

CONSULTANTS REPORT

1 (a) Approx. area of entire school in sq. m 1950

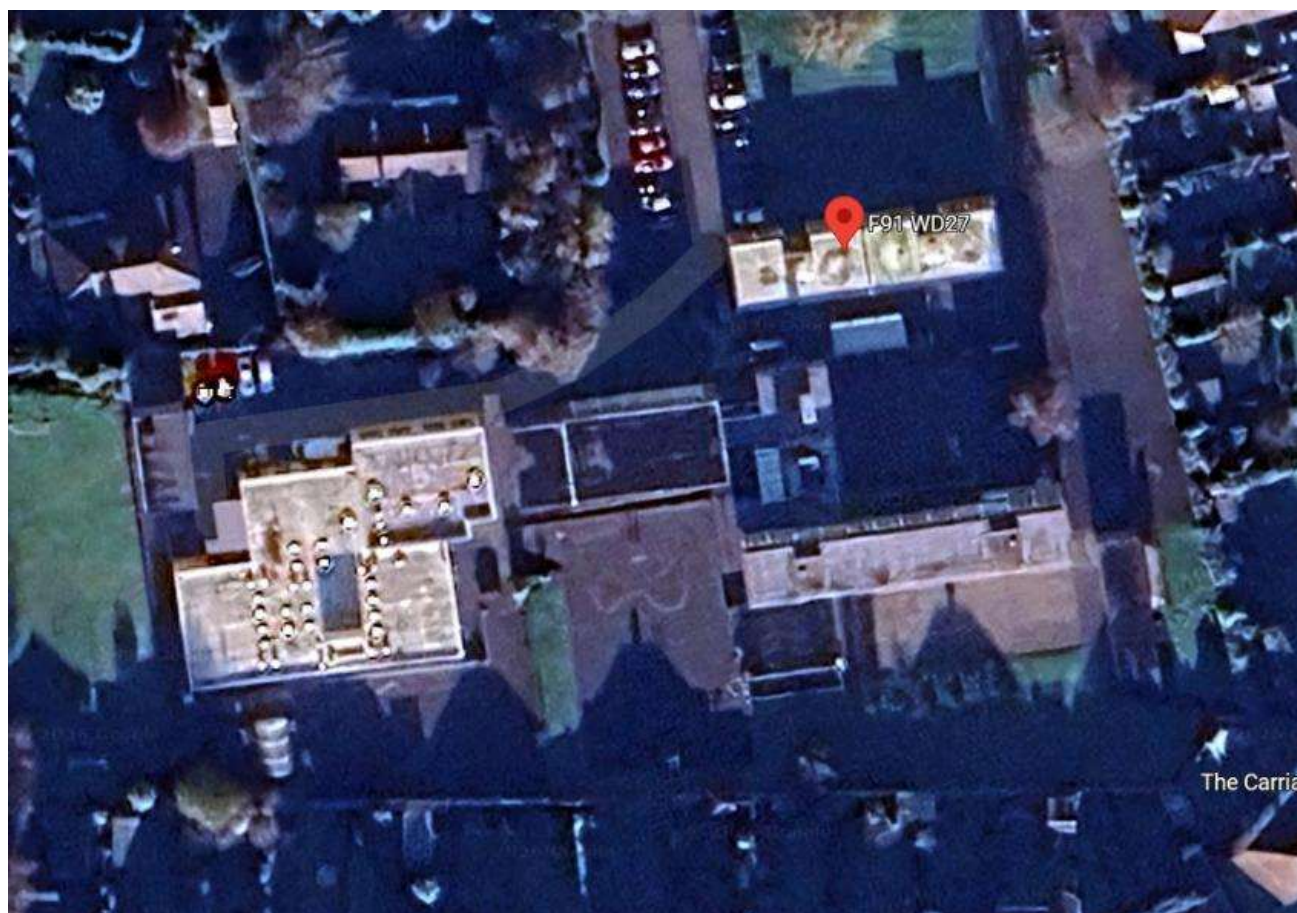
1 (b) Approx. area of where works are proposed in sq. m m2 1950

1 I Describe the part(s) of the building for which the proposed project is required. Include, if applicable, details of number of rooms affected, size or area of the building affected etc.

Scoil Ursula is a large primary school located on Strandhill Road, Sligo (Roll No. 18979F), with a current enrolment of approximately 445 pupils.

