

SAMPLE ASSESSMENT MATERIAL

UNIT 2 - DESIGN THE BUILT ENVIRONMENT: STAGES IN THE DESIGN AND PLANNING PROCESS



This example assignment has been developed by AQA-City & Guilds as part of a QCDA funded project and has been reviewed by practitioners, representatives of sector and awarding organisations and QCDA.

Construction and the Built Environment

Advanced Diploma (Level 3) Unit 2 - (CBE3U2)

Design the built environment: stages in the design and planning process

Internal Sample Assessment Material (iSAM)

Information for teachers

This assignment is provided as an example only. Consortia should produce their own assignments in line with the assessment section of the unit, based on their local delivery circumstances.

Controlled assessment

Aspect		Level of control
1	Task setting	Limited
2	Task taking	
	a Time	Limited
	b Resources	Medium
	c Supervision	Medium
d	Collaboration	Medium
3	Task marking	Medium

A limited level of control means that consortia have control of the assessment process, within the guidance set out by AQA - City & Guilds in the unit specification. This implies that the consortium can alter the internal sample assessment materials (iSAMs), in accordance with the guidance provided in the unit specification, to take account of local delivery circumstances.

A medium level of control means that the parameters for that area are more closely controlled by AQA - City & Guilds and that there are limits to the changes that can be made to the assessment materials by consortia. These limits are made clear in the appropriate guidance.

Task setting: limited level of control

Consortia should feel free to adapt the iSAM to take into account local delivery circumstances, but must ensure that the assignment briefs:

- address the learning outcomes and assessment criteria set out in the unit specification
- follow the guidance contained in the ‘Assessment’ section of the unit specification
- require the learner to produce evidence in the form specified in the ‘Evidence requirements’ section of the unit specification
- are structured in the form specified in the ‘Assignment structure’ section of the unit specification
- are internally moderated by the domain assessor, with all suggested amendments and corrections made prior to issue.

Where consortia take up the opportunity to adapt the exemplar assignment material to suit their local delivery circumstances, they must be careful to use a project of a similar size and complexity in order to ensure that the scope and level of challenge remain the same. Where no suitable construction project is available locally, it is permissible for the centre to devise a virtual project as a basis for the assessment for the unit. It is however important that any adapted assignment brief, whether based on a real or a virtual construction project, allows the learners to address all of the set tasks in such a way that they have a clear opportunity to achieve each of the assessment criteria in the unit.

Task taking: limited (time) or medium (all others) level of control

Consortia may make limited changes to the iSAM but these must be within the following parameters as specified either in the unit overall qualification specification.

Time

15 of the 90 Guided Learning Hours (GLH) available for the delivery and assessment of this unit should be dedicated to production of the assessment evidence by the learner. A maximum of three extra hours may be added for individual learners at the discretion of the consortium. The time recommended for completing each of the assessment tasks is shown in the table below.

Task	Recommended assessment time (h)
1	5.25
2	4.5
3	3.75
4	1.5

Resources

Learners will require access to pre-prepared design sketches, drawings, schedules and specifications of all kinds, manual drawing equipment, digital cameras and ICT equipment with internet access. Learners will also require access to construction drawings linked to photographs of the actual construction project, standard documentation as used by the local planning department and visits to building sites, architects' offices and design studios and the local planning office. There are no constraints on the resources that may be used, but the above should be provided as a minimum.

Supervision

Learners may research information for the project in any place and at any time, but the process of producing a report on the various stages of the design and planning process, the ways in which the two interact to convert client requirements into preliminary design solutions, the production of design suggestions for use in a local urban development, the application of the design and planning cycle to the production of designs leading to a final design solution, the application for Full Planning Permission and the summary of the career opportunities available in design of the built environment, must take place under the supervision of the assessor within the 15 hours allocated for assessment. This applies to all of the tasks that comprise the assessment for this unit.

Collaboration

Learners may work in groups when designing and planning urban spaces as part of a team. Good practice in the use of team work should involve learners by sharing and/or recommending sources of information and in discussion of the work done by other members of the team in the contrasting roles of designer and planner. A useful size for a team would be six learners, in order to ensure that each learner has a chance to contribute to the team work requirement. Team working is not associated with learning outcomes 1, 2 and 4 or with assessment criteria 1a, 2a or 4a. Any evidence submitted for assessment must of course be authenticated as the learner's own work, by both the teacher and the learner.

Task marking: medium level of control

Assessors must use the 'best fit' method to assess the learners' work. This means that they must follow the three 'bands' provided in the assessment grid included in the unit. Assessors are however free to interpret the assessment grid in terms of the local delivery and assessment issues noted in the 'task setting' section above.

