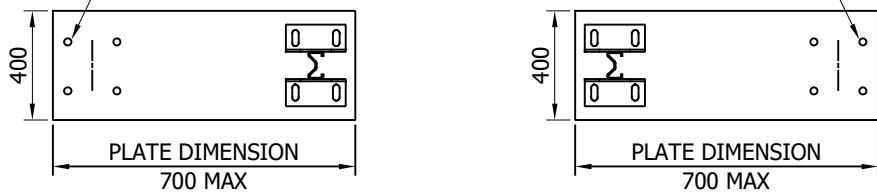
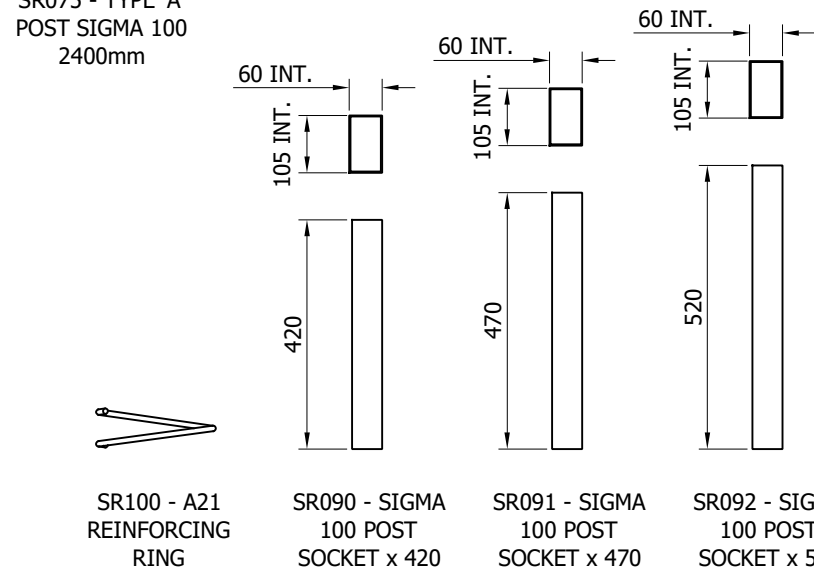
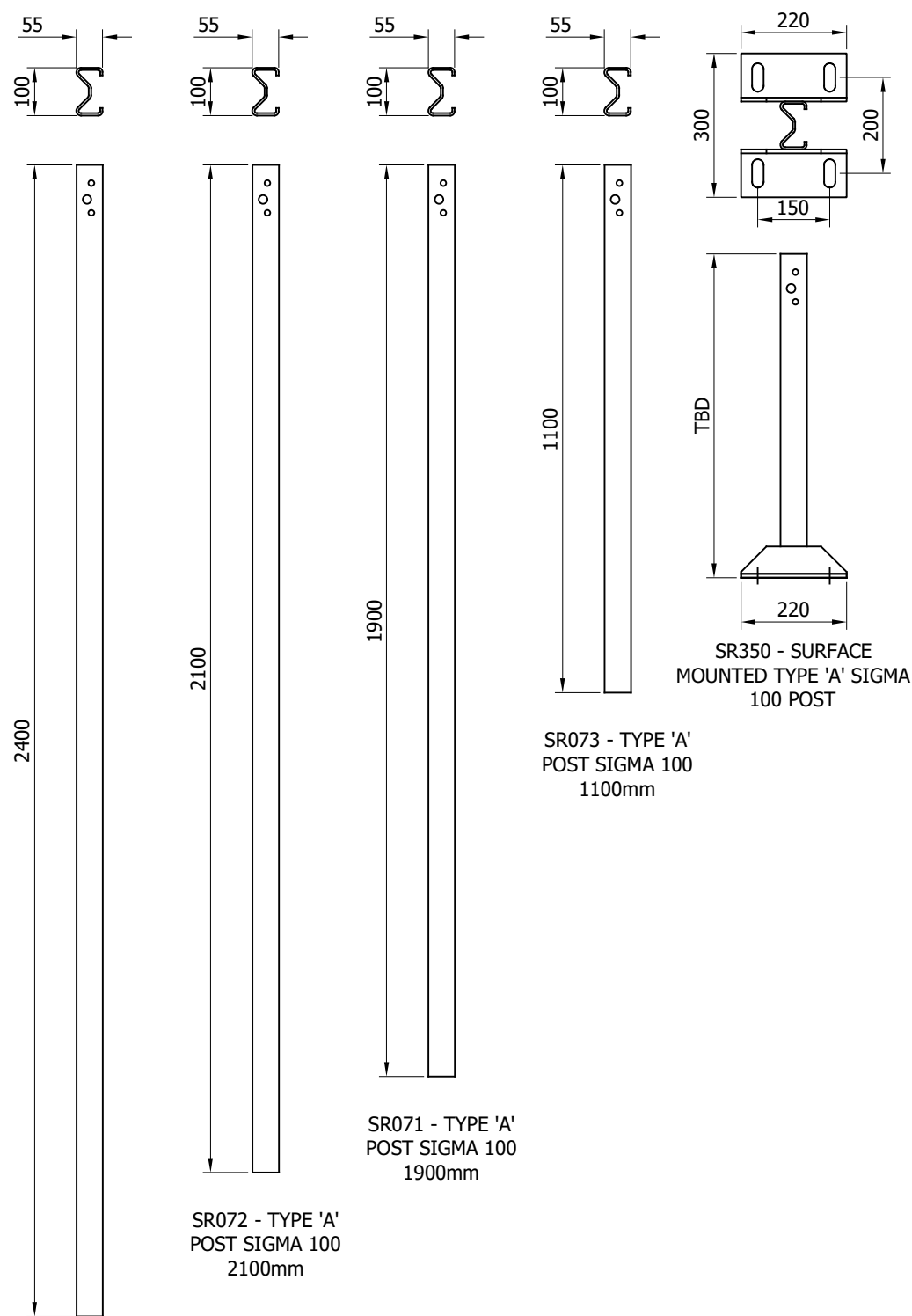


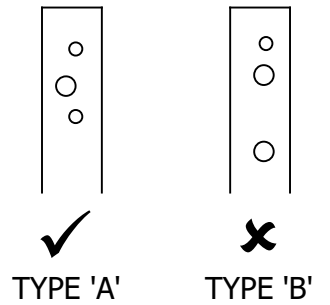
CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



\*BASEPLATE DRILL & TAPPED FOR LIFTING EYE



### POST TOP DRILLING ARRANGEMENT



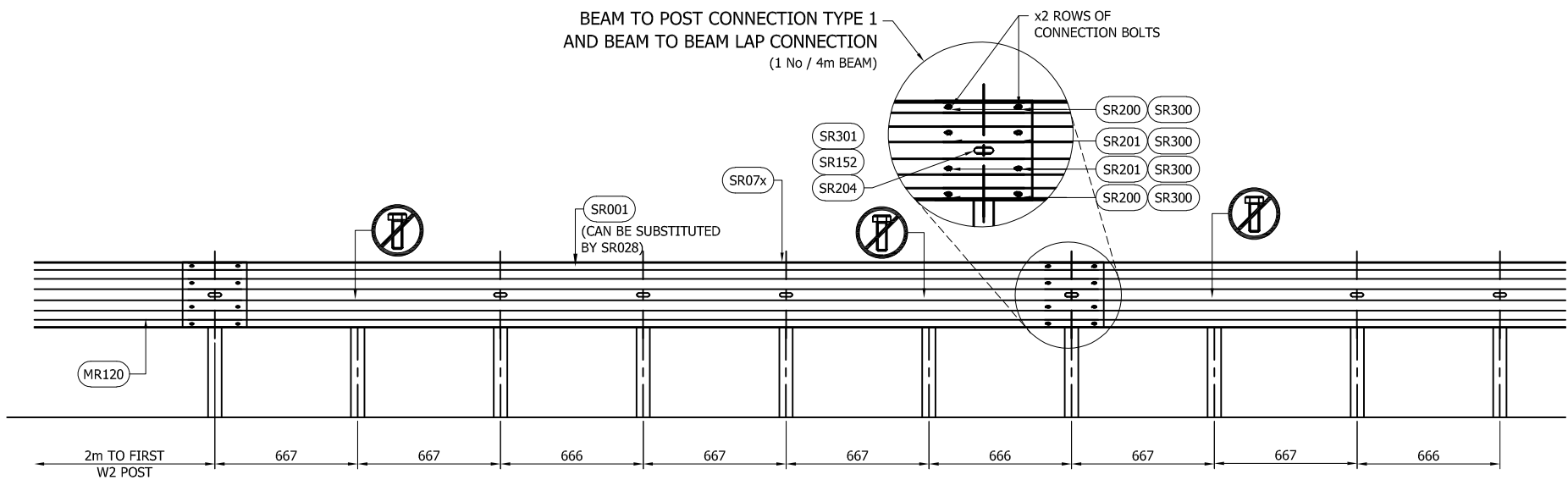
07	31/05/22	OFFSET PLATE DETAIL CHANGED	A.D
06	25/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
05	19/11/19	BEAM DETAILS ADDED	M.T
04	12/02/19	TITLEBLOCK REVISED	H.B
03	10/03/17	OFFSET POST REVISED	L.L
02	26/01/17	DETAILS ADDED & REVISED	L.L
1.2	20/05/15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

## MegaRail ESP+W1 N2 W1

N2.W1 VEHICLE RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

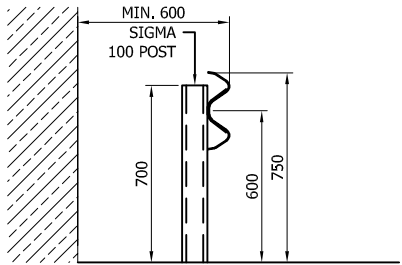
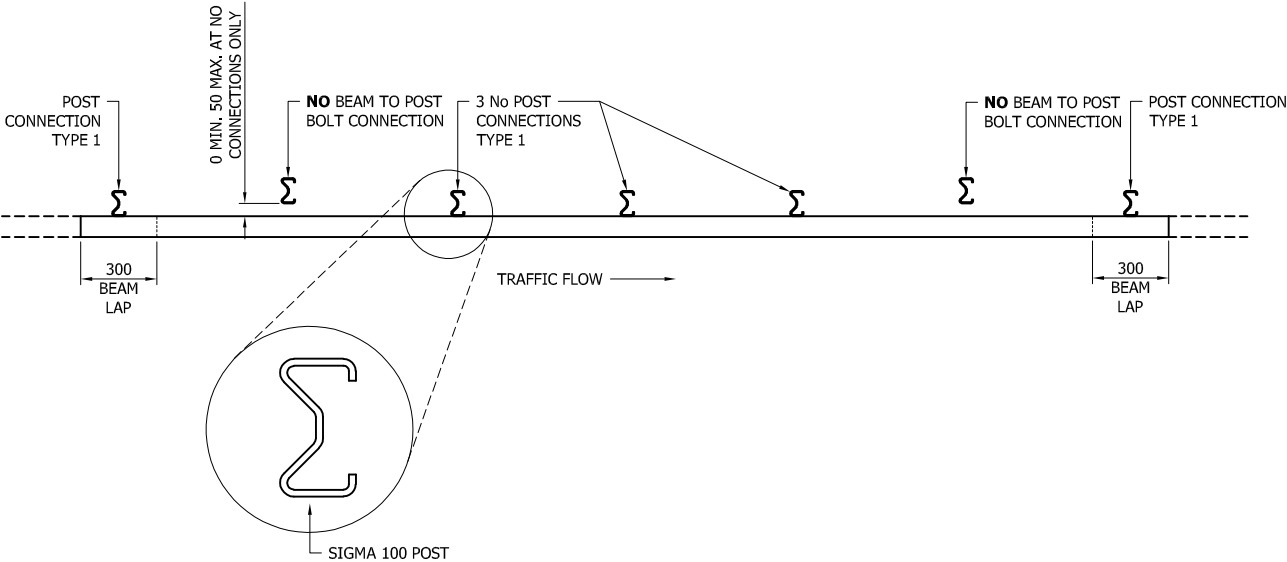
**SAFEROAD®**  
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NORTH LINCOLNSHIRE, DN15 8XE  
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FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W1-GA-00	07



# GENERAL NOTES:

1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
3. AT LOCAL OBSTRUCTIONS INDIVIDUAL POSTS MAY BE OMITTED WHICH WOULD RESULT IN A GAP BETWEEN ADJACENT POSTS OF 1333. OR ALTERNATIVELY OFFSET POST SHOWN ON DRAWING N2W1-GA-00 CAN BE USED.
4. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
5. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
6. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.
7. FRONT & BACKING BEAMS TO RUN IN SYNC.



## MegaRail ESP+W1 N2 W1 N2.W1VEHICLE RESTRAINT SYSTEM ASSEMBLY AND SETTING OUT ARRANGEMENT

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TABLE 'A' - SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM

SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
SR001	BEAM (CAN BE SUBSTITUTED BY SR028)	1
SR025	BEAM ½ ROUND ESP	1
SEE TABLE B	POST SIGMA 100	6

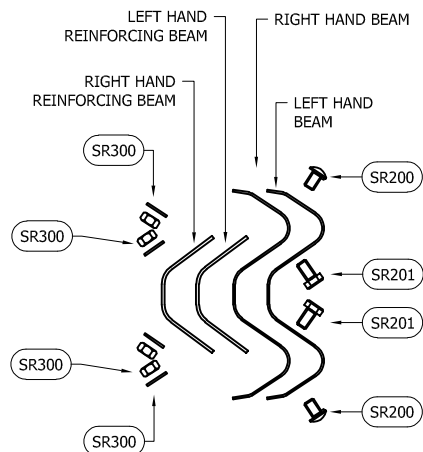
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER N2W1-GA-02

TABLE 'B' - SCHEDULE OF POST REFERENCE NUMBERS AND LENGTHS

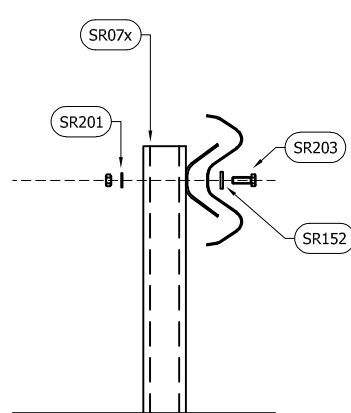
SAFEROAD UK PART NUMBER	POST LENGTH
SR073	1100
SR071	1900
SR072	2100
SR075	2400

REVn	DATE	DETAILS	INITIAL
04	19/11/19	BEAM DETAILS ADDED	M.T
03	12/02/19	REVISED TITLEBLOCK	H.B
02	26/01/17	KERB HEIGHT & CODES REV'D	L.L
1.2	20/05/15	DETAILS REVISED	M.T

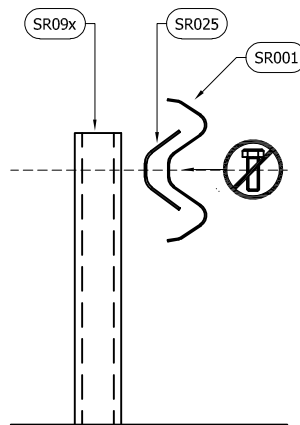
DRAWING NUMBER:	REVn:
N2W1-GA-01	04



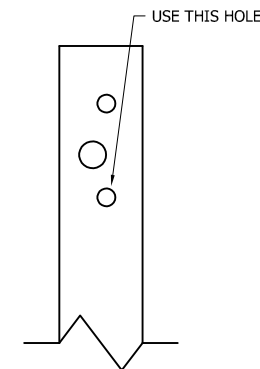
BEAM TO BEAM CONNECTION  
ARRANGEMENT AT FRONT  
BEAM LAP  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1  
(x4 LOCATIONS / BEAM)



**NO** BEAM TO POST  
BOLT CONNECTION  
(TYPE 2)



BEAM TO POST  
CONNECTION HOLE

# GENERAL NOTES:

- NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM			
SAFEROAD UK PART NUMBER	DESCRIPTION	FRONT BEAM LAP JOINT	REINFORCING BEAM LAP JOINT
SR200	SETSCREW 4.6 LAP M16 x 27 c/w NUT	8 (+4)	4 (+4)
SR201	SETSCREW 8.8 M16 x 45 c/w NUT	2 (+2)	0
SR300	M16 WASHER 18Ø HOLE	6 (+6)	4 (+4)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST		
SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
SR203	SETSCREW 4.6 M10 x 60 c/w NUT	1
SR152	WASHER PLATE 115 x 40 x 5 DIA. 12	1
SR301	M10 WASHER 11Ø HOLE	1
QUANTITY OF CONNECTION TYPES / 4m BEAM		
		4 (+1)

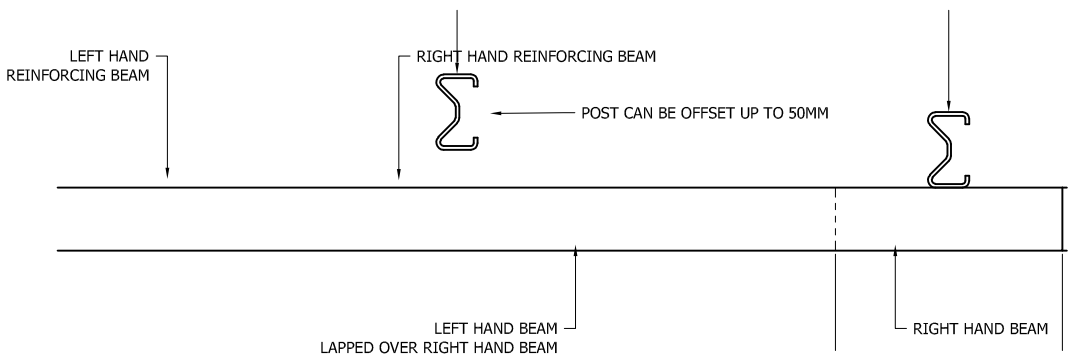
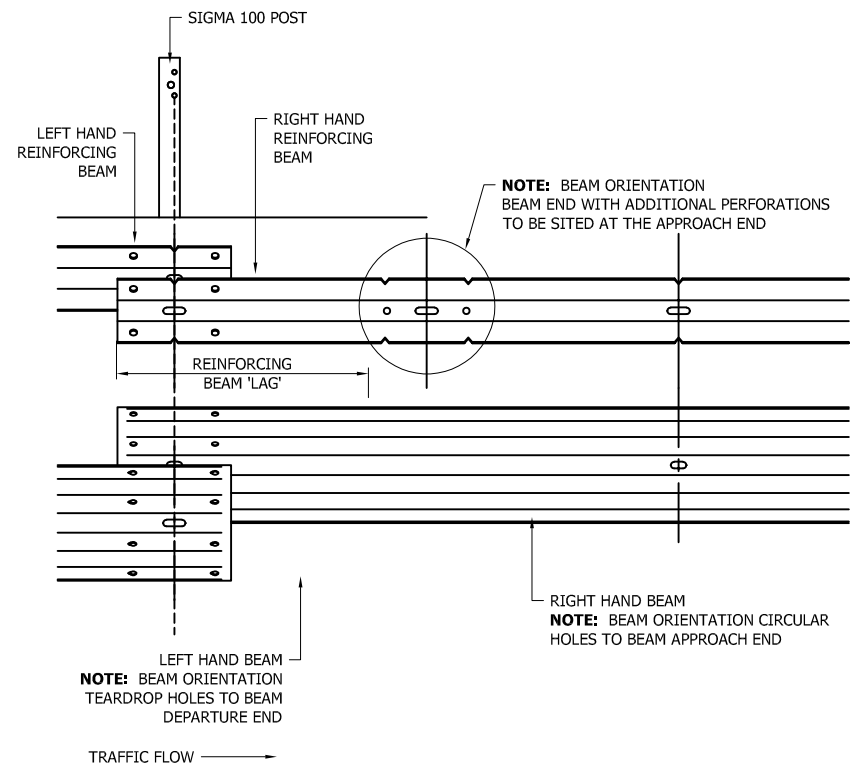
REV#	DATE	DETAILS	INITIAL
03	12/02/19	REVISED TITLEBLOCK	H.B
02	26/01/17	HOLE LOCATION & CODES REVISED	L.L
1.2	20/05/15	DETAILS REVISED	M.T

**MegaRail ESP+W1  
N2 W1**  
N2.W1 VEHICLE RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

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DRAWING NUMBER:	REV#:
N2W1-GA-02	03

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

05	12/02/19	REVISED TITLEBLOCK	H.B
04	28/03/17	POST OFFSET REVISED	L.L
03	10/03/17	DETAILS ADDED	L.L
02	26/01/17	HOLE LOCATION REVISED	L.L
1.2	20/05/15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

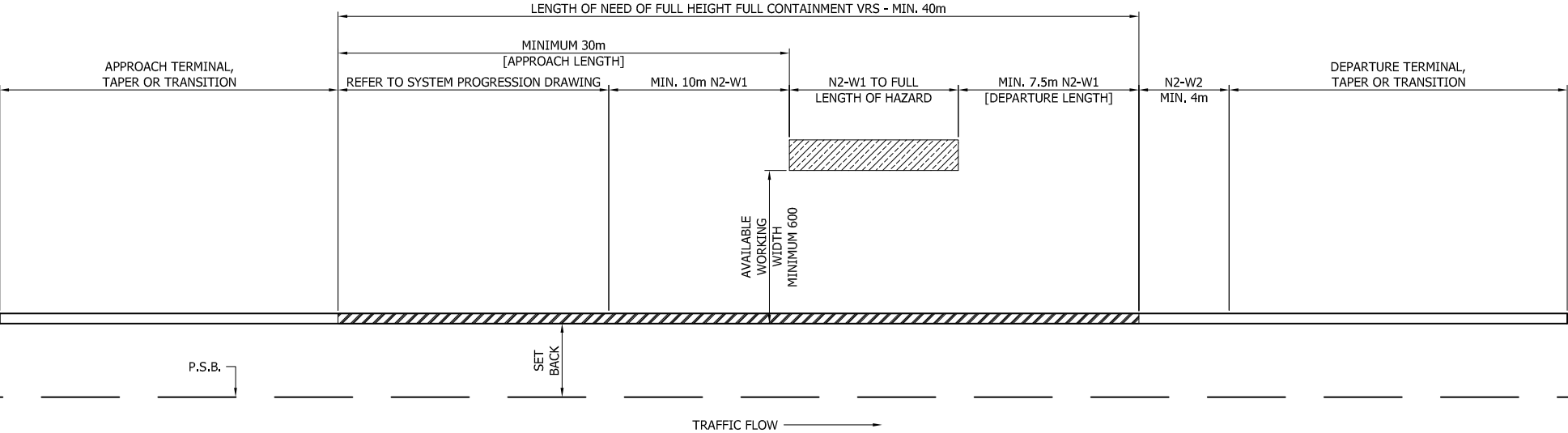
**MegaRail ESP+W1  
N2 W1**  
N2.W1 VEHICLE RESTRAINT SYSTEM.  
BEAM LAPPING ARRANGEMENT

**SAFEROAD®**  
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DRAWING NUMBER:	REVn:
N2W1-GA-03	05



- GENERAL NOTES:
- 1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  - 2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  - 3. MINIMUM LENGTH OF FULL HEIGHT VRS IS 40m

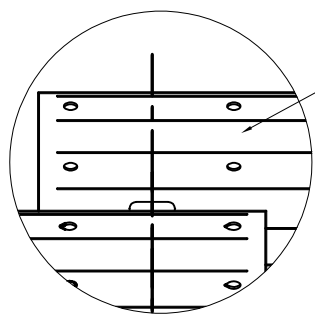
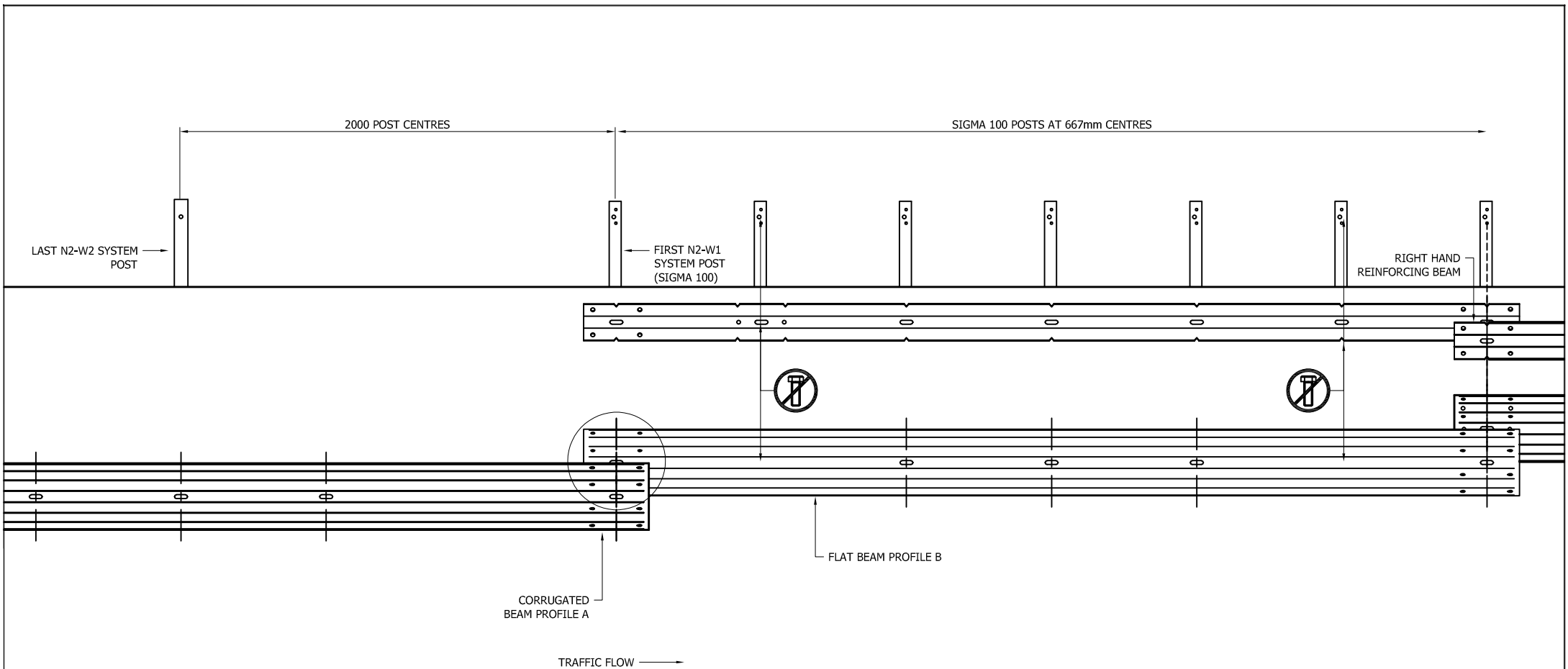


**MegaRail ESP+W1  
N2 W1**  
VEHICLE RESTRAINT SYSTEM.  
SYSTEM PROGRESSION SCHEMATIC  
FOR W1 PROTECTION TO HAZARD

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03	12/02/19	REVISED TITLEBLOCK	H.B
02	26/01/17	DETAILS REVISED	L.L
1,2	20/05/15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

DRAWING NUMBER:	REVn:
N2W1-GA-10	03



**NOTE:** BEAM ORIENTATION CIRCULAR HOLES TO BEAM APPROACH END

**MegaRail ESP+W1  
N2 W1**  
N2.W1 VEHICLE RESTRAINT SYSTEM.  
N2.W2 INTO N2.W1 SYSTEM  
PROGRESSION CONNECTION DETAIL

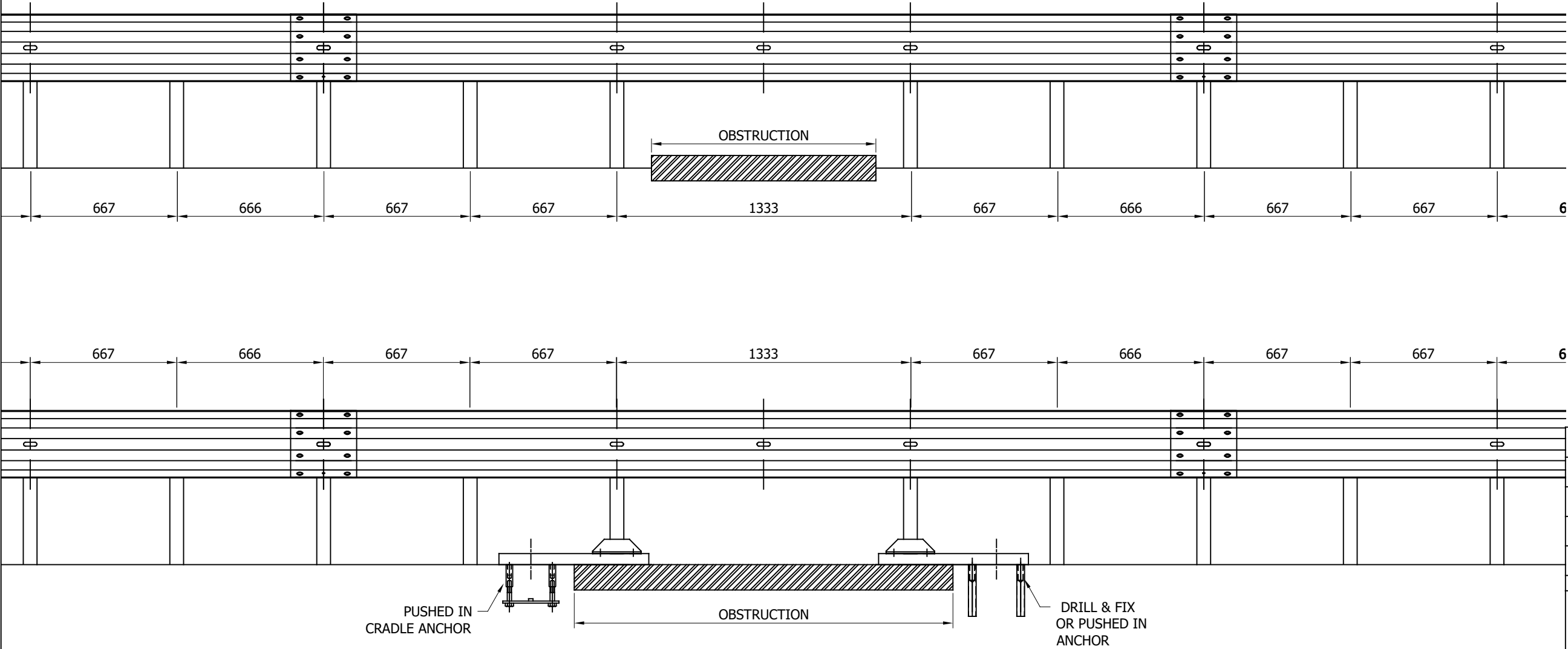
**SAFEROAD®**  
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BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

04	12/02/19	REVISED TITLEBLOCK	H.B
03	10/03/17	POST DETAILS REVISED	L.L
02	26/01/17	VIEW MOVED & BEAM REV'D	L.L
1.2	20/05/15	DETAILS REVISED	M.T
REV'n	DATE	DETAILS	INITIAL

DRAWING NUMBER:	REV'n:
N2W1-GA-20	04

\*\* BEAM REFERENCES I.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

- GENERAL NOTES:
1. IF THE SITE CONDITIONS DO NOT ALLOW A POST TO BE INSTALLED ON THE SYSTEM PITCH DEVIATIONS CAN BE APPLIED. THE OBSTRUCTED POST CAN BE LEFT OUT AND EXTRA POSTS INSTALLED TO SPAN THE OBSTRUCTION. THE NEW POST SPACING MUST NOT EXCEED 1333mm. ALTHOUGH IT WOULD BE BENEFICIAL TO USE THE HOLES ALREADY IN THE BEAM IT IS ACCEPTABLE TO DRILL NEW HOLES IN THE DESIRED POSITIONS AND TREAT WITH ZINC RICH PAINT.
  2. OFFSET POSTS SHOWN ON DRAWING N2W1-GA-00 CAN BE USED.

