

RC CONCRETE SPECIFICATION

25076-SP-1002-TN01 | MAY 2026

QUALITY CHECK SHEET

DOCUMENT TITLE: RC CONCRETE SPECIFICATION

PROJECT TITLE: SEE GENERAL CIVIL AND STRUCTURAL SPECIFICATION "SP-1001"

CLIENT: SEE GENERAL CIVIL AND STRUCTURAL SPECIFICATION "SP-1001"

DOCUMENT REF: 25076-SP-1002-TN01

REVISION	DESCRIPTION	ISSUE DATE	PREPARED BY	CHECKED BY	APPROVED BY
TN01	Tender Issue	27 th May 2026	AOG	LB	Mr. James Langan BE CEng MIEI

AUTHOR, CHECKER AND APPROVER DETAILS

NAME	ROLE	QUALIFICATIONS
Mr. Adam O'Grady (AOG)	Project Engineer, Langan Consulting Engineers	B.E.
Mr. Liam Butler (LB)	Project Engineer, Langan Consulting Engineers	B.E. M.E. MIEI
Mr. James Langan (JL)	Director, Langan Consulting Engineers	B.E. CEng MIEI FConsEI

TABLE OF CONTENTS

INTRODUCTION	3
P1. INFORMATION TO BE SUPPLIED TO THE CONSTRUCTOR.....	4
P1.1 GENERAL INFORMATION	4
P1.2 DESIGN	6
P1.3 DRAWINGS AND CALCULATIONS.....	7
P1.4 EXECUTION MANAGEMENT	8
P1.5 MATERIALS	11
P1.6 PROJECT REQUIREMENTS.....	12
P1.7 WATER-RESISTING CONSTRUCTION	14
P1.8 CONCRETE	15
P1.9 SURFACE FINISHES	19
P1.10 PRECAST CONCRETE	21
P1.11 PRESTRESSED CONCRETE CONSTRUCTION	21
P1.12 DEFLECTION ALLOWANCES	22
P1.13 FURTHER INFORMATION	23
P2. INFORMATION TO BE SUPPLIED BY THE CONSTRUCTOR.....	24
P2.1 GENERAL INFORMATION	24
P2.2 DESIGN	25
P2.3 DRAWINGS AND CALCULATIONS.....	25
P2.4 EXECUTION MANAGEMENT	25
P2.5 MATERIALS	25
P2.6 PROJECT REQUIREMENTS.....	25
P2.7 WATER-RESISTING CONSTRUCTION	25
P2.8 CONCRETE AND CONCRETING.....	26
P2.9 FURTHER INFORMATION	26

LIST OF FIGURES

No table of figures entries found.

LIST OF TABLES

Table 1.1 Design Data	6
Table 1.2 Drawings and Calculations	7
Table 1.3 Execution Documentation	8
Table 1.4 Approval Timing.....	9
Table 1.5 Project Requirements	12
Table 1.6 Designated Concrete Information	15
Table 1.7 Designed Concrete Information	16
Table 1.8 Prescribed Concrete Information	17
Table 1.9 Prescribed Concrete Information	18
Table 1.10 Proprietary Concrete Information.....	19
Table 1.11 Precast Concrete Information	21

INTRODUCTION

- I. The specification for the structure shall be based on the National Structural Concrete Specification for Building Construction (NSCS) 4th Edition.

The National Structural Concrete Specification (NSCS) is prepared by:

Construct
4 Meadows Business Park Station Approach Blackwater
Comberley
SURREY, GU17 9AB
www.construct.org.uk

The NSCS is published and available from:

The Concrete Centre
4 Meadows Business Park Station Approach Blackwater
Comberley
SURREY, GU17 9AB
www.concretecentre.com

- II. The NSCS Project Specification is provided by the Employer and identifies the appropriate information specific to the structure over and above that stated in NSCS Standard Specification. Clauses in the Standard Specification may be modified by information given in the Project Specification.

- III. Standard Specification

The standard specification (Section 1 to Section 10) applies with the modifications as listed in Clause P1.6

P1. INFORMATION TO BE SUPPLIED TO THE CONSTRUCTOR

P1.1 GENERAL INFORMATION

P1.1.1 PROJECT CONTACTS

P1.1.1.1 PROJECT DETAILS

Project Name	Refer to LCE General Civil and Structural Specification SP-1001
Project Ref	Refer to LCE General Civil and Structural Specification SP-1001
Address	Refer to LCE General Civil and Structural Specification SP-1001

P1.1.1.2 EMPLOYER

Name	Refer to LCE General Civil and Structural Specification SP-1001
Address	Refer to LCE General Civil and Structural Specification SP-1001
Contact Name	Refer to LCE General Civil and Structural Specification SP-1001
Telephone	Refer to LCE General Civil and Structural Specification SP-1001
Email	Refer to LCE General Civil and Structural Specification SP-1001

