HousingExecutive

Response to:

FOI_22-23_215

February 2023

Greenisland Carrickfergus Balconies-ECM

In regards to the remedial works under contract project Greenisland Balconies including ECM Works, I would like to request all information relating to the tender including the contract award. Some specific information I would like access to are as follows:

1) Reports and evaluations of what works need to be carried out.
2) Evaluation of the work to be carried out.
3) The Project tender competition which was launched including dates of when the tender was run, type of tender and so forth.
4) Link or a copy of the contract award notice.

Response

1) A copy of the Glassillan Grove Greenisland Balconies Survey/Condition Report as carried out by the Consultant is provided below for reference which lists the various issues found on site as the Consultant surveyed the dwellings in this current proposed scheme. The proposed solutions and work required to resolve these issues are also included in the report.

2) The report carried out in 2016 by a Consultant appointed to look specifically at the metal balconies is also provided below. This provides details of the surveys, issues found and suggested options for the actions needed to resolve said issues and the recommended solution they suggested for same.

3) Tender details: CTU273 – Professional Services for Greenisland Balconies Date published/advertised: 21 February 2019
Date tender closed: 11 March 2019
Description/type of tender: CTU273 (Project No. 22.91.1004) - The provision of professional services to assess refurbishment works and prepare contract documents to 76 properties in Greenisland, Carrickfergus and to manage the subsequent delivery of the works on site.

4) The tender was ‘below threshold’ so no Contract Award Notice required.

SECTION 2

CONDITION REPORT

AND

PROPOSALS

1.00 METAL BALCONIES TO GLASSILLAN GROVE [redacted]

1.01 Existing Condition

Metal fire escape balconies have previously been added to the blocks of flats at Glassillan Grove at first and second floor level which provide fire escape access to the main stairwells via a rear door in the rear bedroom. The fall to the balconies has either been designed to drain towards the walls of the buildings or there has been an issue with the falls at the time of erecting the balconies. This has given rise to rainwater running off the balconies and soaking the brickwork and, in places, bridging the cavity and staining the wall and/or ceiling plaster in the bedrooms, bathrooms and kitchens at ground and first floor levels.

Figure 1 metal balconies to rear of [redacted] Glassillan Grove

Figure 2 metal balconies to rear of [redacted] Glassillan Grove with drying areas

Figure 3 Metal decking laid to incorrect falls into the building

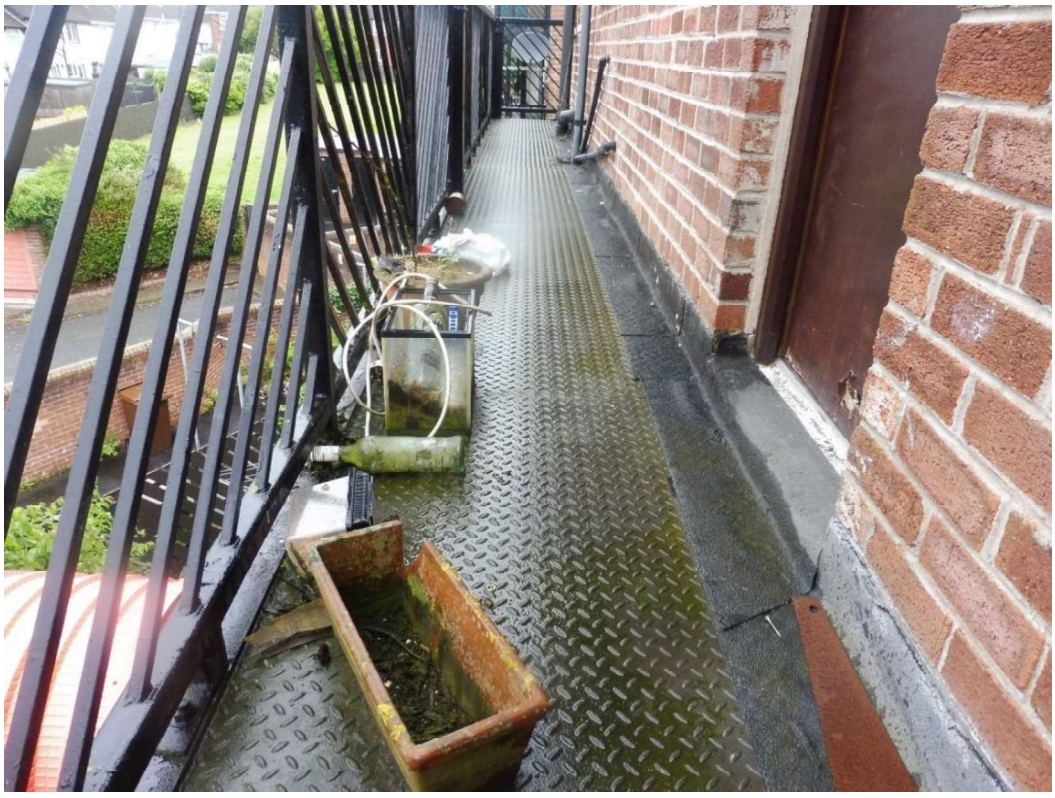


Figure 4 Repairs carried out to existing balconies include temporary felt flashings

