

Chainage	Existing width		Proposed width		Increase in path width (m)	Comments/
	Verge (m)	Towpath (m)	Verge (m)	Towpath (m)		
SU-008 P0525	0	N/A	1.6	0.5	2.5	Towpath Br134
SU-008 P0575	50	1.1	1.6	0.5	2.5	0.9
SU-008 P0625	100	1.1	1.6	0.5	2.5	0.9
SU-008 P0675	150	1.1	1.6	0.5	2.5	0.9
SU-008 P0725	200	1.1	1.6	0.5	2.5	0.9
SU-008 P0775	250	1.1	1.6	0.5	2.5	0.9
SU-008 P0825	300	1.1	1.6	0.5	2.5	0.9
SU-008 P0875	350	1.1	1.6	0.5	2.5	0.9
SU-008 P0925	400	1.1	1.6	0.5	2.5	0.9
SU-008 P0975	450	1.1	1.6	0.5	2.5	0.9
SU-009 P0025	500	1.1	1.6	0.5	2.5	0.9
SU-009 P0075	550	1.1	1.6	0.5	2.5	0.9
SU-009 P0125	600	1.1	1.6	0.5	2.5	0.9
SU-009 P0175	650	1.1	1.6	0.5	2.5	0.9
SU-009 P0225	700	1.1	1.6	0.5	2.5	0.9
SU-009 P0275	750	1.1	1.6	0.5	2.5	0.9
SU-009 P0325	800	1.1	1.6	0.5	2.5	0.9
SU-009 P0375	850	1.1	1.6	0.5	2.5	0.9
SU-009 P0425	900	1.1	1.6	0.5	2.5	0.9
SU-009 P0475	950	1.1	1.6	0.5	2.5	0.9
SU-009 P0525	1000	1.1	1.6	0.5	2.5	0.9
SU-009 P0575	1050	1.1	1.6	0.5	2.5	0.9
SU-009 P0625	1100	1.1	1.6	0.5	2.5	0.9
SU-009 P0675	1150	1.1	1.6	0.5	2.5	0.9
SU-009 P0725	1200	1.1	1.6	0.5	2.5	0.9
SU-009 P0775	1250	1.1	1.6	0.5	2.5	0.9
SU-009 P0825	1300	1.1	1.6	0.5	2.5	0.9
SU-009 P0875	1350	N/A	1.5	N/A	1.5	Towpath under Bridge 133
SU-010 P0925	1400	1.1	1.5	0.5	2	0.5
SU-010 P0975	1450	0.9	1.5	0.5	2	0.5
SU-010 P0025	1500	0.9	1.6	0.5	2	0.4
SU-010 P0075	1550	1	1.5	0.5	2	0.5
SU-010 P0125	1600	1	1.5	0.5	2	0.5
SU-010 P0175	1650	1	1.45	0.5	2	0.55
SU-010 P0225	1700	0.9	1.5	0.5	2	0.5
SU-010 P0275	1750	1.3	1.6	0.5	2	0.4
SU-010 P0325	1800	1.15	1.75	0.5	2	0.25
SU-010 P0375	1850	0.8	1.5	0.4	2	0.5
SU-010 P0400	1900	0.7	1.5	0.4	1.8	0.3
SU-010 P0425	1950	1.2	1.4	0.5	2	0.5
SU-010 P0475	2000	1.05	1.4	0.5	2	0.6
SU-010 P0525	2050	1	1.5	0.5	2	0.5
SU-010 P0575	2100	0.8	1.4	0.4	2	0.6
SU-010 P0625	2150	0.8	1.5	0.4	2	0.5
SU-010 P0675	2200	0.8	1.5	0.5	2	0.5
SU-010 P0725	2250	N/A	1.5	N/A	1.5	0
SU-010 P0775	2300	1	1.3	0.5	2	0.7
SU-010 P0800	2350	0.55	1.25	0.5	1.5	0.25
SU-010 P0825	2400	0.8	1.2	0.5	1.5	0.3
SU-010 P0875	2450	0.7	1.25	0.5	1.5	0.25
SU-010 P0925	2500	0.8	1.25	0.5	1.5	0.25
SU-010 P0975	2550	0.9	1.4	0.5	1.5	0.1
SU-011 P0025	2600	0.6	1.4	0.5	1.5	0.1
SU-011 P0075	2650	0.7	1.35	0.5	2	0.55
SU-011 P0125	2700	1.1	1.4	0.5	2	0.6
SU-011 P0175	2750	1.4	1.45	0.5	2	0.55
SU-011 P0225	2800	1	1.4	0.5	2	0.6
SU-011 P0275	2850	0.9	1.4	0.5	2	0.6
SU-011 P0325	2900	0.9	1.3	0.4	1.8	0.5
SU-011 P0375	2950	0.9	1.45	0.4	2	0.55
SU-011 P0425	3000	0.8	1.4	0.5	2	0.6
SU-011 P0475	3050	1	1.5	0.5	2	0.5
SU-011 P0525	3100	1.4	1.4	0.5	2.25	0.85
SU-011 P0575	3150	1.1	1.5	0.5	2.25	0.75
SU-011 P0625	3200	1.1	1.45	0.5	2.25	0.8
SU-011 P0675	3250	1	1.45	0.5	2.25	0.8
SU-011 P0725	3300	1	1.5	0.5	2.25	0.75
SU-011 P0775	3350	0.9	1.4	0.5	2.25	0.85
SU-011 P0825	3400	1.1	1.3	0.5	2.25	0.95
SU-011 P0875	3450	1.2	1.3	0.5	2.25	0.95
SU-011 P0925	3500	1.2	1.3	0.5	2.25	0.95
SU-011 P0975	3550	1.2	1.25	0.5	2.25	1
SU-012 P0025	3600	1.2	1.3	0.5	2.25	0.85



