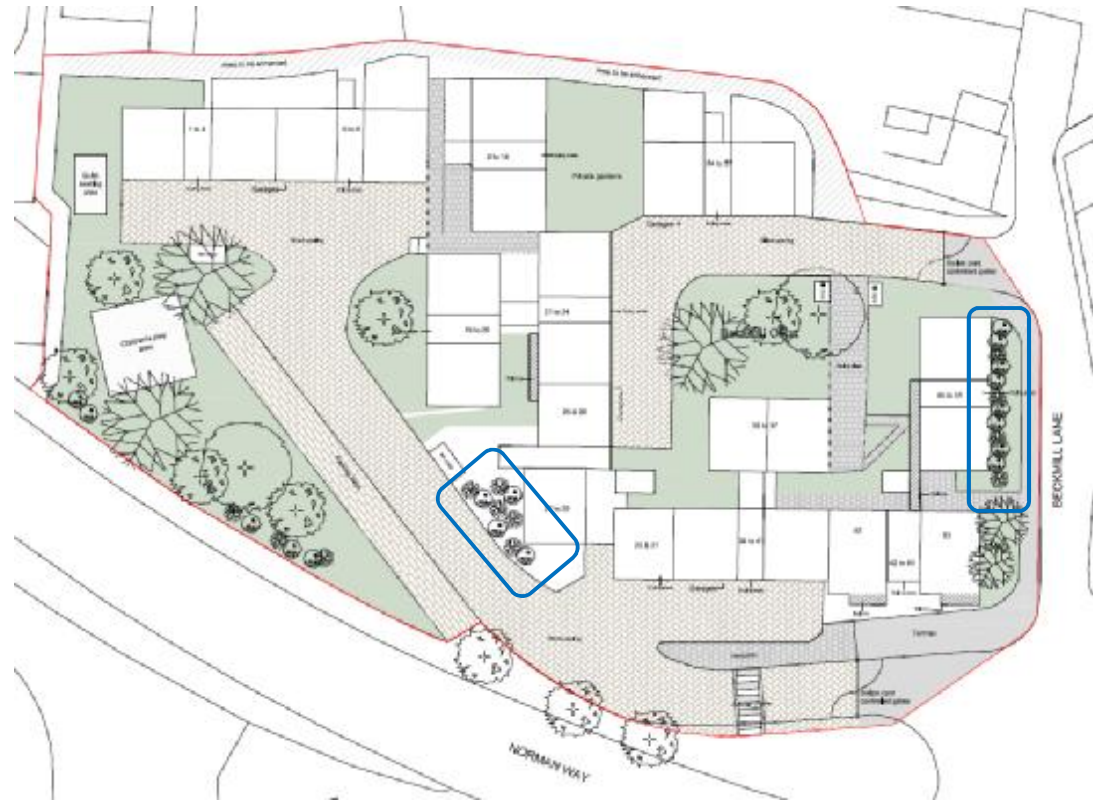


Highlighted areas showing Pedestrian Crossing, Access Controlled Barriers and Car Parking Area

Scheme Planting

The use of 'defensive planting' will assist in improving security to the ground floor flats. Defensive planting is based around identifying vulnerable areas such as ground floor windows, these areas are then planted with species of a sharp and prickly nature, which deter the passage through by an intruder. Berberis is a species commonly used, having varieties that can also add to the aesthetics of the site.

A limited amount of further planting will also soften the overall feel of the areas between the blocks. It is noted that some residents have adopted some of the communal areas as garden space and it is important that these areas are protected to maintain existing community ownership within the scheme.



Highlighted areas showing defensive planting layout



Example of defensive planting species



Example of defensive planting species

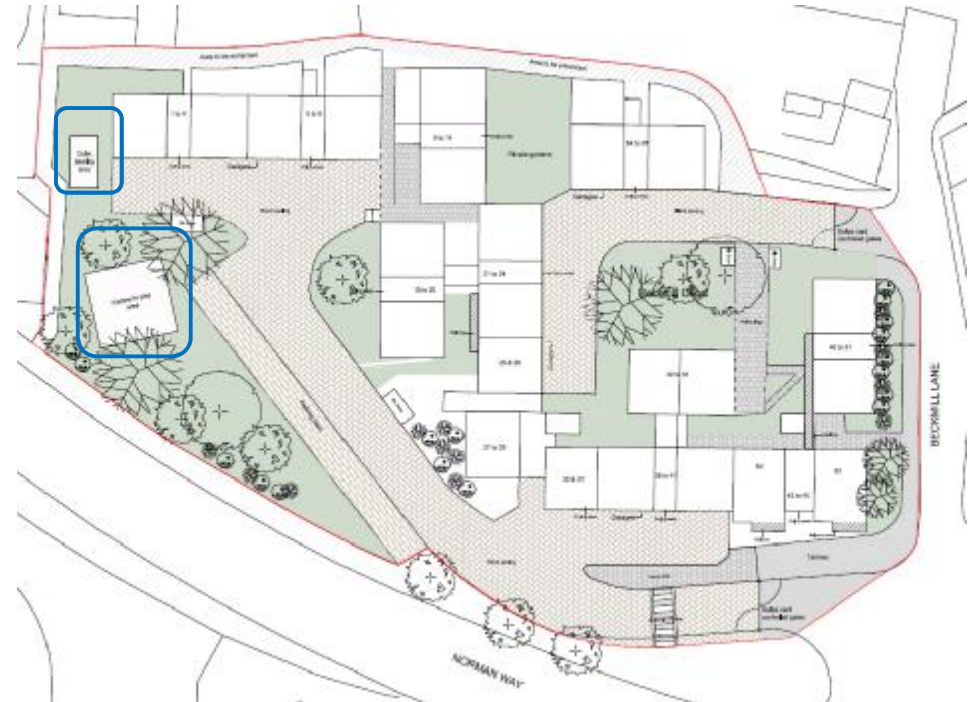
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Hard Landscaping

Improvements to the worn tarmac footpath to the rear of the site, seen below, are proposed in conjunction with the possible replacement of existing frost damaged steps and aged steel handrails. It is suggested that new powder coated steel handrails are installed along with Marshalls 'step' pavers. There is also need for an analysis of site access routes with a view to rationalising them. This will reduce the number of 'dark corners' currently to be found within the scheme and can also rationalise the routes that non-residents take through the scheme.

Additional boundary fencing will also be added to the scheme, increasing the resident's 'defendable space' and reducing the number of un-authorised routes through the scheme.

A quiet sitting areas and children's play area have been allowed for, as highlighted adjacent. These have been designed to increase resident's sense of ownership of the scheme and in particular the communal spaces.



Highlighted areas showing children's playing area and quiet seated area.



Existing poor condition hard landscaping



Example of Marshalls step Pavers

6.0 COMMUNAL CIRCULATION AREAS

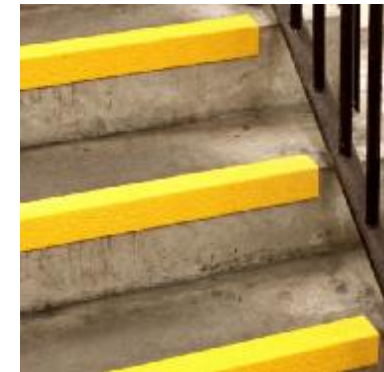
The existing internal communal areas have poor decorations and add to the tired and cold feel of the building, see below left. With the proposed external upgrade works improving the appeal of the scheme from the exterior, it is suggested that the internal areas are upgraded at the same time. Works have therefore been designed to improve the appearance of the communal stairwell areas and make them more welcoming to residents. It is proposed these works consist of:



- Redecoration of existing painted brick walls.
- Redecoration of existing painted concrete ceiling soffit.
- Installation of proprietary pre-finished stair nosing.
- Removal of existing top floor ceiling under boarding and renewal with alternative decorative boarding.
- Installation of additional conduit trunking to tidy up existing cables.



Example of proposed conduit trunking



Example of proposed stair nosing

It should be noted that these works do not have to be carried out at the same time as the external upgrade works outlined above. However they have been included to allow a complete assessment of the scheme to be made.

7.0 HEATING AND VENTILATION WORKS

7.1 Introduction

Gleeds Building Surveying Ltd previously commissioned a report into possible revenue cost savings and energy reduction measures in relation to the production of heat and domestic hot water within the flats at Beckmill Court. The building is provided with incoming electrical services and mains cold water, but no gas is currently installed at the site. The main building is provided with a three phase incoming electrical supply and each individual flat is provided with a single phase sixty three amp supply provided by the district network operator. Heating is provided by 'off peak' electric storage heaters with hot water provided by an electric hot water storage cylinder.

The following issues were noted with the current arrangement:

- Occupants have complained that the majority of the time the rooms are cold and they need to supplement the storage heaters with electric panel radiators.
- General lack of control.
- The electric storage heaters are at the end of their economic life leading to a reduction in efficiency.
- Condensation caused by lack of heating in properties

7.2 Selection of Heating Solutions

To resolve these problems the following alternative solutions were considered:

- Installing new electric storage heaters.
- Installing an individual gas combination boiler in each flat.
- Installing a communal gas central heating system.
- Installing a communal biomass boiler system.

These systems were considered in terms of the payback on the capital expended, future maintenance requirements and also usability for the residents. The table in Appendix E is extracted from the previous report and shows estimated payback period for each type of system.

The installation of replacement electric storage heaters has been discounted as this option will not address the existing controllability issues with the heating.

It is also noted that the Biomass boiler payback relies on the renewable heat Incentive fund which is an external funding payment. This revenue stream is considered less secure as it is vulnerable to government policy change.

From a commercial point of view the most appropriate solution would be to replace the existing heating with individual gas fired boilers. This has the lowest capital cost and shortest payback period.

The following section will therefore assess the feasibility of installing a new metered gas service to each flat to serve new gas fired boilers that will provide heating and domestic hot water. This proposal will provide a number of benefits to both residents and the Borough Council:

- Reduce call-out and repair costs associated with servicing and maintaining the existing antiquated electric storage heaters.
- Reduce energy bills.
- Encourage tenants to use the heating regularly and maintain consistent temperatures within the flats thereby alleviating issues associated with condensation and subsequent black mould growth.
- Improving residents control of the heating system.

7.3 Gas Supply

There are currently two existing ground floor flats that have a gas supply, these are flats 52 and 53. There is no other known gas supply to the site. Gleeds Building Surveying Ltd have contacted an independent gas installation contractor and have received a budget cost to install a new gas supply of £87,750.00 including overhead costs. It is expected that the application process to National Grid will take between 8 and 10 weeks with approximately 4 weeks on site to complete the works, involving the possible closure of affected roads. The meters would all be installed at low level, with the heating installation contractor being responsible for running supply pipes from the property to the meter.

It will then be necessary to consider procurement of the resident's individual gas meters. The following options are available for this:

- The contractor can apply for and arrange installation of all new meters in the name of MBC with one preferred utility company of MBC's choosing.
- Individual residents can apply for their own meters from a supplier of their choice.

The benefit of the contractor applying for all meters is that this item can be included within the programme and all meters will be installed at the same time. This will however mean it will be necessary for MBC to then assign the individual meters to the residents. Should the resident wish to purchase their energy from a different supplier it will be necessary for them to apply for this following assignment of their meter.