Figure 5 Mould on walls where water runs off balcony and down external walls

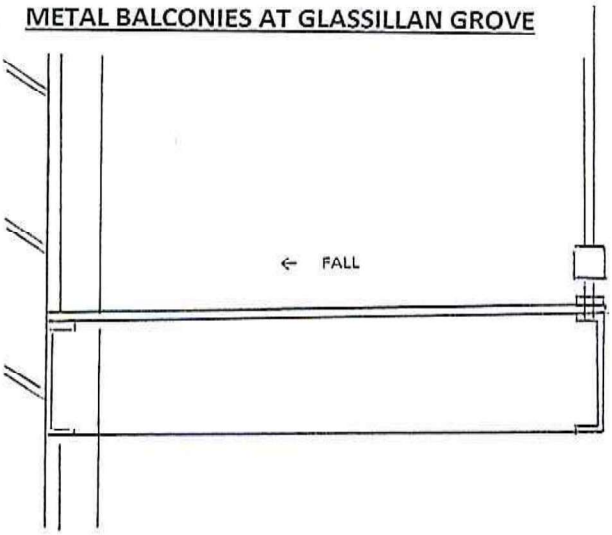
Figure 6 Evidence of water ingress from water coming off balcony to [redacted] Glassillan Grove

1.02 Proposal

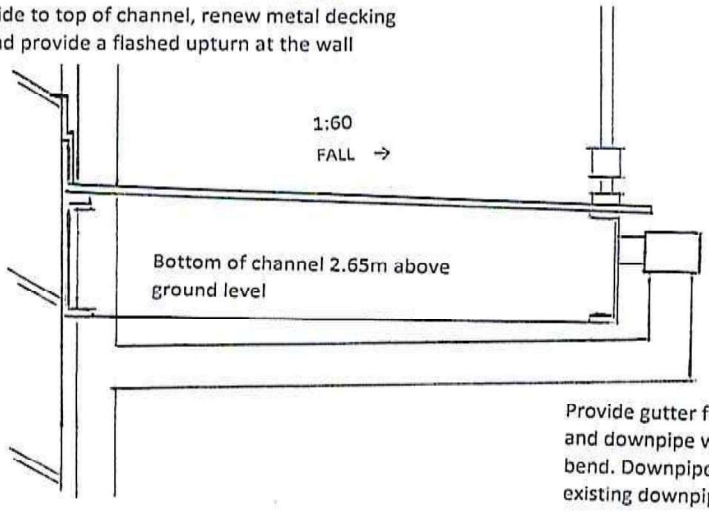
The existing metal plate flooring to the balconies will be removed and disposed of. A steel packer (to raise the level of the plate) will be bolted to the top of the existing steel channel which is bolted to the external face of the cavity wall. A new metal non-slip raised stud pattern floor plate will be bolted to the steel channels which will have an upturn at the wall. The upturn at the wall will be covered with a polyester powder coated flashing with the top edge dressed into a raked out brickwork joint and the flashing screwed to the wall. The flashing will be sealed at the brickwork joint and where it covers the upturn with a low modulus polyurethane sealant. The outer edge will drain into a new rainwater gutter which will be fixed to the external support channel and drained through downpipes connected to the existing downpipes fixed to the rear wall of the flats or, where this is not feasible, to a new gully trap connected into the existing storm drainage system. Existing handrails which are bolted to the outside channel will be removed and refitted as work proceeds. All steelwork will be redecorated following completion of the works on a block by block basis (see DETAIL 1 on next page). Works associated with this element would require careful planning and programming with the Contractor to minimise disruption for the tenants and owners as well as removing or minimising all areas of risk to the tenants, owners and Contractor's workforce.