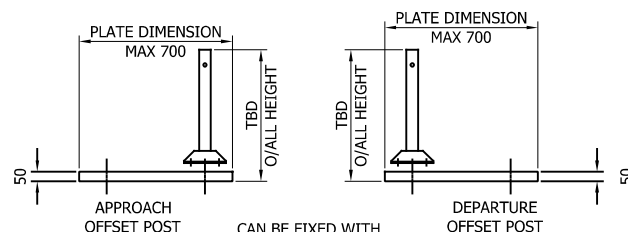
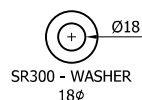
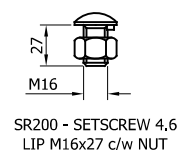
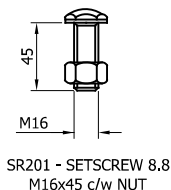
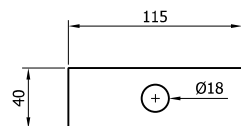
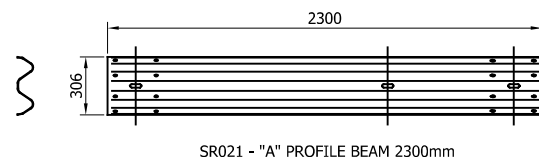
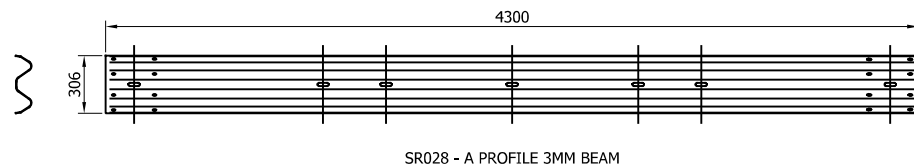
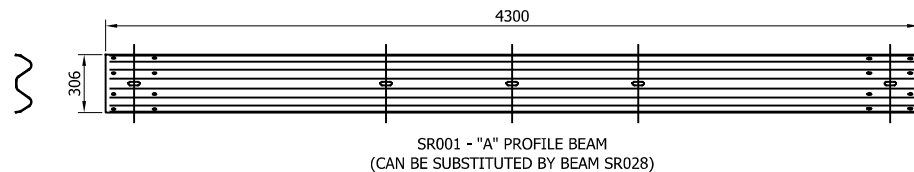


03	25/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
02	01/04/19	REVISED TITLEBLOCK	M.T
01	12/02/19	REVISED TITLEBLOCK	H.B
00	26/01/17	NEW DRAWING	L.L
REVn	DATE	DETAILS	INITIAL

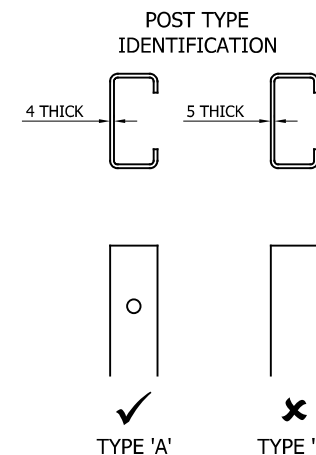
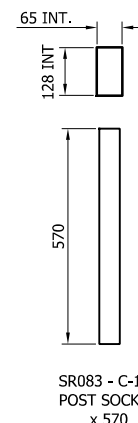
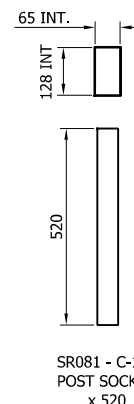
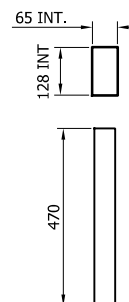
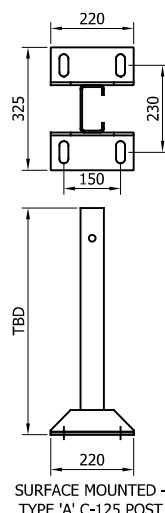
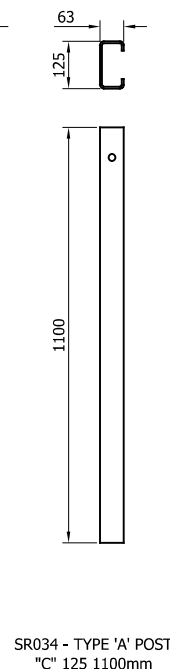
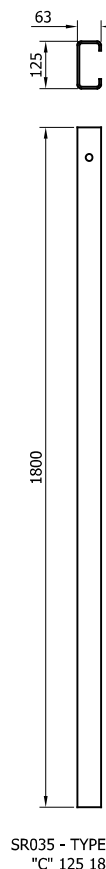
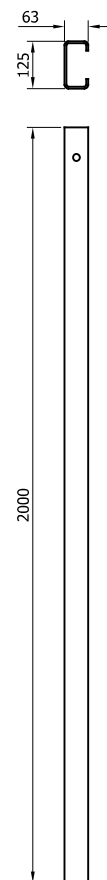
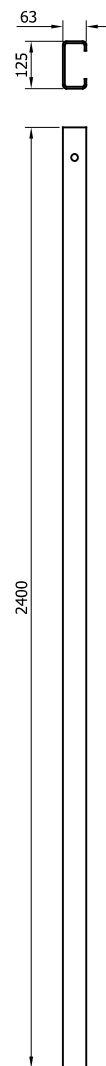
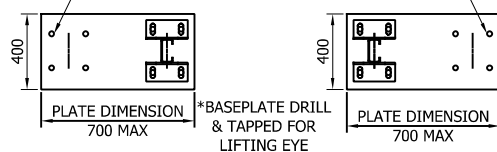
**MegaRail ESP+W1  
N2 W1**  
N2.W1 VEHICLE RESTRAINT SYSTEM.  
DEVIATION SETTING OUT  
ARRANGEMENT

**SAFEROAD®**  
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DRAWING NUMBER:	REVn:
N2W1-GA-40	03



CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



10	26/11/24	DRAWING UPDATED	H,B
09	13/05/22	SURFACE MOUNTED POST BASE CHANGED	A,D
08	27/05/21	DETAILS REVISED	M,T
07	19/11/19	BEAM DETAILS ADDED	M,T
06	12/03/19	TITLEBLOCK REVISED	M,T
05	28/03/17	POST LENGTH REVISED	L,L
04	10/03/17	BEAM ADDED & DETAILS REV	L,L
03	26/01/17	CODES & DETAILS REVISED	L,L
2,4	20/05/15	DETAILS REVISED	L,L
REVn	DATE	DETAILS	INITIAL

## MegaRail es N2 W2

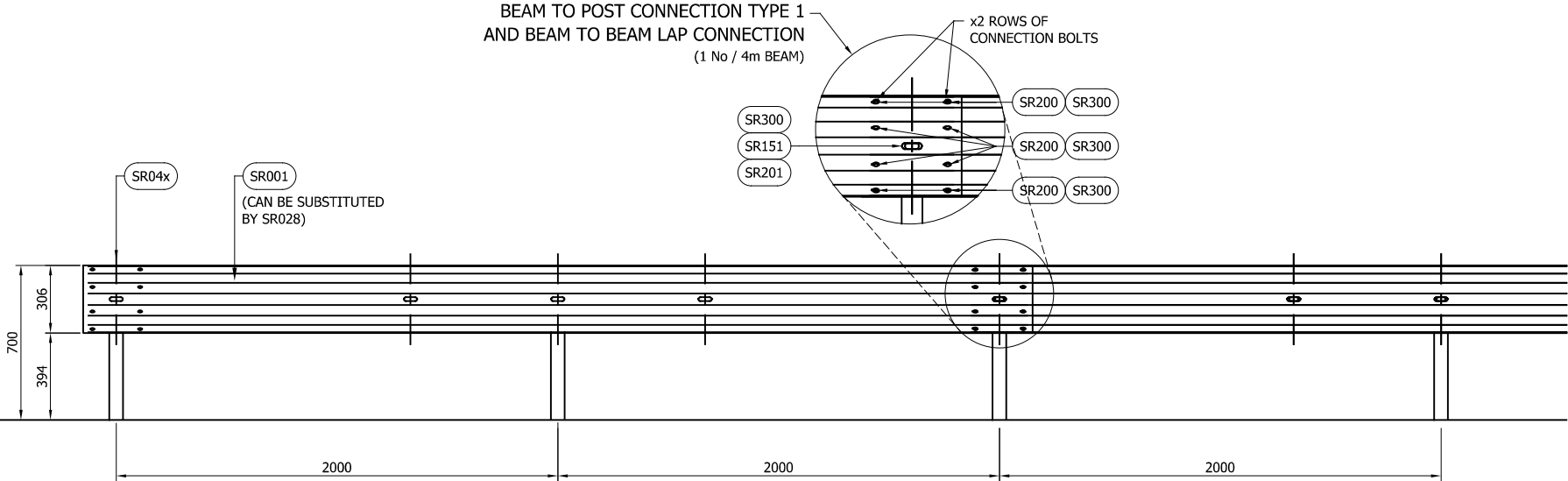
N2.W2 VEHICLE RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC



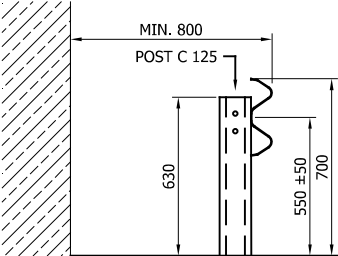
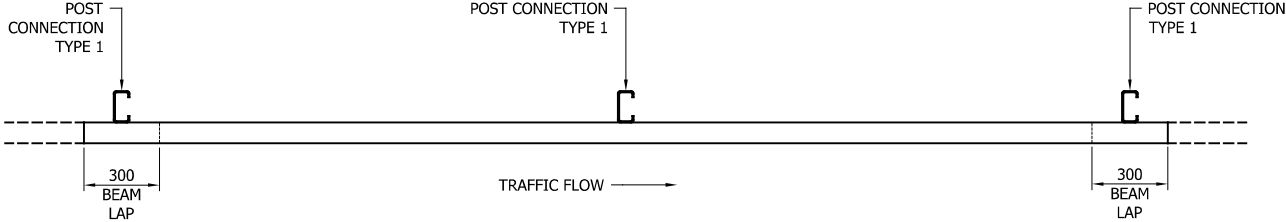
CONCORD HOUSE,  
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FOR TECHNICAL ASSISTANCE CONTACT  
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DRAWING NUMBER:	REVn:
N2W2-GA-00	10

BEAM TO POST CONNECTION TYPE 1  
AND BEAM TO BEAM LAP CONNECTION  
(1 No / 4m BEAM)



- GENERAL NOTES:
1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  3. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
  4. FOR DEVIATIONS IN SYSTEM POST PITCH REFER TO DRAWING N2W2-GA-40
  5. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
  6. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 100mm. SHOULD THE KERB BE HIGHER THAN 100mm AND THE FENCE IS SETBACK LESS THAN 250mm FROM FACE OF KERB THE SYSTEM HEIGHT IS MEASURED FROM THE CARRIAGEWAY. IF THE SETBACK IS MORE THAN 250mm FROM THE FACE OF KERB THE SYSTEM HEIGHT IS MEASURED FROM THE TOP OF THE KERB. SEE MR-GA-002.
  7. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL SEE DRAWING MR-GA-042.



08	26/11/24	DRAWING UPDATED	H.B
07	12/10/21	GENERAL NOTE 7 CHANGED	A.D
06	25/05/21	DETAILS REVISED	M.T
05	19/11/19	BEAM DETAILS ADDED	M.T
04	12/02/19	TITLEBLOCK REVISED	M.T
03	26/01/17	CODES & DETAILS REVISED	L.L
2.3	20/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

# MegaRail es N2 W2

N2.W2 VEHICLE RESTRAINT SYSTEM  
ASSEMBLY AND SETTING OUT  
ARRANGEMENT

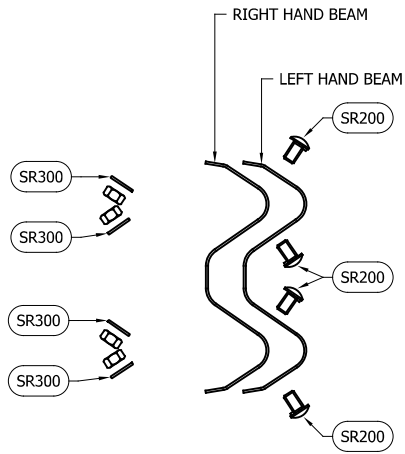


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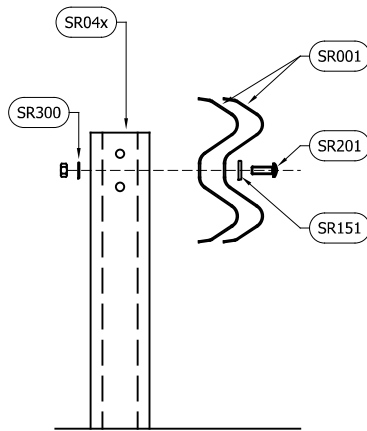
DRAWING NUMBER:	REVn:
N2W2-GA-01	08

TABLE 'A' - SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
SR001	BEAM "A" PROFILE (CAN BE SUBSTITUTED BY SR028)	1
SEE TABLE 'B'	POST "C" 125	2
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER N2W2-GA-02		

TABLE 'B' - SCHEDULE OF POST REFERENCE NUMBERS AND LENGTHS	
SAFEROAD UK PART NUMBER	POST LENGTH
SR034	1100
SR035	1800
SR036	2000
SR040	2400



BEAM TO BEAM CONNECTION  
ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:  
1. NUMBERS IN THE SCHEDULES SUFFIXED (+)  
DENOTES THE ADDITIONAL QUANTITY OF  
COMPONENTS REQUIRED FOR EXTREME ENDS  
OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
SR200	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
SR300	WASHER M16 18Ø HOLE	8 (+8)

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST		
SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
SR201	SETSCREW 8.8 M16 x 45 c/w NUT	1
SR151	WASHER PLATE 115 x 40 x 6 DIA. 18	1
SR300	WASHER M16 18Ø HOLE	1

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION  
INSTALLATIONS THE REFERENCES ARE REVERSED

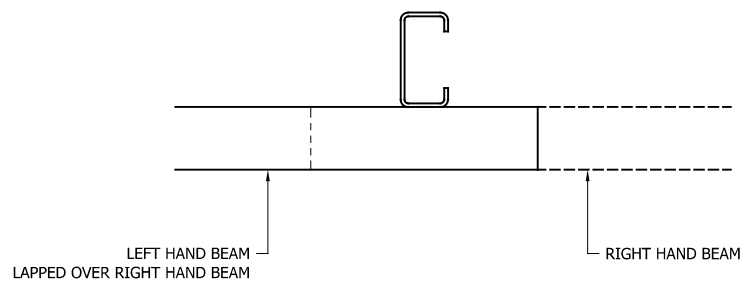
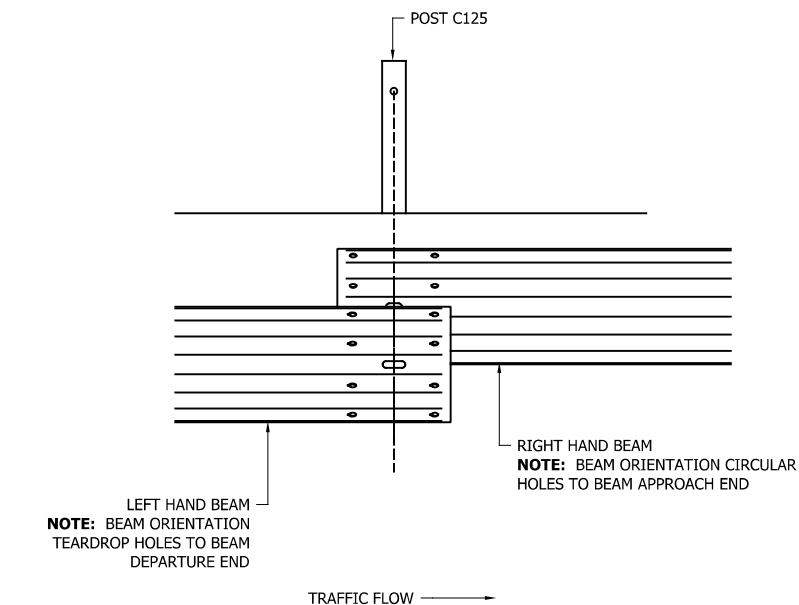
REVn	DATE	DETAILS	INITIAL
05	26/11/24	DRAWING UPDATED	H.B
04	12/02/19	TITLEBLOCK REVISED	M.T
03	26/01/17	CODES & DETAILS REVISED	L.L
2.4	20/05/15	DETAILS REVISED	L.L

MegaRail es  
N2 W2  
N2.W2 VEHICLE RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

**SAFEROAD**  
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W2-GA-02	05

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

REVn	DATE	DETAILS	INITIAL
05	26/11/24	DRAWING UPDATED	H.B
04	12/02/19	TITLEBLOCK REVISED	M.T
03	26/01/17	DETAILS REVISED	L.L
2.4	20/05/15	DETAILS REVISED	L.L

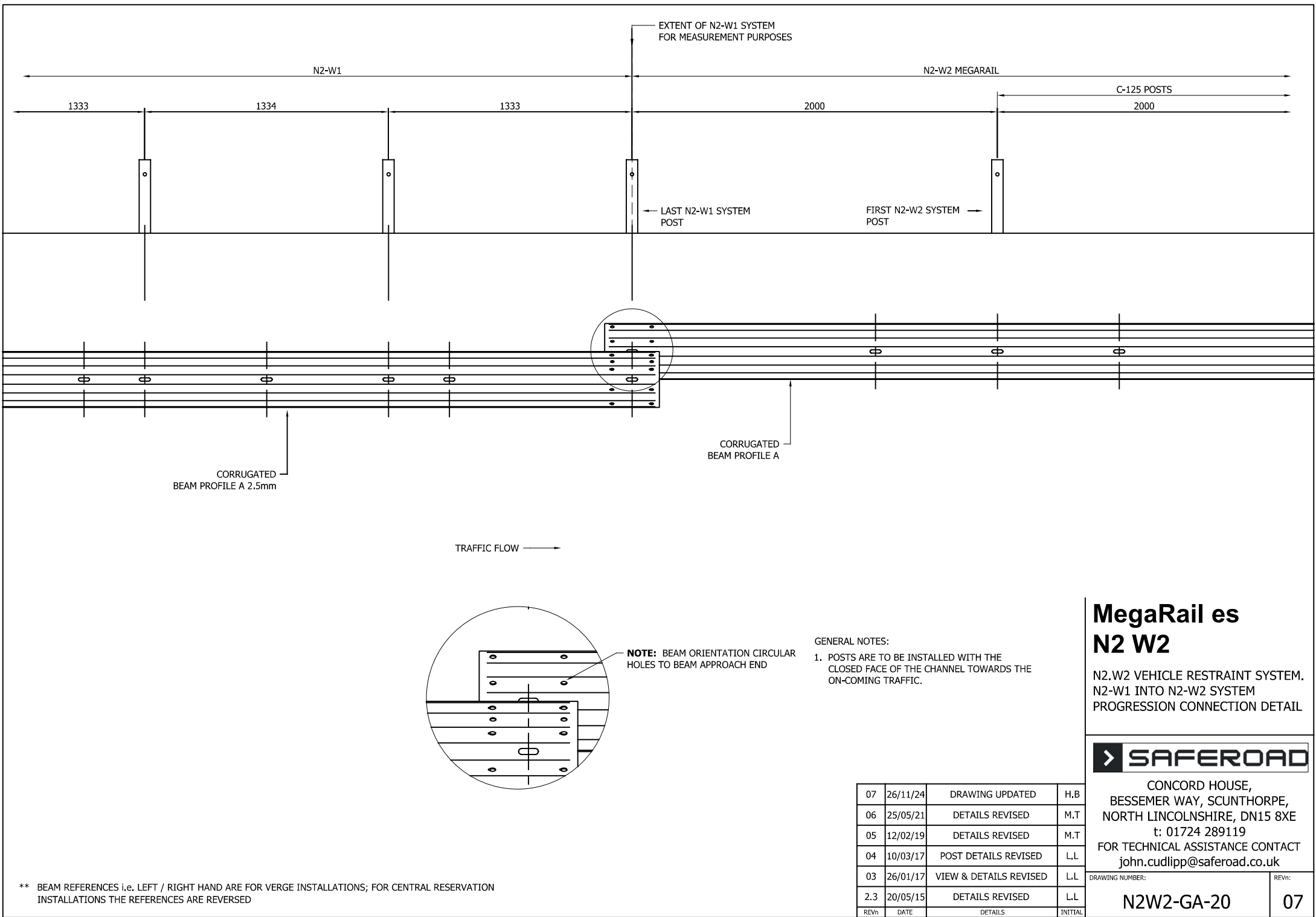
# MegaRail es N2 W2

N2.W2 VEHICLE RESTRAINT SYSTEM.  
BEAM LAPPING DETAIL FOR W2  
MEGARAIL SYSTEM



CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W2-GA-03	05



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.

07	26/11/24	DRAWING UPDATED	H.B
06	25/05/21	DETAILS REVISED	M.T
05	12/02/19	DETAILS REVISED	M.T
04	10/03/17	POST DETAILS REVISED	L.L
03	26/01/17	VIEW & DETAILS REVISED	L.L
2.3	20/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

**MegaRail es  
N2 W2**

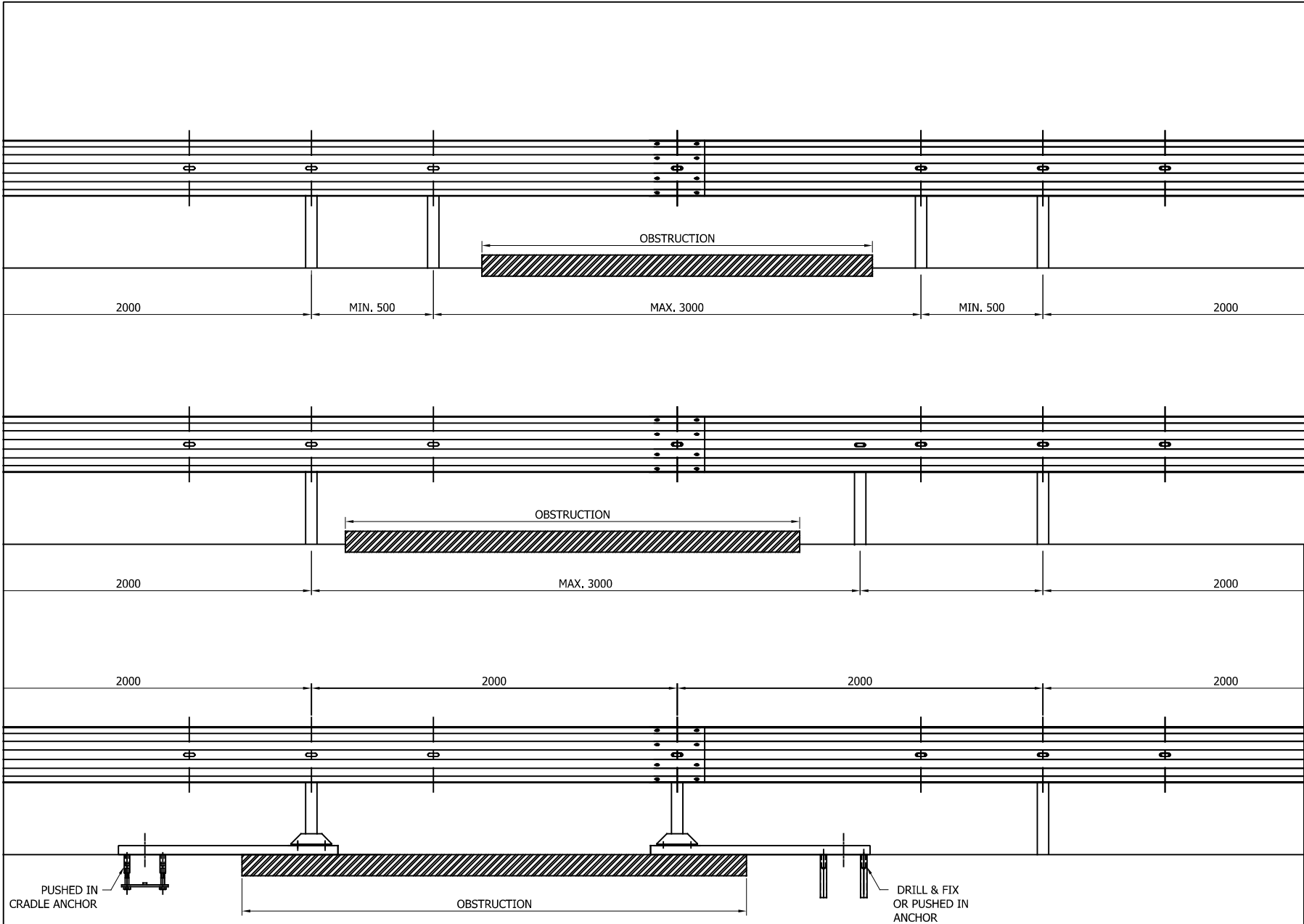
N2.W2 VEHICLE RESTRAINT SYSTEM.  
N2-W1 INTO N2-W2 SYSTEM  
PROGRESSION CONNECTION DETAIL



CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W2-GA-20	07





- GENERAL NOTES:
1. IF THE SITE CONDITIONS DO NOT ALLOW A POST TO BE INSTALLED ON THE SYSTEM PITCH DEVIATIONS CAN BE APPLIED. THE OBSTRUCTED POST CAN BE LEFT OUT AND EXTRA POSTS INSTALLED TO SPAN THE OBSTRUCTION. THE NEW POST SPACING MUST NOT EXCEED 3000mm AND MUST NOT BE LESS THAN 500mm. ALTHOUGH IT WOULD BE BENEFICIAL TO USE THE HOLES ALREADY IN THE BEAM IT IS ACCEPTABLE TO DRILL NEW HOLES IN THE DESIRED POSITIONS AND TREAT WITH ZINC RICH PAINT.
  2. OFFSET POSTS SHOWN ON DRAWING N2W2-GA-00 CAN BE USED, INSERT THE ORIGINAL POST SPACING INSTEAD OF 3000mm

04	26/11/24	DRAWING UPDATED	H,B
03	13/05/22	SURFACE MOUNTED POST BASE CHANGED	A,D
02	12/02/19	TITLEBLOCK REVISED	M,T
01	10/03/17	NOTES REVISED	L,L
00	26/01/17	DRAWING CREATED	L,L
REVn	DATE	DETAILS	INITIAL

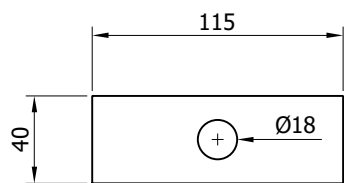
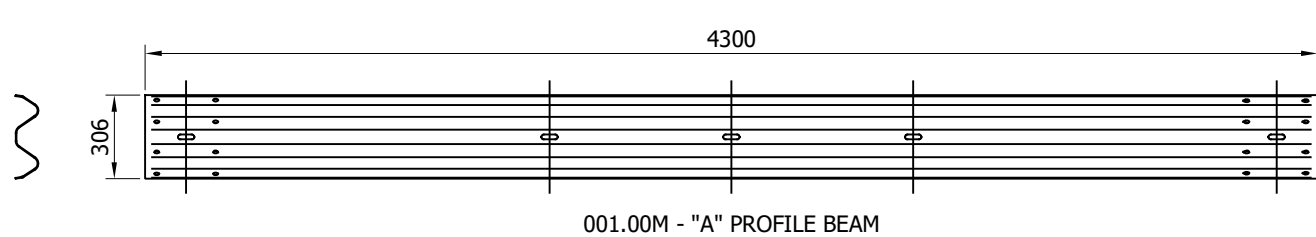
# MegaRail es N2 W2

N2.W2 VEHICLE RESTRAINT SYSTEM  
DEVIATION SETTING OUT  
ARRANGEMENT

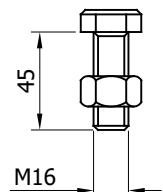


CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

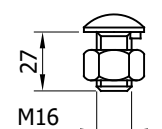
DRAWING NUMBER:	REVn:
N2W2-GA-40	04



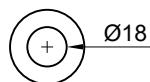
010.40 - WASHER PLATE  
115 x 40 x 6 DIA. 18



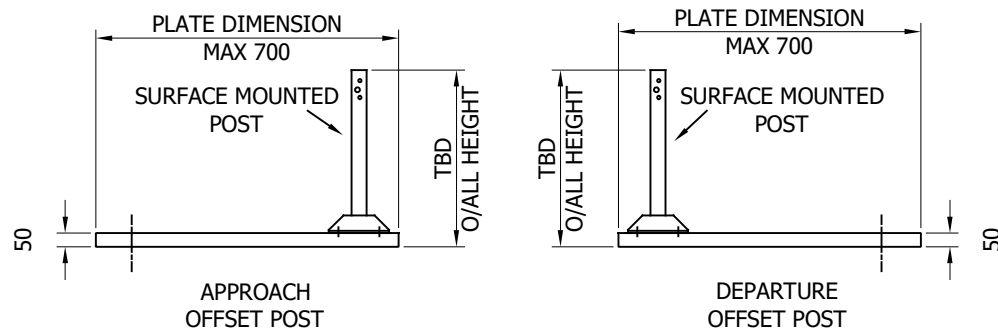
040.04 - SETSCREW 8.8  
M16x45 c/w NUT



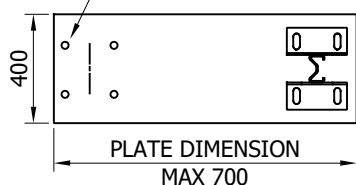
040.00 - SETSCREW 4.6  
LIP M16x27 c/w NUT



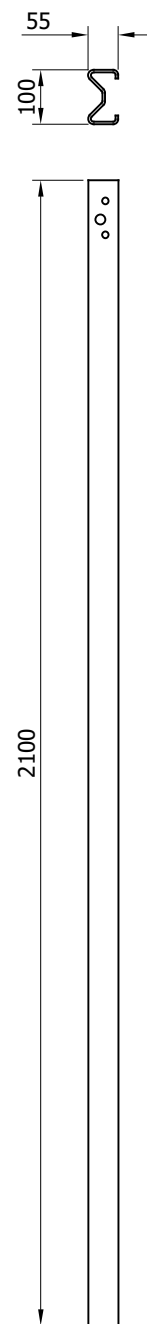
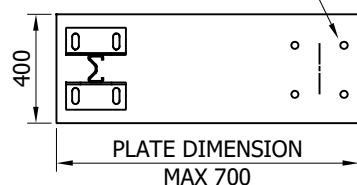
040.30 - M16  
WASHER 18Ø HOLE



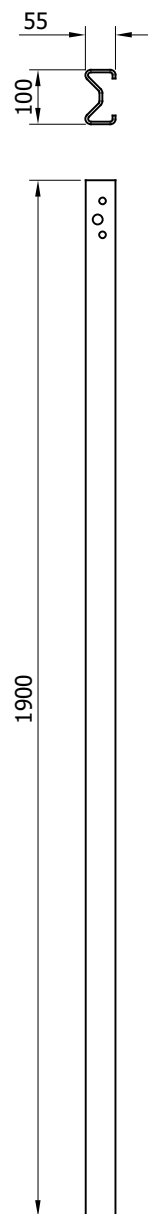
CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



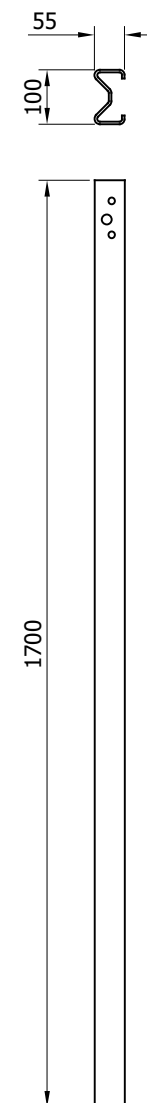
BASEPLATE DRILL &  
TAPPED FOR LIFTING EYE



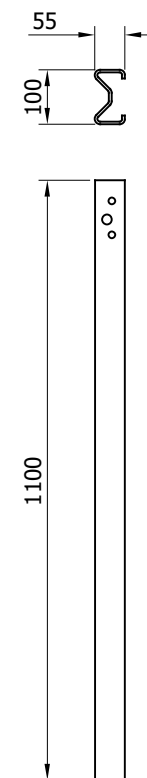
003.27 - TYPE 'A'  
POST SIGMA 100  
2100mm



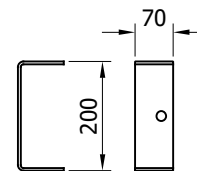
003.00M - TYPE  
'A' POST SIGMA  
100 1900mm



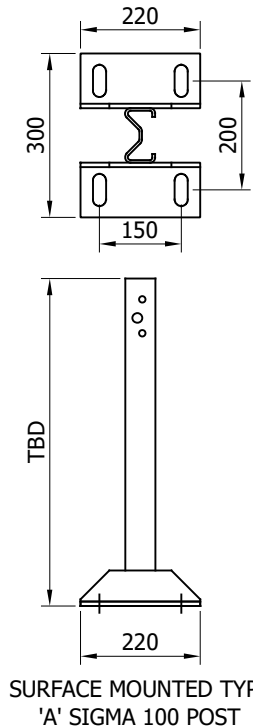
003.25M - TYPE  
'A' POST SIGMA  
100 1700mm



003.28 - TYPE 'A'  
POST SIGMA 100  
1100mm

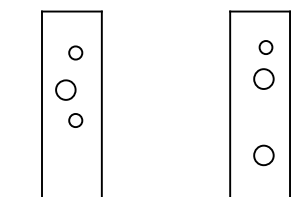


004.00M -  
BRACKET STUB  
IRON 200 x 3



SURFACE MOUNTED TYPE  
'A' SIGMA 100 POST

## POST TOP DRILLING ARRANGEMENT



✓  
TYPE 'A'

✗  
TYPE 'B'

REVn	DATE	DETAILS	INITIAL
2.5	31/05/22	OFFSET PLATE DETAIL CHANGED	A.D
2.4	25/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
2.3	21/05/15	DETAILS REVISED	L.L

## MegaRail e N2 B W3

N2.W3 ROAD RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

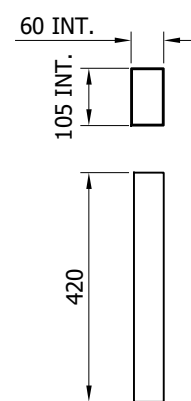
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

