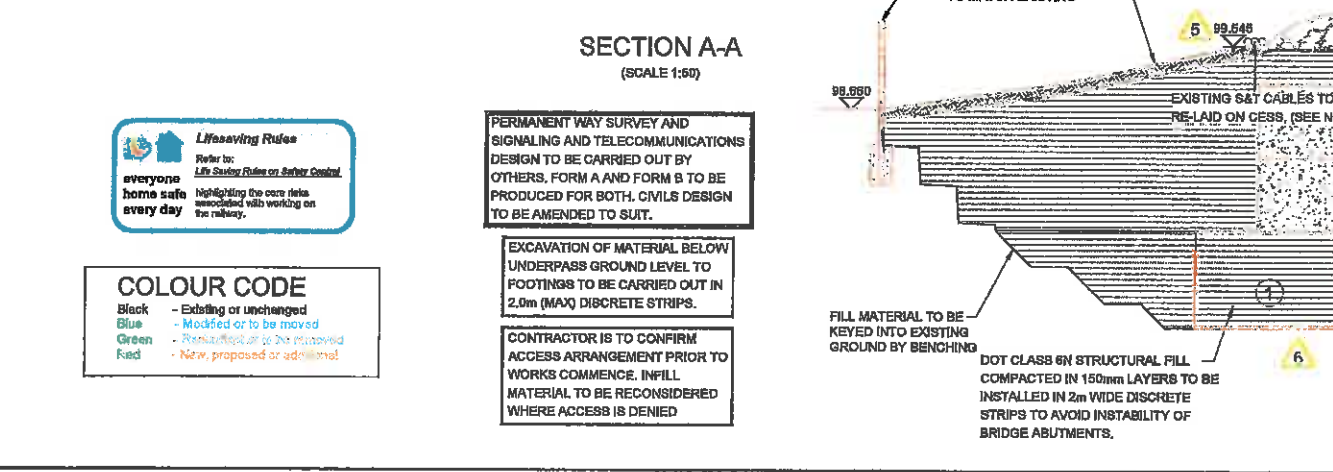
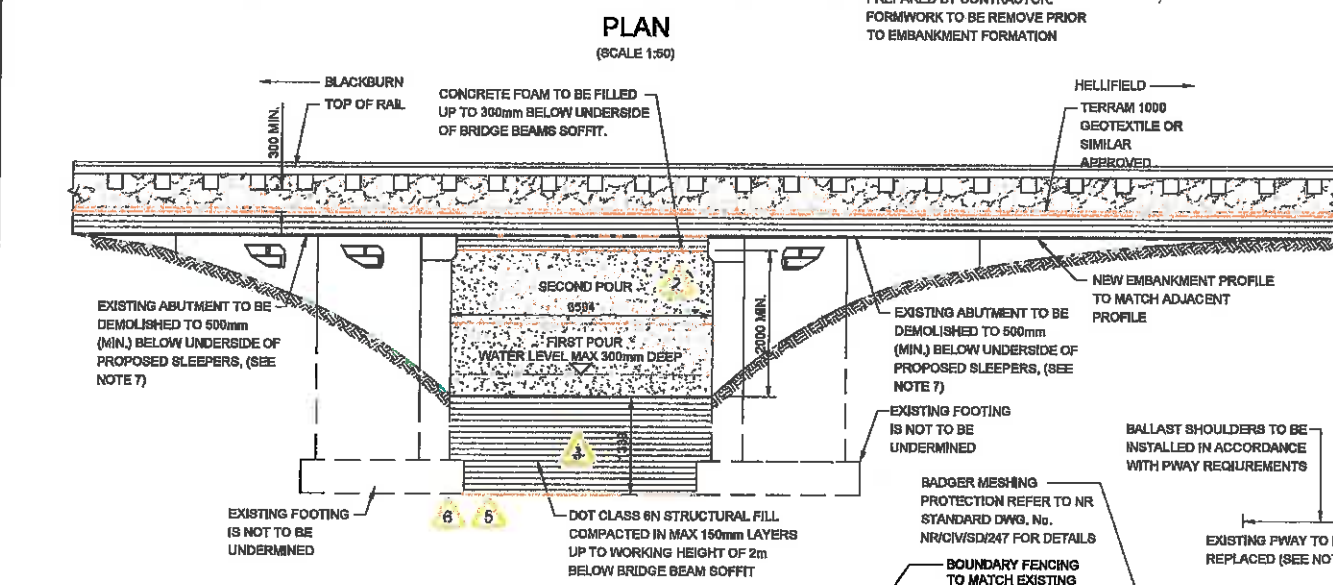