P1.1.1.3 PRINCIPAL CONTRACTOR

Name	Refer to LCE General Civil and Structural Specification SP-1001
Address	Refer to LCE General Civil and Structural Specification SP-1001
Contact Name	Refer to LCE General Civil and Structural Specification SP-1001
Telephone	Refer to LCE General Civil and Structural Specification SP-1001
Email	Refer to LCE General Civil and Structural Specification SP-1001

P1.1.1.4 EMPLOYERS REPRESENTATIVE

Name	Refer to LCE General Civil and Structural Specification SP-1001
Address	Refer to LCE General Civil and Structural Specification SP-1001
Contact Name	Refer to LCE General Civil and Structural Specification SP-1001
Telephone	Refer to LCE General Civil and Structural Specification SP-1001
Email	Refer to LCE General Civil and Structural Specification SP-1001

P1.1.1.5 CONTRACT ADMINISTRATOR (CA)

Name	Refer to LCE General Civil and Structural Specification SP-1001
Address	Refer to LCE General Civil and Structural Specification SP-1001
Contact Name	Refer to LCE General Civil and Structural Specification SP-1001
Telephone	Refer to LCE General Civil and Structural Specification SP-1001
Email	Refer to LCE General Civil and Structural Specification SP-1001

P1.1.1.6 OTHER NAMED PARTIES TO THE CONTRACT

Name	NA
------	----

P1.1.2 DESCRIPTION OF THE PROJECT WORKS

Nature of building and intended use, number of floors, column grids, stair and core, stability system, foundations, basements, location of water-resisting construction, special finishes, relevant project sustainability targets and procedures, etc. as per Civil and Structural Specification SP-1001 and as detailed on the drawings listed in Project MDR.

--

P1.1.3 CONSTRUCTION PLANNING REQUIREMENTS

Note: the information here is largely reproduced from the Contract Documents to assist the Constructor in the preparation of Section P2. The Constructor should notify the CA if any discrepancy is identified between the Contract Documents and the Specification.

Where details of the site conditions are provided, such as underground services, overhead cables, adjacent buildings and site obstructions, they are given to assist the Constructor in their tender stage planning. The Constructor should always confirm the accuracy of this information when on site, before starting work.

As per LCE General Civil and Structural Specification SP-1001

P1.2DESIGN

P1.2.1 GENERAL

The design has been carried out in accordance with BS EN 1990, BS EN 1991 and BS EN 1992. Any design by the Constructor is to be carried out in accordance with these codes and the design data given in this specification.

P1.2.2LOADING

As per Eurocode.

P1.2.3OTHER DESIGN DATA

Table 1.1 Design Data

Design data	Location
	General
Fire rating (hours)	As per fire cert
Exposure Class	Refer to drawing notes on LCE drawing DG-1001
Design life (years)	50 years
Maintenance /replacement assumptions	
Other	

P1.2.4SPECIAL REQUIREMENTS FOR COMPOSITE STRUCTURES

P1.3DRAWINGS AND CALCULATIONS

Table 1.2 Drawings and Calculations

		Preparation		Tender issue		Acceptance issue				Construction issue			
Type Note 1		Prepared by	Format Note 2	Number of copies		Number of copies		Period before construction (weeks)		Number of copies		Period before construction (weeks)	
General arrangement drawings	RC	CA	E	2						5		11	
	PCP	CA	E	2						5		11	
	PCE	CA	E	2						5		11	
	PSC	CA	E	2						5		11	
Design Information drawings	RC	CA	E							5		11	
	PCP	CA	E							5		11	
	PCE	CA	E							5		11	
	PSC	CA	E							5		11	
Construction sequence info	All	CA	E	2						5		11	
Design calculations	RC	Constructor				3		8		5		5	
	PCP	Manufacturer	E			3		8		5		5	
	PCE	Constructor				3		8		5		5	
	PSC	Constructor				3		8		5		5	
Specialist drawings	RC	Enter CA or Constructor				3		8		5		5	
	PCP	Constructor				3		8		5		5	
Enter details as required	PCE	Constructor				3		8		5		5	
	PSC	Constructor				3		8		5		5	
Reinforcement drawings and schedules	RC	Enter CA or Constructor				3		7		5		5	
Pre-cast concrete elements	PCP	Manufacturer	E										
	PCE	Constructor	E			3		7		5		3	
	PSC	Constructor	E			3		7		5		3	
Builders' work information	All	CA				3		6					
Coordinated builders work drawings	All	Enter CA or Constructor				3		4		5		2	
Temporary works and erection drawings and/or calculations and method statements	All	Constructor	E			3		4		5		2	
As-built drawings	All	Enter CA or Constructor	E							3		Months after completion	
												3	

Footnotes:

1. Types of construction:

RC: Reinforced concrete **PCE:** Precast concrete elements

PCP: Precast concrete products in accordance with product standards **PSC:** Prestressed concrete

2. Enter **P** = Paper, **E** = Electronic, **B** = Both

P1.4 EXECUTION MANAGEMENT

P1.4.1 EXECUTION CLASS

The following parts of the structure are to be constructed in accordance with Execution Class 3:

As per LCE General Civil and Structural Specification SP-1001

P1.4.2 EXECUTION DOCUMENTATION

The following documentation is required:

Project values should be entered in the blue panels.