At the request of the Board of management a survey was carried out at the school, to inspect both the life safety systems (emergency lighting fire detection and alarm) and the electrical services installations proper.

In addition to the engineering survey, a Periodic Inspection Report (PIR) undertaken by a qualified electrical contractor (included with this application).



2 Provide a full explanation of the nature and extent of the emergency with supporting photographs as per Appendix 1 Circular 0018/2011

Overview of Existing Installation

From survey aging electrical fittings, corroded and heat-damaged switch plates, exposed wiring connections, deteriorated distribution equipment, and incomplete electrical installation generally has been noted. In several locations, electrical accessories show evidence of overheating and burn marking, while other areas display exposed wiring within wall cavities without appropriate enclosure or protection.

Cable runs are a mixture of legacy wiring methods and later additions introduced over time. Poor / no containment, exposed connectors, and mixed generations of accessories suggests the installation has been piecemeal as required. Additionally, areas of the building show water ingress and structural ceiling deterioration in close proximity to electrical installations. This significantly increases the risk of electrical fault conditions, insulation degradation, and potential electrical fire hazards.

The electrical infrastructure at Scoil Ursula is estimated to be approximately 30 years old, with elements of the installation likely dating back beyond this period.

MAIN & SUB DISTRIBUTION

- Existing main board is in good condition, installed in recent years, with spare capacity available. Same to be retained, with modifications to accept new SDB's throughout.
- The electrical installation is a mixture of obsolete ceramic rewirable fuseboards and newer Main distribution board, demonstrating piecemeal upgrades rather than a coordinated replacement of the distribution system.
- Multiple legacy fuseboards remain in service, incorporating ceramic rewirable fuses and exposed busbar arrangements that are well beyond modern electrical safety standards.
- Circuit identification is incomplete and handwritten within cabinet doors, indicating poor documentation and ad-hoc modification of circuits over time.
- Several fuseboards are mounted in recessed timber cabinets, restricting safe access for inspection, maintenance and emergency isolation.
- The installation shows clear evidence of age, deterioration and outdated enclosure designs, particularly within the legacy fuseboards.
- Loose fuse carriers stored within the cabinets indicate reliance on manual fuse replacement practices, increasing the likelihood of incorrect fuse installation.

While some boards contain modern protective devices, the overall distribution appear to have been made in response to increased electrical loads, including ICT equipment, classroom technology, and heating systems, without corresponding review of upstream distribution capacity and protection.

Overall, the installation does not comply with the requirements of I.S. 10101:2020+A1:2024/AC2:2025 National Rules for Electrical Installations, has significantly exceeded its expected service life, and presents a serious health and safety risk within an occupied school environment.

GENERAL SERVICES / SMALL POWER / WIRING

During the survey of Scoil Ursula, a sample of socket outlets, switches and associated final circuit wiring was inspected throughout classrooms and circulation areas. The installation shows clear evidence of age, deterioration and repeated ad-hoc alterations. Numerous legacy accessories remain in service and several locations exhibit unsafe wiring practices, exposed conductors and improvised repairs. The following conditions were observed:

- Corroded and heavily deteriorated metal switch plates remain in service throughout the school. Several plates show significant oxidation, paint contamination and mechanical wear consistent with long-expired electrical accessories.
- Three-gang switch plate shows clear burn and heat damage, indicating a previous overheating or fault condition that has not been properly investigated or replaced.
- Improvised repairs are present, including switch plates secured or covered with adhesive tape and visibly damaged accessories remaining in operation.
- Open junction points and exposed conductors were observed in ceiling voids and wall cavities where connections have been made without proper junction boxes or protective enclosures.
- Unterminated and loose cables are present in accessory back boxes, indicating abandoned or poorly managed alterations to the wiring system.
- Surface-mounted conduits and trunking have been added retrospectively, poorly aligned and inconsistent with the original installation.
- Extension leads and multi-socket adapters are widely used within classrooms, where they have insufficient fixed socket provision and increasing the risk of overloading and trip hazards.
- Data and electrical cabling are run openly along ceilings and wall edges without proper containment.

Overall, the final circuit wiring and associated accessories within Scoil Ursula are fragmented, deteriorated and inconsistently installed, reflecting decades of piecemeal alterations. The installation falls significantly short of the requirements of I.S. 10101:2020+A1:2024/AC2:2025 National Rules for Electrical Installations, has clearly exceeded its intended service life, and presents a material electrical safety risk within an occupied school environment. A comprehensive upgrade of the electrical installation is strongly recommended.