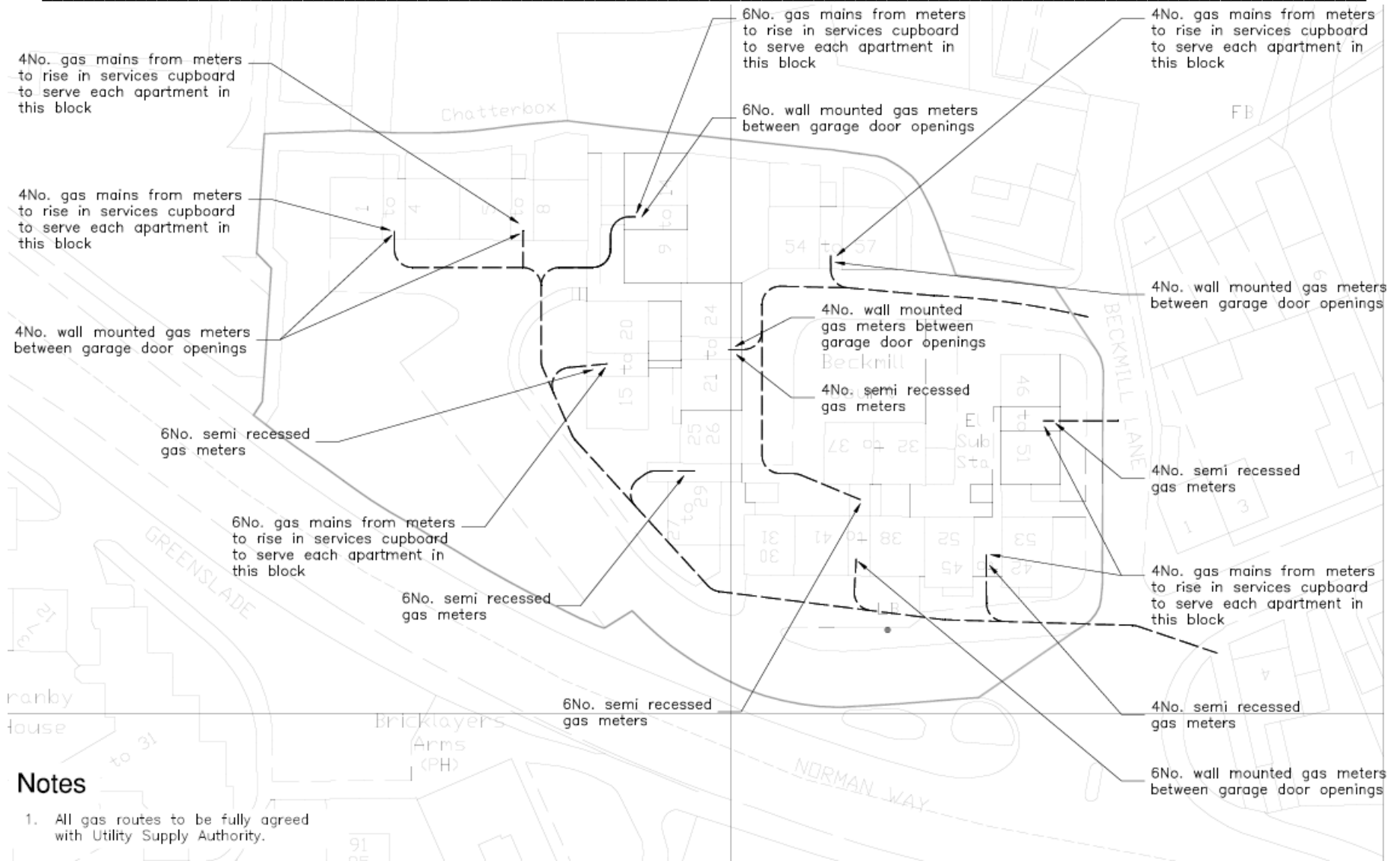
Alternatively residents could apply for their own meter directly to a supplier of their choice. The disadvantage of this approach is that the continuation of the program will rely on the residents arranging their own meters. In addition different utility suppliers will have different lead in times for meter installation.

It will not be possible to install a commission a new gas heating system to a property without their first being a working gas supply available.

We have undertaken preliminary heat loss calculations for each of the two flat types inspected on site, namely flat number 13 (2 person flat) and number 8 (4 person flat). Although these heat loss calculations cannot be directly applied to each and every flat at the site (as they all vary in terms of external wall area, window areas etc.) the preliminary heat loss calculations can be used to provide an estimate of boiler size and therefore total gas load required at the site. Our calculations indicate that each flat will require a boiler size of in the region of 12kW (including the domestic services load) and we therefore estimate that the gas supply required at the site will be 0.09 m³/hr of gas.

A proposed notional distribution scheme demonstrating how gas can be supplied to each property by making use of the electrical riser cupboard in the communal spaces can be found overleaf. The general philosophy is that the mains gas will be taken into the site and up to accessible meters (for future reading) located at ground level either between existing garage door openings or semi-recessed within external walls around the site. The gas supply pipe will then be taken from the meter, to the electrical riser cupboard in the rear of the garages, see adjacent, continuing up through the existing electrical riser cupboards currently located within central core stairwell / drying areas pertaining to each block of flats, see adjacent. The gas pipework will be of sleeved type, removing the need for ventilating the route used for internal gas distribution.

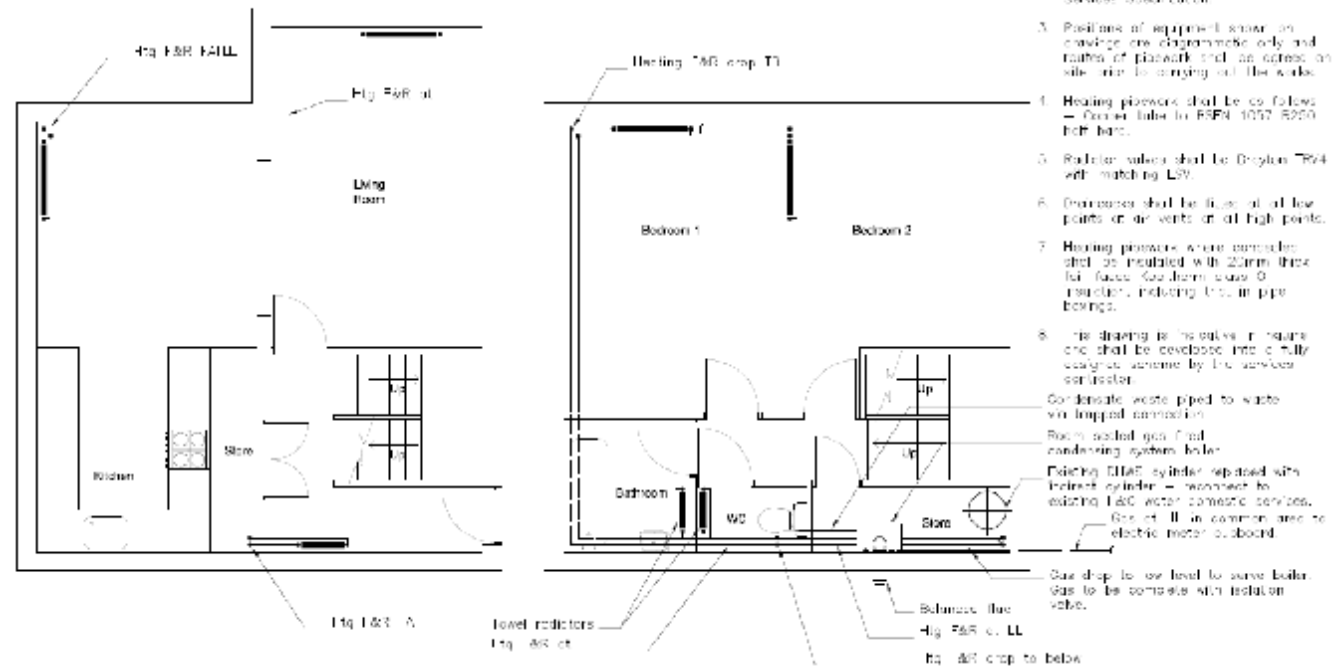




Notes

- 1. All gas routes to be fully agreed with Utility Supply Authority.

Whilst the works are being carried out to the heating system, it is proposed to take the opportunity to change the existing hot water cylinder to an indirect type to allow the gas fired heating to generate domestic hot water. This work is in line with the use of a system boiler instead of a combination boiler to allow smaller gas supply pipes to be utilised to each property. A combination boiler could alternatively be considered should this be a requirement for MBC. It has been allowed for that Thermostatic Mixer Valves are to be installed to each bath within the property. Whilst this is not mandatory for renovation works, it is required of new builds to comply with Part G of Building Regulations. These control the hot water temperatures to the bath and so reduce the residents' risk of scalding and burns and are seen as an important safety feature.

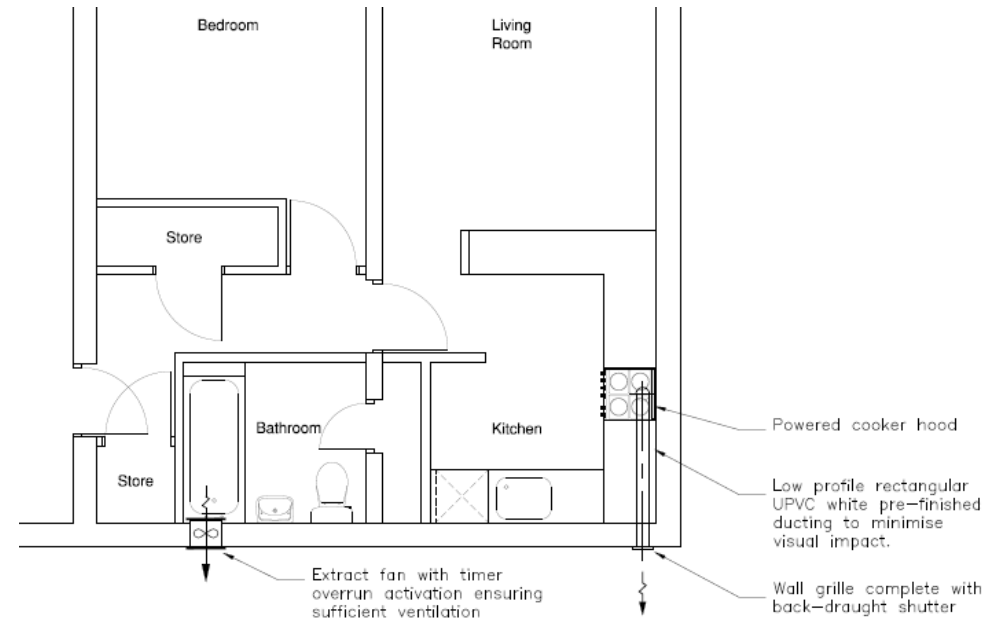


2 Bedroom Flat Indicative Heating Layout

7.5 Mechanical Ventilation

As part of the scheme proposals, Gleeds have also evaluated the possibility of installing new localised mechanical extract systems within each flats bathrooms and kitchen spaces. This removal of moisture at source will assist with mitigating the widespread condensation problems within the flats as identified within the building condition survey.

It is recommended that an appropriate cooker hood should be supplied and installed to each cooker location, complete with extract fan and UVPC ductwork. This allows for moisture and odours generated by the cooking process to be discharged externally rather than retained within the property. To minimise the aesthetic impact to the residents a rectangular pre-finished white uPVC ducting system, fitted as close as possible to the ceiling, is proposed in differing sizes throughout to suit the ventilation requirements.



