

BACHELORS DEGREE ASSIGNMENT SPECIFICATION

Student name:		Student P number:	
Programme:	BSc Built Environment Portfolio		
Module:	Construction Technology 3	Module Level (4, 5, 6):	6
Module code:	M3X8754 (PCM)	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Trevor Francis	Internal Verifier:	Lindsay Richards
Assignment Title:	Victorian Quarter – A Large Complex Site Development	Assignment No (x of x):	1 of 1
Hand Out Date:		Submission deadline:	Tasks:1: 27/1/17 Tasks 2,3,4: 24/3/17

Referencing:	In the main body of your submission you must give credit to authors on whose research your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have read or quoted in order to complete this assignment (e.g. for books: surname of author and initials, year of publication, <u>title of book</u> , edition, publisher: place of publication).		
Disclosure:	I declare that this assignment is all my own work and that I have acknowledged all materials used from the published or unpublished works of other people. All references have been duly cited.		
Student's Signature:	<i>Assignments will not be accepted without a signature here</i>	Date:	
Turnitin: Lecturer to tick to indicate if an electronic version of the assignment must be submitted to Turnitin. Note: the Turnitin version is the primary submission and acts as a receipt for the student. Both electronic and paper versions MUST be submitted by the same deadline. No marks will be released until both submissions are received. Late submission of either the electronic or paper version will result in a late penalty mark. Penalties for late submission			YES
			NO

Learning Outcomes tested (from module syllabus)	Assessment Criteria To achieve each outcome a student must demonstrate the ability to:
1	Evaluate factors influencing the choice of a range of construction technologies.
2	Appraise issues affecting decisions relating to environmental, functional and economic matters relevant to construction technology.

- Please submit the assignment parts in a suitable report folder– **not** in poly-pockets. This form (ALL PAGES) MUST be at the front of the paper submission. Assignments will not be accepted without this form as it is a requirement that you sign the disclosure regarding referencing convention.
- DO NOT put this form into Turnitin or it will match many similarities with other students' submissions.
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TASK DESCRIPTION

This proposal is to be read in conjunction with the associated site plans, elevations and photographs.

This is a University assignment, please state all assumptions that you might make.

Scenario

Proposal:

This consists of the demolition of six existing buildings and redevelopment to provide a twenty storey building, comprising: a 200 bedroom hotel; private apartments; commercial offices for media/design orientated firms; function, meeting, and leisure facilities, specialist two-screen cinema, and five restaurants. This is loosely as indicated on the attached drawings and location plans.

The applicant:

The applicant is a large UK based property developer and you are to assume you work as part of their Construction Management team.

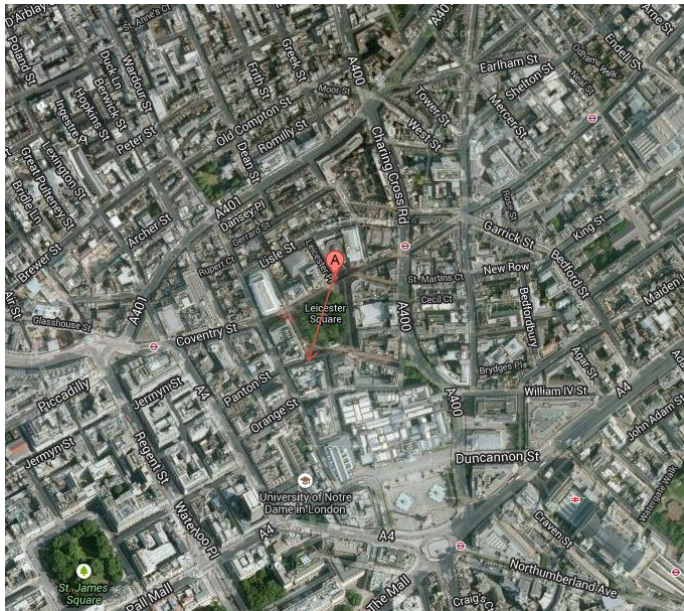
Strategic issues:

The principle of the redevelopment of this site to provide iconic facilities, that make a positive contribution to London's visitor and entertainment experience and infrastructure. Concern however, has been raised regarding the impact on street-scape, scale, neighbouring heritage assets and social housing provision that are it is suggested material considerations that might be contrary to strategic policy. Further discussion regarding inclusive design, climate change, and transport is ongoing with the authorities and amenity groups.

