| Unit 29: | Contracts & Management | |
|--------------|------------------------|--|
| Level: | 5 | |
| Credits: | 15 | |
| Ofqual Code: | K/618/8106 | |
| | | |

Introduction

The successful management of a project relies on ensuring that work is undertaken in accordance with the terms of the contract that exists between client and contractor. In construction, a contract is the legally binding agreement between the client (who wants a project built) and the main contractor (who is responsible for constructing the project). Time, quality and costs are covered by such contracts to ensure that a client receives a project that has been specified by their designer to a budget and at an agreed handover date for completion.

The overall aim of this unit is to give students a working knowledge of contracts so that they can manage a project team in accordance with the agreed terms and conditions of the contract. The principal person responsible for this is often the quantity surveyor and it is their responsibility to ensure compliance with the conditions of the contract.

On successful completion of this unit, students will be able to run and administer a project using the contract terms and conditions that have been agreed between a client and the main contractor. Students will also have the fundamental knowledge and skills to progress to a higher level of study.

Learning Outcomes

By the end of this unit, students will be able to:

- LO1 Discuss the different stakeholders and contractual relationships that may develop during a construction project
- LO2 Explain the criteria that inform the selection of a construction contract
- LO3 Examine different forms of standard construction contract and their application to built environment projects
- LO4 Prepare an appropriate form of contract for a selected project, specifying the terms and conditions.

Essential Content

LO1 Discuss the different stakeholders and contractual relationships that may develop during a construction project

- Stakeholders
- Client/developer

Users

- Finance/investment organisations
- Consultants
- Architects/designers
- Engineers
- Cost consultants
- Project managers
- Other consultants
- Contractors
- Main/general contractor
- Sub-contractors
- Manufacturers/suppliers
- Novation
- Procurement route
- Traditional
- Design and build
- Admeasure
- Construction management
- Contractor led
- Design build finance and operate (e.g., Public Private Partnership, Private Finance Initiative, Design Build Operate)
- Framework agreements
- Engineering procurement and construction contract (EPC)
- Engineering procurement and construction management contract (EPCM)
- Relationships within different contract types

LO2 Explain the criteria that inform the selection of a construction contract

Project factors

Project type (e.g., residential, commercial, industrial) Nature of works (e.g., maintenance, capital works) Client type (e.g., private, commercial, institutional, government) Client information requirements (e.g., BIM requirements, data requirements) Size of project Value of project Complexity of project Knowledge and expertise of the employer or client Location

Contract selection factors

Time (e.g., quick start and shorter completion date) Cost (e.g., lump sum or re-measured costs against a schedule of rates) Quality (e.g., materials and workmanship defined in specification) Level of risk to be apportioned across all stakeholders Client and main contractor balance of risk Form of pricing (e.g., fixed price, variable price) Design responsibility (e.g., architect design, contractor design) Warranties and guarantees required Basis of contract sum and payment options (e.g., phased, monthly) Employer's control over sub-contractors (e.g., nominated, named, novated)

LO3 Examine different forms of standard construction contract and their application to built environment projects

Contract information/documents Contract agreement Scope of work definition General conditions Special conditions Cost information (e.g., bill of quantities) Work schedule Drawings/data Specifications Insurance requirements

The Joints Contracts Tribunal (JCT) Suite of Contracts

Traditional (e.g., JCT Standard Building Contract 2011 (the 'with Quantities' and 'without Quantities' versions), JCT Intermediate Building Contract 2011, JCT Minor Works Building Contract 2011)

Traditional (re-measured) (e.g., JCT Standard Building Contract 2011 (the 'with Approximate Quantities' version), JCT Measured Term Contract 2011)

Design and Build (e.g., JCT Design and Build Contract 2011, JCT Major Project Construction Contract 2011)

Construction Management (e.g., JCT Construction Management Appointment 2011, JCT Management Building Contract 2011)

Partnering (e.g., JCT-Constructing Excellence Contract 2011, PPC2000 (2013 edition))

The New Engineering Contract (NEC) suite

New Engineering Contract (NEC3)

Engineering Construction Contract (ECC) and options A to F

International Federation of Consulting Engineers Contract Suite (FIDIC):

Conditions of Contract for Works of Civil Engineering Construction:

The Red Book (1987)