Table 1.3 Execution Documentation

Information	When required: Number of working days before construction with updates as requested unless noted		Format/Notes P = Paper E = Electronic B = Both	
	Default	Project	Default	Project
Contractor's Quality Assurance Certification	At tender		Paper	E
SpeCC registration or equivalent	As requested		Paper	E
Detailed construction programme	20		Paper	E
Falsework and formwork: design	20		Calculations & drawings	E
Falsework and formwork: pre-concreting cleanliness	As requested		Paper	E
Reinforcement: source and supplier	20		Paper	B
Reinforcement: Certification	20		Paper	
Reinforcement: pre-concreting location	As requested		Paper	
Spacers	As requested		Paper	
Couplers: source and supplier	20		Paper	
Couplers: Certification	20		Paper	
Continuity strips: source and supplier	20		Paper	
Continuity strips: Certification	20		Paper	
Post tensioning work:				
Certification	20		Paper	
Specific quality plan	20		Paper	
Other information	As Cl. P1.11.3		Paper	
Concrete: readymix plant details	20		Paper	
Concrete: readymix producers' certification	20		Paper	
Concrete: delivery ticket	As requested	Collect on site for review	Paper	
Concreting: method statement and pour sequence for each section of the work	5		Paper	
Precast concrete	As Table P1.10		Paper	
As built geometry: setting out and dimensions	10 working days after the construction is complete at each level		Paper	

Information	When required: Number of working days before construction with updates as requested unless noted		Format/Notes P = Paper E = Electronic B = Both	
	Default	Project	Default	Project
As built geometry: reinforcement cover	As requested		Cover meter survey	
Environmental certification and responsible sourcing documentation where required: relating to reinforcement, aggregate, cementitious materials, formwork and concrete supply	20		Paper	

P1.4.3 APPROVALS TIMING

The timings given in NSCS Standard Specification apply to all approvals except as noted below.

Project values should be entered in the blue panels.

Table 1.4 Approval Timing

Standard Specification clause ref.	Item	Requirements Before or after as appropriate. Working days unless stated	
		Default	Project
4.1.2.1	Material test results	10	10
4.2.1	Quality plan	5	20
4.3.3	Notice to CA for concrete pour inspection	1	3
4.3.3	Before prestressing work starts	1	
4.3.3	Before covering up or backfilling	5	5
4.3.3	For water-resisting construction to allow joint inspections	5	
4.3.4	Response by CA to request for modifications	5	
4.3.7	Copies of test results	3 No.	3 No
4.3.8	Proposal and response time for work rectification	5 & 5	5 & 5
6.2.1	Notice to CA for site changes to reinforcement	1	3
7.1.1.4	Extension calculations for post-tensioning tendons	10	
7.3.1.1	Notice to CA for site changes to post-tensioning tendons	1	
7.4.1	Grouting records	5	
8.1.2.1	Concrete non-conformity	24 hours	24 hours
8.2.1.3	Method of fixing kickerless shutters	5	
8.2.1.4	Premature cessation of a pour	2 hours	2 hours
9.1.2	Precast connection details	15	
9.1.3	Precast erection specification and work programme	5	
9.5.3	Proposals for cutting standard precast products	5	
Other	Before applying sealant to expansion joints		3

P1.4.4 INSPECTION

Items not defined in table 1 of BS EN 13670 shall be inspected as follows:

Additional third party inspection carried out by the Contractor is required of the following parts of the structure.

P1.4.5 DOCUMENTS

The following special documentation is required:

Requirements for responsible sourcing documentation:

The Contractor shall provide an undertaking and evidence from the concrete supplier that the supplier has accreditation to a UKAS certified EMS such as BS EN ISO 14001, EMAS and for SMEs, BS 8555 or equivalent.

P1.4.6 AS-BUILT GEOMETRY

The overall concrete dimensions shall be checked:

List of requirements	Frequency
In accordance with the main specification SP-1001	

The cover to reinforcement shall be checked:

List of requirements	Frequency
For all elements	

P1.4.7 CURING CLASS

List where curing classes other than 2 shall be used:

List of requirements	Frequency
Curing Class 2 in accordance with BS EN 13670	All locations

P1.4.8 PROTECTION

The following special protection is required:

All concrete elements shall be protected to ensure the works are not damaged.

P1.5 MATERIALS

P1.5.1 REINFORCEMENT

Stainless steel reinforcement shall be used in the following locations:

Epoxy coated steel reinforcement shall be used in the following locations:

Anchorage and couplers shall be:

Covered by a relevant CARES technical approval or other relevant product approval from an appropriate UKAS accredited product certification body.

Anchorage and couplers as noted in the Contract Documents and in accordance with EN 1992.