Consortia should ensure that, where there are two or more assessors for the unit, standardisation meetings take place to ensure that every assessor is assessing to the same standard. It is good practice for each assessor to assess five to ten assignments (depending upon the total number of assignments to be assessed) in pencil, prior to the standardisation meeting. Discussions at the meeting should focus upon resolution of any different interpretations of the marking scheme, consideration of unexpected but apparently acceptable responses to the set tasks, and agreement of an agreed, unified mark scheme to be followed thereafter by all assessors. Those assignments that were assessed in pencil before the meeting, should then be reassessed in pen, using the agreed mark scheme.

Consortia must also ensure that, even where there is only one assessor for the unit, the domain assessor samples all assessment decisions made, as part of the internal moderation process.

Assessors are encouraged to provide feedback at intermediate stages of the evidence production in the form of progress reviews. They should not however comment on the marks achieved at intermediate stages, nor should they provide any specific direction or detail on how the portfolio of evidence could be improved. During progress reviews assessors must confine themselves to pointing out those tasks that have yet to be addressed properly and should confine themselves to a general narrative only. Two progress reviews are suggested as being manageable and the learners may redraft their work after such progress reviews, but not after agreement of the final assessed mark, which will take place at the external moderator's second visit.

Assessors must discriminate between those learners who fail to complete a portfolio of evidence because of illness or indisposition, and those who simply fail to complete, for one reason or another, but without mitigation. The latter must, if they wish to complete the unit, be provided with a completely new assignment brief, and the work done previously should not count towards the mark for the retaken assignment. The former group may, assuming that the mitigating circumstances are validated, be given extra time to complete the project, or allowed to revisit the original assignment when able. In short, resubmission of the original assignment should only be permitted where the learner was unable to complete the assignment on time due to circumstances outside his or her direct control.

Information for learners

Assignment overview

This assignment is the only assignment for this unit and addresses all the learning outcomes and assessment criteria contained in the unit. The mark you obtain for this assignment will be the mark you are awarded for this unit.

You will be provided with access to pre-prepared design sketches, drawings, schedules and specifications of all kinds, manual drawing equipment, digital cameras, ICT equipment with internet access, construction drawings linked to photographs of the actual construction project and standard documentation as used by the local planning department. You should make full use of any site visits that occurred during delivery.

You may research information for the project in any place and at any time, but the process of compiling the report on the various stages of the design and planning process, the ways in which the two interact to convert client requirements into preliminary design solutions, the production of design suggestions for use in a local urban development, the application of the design and planning cycle to the production of designs leading to a final design solution, the application for Full Planning Permission and the summary of the career opportunities available in design of the built environment, must take place under the supervision of the assessor within the 15 hours allocated for assessment.

You may work in groups when designing and planning urban spaces as part of a team, but any evidence submitted for assessment must be authenticated as your own work, by both the teacher and yourself.

When you have completed this unit you should:

1. understand the stages of the design process and be able to apply design principles and methods to the design of the urban environment.
2. understand the stages of the planning process and how it monitors, controls and assists the work of designers.
3. understand how urban development affects communities and the environment.
4. know how to plan a career in design and planning up to professional membership.

Weighting of assessment criteria topics

Assessment criteria topics	Weighting	Marks
1. The design process	35%	21
2 The planning process	30%	18
2. Development of the urban environment	25%	15
3 Career opportunities	10%	6
Total	100%	48

In order to attain a high mark in this unit, you must address all of the above.

Assignment brief

Scenario

A national property developer has purchased a large plot of land in an outlying suburb of a medium-sized market town. The proposed development site was previously home to an old factory. This factory was the major employer in the town, but the buildings were demolished after the business moved abroad. Close to the proposed development site are residential housing, a primary school, a large public park and sheltered housing for the elderly. The developer plans to erect 150 dwellings, to include a mixture of detached houses, semi-detached houses, town houses, an apartment block and a small number of bungalows, together with four retail units and a pub/restaurant.

Several objections to the new development have been received by the local planning authority. These include concerns over the anticipated increase in traffic density, particularly given the proximity of the primary school; increased noise from traffic and the possible effect of this on the primary school and the sheltered housing for the elderly; the possibility of contaminated ground on the old factory site being opened up and the overall impact of a large residential and commercial/retail development on existing local services such as schools, shops and other businesses.

The local planning authority believe that the new development will make a major contribution to the local economy, which is in urgent need of growth since the factory closed, and have granted Full Planning Permission for the development. They are also conscious of the employment opportunities offered by the new development, both during construction, and after completion of the project. They hope that, if this project is completed successfully, other similar developments will come to the town.

