

Report on Inspection of
Residential Building

at
13 Market Street, Galway,
Co. Galway

for
Galway Simon

March 2025



Contents

Brief	2
Scope of Report	2
General	3
Ground Floor Level	5
First Floor Structure	9
Second Floor Structure	10
Third Floor Structure	11
Attic Space/Roof Structure	15
Exterior	17
Conclusions and Recommendations	19
Survey Drawings	22

Report on Inspection of Residential Building at No. 13 Market Street, Galway, Co Galway for Galway Simon

Brief

Instructions were received from Paul Corrigan & Associates (PCA) to carry out a conditional survey of the structure and fabric of a residential building at No. 13, Market St, Galway on behalf of Galway Simon, and to report on its current condition and any matters of concern in relation to the fabric or structure of the building. Galway Simon are prospective purchasers of the building.

Scope of Report

This report and its conclusions and recommendations are based on a visual inspection of the property carried out on 19th February 2025 by Mr Alan Clarke BE CEng MIEI and photographs taken during this inspection.

Access was obtained to the internal areas of the building throughout. The building was inspected externally from ground level. This report relates to the physical condition of the building structure and fabric at the time of the inspection. The survey was visual only and cannot take account of any items that are concealed, covered over or not readily accessible for visual inspection. Some localised opening up work was carried out to inspect a small number of concealed elements as noted in the report.

The report was prepared in conjunction with Val O'Brien & Associates who undertook an inspection of the visible and accessible elements of the building fabric and this report should be read in conjunction with the report prepared by them. A dimensional survey of the building was also undertaken by PCA as part of the assessment of the building and a copy of the survey plans which were prepared by PCA are appended to this report for ease of reference.

Electrical or plumbing services have not been inspected and are not commented on, and the mechanical and electrical services should be inspected by a competent consultant or contractor.

Internal and external drainage and piped services have not been inspected beyond where they are visible at manholes or inspection chambers. They have not been camera-surveyed and no opinion can be given in relation to these concealed elements.

It was not possible to inspect woodwork, concrete, or other parts of the structure which were covered or inaccessible, and it is not therefore possible to accept any liability in respect of defects that may subsequently become apparent arising from timber diseases of any

description including vermin, insects, wet or dry rot, defects in constituents of concrete, the extent of bearings, ties, fixings or any defect of a similar nature. We will advise if evidence suggests that opening up of concealed parts for further investigation is required.

No testing of materials of construction was carried out, and no opinion is given in relation to the adequacy of materials of construction, save where visible evidence suggests ongoing or potential future problems due to defects in these materials. No excavations or tests were carried out to determine the depth, nature or condition of the foundations or the adequacy of the bearing stratum in which they are founded.

Checking and/or certifying compliance of the property with planning permission and building regulations, and checking or verification of property boundaries are outside the scope of the survey and report.

General

The property is a four storey end of terrace structure located on the north western side of Market St, in Galway city centre (see photograph 1). It is likely to date from the early to mid-19th Century. An historic photograph of the building indicates that the existing street front building was originally constructed with an attached three storey rear annex, most of which has subsequently been demolished (see photograph 2). The remaining original building has been extended to the rear (northwest) by the addition of a single storey extension constructed partly on the footprint of the original rear part of the building. It appears likely that some of the external walls to the original rear building have been retained and the extensions constructed on these original walls.

An originally adjoining two storey building to the north east of the subject building has also been demolished and the remains of an original arch over a carriageway between the two buildings remains. The existing fourth floor accommodation is an addition to the original accommodation and is constructed within the roof structure. It is not clear from a visual inspection if the existing timber roof structure dates from the original construction of the building or is a more recent replacement.

The historic photograph appears to indicate that the building originally contained two adjoining dwellings with two separate front entrance doors, but was subsequently merged into a single property with alterations to the arrangement of doors and windows at ground floor level reflecting these internal alterations.



Photograph 1: Front Elevation of Building



Photograph 2: Historic photograph of building (dated circa 1880)

The external walls to the building appear to be the original solid rubble masonry walls (the building was originally rendered externally). The interior of the original building has been significantly altered since its original construction with little of the original building fabric remaining. The original internal walls have been removed and replaced with modern block walls at ground floor level and stud partitions at the upper floor levels. The external masonry

walls are generally dry-lined internally. The ground floor is of concrete construction throughout and the upper floors are formed with timber floor decking on timber joists. It is likely that the timber joists to the upper floor levels are replacements of the original timber structure.

The building is included on Galway City Councils Record of Protected Structures (Record No. 5407). It is not included in the National Inventory of Architectural Heritage. It was vacant at the time of this inspection and has not been occupied or maintained in recent years. The building has deteriorated significantly since its last occupation and parts of the interior are in poor condition. The property is in need of significant refurbishment and upgrade to render it energy efficient and habitable to a modern and comfortable standard.

Room numbers have been assigned to the various rooms throughout the building for ease of reference in the report. These room numbers are indicated on the survey drawings of the building (which have been prepared by PCA), which are appended to this report.

Ground Floor Level

The ground floor comprises two rooms either side on an entrance hall inside the front entrance door, and the stairwell to the upper floors, all contained within the original street front building. The rear extensions contain a kitchen, a bathroom and other ancillary rooms along with a boiler house with a small enclosed yard area between the original building and the rear extension. The ground floor appears to be a ground bearing concrete slab throughout. The floors are finished with a combination of tiles, carpet and vinyl/marmoleum coverings.

The internal structure of the original building consists of timber floor joists spanning between the front and rear walls and supported internally on downstand beams which are in turn supported on the external end gable walls and the internal walls enclosing the stairwell (see photograph 3). Timber stud walls constructed from the first floor level support the second floor third and fourth floor structures. Drilling of the enclosure to the downstand beams above the ground floor level indicate that these are timber beams supported on the internal and external masonry walls.

Moisture ingress was noted in numerous locations throughout the ground floor, both in the original building and more extensively in the rear extension. Moisture damage was noted around the front window in room G-1, and also on the rear wall of this room. Copious water ingress is occurring at the junction between the pitched roof over room G-2 in the rear extension and the rear wall of the original building. This is resulting in water damage to the ceilings and walls in room G-2, and is most likely the source of the moisture damage on the inside of the rear wall of the original building. Opening up was carried out to the ceiling at the

rear of room G-1. The bearing ends of the timber floor joists forming the first floor overhead were exposed.