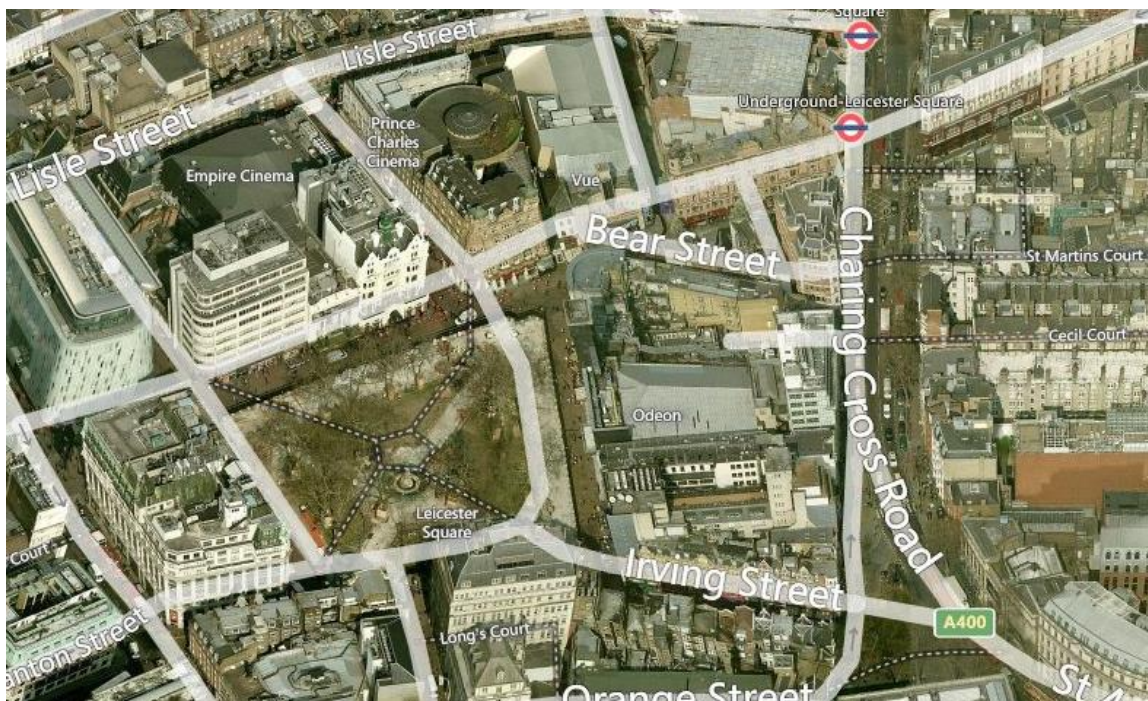
The Greater London Authority (GLA) and Historic England have both expressed serious reservations about the proposals, hence your client, keen to reach a compromise has asked you to modify the scheme to reduce the above ground height to a maximum of twenty storeys and provide four basement floors Three for car parking but with the upper basement being fitted out to create a night shelter for young, temporarily homeless, people. The development will also need to have 40 units of affordable housing if it is to gain consent. The external façade is also to be re-engineered such that it forms an environmentally sustainable response.

The developer client aware of the additional time delay and project costs arising has requested that as a recent graduate you review potential aspects of build-ability utilising a value engineered approach.

