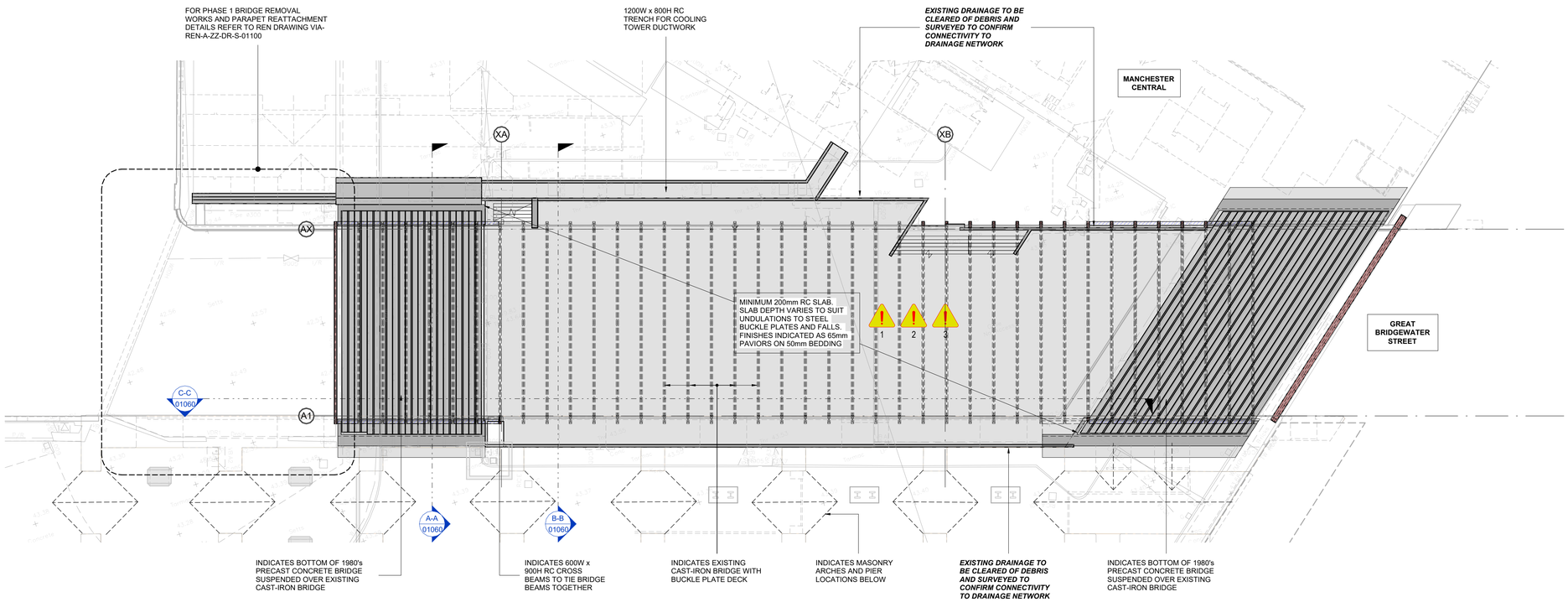
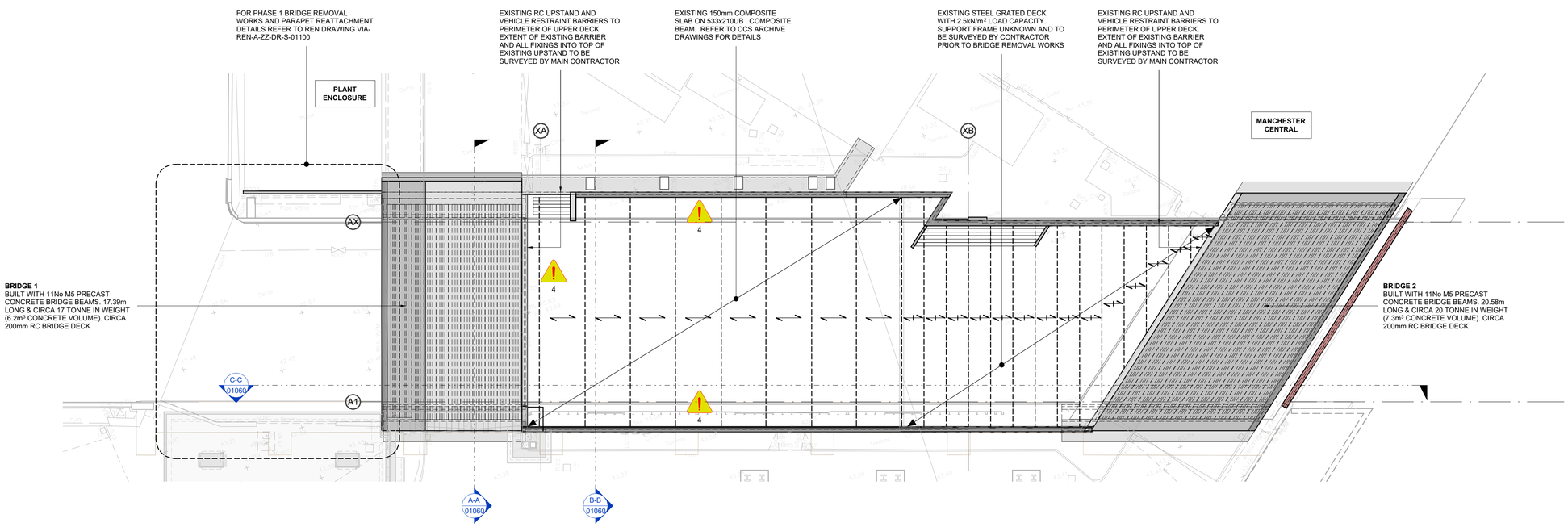


EXISTING BRIDGE LOWER LEVEL PLAN



EXISTING BRIDGE UPPER LEVEL PLAN

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.
2. THE DRAWINGS SHOWING THE EXISTING STRUCTURE ARE BASED UPON THE 1980'S DRAWINGS CONTAINED WITHIN MANCHESTER CENTRALS ARCHIVES AND ORIGINAL 1870'S DRAWINGS FOR THE CAST-IRON BRIDGE OVER GREAT BRIDGEWATER STREET. THE ARCHIVE DRAWINGS ARE INCOMPLETE OR OF POOR SCAN QUALITY. THE INFORMATION SHOWN ON THESE DRAWINGS SHOULD THEREFORE BE CONSIDERED AS INDICATIVE AND PROVIDED TO GIVE AN UNDERSTANDING OF THE LIKELY CONSTRUCTION AND DETAILS THAT MAY BE ENCOUNTERED. WHERE EXISTING DETAILS ARE CRITICAL TO THE DEMOLITION WORKS OR DETAILING OF NEW INTERFACES THESE SHOULD BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF DEMOLITION AND CONSTRUCTION WORKS SO THAT ANY ANOMALIES BETWEEN THE ARCHIVE DRAWINGS AND AS-BUILT STRUCTURE OR SUBSEQUENT ALTERATIONS OR ADDITIONS CAN BE ADDRESSED.

DEMOLITION WORKS
THE DEMOLITION CONTRACTOR SHOULD READ THESE DRAWINGS IN CONJUNCTION WITH THE FOLLOWING ARCHIVE INFORMATION:
A. CAST IRON RIB & BUCKLE PLATE DRAWINGS (CIRCA 1875)
B. RC OVERSLAB DETAILS & RC DETAIL DRAWINGS (CIRCA 1984)
C. CONSTRUCTION PHOTOGRAPHS (CIRCA 1985-1986)
D. INFILL FLOOR (CCS 2013)
E. DRAWINGS TOPGRAPHICAL (SURVEY SYSTEMS 2016)

THE INFORMATION PROVIDED ABOVE AND ON THESE DRAWINGS IS INCOMPLETE, BASED ON LIMITED RECORD INFORMATION AND COMES WITH NO RELIANCE. THE DEMOLITION CONTRACTOR IS THEREFORE TO UNDERTAKE THEIR OWN DETAILED SURVEYS TO CONFIRM THE EXISTING CONSTRUCTION, EXISTING DETAILS AND TEMPORARY LOADING CONSTRAINTS TO ALLOW THEM TO DEVELOP THEIR DEMOLITION STRATEGY, DETAILED RISK ASSESSMENTS AND METHOD STATEMENTS.

SURVEYS REQUIRED
THE INFORMATION ON THIS DRAWINGS IS BASED UPON ARCHIVE INFORMATION AND LIMITED SURVEY INFORMATION. TO ALLOW FOR STAGE 3 AND 4 TO BE DEVELOPED AND ALTERATIONS TO EXISTING ELEMENTS TO BE DEFINED THE FOLLOWING SURVEYS ARE REQUIRED:
- **OPEN MESH FLOOR & SUPPORT FRAME** : DETAILED SURVEY REQUIRED CONFIRMING ALL SECTION SIZES, CONNECTION DETAILS, DETAILED SETTING OUT AND INTERFACE DETAILS.
- **EXISTING RC UPSTAND AND BARRIER PLINTHS** : FOLLOWING REMOVAL OF THE MARQUEE ALL EXISTING LEVELS AND EXTENT OF RC UPSTANDS AND SAFETY BARRIERS SHOULD BE COMPLETED.
- **EXISTING LOWER DECK DRAINAGE** : THE EXISTING LOWER DECK DRAINAGE CHANNEL AND OUTLETS ARE TO BE CLEANED AND SURVEYED, INCLUDING CONNECTION INTO BELOW GROUND DRAINAGE SYSTEM.
- ***MANCHESTER CENTRAL SERVICES*** : THE EXISTING SERVICES AND BELOW GROUND DRAINAGE SYSTEM ALONG THE MANCHESTER CENTRAL SIDE IS TO BE SURVEYED TO UNDERSTAND INTERFACE WITH NEW WORKS AND POTENTIAL NEED FOR EXISTING SERVICES DIVERSIONS OR ALTERATIONS

A SUITABLE PERIOD SHOULD BE ALLOWED BETWEEN RECEIPT OF THE SURVEY INFORMATION AND BRIDGE DEMOLITION TO ALLOW FOR FINAL CO-ORDINATION BETWEEN THE DESIGN TEAM AND COMPLETION OF THE DESIGN. THE MARQUEE WILL REQUIRE EARLY REMOVAL TO ALLOW FOR COMPLETION OF THE SURVEYS.

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1. THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m².
2. THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.
3. THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.
4. THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER, THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.
5. THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.

KEY

INDICATES EXISTING PRECAST CONCRETE INFILL PANELS

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B, MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL EXISTING PLANS

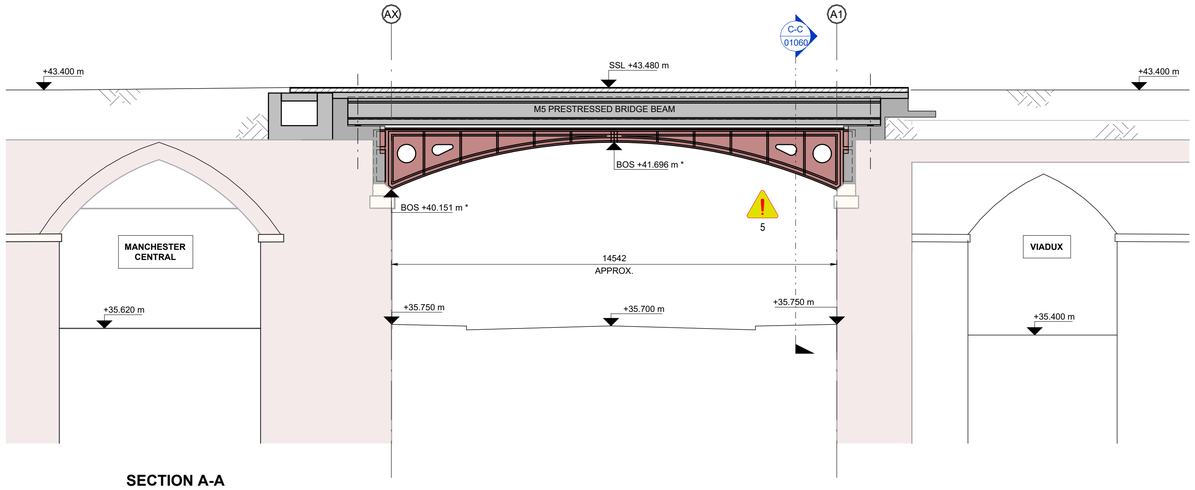
DRAFT

Status:
STAGE 4

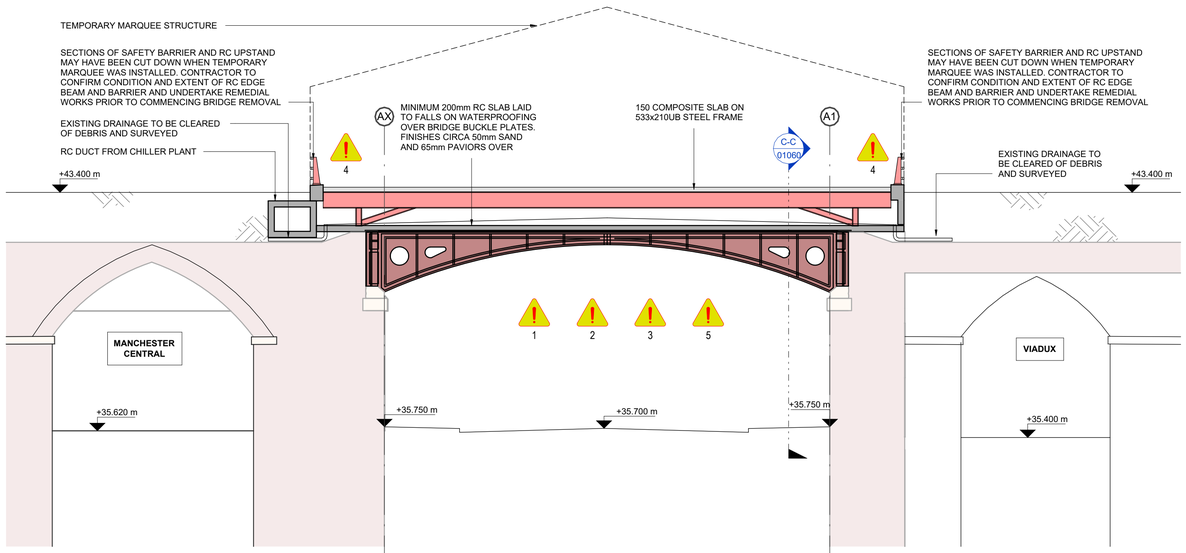
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: 1 : 200 | Project No: 2209-01

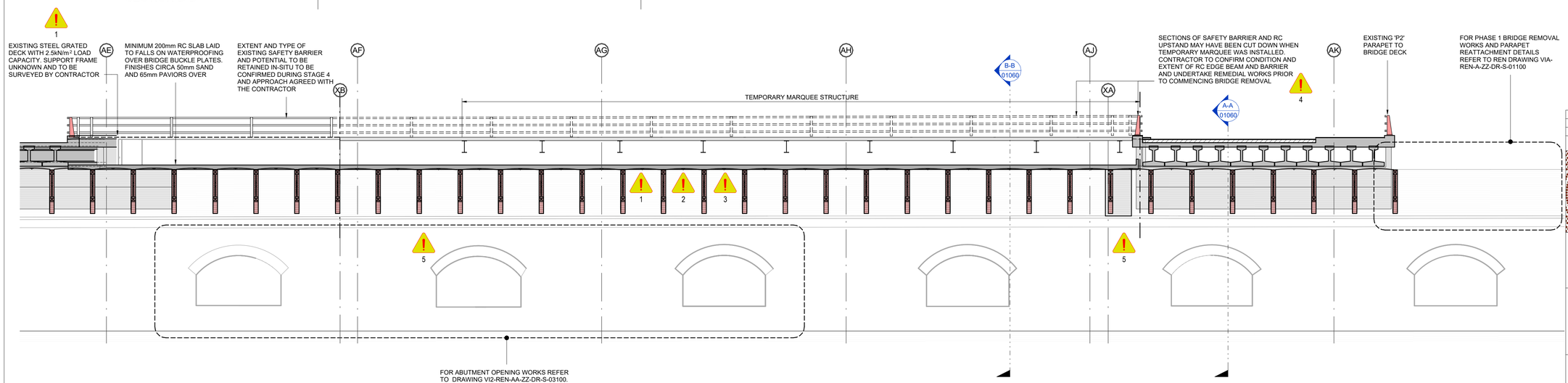
Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01050 -	P03



SECTION A-A



SECTION B-B



SECTION C-C



PHOTOGRAPH SHOWING BRIDGE 1 PRECAST CONCRETE INSTALLATION AND WATERPROOFING OF BUCKLE PLATES OVER CAST-IRON ARCHES
CIRCA 1985



PHOTOGRAPH SHOWING COMPLETED BRIDGE 1, CONCRETE SLAB TO CAST-IRON ARCHES AND RC VENT DUCTS
CIRCA 1985

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.
2. FOR ADDITIONAL NOTES REFER TO DRAWING VI2-REN-AA-ZZ-DR-S-01050.

