

ARCHITECTURAL CONSERVATION REPORT

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1.0 INTRODUCTION

1.1 Introduction

This report on the conservation and heritage issues associated with the proposed Ballina Flood Relief Scheme has been commissioned by the RPS Group on behalf of Mayo County Council and prepared by Alastair Coey of Alastair Coey Architects. Alastair Coey is a conservation architect accredited at Grade One by the Royal Institute of the Architects of Ireland. Alastair Coey Architects has previously acted as Conservation Advisor with Arup for the Lower Lee (Cork City) Flood Relief Scheme since October 2017.

The report takes into account the Heritage Council Submission on the Ballina Flood Relief Scheme, dated 20 February 2023.

The following actions have taken place during the preparation of this report:

- Alastair Coey visited Ballina on Wednesday 15 November 2023 and conducted an initial inspection of the areas on the north and south banks of the River Moy which would be impacted by the Flood Relief Scheme. This was not a detailed condition survey and this report is based on initial impressions which may be subject to review as additional information becomes available and more-detailed surveys are carried out.
- An MS Teams meeting was held with Robbie Maguire (Executive Architect, Ballina Municipal District, Mayo County Council) on Wednesday 13 December 2023. Mr Maguire's views expressed in the meeting have been taken into account.
- A site meeting was held in Ballina on Tuesday 06 February 2024, attended by PJ Griffin (RPS Technical Director), Joanna Mole (RPS Landscape Architect), Robbie Maguire and Michael O'Grady (Mayo County Council, Flood Risk Management). Matters discussed and agreed have been incorporated into the report.
- An MS Teams meeting was held on 22 February 2024 with Shay Kelleher, representing the Heritage Council.
 The meeting was attended by Alastair Coey, Tatiana Kelley (RPS), Joanna Frehill (Senior Project Engineer) and Joanna Mole (Senior Landscape Architect). The approach and recommendations outlined below were presented and broadly endorsed by Mr Kelleher.

1.2 Background

Ballina Town has a long history of flooding. The main sources of flooding are high-water levels in the River Moy and also the inadequate conveyance capacities of the smaller stream channels and associated culverts along with their limited discharge capacities into the River Moy during high water levels. Properties located on Bachelors Walk, Arbuckle Row and Clare Street suffered extensive flood damage during the January 2014 and December 2015 flood events.

In 2012 the Office of Public Works (OPW) National Catchment-based Flood Risk Assessment and Management study (CFRAM) identified Ballina and its low-lying environs as an Area for Further Assessment (AFA) and subsequently a number of potential flood relief/protection measures were identified and assessed to be viable and effective to reduce the risk of flooding for vulnerable properties located in the town.

In February 2020, Mayo County Council, in partnership with the OPW, appointed RPS Consulting Engineers to further assess the CFRAM Study, identify options and prepare a detailed scheme for Ballina which was economically viable, socially acceptable and environmentally sustainable.

Ballina lies at the mouth of the River Moy near Killala Bay in the Moy Valley and Parish of Kilmoremoy, with the Ox Mountains to the east and the Nephin Beg mountains to the west. The first evidence of settlement on the site of the town date from around 1370 when an Augustinian Friary was founded on the site. Ballina became a garrison town and commercial centre in 1723 under the influence Field Marshall James O'Hara Lord Tyrawley, an Irish officer in British Army. The Great Famine (1845-1852) severely affected the population in and around Ballina and severe starvation occurred. The Ballina workhouse served the entire northwestern coast of Mayo. Francis Kinkead, the Church of Ireland curate in Ballina is memorialized on a marble tablet in the church for his work in seeking to raise funds to help relieve the suffering of both Catholic and Protestant populations. Ballina was among the first urban areas in County Mayo to adopt the English language.

The town's Pearse Street Architectural Conservation Area (Fig.03) lies to the north of the River Moy and largely comprises buildings flanking both sides of Pearse Street, Walsh Street, Moy Lane and Pawn Office Lane with the southern boundary occupying a short length of the north side of Emmet Street. The town has a number of architecturally-significant buildings included on the Record of Protected Structures the most impressive of which is St Muredach's Cathedral, the Cathedral church of the Diocese of Killala, which is located on the south bank of the river. Construction of St Muredach's began in 1827 using locally-quarried limestone, and the main body of the church was completed before the Famine years, with the spire being added in 1855 and the organ in 1875. Other buildings of note in the town centre include the former Provincial Bank

located at the junction of Pearse Street and Walsh Street (now housing the Jackie Clarke Museum) and the childhood home of Mary Robinson, Ireland's first female President (now housing the Mary Robinson Centre for Change) on Emmet Street. The historic streets of the town consist mainly of three-and four-storey Georgian and Victorian buildings although a great deal of redevelopment has taken place over recent years and in particular the Ballina Manor Hotel dominates the riverside on the north bank upstream from Upper Bridge. The area now occupied by this hotel and Ballina Arts Centre to the south of Barrett Street (formerly Shamble Street) was, in the nineteenth century, the site of the town's gas works, a sawmill, brewery and cornmill of which only fragments survive as evidence of the former industrial use.

Upper Bridge (formerly Arran Bridge after the Earl of Arran) and Lower Bridge were constructed in the 1830s to replace earlier bridges. Neither appear to have any statutory protection although both are of considerable historic and architectural significance and make an important contribution to the town's riverscape.

The town centre areas impacted by the Flood Relief Scheme include, on the South Bank of the river, Ridgepool Road from the footbridge to Upper Bridge, Cathedral Road from Upper Bridge to Lower Bridge and Clare Street (Sligo Road) from Lower Bridge to the west boundary of Tom Ruane Park and, on the North Bank, the footbridge to Upper Bridge, Emmet Street from Upper Bridge to Lower Bridge and Bachelors Walk from Lower Bridge to Arbuckle Row.



Fig.01 Upper Bridge



Fig.02 Lower Bridge

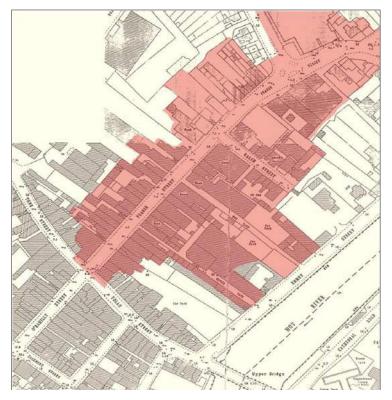


Fig.03 Pearse Street Architectural Conservation Area

1.3 Notes

LIMITATIONS TO PRELIMINARY INSPECTION

- High water levels Water levels were high on the day of the initial inspection and, as a result, it was not possible to view the riverside walkways, located at a lower level below the roadside pedestrian footpaths, which were under water.
- Footbridge to Upper Bridge Parts of this area were not accessible and were not inspected.

CONDITION OF RIVERSIDE RETAINING WALLS

No attempt was made to assess the condition of the riverfacing surface of walls which, in many cases, drop directly to the riverside.

ORIENTATION

For the purposes of this report the Emmet Street side of the River Moy is termed the North Bank and the St Muredach's Cathedral side is termed the South Bank. 'West' is upstream and 'east' is downstream.

UPPER AND LOWER BRIDGES

- Existing condition It has been confirmed that neither Upper nor Lower Bridge, including their wing walls, are to be repaired, altered or impacted by the flood relief scheme. It should, however, be noted that both bridges appear to require some reasonably urgent repair.
- Demarcation with river boundary walls There is no physical demarcation between the north-east wing wall of Upper Bridge and north-west wing wall of Lower Bridge and the ashlar limestone walling of River Boundaries 14 and 26.

