

SERVICE STANDARD 3

Structures

1. REQUIRED OUTCOMES

1.1 The Service Provider shall comply with the provisions of this Service Standard 3 so as to ensure that throughout the Term (except where indicated otherwise in Table 3) in relation to the Project Network:

1.1.1 all Structures (Type 1) (excluding Gantries and Retaining Walls (Type 1) above Highway) comply with current load assessment criteria in accordance with BD21, as set out in the DMRB (unless otherwise agreed with the Authority); and

1.1.2 Safety Inspections are undertaken on Third Party Structures either carrying or over highway.

1.2 The Service Provider shall ensure that all Structures (Type 1) and Structures (Type 2) are maintained in accordance with Highway Standards.

2. PERFORMANCE REQUIREMENTS

The Service Provider shall perform the Structures Service in accordance with the Performance Requirements set out in Table 3.

TABLE 3

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.1 (a)	Bridges	The Service Provider shall ensure in each Milestone Year that the $BSCI_{AV}$ for Structures (Type 1) (excluding Masonry Arch Bridges, Subways (Type 1) and Retaining Walls (Type 1)) should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections
3.1 (b)	Bridges	The Service Provider shall ensure in each Milestone Year that the $BSCI_{AV}$ for Masonry Arch Bridges should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections
3.2 (a)	Bridges	The Service Provider shall ensure in each Milestone Year that the $BSCI_{CRIT}$ for Structures (Type 1) (excluding Masonry Arch Bridges, Subways (Type 1) and Retaining Walls (Type 1)) should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.2 (b)	Bridges	The Service Provider shall ensure in each Milestone Year that the $BSCI_{CRIT}$ for Masonry Arch Bridges should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections
3.3	Retaining Walls	The Service Provider shall ensure in each Milestone Year that the $RWSCl_{AV}$ for Retaining Walls (Type 1) should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections
3.4	Retaining Walls	The Service Provider shall ensure in each Milestone Year that the $RWSCl_{CRIT}$ for Retaining Walls (Type 1) should be greater than or equal to the applicable value as set out Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections
3.5	Other SCC Structures - Subways	The Service Provider shall ensure in each Milestone Year that the $BSCI_{AV}$ for Subways (Type 1) should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.6	Other SCC Structures - Subways	The Service Provider shall ensure in each Milestone Year that the $BSCI_{CRIT}$ for Subways (Type 1) should be greater than or equal to the applicable value as set out in Schedule 35 (Milestones).	N/A	N/A		N/A	Structure Inspections
3.7 (a)	Bridges	The Service Provider shall ensure that the $BSCI_{AV}$ for Structures (Type 1) (excluding Masonry Arch Bridges, Subways (Type 1) and Retaining Walls (Type 1)) should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections
3.7 (b)	Bridges	The Service Provider shall ensure that the $BSCI_{AV}$ for Masonry Arch Bridges should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.8 (a)	Bridges	The Service Provider shall ensure that the $BSCI_{CRIT}$ for Structures (Type 1) (excluding Masonry Arch Bridges, Subways (Type 1) and Retaining Walls (Type 1)) should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections
3.8 (b)	Bridges	The Service Provider shall ensure that the $BSCI_{CRIT}$ for Masonry Arch Bridges should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections
3.9	Retaining Walls	The Service Provider shall ensure that the $RWSCl_{AV}$ for Retaining Walls (Type 1) should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.10	Retaining Walls	The Service Provider shall ensure that the $RWSCl_{CRIT}$ for Retaining Walls (Type 1) should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections
3.11	Other SCC Structures - Subways	The Service Provider shall ensure that the $BSCI_{AV}$ for Subways (Type 1) should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections
3.12	Other SCC Structures - Subways	The Service Provider shall ensure that the $BSCI_{CRIT}$ for Subways (Type 1) should be greater than or equal to 90 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	N/A	N/A		5 Milestone Years	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.13 (a)	Bridges	The Service Provider shall ensure that the BCI_{AV} for each Structure (Type 1) (excluding Masonry Arch Bridges, Subways (Type 1) and Retaining Walls (Type 1)) should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		4 years	Structure Inspections
3.13 (b)	Bridges	The Service Provider shall ensure that the BCI_{AV} for each Masonry Arch Bridge should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		4 years	Structure Inspections
3.14 (a)	Bridges	The Service Provider shall ensure that the BCI_{CRIT} for each Structure (Type 1) (excluding Masonry Arch Bridges, Subways (Type 1) and Retaining Walls (Type 1)) should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		2 years	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.14 (b)	Bridges	The Service Provider shall ensure that the BCI_{CRIT} for each Masonry Arch Bridge should be greater than or equal to 76 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		2 years	Structure Inspections
3.15	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Footbridge (Type 2), Footbridge (Type 3), Bridge (Type 2), Bridge (Type 3), Subway (Type 2), Miscellaneous Structure (Type2) and Miscellaneous Structure (Type 3) is maintained in a Safe For Use Condition.	6 months	3 months		N/A	Structure Inspections
3.16	Retaining Walls	The Service Provider shall ensure that the $RWCI_{AV}$ for each Retaining Wall (Type 1) should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		4 years	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.17	Retaining Walls	The Service Provider shall ensure that the $RWCI_{CRIT}$ for each Retaining Wall (Type 1) should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		4 years	Structure Inspections
3.18	Other SCC Structures - Subways	The Service Provider shall ensure that the BCI_{AV} for each Subway (Type 1) should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		4 years	Structure Inspections
3.19	Other SCC Structures - Subways	The Service Provider shall ensure that the BCI_{CRIT} for each Subway (Type 1) should be greater than or equal to 80 as demonstrated by the Structure Inspections submitted pursuant to Clause 27.17 in each Contract Year.	2 years	3 months		4 years	Structure Inspections

