# QFI NVQ in Tunnelling Operations (Tunnel Boring Machine Operator) at Level 3

Specification

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# 1. Introduction

1.1. The QFI NVQ in Tunnelling Operations (Tunnel Boring Machine Operator) at Level 3 qualification is a nationally recognised qualification for those working as a Tunnel Boring Machine Operator in the construction and the built environment sector. It is designed to assess occupational competence in the Workplace where candidates are required to demonstrate skills and knowledge to a level required in the construction industry.

1.2. The awarding organisation for this qualification is Qualifications for Industry Limited (Qualifications For Industry (QFI): Awards qualifications for industry globally) recognised by the Office of Qualifications and Examinations Regulation (Ofqual).

1.3. The qualification is on the Regulated Qualifications Framework (RQF) and is published on Ofqual's Register of Qualifications.

1.4. The qualification's requirements have been specified in the National Occupational Standards (NOS) developed by the Sector Skills Council (SSC) CITB in liaison with employers and industry/ sector representatives. As NVQs, all units within the qualifications are derived from these occupational standards directly, and evidence of knowledge, skill and understanding will be gained from a Workplace or a realistic Workplace situation.

# 2. Qualification's objectives

2.1. This qualification is for construction operatives working in as a Tunnel Boring Machine Operator within tunnelling. It is designed to assess and prove occupational competence in the Workplace to a recognised standard in the construction industry.

# 3. Progression

3.1. Learners may use this qualification to gain employment in the construction sector specialising in tunnelling operations using tunnel boring machines. It may be used as evidence to prove competence to prospective employers, directly or as a component of card competence schemes. Such schemes are not a licence to practice and can be achieved by different routes (e.g., through the experienced worker route), but are widely recognised and used by many employers as proof of competence and access to sites.

# 4. Entry requirements

4.1. This qualification is for all Learners aged 16 and above who are capable of reaching the required standards and have opportunity to demonstrate practical skills in a realistic construction working environment. There are no formal entry requirements for this qualification. Centres should carry out an initial assessment of a Learner's skills and knowledge to identify any gaps and help plan the assessment. They are likely however to be working or experienced, in tunnelling roles on construction sites.

4.2. Candidates taking this qualification must be made fully aware of what this entails. Centres must be satisfied that Learners have the experience and skills and will have sufficient assessment opportunities within their job role to provide evidence of competence for the qualification. Where this may not be the immediate case, Learners should check with their employer whether they are able to go out with departmental or immediate job role boundaries to gain the necessary assessment opportunities.

## 5. Qualification structure

5.1. Total Qualification Time (TQT):

An estimate of the total time it could reasonably be expected for a Learner to achieve a qualification. TQT includes Guided Learning Hours (GLH) plus an estimate of the time a Learner is likely to spend in preparation, study or other learning activities as directed by but not under the immediate guidance of a lecturer, supervisor, or tutor. This qualification's TQT = 1660 hours.

5.2. GLH:

The time a Learner spends in activities under the immediate guidance or supervision of a lecturer, supervisor, or tutor. This includes assessment if under supervision. This qualification's GLH = 1034 hours.

5.3. Units

To achieve this qualification a minimum of 166 credits needs to be attained, this comprises the 7 mandatory units.

Qualification Accreditation Number: 603/7780/X

Mandatory Group:

| Title | Reference | Credit Value | Level | TQT | GLH |
|---|---|---|---|---|---|
| Preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels in the workplace | R/618/8231 | 69 | Level 3 | 690 | 510 |
| Excavating and profiling tunnels in the workplace | R/618/8214 | 63 | Level 2 | 630 | 410 |
| Developing and Maintaining Good Occupational Working Relationships in the Workplace | D/618/7583 | 8 | Level 5 | 80 | 27 |
| Conforming to Productive Working Practices in the Workplace | Y/618/8215 | 3 | Level 2 | 30 | 10 |
| Conforming to General Health, Safety and Welfare in the Workplace | A/618/7588 | 2 | Level 1 | 20 | 7 |
| Confirming Work Activities and Resources for an Occupational Work Area in the Workplace | Y/618/7582 | 10 | Level 3 | 100 | 33 |
| Confirming the Occupational Method of Work in the Workplace | H/618/7584 | 11 | Level 3 | 110 | 37 |

# 6 Assessment

## 6.1. Roles and responsibilities

There are a number of people involved in the assessment process and the role of each needs to be clearly understood by each.

### 6.1.1. Learners

– must familiarise themselves with the content of the Units that they are taking and how these are to be assessed. They should co-operate with the assessment process, looking for opportunities to evidence the elements and gathering evidence where this arises. Learners must take on board feedback from their assessor and work with their assessor to develop realistic plans for assessment. An Assessment Plan and Review template are included at Appendix 3.

### 6.1.2. Assessors

- must familiarise themselves with the content of the units that they are assessing and how these are to be assessed. They must assist Learners in identifying assessment opportunities, gathering, and presenting evidence. Assessors must assess all elements and record these assessments. Templates for recording elements, and for unit achievement, are at Appendix 4. Assessors must feedback and work with Learners to identify any gaps and develop realistic plans for assessment. They must also work with the Internal Verifier and External Verifier to ensure a common standard of assessment.

### 6.1.3. Internal Verifiers (IVs)

– sometimes known as Internal Quality Assurers (IQAs), their role is to ensure that the assessment process is appropriate, consistent, fair, and transparent; those assessors receive on-going support and that they are assessing to a common standard; and that awards are valid, reliable, and consistent. IVs must develop a strategy that includes standardisation activities such as reviewing samples of evidence from each assessor and countersigning the decisions of unqualified assessors.

### 6.1.4. External Verifiers

- sometimes known as External Quality Assurers (EQAs), are appointed by QFI and are independent of the centre. Their role is to check that internal processes are in place to ensure robust, consistent assessment. This includes sampling assessment evidence.

## 6.2 The assessment process

6.2.1 Assessment for this qualification, and for individual units that comprise the qualification, must take place in accordance with '*Construction Skills Consolidated Assessment Strategy for Construction and the Built Environment: Craft, Supervisory, Technical, Managerial and Professional National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs)*'.

6.2.2 This document translates the requirements of the assessment strategy and gives guidance to ensure that Centres meet these.

6.2.3 Centres delivering the qualification must ensure that assessors and Internal Verifiers are aware of the assessment strategy and how to access this. External Verifiers may check this requirement during monitoring visits to centres.

6.2.4 Assessment involves the following key stages: planning; producing evidence; assessing

evidence; recording. Each of these is considered in more detail below.

## 6.3 Planning

6.3.1 The assessor must create an Assessment Plan with each Learner that he/ she will be assessing. The Assessment Plan will need to be reviewed as the Learner progresses through the units. A template for assessment planning and review is at Appendix 3 of this document.