FEATURE ON SHEET 07

We were unable to identify the feature projecting to the north and, apparently, included as part of the new flood relief wall.

MATERIALS ANALYSIS

At the time of inspection neither petrographic stone analysis nor mortar analysis had been carried out. Potential local sources of suitable stone to be used in construction of new walls and repair of existing walls had not been explored.

TERMINOLOGY

The report uses the term 'River Boundary' to identify individual sections of walling/fencing of similar age and construction which separate public footpaths and roadways from the riverside. The areas separated by the existing wide flights of steps between River Boundaries 05 and 06 and 06 and 07 are termed 'West Esplanade', 'Central Esplanade' and 'East

Esplanade'. The steps between the esplanades are referred to as 'Cathedral Riverside Steps'.

MITIGATION OF IMPACTS

The report is concerned only with mitigation of the impacts of the proposed Flood Relief Scheme on heritage assets within the six zones and identifying the potential for appropriate enhancement. The recommendations below should therefore be considered in the context of the practicalities of essential civil and structural engineering implications.

DOCUMENTS REFERRED TO

- Drawings Drawings referred to in the report are those prepared by RPS titled 'Proposed Works to be carried out along the River Moy' Sheets 1 to 14 (File Identifier MGW0290-RPS-EI-XX-D-EN-0504, Status: S1, Rev: P01, Drawn: NC, Checked: KF, Date: 24/10/2023).
- Heritage Council submission The Heritage Council submission document concerning the Ballina Flood Relief Scheme, dated 20 February 2023, concludes '... the Heritage Council submits that the proposed flood relief scheme needs to be based on sound design rigour and rationale, particularly the section of the scheme that is to be located within the historic town centre of Ballina'. In this context, the ashlar limestone river walling and associated masonry steps to the south side of Emmet Street (River Boundaries 14-26) is by far the most important.

SALMON WEIR FOOTBRIDGE

It has been confirmed that no work to the Salmon Weir footbridge is to be included in the Flood Relief Scheme although it is noted that the structure is in need of some maintenance, particularly the non-slip textured deck surface which is in very poor condition.

CATHEDRAL ANGLING CENTRE

It has been confirmed that no work to the Cathedral Angling Centre is to be included in the Flood Relief Scheme although it was noted that the building is in need of some maintenance.

2.0 RECOMMENDATIONS

2.1 Introduction

The following recommendations have been discussed with the RPS design team, Mayo County Council's technical and conservation representatives and Shay Kelleher representing the Heritage Council. Detailed designs and specifications for the heritage elements will, in due course, need to be prepared for approval by the Council's Conservation Officer.

2.2 Ongoing conservation support

A suitably qualified Conservation Architect should be engaged to:

- Prepare detailed survey information.
- Assist in the preparation of conservation-sensitive tender documents including schedules, drawings and specifications.
- Advise on pre-qualification requirements for selection of specialist masonry sub-contractors.
- Provide periodic site inspections of heritage-related work during the construction stage.

2.3 Requirement for detailed surveys

- Accurate detailed surveys of historic walls, steps etc. to be retained as part of the Flood Relief Scheme (mainly at Emmet Street River Boundaries 14-26) will be required to enable quantification and preparation of specifications for repair and restoration works. It is recommended that these should be based on point cloud surveys.
- River-facing walls below pavement level to be retained in the Flood Relief Scheme should be surveyed to determine structural stability and requirements for removal of vegetation, repointing or grouting.

2.4 Potential salvage of existing materials

- Stone Where existing rubble stone walls are to be replaced with new flood relief walls, the potential for salvaging stone for re-use in the new walls should be assessed. This will require dismantling of short sections of wall at representative locations (preferably from River Boundaries 27 to 31 at Bachelors Walk where disruption would have minimal impact). Temporary guarding should be erected in these locations.
- Concrete block paving The potential for salvaging block paving from pavements such as the south side of Emmet Street for re-use in locations such as Ridgepool Road should be considered.

2.5 New stone selection

- Emmet Street walls Samples of existing ashlar stonework should be subjected to petrographic analysis to inform selection of suitable stone for repairs and reconstruction of missing sections of walling. New stone should ideally be locally sourced and, if possible, drawn from original quarries.
- New rubble stone flood walls New stone will be required for most of the new flood walls. This should match existing stone as closely as possible both geologically and in physical appearance.
- New copings to rubble stone walls New copings should be manufactured from suitably durable, locally-sourced, sandstone.
- New paving Stone for paving should be sourced in Ireland and should be compliant with all technical requirements regarding slip resistance etc.
- Kerbs Stone for granite kerbs should be sourced in Ireland and should be compliant with all technical requirements regarding slip resistance etc.

2.6 Salmon Weir Building

The Salmon Weir building makes a significant contribution to the riverside setting of Ridgepool Road and should not be isolated from the pavement by a new flood wall.

It has been agreed that the potential for incorporating tanking, applied to the internal face of the south wall of the building, is to be investigated. This will require gaining access to the interior of the building to enable a survey to be carried out to establish the practicality of installing tanking.

Cement-based mortar pointing, on the external face of the south elevation, should, ideally, be replaced with lime-based mortar.

2.7 Moy Fishery Lower Beat Facility Hut

The Moy Fishery Lower Beat Facility Hut (River Boundary 10) is to be demolished in order to facilitate construction of the new flood relief wall on Sligo Road. The existing building is of no architectural significance but, if it is to be replaced, the new structure should be complementary to the new walling.

2.8 New rubble stone flood relief walls

- Potential solution The sketch detail (Fig.04) illustrates one possible appropriate solution for new flood walls to replace existing river boundary walls. The construction envisages a reinforced concrete core faced on both sides with coursed rubble limestone and capped with tooled ashlar stone hog-back copings. Stonework joints should be pointed with NHL3.5 lime batched with suitably graded aggregate, finished flush with stonework arrises with a bag-rubbed finish. The detail will require refinement following structural design.
- A sample panel of the proposed walling design should be constructed for review and approval by all stakeholders.
 It was agreed at the site walkaround on 06 February 2024 that a suitable location for this would be at Batchelors Walk.