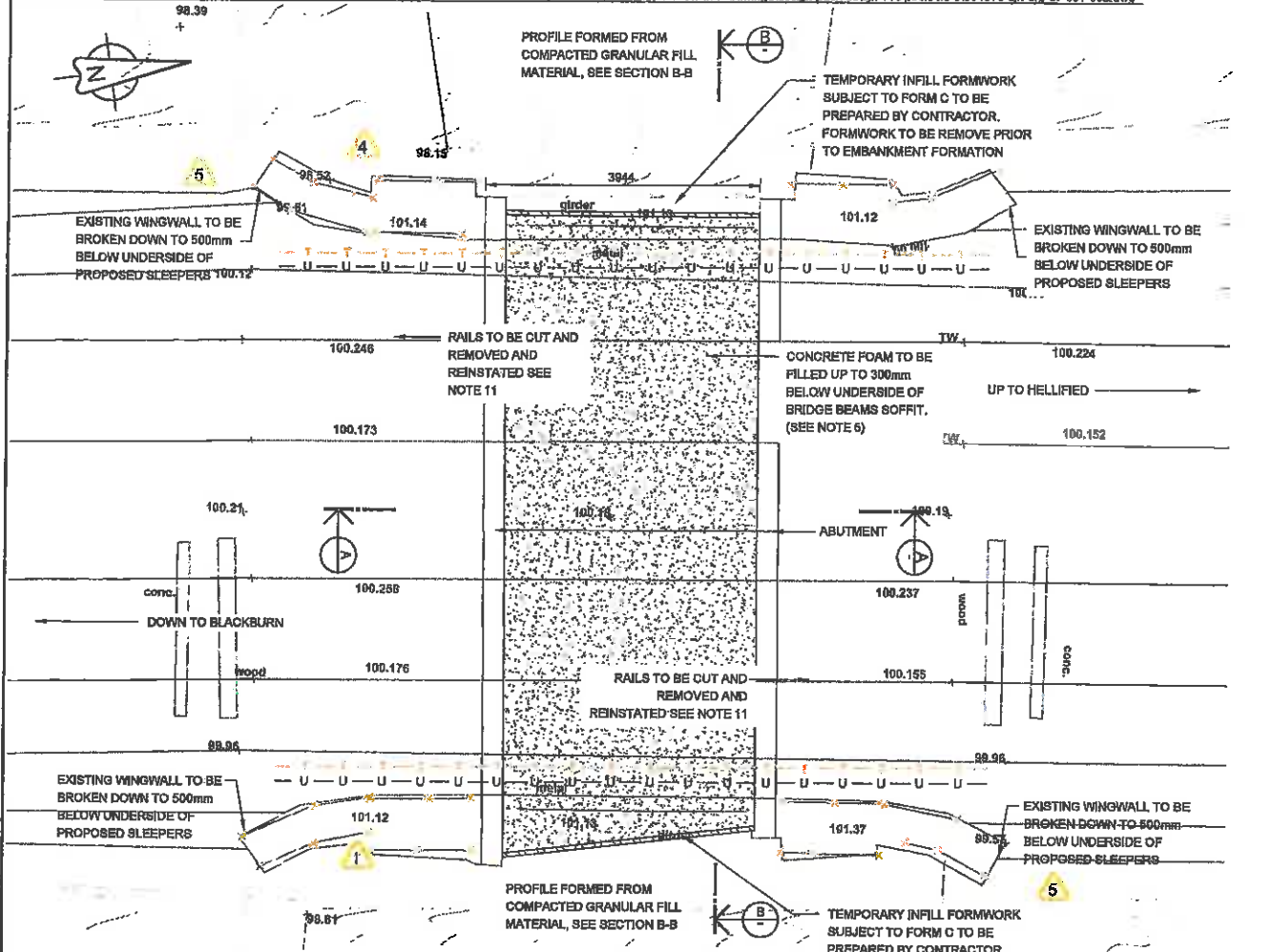