Conditions of Contract for Electrical and Mechanical Works, including Erection on Site: The Yellow Book (1987)

Conditions of Contract for Design-Build and Turnkey: The Orange Book (1995)

Other types of contract (e.g., ICC Minor Works Version 2011, GC/Works series)

LO4 Prepare an appropriate form of contract for a selected project, specifying the terms and conditions

Contract documents

Distinction between contract and non-contract documents

Articles of agreement

Conditions of and appendices to the different forms of contract

Forms of contract used (construction and civil engineering projects)

Supply chain

Supply chain management (e.g., nominated, named and other sub-contractors)

Manufacturers/suppliers contract conditions (e.g., tendering arrangements, information requirements, main contract implications, forms and agreement)

Sub-contractors contract conditions (e.g., domestic, directly employed, tendering criteria)

Quality

Materials

Goods

Standards of workmanship

Specification

Statutory obligations

Methods of working

Testing

Defects and removal of defective work

Quality assurance

Other clauses of the contract (e.g., certificate of making good defects, defects liability period)

Specific conditions

Articles of agreement

Payment terms

Variations

Insurances

Contractors' main responsibilities

Testing and defects

Architects/engineer instructions

Risks

Time

Limitation of liability

Possession

Extensions of time

Extensions and delays to contract period

Costs

Loss and expense

Performance damages

Performance bonds

Retention

Bonus for early completion

Termination

Price adjustments

Learning Outcomes and Assessment Criteria

| Pass | Merit | Distinction |
|--|---|--|
| LO1 Discuss the different stakeholders and contractual relationships that may develop during a construction project | | |
| P1 Explain the different stakeholders involved in a publicly financed project. P2 Illustrate the contractual relationships that may exist in a given construction project. | M1 Analyse the different relationships between contractor, client and consultants in a range of procurement routes. | D1 Evaluate the risks associated with construction projects and how contracts manage risk for the parties involved. |
| LO2 Explain the criteria that inform the selection of a construction contract | | |
| P3 Discuss the relationship between project size, type and complexity on contract selection. | M2 Assess the way in which a contract supports the assurance of quality through warranties and | |
| P4 Explore how time, cost and quality are managed through a construction contract. | guarantees. | |
| LO3 Examine different forms of standard construction contract and their application to built environment projects | | |
| P5 Discuss standard forms of contract for building and infrastructure projects. | M3 Compare forms of standard contracts in terms of their applicability for a | D2 Justify the selection and preparation of a standard form of construction |
| P6 Explain how contract information/documents support a standard form of contract. | given project. | contract in ensuring quality of the project and managing liability. |
| LO4 Prepare an appropriate form of contract for a selected project, specifying the terms and conditions | | |
| P7 Revise a standard form of contract to meet the requirements of a client/stakeholder group. P8 Explain the rationale for defining selected terms and conditions in the preparation of a contract. | M4 Discuss how collaboration between contractors and sub- contractors influences contractual arrangements. | |

Recommended Resources

Print resources

CHAPPELL, D. (2020), Construction Contracts, Routledge

CHAPPELL, D. (2017), *Understanding JCT Standard Building Contracts*, Routledge GODWIN, W. (2012), *International Construction Contracts*, John Wiley & Sons HUGHES, W., CHAMPION, R., MURDOCH, J. (2007), *Construction Contracts*, Routledge

Links

This unit links to the following related units:

- Unit 1: Construction Design Project (Pearson-set)
- Unit 4001CE: Construction Design Project Civil Engineering (Pearson-set)
- Unit 4: The Construction Environment
- Unit 5: Legal and Statutory Requirements in Construction
- Unit 6: Digital Applications for Construction Information
- Unit 10: Measurement & Estimating
- Unit 11: Financial Management & Business Practices in Construction
- Unit 12: Tender & Procurement
- Unit 13: Building Information Modelling
- Unit 23: Construction Economics & Sustainability
- Unit 25: Quantity Surveying Practice
- Unit 30: Project Management
- Unit 32: Advanced Construction Drawing & Detailing
- Unit 36: Value Engineering & Cost Control
- Unit 38: Advanced Quantities for Complex Building Projects
- Unit 47: Advanced Building Information Modelling
- Unit 52: Advanced Housing Design & Specification
- Unit 54: Advanced Quantity Surveying Practice.