Fibres shall be used as follows:

List of requirements	Frequency

Requirements for responsible sourcing of reinforcement:

The fabricator and mill supplying the reinforcement, shall be certified through either the Co-Reinforcement scheme operated by BRE Global, or the 'Sustainable Reinforcing Steel Scheme' operated by CARES, or other third party accredited scheme that follows the principles of BS 8902.

The mill supplying the reinforcement shall also operate a certified Environmental Management System operated by an accredited certification body to IS EN ISO 14001. The Fabricator shall confirm the steel is supplied from a certified mill and operate an Environmental Management System which follows the principles of IS EN 14001, EMAS or SMES, BS 8555 or equivalent.

P1.5.2 TIMBER

Requirement for responsible sourcing of timber or timber products:

All lumber and timber to be used in the construction and manufacture of structural timber and products are to be sourced exclusively from sources recognised and certified by the Forest Stewardship Council (FSC). All structural timber and timber products are to carry the official FSC logo according to the provisions of the FSC.

All wood based products permanently installed in the project are to be certified in accordance with the Forest Stewardship Council (FSC). The Contractor is required to provide Chain of Custody (COC) documentation for all certified wood purchases, and copies of vendor invoices for each certified wood product.

P1.5.3 OTHER MATERIALS

P1.5.3.1 MATERIALS NOT PERMITTED

Any materials defined as 'excluded' in 'Good Practice in the Selection of Construction Materials' by the British Property Federation, British Council for Offices, 1997.

P1.5.3.2 MATERIALS REQUIRING SPECIAL CONSIDERATION

Any alternative materials proposed by the contractor shall be approved by the engineer prior to incorporation in the Works.

GGBS (Cement Replacement Product): It is permitted to use GGBS as a cement replacement within the identified concrete mix designs. Please refer to permitted cement types listed in the Designed Concrete Specification in Section P1.8.2. Additional striking time will be required over and above the requirements as outlined in BS 8110 Part 1 Table 6.2 based on the choice of cement type chosen. Early striking periods may be permitted subject to confirmation of early stage strength using thermo-couple comparison techniques. Irrespective, the minimum striking times as outlined in Table 6.2 of BS 8110 Part 1 shall be the minimum acceptable time. Proper curing of all concrete is essential. Curing operations and procedures are to be undertaken as per the recommendations outlines in the publication "Concrete on Site – Curing" published by the British Cement Association of Ireland. Additional concrete cubes will be required to be taken on-site and tested to verify concrete strengths at 3, 7, 28 and 56 days.

P1.5.3.3 ITEMS SUPPLIED BY THE EMPLOYER

P1.6 PROJECT REQUIREMENTS

Enter variations form NSCS Standard specifications.

Table 1.5 Preject Requirements

Standard Spec Clause Ref	Change N: New D: Deleted M: Modified	Description
All Clauses	M	"Where conflicting requirements are present between Euronorms, IS and or BS standards. The SCC shall bring them to the attention of the Employers Representative"
All references to BS EN codes.	M	Replace with IS EN equivalent (most recent version).
3.10	M	Reference panels – Change to: Full size panels of plain and Ordinary formed finishes manufactured by Constructor, or equal and approved by the Employers Representative or Architect and available for inspection at various locations around Ireland.
4.1.2.1	M	Refer to Section P1.5 of this document
4.1.2.4	M	Water-resisting construction – Add: Where a performance specification exists for water-resisting construction, all materials, workmanship and construction are to be in accordance with it.
4.2.1	M	Quality Plan – Add: Refer to the Main Specification (SP-1001) for additional requirements on Quality Assurance.

