

Morris, Luke 01/05/2024

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Supplier Quality Conditions Reference Material: QUA-RM-0100d

A MESSAGE FROM OUR CHIEF EXECUTIVE OFFICER





"Our supply chain is much more than a group of individual sub-contractors and Suppliers: it is a key part of our business, core to our own performance and reputation as a company.

We aim to build strong, long-term partnerships with these companies, based on shared values, to help us deliver excellence to our customers. Working in partnership means we **can**, together, constantly improve quality, efficiency, and safety.

If everyone takes responsibility for quality, defects disappear."

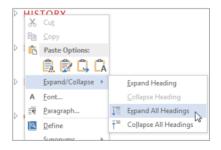
Leo Quinn, Balfour Beatty, Group Chief Executive

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Navigation

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REVISION HISTORY

Version No.	Description of revision	Date
1.0	New UK Document	01/02/2023
2.0	Major updates, new inclusions and additional reference material added	15/06/2023
3.0	Major updates, additions of new sections and additional reference material added	02/04/2024

PURPOSE

This document defines the minimum requirements for Quality Assurance and Quality Control (QA/QC) applicable to the supply chain for the provision of activities, products, and services to support and maintain the integrity of Balfour Beatty quality requirements specified within individual purchase orders for all Balfour Beatty Projects.

SCOPE

This document applies to all Suppliers in receipt of a Purchase Order (PO), Contract or Invitation to Tender (ITT) / Request for Quotation (RFQ) from Balfour Beatty in relation to the provision of plant, equipment, products and services defined work scopes on behalf of Balfour Beatty for any approved projects.

Supplier, for the purposes of this document, is Contractors, Subcontractors, Suppliers, Sub-Suppliers and Service Providers referred to within the Subcontract, Consultancy Agreement or Design Agreement.

INTRODUCTION

Balfour Beatty is committed to working together with its supply chain to deliver excellence in everything it does; this is achieved by having the right people, with the right skills in place to deliver products and services at the right time.

This requires Balfour Beatty and its Suppliers to develop a supportive relationship, working together to deliver to the required standards, identifying opportunities to improve performance and resolving issues promptly through:

- Open and honest communication at all levels and tiers, throughout the supply chain raising queries and concerns as they become known
- Checking for understanding and compliance at all levels and tiers of the supply chain ensuring that specifications, requirements, and identified processes are shared, understood, and met
- Sharing knowledge and lessons learnt to prevent issues and improve performance
- Identifying, sharing and building on best practice
- Documented process for lessons learnt to demonstrate improvement and repeat success
- Collaborative and focused improvement and structured problem solving

This document is to be read in conjunction with contractual requirements and deliverables set out in any issued contract / purchase order terms and conditions.

Balfour Beatty require that all Suppliers have current registration to the Constructionline "Gold Standard". Exemptions to this requirement are available for our design service providers. Clarity will be provided by the relevant Procurement Team member.

In the event of conflicts between this document and other document (such as technical specifications and drawings issued by the Contractor) the Supplier/Subcontractor shall notify the Contractor of any such conflicts for resolution using their own Request for Information (RFI) or Technical Query (TQ) procedure (if approved by Balfour Beatty).

Surveillance activities including auditing, inspection/testing and approval/release by the Contractor, the Customer or Independent Inspection Authority shall not relieve the Supplier/Subcontractor of his obligations under the Contract Terms, Conditions of Purchase and Statutory Requirements.

OUR RIGHT FIRST TIME CULTURE

To deliver Right First Time, every time, always:

- 1. Understand what is required
- 2. Have the right skills and knowledge
- 3. Use the correct materials and tools
- 4. Carry out, check, document and hand over the completed work

To get it right, we must ensure:

- 1. Right planning
- 2. Right design
- 3. Right skills
- 4. Right materials
- 5. Right tools
- 6. Right checks



Elimination of quality risk will be at the forefront of what we do, from winning business, through developing, planning, design, construction and onward into operations and maintenance.

It will feature prominently in the business we pursue, who we work with, how we work and how we measure performance and encourage the personal advancement of our employees and foster relationships with our supply chain.

Critical elements within this document are found below and further explanation provided in the pertinent sections.

- Our Right First Time commitments extend throughout the Supply Chain and must guide the behaviours of all parties at all times
- Pre-Award and Pre-Start Meetings must take place and serve as an opportunity discuss and agree quality-related queries
- Works cannot commence without an accepted ITP in place and briefing
- ITP requirements must be delivered in full, including the adherence to all hold & witness points, and evidenced accordingly through quality records
- Work is not considered complete until full records have been received and accepted
- Plant, tools & equipment must be fit for purpose, maintained and calibrated (as required) as per manufacturer's instructions
- Resources must be competent to perform their duties, that is to hold the necessary qualifications, skills, and experience for their designated role
- Non-conforming products or services must be notified immediately, resolved and factored into learning to prevent re-occurrence
- These conditions should be reviewed alongside the Supplier H&S and Sustainability Conditions

SECTION 1 – QUALITY MANAGEMENT

Balfour Beatty operates a Quality Policy (<u>Quality Policy</u>) that requires the implementation of a Business Management System across its operations that conforms to the current version of <u>ISO 9001</u>. Accordingly, the Supplier is required to co-operate and comply with the Policy.

