

Project No. 21.016	REDEVELOPMENT OF CRAWFORD ART GALLERY	 OPW Oifig na nOibreacha Poiblí Office of Public Works
	MECHANICAL AND ELECTRICAL SERVICES	
	M&E RESIDENT MONITORING ENGINEER SCOPE OF WORKS SUMMARY	



OPW

Oifig na
nOibreacha Poiblí
Office of Public Works

MECHANICAL AND ELECTRICAL AND LIFT SERVICES

M&E RESIDENT MONITORING ENGINEER SCOPE OF WORKS SUMMARY

Document Reference: 21.016-M&E and Lift Services RE Scope of Works Summary

The Office of Public Works
M&E Section
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Project Name: Redevelopment of Crawford Art Gallery
Subject: M&E RE Monitoring Scope of Works Summary

Project Number: 21.016
Date: September 2026

Approvals for Use

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1 INTRODUCTION

The Office of Public Works (OPW) is seeking an experienced **Mechanical and Electrical Resident Monitoring Engineer** to work in a monitoring role for a long-term contract position on a landmark office development in Cork City. The details are as follows:

Job Title: M&E Resident Monitoring Engineer (Contract)

Location: 1 Emmett Place, Centre, Cork, T12 YHN7

Project: Redevelopment of Crawford Art Gallery

RE Contract Duration: 406 Days over 92 Weeks Amounting to 3,045 hours

Estimated Start for RE: November 2026

Employment Type: Contract Position

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2 SPECIFIC DETAILS

The following contains specific details related to the role:

2.1 OVERVIEW

A Building Contract was awarded for the Redevelopment of Crawford Gallery in Cork City.

This Contract is between OPW and the preferred building contractor, PJ Hegarty.

The OPW is the Approving/Contracting Authority and will monitor this delivery.

Please see some details below of the project:

Contract Value: €61.3 Million ex. VAT approximately

Contract: Public Works-CF1.

2.2 PROJECT DESCRIPTION

This Crawford Gallery is an 18th Century Listed Building which is undergoing extensive redevelopment, refurbishment. The redevelopment also includes the construction of a new 1,919m², 7- storey, extension with new rooftop plant spaces.

Construction works commenced on January 12th 2026.

This contract includes public realm works at Emmett Place and the construction of a new ESB Substation.

The overall Gross Floor Area of the existing and new Buildings amounts to 5,560m² approximately.

There will also be demolition works of existing floor space of 299m² involved in the redevelopment.

Refer to the Definite Project Brief for further details.

2.3 THE ROLE

The M&E Resident Monitoring Engineer will report to a Senior Engineer from the OPW. S/he will undertake a range of duties on-site.

The M&E Resident Monitoring Engineer will also be required to perform other duties assigned from time to time as appropriate to the position. S/he will be required to work as part of a team and/or under his/her own initiative.

2.4 LOCATION

The M&E Resident Monitoring Engineer will be based at the Temporary Site Offices at Crawford Building Site, Emmett Place, Cork City.

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The M&E Resident Monitoring Engineer will also be required to attend OPW offices in Trim and / or Dublin City Centre on occasion or at design team offices as required.

2.5 PROJECT STAGES APPLICABLE TO THE ROLE

The services of an M&E Resident Monitoring Engineer is required for Stage (iv) Construction and for a period of time during the Handover Stage.

2.6 PRIMARY AND SUBSTITUTE M&E RESIDENT MONITORING ENGINEERS

In the event that the M&E Resident Monitoring Engineer is absent from site while the site is operating for reasons of illness or annual leave for example, it is expected that a suitable temporary substitute replacement will be made available.

The replacement engineer shall be of equal or greater standing in terms of qualifications and experience to the primary M&E Resident Monitoring Engineer.

The tender to only include details for the following:

- 1) 1no. Primary M&E Resident Monitoring Engineer.
- 2) 1no. Temporary Substitute M&E Resident Monitoring Engineer.

The CV's of other optional engineers shall not be provided.

2.7 DETAILS AND TIMELINES OF SERVICE

For evaluation purposes your fee proposal should be based on 1 M&E Resident Monitoring Engineer being assigned to the project for durations and timelines as set out below. The intent is that time allotted to the project by the engineer is gradually ramped up as the project progresses and ultimately needs more time input to the M&E aspects of the project by the M&E Resident Monitoring Engineer.

Construction works commenced on January 12th 2026.