Photograph 3 – Front room at ground floor level with downstand beam at ceiling level

While the joists were generally intact, some softening and the timber was observed where the joists are embedded in the rear wall. This is due to the extent of moisture in the wall, which is causing wet rot decay to the timber. Staining on the ceiling over much of the rear of room G-1 would indicate that moisture ingress is occurring over a significant portion of the rear wall, and it is likely that a number of the joist ends have suffered from decay. This would need to be investigated further prior to, or as part of any refurbishment work to determine the extent of the damage to the floor joists and the need for repairs to, or replacement of, the affected floor joists.

Room G-2 would appear to have originally been an open external area between the original front building and the building containing rooms G-3, G-4 & G-5, which has been roofed over. The building fabric in this room is in very poor condition with water ingress occurring through the roof particularly at the junction between the pitched roof and the rear wall to the original building, and along the valley gutter between the roofs over room G-2 and room G-7 and the stairs (see photograph 4). Rising damp was also observed around the base of the internal walls. This part of the building will either need to be taken down and reconstructed (if required), or extensive repairs would need to be carried out to the roof, walls and floors, and consideration would need to be given to installing an injected type damp proof course around of the base of the masonry walls.

2No. manholes on the foul sewer drainage system are located within the floor of this room, and are covered with matting. The manholes are poorly constructed and are in very poor condition, and the covers are not properly sealed - as required for internal manhole covers - to prevent foul odours or gases from entering the room (see photograph 5). If this area is to form part of the interior of the building in the future, the manholes (as most likely the associated pipework) would need to be removed and reconstructed.



Photograph 4 – View towards rear wall of original building in room 2 showing water ingress on walls and rising dampness



Photograph 5 – Foul sewer manhole in floor of room 2

An oil boiler is located in room G-6 which is accessed directly from room G-2. The flue from the boiler extends into the small open yard between room G-6 and room G-1, and upwards along the south western site boundary wall. The boiler room is poorly constructed with a ventilation opening in the southern wall having been formed by breaking out the original blockwork and does not appear to incorporate any lintel to support the masonry wall and roof over the opening. It appears likely that the heating system in the building will need to be renewed in its entirety, and consideration should be given to relocating the boiler room from this location, or reconstructing this room.

The part of the building which contains room numbers G-3, G-4 & G-5 is a single storey structure with a pitched roof with a slate finish, which is at a higher level than the pitched roof over room G-2. A hatch in the ceiling over room G-3 provides access into a small attic space within the roof over this part of the building. The portion of the external walls that are visible within the attic space are of modern concrete block construction. However, the thickness of the walls at ground floor level would appear to indicate that the blockwork upper portion of the external walls on the south western, north western and a portion of the north eastern side of this building are constructed on a retained lower portion of the thicker, single leaf, rubble stone walls to the original building that covered this part of the site. The original masonry walls are not visible as most of the walls are dry-lined internally. There was no evidence of moisture ingress on the internal finishes. There is no insulation over the ceilings to this part of the building and it is unlikely that any of the external walls or the concrete ground floor structure are insulated. If this part of the building is to be retained, the dry-lining should be removed to allow the original stone walls to be examined to check their condition and integrity. If any significant alterations are to be undertaken requiring alterations to the original stone walls, consideration would need to be given to possibility of having to take down and reconstruct these external walls.

Cracking was noted in the ceiling over room G-7 which contains a fitted kitchen and has been constructed as a single storey extension to the rear of the original three storey building. The roof over this part of the building is constructed with a slate covered, pitched cut timber roof with a vaulted ceiling. It is likely that some slight deflection of the rafters in this roof due to the raised collar type ceiling joists has caused lateral movement of the tops of the external masonry support walls supporting the roof, which has led to the cracking visible in the ceilings. The external masonry walls to this part of the building are likely to be partly formed by the original external enclosing walls to the rear yard, as lead flashings have been applied from behind the gutters at the eaves of the roof down over the top of the external walls. It is unlikely that this wall construction incorporated any insulation. Again, if this part of the building is to be retained or remodelled, consideration should be given to taking down and reconstructing these parts of the building.

The exact depth and width of the timber downstand beam spanning over rooms G-1 and G-8 could not be determined, and the adequacy of the beam, both in terms of load bearing capacity and fire rating could not be definitively determined. The plaster finishes to this beam should be stripped back over a portion of the beam in each of the rooms to allow the beam to be fully assessed, including the bearing points in the external walls to check for any decay or deterioration in these bearings.

First Floor Structure

The first floor structure consists of timber decking on timber floor boards which are supported on timber joists spanning between the front and rear walls of the building, and supported on the timber beams over rooms G-1 and G-8 at ground floor level, as noted above. The first floor structure was opened up at 2No. locations within the rooms at first floor level (in addition to the opening up carried out below ceiling level in room G-1 at ground floor as noted above). The floor joists were exposed at their bearing points at the front of room 1-1 and along the rear wall in room 1-4 (see photograph 6). The timber floor joists vary in depth from 210mm to 225mm and vary in width between 50mm and 52mm at the locations which were exposed. Joist centres varied between 360mm and 480mm. No excessive moisture content readings were observed in the masonry walls or in the timber joists at the 2No. locations which were opened up, and no decay was observed in the floor joists. The joists were notched at both of the locations which were opened up, with the notches at these locations measured at 30mm and 35mm, both exceeding the maximum notch depth permitted under current design codes.



Photograph 6 – View of floor first joists at bearing on external wall

Note notching in joists for heating pipes

An attempt was made to undertake further opening up in room 1-3, however the floor finishes in this room (and other rooms) consist of sheet vinyl type coverings on a plywood deck overlying carpet which is fully glued/bonded to the original floor boards. It was not possible to locally remove this carpet. It would appear that, during the most recent upgrade to the floor finishes, the plywood overlay to the earlier carpet finish was fitted to allow the vinyl coverings to be laid and to avoid the need to remove the original carpet finish. This will have an impact on the extent of work involved in replacing or renewing the floor finishes as part of the upgrade to the building finishes.

All of the external walls at first floor level are dry-lined. The opening up of the floor joists exposed the masonry walls at the joists bearings and the walls appear to be the original brick and rubble masonry at these locations, which would suggest that the front and rear walls generally retain their original masonry fabric. The ceilings below the first floor structure were a modern gypsum plasterboard in all areas inspected.