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.20	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) (excluding Gantries and Retaining Walls (Type 1) above Highway) is capable of carrying the load effects in accordance with BD21 of the DMRB (unless otherwise agreed with the Authority).	2 years	3 months		4 years	Structure Inspections
3.21	Bridges, Retaining Walls and other Structures	Subject to the provisions of Clause 27.23, the Service Provider shall ensure that the load capability of each Structure (Type 1) (excluding Gantries and Retaining Walls (Type 1) above Highway) is assessed in accordance with the Highway Structures Code, and no more than twelve (12) years after the previous assessment, to ensure that it is capable of carrying the load effects in accordance with BD21 of the DMRB (unless otherwise agreed with the Authority).	N/A	1 month		6 years	Structure Inspections
3.22	Other SCC Structures - Gantries	The Service Provider shall ensure that each Gantry is Structurally Sound.	20 Business Days	5 Business Days		6 months	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.23	Other SCC Structures - Gantries	The Service Provider shall ensure that the supporting structure to each Gantry is True and Plumb.	20 Business Days	5 Business Days		6 months	Service Inspections
3.24	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Drainage Structure, Culvert (Type 2), Retaining Wall (Type 2) and Culvert (Type 3) is Free From Defects.	6 months	3 months		1 year	Structure Inspections
3.25	Other SCC Structures - Reinforced Earth Structures/ Anchored Earth Structures/ Ground Anchors	The Service Provider shall ensure that each Anchored Earth Structure and Ground Anchor forming part of a Structure (Type 1) and each Reinforced Earth Structure is Free From Defects.	1 year	1 year		N/A	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.26 Not used							
3.27	Other SCC Structures - Gabions	The Service Provider shall ensure that mesh on each Gabion is Free From Visible Surface Corrosion.	1 year	1 year		N/A	Service Inspect
3.28	Other SCC Structures - Gabions	The Service Provider shall ensure that each Gabion is Free From Slippage, Subsidence Or Signs Of Distress.	1 year	1 year		N/A	Service Inspect
3.29	Other SCC Structures - Earthworks, Cuttings and Embankments	The Service Provider shall ensure that each Earthwork, Cutting and Embankment is Free From Slippage, Subsidence Or Signs Of Distress.	1 year	1 year		N/A	Service Inspect
3.31 (Not used)							