The local planning authority is however keen to explain the position to the general public and to allay the concerns of the local community. They hope to do this by explaining how the new development complies with the Local Area Plan, how the design and planning processes work to protect community interests, how the development will enhance social inclusion and improve the quality of life for local residents, and how it will create much-needed employment opportunities for the local population.

They have decided to give the task of liaising with the local community to a junior officer in the employ of the local planning authority. This person will be responsible for producing materials to explain how the design and planning processes will address the concerns of the local community, and for describing the job opportunities, particularly in the design of the built environment, that will be generated by the proposed development.

Roles

Your teacher will take the role of the developer in this assignment. You will take the role of the junior town planning officer who has been given the role of liaising with the local community. The work you do to address the tasks in the assignment brief will be used to address the concerns raised by the local community. You may use any source of information that seems appropriate to you, including any advice or guidance provided by any employers and professional practitioners you have met during the delivery of this unit. You must however be careful to reference any comments or information that is not your own work. Your teacher will be the assessor for this unit and will mark your work.

Your assignment report should be a word processed A4 document that must be included in your portfolio. Photographs and other images to support your work may be included in the assignment report. Should you wish to include any drawings or sketches then they must be no larger than A3 sheets. You may use the opinions and judgements of construction professionals, to support your work but you must reference these carefully.

Each page of your portfolio should be numbered and include the following information:

candidate name, candidate number, centre name, centre number.

No marks are available for work that does not address the learning outcomes and assessment criteria. You must therefore concentrate your efforts on those requirements in order to maximise your final mark for this unit. When you work in teams you must clearly identify your own contributions.

Assignment tasks

Task 1

- (a) Identify the various stages of the design of the new development, and describe how the design team will work through these stages with the client to convert the client's initial concept into a final design solution.
- (b) Analyse the stages of the design process in terms of client requirements, planning legislation, the relationship between the client and the design team, the interactions between the various members of the design team and the visual impact of the proposed development on the existing built environment.
- (c) Apply design principles and methods to develop a preliminary design solution for a detached home on the site. Evaluate your initial design against planning constraints and conditions and use these to develop increasingly refined designs.

Learning Outcome 1, Assessment Criteria 1a (i to ix), PLTS (IE2, IE4, SM2)

You should:

- allow 5h 15min to complete this task
- hand in a technical report on the above, as part of your portfolio, and include sample documentation relating to the planning guidance received, together with annotated sketches and drawings to support your design solutions.

Task 2

- (a) Identify and describe the various stages of the planning process for the full range of houses proposed for the new development.
- (b) Analyse the important factors that affected the decisions the planners have taken in terms of the social, political, legal, economic, environmental and technical issues associated with the retail units and the pub/restaurant. Take into account the concerns expressed by the local community relating to traffic density, traffic noise, and the impact of the new development on existing shops and businesses.
- (c) Describe what is meant by the terms 'Outline Planning Permission' and 'Full Planning Permission' and analyse how the design team can ensure that the construction process will comply with the Building Regulations.

Learning Outcome 2, Assessment Criteria 2a (i to vii), PLTS (IE2, IE4)

You should:

- allow 4h 30min to complete this task
- hand in a technical report on the above, as part of your portfolio, and include sample documentation relating to the planning guidance that led to the granting of planning permission
- include other sketches and/or images with your written work, where appropriate.

Task 3

- (a) Evaluate the use of urban space in the new development, and in the existing built environment around the proposed site.
- (b) Describe the anticipated contribution of the new development to social inclusion, economic growth, sustainability, transport structures and the quality of life for the local community.
- (c) Working as part of a small team, apply the various disciplines associated with the design process to manipulate space to produce an urban design solution for the retail units on the new development. Discuss the design solutions produced with other members of the team and use the outcomes of the discussion to reach a final design solution.

*Learning Outcome 3, Assessment Criteria 3a (i to v)
PLTS (IE1, IE5, CT1, CT5, SM3, TW1, TW2, TW5)*

You should:

- allow 3h 45min to complete this task
- discuss the design and planning of urban spaces with the other members of the team, and act on their comments where necessary
- hand in a technical report on the above to your teacher, as part of your portfolio
- include annotated sketches and drawings of your design suggestions with your report, to demonstrate the effective use of urban space
- include witness statements from your teacher as evidence of your working as part of a team when designing and planning urban spaces.