SUGGESTED SEQUENCE OF WORKS:

- OUTSIDE POSSESSION - UNDERPASS LEVEL**
- ACCESS TO BRIDGE TO BE ARRANGED VIA ADJACENT LAND-OWNERS FIELDS FROM THE A682.
 - BAT ROOST TO BE MANAGED UNDER NATURAL ENGLAND LICENCE AND IN ACCORDANCE WITH ECOLOGY REPORT RECOMMENDATION AS PRODUCED BY AMEY SERVICES.
 - INSTALL ACCESS HAUL ROAD, SET UP SITE AND REMOVE FENCING. ACCESS AND SITE LOCATION TO BE AGREED WITH ADJACENT LANDOWNERS.
 - CLEAR VEGETATION WITHIN 3.0m OF THE STRUCTURE. TREES AND ROOTS TO BE FULLY REMOVED.
 - EXCAVATE GROUND BELOW THE BRIDGE TO THE BOTTOM OF THE BRIDGE FOUNDATIONS IN 2.0m WIDE HIT AND MISS DISCRETE STRIPS TO ENSURE STABILITY OF ABUTMENTS, INFILLING STAGES 1 AND 2 OF THE DISCRETE STRIPS ARE SHOWN IN SECTION B-B. CONTRACTOR TO MANAGE AND MONITOR GROUND WATER LEVELS DURING EXCAVATION. CONTRACTOR TO IDENTIFY ANY UNKNOWN SERVICES PRIOR TO COMMENCING GROUND EXCAVATIONS.
 - INSTALL STRUCTURAL FILL UPON FOUNDING LAYER IN MAX 150mm LAYERS UP TO 2.0m WORKING HEIGHT BELOW BRIDGE DECK BEAMS.
 - INSTALL TEMPORARY FORMWORK AT THE OUTER BRIDGE ELEVATIONS AND INFILL STRUCTURE UP TO 300mm BELOW BRIDGE DECK BEAMS. STRUCTURE TO BE FILLED IN TWO FOAM CONCRETE POURS, BOTH OUTSIDE POSSESSION WORKING. FORMWORK TEMPORARY WORKS TO BE CONFIRMED BY CONTRACTOR IN FORM C.
 - REMOVE TEMPORARY FORMWORK WHEN FOAMED CONCRETE HAS CURED.
 - INSTALL INITIAL SECTION OF EMBANKMENT ON BOTH SIDES OF THE BRIDGE (BELOW FOAM CONCRETE FINISHED LEVEL) WITH TYPE DOT 6N FILL COMPACTED IN 150mm THICK MAXIMUM LAYERS. PROPOSED EMBANKMENT PROFILE TO MATCH ADJACENT EXISTING EMBANKMENT.
 - INSTALL INITIAL SECTION OF RABBIT/BADGER NETTING.
- DURING POSSESSION - TRACK LEVEL**
- TAKE WHEELS FREE POSSESSION (NO RRV / PLANT WITHIN 10m OF BRIDGE BUTTRESSES).
 - PROTECT UNLINED EQUIPMENT AND SERVICE LAID CABLES (SEPARATE S&T DESIGN TO BE UNDERTAKEN).
 - REMOVE TRACKS AND BALLAST IN THE VICINITY OF THE UNDERPASS (SEPARATE PWAY FORM A AND B TO BE UNDERTAKEN).
 - REMOVE METALLIC DECK (REFER TO SAFE DEMOLITION SEQUENCE NOTE).
 - BREAKDOWN BRIDGE PARAPETS AND WINGWALLS UP TO 500mm BELOW EXISTING SLEEPER LEVEL.
 - FILL AND COMPACT TYPE DOT 6N FILL COMPACTED IN 150mm THICK MAXIMUM LAYERS UP TO 300mm BELOW BOTTOM OF SLEEPER LEVEL.
 - INSTALL BALLAST AND REINSTATE TRACK IN ACCORDANCE WITH PWAY DESIGN.
 - REINSTATE CABLES AND SERVICES IN ACCORDANCE WITH S&T DESIGN
 - HANDBACK WHEELS FREE POSSESSION.

- OUTSIDE POSSESSION - UNDERPASS LEVEL**
- INSTALL FINAL SECTION OF EMBANKMENT (TO BALLAST LEVEL) WITH TYPE DOT 6N FILL COMPACTED IN 150mm THICK MAXIMUM LAYERS. PROPOSED EMBANKMENT PROFILE TO MATCH ADJACENT EXISTING EMBANKMENT.
 - COMPLETE RABBIT/BADGER NETTING, PLACE TOPSOIL LAYER AND RESEED EMBANKMENT.
 - INSTALL BURIED STRUCTURE SIGN.
 - INSTALL PROPOSED PERMANENT BOUNDARY FENCING TO MATCH EXISTING.