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.32 Not Used							
3.33 Not Used							
3.34 Not Used							

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.36	Other SCC Structures	If the Service Provider believes (acting reasonably) that any loss of support to the Project Network is attributable in whole or in part to the condition of any adjoining Third Party's land or property, the Service Provider shall notify the Authority and the relevant Third Party, having used all reasonable endeavours to identify the Third Party, within one (1) Business Day of the time at which the Service Provider becomes aware or should have become aware of the loss of support.	N/A	1 Business Day		N/A	Inspect
3.37	Other SCC Structures	Where, pursuant to Performance Requirement 3.36, the Authority instructs the Service Provider to do so, the Service Provider shall, within two (2) Business Days of receipt of the Authority's instruction and , having used all reasonable endeavours to identify the Third Party, inform the Third Party land owner about the measures to be taken to resolve the loss of support.	N/A	1 Business Day		N/A	Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.38	Other SCC Structures	Pursuant to Performance Requirement 3.37, the Service Provider shall (subject to the provisions of Clause 16 (<i>Necessary Consents</i>)) enter the Third Party land in order to take such steps as are required (acting reasonably) to resolve the loss of support to the Project Network issue, whether by creation of an embankment, retaining wall or otherwise, within a timescale subject to Authority Approval but in any event within one (1) year of receipt of the Authority's instruction pursuant to Performance Requirement 3.37.	N/A	1 year		N/A	Inspect
3.39	Not used						
3.40	Not used						