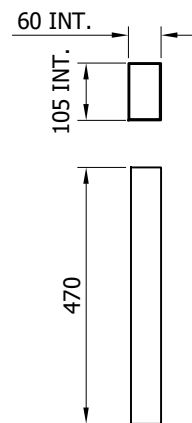
**N2W3-GA-00 v2.5**



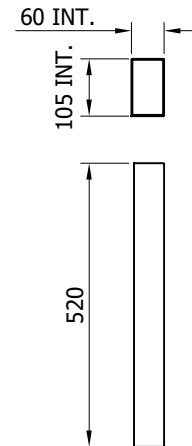
NP001 - A21  
REINFORCING  
RING



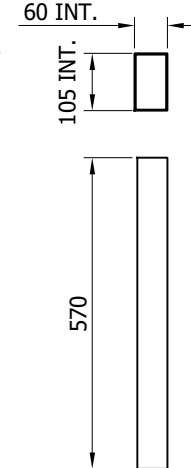
MR230 - SIGMA  
100 POST  
SOCKET x 420



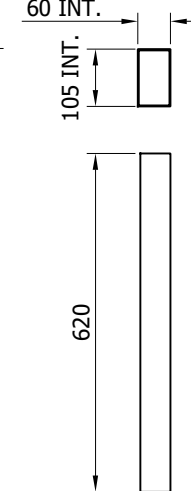
MR231 - SIGMA  
100 POST  
SOCKET x 470



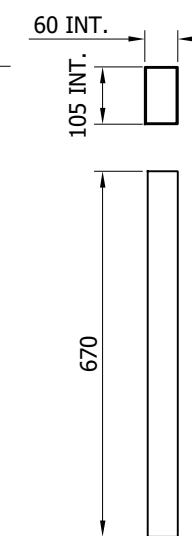
MR232 - SIGMA  
100 POST  
SOCKET x 520



MR203 - SIGMA  
100 POST  
SOCKET x 570

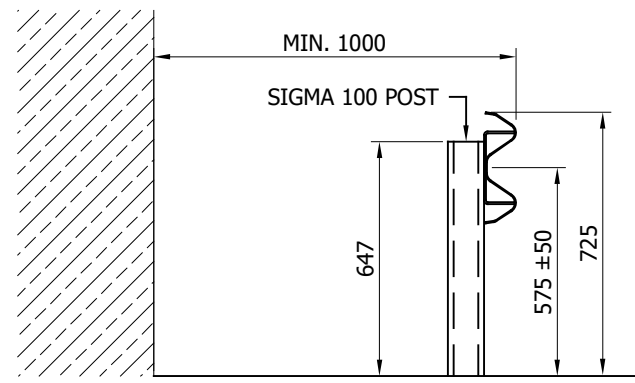
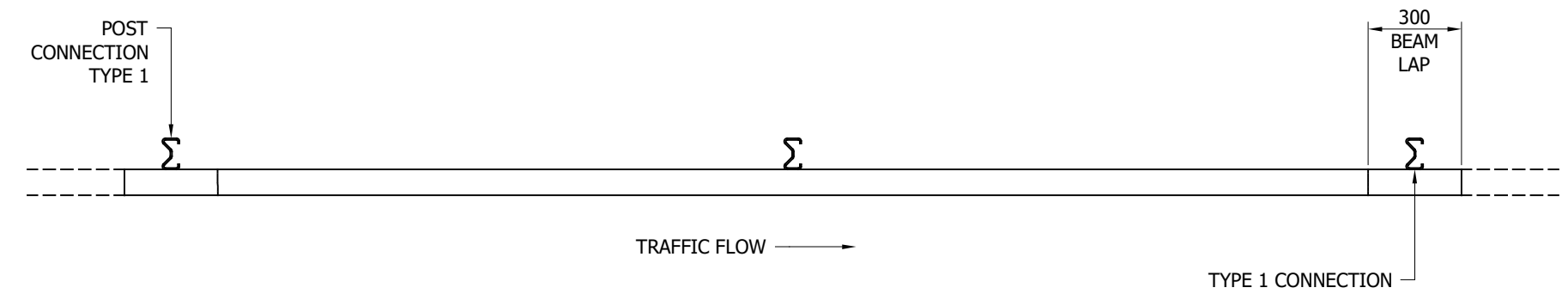
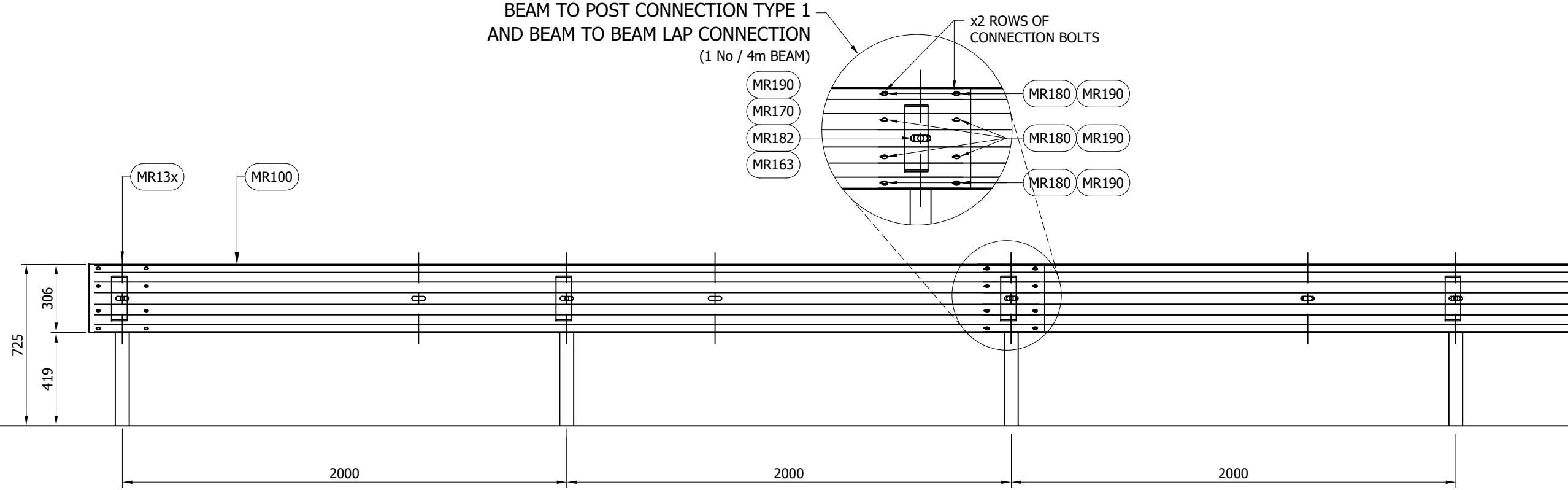


MR204 - SIGMA  
100 POST  
SOCKET x 620



MR205 - SIGMA  
100 POST  
SOCKET x 670

BEAM TO POST CONNECTION TYPE 1  
AND BEAM TO BEAM LAP CONNECTION  
(1 No / 4m BEAM)



- GENERAL NOTES:
1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  3. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
  4. FOR DEVIATIONS IN SYSTEM POST PITCH REFER TO SECTION 8 OF SAFEROAD MEGARAIL MANUAL, DEVIATION CHART
  5. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
  6. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 125mm.
  7. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.

2.4	25/05/22	ADDRESS CHANGED	A.D
2.3	21/05/15	DETIALS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

MegaRail e

N2 B W3

N2.W3 ROAD RESTRAINT SYSTEM  
ASSEMBLY AND SETTING OUT  
ARRANGEMENT

SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
001.00M	MR001	BEAM "A" PROFILE	1
004.00M	MR035	BRACKET STUB IRON 200 x 3	2
003.xx		POST SIGMA 100	2
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER N2W3-GA-02			

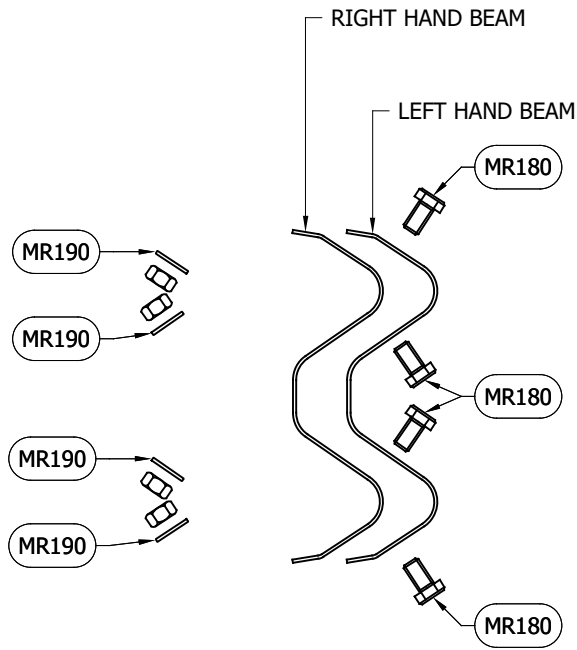
TABLE 'B' - SCHEDULE OF POST REFERENCE NUMBERS AND LENGTHS		
OUTIMEX MANUFACTURING REF.	SAFEROAD UK PART NUMBER	POST LENGTH
003.28	MR031	1100
003.25M	MR032	1700
003.00M	MR033	1900
003.27	MR034	2100

SAFEROAD®

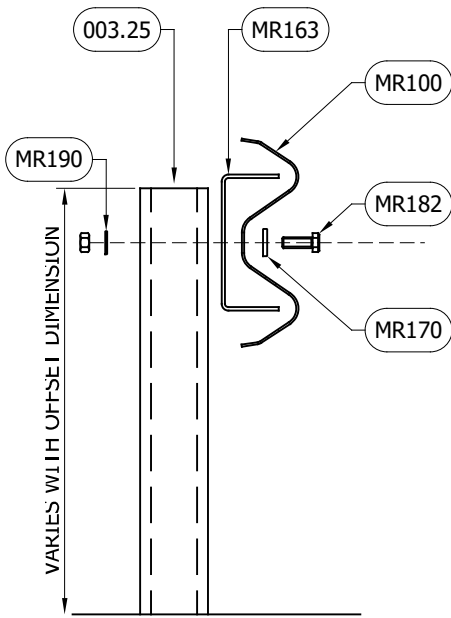
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:  
N2W3-GA-01 v2.4



BEAM TO BEAM LAP  
CONNECTION ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
040.00	MR180	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
040.30	MR220	WASHER M16 18∅ HOLE	8 (+8)

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
040.04	MR182	SETSCREW 8.8 M16x45 c/w NUT	1
010.40	MR160	WASHER PLATE 115 x 40 x 6 DIA. 18	1
040.30	MR220	WASHER M16 18∅ HOLE	1
QUANTITY OF CONNECTION TYPES / 4m BEAM			
			2 (+1)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

- GENERAL NOTES:
- NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.

2.4	25/05/22	ADDRESS CHANGED	A.D
2.3	21/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

# MegaRail e N2 B W3

N2.W3 ROAD RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

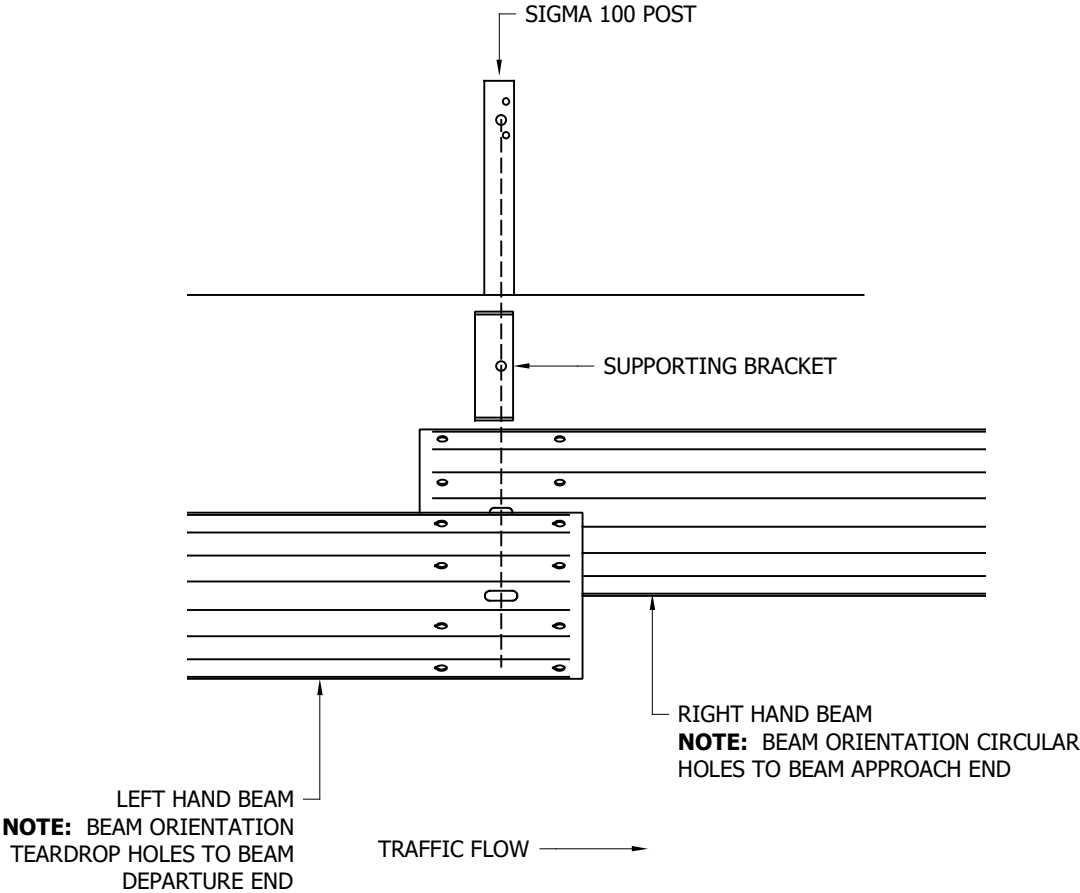
**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

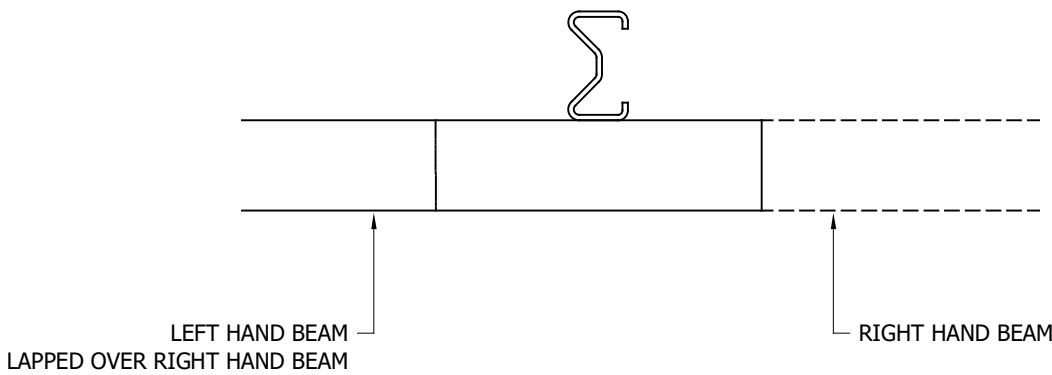
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

N2W3-GA-02 v2.4



- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

2.4	25/05/22	ADDRESS CHANGED	A.D
2.3	21/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

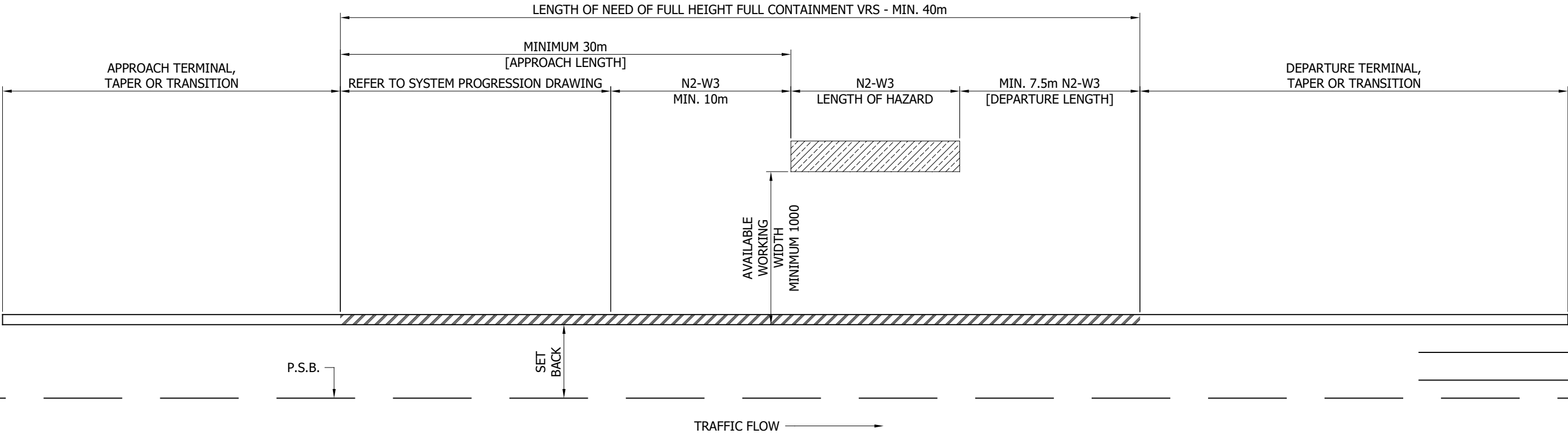
# MegaRail e N2 B W3

N2.W3 ROAD RESTRAINT SYSTEM.  
BEAM LAPPING DETAIL FOR W3  
MEGARAIL SYSTEM

**SAFEROAD®**  
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:  
**N2W3-GA-03 v2.4**

- GENERAL NOTES:
1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  3. MINIMUM LENGTH OF FULL HEIGHT VRS IS 40m



2.4	25/05/22	ADDRESS CHANGED	A.D
2.3	21/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

**MegaRail e  
N2 B W3**

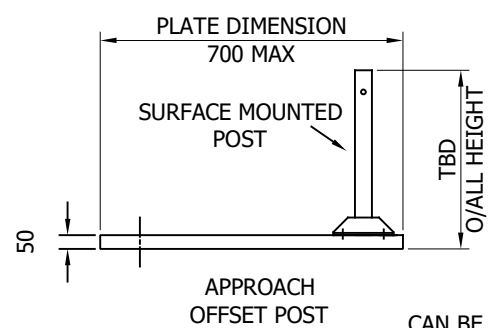
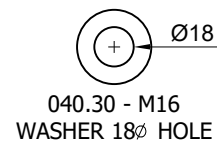
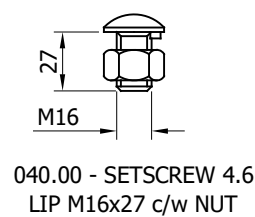
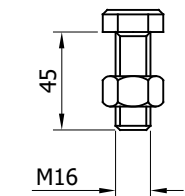
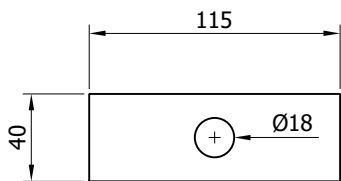
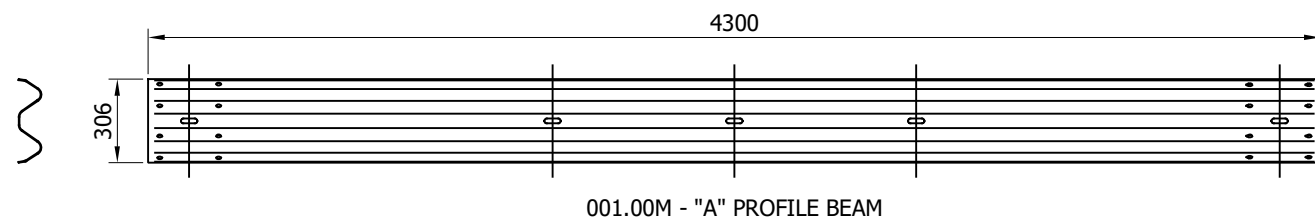
ROAD RESTRAINT SYSTEM.  
SYSTEM PROGRESSION SCHEMATIC  
FOR N2.W3 PROTECTION TO HAZARD

**SAFEROAD®**

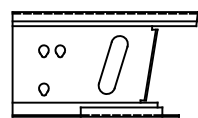
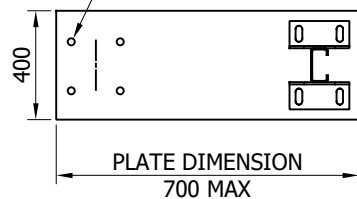
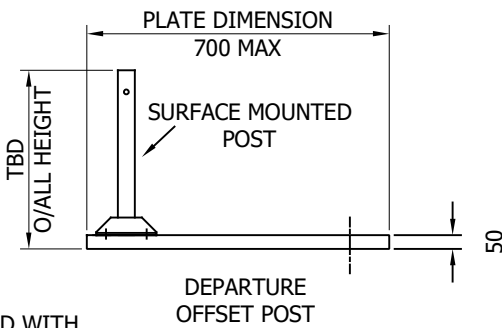
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

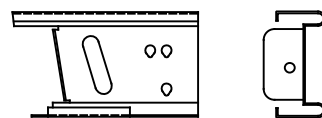
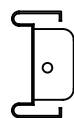
DRAWING NUMBER:  
**N2W3-GA-10 v2.4**



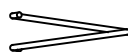
CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



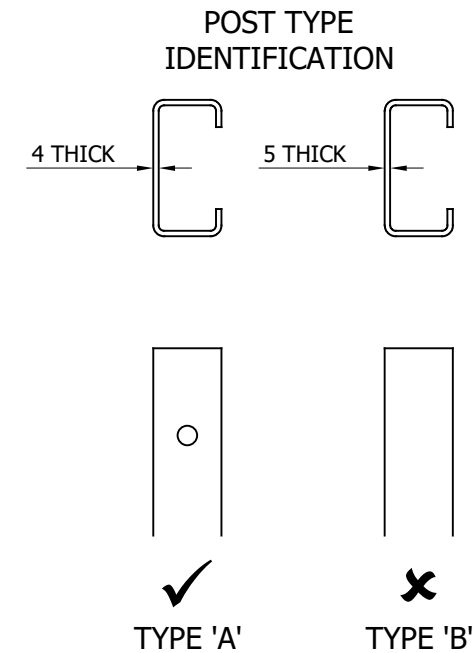
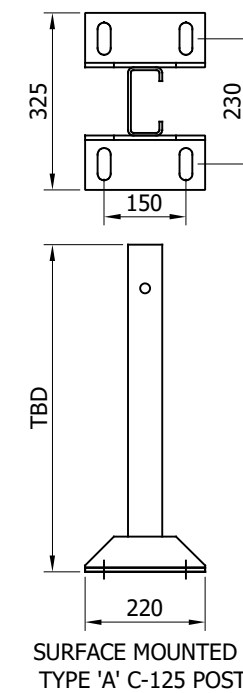
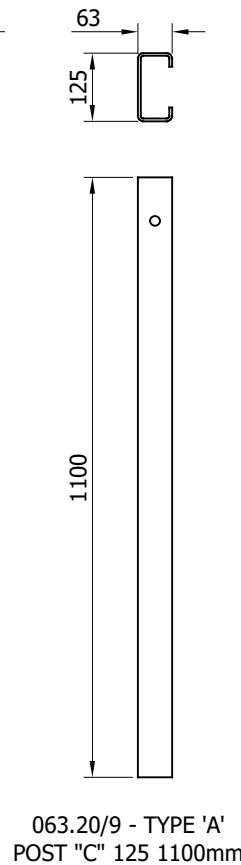
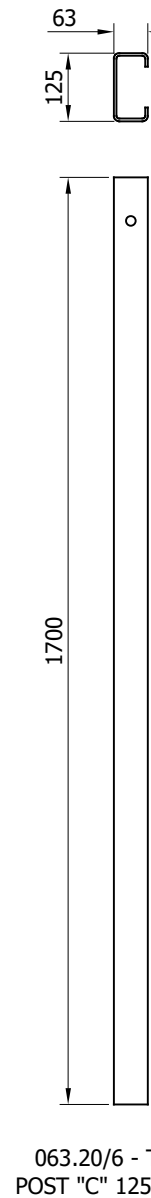
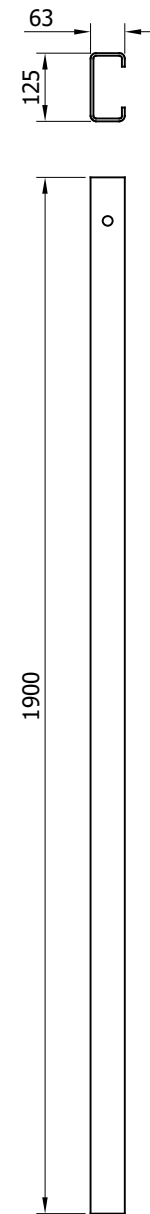
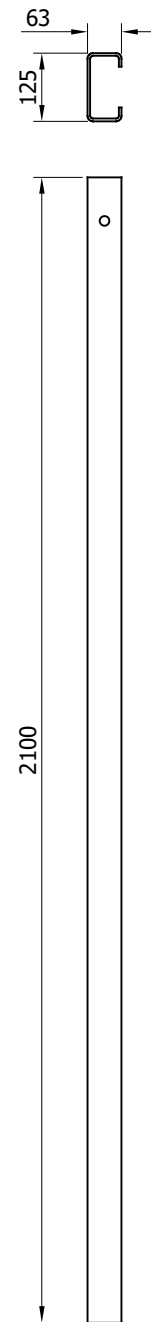
005.70 - BRACKET SINGLE  
SPACER LEFT 340mm



005.71 - BRACKET SINGLE  
SPACER RIGHT 340mm



NP001 - A21  
REINFORCING  
RING



REVn	DATE	DETAILS	INITIAL
2.5	31.05.22	OFFSET PLATE DETAIL CHANGED	A.D
2.4	25.05.22	SURFACE MOUNTED POST BASE CHANGED	A.D
2.3	20.05.15	DETAILS REVISED	M.T

## MegaRail sl H1 A W4 / N2 A W4

H1.W4 AND N2.W4 (DUAL  
CLASSIFICATION) ROAD RESTRAINT  
SYSTEM COMPONENTS SCHEMATIC

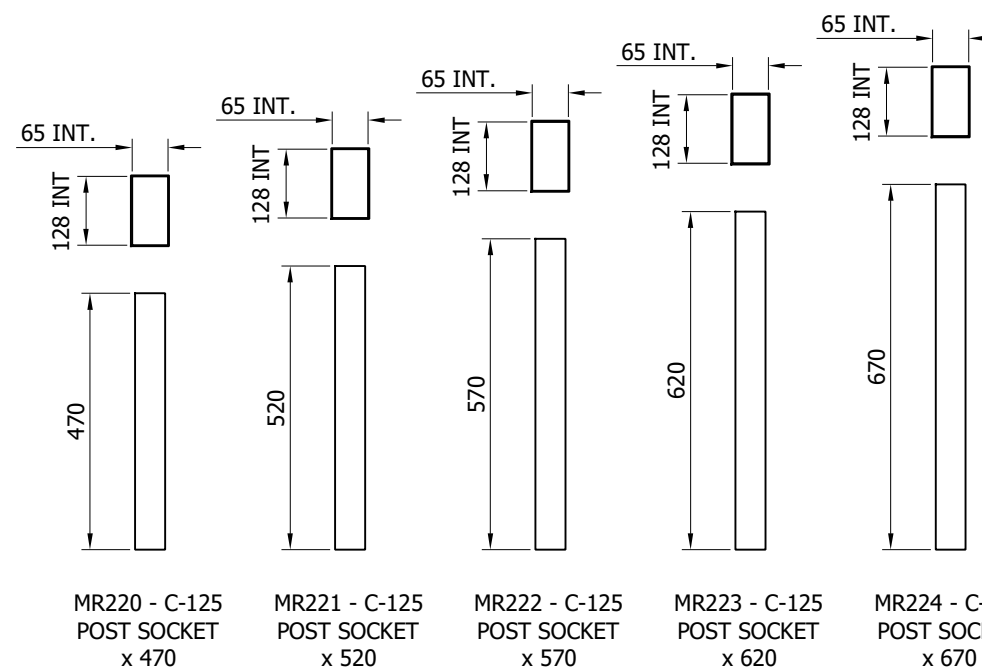
**SAFEROAD®**

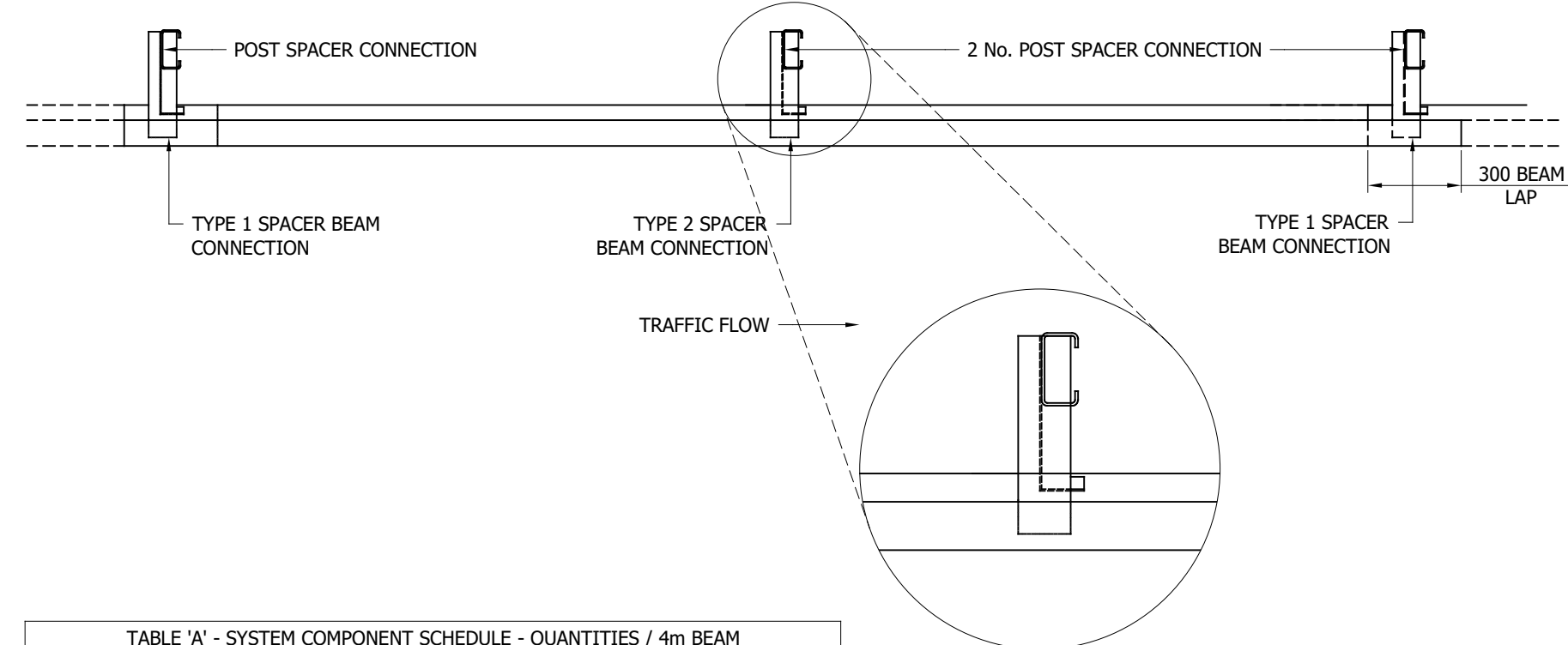
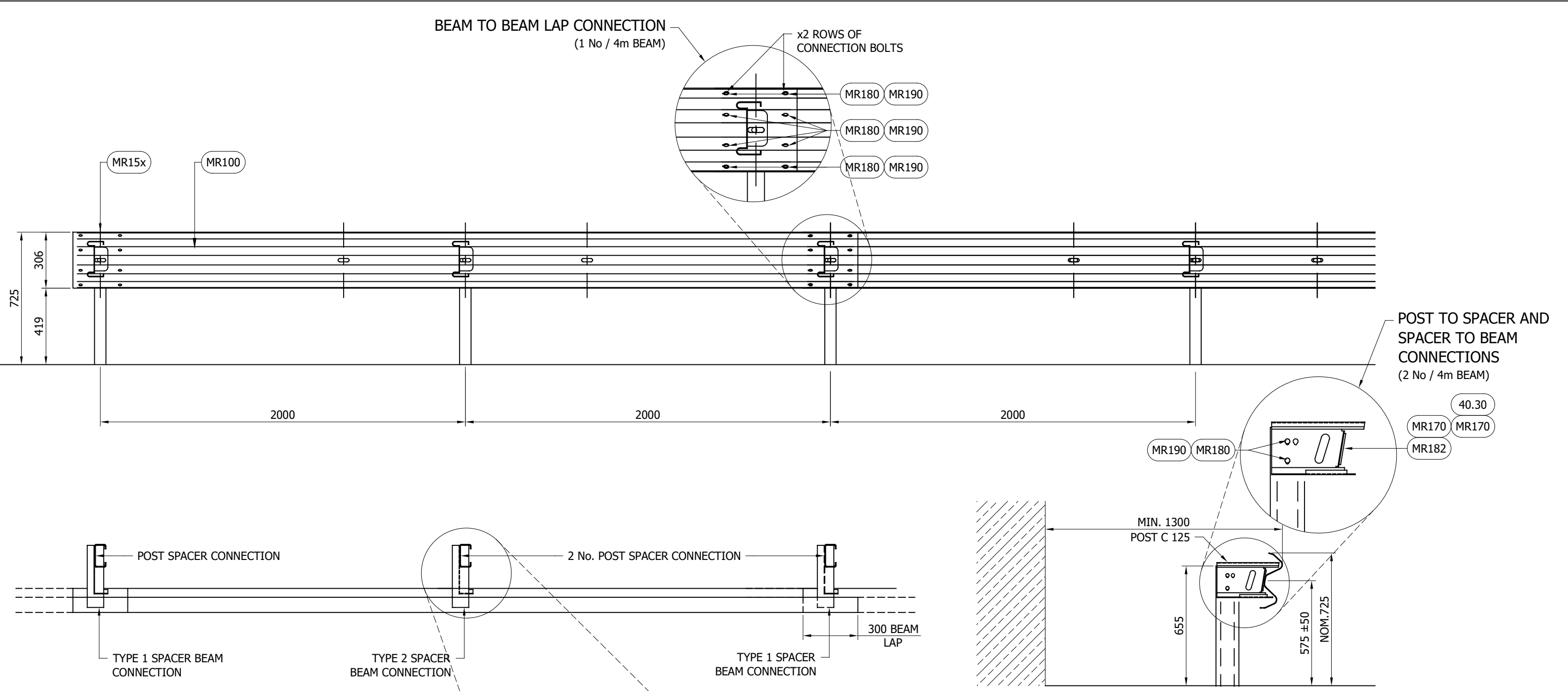
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

**H1/N2W4-GA-00 v2.5**





- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  2. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
  3. FOR DEVIATIONS IN SYSTEM POST PITCH REFER TO SECTION 8 OF SAFEROAD MEGARAIL MANUAL, DEVIATION CHART.
  4. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
  5. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 125mm.
  6. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.

