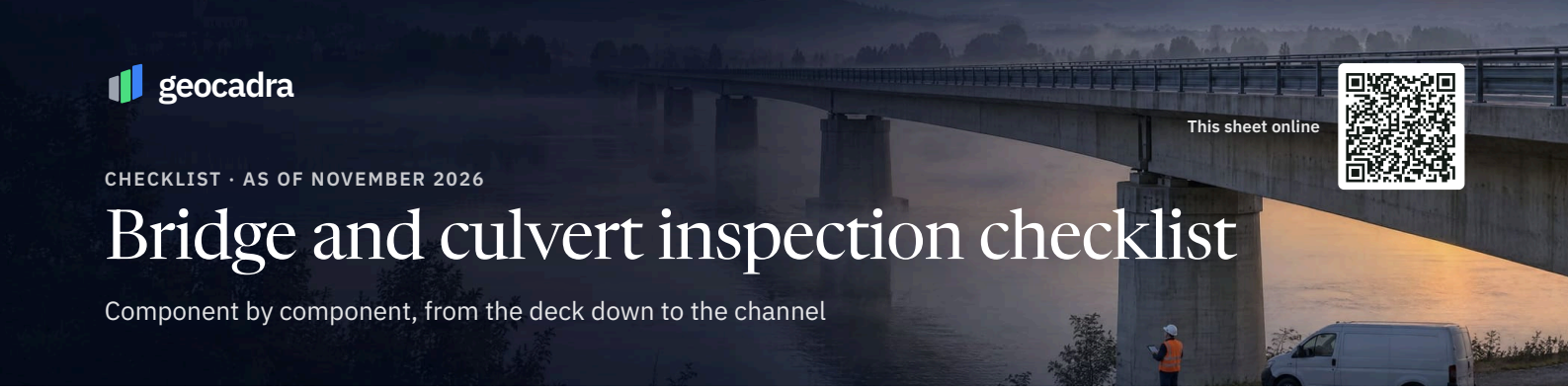

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CHECKLIST · AS OF NOVEMBER 2026

Bridge and culvert inspection checklist

Component by component, from the deck down to the channel

One sheet per structure and inspection. Walk it in the order of the list: on top, underneath, then at the water. Enter each defect in the table that follows. Where you could not see a point, leave its boxes empty and enter it under ‘Parts not inspected’. Work from a safe place: traffic, water and the inside of a culvert each need their own precautions.

Structure	Structure number	Road and crossing	Date
Inspector	**Inspection type**	**Weather and water level**	**Next inspection due**

1 Deck and approaches

Start on top, where the public is.

NO.	COMPONENT AND WHAT TO LOOK FOR	OK	Defect	N/A	REMARK OR DEFECT NO.
1.1	**Wearing surface** Cracking, potholes, rutting, ponding water. On timber decks, loose or decayed boards.	☐	☐	☐	
1.2	**Expansion joints** Debris packed into the gap, torn or missing seals, a step between the two sides, water leaking on to what is below.	☐	☐	☐	
1.3	**Drainage** Blocked gullies and scuppers, outlets that discharge on to bearings or abutments, staining that shows where the water runs.	☐	☐	☐	
1.4	**Parapets and railings** Impact damage, loose posts, corroded fixings, missing infill or sections.	☐	☐	☐	
1.5	**Footbridge decks, steps and handrails** Slippery or loose boards, worn anti-slip strips, damaged steps and ramps, loose or incomplete handrails.	☐	☐	☐	
1.6	**Approaches** Settlement at the ends of the deck, erosion of the embankment, damaged approach barriers.	☐	☐	☐	
1.7	**Signs** Weight limit and headroom signs present, readable and still correct.	☐	☐	☐	

2 Superstructure

From below, with a torch.

NO.	COMPONENT AND WHAT TO LOOK FOR	OK	Defect	N/A	REMARK OR DEFECT NO.
2.1	**Beams, girders or slab** Concrete: cracks, spalling, exposed or rusting reinforcement. Steel: corrosion with loss of section, cracked welds, loose or missing bolts. Timber: decay, splits, crushing at the supports.	☐	☐	☐	
2.2	**Arch barrel and spandrels** On masonry: open joints and lost mortar, displaced or dropped stones, bulging spandrel walls, rings separating.	☐	☐	☐	
2.3	**Bearings** Seized, displaced or corroded; rubber bearings bulging or split; debris and standing water on the bearing shelf.	☐	☐	☐	
2.4	**Movement and impact** Vehicle strikes on the soffit, sagging, a gap that was not there before.	☐	☐	☐	

3 Substructure

NO.	COMPONENT AND WHAT TO LOOK FOR	OK	Defect	N/A	REMARK OR DEFECT NO.
3.1	**Abutments and piers** Cracks, spalling, tilting or rotation, impact damage at road or water level.	☐	☐	☐	
3.2	**Wing walls and headwalls** Leaning, bulging, separation from the abutment, backfill washed out behind them.	☐	☐	☐	
3.3	**Foundations, where you can see them** Exposed footings, settlement, a gap opening between the structure and the ground.	☐	☐	☐	
3.4	**Vegetation** Roots in joints and trees growing against the structure. Note it before it becomes a defect.	☐	☐	☐	

4 Channel and scour

Scour happens out of sight, and fastest in a flood.