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.41	Not used						
3.42	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Bird, Animal And Human Waste Products.	1 month	1 month		1 year	Service Inspect
3.43	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) (including any Parapets) is Free From Any Breakdown In The Paint Or Protective System.	1 year	1 year		1 year	Service Inspect
3.44	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Vegetation.	6 months	6 months		6 months	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.45	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1), Structure (Type 2) and Culvert (Type 3) is free from Debris.	1 month	1 month		N/A	Service Inspect
3.46	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that the drainage elements of each Structure (Type 1) and Structure (Type 2) including drains, weep holes, pipes, manholes, chambers, pumps and drainage holes are Free From Any Lack Of Function.	1 year	1 year		N/A	Service Inspect
3.47	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Defects In Pedestrian Protection Measures.	3 months	3 months		1 year	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.48	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Spalling.	1 year	1 year		5 years	Service Inspect
3.49	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Corrosion.	1 year	1 year		5 years	Service Inspect
3.50	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Deformation Of Structural Members, Welds Or Fixings.	1 year	1 year		5 years	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.51	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Leaks.	1 year	1 year		5 years	Service Inspect
3.52	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Any Breakdown Of The Deck Waterproofing.	1 year	1 year		5 years	Service Inspect
3.53	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each joint and bearing on any Structure (Type 1) and Structure (Type 2) is intact, of sound condition, does not rock under loading and is free from corrosion that is Detrimental to the structural integrity and/or functionality of the joint or bearing.	1 year	1 year		5 years	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.55	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Damage Caused By Ground Settlement.	1 year	1 year		5 years	Service Inspect
3.56	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Scour Damage.	1 year	1 year		5 years	Service Inspect
3.57	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is Free From Mortar Erosion And/Or Loose Or Missing Mortar.	1 year	1 year		5 years	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.58	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Movement Joint on any Structure (Type 1) and Structure (Type 2) is Free From Defects In Sealants, and is also free from: defects in associated drainage systems; missing or defective nuts and bolts; defects in gaskets; and/or dirt.	1 year	1 year		5 years	Service Inspect
3.59	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Parapet on any Structure (Type 1) and Structure (Type 2) is Free From Damage and is also free from: missing or defective nuts and bolts; and/or defects in hollow section drain holes.	3 months	3 months		1 year	Service Inspect
3.60	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Parapet, Pier and Soffit on any Structure is maintained in a Safe For Use And Fit For Purpose condition.	1 month	1 month		3 years	Service Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.61	Bridges, Retaining Walls and other Structures	The Service Provider shall ensure that each Structure (Type 1) and Structure (Type 2) is maintained in accordance with the relevant Highway Standards.	1 year	1 year		N/A	Service Inspect
3.62	Bridges, Retaining Walls and other Structures – Structure File	The Service Provider shall ensure that the Structure File for each Structure and Third Party Structure is kept up to date where a Structure File for that structure has been provided to the Service Provider by the Authority during the Mobilisation Period.	1 Business Day	1 Business Day		N/A	Inspect
3.63	Bridges, Retaining Walls and other Structures – Structure File	For any Structure and Third Party Structure for which the Authority has not provided a Structure File during the Mobilisation Period, the Service Provider shall ensure that a Structure File is created.	10 Business Days	10 Business Days		1 year	Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.64	Bridges, Retaining Walls and other Structures – Structure File	Pursuant to Performance Requirement 3.63 the Service Provider shall ensure that such Structure File shall thereafter be kept up to date.	1 Business Day	1 Business Day		N/A	Inspect
3.65	Bridges, Retaining Walls and other Structures – Health and Safety	The Service Provider shall ensure that the Structure Health & Safety File (including any Maintenance Manuals) for each Structure and Third Party Structure is kept up to date where a Structure Health & Safety File for that structure has been provided to the Service Provider by the Authority during the Mobilisation Period.	1 Business Day	1 Business Day		N/A	Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.66	Bridges, Retaining Walls and other Structures – Health and Safely	For any Structure or Third Party Structure for which the Authority has not provided a Structure Health & Safety File during the Mobilisation Period, the Service Provider shall ensure that a Structure Health & Safety File (including any Maintenance Manuals) is created when the Service Provider carries out any works to the structure or carries out a General Inspection or Principal Inspection of the structure.	1 Business Day	1 Business Day		N/A	Inspect
3.67	Bridges, Retaining Walls and other Structures – Health and Safely	Pursuant to Performance Requirement 3.66 the Service Provider shall ensure that such Structure Health & Safety File shall thereafter be kept up to date.	1 Business Day	1 Business Day		N/A	Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.68	Bridges, Retaining Walls and other Structures - Structure File	The Service Provider shall ensure that the Structure File and Structure Health and Safety File in respect of any Structure and Third Party Structure are capable of being accessed by the Authority at all times, (on the basis of twenty-four (24) hours a day and three hundred and sixty five (365) (or in the case of a leap year, three hundred and sixty six (366) days a year)).	1 hour	1 hour		N/A	Inspect
3.69	Third Party Structures	The Service Provider shall ensure that the assessment load capability of each Third Party Structure, (assessed in accordance with BD21) shall not be reduced by the provision or non-provision by the Service Provider of the Services.	N/A	1 month		N/A	Inspect
3.70	Third Party Structures	The Service Provider shall ensure that a General Inspection is undertaken of each Third Party Structure either carrying or over Highway every two (2) years within the first two (2) years from the Service Commencement Date and thereafter no less than once every 2 years in accordance with Clause 27.18.	N/A	10 Business Days		N/A	Inspect

	Service Delivery Output Element	Performance Requirement	Rectification Period	Repeat Period	Adjustment Type	Grace Period	Monitoring Methodology
3.71	Health and Safety	The Service Provider shall ensure that the Structures Service is delivered in accordance with Clause 37 and 38 and the Service Provider Health and Safety Manual.	N/A	1 day		N/A	Inspect
3.72	Third Party Structures	The Service Provider shall ensure that a Structural Review and a Structural Assessment (if the Structural Review indicates that a Structural Assessment is required) is undertaken of each Third Party Structure carrying the Project Network in accordance with the Highway Structures Code, and no more than twelve (12) years after the previous Structural Review, to ensure that it is capable of carrying the load effects in accordance with BD21 of the DMRB (unless otherwise agreed with the Authority) in accordance with Clause 27.23.	N/A	1 month		6 years	Structure Inspections