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS STATED OTHERWISE (DO NOT SCALE OFF THIS DRAWING. ALL LEVELS ARE IN METRES, UNLESS STATED OTHERWISE).
- ALL DIMENSIONS AND LEVELS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO IMPLEMENTATION ON SITE.
- ALL DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR IS TO CONFIRM THE EXTENT OF DEFECTS PRIOR TO COMMENCING THE REPAIR/REBUILD WORKS.
- FOAM CONCRETE SPECIFICATION IS AS FOLLOWS:
 - COMPRESSIVE STRENGTH CLASS 5 : (MIN STRENGTH 12N/mm²)
 - TARGET DENSITY: 1400kg/m³
- REFER TO ECOLOGY SURVEY AND BAT SURVEY CARRIED OUT BY AMEY FOR THE INSTALLATION OF THE PROPOSED BAT ROOSTS PRIOR TO BRIDGE REMOVAL.
- ALL VEGETATION AND TOPSOIL TO BE REMOVED FROM THE RE-GRADED AREA AND BANK SLOPE PRIOR TO PLACING FILL. CONTRACTOR TO CONSIDER STORING SEPARATELY AND RE-USING TOPSOIL (IF SUITABLE) PRIOR TO MAIN EXCAVATION WORKS. LARGE TREES TO BE CUT DOWN FLUSH TO GROUND LEVEL AND TREATED TO PREVENT RE-GROWTH. ROOT BALLS REMOVED WHERE POSSIBLE.
- THE EXISTING SAT CABLES CAN REMAIN IN PLACE DURING THE DECK REMOVAL BUT REQUIRE TEMPORARY SUPPORT AND PROTECTION. LOCAL ADJUSTMENT MAYBE REQUIRED DURING THE BRIDGE REMOVAL AND SUBSTRUCTURE DEMOLITION. REFER TO SAT DESIGN FOR DETAILS.
- THE SUBSTRUCTURE IS TO BE DEMOLISHED TO A MINIMUM OF 500mm BELOW THE SLEEPER.
- 6N STRUCTURAL FILL TO BE PLACED AND COMPACTED IN 150mm LAYERS IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORK, SERIES 800, TO ACHIEVE >95% OF MAXIMUM DRY DENSITY AND 5% AIR VOIDS. COMPACTION IS TO BE UNDERTAKEN USING AN END PERFORMANCE SPECIFICATION AND MEASURED BY USE OF AN ON-SITE NUCLEAR DENSITY GAUGE.
- EXCAVATION BELOW UNDERPASS GROUND LEVEL TO BE CARRIED OUT IN 2.0m HIT AND MISS DISCRETE STRIPS. EXCAVATION OF THE STRIPS ARE TO TAKE PLACE FOLLOWING INFILL AND COMPACTION OF 6N MATERIAL, UP TO THE EXISTING GROUND LEVEL.
- ABUTMENTS STABILITY IS CONSIDERED ADEQUATE PROVIDING THE DISCRETE STRIP PROCEDURE AND INFILLING UP TO THE UNDERSIDE OF DECK IS CARRIED OUT.
- THE TRACKS ARE TO BE REMOVED OVER THE EXISTING BRIDGE AND REPLACED IN ACCORDANCE WITH SEPARATE PWAY FORMS A AND B.

SAFE DEMOLITION SEQUENCE

- REMOVE TRACKS AND BALLAST IN THE VICINITY OF THE UNDERPASS IN ACCORDANCE WITH THE PWAY FORMS A AND B.
- REMOVE INFILL AND WATERPROOFING FROM TOP OF BRIDGE DECK
- CUT OR DISMANTLE CAST IRON PARAPET SECTIONS.
- BREAKDOWN MASONRY PILASTERS AND PARAPETS.
- CUT OR DISMANTLE CAST IRON DECK PLATES AND CROSS GIRDERS.
- REMOVE MAIN GIRDERS.

RESIDUAL DESIGN HAZARDS

(THE FOLLOWING INFORMATION HAS BEEN COLLECTED FROM PRECONSTRUCTION INFORMATION AND THE AMEY - HAZARD MANAGEMENT FOR DESIGNERS PROCESS).

THE DESIGNERS WOULD DRAW THE READERS ATTENTION TO THE KEY RESIDUAL HEALTH AND SAFETY RISKS THAT HAVE NOT BEEN ELIMINATED FROM THE DESIGNS SHOWN ON THIS DRAWING BY THE DESIGN PROCESS. THESE KEY RESIDUAL RISKS ARE IDENTIFIED BELOW:

- POOR STRUCTURE CONDITION
- LOW HEADROOM
- STANDING WATER
- BAT ROOST
- BURIED SERVICES / UNKNOWN SERVICES
- STRUCTURE STABILITY
- BURIED STRUCTURE

ANY CONSTRUCTION PERSONNEL INCLUDING OPERATIVES INTENDING TO CONSTRUCT THE DESIGNS SHOWN ON THIS DRAWING SHOULD ENSURE THAT THEY HAVE BEEN REGULARLY AND THOROUGHLY BRIEFED BY THE PRINCIPAL CONTRACTOR ON ALL HEALTH AND SAFETY MATTERS AND HAVE HAD SIGHT OF:

- THE FULL DESIGNERS AND CONTRACTORS RISK ASSESSMENTS AND RISK REGISTERS.
- THE DEVELOPED CONSTRUCTION HEALTH AND SAFETY PLAN.
- THE CONTRACTORS CONSTRUCTION METHOD STATEMENTS.

KEY TO EXISTING SERVICES

- PUBLIC SEWER
- WATER
- BURIED TELECOMS
- OVERHEAD TELECOMS CABLE
- UNKNOWN SERVICES

1	SCHEMATIC SUBMISSION	KG	AD	29.01.19
0	FOR COMMENT	KG	AD	20.10.15
Rev	Revision details	Chkd	Appd	Date
Designed:	HG			Date: 20/10/2015
Drawn:	LTF			Date: 20/10/2015
Checked:	KG			Date: 20/10/2015
Approved:	AD			Date: 20/10/2015

SCHEMATIC DRAWING

Date:	October 2015	Scale:	AS SHOWN
Approved for Construction:	Network Rail	Signature:	Tin Oo
Name:	A. Dutton	Date:	20/10/15
Network Rail Asset Engineer:	Principal Contractor	Signature:	
Name:	Mark Vignall	Date:	
Network Rail Project Engineer:	Principal Designer	Signature:	
Name:		Date:	

