

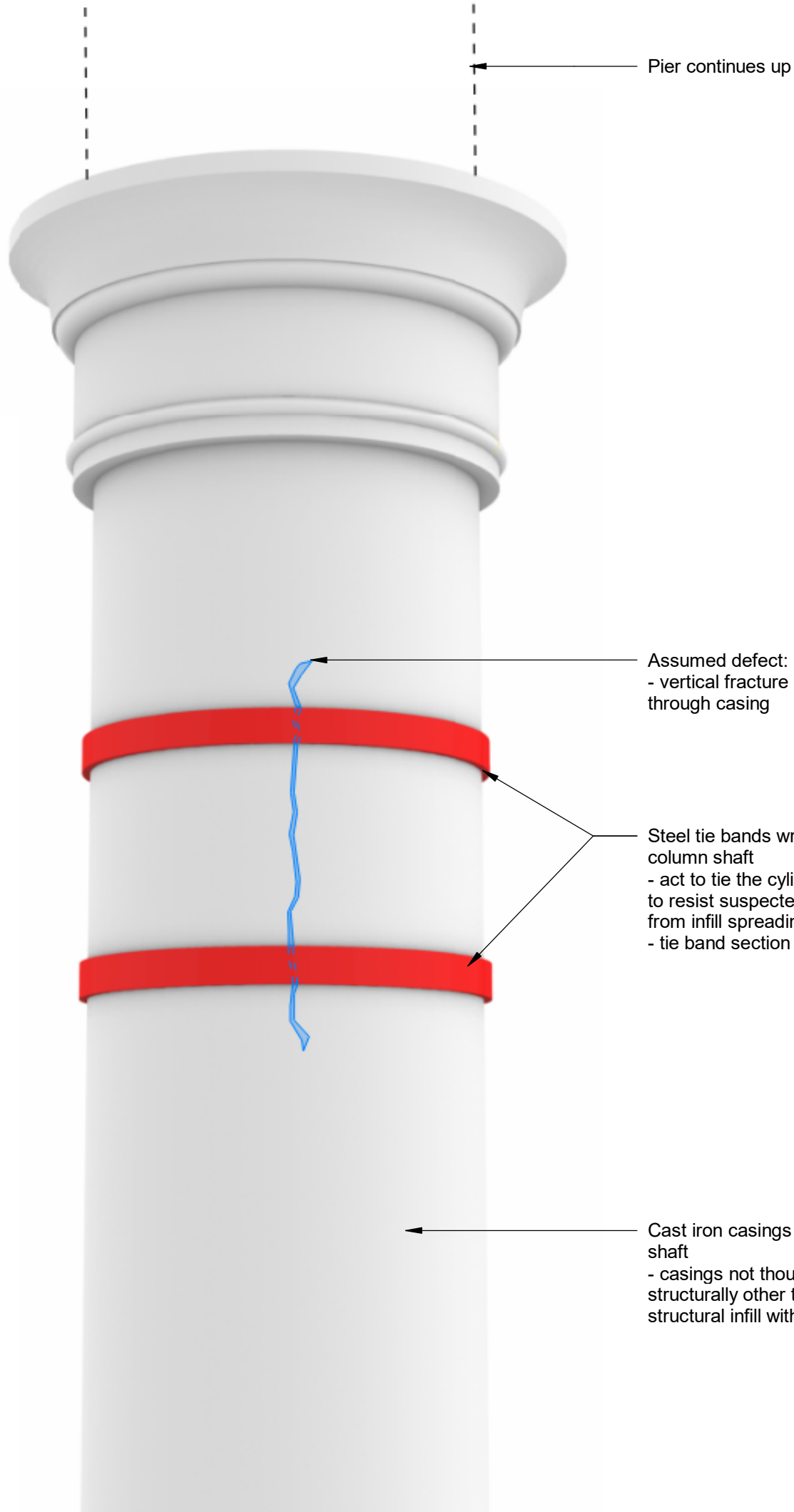


Decorative castellations
at column interface with
lattice girders

Cross pier beam

Flarings at column head

Cast iron casings to
main column shaft



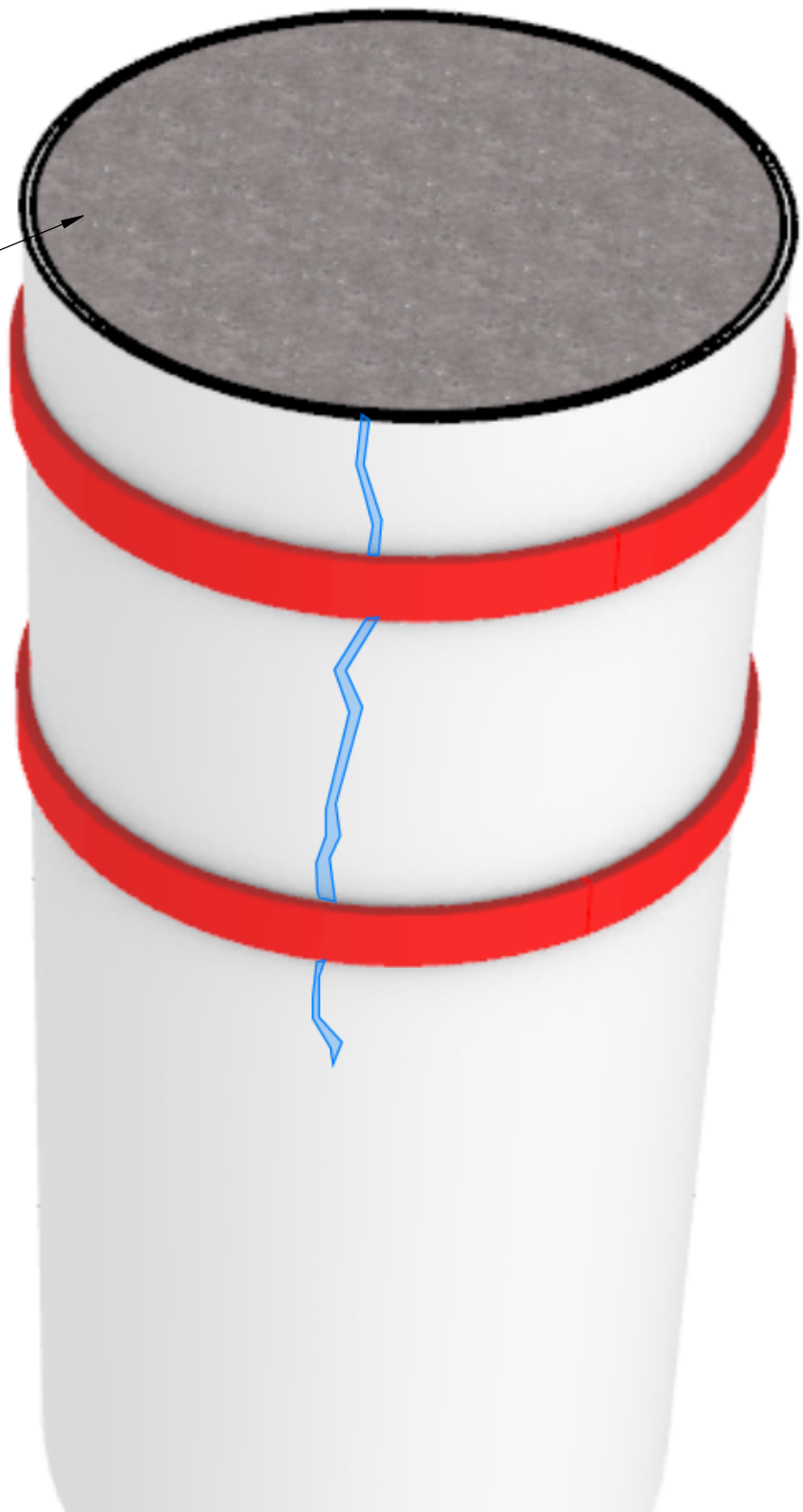
Pier continues up

Assumed defect:
- vertical fracture
through casing

Steel tie bands wrapping around
column shaft
- act to tie the cylinder across crack,
to resist suspected outwards force
from infill spreading
- tie band section TBC