Design and Development

Project:  
**P11340 CHESTER TOWPATH UPGRADE**  
 Br 131 to Br 134

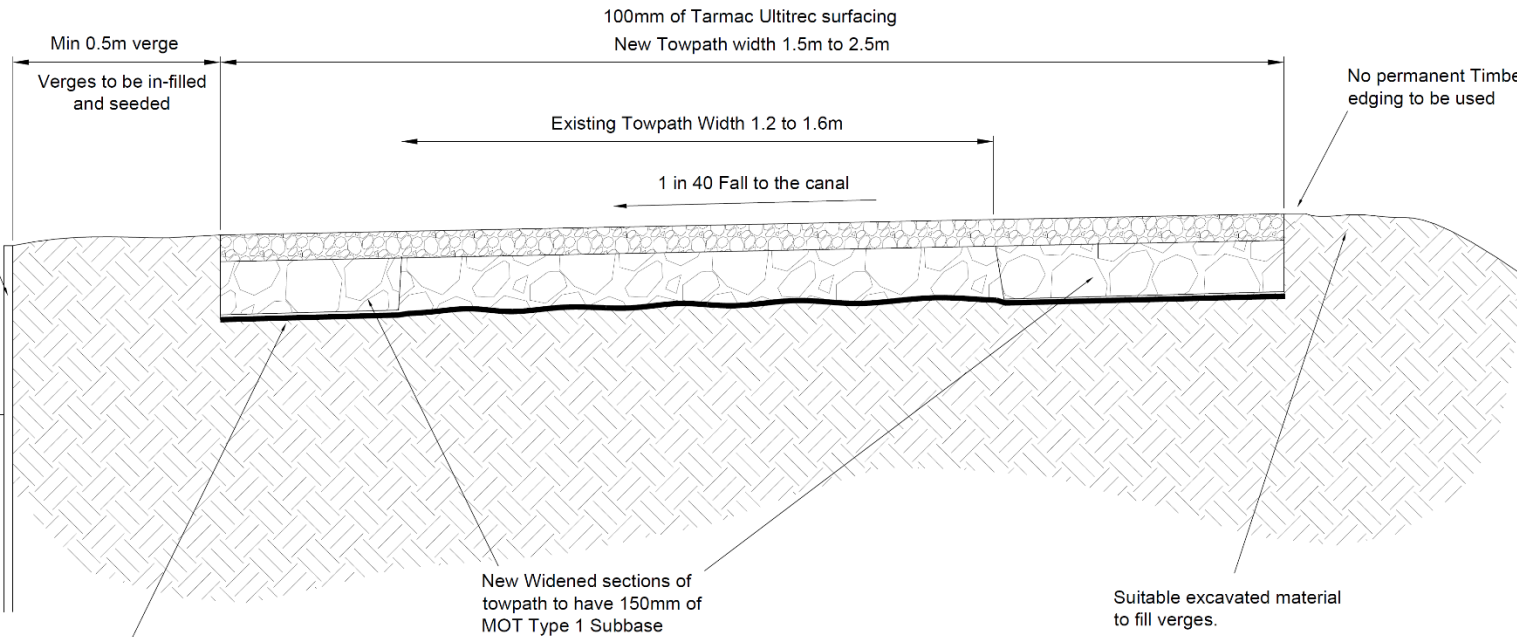
Drawing Title:  
**SHROPSHIRE UNION CANAL**  
**CHESTER TOWPATH UPGRADE**  
 Existing Layout, Hazards,  
 Chainage and Towpath Widths

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Drawn By:	Checked By:
DJH	TS
Authorised By:	Date:
	21/4/2020
Drawing Scale (A1):	Rev.
Not to scale	A
Dwg. No. P11340-DR1	

Ordnance Survey 100010994. © Contains Royal Mail data, © Royal Mail copyright and database right, 2019. Contains National Statistics data, © Crown copyright and database right, 2018.