6.3.2 A wide range of assessment methods exist that can be used to assess knowledge and skills. Methods of assessment that are commonly used for assessing competence based qualifications such as NVQs include the following:

- Product evidence – this relates to the outcome of the Learner's work, and the actual product that is generated as a result of their work.
- Direct observation – where an assessor (or credible witness) will directly observe the Learner undertaking certain tasks/ creating products that occur as part of their role. Observations must be referenced to the elements covered.
- Question/ answer – these will often supplement the methods above, for example the assessor may ask the Learner a number of questions whilst they are undertaking a task. Questioning is a useful way to establish knowledge and to generate evidence of this.
- Witness testimony – credible witnesses may be identified who can for example testify that the Learner can successfully undertake certain tasks.
- Personal statement – declaration made by the Learner that should be referenced to elements.

6.3.2 Centres should ensure that their Assessors use the methods above to assess Learners for this qualification. Template assessment documents including an Assessor Report can be found at Appendix 3.

## 6.4 Producing evidence

6.4.1 The methods of assessment must generate evidence to demonstrate the candidates' competence. Evidence produced in the Workplace is central to Construction Skills Consolidated Assessment Strategy. Workplace evidence is vital to ensuring that the candidate is competent to industry standards and a suitable way of recording this must be used.

6.4.2 The following indicates the type of evidence generated by the methods on the section above:

- Product evidence –Photographic or video evidence is often used to record this, or it may also be recorded via the method below. Labelled photographs and/or videos that clearly show the candidate are sources of evidence for this purpose.
- Direct observation –observations must be recorded via an Assessor or other report (e.g., witness statement).
- Question/ answer –both the questions and the candidate's responses to these must be recorded either in writing or via some audio or visual device (e.g., part of a video recording).
- Witness testimony – this may be written, audio or visual recordings.
- Personal statement – the declaration made by the candidate must be recorded.

6.4.3 All of the above must be referenced to the evidence that they cover. Templates that

may be used for recording evidence are at Appendix 3.

6.4.4 Feedback should be given to the candidate on an on-going basis and where there are any gaps or shortfalls in evidence then these should be incorporated into the Assessment Plan.

6.4.5 Assessment must meet the requirements of the performance criteria, knowledge and understanding documented for each unit of assessment. Methods of assessment must ensure coverage of all elements, scope, and range, and generate sufficient evidence to demonstrate competence. A holistic approach towards the collection of evidence is encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence.

6.4.6. Direct evidence produced through normal performance in the Workplace is the primary source for meeting these requirements. This includes naturally occurring evidence, direct observation of activities and witness testimony as relevant, all of which must be recorded. Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:

- questioning the candidate,
- recognised industry education and training programme assessment, or professional interview assessment that has been matched to NOS requirements
- performance evidence/ completed work,

6.4.7 All of which must be recorded and made available for verification purposes. Workplace evidence of skills cannot be simulated for this qualification.

## 6.5 Assessing evidence

6.5.1 Evidence must be assessed against the units/ elements to establish whether the candidate is competent with regards to their performance and knowledge. In order to achieve the qualification candidates must achieve a 'pass'. The evidence must show that the candidate consistently (i.e., on more than one occasion) meets all of the elements across the scope/range of each unit.

6.5.2 If there is insufficient evidence to make this judgement, then plans must be made as to how the candidate can produce further evidence in order to demonstrate competence.

6.5.3 Assessors must check that the evidence produced is sufficient in volume, relevant and current. They must also be confident that the evidence has been generated by the candidate. Assessors and candidates normally sign documentation to declare that the evidence produced is that of the candidate and no other.

## 6.6 Recording evidence

6.6.1 Evidence (or reference to where certain evidence is located) is normally kept in a portfolio. This may be paper-based or electronic. All evidence contained within the portfolio must be clearly referenced to the units and elements. Candidates' progress can therefore be tracked. Note that certain pieces of evidence can be recorded across more than a single element. Tracking is important to show where this is that case.

6.6.2 It is helpful to give each piece of evidence a number so that this can be mapped across elements. See the template forms at Appendix 4. Assessment decisions made against

the evidence must also be recorded so that an IV or an EV can see these. All evidence must be kept for internal and external verification.

## 7. Assessors

7.1 The occupational competence of assessors is defined in '*Construction Skills Consolidated Assessment Strategy for Construction and the Built Environment: Craft, Supervisory, Technical, Managerial and Professional National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs)*'.

7.2 The roles and responsibilities of assessors is outlined in the section above. Assessors must be competent to perform their role and either hold the qualifications needed to carry out assessment – or achieve within 18 months of commencing their role:

- D32 or D33,
- A1,
- Level 3 Award in Assessing Competence in the Work Environment,
- Level 3 Award in Assessing Vocationally Related Achievement,
- Level 3 Certificate in Assessing Vocational Achievement, or
- an appropriate Assessor qualification as identified by QFI.

Assessors must also:

- have a sound, in-depth knowledge of, and uphold the integrity of, the relevant NOS and Assessment Strategy to enable them to carry out assessment to the standards specified,
- have the occupational expertise (craft/ trade specific) before commencing their role so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing,
- only assess in their acknowledged area of occupational competence,
- maintain the currency of this for the duration of their role, and
- know QFI's requirements for recording assessment decisions and maintaining assessment records.

7.3 Holders of A1 and D32/33 must assess to the current National Occupational Standards (NOS) for Learning and Development.

7.4 Assessors must be registered with QFI. The Centre Handbook provides details.

7.5 The assessment decisions of unqualified assessors must be countersigned by the IV.

## 8. Internal verification

8.1 Centres' internal assessment processes and practices must be effective and support the integrity and consistency of the qualification. This is achieved through the internal quality assurance that is undertaken by the approved centre, and the external quality assurance that is undertaken by QFI. Centres must operate explicit, written internal quality assurance procedures to ensure:

- the accuracy and consistency of assessment decisions between assessors operating at the centre, and
- those assessors are consistent in their interpretation and application of the qualifications or unit(s) learning outcomes.

8.2 Centres must appoint IVs who will be responsible for:

- regular sampling evidence of assessment decisions made by all assessors across all aspects of assessment for the qualification. Sampling must include direct observation of assessment practice,
- maintaining up-to-date records of IV and sampling activity (what was evidence was sampled or assessors / IV observed where there is more than one) and ensuring that these are available for external quality assurance,
- establishing procedures to ensure that all assessors interpret the learning outcomes in the same way,
- monitoring and supporting the work of assessors,
- facilitating appropriate staff development and training for assessors,
- providing feedback to the EV on the effectiveness of assessment, and
- ensuring that any corrective action required by QFI is carried out within agreed timescales.

