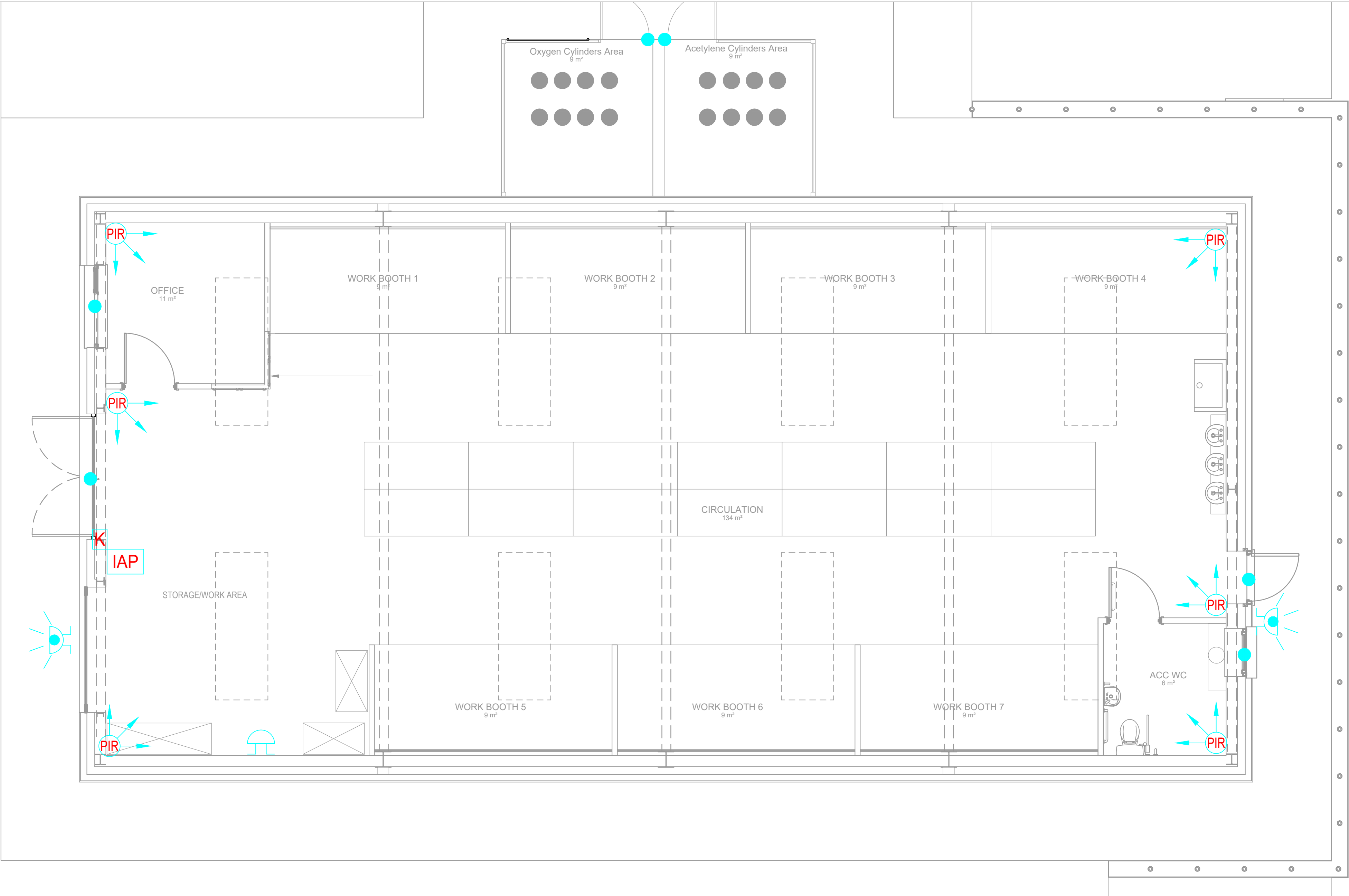




A
E005 INTRUDER ALARM SYSTEM
SCALE 1:50

GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PARTICULAR SPECIFICATIONS.
- THE CONTRACTOR SHALL CO-ORDINATE FULLY WITH ALL OTHER TRADES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF ALL SERVICES AND WORKS REQUIRED FOR THE PROJECT.
- EXTRA COSTS INCURRED DUE TO THE CO-ORDINATION EXERCISE NOT BEING COMPLETED WILL NOT BE ACCEPTED BY THE ENGINEER.
- DO NOT SCALE THIS DRAWING. ALL DIMENSIONS TO BE TAKEN ON SITE. ALL DIMENSIONS IN mm, UNLESS STATED OTHERWISE.
- EXACT LOCATIONS OF ALL SERVICES TO BE AGREED ON SITE. FINAL LOCATIONS OF ALL SERVICES TO BE CO-ORDINATED ON SITE WITH EXISTING LOOSE AND FIXED FURNITURE LAYOUTS IN THE ROOM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORKS AND BUILDERS WORKS AS IDENTIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
- REFURBISHMENT WORKS ARE ONLY TO BE CARRIED OUT TO THE EXISTING FIRE ALARM INSTALLATION.
- THE CONTRACTOR SHALL ALLOW FOR CONNECTING THE NEW ELECTRICAL SERVICES TO THE EXISTING SYSTEMS IN THE BUILDING AS INDICATED.