The expected total performance period for the M&E Resident Monitoring Engineer role is as follows:

Total Expected Project Performance Period for M&E Resident Monitoring Engineer	
Stage IV Construction:	75 weeks
Stage V Handover Period:	9 weeks
Contingency for Project Overrun:	8 weeks

For evaluation purposes your fee proposal should be based on 1 M&E Resident Monitoring Engineer for **3,045 hours, over 406 days in a 92 week contract.**

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2.7.1 Definite Project Brief Programme

Please note that the accompanying Definitive Project Brief contains a Programme on Page 14. This programme is out of date and shall be ignored as part of the tender.

2.8 TIMELINE TABLE

The figures in Clause 2.7 are based on figures included in the timeline table below:

Weeks	Days Per Week	Total Days	Hours Per Day	Total Hours
Construction				
Weeks 1 - 7	3	21	7.5	157.5
Weeks 8 - 29	4	88	7.5	660.0
Weeks 30 - 75	5	230	7.5	1,725.0
Handover				
Weeks 76 – 84	3	27	7.5	202.5
Contingency				
Weeks 85 – 92	5	40	7.5	300.0
92 Weeks		406 Days		3,045.0 Hours

The M&E Resident Monitoring Engineer will need to be available from approximately the start of November 2026 until substantial completion of the project and also for the handover period of the project. The handover period is expected to be in Q2 or Q3 of 2028.

The M&E Resident Monitoring Engineer programme will be reviewed on a pro rata basis based on updates to the main contractors project programme as the project progresses on site.

The appointment is based on a gradual ramp up of an M&E Resident Monitoring Engineer's time allotted to the project from an initial 3 days per week to 5 days per week as installation work progresses on site.

Actual time allocated on site can be determined on a pro rata basis.

The appointment is based on work completed over the normal site hours. The Crawford Art Gallery construction site opens around 7am and closes at 6pm Monday to Thursday and 4:30pm on Friday.

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Notional hourly rates are required as part of the tender for working during normal site hours and for out of hours working such as during evenings and weekends (excluding Saturday 08:00 – 14:00). These will be used for evaluation purposes in conjunction with the fixed price fee.

The M&E Resident Monitoring Engineer will be required to be available and attend the likes of the fortnightly site meetings and M&E coordination meetings and any other important meetings and workshops that may be arranged during the initial ramp up phases where the engineer is on site for between 3 and 4 days and therefore flexibility is required with regards to attendance on site to facilitate the likes of this.

The job specification and project description are set out in the Tender and Schedule and Definitive Project Brief in the accompanying contract documentation.

Note that all travel, subsistence and accommodation associated with works on site are deemed to be included in your fixed price lump sum.

2.9 FACILITIES AND EQUIPMENT

The following facilities will be available to the Resident Engineer:

- 1) Site accommodation to include a desk and electrical sockets.
- 2) Guest Wi-fi.
- 3) Scanning facilities in Main Contractors Office.
- 4) WC Facilities.

Please note that the resident engineer will need to provide the following:

- 1) Their own laptop with all required software and a mobile telephone.
- 2) Personal Protective Equipment (PPE).

2.10 DESCRIPTION OF SERVICES INCLUDING STAGE SERVICES

2.10.1 High Level Description

The Service to be that of:

- 1) M&E Resident Monitoring Engineer for the duration of the Construction Project, currently programmed for substantial completion in April 2028 and in accordance with the timelines included in the table in Clause 2.7 and Clause 2.8.
- 2) To carry out duties in consultation with the OPW's Senior Engineer.

2.10.2 High Level Duties

High level duties will include:

- 1) Act as the OPW's lead M&E Engineering representative on-site for the duration of construction.

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- 2) Read and understand the M&E Consultants construction information e.g. drawings, specifications, schedules etc.
- 3) Daily Monitoring of Works on site on behalf of the OPW – tracking of progress on site against the Contractor’s programme.
- 4) Monitor M&E and Lift Services works and ensure compliance with design intent and specifications.
- 5) BC(A)R and general inspections.
- 6) Daily liaison with Contractors team on site.
- 7) Review contractor submittals and Integrated Design Team responses.
- 8) Liaise with other members of the OPW’s monitoring team e.g. OPW Architectural Services, OPW Civil and Structural Engineer etc.
- 9) Monitor the quality of M&E installations and lift services installations.
- 10) Prepare weekly project reports on works and other reports as deemed required.
- 11) Attendance at design team meetings, site meetings and main contractors’ meetings and M&E Coordination meetings as appropriate.
- 12) Attendance at weekly update meetings with OPW.
- 13) Site safety matters – raise any concerns as they arise with the Project Supervisor for Design Process (PSDP).
- 14) Assisting with review of Main Contractor and Sub-Contractor works proposals, Requests for Information, etc.
- 15) Other duties assigned from time to time as appropriate to the position.