# MegaRail sl H1 A W4 / N2 A W4

H1.W4 AND N2.W4 (DUAL CLASSIFICATION) ROAD RESTRAINT ASSEMBLY & SETTING OUT ARRANGEMENT

**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

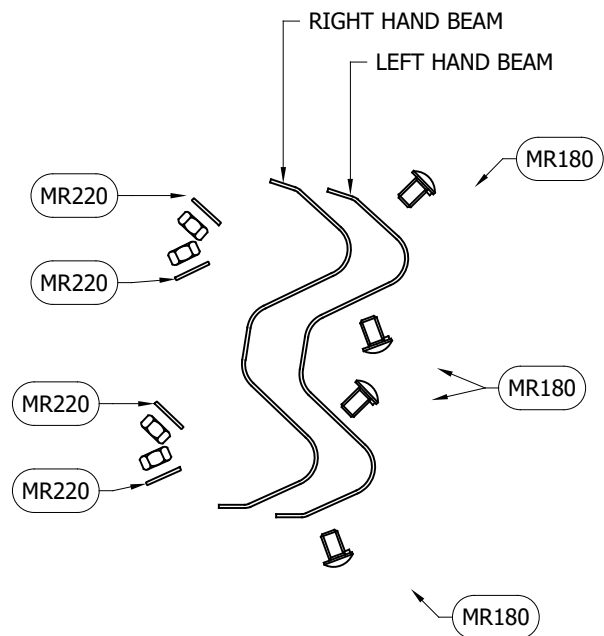
DRAWING NUMBER:  
**H1/N2W4-GA-01 v2.4**

TABLE 'A' - SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
001.00M	MR001	BEAM "A" PROFILE	1
063.20/x	SEE TABLE 'B'	POST "C" 125	2
<b>either</b> 005.70M	MR087	BRACKET SINGLE SPACER LEFT 340mm	2
<b>or</b> 005.71M	MR088	BRACKET SINGLE SPACER RIGHT 340mm	2
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER MR-GA-W4HN-02			

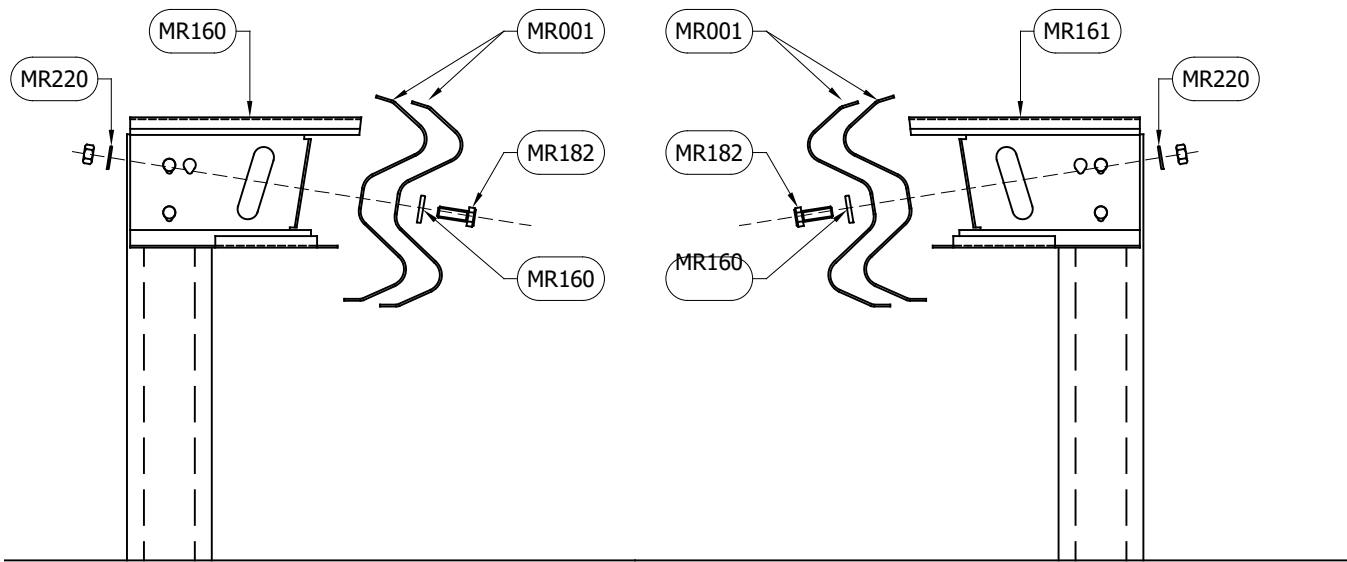
TABLE 'B' - SCHEDULE OF POST REFERENCE NUMBERS AND LENGTHS		
OUTIMEX MANUFACTURING REF.	SAFEROAD UK PART NUMBER	POST LENGTH
063.20/9	MR080	1100
063.20/6	MR082	1700
063.20/7	MR084	1900
063.20/8	MR086	2100

REVn	DATE	DETAILS	INITIAL
2.4	25.05.22	E-MAIL ADDRESS CHANGED	A.D
2.3	20.05.15	DETAILS REVISED	M.T





BEAM TO BEAM CONNECTION  
ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



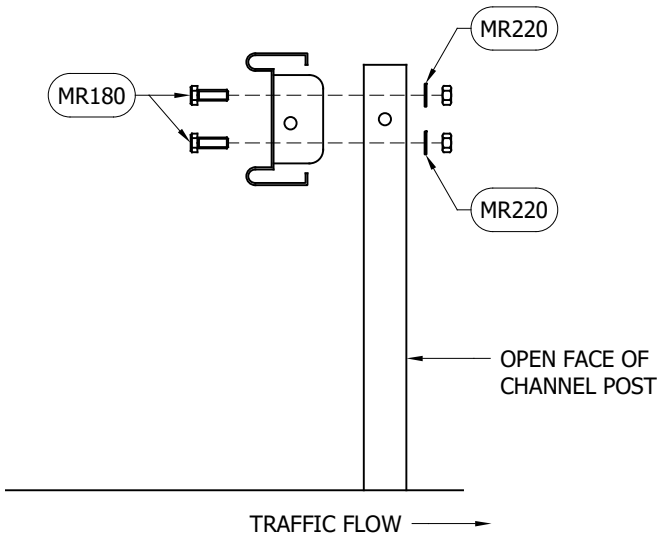
SPACER TO BEAM  
CONNECTION TYPE 1  
[VERGE]

SPACER TO BEAM  
CONNECTION TYPE 1  
[CENTRAL RESERVE]

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
040.00	MR180	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
040.30	MR220	WASHER M16 18Ø HOLE	8 (+8)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
040.00	MR180	SETSCREW 4.6 LIP M16 x 27 c/w NUT	2
040.04	MR182	SETSCREW 8.8 M16x45 c/w NUT	1
010.40	MR160	WASHER PLATE 115 x 40 x 6 DIA. 18	2
040.30	MR220	WASHER M16 18Ø HOLE	3
QUANTITY OF CONNECTION TYPES / 4m BEAM			
			2 (+1)



SPACER BEAM TO POST  
CONNECTION TYPE 1

- GENERAL NOTES:
- NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.
  - VERGE AND CENTRAL RESERVE BRACKET SPACERS ARE HANDED AND **NOT** INTERCHANGEABLE.

2.4	25.05.22	E-MAIL ADDRESS CHANGED	A.D
2.3	20.05.15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

# MegaRail sl

## H1 A W4 / N2 A W4

H1.W4 AND N2.W4 (DUAL CLASSIFICATION) ROAD RESTRAINT SYSTEM BOLTING ARRANGEMENTS

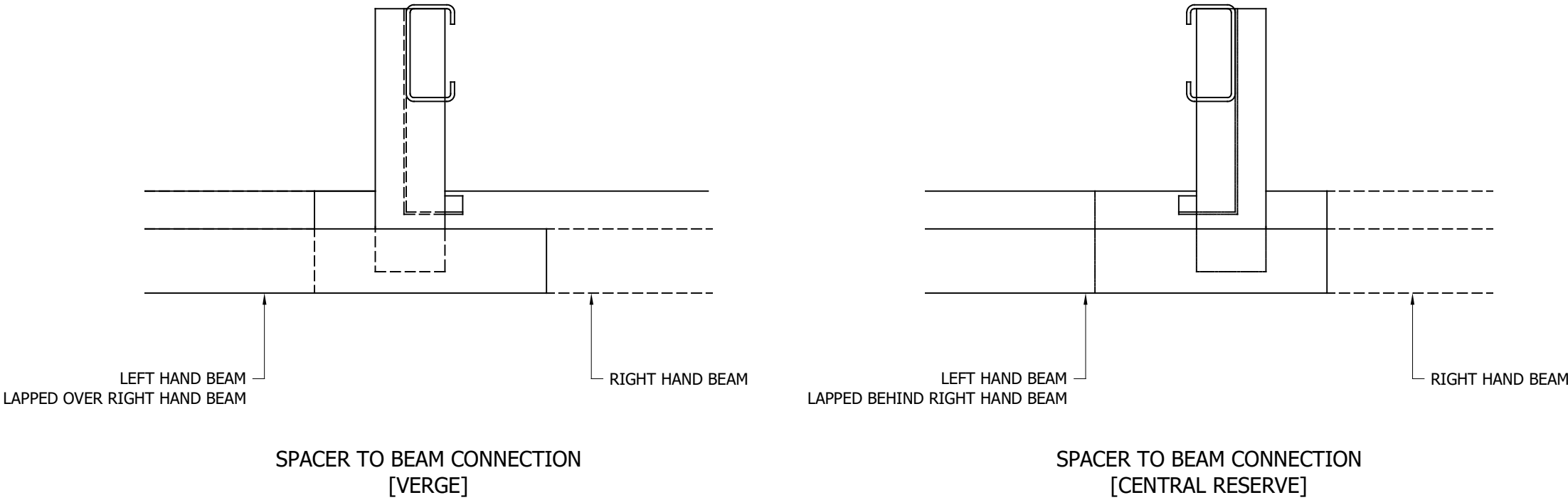
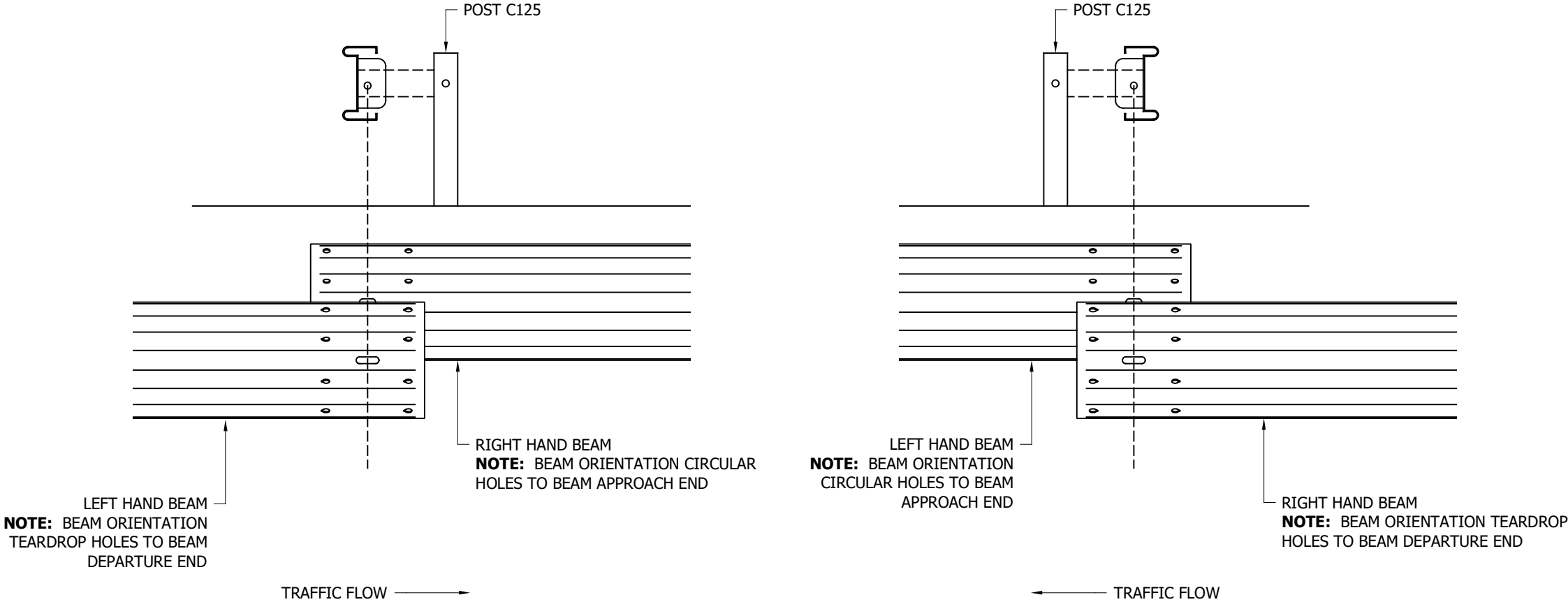
**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:  
**H1/N2W4-GA-02 v2.4**

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



2.5	25.05.22	E-MAIL ADDRESS CHANGED	A.D
2.4	20.05.15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

# MegaRail sl

## H1 A W4 / N2 A W4

H1.W4 AND N2.W4 (DUAL CLASSIFICATION) ROAD RESTRAINT BEAM LAPPING DETAIL FOR W4 MEGARAIL SYSTEM

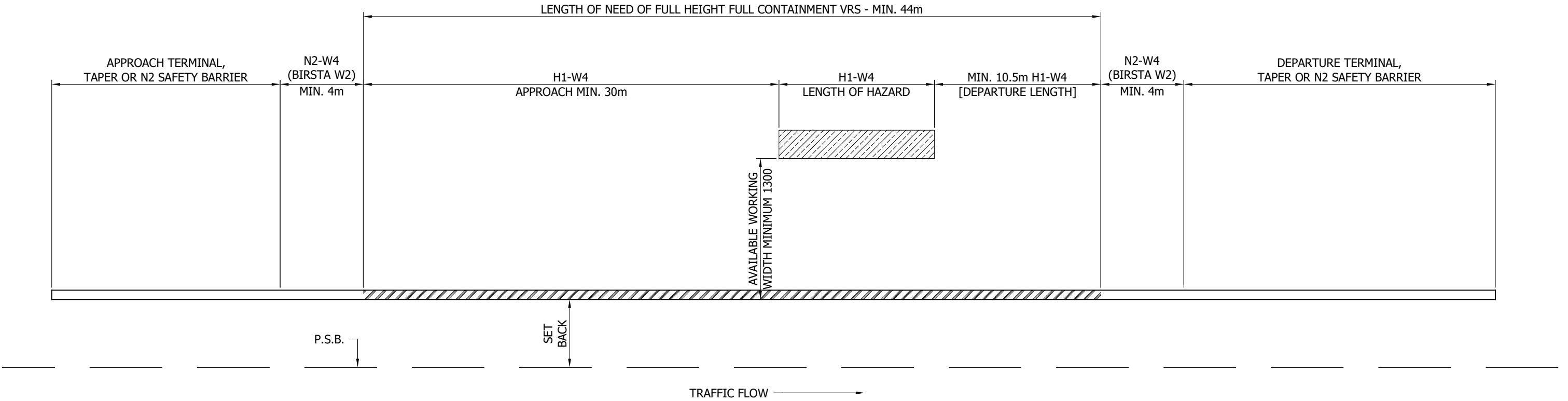
**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:  
H1/N2W4-GA-03 v2.5

- GENERAL NOTES:
1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  3. MINIMUM LENGTH OF FULL HEIGHT VRS IS 44m



2.5	25.05.22	E-MAIL ADDRESS CHANGED	A.D
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# MegaRail sl

## H1 A W4 / N2 A W4

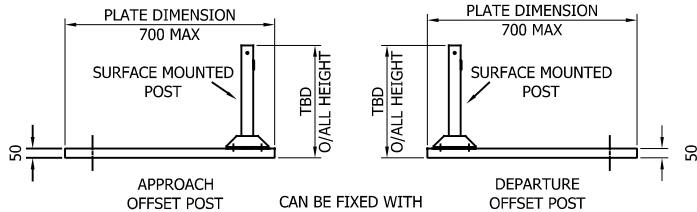
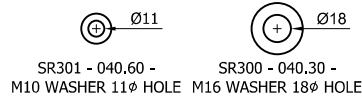
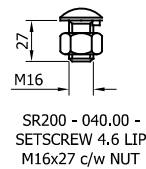
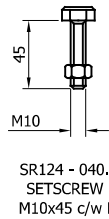
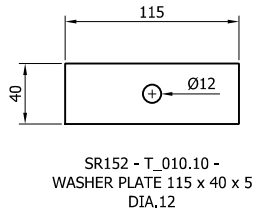
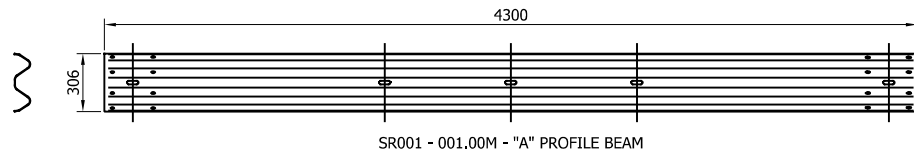
H1.W4 AND N2.W4 (DUAL CLASSIFICATION) ROAD RESTRAINT SYSTEM COMPONENTS SCHEMATIC

**SAFEROAD®**

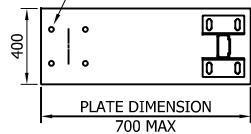
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

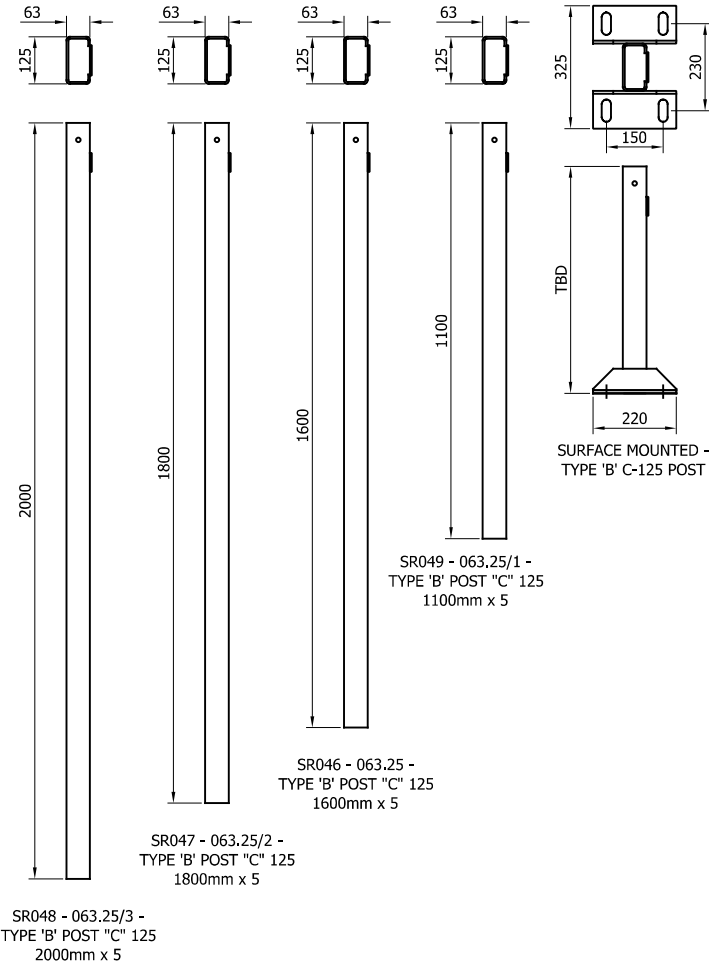
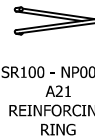
DRAWING NUMBER:  
**H1/N2W4-GA-10 v2.5**



CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



BASEPLATE DRILL &  
TAPPED FOR LIFTING EYE



1.5	12/01/23	BOLT GRADE AMENDMENT	H.B
1.4	31.05.22	OFFSET PLATE DETAIL CHANGED	A.D
1.3	25.05.22	SURFACE MOUNTED POST BASE CHANGED	A.D
1.2	03.06.15	POST HEIGHTS REVISED	M.T
1.1	20.05.15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

## MegaRail ec4.4 H2 A W4

H2.W4 ROAD RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

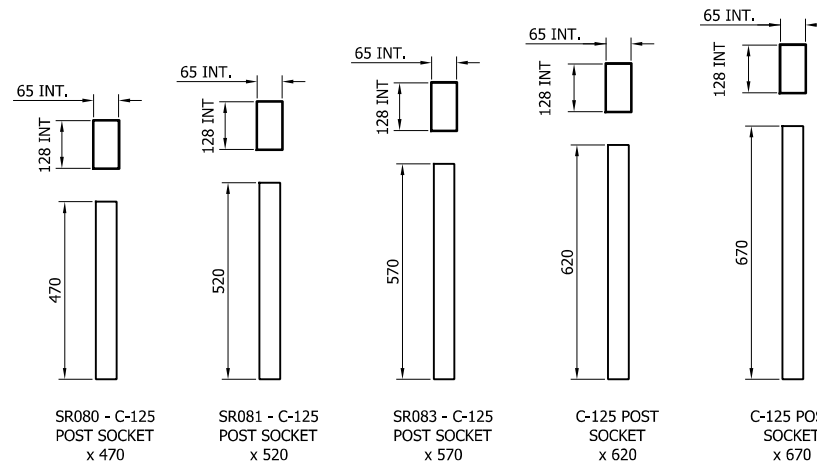
**SAFEROAD®**

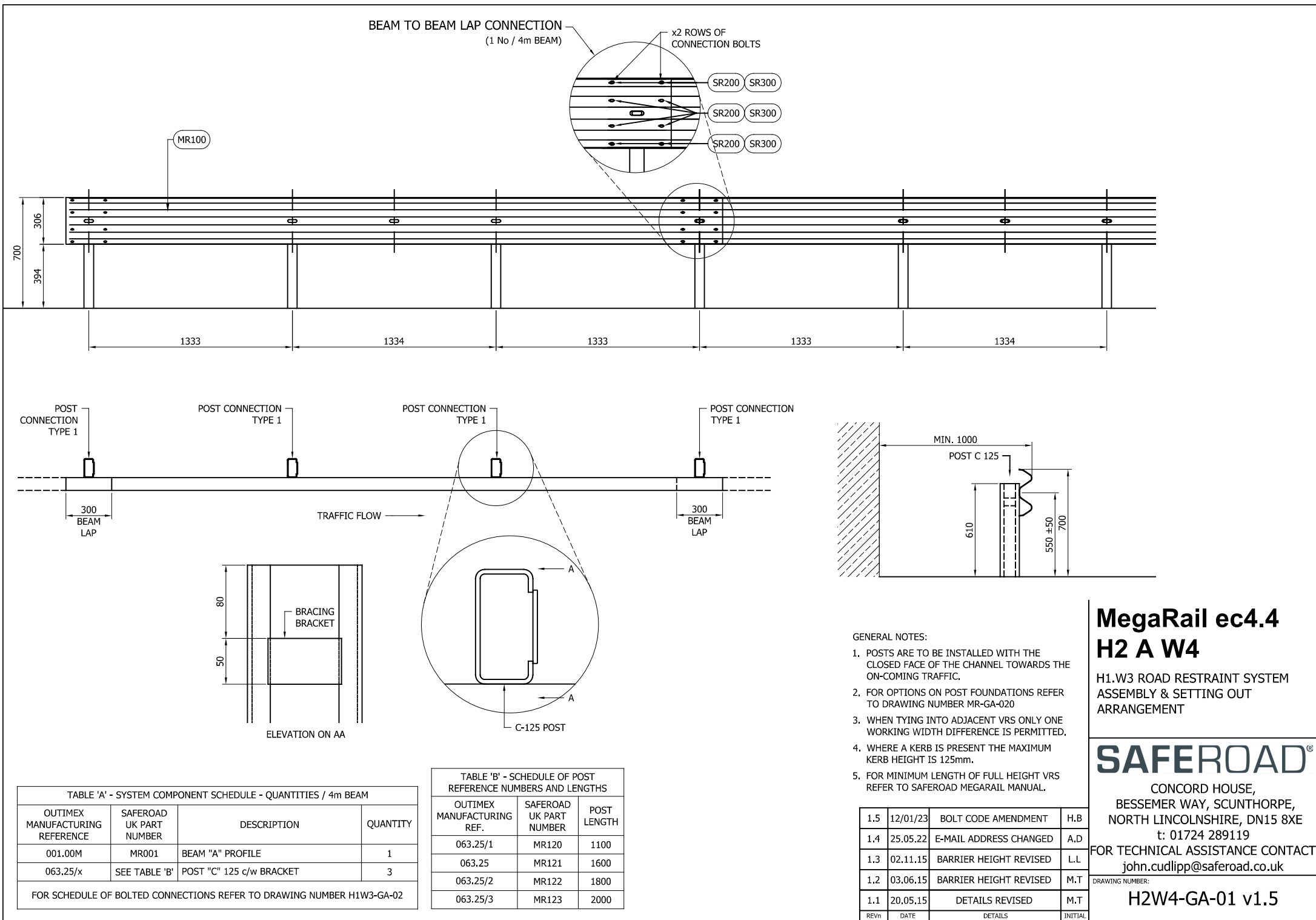
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

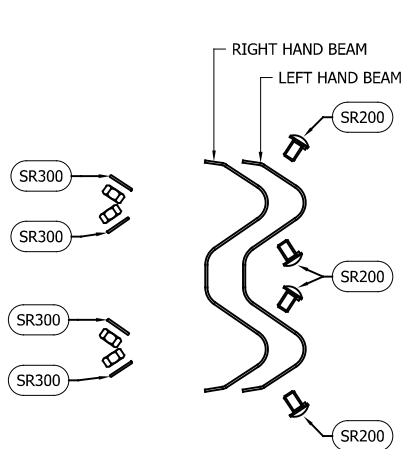
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

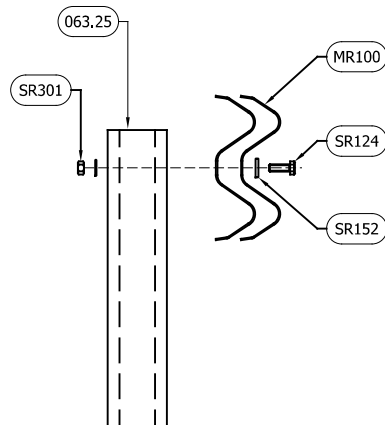
**H2W4-GA-00 v1.5**







BEAM TO BEAM CONNECTION  
ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:

1. NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.
2. POST STRAPS ARE INTERCHANGEABLE BETWEEN VERGE & CENTRAL RESERVE.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
040.00	SR200	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
040.30	SR300	WASHER M16 18Ø HOLE	8 (+8)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
040.54	SR124	SETSCREW 8.8 M10 x 45 c/w NUT	1
T_010.10	SR152	WASHER PLATE 115 x 40 x 5 DIA. 12	1
40.60	SR301	M10 WASHER 11Ø HOLE	1
QUANTITY OF CONNECTION TYPES / 4m BEAM			
			3 (+1)

1.3	12/01/23	BOLT GRADE AMENDMENT	H.B
1.2	25.05.22	E-MAIL ADDRESS CHANGED	A.D
1.1	20.05.15	NOTES REVISED	M.T
REVn	DATE	DETAILS	INITIAL

## MegaRail ec4.4 H2 A W4

H1.W3 ROAD RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

**SAFEROAD**®

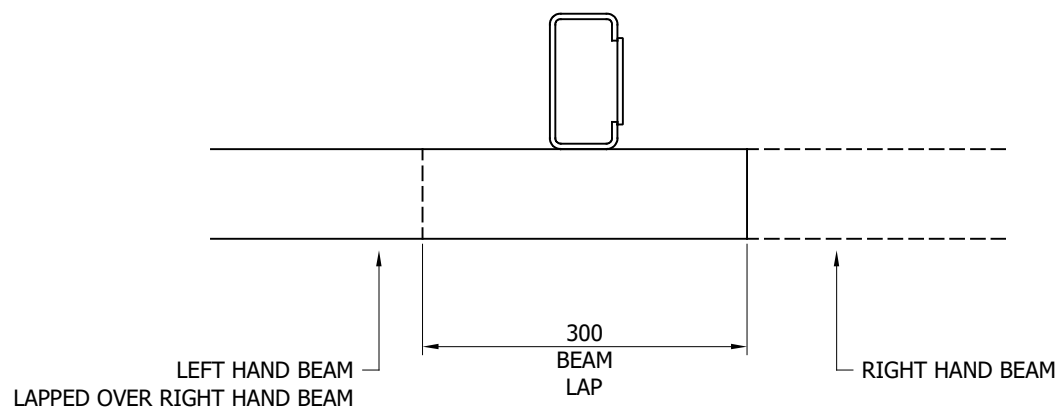
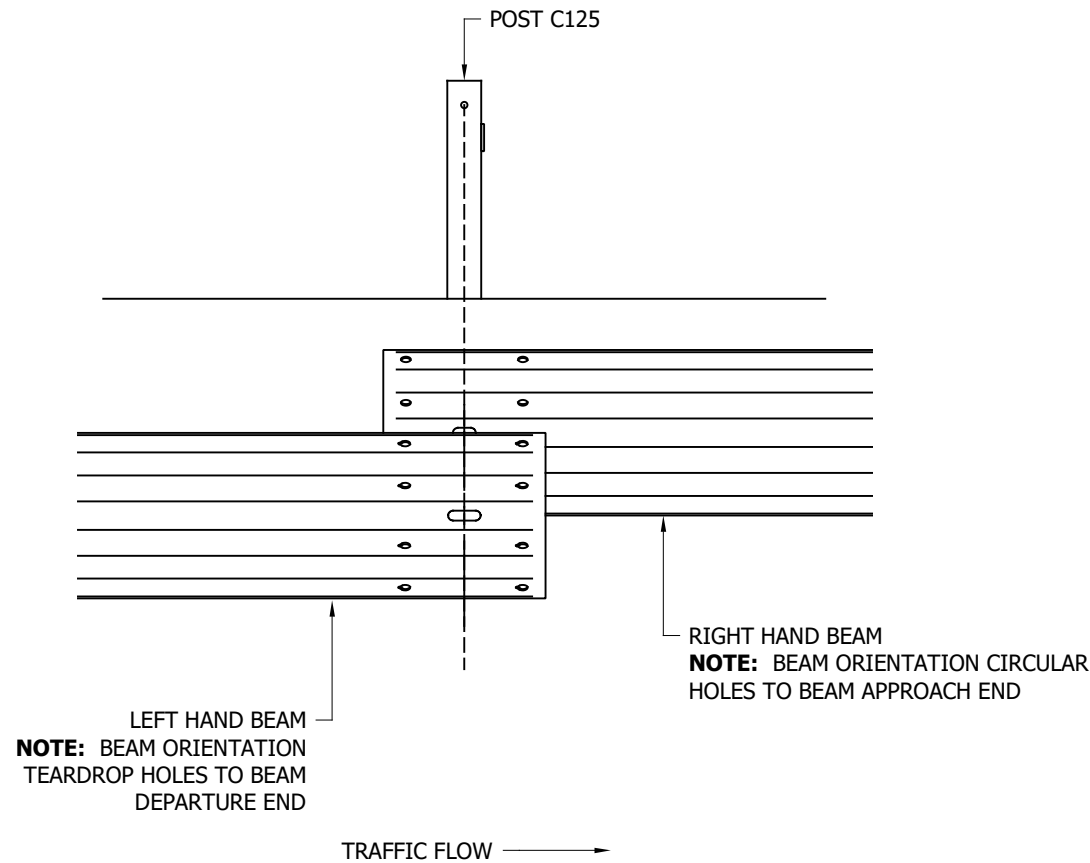
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