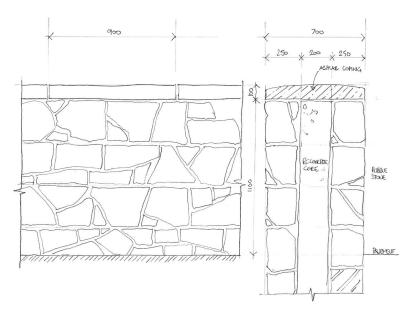


Fig.04 Indicative sketch detail

2.9 Proposed treatment of river boundaries

- River Boundary 01 The existing wall should be replaced with a new rubble stone flood wall as described above.
- River Boundary 02 The existing wall should be replaced with a new rubble stone flood wall as described above.
- River Boundary 03 The wall is to be retained in the Flood Relief Scheme and, as such, will require removal of vegetation and comprehensive repointing in lime-based mortar.
- River Boundary 04 The wall is to be retained in the Flood Relief Scheme and, as such, will require removal of vegetation and comprehensive repointing in lime-based mortar.
- River Boundaries 05, 06 and 07 The proposed Cathedral Plaza will replace the existing river boundaries. Although in reasonable condition, these are of limited, if any, historic or architectural interest, and as such their loss should not be a major consideration provided the proposed new plaza is of improved design. The new plaza will be at a higher level than the existing pavement. New railings on the river side will be fabricated from durable metal such as an appropriate grade of stainless steel.
- River Boundary 08 The wall is to be retained in the Flood Relief Scheme and, as such, will require removal of vegetation and comprehensive repointing in lime-based mortar.
- River Boundaries 09 and 10 The existing walls be replaced with new rubble stone flood walls as described above.
- River Boundaries 11, 12 and 13 No heritage considerations.
- River Boundaries 14, 16, 18, 20, 22, 24 and 26 The existing ashlar limestone walls on Emmet Street, between Upper and Lower Bridges, are the most historically significant and important element of the town/river interface to be impacted by the Flood Relief Scheme. A preliminary inspection of the ashlar masonry indicated that the upper four courses of walling and coping, above pavement level, are significantly out of alignment while most of the individual masonry units are in reasonable condition. The walls should be carefully dismantled and re-constructed using appropriately gauged NHL-based mortar. It was also agreed at the site walkaround on 06 February 2024 that the openings to River Boundaries 15, 17, 19, 21, 23 and 25 should be reduced to their original river access width and that original copings (which currently have been re-used as kerbs), should be reinstated on the reconstructed walling.
- Steps at River Boundaries 15, 17 and 25 The original fabric of these features is clearly of considerable historic interest (although more historic research is required). It is recommended they should be fully restored as part of the Flood Relief Scheme. This will involve, as a minimum, removal of all vegetation to allow in-depth assessment of their structural stability.

- Railings and outshoots at River Boundaries 19, 21 and 23 – It has been determined that these features are later alterations and should be removed to allow reinstatement of walling to match the original.
- River Boundaries 27, 28, 29, 30 and 31 The existing walls be replaced with new rubble stone flood walls as described above.

2.10 Glass panels

Proposed design and detailing of inset glass panels to the reconstructed Emmet Street walls should be assessed by a Conservation Architect.

It is recommended that the design should have minimal visual impact with, for example, framing being largely concealed by being rebated into adjoining vertical and horizontal surfaces.

2.11 Horizontal surface treatment

- Pavements at Ridgepool Road
 - Existing concrete block paving on pavements are not entirely appropriate but may be capable of reinstatement following construction of the flood walls
 - Existing insitu concrete paving, forming pavements at the Salmon Weir building and the east end of Ridgepool Road at Upper Bridge, will inevitably be disturbed by the flood relief works. It is recommended that these should be replaced with a more suitable surfacing material such as concrete block paving (perhaps salvaged from Emmet Street).
- Pavement between Upper and Lower Bridges at Cathedral Road – The existing cast insitu concrete paving and integral kerbing should be replaced with new natural limestone slab paving and granite kerbing.
- Pavement at Clare Street The existing cast insitu concrete paving and integral kerbing be replaced with good quality insitu concrete paving and granite kerbing. Aggregate selection, bay sizes and surface finish will need to be carefully considered.
- Pavement at Emmet Street between Upper and Lower Bridges – Existing concrete block paving (although evidencing some disruption at tree bases) is generally in reasonable condition and may be capable of reinstatement following restoration of ashlar stone walls. However, in view of the heritage significance and central location, it has been agreed that the existing paving should be replaced with new natural limestone slab paving and granite kerbing. It is possible that existing concrete block paving could be salvaged and reused at Bachelor's Walk.
- Pavement between Lower Bridge and Arbuckle Row –
 It is recommended that the existing cast insitu concrete
 paving and integral kerbing be replaced with good quality
 asphalt paving and granite kerbing.

2.12 Cathedral Plaza

The proposed Cathedral Plaza will replace the existing West, Central and East Esplanades and the intervening West and East Cathedral Riverside Steps. Proposals for the new plaza were being developed at the time of writing. The following was agreed at the site visit on 06 February 2024:

- The plaza will be raised approximately 600mm above existing pavement level and will not have a balustrade at this interface.
- Existing trees will be retained.
- New surfacing will consist of natural stone slab paving.
- New railings at the riverside will be carefully considered in terms of appearance, fitness for purpose and durability.

Finalised designs should be submitted for assessment by a Conservation Architect for appropriateness.



Existing signage and interpretation is inconsistent and poorly maintained. A carefully considered signage and interpretation scheme should be included as a component of the Flood Relief Scheme.

2.14 Street furniture

Existing street furniture is uncoordinated and has generally reached the end of its useful life. A coordinated strategy should be adopted for the design, specification and location of new street furniture.

2.15 Street and amenity lighting

Consideration should be given to provision of an integrated street and amenity lighting scheme throughout the area impacted by the Flood Relief Scheme or, as a minimum, at the new Cathedral Road plaza and Emmet Street.

2.16 Commemorative plaques

A number of plaques, commemorating historic events and people associated with the riverside, are found throughout the area. Some of these are undoubtedly of community interest. Where possible, these should be appropriately incorporated into the Flood Relief Scheme.



Fig.05 RB01 Street signage



Fig.06 RB01 Litter bin



Fig.07 RB07 Information board



Fig.08 RB05 Parking meter signage



Fig.09 RB02 Granite plaque

3.0 SOUTH BANK

3.1 Ridgepool Road, from Footbridge to Upper Bridge (Sheets 01 & 02)

STRUCTURES

 Salmon Weir footbridge – Two-span suspension footbridge opened 2009, designed to reflect fishing rod, erected gently curved concrete deck, stainless steel balustrades set on cast-insitu concrete plinth walls, deck suspension post-tensioned cables asymmetrically attached to curved pylon rising from concrete mid-stream pier.

The footbridge will not be impacted by the proposed Flood Relief Scheme.

- Salmon Weir building Single-storey, rectangular on plan, pitched roof building. Uncoursed rubble limestone south and east walls, natural slate roofing having cast insitu concrete verges to east and west gables, half-round cast iron gutters on projecting eaves corbel, square-headed opening at high level having timber louvred panel. Contiguous flat-roofed building to west also having uncoursed rubble stone walling which has been increased in height at some time in the past, and containing square-headed door opening with steel lintel, flush steel door and steel frame. 4no. plaques fixed to wall from east to west:
 - 'SALMON WEIR RESTORATION PROJECT, Heritage Award, National Tidy Towns Competition 2011'
 - 'Inland Fisheries Ireland, Ballina Salmon Weir, Restored & Automated 2010-2011, opened by An Taoiseach Enda Kenny TD on 2nd September 2011'
 - 'COMHAIRLE AN BHAILE BHEALATHAn FHEADHA, CORAI BRADAN, c.1837, SALMON WEIRS'
 - ERECTED TO THE MEMORY OF THE LATE BILLY EGAN WHO DIED 8th August 2000, BY THE MEMBERS OF BALLINA SALMON ANGLERS ASSOCIATION'

The Salmon Weir building and contiguous building to the west appear to be in reasonable condition (apart from inappropriate cement-rich pointing to the masonry walling). The building, along with the contiguous structure to the west, will be incorporated into the scheme.



Fig.10 Salmon Weir Footbridge



Fig.11 Salmon Weir Building



Fig.12 Salmon Weir Restoration Project plaque



Fig.13 Salmon Weir Restoration plaque



Fig.14 Billy Egan Memorial plaque

RIVER BOUNDARIES

River Boundary 01 (between footbridge and Salmon Weir building) – Concrete blockwork wall approximately 200mm thick stepping down to the Salmon Weir building the west end of which it abuts. An opening in the wall gives to steps descending to the riverside. An elliptical plaque engraved 'The Versehoyle Fisheries' fixed to south side of wall.

Wall is substantially intact but is of extremely crude construction and of no architectural interest. It is to be removed and replaced with a new flood wall.