Leicester Square – Context

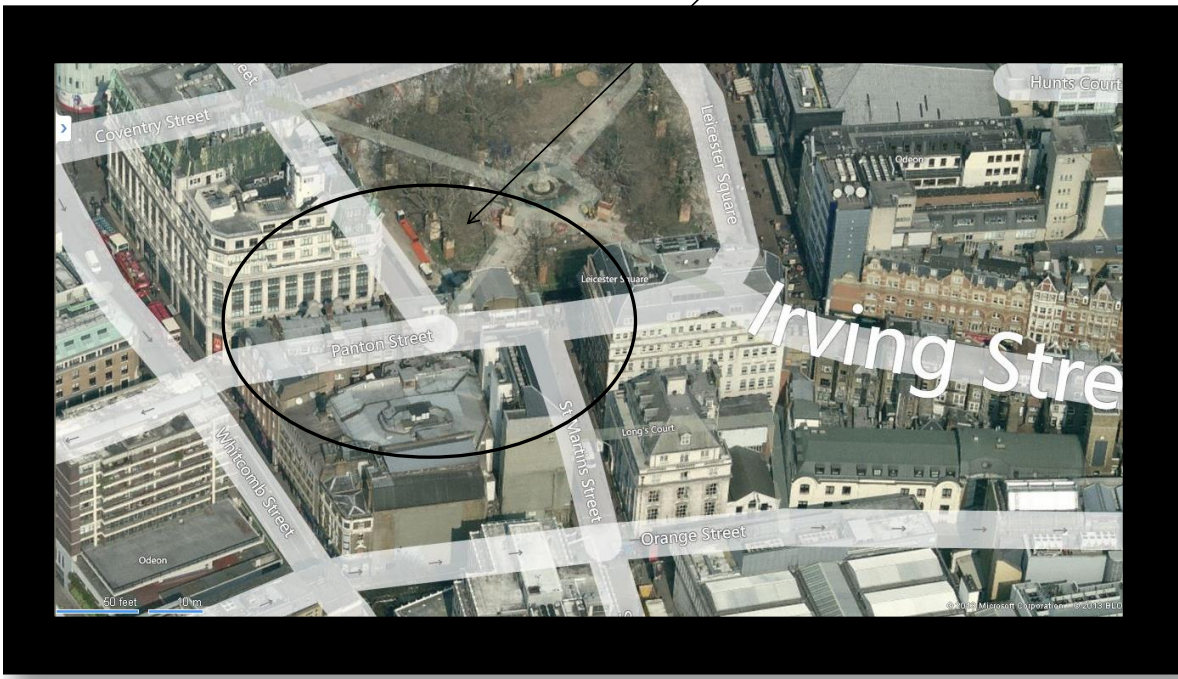


Leicester Square – Context



Leicester Square – Context

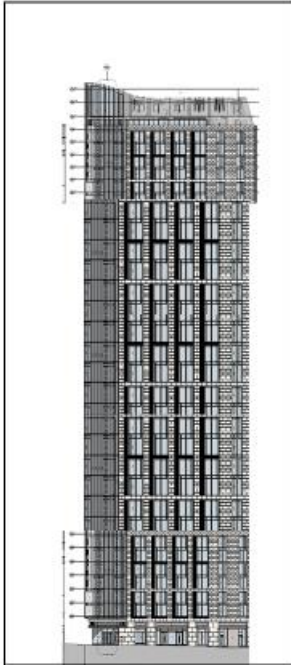
Area embraced by this study



Leicester Square – Current Proposal

Current Proposal

A = Portland Stone;
B = Double glazed windows ;
with stainless steel metal finishes;
C= Faience;
D= Zinc Fins;
E= Stainless Steel
F= Perforated stainless louvres;
G= Stone Louvres;
H= Glass spandrel;
J= Curved Portland Stone;
K= ATM;
L= Signage;
M= Plant Screen



The current proposal prior to re-engineering.