H2W4-GA-02 v1.3

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

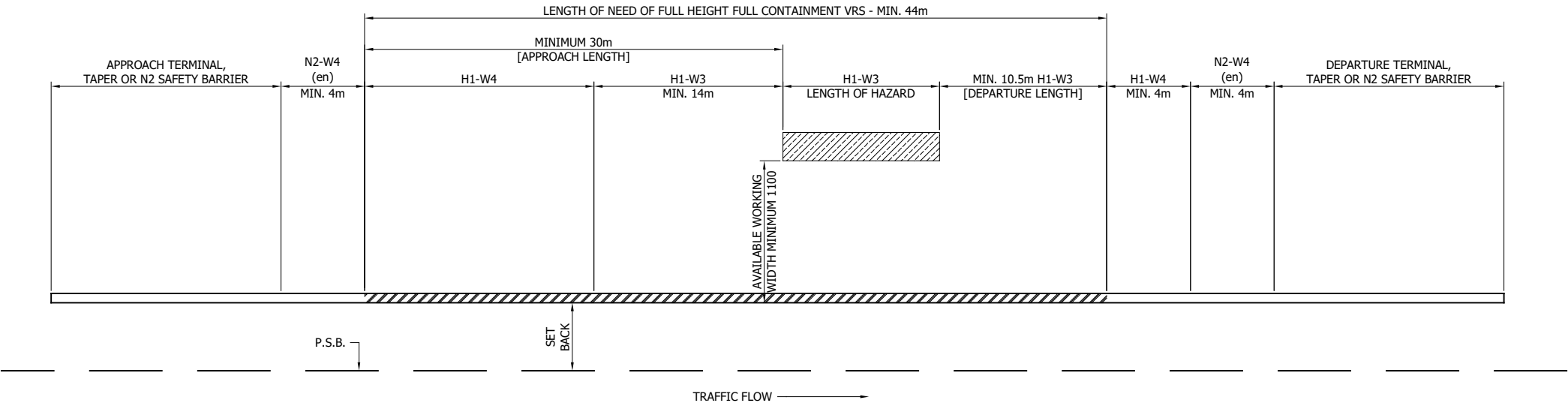
1.2	25.05.22	E-MAIL ADDRESS CHANGED	A.D
1.1	20.05.15	REVn BOX ADDED	M.T
REVn	DATE	DETAILS	INITIAL

**MegaRail ec4.4**  
**H2 A W4**  
H1.W3 ROAD RESTRAINT SYSTEM  
BEAM LAPPING DETAIL FOR H1 A W3  
MEGARAIL SYSTEM

**SAFEROAD®**  
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:  
**H2W4-GA-03 v1.2**

- GENERAL NOTES:
- 1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  - 2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  - 3. MINIMUM LENGTH OF FULL HEIGHT VRS IS 44m



MegaRail ec4.4  
H2 A W4

H1.1.W3 ROAD RESTRAINT SYSTEM  
SYSTEM PROGRESSION SCHEMATIC  
FOR H1.1.W3 PROTECTION TO HAZARD

SAFEROAD®

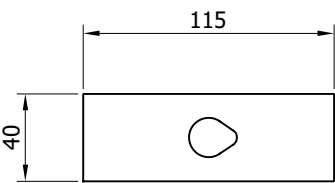
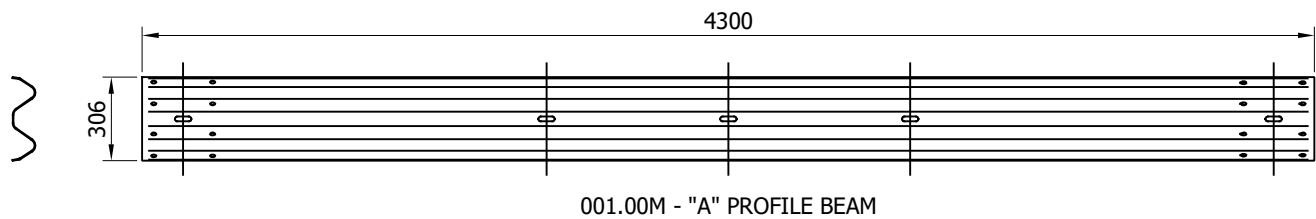
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

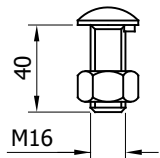
H2W4-GA-10 v1.2

1.2	25.05.22	E-MAIL ADDRESS CHANGED	A.D
1.1	20.05.15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

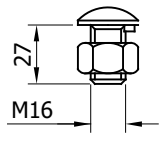




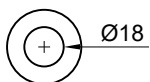
T\_010.00 - WASHER  
PLATE 115 x 40 x 5  
TEAR DROP



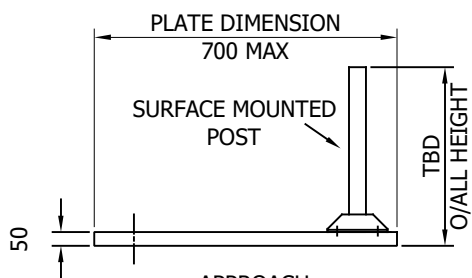
040.01 - SETSCREW 4.6  
LIP M16x40 c/w NUT



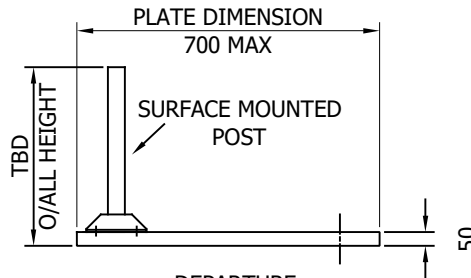
040.00 - SETSCREW 4.6  
LIP M16x27 c/w NUT



040.30 - M16  
WASHER 18ø HOLE

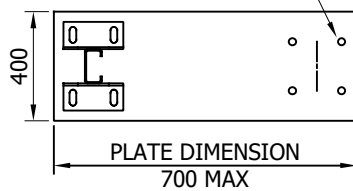
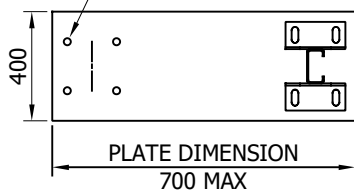


APPROACH  
OFFSET POST

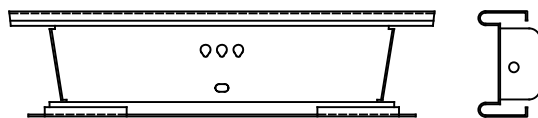


DEPARTURE  
OFFSET POST

CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



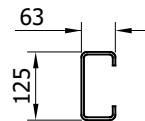
BASEPLATE DRILL &  
TAPPED FOR LIFTING EYE



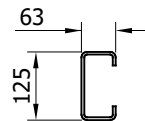
006.96M - BRACKET  
DOUBLE SPACER 780mm



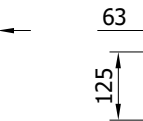
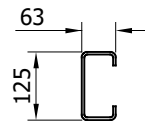
NP001 - A21  
REINFORCING  
RING



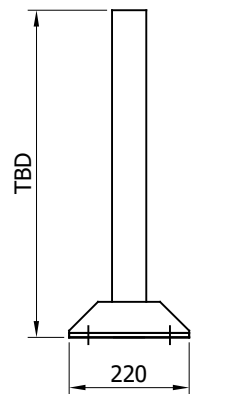
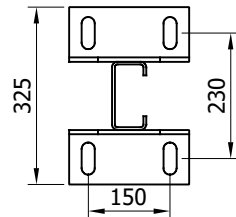
063.23/2 - TYPE 'B' POST  
"C" 125 2100mm x 5



063.23/M - TYPE 'B' POST  
"C" 125 1700mm x 5

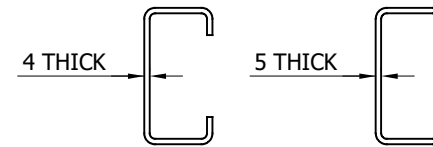


063.23/3 - TYPE 'B' POST  
"C" 125 1250mm x 5



SURFACE MOUNTED -  
TYPE 'B' C-125 POST

## POST TYPE IDENTIFICATION



TYPE 'A'

TYPE 'B'

REVn	DATE	DETAILS	INITIAL
2.5	31.05.22	OFFSET PLATE DETAIL CHANGED	A.D
2.4	25.05.22	SURFACE MOUNTED POST BASE CHANGED	A.D
2.3	21.05.15	DETAILS REVISED	M.T

## MegaRail d H2 A W5

H2.W5 ROAD RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

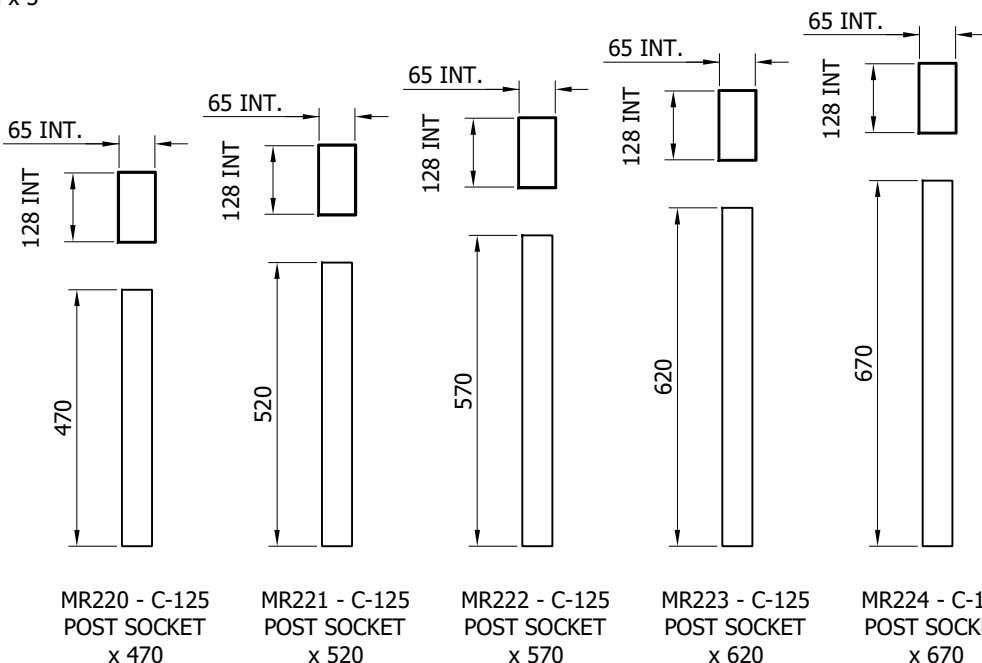
**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

H2W5-GA-00 v2.5



SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m RUN			
OUTIMEX REFERENCE NUMBER	SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
001.00M	MR100	BEAM "A" PROFILE	2
063.23xx	SEE TABLE 'B'	POST "C" 125 x 5mm	2
006.96M	MR162	BRACKET DOUBLE SPACER 780mm	2
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER MR-GA-W5-02			

TYPE 1 SPACER BEAM CONNECTION  
AND BEAM TO BEAM CONNECTION

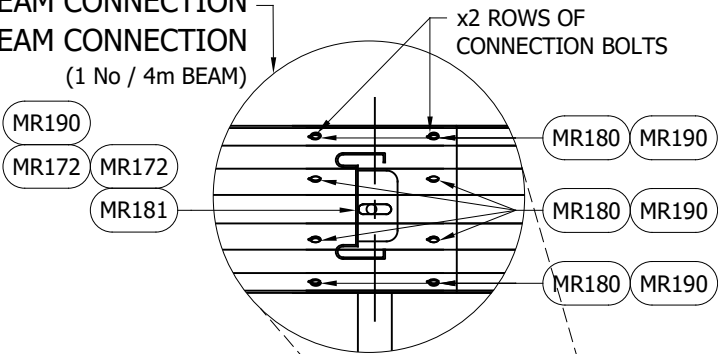
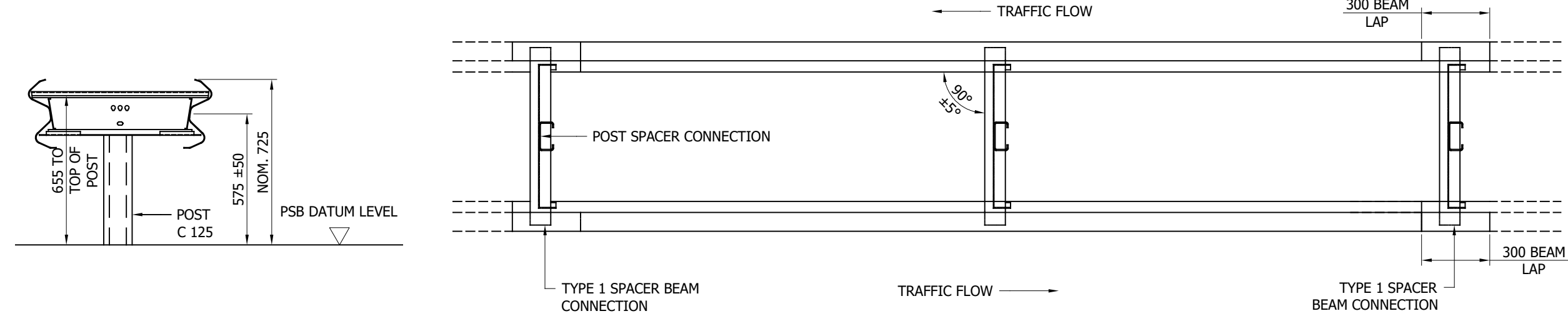
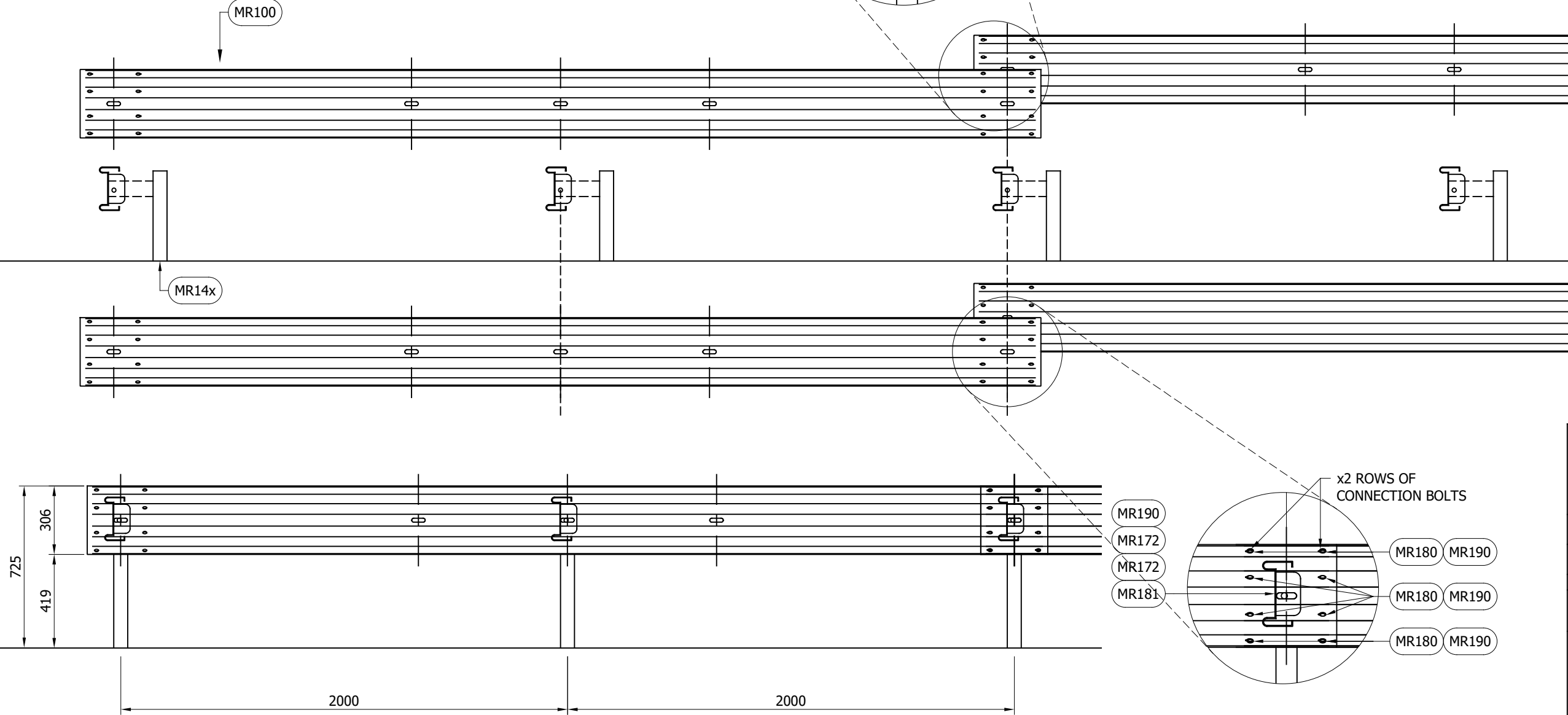


TABLE 'B' - SCHEDULE OF POST REFERENCE NUMBERS AND LENGTHS		
OUTIMEX MANUFACTURING REF.	SAFEROAD UK PART NUMBER	POST LENGTH
063.23/3	MR143	1250
063.23M	MR140	1700
063.23/1	MR141	1900
063.23/2	MR142	2100

- GENERAL NOTES:
1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC WITH THE SMALLEST BIAS.
  3. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
  4. FOR DEVIATIONS IN SYSTEM POST PITCH REFER TO SECTION 8 OF SAFEROAD MEGARAIL MANUAL, DEVIATION CHART.
  5. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
  6. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 125mm.
  7. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.



MegaRail d  
H2 A W5

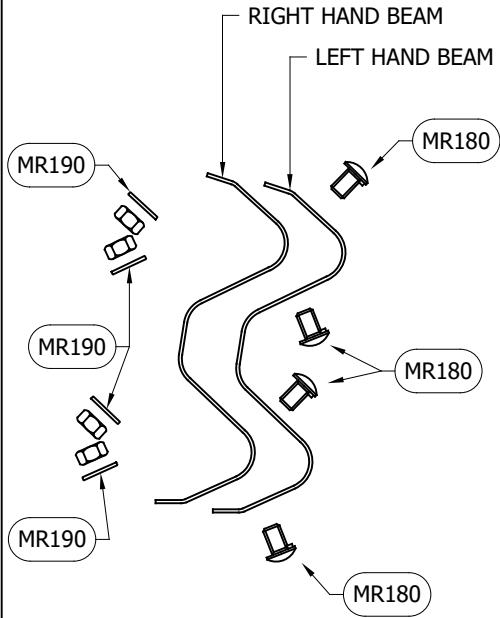
H2.W5 ROAD RESTRAINT SYSTEM  
ASSEMBLY & SETTING OUT  
ARRANGEMENT

SAFEROAD®

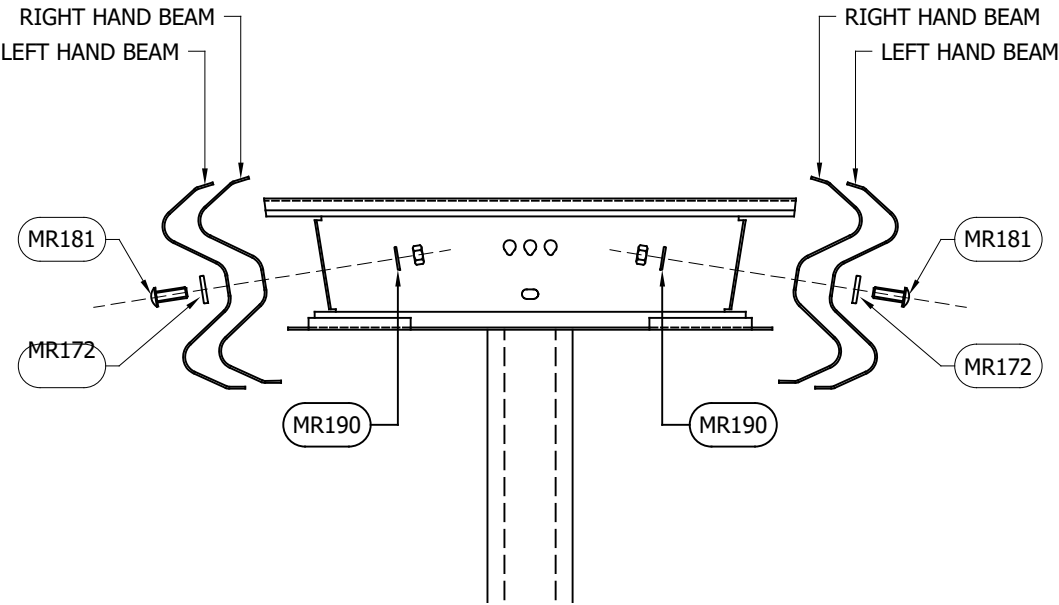
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

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john.cudlipp@saferoad.co.uk

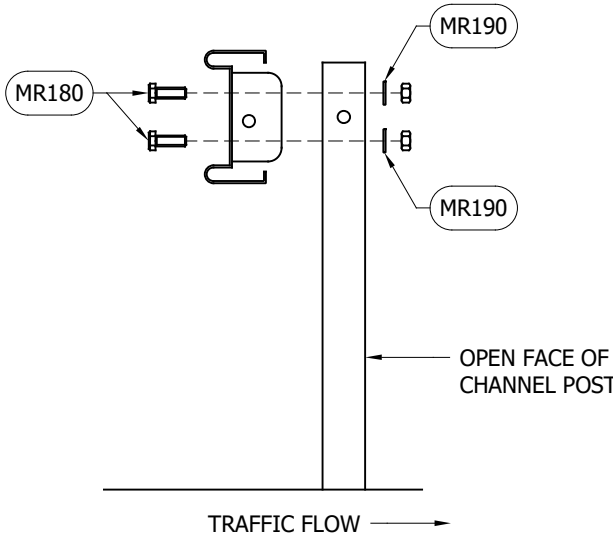
DRAWING NUMBER:  
H2W5-GA-01 v2.5



BEAM TO BEAM CONNECTION  
ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



SPACER TO BEAM  
CONNECTION TYPE 1



SPACER BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:

1. NUMBERS IN THE SCHEDULES SUFFIXED (+)  
DENOTES THE ADDITIONAL QUANTITY OF  
COMPONENTS REQUIRED FOR EXTREME ENDS  
OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
040.00	MR180	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
040.30	MR190	WASHER M16 18Ø HOLE	8 (+8)

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
040.00	MR180	SETSCREW 4.6 LIP M16 x 27 c/w NUT	2
040.01	MR181	SETSCREW 4.6 LIP M16 x 40 c/w NUT	2
010.00	MR172	WASHER PLATE 115 x 40 x 6 TEARDROP	2
040.30	MR190	WASHER M16 18Ø HOLE	4
QUANTITY OF CONNECTION TYPES / 4m BEAM			
			2 (+1)

2.6	25.05.22	E-MAIL ADDRESS CHANGED	A.D
2.5	21.05.15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

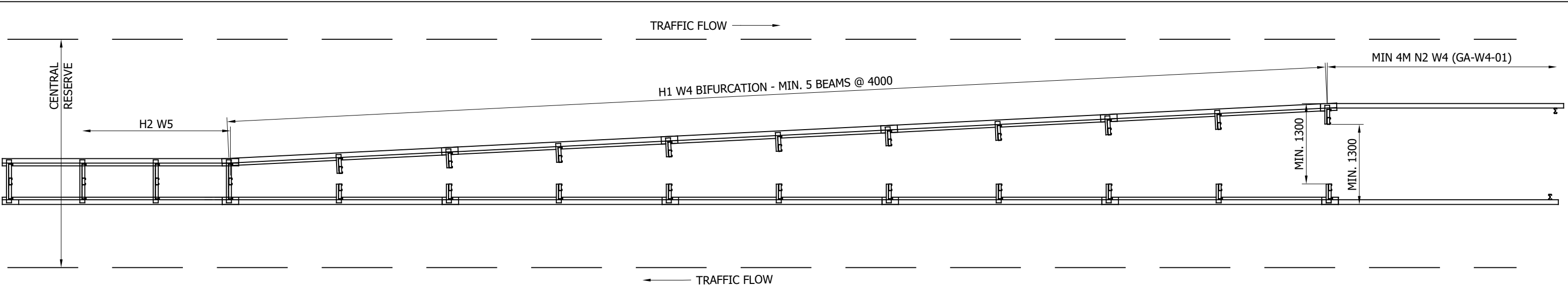
# MegaRail d H2 A W5

H2.W5 ROAD RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

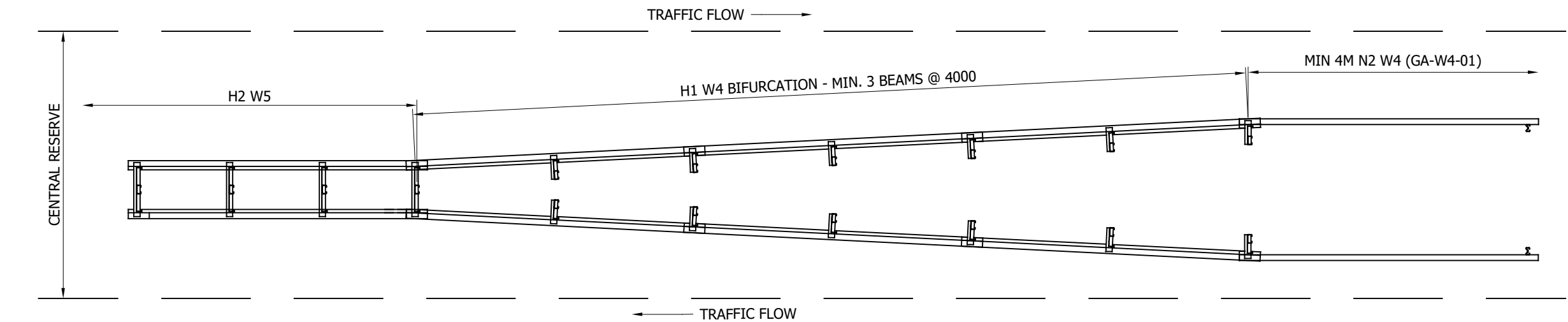
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DRAWING NUMBER:  
H2W5-GA-02 v2.6



- GENERAL NOTES:
- 1. FULL LENGTH OF BIFURCATION ARRANGEMENT IS TO BE INSTALLED AS H1 W4 UNTIL W4 WORKING WIDTH IS ATTAINED BETWEEN THE FRONT FACE OF EITHER BEAM AND THE REAR FACE OF THE POST TO THE OPPOSING SIDE.
  - 2. MINIMUM OF 4m OF N2 W4 (GA-W4-01) SYSTEM TO BE INSTALLED BEYOND THE EXTENT OF THE BIFURCATION ARRANGEMENT.



2.4	25.05.22	E-MAIL ADDRESS CHANGED	A.D
2.3	21.05.15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

# MegaRail d

## H2 A W5

ROAD RESTRAINT SYSTEM  
CENTRAL RESERVE BIFURCATION  
GENERAL ARRANGEMENT

# SAFEROAD®

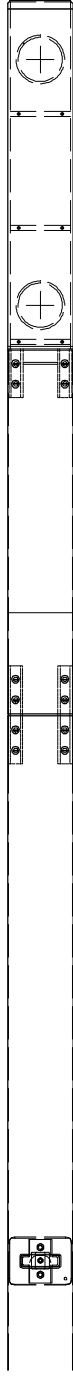
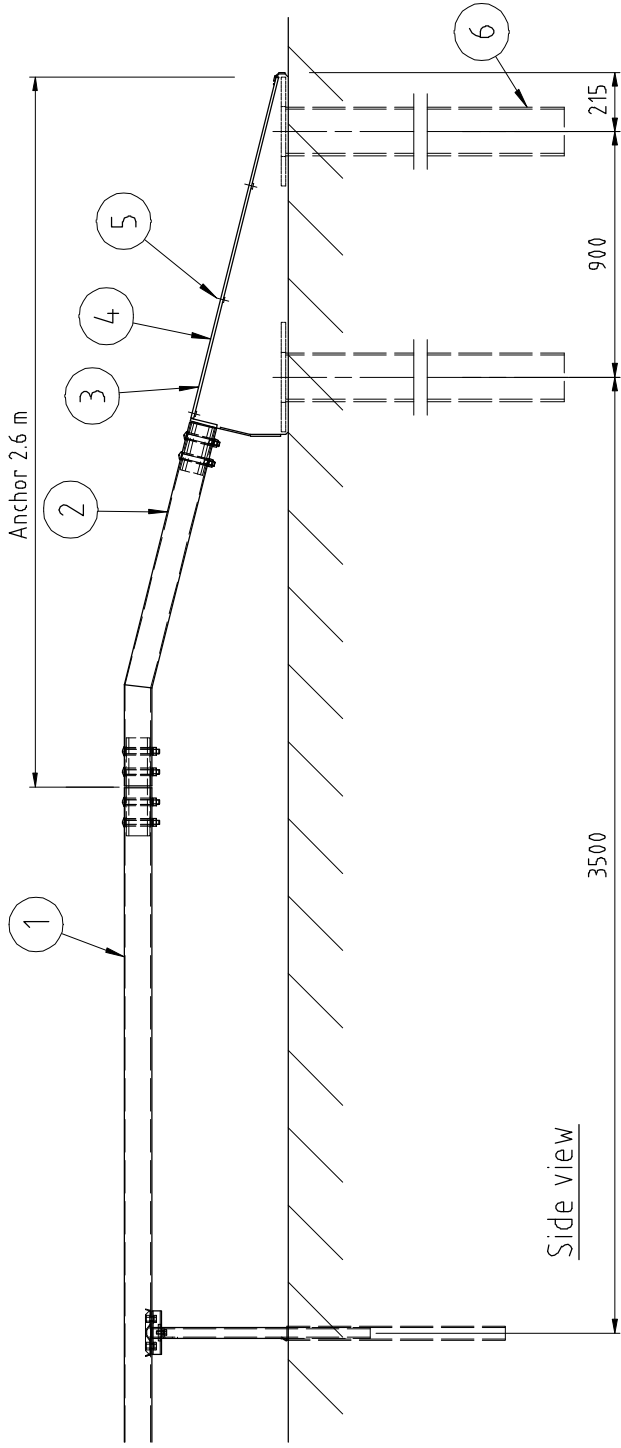
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DRAWING NUMBER:  

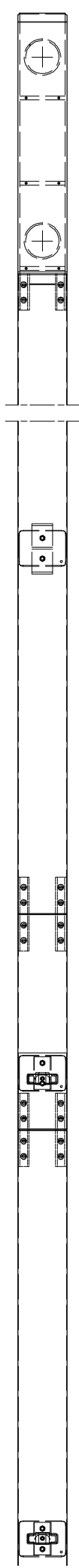
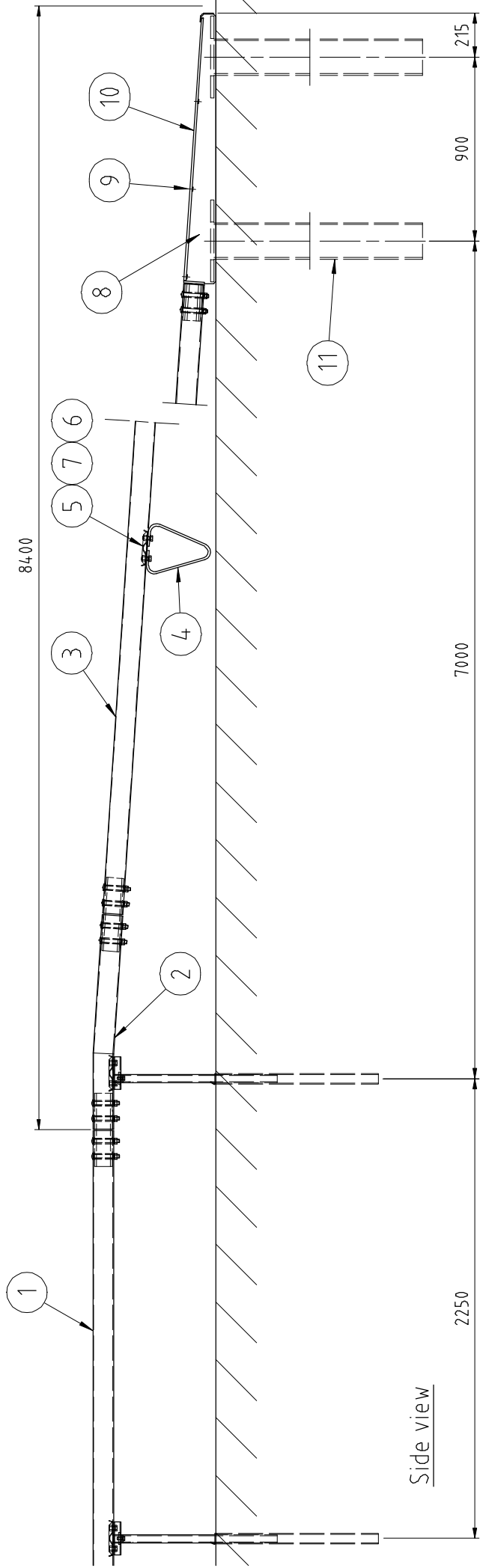
## H2W5-GA-50 v2.4






Top view

6	2	" Nail "			Assembly no. 8910070
5	6	M6x5,5 TT Marutex	A2		Article no. 1132550320
4	1	Cover POLYSTONE	G-BLACK HD		Article no. 8920508
3	1	Anchor " box "			Article no. 8920509
2	1	Transition pipe			Assembly no. 8920206A
1	1	Birsta 1P, Guardrail			Assembly no. 8910002
Item No.		Qty.	Description		Note
Design.		Drawn	Control.	Material	Dimension
		GLN	ALN	Appr.	Scale
					1:20
					Replaces
					Replaced by
					File name
					8910010
					Date
					2009-12-21
					Drawing no.
					8910010
					Rev.