NO.	COMPONENT AND WHAT TO LOOK FOR	OK	Defect	N/A	REMARK OR DEFECT NO.
4.1	**Scour at foundations** Exposed footings or piles, undermining, holes at the upstream end of piers and along abutments. Probe where you cannot see.	☐	☐	☐	
4.2	**Channel** A main channel that has shifted, eroding banks, new bars of gravel or silt.	☐	☐	☐	
4.3	**Debris and blockage** Trees and rubbish against piers or in a culvert barrel, and how much of the opening they block.	☐	☐	☐	
4.4	**Scour protection** Riprap, aprons and invert paving displaced or broken up.	☐	☐	☐	
4.5	**After high water** Walk the structure again once a flood has passed. Scour holes fill back in as the water drops, so probe rather than look.	☐	☐	☐	

5 Culvert inspection checklist

A short span can fall below the threshold of every inspection system.

NO.	COMPONENT AND WHAT TO LOOK FOR	OK	Defect	N/A	REMARK OR DEFECT NO.
5.1	**Barrel** Cracks and open joints, deformation of corrugated steel, corrosion or abrasion along the invert.	☐	☐	☐	
5.2	**Inlet and outlet** Headwalls, aprons, undermining at the outlet, a drop that has formed downstream.	☐	☐	☐	
5.3	**The road above** Sinkholes or settlement in the carriageway: soil is being lost into the barrel.	☐	☐	☐	

Defects

One line per defect, rated on the scale of the system you work under. The last column is the question every later reader asks first.

No.	Element	Defect and where	Measurement	Rating	Priority	New, unchanged, larger or repaired

No.	Element	Defect and where	Measurement	Rating	Priority	New, unchanged, larger or repaired

Parts not inspected

Part	Why

Result

- [ ] No defects
- [ ] Defects, no restriction needed
- [ ] Restriction or closure recommended: reported to the owner

Date

Inspector

Signature

Bridge inspection intervals and rating scales, by country

SYSTEM	REGULAR INSPECTION	DEEPER INSPECTION	HOW FINDINGS ARE RATED
United States, NBIS (spans over 20 ft)	Routine inspection at least every 24 months; every 12 where a component or scour rating is 3 or less; up to 48 where the criteria are met	Underwater inspection at least every 60 months; in-depth, damage and special inspections as needed	Component condition ratings from 0 to 9 for deck, superstructure, substructure, culvert and more
United Kingdom, CS 450	General Inspection every 24 months	Principal Inspection every 72 months, unless a longer interval has been agreed	Severity and extent recorded for each element defect
Germany, DIN 1076 with RI-EBW-PRÜF	A visual inspection once a year, except in years with a main or simple inspection; observation during road patrols and, as a rule, twice a year	Main inspection every 6 years, a simple inspection 3 years after it	Each defect rated 0 to 4 for stability, traffic safety and durability; a condition grade from 1.0 to 4.0
Below the thresholds	The owner decides	As the condition requires	The owner's own scale, or one of the three above

NBIS intervals are those of 23 CFR 650.311 (rule effective June 2022). CS 450 is version 0.1.0 of April 2021, written for motorways and trunk roads; it covers spans greater than 0.9 m. The DIN 1076 figures here, the 2.00 m clear span and the intervals, are those of the edition of November 1999. A new edition was published in January 2026: check its text, and which edition your contract names. A short culvert or a private footbridge may fall under none of these, which does not mean it needs no inspection.

Standards and editions this sheet draws on

23 CFR 650, Subpart C	United States. The National Bridge Inspection Standards as revised in 2022, in force since 6 June 2022: a bridge is a span of more than 20 ft, and a routine inspection is due at intervals of up to 24 months.
FHWA, Specifications for the National Bridge Inventory, March 2022	United States. The component condition ratings from 0 to 9.
CS 450, version 0.1.0, April 2021	United Kingdom, motorways and trunk roads. General Inspections at 24 months, Principal Inspections at 72; location, severity, extent and type recorded for each defect.
DIN 1076:1999-11	Germany. The 2.00 m threshold and the intervals in the table. Replaced by DIN 1076:2026-01, which this sheet has not been checked against.
RI-EBW-PRÜF, edition 2017	Germany. The federal guideline for recording and rating the results of inspections under DIN 1076: each defect 0 to 4 for stability, traffic safety and durability, and a condition grade from 1.0 to 4.0.

No single standard publishes this list. It follows the components that inspections under the US National Bridge Inspection Standards, the UK's CS 450 and Germany's DIN 1076 all cover. A checklist does not replace the inspections by qualified engineers that those systems require.

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The same checklist runs as a form on the map in Geocadra, with every defect and photo kept on its structure:

www.geocadra.com/en/templates/bridge-inspection-checklist