Existing View

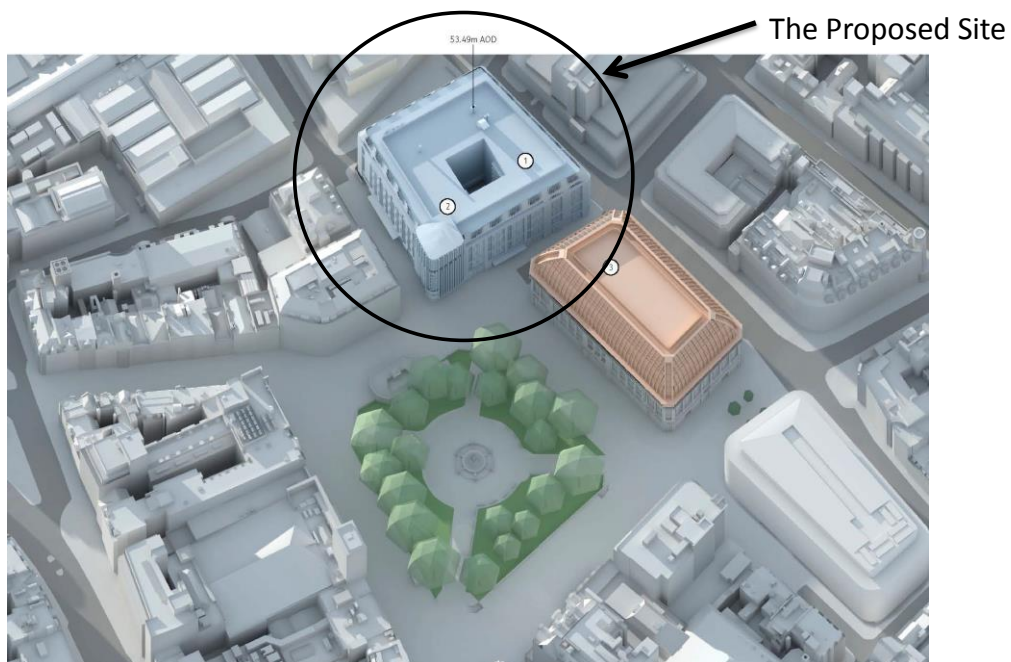


Proposed View



Tower inserted. Please see image below, for an indication of what was being proposed.

The Development Site – Indicated by the red outline



Task 1

Utilising suitably annotated sketches make appropriate recommendations for constructing the modified substructure and basement areas that will be necessary.

Task 2

Suggest a suitable design (with illustrated sections and schematics) that illustrate how the structural frame can be designed and constructed such that it will allow for the efficient use of individual spaces internally, whilst remaining cost effective, buildable and sufficiently flexible for application to a range of multiple uses, now and in the future.

Task 3

Make recommendations for weathering the external envelope. This should consider both wall cladding and roof coverings. Present this via neat annotated sketches that generate sections of structure and fabric interface and intersection details at abutments.

Task 4

Consider briefly how the new structure could be modified to integrate environmentally aware design considerations such as: passive design solutions; intelligent building innovations and fire engineering principles.

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

(Lecturer – please insert guidance for students here. Please link the task to the five common assessment criteria overleaf)

This assignment provides candidates with an opportunity to demonstrate their knowledge and appreciation of a range of factors involved in successfully integrating build-ability and sustainability in a large complex highly serviced facility.

Your solution should emphasise economic, social and environmental benefits.

MARKING CRITERIA AND STUDENT FEEDBACK

This section details the assessment criteria. The *extent* to which these are demonstrated by you determines your mark. The marks available for each criterion are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Common Assessment Criteria Applied	Marks available	Marks awarded
1. Research-informed Literature Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions.		
Depth of research undertaken, citation and references	20%	
2. Knowledge and Understanding of Subject Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.		
Knowledge and understanding of the range and application of technologies.	20%	
3. Analysis Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence		
Analysis of the challenges posed.	20%	
4. Practical Application and Deployment Deployment of methods, materials, tools and techniques; application of concepts; formulation of innovative and creative solutions to solve problems.		
Use of suitable methods, tools and techniques to produce a quality development (redevelopment) proposal.	30%	
5. Skills for Professional Practice Attributes in professional practice: individual and collaborative working; deployment of appropriate media; presentation and organisation.		
Presentation standards	10%	

