

## 1 Purpose

This document provides information on how to maximise successful application of independent sustainability assessment schemes, such as BREEAM (Building Research Establishment Environmental Assessment Method) and CEEQUAL (Civil Engineering Environmental Quality Assessment & Award Scheme), during the design and construction of infrastructure developments. This guidance is to support the *Level 2 Contract Requirements Environment standard NR/L2/ENV/015*.

*Note 1: In November 2015 the Building Research Establishment (BRE) announced their acquisition of the CEEQUAL assessment scheme to add to their existing BREEAM assessment scheme portfolio. During the intervening years BRE have been implementing a merger of the two schemes for civil engineering infrastructure. In February 2018 BRE announced that for civil engineering infrastructure the BREEAM New Construction Infrastructure scheme would be discontinued and they would switch to CEEQUAL 2018 as their industry standard infrastructure sustainability assessment scheme. BREEAM schemes for occupied buildings will continue to operate.*

*Note 2: This guidance has been written with the existing BREEAM New Construction Infrastructure pilot assessment scheme in mind. However, following these guiding principles should improve success with any sustainability assessment scheme. Further to Note 1 – when details of the new CEEQUAL 2018 civil engineering assessment methodology become available this guidance note will be revised to provide improved alignment between BREEAM 2018 for occupied buildings and CEEQUAL 2018 for infrastructure.*

### 1.1 What are sustainability assessment schemes like BREEAM and CEEQUAL?

Assessment schemes like BREEAM and CEEQUAL are used to masterplan projects for buildings (BREEAM) and infrastructure (CEEQUAL) and drive genuine, measurable sustainability outcomes. They set standards for the environment and sustainable development performance through the design, specification, construction and operation phases and can be applied to new developments or refurbishment schemes.

The assessment schemes set out a detailed framework of performance criteria across a wide range of sustainability disciplines. During the assessment credits are awarded where the project is able to demonstrate (with evidence) that sustainability assessment criteria have been satisfied or exceeded. The more assessment credits are achieved the higher the overall score. The final rating enables comparison and benchmarking between projects and provides reassurance to asset owners, customers and users.

By focusing on sustainable value and efficiency the certified developments will deliver assets that are attractive to investors and generate sustainable environments to enhance the wellbeing of people who work in, use or live near the asset.

While building to meet BREEAM and CEEQUAL's enhanced standards may incur a capital cost, this should be viewed in the context of the overall value of sustainable development. In particular; reduced operational costs, limiting investor and developer risk in building for the future, making assets more attractive to let, sell or retain, and creating a healthier workplace.

## 2 Planning assessment activities and responsibilities through key project work stages

Network Rail is ultimately accountable for leading and creating a culture where sustainability assessments are applied to drive enhanced sustainability standards and life-cycle value from rail infrastructure.

The following sub-section RACI matrices set out illustrative activities and responsibilities for managing the sustainability assessment process through the project work stages.

*Note 3: A RACI matrix is a conventional method for representing the allocation of duties across a range of project participants and stakeholders, in accordance with the following terminology:*

*R – Responsible – Allocated to any party who are deemed to be ‘responsible’ for the delivery of a designated action. It is acceptable to have multiple parties with responsibility for actions.*

*A – Accountable – Allocated to the party who is deemed to have the overall duty for overseeing, resourcing and assuring the successful delivery of a designated action. It is normal convention to have only one accountable party per action. The Accountable party may also have responsibilities (R), or may be accountable only with no delivery responsibilities.*

*C – Consult – Allocated to any party whose opinion is considered to be valuable as a consultee when developing solutions or delivering actions. Responsible parties should be taking the views of Consultees into consideration.*

*I – Inform - Allocated to any party who needs to be informed about outcomes but does not need to be consulted when developing the solution.*

### 2.1 Strategy, Pre-feasibility and Option selection stages (GRIP 1, 2 & 3)

At present these requirements only apply directly within the BREEAM New Construction Infrastructure pilot scheme, and would be termed ‘pre-assessment and strategic assessment’.

However these steps represent good practice for any assessment scheme and may well appear more universally in the BREEAM 2018 revisions and CEEQUAL 2018.

Recommended Action	Client / Asset Owner	Lead Designer	Principal Contractor	Product / Material Suppliers
Establish a preliminary plan to identify which specific assessment scheme issues and criteria are likely to be within the scope and influence of the development (see *Note 4).	A/R	R	C	I

Establish the assessment boundaries that will apply to the development i.e. in a complex development will the assessment be restricted to specific parts.	A/R	R	C	I
Highlight those strategic assessment criteria that will require early adoption and evidence in order to secure credits that would no longer be achievable later in the project.	A/R	R	C	I
Highlight assessment criteria that must achieve minimum prerequisite scores if a high overall performance rating is to be targeted.	A/R	R	C	I
Highlight which assessment criteria are likely to pose significant investment / performance challenges.	A/R	R	C	I
Estimate the rating score that could be achieved.	A/R	R	C	I
Confirm whether to proceed with formal, externally verified assessment.	A/R	R	C	I
Confirm formal assessment as a strategic project requirement / outcome within Client Requirement Documents (CRDs) and Route Requirement Documents (RRDs) and agree a provisional target rating.	A/R	C	C	I
Nominate named senior managers across the value chain to be accountable for successful delivery of the assessment and optimization of the target rating.	A/R	R	C	I
Make prescribed professional appointments needed to support successful delivery of the assessment scheme, such as BREEAM Accredited Professional, suitable Ecologist, Security assessor and BREEAM Assessor, etc.	A/R	R	C	I
Establish arrangements for software tools (i.e. BRE 'Tracker Plus' or equivalent) for monitoring performance and logging evidence.	A/R	R	C	I
Establish the governance arrangements (progress review meetings and leadership decision making) through which the assessment progress and performance will be kept on track.	R/A	C	C	I
Establish early engagement with value chain partners on the assessment target.	A/R	C	C	I
Coordinate an evidence pack to support the project pre-assessment and strategic assessment and enable the independent scheme assessor to establish the strategic assessment rating.	A/R	R	C	I