2.10.3 Other Monitoring Teams

The M&E Resident Monitoring Engineer will work within an overall OPW RE Monitoring Team. The RE Team will include an RE Architect and Civil / Structural Engineer for example.

There will also be a monitoring Design Team including Mechanical & Electrical Engineer(s), Quantity Surveyor(s), Civil & Structural Engineer(s) and Fire Engineer(s).

The monitoring Design Team will consist of members from the OPW and some external consultants procured to work on the project.

2.10.4 Reports

Recording of information for, and production of, weekly site reports should include the following as a minimum for example:

- 1) Executive Summary.
- 2) Weather information.
- 3) M&E Consultants Engineering Overview.

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- 4) Issued for Construction (IFC) Design Deliverables.
- 5) Design Queries / Requests for Information (RFI's).
- 6) Builders Works.
- 7) M&E Coordination and Drawings.
- 8) Procurement and Technical Submittals.
- 9) Contractor's Personnel.
- 10) Programme.
- 11) Progress and Installation Overview.
- 12) Plant and equipment.
- 13) Materials delivered.
- 14) BC(A)R and other inspections.
- 15) Meetings.
- 16) Visitors.
- 17) Quality Assurance.
- 18) Key Issues.
- 19) Decisions to be Made and Actions Required.
- 20) Milestones and Look Ahead.
- 21) Miscellaneous.
- 22) Photographs.

The exact format and details of the report to be agreed with OPW.

3 REQUIREMENTS FOR M&E RESIDENT MONITORING ENGINEER

3.1 High Level Key Requirements

The person appointed to the position of Resident Engineer should have at least **7 years' experience in either design or construction on building and M&E engineering projects with at least 5 years of demonstrable construction based supervision.** The number of years of experience gained will be taken into consideration in the qualitative assessment.

The person appointed to the position of Resident Mechanical and Electrical Services Engineer should hold a recognised Level 8 degree in Mechanical or Electrical Engineering. The educational qualification and the number of years post qualification will be taken into consideration in the qualitative assessment.

A Chartered Engineer recognised by Engineers Ireland will achieve a higher score in the qualitative assessment than a non-chartered engineer and the number of years post Chartership receipt will also be taken into consideration.

The person appointed should have in depth knowledge of current H&S regulations and best practices and hold a valid Safepass.

In addition to the above:

- 1) They should have good interpersonal and communication skills including the ability to build effective working relationships.
- 2) They should possess strong computer skills particularly in Microsoft Word, Excel, Outlook and Teams or their equivalent.
- 3) They should be familiar with the following software: AutoCAD, Autodesk Navisworks and Autodesk Revit MEP 3D software for 3D model review.
- 4) They should be familiar with information management and control in a Common Data Environment, such as Autodesk Construction Cloud, Procore, Dalux or their equivalent.
- 5) They should have a knowledge of Public Procurement specific to Mechanical & Electrical Engineering.
- 6) They must have a knowledge and awareness of developments and changes in relevant Irish Building Regulations, Irish Standards, Codes of Practice and legislation and must have a history of Continuous Professional Development and Training.
- 7) Availability to be based on-site in Limerick part-time / full-time once, construction begins, as required based on the Timeline Table included in this document.
- 8) Knowledge of the GCC Contract and ability to apply this to Construction Stage issues.
- 9) Experience with shell and core office developments.
- 10) An ability to produce weekly reports and maintain relevant site records is essential.
- 11) Awareness of security issues.
- 12) A commitment to the project to be demonstrated at an interview with the OPW Mechanical and Electrical Engineering Section.

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13) They must hold a current full driving licence (Category B) and have access to a car.

The following are desirable:

- 1) Master's Degree (Level 9) in Building Services, Mechanical, Electrical or related Engineering Discipline.
- 2) A knowledge and understanding of ISO 9001 Quality Management System.
- 3) Experience of working on public buildings within a confined site and immediately adjacent to critical live working environments.
- 4) Chartered Engineer with Engineers Ireland.