LIGHTING AND LIGHTING CONTROLS

Inspection of the lighting installation in Scoil Ursula shows that the system is largely obsolete and in poor condition, with multiple examples of aging fittings, failed components and deteriorated ceiling infrastructure. The following conditions were observed:

- The majority of luminaires are older fluorescent fittings with discoloured diffusers, yellowed housings and visible aging, indicating fittings that are well beyond their intended service life.
- Several fittings show partial lamp failure, suggesting deteriorating control gear and inconsistent maintenance.
- Obsolete circular compact fluorescent fittings remain in service in some rooms.
- Lighting is installed within aged ceiling tile systems, many of which are stained, damaged, displaced or missing, exposing services above and compromising the integrity of the ceiling system.
- Exterior lighting fittings are heavily weathered and discoloured, most are obsolete
- The lighting system is entirely manually switched, with no daylight sensing, occupancy detection, or energy control systems installed.

Overall, the lighting installation in Scoil Ursula is outdated, poorly maintained and inconsistent, and does not meet the requirements of current Department of Education Technical Guidance (TGD-002 and TGD-030). The system relies on obsolete fluorescent technology that is now being phased out, making ongoing maintenance increasingly difficult. A complete replacement of the lighting system with modern LED luminaires and compliant lighting controls is therefore required. This should be undertaken as part of the wider electrical upgrade of the school to ensure compliance with current Department of Education & Youth standards and to avoid repeated disruption and duplicated works.

EMERGENCY LIGHTING SYSTEM

Inspection of the emergency lighting installation identified significant deficiencies.

- In a number of areas emergency lighting fittings were not installed above exit doors or over classroom escape routes.
- In addition, no emergency lighting is installed within classroom spaces.
- Limited detection is installed within circulation spaces – a lot of fittings no longer working
- Emergency lighting should provide adequate illumination of escape routes and exit points in the event of power failure. The absence of emergency lighting within classrooms and over exit doors represents a significant life-safety deficiency.
- The existing system therefore requires comprehensive upgrading to ensure that escape routes and occupied spaces are adequately illuminated in accordance with current emergency lighting standards IS3217: 2023

FIRE DETECTION AND ALARM SYSTEM

The fire alarm installation at Scoil Ursula was visually inspected as part of our site survey. The system is a conventional, zone-based installation however is no longer in operation (see photograph). The panel shows signs of deterioration, including damaged control components and missing / broken operating switches. There are also mechanical alarm bell sounders and manual “smash glass” call points, which appear to form part of the original installation

It is recommended that a fully addressable fire detection and alarm system be installed in accordance with I.S. 3218; 2024. The proposed upgrade to include:

- New addressable fire alarm control panel.
- Automatic smoke / heat detection throughout classrooms, circulation areas, stores and ancillary spaces.
- New resettable addressable manual call points at final exits and key circulation routes.
- Installation of addressable sounders and sounder/beacons to provide adequate alarm coverage.
- New fire-resistant loop cabling and containment where required.
- Provision of battery backup, fault monitoring and event logging.
- Full commissioning, certification and documentation in accordance with I.S. 3218:2024.

ASSOCIATED ELECTRICAL SYSTEMS

In addition to the electrical distribution, lighting, emergency lighting, and fire detection systems, a number of associated electrical systems within the school are directly impacted by the condition of the existing installation. These systems are powered from, routed alongside, or integrated with the same aged and non-compliant infrastructure and will be affected by the proposed electrical upgrade works.

- Existing communications infrastructure, due to replacement of legacy containment and segregation deficiencies.
- Universal Access WC (UAWC) / emergency call systems, to provide compliant life-safety provision.
- Electrical supplies serving mechanical plant and ancillary equipment, currently fed from deteriorated and non-compliant circuits.
- Intruder alarm system power supplies and interfaces, affected by the replacement of wiring and containment.
- Lightning protection and associated earthing and bonding to be provided, to integrate with the upgraded electrical installation.

The inclusion of these items is directly consequential to the electrical and life-safety upgrade. Their inclusion reflects the minimum necessary scope to deliver a safe, compliant, and fully functional electrical installation.

3. When did the need for these emergency works first arise?

The school identified safety concerns relating to the condition of the electrical and life-safety installations and subsequently commissioned this office to carry out a survey and prepare an Emergency Works Application.