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Client: **Network Rail**

Project Name: **CP5 DESIGN PACK NOS.31-33 DJH 110 PEELS No.6**

Drawing Title: **BLACKBURN TO HELLIFIELD LINE ELR: DJH, 031m 0594yds PROPOSED GENERAL ARRANGEMENT**

Original Drawing Size:	A1	Scale:	As Shown
Dimensions:			
Drawing Status:	SCHEMATIC	Suitability:	-
Drawing No:	664918-DJH-DRG-CV-002	Rev:	1



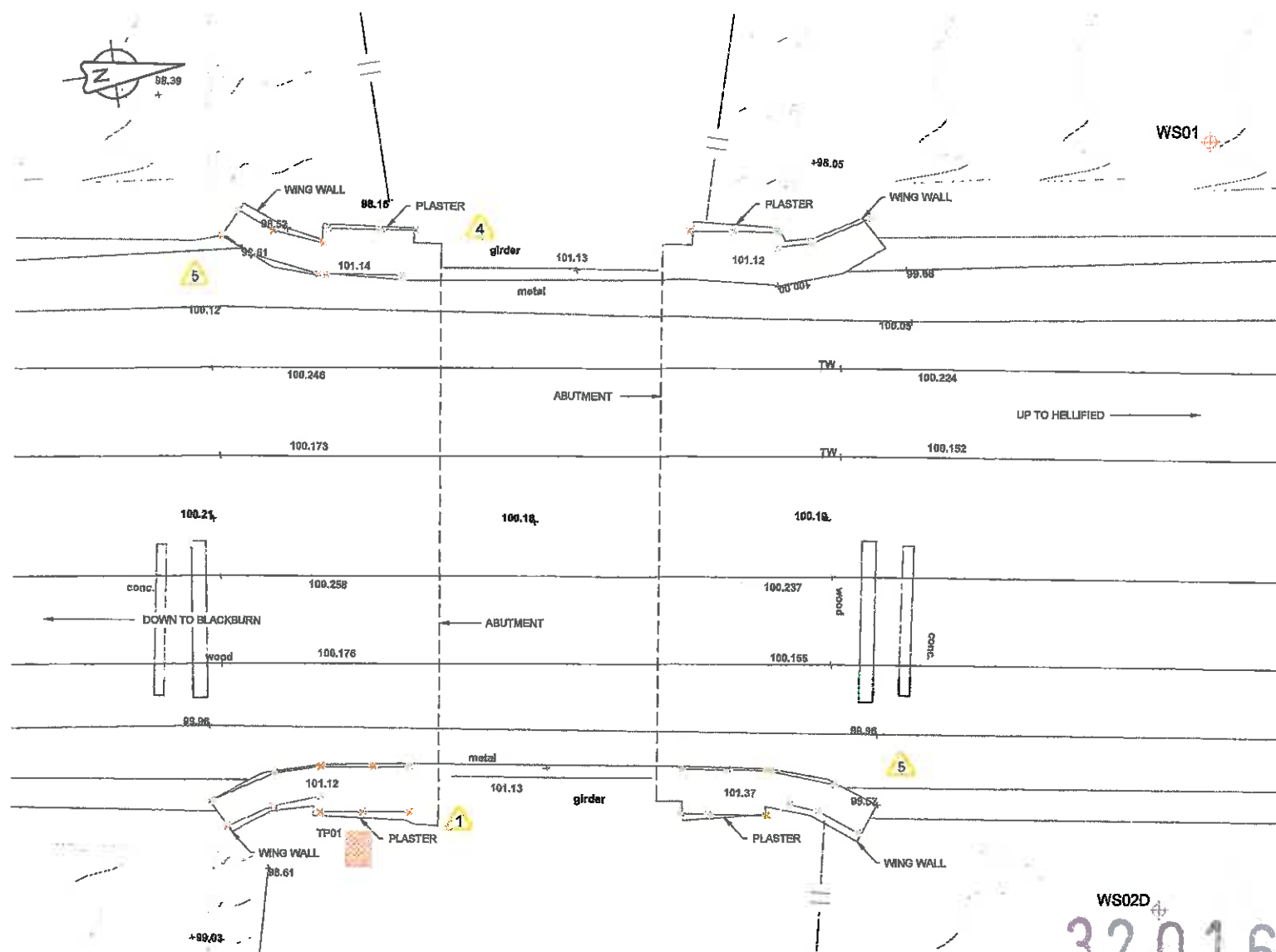
LOCATION PLAN
SCALE NT6



VIEW ON UPSIDE ELEVATION

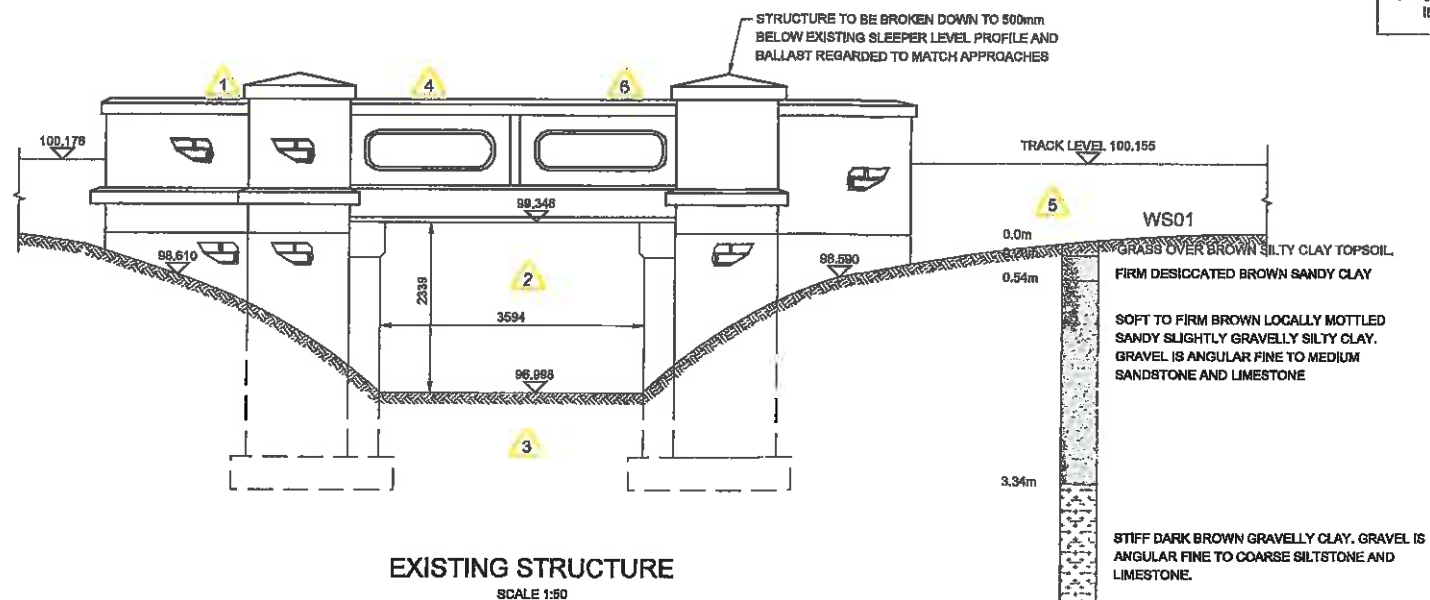


VIEW ON DOWNSIDE ELEVATION



PLAN VIEW
SCALE 1:50

ALL LEVELS AND DIMENSIONS SHOWN
ARE TO BE VERIFIED BY THE CONTRACTOR
PRIOR TO IMPLEMENTATION ON SITE



EXISTING STRUCTURE
SCALE 1:50



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7. BURIED STRUCTURE

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3. THE CONTRACTORS CONSTRUCTION METHOD STATEMENTS.

NOTES

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3. ALL DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR IS TO CONFIRM THE EXTENT OF DEFECTS PRIOR TO COMMENCING THE REFURBISHMENT WORKS.