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1. THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m².
2. THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.
3. THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.
4. THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER. THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.
5. THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B, MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL EXISTING SECTIONS

Status:
STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: 1 : 100 | Project No: 2209-01

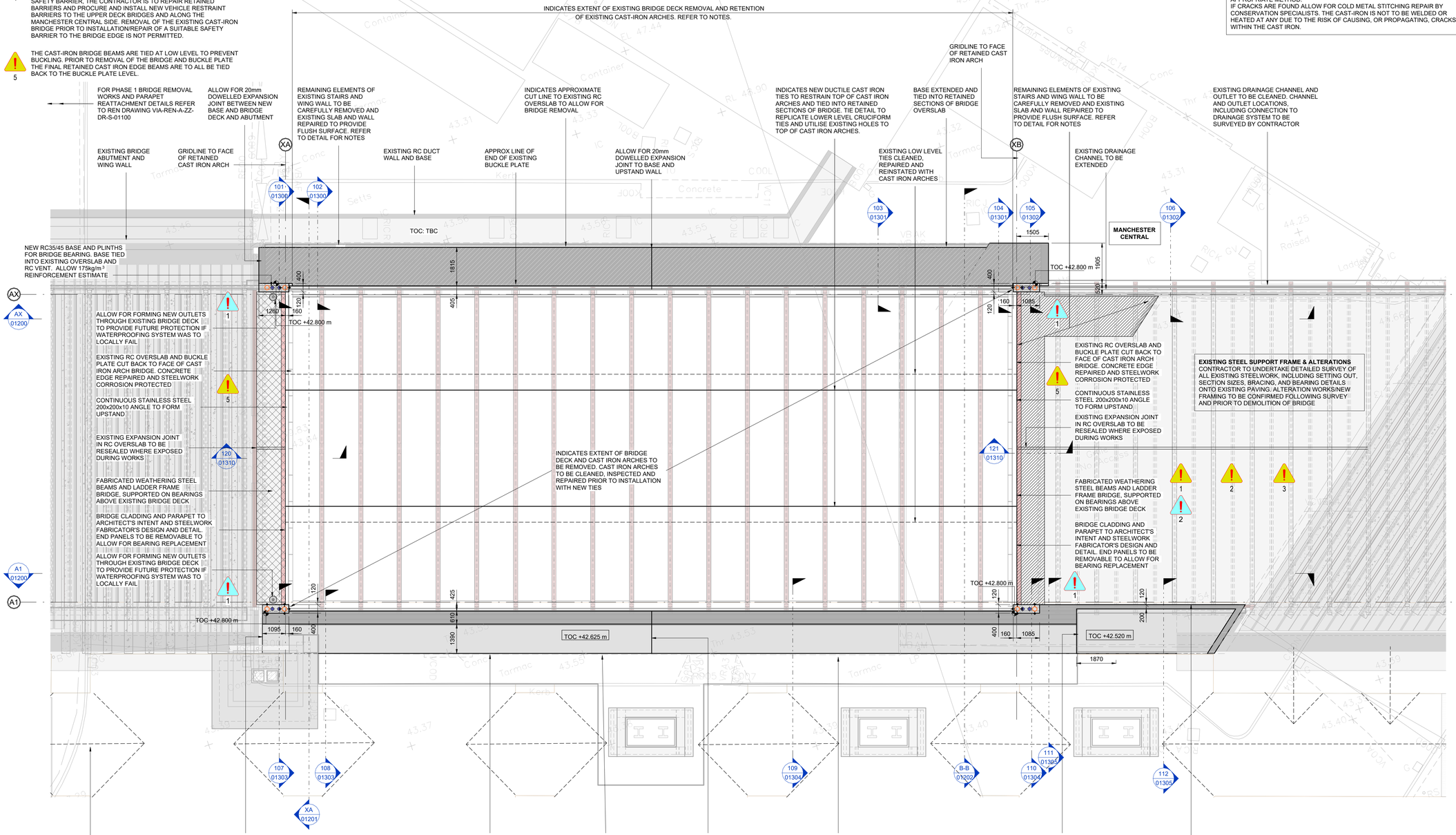
Project Code: Originator: Volume: Level: Type: Role: Category / Number: Rev:
V2B - REN - AA - ZZ - DR - S - 01060 - P03

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1. THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m².
2. THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.
3. THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.
4. THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER, THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.
5. THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.

OPERATION & MAINTENANCE
IN ADDITION TO THE NORMAL OPERATION AND MAINTENANCE OF THE BUILDING AND STRUCTURE, NOTE THE FOLLOWING:

1. ALL BRIDGE BEARINGS ARE TO BE PERIODICALLY INSPECTED AND MAINTAINED. REFER TO NOTE ON DRAWING FOR REQUIREMENTS
2. GRATED INFILL AREA OVER EXISTING CAST-IRON BRIDGE, AND NEW BRIDGE EXTENSION, AREAS TO BE LIMITED TO A MAXIMUM 2.5kN/m² IMPOSED LOAD. MANCHESTER CENTRAL TO CONTINUE TO OPERATE AREAS WITH RESTRICTED LOADS AND ENSURE VEHICLE ACCESS AND LOADINGS ARE RESTRICTED



EXISTING STEEL SUPPORT FRAME & ALTERATIONS
CONTRACTOR TO UNDERTAKE DETAILED SURVEY OF ALL EXISTING STEELWORK, INCLUDING SETTING OUT, SECTION SIZES, BRACING, AND BEARING DETAILS ONTO EXISTING PAVING. ALTERATION WORKSNEW FRAMING TO BE CONFIRMED FOLLOWING SURVEY AND PRIOR TO DEMOLITION OF BRIDGE

BRIDGE DECK REMOVAL
THE EXISTING PAVING, CONCRETE DECK, AND BRIDGE DECK BUCKLE PLATE ARE TO BE CAREFULLY REMOVED TO THE EXTENT INDICATED. THE EXISTING FIXINGS INTO THE TOP OF THE EXISTING CAST-IRON ARCHES ARE TO BE CAREFULLY REMOVED USING NON-PERCUSSIVE TECHNIQUES TO PREVENT RISK OF DAMAGE TO THE CAST-IRON ARCHES WHICH ARE TO BE RETAINED. BRIDGE DECK REMOVAL TO BE SEQUENCED BY THE CONTRACTOR. WITH TEMPORARY WORKS AS REQUIRED TO ENSURE STABILITY OF THE ARCHES AND OVERALL STRUCTURE ARE MAINTAINED AT ALL TIMES.

CAST IRON BRIDGE BEAM REMOVAL, REPAIR AND REINSTATEMENT
THE EXISTING CAST IRON BEAMS ARE TO BE CAREFULLY REMOVED, FULLY CLEANED, INSPECTED, REPAIRED, CORROSION PROTECTION APPLIED, AND THEN REINSTATED ONTO EXISTING BEARING STONES. NEW SUPPORT RESTRAINTS AND TIES TO BE INSTALLED TO MAINTAIN STABILITY OF THE ARCHES.
THE CONTRACTOR IS TO CLEARLY LABEL ALL BEAMS AND REINSTALL IN THE SAME PLACE. ALL INVESTIGATIONS AND REPAIRS ARE TO BE FULLY DOCUMENTED AND AGREED WITH THE CONSERVATION ARCHITECT, ENGINEER AND CONSERVATION OFFICE PRIOR TO BEING UNDERTAKEN.
INSPECTION TO INCLUDE NON-DESTRUCTIVE TECHNIQUES INCLUDING DYE PENETRATION AND/OR MAGNETIC PARTICLE TESTING. WHERE DEEP CRACKS ARE SUSPECTED ULTRASONIC AND/OR RADIOGRAPHY TESTING SHOULD BE UNDERTAKEN WITH INPUT FROM THE SURVEY SPECIALISTS ON THE MOST APPROPRIATE METHOD.
IF CRACKS ARE FOUND ALLOW FOR COLD METAL STITCHING REPAIR BY CONSERVATION SPECIALISTS. THE CAST-IRON IS NOT TO BE WELDED OR HEATED AT ANY DUE TO THE RISK OF CAUSING, OR PROPAGATING, CRACKS WITHIN THE CAST IRON.

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

SURVEYS REQUIRED
THE INFORMATION ON THIS DRAWINGS IS BASED UPON ARCHIVE INFORMATION AND LIMITED SURVEY INFORMATION. TO ALLOW FOR STAGE 3 AND 4 TO BE DEVELOPED AND ALTERATIONS TO EXISTING ELEMENTS TO BE DEFINED THE FOLLOWING SURVEYS ARE REQUIRED:
- **OPEN MESH FLOOR & SUPPORT FRAME** : DETAILED SURVEY REQUIRED CONFIRMING ALL SECTION SIZES, CONNECTION DETAILS, DETAILED SETTING OUT AND INTERFACE DETAILS.
- **EXISTING RC UPSTAND AND BARRIER PLINTHS** : FOLLOWING REMOVAL OF THE MARQUEE ALL EXISTING LEVELS AND EXTENT OF RC UPSTANDS AND SAFETY BARRIERS SHOULD BE COMPLETED.
- **EXISTING LOWER DECK DRAINAGE**: THE EXISTING LOWER DECK DRAINAGE CHANNEL AND OUTLETS ARE TO BE CLEANED AND SURVEYED, INCLUDING CONNECTION INTO BELOW GROUND DRAINAGE SYSTEM.
- ***MANCHESTER CENTRAL SERVICE***: THE EXISTING SERVICES AND BELOW GROUND DRAINAGE SYSTEM ALONG THE MANCHESTER CENTRAL SIDE IS TO BE SURVEYED TO UNDERSTAND INTERFACE WITH NEW WORKS AND POTENTIAL NEED FOR EXISTING SERVICES DIVERSIONS OR ALTERATIONS

A SUITABLE PERIOD SHOULD BE ALLOWED BETWEEN RECEIPT OF THE SURVEY INFORMATION AND BRIDGE DEMOLITION TO ALLOW FOR FINAL CO-ORDINATION BETWEEN THE DESIGN TEAM AND COMPLETION OF THE DESIGN. THE MARQUEE WILL REQUIRE EARLY REMOVAL TO ALLOW FOR COMPLETION OF THE SURVEYS.

BEARING INSPECTION & MAINTENANCE
THE BEARINGS ARE TO BE PERIODICALLY INSPECTED BY A COMPETENT SPECIALIST IN ACCORDANCE WITH THE LATEST EDITION OF HIGHWAY ENGLAND'S CS450 'INSPECTION OF HIGHWAY STRUCTURES'.

INSPECTIONS ARE TO OCCUR:
- FOLLOWING ERECTION OF THE BRIDGE AND PRIOR TO GROUTING OF BEARINGS
- ***SAFETY INSPECTIONS*** IMMEDIATELY AFTER ANY ACCIDENTAL OR MALICIOUS VEHICLE IMPACT TO THE FRAME OR SUPPORTING STRUCTURE
- ***GENERAL INSPECTION*** EVERY 24 MONTHS
- ***PRINCIPAL INSPECTION*** EVERY 6 YEARS
- ***SPECIAL INSPECTION*** IF DEFECTS ARE RECORDED
- ANY ADDITIONAL INSPECTION AND MAINTENANCE IDENTIFIED WITHIN THE BEARING SPECIALIST'S OPERATION AND MAINTENANCE DATA.

THE BUILDING OWNER/MANAGER ARE RESPONSIBLE FOR MANAGING AND ORGANISING INSPECTION AND REMOVAL AND REINSTATEMENT OF ACCESS HATCH AND WATERPROOFING TO ALLOW INSPECTION. THEY ARE ALSO TO MAINTAIN INSPECTION RECORDS. WHERE MAINTENANCE, REPAIR OR REPLACEMENT WORKS ARE REQUIRED THESE ARE TO BE UNDERTAKEN IN A TIMELY MANNER TO ENSURE THE OVERALL STRUCTURAL INTEGRITY OF THE BRIDGE IS NOT COMPROMISED.

FOR DETAILED BEARING INSPECTION AND MAINTENANCE REQUIREMENTS REFER TO BEARING SUPPLIER'S OPERATION & MAINTENANCE MANUAL.

WHERE BEARING REPLACEMENT IS REQUIRED THE BUILDING OWNER/MANAGER IS TO APPOINT A SPECIALIST CONTRACTOR TO DESIGN THE REPLACEMENT BEARING AND ASSOCIATED TEMPORARY WORKS.

THE CLIENT IS TO ENSURE ACCESS RIGHTS ARE INCLUDED WITHIN ANY THIRD PARTY AREAS TO ENSURE ACCESS IS AVAILABLE FOR THE BEARING INSPECTION, MAINTENANCE AND IF REQUIRED, REPLACEMENT.

WATERPROOFING
THE NEW RC STRUCTURES ARE TO BE FULLY WATERPROOFED AND LAPPED INTO THE EXISTING WATERPROOFING SYSTEMS TO MAINTAIN CONTINUITY AND PREVENT WATER INGRESS THROUGH THE VIADUCT STRUCTURE AND BRIDGES. ALL WATERPROOFING, INCLUDING LAPPING TO THE EXISTING WATERPROOFING SYSTEMS IS TO THE SPECIALIST WATERPROOFING SUPPLIER'S DESIGN AND DETAIL. THE CONTRACTOR IS TO APPOINT A WATERPROOFING SPECIALIST TO CO-ORDINATE AND DETAIL ALL WATERPROOFING WORKS. ALL WATERPROOFING INDICATED ON THESE DRAWINGS IS INDICATIVE ONLY AND THE FINAL LOCATION AND DETAILS ARE TO BE TO THE ARCHITECT'S INTENT AND WATERPROOFING SPECIALIST'S DESIGN.