Similarly, an extract fan should be located in each toilet, bath and shower area, to discharge the moisture generated direct to outside. The extract unit would be controlled in line with switching and would also have an overrun timer. All ventilation systems should be complete with back draught dampers designed to deal with adverse wind pressures and appropriate external wall grilles, see notional layout above.

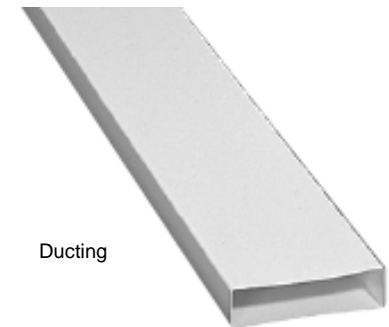
Extract fan



Cooker Hood



Ducting



8.0 STATUTORY CONSENTS

8.1 Section 278 Agreement – Adopted Roads

The Section 278 Agreement is a legally binding document between the Local Highway Authority and a developing organisation to ensure that works to be carried out on a highway are completed to the standards and satisfaction of the Local Highway Authority. It details what the requirements of both parties are to ensure that the proposed works are carried out in accordance with approved drawings. Key elements which would be included within a Section 278 Agreement would be:

- The relevant planning permission and authorisation under which the works are to be carried out.
- A schedule detailing the works to be done and shown on appropriate plans.
- Details of a bond or surety.
- An agreement of who will design and/or project manage the new works. This can either be the Local Highway Authority or a consultant Highway Engineer working on behalf of the developer.
- Details of the full costs of the works to be paid by the developer and also the Local Highway Authority's administrative, legal, design checks and inspection costs.
- Details of commuted sums for the future maintenance of the improvement works.

8.2 Road Closures

As part of the installation of the new gas supply pipe to the flats it may be necessary to undertake a temporary road closure to the roads surrounding Beckmill Court to allow access to existing gas assets. It is known that there are existing gas assets in Norman Road and Beckmill Lane.

The lead in time for the gas supply installation has been allowed in part, so the contractor undertaking the works can apply for the temporary road closure order. The installation contractor will manage the road closure as part of the works and will undertake all making good works in compliance with highways agency standards. The cost of this road closure has been allowed for within the budget costs provided for the gas supply.

8.3 Building Regulations and Consequential Improvements

The project will require building control approval and we have assessed the impact of the current building regulations on the proposed works.

Thermal Upgrade of the Building

Under Part L of the Building Regulations there are minimum energy efficiency standards laid down for building elements when undertaking construction works. In addition some works attract the need to undertake Consequential Improvements. Consequential Improvements are upgrades to the energy efficiency of the building carried out when qualifying works are carried out to the building, or an extension is built over 1000m². As Beckmill Court is a residential scheme there is no requirement under the building regulations to carry out consequential improvements.

However there will be improvements to the energy efficiency of Beckmill Court carried out as a result of these works. The rendering of the external walls will be classed as 'upgrading a thermal element' under Part L of the Building Regulations.

Other buildings elements proposed to be upgraded such as the flat windows will also have to meet the thermal standards set out in Part L of the Building Regulations.

Internal Communal Areas

It is proposed that the internal communal areas will be enclosed as part of the works. The management of fire safety within the internal communal areas will have to be considered as a result of this. A new Fire Risk Assessment should be undertaken as part of these works.

An allowance has been made to change the residents front doors for fire rated front doors to allow to provide adequate fire compartmentation. The works outlined to provide emergency lighting will also be required as an essential feature. An additional allowance has been made to provide new fire signage throughout.

8.4 Leaseholders and Section 20 Notification

It has been assumed within this report that there are no leaseholder properties within Beckmill Court. If there are leasehold properties it will be necessary to consult with the residents under Section 20 of the Landlord and Tenant Act 1985. Without this consultation MBC will not be able to recover any costs of works from the leaseholders.

The programme outlined in Section 8.0 does not allow for leaseholder consultation and will require revision should this be necessary.

Works classed as 'improvement' works may not be recoverable under a Section 20 notice. This will depend on the individual wording of the lease and this must be considered carefully as part of any decision. It is recommended that independent specialist advice is sought prior to commencing with any consultation.

9.0 PROGRAMME

Gleeds have prepared a project programme based on procurement through the SCAPE framework and is subject to further discussions with Melton Borough Council and the appointed contractor. A copy of the programme can be found in Appendix A and key milestone dates are summarised below:

Key Milestone	Date
Board Approval to Works	Friday 20th March 2015
Gleeds Appointment	Monday 23rd March 2015
New Gas Supply Application	Friday 6th April 2015
Design Development	Friday 22nd May 2015
Board Approval to Proceed to Tender	Friday 5th June 2015
Contractor Appointment	Friday 26th June 2015
Gas Supply Install	Friday 21st August 2015
Contract Start Date	Monday 20th July 2015
Contract Completion Date	Friday 1st January 2016

The programme makes due allowance for stakeholder engagement with regards to feedback and uptake on participation within the scheme and rudimentary time estimates for project board approval have been made. The programme outlines additional surveys required such as asbestos refurbishment & demolition surveys within each flat and topographical surveys and the need for early engagement of a CDM Co-Ordinator and highways engineer. The programme reconciles the time required to submit a new gas application followed by an 8-10 week national grid approval process (along with likely need for a road closure) and a subsequent 4 week period on site to install the new gas supply. The design process will run parallel with the gas supply application and it is regarded that all statutory consents such as building control, planning permission and s.278 agreements (if required) will be obtained prior to execution of the construction contract.

We have made a preliminary assessment of a 6 month contract duration on site but this is to be discussed further with potential contractors and Melton Borough Council. It is envisaged that the work will commence on a single block at each time with a 'lessons learned' review planned between completion of the block and commencement of the next block of flats. It is anticipated that a block containing say 8 flats (such as Block 1-8) will have approximately 7 days of intrusive disturbance within each flat. Broadly, this will be attributed to the following work:

Day 1 - Gas supply distribution from meter location to the flat external store rooms. Isolate, disconnect and remove existing storage heaters.

Day 2 – First fix electrical to proposed mechanical extract locations, room stat and new boiler location. LTHW pipework distribution within flats.

Day 3 – LTHW pipework distribution within flats.

Day 4 – Install radiators. Install new TMV's and swap over cylinder.

Day 5 – Install new boiler and flue.

Day 6 – Test & Commission Boiler, snagging and making good.

Day 7 – Test & Commission Boiler, snagging and making good.

It is anticipated that the external rendering works will be ongoing and are to start before commencement of mechanical works so that window replacement works coincide with all other intrusive internal works. This sequence will also allow the main contractor to utilise access scaffold when fitting boiler flues and louvers to new mechanical extract installations.

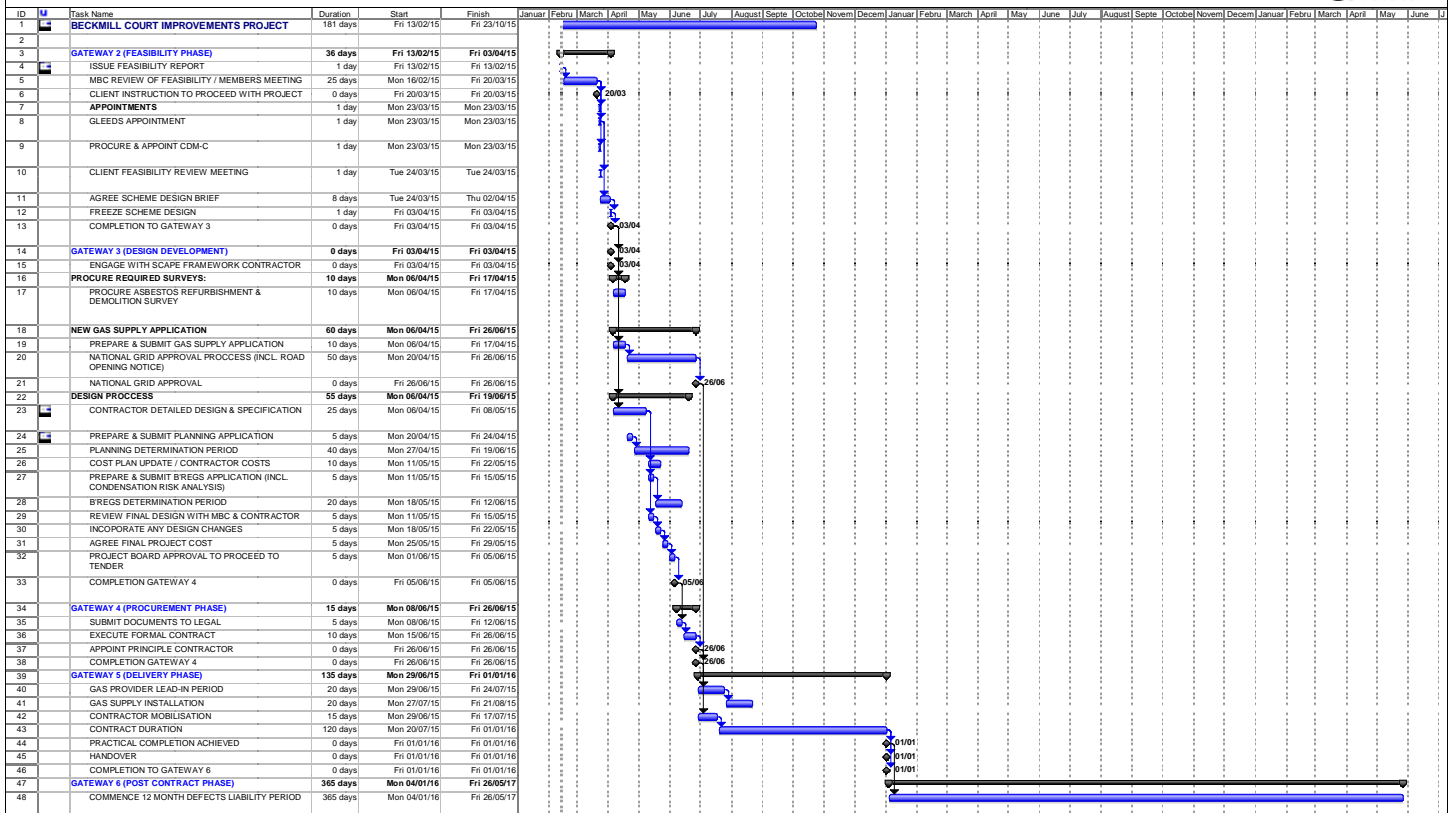
The early engagement of a SCAPE contractor will be of benefit to the overall programme.



Appendix A
Forecast Project Programme



BECKMILL COURT IMPROVEMENTS PROGRAMME
MELTON BOROUGH COUNCIL



Project: Granby House Programme
Date: Fri 13/02/15

Task: Progress (blue bar), Summary (grey bar), External Tasks (grey bar with arrow), Deadline (green diamond)
Split: Milestone (diamond), Project Summary (grey bar with arrow), External Milestone (grey bar with arrow)



Appendix B
Short Form Condition Survey

PROPERTY: Beckmill Court
ADDRESS: Beckmill Road
 Melton Mowbray

Condition Code
 1 - Excellent
 2 - Good
 3 - Below Standard
 4 - Poor

Priority Code
 1 - H&S
 2 - Structural
 3 - Essential Repairs
 4 - Desirable

Note Older polyester-coated metal casements are typically in a poor condition, ill-fitting and failing to adequately protect internal areas from the elements. Drafts were frequently apparent when inspecting internally, moisture visible between the panes indicates gasket failure and a suspected absence of thermal breaks is leading to condensation around the frame. In addition possible DPC failure or a total lack of a DPC may be contributing to masonry damage beneath.

Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Block 1 - 8 Internal and External Communal Areas				
Roof	<p>Pitched timber roof with concrete roof tiles. All roof coverings, ridge tiles and lead sheet abutments appear in good condition.</p> <p>It was noted at the time of inspection that there are several flue penetrations through the roof without a balloon/leaf guard.</p> <p>The lead flashing detail to the pitched roof behind the external escape stair structure serving No 5-8 appears to be uplifting at the most lowest part of the roof at the eaves with the right and left hand side.</p>	2	<p>Install balloon guards to flues.</p> <p>Re-dress lead flashing.</p>	4
Rainwater Goods	<p>PVC half round guttering and round downpipes generally in good condition.</p> <p>UV degradation/bleaching noted to lower section of rainwater downpipe between Garages 43 and 44.</p> <p>There is a section of rainwater downpipe disconnected/cut between Garages 38 and 39, this is leading to damp penetration of the brickwork below.</p>	2	<p>Replace section of downpipe for aesthetic reasons.</p>	4
External Walls	<p>Brick cavity walls.</p> <p>There is low level frost damaged brickwork noted to the brick courses below DPC level on the elevation opposite Halfords.</p> <p>There is a ply / felt lean-to porch canopy above the entrance doors with a flash band detail at abutments with the adjacent walls. This is considered as a temporary repair measure. There are exposed outer faces of the ply sheet exposed to the elements.</p> <p>In general there are sections of damp brickwork below the majority of the tile sill details immediately below the aluminium framed double glazed windows and sills to the rear elevation of the Halfords.</p> <p>There is damp and frost damaged brickwork below the chamfered concrete capping detail which separates the lower and upper half of the brickwork to the side elevation of the external escape stair serving Flats 5-8. This is being caused by lack of a suitable drip detail to project the water away from the lower half of the brickwork. At present the chamfered stone/concrete finishes flush with the brickwork below and therefore does not discharge it away from the brickwork.</p>	3	<p>Cut out and replace frost damaged brickwork.</p> <p>Replace 2 nr lean-to canopies.</p> <p>Revise the inadequate chamfered brick detail.</p> <p>Fix new louvered covers to flue / extractor fan penetrations.</p> <p>Repoint minor hairline cracking and repair / replace defective tile sill details.</p>	3
External Walls	<p>There are frost damaged / slightly displaced brickwork immediately below the felt verge /parapet capping detail to the left hand side of the external stair structure as you face it from the Halfords elevation.</p> <p>There is a round flue penetration in the brickwork between the two external escape stair structures (2 No. in total) that does not have an external louvre grille.</p> <p>There is damp brickwork immediately below the concrete slab pertaining to the drying areas and above the garage below.</p> <p>The tile sill detail below the aluminium window frame/sill to the rear directly above Garage 44 is defective and requires replacing (2 No. tiles).</p> <p>There is some diagonal hairline cracking to brickwork adjoining the garden flank wall (to concrete ramp affording access to the rear of this block) and immediately to the right hand side of Garage 44.</p>		<p>Works / costs included above.</p>	

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Windows	<p>Windows are a mixture of double glazed UPVC framed and double glazed aluminium framed.</p> <p><i>Front Elevation</i> There are approximately 30 No. aluminium framed windows. Tenant complaints regarding condensation on inner face of frames due to possible cold bridging of uninsulated aluminium frames. Minor deterioration to decoration of the lintels noted to 3-4 windows.</p> <p><i>Rear Elevation</i> There appears to be approximately 14 No. aluminium framed windows along this elevation.</p> <p>In general all window glazing is heavily soiled, not all windows have trickle vents and there are signs of damp patches to brickwork immediately below tiled window sills suggest that there is a breach in the integrity of the tiled sill, i.e. to the mortar joints in between the tiles.</p> <p>There are 2 No. exposed penetrations to brickwork without any vents or louvre externally.</p>	2 + 3	<p>Allowance made to replace aluminium framed windows within the next 5 years; Access scaffolding at circa £10k plus £30k window replacement.</p> <p>Allowance of £2k to install trickle vents within remaining windows to aid condensation issues.</p>	
Internal Access & Circulation (Staircases, walkways etc)	<p>The PVC framed full height windows/casements to the external stair structures appear to be single glazed and there is no demarcation to denote that the single panes of glass are toughened glazing as required by current Building Regulations for windows such as these in critical locations. In general the mastic silicon sealant between the edge of the window frames and adjoining brickwork has deteriorated to leave exposed junctures open to the elements. In general the window frames have moss growth to the glazing bead pertaining to the lower panes of the full height glazing and in general the glass itself is heavily soiled.</p> <p>There is frost damaged brickwork and degraded mortar joints to the chamfered brick detail below the aluminium window frames and sills pertaining to the external stair structure serving Flats No. 1-4.</p> <p>There is frost damaged and damp brickwork adjacent to the rainwater downpipe and immediately below the turned-down felt detail at the verge of the flat roof to the external stair structure serving Flats 1-4. There is also frost damaged and damp brickwork below the concrete sill/lintel detail below the lower aluminium window frames to the front of the external stair structure.</p>	1	<p>Replace glazing with toughened glass.</p> <p>Cut out and replace frost damaged brickwork; revise chamfered brick detail.</p> <p>Take down plyboard and renew with external quality board.</p> <p>Increase fixing points to timber hit and miss screen and test to ensure adequate strength on completion.</p>	3
Internal Access & Circulation (Staircases, walkways etc)	<p>There is frost damaged and damp brickwork adjacent to the rainwater downpipe and immediately below the turned-down felt detail at the verge of the flat roof to the external stair structure serving Flats 5-8.</p> <p>There is frost damaged brickwork and degraded mortar joints to the chamfered brick detail below the aluminium window frames and sills pertaining to the external stair structure serving Flats No. 5-8.</p> <p>The timber hit and miss screens to the drying areas are generally in good condition. However they lack central fixings which will reduce their resistance to collision and impact which is essential in this area.</p> <p>The internal ceiling to the top of the communal stairwell including the balcony area has been under-boarded with plyboard sheeting. This sheeting is bowing and showing areas of deflection. It is likely that the boards have absorbed moisture from the atmosphere as well as any condensation which has formed on the underside of the concrete soffit. This has caused the deflection in the timber, although there is currently no water staining evident to the boards.</p>	2+3	Works / costs included above.	3

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Doors	There are 2 No. external single glazed timber doors in need of redecoration. The communal entrance door to stairwell 5-8 is binding in its frame and does not close fully. This is preventing the communal door entrance system from engaging.	4	Ease door and re-decorate.	4
Decorations	Decorations to the steel garage doors to the front elevation of the block appear to be in fair condition. For information there are 10 garages in total. Decoration to the internal painted brickwork requires refreshing with a number of marks and areas of damage noted. The nosings to the internal stairs are in poor condition and require re-decoration.	2	Allow for future redecorations including stair nosings.	4
Block 14-20 and 24-29 Internal and External Communal Areas				
Roofs	The roof coverings appear to be in good condition.	2		
Rainwater Goods	The PVC half round rainwater goods and round PVC downpipe appear to be in good condition to the front elevation of Block 15-20. There is a section of loose guttering at the joint location mid span of the front elevation of Block 21-24 (elevation facing the rear of Block 15-20). There is a dripping overflow pipe at first floor level to the right hand side rainwater downpipe that is causing splash back up to the brick pillar immediately below. This brickwork will be susceptible to freeze/thaw action and subsequent frost damage. The rainwater goods to the rear elevation of Block 21-24 appear in good condition. The rainwater downpipe and hopper head to the lower section of the wall pertaining to the side of the brick stair structure linking blocks 21-24 to 15-20 requires re-securing back to the wall as at present the rainwater downpipe above is just discharging water behind the hopper head below and on to the brickwork.	3	Allow to re-secure loose guttering / downpipes and attend to the overflow pipe.	3
External Walls	There is some damp noted to perp joints pertaining to the brickwork at the far left hand side of the rear elevation of Block 21-24. It can be noted above that the guttering stops short of the verge. There is hairline diagonal cracking to the left hand side and centre of the second floor window in the of Garage No 56. There is damp brickwork and moss growth to the edge of the concrete floor to the first floor drying area directly above Garage No 52 (brickwork in between the head of the garage door opening and the concrete floor above is saturated and moss growth is noted). There is minor hairline diagonal cracking in a downward direction from the bottom left hand corner of the first floor window directly above Garage No 56. This extends only two courses. There is diagonal hairline cracking from the top right hand side of the window protruding upwards of 13 courses from right to left to the first floor flat, No 25.	4	Undertake minor re-pointing works. Clean concrete landings down. Replace soldier course to incorporate a suitable drip detail. Access allowance @ £5k.	4

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
External Walls (Front Elevation of Block 15-20)	<p>There are damp patches immediately below tile sill details where the tile sill detail above has failed.</p> <p>The tile sill is completely missing to the ground floor flat in the bottom right hand corner of the front elevation of Block 15-20. The low level brickwork below the damp proof course in this area is also defective.</p> <p>It is noted at the time of inspection that black mould growth can be seen to the inner face of this ground floor window.</p> <p>There is hairline diagonal cracking to eight courses of brickwork from right to left at the top right hand corner of the ground floor window.</p>	3	Replace the defective / missing tile sill details and re-point minor cracking.	4
The external stair structure linking Blocks 21-24 to 15-20	<p>There is damp brickwork immediately adjacent to the felt detail at the top of the wall and to the left hand side of the external hopper. There are also sections of damp brickwork and evidence of moss growth to brickwork immediately below the chamfered brick detail which is located below each section of full height glazing to the stairwell.</p> <p>There is damp brickwork to the top of the wall adjoining Blocks 15-20 and 21-24. This is caused by the inadequate brick on edge/soldier course detail to the top at this wall which is not discharging water away from the face of the brickwork below. The leadwork to chutes through this wall requires redressing back into the external hoppers.</p> <p>The windows to the external stair structure adjoining the two blocks are single glazed UPVC casements. The single glass panes do not appear to be toughened glass, as required in such critical locations.</p>			
Windows	<p>There are a mixture of PVC double glazed and aluminium double glazed windows to the front elevation of Block 15-20. In general there are approximately seven aluminium frame windows to the front elevation. All windows appear soiled and begrimed.</p> <p>The windows to the rear elevation of Block 21-24 are a mixture of UPVC double glazed and aluminium frame double glazed windows. All windows appear begrimed and soiled.</p>	2 + 3	<p>Allowance made to replace aluminium framed windows within the next 5 years; Access scaffolding at circa £5k plus £8k window replacement.</p> <p>Allowance of £2k to install trickle vents within remaining windows to aid condensation issues.</p>	4
Internal Communal Areas	<p>There is a 1-2mm vertical crack in the brickwork at the junction of the communal stairwell and the building containing flats 15-20. This crack appears to run the full height of the first and second storey at the junction between the two buildings, as well as running horizontally to the underside of the balcony slab.</p> <p>The internal ceiling to the top of the communal stairwell including the balcony area has been under-boarded with plyboard sheeting. This sheeting is bowing and showing areas of deflection. It is likely that the boards have absorbed moisture from the atmosphere as well as any condensation which has formed on the underside of the concrete soffit. This has caused the deflection in the timber, although there is currently no water staining evident to the boards.</p> <p>The timber hit and miss screens to the drying areas are generally in good condition. However they lack central fixings which will reduce their resistance to collision and impact which is essential in this area.</p>		<p>The crack should be monitored for further movement and an assessment then made on its repair.</p> <p>If there is no further movement the crack should be re-pointed.</p> <p>The timber boarding should be renewed to the top floor with a suitable moisture resistant board.</p> <p>Additional fixings should be added to the timber hit and miss screens to ensure they comply with building regulations collision resistance standards.</p>	