Task 4

- (a) Compare and contrast the different career opportunities offered by the new development in terms of the range and characteristics of jobs available.
- (b) Describe progression opportunities in the construction and built environment sector with particular reference to progression from craft, through technical and supervisory, to and professional and management job roles.
- (c) Explain how the members of the design team interact in their job roles.
- (d) Identify the qualifications needed to support the career opportunities identified.
- (e) Describe the individual membership requirements of the professional institutions involved in the design of the built environment, using examples related to the design of the proposed development.

Learning Outcome 4, Assessment Criteria 4a (i to vi), PLTS (IE6)

You should:

- allow 1h 30min to complete this task
- hand in a summary of the careers and career progression opportunities available to the local population, to your teacher, as part of your portfolio
- include a list of the qualifications needed for career progression, and the minimum requirements for professional membership, with your report.

Assessment grid

Assessment criteria topic	Band 1	Band 2	Band 3
	The learner has:		
1. The design process	Demonstrated a basic understanding of the design process by identifying most of the stages of the design cycle, briefly describing how the design team work through the various stages to develop simple design solutions, and relating the process to the building or structure under consideration in a superficial but generally accurate fashion.	Demonstrated a good understanding of the design process by identifying all of the stages of the design cycle, clearly describing how the design team work through the various stages to develop effective design solutions, and relating the process to the building or structure under consideration in a clear and accurate fashion.	Demonstrated an in-depth understanding of the design process by identifying every stage of the design cycle in full, thoroughly describing how the design team work through the various stages to develop creative and practical design solutions, and relating the process to the building or structure under consideration in a detailed fashion.
2. The planning process	Demonstrated a basic understanding of the planning process by identifying most of the stages of the planning cycle, briefly describing how planning ensures compliance with legislation and community needs, and relating the planning process to the building or structure under consideration in a superficial but generally accurate fashion.	Demonstrated a good understanding of the planning process by identifying all of the stages of the planning cycle, clearly describing how planning ensures compliance with legislation and community needs, and relating the planning process to the building or structure under consideration in a clear and accurate fashion.	Demonstrated an in-depth understanding of the planning process by identifying every stage of the planning cycle in full, thoroughly describing how good planning ensures compliance with legislation and community needs, and relating the planning process to the building or structure under consideration in a detailed fashion.
3. Development of the urban environment	Worked as a member of team to demonstrate a basic understanding of the development of the urban environment by making a minor contribution to the use of the design and planning cycle to progress a design solution to the full planning permission stage.	Worked as a member of team to demonstrate a partial understanding of the development of the urban environment by making an effective contribution to the use of the design and planning cycle to progress a design solution to the full planning permission stage.	Worked as a member of team to demonstrate an in-depth understanding of the development of the urban environment by making a major contribution to the use of the design and planning cycle to progress a design solution to the full planning permission stage.

Assessment criteria topic	Band 1	Band 2	Band 3
	The learner has:		
4. Career opportunities	Compared careers available in the design and planning of the built environment, and produced a basic summary of individual career progression opportunities, up to professional membership level.	Compared careers available in the design and planning of the built environment, and produced a coherent summary of individual career progression opportunities, up to professional membership level.	Effectively compared careers available in the design and planning of the built environment, and produced a precise and thoughtful summary of individual career progression opportunities, up to professional membership level.

Personal, Learning and Thinking Skills (PLTS)

The list below is indicative of the way this assignment supports the development and achievement of PLTS. The assignment supports the development of more PLTS than are covered through the assessment criteria alone.

Independent enquirers

- IE1 identifying questions to answer and problems to resolve when identifying, describing and analysing the various stages of the design process, and when designing and planning urban spaces
- IE2 planning and carrying out research, and appreciating the consequences of decisions, when researching into the factors that influence the design and planning processes, and evaluating the various stages of the planning process
- IE4 analysing and evaluating information, and judging its relevance and value, when identifying, describing and analysing the various stages of the design process, and when evaluating the various stages of the planning process
- IE6 supporting conclusions, using reasoned arguments and evidence, when comparing and contrasting career opportunities in the design of the built environment

Creative thinkers

- CT1 generating ideas and exploring possibilities when designing and planning urban spaces
- CT2 trying out alternatives or new solutions, and following ideas through, when designing and planning urban spaces

Team workers

- TW1 co-operating with others to work towards common goals when designing and planning urban spaces
- TW2 reaching agreements, and managing discussions to achieve results, when designing and planning urban spaces
- TW5 taking responsibility, and showing confidence in themselves and their conclusions, when designing and planning urban spaces

Self-managers

- SM2 working towards goals, and showing initiative, commitment and perseverance, when describing and analysing the various stages of the design process
- SM3 organising time and resources, and prioritising actions, when designing and planning urban spaces