4. REFER TO ARCHIVE DRAWING 16271 FOR FURTHER DETAILS OF THE EXISTING STRUCTURE.

1	SCHEMATIC SUBMISSION	KG	AD	29.01.16
0	FOR COMMENT	KG	AD	20.10.15
Rev	Revision details	Chkd	Appd	Date
Designed:	HG			Date: 20/10/2015
Drawn:	LTP			Date: 20/10/2015
Checked:	KG			Date: 20/10/2015
Approved:	AD			Date: 20/10/2015

SCHEMATIC DRAWING

Date:	October 2015	Scale:	AS SHOWN
Approved for Construction:		Network Rail	
Signed:	C.D.M. (Design Planner)	Signed:	Principal Designer
Name:	A.Dubois	Name:	Principal Contractor
Date:	6/10/16	Date:	
Network Rail Asset Engineer:		Network Rail Project Engineer:	
Signed:		Signed:	
Name:	Mark Vignall	Name:	
Date:	20/10/15	Date:	
Network Rail Project Engineer:		Principal Designer:	
Signed:		Signed:	
Name:		Name:	
Date:		Date:	

DRAWING LIST

- 664918-DJH-DRG-CV-001 - EXISTING GENERAL ARRANGEMENT
- 664918-DJH-DRG-CV-002 - PROPOSED GENERAL ARRANGEMENT
- 664918-DJH-DRG-CV-003 - PLAN & DETAILS OF BURIED STRUCTURE IDENTIFICATION PLATE