The dry-lining was locally opened up on the inside face of the north eastern external end wall. The exposed face of the external wall consisted of modern block construction at this location, however it appears likely that this is a localised infill block to an original fireplace on this external wall. This could only be confirmed by more extensive opening up work, prior to or during any refurbishment/upgrade works to the building. The dry-lining did not incorporate any insulation.

The internal walls at first floor level are all of timber stud construction and these are providing support to the floor joists at second floor level above. This structural arrangement (which is repeated at third floor level) results in the load from all of the upper floors being transferred down through the internal stud walls to the downstand timber beams above the ground floor rooms. The upper floors rely on the internal stud walls for support and if it is intended to alter the layout of these internal walls, consideration will need to be given to providing additional structural support to the floor joists.

Second Floor Structure

The general arrangement, span directions and sizes and spacings of the joists and floor structure at second floor level replicate that at first floor level. Opening up of the second floor structure was undertaken against the rear wall in room 2-4. Wet-rot decay was observed in the bearing end of one of the two joists ends which were exposed. Again, excessive notching to the joists was noted. An access hatch in the ceiling (close to the rear wall) over room 2-5 allowed access to examine the joists ends at third floor level above, and the findings relating to this location are noted below.

All of the external walls at second floor level are dry-lined inside the original brick and rubble masonry walls. Damage due to moisture ingress was noted on the dry-lining to the window jamb in room 2-3 and the dry lining board had softened and broke away easily when probed in this area. The opened up section of the dry lining exposed the rubble stone masonry wall behind. Moisture content readings on this front external wall indicate that the wall fabric is saturated due to water ingress through the exposed external stone face. While the floor structure could not be opened up in this room due to the excessive build-up of floor finishes, it is likely that some decay in the joist ends has occurred in this area due to the elevated moisture content in the front external wall at the joist bearing locations. Remedial works will be required externally to the front wall in order to mitigate against the risk of ongoing moisture ingress into the wall structure to prevent further decay to the floor joists. Structural repairs or replacement of the damaged joists will be necessary.

Third Floor Structure

The floor structure at third floor level replicates that at the first and second floors below. This floor is at the eaves level of the building and is likely to have been formed subsequent to the original construction of the building.

Opening up of the floor structure was carried out against the front wall in room 3-1. The bearing ends of two joists were exposed at this location and one of these joist ends was found to be badly decayed where it was embedded in the front wall due to wet-rot as a result of elevated moisture levels in the masonry (see photograph 7). Again, excessive notching off the joist (up to a depth of 40mm) was observed at this location which significantly exceeds the maximum permitted notch depth for a timber floor joist. An access hatch in the ceiling over room 2-5 at second floor level allowed the bearing end of the adjacent floor joist to be inspected at this location. Significant decay was noted along the bottom edge of the floor joist at its bearing in the external rear wall (see photograph 8). Timber packers were noted between the decayed joist end and the masonry on which it is supported, presumably fitted during an earlier refurbishment of the building in an attempt to remediate the damage cost to the joist end by the localised decay.

The general condition of the upper floor joists, due to the decay observed at numerous locations throughout the building, is a significant concern in the context of the refurbishment and upgrade of the building, and it is likely that either significant repairs/remedial works will be required to rectify the damage caused by this decay or, depending on the extent of proposed alterations to the internal layout of the building, it may prove more economical to remove and replace the existing timber floor joists.



Photograph 7 – Decay at embedded joist end in front masonry wall



Photograph 8 – Decay in joists end (beyond pipes) with wedges supporting joist

Damage to the sloping ceilings due to water ingress was visible along the rear of room 3-7 close to the rooflight (see photograph 9). Opening up of the sloped ceiling in this area was undertaken in order to assess the condition of the rafters and the roof makeup generally in this area. Significant damage has been caused to the roof construction in this area due to water ingress which appears to be occurring through the slate roof finish adjacent to the velux type roof light on the rear of this sloping roof. The gypsum ceiling slabs were locally removed revealing decayed rafters and slating battens with the roofing felt above the rafters also having failed and broken away (see photograph 10). Fibreglass insulation has been packed

into the voids between the rafters in the roof construction. Both wet rot, and traces of dry-rot mycelium were visible on the rafters where the ceiling was removed (see photograph 11). The extent of this dry-rot infestation will need to be determined by opening up and all affected timber will need to be removed. This area will need to be examined and treated by a specialist, in order to remove all affected timber and to eliminate the dry-rot fungus from any affected wall fabric in this area to prevent it from recurring and/or spreading. Similar evidence of water ingress through the roof coverings was observed at numerous locations throughout the accommodation at third floor level.



Photograph 9 – Damage on ceiling/wall at rear due to water ingress



Photograph 10 – Decayed rafter on rear of roof



Photograph 11 – Dry-rot mycelium on rafter at rear of roof

The roof finishes were examined locally around the velux rooflight over room 3-7. A visual inspection of the slates in the vicinity of the rooflight indicated that the slate roof coverings are in poor condition with numerous slipped slates, vegetative growth and extensive surface pitting of the top of the slates (see photograph 12). It is not possible from a visual inspection to determine the exact source of the water ingress that is causing the damage to this part of the roof, however it is likely to be due either to the slipped slates or the issues with the flashings and detailing around the rooflights, or a combination of both. It is likely that similar defects/deterioration to the roof coverings and flashings etc are causing the water ingress that was observed at other locations around the rooms at third floor level. It would appear that the roof coverings are nearing the end of their useful life, and in the context of an extensive refurbishment and upgrade to the building, it is likely that the roof coverings will need to be replaced.



Photograph 12 – Damaged/pitted and slipped slates on rear of roof

Cracking was noted in the ceilings above third floor level and between the ceilings and the external walls. This cracking is likely to be due to movement/deflection on the roof structure and the cause of this movement is discussed below

Attic Space/Roof Structure

The roof structure is visible within a small attic space over the third floor accommodation, and confirms the general structural arrangement as visible where the vaulted ceiling was opened up in room 3-7. The roof consists of timber rafters spanning from the tops of the front and rear external walls up to ridge level, with raised collar ceiling joists spanning between the rafters at ceiling level over the third floor accommodation.

Roof lights have been formed in all of the habitable rooms at third floor level. A number of the original rafters have been cut away in order to provide adequate space between the rafters for the rooflights. Bridging timbers have been fixed between the remaining rafters to provide support for the cut rafters at the top and bottom of the rooflight openings.