KEY

- INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS
- EXISTING PAVING AND BEDDING TO BE LOCALLY REMOVED, ALTERATION AND NEW RC WORKS UNDERTAKEN, CONCRETE SURFACE CLEANED AND BRIDGE DECK WATERPROOFING SYSTEM INSTALLED. PAVING TO THEN BE REINSTATED. WHERE PAVING IS IN POOR CONDITION ALLOW FOR REPLACEMENT WITH NEW UNITS TO MATCH EXISTING
- DENOTES PAVING AND BEDDING TO BE LOCALLY REMOVED, ALTERATION AND NEW RC WORKS UNDERTAKEN, CONCRETE SURFACE CLEANED AND BRIDGE DECK WATERPROOFING SYSTEM INSTALLED
- DENOTES BEARING (FIXED HORIZONTALLY)TO SPECIALIST BEARING SUPPLIER'S DESIGN AND DETAIL
- DENOTES BEARING (MULTI-DIRECTION HORIZONTAL SLIDING) TO SPECIALIST BEARING SUPPLIER'S DESIGN AND DETAIL
- DENOTES BEARING (UNI-DIRECTION HORIZONTAL SLIDING) TO SPECIALIST BEARING SUPPLIER'S DESIGN AND DETAIL
- DENOTES ASSUMED JACKING LOCATION PRIMARY STRUCTURE HAS BEEN DESIGNED FOR. FINAL JACKING LOCATIONS AND RESTRAINT TO ALLOW FOR BEARING REPLACEMENT OF BEARINGS TO BE DEVELOPED BY BEARING SPECIALIST SUPPLIER AND COORDINATED WITH STEELWORK FABRICATOR

B1.1.1 INDICATES BEARING REFERENCE

B1.1.1 — LEVEL / TYPE / NUMBER

TYPE 1 - POT BEARING (COLUMN/TRUSS HORIZONTALLY FIXED)
TYPE 2 - POT BEARING (TRUSS MULTI-DIRECTION HORIZONTALLY FREE)
TYPE 3 - POT BEARING (BEAM HORIZONTALLY FIXED)
TYPE 4 - POT BEARING (BEAM UNI-DIRECTIONALLY HORIZONTALLY FREE)

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B, MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL LOWER DECK PLAN

Status:
STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: 1 : 100 | Project No: 2209-01

Project Code: Originator: Volume: Level: Type: Role: Category / Number: Rev:
V2B - REN - AA - ZZ - DR - S - 01100 - P03

OPERATION & MAINTENANCE
IN ADDITION TO THE NORMAL OPERATION AND MAINTENANCE OF THE BUILDING AND STRUCTURE, NOTE THE FOLLOWING:

1 ALL BRIDGE BEARINGS ARE TO BE PERIODICALLY INSPECTED AND MAINTAINED. REFER TO NOTE ON DRAWING FOR REQUIREMENTS

2 GRATED INFILL AREA OVER EXISTING CAST-IRON BRIDGE, AND NEW BRIDGE EXTENSION, AREAS TO BE LIMITED TO A MAXIMUM 2.5kN/m² IMPOSED LOAD. MANCHESTER CENTRAL TO CONTINUE TO OPERATE AREAS WITH RESTRICTED LOADS AND ENSURE VEHICLE ACCESS AND LOADINGS ARE RESTRICTED

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1 THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m².

2 THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.

3 THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.

4 THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER. THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.

5 THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.

6 RESTRICTED LOADING ZONE TO REAR OF ALL EXISTING AND NEW BASES AND RETAINING WALLS DURING CONSTRUCTION TO PREVENT OVERLOADING/SLIDING AND INSTABILITY

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

SURVEYS REQUIRED
THE INFORMATION ON THIS DRAWINGS IS BASED UPON ARCHIVE INFORMATION AND LIMITED SURVEY INFORMATION. TO ALLOW FOR STAGE 3 AND 4 TO BE DEVELOPED AND ALTERATIONS TO EXISTING ELEMENTS TO BE DEFINED THE FOLLOWING SURVEYS ARE REQUIRED:
- **OPEN MESH FLOOR & SUPPORT FRAME** : DETAILED SURVEY REQUIRED CONFIRMING ALL SECTION SIZES, CONNECTION DETAILS, DETAILED SETTING OUT AND INTERFACE DETAILS.
- **EXISTING RC UPSTAND AND BARRIER PLINTHS** : FOLLOWING REMOVAL OF THE MARQUEE ALL EXISTING LEVELS AND EXTENT OF RC UPSTANDS AND SAFETY BARRIERS SHOULD BE COMPLETED.
- **EXISTING LOWER DECK DRAINAGE**: THE EXISTING LOWER DECK DRAINAGE CHANNEL AND OUTLETS ARE TO BE CLEANED AND SURVEYED, INCLUDING CONNECTION INTO BELOW GROUND DRAINAGE SYSTEM.
- ***MANCHESTER CENTRAL SERVICE***: THE EXISTING SERVICES AND BELOW GROUND DRAINAGE SYSTEM ALONG THE MANCHESTER CENTRAL SIDE IS TO BE SURVEYED TO UNDERSTAND INTERFACE WITH NEW WORKS AND POTENTIAL NEED FOR EXISTING SERVICES DIVERSIONS OR ALTERATIONS

A SUITABLE PERIOD SHOULD BE ALLOWED BETWEEN RECEIPT OF THE SURVEY INFORMATION AND BRIDGE DEMOLITION TO ALLOW FOR FINAL CO-ORDINATION BETWEEN THE DESIGN TEAM AND COMPLETION OF THE DESIGN. THE MARQUEE WILL REQUIRE EARLY REMOVAL TO ALLOW FOR COMPLETION OF THE SURVEYS.

BEARING INSPECTION & MAINTENANCE
THE BEARINGS ARE TO BE PERIODICALLY INSPECTED BY A COMPETENT SPECIALIST IN ACCORDANCE WITH THE LATEST EDITION OF HIGHWAY ENGLAND'S CS450 'INSPECTION OF HIGHWAY STRUCTURES'.

INSPECTIONS ARE TO OCCUR:
- FOLLOWING ERECTION OF THE BRIDGE AND PRIOR TO GROUTING OF BEARINGS
- ***SAFETY INSPECTIONS*** IMMEDIATELY AFTER ANY ACCIDENTAL OR MALICIOUS VEHICLE IMPACT TO THE FRAME OR SUPPORTING STRUCTURE
- ***GENERAL INSPECTION*** EVERY 24 MONTHS
- ***PRINCIPAL INSPECTION*** EVERY 6 YEARS
- ***SPECIAL INSPECTION*** IF DEFECTS ARE RECORDED
- ANY ADDITIONAL INSPECTION AND MAINTENANCE IDENTIFIED WITHIN THE BEARING SPECIALIST'S OPERATION AND MAINTENANCE DATA.

THE BUILDING OWNER/MANAGER ARE RESPONSIBLE FOR MANAGING AND ORGANISING INSPECTION AND REMOVAL AND REINSTATEMENT OF ACCESS HATCH AND WATERPROOFING TO ALLOW INSPECTION. THEY ARE ALSO TO MAINTAIN INSPECTION RECORDS. WHERE MAINTENANCE, REPAIR OR REPLACEMENT WORKS ARE REQUIRED THESE ARE TO BE UNDERTAKEN IN A TIMELY MANNER TO ENSURE THE OVERALL STRUCTURAL INTEGRITY OF THE BRIDGE IS NOT COMPROMISED.

FOR DETAILED BEARING INSPECTION AND MAINTENANCE REQUIREMENTS REFER TO BEARING SUPPLIER'S OPERATION & MAINTENANCE MANUAL.

WHERE BEARING REPLACEMENT IS REQUIRED THE BUILDING OWNER/MANAGER IS TO APPOINT A SPECIALIST CONTRACTOR TO DESIGN THE REPLACEMENT BEARING AND ASSOCIATED TEMPORARY WORKS.

THE CLIENT IS TO ENSURE ACCESS RIGHTS ARE INCLUDED WITHIN ANY THIRD PARTY AREAS TO ENSURE ACCESS IS AVAILABLE FOR THE BEARING INSPECTION, MAINTENANCE AND IF REQUIRED, REPLACEMENT.

WATERPROOFING
THE NEW RC STRUCTURES ARE TO BE FULLY WATERPROOFED AND LAPPED INTO THE EXISTING WATERPROOFING SYSTEMS TO MAINTAIN CONTINUITY AND PREVENT WATER INGRESS TROUGH THE VIADUCT STRUCTURE AND BRIDGES. ALL WATERPROOFING, INCLUDING LAPPING TO THE EXISTING WATERPROOFING SYSTEMS IS TO THE SPECIALIST WATERPROOFING SUPPLIER'S DESIGN AND DETAIL. THE CONTRACTOR IS TO APPOINT A WATERPROOFING SPECIALIST TO CO-ORDINATE AND DETAIL ALL WATERPROOFING WORKS. ALL WATERPROOFING INDICATED ON THESE DRAWINGS IS INDICATIVE ONLY AND THE FINAL LOCATION AND DETAILS ARE TO BE TO THE ARCHITECT'S INTENT AND WATERPROOFING SPECIALIST'S DESIGN.

KEY

★ INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS

\# INDICATES LEVEL TO BE CONFIRMED FOLLOWING REMOVAL OF MARQUEE. ALL NEW RC WORKS RELATE TO THESES EXISTING LEVELS SO MAY ALTER FOLLOWING RECEIPT OF SURVEY

70 INDICATES STEP IN SLAB

FOR PHASE 1 BRIDGE REMOVAL WORKS AND PARAPET REATTACHMENT DETAILS REFER TO REN DRAWING V1A-REN-A-ZZ-DR-S-01100

EXISTING STAIR TO BE CAREFULLY REMOVED AND RC WALL LOCALLY CUT DOWN TO ALLOW FOR CONSTRUCTION OF CIRCA 500H x 420W TO MATCH EXISTING. NEW SECTION TO BE TIED INTO EXISTING WALL

4

EXTENT OF EXISTING SAFETY BARRIER TBC BY CONTRACTOR. CONTRACTOR TO CONFIRM CONDITION AND EXTENT OF RC EDGE BEAM AND BARRIER AND UNDERTAKE REMEDIAL / INSTALLATION OF NEW BARRIER PRIOR TO COMMENCING BRIDGE REMOVAL

EXISTING RC PLINTH TO PERIMETER OF BRIDGE SHOWN INDICATIVELY. CONTRACTOR TO UNDERTAKE DETAILED LEVEL SURVEY TO VERIFY EXTENT, LOCATION, LEVELS AND FALLS FOLLOWING REMOVAL OF MARQUEE AND PRIOR TO BRIDGE REMOVAL WORKS

PEDESTRIAN FOOTPATH. ALLOW FOR 30mm HOT ROLLED ASPHALT WEARING COURSE AND 40mm CLOSE GRADED MACADAM BINDER COURSE ON BRIDGEDECK WATERPROOFING SYSTEMS TO SPECIALISTS DESIGN AND DETAIL

CIRCA 1.5m LOAD EXCLUSION ZONE DURING BRIDGE REMOVAL AND ALTERATION WORKS. ZONE TO BE CONFIRMED BY MAIN CONTRACTORS TEMPORARY WORKS ENGINEER

EXISTING STAIR TO BE CAREFULLY REMOVED AND RC WALL LOCALLY CUT DOWN TO ALLOW FOR CONSTRUCTION OF CIRCA 500H x 420W TO MATCH EXISTING. NEW SECTION TO BE TIED INTO EXISTING WALL

DRAINAGE AND SERVICES TO BE SURVEYED BY CONTRACTOR. LOCALISED DIVERSION OF DRAINAGE AND SERVICES MAY BE REQUIRED SUBJECT TO SURVEY

ALLOW FOR 20mm DOWELLED EXPANSION JOINT TO BASE AND UPSTAND WALL

NEW RC35/45 PARAPET WALL. ALLOW 200kg/m³ REINFORCEMENT ESTIMATE

OPEN MESH FLOOR LOCALLY REMOVED TO ALLOW FOR CLEANING AND SURVEYING OF EXISTING CHANNEL DRAIN AND OUTLET BY CONTRACTOR

MANCHESTER CENTRAL

MANCHESTER CENTRAL CONFERENCE CENTER ASSUMED TO CONTINUE TO MANAGE GRATED AREA TO ENSURE NO VEHICLE ACCESS

XA 01200 · 101 01300 · 102 01300 · XB · 103 01301 · 104 01301 · 105 01302 · 106 01302

TOC +43.630 m · TOC +43.650 m · 1:40 FALL · 1:40 FALL · 420 · 2018 · 405 · 205 · 150 · TOC +44.655 m · TOC +44.230 m · TOC +43.650 m * · TOC +43.650 m

AX 01200

CIRCA 300 DIAMETER ACCESS HOLE WITH 400mm DIAMETER COVER PLATE TO ALLOW FOR PERIODIC INSPECTION OF BEARINGS. DETAIL TO BE DEVELOPED

MINIMUM 8mm THICK BRIDGE DECK PLATE AT 1:40 FALL WITH BRIDGE DECK WATERPROOFING SYSTEM. BRIDGE DECK TO OVERSAIL ADJACENT CONCRETE

BARRIER REQUIREMENTS TO BRIDGE EDGE SUBJECT TO DISCUSSIONS WITH MANCHESTER CENTRAL TO AGREED USE

MINIMUM 8mm THICK BRIDGE DECK PLATE AT 1:40 FALL WITH BRIDGE DECK WATERPROOFING SYSTEM. BRIDGE DECK TO OVERSAIL ADJACENT CONCRETE

BARRIER REQUIREMENTS TO BRIDGE EDGE SUBJECT TO DISCUSSIONS WITH MANCHESTER CENTRAL TO AGREED USE

ALLOW FOR HIGH CONTAINMENT KERB AND NEW 'H2-W2' CONTAINMENT PARAPET (TBC AT STAGE 4) TO EDGE OF EXISTING BRIDGE. EXISTING PARAPET CONNECTIONS TO BE INSPECTED BY BARRIER SUPPLIER TO ASSESS SUITABILITY FOR REUSE

120 01310 · 121 01310

TOC +43.650 m * · TOC +43.630 m *

1

OPEN MESH FLOOR & SUPPORT FRAME
ALLOW FOR ALTERATIONS TO EXISTING GALVANISED STEEL SUPPORT FRAME. EXTENT OF ALTERATION WORKS TO BE CONFIRMED FOLLOWING SURVEY BY CONTRACTOR

TOC +43.650 m * · TOC +43.630 m *

FABRICATED WEATHERING STEEL BEAMS AND LADDER FRAME BRIDGE, SUPPORTED ON BEARINGS ABOVE EXISTING BRIDGE DECK

BRIDGE CLADDING AND PARAPET TO ARCHITECTS INTENT AND STEELWORK FABRICATORS DESIGN AND DETAIL. END PANELS TO BE REMOVABLE TO ALLOW FOR BEARING REPLACEMENT

FABRICATED WEATHERING STEEL BEAMS AND LADDER FRAME BRIDGE, SUPPORTED ON BEARINGS ABOVE EXISTING BRIDGE DECK

BRIDGE CLADDING AND PARAPET TO ARCHITECT'S INTENT AND STEELWORK FABRICATOR'S DESIGN AND DETAIL. END PANELS TO BE REMOVABLE TO ALLOW FOR BEARING REPLACEMENT

CIRCA 300 DIAMETER ACCESS HOLE WITH 400mm DIAMETER COVER PLATE TO ALLOW FOR PERIODIC INSPECTION OF BEARINGS. DETAIL TO BE DEVELOPED