River Boundary 02 (between Salmon Weir building and west end of River Boundary 03) - 16no. short lengths of free-standing walling alternating with 15no. steel railing panels. Each wall constructed from uncoursed rubble limestone having saddle-back copings formed from masonry off-cuts bedded in mortar. Westernmost wall turns north through 90° to abut east end of Salmon Weir building. Painted railings span between wall ends, each having continuous tubular steel handrail, flat bar top and bottom rails, square vertical bars and decorative motifs comprising two circular plates above and below a square section bar. Individual panels bolted to square-section support posts set into cast insitu concrete base and flanking. Bottom edge of panels stepped to accommodate rising ground levels to east. Circular bronze plaque having embossed legend 'Gallowglass Slaughter 1586' and shield, fixed to south side of fourth wall from west. Rectangular polished granite plague having engraved legend 'Seating donated by Ballina Soroptimists Club 2003'.

The existing walls and railings are of no architectural interest. They are to be removed and replaced with a new flood wall.

River Boundary 03 (between east end of River Boundary 02 and west end of Upper Bridge south-west wing wall)
 Cement-based roughcast on rubble stone wall having cast insitu concrete hog back coping. Wall rises at east end to meet west end of bridge wing wall.

The existing wall is of no architectural interest. Roughcast extensively cracked and detaching from masonry background. Wall is to be removed and replaced with a new flood wall. The abutment junction with the west end of the Lower Bridge south-west wing wall will need to be carefully considered.

 Upper Bridge wing walls – Tooled ashlar limestone wing walls having substantial projecting limestone copings.

Although not at present included within the Flood Relief Scheme, it was noted that both south-east and south-west ashlar limestone wing walls have been undermined and loose masonry is evident at base of both walls.



Fig.15 RB01 View east towards salmon weir building



Fig.16 RB01 Steps to riverside



Fig.17 RB01 View west towards footbridge



Fig.18 RB01 Battle of Ardnaree Memorial



Fig.19 RB01 SW Building south elevation

PAVED SURFACES

 Pavement surface between footbridge and west end of River Boundary 03 – Dry-laid butt-jointed concrete pavers of equal width and varying length laid in rows parallel to kerb line. Pre-cast concrete kerbing to roadside. Cast insitu concrete fence bases of same width as walls and level with paved surface, 1no. circular cast-iron manhole cover set in concrete surround level with paved surface.

Existing concrete block paving is in reasonable condition but not entirely inappropriate for this location. Disruption of existing paved surface will be inevitable to facilitate construction of new flood wall although it may be possible to lift and re-lay pavers.

 Ramp and steps to Salmon Fishery building – Insitu concrete ramp and steps, stone facing to south side, painted galvanized tubular steel balustrade.

Existing ramp of very poor visual appearance. Should be replaced with new and more visually appealing ramp.

 Low-level river walkway – Cast-insitu concrete approach steps from pavement, cast insitu concrete walkway, ad hoc galvanized steel round bar balustrades to steps.

Steps and walkways not inspected. Walkway should not be impacted by construction of proposed flood wall. Established weed growth in construction joints is unsightly. Steel balustrades to steps unsightly and non-compliant with current health and safety standards, should be replaced with new carefully considered balustrades and barriers.

 Triangular area to south of Salmon Fishery building – Insitu concrete paving.

Inappropriate poor-quality surface. Should be replaced with new, more appropriate, surface.

Pavement surface between west end of River Boundary
 03 and west end of south-west wing wall to Lower Bridge
 Insitu concrete paving laid in construction bays.

Inappropriate poor-quality surface. Extensive cracking to westernmost bay. Entire surface should be replaced with new, more appropriate, surface.



Fig.20 RB02 View towards upper bridge



Fig.21 RB03 View towards upper bridge

STREET FURNITURE

Lifebelts – 3no. lifebelts in bright yellow plastic housing.
 That to west fixed to timber post secured to wall, those to east secured to railings.

All existing lifebelt housings will be removed to facilitate construction of new flood wall. New purpose-made, appropriately designed, free-standing supports should be provided.

 '1586 Battle of Ardnaree' commemorative feature – Large rock having sword set into top on smooth insitu concrete base level with surrounding tarmac paving.

Feature is assumed to be of local significance. It should be carefully removed, stored for the duration of the flood relief works, refurbished and reinstated upon completion on a new, appropriately designed, plinth accompanied by interpretive signage.

 'Heritage' lamp posts – 6no. painted steel 'heritage lamp posts each having octagonal base sleeve at pavement level, cylindrical base and shaft separated by cast metal reducing feature having half-ball enrichments, cast metal finial, metal lamp shade with polycarbonate lamp globe carried on scrolled gallows bracket.

Lamp posts appear to be in reasonable condition and should be capable of being carefully removed, stored for the duration of the flood relief works, refurbished and reinstated upon completion of the works.

 Standard lamp post – 1no. octagonal galvanized steel lamp post located at approximately mid-point of River Boundary Wall 3.

Lamp post in poor condition. Should be replaced possibly with 'heritage' lamp post.

 Wayfinding signposts – 2no. 'heritage' signposts located at west end of River Boundary Wall 1 and at west end of eleventh wall from west. Polyester powder-coated aluminium shaft, ball finial and two direction fingers.

Paint finish peeling from both signposts, broken finger on post to west. Both posts should be replaced as part of coordinated signage and interpretation scheme.

- Traffic signs 2no. traffic flow direction signs on standard circular posts. That to east also has 'stop' sign.
- Litter bins 3no. painted steel litter bins two of similar design having segmental cap, dimpled side panels and front hinged door. Remaining dog fouling bin (set against east end of fifth wall from west) having flat top and circular waste aperture above hinged door.

Both litter bins poor condition. Dog foul bin reasonable condition.

 Seating – 4no. forms each having decorative cast-iron end legs and five painted timber seat rails. 2no. benches each having decorative cast-iron end legs, four painted timber seat rails and three painted timber back rails.

Forms and benches in reasonable condition, some rails have been replaced. May be possible to integrate into scheme.

PLANTING

 Trees – 15no. trees each set in square planter flush with pavement.

Exposed earth surface is unattractive. Condition of trees not assessed.

3.2 Cathedral Road, from Upper Bridge to Lower Bridge (Sheets 03 & 04)

STRUCTURES

Cathedral Angling Centre – Single-storey building, built 2006, set in quadrant corner and below parapet of southwest wing wall of Lower Bridge. Flat insitu concrete slab roof, squared-and-snecked rubble stone walling, exposed timber horizontal boarding and planar glass above heavy cast insitu concrete sill.

The building will not be impacted by the proposed Flood Relief Scheme, however, there are a number of defects evident including inappropriate cement-rich strap pointing and horizontal boarding in need of re-finishing.

RIVER BOUNDARIES

 River Boundary 04 (between east end of Upper Bridge south-east to west end of West Esplanade) – Uncoursed rubble limestone walling, roughly hewn hog-back limestone coping stones turning down to ground level at east end. Crude mortar panel inscribed 'FAS 1996' probably indicating date of re-pointing by State Training and Employment Authority.

Inappropriate cement-rich strap pointing to south face and copings. Original pointing to north (river) face in very poor condition. Extensive open joints throughout both faces and extensive vegetation established in open joints. Rubble stone footings exposed on south (pavement) side presumably owing to reduction of pavement height at some time in past. Existing wall is to be retained, existing



Fig. 22 RB04 View towards Cathedral Esplanade



Fig.23 RB04 Stone decay and strap pointing



Fig.24 RB04 View towards upper bridge



Fig.25 RB04 North face of wall



Fig.26 RB05 West Esplanade from west

pointing and vegetation should therefore be removed and re-placed with lime-based mortar.