A number of the original timber rafters have also been cut away above ceiling level over the third floor accommodation, with new replacement timbers nailed to the side of the remaining part of the original rafters (see photograph 13). The cutting/replacement of the original rafters was most likely carried out during a previous refurbishment of the building to remove damaged/decayed timbers from historic water ingress. The form of the roof structure relies on continuity of the roof rafters and the integrity of the ceiling joists/ties to provide structural stability to the roof. The cutting and replacement of parts of the rafters has compromised this

stability. It is likely that the extent of cracking observed in the ceilings in the third floor accommodation is partly due to the alterations that have been carried out to the roof structure, most significantly the cutting of the rafters to remediate historic damage and to form the roof light openings. It is likely that the roof structure is now partly relying on the internal stud walls at third floor level to provide support to the roof structure. This will need to be considered prior to the refurbishment of the building, particularly if it is intended to alter the layout of the internal walls. As the roof coverings and internal ceiling finishes will need to be stripped away to facilitate the refurbishment of the building, and the decayed rafters will have to be replaced where wet and dry-rot have occurred as noted above, the cut and lapped rafters should be replaced with new full length timber rafters, properly fixed to the ceiling joists. Where rafters have been cut away to install rooflights, the original rafters on each side of the rooflight openings should be doubled up to restore the integrity of the roof structure.



Photograph 13 – Cut and lapped rafters above third floor level

No significant water ingress was observed in the attic space above the accommodation at third floor level. The gable walls at each end of the roof are of rubble masonry type construction, indicating that these gable walls are likely to be the original masonry walls.

Fibreglass insulation filling the void spaces between the rafters and the ceilings over the sloping ceilings has eliminated any possibility of ventilation across the roof space which compromises the durability of the timber rafters. It is likely that this may be a contribution to the presence of dry-rot in the rear of the roof structure. A new regime for insulation of the roof structure will need to be established with rigid insulation between the rafters while maintaining a ventilation gap across the roof construction to mitigate against the risk of condensation within the roof structure and consequent decay. As noted above, given the condition of the

roof slates, it is likely that the roof coverings will be removed and replaced as part of the refurbishment of the building. The existing exposed timber structure should be examined in full at that stage (following the removal of all timbers affected by dry-rot) and any necessary replacement or upgrade should be undertaken at that stage. Any existing timbers which are to be retained should be treated by a specialist to ensure the long-term durability of the timber structure.

The original chimney that would have been present at the top of the north eastern gable wall has been removed at some point when the building was historically renovated. The chimney on the south western gable remains in place and is finished with what appears to be a sand and cement render. While there is no significant evidence of water ingress into the building through this chimney, the north eastern face of the chimney is visible from the rooflights on the rear of the roof and damage to the chimney capping is evident with loss of the plaster finish and vegetative growth at the top of the chimney (see photograph 14). This chimney should be repaired to prevent further deterioration to the masonry structure and the render finishes, and to mitigate against the risk of future water ingress into the building.



Photograph 14 – Damage to chimney capping on south western gable wall

Exterior

The external masonry structure to the three storey building is generally in reasonable condition, with some cracking noted, particularly on the north eastern gable wall. Given the age of the structure, this cracking is unlikely to be of structural significance. However, it is most likely contributing to the extent of the moisture ingress noted internally in the building,

This gable wall, along with the rear wall are finished externally with a sand and cement render and the pointing to the stone on the front elevation appears to be a sand cement mortar. The building would originally have been finished with a lime plaster. While, the replacement sand and cement render/pointing would not be considered to be an appropriate wall finish in terms of the breathability of the external walls, and leaves them prone to moisture ingress, recommendations regarding the most appropriate course of action in relation of the external wall finishes is outside the scope of this report, and reference should be made to the building survey report prepared by Val O'Brien & Associates. While some repairs or remedial work will be required to the external render and pointing to mitigate against moisture ingress, removal and replacement of the render and/or pointing may not always be appropriate or feasible due to the potential damage that can be caused to the existing masonry.

Lateral ties and restraint straps should be installed between the floors and the external walls during the refurbishment of the building in order to ensure the long term lateral stability of the external wall panels. The lintels over the doors and windows in the rendered external walls are most likely formed with flat stone arches (as visible on the front elevation) but may retain timber lintels to the inside of the wall openings. This would need to be exposed and examined prior to, or during the restoration of the building to check for any decay or deterioration, and any necessary repairs/remedial works carried out as necessary.

Conclusions and Recommendations

The existing structure to the main three storey building consists of load bearing external walls, an internal support beam at first floor level and load bearing internal stud walls at the upper floor levels supporting timber joists spanning between the front and rear of the building. While the structure is generally stable at present, with no significant structural distress or cracking apparent on the main external masonry structure, ongoing water ingress through the walls and roof is causing damage and decay to the floor joists at their bearing ends, and this decay has now progressed to a point where it has compromised the structural adequacy of the floors and the roof structure. Without intervention in the short term, the timber elements of the fabric and structure of the building will continue to progressively deteriorate at an increasing rate, and will ultimately reach a point where they are no longer structurally stable. The presence of dry-rot in the roof structure is a significant element in terms of the durability of the building structure and in particular the roof, due to the speed at which it can cause catastrophic damage to the timber elements in which it is present. This dry-rot needs to be eliminated as a matter of urgency.

Eliminating the moisture ingress into the external wall fabric will be critical to the long term durability of the refurbished building and this will most likely require some degree of repair and/or repointing to the stone and associated joints in the external front wall, and repairs/remedial works to the external render. This intervention will be dealt with in more detail in the report prepared for the building by Val O'Brien and Associates, Building surveyors.

Remedial structural works will be required to the timber floors at all levels in order to rectify the damage to the bearing ends of the joists as observed at a significant number of the areas where opening up of the ceilings and floors was carried out, and to remediate the excessive notching to the joists. It is not possible from a visual inspection of localised opening up works, to definitively determine the proportion of joists that have been compromised and will need to be rectified or replaced. The existing floor boards would need to be removed along the external walls throughout the building to allow all of the joist ends to be examined. It is likely that the existing ceilings below the joists will need to be removed and this will allow the locations and the extent of the notching to the joists to be ascertained. At that stage, a decision could be made as to whether localised repairs to the affected joists will be more economical than a full replacement of the existing joist structure in the context of the extent of refurbishment and upgrade works that will be undertaken.