DETAIL 1

METAL BALCONIES AT GLASSILLAN GROVE



Provide metal bar 15mm thick x 75mm wide to top of channel, renew metal decking and provide a flashed upturn at the wall



Provide gutter fixed to outer channel and downpipe with 92 degree bend. Downpipe connected to existing downpipe

PROPOSED ALTERATIONS TO METAL BALCONIES PROJECT NO. 22/78/1001	CLIENT	N.I.H.E.	Cooke & Kettyle LLP Chartered Surveyors 147 Cregagh Road Belfast BT6 0LB tel: 0289029 3208 email: joe@cookeandkettyle.co.uk
	SCALE		
	DRAWN	DD	
CONTRACT SUNNYLANDS SPECIAL REVENUE	DATE	AUGUST 2019	

2.00 DRYING AREAS TO GLASSILLAN GROVE [redacted] – [redacted] – [redacted]

2.01 Existing Condition

Blocks [redacted] Glassillan Grove have recessed open drying areas to the rear elevation. The floors to these areas are covered with asphalt and are generally approximately 200mm below the floor levels of the flats and metal balconies. The asphalt to these areas is cracked in places and with broken skirtings or with skirtings damaged with saw cuts from previous works. The asphalt skirting detail is incorrect in that the top edge is dressed to the wall rather than being turned into a chase cut into the wall. This is possibly leading to water penetration to stores below, which in isolated cases, have mould growth to walls and ceilings. This problem is probably exacerbated by a lack of heat or ventilation to these stores.

Drainage to these areas is inadequate with 50mm holes through walls from one drying area to another and a 32mm copper pipe outlet leading to a hopper head which is draining into a 100mm uPVC downpipe. The holes through the walls and the copper pipes are currently blocked. Falls in the asphalt are insufficient to remove rainwater in an efficient manner. A few of the drying areas have been enclosed by the tenant or owner therefore any remedial work may be problematic.

Between the drying areas are the fire escape routes from the balconies to the stairs within the communal halls. These areas are covered with durbar type steel flooring which could not be removed at survey stage for inspection. Any problems which are discovered to these areas during the works will need to be assessed and designed as works progress.

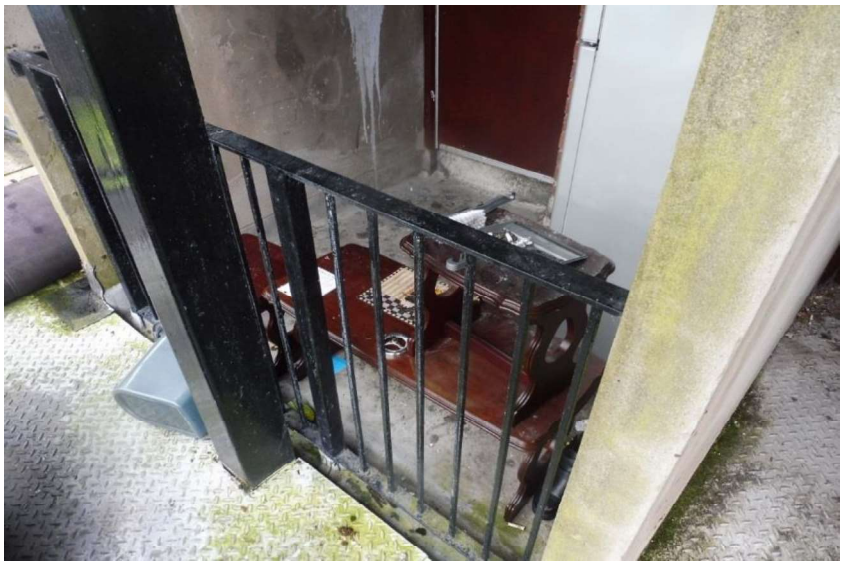


Figure 7 Asphalt drying areas with metal railing to front and access door from flat