Standard Spec Clause Ref	Change N: New D: Deleted M: Modified	Description
4.3.2	M	Setting out – Add: Set out of the building shall be in accordance with the Design drawings, and Main Specification SP-1001.
5.2	M	Material – Change to: Permanent formwork may be used subject to the agreement of the CA. New timber and wood products should all be certified as legally sourced by CPET (The Central Point of Expertise on Timber) or equivalent recognised schemes. Refer to Fair-Faced Concrete Specification for special finishes.
5.8.1	M	Geometry – Add: Any particular requirements for joint layouts are detailed in the Contract Documents.
5.8.2	M	Joint preparation – Add: Expanded metal mesh shall not be permitted unless agreed in writing with the CA.
5.9.1	M	Waterstops – Add: Refer the Civil and Structural Drawings and to Water-Resisting Construction Specification
6.2.2	M	Tying – Add: For slabs that require earthing, e.g. ground floor pits, all reinforcement must be tied together to ensure a continuous bond over the entire slab that can be connected to the earthing system.
6.2.3.3	N	<i>Tack Welding</i> Tack welding on site will not be permitted, other than in particular circumstances for which special approval must be sought from the Employers Representative. Only firms that have achieved certification to CARES Appendix 6 – Quality Schedule for the tack welding of reinforcing steel shall be permitted to bid for or undertake contracts to supply pre-assembled tack welded fabrications. Where tack welding is proposed for reinforcement with a Carbon Equivalent greater than 0.42, the appropriate procedures in IS EN 1011 must be followed.
6.2.3.4	N	<i>Semi-Structural / Structural Welding</i> Only firms that have achieved certification to CARES Appendix 10 – Quality and Operations Assessment Schedule for the manufacture of pre- assembled welded fabrications using welded semi- structural and / or structural joints shall be permitted to bid for or undertake contracts to supply pre- assembled welded fabrications
6.2.4	M	Projecting reinforcement – Add: Projecting reinforcement ends should have plastic mushroom caps fitted (H&S).
6.2.5.2	M	Agreement – Add: Site bending shall not be carried out without prior agreement of the CA.
7.1.1	M	General – Add: Where bonded tendons are to be used, grouting trials shall be carried out. These shall be carried out ahead of the permanent structure so that there is sufficient time for the results to be considered and any changes to the original method statement made.
7.2.1.1	M	Grout – Add: The sources and quality of the cement used in the Works shall be the same as used in the grout mix and grouting trials.
7.3.6	M	Anchorage protection – Add: After anchoring, the force exerted by the tensioning equipment is to be decreased gradually and steadily to avoid slip.
7.3.9	M	Grouting – Add: The filled ducts shall be protected to the satisfaction of the CA to ensure that they are not subject to shock or vibration for one day after injection of the grout, and that the temperature in them does not fall below 5°C for 48 hours after injection of the grout. Two days after grouting, the level of grout in the injection and vent tubes shall be inspected and made good if necessary.
8.4.2	M	Water-resisting construction – Change to: For water-resisting construction, inspection shall be carried out jointly with the Constructor and specialist waterproofing Contractor before backfilling or covering up to identify defects which may lead to water penetration. Further inspection shall be jointly carried out to identify any water penetration after backfilling. Refer also to the Civil and Structural Drawings and Waterproof Concrete Specification.
8.6	M	Surface Finishes – Add: Refer also to the Civil and Structural Drawings and Fair-Faced Concrete Specification.

Standard Spec Clause Ref	Change N: New D: Deleted M: Modified	Description
8.6.1.4	M	Special Finish – Change to: A Special finish requires the careful selection of the concrete, release agent, the use of good quality formwork and thorough compaction. Detailed requirements of the surface finish required, and any permitted further working or improvements to the as-struck finish are given in NSCS Project Specification, the Civil and Structural Drawings and Fair-Faced Concrete Specification. A sample panel will be required as described in the NSCS Project Specification.
8.6.2.4	M	Special – Change to: To be produced by further working of a finish or other improvements as specified in NSCS Project Specification, the Civil and Structural Drawings and Fair-Faced Concrete Specification.
10.1.1	M	Precedence - Add: Notwithstanding the following items, the concrete elements, slabs, beams, columns etc. should be handed over within an envelope of at most ± 15 mm to level and ± 15 mm to grid or tighter tolerance.

P1.7 WATER-RESISTING CONSTRUCTION

P1.7.1 DETAIL

The required performance for water-resisting construction is to be achieved by the use of materials and details listed below and as shown on construction drawings.

Location	Detail	Waterstops	Separation membranes	Joint fillers
	Manufacturer			
	Material			
Slab: horizontal construction joints	Type			
Slab: horizontal movement joints	Type			
Wall: horizontal slab/ wall joints	Type			
Wall: vertical construction joints	Type			
Wall: vertical movement joints	Type			

Or

Construction selection and installation of materials and systems, as appropriate, to achieve a Grade 3

environment using the grade classification in BS 8102: 2009 Table 2.

The water table classification in accordance with BS 8102: 2009 Table 2 is

The risk associated with groundwater is considered to be

Note: Section P2.6 to be completed.

P1.7.2 CRACK WIDTHS

These should be limited to mm.

P1.8 CONCRETE

P1.8.1 DESIGNATED CONCRETE

To be in accordance with BS 8500-2 and BS EN 206-1.

Table 1.6 Designated Concrete Information

	Requirements	Defaults	Project	Project	Project
1.	Concrete designation (Ref. BS 8500-2: 2006, Table 5)		N/A	N/A	N/A
2.	Maximum aggregate size (mm) Enter 10, 14, 20 or 40	20	N/A	N/A	N/A
3.	Slump class S1, S2, S3, S4 or other value	S3	N/A	N/A	N/A
4.	Special restrictions on cement types (enter reference if required)	None	N/A	N/A	N/A
5.	Special requirements for aggregates (enter reference if required)	None	N/A	N/A	N/A
6.	Use of RCA permitted? Maximum mass fraction of total coarse aggregate enter a higher mass fraction of total coarse aggregate, where permitted (Ref. BS 8500-1: 2006, Cl. 4.2.3c)	Yes	N/A	N/A	N/A
		20%	N/A	N/A	N/A
7.	Requirements for accelerated or retarded set	None	N/A	N/A	N/A
8.	Special colour requirements None or see P1.9	None	N/A	N/A	N/A
9.	Type and dosage of fibres	See P1.5.1	N/A	N/A	N/A
10.	Chloride class Cl 1,0 for GEN series, Cl 0,20 for SRPC, Cl 0,40 for all other concretes or enter special requirements	As BS 8500-1	N/A	N/A	N/A
11.	Minimum air content	None	N/A	N/A	N/A
12.	Method of placing concrete		N/A	N/A	N/A
13.	Requirement for finishing concrete	See P1.9	N/A	N/A	N/A
14.	Identity testing for consistence or other properties required in accordance with BS EN 206: 2000 Annex B and BS 8500-1: 2006 Annex B (If yes then details to be added into P1.13)	No	N/A	N/A	N/A