The Supplier shall identify their Representative(s) responsible and accountable for all Quality related activities. The Representative(s) must be demonstrably competent in the activities that they are being asked to manage (<u>SECTION 6</u>).

The Supplier will also provide organisation charts, roles and named individuals, together with the expected resources (QA & QC) to provide the necessary oversight and assurance for the duration of their works on the Project.

Balfour Beatty will provide their Project Quality Plan, prior to works commencing, to the Subcontractor(s) to enable them to understand the scope(s) of work and requirements from Balfour Beatty's perspective and to allow the Subcontractor(s) the ability to develop their own Project Quality Plans for the works they are subcontracted to perform.

The Supplier is to provide Quality Plans, Programmes, Inspection & Test Plans (ITPs) (<u>SECTION 2</u>) and any associated quality records (<u>SECTION 3</u>) as identified in the enquiry documentation and the Subcontractor Pre-award Meeting.

The Supplier's Quality Plan shall define the resources, processes, products and services to be undertaken to deliver the product and shall be submitted to the overseeing organisation. Examples of compliance standards required are:

- ISO 9001:2015
- ISO 10005:2018
- GG102 Quality Management System for highways works
- GG182 Major schemes: Enabling handover into operation and maintenance (where applicable)
- National Highway Sector Scheme NHSS (where applicable)
- AQAP 2105 NATO Requirements for Quality Plans (where applicable)

Note: the above is not exhaustive and there will be further examples depending on area of work

The Quality Plan shall also identify a commitment to Quality, key roles and their competencies, that are necessary for the delivery of the product/project. This includes an organisational chart.

Minimum Supplier Quality Plan requirements are:

- Context of the Organisation
- Leadership
- Planning
- Support
- Operation
- Handover & Completion
- Performance Evaluation
- Improvement
- Correlation between compliance requirements

The Supplier is to ensure all materials due to be brought to site are approved by Balfour Beatty prior to delivery. The procedure for approval of the materials will be agreed at the Pre-Award meeting and will take <u>Supplier Sustainability Conditions</u> into consideration. The Supplier shall provide and document receipt inspection of materials, in process and final inspection and test. Inspections and tests carried out by the Contractor shall be in addition to any performed by the Supplier.

The Supplier <u>must</u> provide ITPs for their contract works. Alternatively, in certain circumstances, they can operate under an agreed overarching trade / discipline / area ITP, as approved by the relevant Project Lead.

The Supplier ITPs <u>must</u> relate to the relevant project specification and identify the items specified in <u>Section</u> <u>2</u>.

The Supplier may be issued with a Balfour Beatty ITP template to enable them to prepare this documentation, in accordance with Company requirements, where their own template is inadequate.

ITPs produced by the Supplier, either using their own template or Balfour Beatty template, shall be submitted to Balfour Beatty for review a minimum time before works (typically 4 weeks) are scheduled to commence. The ITP shall then be checked, using the Balfour Beatty ITP review process, verified and endorsed as acceptable by both the Supplier and an appropriate member of Balfour Beatty Project Management Team prior to any subcontracted works commencing. **Works shall only commence once the ITP has been accepted by Balfour Beatty** and the Customer/Customer's Representative where necessary.

The Supplier shall strive to deliver an inspection and test process that supports Right First Time and reduces or eliminates defects and rework. Additionally, the Supplier shall support the Balfour Beatty Right First Time Delivery cultural programme and any events established by the Project or Balfour Beatty. Test results shall be summarised to verify compliance with minimum test frequencies.

The Supplier will build on Balfour Beatty's four Quality Commitments through toolbox talks and on-site leadership actions.

The Supplier shall ensure any Quality Issue (e.g. non-conforming product, process or service) is immediately notified to Balfour Beatty. Additionally, where an issue or delay is raised, or realised, that adversely affects our customer's interests, the Supplier is expected to conduct a root cause analysis investigation on the reasons for the delivery of a poor quality product, process of service and confirm corrective and preventive actions (<u>SECTION 9</u>).

The Supplier shall strive for continual improvement as well as the ongoing review and proposing of innovation and best practice. Where required, the Supplier shall utilise digital solutions (e.g. Autodesk BIM 360) for quality management, support Short Interval Control, Collaborative Planning and/or Lean Visual Management activities related to the works.