8.3 Centres must ensure that the decisions of unqualified IVs are checked, authenticated, and countersigned by an IV who is appropriately qualified and occupationally expert. QFI will monitor a centre's compliance with these requirements through monitoring visits and certification claims.

8.4 The IV is also responsible and accountable for arranging the checking and countersigning process. IVs may verify only evidence that they did not assess themselves. Further guidance on internal quality assurance/verification is provided in the Centre Handbook. Appendix 5 of this document indicates suggested content for an IV strategy, and a template for sampling assessment evidence.

## 9. Internal verifiers

9.1 The occupational competence of IVs is defined in '*Construction Skills Consolidated Assessment Strategy for Construction and the Built Environment: Craft, Supervisory, Technical, Managerial and Professional National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs)*'

9.2 The roles and responsibilities of IVs is outlined above. IVs must be competent to perform their role and either hold the qualifications needed to carry out internal verification – or achieve within 18 months of commencing their role:

- D34,
- V1,
- Level 4 Award in the Internal Quality Assurance of the Assessment Process and Practice,
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Process and Practice, or
- an appropriate Internal Verifier qualification as identified by QFI.

9.3 It is strongly recommended that IVs also hold assessor qualifications (see section above).

9.4 Holders of V1/D34 must quality assure to the current National Occupational Standards (NOS) for Learning and Development.

9.5 IVs must be registered with QFI. The Centre Handbook provides details.

## 10. External verification

10.1 External verification of this qualification ensures that the requirements are met for the '*Construction Skills Consolidated Assessment Strategy for Construction and the Built Environment: Craft, Supervisory, Technical, Managerial and Professional National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs)*.

10.2 Centre visits will normally take place on an annual basis, though these could be more frequent if deemed necessary as a result of QFI's risk assessments. The Centre Handbook provides further details on external verification including to prepare for centre visits.

10.3 QFI's appointed External Verifiers meet the requirements of the assessment strategy.

## 11. Certification

11.1 Note that there is a lapsing period of two years for this qualification. This means that when the qualification expires, is withdrawn or replaced by a revised version, candidates registered have two years from the expiry date in which to complete the qualification. This will allow sufficient time for candidates to compete and allow for currency of evidence.

## 12. Equality and diversity

12.1 This qualification must be assessed in English.

12.2 Assessment must be inclusive and where appropriate reasonable adjustments made to ensure equality of access in line with QFI's Equality and Diversity Policy. Full details are included in the QFI Centre Handbook.

12.3 Special consideration is not normally given for competence-based qualifications as it is necessary for candidates to demonstrate that they have the necessary skills and knowledge to achieve the qualification and operate safely in the Workplace.

12.4 Equality data will be collected at the point of registration. This is for monitoring purposes only and will include age, gender, ethnicity, and disability.

## 13. Fees

13.1 The current fees for this qualification, and for individual units, are included in the QFI Fees document. This document also details what is/ is not included in fees.

13.2 Fees may be broken down to a reasonable level upon request to QFI.

# APPENDIX 1: CANDIDATE TEMPLATE DOCUMENTS

| **Sample Form – Induction Checklist** | |
|---|---|
| This document indicates what may be covered as part of a candidate's induction. This list is not exhaustive. | **Tick** |
| Qualification information:<br>• Units<br>• Structure<br>• Summary of assessment<br>• Awarding body | |
| Roles and responsibilities:<br>• Candidate<br>• Assessor<br>• Internal Verifier<br>• External Verifier | |
| Training and assessment process:<br>• Planning<br>• Collection of evidence (including methods)<br>• Review of evidence<br>• Feedback on evidence<br>• Verification of evidence<br>• Certification | |
| Policies:<br>• Complaints<br>• Appeals<br>• Malpractice<br>• Data protection<br>• Health and safety<br>• Equality (including reasonable adjustments/ additional support) | |
| Forms:<br>• Enrolment<br>• Other | |
| I confirm that I have received this induction and the associated documents:<br><br>Candidate name: ……..<br><br>Candidate signature: ……..…<br><br>Date:<br>…… | |

# APPENDIX 2: Units – Learning Outcomes and Assessment Criteria

## Preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels in the workplace

| **Title:** | **Preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels in the workplace.** |
|---|---|
| **Unit Number:** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Interpret the given information relating to preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels. | 1.1 Interpret and extract relevant information from drawings, computer generated data, specifications, method statements, task briefings, risk assessments and manufacturers' information.<br><br>1.2 Comply with information and/or instructions derived from risk assessments and method statements.<br><br>1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.<br><br>1.4 Describe different types of information, their source and how they are interpreted in relation to:<br>– drawings, computer generated data, specifications, schedules, method statements, task briefings, risk assessments, manufacturers' information, organisational procedures, official guidance and current regulations governing tunnelling and the operation of tunnel boring machines. |
| 2 Organise with others the sequence and operation in which constructing and forming tunnels using earth pressure balance and slurry tunnel boring machines are to be carried out. | 2.1 Organise the work according to given information or instructions.<br><br>2.2 Describe how to communicate ideas between team members. |

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| | 2.3 Organise and communicate with team members and other associated occupations.<br><br>2.4 Describe how to organise resources prior to and during constructing and forming tunnel operations with balance and slurry tunnel boring machines. |
| 3 Know how to comply with relevant legislation and official guidance when preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels. | 3.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:<br>– in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting.<br><br>3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.<br><br>3.3 Explain what the accident reporting procedures are and who is responsible for making reports. |
| 4 Maintain safe and healthy working practices when preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels. | 4.1 Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements whilst preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels<br><br>4.2 Demonstrate compliance with given information and relevant legislation when preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels in relation to the following:<br>– safe use of access equipment/systems<br>– safe use and storage of machinery<br>– specific risks to health.<br><br>4.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:<br>– collective protective measures |

| | |
|---|---|
| | – personal protective equipment (PPE)<br>– respiratory protective equipment (RPE)<br>– local exhaust ventilation (LEV).<br><br>4.4 Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.<br><br>4.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task related activities. |
| 5 Select the required quantity and quality of resources to prepare and operate earth pressure balance and slurry tunnel boring machines to construct and form tunnels. | 5.1 Select resources associated with earth pressure balance and slurry tunnel boring machines in relation to tools and ancillary equipment and/or accessories.<br><br>5.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:<br>– consumables, lubricants, attachments and aids for construction and formation work<br>– hand tools, ancillary equipment and accessories.<br><br>5.3 Describe how the resources should be used correctly and how problems associated with the resources are reported.<br><br>5.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources.<br><br>5.5 Describe any potential hazards associated with the resources and methods of work.<br><br>5.6 Describe how to identify quantity and length associated with the method/procedures to prepare and operate earth pressure balance and slurry tunnel boring machines to construct and form tunnels. |
| 6 Minimise the risk of damage to the work and surrounding area when preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels. | 6.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.<br><br>6.2 Maintain a clean workspace. |