ALLOW FOR 20mm DOWELLED EXPANSION JOINT TO BASE AND UPSTAND WALL

A1 01200

TOC +43.340 m · TOC +43.305 m · 425 · 135 · TOC +43.650 m · TOC +43.650 m · 225 · 250 · TOC +43.650 m · 200

EXISTING RC PLINTH TO END OF BRIDGE TO BE CAREFULLY BROKEN DOWN TO 43.35m. CONCRETE FACE TO BE ROUGHENED, CLEANED AND EXPOSED REINFORCEMENT TREATED WITH FOSROC NITOPRIME ZINCHRICH. CONCRETE BROUGHT UP TO LEVEL WITH FOSROC RENDEROC HB30. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH FOSROC PRODUCT INSTRUCTIONS

107 01303 · 108 01303 · 109 01304 · B-B 01202 · 110 01304 · 111 01305 · 112 01305

FOR SERVICE YARD SLAB DETAILS REFER TO DRAWING V2B-REN-AA-01-C-01420

XA 01201

ALLOW FOR WATERPROOFING RC AND GROUTING IN A CONTINUOUS ACO MD 200 CHANNEL WITH FOSROC CONBEXTRA NON-SHRINK GROUT. ACO MD200.20 ACO CHANNELS WITH PERFORATED GALVANISED GRATING. MINIMUM 3No. OUTLETS. LOCATION TBC FOLLOWING LOWER DECK DRAINAGE SURVEY

NEW RC35/45 UPSTANDS WITH REBATE FOR CHANNEL DRAIN. ALLOW 200kg/m³ REINFORCEMENT ESTIMATE

ALLOW FOR 20mm DOWELLED EXPANSION JOINT TO BASE AND UPSTAND WALL

EXISTING RC PLINTH TO END OF BRIDGE TO BE CAREFULLY BROKEN DOWN TO 43.35m. CONCRETE FACE TO BE ROUGHENED, CLEANED AND EXPOSED REINFORCEMENT TREATED WITH FOSROC NITOPRIME ZINCHRICH. CONCRETE BROUGHT UP TO LEVEL WITH FOSROC RENDEROC HB30. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH FOSROC PRODUCT INSTRUCTIONS

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B, MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL UPPER DECK PLAN

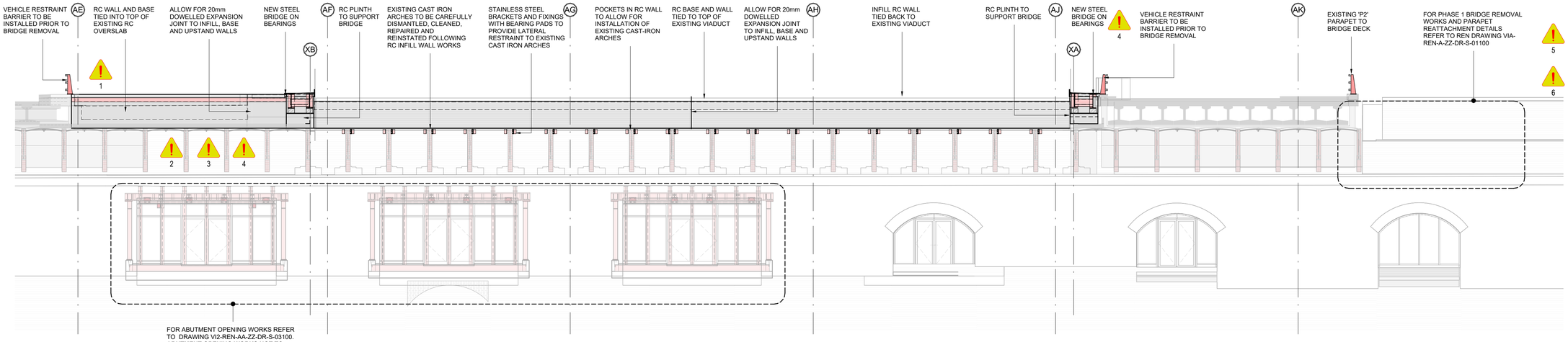
DRAFT

Status:
STAGE 4

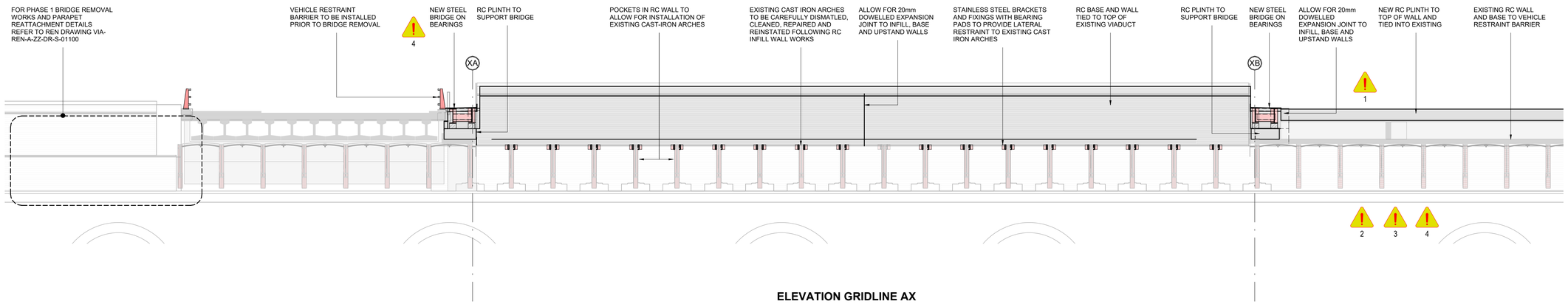
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: 1 : 100 · Project No: 2209-01

Project Code: V2B - Originator: REN - Volume: AA - Level: ZZ - Type: DR - Role: S - Category / Number: 01101 - Rev: P03



ELEVATION GRIDLINE A1



ELEVATION GRIDLINE AX

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

DENOTES BRIDGE BEARING TO SPECIALIST BEARING SUPPLIER'S DESIGN AND DETAIL

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1. THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m².
2. THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.
3. THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.
4. THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER. THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.
5. THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.
6. RESTRICTED LOADING ZONE TO REAR OF ALL EXISTING AND NEW BASES AND RETAINING WALLS DURING CONSTRUCTION TO PREVENT OVERLOADING/SLIDING AND INSTABILITY

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B,
MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL ELEVATIONS GRIDLINE A1 & AX

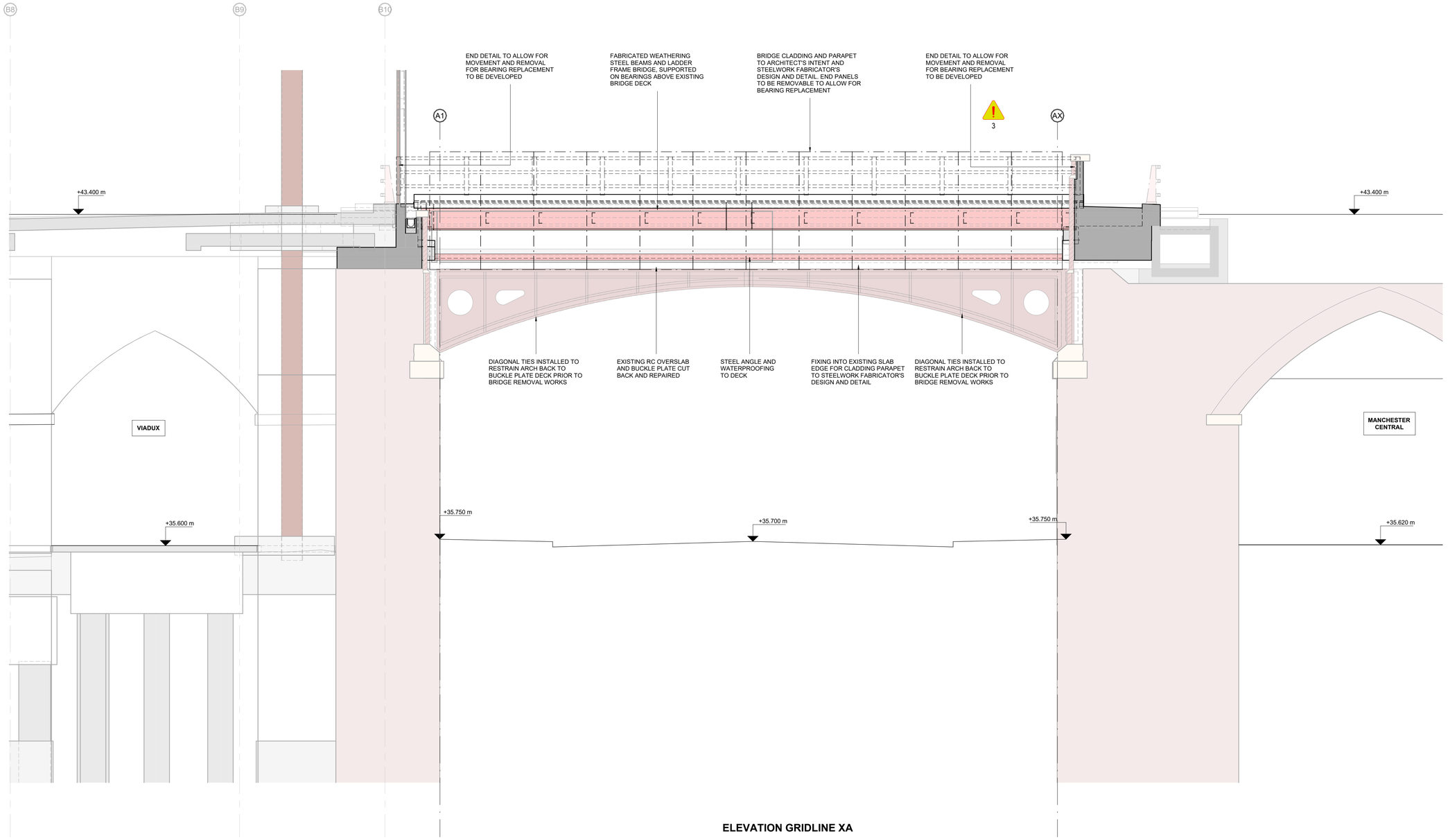
Status:
STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: 1 : 100 | Project No: 2209-01

Project Code: Originator: Volume: Level: Type: Role: Category / Number: Rev:
V2B - REN - AA - ZZ - DR - S - 01200 - P03



ELEVATION GRIDLINE XA

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1. THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m².
2. THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.
3. THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.
4. THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER. THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.
5. THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.
6. RESTRICTED LOADING ZONE TO REAR OF ALL EXISTING AND NEW BASES AND RETAINING WALLS DURING CONSTRUCTION TO PREVENT OVERLOADING/SLIDING AND INSTABILITY

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B, MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL ELEVATIONS GRIDLINE XA

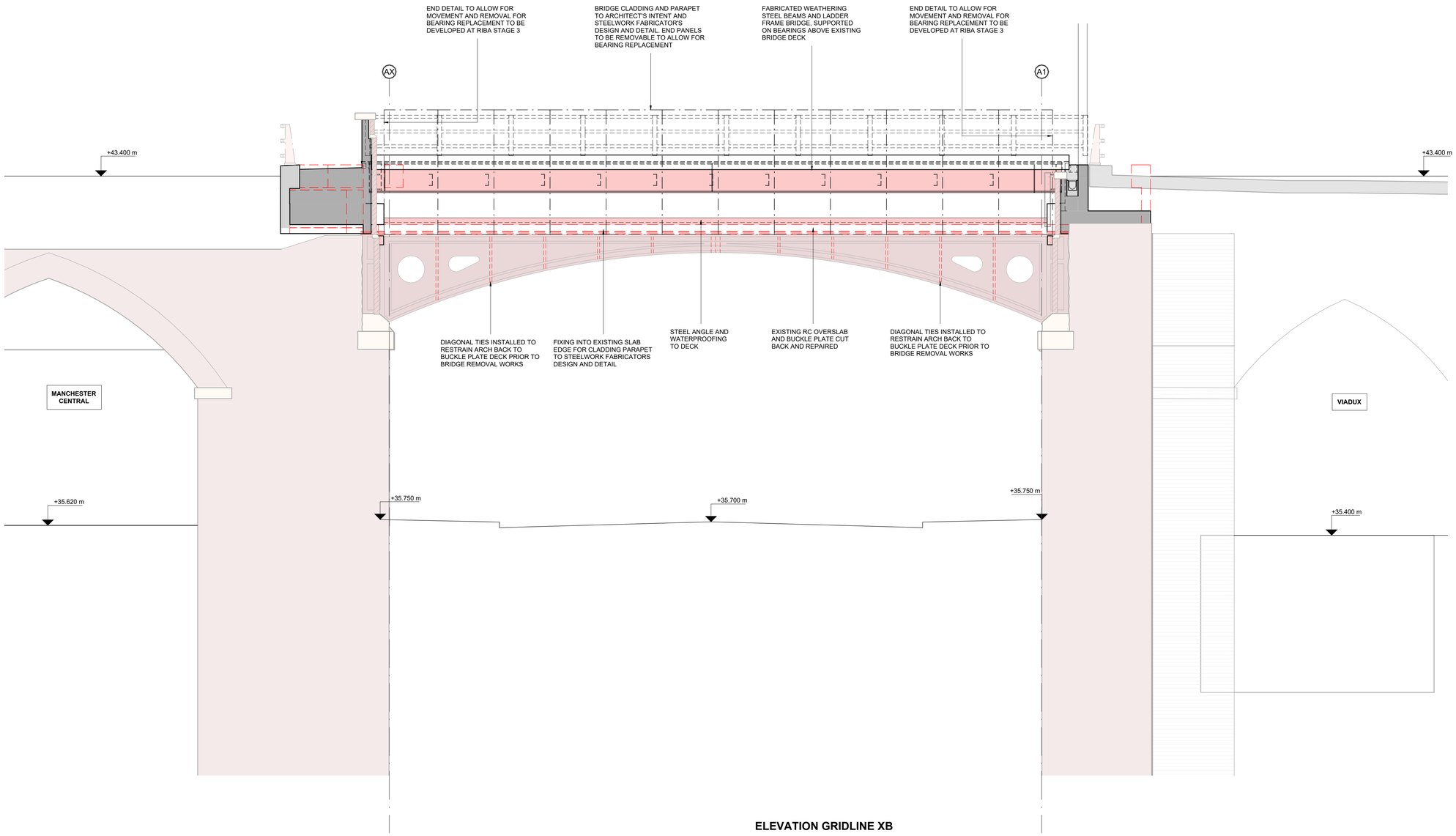
Status:
STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: 1 : 50 | Project No: 2209-01

Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01201 -	P03



ELEVATION GRIDLINE XB

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

HEALTH & SAFETY NOTES:
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH WORKS OF THIS NATURE, NOTE THE FOLLOWING ABNORMAL RISKS

1. THE LOAD CAPACITY OF EXISTING CAST-IRON BRIDGE IS UNKNOWN AND ANECDOTAL EVIDENCE INDICATES IT HAS FRACTURES, WHICH WILL LIMIT ITS LOAD CAPACITY. ALL WORKS UNDERTAKEN TO OR OVER THE EXISTING BRIDGE NEED TO TAKE CONSIDERATION OF THIS (I.E. PLANT LIMITED TO LIGHTWEIGHT MACHINERY, NO STOCKPILING OF MATERIALS ETC.). ARCHIVE DRAWINGS INDICATE A MAXIMUM IMPOSED LOAD ALLOWANCE OF 2.5kN/m^2.