The extent of refurbishment that it is intended to undertake will inform the most appropriate and economical form of internal structure for the building. Options for the repairs/replacement of the internal floor structures include using the existing external walls to support the floor

structures - generally as the present arrangement, or the possible installation of a new structural support frame within the building which would support the internal floors independently of the existing masonry walls. This would create the possibility to form new internal floors in concrete if considered desirable.

The adequacy of the lateral ties between the floors and the external walls would need to be assessed and adequate provision made for remedial ties to the walls to ensure the long-term lateral stability of the external walls.

The adequacy of the existing timber support beam spanning across the building at first floor level and supporting the first, second and third floor structures, would need to be confirmed by exposing the bearing ends of the beams on the external walls which would both allow the condition of the bearings to be assessed, and the size, structural adequacy and fire resistance of the beam to be confirmed. The masonry piers on which these timber beams are supported on each side of the internal stairwell at ground floor level are critical elements in the current general structural arrangement, and these walls cannot be removed without rearranging the internal support structure.

All of the upper timber floors depend on the existing arrangement of internal load bearing stud walls at each floor level, to support these floors and if it is intended to alter the layout of these internal walls, consideration will need to be given to providing additional structural support to the floor joists. The general condition of the upper floor joists, due to the decay observed at numerous locations throughout the building, is a significant concern in the context of the refurbishment and upgrade of the building, and it is likely that either significant repairs/remedial works will be required to rectify the damage caused by this decay or, depending on the extent of proposed alterations to the internal layout of the building, it may prove more economical to remove and replace the existing timber floor joists.

The existing roof structure has been compromised by decay and deterioration, and by the cutting and removal of a number of the original timber rafters. Extensive structural repairs will be required to the roof structure, including the removing and replacing of all timbers affected by the wet rot and dry rot that were observed where the roof was opened up at the rear of the building, treating and eliminating the dry-rot, examining the remaining roof timber and replacing any other areas affected by wet and/or dry rot, in order to restore the structural integrity and capacity of the roof structure.

It is likely that the existing ground floor slabs do not incorporate any insulation. It is likely that the ground floor slabs will need to be removed entirely and replaced with new, insulated and damp-proofed concrete slabs, as part of any refurbishment works.

It will be necessary to remove the existing dry-lining to the inside of the external masonry walls to facilitate the insulation of the building envelope. The condition of the masonry walls should be examined in detail, particularly close to ground level to establish if rising dampness is occurring or at risk of occurring. It may be necessary to consider the installation of a remedial damp proof course around the base of the external walls or other measures to prevent moisture ingress into the restored building in the long term.

The single storey buildings to the rear of the three storey building are generally in poor condition, are badly detailed, and are in need of either significant remedial works or removal and replacement. Water ingress into parts of the roof structure have caused extensive visible damage to the internal wall and ceiling finishes and have most likely led to decay in the concealed timber rafters. It is our opinion that the removal and replacement of this part of the building will be the most appropriate and economical solution for this area.

No insulation is incorporated in the floors or external walls of the building and most likely none is present in the roof construction, and consideration will need to be given to an overall strategy for insulating the building in a manner which is compatible with its age and form of construction. While specific details of the approach and specification of the insulation to the various elements of the building is beyond the scope of this report, new insulation will need to be incorporated in the floors, walls and roof of the building as part of the restoration and upgrade of the building in order to mitigate against excessive heat loss and energy consumption.

The existing manholes on the foul sewer drainage which are currently located in room G-2 in the single storey part of the building will need to be removed and reconstructed, regardless of whether the accommodation in this part of the building is retained, renovated or removed. A CCTV survey of the existing drainage pipework should be carried out in order to determine its condition and the need for any repairs, remedial works or replacement.

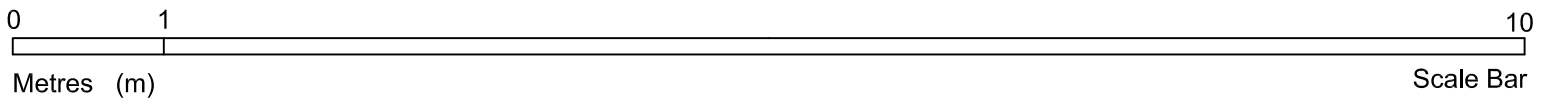
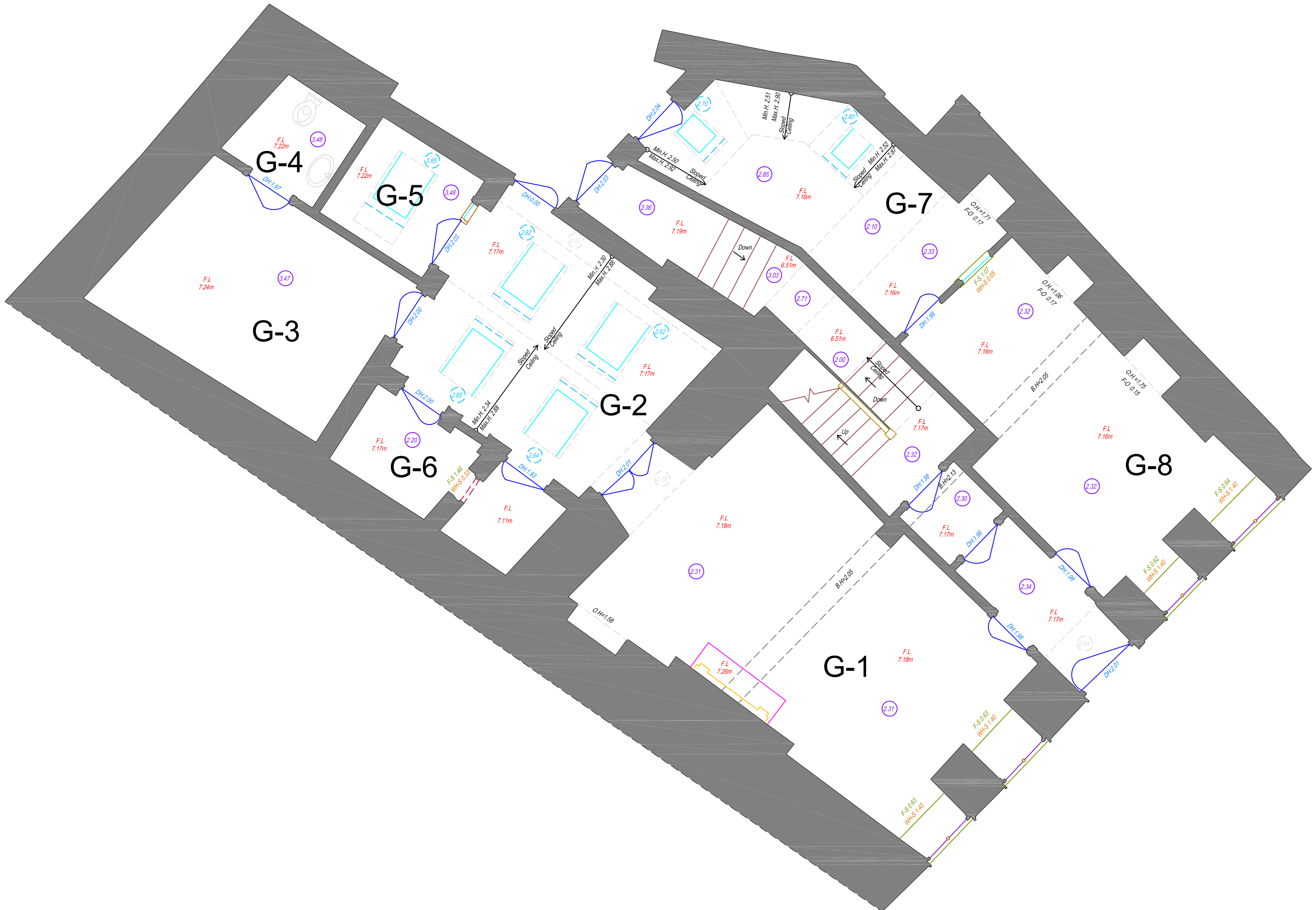
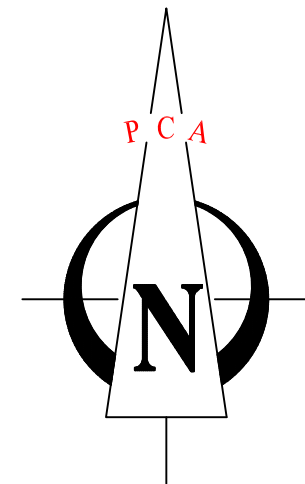
Signed:



Alan Clarke BE CEng MIEI
Chartered Engineer
Alan Clarke & Associates

Date: 19th March 2025

Survey Drawings



- Wall
- Window
- Step
- Ceiling
- Door
- Fireplace
- Surface
- Bannister
- Sill
- Glass
- Panel
- Beam

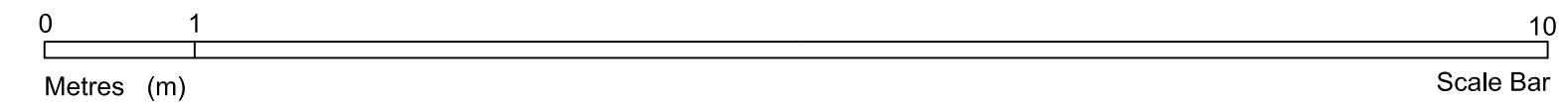
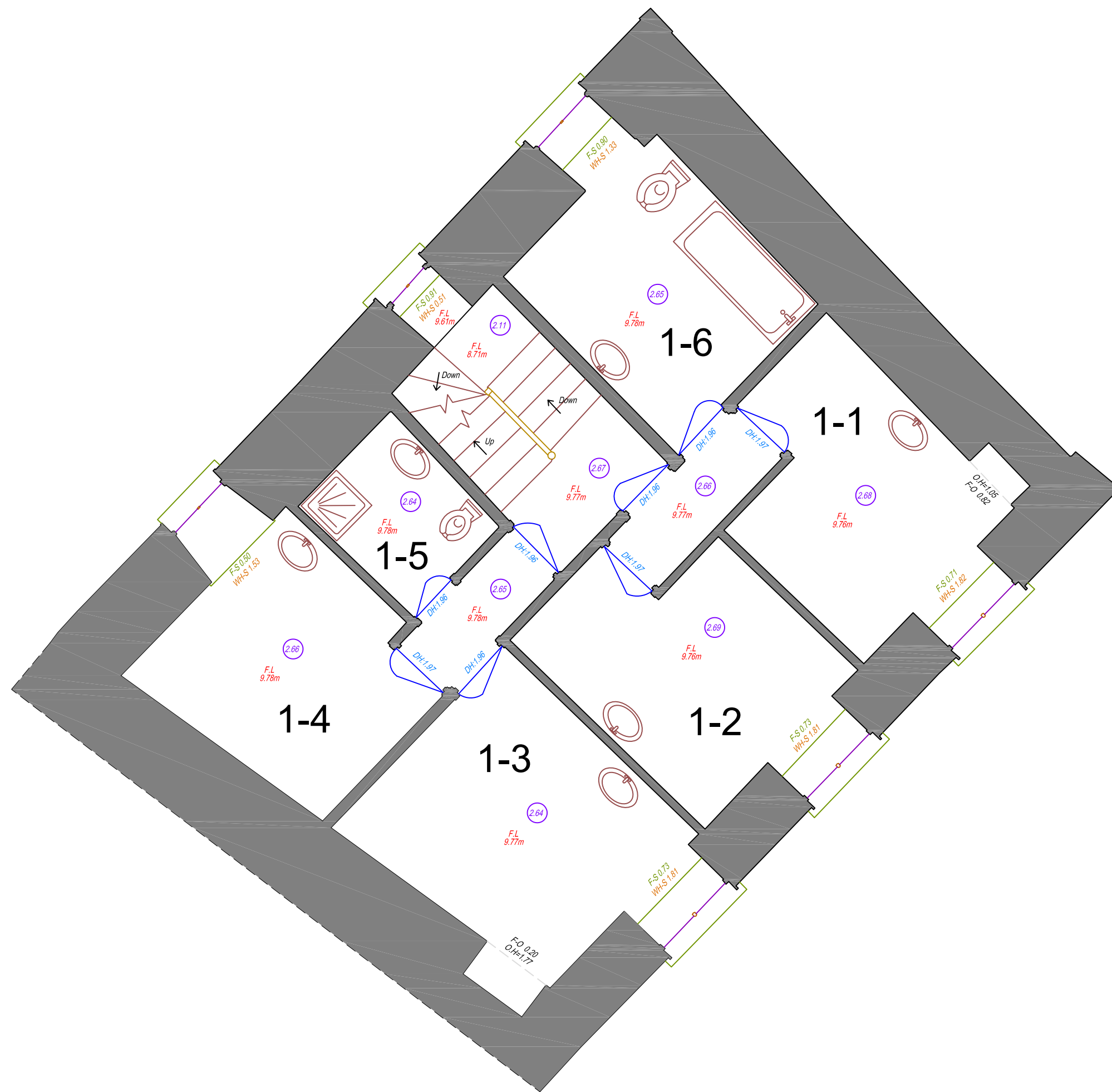
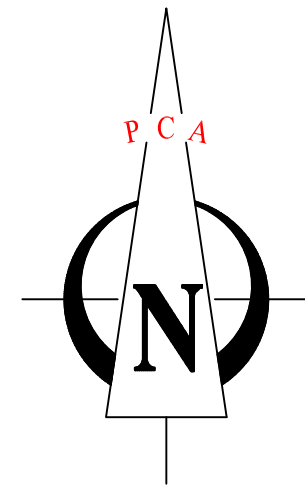
- Ceiling Height
- Floor Level
- Beam Height
- F-S 0.00
- WH-S 0.00
- Door Height
- Minimum Ceiling Height
- Maximum Ceiling Height
- Opening Height
- Floor to Opening