The Supplier shall ensure all records (<u>SECTION 3</u>) are completed as required by their contract and the agreed ITPs. The final ITP record package shall be checked and verified as acceptable by an appropriate member of the Balfour Beatty Project Management Team prior to final acceptance of the subcontracted works.

Completed Records shall be submitted to Balfour Beatty and retained by the Supplier in accordance with the contractual requirements to verify compliance with the Contract and any formal agreements with Balfour Beatty. Please note that compliance with the agreed Quality or ITP process will be considered in subcontractor payments.

SECTION 2 – QUALITY CONTROL

2.1 INSPECTION AND TEST PLANS

The Supplier shall prepare ITPs covering the scope of works. The ITPs shall identify the key processes associated with the execution of the Work in logical numbered steps from start to finish and shall typically include:

- Project title
- Subcontract details
- Process Activity
- Reference Document (specific clauses and/or sections in standards, procedures, specifications)
- Verification Record (e.g. certification/reports resulting from the process)
- Intervention/inspection points including Balfour Beatty and third parties, i.e. what is to be tested, when and how often tests and inspections are to be carried out, who is involved
- Descriptions of the work steps in sequence
- Reference to applicable procedures, specifications, drawings, codes or standards and statutory requirements
- Acceptance criteria, specification requirements, tolerances
- Verifying report, document or certificate that will be produced i.e. how it will be recorded
- All tests as specified in Balfour Beatty specifications
- Review, inspection and verification activities
- Witness and Hold points which will be the subject of Balfour Beatty, and/or Customer inspection / witness
- Blank pages to capture any additional line items after initial sign-off and approval

ITPs should also include, where appropriate, the following:

- Pre-construction
- Design acceptance and approved for construction
- Other approvals required, e.g., planning and end user
- Material approvals/acceptances
- Agreed product or service acceptance criteria, e.g. benchmarks, samples and/or mock-ups, compliance with standards
- Construction
- Specific competence requirements for each activity
- Specific In-situ Benchmark
- Material receipt requirements
- Identification and traceability of material and information including unique coding
- Storage, packaging, protection and preservation requirements
- Off-site fabrication inspection & test requirements
- Factory acceptance tests (FAT) and release requirements
- Site acceptance tests (SAT) and release requirements
- Shipping, transportation, movement and lifting requirements
- Sampling requirements, e.g., by attributes through ISO 28590
- Acceptance criteria which uses statistical techniques, e.g., CUSUM in concrete
- Quality related Life-Cycle requirements
- Post-construction
- Closure of quality issues (snags, nonconformities)
- Requirement for as-built and/or redline drawings
- Handover, package listing, completion certification

A typical sample for a Supplier ITP is available upon request. The Supplier may use its own format providing all information indicated in the template is included and the Supplier template is approved for use by Balfour Beatty.

The Supplier shall submit ITPs to Balfour Beatty for review prior to commencement of the Work.

As part of the review process, Balfour Beatty staff shall ensure that the ITP is suitable for the activity and is referenced in the Work Package Plan/Method Statement applicable to the works.

Note – Sub-Supplier/Subcontractor ITPs shall also conform to the above requirements.

2.2 INSPECTION POINTS

The ITP shall identify the following inspection points in the fabrication, manufacture and/or assembly process:

Inspection Point	Description
Actual Inspection (A)	An inspection point in the process where an activity, work or function is observed. Balfour Beatty Representative may attend. No formal notification is required.
Document Review (D)	An inspection point where the product and quality records are checked and endorsed. Balfour Beatty Representative may attend. No formal notification is required.
Witness Inspection (W)	Inspection point in the process that may be witnessed or verified by Balfour Beatty. A Balfour Beatty Representative may attend. Formal inspection notification is required. (5 working days' notice required). The ultimate Customer may also be required to attend and this needs to be captured as a requirement. If the Balfour Beatty Representative is unable to attend after being provided with the required notice, then work may proceed as per schedule after permission to proceeds is received.
	Mandatory inspection point in the process. The Supplier shall not proceed with the specified activity without being witnessed by Balfour Beatty. The Balfour Beatty Representative needs to attend. Formal inspection notification is
Hold (H)	required.
	Note: Hold Points can also be within the S/C's remit, places where they must hold works until they have made checks, tests, etc. Hold points are not always only for BB attendance. For example, As-builts of items.

2.3 INSPECTION NOTIFICATION

The Supplier shall provide 5 working days' notice (or as otherwise approved by Balfour Beatty) of hold and witness inspection points identified in the ITPs to Balfour Beatty.

For activities or processes taking place internationally, the Supplier shall provide 14 calendar days' notice (or as otherwise approved by Balfour Beatty) of hold and witness inspection points identified in the ITPs to Balfour Beatty.