Notes:

1. All sections of the Specification must be completed before it is passed to the Producer. The person sending the final specification to the producer must send copies of the document to all other parties (CA, Employers Representative, Employer, as appropriate) who have contributed to the Specification.
2. Where 'None' is entered in the table this is a default value to ensure that the Specification is complete. All those involved in completing the specification need to check if 'None' is appropriate.
3. Guidance on specification of designated concrete can be found in BS 8500-1: 2006, Section 4.2.

P1.8.2 DESIGNED CONCRETE

To be in accordance with BS 8500-2 and BS EN 206-1 as per Drawing Notes on LCE Drawing DG-1001.

Table 1.7 Designed Concrete Information

	Requirements	Defaults	Project
1	Concrete reference		As per LCE Drawing Notes "DG-1001"
2	Strength class		As per LCE Drawing Notes "DG-1001"
3	Maximum water-cement ratio		As per LCE Drawing Notes "DG-1001"
4	Minimum cement content kg/m ³		As per LCE Drawing Notes "DG-1001"
5	DC-Class where appropriate		As per LCE Drawing Notes "DG-1001"
6	Permitted cement types- See BS 8500-1: 2006, Cl. 4.3.2, Note 3		As per LCE Drawing Notes "DG-1001"
7	Maximum aggregate size (mm)- Enter 10, 14, 20 or 40	20	
8	Chloride class (a value must be entered unless Cl 0,40 is acceptable)	Cl 0, 40	
9	Target density/ density class (for lightweight and heavyweight concrete)	N/A	
10	Consistence class S1, S2, S3, S4		As per LCE Drawing Notes "DG-1001"
11	Method of placing concrete		As per LCE Drawing Notes "DG-1001"
12	Requirement of finishing concrete	See P 1.9	
13	Type and dosage of fibres	See P 1.5.1	
14	Use of RA conforming to BS 8500-2: 2006, 4.3, permitted? If YES: enter requirements for the following in P1.13:	Yes	
	Maximum acid-soluble sulphate, method for determination of the chloride content classification with respect to ASR, method for determination of alkali content, any limitations on use in concrete, e.g. exposure classes, maximum mass fractions, etc. (Enter details in P1.13)	RCA permitted to 20% mass fraction	
15	Special requirements for aggregates	None	
16	Minimum air content, or other requirements to resist freeze-thaw attack	None	
17	Special requirements for temperature of fresh concrete	None	
18	Special requirements for strength development	None	
19	Special requirements for heat development during hydration	None	
20	Special requirements for retarded stiffening	None	
21	Special requirements for resistance to water penetration	None	
22	Special requirements for resistance to abrasion	None	
23	Requirements for tensile splitting strength	None	
24	Additional technical requirements See BS 8500-1: 2006, Cl. 4.3.3. sections n & m	None	
25	Identity Strength testing required? (If YES then details to be added into P1.13)	None	

	Requirements	Defaults	Project
26	Identity Consistence testing required? (if YES then details to be added into P1.13)	None	
27	Other properties Identity testing required? (If YES then details to be added into P1.13)	None	
Notes: 1. All sections of the specification must be completed before it is passed to the producer. The person sending the final specification to the producer must send copies of the document to all other parties (CA, Engineer, Employer as appropriate) who have contributed to the specification. 2. Where 'None' is entered in the table this is a default value to ensure that the specification is complete. All those involved in completing the specification need to check if 'None' is appropriate. 3. Guidance on specification of designed concrete can be found in BS 8500-1: 2006, Section 4.3.			

P1.8.3 PRESCRIBED CONCRETE

To be in accordance with BS 8500-2 and BS EN 206-1.