Figure 8 Blocked outlet leading to a 32mm copper pipe

Figure 9 Pipe outlet from drying areas to hopper head

Figure 10 Fire escape route from balcony to communal hall door

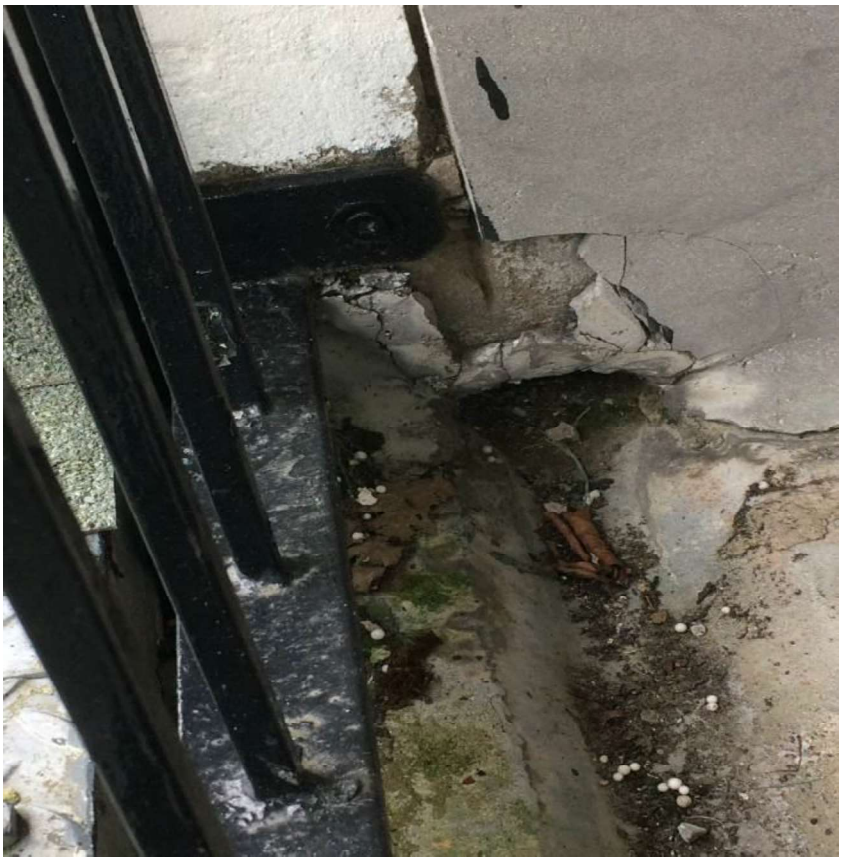


Figure 11 Damage to asphalt possibly leading to water penetration to dwellings below

Figure 12 Evidence of water ingress to store below drying area to [redacted] Glassillan Grove

2.02 Proposals

The existing asphalt surfacing will be recoated with a separating layer and 20mm asphalt. The skirtings to these areas will be re-asphalted and a glass reinforced plastic cover flashing will be fitted to the wall (see typical flashing detail at Drawing 003). The holes to the walls between the drying areas will be increased to 100mm and the outlet hole will have a mini-balcony outlet (see Drawing 006 Internal Rainwater Outlet) with a 50mm vertical outlet which will be connected to the existing hopper through a 63mm downpipe.

The escape route leading up to the fire escape door which is between drying areas has a metal surface at the same level as the balcony surface. We have been unable to lift this to establish the nature of the flooring below but we believe it would be fair to assume that it is the same as the asphalt flooring and skirtings to the drying areas and would need to be recovered and have the proposed drainage works continued to this area.

3.00 CAVITY WALLS INCLUDING INSULATION TO ALL DWELLINGS

3.01 Existing Condition

Walls to all blocks have been drilled at various levels to allow checking of the existing cavity insulation with a boroscope. The findings are that, at Rossmore Green, there is a mixture of different types of insulation to the cavities with some white beads having been used and some blown fibre evident, in all other instances the walls have been insulated with white polystyrene beads. In all cases areas of missing cavity insulation were observed. Refer to typical photographs 13 to 15 which were taken within the wall cavity. This was the case at both high and low level in the wall elevations. Insulation has settled and boroscope inspections indicate areas of the cavities that have no insulation present.

It could also be the case that insulation may not have been installed correctly or that it could have been installed in the 1980's when industry standards were not as advanced as they are today. The mortar pointing to the existing brickwork is badly weathered with areas of pointing having lost its struck joint and the softer more porous jointing bed being exposed. A mortar fillet has been provided at reveals of windows and external doors.

Steel angle lintels over windows and doors have rusted in numerous positions due to the water ingress as described in section 1.01 above. These lintels are now affected by ferrous oxide which is causing the steel to expand and widen the joints within the surrounding brickwork.

