



Assignment





Assignment Brief

Assignment Brief:

You are to complete a structured digital building survey project in three parts. The focus is on real-world application of digital technologies, in particular 3D laser scanning. This will involve planning a professional survey, carrying it out on site, and interpreting processed point cloud data to extract accurate building measurements.

Assignment Brief

Assignment Brief:

You are to complete a structured digital building survey project in three parts. The focus is on real-world application of digital technologies, in particular 3D laser scanning. This will involve planning a professional survey, carrying it out on site, and interpreting processed point cloud data to extract accurate building measurements.

01

Plan

To plan a professional building survey

02

Implement

To gain hands-on experience in conducting a manual survey and a laser scanning survey on the Dylan Thomas Centre

03

Analyse

To interpret and extract accurate spatial data from process scan outputs.



01 Planning the Survey

You will create a detailed, professional survey plan, considering site logistics, safety, and objectives. (1000 words)

Your plan should include:

- Purpose of the Survey: What is being surveyed and why? (e.g., internal layout)
 - Survey Area Definition: Which parts of the building are being captured, and what level of detail is required?
 - Site Assessment: Access points, scanning positions, lighting conditions, safety considerations.
 - Risk Assessment Summary: Identify any operational or environmental risks, with mitigation.
-

The Dylan Thomas Centre



The Dylan Thomas Centre in Swansea is a historic, repurposed civic building now used as an arts and cultural venue, and offices as part of UWTSD.

The building was originally constructed in 1829 as Swansea's Guildhall, designed in a neo-classical architectural style.

It has a formal symmetrical façade with multiple bays, arched windows and classical detailing.

It later underwent conversion and major refurbishment before reopening as the Dylan Thomas Centre in 1995.

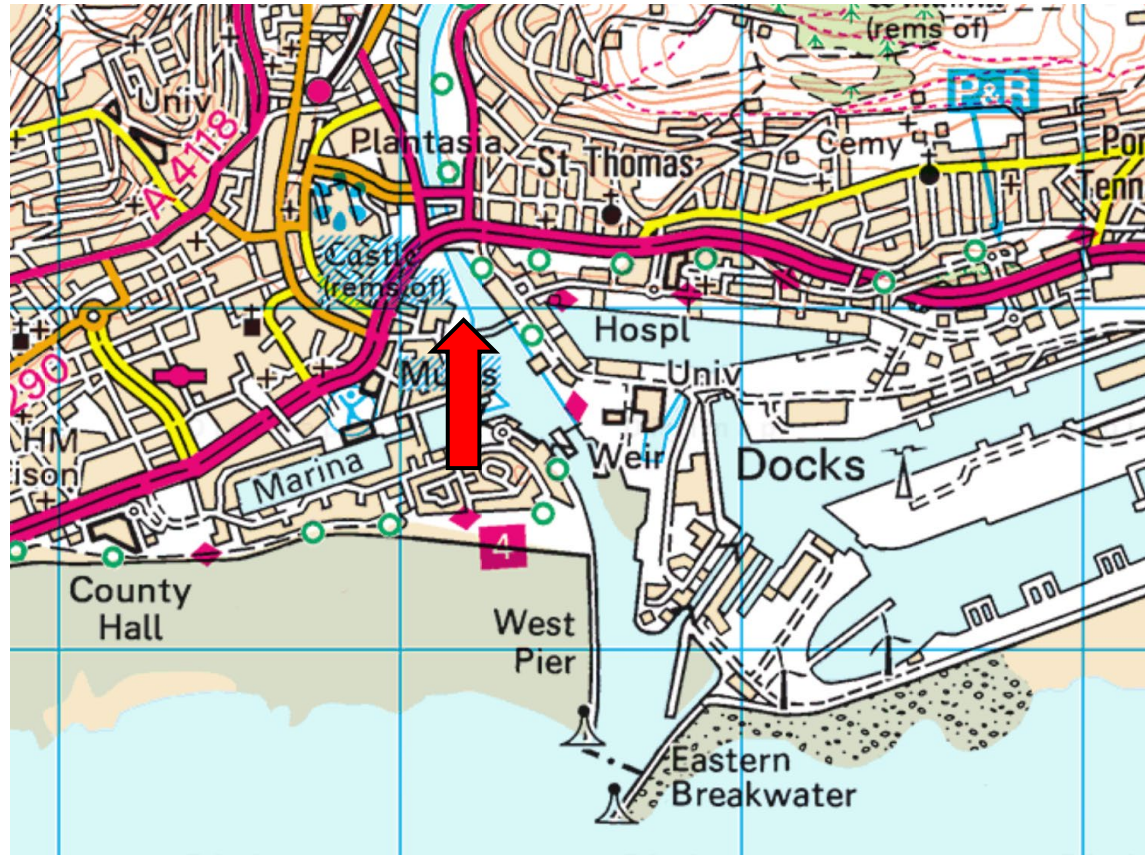
The Dylan Thomas Centre



It later underwent conversion and major refurbishment before reopening as The Dylan Thomas Centre in 1995.