For offsite manufacturing processes, the Supplier shall include the following in the Inspection Notification:

- Purchase Order/Contract number and title
- ITP description and reference
- Supplier's fabrication location
- Inspection date and time
- Inspection activities
- Supplier's contact name, telephone and e-mail address

In relation to Witness points, if the Balfour Beatty Representative is unable to attend after being provided with the required notice, then work may proceed after permission has been provided.

In relation to Hold points, if a Balfour Beatty Representative is unable to attend at the scheduled time and location, the Supplier shall not proceed with the work but, shall organise an agreed time for the inspection. Progressing past a Hold point will result in a nonconformity.

The Supplier must immediately notify Balfour Beatty of any delay or other change to the inspection schedule as soon as the change is known and follow up such communication in writing.

2.4 INSPECTIONS

The Supplier is responsible to conduct regular inspections on the progress of its work and the work of its Sub-Suppliers/Subcontractors. In particular, the Supplier shall:

- Submit ITPs to Balfour Beatty for acceptance prior to commencement of the Work
- Conduct all inspection and tests specified in the ITP and/or relevant specification/code/drawing etc.
- Maintain inspection and test verification records as specified in the ITP and/or relevant specification/code
- Review the Quality arrangements of any parties within the Supplier(s)/Subcontractors(s) own supply chain where applicable
- All records must be maintained in an agreed digital format which is legible and easily retrievable unless Customer imposed restrictions apply
- Store and progressively review records within the final record pack (O&M's, etc.)
- Liaise in a timely manner with Balfour Beatty, or its nominated Representative, in relation to Balfour Beatty Hold / Witness points identified on the ITPs.

The Supplier shall document the actual results of inspections and/or tests. These shall be evaluated against national codes, standards, specifications and/or project specific requirements. Where test certificates are specified / required, the actual values achieved shall be presented as part of the final submission of records by the Supplier to the Contractor. Records shall include reference to any Quality Issues / failures which have occurred during manufacture.

2.5 CHECKLISTS

A checklist is simply a document that outlines the specific steps that need to be taken to ensure the quality of your work. The checklist should be created before any works begins, and it should be followed throughout the entire process. Checklists should be linked to a specific Inspection and Test Plan for information flow and traceability. Checklists should be in a digital format where restrictions are not imposed and must be closed and signed off by the Supplier and relevant Balfour Beatty staff.

2.5.1 Why is a checklist important?

Avoid Costly Mistakes

Mistakes can lead to costly problems such as customer complaints, errors, and even legal matters. Having a checklist in place lets you avoid these costly mistakes by ensuring that your work is carried out correctly.

• Meet Quality Standards

When you have a checklist in place, you can ensure that your work meet the high standards that you have set for them. This is important because it helps build trust with your customers and can assist in ensuring that they will keep coming back to work with us.

Ensure Customer Satisfaction

Customers expect high quality products, and if they are not satisfied, they will likely take their business elsewhere. By having a checklist in place, you can be sure that your products meet the high standards that your customers expect.

Improve Supplier Communication

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A checklist will help improve communication between you and your suppliers. For example, when you have a checklist, you can be sure to communicate your specific requirements to your suppliers or show your customer that you understand their needs and expectations.

Create a Quality Culture for Your Company

When you have a checklist in place, it shows your employees that you are serious about quality and expect them to meet the high standards you have set. This helps create a culture of quality within your organisation which can ultimately lead to improved finished quality.

When creating a checklist, you need to include all aspects of the work. This includes things like dimensions, materials, colours, etc. By including all of these details in the checklist, you can be sure that your work will meet the customer's requirements.

Specific instructions should be included on how the product should be checked. For example, if you're checking the dimensions of a product, you need to include specific instructions on how to measure the product.

2.6 SURVEILLANCE (NUCLEAR SECTOR)

Where applicable, a Quality (Assurance) Grading and Criticality Rating may be defined for project work in the nuclear sector. A graded approach shall be applied which outlines the arrangements required to control the quality of the works including design, procurement, manufacture, construction and handover of any structures, systems, and components important to nuclear safety. This will ensure that adequate levels of quality management, quality control and inspection are applied by all organisations within the supply chain.

The Supplier/Subcontractor will be subject to Quality Surveillance by the Contractor's Representative and/or, when applicable, the Customer, to the extent indicated as a function of the defined Quality (Assurance) Grade and Criticality Rating (where applicable) and/or as per the accepted Inspection and Test Plan.

Surveillance activities may consist of but are not limited to:

- Witnessing/undertaking of inspections including hold, witness and review points, examinations, tests, and process activities as defined within the approved ITP
- Progressive review of documentation
- Regular review of adherence to the core elements of quality management e.g., Documented Contract Review, Quality Plans, Process Route Cards, Build History Documentation, Material Certification, Inspection Records
- CFSI, cleanliness, finishing, packaging and identification
- Training and competency of personnel involved in the realisation of the deliverables
- Review of Supplier internal and sub-tier audits, Nonconformity Reports (NCR) and Corrective and Preventative Actions
- Stage/final release activities

For inspection release, a full review of the original Lifetime Records provided by the Supplier shall be conducted by Balfour Beatty and/or Employer Representative depending on the Quality Grade.

