

CONSULTANTS REPORT

1 (a) Approx. area of entire school in sq. m 2250

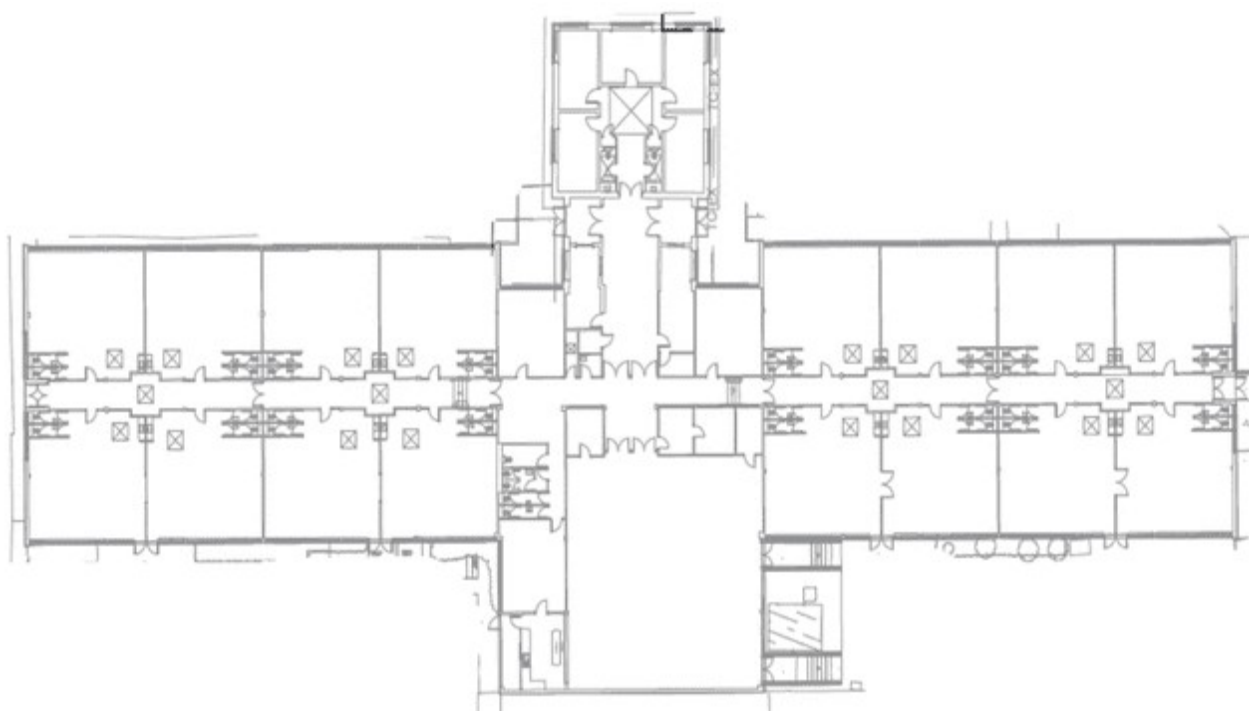
1 (b) Approx. area of where works are proposed in sq. m 2250m2

1 (c) 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 Treasa is a mixed primary school catering to classes from third to sixth with a pupil population of approximately 420. Students.

A Periodic Inspection of the Electrical Installation was commissioned by the school authority following ongoing concerns regarding the safety and condition of the electrical services. The inspection identified extensive and serious defects across the electrical installation and associated life safety systems.

The electrical infrastructure is aged, deteriorated, and non-compliant with current standards, and the defects identified are widespread rather than localised.



Building Layout

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

The Periodic Inspection Report and associated photographic evidence clearly demonstrate that the electrical installation within Scoil Treasa has exceeded its safe service life and presents an immediate risk to health and safety.

The inspection identifies Category 1 (Immediate Danger) and Category 2 (Potentially Dangerous) observations throughout the building, including but not limited to:

- Broken sockets, switches, and light fittings with exposed live conductors
- Absence of earthing and bonding to metal sinks, pipework, and metal accessories
- No effective earth present in most metal socket outlets and light switches
- Incorrect conductor identification, including black conductors used as both phase and neutral
- Signs of excessive heating at lighting fittings
- Extensive reliance on extension leads in classrooms
- Obsolete fuse-based circuit protection with incorrect fuse sizes and missing gauge links
- Emergency lighting present only in limited areas and not operational throughout

These defects are systemic and affect classrooms and circulation areas used daily by pupils and staff.

MAIN & SUB DISTRIBUTION

- Majority of distribution boards use porcelain rewirable fuses rather than modern circuit breakers or RCBOs.
- No residual current protection (RCD) on most circuits, increasing shock risk and non-compliance
- Several boards show manual labelling, missing covers, and signs of wear and corrosion on fixings and terminals.
- Equipment installed is long obsolete, making repairs and replacements difficult or impossible.