Notes:

- This Survey was produced for original clients specification at time of instruction.
- If the survey is to be used by any other parties, or for purposes other than those originally considered, further details or higher accuracies may be required. Please contact PCA.
- PCA takes no responsibility for additions made by third parties to survey.
- Accuracy and amount of detail is based on scale of mapping.
- Drainage pipe sizes (where shown) have been gauged from the surface for safety reasons and should be regarded as approximate only.
- Note: Accuracy of survey to plot scale.

Grid	11M	Job No.	250211WC
Levels	Main Head	Date	15/02/2025
Scale	1:500	Drawn	TS
Revision	Original	Checked	NC

13 MARKET STREET
GALWAY
FLOOR PLAN - GROUND FLOOR



- Wall
Window
Step
Ceiling
- Door
Beam
Surface
Bannister
- Sill
Glass

- 0.00 Ceiling Height
FL 0.00m Floor Level
B.H.=0.00 Beam Height
- F-S 0.00 Floor to Sill
WH-S 0.00 Window to Sill
DH:0.00 Door Height
- Min.H. 0.00 Minimum Ceiling Height
Max.H. 0.00 Maximum Ceiling Height
O.H.=0.00 Opening Height
F-O 0.00 Floor to Opening

Notes:

- * This Survey was produced for original clients specification at time of instruction.
- * If the survey is to be used by any other parties, or for purposes other than those originally considered, further details or higher accuracies may be required. Please contact PCA.
- * PCA take no responsibility for additions made by third parties to survey.
- * Accuracy and amount of detail is based on scale of mapping.
- * Drainage pipe sizes (where shown) have been gauged from the surface for safety reasons and should be regarded as approximate only.

Note: Accuracy of survey to plot scale

PAUL CORRIGAN & ASSOCIATES
Billicrest House, Billicrest Road
Sandyford, Dublin 18
tel (+353 1) 2136300
fax (+353 1) 2136301
office@pcas.ie

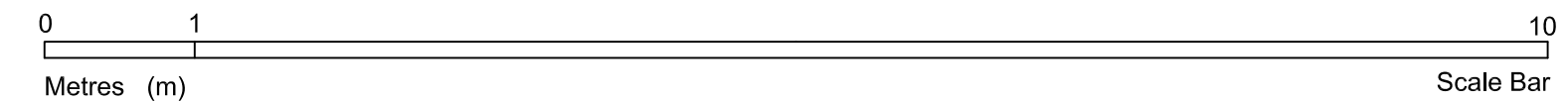
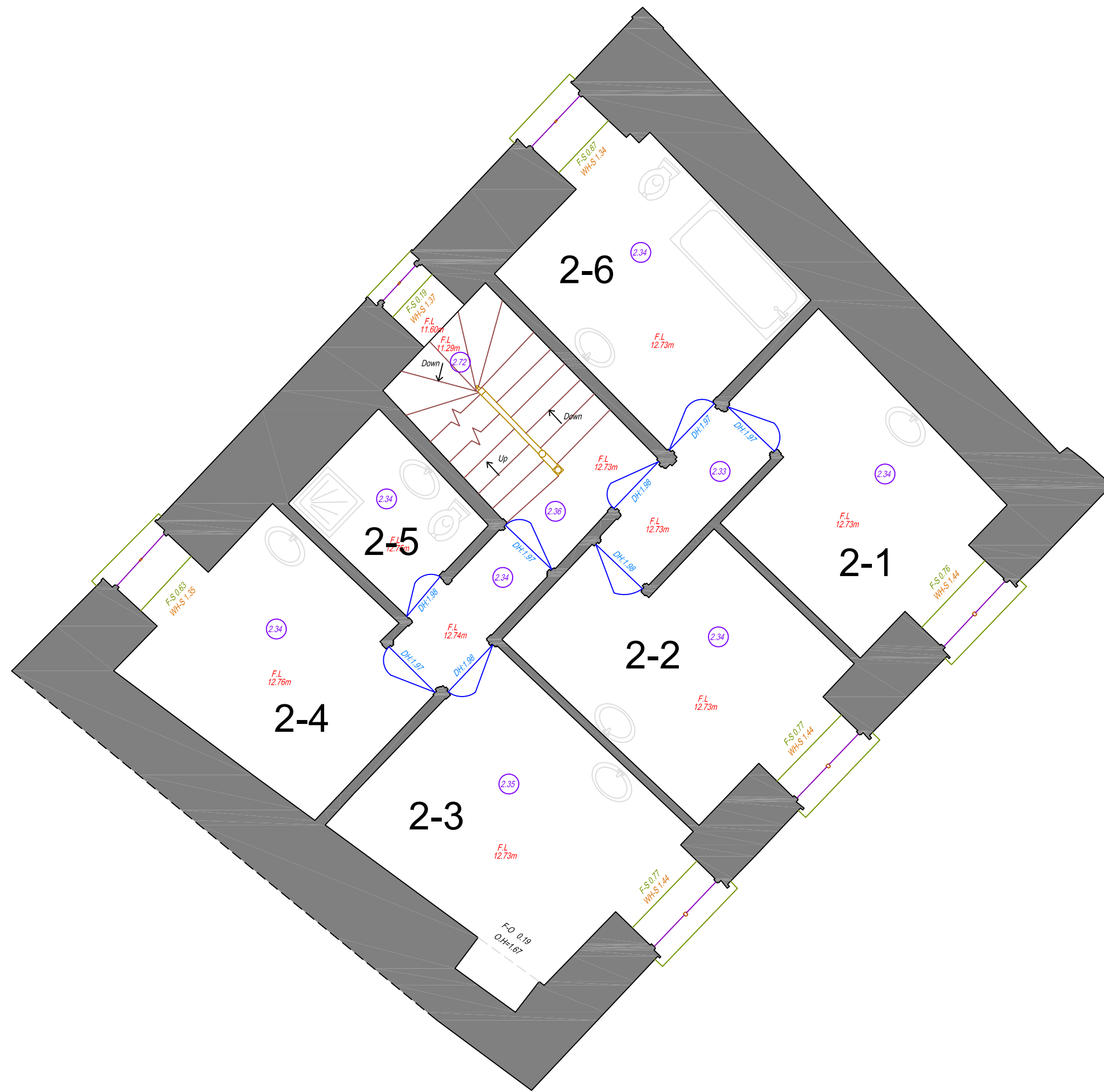
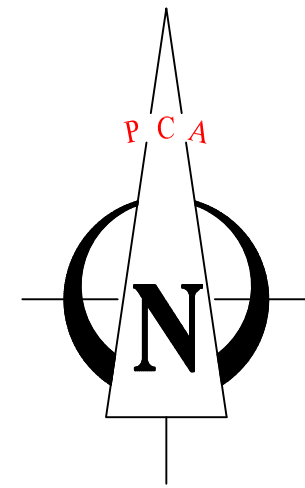


