

Overview

This unit is concerned with investigating development options, taking into account relevant influencing factors, including environmental and social impact issues. It covers investigating and evaluating a project's development options so that they can be prioritised. You must be able to show that you identify project goals and priorities, investigate potential development options and evaluate these against environmental and social criteria, as well as duly considering stakeholder views. It is a more detailed analysis of the potential environmental impact of the project development options and their impact upon stakeholders' respective corporate social responsibilities and values. You must be able to investigate project requirements and identify and quantify relevant influencing factors in order to present solutions.

Performance criteria

You must be able to:

Investigate and evaluate development options

- P1 identify **goals and priorities** for potential development
- P2 investigate **development options** to meet the **goals and priorities** where there is a justifiable need to undertake development
- P3 investigate and identify the design, function and performance requirements of the potential development
- P4 investigate **economic factors and resources, environmental and ecological factors**, and **stakeholder views** that affect the future asset value and sustainability of potential development
- P5 evaluate the best balance between the potential **goals and priorities**
- P6 recommend whether and how to implement potential sustainable development so as to achieve key **goals and priorities**

Assess the environmental impact of development options

You must be able to:

- P7 investigate the **requirements** for assessing the environmental impact of **development options**
- P8 identify the **factors** and **relevant data** to be used for assessing impact
- P9 assess and quantify the significance of each **factor** and suggest measures which will reduce the environmental impact
- P10 identify and review **alternative solutions** which will improve environmental quality and increase sustainability
- P11 prepare a report of the assessed environmental impact of proposals in a form suitable for public consultation

Knowledge and understanding

You need to know and understand:

Investigate and evaluate development options

- K1 what to identify as **goals and priorities** for potential development (understanding)
- K2 how and why to investigate development options where there is a justifiable need to undertake development (analysis)
- K3 how and why to investigate the design, function, and performance requirements of the potential development (analysis)
- K4 what to identify as the design, function and performance requirements of the potential development (understanding)
- K5 how and why to investigate **economic factors and resources, environmental and ecological factors**, and **stakeholder views** that affect the future asset value and sustainability of potential development (analysis)
- K6 how to evaluate the best balance between potential goals and priorities (evaluation)
- K7 how and why to recommend whether and how to implement potential sustainable developments so as to achieve key **goals and priorities** (evaluation)

Assess the environmental impact of development options

You need to know and understand:

- K8 how and why to investigate the **requirements** for assessing the environmental impact of **development options** (analysis)
- K9 how and why to identify **factors** and **relevant data** which will be used for assessing impact (analysis)
- K10 how and why to assess and quantify the significance of each **factor** (analysis)
- K11 how and why to suggest measures which will reduce the environmental impact (synthesis)
- K12 what to identify as **alternative solutions** which will improve environmental quality and increase sustainability (understanding)
- K13 how and why to review **alternative solutions** which will improve environmental quality and increase sustainability (analysis)
- K14 how to prepare a report of the assessed environmental impact of proposals in a form suitable for public consultation (application)

Scope/range

Investigate and evaluate development options

- 1 Goals and priorities:
 - 1.1 security
 - 1.2 health and safety
 - 1.3 quantity
 - 1.4 quality (including design)
 - 1.5 time
 - 1.6 whole life costs
 - 1.7 environmental
 - 1.8 sustainability
 - 1.9 return on investment
 - 1.10 function
 - 1.11 performance
- 2 Development options:
 - 2.1 new build
 - 2.2 adaptation
 - 2.3 alteration
 - 2.4 refurbishment
 - 2.5 relocation
 - 2.6 not carrying out the proposal
- 3 Economic factors and resources:
 - 3.1 finance
 - 3.2 taxation
 - 3.3 workforce
 - 3.4 raw materials
 - 3.5 manufactured systems and components
 - 3.6 energy
- 4 Environmental and ecological factors:
 - 4.1 natural resources
 - 4.2 emissions
 - 4.3 effluent
 - 4.4 waste
 - 4.5 the effects of climate

Scope/range

5 Stakeholder views:

5.1 client

5.2 users

5.3 community

Assess the environmental impact of development options

6 Requirements:

6.1 meeting social and community obligations

6.2 meeting legal and regulatory obligations

6.3 considering significant environmental issues and effects

7 Development options:

7.1 new build

7.2 adaptation

7.3 alteration

7.4 refurbishment

7.5 relocation

7.6 not carrying out the proposal

8 Factors:

8.1 social

8.2 cultural

8.3 economic

8.4 political

8.5 legal

8.6 use

8.7 timescale

8.8 environmental

8.9 sustainability

8.10 accessibility

8.11 health and safety

9 Relevant data:

9.1 baseline information

9.2 survey information

9.3 standards

COSBEDMO05 - SQA Unit Code HG3X 04

Investigate and assess development options in built environment design management



Scope/range

- 9.4 legal, regulatory and policy requirements
- 9.5 historical
- 10 Alternative solutions:
 - 10.1 different locations
 - 10.2 different layouts
 - 10.3 extending the use of existing resources
 - 10.4 use of alternative resources
 - 10.5 changes to implementation and phasing
 - 10.6 not carrying out the proposal

COSBEDMO05 - SQA Unit Code HG3X 04
Investigate and assess development options in built
environment design management



COSBEDMO05 - SQA Unit Code HG3X 04
Investigate and assess development options in built
environment design management



Developed by ConstructionSkills

Version number 2

Date Approved December 2012

Indicative review date January 2018

Validity Current

Status Original

Originating organisation ConstructionSkills

Original URN COSBEDMO05

Relevant occupations Architects; civil engineers; graphic designers; architectural technologists, town planning technicians and building surveyors

Suite Built Environment Design Management

Keywords sustainable; environmental