Overall the installation fails to comply with I.S. 10101:2020+A1:2024/AC2:2025 National Rules for Electrical Installations, has far exceeded its life span, and presents a serious health and safety risk to the school and should be upgraded.

GENERAL SERVICES / SMALL POWER / WIRING

- Mixed cabling types with no consistent colour coding or labelling.
- Evidence of splices, taped joints and exposed conductors — all presenting serious safety and fire hazards.
- Wiring is bundled and cable-tied, creating risks of overheating and failure under fault conditions.
- No evidence of surge protection, cable identification, or compliant earthing/bonding to modern standards.

Overall the installation fails to comply with I.S. 10101:2020+A1:2024/AC2:2025 National Rules for Electrical Installations, has far exceeded its life span, and presents a serious health and safety risk to the school and should be upgraded.

LIGHTING AND LIGHTING CONTROLS

- The general lighting installation comprises older fluorescent luminaires, many of which are in poor condition.
- Inspection and photographic evidence confirm failed lamps, damaged or discoloured diffusers, broken fittings, and signs of overheating.
- Many fittings are beyond their expected service life, and replacement lamps and components for older fluorescent technologies are increasingly difficult or unavailable.
- The associated lighting wiring is aged and obsolete, with older cabling types and colour coding that do not comply with current standards.
- All lighting is controlled by manual switching only, with no automatic lighting controls provided, contrary to the requirements of TGD-002 and TGD-030.

It is therefore proposed to replace the existing lighting installation throughout the school with energy-efficient LED luminaires and to install compliant lighting controls in accordance with current Department of Education Technical Guidelines. Works will include new luminaires, controls, circuit wiring, containment, and associated accessories. Carrying out the lighting works in conjunction with the wider electrical upgrade will avoid duplication, reduce cost, and ensure full compliance.

EMERGENCY LIGHTING SYSTEM

- Emergency lighting and exit signage are present only in limited areas of the school.
- The existing fittings are of legacy type, with evidence of age, discolouration, and inconsistent provision.
- Emergency lighting coverage is incomplete and does not extend to all escape routes, circulation areas, or occupied spaces.
- No clear evidence of a modern, compliant emergency lighting system, central test facilities, self-testing luminaires, or system labelling to current standards was observed.

The existing emergency lighting provision is fragmented and does not constitute a compliant life-safety system in accordance with I.S. 3217:2023. The general wiring routes and containment serving emergency lighting also reflect legacy installation practices, including surface-mounted and exposed runs, limited containment capacity, and poor segregation from other services. As a result, the current installation is inadequate for safe evacuation and requires full replacement.

FIRE DETECTION AND ALARM SYSTEM

- The school has an addressable fire detection and alarm system, approximately 12–15 years old, placing it at or beyond the typical service life recommended under CIBSE Guide M.
- Automatic fire detection is not provided throughout the building, with significant gaps in coverage identified in some circulation and teaching spaces, and majority ancillary areas including stores, plant areas, and ceiling/void spaces, contrary to the requirements of I.S. 3218:2024.
- The system comprises devices of mixed age and type, with visible variation in condition, indicating piecemeal extensions and alterations rather than a coordinated, compliant installation.
- The existing system does not provide sufficient capacity to accommodate future extensions to the school building (currently at Stage 1).

In this context, a new addressable fire detection and alarm system is required to ensure current compliance, system integrity, and future expandability. The proposed works include a new control and indicating panel, detection devices, manual call points, sounders, cabling, and associated testing, commissioning, and certification.

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.

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 highlighted safety concerns within the school and commissioned this office to carry out a survey and prepare an emergency works application on behalf of the school, for the upgrading of the electrical services and life safety systems. Refer to Periodic Inspection Report highlighting concerns.

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

The school commissioned and received a Periodic Inspection Report from its appointed electrical contractor. The report confirms that the electrical installation is aged, obsolete, and non-compliant with current standards, and identifies multiple safety risks, including outdated distribution boards, deteriorated wiring systems, absence of residual current protection (RCDs), and poor condition of switchgear and accessories. These findings confirm that temporary or localised measures are insufficient and that an urgent upgrade of the electrical and associated life safety systems is required.

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.

No major works carried out over the years.

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 either at the end of their serviceable life, non-compliant with current standards, and/or present a real risk to occupant safety. Given the age, condition and operational importance of these systems, a full electrical and life safety upgrade is essential to ensure legal compliance, protect the safety of students and staff, and support the future educational operation of the school.

All of the above issues are significant failures in both the fire safety strategy and health and safety in the school buildings. Failure to carry out the necessary works has potential to risk the safety and lives of the staff and students in the event of a fire/evacuation situation.

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 – Upgrade System Installation to I.S. 3218:2024

Upgrade and extend the existing addressable fire alarm system to achieve full compliance with I.S. 3218:2024. Works will include the provision of additional detection, rationalisation of existing devices where required, and all associated cabling, testing, commissioning, and certification, retaining existing equipment where suitable.