 River Boundary 05 (West Esplanade) – Painted galvanized steel railing panels, returning southwards to meet steps to riverside to west and pavement to east. Each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Panels bolted to square-section support posts set into concrete pockets in squat rubble stone plinth wall.

Railings and plinth walls are in reasonable condition but are to be removed to facilitate construction of new Cathedral Plaza.

River Boundary 06 (Central Esplanade) – Painted galvanized steel railing panels returning southwards to meet footpath to west and east, each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Panels bolted to square-section support posts set into concrete pockets in squat rubble stone plinth wall.

Railings and plinth walls are in reasonable condition but are to be removed to facilitate construction of new Cathedral Plaza.

• River Boundary 07 (East Esplanade) – Painted galvanized steel railing panels returning southwards to meet footpath to west and ramp to riverside walkway to east, each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Panels bolted to square-section support posts set into concrete pockets in squat rubble stone plinth wall.

Railings and plinth walls are in reasonable condition but are to be removed to facilitate construction of new Cathedral Plaza.

River Boundary 08 (from east end of East Esplanade to west end of Lower Bridge south-west wing wall) – Uncoursed rubble limestone walling approximately 600mm high on south (pavement) side and dropping to meet ramp on north (river) side and rising slightly to meet end of west end of Lower Bridge south-west wing wall. Rock-faced in-line limestone stone copings

Inappropriate cement-rich strap pointing to south face and copings. Original pointing to north (river) face in very poor condition. Extensive open joints throughout both faces and extensive vegetation established in open joints. Most of existing wall is to be retained in Flood Relief Scheme, existing pointing and vegetation should therefore be removed and re-placed with lime-based mortar. It is not clear how the new flood wall is to meet the west end of the existing wall.



Fig.27 RB05 West Esplanade from east



Fig.28 RB06 Central Esplanade from west



Fig.29 RB06 Central Esplanade from east



Fig.30 RB07 East Esplanade from west



Fig.31 RB07 East Esplanade from east

PAVED SURFACES

Pavement between east end of south-east wing wall to Upper Bridge and west end of south-west wing wall to Lower Bridge – Insitu concrete paving laid in construction bays. Insitu concrete kerbing. Dimpled square concrete paving slabs at Cathedral pedestrian crossing and pedestrian crossing to east end. Proprietary drainage channel between main pavement and projection to Cathedral pedestrian crossing to south.

Inappropriate poor-quality surface. Widespread patching. Entire surface should be replaced with new, more appropriate, materials.

 Steps at west end of West Esplanade – 7no. stone slab steps having stone slab treads, descending to riverside, south side abutting north face of River Boundary 04 and north side formed into quadrant abutting west side of River Boundary 05.

Existing stone steps appear to be well-detailed and in reasonable condition but are to be removed to facilitate construction of new Cathedral Plaza.

 West Esplanade – Random stone paving between River Boundary 05 to north and pavement to south. 1no. helical feature flush with general surface formed from stone units.

Existing stone paving is in reasonable condition but is to be removed to facilitate construction of new Cathedral Plaza.

Area between West Esplanade and Central Esplanade

 7no. steps descending to riverside, each step having equally-sized stone slab treads. Rectangular stone slab paving laid in irregular pattern between top of steps to north and pavement to south with splayed east and west sides. 1no. square cast-iron manhole cover.

Existing steps and paving appear to be in reasonable condition apart from some loose slabs at east and west sides and missing jointing mortar throughout. All to be removed to facilitate construction of new Cathedral Plaza.

 Central Esplanade – Irregularly-shaped stone slab paving between River Boundary 06 to north and pavement to south. 1no. helical feature flush with general surface formed from stone units. 2no. circular cast-iron manhole covers.

Existing paving appears to be in reasonable condition but is to be removed to facilitate construction of new Cathedral Plaza.

Area between Central Esplanade and East Esplanade
 8no. steps descending to riverside, each step having



Fig.32 RB08 North face of wall



Fig.33 RB08 North face of wall



Fig.34 RB08 View towards lower bridge



Fig.35 RB08 View west towards East Esplanade

equally-sized stone slab treads. Rectangular stone slab paving laid in irregular pattern between top of steps to north and pavement to south with splayed east and west sides.

Existing steps and paving appear to be in reasonable condition but are to be removed to facilitate construction of new Cathedral Plaza.

 East Esplanade – Irregularly-shaped stone slab paving between River Boundary 07 to north and pavement to south. 1no. helical feature flush with general surface formed from stone units. 1no. circular cast-iron manhole cover.

Existing paving appears to be in reasonable condition but is to be removed to facilitate construction of new Cathedral Plaza.

 Ramp from east end of East Esplanade to riverside walkway leading to Cathedral Angling Centre – Irregularlyshaped stone slab paving between rubble stone wall to north and River Boundary 08 to south.

Existing ramp appears to be in reasonable condition. It is not clear if ramp is to be removed and replaced with new ramp from east end of new Cathedral Plaza.

 Path from east end of ramp East Esplanade to riverside walkway leading to Cathedral Angling Centre to east – Irregularly-shaped stone slab paving between grass mounds to riverside to north and rubble stone wall to north and River Boundary 08 to south.

Existing paving appears to be in reasonable condition apart from some defective jointing. It is not clear if it is to be replaced in connection with new Cathedral Plaza.

STREET FURNITURE

 Street nameplates –street names – 2no. cast aluminium 'Cathedral Road' nameplates each having raised lettering in Gaelic and English, one secured to south-east wing wall of Upper Bridge and the other to the south-west wing wall of Lower Bridge.

Both signs exhibiting extensive surface corrosion and loss of paint finish.

Lifebelts – 3no. lifebelts in bright yellow plastic housing.
 That to Central Esplanade fixed to timber post, those to West and East Esplanades secured to railings.

All existing lifebelt housings will be removed to facilitate construction of new Cathedral Plaza. New purpose-made, appropriately designed, free-standing supports should be incorporated into the design.

 Interpretive signage – 1no. double-sided interpretive panel on two cylindrical support posts.

Panel poorly maintained.

 'Heritage' lamp posts – 7no. polyester powder coated 'heritage' lamp posts (2no. West Esplanade, 3no. Central Esplanade, 2no. East Esplanade) each having decorative base sleeve set on raised concrete plinth at pavement level, cylindrical shaft, four-sided splayed glass lamp panels, moulded metal cap and finial.

Lamp posts appear to be in reasonable condition and should be capable of being carefully removed, stored for the duration of the flood relief works, and possibly refurbished and reinstated upon completion of the works.

Standard lamp post – 1no. galvanized steel lamp posts.

Lamp post in reasonable condition.

- Pedestrian crossing lamps 2no. lamps having black and white horizontal banding on cylindrical post and orange polycarbonate globe.
- Traffic signs 4no. signs on standard cylindrical posts.
- Parking meters 2no. parking meters (1no. east end of West Esplanade, 1no. east end of Central Esplanade.

Both parking meters in very poor condition.

• Litter bins – 2no. painted steel litter bins having segmental cap, dimpled side panels and front hinged door.

Both bins reasonable condition.

Seating – 1no. picnic bench at Cathedral Angling Centre.
 4no. benches (1no. on West Esplanade, 3no. on Central Esplanade) each having decorative cast-iron end legs, two painted timber seat rails and two painted timber back rails.

Benches in reasonable condition. May be possible to integrate into Cathedral Plaza scheme.

PLANTING

- Planters 20no. circular steel bowl planters (6no. West Esplanade, 10no. Central Esplanade, 4no. East Esplanade).
- Shrubs 4no. shrub beds (1no. at either side of steps between Central and West and East Esplanades).
- Grass Informal grass areas with trees between riverside and path leading to Cathedral Angling Centre.