3.2 Detailed Stage Services Requirements

3.2.1 Stage IV Construction

The primary (non exhaustive) duties of the Monitoring Resident Engineer at Stage IV Construction will be:

- 1) Report directly to the client (OPW) and others where directed by the client.
- 2) Liaise with client, client's technical advisor / Employers Representative (ER), M&E Consultant, contractors and all relevant stakeholders as required.
- 3) Attend meetings with client, client's technical advisor / Employers Representative (ER), contractors, contractors commissioning agents and all relevant stakeholders as required. Meetings for example shall include Main Contractor Site Meetings, M&E Coordination Meetings, Design Team Meetings, Project Team Meetings, Workshops, meetings with utility service providers, weekly meetings with OPW to provide updates, Standing Conciliator meetings if required etc.
- 4) Review and advise on all relevant contractor drawings, submissions, programmes and risk assessments and method statements (RAMS).
- 5) Review M&E equipment technical submittals and Design Team Responses and provide feedback to OPW.
- 6) Review Room Data Sheets for accuracy and coordination purposes.
- 7) Monitor the progress of the works on a daily basis, maintain daily and weekly records (written and photographic) of all site activities, including any obvious periods of inactivity to ensure early attention to potential delays.
- 8) Compile daily, weekly and monthly reports under agreed headings with the client.
- 9) Report on equipment deliveries, including any equipment rejected by the contractor's team. Report also on any damage to equipment prior to project handover / practical completion.
- 10) Monitor and ensure that all co-ordination that is necessary on site is taking place.
- 11) Ensure all works are carried out in accordance with contract specification and construction drawings.

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- 12) Keep comprehensive records on the location of existing and relocated services and utilities.
- 13) Ensure any certification or approval by the local authority or utility companies are completed on time.
- 14) Ensure all relevant product certification has been provided.
- 15) Ensure timely production of testing and commissioning plans and programmes by the Contractors.
- 16) Witness and report on any M&E testing being carried out by the Contractors.
- 17) Monitor the Contractor's progress relative to any agreed contract programmes.
- 18) Monitor the Contractor's compliance with Health & Safety plans and regulations.
- 19) Monitor compliance with the conditions as set out in the planning permission for the works.
- 20) Advise the Client on any issue that requires the Client's inputs or decisions.
- 21) Undertake day-to-day contract administration activities.
- 22) Attend and provide reports from site and design team meetings, workshops etc.
- 23) Attend and provide reports from Factory Acceptance Tests and Site Acceptance Tests e.g. Switchgear tests, generator tests.
- 24) Attend any key meetings to resolve any M&E issues encountered. Provide reports on such meetings. This shall also include for attendance, as required, at contractor BIM Meetings to discuss any M&E coordination issues.
- 25) Monitor the Contractor's co-ordination of services, both on-site and off-site.
- 26) Monitor and provide supporting information as required to enable the ER to determine any contractor claims.
- 27) Review and report on Contractor payment applications against work completed.
- 28) Check that phasing of Construction Works, are as agreed with client and relevant stakeholders and fully comply with relevant legislation.
- 29) Prepare defects lists and carry out final inspections.
- 30) In collaboration with the other members of the Project Team, assist the ER in administering the terms of the Works contract during operations on site and relating to the completion of the Works including (but not limited to) all activities in connection with the adjudication of disputes between the Employer and the Contractors.

3.2.2 Stage V Handover of Works

The primary (non exhaustive) duties of the Resident Engineer at Stage V Handover of Works will be:

- 1) Prepare separate M&E defects lists and carry out final M&E inspections.
- 2) Complete site walks with the contractors to discuss the close out of each individual snag.

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- 3) Verify the M&E as-built / final construction drawings for accuracy and provide comments on the drawings.
- 4) Witness all M&E commissioning tests on completion and record key results.
- 5) Compile separate mechanical and electrical commissioning reports.
- 6) Verify all M&E Commissioning Certificates for accuracy and ensure all of the necessary certificates are provided prior to a substantial completion certificate being issued by the ER.
- 7) Review the M&E Safety Files and provide comments on the documents prior to a substantial completion certificate being issued by the ER.
- 8) Attend dedicated M&E services demonstrations provided by the contractors to Design Team.
- 9) Attend subsequent, dedicated M&E services demonstrations provided by the contractors to OPW monitoring team and OPW Help Desk staff.
- 10) Complete separate mechanical and electrical demonstration reports.
- 11) Prepare a lessons learned report and recommendations.
- 12) Include for attendance at 2no. meetings on site towards the end of the 12 months defects liability period (Note: This is outside of the RE Performance Period included in the accompanying cover letter and this document). The purpose of each meeting is to complete a final walk down of the building with the design team and contractors to verify the status of any historical or recent snag items that need to be addressed and closed out. Updated snag lists to be completed.
- 13) Witness and Report on Endurance Testing of Mechanical Plant during the Handover Period including monitoring of the Internal Temperature and Humidity levels of the Exhibition and Storage Spaces from the New BMS front end.

Note 1

The M&E scope includes vertical transportation services within the Building(s) and the above duties shall equally apply to those services. 1no. Evacuation / Passenger / Art Handling Lift will be provided at a minimum.

Note 2

It is desirable that Engineers are Chartered with Engineers Ireland.