INTRUSIVE INVESTIGATION POSITIONS

- BOREHOLE
- TRIAL PIT

KEY TO EXISTING SERVICES

- PUBLIC SEWER
- WATER
- BURIED TELECOMS
- OVERHEAD TELECOMS CABLE
- UNKNOWN SERVICES

COLOUR CODE

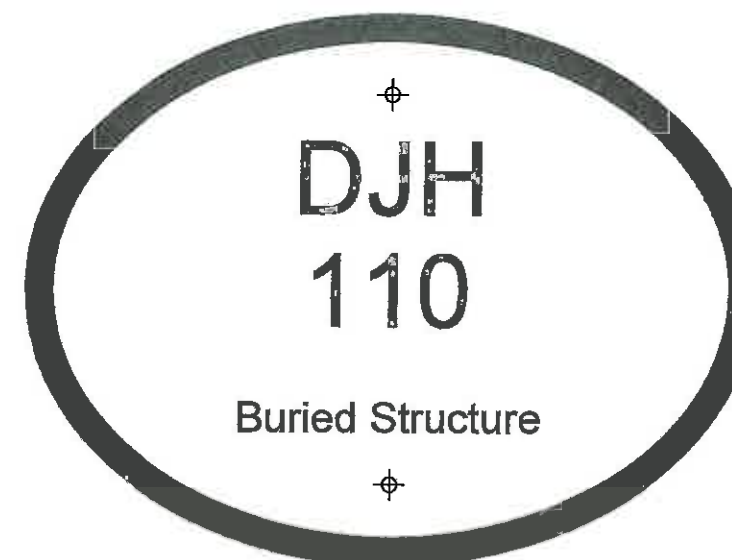
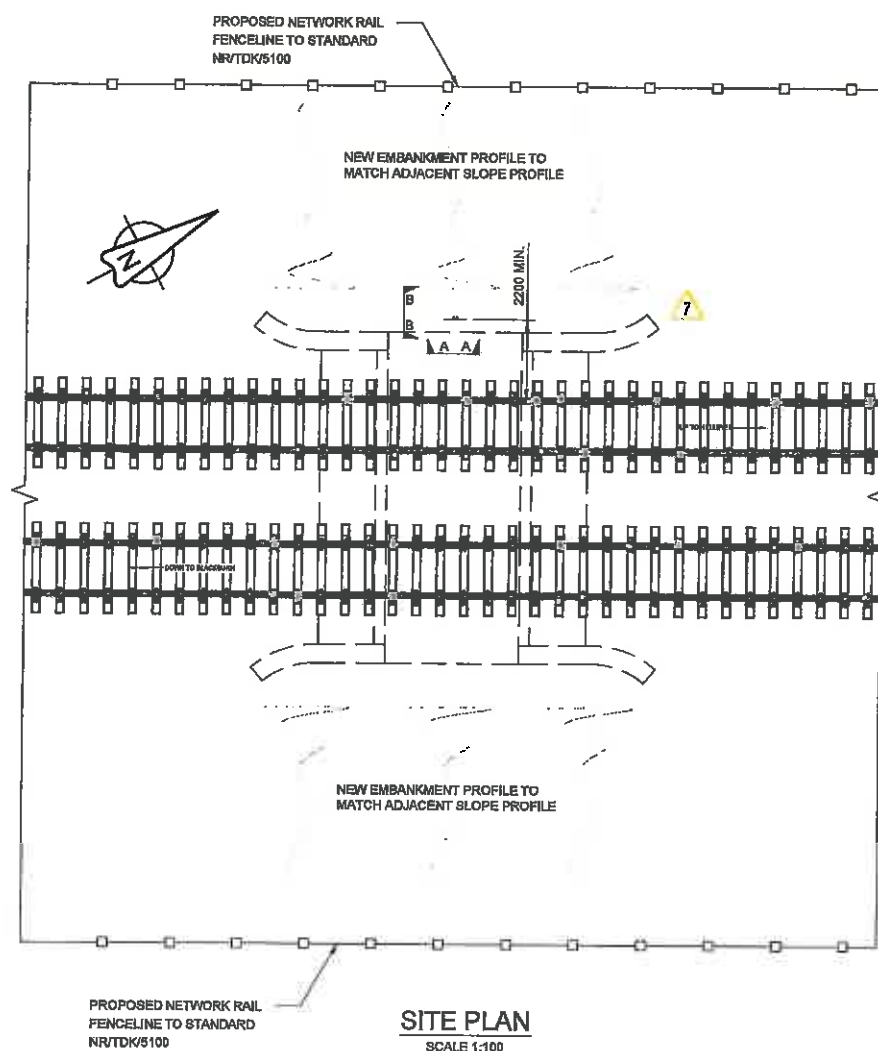
- Black - Existing or unchanged
- Blue - Modified or to be moved
- Green - New proposed or additional
- Red - New proposed or additional