| | |
|---|---|
| | 6.3 Dispose of waste in accordance with current legislation.<br>6.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.<br><br>6.5 Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance. |
| 7 Complete the work within the allocated time when preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels. | 7.1 Demonstrate completion of the work within the allocated time.<br><br>7.2 Describe the purpose of the work programme and describe why deadlines should be kept in relation to:<br>– types of progress charts, timetables and estimated times<br>– organisational procedures for reporting circumstances which will affect the work programme. |
| 8 Comply with the given contract information to prepare and operate earth pressure balance and slurry tunnel boring machines to construct and form tunnels to the required specification. | 8.1 Demonstrate the following work skills when preparing and operating earth pressure balance and slurry tunnel boring machines to construct and form tunnels<br>– checking, evaluating, adjusting, communicating, aligning,<br>– manoeuvring, positioning, constructing and forming.<br><br>8.2 Use and maintain hand tools, ancillary equipment and/or accessories.<br><br>8.3 Prepare and operate one of the following tunnel boring machines (TBM) to construct and form tunnels to given working instructions, to given working instruction:<br>– earth pressure balance TBM<br>– slurry TBM<br><br>8.4 Analyse and process computer generated data.<br><br>8.5 Shut down and secure the machine.<br><br>8.6 Describe how to apply safe and healthy work practices, follow procedures, report problems |

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|---|---|
| | and establish authority needed to rectify, to:<br>– identify the characteristics of the TBM used for the construction and formation of tunnels<br>– carry out function checks for the tunnelling operation<br>– identify geological, environmental and material changes and report<br>– carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area<br>– carry out the tunnelling operation using an earth pressure balance or slurry TBM<br>– check to avoid damage to structures and utilities service apparatus<br>– operate hydraulic systems<br>– interpret, analyse and process the visual display and computer data systems to advance the machine's operation<br>– identify working parameters (ground pressures/strata changes)<br>– identify alignment and rate of advance<br>– adjust machine settings, as required, to maintain alignment<br>– record and report information<br>– recognise and determine when specialist skills and knowledge are required and report accordingly<br>– shut down and secure the TBM<br>– use hand tools, ancillary equipment and accessories.<br><br>8.7 Describe the needs of other occupations and how to effectively communicate within a team when using earth pressure balance and slurry tunnel boring machines to construct and form tunnels.<br><br>8.8 Describe how to maintain the machinery, hand tools, ancillary equipment and accessories used to prepare and operate earth pressure balance and slurry tunnel boring machines to construct and form tunnels. |
| **Additional information about this unit** | |
| Assessment Guidance | This unit must be assessed in a work environment, in accordance with the Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment. Please refer to the hyperlink for clarity - |

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|---|---|
| | https://www.citb.co.uk/qualifications-standards/qualification-framework/<br><br>Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.<br><br>Workplace evidence of skills cannot be simulated.<br><br>This unit must be assessed against one of the endorsements:<br>Earth pressure balance tunnel boring machine<br>Slurry tunnel boring machine. |

## Conforming to general health, safety, and welfare in the Workplace.

| Title: | **Conforming to general health, safety, and welfare in the Workplace.** |
|---|---|
| **Unit Number:** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Comply with all Workplace health, safety, and welfare legislation requirements. | 1.1 Comply with information from Workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area.<br><br>1.2 Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements.<br><br>1.3 Comply with statutory requirements, safety notices and warning notices displayed within the Workplace and/or on equipment.<br><br>1.4 State why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use, and the general work environment, in relation to:<br>– collective protective measures<br>– personal protective equipment (PPE)<br>– respiratory protective equipment (RPE)<br>– local exhaust ventilation (LEV).<br><br>1.5 State how the health and safety control equipment relevant to the work should be used in accordance with the given instructions.<br><br>1.6 State which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment.<br><br>1.7 State why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area.<br><br>1.8 State how to comply with control measures that have been identified by risk assessments and safe systems of work. |
| 2 Recognise hazards associated with the Workplace that have not been previously controlled and report them in accordance with organisational procedures. | 2.1 Report any hazards created by changing circumstances within the Workplace in accordance with organisational procedures.<br><br>2.2 List typical hazards associated with the work |

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|---|---|
| | environment and occupational area in relation to:<br>– resources, substances, asbestos, equipment, obstructions, storage, services, and work activities.<br><br>2.3 List the current Health and Safety Executive top ten safety risks.<br><br>2.4 List the current Health and Safety Executive top five health risks.<br><br>2.5 State how changing circumstances within the Workplace could cause hazards.<br><br>2.6 State the methods used for reporting changed circumstances, hazards, and incidents in the Workplace. |
| 3 Comply with organisational policies and procedures to contribute to health, safety, and welfare. | 3.1 Interpret and comply with given instructions to maintain safe systems of work and quality working practices.<br><br>3.2 Contribute to discussions by offering/providing feedback relating to health, safety, and welfare.<br><br>3.3 Contribute to the maintenance of Workplace welfare facilities in accordance with Workplace welfare procedures.<br><br>3.4 Safely store health and safety control equipment in accordance with given instructions.<br><br>3.5 Dispose of waste and/or consumable items in accordance with legislation.<br><br>3.6 State the organisational policies and procedures for health, safety, and welfare, in relation to:<br>– dealing with accidents and emergencies associated with the work and environment<br>– methods of receiving or sourcing information<br>– reporting<br>– stopping work<br>– evacuation<br>– fire risks and safe exit procedures<br>– consultation and feedback.<br><br>3.7 State the appropriate types of fire extinguishers relevant to the work.<br><br>3.8 State how and when the different types of fire extinguishers are used in accordance with legislation and official guidance. |

| | |
|---|---|
| 4 Work responsibly to contribute to Workplace health, safety and welfare whilst carrying out work in the relevant occupational area. | 4.1 Demonstrate behaviour which shows personal responsibility for general Workplace health, safety, and welfare.<br><br>4.2 State how personal behaviour demonstrates responsibility for general Workplace health, safety, and welfare, in relation to:<br>– recognising when to stop work in the face of serious and imminent danger to self and/or others<br>– contributing to discussions and providing feedback – reporting changed circumstances and incidents in the Workplace<br>– complying with the environmental requirements of the Workplace.<br><br>4.3 Give examples of how the behaviour and actions of individuals could affect others within the Workplace. |
| 5 Comply with and support all organisational security arrangements and approved procedures. | 5.1 Provide appropriate support for security arrangements in accordance with approved procedures:<br>– during the working day<br>– on completion of the day's work<br>– for unauthorised personnel (other operatives and the general public)<br>– for theft.<br><br>5.2 State how security arrangements are implemented in relation to the Workplace, the general public, site personnel and resources. |
| **Additional information about this unit** | |
| Assessment Guidance | This unit must be assessed in a work environment and in accordance with the Construction Skills '*Consolidated Assessment Strategy for Construction and the Built Environment*'.<br><br>Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.<br><br>Workplace evidence of skills cannot be simulated. |