Figure 13 Block [redacted] - Glassillan Grove – Insulation absent

Figure 14 Block [redacted] – Glassillan Grove – Insulation absent

Figure [redacted] Rossmore Green - Void in insulation

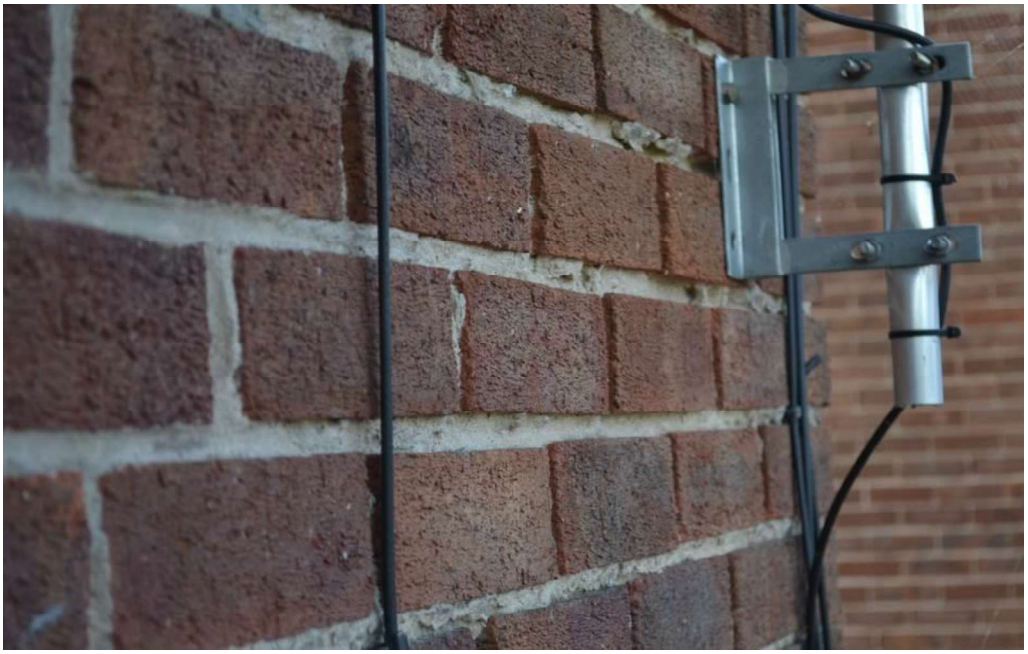


Figure 16 Poor mortar pointing to the existing brickwork

Figure 17 Steel angle irons affected by rust

3.02 Proposals

The remnants of the existing blown fibre or bead cavity insulation will be mechanically removed by a BBA accredited cavity clean specialist. Cavities will be allowed time to dry and refilled with an approved expanded polystyrene bonded bead cavity wall insulation by a registered installer (BBA accredited) and a Cavity Insulation Guarantee Agency (CIGA) guarantee obtained.

Brickwork, where covered in moss or water stained, will be cleaned to remove moss and staining (260m2) and treated with a biocide. All brickwork will be repointed (3980m2) in accordance with the NIHE Specification. A masonry water repellent will be applied (3980m2). Mortar fillets will be provided to all window and door reveals.

Steel lintels will be replaced where affected by rusting. This will entail cutting out the existing steel lintel together with the end brickwork and the brickwork courses carried by the lintel. It is proposed to use a stainless steel lintel together with a rigid plastic cavity type cavity damp proof course with end closers and weep holes fitted above the lintel, the brickwork above the lintels with be built up using the salvaged existing bricks to maintain the existing appearance as far as possible. (118Nr)

4.00 PRECAST CONCRETE WINDOW SURROUNDS TO GLASSILLAN GROVE

4.01 Existing Condition

Living room windows to flats generally have precast concrete surrounds which project forward from the external face of the wall. Most flats have recently installed uPVC windows. The precast concrete creates a cold bridge to the internal reveal of the living room. The uPVC windows have been positioned towards the outer edge of the concrete surround, which works to increase the action of the cold bridge. This tends to promote the formation of condensation on the reveal.

Rainwater running down the external face of the wall will run onto the top of the concrete window surround which creates a problem of water ingress as water can bridge the cavity at this point. This is causing plaster staining and debonding to window heads. Most of the surrounds have a lead flashing fitted to counteract this (see photograph below).

A few dwellings have had these precast concrete surrounds removed already (see photograph 19 below). Where wall finish is fair faced brickwork a self-finished render band has been provided around the top and sides of the window opening.

Figure 18 A typical concrete window surround

Figure 19 Window where concrete surround has been removed

4.02 Proposals

It is proposed to replace the (11 Nr) window surrounds to match those previously replaced. The window surrounds will be removed and new precast concrete lintels and sills will be built in, jambs will be built up and a new damp proof course and insulation will be provided to lintels, sills and jambs. A self-finished render band will be provided around the top and sides of the window opening. Internal wall plaster will be made good and a new PVC window will be installed.

It is proposed to replace concrete window surrounds to the following dwellings.

Glassillan Grove [redacted]

An * indicates a sold flat.