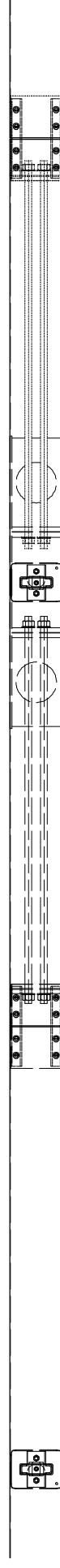
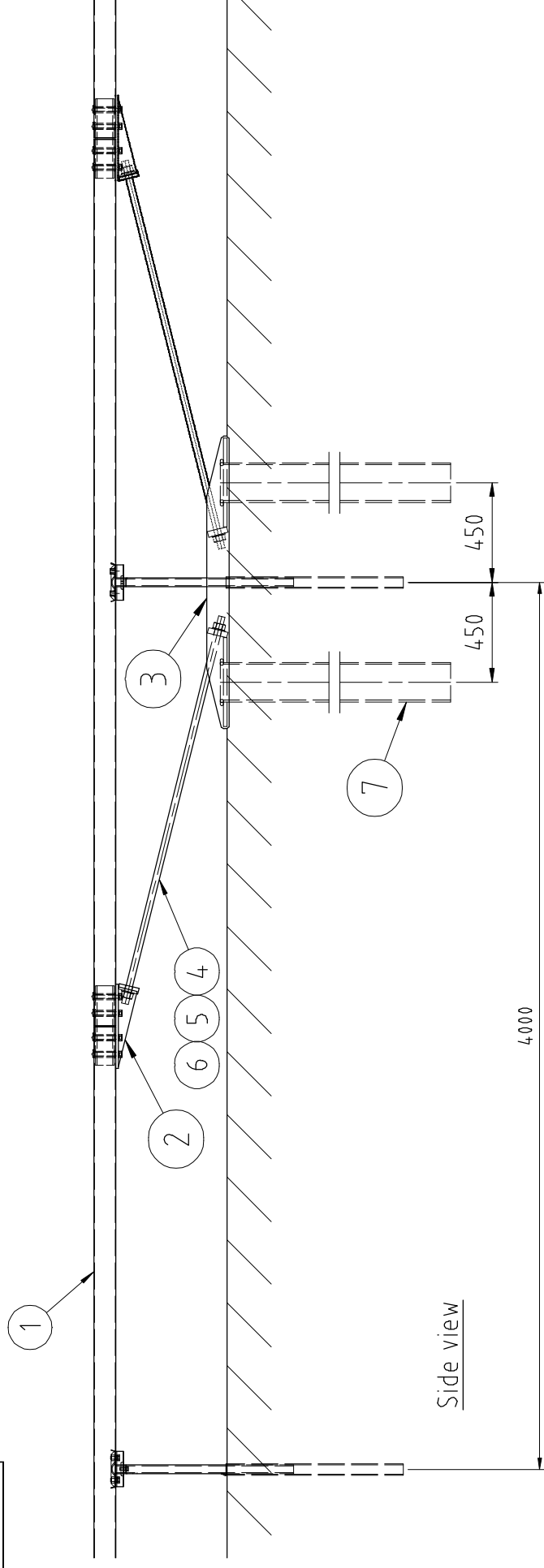
Top view

11	2	" Nail "				Assembly no. 8910070
10	1	Cover POLYSTONE	G-BLACK HD			Article no. 8920508
9	6	M6x5,5 TT Marutex	A2			Article no. 1132550320
8	1	Anchor "box"				Article no. 8920510
7	2	RB 17x30 BRB VFZ HB 200				Article no. 1126173400
6	2	M16x35 M6S 8.8 VFZ				Article no. 1120160350
5	1	Nutplate				Article no. 8920501
4	1	Support				Article no. 8920329
3	1	Square pipe Assembly 6 m				Assembly no. 89202022A
2	1	Transition pipe				Assembly no.8920207A
1	1	Birsta 1P, Guardrail				Assembly no. 89100002
Item No.	Qty.	Description		Material	Dimension	Note
Design.	Drawn	Copied	Control	Stand.	Scale	Replaces
	GLN	ALN	Appr.		1:20	Replaced by
Birsta 1P, Guardrail						File name
Anchor SP 8.4 m						8910020
						Date
						2009-12-21
						Drawing no.
						8910020
						Rev.




**Бирста**  
Бирста вентилни апарати

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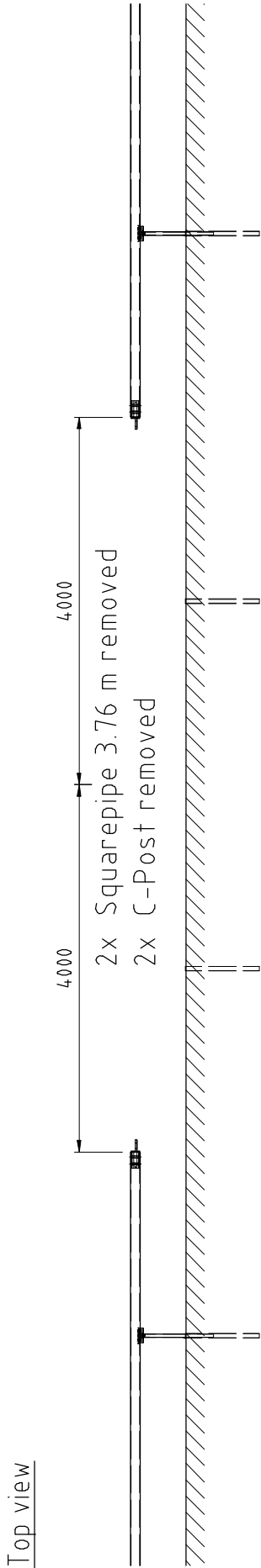
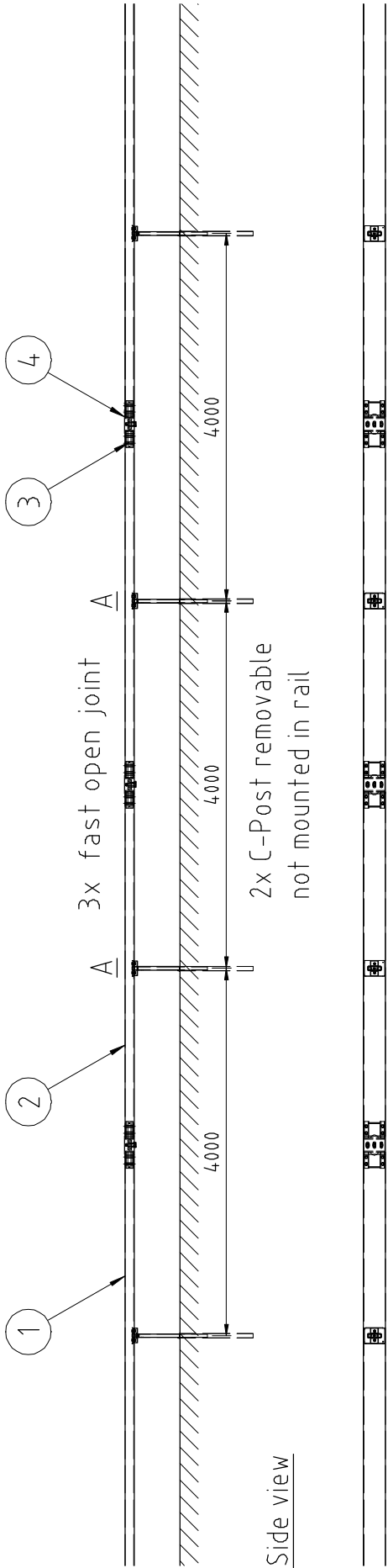
7	1	" Nail "				Article no. 8920515
5	4	M30 M6M 8.8 VFZ				Article no. 1123300000
4	4	RB 34x58 SRB VFZ				Article no. 1126345800
6	2	Tie rod			M30 x 1800	Article no. 8920518
3	1	Ground tie rod bracket				Article no. 8920513
2	1	Upper tie rod bracket				Article no. 8920514
1	1	Birsta 1P				Assembly no. 8910002

Item No.	Qty.	Description	Material		Dimension	Note
			Stand.	Appr.		
Design.	Drawn GLN	Control. ALN			Scale 1:20	Replaces Replaced by

 <b>ഭൂവ്വസ്ഥാനം</b> <b>ഭൂവ്വസ്ഥാനം</b>		Birsta 1P, Guardrail		File name 8910030	Date 2009-12-21
		Tie rod anchor		Drawing no. 8910030	Rev.

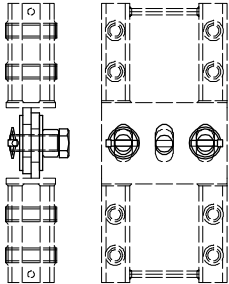
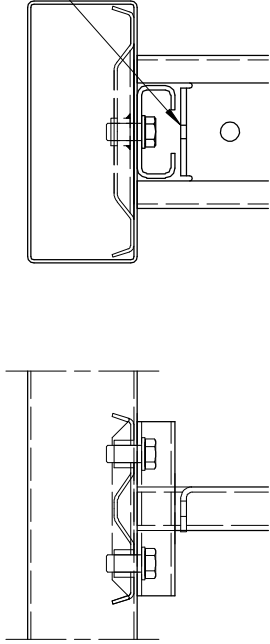
Tel: 080 - 52 72 00	Fax: 080 - 52 72 15, 52 72 16
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Side view, open

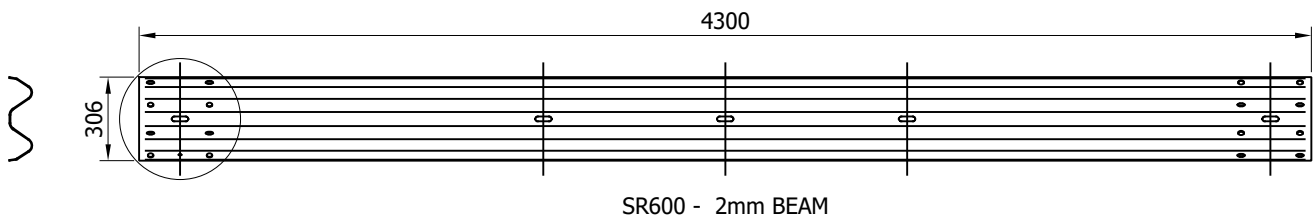
OBS!  
At the removable section, the posts  
must NOT be mounted to the squarepipe



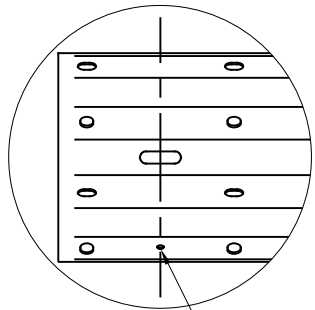
Joint  
(1:10)

Removable posts  
(1:5)

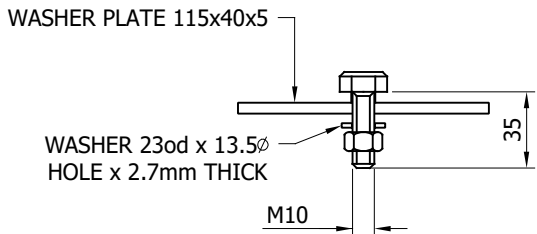
4	3	Joint cover				Article no. 8920536
3	3	Fast opening joint				Assembly no. 8920415A
2	2	Squarepipe 3.76 m				Assembly no. 8920208A
1	1	Birsta 1P, Guardrail				Assembly no. 8910002
Item No.	Qty.	Description	Material	Dimension	Note	
Design.	Drawn	Copied	Stand	Appr.	Replaces	
	GLN	ALN			Scale	
					1:50	
Birsta 1P, Guardrail Fast opening					File name 8910050	Article no. 8920536
					Drawing no. 8910050	Assembly no. 8920415A
					Rev.	Assembly no. 8920208A
					Date 2009-12-21	Assembly no. 8910002



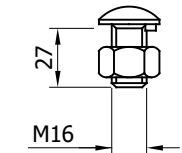
SR600 - 2mm BEAM



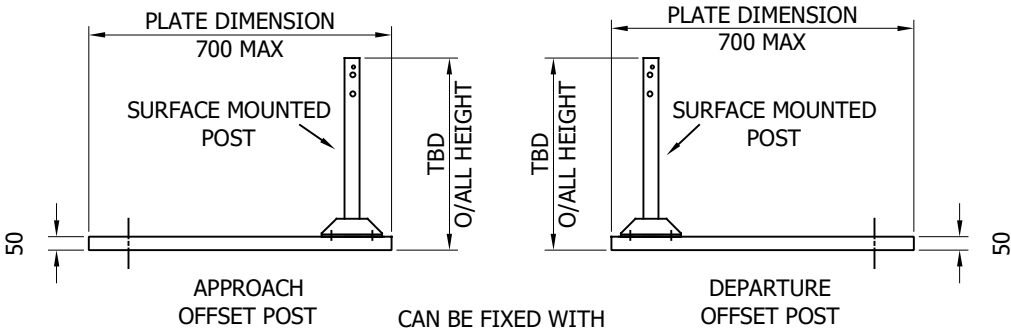
**NOTE:** THIS HOLE IDENTIFIES THE REQUIRED ORIENTATION OF THE BEAM AND THE BEAM END WITH THE ADDITIONAL HOLE SHOULD BE SITED AS THE REAR BEAM AT LAP JOINTS



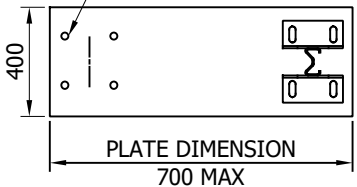
SR632 - BOLT 4.6 M10x35 c/w NUT, WASHER AND WASHER PLATE



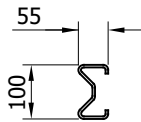
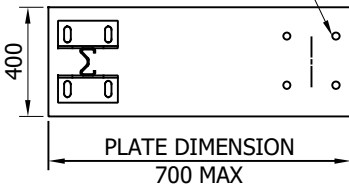
SR635 - SETSCREW 4.6 LIP M16x27 c/w FLANGE NUT



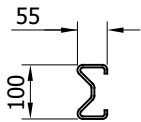
CAN BE FIXED WITH CAST IN ANCHORS, DRILL AND FIX ANCHORS OR PUSHED IN ANCHORS AT 180x180 CENTERS



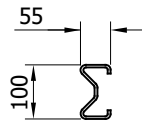
BASEPLATE DRILL & TAPPED FOR LIFTING EYE



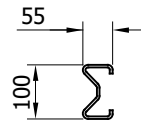
SR609 - TYPE 'B' POST SIGMA 100 2400mm



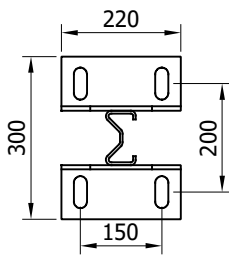
SR613 - TYPE 'B' POST SIGMA 100 2100mm



SR612 - TYPE 'B' POST SIGMA 100 1950mm

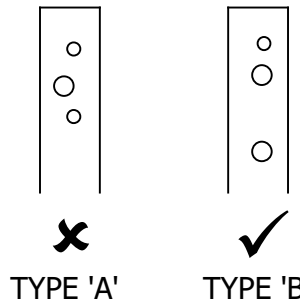


SR614 - TYPE 'B' POST SIGMA 100 1100mm



SURFACE MOUNTED TYPE 'B' SIGMA 100 POST

POST TOP DRILLING ARRANGEMENT



07	31/05/22	OFFSET PLATE DETAIL CHANGED	A.D
06	25/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
05	12/02/19	MINOR DETAIL CHANGES AND TITLEBLOCK CHANGE	H.B
04	10/03/17	OFFSET PLATE REVISED	L.L
03	27/01/17	DETAILS REVISED	L.L
2.3	20/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

MegaRail Birsta W2  
N2 A W4

N2.W4 VEHICLE RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

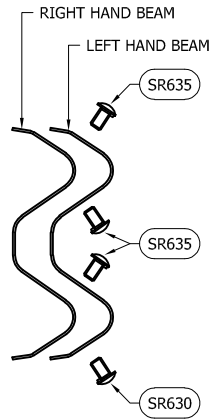
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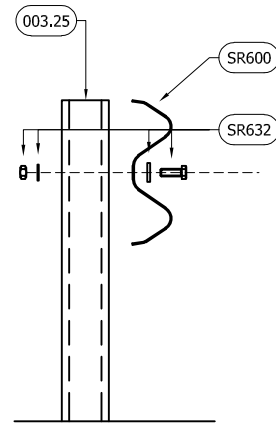
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W4-GA-00	07





BEAM TO BEAM LAP  
CONNECTION ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:

1. NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM			
BIRSTA MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
1122160250	SR635	SETSCREW 4.6 LIP M16x27 c/w FLANGE NUT	8 (+8)

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST			
OUTIMEX MANUFACTURING REFERENCE	SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
1128121150A	SR632	BOLT 4.8 M10x35 c/w NUT, WASHER 11Ø HOLE AND WASHER PLATE 115 x 40 x 5mm	1
QUANTITY OF CONNECTION TYPES / 4m BEAM			
			1 (+1)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

REV#	DATE	DETAILS	INITIAL
04	12/02/19	TITLEBLOCK CHANGES	H.B
03	27/01/17	DETAILS REVISED	L.L
2.4	20/05/15	DETAILS REVISED	L.L

## MegaRail Birsta w2 N2 A W4

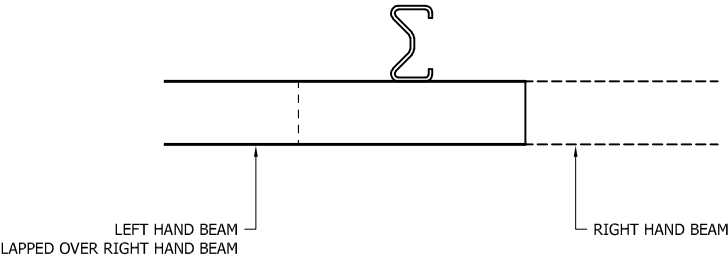
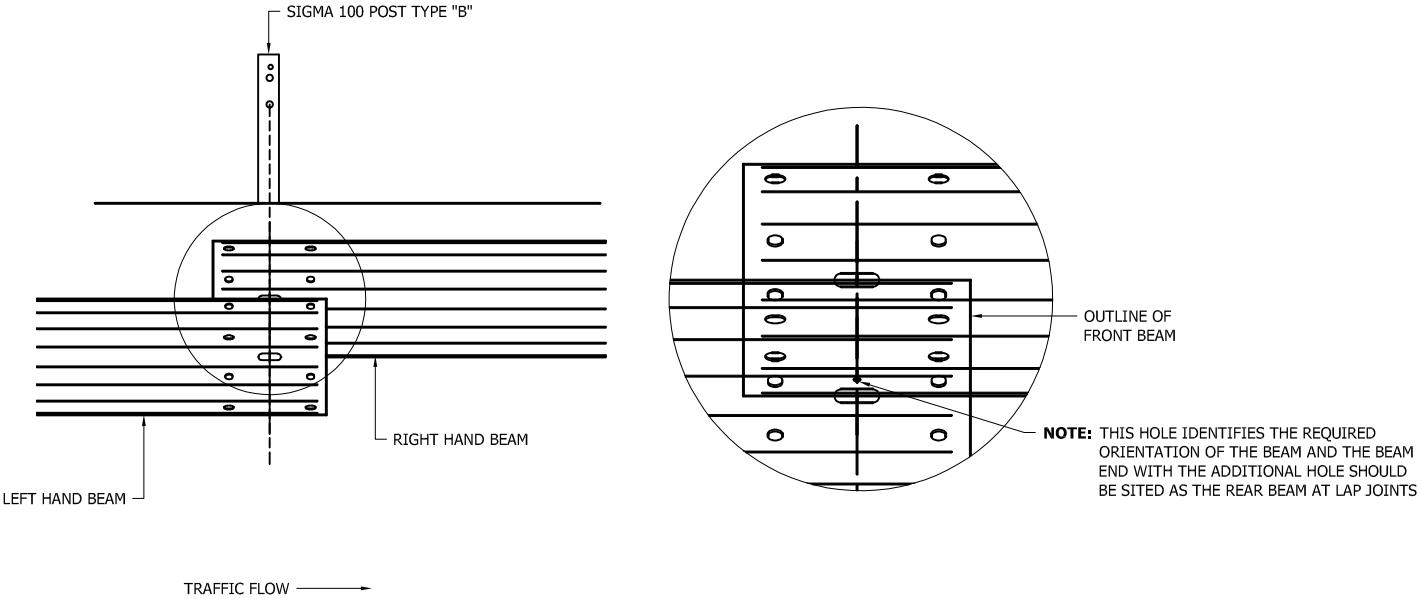
N2.W4 VEHICLE RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

# SAFEROAD®

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DRAWING NUMBER:	REV#:
N2W4-GA-02	04

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



REV#	DATE	DETAILS	INITIAL
04	12/02/19	TITLEBLOCK CHANGES	H.B
03	27/01/17	DETAILS REVISED	L.L
2.3	20/05/15	DETAILS REVISED	L.L

MegaRail Birsta w2  
N2 A W4

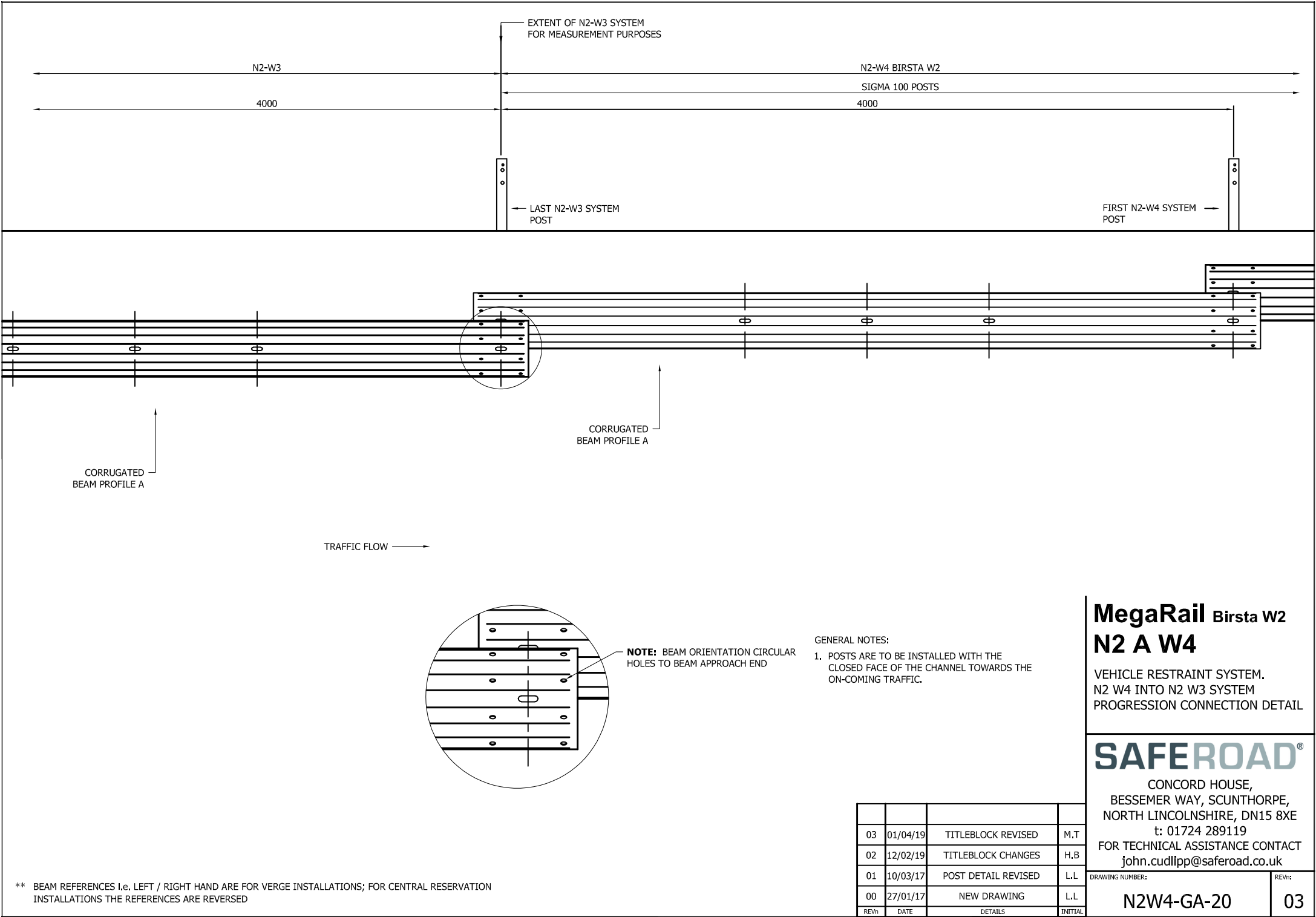
N2.W4 VEHICLE RESTRAINT SYSTEM.  
BEAM LAPPING DETAIL FOR W4  
MEGARAIL SYSTEM

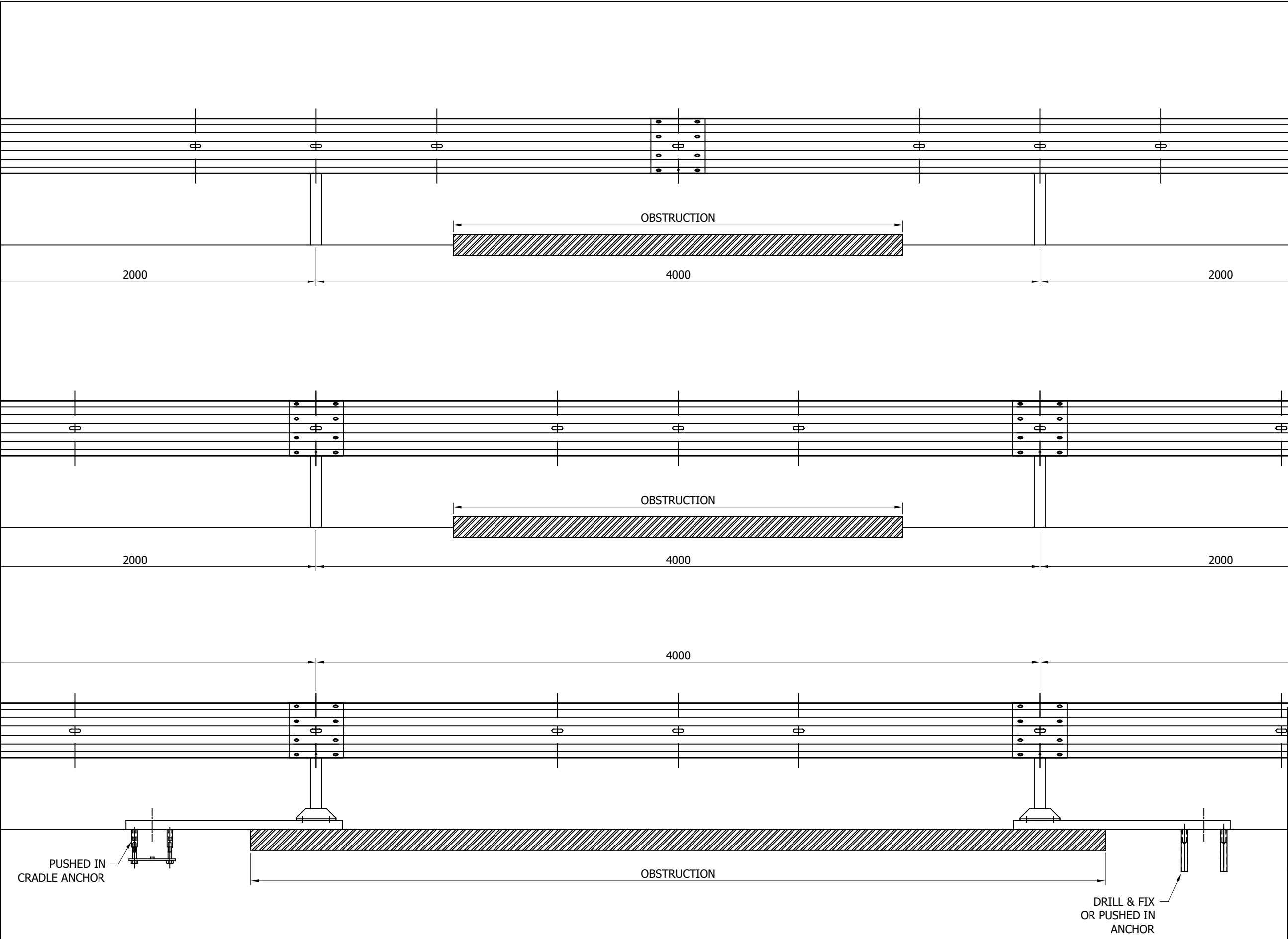
SAFEROAD®

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DRAWING NUMBER:	REV#:
N2W4-GA-03	04





- GENERAL NOTES:
1. IF THE SITE CONDITIONS DO NOT ALLOW A POST TO BE INSTALLED ON THE SYSTEM PITCH DEVIATIONS CAN BE APPLIED. THE OBSTRUCTED POST CAN BE LEFT OUT AND EXTRA POSTS INSTALLED TO SPAN THE OBSTRUCTION AS PER THIS DRAWING. ALTHOUGH IT WOULD BE BENEFICIAL TO USE THE HOLES ALREADY IN THE BEAM IT IS ACCEPTABLE TO DRILL NEW HOLES IN THE DESIRED POSITIONS AND TREAT WITH ZINC RICH PAINT.
  2. OFFSET POSTS SHOWN ON DRAWING N2W4-GA-00 CAN BE USED.

# MegaRail Birsta W2 N2 A W4

N2.W4 VEHICLE RESTRAINT SYSTEM  
DEVIATION SETTING OUT  
ARRANGEMENT

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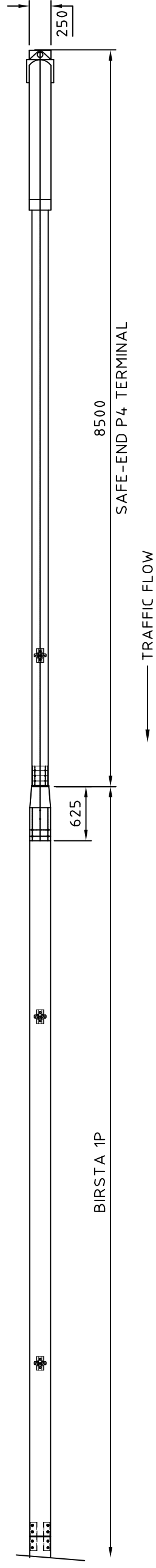
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01	12/02/19	TITLEBLOCK CHANGES	H.B
00	27/01/17	NEW DRAWING	L.L
REVn	DATE	DETAILS	INITIAL

DRAWING NUMBER:	REVn:
N2W4-GA-40	02

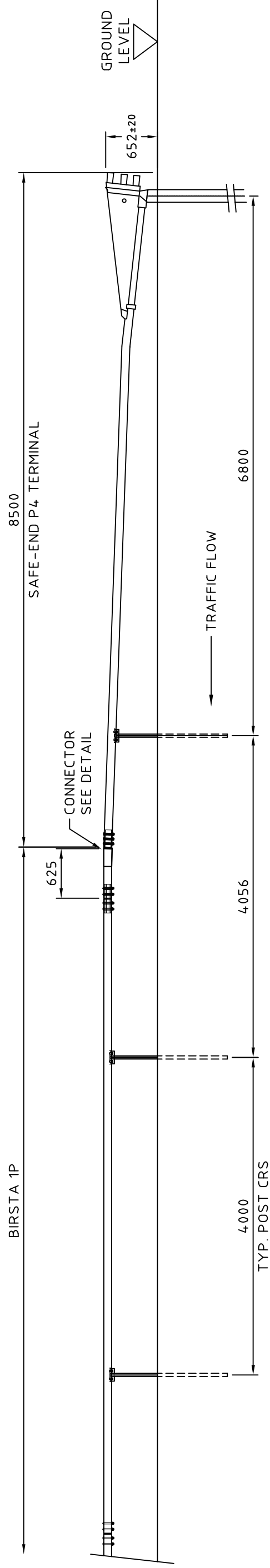
WELDING SYMBOLS		MACHINING NOTES		FABRICATION NOTES		WELDING SPECIFICATION	
	FILLET		MACHINE MARKS MARKED BY REMOVE SHARP EDGES TOLERANCES UNLESS STATED OTHERWISE	TOLERANCES UNLESS STATED OTHERWISE $\pm .0062(1.5mm)$			
	BEVEL BUTT		SHOP WELD				
	SQUARE BUTT		SITE WELD				
			SEAL				
			DOUBLE VEE BUTT SEAL ON SITE				
			SINGLE VEE BUTT SEAL ON REVERSE				
			WELD ALL ROUND IN SHOP				
			WELD ALL ROUND SEAL				
			WELD PER SIZE				
			WELD NEAR SEAL				
			WELD 2' MAX 4'				
			WELD 2' (+/-)				

IF IN DOUBT, ASK.

DRAWING NOT TO BE SCALED.