## Conforming to Productive Working Practices in the Workplace

| **Title:** | **Conforming to Productive Working Practices in the Workplace** |
|---|---|
| **Unit Number:** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Communicate with others to establish productive work practices. | 1.1 Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively.<br><br>1.2 Describe the different methods of communicating with line management, colleagues, and customers.<br><br>1.3 Describe how to use different methods of communication to ensure that the work carried out is productive. |
| 2 Follow organisational procedures to plan the sequence of work. | 2.1 Interpret relevant information from organisational procedures in order to plan the sequence of work.<br><br>2.2 Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively.<br><br>2.3 Describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to:<br>• using resources for own and other's work requirements<br>• allocating appropriate work to employees<br>• organising the work sequence<br>• reducing carbon emissions.<br><br>2.4 Describe how to contribute to zero/low carbon work outcomes within the built environment. |
| 3 Maintain relevant records in accordance with the organisational procedures. | 3.1 Complete relevant documentation according to the occupation as required by the organisation.<br><br>3.2 Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to:<br>• job cards<br>• worksheets<br>• material/resource lists<br>• time sheets.<br><br>3.3 Explain the reasons for ensuring documentation is completed |

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| | clearly and within given timescales. |
| 4 Maintain good working relationships when conforming to productive working practices. | 4.1 Carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships.<br><br>4.2 Apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others.<br><br>4.3 Describe how to maintain good working relationships, in relation to:<br>• individuals<br>• customer and operative<br>• operative and line management<br>• own and other occupations.<br><br>4.4 Describe why it is important to work effectively with line management, colleagues, and customers.<br><br>4.5 Describe how working relationships could have an effect on productive working.<br><br>4.6 Describe how to apply principles of equality and diversity when communicating and working with others. |
| **Additional information about this unit** | |
| Assessment Guidance | This unit must be assessed in a work environment, inaccordance with the Construction Skills 'ConsolidatedAssessment Strategy for Construction and the Built Environment.<br><br>Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.<br><br>Workplace evidence of skills cannot be simulated. |

## Excavating and profiling tunnels in the Workplace

| **Title:** | **Excavating and profiling tunnels in the Workplace** |
|---|---|
| **Unit Number** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Interpret the given information relating to the work and resources when excavating and profiling tunnels. | 1.1 Interpret and extract relevant information from drawings/required evacuation support sheet (RESS), method statements, task briefings, risk assessments, and manufacturers' information.<br><br>1.2 Comply with information and/or instructions derivedfrom risk assessments and method statements.<br><br>1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.<br><br>1.4 Describe different types of information, their source andhow they are interpreted in relation to:<br>– drawings/required evacuation support sheet (RESS), method statements, task briefings, risk assessments, manufacturers' information, organisational procedures, official guidance, and current regulationsgoverning tunnelling. |
| 2 Know how to comply withrelevant legislation and official guidance when excavating and profiling tunnels. | 2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:<br>– in the Workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanicallifting.<br><br>2.2 Describe the organisational security procedures for tools, equipment, and personal belongings in relation tosite, Workplace, company and operative.<br><br>2.3 Explain what the accident reporting procedures are andwho is responsible for making reports.<br><br>2.4 Describe the types of fire extinguishers available when excavating and profiling tunnels and describe how andwhen they are used. |

| | | | |
|---|---|---|---|
| 3 | Maintain safe and healthy working practices when excavating and profiling tunnels. | 3.1 | Use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when excavating and profiling tunnels. |
| | | 3.2 | Demonstrate compliance with given information and relevant legislation when excavating and profiling tunnels in relation to the following:<br>• safe use of access equipment/systems<br>• safe use, storage and handling of materials, tools, and equipment<br>• specific risks to health. |
| | | 3.3 | Explain why and when health and safety control equipment, identified by the principles pf prevention, should be used, relating to excavating and profiling tunnels, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:<br>• collective protective measures<br>• personal protective equipment (PPE)<br>• respiratory protective equipment (RPE)<br>• local exhaust ventilation (LEV) |
| | | 3.4 | Describe how the relevant health and safety control equipment should be used in accordance with the given working instructions. |
| | | 3.5 | Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, and other task-related activities. |
| 4 | Select the required quantity and quality of resources for the methods of work to excavate and profile tunnels. | 4.1 | Select resources associated with own work in relation to materials, components, tools, and equipment. |
| | | 4.2 | Describe the characteristics, quality, uses, sustainability, limitations, and defects associated with the resources in relation to:<br>• engineering controls (e.g., lasers, drill patterns, profile boards, string lines, square marks, and software controls), hand, mechanical or drill and blast excavation equipment and ancillary equipment |
| | | 4.3 | Describe how to confirm that the resources and materials conform to the specification. |
| | | 4.4 | Describe how the resources should be used correctly and how problems associated with the resources are reported. |

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| | | 4.5 | Explain why the organisational procedures have been developed and how they are used for the selection of required resources. |
| | | 4.6 | Describe any potential hazards associated with the resources and methods of work. |
| 5 | Minimise the risk of damage to the work and surrounding area when excavating and profiling tunnels. | 5.1 | Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures. |
| | | 5.2 | Maintain a clean workspace. |
| | | 5.3 | Dispose of waste in accordance with current legislation. |
| | | 5.4 | Describe how to protect work from damage and the purpose of protection in relation to general Workplace activities, other occupations, and adverse weather conditions. |
| | | 5.5 | Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations, and official guidance. |
| 6 | Complete the work within the allocated time when excavating and profiling tunnels. | 6.1 | Demonstrate completion of the work within the allocated time. |
| | | 6.2 | State the purpose of the work programme and explain why deadlines should be kept in relation to:<br>• types of progress charts, timetables, and estimated times<br>• organisational procedures for reporting circumstances which will affect the work programme. |
| 7 | Comply with the given contract information to excavate and profile tunnels to the required specification. | 7.1 | Demonstrate the following work skills when excavating and profiling tunnels:<br>• excavating and profiling. |
| | | 7.2 | Use and maintain ancillary equipment. |
| | | 7.3 | Excavate and profile tunnels to given working instructions and engineering controls for at least one of the following operations:<br>• sprayed concrete lining<br>• hand mining<br>• drilling and blasting<br>• tunnel boring |