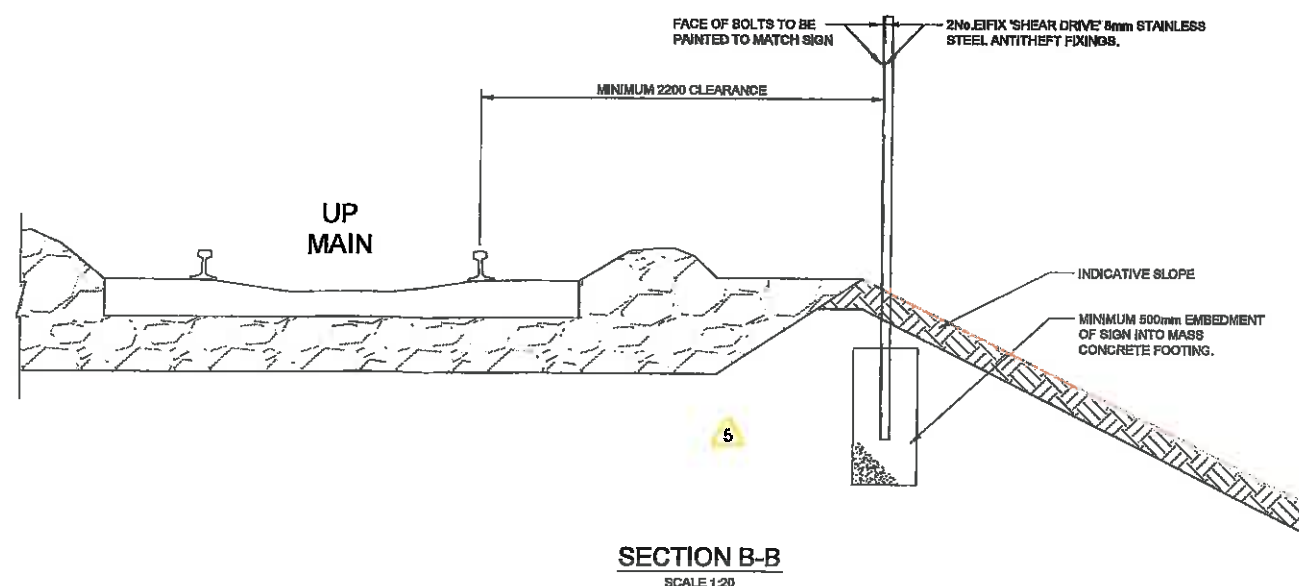
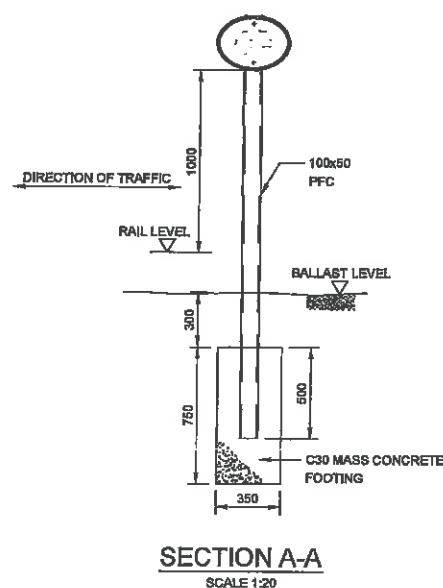
Project Name
**CP5 DESIGN PACK NOS.31-33
DJH 110 PEELS No.6**

Drawing Title
**BLACKBURN TO HELLFIELD LINE
ELR: DJH, 031m 0594yds
EXISTING GENERAL
ARRANGEMENT**

Original Drawing Size:	A1	Scale:	As Shown
Dimensions:			
Drawing Status	SCHEMATIC	Suitability	-
Drawing No	664918-DJH-DRG-CV-001	Rev	1



SIGN PLATE LAYOUT
SCALE 1:2



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4. BURIED SIGN TO BE FABRICATED IN ACCORDANCE WITH GWR17033 SIGN TYPE AK213.

1	SCHEMATIC SUBMISSION	KG	AD	29.01.16
0	FOR COMMENT	KG	AD	20.10.15
Rev	Revision details	Chkd	Appd	Date
Designed:	HG			Date: 20/10/2015
Drawn:	LTF			Date: 20/10/2015
Checked:	KG			Date: 20/10/2015
Approved:	AD			Date: 20/10/2015

SCHEMATIC DRAWING

Date:	October 2015	Scale:	AS SHOWN
Approved for Construction	Network Rail		
Signer:	Titin	Signer:	Titin
Name:	A. Dudson	Name:	A. Dudson
Network Rail Asset Engineer		Principal Contractor	
Signer:		Signer:	
Name:	Mark Vahagan - King Ching MCE	Name:	
Network Rail Project Engineer		Principal Designer	
Signer:		Signer:	
Name:		Name:	



Project Name
**CP5 DESIGN PACK NOS.31-33
DJH 110 PEELS No.6**

Drawing Title
**BLACKBURN TO HELLIFIELD LINE
ELR: DJH, 031m 0594yds
PLAN & DETAILS OF BURIED
STRUCTURE IDENTIFICATION
PLATE**

Original Drawing Size : A1	Scale : As Shown
Dimensions : -	
Drawing Status SCHEMATIC	Suitability -
Drawing No 664918-DJH-DRG-CV-003	Rev 1