### PLAN VIEW

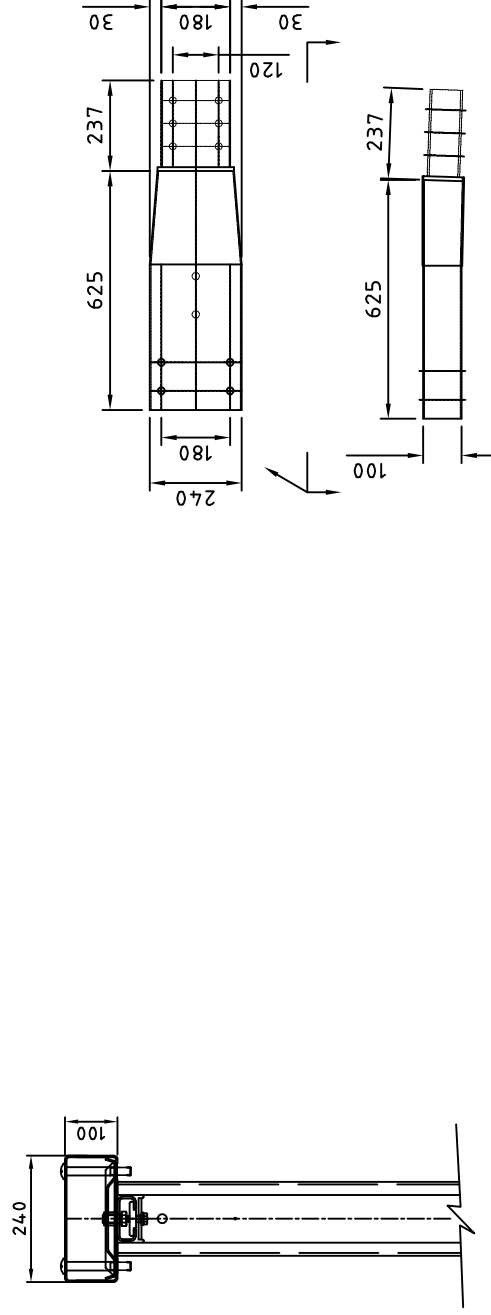


ELEVATION ON TRAFFIC FACE  
SAFE-END P4 TO BIRSTA 1P


FOR DETAILS OF CONCRETE  
FOUNDATIONS CONTACT  
SAFEROAD VRS

NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. FOR INSTALLATION PROCEDURES REFER TO SAFEROAD MANUAL.



















## SECTION THROUGH BIRSTA 1P

SECTION THROUGH BIRSTA 1P		CONNECTION PIECE DETAIL	
<b>SAFEROAD®</b> <b>VRS LTD</b> Concord House Bessie Way Scurthorpe North Lincolnshire, DN15 6XE Tel: 01724 289119 Fax: 01724 281476		<b>TITLE:--</b> GENERAL ARRANGEMENT & DETAIL SAFE-END P4 END TERMINAL TO BIRSTA 1P	
<b>ORDER No:--</b> -		<b>REVN.</b> <b>DATE</b> <b>REMARKS</b> <b>SIG.</b>	
<b>ISSUE DATE:--</b> -		<b>MATL:--</b> <b>DRAWN:--</b> <b>CHECKED:--</b> <b>CHECKED QA:--</b> -   M.T   MT   -	
<b>PROJECTION:--</b> 		<b>DATE:--</b> <b>SCALE:--</b> <b>APPROVED:--</b> 27.11.17   N.T.S   -	
<b>DRG No:--</b> -		<b>REV:--</b> 00	

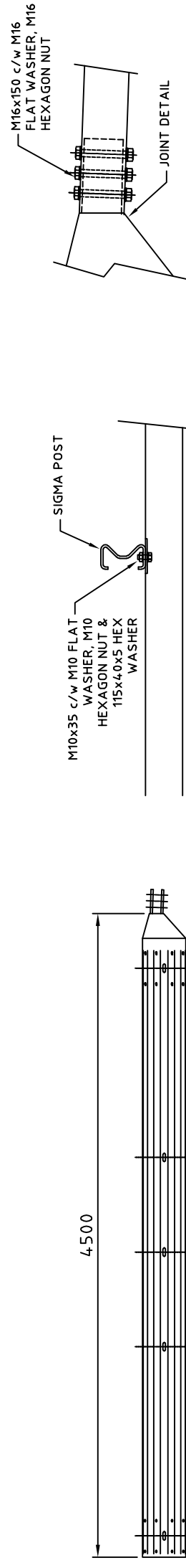
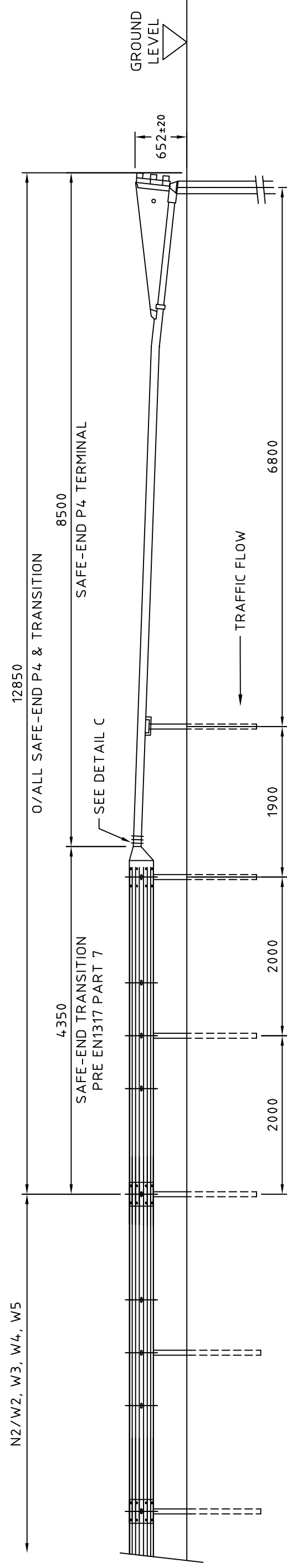
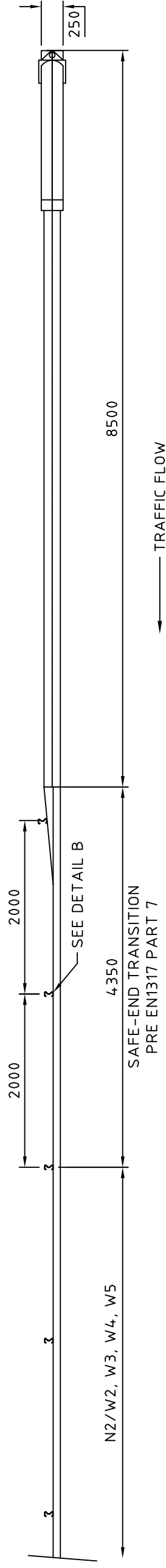


WELDING SYMBOLS

	FILLET		SEAL		SHOP WELD		WELD ALL ROUND IN SHOP		WELD ALL ROUND ON SITE		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"		WELD 2" MBS 4"
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IF IN DOUBT, ASK.

DRAWING NOT TO BE SCALED.

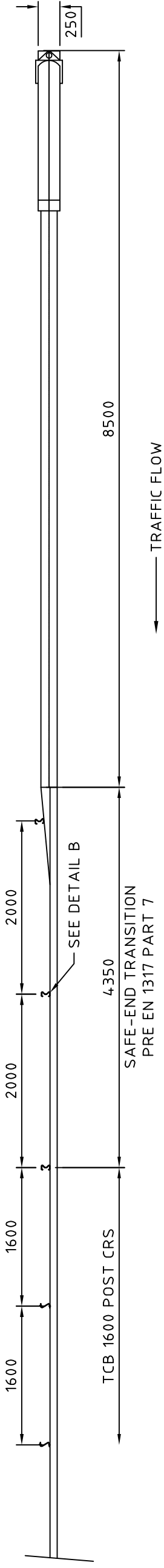


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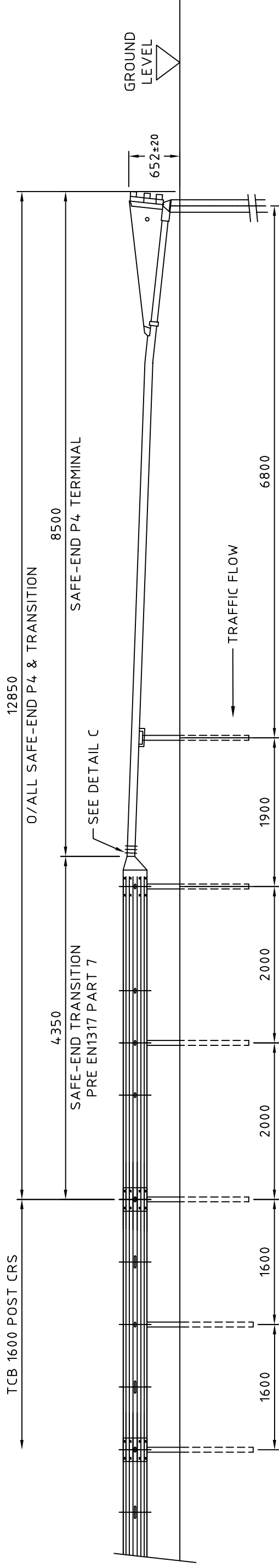
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. FOR INSTALLATION PROCEDURES REFER TO SAFEROAD MANUAL.

2. FOR INSTALLATION PROCEDURES REFER TO SAFEROAD MANUAL.

<div><div>SAFEROAD®</div><div>VRS LTD</div><div>Concord House</div><div>Bessmer Way</div><div>Southdorp</div><div>North: Lincolnshire, DN15 0XE</div><div>Tel: 01724 289119 Fax: 01724 281476</div></div>	TITLE:-		ORDER No:-		DRAWN:-		CHECKED:-	CHECKED QA:-
	GENERAL ARRANGEMENT & DETAIL		-		M.T		MT	-
	SAFE-END P4 END TERMINAL & TRANSITION		-		DATE:-		SCALE:-	APPROVED:-
	PRE EN1317 PART 7		ISSUE DATE:-		22.02.16		N.T.S	-
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				PROJECTION:-		DATE		SIG.
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PLAN VIEW



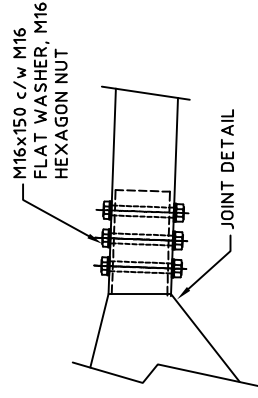
ELEVATION ON TRAFFIC FACE  
TRANSITION TO SINGLE SIDED TCB

FOR DETAILS OF CONCRETE  
FOUNDATIONS CONTACT  
SAFEROAD VRS

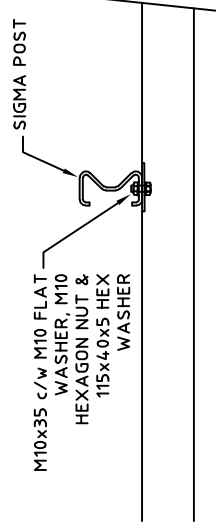
NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. FOR INSTALLATION PROCEDURES REFER TO SAFEROAD MANUAL.

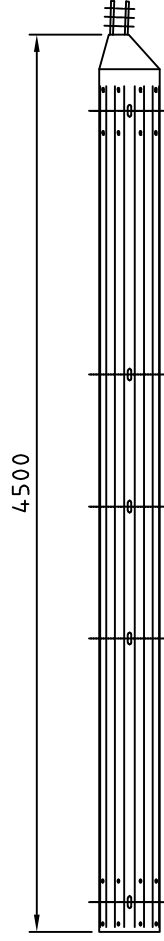
## DETAIL C



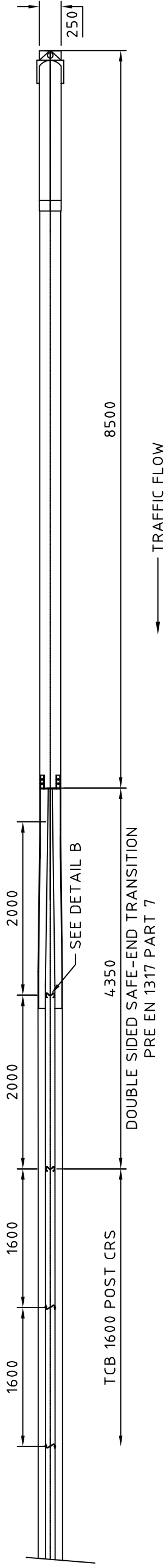
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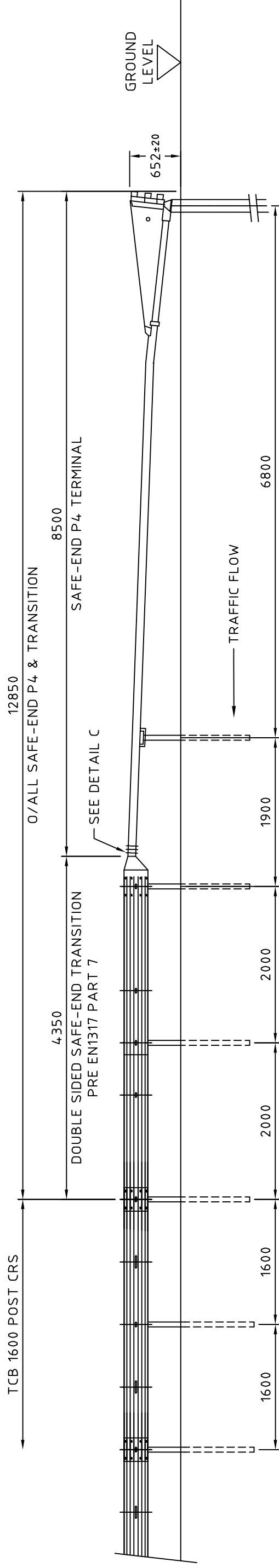
## SAFE-END TRANSITION

[illegible]

WELDING SYMBOLS		MACHINING NOTES		FABRICATION NOTES		WELDING SPECIFICATION	
	FILLET		WELD ALL ROUND IN SHOP		MACHINE WELD MARKED BY	TOLERANCES UNLESS	IF IN DOUBT, ASK.  DRAWING NOT TO BE SCALED.
	BEVEL BUTT		WELD ALL ROUND ON SITE		PERMANENT STAMP CODES	STATED OTHERWISE	
	SQUARE BUTT		WELD PER SIZE		MACHINE WELD MARKED BY	TOLERANCES UNLESS	
			DOUBLE VEE BUTT		MACHINE WELD MARKED BY	TOLERANCES UNLESS	
			SINGLE VEE BUTT		MACHINE WELD MARKED BY	TOLERANCES UNLESS	



## PLAN VIEW

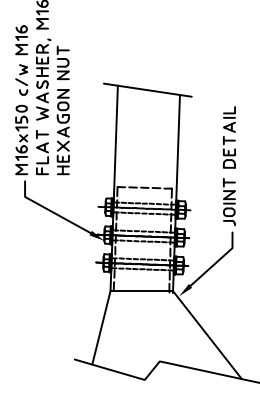


ELEVATION ON TRAFFIC FACE  
TRANSITION TO DOUBLE SIDED TCB

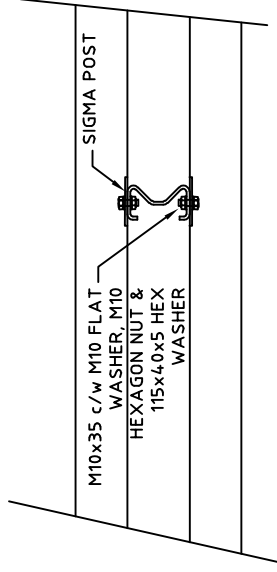
FOR DETAILS OF CONCRETE  
FOUNDATIONS CONTACT  
SAFEROAD VRS

NOTES:

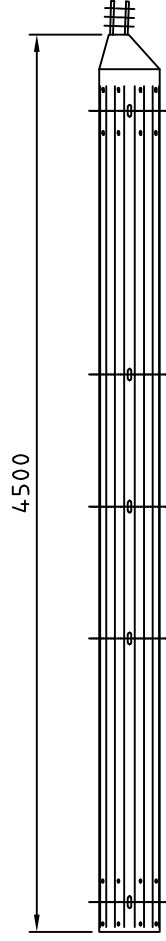
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. FOR INSTALLATION PROCEDURES REFER TO SAFEROAD MANUAL.




## DETAIL C



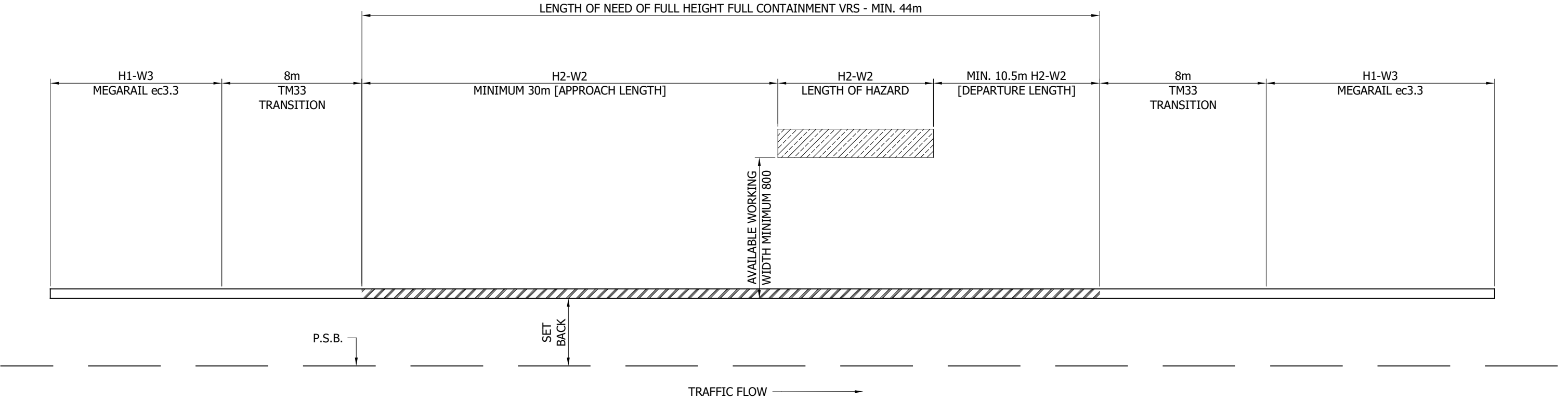
DETAIL B



## SAFE-END TRANSITION

<div><div>SAFEROAD®</div><div>VRS LTD</div><div>Concord House</div><div>Beacons Way</div><div>Southcliffe</div><div>North Lincolnshire, DN15 6XE</div><div>Tel: 01724 269119 Fax: 01724 261476</div></div>	TITLE:--													
	GENERAL ARRANGEMENT & DETAIL													
	SAFE-END P4 END TERMINAL & TRANSITION (TO DOUBLE SIDED TCB)													
	PRE EN1317 PART 7													
	ORDER No:--		-				DRAWN:--		CHECKED:--		CHECKED QA:--			
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							DRG No:--		UK 20321		REV:--			
										00				
	REV. L		DATE		REMARKS								SIG.	

- GENERAL NOTES:
- 1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  - 2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  - 3. MINIMUM LENGTH OF FULL HEIGHT VRS IS 44m



MegaRail sk  
H2 A W2 VI2

H2.W2 VEHICLE RESTRAINT SYSTEM  
SYSTEM PROGRESSION SCHEMATIC  
FOR H2 W2 PROTECTION TO HAZARD

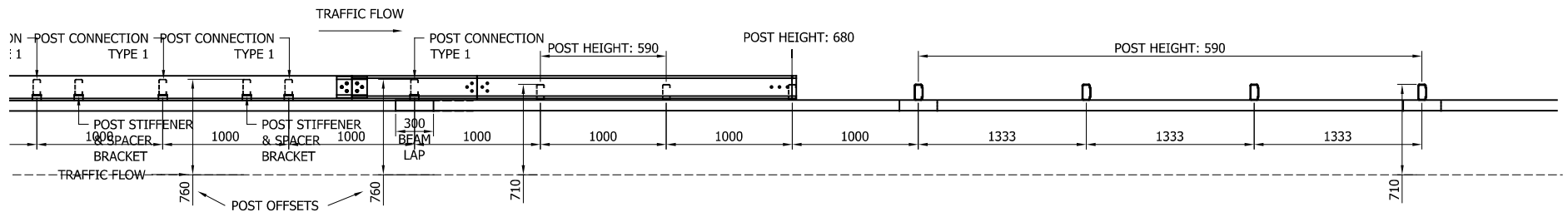
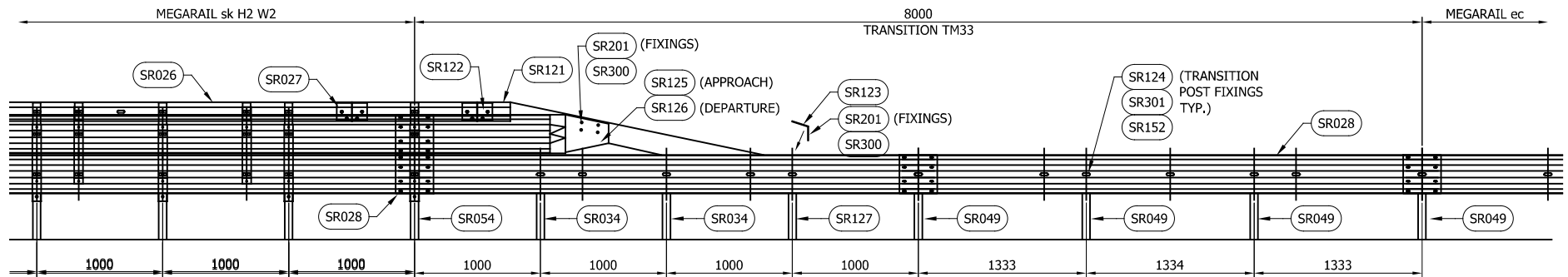
SAFEROAD®

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

02	01.06.22	E-MAIL ADDRESS CHANGED	A.D
01	10.01.19	TITLE DETAILS REVISED	M.T
00	17.10.18	DRAWING CREATED	M.T
REVn	DATE	DETAILS	INITIAL

DRAWING NUMBER:	REVn:
H2W2-GA-10	02



POST LENGTHS DETAILED WITHIN GA & TABLE ARE EXAMPLES OF LENGTHS AVAILABLE. LENGTH/FOUNDATION VARIATIONS ARE AVAILABLE AS SHOWN ON GA-00, AS REQUIRED VIA SOIL TESTING PROCEDURE

#### GENERAL NOTES:

1. TO BE READ IN CONJUNCTION WITH DRG. Nos. H2W2-GA-00, H2W2-GA-01 & H2W2-GA-02.
2. DEPARTURE TRANSITION SHOWN, APPROACH SIMILAR BUT HANDED. CODES AS SHOWN.

TABLE 'A' - TRANSITION COMPONENT SCHEDULE - QTY'S 1 No. DEPARTURE TRANSITION		
SAFEROAD PART NUMBER	DESCRIPTION	QUANTITY
SR122	BOX PROFILE JOINT	1
SR121	BOX PROFILE LOWERING	1
SR125	CONNECTION BEAM POS. D - APPROACH	0
SR126	CONNECTION BEAM POS. C - DEPARTURE	1
SR028	sk BEAM "A" PROFILE	2
SR123	ATTACHMENT ANGLE 100	1
SR049	'C' POST c/w BRACKET 1100 LONG	6
SR127	'C' POST 125 x 1100 x 5mm	1
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER H2W2-GA-02		

04	11/03/24	NOTE REGARDING POST LENGTHS ADDED	H,B
03	10.01.19	TITLE DETAILS REVISED	M,T
02	28.03.17	VI ADDED	M,T
01	10.03.17	POST TYPES CORRECTED	M,T
00	08.02.17	DRAWING CREATED	M,T
REVn	DATE	DETAILS	INITIAL

## MegaRail sk H2 A W2 VI2

H2.W2 VEHICLE RESTRAINT SYSTEM  
TM33 TRANSITION ARRANGEMENT

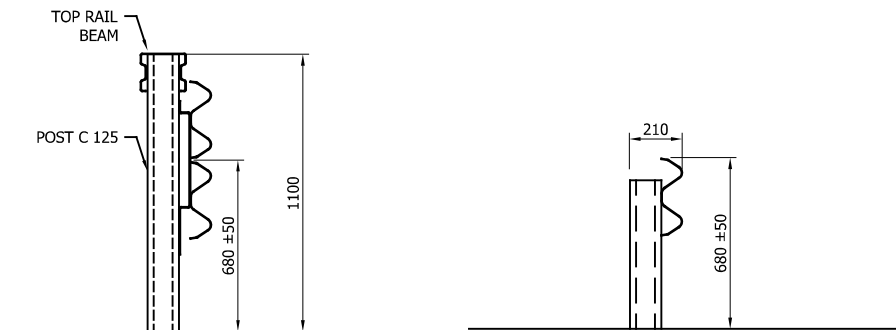
**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
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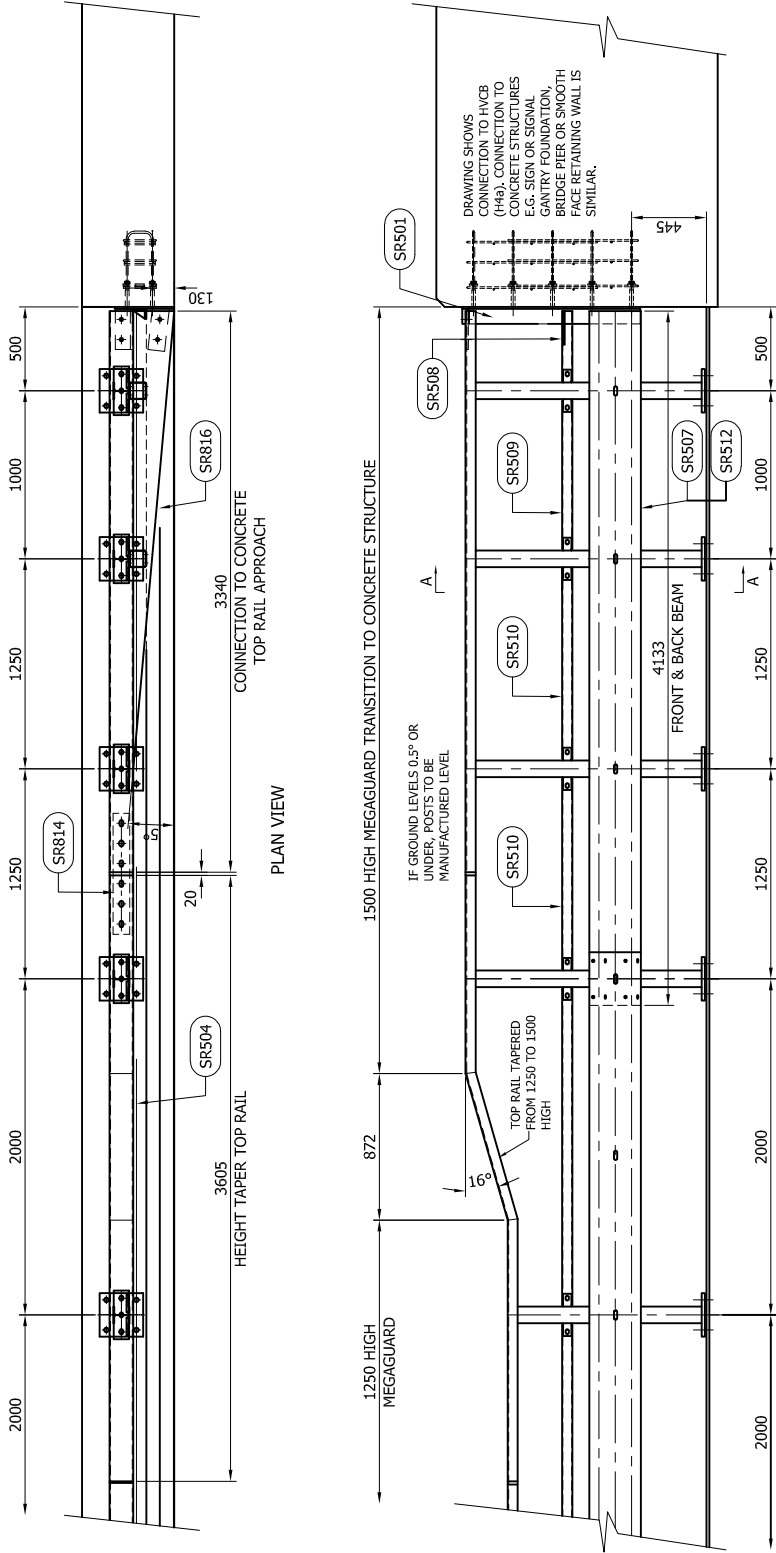
H2W2-GA-50

04

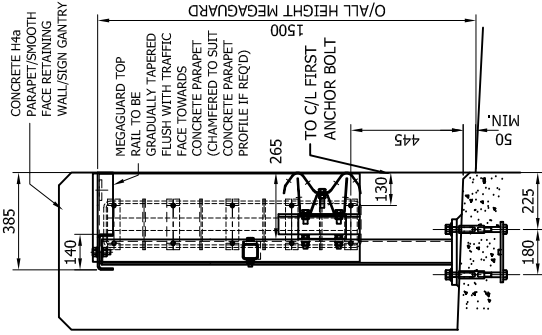


GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
3. FOR DETAILS OF STRUCTURE ANCHORAGE, ITEM V60, SEE DRG. NO. S9/155, EXCEPT MATERIAL TO BE STAINLESS STEEL GRADE 1.4362.
4. MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
5. REACTION BRACKET TO ACCOMMODATE H2/W1 MEGAGUARD SYSTEM.
6. TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
7. HEIGHT TO BE MAXIMUM OF 1500mm. BARRIER HEIGHT CAN BE REDUCED TO SUIT A MINIMUM CONCRETE STRUCTURE HEIGHT OF 1250mm



ELEVATION ON TRAFFIC FACE  
APPROACH CONNECTION



APPROACH RUN LENGTH: 30.0m OVERALL  
INCLUDING CONNECTION TO CONCRETE  
AND TRANSITION TO 1250 HIGH

ARRANGEMENT SHOWN WITH BASEPLATED  
POSTS. CAN ALSO BE SOCKETED

## MegaGuard H2 W1

CONNECTION TO CONCRETE  
STRUCTURE (V60 CRADLE)  
APPROACH / LEFT HAND  
GENERAL ARRANGEMENT

**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

SECTION A-A

H2W1-GA-05

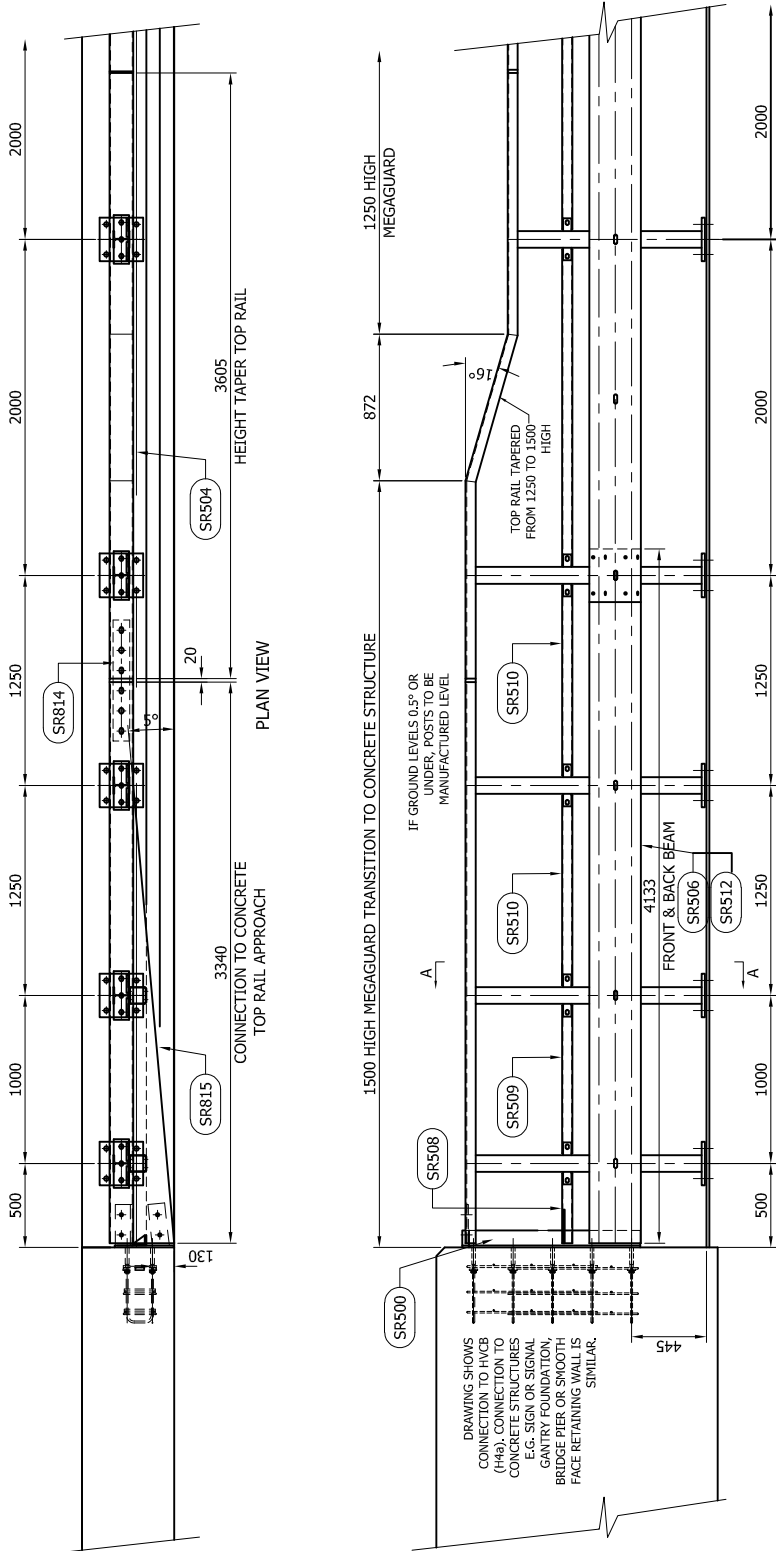
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REV	DATE	DETAILS
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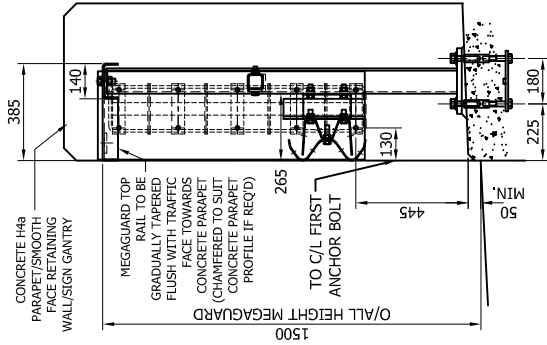
M.T	INITIAL

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
3. FOR DETAILS OF STRUCTURE ANCHORAGE, ITEM V60, SEE DRG. No. SB/155, EXCEPT MATERIAL TO BE STAINLESS STEEL GRADE 1.4362.
4. MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
5. REACTION BRACKET TO ACCOMMODATE H2/W1 MEGAGUARD SYSTEM.
6. TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
7. HEIGHT TO BE MAXIMUM OF 1500mm. BARRIER HEIGHT CAN BE REDUCED TO SUIT A MINIMUM CONCRETE STRUCTURE HEIGHT OF 1250mm.