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| | 7.4 Describe how to apply safe and healthy work practices, follow procedures, report problems, and establish the authority needed to rectify them, to:<br>• follow engineering controls to excavate and profile tunnels for sprayed concrete lining, hand mining, drilling, and blasting or tunnel boring operations<br>• recognise and determine when specialist skills and knowledge are required and report accordingly<br>• work with, around and in close proximity to plant and machinery<br>• direct and guide the operations and movement of plant and machinery<br>• use ancillary equipment<br>• work at height<br>• use access equipment/systems.<br><br>7.5 Describe the needs of other occupations and how to communicate effectively within a team when excavating and profiling tunnels.<br><br>7.6 Describe how to maintain the ancillary equipment used when excavating and profiling tunnels. |
| **Additional information about this unit** | |
| Assessment Guidance | This unit must be assessed in a work environment and in accordance with the Construction Skills 'Consolidated Assessment Strategy for Construction and the Built Environment.<br><br>Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge and must use a combination of assessment methodsas defined in the Consolidated Assessment Strategy.<br><br>Workplace evidence of skills cannot be simulated.<br><br>This unit must be assessed against the endorsements detailed withinthe relevant NVQ structure.<br><br><u>QFI Level 2 NVQ Diploma in Tunnelling Operations (Construction):</u><br><br>One of the following endorsements required:<br><br>Sprayed concrete lining<br>Hand mining<br>Drilling and blasting<br>Tunnel boring |

## Confirming work activities and resources for an occupational work area in the workplace

| **Title:** | **Confirming work activities and resources for an occupational work area in the workplace** |
|---|---|
| **Unit Number:** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Identify work activities, assess required resources, and plan the sequence of work. | 1.1 Identify work activities, assess required resources, and plan the sequence of work.<br><br>1.2 Identify work activities and formulate a plan for their own sequence of work.<br><br>1.3 Explain the types of work relative to the occupational area and how to identify different work activities.<br><br>1.4 Explain methods of assessing the resources needed from a range of available information.<br><br>1.5 Explain the required information and the different methods used to prepare a work programme relative to the occupational area. |
| 2 Obtain clarification and advice where the resources required are not available. | 2.1 Seek advice and clarity from appropriate sources on resources available and the alternatives that can be used for the work when required resources are not available.<br><br>2.2 Explain the different sources and methods that can be used to obtain clarification and advice when the required resources are not available. |
| | 3.1 Assess progress of work against project requirements, taking into account external factors relating to:<br>– other occupations and /or customers<br>– resources<br>– weather conditions<br>– health and safety requirements.<br><br>3.2 Explain different methods of evaluating work activities against the following project requirements:<br>– contract conditions<br>– contract programme<br>– health and safety requirements of operatives.<br><br>3.3 Evaluate the requirements of significant external factors that |

| | |
|---|---|
| | could affect the progress of work, in relation to:<br>– other related programmes<br>– special working conditions<br>– weather conditions<br>– other occupations/people<br>– resources.<br>– health and safety requirements. |
| 4 Identify work activities which influence each other and make the best use of the resources available. | 4.1 Determine work activities that have an influence on each other.<br><br>4.2 Evaluate which work activities make the best use of available resources in relation to:<br>– occupations and/or customers associated with the work<br>– tools, plant and/or<br>– ancillary equipment, materials, and components.<br><br>4.3 Explain different methods and sources that can identify which work activities influence each other.<br><br>4.4 Describe how to determine the sequence of work activities and how long each work activity will take.<br><br>4.5 Describe what zero and low carbon requirements are.<br><br>4.7 Explain how work activities and different ways of using resources can impact on zero and low carbon requirements and make a positive contribution to the environment. |
| 5 Identify changed circumstances that require alterations to the work programme and justify them to decision makers. | 5.1 Evaluate project progress against the work programme to identify any changed circumstances.<br><br>5.2 Inform line management and/or customers on the type and extent of any required changes to the work programme.<br><br>5.3 Explain how to identify possible alterations to the work programme to meet changed circumstances relating to action lists, method statements, duration, schedules and/or occupation specific requirements.<br><br>5.4 Explain how to assess contractual/work effects resulting from alterations to the work programme.<br><br>5.5 Explain the methods used to justify to decision makers on the effects resulting from alterations to the work programme. |

## Confirming the occupational method of work in the workplace

| Title: | **Confirming the occupational method of work in the workplace** |
|---|---|
| **Unit Number** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Assess available project data accurately to determine the occupational method of work. | 1.1 Interpret and extract information from drawings, specifications, schedules, manufacturer's information, methods of work, risk assessments and programmes of work.<br><br>1.2 Explain how to summarise the following project data:<br>– required quantities<br>– specifications<br>– detailed drawings<br>– health and safety requirements<br>– timescales<br>– scope of works.<br><br>1.2 Explain the different methods of assessing available project data.<br><br>1.4 Explain how to use project data to interpret the work method, In relation to:<br>– standard work procedures<br>– sequence of work<br>– organisation of resources (people, equipment, materials)<br>– work techniques<br>– working conditions (health, safety and welfare)<br>– risk assessment. |
| 2 Obtain additional information from alternative sources in cases where the available project data is insufficient | 2.1 Collect and collate additional information from alternative sources to clarify the work to be carried out.<br><br>2.2 Explain different methods and techniques of obtaining additional information from the following alternative sources when available project data is insufficient:<br>– customers or representatives<br>– suppliers<br>– regulatory authorities<br>– manufacturer's literature. |

| | |
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| | |
| 3 Identify work methods that will make best use of resources and meet project, statutory and contractual requirements. | 3.1 Examine potential work methods to carry out the occupational work activity.<br><br>3.2 Determine which work methods will make best use of relevant resources and meet health and safety requirements relating to technical and/or project criteria.<br><br>3.3 Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against technical criteria, in relation to:<br>– health and safety welfare (principles of protection)<br>– fire protection<br>– access and egress<br>– equipment availability<br>– availability of competent workforce<br>– pollution risk<br>– waste and disposal<br>– zero and low carbon outcomes<br>– weather conditions.<br><br>3.4 Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against project criteria, in relation to:<br>– conforming to statutory requirements<br>– customer and user needs<br>– contract requirements in terms of time, quantity and quality<br>– environmental considerations.<br><br>3.5 Explain how different methods of work can achieve zero/low carbon outcomes. |

| | |
|---|---|
| 4 Confirm and communicate the selected work method to relevant personnel. | 4.1 Confirm the selected occupational work method that meets project, statutory and contractual requirements.<br><br>4.2 Communicate appropriately to relevant people on the selected occupational work method.<br><br>4.3 Describe the different techniques and methods of confirming and communicating work methods to relevant people.<br><br>4.4 Explain the principles of equality and diversity and how to apply them when working and communicating with others. |