Table 1.8 Prescribed Concrete Information

	Requirements	Defaults	Project	Project	Project
1.	Concrete reference		N/A	N/A	N/A
2.	Cement type, class and content		N/A	N/A	N/A
3.	Water/cement ratio		N/A	N/A	N/A
4.	Consistence Class S1, S2, S3, S4		N/A	N/A	N/A
5.	Type, category and maximum size of aggregate		N/A	N/A	N/A
6.	Special requirements for density (for lightweight and heavyweight concrete)	None	N/A	N/A	N/A
7.	Concrete chloride class or maximum chloride content of aggregate		N/A	N/A	N/A
8.	Required admixtures - quantity and source of material		N/A	N/A	N/A
9.	Additional requirements for source of materials	None	N/A	N/A	N/A
10.	Requirements for proportion of fine aggregate		N/A	N/A	N/A
11.	Special requirements for temperature of fresh concrete	None	N/A	N/A	N/A
12.	Additional technical requirements	None	N/A	N/A	N/A
13.	Use of RCA permitted? Maximum mass fraction of total coarse aggregate Enter a higher mass fraction of total coarse aggregate, where permitted (Ref. BS 8500-1: 2006, Cl. 4.2.3c)	Yes	N/A	N/A	N/A
		20%	N/A	N/A	N/A
Notes:					
1.	All sections of the Specification must be completed before it is passed to the Producer. The person sending the final specification to the Producer must send copies of the document to all other parties (CA, Employers Representative, Employer) as appropriate who have contributed to the specification.				
2.	Where 'None' is entered in the table this is a default value to ensure that the Specification is complete. All those involved in completing the Specification need to check if 'None' is appropriate.				
3.	Guidance on specification of Prescribed concrete can be found in BS 8500-1: 2006, Section 4.4				

P1.8.4 STANDARDISED PRESCRIBED CONCRETE

To be in accordance with BS 8500-2 and BS EN 206-1.

Table 1.9 Prescribed Concrete Information

	Requirements	Defaults	Project	Project	Project
1.	Concrete reference		N/A	N/A	N/A
2.	Designation		N/A	N/A	N/A
3.	State if concrete is reinforced	Unreinforced	N/A	N/A	N/A
4.	Maximum aggregate size (mm) Enter 10, 14, 20 or 40	20	N/A	N/A	N/A
5.	Consistence Class S1, S2, S3, S4		N/A	N/A	N/A
6.	Restrictions on cement types	None	N/A	N/A	N/A
7.	Restrictions on aggregate types	None	N/A	N/A	N/A
8.	Any other special requirements	None	N/A	N/A	N/A
Notes: 1. All sections of the Specification must be completed before it is passed to the Producer. The person sending the final Specification to the Producer must send copies of the document to all other parties (CA, Employers Representative, Employer as appropriate) who have contributed to the Specification. 2. Where 'None' is entered in the table this is a default to ensure that the Specification is complete. All those involved in completing the Specification need to check if 'None' is appropriate. 3. Guidance on specification of standardised prescribed concrete can be found in BS 8500-1: 2006, Section 4.5. 4. Standardised prescribed concrete produced using sulphate-resisting Portland cement is not intended to produce sulphate-resisting concrete.					

P1.8.5 PROPRIETARY CONCRETE

To be in accordance with BS 8500-2 and BS EN 206-1.

Table 1.10 Proprietary Concrete Information

	Requirements	Defaults	Project	Project	Project
1.	Concrete reference		N/A	N/A	N/A
2.	Strength class		N/A	N/A	N/A
3.	Exposure class		N/A	N/A	N/A
4.	State if concrete is reinforced	Reinforced	N/A	N/A	N/A
5.	Requirement for finishing concrete	See P.1.9	N/A	N/A	N/A
6.	Any other special requirements, including restrictions on constituents.		N/A	N/A	N/A
7.	Use of RCA permitted? Maximum mass fraction of total coarse aggregate. Enter a higher mass fraction of total coarse aggregate, where permitted (Ref. BS 8500-1: 2006, Cl. 4.2.3c)	Yes	N/A	N/A	N/A
		20%	N/A	N/A	N/A
8.	Producer to provide confirmation, in accordance with BS 8500-1: 2006, Section 5.2j that concrete complies with the above performance requirements	Yes	N/A	N/A	N/A
9.	Identity strength testing required. (If Yes then details to be added into P1.13 in accordance with BS EN 206 Annex B)		N/A	N/A	N/A
10.	Identity consistence testing required. (If Yes then details to be added into P1.13 in accordance with BS 8500-1 Annex B)		N/A	N/A	N/A
11.	Identity other properties testing required. (If Yes then details to be added into P1.13 in accordance with BS 8500-1 Annex B)		N/A	N/A	N/A
Notes: 1. All sections of the Specification must be completed before it is passed to the Producer. The person sending the final Specification to the Producer must send copies of the document to all other parties (CA, Employers Representative, Employer as appropriate) who have contributed to the Specification. 2. Guidance on Specification of proprietary concrete can be found in BS 8500-1: 2006, Section 4.6.					

P1.9 SURFACE FINISHES

The surface finish requirements for this project shall be agreed with the Architect and Employers Representative in advance of the Works.

P1.9.1 REFERENCE PANELS

The Ordinary and Plain Formed Reference Panels for this project are at:

P1.9.2 SPECIAL FINISHES

Special Finishes (other than formed or unformed, Basic and Ordinary finishes) are required as follows:

Type	N/A
Location on site	N/A
Similar finish can be seen	N/A
Concrete mix	N/A
Sample/ special requirements	N/A

P1.10 PRECAST CONCRETE

This is information to be provided for precast concrete works.