Where Contractor surveillance activities demonstrate that the Supplier's Quality Management System is not operating effectively, the Contractor may quarantine a deliverable until correction and the Supplier has demonstrated that the deliverable complies with the requirements of the Contract.

Quality (Assurance) Grades and their agreed corresponding requirements should be cascaded to the Supplier/Subcontractor's supply chain accordingly.

SECTION 3 – RECORDS

Quality records are one of the principal forms of objective evidence of quality assurance. It should be unequivocally understood that generation and compilation of digital quality records (e.g. checklists) shall commence following ITP approval, acceptance and commencement of works.

For any project where CDM regulations apply, the handover, at completion of the works, of an H & S File is a legal requirement. For the majority of projects that BBUK undertake, the handover, at completion of the works, of O & M documentation is a contractual requirement. For all projects requiring Building Control approval, the handover, at completion of the works, of a Section 38 Fire Safety Manual, is a legal requirement.

Agreement must be sought from Balfour Beatty for the content of the Operations and Maintenance Manuals from the commencement of activities to facilitate the handover process. This includes ongoing maintenance requirements, prior to project completion, where this is required to maintain product before handing over to the Customer.

All supply chain suppliers, designers, manufacturers, and installers are to make themselves aware of, and contracted to provide all information required to populate the H&S File, O&M Manual(s) or any other handover packages as agreed on the project. The full scope of information required shall be discussed and agreed at the Pre-Award Meeting and the Pre-Start Meeting.

The Supplier shall **progressively** compile digital quality records, including Manufacturer and Subsubcontractor records, into handover packages. These records shall be accessible to Balfour Beatty at any time for review and audit.

The Supplier shall ensure that all digital quality records, including those generated by subcontractors, are compiled in accordance with the contract.

No items of equipment will be deemed acceptable, or handed over, without submission or demonstration of critical documents as defined within contractual requirements and / or legislative requirements to support their integrity and fit for purpose criteria.

It is the responsibility of the Supplier to continually monitor the development, quality and status of the contract documents. The quality records will form part of the handover of documents. All documentation must be legible, dated, clean, readily identifiable, digital, retrievable and maintained in an orderly manner.

Documents must be controlled, stored and maintained throughout the life cycle of the contract. Typically, but not exclusively, the quality records for non-standard product / plant and equipment will include the following as applicable:

- Quality records shall be provided in accordance with the quality assurance requirements as stated in the accompanying contract / purchase order documentation.
- Quality records shall be collated and presented in a format specified by the allocated Balfour Beatty project Representative(s).

The quality records pack should be presented to Balfour Beatty as early as possible to permit endorsement at the time of final inspections of works and Plant and Equipment acceptance and release. Balfour Beatty does not consider works to be complete until satisfactory records have been issued and approved. This means that quality records will be considered in subcontractor/supplier applications for payment.

3.1 DOCUMENTS REQUIRED PRIOR TO WORKS COMMENCING

The following listed documents are required to be submitted to Balfour Beatty prior to works commencing. This list is not exhaustive and supplementary documents may be required. Note that some of these are not specific to quality but will likely reference or otherwise relate to quality.

- Accepted Method Statement & Risk Assessment (RAMS)
- Accepted Quality Plan
- Accepted Health & Safety Plan
- Accepted Environmental Plan
- Accepted Inspection & Test Plan and associated checklists
- Accepted Logistics Plan
- Accepted specific procedures
- Accepted drawings
- Product Identification & Traceability process
- Operatives Certification of Competency to undertake works
- Organisation Chart
- Register of specialist equipment
- Plant & Equipment test certificates
- Handover Schedule
- Sample, Benchmark and/or Mock-up Register
- Material Acceptance Schedule (MAS)
- Material Approval Forms (MAR)
- Protection of works & Area Release process
- List of Sub-tiers (to be included in Quality Plan)
- Audits/Surveillances programme

3.2 AS-BUILT AND REDLINE DRAWINGS

An As-Built drawing is:

- A Drawing contractually issued with Revision code as per BB Information Management Number Status and ISO 19650
- Marked as Drawn / Checked / Approved / Authorised by competent people from the originating company, which has been through the rigour of review as described in the Project Quality Plan
- Generated from the As-Built Model

A Redline Drawing is an annotated "marked-up" drawing of an Issued For Construction (IFC) drawing referencing accepted NCRs / RFIs / PMIs; Red Line Drawings are important because they:

- Provide a progressive record of the changes from the intended design for as-built purposes
- Are a requirement of the CDM Regulations
- Provide useful reference for future Operators & Maintainers

3.2.1 Where does the Redline Process apply?

Where there is an element of permanent works shown on an IFC drawing, any fabrication drawings etc. are also to be submitted individually. It is not acceptable to bundle up multiple drawings under a single reference number. This means submitting Fabrication drawings as IFC with a unique number and then also redlining it.