Much of the existing washwall is L8G Trench sheet piles. Depth of the piles is unknown and the position of the anchor piles is unknown.



Water Level

Terram 1000 Geotextile or similar approved.  
New widened towpath Terram to overlap 150mm with the existing terram.

## TOWPATH ULTITREC FULL CONSTRUCTION WITH VERGE

### Construction Notes:

1. The existing towpath construction is resin bound surfacing with 6mm gravel on top of approximately 150mm of well compacted MOT type 1 fill, with Terram 1000 geotextile under lay or similar and timber edging boards. The existing resin bound surfacing has worn away in many places. The MOT subbase has become loose on the exposed surface, and is soft on the edges near the timber edging.

2. The existing surfacing and the top 50mm of subbase is to be scraped back removing any loose or organic material. Where the existing subbase is still well compacted, this is to be increased in thickness with 50mm of MOT Type 1, well compacted. Where any further soft spots and voids exist within the existing subbase, the material shall be removed and replaced with new MOT type 1. The existing ground for the widened section of towpath is to be widened to specified width, and excavated to required depth, ensuring ground is firm

below the base course of the towpath. Line with Terram 1000 geotextile or similar, and place 150mm depth of MOT Type 1, well compacted.

3. The existing timber boarding is to be removed, and new Terram is to overlap with the existing by 150mm.

4. Lay 100mm thick Tarmac Ultitrec to manufactures specification for the proposed width of towpath required. A fall of 1 in 40 to the canal is

required.

5. Suitable excavated material is to be used to fill the verges. A final 25mm depth of site won material suitable for grass seeding is to be placed and seeded as per Specification. All verges are to be stone picked.

6. The condition of the towpath varies between sections. The worst section is between bridge 132A and Br133.

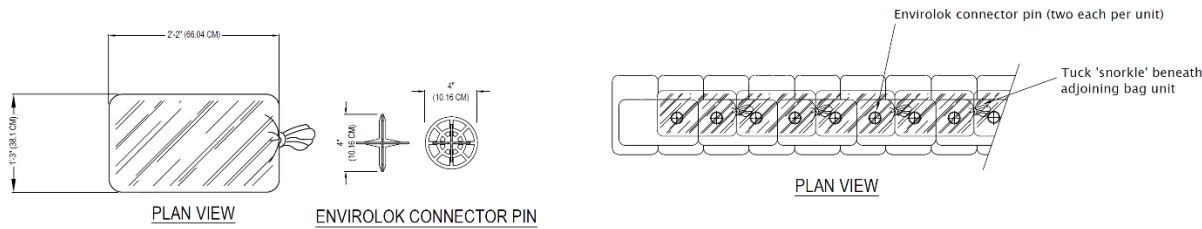


Design & Delivery Team

DESIGN OFFICE  
Navigation House  
Navigation Road  
Northwich, Cheshire  
CW8 1BH

TITLE  
Shropshire Union Canal  
P11340 Chester Towpath Enhancement  
Br 131 to Br134  
Ultitrec Cross Section

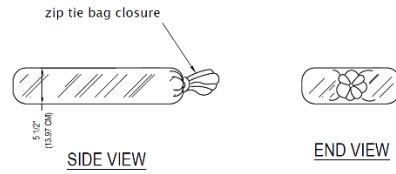
DRAWN BY	DJH	DESIGNED BY	RJ/DJH
CHECKED BY	TS	APPROVED BY	
DATE	21-4-2020	SCALE	NTS
RG. NO.	P11340/Dr4	REVISION	A