Assignment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		40 %

COMMON ASSESSMENT AND MARKING CRITERIA

	OUTRIGHT FAIL	UNSATISFACTORY	SATISFACTORY	GOOD	VERY GOOD	EXCELLENT	EXCEPTIONAL
Assessment Criteria	0-29%	30-39%*	40-49%	50-59%	60-69%	70-79%	80-100%
1. Research-informed Literature Extent of research and/or own reading, selection of credible sources, application of appropriate referencing conventions	Little or no evidence of reading. Views and findings unsupported and non-authoritative. Referencing conventions largely ignored.	Poor evidence of reading and/or of reliance on inappropriate sources, and/or indiscriminate use of sources. Referencing conventions used inconsistently.	References to a limited range of mostly relevant sources. Some omissions and minor errors. Referencing conventions evident though not always applied consistently.	Inclusion of a range of research-informed literature, including sources retrieved independently. Referencing conventions mostly consistently applied.	Inclusion of a wide range of research-informed literature, including sources retrieved independently. Selection of relevant and credible sources. Very good use of referencing conventions, consistently applied.	A comprehensive range of research-informed literature embedded in the work. Excellent selection of relevant and credible sources. High-level referencing skills, consistently applied.	Outstanding knowledge of research-informed literature embedded in the work. Outstanding selection of relevant and credible sources. High-level referencing skills consistently and professionally applied.
2. Knowledge and Understanding of Subject Extent of knowledge and understanding of concepts and underlying principles associated with the discipline.	Major gaps in knowledge and understanding of material at this level. Substantial inaccuracies.	Gaps in knowledge, with only superficial understanding. Some significant inaccuracies.	Evidence of basic knowledge and understanding of the relevant concepts and underlying principles.	Knowledge is accurate with a good understanding of the field of study.	Knowledge is extensive. Exhibits understanding of the breadth and depth of established views.	Excellent knowledge and understanding of the main concepts and key theories. Clear awareness of challenges to established views and the limitations of the knowledge base.	Highly detailed knowledge and understanding of the main theories/concepts, and a critical awareness of the ambiguities and limitations of knowledge.
3. Analysis Analysis, evaluation and synthesis; logic, argument and judgement; analytical reflection; organisation of ideas and evidence	Unsubstantiated generalisations, made without use of any credible evidence. Lack of logic, leading to unsupported/missing conclusions. Lack of any attempt to analyse, synthesise or evaluate.	Some evidence of analytical intellectual skills, but for the most part descriptive. Ideas/findings sometimes illogical and contradictory. Generalised statements made with scant evidence. Conclusions lack relevance.	Evidence of some logical, analytical thinking and some attempts to synthesise, albeit with some weaknesses. Some evidence to support findings/views, but evidence not consistently interpreted. Some relevant conclusions and recommendations, where relevant	Evidence of some logical, analytical thinking and synthesis. Can analyse new and/or abstract data and situations without guidance. An emerging awareness of different stances and ability to use evidence to support the argument. Valid conclusions and recommendations, where relevant	Sound, logical, analytical thinking; synthesis and evaluation. Ability to devise and sustain persuasive arguments, and to review the reliability, validity & significance of evidence. Ability to communicate ideas and evidence accurately and convincingly. Sound, convincing conclusions / recommendations.	Thoroughly logical work, supported by evaluated evidence. High quality analysis, developed independently or through effective collaboration. Ability to investigate contradictory information and identify reasons for contradictions. Strong, persuasive, conclusions, justifiable recommendations.	Exceptional work; judiciously selected and evaluated evidence. Very high quality analysis, developed independently or through effective collaboration. Ability to investigate contradictory information and identify reasons for contradictions. Highly persuasive conclusions
4. Practical Application and Deployment Effective deployment of appropriate methods, materials, tools and techniques; extent of skill demonstrated in the application of concepts to a variety of processes and/or contexts; formulation of innovative and creative solutions to solve problems.	Limited or no use of methods, materials, tools and/or techniques. Little or no appreciation of the context of the application.	Rudimentary application of methods, materials, tools and/or techniques but without consideration and competence. Flawed appreciation of the context of the application.	An adequate awareness and mostly appropriate application of well established methods, materials, tools and/or techniques. Basic appreciation of the context of the application.	A good and appropriate application of standard methods, materials, tools and/or techniques. Good appreciation of the context of the application, with some use of examples, where relevant.	A very good application of a range of methods, materials, tools and/or techniques. Very good consideration of the context of the application, with perceptive use of examples, where relevant. Evidence of some innovation and creativity.	An advanced application of a range of methods, materials, tools and/or techniques. The context of the application is well considered, with extensive use of relevant examples. Application and deployment extend beyond established conventions. Innovation and creativity evident throughout.	Outstanding levels of application and deployment skills. Assimilation and development of cutting edge processes and techniques.
5. Skills for Professional Practice Demonstrates attributes expected in professional practice including: individual initiative and collaborative working; deployment of appropriate media to communicate (including written and oral); clarity and effectiveness in presentation and organisation.	Communication media is inappropriate or misapplied. Little or no evidence of autonomy in the completion of tasks. Work is poorly structured and/or largely incoherent.	Media is poorly designed and/or not suitable for the audience. Poor independent or collaborative initiative. Work lacks structure, organisation, and/or coherence	Can communicate in a suitable format but with some room for improvement. Can work as part of a team, but with limited involvement in group activities. Work lacks coherence in places and could be better structured.	Can communicate effectively in a suitable format, but may have minor errors. Can work effectively as part of a team, with clear contribution to group activities. Mostly coherent work and is in a suitable structure.	Can communicate well, confidently and consistently in a suitable format. Can work very well as part of a team, with very good contribution to group activities. Work is coherent and fluent and is well structured and organised.	Can communicate professionally and, confidently in a suitable format. Can work professionally within a team, showing leadership skills as appropriate, managing conflict and meeting obligations. Work is coherent, very fluent and is presented professionally.	Can communicate with an exceptionally high level of professionalism. Can work exceptionally well and professionally within a team, showing advanced leadership skills. Work is exceptionally coherent, very fluent and is presented professionally.