*\*Note 4: If there are significant assessment criteria where the development will have little or limited opportunity to influence the outcome and earn credits, it may not be possible to achieve a high score*

across the full assessment. In these circumstances it may not be appropriate to continue with the formal, externally verified assessment.

## 2.2 Single option development and Detailed design (GRIP 4 & 5)

During these phases of the project any independent assessment scheme will be undergoing design-stage assessment. The following actions will help to structure and coordinate the approach to the assessment:

Recommended Actions	Client / Asset Owner	Lead Designer	Principal Contractor	Product / Material Suppliers
Confirm named senior managers across the value chain to be accountable for successful delivery of the assessment and optimization of the target score / rating.	A/R	R	R	C
Confirm the assessment boundaries that will apply to the development i.e. in a complex development will the assessment be restricted to specific parts.	A/R	R	C	I
Create a schedule of all specific assessment scheme issues and criteria that will be within the scope and influence of the development.  NB. This will form the basis of the design-stage pre-assessment plan and will include all assessment criteria deemed applicable to the project and for which evidence will be required to secure credits.	A/R	R	C	C
Review and highlight which design-stage assessment criteria are likely to pose significant investment / performance challenges.	A/R	R	C	C
Review and highlight design-stage assessment criteria that will require early adoption and evidence in order to secure credits that would no-longer be achievable later in the project.	A/R	R	C	C
Review and highlight design-stage assessment criteria that must achieve minimum prerequisite scores if a high overall performance rating is to be targeted.	A/R	R	C	C
Revise / confirm the target score /rating for the project.	A/R	R	C	C
Provide and coordinate sufficient competence resources to deliver a costed design proposal that will meet or exceed the agreed target score and rating.	A/R	R	R	R
Maintain governance processes (progress review meetings and leadership decision making) to track and review performance against the assessment and target score / rating.	A/R	R	R	C
Establish engagement with future asset owner stakeholders to achieve agreement and sign off on innovative technologies/ solutions, such as renewable energy systems (PV / GSHP / CHP).	A/R	R	R	C

Maintain engagement with value chain partners on performance against the assessment target score / rating.	A/R	R	R	C
Towards the end of detailed design coordinate and provide a design-stage evidence pack to enable the independent scheme assessor to establish the design-stage assessment rating.	A/R	R	C	C

## 2.3 Construction and commissioning and Handover (GRIP 6 &7)

During this phase of the project any independent assessment scheme will be undergoing the construction management assessment and post-construction review. The following actions will help to structure and coordinate the approach to the assessment:

Recommended Actions	Client / Asset Owner	Lead Designer	Principal Contractor	Product / Material Suppliers
Confirm named senior persons across the value chain to be accountable for successful delivery of the assessment and optimization of the target score / rating.	A	C	R	C
Highlight those assessment criteria and requirements that are directly dependent on construction-phase environmental management practises, monitoring and supply chain recording, to a standard that enables the stated target score / rating to be met or exceeded	A	C	R	C
<p>Create a revised schedule of all specific assessment scheme issues and criteria that are within the scope and influence of the development.</p> <p>NB. This will form the basis of the construction-stage as-built plan and will need to include:</p> <p>(a) all design-stage assessment criteria for which as-built evidence will be required to secure credits; <b>and</b></p> <p>(b) all construction-stage criteria applicable to the project for which construction evidence will be required to secure credits.</p>	A	C	R	C
Provide and coordinate sufficient competence resources to deliver construction-phase as-built evidence, site monitoring records, and supply chain records for responsibly sourced materials, to meet or exceed the agreed target score and rating.	A	C	R	R
Maintain governance processes to track and review performance against the assessment and target score / rating.	A/R	C	R	C
Maintain engagement with value chain partners on performance against the assessment target score / rating.	A	C	R	C

<p>Towards the end of construction and commissioning provide an ‘as-built evidence pack’ in a format that enables the independent scheme assessor to verify the post-construction review score and final rating.</p> <p>The as-built evidence pack should include, without limitation:</p> <ul style="list-style-type: none"> <li>• As-built records, as prescribed by the assessment scheme, to verify the installation and commissioning of sustainable design features and services;</li> <li>• Relevant construction-phase environmental inspection and monitoring records to confirm adherence to environmental standards.</li> <li>• Supply chain records for responsibly sourced materials.</li> </ul>	A	C	R	C
<p>Handover to client/asset owner all relevant materials and documentation needed for on-going scheme related monitoring/post occupancy evaluation.</p>	A	C	R	R

### 3 Considerate Constructors Scheme (CCS), or equivalent

Where Network Rail has elected to apply the CCS, the Contractor should achieve formal certification and comply with requirements of the Considerate Constructors Scheme (CCS), or an alternative independently assessed scheme equivalent to CCS by agreement with the Employer’s Representative. The Contractor shall achieve a CCS Code of Considerate Practice score of at least 35, with an aspiration and resource plan to score above 40.