- REFER TO ALL OTHER DRAWINGS FOR SPECIFIC LAYOUT OF REQUIRED SERVICES THROUGHOUT THE BUILDING.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY SUITABLE FINAL ROUTES FOR ALL CONTAINMENT THROUGHOUT THE BUILDING. NEW MAINS RUN OF ELECTRICAL CONTAINMENT SHALL BE INSTALLED IN THE AREAS AS INDICATED ON THE DRAWINGS BUT THIS IS INDICATIVE ONLY AND IF THE CONTRACTOR FINDS A MORE CONVENIENT ROUTE FOR ELECTRICAL CONTAINMENT IN THE BUILDING ON SITE THEN THAT WILL BE ACCEPTABLE.
- THE MAJORITY OF MAINS RUNS OF NEW ELECTRICAL CONTAINMENT IN THE BUILDING SHALL BE INSTALLED BELOW THE CEILING UNLESS INDICATED ON THE DRAWING.

1. DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND DOCUMENTATION.	
2. CONTRACTOR SHALL ENSURE ALL SERVICES ARE CO-ORDINATED.	
3. INTRUDER ALARM TO BE COMPATIBLE WITH EXISTING INTRUDER ALARM IN THE MAIN BANAGHER FET BUILDING. WIRELESS/WIRED CONNECTION TO LINK BOTH.	
	INTRUDER ALARM PANEL
	INTRUDER ALARM KEYPAD
	PANIC ALARM PUSH BUTTON
	EXTERNAL INTRUDER ALARM SOUNDER AND STROBE.
	INTRUDER ALARM SOUNDER
	MAGNETIC DOOR CONTACT
	DUAL TECHNOLOGY PASSIVE INFRA-RED / ULTRA SONIC DETECTOR
	360° PASSIVE CEILING MOUNTED INFRA-RED BEAM DETECTOR