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Communal Doors	Communal entrance doors are timber with a glazed screen. There was a broken pane of glass noted adjacent to the entrance door which has previously been boarded over. The door entry system also requires repair as the door keep does not remain locked when closed. Communal doors to the balcony are timber with overhead closers. The overhead closers were not closing the doors at a consistent speed and were affected by the wind load. The bottom of the frame legs to the communal door leading to 22-24 are rotten.	3	The broken pane of glass should be replaced with suitable toughened glass. The door entry system should be repaired to ensure the electronic keep engages. The overhead door closers should be adjusted to ensure that the doors close correctly. The rotten frame legs should be cut out and spliced.	3
Balconies	The underside of the concrete balconies pertaining to Block 21-24 appear in fair condition. The asphalt covering to the walkways appears cracked and fractured and generally at the end of its economic life. There is evidence of some water penetration through the asphalt from the second floor balcony. This is particularly evidence opposite flat 25. The decoration to the face on the side of the concrete walkway at second floor level has deteriorated and requires redecoration. Decorations to the metal handrail and wire grill balustrade appear to be in fair condition. There is moss growth noted to the aluminium capping/trim to the top of the outer face of the concrete walkway (cantilevered).	3	The asphalt to the balconies should be renovated or renewed. At the same time the opportunity should be taken to renew all edge and upstand details. The balconies should be cleaned of moss regularly to ensure the drainage channel is left clear.	3
Decorations	There is damage to areas of the painted brickwork internally. The nosings to the internal stairs are in poor condition and require re-decoration.	3	Allow for future redecorations of internal communal areas. Renew internal stair nosings.	3
Block 27-29 External Areas				
Roof	The roof coverings and rainwater goods generally appear in fair condition.			
External Walls	<i>Front Elevation</i> Brickwork generally in fair condition throughout. Minor hairline cracking noted above the ground floor window to the left hand corner protruding up four courses of brickwork, to the bottom left hand corner the ground floor window between the tile sill detail and the louvre vent below, and the top left hand corner of the first floor window protruding from left to right up seven courses of brickwork and below the left hand corner of the first floor window protruding from left to right down four courses towards the external louvre vent. <i>Gable End Elevation opposite Norman Way</i> Dry verge appears to be in good condition. The brickwork is generally in fair condition throughout. There is a missing cupboard door to the external housing which contains the TV central amplification device. There are missing mortar joints to approximately half a dozen perp joints at low level to the bottom left hand corner of this elevation. Decorations to the timber face panel between the two concrete landings is degraded and requires renewal.	4	Undertake re-pointing works to minor cracking and low level brickwork. Replace cupboard door. Redecorate timber panel to outer edge of concrete landing.	4
Block 30-53 External Areas				
Roofs	Pitched timber roof with concrete roof tiles. All roof coverings, ridge tiles and lead sheet abutments appear in good condition. It was noted at the time of inspection that there are several flue penetrations through the roof without a balloon/leaf guard.	2	Install balloon guards to flues.	4

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
External Walls	Brick cavity wall construction. Brickwork generally in fair condition. There is a quarry tile 'secondary' sill detail below the windows. This was noted to be damaged and completely missing in some locations. Spalling to the brickwork of external walls to the buildings was apparent at high level at the gable end opposite Beckmill Lane. Weathered mortar of external walls to the buildings was apparent. There is minor hairline vertical cracking to the bottom left hand corner of ground floor window. White staining to brickwork caused by overflow.	3	Cut out and replace frost damaged bricks. Repair / replace defective tile sill details. Repoint hairline cracking. Investigate overflow.	4
Windows	Mixture of PVC, Polyester Coated Metal and Timber framed window units. The majority of windows are double glazed.	4	Replace metal framed window units in Year 1 to improve thermal and ventilation performance. Allow to replace / include for new DPCs and cavity closers at jambs.	3
Balconies and walkways	Concrete slab with asphalt finish dressed up the face of external walls and turned into a below standard recess (note that there is no sealant bead at this junction). The asphalt finishes will be nearing the end of their economic life towards year 10. <i>Balconies above GF Flats 52 & 53</i> Spalling of concrete in right hand corner, with general fracturing of outer face of concrete landing. Corrosion noted to top of steel downposts. At the top of each communal flight of stairs there is a drainage channel set within the asphalt. This channel has failed on the first floor balcony at the junction with the upstand detail leading to water penetration underneath the balcony.	3	Damaged upstands should be repaired. Patch repair isolated concrete damage (group with brick work repair). Renew the upstand detail at the edge of the drainage channel in front of the stairwell.	4
Drainage	PVC half round gutters and round downpipes. There are defective downpipes at the corner abutment with flat 53 front elevation, misaligning with the below ground drain.	3	Repair defective downpipes.	4
Decorations	Steel handrails to ramps serving ground floor flats in need of redecoration	3	Rub down and redecorate steel handrails.	4
Block 32 - 37 External Areas				
Roofs	Pitched timber roof with concrete roof tiles. All roof coverings, ridge tiles and lead sheet abutments appear in good condition.	2		
External Walls	Brick cavity wall construction. External brickwork generally is in a weathered condition in exposed locations, displaying hairline cracking and suffering the effects of long-term exposure to the elements which is causing the masonry to deteriorate. Weathered mortar of external walls to the buildings was apparent at mid level at the gable end. There is minor hairline cracking to the bottom left hand corner of the gable end. Apparent damp brickwork at low level, no notable damage. Previous brick replacement works at low level noted.	3	Repoint where needed and hairline cracking at same time as window replacement works	4

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Windows	Mixture of PVC, Polyester Coated Metal and Timber framed window units. The majority of windows are double glazed. There is a quarry tile 'secondary' sill detail below the windows. This was noted to be damaged and completely missing in some locations.	4	Replace metal framed window units in Year 1 to improve thermal and ventilation performance. Allow to replace / include for new DPCs and cavity closers at jambs. - Allow 21 No replacement windows @ £750 per window. Repair / replace quarry tile sill detail.	3
Plumbing	There is an overflow to the rear elevation of the block which is causing the ground below to 'pitt'.	3	Investigate diversion of overflow.	3
Block 27-31 Internal Communal Areas				
Roof	The roof coverings and rainwater goods generally appear in fair condition.	2		
External Walls	<i>Front Elevation</i> Brickwork generally in fair condition throughout. Minor hairline cracking noted above the corners of some of the windows.	4	Undertake re-pointing works to minor cracking and low level brickwork.	4
Windows	Mixture of PVC, Polyester Coated Metal and Timber framed window units. The majority of windows are double glazed. Older polyester-coated metal casements are typically in a poor condition, ill-fitting and failing to adequately protect internal areas from the elements. During the 2012 internal inspection, drafts were frequently apparent when inspecting internally, moisture visible between the panes indicates gasket failure and a suspected absence of thermal breaks is leading to condensation around the frame. In addition possible DPC failure or a total lack of a DPC may be contributing to masonry damage beneath.	4	Replace metal framed window units in Year 1 to improve thermal and ventilation performance. Allow to replace / include for new DPCs and cavity closers at jambs. - Allow 5 No replacement windows @ £750 per window.	3
Communal Staircase and Windows	The PVC framed full height windows/casements to the external stair structures appear to be single glazed and there is no demarcation to denote that the single panes of glass are toughened glazing as required by current Building Regulations for windows such as these in critical locations. The fixing to the head of this frame has failed leaving the frame unsupported in the centre. This has placed the frame under increased stress and risk of failure, with the mastic having been noted as failed to the centre due to the added stress to the frame.	4	The existing glass and frame should be replaced by toughened glass in accordance with the Building Regulations.	1
Communal Balcony Areas	The internal ceiling to the top of the communal stairwell including the balcony area has been under-boarded with plyboard sheeting. This sheeting is bowing. It is likely that this board has absorbed moisture from the atmosphere and any condensation which has formed on the underside of the concrete soffit. This has caused the deflection in the timber. The timber hit and miss screens to the drying areas are generally in good condition. However they lack central fixings which will reduce their resistance to collision and impact which is essential in this area.	3	Increase fixing points to timber hit and miss screen and test to ensure adequate strength on completion. Take down the existing balcony underboarding and renew with an external quality board.	1+3
Communal Doors	The communal entrance door is timber. The communal door to the landing are a timber half glazed door with an overhead closer. These doors do not fully close into their frame currently. The base of the frame legs to the second floor door are rotten.	3	Ease communal door and adjust closer. Splice legs of frame to second floor door.	3
Decorations	There is damage to areas of the painted brickwork and joinery internally. The existing stair nosings are in poor condition.	3	Allow for future re-decorations.	4

PROPERTY: Beckmill Court
ADDRESS: Beckmill Road
 Melton Mowbray

Condition Code
 1 - Excellent
 2 - Good
 3 - Below Standard
 4 - Poor

Priority Code
 1 - H&S
 2 - Structural
 3 - Essential Repairs
 4 - Desirable

Note Older polyester-coated metal casements are typically in a poor condition, ill-fitting and failing to adequately protect internal areas from the elements. Drafts were frequently apparent when inspecting internally, moisture visible between the panes indicates gasket failure and a suspected absence of thermal breaks is leading to condensation around the frame. In addition possible DPC failure or a total lack of a DPC may be contributing to masonry damage beneath.

Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Plumbing	Overflow in need of investigation due to white staining at lower level.	3	Investigate white staining.	3
Beckmill Court 34-41 Internal Communal Areas				
Doors	The front entrance door is a timber half glazed door. There was a broken glazing pane to this door.	3	The broken pane of glass should be replaced.	3
Decorations	The internal brickwork was marked. The stair nosings are marked with areas missing.	3	Allowance should be made to periodically re-decorate. The stair nosings should be re-decorated.	4
Balconies and Communal Areas	The asphalt to the balcony walkways is coming towards the end of its economic life. A crack was noted at the asphalt junction. There is also evidence of a leak underneath the second floor balcony. The timber hit and miss screens to the drying areas are generally in good condition. However they lack central fixings which will reduce their resistance to collision and impact which is essential in this area. The PVC framed full height windows/casements to the external stair structures appear to be single glazed and there is no demarcation to denote that the single panes of glass are toughened glazing as required by current Building Regulations for windows such as these in critical locations.	3	The asphalt to the balconies should be either renewed or renovated. The number of fixings to the timber hit and miss screen should be increased to improve collision resistance in line with the building regulations. The timber underboarded ceilings should be replaced with a suitable moisture resistant board.	2+3
Block 42-51 Communal Areas				
Roofs	Pitched timber roof with concrete roof tiles. All roof coverings, ridge tiles and lead sheet abutments appear in good condition. There are 2 nr flues without balloon guards.			
Windows	Mixture of PVC, Polyester Coated Metal and Timber framed window units. The majority of windows are double glazed. Older polyester-coated metal casements are typically in a poor condition, ill-fitting and failing to adequately protect internal areas from the elements. During the 2012 internal inspection, drafts were frequently apparent when inspecting internally, moisture visible between the panes indicates gasket failure and a suspected absence of thermal breaks is leading to condensation around the frame. In addition possible DPC failure or a total lack of a DPC may be contributing to masonry damage beneath. The decoration to 6 No lintels is in need of redecoration opposite the courtyard.	4	Replace metal framed window units in Year 1 to improve thermal and ventilation performance. Allow to replace / include for new DPCs and cavity closers at jambs. - Allow 26 No replacement windows @ £750 per window. Repair / replace quarry tile sill detail. 4 No defective sills Redecorate Lintels	3
External Walls	Brick cavity wall construction. There is frost damaged low level brickwork to the gable end (lower 4 courses). There is weathered mortar joints at the top of the gable end elevation. There are 2 nr missing / defective louvered vent covers to flue/extract penetrations through the external wall. Decoration to lintels above windows on the elevation opposite the 'courtyard' are deteriorating. <i>Beckmill Lane Elevation</i> There are 3 nr defective tile sill details below windows, low level frost damaged brickwork and minor repointing works required.	3	Cut out and replace frost damaged bricks. Repoint where needed. Access Allow £5k	4

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Note Older polyester-coated metal casements are typically in a poor condition, ill-fitting and failing to adequately protect internal areas from the elements. Drafts were frequently apparent when inspecting internally, moisture visible between the panes indicates gasket failure and a suspected absence of thermal breaks is leading to condensation around the frame. In addition possible DPC failure or a total lack of a DPC may be contributing to masonry damage beneath.

Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Balconies and walkways	Concrete slab with asphalt finish dressed up the face of external walls and turned into a below standard recess (note that there is no sealant bead at this junction). The asphalt finishes will be nearing the end of their economic life towards year 10. Redecoration needed to outer edge of cantilevered walkway slab. There is a drainage channel set within the balcony in front of the communal stairs. The asphalt up stand has failed at the junction with this drainage channel The timber hit and miss screens to the drying areas are generally in good condition. However they lack central fixings which will reduce their resistance to collision and impact which is essential in this area.	3	Redecorate outer edge of walkway - Allow 1 man 1/2 day @ £250	4
Steel Handrail	Handrails in need of redecoration.	3	Redecorate 22m	3
Joinery	Timber drying areas in need of redecoration.	3	Redecorate - Allow 1 man 2 day	3
Block 54-57 Internal Communal Areas				
Roofs	Pitched timber roof with concrete roof tiles. All roof coverings, ridge tiles and lead sheet abutments appear in good condition. Missing balloon guard to flue.	2	Replace missing balloon guard.	4
External Walls	Brick cavity wall construction. There is minor hairline cracking above the second floor window above garage No 49. There is damp to brickwork immediately below the drying room concrete slab. There is 1 nr missing louvered vent cover to extract/flue penetration. Missing / defective tile window sill details.	3	Repoint minor cracking and repair/replace defective tile sill details. Replace missing vent cover.	4
Windows	Mixture of PVC, Polyester Coated Metal and Timber framed window units. The majority of windows are double glazed. Older polyester-coated metal casements are typically in a poor condition, ill-fitting and failing to adequately protect internal areas from the elements. During the 2012 internal inspection, drafts were frequently apparent when inspecting internally, moisture visible between the panes indicates gasket failure and a suspected absence of thermal breaks is leading to condensation around the frame. In addition possible DPC failure or a total lack of a DPC may be contributing to masonry damage beneath.	4	Replace metal framed window units in Year 1 to improve thermal and ventilation performance. Allow to replace / include for new DPCs and cavity closers at jambs. - Allow 14 No replacement windows @ £750 per window. Repair / replace quarry tile sill detail. 1 No defective sills - Allow 2 men, 1/2 day @ £200	3
Decorations	The internal brickwork was marked. The stair nosings are marked with areas missing.	3	Allowance should be made to periodically re-decorate. The stair nosings should be re-decorated.	4
Joinery	The timber hit and miss screens to the drying areas are generally in good condition. However they lack central fixings which will reduce their resistance to collision and impact which is essential in this area.	3		3

Internally - 2012 COMMENTS (this report does not cover minor items of repair such as decorations, fixtures and fittings)

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Element	Description and Condition	Cond. Code	Recommended Works	PR Code
Condensation Issues	<p>There was evidence of damp and black mould growth to the window frames and adjacent finishes within the majority of the properties we inspected. In one instance, this mould growth has extended to tenants full height curtains (Flat 39).</p> <p>The electric storage heaters are nearing the end of their economic life, there is a lack of thermal insulation and a lack of ventilation.</p>	3	<p>For budget purposes only:</p> <ul style="list-style-type: none"> - Allow for new additional mechanical extraction within each flat at £400 per flat. - Allow for isolation, disconnection and strip-out of electric storage heaters @ £750 per flat. - Allow for the installation of a new gas supply at say £30k - Allow for the installation of new gas central heating with combi boiler to each flat @ £2.5k per flat - Allow for new cavity wall insulation @ £18k 	3
External Areas				
Concrete balconies	Undersides of concrete balconies were observed as in poor condition at flats 42-51 and at the south eastern corner of the development, with peeling and failed soffit finish and evidence of rust staining indicating corrosion of either the underlying reinforcement or rail fixings.	3	Disrepair to the concrete was only noted in isolated instances and it is therefore recommended that an inhibitor is applied to the rebar and an epoxy mortar repair is undertaken to prevent further exposure of the reinforcement to the elements.	4
Lighting	Lighting to all common areas generally had poor lux levels and were not emergency light fittings.	3	Upgrade lighting.	1
Steel Handrail	The steel edge protection running along the northern perimeter path is incomplete, with a top rail missing adjacent to the entrance to flats 54-57.	3	Consideration should be given to upgrading the lighting to these areas.	1
External Ramps	Surface damage to the ramp running between flats 1-8 and 9-14 should be repaired in order to negate the risk of a potential trip hazard. The brickwork to the ramp running between flats 9-14 is also in poor condition was a number of spalled bricks. These should be replaced.	3	Repair.	2
Meter Cupboards	The external cover was noted as missing from the electricity meter box to flat 38 and should be replaced.	3	Replace.	1
Electrical Cabling	The electrical cabling within the internal communal areas is surface mounted in trunking. The trunking has been patched in a number of areas and was also seen to be open and missing in areas with unfastened cables exposed.	3	<p>All electrical cables in communal areas should be surface clipped with a fastening with an equal fire rating to the cable. Missing or damaged areas of trunking should be repaired.</p> <p>Allow £200 per area.</p>	4
Retaining Wall	There is a diagonal crack of approx 1-2mm in the brickwork to the retaining wall adjoining the industrial estate.	3	This crack should be monitored to ensure no further movement is taking place.	2
Footpaths	There are isolated potholes in the tarmac footpaths which run through the site. To the footpath running to the side of 54-57 there are tree roots which have disturbed the path surface. These cause a trip hazard.	3	Undertake patch repairs to tarmac to remove trip hazards. Remove tree roots to side of 54-57 and patch tarmac.	3
Car Park	There are isolated pot holes to the tarmacadam surface and deterioration to the thermoplastic demarcation to parking bays. The tarmac to the front parking area is becoming worn.	3	Undertake isolated tarmac repairs and renew thermoplastic line markings. Allow for future renewal of line markings every 5 years.	4

Sum-Totals



Appendix C

Heating and Hot Water Solutions Payback Periods (2012)

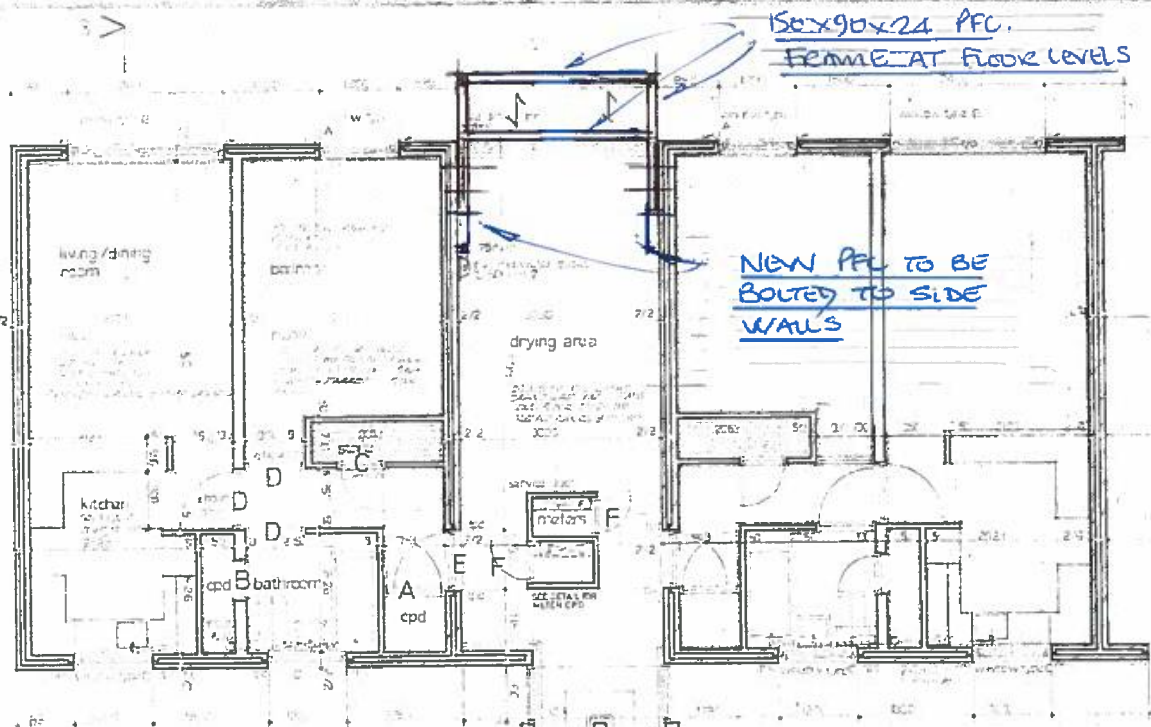
Beckmill Court

Energy for Alternative Heating

Primary Heating	Energy Required			Energy Used			Cost of Energy	Revenue Cost			Rebate / Revenue Generation /	True Revenue	Capital Cost	Payback Period (in relation to Existing)
	kWhr			kWhr				(£)	(£)					
	1 Bed Flat	2 Bed Flat	Combined	1 Bed Flat	2 Bed Flat	Combined	1 Bed Flat		2 Bed Flat	Combined	(£)	(£)	(£)	(Years)
Electric Storage Heaters	9,425	12,430	554,861	9,425	12,430	554,861	£ 0.15	£ 1,413.81	£ 1,864.47	£ 83,229.18	£ -	£ 83,229.18	£ 151,350.00	N/A
Individual Gas Fired Boilers	9,425	12,430	554,861	10,027	13,223	590,278	£ 0.06	£ 551.49	£ 727.28	£ 32,465.28	£ -	£ 32,465.28	£ 449,230.00	5.87
Central Biomass Boiler Plant	9,425	12,430	554,861	10,473	13,811	616,512	£ 0.10	£ 1,047.26	£ 1,381.09	£ 61,651.25	-£ 27,188.20	£ 34,463.05	£ 823,980.00	13.79
Ground Source Heat Pumps	9,425	12,430	554,861	3,366	4,439	198,165	£ 0.15	£ 504.93	£ 665.88	£ 29,724.71	-£ 16,645.84	£ 13,078.87	£ 1,236,280.00	15.47
Combined Heat and Power	9,425	12,430	554,861	17,137	22,600	1,008,839	£ 0.06	£ 942.54	£ 1,242.98	£ 55,486.12	-£ 11,652.09	£ 43,834.04	£ 673,780.00	13.26