Student Self Evaluation Form

Student name:		Student number:	P	
Programme:		Year programme	of	
Assignment Title:				

This section repeats in brief the common assessment criteria detailed on previous pages. The *extent* to which these are demonstrated by you determines your mark. Using these criteria, tick the box that best indicates the level of achievement you feel you have achieved with regard to each of them.

Common Assessment Criteria Applied	Level of Achievement						
	REFER		3 rd	2:2	2:1	1 st	1 st
	OUTRIGHT FAIL	UNSATISFACTORY	SATISFACTORY	GOOD	VERY GOOD	EXCELLENT	EXCEPTIONAL
1. Research-informed Literature	0-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-100%
	☐	☐	☐	☐	☐	☐	☐
2. Knowledge and Understanding of Subject	0-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-100%
	☐	☐	☐	☐	☐	☐	☐
3. Analysis	0-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-100%
	☐	☐	☐	☐	☐	☐	☐
4. Practical Application and Deployment	0-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-100%
	☐	☐	☐	☐	☐	☐	☐
5. Skills for Professional Practice	0-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-100%
	☐	☐	☐	☐	☐	☐	☐

PLEASE COMMENT ON AREAS IN WHICH YOU FEEL THAT YOU HAVE PERFORMED WELL	PLEASE COMMENT ON AREAS YOU FEEL THAT YOU NEED TO DEVELOP

Student's Name		Date	
Student's Signature			