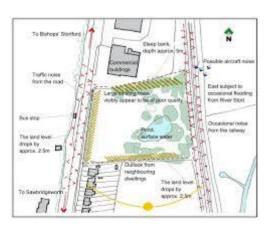
Where is this process not applicable?

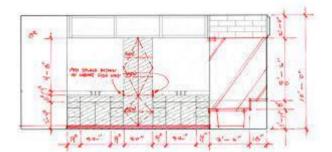
- RIBA stage E and Preliminary Design drawings to be further developed by Contractor
- Temporary works drawings, except where the temporary works are required for interim maintenance, operational, safety purposes or are handed to a follow on Contractor
- Temporary traffic management schemes, including temporary road closures, except where such drawings are required for interim maintenance, operational, safety purposes (e.g. Temp Ticket Hall)
- Construction access, except where such access is also permanent works access
- Bar Bending Schedules

3.2.2 How is a Red Line Drawing Prepared?

Redlines should be created in accordance with the following guidelines:

- Must be created electronically where possible
- Must be created accurately with respect to the assets and build features important for the O&Ms and Safety
- Must reference the appropriate RFI, NCR and PMI using the full reference
- Must be clearly annotated to depict the change graphically and pictorially. Where the change is complex, the reference should be 'attached' to the Redlines
- Information must be legible, precise, clear and concise. Specifically:
 - All comments/changes are to be compiled onto one Redline drawing per IFC drawing
 - o Explanations to describe the changes may be included, do not rely totally on graphical means
- Wherever a change made to one drawing affects several others, ensure the changes are made to all affected drawings to avoid conflicting information being submitted
- Where changes are made, cross out redundant features and captions
- All changes to be fully dimensioned and clearly sketched
- Where pictorial changes are required on a small scale, these can be drawn on a larger scale and appended to the drawing with associated leaders to the area
 - Marked up with any changes to the installed condition, providing a Legend and using the following base colours:
 - Red changes or deletions (e.g. change of dimension, reposition of a wall)
 - **Green** additions (e.g. additional pile)
 - Blue notes to the designer for clarity. Notes that are not to be transcribed into the As-built.
 - Clouding to be used to aid with identifying Redlines. For major revisions, a supplementary sheet shall be used





SECTION 4 - INSPECTION, MEASURING AND TEST EQUIPMENT

Suppliers shall ensure the calibration of test and measuring equipment is performed in accordance with the equipment manufacturer's specifications.

The Supplier shall establish, in line with Manufacturer's data sheets, the frequency of calibration for each item of equipment and record the details in a Measuring and Test Equipment Register.

Where calibration is required by an external laboratory, the Supplier shall ensure that the laboratory possesses current UKAS certification or for overseas Suppliers, an equivalent internationally recognised certification for conducting calibration activities and approved by Balfour Beatty.

Calibration certificates shall contain a statement that the test equipment is accurate to within specified tolerances and nominates a recalibration date. Calibration certificates shall be included in the handover packs.

Where the calibration status of the equipment is unknown or expired, the equipment shall be quarantined and tagged. The Supplier is responsible to ensure that suitable re-calibration is conducted prior to the equipment being used on the Works. Any product that has been tested or measured using unknown or expired equipment shall be re-tested.

Equipment, or parts thereof, on which are found irreparable or harmful defects, will be subject to rejection and notified by a nonconformity report (NCR).

If any part of the equipment is damaged after tests have been completed, re-testing of the affected works is mandatory. All formal testing shall be conducted in accordance with a written and approved test procedure.

SECTION 5 – DESIGN

All designers, and supply chain partners with design responsibility, will be required to enter into a Designer Agreement/Appointment/Deed which will be formalised by the Balfour Beatty Technical Team.

This section sets out what will be required of the designers throughout the lifecycle of the project and what the Balfour Beatty minimum standards for designers are.

All those carrying out design elements are required to be aware of Balfour Beatty's:

- Balfour Beatty Code of Ethics
- Supplier Health and Safety Conditions
- Supplier Sustainability Conditions

Furthermore, those carrying out the aforementioned elements must:

- Be registered with our Procurement and Supply Chain Team.
- Be able to demonstrate competence in their chosen field through professional qualifications and membership of the relevant professional Institution. Note: Suppliers providing design services involving Building Regulations Approval, will need to demonstrate compliance of competencies as set out in <u>PAS8671:2022</u>.
- Carry PI Insurance to a level to be agreed with the Commercial Team.