 Trees – 10no. trees (3no. West Esplanade, 3no. Central Esplanade, 4no. East Esplanade) each set in square planter flush with pavement.

Exposed earth surface is unattractive. Condition of trees not assessed.

3.3 Clare Street (Sligo Road), from Lower Bridge to Tom Ruane Park (Sheets 05,06 & 07)

STRUCTURES

 Moy Fishery Lower Beat Facility Hut – Single-storey building rectangular on plan, built against north face of River Boundary 10, having cast insitu concrete monopitch roof.

The building will be severely impacted by the proposed Flood Relief Scheme.

RIVER BOUNDARIES

 River Boundary 09 (between east end of Lower Bridge south-east wing wall to square pier on Sligo Road) – Roughly-coursed rubble limestone walling, roughly hewn in-line limestone coping stones. Stile access to riverside having insitu concrete landing, steps and wall.

Inappropriate cement-rich strap pointing to south face and copings. Extensive vegetation growth. Wall is to be replaced with new flood relief wall.

• River Boundary 10 (between square pier and painted rendered pier on Sligo Road) – Roughcast masonry walling with extensive insitu concrete infilling, roughly hewn in-line limestone coping stones. Stile access to riverside having insitu concrete landing, steps and wall. River access opening having flat-bar wrought-iron gate of some historic interest giving to insitu concrete steps descending to riverside. River access opening at east end giving to timber steps descending to riverside.

Inappropriate cement-rich strap pointing to copings. Most of the existing wall is to be replaced with new flood relief wall. The final section to the east of the floodgate is to be retained and will therefore require re-pointing and rerendering.

PAVED SURFACES

 Pavement between east end of south-east wing wall to Lower Bridge and painted rendered wall on Sligo Road
 Insitu concrete paving laid in construction bays. Insitu



Fig.36 RB09 East end from west



Fig.37 RB09 West end from east



Fig.38 RB10 View from east



Fig.39 RB10 River access point



Fig.40 RB10 View from east

concrete kerbing. 1no. rectangular cast-iron manhole cover at west end.

Inappropriate poor-quality surface. Widespread patching. Entire surface should be replaced with new, more appropriate, materials.

STREET FURNITURE

 Lifebelts – 2no. lifebelts in bright yellow plastic housing both fixed to timber posts on north side of River Boundaries 09 and 10.

Both lifebelt housings will be removed to facilitate construction of new flood relief walls. New purpose-made, appropriately designed, free-standing supports should be incorporated into the design.

- Bollards 12no. metal bollards at roadside to east of pedestrian crossing.
- Telegraph poles 6no. wood telegraph poles on north (river) side of River Boundaries 09 and 10.
- Pedestrian crossing lamp 1no. lamp having black and white horizontal banding on cylindrical post and orange polycarbonate globe.
- Traffic signs 5no. signs on standard cylindrical posts.

PLANTING

 Trees – 14no. trees in pavement (10no. against river boundary walls, 2no. at east end at roadside).

Condition of trees not assessed.

4.0 NORTH BANK

4.1 Footbridge to Upper Bridge (Sheets 08 & 09)

This area to the south of Barrett Street was, in the nineteenth century, the site of the town's gas works, a sawmill, brewery and cornmill. At the time of writing detailed research has not been carried out but, clearly, extensive redevelopment has taken place and only partial remains survive as evidence of the former industrial use.

STRUCTURES

- Remains of Sawmill Only fragments of machinery and upstanding brick walls remain of the sawmill which once occupied this site whose machinery was powered by a mill
- Ballina Arts Centre Not inspected.
- Ballina Manor Hotel Not inspected.

RIVER BOUNDARIES

 River Boundary 11 (between footbridge and Ballina Arts Centre) – Insitu concrete flood wall surmounted by steel balustrade.

Existing flood relief provision to be retained.

- River Boundary 12 Not inspected.
- River Boundary 13 (Ballina Manor Hotel) Not inspected.

PAVED SURFACES

Not inspected.

STREET FURNITURE

Not inspected.

PLANTING

Not inspected.



Fig.41 RB11 View from west



Fig.42 RB11 and RB12 View from south bank



Fig.43 RB13 View from east



Fig.44 RB13 Riverside walk from east



Fig.45 RB13 View from south bank

4.2 Emmet Street, from Upper Bridge to Lower Bridge (Sheets 10 & 11)

RIVER BOUNDARIES

 River Boundary 14 (between east end of Upper Bridge north-east wing wall and west end of River Boundary 15)
 Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings and 1no. hog-back coping. Ashlar wall built on rubble stone base rising from river bed.

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some 'rust' staining. Existing wall is to be retained in Flood Relief Scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar. It is not clear where the point of demarcation with the north-east wing wall to Upper Bridge will be.

River Boundary 15 (between east end of River Boundary 14 and west end of River Boundary 16) - Painted galvanized steel railing panels turning southwards at east end to follow line of outshoot. Each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Small hinged and padlocked access hatch (purpose unclear) incorporated into second panel from west end. Panels welded to round-section support posts each having knop finial and set into concrete pockets in paving. Original ashlar stone copings project above and into paving. Ashlar stone steps descend to river from landing to west end of opening, each tread narrower than the tread above. Ashlar stone outshoot to east end of opening, bullnose on plan, having concrete block-paved surface. All stonework is of historic interest.

Extensive debris and vegetation on steps. Railings in reasonable condition but are to be removed to facilitate reinstatement of original wall line. Plinth walls in reasonable condition. Stone steps appear to have been dislodged. All surviving original stonework, comprising copings, steps and outshoot, should be fully restored. Existing plinth walls appear to have originally been copings and should be reinstated after reconstruction of the main walling.

 River Boundary 16 (between east end of River Boundary 15 and west end of River Boundary 17) – Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings.



Fig.46 RB14 View from west



Fig.47 RB14 View from east



Fig.48 RB14 Ashlar masonry



Fig.49 RB15 View from west



Fig.50 RB15 Steps

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some 'rust' staining. Existing wall is to be retained in Flood Relief Scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar.

• River Boundary 17 (between east end of River Boundary 16 and west end of River Boundary 18) — Painted galvanized steel railing panels. Each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Small hinged and padlocked access hatch (purpose unclear) incorporated into second panel from west end. Panels welded to round-section support posts to east and west ends, each having knop finial and set into concrete pockets in paving. Intermediate stub supports let into paving or secured to outer face of masonry wall. Original ashlar stone copings project above and into paving. Ashlar stone steps descend to river from landing to west end of opening, each tread narrower than the tread above. All stonework is of historic interest.

Some debris and vegetation on steps. Railings in reasonable condition but are to be removed to facilitate reinstatement of original wall line. Plinth walls in reasonable condition. Stone steps may have been dislodged. All surviving original stonework, comprising copings and steps, should be fully restored. Existing plinth walls appear to have originally been copings and should be reinstated after reconstruction of the main walling.

 River Boundary 18 (between east end of River Boundary 17 and west end of River Boundary 19) – Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings.

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some 'rust' staining. Existing wall is to be retained in Flood Relief Scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar.

 River Boundary 19 (between east end of River Boundary 18 and west end of River Boundary 20) – Ashlar stone cantilevered outshoot, bullnosed on plan, having concrete block-paved surface. Painted galvanized steel railing panels following curved line of outshoot. Each



Fig.51 RB15 Outshoot



Fig.52 RB16 View from west

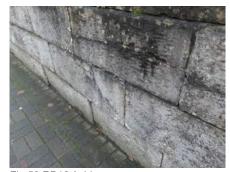


Fig.53 RB16 Ashlar masonry



Fig.54 RB17 View from west



Fig.55 RB17 View from east

panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Panels welded to round-section support posts each having knop finial and set into concrete pockets in paving. All stonework is of historic interest.