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 DoE Technical Guidelines. Works include new luminaires, lighting controls, circuit wiring, containment, and associated accessories.

Main and Sub-Distribution, Power & General Services Installation

Installation of new main and sub-distribution boards, power circuits, sockets, spurs, wiring, containment, and associated electrical infrastructure throughout the buildings.

Associated Electrical Systems

Works to associated electrical systems affected by the condition of the existing installation, including communications infrastructure, Universal Access WC (UAWC) / emergency call systems, and electrical supplies to mechanical plant and ancillary equipment. These systems are fed from or routed alongside the same aged and non-compliant infrastructure and are consequential to the electrical and life-safety upgrades.

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.

Site Survey Photographs





Itemised Cost Breakdown of Proposed Works to Address the Emergency (Estimated)

Scoil Treasa						
			Units	Unit Cost (€)	Total Cost (€)	Element Total
1.0	<i>Insurances & Preliminaries (8%)</i>					
2.0	<i>Disconnection Removal Works</i>					
	<i>Works (€/m2)</i>					
3.0	<i>Electrical Services Installation Works</i>					
3.1	<i>Main Distribution Board Installation</i>					
	<i>Switchgear (supply & installation)</i>					
	<i>Surge protection</i>					
	<i>Header Trunking System / cabling containment</i>					
3.2	<i>Sub Distribution Board Installation</i>					
	<i>Switchgear (supply & installation) (3boards)</i>					
	<i>SWA Cabling & terminations</i>					
	<i>Fire rated cabinets to SDB's</i>					
3.3	<i>Sub Main Cabling</i>					
	<i>Sub-main cabling (XLPE/SWA) – supply & install</i>					
	<i>Sub-main containment (tray, trunking, supports) – supply & install</i>					
	<i>Glanding & Terminations</i>					
	<i>Earthing & Bonding Works</i>					
	<i>Testing & Commissioning</i>					
3.4	<i>General Lighting</i>					
	<i>Dimmable fittings</i>					
	<i>Lighting control modules</i>					
	<i>LSF Cable</i>					
	<i>Containment</i>					
	<i>Non dimmable fittings</i>					
	<i>External (façade fittings)</i>					
	<i>External Photocell / controls</i>					
	<i>External LSF Cable</i>					
3.5	<i>General Services Installation</i>					

	Dado Trunking, incl. bends, end cap etc					
	Cable Tray					
	Conduit / mini-trunking routes					
	Fixing Supports Brackets					
	13A Twin socket outelt wall					
	13A Twin socket outelt dado					
	CO2 monitors					
	PIR / occupancy sensors					
	Manual switches / control points					
	Control modules / interface units					
	Sub circuit cabling					
3.6	Wiring Associated with Mechanical Plant (fans, hand dryers, stats etc)					
	Wiring to boiler house plant (pumps, valves, controls)					
	Wiring to hand dryers (incl. local isolators & drops)					
	Wiring to water heaters, local heater fans & stats					
3.6	Emergency Voice Call System (UAWC)					
	UAWC call units, incl. cabling terminations and labelling					
	Testing, commissioning & integration with FA/PA					
4.0	New Fire Detection and Alarm System					
	FDAS Devices (detectors)					
	FDAS Devices (sounders)					
	I/O Modules					
	BGU's					
	Fire Alarm Cabling PH120					
	Containment ELV Cable Tray					
	Testing and Commissioning					
	1 year maintenance agreement					
5.0	Emergency Lighting System					
	New Central Test Unit					
	EL Fittings					
	LSF Cable					
	Containment LV Cable Tray					
	Testing and Commissioning					
	1 year maintenance agreement					

6.0	Associated Builders Works – Site Trenching / Ducting / reinstatement of ground					
	ESB New Service - Ducting – Supply and installation of ducting within trenches.					
	Reinstatement of Ground – Backfilling, compacting, and surface reinstatement to original condition.					
7.0	Associated Internal Builders Works – Opes in structure / making good / painting affected areas					
	Fire-Stopping Works – Allow for all required fire-stopping, sealing, and reinstatement of fire-rated walls, floors, and ceilings where new electrical or life-safety services penetrate existing construction.					
	Opes in Structure - Cutting and forming openings in existing walls, floors, or ceilings for new services or access					
	Reinstatement / Making Good Restoring affected areas to match existing construction, including plastering, patching, and repairs following installation works.					
	Estimated Construction Sub Total					
	VAT @ 13.5%					
	Total Estimated Construction Cost					
	Estimated Professional Fees (Consultant and PSDP)					
	VAT @ 23%					
	Total Estimated Professional Fees					
	Overall Total (Construction & Fees)					

Timeline for the Works (Summer 2027)	
	Consultant Tender - 4weeks
	Design Stage - 8 weeks
	Contractor Tender - 5 weeks
	Works on Site – 8-12 weeks