## Developing and maintaining good occupational working relationships in the workplace

| **Title:** | **Developing and maintaining good occupational working relationships in the workplace** |
|---|---|
| **Unit Number** | |
| **Learning outcomes**<br>*The learner will be able to:* | **Assessment criteria**<br>*The learner can:* |
| 1 Develop, maintain and encourage working relationships to promote goodwill and trust. | 1.1 Give appropriate advice and information to relevant people about the occupational work activities and/or associated occupations involved.<br><br>1.2 Apply the principles of equality and diversity by considering the needs of individuals when working and communicating with others.<br><br>1.3 Explain the methods and techniques used and personal attributes required to encourage and maintain working relationships that promote goodwill and trust with relevant people.<br><br>1.4 Explain the principles of equality and diversity and how to apply them when working and communicating with others. |
| 2 Inform relevant people about work activities in an appropriate level of detail, with the appropriate level of urgency. | 2.1 Communicate on the following work activity information to relevant people following organisational procedures: |

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|---|---|
| | – appropriate timescales<br>– health and safety requirements<br>– co-ordination of work procedures.<br><br>2.2 Explain the different methods and techniques used to inform relevant people about work activities.<br><br>2.3 Explain the effects of not informing relevant people with the expected level of urgency.<br><br>2.4 Explain the different types of work activity related information and to what level of detail the following people would expect to receive:<br>– colleagues<br>– employers<br>– customers<br>– contractors<br>– suppliers of products and services<br>– other people affected by the work/project. |
| 3 Offer advice and help to relevant people about work activities and encourage questions/requests for clarification and comments. | 3.1 Give appropriate advice and information to relevant people about the different methods of carrying out occupational work activities to achieve the required outcome.<br><br>3.2 Explain the techniques of encouraging questions and/or requests for clarification and comments.<br><br>3.3 Explain the different ways of offering advice and help to different people about work activities, in relation to:<br>– progress<br>– results<br>– achievements<br>– occupational problems<br>– occupational opportunities<br>– health and safety requirements<br>– co-ordinated work. |
| 4 Clarify proposals with relevant people and discuss alternative suggestions. | 4.1 Engage regular discussions with relevant people about the occupational work activity and/or other occupations involved.<br><br>4.2 Explain the methods of clarifying alternative proposals with relevant people.<br><br>4.3 Explain the methods of suggesting alternative proposals. |

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| 5 Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect. | 5.1 Examine and agree the work activities that satisfy all people involved and will meet the required outcome of the proposed method of work.<br><br>5.2 Explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect. |

# APPENDIX 3 - ASSESSMENT TEMPLATE DOCUMENTS

| **3a. Sample form – Assessment Plan and Review** | |
|---|---|
| Candidate name: | |
| Employer/location: | Date: |
| Qualification:<br>Unit(s):<br>Elements: | |
| Assessor: | |
| Period of Review:<br>(should not normally exceed 12 weeks) | Proposed Date for next review: |
| **Part 1** – **Activities / Tasks / Learning / Training** undertaken since last review: | |
| **Part 2a** – '**Progress to date'** specifying units/elements/modules achieved to date (the progress recorded **must** tie in with the associated '**Summary of Achievement Record'**): | |
| **Part 2b** – Identified **barriers** to progress (please detail here any issues relating to the programme delivery, which have impacted negatively on progress e.g., attendance times, learning difficulties, suitability of training/learning materials, physical barriers to participation, health issues, attitude etc): | |

*

| |
|---|
| **Part 2c** – Solutions proposed to address the above barriers: |

| **Part 3** – Agreed '**assessment planning'** & action required for the next review (proposed methods of evidence collection must be recorded & proposed assessment methods must be selected):<br><br>***N.B.*** *Methods of evidence collection may include either hard copy records or electronic records such as audio recordings, scanned documents, photographs etc.* | Element:<br><br>Proposed Assessment Methods/Sources of Evidence: | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | CrossRef | RPL | OBS | Questioning | PS | WR | D | WT |
| | | | | | | | | |
| | | | | | | | | |

**Key: Assessment Methods/Sources of Evidence**

**CrossRef** = Cross Referencing RPL= Recognition of Prior Learning
**OBS** = Observation **PS** = Personal Statement
**WR** = Work Record **D** = Discussion
**WT**= Witness Testimony

| **Part 4** – Additional comments / issues (e.g., health & safety issues): |
|---|
| **Part 5** – Candidate comments/feedback/evaluation: |

| |
|---|
| **Part 6** – Employer comments on progression and achievement noted in **Part 2a**: |
| **Part 7** – Assessor Feedback/Assessment Judgements/Decisions/Outcome |

Candidate Signature: ..... Date: .....

Assessor Signature: ..... Date: .....

Employer Signature (where present): ..... Date: .....

Employer Name and position: .....

| 3b. Sample Form – Assessor Report | |
|---|---|
| **Qualification:** | |
| **Candidate:** | |
| **Assessor:** | |
| **Date:** | |
| **Unit/ element:** | |
| **Location/ circumstance:** | |
| **Details of observation/ question/ answers/ discussion** | **Ref** |
| | |
| **Details of observation/ question/ answers/ discussion** | **Ref** |
| | |
| **Details of observation/ question/ answers/ discussion** | **Ref** |
| | |
| **Assessors comments** (state whether candidate is competent) | |
| **Assessor signature** | |
| **Candidate signature** | |

## 3c. Sample Form – Witness Testimony

Qualification: ……

Unit: ……

Element(s): ……

Candidate Name: ……

Witness Name: ……

Witness Contact Details: ……
……

Describe your construction and any assessment qualifications/ experience:
……
……
……

Describe your relationship with the candidate:
……
……

Date of evidence: ……

**Testimony and comment on candidate's performance**

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Witness Signature & Date: ……

Candidate Signature & Date: ……

Assessor Signature & Date: ……

## 3d. Sample Form – Candidate Personal Statement

**Qualification:**

**Candidate name:**

| Element(s) | Date | Statement / evidence |
|---|---|---|
| | | |

Candidate's signature:

Date:

Assessor's signature:

Date:

# APPENDIX 4 - ASSESSOR TEMPLATE DOCUMENTS

## 4a. Sample Form – Element Achievement Record

**Candidate name:**

**Qualification:**

**Unit title:**
**Element(s):**

**Assessor:**

| Evidence ref: | Evidence description * | Location ** | Performance criteria | | | | | Knowledge and understanding | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
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*** Key: Assessment Methods/Sources of Evidence**