- GENERAL REQUIREMENTS & COMPATIBILITY
 - System Integration: The intruder alarm system for the new Plumbing Training Workshop shall serve as a fully integrated extension of the existing commercial intruder alarm panel located in the main building.
 - System Compatibility: All new devices, control infrastructure, expanders, and communication modules must be 100% backward and forward compatible with the existing manufacturer's ecosystem (e.g., Vanderbilt/SPC, HKC, or equivalent as installed in the main building).
 - Workmanship: All installation work shall comply strictly with Building Regulations Part D (Materials and Workmanship).
- STATUTORY LEGISLATION & LICENSING
 - PSA Licensing: The installation, programming, commissioning, and subsequent maintenance of the system must be executed exclusively by a contractor holding a valid license issued by the Private Security Authority (PSA) under the Private Security Services Act 2004.
 - Illegal Works Notice: It is a statutory offense under Irish law to engage an unlicensed contractor for electronic security system installations. The contractor must display their PSA license number on all submittals and hand-over documentation.
 - Company Management: The installing contractor must comply with the operational and organizational standards outlined in PSA 74-2019.
- TECHNICAL STANDARDS & RISK GRADING
 - System Standard: The entire installation shall be designed, fitted, tested, and certified in strict compliance with the Irish and European Standard I.S. EN 50131-1:2006 (Alarm Systems – Intrusion and Hold-Up Systems) and the application guidelines of I.S. CLC/TS 50131-7.
 - Risk Grading: Due to the high-value plant, plumbing tools, machinery, and materials stored within the workshop environment, the extended system must meet the criteria for a minimum of a Grade 2 / Grade 3 System (as specified by the client/insurer). All system devices, expanders, and transmission paths must match or exceed this grade rating.
 - Audible Alerts & Noise Pollution: In compliance with I.S. EN 50131 and Local Authority Noise Nuisance Prevention Guidelines, the external audible sounder must be configured with an automatic cut-out device limiting the siren to a maximum duration of 15 minutes from initial activation. The associated visual strobe must remain active for a minimum of 60 minutes or until manual reset.
- SITE INTERCONNECTION & NETWORKING PATHS
 - Civil Infrastructure Utilisation: The linkage from the new Plumbing Workshop back to the main building panel shall utilize the underground site services electrical power ducts as indicated on the relevant Site Services Electrical Power Layout Drawing.
 - Option A – Hardwired Linkage (Preferred):
 - Where data cables traverse the external underground ducting, the contractor shall supply and pull an appropriately rated, moisture-resistant, armored data cable (e.g., Cat6 FTP PE-sheathed outdoor rated or specialized bus signaling cable) to resist water ingress.
 - Isolation, surge protection, and lightning protection modules shall be fitted at both entry and exit points of the buildings.
 - Option B – Wireless Linkage (Alternative):
 - If a hardwired bus expansion is not viable, connection via secure wireless infrastructure may be considered, subject to client approval.
 - The wireless link must comply with the radio frequency, encryption, anti-jamming, and continuous polling/supervision requirements mandated by I.S. EN 50131-1 for the designated system grade.
 - Point-to-point secure wireless bridges or system-specific high-power radio mesh expanders must be used. Standard unencrypted commercial Wi-Fi is strictly prohibited.
- POWER SUPPLY & CONTAINMENT
 - Mains Power: The alarm panel/remote expander power supply units (PSUs) require a permanent, unswitched 230V AC mains electrical supply taken from a dedicated circuit breaker within the new workshop distribution board. This circuit breaker must be clearly labeled "INTRUDER ALARM – DO NOT SWITCH OFF".
 - Battery Backup: Standby batteries (sealed lead-acid) must be housed within the control equipment enclosures. In accordance with I.S. EN 50131, the standby battery capacity must be calculated to sustain full system operation for a minimum duration as required by the system grade (typically 12 hours for Grade 2 / 24 hours for Grade 3) in the event of a mains failure.
 - Containment: All internal security wiring below a height of 2.5 meters shall be enclosed in heavy-duty high-impact surface PVC or steel conduit/trunking to prevent mechanical damage within the plumbing training workshop environment.
- COMMISSIONING, CERTIFICATION & HANDOVER
 - Certification of Compliance: Upon completion, the licensed contractor must perform comprehensive end-to-end testing and issue an official As-Installed Certificate of Compliance to the Banagher FET building management, as required under NSAI / PSA regulations.
 - Monitoring Centre Linkage: If the main building alarm is linked to an Alarm Receiving Centre (ARC), the new workshop zones must be mapped to transmit unique point-identification signals via a transmitter certified to PSA 33:2014 / PSA 33:2022 and I.S. 228 standards.
 - Documentation: The contractor shall supply full user documentation, localized keypad labeling, and an updated zone list to be placed inside the main building control panel cabinet.

No.: Date: By: Revision:

CALLISTO

Callisto Consulting Engineering Ltd

Block 6, Central Buisness Park, Clonminch,Tullamore, Co Offaly - Email info@callisto.ie -Tel: 05793 51010

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Project: BANAGHER PLUMBING WORKSHOP

Address: BANAGHER FET CENTRE, MAIN STREET, BANAGHER, CO. OFFALY

Client: LOETB

Title:	INTRUDER ALARM LAYOUT	Drawing No:	2512-CCE-00-ZZ-DR-E005	Rev No:	A
Date:	30/09/2026	Scale:	1:50	Drawn by:	DM
		Checked:	DM	A1	