It is a Grade II* listed building recognising its historical and architectural significance.

The Dylan Thomas Centre





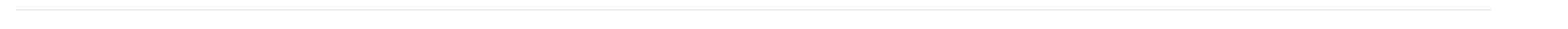
01 Planning the Survey

You will create a detailed, professional survey plan, considering site logistics, safety, and objectives. (1000 words)

Your plan should include:

- Purpose of the Survey: What is being surveyed and why?

Measured internal layout





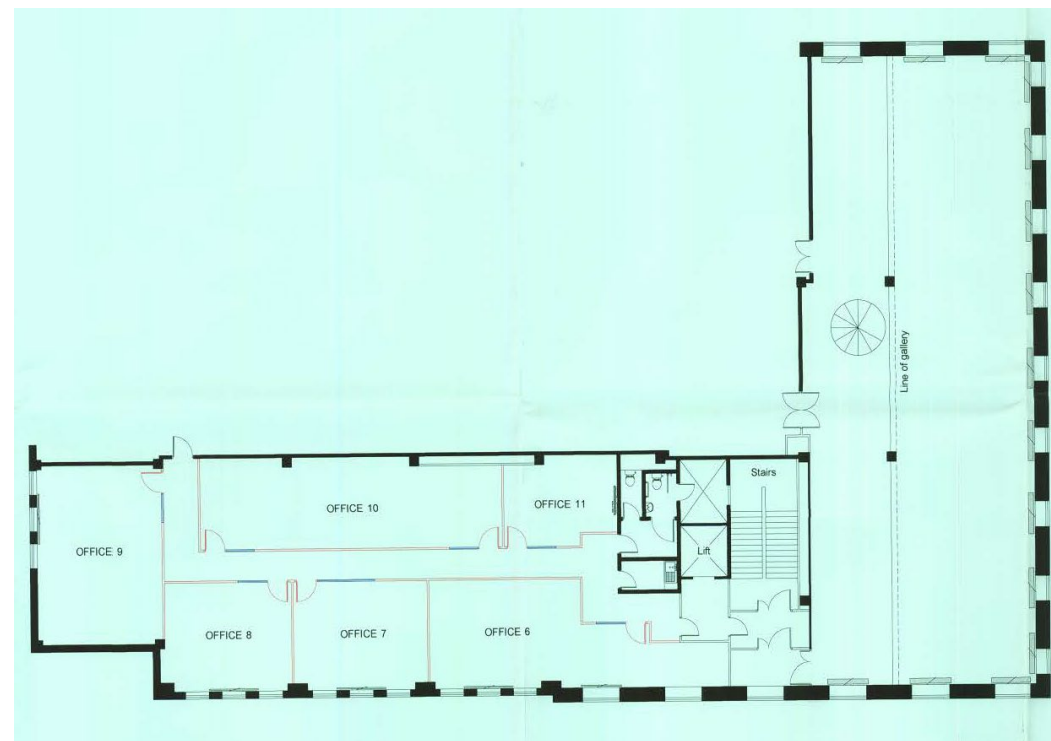
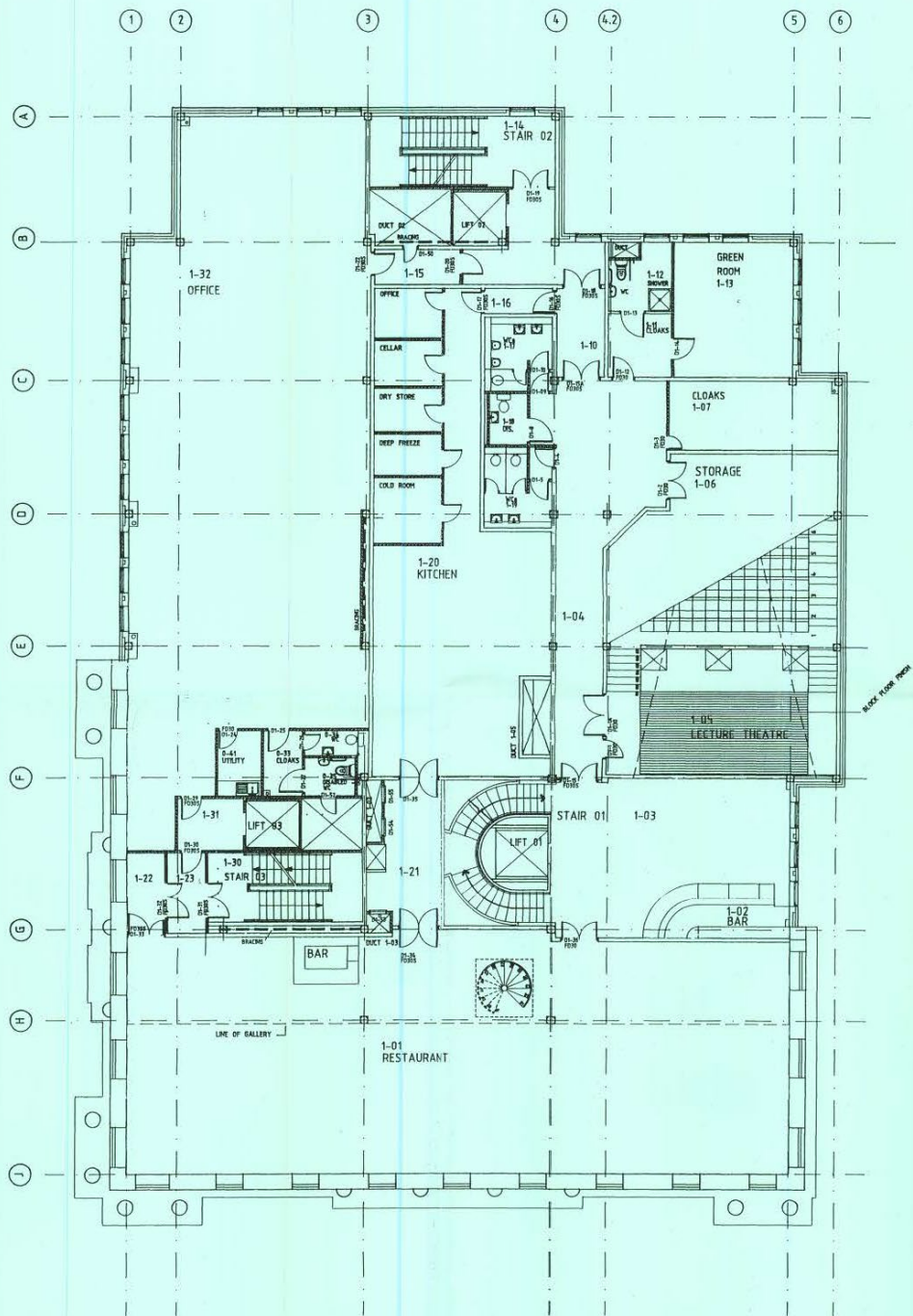
01 Planning the Survey

You will create a detailed, professional survey plan, considering site logistics, safety, and objectives. (1000 words)

Your plan should include:

- Survey Area Definition: Which parts of the building are being captured, and what level of detail is required?

1st Floor Communal Areas





01 Planning the Survey

You will create a detailed, professional survey plan, considering site logistics, safety, and objectives. (1000 words)

Your plan should include:

- Site Assessment: Access points, scanning positions, lighting conditions, safety considerations.

01 Planning the Survey

You will create a detailed, professional survey plan, considering site logistics, safety, and objectives. (1000 words)

Your plan should include:

- Risk Assessment Summary: Identify any potential risks (~2-3), with mitigation.

Health and Safety risks Operational risks

Hazard	Risk / Impact	Who / What is at Risk	Likelihood	Severity	Control Measures

02 Practical

You will conduct a real on-site laser scan survey and a manual measured survey of the chosen building.





03 Measurement and Analysis

You will be provided with the processed laser scans in paper format. You will use these to extract measurements such as

- Overall Room Dimensions
- Door and Window Dimensions

You then need to compare these measurements with those taken manually, and assess them for accuracy, speed and completeness.