4. What action has the school taken to manage the emergency?

The school commissioned a Periodic Inspection Report by a qualified electrical contractor. The report identified a range of deficiencies across the electrical installation including mixed-age distribution boards, legacy switchgear, inconsistent protective device arrangements, ageing wiring systems and the absence of modern protective measures. These findings confirm the urgent need for intervention.

5. When was the affected part(s) of the building last replaced and/or remedial works carried out? Where applicable, a description of previous remedial works should be included.

There is no evidence of a comprehensive electrical upgrade in recent decades. While minor remedial works and incremental alterations have been carried out over time, these were reactive in nature and did not constitute a coordinated renewal of the main distribution, lighting, emergency lighting, or fire alarm systems.

6. What evidence is there of an effective maintenance programme for the affected area? For the affected area

Is there an Inspection/Maintenance Programme in Place?

Y		N	
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If Yes How many times a year is Maintenance carried out?

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Name the Person/Company & contact details responsible for Maintenance.

N/A

Please provide any additional information in relation to your maintenance programme that may be relevant to this application

7. In your view, how would the school be affected if the proposed works were not carried out?

The electrical, emergency lighting and fire detection installations are at the end of their serviceable life, are non-compliant with current safety standards, and present a significant risk to occupant safety. Given the age, condition and operational importance of these systems, a full electrical and life-safety upgrade is required to ensure regulatory compliance, safeguard the safety of pupils and staff, and allow the continued safe operation of the school. Failure to carry out the proposed works would leave the building without compliant fire detection and emergency escape lighting systems and would represent a serious risk in the event of a fire or emergency evacuation.

8. Outline the **minimum works necessary** to address the emergency **only**.

Emergency Lighting – New System Installation to I.S. 3217:2023

To ensure adequate protection is provided to the school. A new system to current standards will be installed, including central test facilities, exit signage, emergency luminaires, cabling, and associated equipment.

Fire Detection and Alarm – New System Installation to I.S. 3218:2024

To provide appropriate life-safety protection, which is currently absent. Works include a fully addressable fire alarm system, fire alarm panel, field devices, manual call points, cabling, and all associated components.

General Lighting – Replacement of Existing Lighting System

Replacement of the existing end-of-life T5/T8 and CFL luminaires with new energy-efficient LED lighting throughout the buildings, including lighting controls in accordance with DoEY Technical Guidelines. Works include new luminaires, lighting controls, circuit wiring, containment, and associated accessories.

Main and Sub-Distribution, Power & General Services Installation

Retention of existing main board and installation of all new sub-distribution boards, power circuits, sockets, spurs, wiring, containment, and associated electrical infrastructure throughout the buildings.

Testing, Commissioning and Certification

Full testing, commissioning, and certification of the upgraded electrical and life-safety installations to ensure compliance with all relevant standards and regulations.

Associated Builders Works and Ancillary Items

Allow for builders' works, making good, and reinstatement required to facilitate the electrical and life-safety upgrades. This includes forming opes, repairing fabric for cable routes, fire-stopping all penetrations, reinstating ceilings and finishes, and all associated making good.

Associated Electrical Systems

Allowance for works to associated electrical systems that are directly impacted by, or dependent on, the condition of the existing electrical installation and which must be addressed as part of the minimum emergency works.

These include modification, upgrade, or reinstatement of the following:

- Existing communications infrastructure
- Universal Access WC (UAWC) / emergency call systems
- Electrical supplies and wiring serving mechanical plant and ancillary equipment
- Intruder alarm system power supplies and interfaces
- Lightning protection and associated earthing and bonding arrangements

The proposed works represent the minimum necessary intervention required to address the immediate life-safety risks identified during survey and to ensure that Scoil Ursula can continue to operate safely in compliance with current electrical and fire safety standards.

Site Survey Photographs



LIGHTING - SCORCHING



CABLING EXPOSED



OBSOLETE EML FITTING



SDB CERAMIC SCREW-IN FUSES



OLD RED & BLACK CABLING



EXTENSION LEADS



OBSOLETE FDAS PANEL



OBSOLETE EXTERNAL LIGHTING



SDB CERAMIC SCREW-IN FUSES



NO EMERGENCY LIGHTING



OVERHEATED SWITCH PLATE



SWITCHES / MANUAL FIRE CALL POINT