Grid	ITM	Job No.	2502IMC
Levels	Main Head	Date	15/02/2025
Scale	1:50 @ A1	Drawn	TS
Revision	Original	Checked	NC



13 MARKET STREET
GALWAY

FLOOR PLAN - FIRST FLOOR



Wall
Window
Step
Ceiling
Door
Beam
Surface
Bannister
Sill
Glass

0.00 Ceiling Height
FL 0.00m Floor Level
B.H.=0.00 Beam Height

F-S 0.00 Floor to Sill
WH-S 0.00 Window to Sill
DH 0.00 Door Height

Min.H. 0.00 Minimum Ceiling Height
Max.H. 0.00 Maximum Ceiling Height
O.H.=0.00 Opening Height
F-O 0.00 Floor to Opening

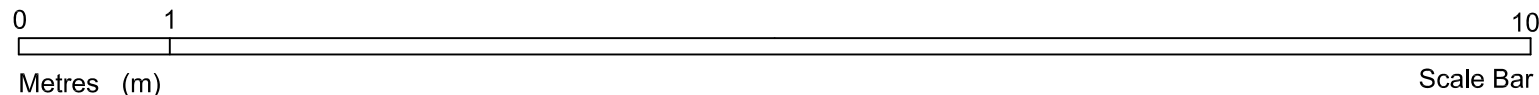
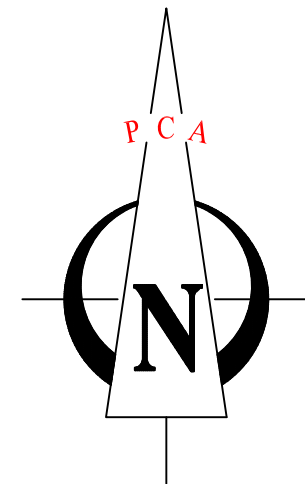
Notes:
* This Survey was produced for original clients specification at time of instruction.
* If the survey is to be used by any other parties, or for purposes other than those originally considered, further details or higher accuracies may be required.
* Please contact PCA
* PCA take no responsibility for additions made by third parties to survey.
* Accuracy and amount of detail is based on scale of mapping.
* Drainage pipe sizes (where shown) have been gauged from the surface for safety reasons and should be regarded as approximate only.
Note: Accuracy of survey to plot scale

PAUL CORRIGAN & ASSOCIATES
Hilbert House, Hilbert Road
Sandyford, Dublin 18
tel (+353 1) 2136300
fax (+353 1) 2136301
office@pcas.ie



Grid	ITM	Job No.	250211WC
Levels	Main Head	Date	15/ 02/ 2025
Scale	1:500@A	Drawn	TS
Revision	Original	Checked	NC

13 MARKET STREET
GALWAY
FLOOR PLAN - SECOND FLOOR



- Wall
- Window
- Step
- Ceiling
- Door
- Fireplace
- Surface
- Bannister
- Sill
- Glass
- Panel
- Beam

0.00 Ceiling Height
F.L. 0.00m Floor Level
B.H.=0.00 Beam Height

F-S 0.00 Floor to Sill
WH-S 0.00 Window to Sill
D.H. 0.00 Door Height

Min.H. 0.00 Minimum Ceiling Height
Max.H.. 0.00 Maximum Ceiling Height
O.H.=0.00 Opening Height
F-O 0.00 Floor to Opening

Notes:
* This Survey was produced for original clients specification at time of instruction.
* If the survey is to be used by any other parties, or for purposes other than those originally considered, further details or higher accuracies may be required.
* Please contact PCA
* PCA take no responsibility for additions made by third parties to survey.
* Accuracy and amount of detail is based on scale of mapping.
* Drainage pipe sizes (where shown) have been gauged from the surface for safety reasons and should be regarded as approximate only.
Note: Accuracy of survey to plot scale

PAUL CORRIGAN & ASSOCIATES
Hilbert House, Hilbert Road
Sandyford, Dublin 18
tel (+353 1) 2136300
fax (+353 1) 2136301
office@pcas.ie



Grid	ITM	Job No.	250211WC
Levels	Main Head	Date	15/02/2025
Scale	1:500	Drawn	TS
Revision	Original	Checked	NC

13 MARKET STREET
GALWAY
FLOOR PLAN - THIRD FLOOR