Cast iron casings to main column
shaft
- casings not thought to be acting
structurally other than to contain
structural infill within

Brick and cement infill
- according to archive
original drawings



Horizontal and vertical
joints between casing
segments

Vertical fractures in casing segments



Vertical fracture to column head
flaring

Vertical corrosion
- no fracture



DEFECT EXAMPLES

NTS

REMEDIAL DETAIL

NTS

Notes:

1. These drawings shall be read in conjunction with all relevant Engineer's and Architect's drawings and with all relevant specifications
2. Existing condition drawn with dimensions from original archive drawings. All existing dimensions to be verified by the Contractor prior to fabrication or construction.
3. Drawing to be read in colour.
4. Do not scale from this drawing
5. For structural nomenclature refer to drawing CVI-ARUP-ZZ-ZZ-DR-S-1055. For structural notation of spans/beams/piers refer to drawing CVI-ARUP-ZZ-ZZ-DR-S-1056

H&S / CDM Risks:

- Specific risks highlighted thus:
- existing paintwork contains lead
 - limited structural capacity of viaduct deck plates
 - existing ballast contaminated with lead and hydrocarbons
 - working at height above water and public areas
- Refer to Arup risk register for further details.

Legend:

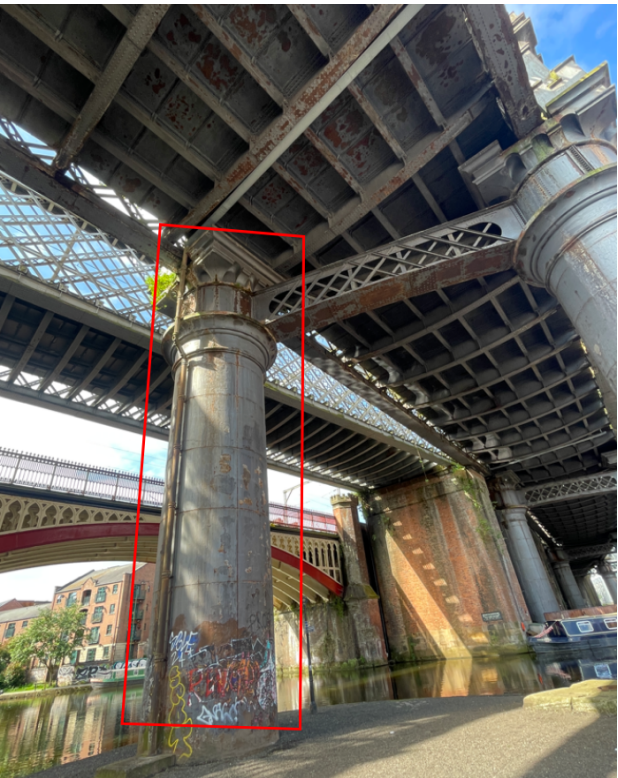
- Existing structure
- unchanged unless noted otherwise
- Proposed remedial
- Indicative extent of defect
- typical loss of section or thickness due to corrosion
- Indicative packing plates
- where required

NOTE:

The remedial details shown consider the most likely corrective intervention based on the expected type/extent of defect. Extent of defect to be confirmed pending future brush down, removal of debris, and subsequent tactile surveys. Further defect types and consequent remedials may also be identified.

KEY PLAN:
LOCATION / NUMBER OF REMEDIALS REQUIRED:

- TBC
- Refer to general notes drawing CVI-ARUP-ZZ-XX-DR-S-0001 for background context for proposed remedials



T1	14/08/24	RR	GH	Preliminary Issue
Rev	Date	Chkd	Appd	Issue Notes

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Client
The National Trust

Project Title
Castlefield Viaduct
Phase 2

Drawing Title
Remedials
Piers

Scale at A1	1 : 100	Drawn By	Author
Role	Structural	Status	S2 - For Information
Arup Job No	282210	Rev	T1
ID	CVI-ARUP-ZZ-ZZ-DR-S-4021		