Appendix D
Indicative Structural Drawings

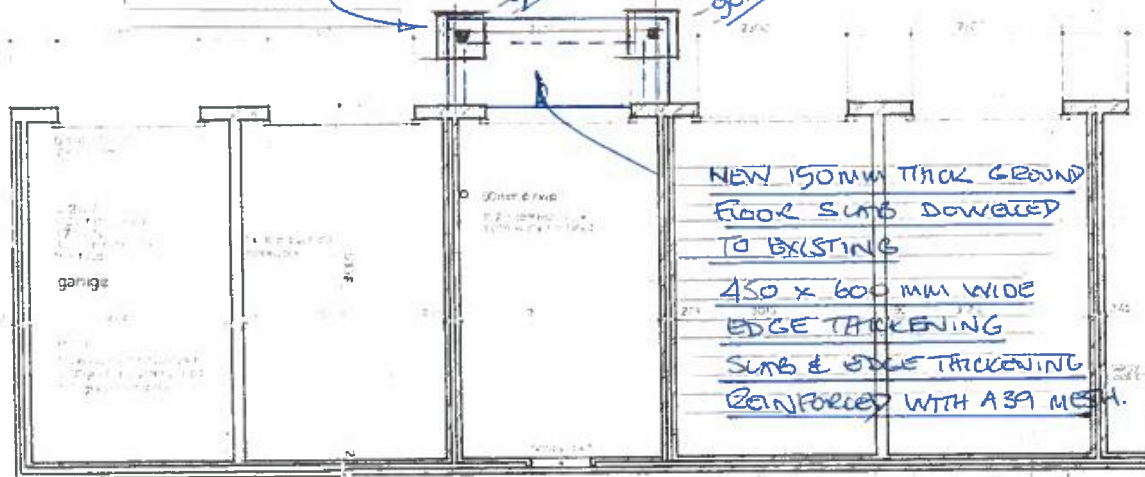


1st floor
PERSON FLATS

750x750x600 DP
CONCRETE BASES

90x90x306 SHS

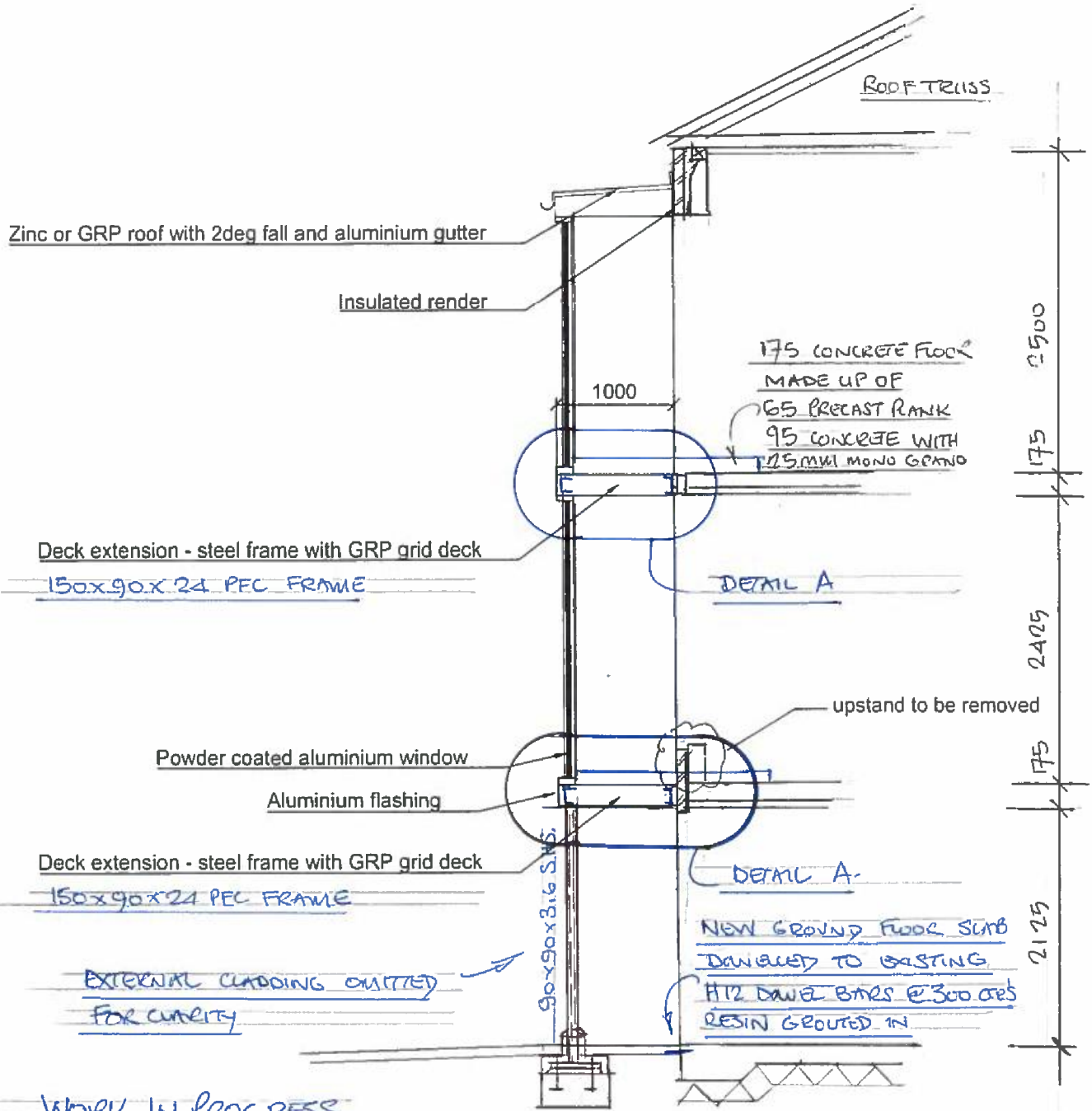
90x90x306 SHS



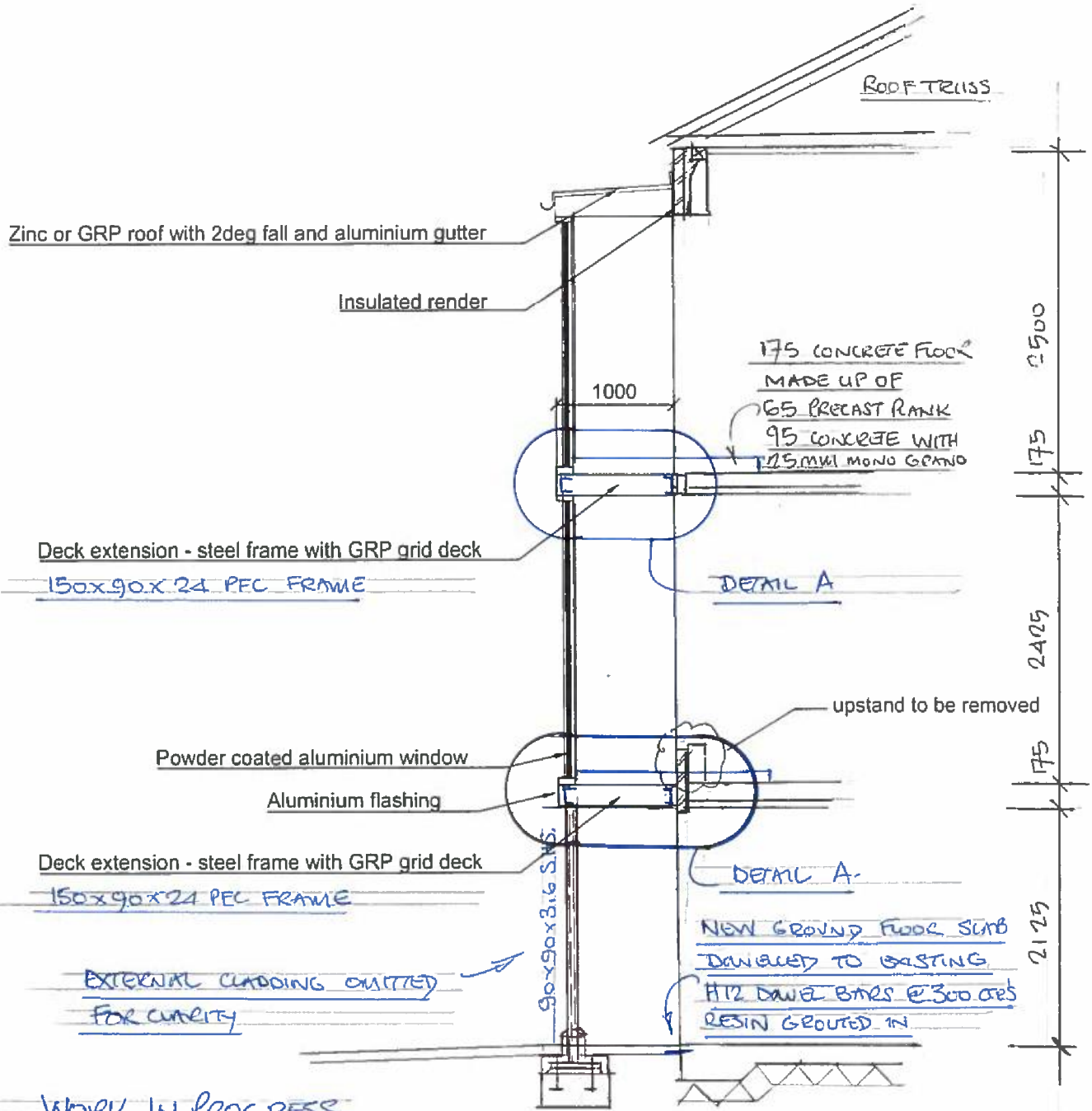
WORK IN PROGRESS

FULL HEIGHT EXTENSION
BECKMILL COURT
MELTON MOWBRAY

P12-386-SK 1/P1

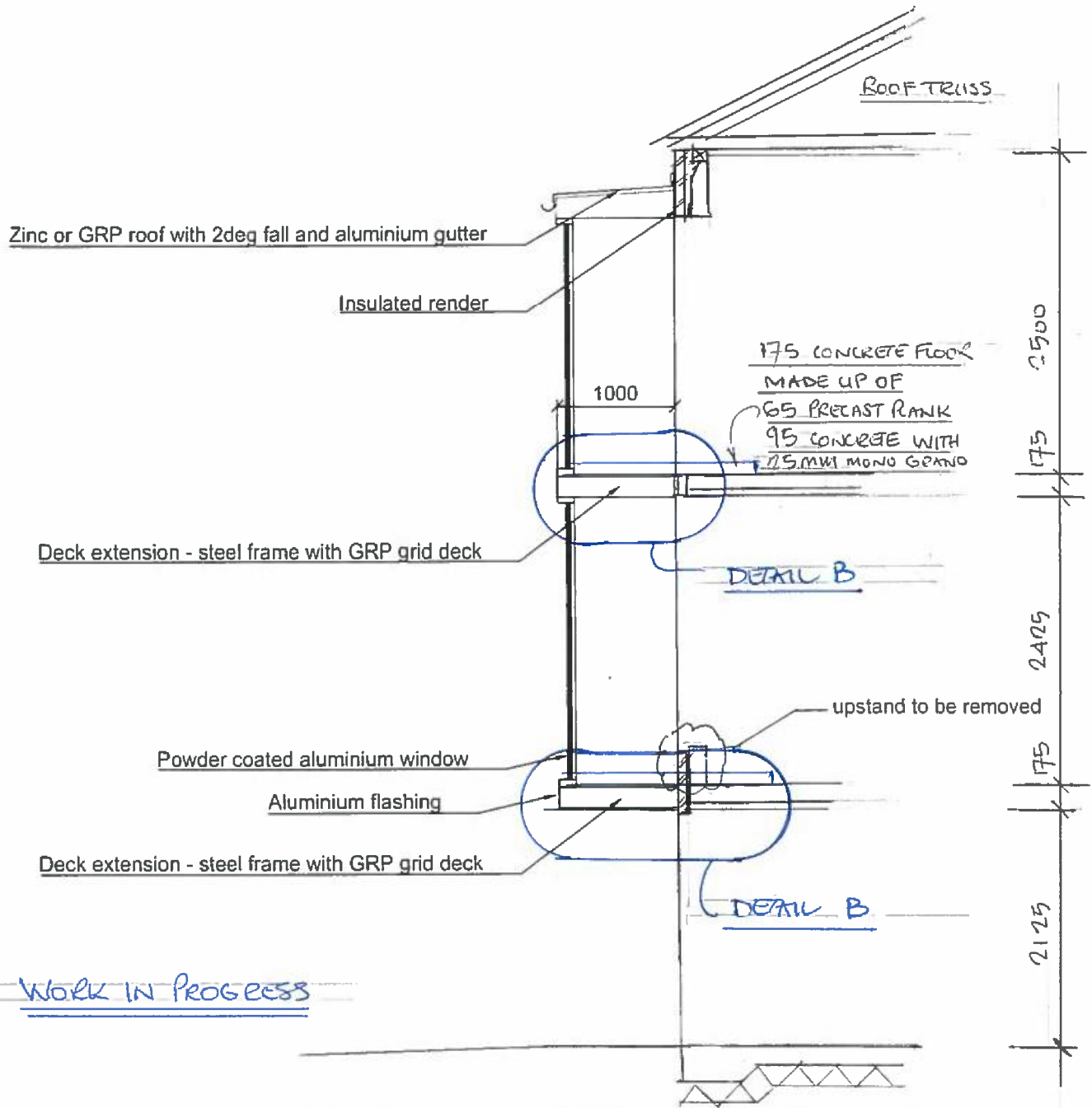


TYPICAL SECTION.



WORK IN PROGRESS

TYPICAL SECTION.