- Comply with the relevant legislation such as the current version of the <u>CDM Regulations</u>
- Comply with <u>Balfour Beatty's Sustainable Procurement Policy</u>
- Be able to provide all information required for the execution of their design in a digital format. The extent, format and content will need to be agreed with the Design Manager responsible for the project. Designers will need to be cognizant of the Fire and Building Safety Acts together with the secondary legislation regarding the Golden Thread of Information.
- Design Consultants shall submit a Design / Quality Management Plan that meets the needs of Balfour Beatty and the project.

All those carrying out design elements will also <u>need to agree</u> with the Technical Team the following prior to an order being placed:

- The BIM Process Protocols
- Design deliverables, including information exchange programme and protocol
- The Project Portal Collaboration Protocols
- The Fee proposal
- The Scope of Services
- The Programme and sequence of their design and/or operations
- The Change Control Procedure
- The requirement for meetings, inspections and collaborative working
- The provision of warranties and/or insurance backed guarantees
- The timing and provision of digital as-built information
- The wording and scope of a compliance statement that captures the alignment of the design to the relevant legislation, standards and specification.

SECTION 6 – SUPPLIER'S QA / QC STAFFING

The Supplier shall provide sufficient competent supervisory, QA/QC and technical (where required) personnel to implement and control the Supplier's Quality System and coordinate QA/QC activities associated with the execution of the Work and the respective ITPs.

Furthermore, the Supplier shall ensure that all personnel they assign to undertaking work for Balfour Beatty are suitably qualified, experienced and exhibit and practice the right behaviours to deliver the assigned work. The Supplier shall, upon request, provide documented evidence of personnel competency to Balfour Beatty.

Supplier personnel must have received appropriate recognised training and certification and be sufficiently experienced to discharge their responsibilities. Anyone wishing to undertake work on our Project will be required to provide evidence of their recognised skills prior to admittance to the project.

The Supplier shall determine and provide the appropriate number of qualified and competent resources required to deliver the contracted scope of work and, where appropriate, agree prior to commencement of work, the level of resource with Balfour Beatty.

Balfour Beatty will, from time-to-time, host training sessions on site. Supplier employees must attend these training sessions if requested to do so. Time costs associated with this type of training will be borne by each Supplier.

Suppliers' employees with training certificates which do not have a fixed expiry date must either:

- Refresh the training after 5 years
- Be able to demonstrate current updated knowledge and skills via either Continual Professional Development (CPD), or a Professional Development Review (PDR) process

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• No longer undertake activities related to the training

The Supplier shall implement and maintain a competency / training register supported by appropriate training and qualification records.

The Supplier shall ensure that any personnel to be deployed on site work will receive all Balfour Beatty site orientation and induction courses prior to commencing work on the contract.

Note: Suppliers providing design services involving Building Regulations Approval, will need to demonstrate compliance of competencies as set out in <u>PAS8671:2022</u>.

SECTION 7 – REVIEW OF CONTRACT REQUIREMENTS

The Supplier shall have a process that covers contract review. This process shall pay attention to the Supplier's ability to supply the product and service on time, paying particular attention to critical tolerances or activities that are deemed critical and final.

Where the Supplier cannot supply exactly what the order / contract requires, then the Supplier shall contact Balfour Beatty with any proposals for alternate methods of supply.

This contract review must be undertaken at both tender and order stages to take into account any changes that may impact delivery or any items not within the control of the Supplier, e.g. material availability.

The Supplier shall ensure that all contract requirements for the scope of work are reviewed, agreed and understood prior to the commencement of work both at site and in their supply chain. Any deviations from specifications will require the Supplier to obtain written approval from Balfour Beatty.

The Supplier shall confirm their understanding of the works information package / purchase orders via the contract inaugural meetings.

The Supplier shall have a process for ongoing contract review throughout the life of the contract.

Records of the ongoing reviews and the conclusion reached shall be retained and form part of the Quality records.

Following Contract Award, a number of meetings may take place as part of efforts to ensure successful quality management. These include (but are not limited to) quality 'kick-off' meetings, Pre-Inspection Production Meetings (PIPM) and Lifetime Quality Records meetings.

SECTION 8 – SUPPLIER AUDITS

Balfour Beatty and their Representatives shall be afforded access and cooperation by the Supplier, when requested, for the purpose of quality audits and surveillance inspection throughout the duration of the works. Such access shall also be extended to all Sub-Supplier and Subcontractor premises.

The Supplier shall carry out audits in accordance with its quality system at all locations where work is carried out – including Sub-Supplier/Subcontractor facilities – to ensure that Project quality requirements are achieved.

The Supplier shall notify Balfour Beatty of any audits to be conducted associated with the Contract Scope so that Balfour Beatty has the opportunity to attend as an Observer should they deem it necessary.