Table 1.11 Precast Concrete Information

Details to be provided		At tender	8 weeks before construction
Production plant	Details	Y	Y
	QA certification	Y	Y
Lifting	Method	N	N
	Equipment details	N	N
	Design of lifting point/devices	N	N
	Location of lifting devices	N	N
Handling	Minimum age	N	N
	Additional reinforcement	N	N
	Storage details	N	N
	Transport storage details	N	N
Erection	Specification	Y	Y
	Work programme	Y	Y
	Temporary supports/details	Y	Y
	Details of protection	Y	Y
Connections	Details	Y	Y
	Preparation	N	N
	Grouting/packing	N	N
	Removal of temporary shims etc.	N	N
Concrete	Designation	N	N
Finishes	Samples of finishes	Y	Y
	Details of spacers	N	N
	Formwork details	N	N
Environmental certification	Enter requirements		

P1.11 PRESTRESSED CONCRETE CONSTRUCTION

Refer to LCE General Civil and Structural Specification SP-1001.

P1.11.1 QUALITY AUDIT

A quality audit carried out by CARES or equivalent is required.

Yes	No
-----	----

P1.11.2 THE STRESSING SEQUENCE REQUIRED

Location	Requirements
N/A	N/A

P1.11.3 OTHER PRESTRESSING INFORMATION REQUIRED

Transfer strength required for stressing, N/mm ²	
Load/extension graphs shall be plotted for at least four points on in-situ trial tendons– list locations	
Definition of a tendon group	
Specific requirements for anchorages	
Specific requirements for tendon coating materials	
Specific requirements for duct materials	
Method of anchorage sealing	
Full scale grouting trials to be carried out	
Documentary evidence of compliance of anchorage	
Vent labelling is required	
Actual position of tendons to be marked on slab soffit to indicate location in both plan and elevation within the slab	
Special requirements for crack widths	
Other	

P1.12 DEFLECTION ALLOWANCES**P1.12.1 TO BE USED IN CALCULATING FORMWORK PRE-CAMBER**

Location	Requirements
N/A	

P1.12.2 DESIGN PRE-CAMBER REQUIRED FOR PRECAST CONCRETE ELEMENTS

Location	Requirements
N/A	

P1.13 FURTHER INFORMATION

Further information to expand data given in C1 P1.1 to P1.12.

Clause Ref	Additional Information
P1.13.1	<i>Identity Testing shall be as per drawing notes on LCE Drawing DG-1001.</i>

P2. INFORMATION TO BE SUPPLIED BY THE CONSTRUCTOR

P2.1 GENERAL INFORMATION

P2.1.1 PROJECT CONTACTS

Project Name	
Project Ref	
Address	
Telephone	
Email	

P2.1.2 CONSTRUCTOR

Name			
Address			
Contact Name			
Telephone			
Email			
SpeCC Registration		Required/ Not Required	

P2.1.3 DISGNER

Name	
Telephone	
Email	

P2.1.4 TEMPORARY WORKS COORDINATOR

Name	
Telephone	
Email	

P2.1.5 OTHER SPECIALIST CONTRACTORS TO BE USED BY CONSTRUCTOR

Name	
Telephone	
Email	

P2.2 DESIGN

Details of any Constructor designed structure as defined in Table 1.7.

P2.3 DRAWINGS AND CALCULATIONS

Details of any proposed variation of the values in Clause P1.4 and other specification changes:

P2.4 EXECUTION MANAGEMENT

P2.4.1 CONSTRUCTION PLANNING

An information requirement schedule, based on the construction programme and this specification is to be issued to the CA within two weeks of Constructor being appointed.

P2.4.2 OTHER EXECUTION MANAGEMENT PROPOSALS BY CONSTRUCTOR

Details of any other proposals for execution management from the Contractor.

P2.5 MATERIALS

Details of any alternative materials, or material sources, proposed by Constructor.

P2.6 PROJECT REQUIREMENTS

Details of any proposals for alternative specification or workmanship from the Constructor.

P2.7 WATER-RESISTING CONSTRUCTION

When the constructor is responsible for the detailed design of water-resisting construction the following materials will be used:

Location	Detail	Waterstops	Separation membrane	Joint fillers
	Manufacturer			
	Material			
Slabs: horizontal construction joints	Type			
Slabs: horizontal movement joints	Type			
Walls: horizontal slab/wall junctions	Type			
Walls: vertical construction joints	Type			
Walls: vertical movement joints	Type			

P2.8 CONCRETE AND CONCRETING

Any proposed concrete specification variations, in addition to the Constructor's input to the tables in Table 1.2.

--

P2.9 FURTHER INFORMATION

Further information to expand data given in sections P2.1 to P2.8.

Clause reference	Additional information