TYPICAL SECTION CANTILEVER BALCONY

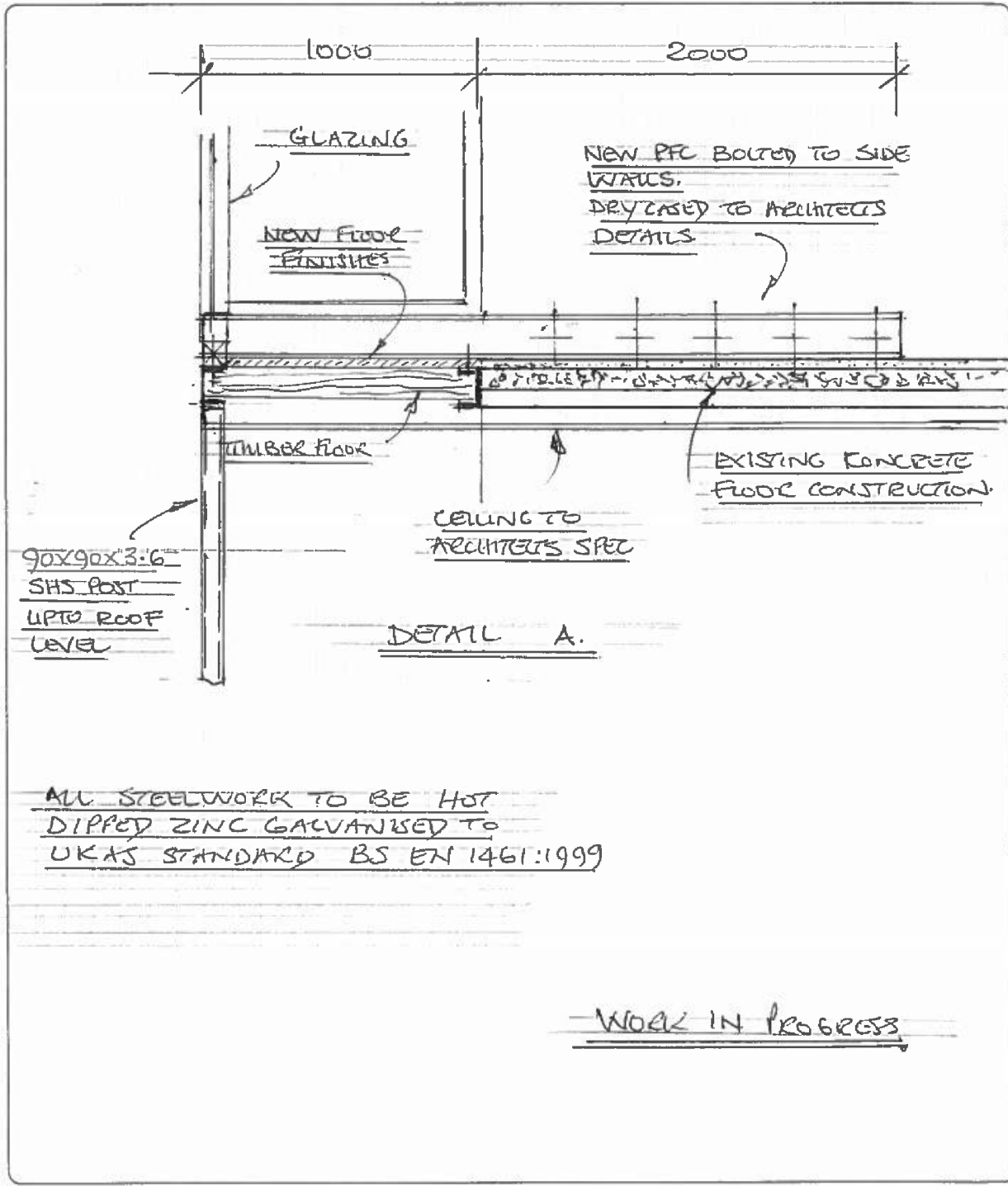
BALCONY EXTENSION

BECKMILL COURT

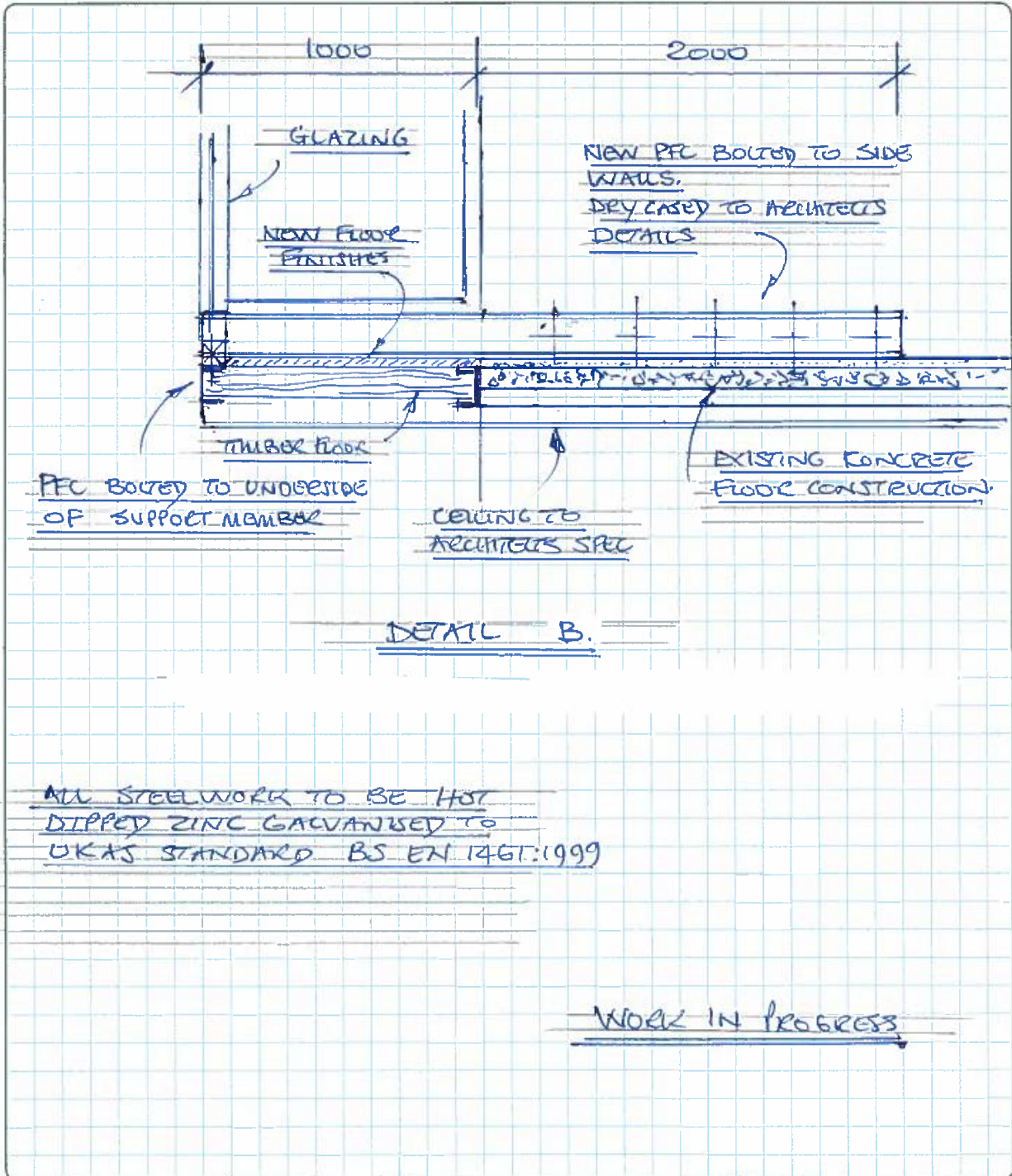
MELTON MOWBRAY

P12-386-SK4/P1

Project no: <u>P12-386</u>	Date: <u>FEB 15</u>	Time: _____	Prepared by: <u>JK</u>	Page: <u>SK5/PI</u>
Address	<u>BECKMILL COURT MELTON MOWBRAY</u>			
Subject	<u>EXTERNAL BALCONY - DETAILS</u>			



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