The Supplier shall submit copies of audit reports to Balfour Beatty within 5 working days of the completion of each audit. Where Balfour Beatty determines unsatisfactory performance is evident, the Supplier shall perform additional audits under Balfour Beatty instruction.

Balfour Beatty and its Customers, reserve the right to participate in, or conduct, audits on the supply chain.

Supplier Performance management is also conducted through the Jaggaer Procurement application. Projects evaluate performance during the works and allocate ratings to each Supplier.

SECTION 9 – DEVIATIONS, NON-CONFORMING PRODUCTS, PROCESSES, SERVICES AND CORRECTIVE ACTION

The Supplier shall follow a documented process to identify record, clarify and resolve Quality Issues with respect to Balfour Beatty and / or Balfour Beatty requirements prior to, or during, the implementation of the contracted work scope.

The Supplier shall ensure that non-conforming items are clearly identified throughout the manufacturing process, are traceable and are kept separate from other items. All items with nonconformities shall clearly have the nonconformity recorded on the associated certificate of conformity to facilitate traceability and configuration control.

No part of the work shall be repaired, or spoiled work corrected, without the prior written approval of Balfour Beatty.

An investigation into the root cause of the Nonconformity Report (NCR) shall be undertaken and submitted to Balfour Beatty for approval along with any corrective actions. Should this root cause investigation be deemed not to be sufficiently robust, then Balfour Beatty reserves the right to undertake a root cause investigation on the Supplier's or sub-tier Supplier's site.

Upon identification of a non-conforming product or service, the Supplier shall ensure the product is clearly identified, segregated, controlled, recorded, and reported to the appropriate level of management within the organisation and then reported onwards to Balfour Beatty.

If the Supplier/Subcontractor proposes to raise a "use as is" application, they must clearly identify the Product or Service as nonconforming and raise a request to Balfour Beatty to consider the acceptance of the nonconformity, or if proposing remedial action.

Authorisation to 'use as is' shall be given by the appropriate Design Authority to accept requests for items, products, work, or services, that do not meet the requirements of the contract specifications.

Balfour Beatty are not obliged to accept an application from suppliers or subcontractors, and the acceptance of a request must not be taken as a license to furnish additional non-conforming products.

SECTION 10 – SUPPLY OF STEEL PRODUCTS

Reference must be made to the Supplier Sustainability Conditions for details of lists of materials and products that are not permitted on Balfour Beatty projects.

For reinforcing steel on Balfour Beatty projects, the supplier/subcontractor must supply reinforcing steel that is responsibly sourced.

Only reinforcing that is BES 6001 Eco-Reinforcement approved, or CARES SCS accredited to BS 8902 approved, will be permitted to be supplied and installed. All other reinforcement will be rejected unless specific approval has been obtained by Balfour Beatty.

Suppliers of all steel products should seek to positively impact social and environmental considerations. Steel products should be accredited to BRE Standard BES 6001.

APPENDIX 1 – REFERENCES

Document Title	Document Ref.	File or <u>URL</u>
Balfour Beatty Code of Ethics		Doing the Right Thing
CDM Regulations		CDM Regulations
Quality Management Systems - Requirements	ISO 9001	<u>ISO 9001</u>
Sampling Procedures for Inspection by Attributes – Introduction to the ISO 28590 series of standards for sampling for inspection by attributes	ISO 28590	Sampling Procedures for Inspection by Attributes
Sustainable Procurement Policy Guidance and Requirements for Supply Chain		Balfour Beatty Sustainable Procurement Policy
Supplier Health & Safety Conditions	HSF-RM-00018a	Important Deguments for Suppliare
Supplier Sustainability Conditions	SUS-RM-0007a	Important Documents for Suppliers
Construction Information Service (Location of Standards subscribed to by Balfour Beatty)		The Construction Information Service (CIS) - Login (ihs.com)
Principal Designers Competence (Location of Standards subscribed to by Balfour Beatty)	PAS8671:2022	The Construction Information Service (CIS) - Login (ihs.com)
Responsible sourcing sector certification schemes for construction products – Specification <i>(Location of Standards subscribed to by Balfour Beatty)</i>	BS 8902	The Construction Information Service (CIS) - Login (ihs.com)
Responsible Sourcing of Construction Products (Location of Standards subscribed to by Balfour Beatty)	BES 6001	The Construction Information Service (CIS) - Login (ihs.com)
Quality Management System for Highways Works	GG102	GG102 - Quality Management System for Highways Works
Major schemes: Enabling handover into operation and maintenance	GG182	<u>GG182 - Major Schemes -</u> Enabling Handover into operation and maintenance
NATO Requirements for Quality Plans	AQAP 2105	AQAP 2015 - NATO Requirements for Quality Plans
CQI NucSIG Nuclear Quality Knowledge		Nuclear Quality Knowledge nucsig