Railings in reasonable condition but are to be removed to facilitate reinstatement of original wall line. All surviving original outshoot stonework should be fully restored.

 River Boundary 20 (between east end of River Boundary 19 and west end of River Boundary 21) – Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings.

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some 'rust' staining. Existing wall is to be retained in Flood Relief Scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar.

River Boundary 21 (between east end of River Boundary 20 and west end of River Boundary 22) — Painted galvanized steel railing panels. Each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Small hinged and padlocked access hatch (purpose unclear) incorporated into second panel from east end. Panels welded to round-section support posts to east and west ends, each having knop finial and set into concrete pockets in paving. Intermediate square-section posts let into paving. Original ashlar stone copings project above paving and in-line with walling. All stonework is of historic interest.

Railings in reasonable condition but are to be removed to facilitate reinstatement of original wall line. Plinth walls in reasonable condition. All surviving original stonework should be fully restored. Existing plinth walls appear to have originally been copings and should be reinstated after reconstruction of the main walling.

 River Boundary 22 (between east end of River Boundary 21 and west end of River Boundary 23) – Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings.

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some



Fig.56 RB18 View from west



Fig.57 RB18 Ashlar masonry



Fig.58 RB18 Ashlar masonry



Fig.59 RB19 Outshoot



Fig.60 RB20 View from west

'rust' staining. Existing wall is to be retained in Flood Relief Scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar.

• River Boundary 23 (between east end of River Boundary 22 and west end of River Boundary 24) – Ashlar stone cantilevered outshoot, bullnosed on plan, having concrete block-paved surface. Painted galvanized steel railing panels following curved line of outshoot. Each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Panels welded to round-section support posts each having knop finial and set into concrete pockets in paving. All stonework is of historic interest.

Railings in reasonable condition but are to be removed to facilitate reinstatement of original wall line. All surviving original outshoot stonework should be fully restored.

 River Boundary 24 (between east end of River Boundary 23 and west end of River Boundary 25) – Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings.

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some 'rust' staining. Existing wall is to be retained in Flood Relief Scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar.

River Boundary 25 (between east end of River Boundary 24 and west end of River Boundary 26) — Painted galvanized steel railing panels. Each panel comprising flat bar top, bottom and intermediate rails, square vertical bars and ring motifs between top and intermediate rails. Small hinged and padlocked access hatch (purpose unclear) centrally-located and incorporated into railing. Panels welded to round-section support posts to east and west ends, each having knop finial and set into concrete pockets in paving. Original ashlar stone copings project above and into paving. Ashlar stone steps descend to river from landing to west end of opening. All stonework is of historic interest.

Extensive debris and vegetation on steps. Railings in reasonable condition but are to be removed to facilitate reinstatement of original wall line. Plinth walls in reasonable condition. Stone steps may have been dislodged. All surviving original stonework, comprising copings and steps, should be fully restored. Existing plinth



Fig.61 RB20 Ashlar masonry



Fig.62 RB21 View from west



Fig.63 RB22 Ashlar masonry



Fig.64 RB22 View from west



Fig.65 RB23 Outshoot

walls appear to have originally been copings and should be reinstated after reconstruction of the main walling.

 River Boundary 26 (between east end of River Boundary 25 and west end of Lower Bridge north-west wing wall)
 Coursed ashlar limestone walling having stugged and pecked tooled dressings. In-line flat-topped copings and 1no. hog-back coping.

Inappropriate cement-rich strap pointing to north face and copings. Original pointing to south (river) face not inspected. Widespread detachment of cement-based mortar pointing, some misaligned stones, some vegetation growth mainly on river side, some surface spalling, some 'rust' staining. Existing wall is to be retained in flood relief scheme. It is probable that the top three courses and copings (that is, the wall above pavement level) will need to be carefully dismantled and rebuilt using lime-based mortar. It is not clear where the point of demarcation with the north-west wing wall to Lower Bridge will be.

PAVED SURFACES

Pavement between Upper and Lower Bridges – Charcoal and purple concrete pavers laid in basket weave pattern having charcoal stack-bond margins. Circular soldier course around base of trees. Dimpled square concrete paving slabs at Upper Bridge pedestrian crossing. Original limestone kerbing survives at quadrants returning to Upper and Lower Bridges. Pre-cast concrete kerbing to remainder of roadside and parking bay projections. Surface drainage channel between pavement and parking outshoot opposite River Boundary 17.

Historic kerbing at bridge quadrants should be protected during flood relief works. Concrete block-paved surfaces generally in reasonable condition. Soldier courses around tree bases disrupted by root growth.

STREET FURNITURE

 Street nameplate – 1no. cast aluminium 'Emmet Street' nameplate having raised lettering in Gaelic and English, secured to north-west wing wall of Lower Bridge.

Sign exhibits extensive surface corrosion and loss of paint finish.

 Lifebelts – 2no. lifebelts in bright yellow plastic housings fixed to north face of River Boundary walls 15 and 19.

Both lifebelt housings will be removed to facilitate repair/re-building of existing river walls.

 Interpretive signage – 1no. double-sided interpretive panel opposite River Boundary 14. Mounted on two polyester powder-coated cylindrical support posts each having moulded collars on shafts and over-panel with



Fig.66 RB24 View from west



Fig.67 RB24 Ashlar masonry



Fig.68 RB25 View from west



Fig.69 RB26 Ashlar masonry



Fig.70 RB26 View from west

lettering 'eolas cuartaíochta'.

Panel in reasonable condition.

- Pedestrian crossing lamps 1no. lamp having black and white horizontal banding on cylindrical post and orange polycarbonate globe.
- Traffic signs 7no. signs on standard cylindrical posts.
- Parking meters 3no. parking meters.
- Litter bins 4no. painted steel cylindrical litter bins having domed caps, raised strap mouldings, raised lettering 'LITTER' and 'BRUSCAR', 2no. circular apertures and hinged doors. 1no. painted steel litter bin having segmental cap, dimpled side panels and front hinged door.

All bins exhibiting flaking paint, previous modifications and generally poor condition.

 Seating – 4no. benches located on parking bay outshoots each having decorative cast-iron end legs, two painted timber seat rails and two painted timber back rails.

Benches in reasonable condition.

PLANTING

 Trees – 11no. trees in pavement located in projections between parking bays.

Condition of trees not assessed.



Fig.71 RB24, 25 and 26 from south bank



Fig.72 RB31 Hut at east end of Bachelors Walk

4.3 Bachelors Walk, from Lower Bridge to Arbuckle Row (Sheets 12, 13 & 14)

STRUCTURES

 Hut at east end of Bachelors Walk – Small single-storey building rectangular on plan, built against south face of river wall to east of River Boundary 31. Cast insitu concrete flat roof, concrete walls, painted timber framed and sheeted door, sheet steel landing to west, mild steel welded mesh balustrade on square-section steel frame.

The hut will be severely impacted by the proposed Flood Relief Scheme.

RIVER BOUNDARIES

 River Boundary 27 (between east end of Lower Bridge north-east wing wall and change of construction to west of river access steps and west end of River Boundary 28) – Uncoursed rubble limestone walling without coping, extensive cement-rich strap pointing to north side and upper surface.

Inappropriate cement-rich strap pointing to north face and top. Extensive vegetation growth. Wall is to be replaced with new flood relief wall.