PLAN VIEW

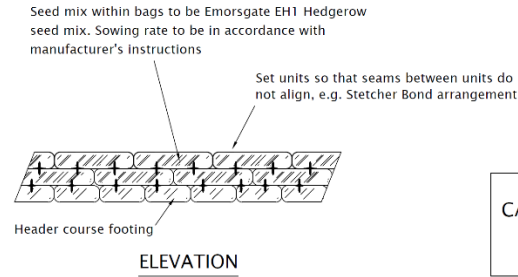
ENVIROLOK CONNECTOR PIN

PLAN VIEW



SIDE VIEW

END VIEW



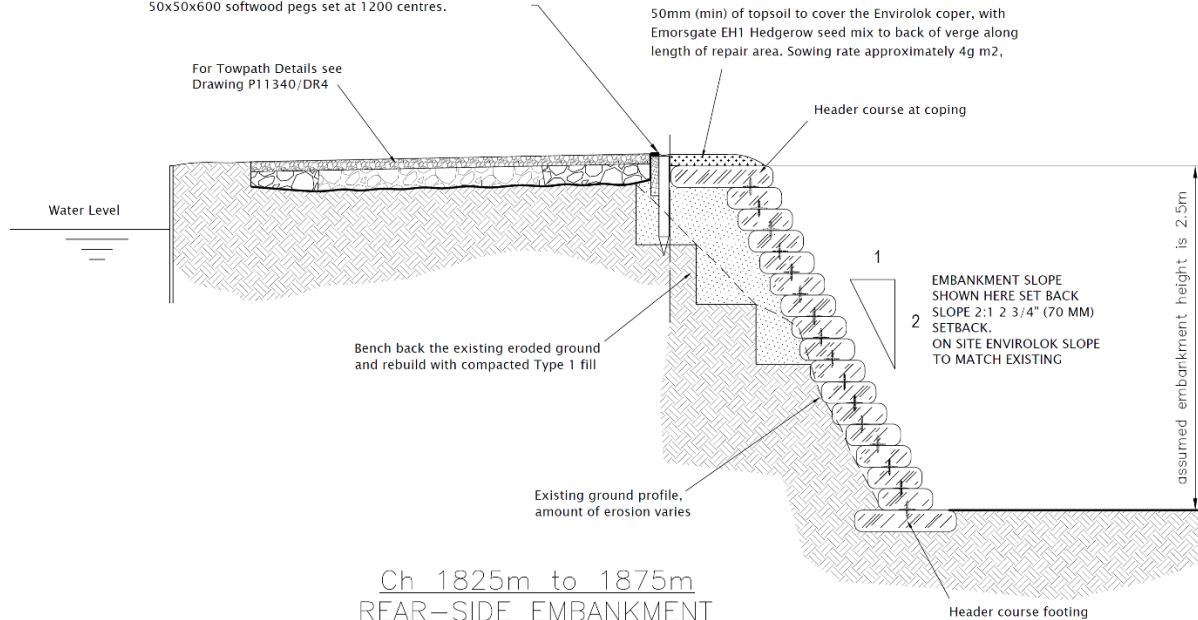
ELEVATION

ENVIROLOK SPECIFICATION:  
 CALCULATED UNIT FILL: 1.25 CU FT (.0354 M<sup>3</sup>)/UNIT  
 FACE AREA: 1 SQ FT (.093 M<sup>2</sup>)  
 MATTRESS FACE AREA: 2.7 SQ FT (.25 M<sup>2</sup>)/UNIT

Timber Edging to be used from chainage 1800m to 1900m where the embankment slope is at the rear of the towpath. All timber to be FSC and pressure treated softwood. 150x25 boards nailed to 50x50x600 softwood pegs set at 1200 centres.

For Towpath Details see Drawing P11340/DR4

50mm (min) of topsoil to cover the Envirolok cover, with Emorsgate EH1 Hedgerow seed mix to back of verge along length of repair area. Sowing rate approximately 4g m<sup>2</sup>.



Ch 1825m to 1875m  
 REAR-SIDE EMBANKMENT  
 CROSS SECTION

\*1825m to 1875m chainage between bridges 132a and 133 is on a non-principal Embankment. No topographical survey has been carried out, and much of the embankment is hidden by hedge. It is assumed that the embankment is 2.5m with a 2 in 1 slope, but existing slope angle is to be retained.

The embankment face is to be rebuilt and lined with Envirolok slope stabilization system to prevent future erosion of the bank. The embankment behind behind the envirolok is to be built up with MOT type 1



DESIGN OFFICE Navigation House  
 Navigation Road  
 Northwich, Cheshire  
 CW8 1BH

TITLE  
 Shropshire Union Canal  
 P11340 Chester Towpath Upgrade  
 Rear of Towpath Embankment  
 Cross Section

DRAWN BY DJH	DESIGNED BY DJH
CHECKED BY TS	APPROVED BY
DATE 27-4-2020	SCALE NTS
DRG. NO. P11340/Dr5	REVISION A