**CrossRef** = Cross Referencing **RPL**= Recognition of Prior Learning **OBS**= Observation
**Q&A**= Questioning **PS**= Personal Statement **WR** = Work Record **D**= Discussion

**** Should refer to whether the evidence can be found in the portfolio ('PF') or elsewhere, if so state location of evidence**

## 4b. Sample Form – Unit Progress Record

| | | |
|---|---|---|
| **Qualification:** | | |
| **Unit title:** | | |
| I confirm that the candidate has been assessed as competent for this unit | | |
| **Assessor name** | **Assessor signature** | **Date** |
| | | |
| I confirm that I have been assessed as competent and that the evidence produced is from work that is all mine | | |
| **Candidate name** | **Candidate signature** | **Date** |
| | | |
| I confirm that I have internally verified this unit and confirm that the candidate is competent (this section must be completed where the assessor is unqualified) | | |
| **IV name** | **IV signature** | **Date** |
| | | |

# APPENDIX 5 - INTERNAL VERIFIER TEMPLATE DOCUMENTS

## 5a. Sample Internal Verification Strategy

This document indicates what may be covered as part of an internal verifier's strategy. An effective internal verification strategy ensures:

- A forum for discussion of borderline cases
- Assessor networking and sharing of good practice
- Valid, reliable, and consistent training and/or assessment
- Recorded assessment decisions which are appropriate, consistent, fair, transparent, and equitable
- Clarity for candidates about assessment requirements
- Effective preparation and presentation for external verification
- Reduction in level of direct external verification scrutiny

To underpin the IV/ verification process a plan of internal activity should be developed indicating

- what will happen
- when it will happen
- who will be involved

New instructors/assessors must:

a) be supplied with assessment and materials
b) clearly understand assessment requirements and procedures

All assessors must:

a) know the name of the person who will manage the IV process and the name of the IV
b) know how IV/ verification will happen, when it will happen and who will be involved
c) be informed about issues raised through previous internal and external quality assurance

**On Course Monitoring**

The IV should:

a) Sample assessments to ensure that:
   - feedback to candidates is clear and constructive
   - teaching and assessment activities are standard and appropriate
   - assessment decisions are fair and consistent
   - teaching and assessment records are clear
b) Undertake standardisation activities
c) Ensure candidates understand assessment requirements
d) Provide advice and support for Assessors and share good practice
e) Identify good assessment practice
f) Record internal verification activities and findings, list action points and report to instructors/assessors and the EV
g) Liaise with the EV as necessary

**End of Course Checking**

The IV should:

a) monitor progress against previous action points
b) ensure assessment records are complete and accurate

c) ensure evidence of achievement is appropriate and standardised
d) record internal verification activities and findings, list action points, and report these to assessors and the EV

**Guidance on Sampling and Record Keeping**

**What do IVs/IVs sample and why?**
IVs are responsible for monitoring the quality of assessment, hence the need for them to sample assessment practices and decisions. It is not usually possible or necessary to verify every aspect of assessment at each internal verification. A properly selected representative sample should identify any issues with assessment practices and decisions.

**Selecting a sample**
To select a representative sample, IVs must take account of factors which may impact on the quality of assessment. These factors are used to define a sampling strategy that determines the size of the sample and enables judgements to be made.
Key factors to consider are:

- Sites of delivery
- Number and experience of Assessors
- Number of courses/assessments
- Previous IV actions/recommendations
- Assessment methods
- Special arrangements
- EV recommendations
- Borderline cases
- Anything else that you think might impact on assessment decisions

The sample should include an element of random selection by the IV. It is not necessary to sample across every aspect of the programme at each event, but the plan should seek to cover everything over a period of time, e.g., 3 years.

**Which records should be kept?**
Records of internal quality assurance/ verification must be kept and made available to the EV during monitoring visits. These should demonstrate that the internal verification procedures have been carried out. IVs should record two sets of information:

1. The sample taken by the IV
2. The comments and feedback to the Assessor following the sampling exercise, showing any recommendations or action required and how this was resolved.

There is a sample form shown below that you may use or adapt to suit your own requirement.

| **5b. Sample Form – Internal Verification Sampling Assessment Decisions** |
| --- |
| **Unit / qualification:** |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| **Location:** | | | | | |
| **Assessor name:** | | | | | |
| **Candidate Name** | **Sampling element[1]** | **Was the assessment method appropriate?** | **Is there sufficient evidence that outcomes have been met?** | **Is the evidence appropriate for the level?** | **Comments** |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| **Comments** | | | | | |
| **Signed (IV):**<br><br>**Date:** | | | **Signed (Assessor):**<br><br>**Date:** | | |

## 5c: Sample Form
## Internal verification – observation of assessors

[1] *Was this a learning outcome across candidates, or a whole unit or one method of assessment?*

Internal Verifier's Name: ……
Assessor's Name: ……
Candidate's Name: ……
Qualification Title: ……
Unit Assessed: ……
Element Assessed: ……
Date of Observation: ……
Location of Assessment: ……

| **Prior to the assessment had the Assessor:** | **Yes** | **No** | **Comments:** |
|---|---|---|---|
| Developed a written Assessment Plan for the candidate | | | |
| Checked that the facilities, resources, and information required for the assessment were available and ready for use | | | |
| Briefed the candidate on how the assessment would take place and what would be assessed | | | |
| **During the assessment did the Assessor:** | **Yes** | **No** | **Comments:** |
| Conduct the assessment unobtrusively without interfering with the candidate's performance | | | |
| Encourage the candidate to satisfy the specified Assessment Criteria | | | |
| Ask questions clearly in an encouraging tone and manner without leading the candidate | | | |
| Ensure that sufficient questions were asked and that they were justifiable and relevant to the Unit assessed | | | |

| **During the assessment did the Assessor (continued):** | **Yes** | **No** | **Comments:** |
|---|---|---|---|
| Ensure that the atmosphere created during the assessment was pleasant and conducive | | | |

| | | | |
|---|---|---|---|
| Clarify and resolve any concerns that the candidate had during the assessment | | | |
| Clearly inform the candidate of the assessment decision i.e., 'achieved' or 'requires further practice' | | | |
| **After the assessment did the Assessor:** | **Yes** | **No** | **Comments:** |
| Provide feedback that was clear, constructive, met the candidate's needs and was appropriate to his/her level of confidence | | | |
| Encourage the candidate to comment on the assessment decision and how he/she was assessed | | | |
| Complete the Unit assessment documentation and ensure it was fully signed and dated | | | |
| **Overall feedback to Assessor:** | | | |
| **Assessor's comments on the IV's feedback:** | | | |

Assessor's Signature: ……Date:……

IV's Signature: ……Date:……

End of document