• River Boundary 28 (between change of construction to west of river access steps [River Boundary 27] and east side of opening to pontoon) – Roughly coursed and squared rubble limestone walling with substantial tooled in-line copings. Cement-rendered pier and threshold river access stile leading to stone slab landing and steps with rubble stone outer balustrade descending to riverside. Access to pontoon having cement-rendered piers, 3no. cast insitu steps rising from pavement, painted iron gate between, and fence panels above, piers having horizontal top, intermediate and bottom flat rails and square bars with pointed tops.

Mortar pointing almost entirely missing from north face and copings. Many voids in walling. Line of wall disrupted. Extensive vegetation growth to wall and steps. Wall is to be replaced with new flood relief wall. Not clear what is to happen to steps.

 River Boundary 29 (between east side of opening to pontoon and east side of square pier) – Low roughly squared rubble limestone walling substantially unbonded. Stone stile set back from north face of wall giving to masonry steps. Pier at east end capped with large square stone sitting above top of wall, 2no. iron hinge hoops embedded in masonry.



Fig.73 RB27 View from west



Fig.74 RB27 East end



Fig.75 RB28 Access to pontoon



Fig.76 RB28 View from east



Fig.77 RB28 Rubble stonework

Wall in very poor condition. Line of wall disrupted. Extensive vegetation growth to wall and steps. Wall is to be replaced with new flood relief wall. Not clear what is to happen to steps.

River Boundary 30 (between east side of square pier [River Boundary 29] and east side of square pier [River Boundary 31]) – Mainly cast insitu concrete walling capped with very crude limestone crenelation. Former opening at west end infilled with cast insitu concrete. 2no. iron hinge hoops embedded in masonry of east side of east pier.

Wall in very poor condition. Extensive vegetation growth. Wall is to be replaced with new flood relief wall.

 River Boundary 31 (between east side of square pier [River Boundary 30] and change of walling opposite telegraph pole [River Boundary 32]) – Mainly cast insitu concrete walling capped with very crude limestone crenelation. Former opening at west end infilled with cast insitu concrete.

Wall in very poor condition. Extensive vegetation growth. Wall is to be replaced with new flood relief wall.

 River Boundary 32 (between change of walling opposite telegraph pole [River Boundary 31] and wall at Arbuckle Row) – Uncoursed squared rubble walling with very crude limestone crenelation. Removable sheet steel flood gate having horizontal hooped round bar handles to both sides, slotted in vertical steel channels embedded in either side of opening. East end of wall rebuilt in cast insitu concrete topped with roughly-dressed limestone crenelations.

Wall in very poor condition. Extensive vegetation growth. Wall is to be replaced with new flood relief wall.

PAVED SURFACES

 Pavement between east end of north-east wing wall to Lower Bridge and rendered wall at Arbuckle Row – Insitu concrete paving laid in construction bays. Insitu concrete kerbing. 1no. rectangular cast-iron manhole cover at west end. 6no. square cast-iron manhole covers.

Inappropriate poor-quality surface. Widespread patching. Entire surface should be replaced with new, more appropriate, materials.

STREET FURNITURE

 Street nameplate – 1no. cast aluminium 'Bachelors Walk' nameplate having raised lettering in Gaelic and English, secured to north face of River Boundary 31.

Sign in reasonable condition.

• Lifebelts – 2no. lifebelts in bright yellow plastic housing.



Fig.78 RB29 Rubble stonework



Fig.79 RB29 View from west



Fig.80 RB31 View from west



Fig.81 RB32 Floodgate



Fig.82 RB32 View from east

1no. fixed to timber post at west end of River Boundary 26, 1no. mounted on pier to east side of pontoon entrance.

Both lifebelt housings will be removed to facilitate construction of new flood relief walls. New purpose-made, appropriately designed, free-standing supports should be incorporated into the design.

 Standard lamp post – 6no. cylindrical galvanized steel lamp posts set against river boundary walls.

Lamp posts will need to be removed to facilitate construction of new flood relief walls. Replacement lamp posts should be compliant with coordinated street furniture scheme.

- Telegraph pole 1no. wooden telegraph pole on roadside between River Boundaries 31 and 32.
- Traffic signs 5no. signs on standard cylindrical posts.
- Seating 1no. bench located against wall at east end having concrete end legs, painted timber seat and one painted timber back rail.

Bench in reasonable condition.

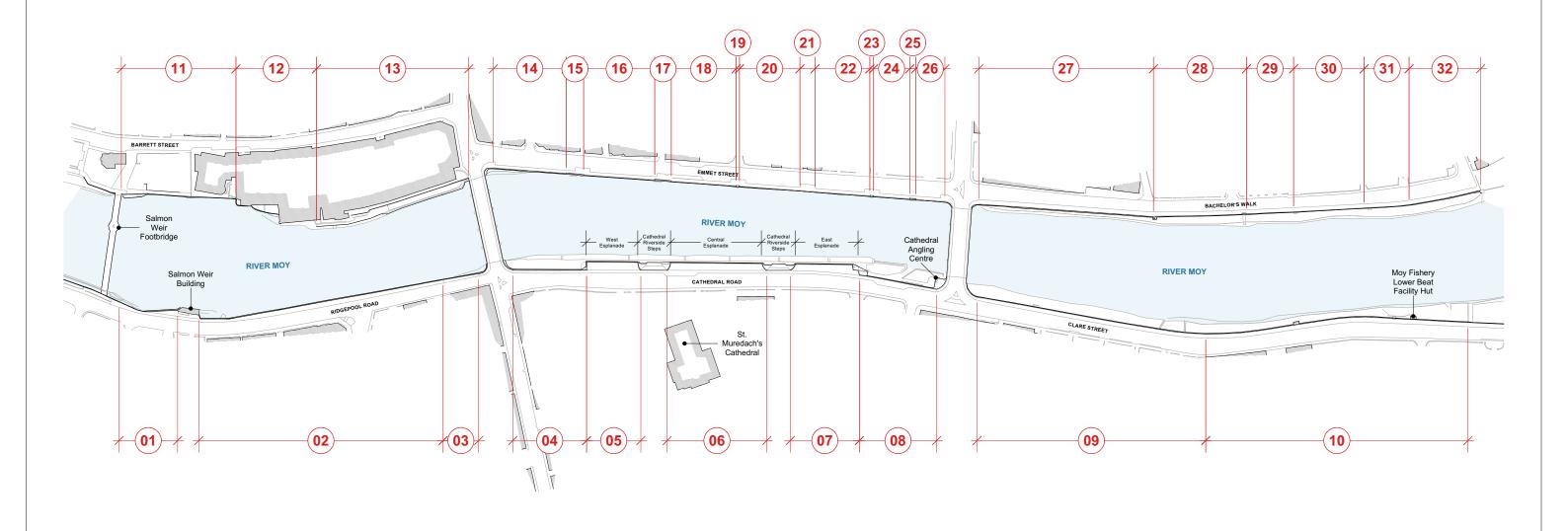
PLANTING

• Trees – 14no. trees in pavement.

Condition of trees not assessed.

5.0 **APPENDICES**

APPENDIX A - River Boundaries Map



KEY



River Boundary No.



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CONSERVATION ARCHITECT SERVICES at BALLINA FLOOD RELIEF SCHEME for RPS GROUP CONSULTING ENGINEERS

River Boundaries Map

RPS01 Drawing number

Date drawn JAN 2024 Drawn by: AB Checked by: ADC

Revision

APPENDIX B RPS Sheets 1 to 14

'Proposed Works to be carried out along the River Moy'