2. THE EXISTING BRIDGE IS OF CAST-IRON CONSTRUCTION WHICH IS BRITTLE. THE USE OF PERCUSSIVE TECHNIQUES ON OR IN CLOSE PROXIMITY TO THE CAST-IRON ARCHES SHOULD BE USED WITH EXTREME CAUTION AND SUBJECT TO ASSESSMENT BY THE CONTRACTOR'S TEMPORARY WORKS ENGINEER.

3. THE EXISTING BRIDGE IS AN ARCH AND RELIES ON BALANCED LOADING FOR ITS STABILITY. ALL CONSTRUCTION AND DEMOLITION WORKS NEED TO BE PHASED TO MINIMISE OUT OF BALANCE LOADING AND AN ASSESSMENT UNDERTAKEN BY THE CONTRACTOR AND THEIR TEMPORARY WORKS ENGINEER.

4. THE EXISTING BRIDGE PARAPET RC EDGE AND STEEL BARRIER CONDITION IS UNKNOWN. PRIOR TO DEMOLITION OF THE CAST IRON BRIDGE BELOW THE CONTRACTOR IS TO UNDERTAKE A DETAILED CONDITION SURVEY OF THE BRIDGE EDGE & EXISTING PARAPET SAFETY BARRIER. THE CONTRACTOR IS TO REPAIR RETAINED BARRIERS AND PROCURE AND INSTALL NEW VEHICLE RESTRAINT BARRIERS TO THE UPPER DECK BRIDGES AND ALONG THE MANCHESTER CENTRAL SIDE. REMOVAL OF THE EXISTING CAST-IRON BRIDGE PRIOR TO INSTALLATION/REPAIR OF A SUITABLE SAFETY BARRIER TO THE BRIDGE EDGE IS NOT PERMITTED.

5. THE CAST-IRON BRIDGE BEAMS ARE TIED AT LOW LEVEL TO PREVENT BUCKLING. PRIOR TO REMOVAL OF THE BRIDGE AND BUCKLE PLATE THE FINAL RETAINED CAST IRON EDGE BEAMS ARE TO ALL BE TIED BACK TO THE BUCKLE PLATE LEVEL.

6. RESTRICTED LOADING ZONE TO REAR OF ALL EXISTING AND NEW BASES AND RETAINING WALLS DURING CONSTRUCTION TO PREVENT OVERLOADING/SLIDING AND INSTABILITY

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:
VIADUX 2B,
MANCHESTER

Drawing Title:
GBS BRIDGE DECK REMOVAL ELEVATIONS GRIDLINE XB

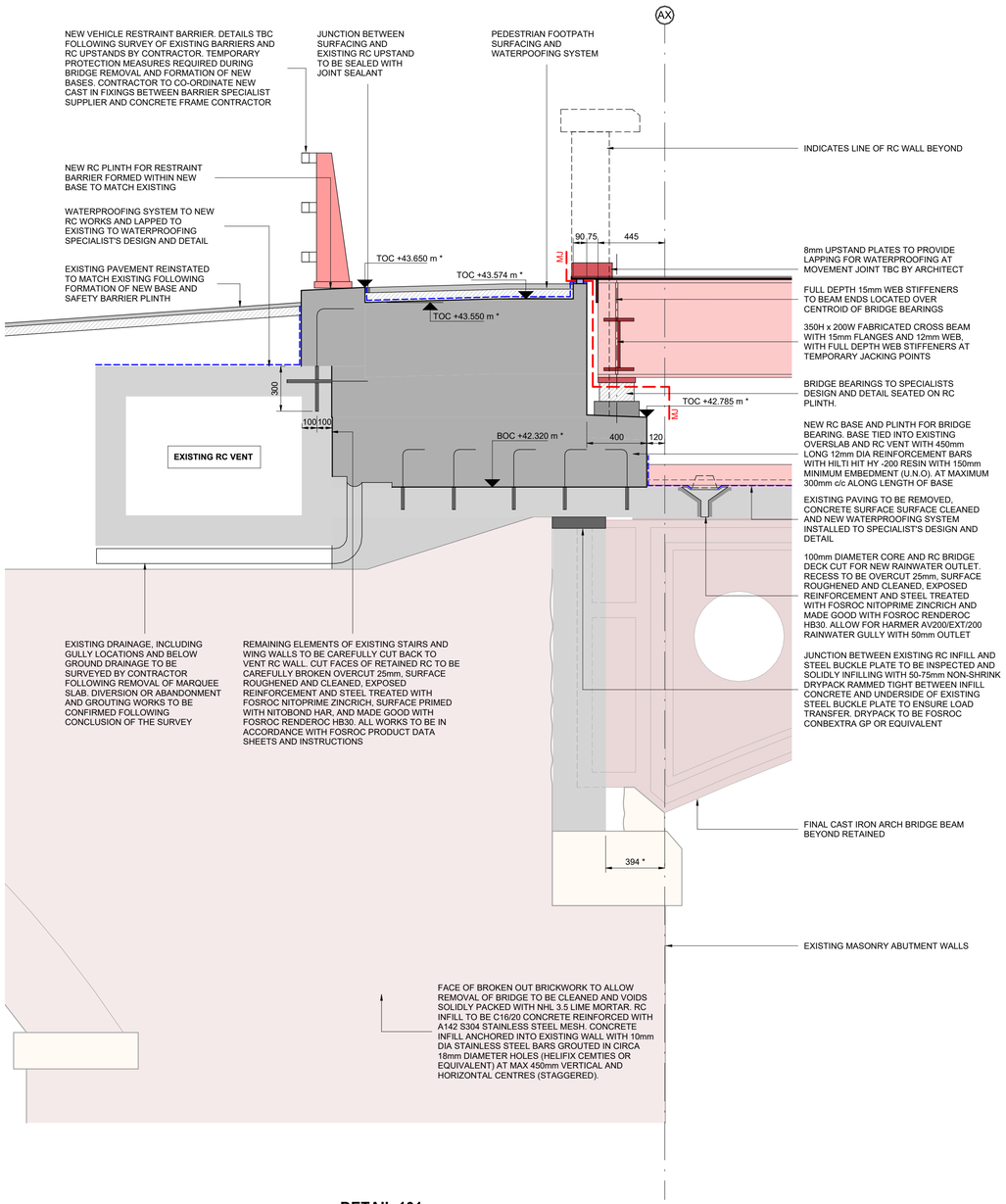
Status:
STAGE 4

DRAFT

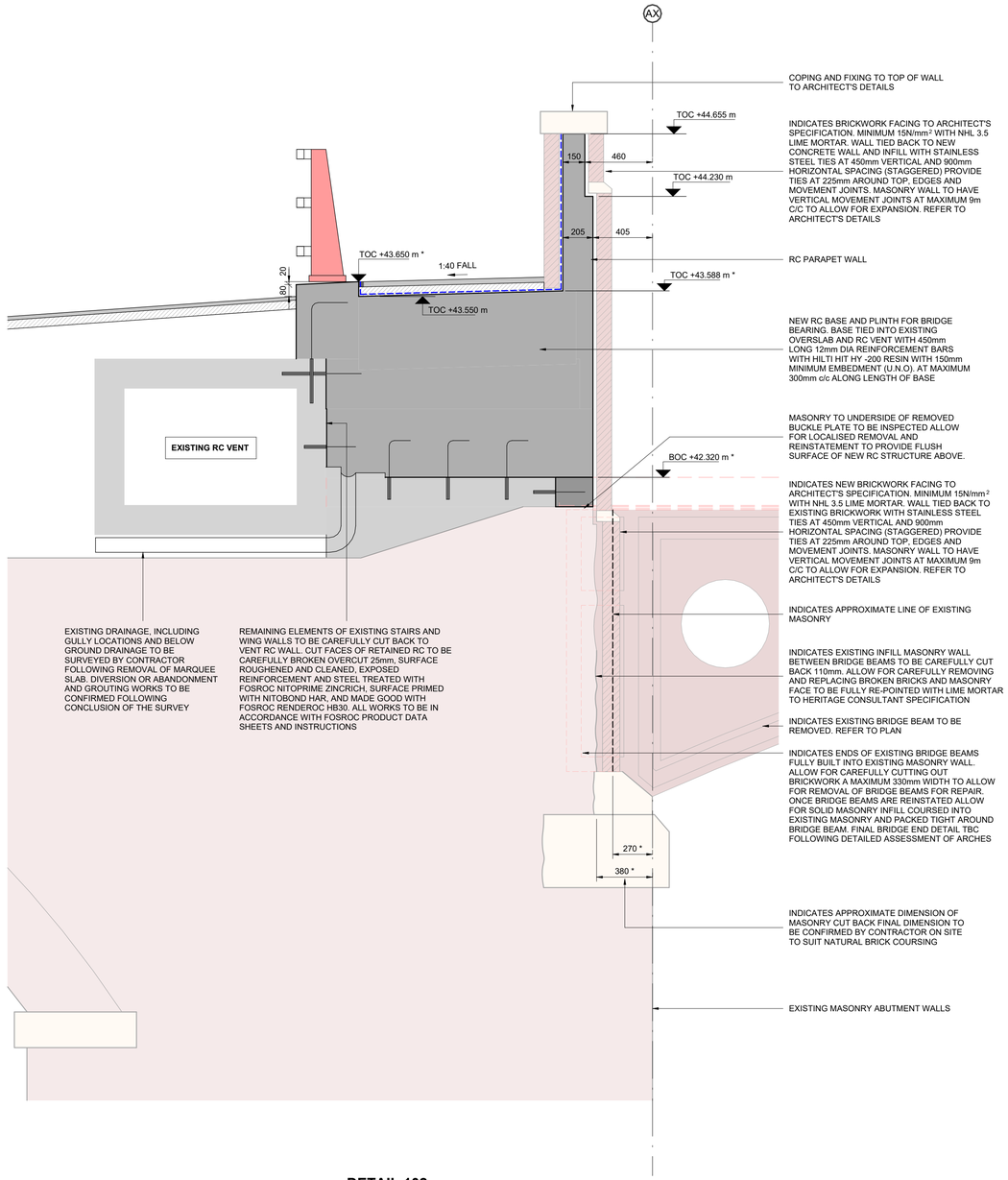
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale:	Project No:
1 : 50	2209-01

Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01202 -	P03



DETAIL 101



DETAIL 102

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance
Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL DETAILS (SHEET 1)

DRAFT

Status:

STAGE 4

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

Project Code: Originator: Volume: Level: Type: Role: Category / Number: Rev:

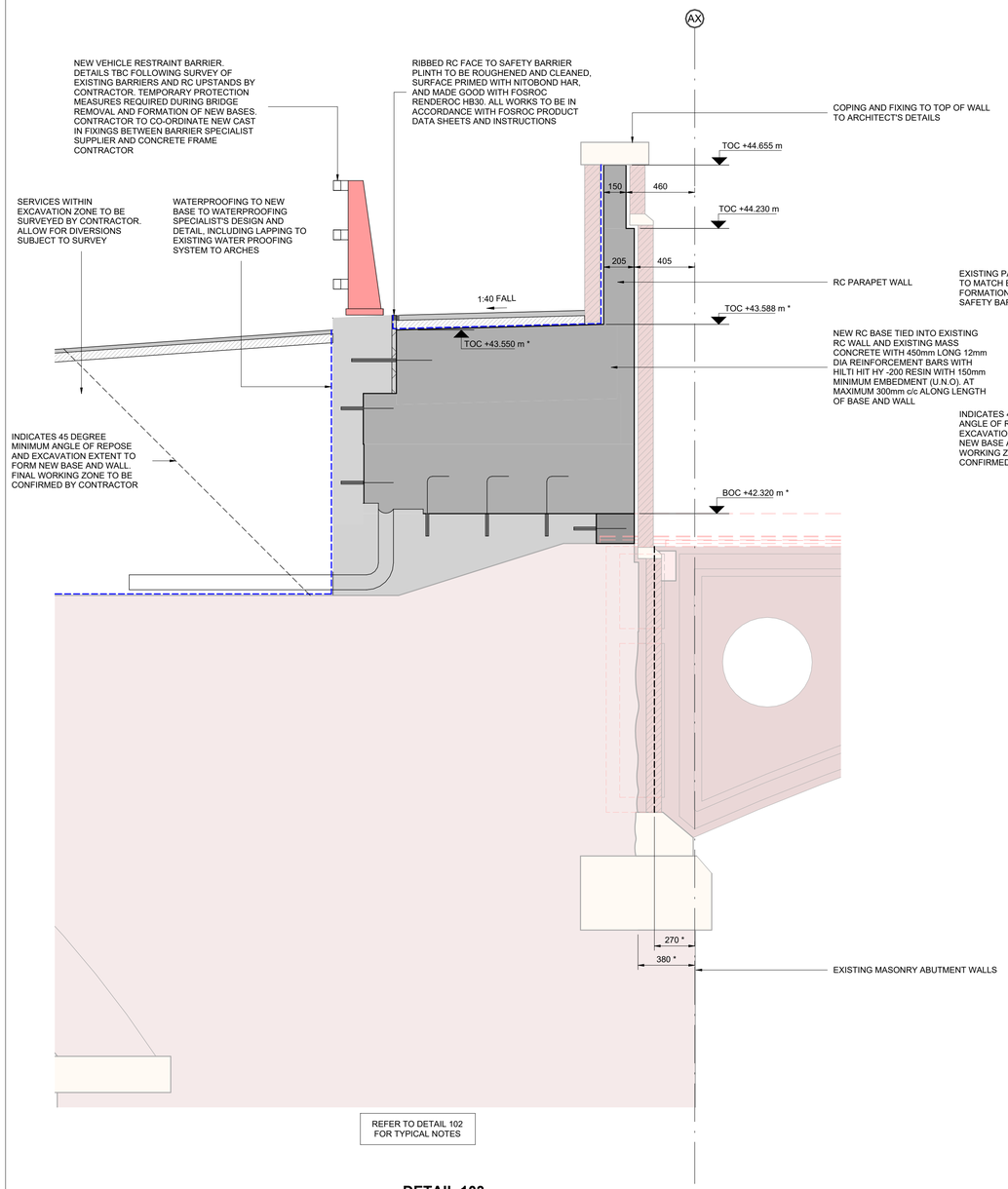
V2B - REN - AA - ZZ - DR - S - 01300 - P03

NOTES:

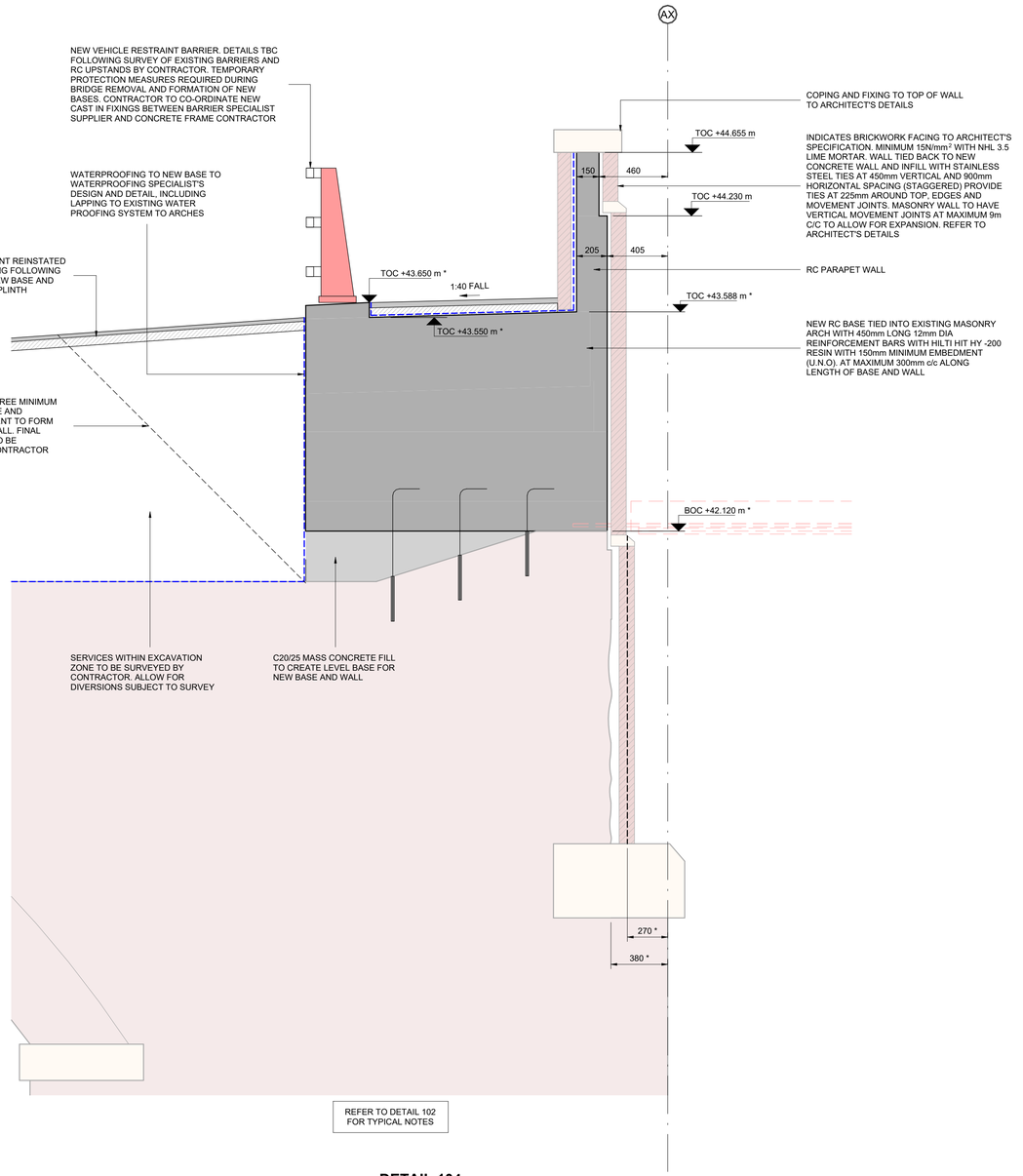
1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS



DETAIL 103



DETAIL 104

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL DETAILS (SHEET 2)

DRAFT

Status:

STAGE 4

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

Project Code: Originator: Volume: Level: Type: Role: Category / Number: Rev:

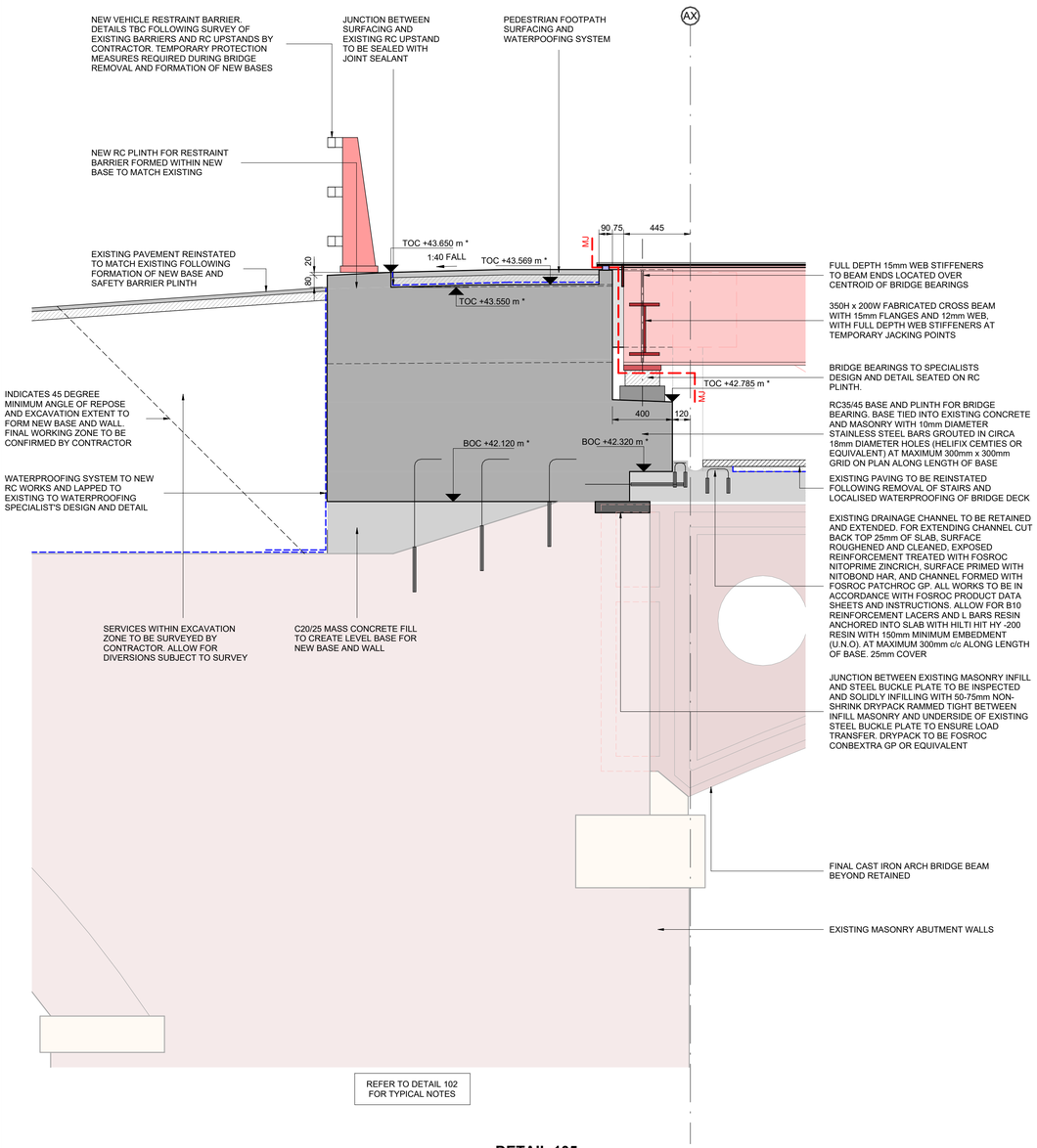
V2B - REN - AA - ZZ - DR - S - 01301 - P03

NOTES:

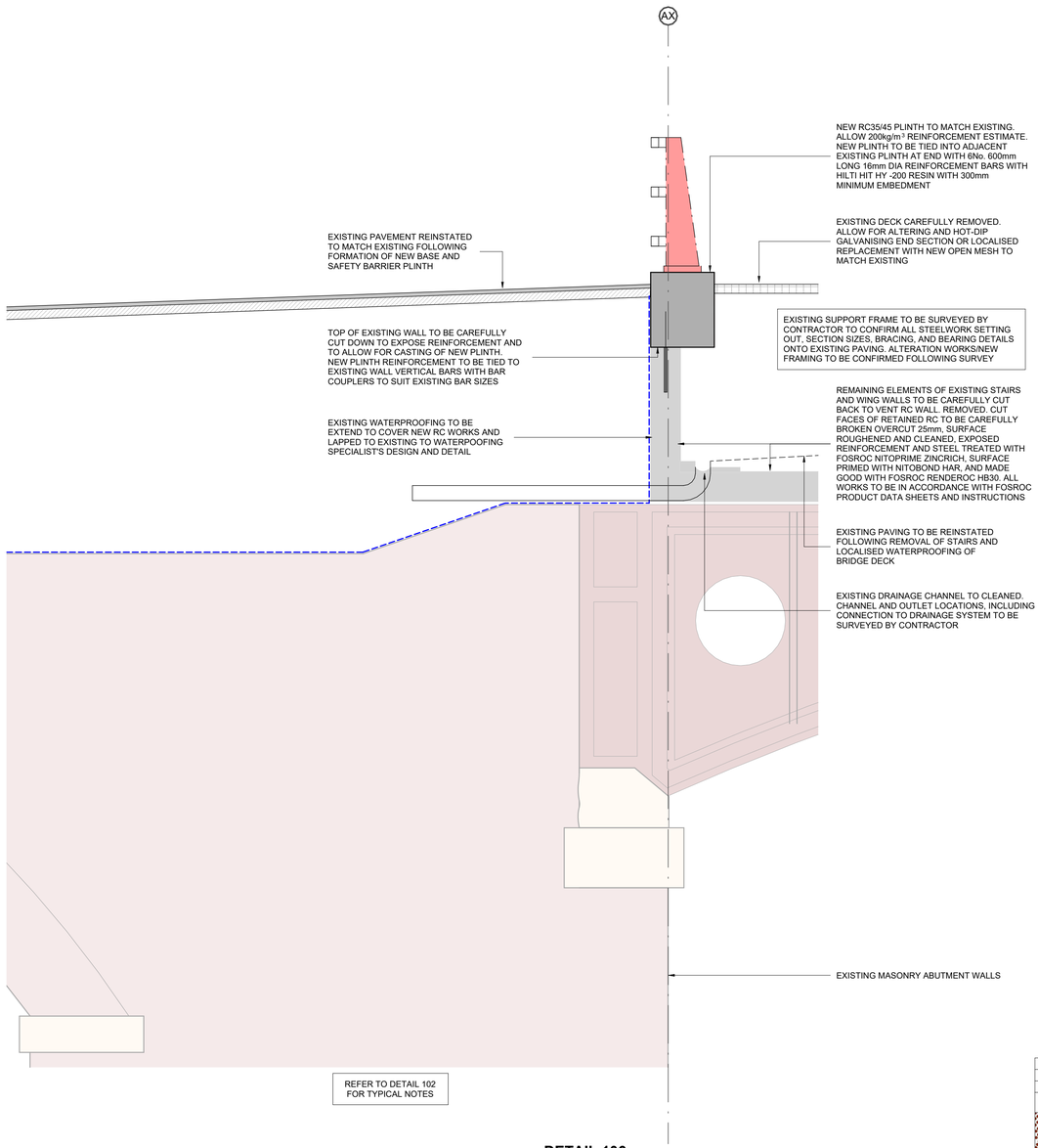
1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS



DETAIL 105



DETAIL 106

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL DETAILS (SHEET 3)

Status:

STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

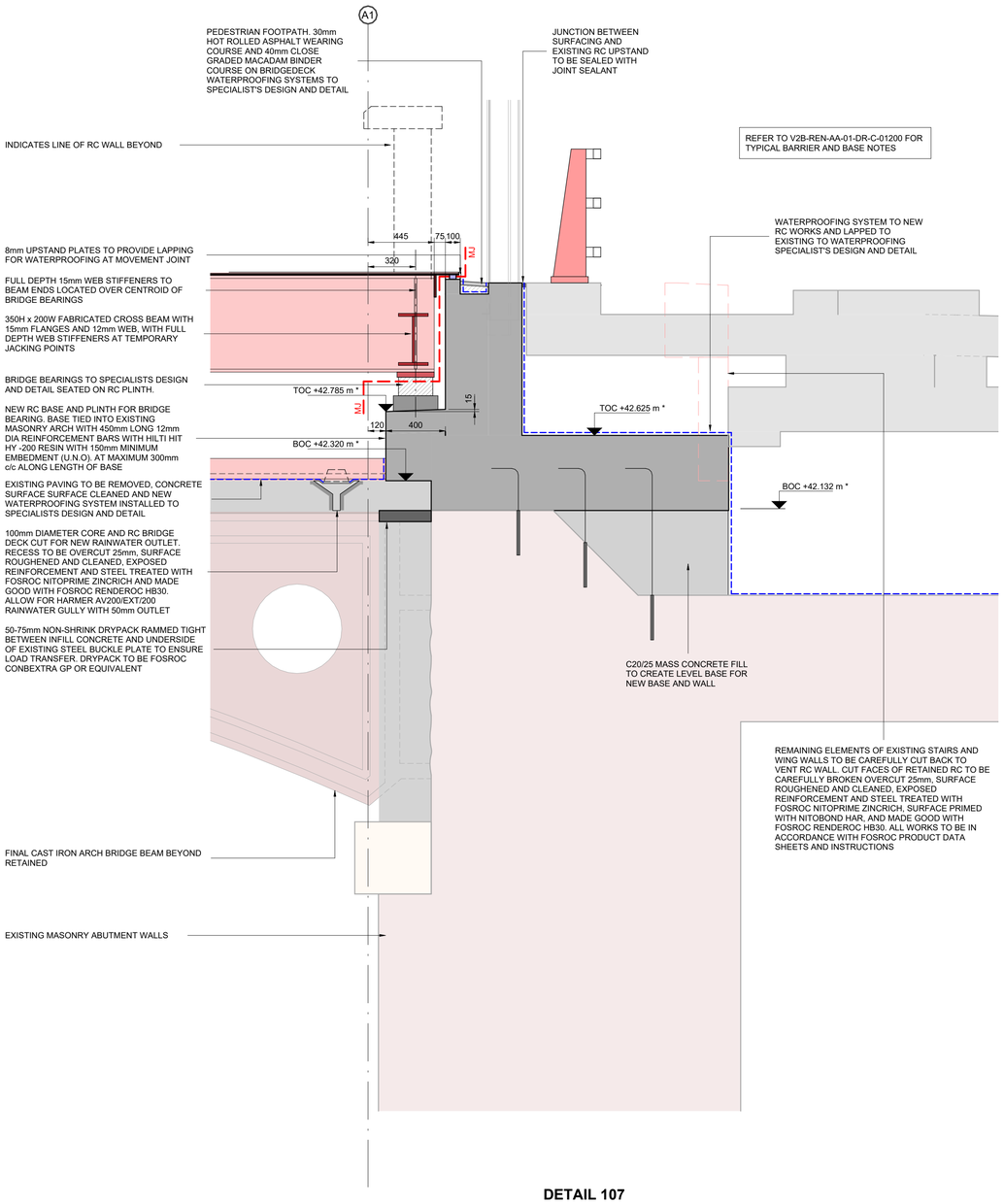
Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01302 -	P03

NOTES:

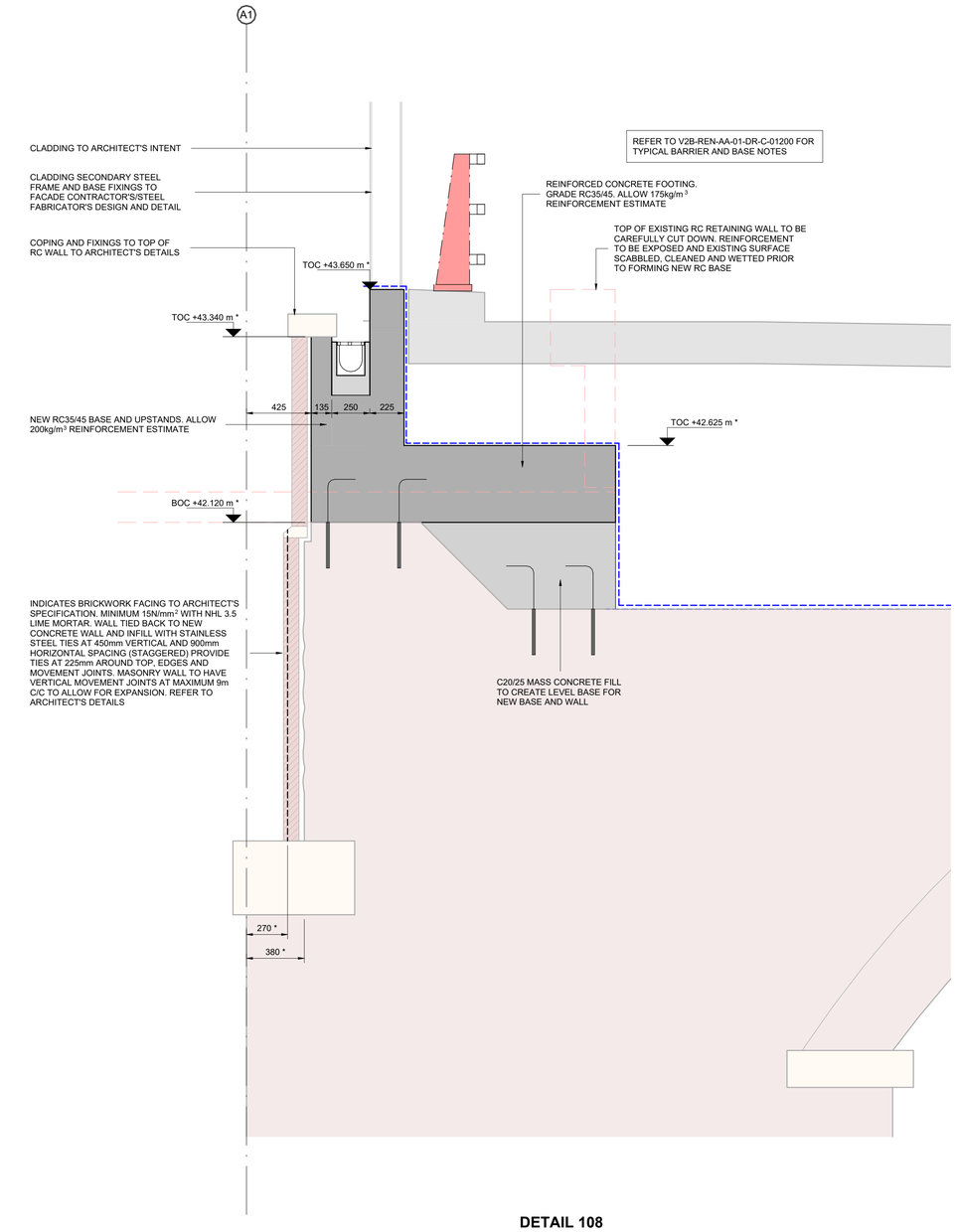
1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS



DETAIL 107



DETAIL 108

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL DETAILS (SHEET 4)

Status:

STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

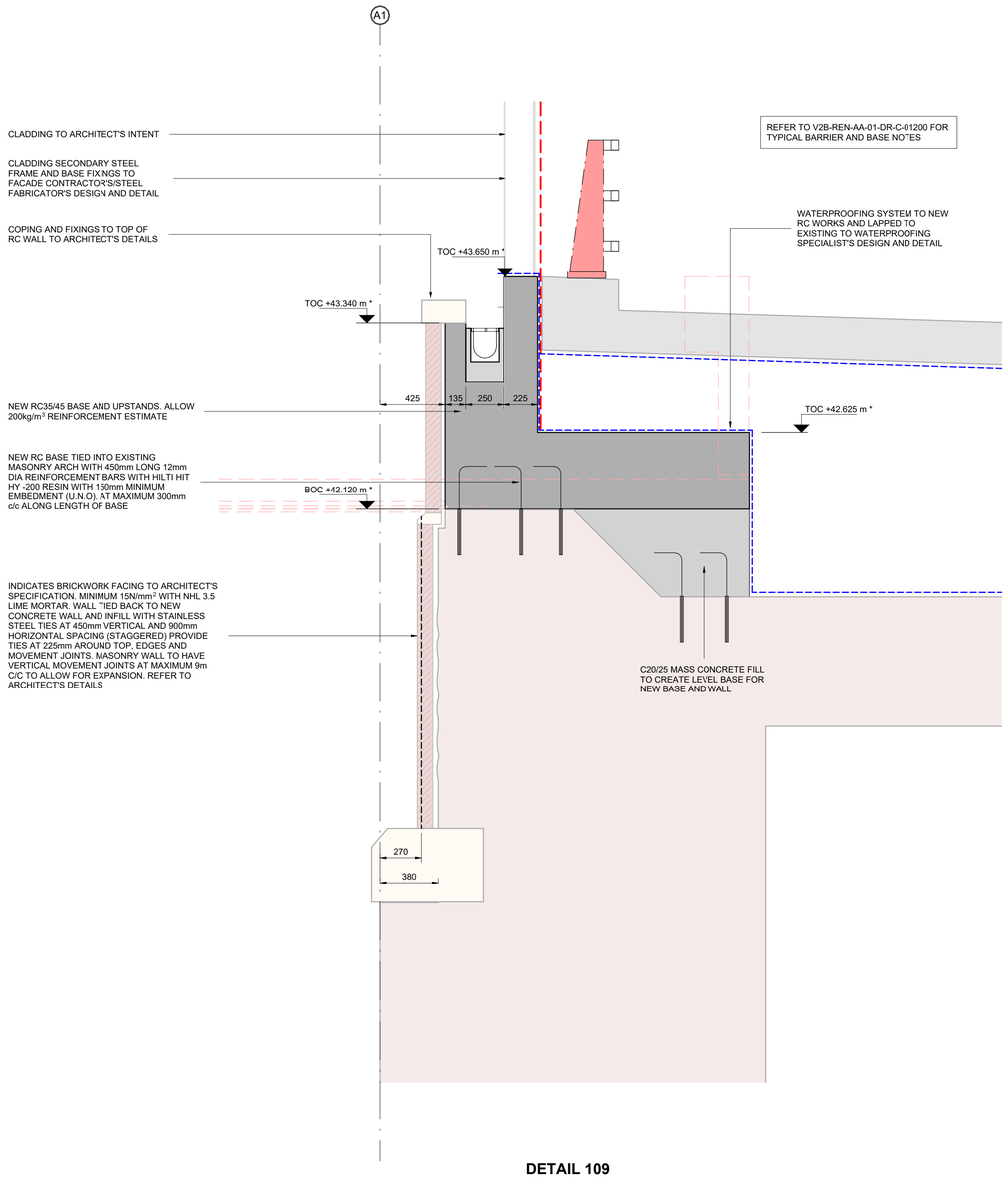
Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01303 -	P03

NOTES:

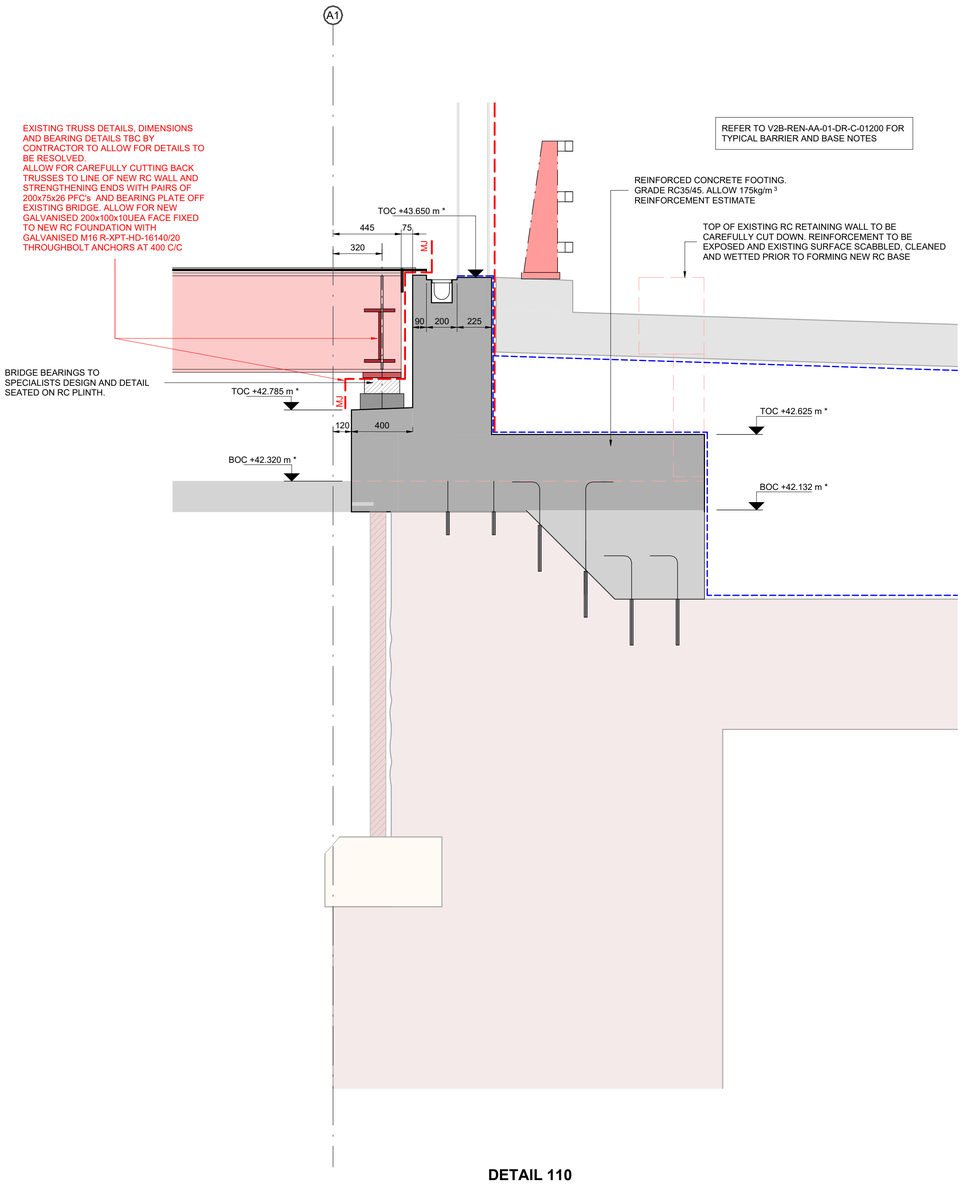
1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS



DETAIL 109



DETAIL 110

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL DETAILS (SHEET 5)

DRAFT

Status:

STAGE 4

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

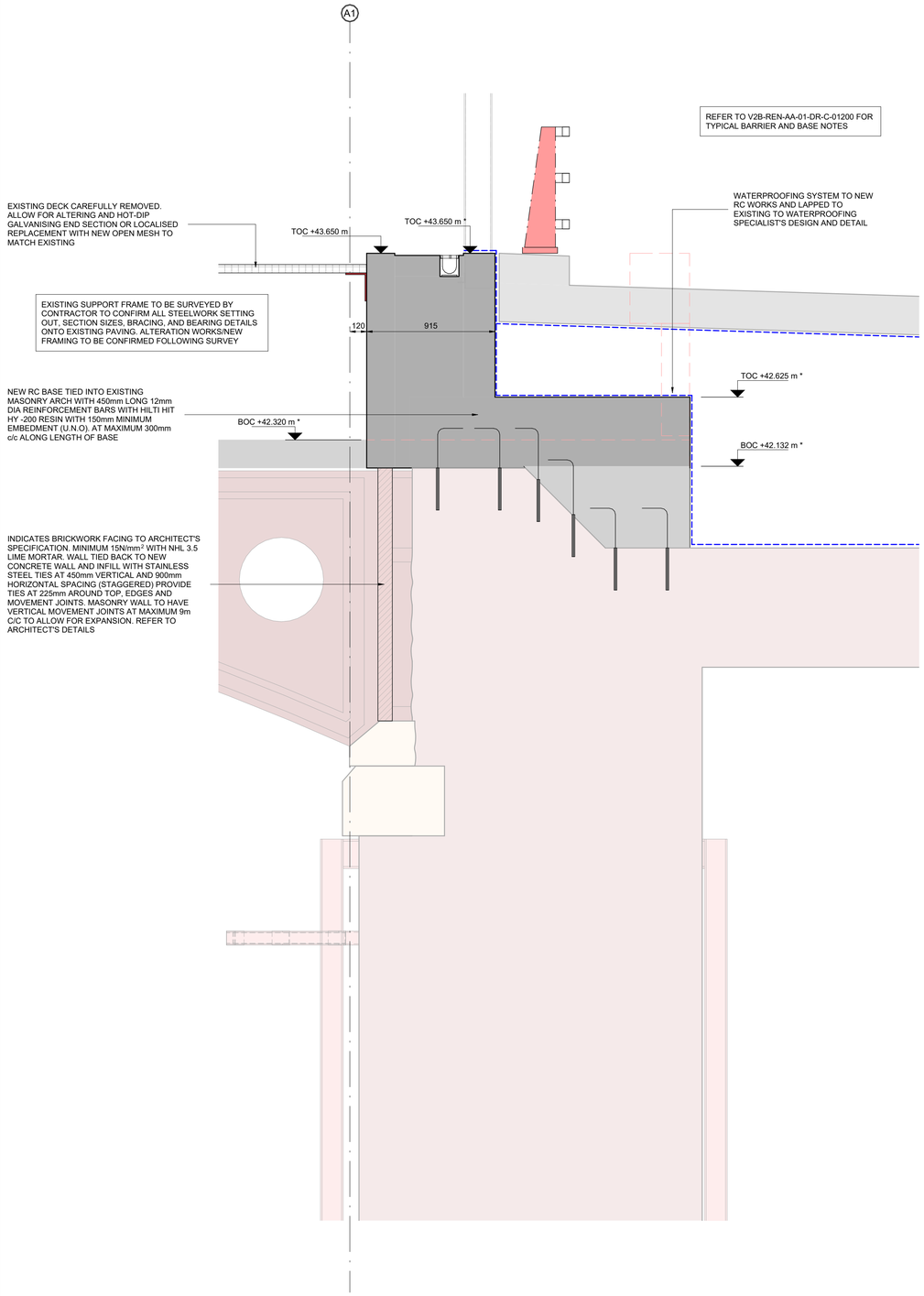
Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01304 -	P03

NOTES:

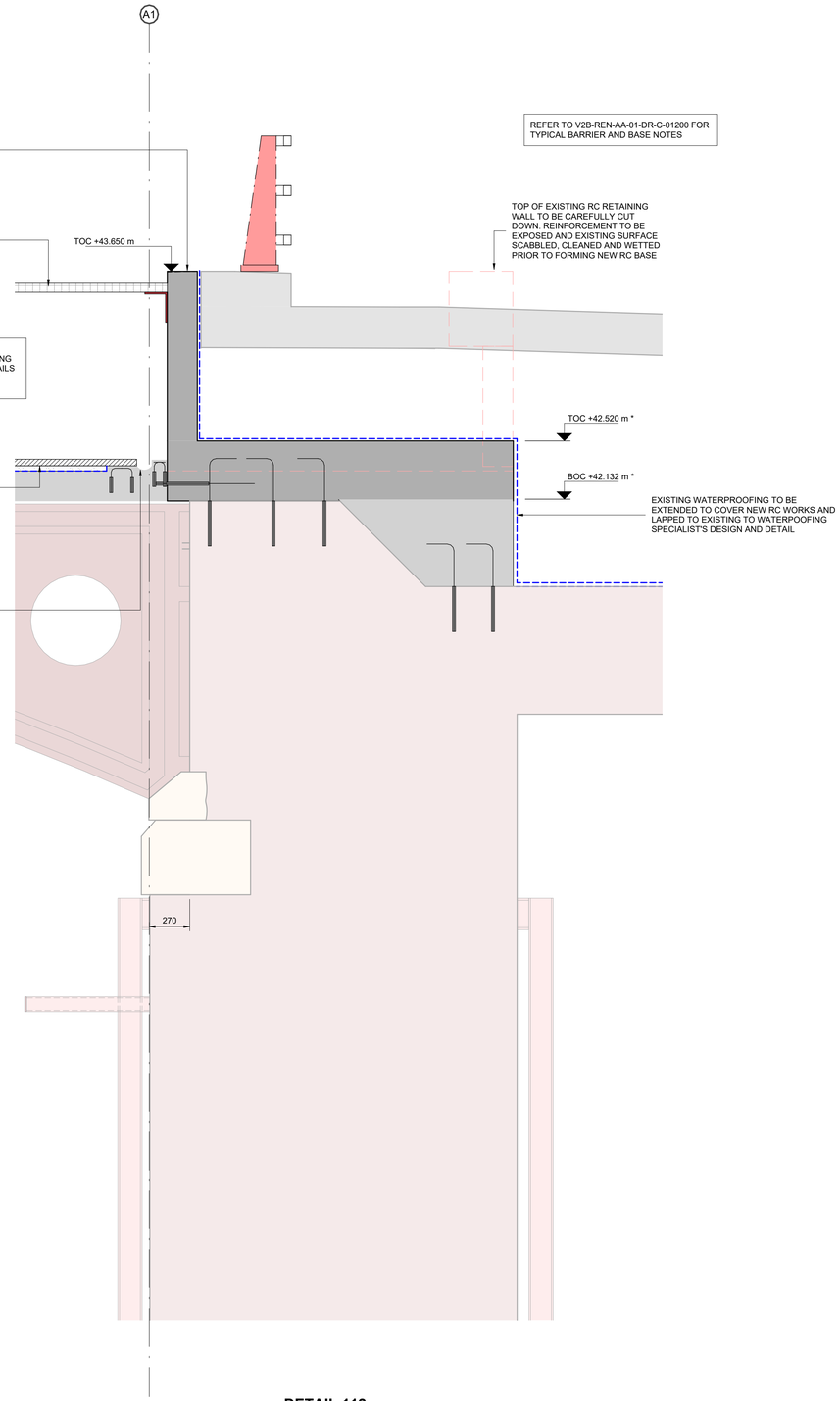
1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS



DETAIL 111



DETAIL 112

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL DETAILS (SHEET 6)

DRAFT

Status:

STAGE 4

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

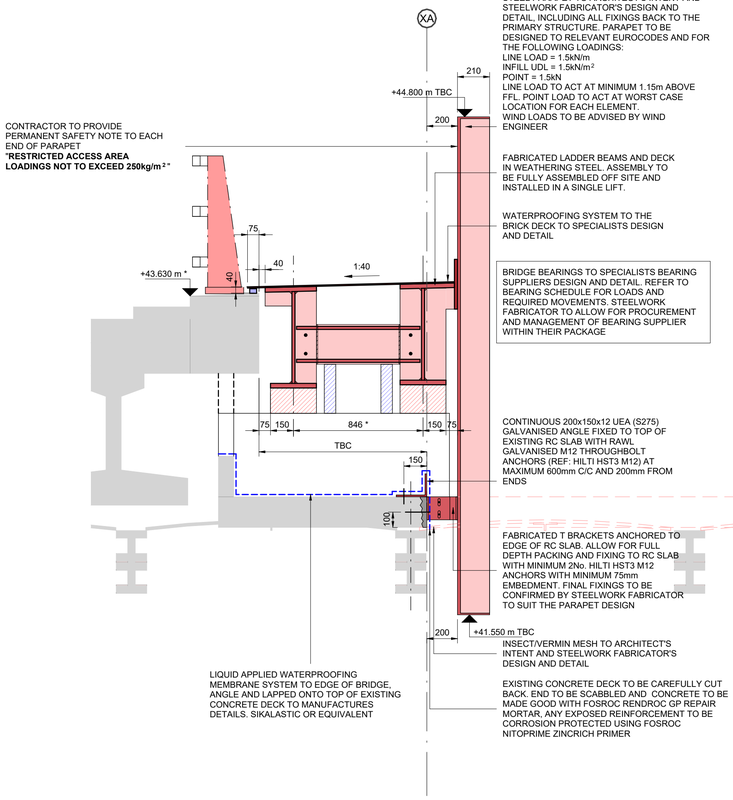
Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01305 -	P03

NOTES:

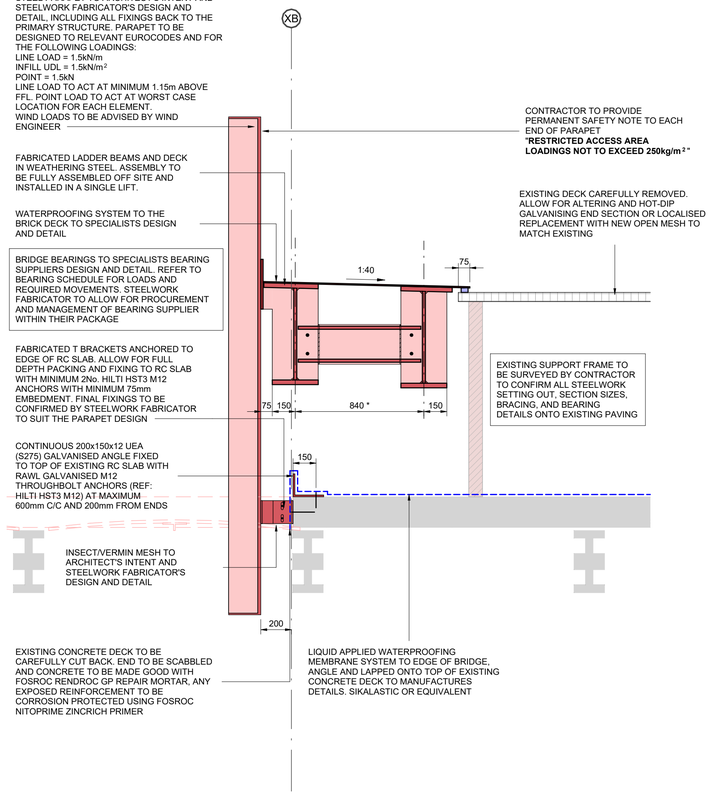
1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.

KEY

* INDICATES DIMENSIONS AND LEVEL TO BE CONFIRMED ON SITE AND AGREED WITH THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND EXECUTION OF THE WORKS



DETAIL 120



DETAIL 121

Rev:	Description:	Date:	By:	Chkd:
P02	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P01	RIBA STAGE 2 UPDATE	06.02.25	GM	PC

renaissance

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B, MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL STEEL DETAILS (SHEET 1)

DRAFT

Status:

STAGE 4

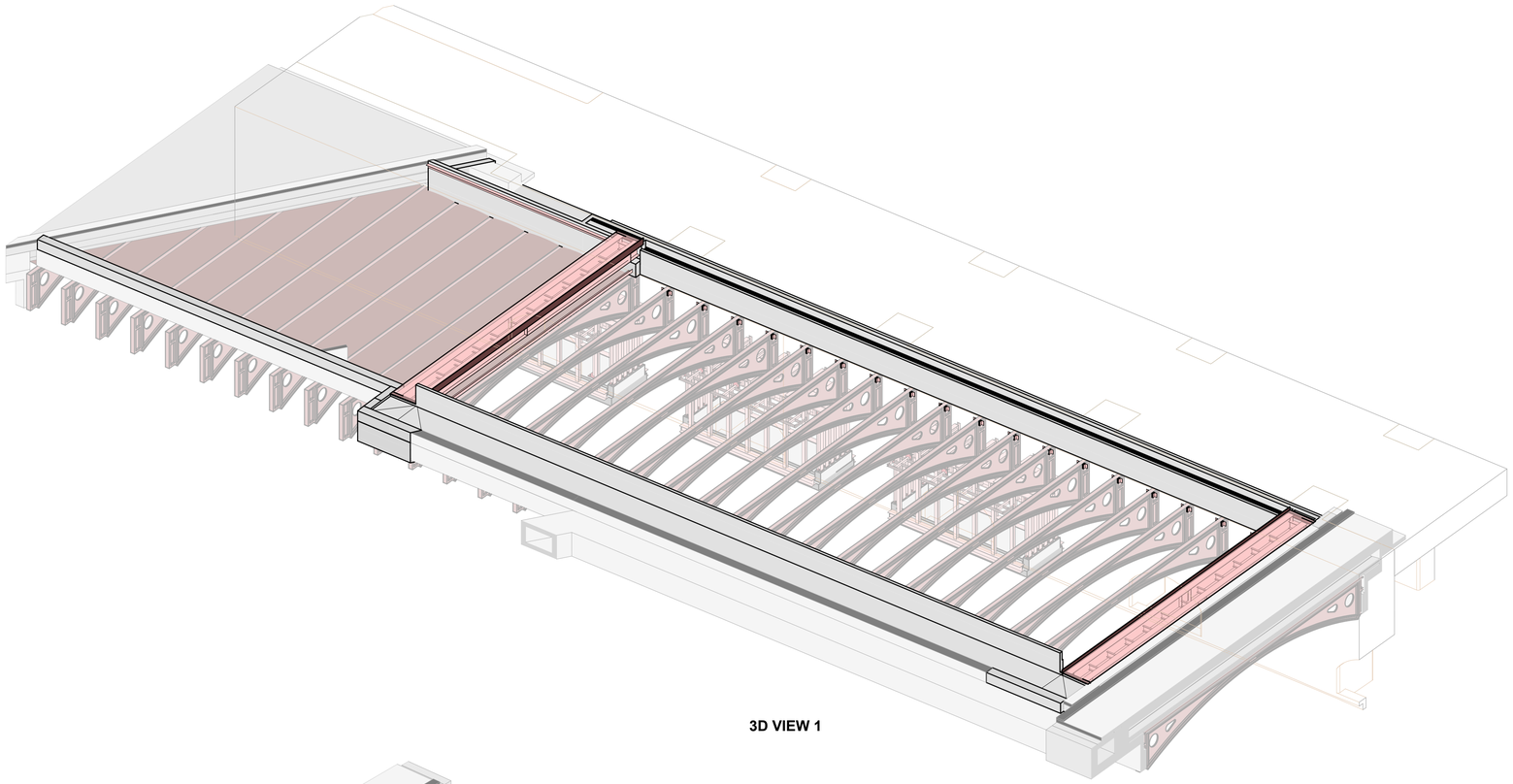
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: As indicated | Project No: 2209-01

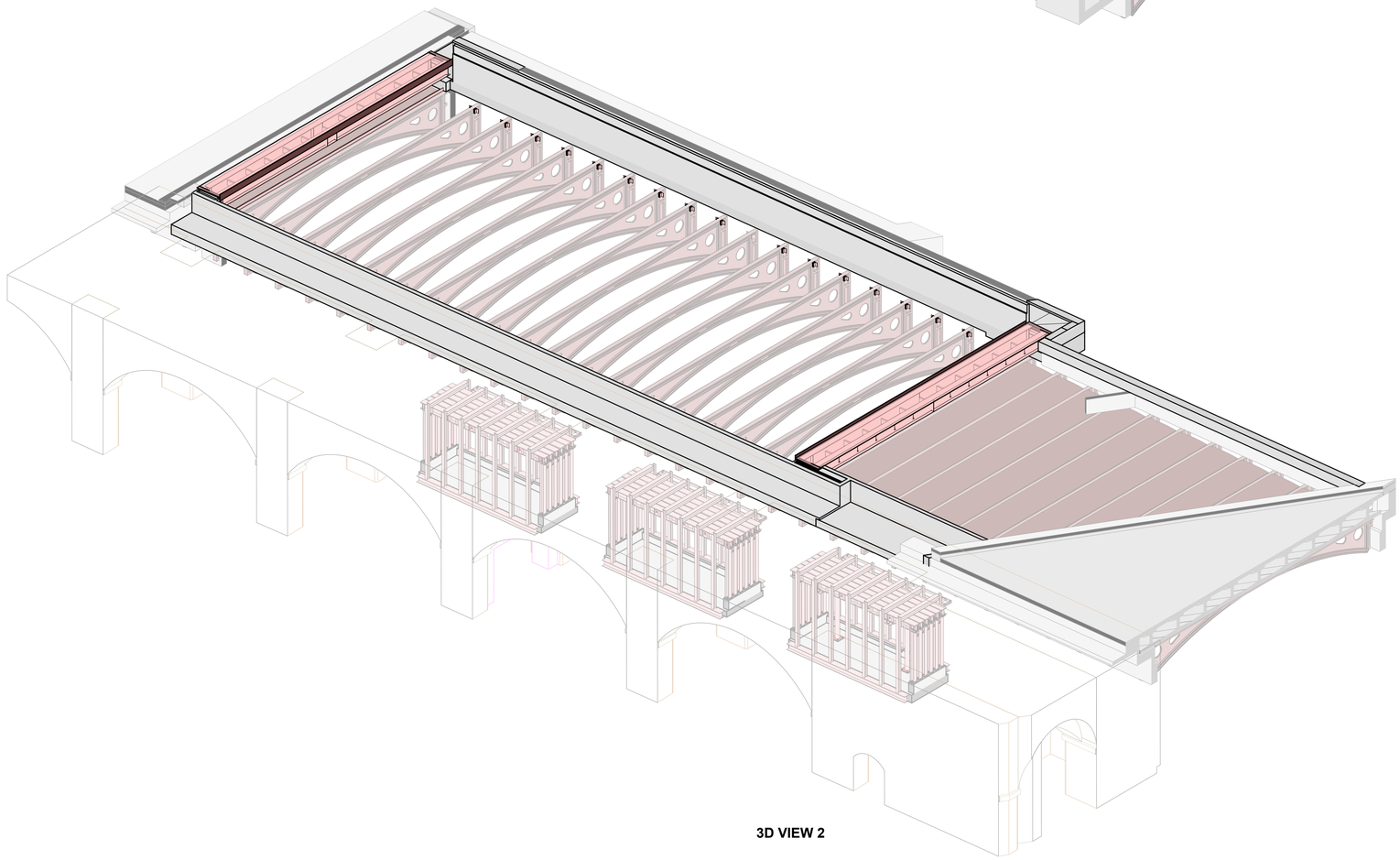
Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01310 -	P02

NOTES:

1. REFER TO DRAWING V2B-REN-AA-XX-DR-S-00010 FOR GENERAL NOTES.



3D VIEW 1



3D VIEW 2

Rev:	Description:	Date:	By:	Chkd:
P03	RIBA STAGE 4 ISSUE	01.08.25	AMi	EM
P02	RIBA STAGE 2 UPDATE	06.02.25	GM	PC
P01	RIBA STAGE 2 ISSUE	02.04.24	AMi	KAG

renaissance

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

VIADUX 2B,
MANCHESTER

Drawing Title:

GBS BRIDGE DECK REMOVAL ISOMETRICS

Status:

STAGE 4

DRAFT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	APR 24	AMi	-	KAG

Scale: | Project No: 2209-01

Project Code:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
V2B -	REN -	AA -	ZZ -	DR -	S -	01350 -	P03