ELEVATION ON TRAFFIC FACE  
DEPARTURE CONNECTION



SECTION A-A

## MegaGuard H2 W1

CONNECTION TO CONCRETE  
STRUCTURE (V60 CRADLE)  
DEPARTURE / RIGHT HAND  
GENERAL ARRANGEMENT

**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

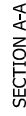
H2W1-GA-06

REV/C:

00

REV/C	DATE	DETAILS	M.T
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1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
3. ANCHOR IN CONCRETE STRUCTURE TO BE SSR-VDI M16 x 125 INTERNALLY THREADED ANCHOR C/W VDP20 x 135 CAPSULE, 28 DIA. x 125mm DRILLING DEPTH REQ'D. 10 No. ANCHORS REQ'D PER CONNECTION.
4. MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET, DESIGN TBD.
5. REACTION BRACKET TO ACCOMMODATE H2/W1 MEGAGUARD SYSTEM.
6. TOTAL LENGTH OF BARRIER TO BE AS TD19/06/ CHAPTER 3 TABLE 3/1.



ARRANGEMENT SHOWN WITH BASEPLATED  
POSTS. CAN ALSO BE SOCKETED

# MegaGuard H2 W1



1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
3. ANCHOR IN CONCRETE STRUCTURE TO BE SSR-VDI M16 x 125 INTERNALLY THREADED ANCHOR C/W VDP20 x 135 CAPSULE: 28 DIA. x 125mm DRILLING DEPTH REQD. 10 No. ANCHORS REQ'D PER CONNECTION.
4. MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
5. REACTION BRACKET TO ACCOMMODATE H2/W1 MEGAGUARD SYSTEM.
6. TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
7. HEIGHT TO BE MAXIMUM OF 1500mm. BARRIER HEIGHT CAN BE REDUCED TO SUIT A MINIMUM CONCRETE STRUCTURE HEIGHT OF 1250mm.



# MegaGuard H2 W1

CONNECTION TO CONCRETE  
STRUCTURE (DRILL & FIX)  
DEPARTURE / RIGHT HAND  
GENERAL ARRANGEMENT

# SAFEROAD®

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
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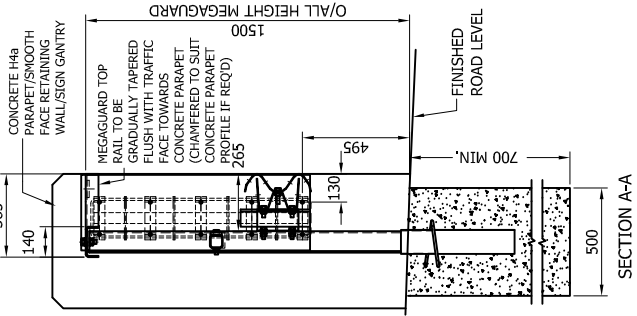
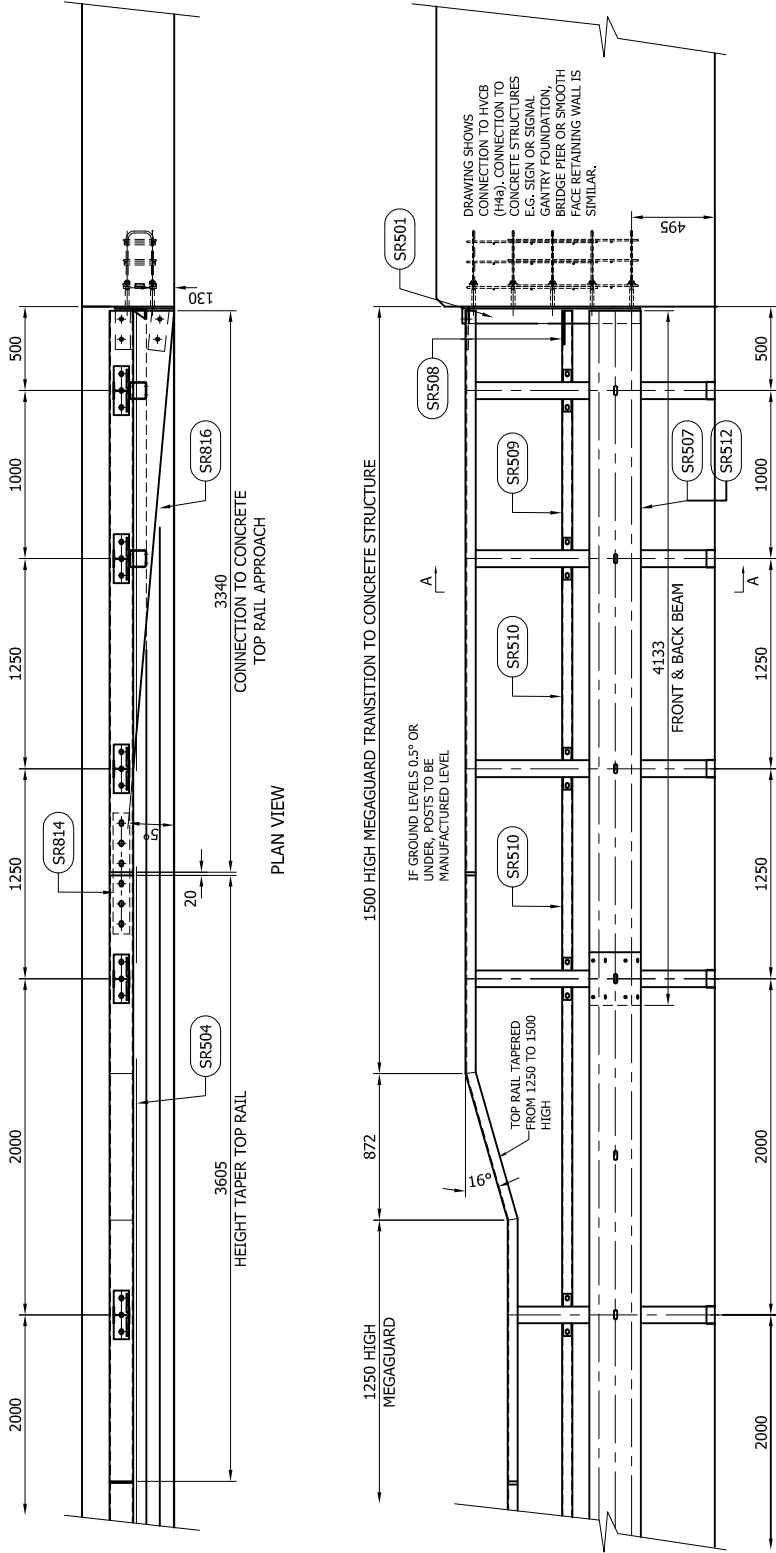
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H2W1-GA-08

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GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
3. FOR DETAILS OF STRUCTURE ANCHORAGE, ITEM V60, SEE DRG. No. 59/155, EXCEPT MATERIAL TO BE STAINLESS STEEL GRADE 1.4362.
4. MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
5. REACTION BRACKET TO ACCOMMODATE H2/W1 MEGAGUARD SYSTEM.
6. TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
7. HEIGHT TO BE MAXIMUM OF 1500mm. BARRIER HEIGHT CAN BE REDUCED TO SUIT A MINIMUM CONCRETE STRUCTURE HEIGHT OF 1250mm



ELEVATION ON TRAFFIC FACE  
APPROACH CONNECTION

APPROACH RUN LENGTH: 30.0m OVERALL  
INCLUDING CONNECTION TO CONCRETE  
AND TRANSITION TO 1250 HIGH

ARRANGEMENT SHOWN WITH SOCKETED  
POSTS. CAN ALSO BE BASEPLATED

# MegaGuard H2 W1

CONNECTION TO CONCRETE  
STRUCTURE (V60 CRADLE)  
APPROACH / LEFT HAND  
SOCKETED GENERAL ARRANGEMENT

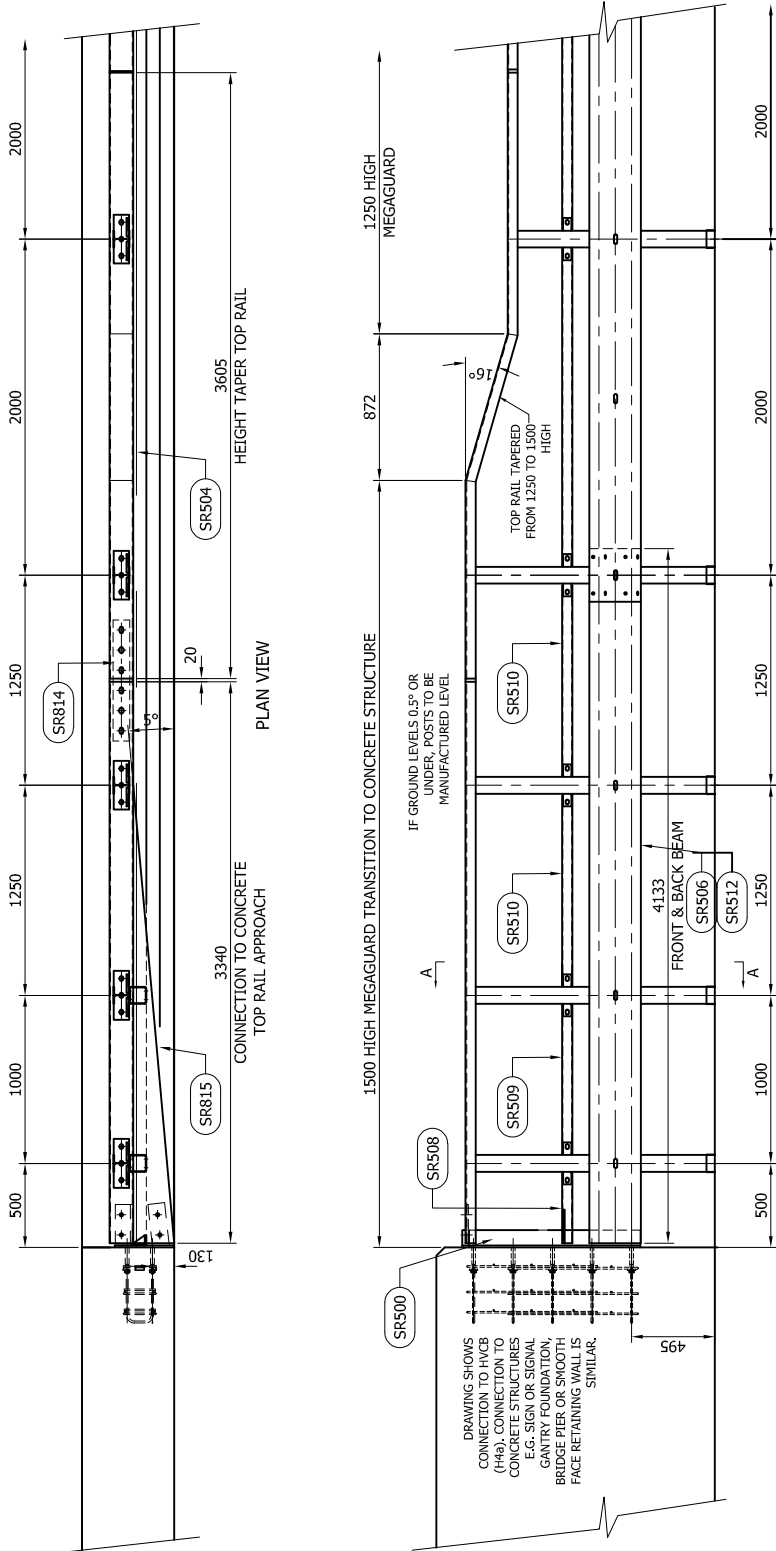
**SAFEROAD®**  
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REV	DATE	DETAILS
00	06.02.19	DRAWING CREATED
M.T		INITIAL

DRAWING NUMBER:	H2W1-GA-12
REV:	00

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
3. FOR DETAILS OF STRUCTURE ANCHORAGE, ITEM V60, SEE DRG. No. SB/155, EXCEPT MATERIAL TO BE STAINLESS STEEL GRADE 1.4362.
4. MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
5. REACTION BRACKET TO ACCOMMODATE H2/W1 MEGAGUARD SYSTEM.
6. TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
7. HEIGHT TO BE MAXIMUM OF 1500mm. BARRIER HEIGHT CAN BE REDUCED TO SUIT A MINIMUM CONCRETE STRUCTURE HEIGHT OF 1250mm.



ELEVATION ON TRAFFIC FACE DEPARTURE CONNECTION

APPROACH RUN LENGTH: 12.0m OVERALL INCLUDING CONNECTION TO CONCRETE AND TRANSITION TO 1250 HIGH

ARRANGEMENT SHOWN WITH SOCKETED POSTS. CAN ALSO BE BASEPLATED

SECTION A-A

## MegaGuard H2 W1

CONNECTION TO CONCRETE  
STRUCTURE (V60 CRADLE)  
DEPARTURE / RIGHT HAND  
SOCKETED GENERAL ARRANGEMENT

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DRAWING NUMBER:

H2W1-GA-13

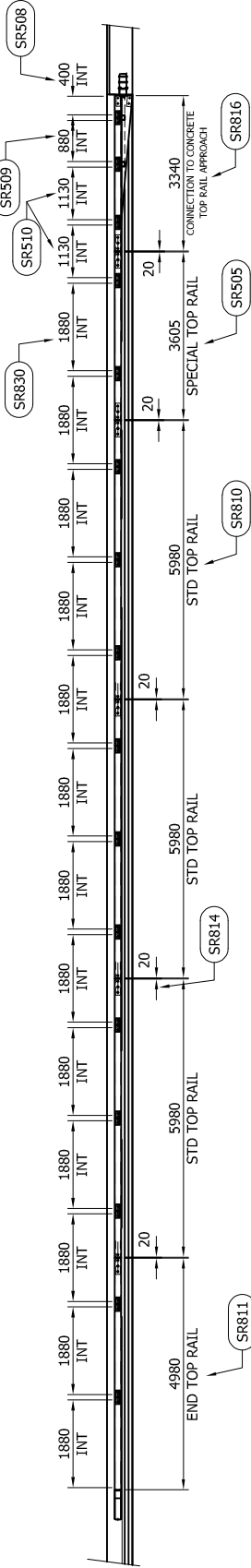
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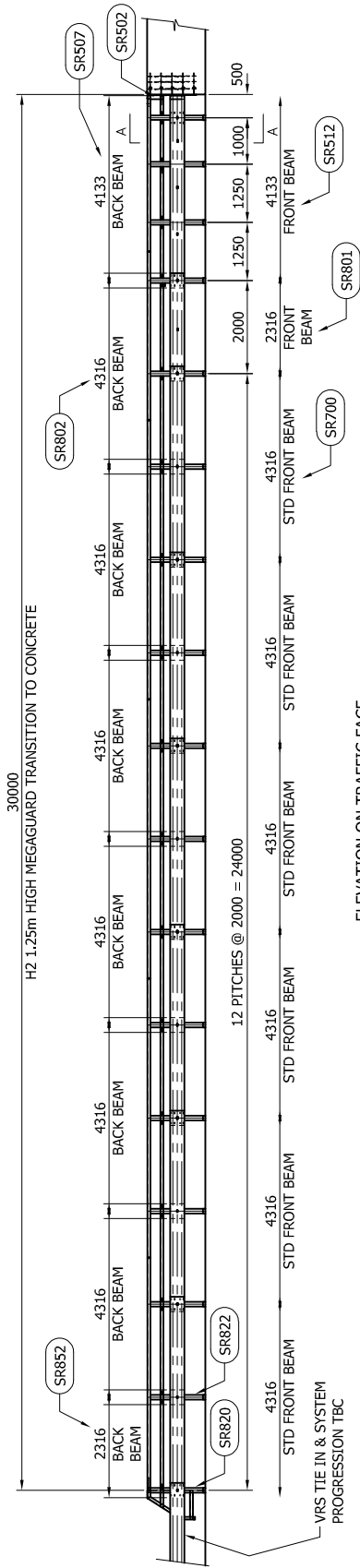
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00	06.02.19	DRAWING CREATED	M.T

GENERAL NOTES:

- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
- CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
- FOR DETAILS OF STRUCTURE ANCHORAGE, ITEM V60, SEE DRG. No. SB/155.
- MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
- TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
- ARRANGEMENT & REACTION BRACKET SUITABLE FOR 1.25m MIN. O/ALL HEIGHT MEGAGUARD SYSTEM.

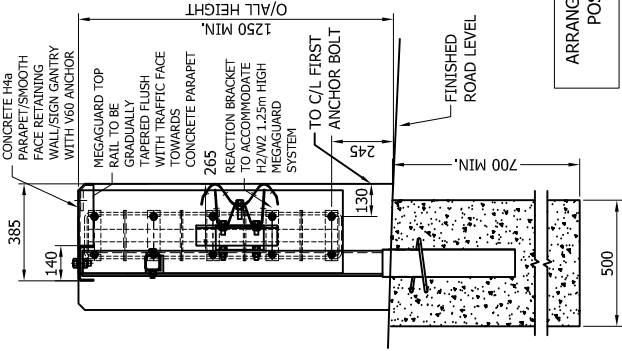


PLAN VIEW



ELEVATION ON TRAFFIC FACE  
APPROACH CONNECTION

FULL REQUIRED QUANTITY PER APPROACH/LEFT HAND 30.0m RUN		
CODE	DESCRIPTION	QTY
SR502	REACTION BRACKET APPROACH FOR 1250mm HIGH	1
SR822	INTERMEDIATE SOCKETED POST 1734mm LG	16
SR820	LEFT HAND END SOCKETED POST 1734mm LG	1
SR825	MEGAGUARD POST SOCKET 525mm LG	17
SR100	REINFORCING RING (ITEM A21)	17
SR831	SPACER BRACKET 180mm LG	17
SR508	INTERMEDIATE RAIL 400mm LG	1
SR509	INTERMEDIATE RAIL 880mm LG	1
SR510	INTERMEDIATE RAIL 1130mm LG	2
SR830	INTERMEDIATE RAIL 1880mm LG	13
SR816	TOP RAIL TO CONCRETE APPROACH 3340mm LG	1
SR505	SPECIAL TOP RAIL 3605mm LG	1
SR810	STANDARD TOP RAIL 5980mm LG	3
SR811	END TOP RAIL 4980mm LG	1
SR507	BACK BEAM TO CONCRETE APPROACH 4133mm LG	1
SR802	STANDARD BACK BEAM 4316mm LG	6
SR852	BACK BEAM 2316mm LG	1
SR512	FRONT BEAM TO CONCRETE 4133mm LG	1
SR801	FRONT BEAM 2316mm LG	1
SR700	STANDARD FRONT BEAM (V1K) 4316mm LG	6



SECTION A-A

ARRANGEMENT SHOWN WITH SOCKETED  
POSTS. CAN ALSO BE BASEPLATED

## MegaGuard H2 W1

1.25m CONNECTION TO CONCRETE  
STRUCTURE (V60 CRADLE)  
APPROACH / LEFT HAND SOCKETED  
FULL 30.0m GENERAL ARRANGEMENT

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DRAWING NUMBER: REV:

H2W1-GA-16

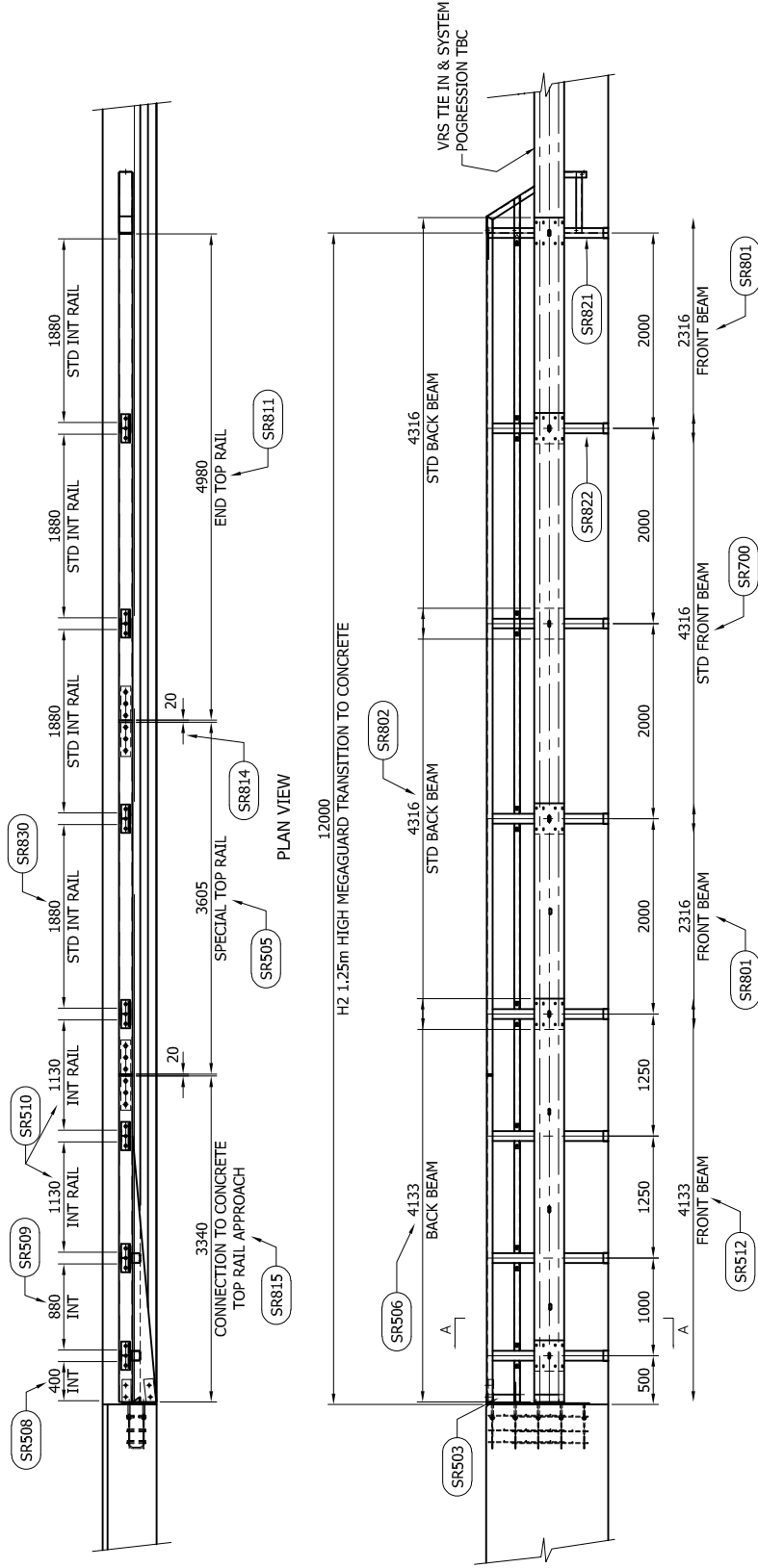
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REV.	DATE	DETAILS
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00	18.02.19	DRAWING CREATED
		INITIAL

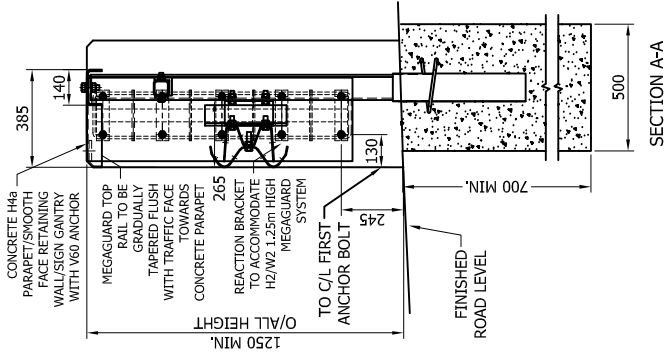
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01	07.05.19	NOTES REVISED
00	18.02.19	DRAWING CREATED
		INITIAL

GENERAL NOTES:

- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
- CONNECTION APPLICABLE TO: CONCRETE H4a PARAPET, SMOOTH FACE RETAINING WALL OR SIGN GANTRY.
- FOR DETAILS OF STRUCTURE ANCHORAGE, ITEM V60, SEE DRG. No. SB/155.
- MEGAGUARD TOP RAIL TO BE TAPERED TO BE FLUSH WITH TRAFFIC FACE AT END OF MEGAGUARD & CONCRETE PARAPET. DESIGN TBD.
- TOTAL LENGTH OF BARRIER TO BE AS TD19/06, CHAPTER 3 TABLE 3/1.
- ARRANGEMENT & REACTION BRACKET SUITABLE FOR 1.25m MIN. O/ALL HEIGHT MEGAGUARD SYSTEM.



ELEVATION ON TRAFFIC FACE  
DEPARTURE CONNECTION



ARRANGEMENT SHOWN WITH SOCKETED  
POSTS. CAN ALSO BE BASEPLATED

FULL REQUIRED QUANTITY PER DEPARTURE/RIGHT HAND 12.0m RUN		
CODE	DESCRIPTION	QTY
SR503	REACTION BRACKET DEPARTURE FOR 1250mm HIGH	1
SR822	INTERMEDIATE SOCKETED POST 1734mm LG	7
SR821	RIGHT HAND END SOCKETED POST 1734mm LG	1
SR825	MEGAGUARD POST SOCKET 525mm LG	8
SR100	REINFORCING RING (ITEM A21)	8
SR831	SPACER BRACKET 180mm LG	8
SR508	INTERMEDIATE RAIL 400mm LG	1
SR509	INTERMEDIATE RAIL 880mm LG	1
SR510	INTERMEDIATE RAIL 1130mm LG	2
SR830	INTERMEDIATE RAIL 1880mm LG	4
SR815	TOP RAIL TO CONCRETE DEPARTURE 3340mm LG	1
SR505	SPECIAL TOP RAIL 3605mm LG	1
SR811	END TOP RAIL 4980mm LG	1
SR506	BACK BEAM TO CONCRETE DEPARTURE 4133mm LG	1
SR802	STANDARD BACK BEAM 4316mm LG	2
SR512	FRONT BEAM TO CONCRETE 4133mm LG	1
SR801	FRONT BEAM 2316mm LG	2
SR700	STANDARD FRONT BEAM (VIK) 4316mm LG	1

## MegaGuard H2 W1

1.25m CONNECTION TO CONCRETE  
STRUCTURE (V60 CRADLE)  
DEPART / RIGHT HAND SOCKETED  
FULL 12.0m GENERAL ARRANGEMENT

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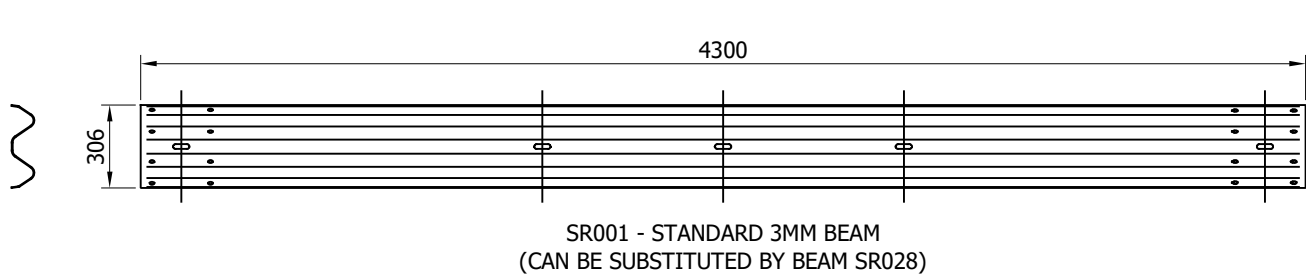
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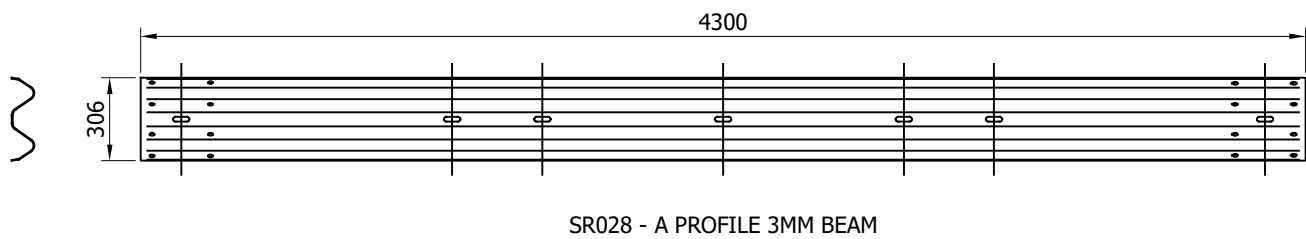
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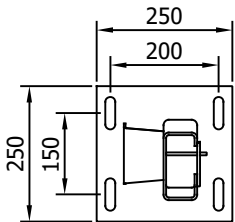
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00	18.02.19	DRAWING CREATED	M,T



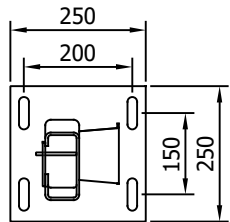
SR001 - STANDARD 3MM BEAM  
(CAN BE SUBSTITUTED BY BEAM SR028)



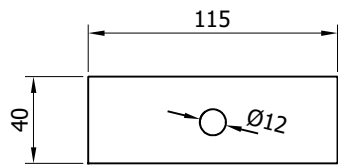
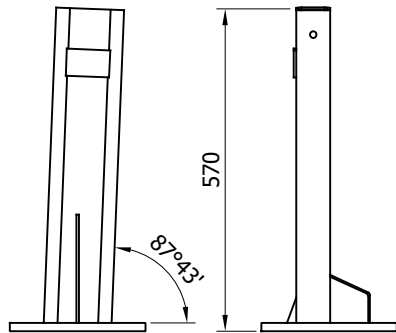
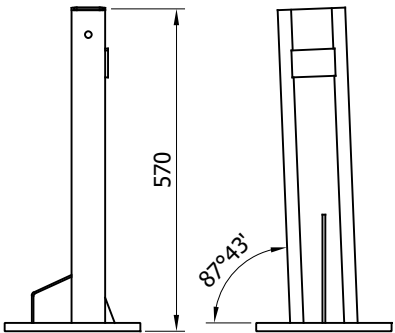
SR028 - A PROFILE 3MM BEAM



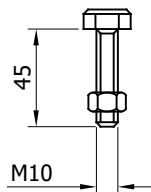
SR058 - POST UK VERGE  
"C" 125 595mm x 5



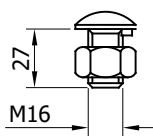
SR057 - POST UK  
CENTER "C" 125 595mm  
x 5



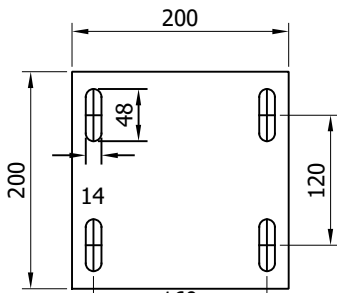
SR152 - WASHER PLATE  
115 x 40 x 5 DIA. 12



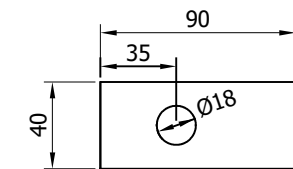
SR204 - SETSCREW  
4.6 M10x45 c/w NUT



SR200 - SETSCREW 4.6  
LIP M16x27 c/w NUT

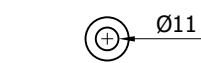


SR115 - GASKET  
(NEOPRENE)

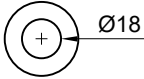


SR154 - WASHER PLATE  
90 x 40 x 5 DIA. 18

NOTE -WASHER IS FOR USE  
WITH THE HOLDING DOWN  
FIXINGS



SR301 - M10  
WASHER 11Ø HOLE



SR300 - M16  
WASHER 18Ø HOLE

GENERAL NOTES:

1. CONCRETE TRENCH ONLY - MINIMUM LENGTH 4M
2. FOR DEVIATIONS SEE H1W2-GA-40
3. CAN CONNECT TO HYBRID GA72 OR GA120/GA140 ONLY UNDER SPECIAL DETAIL APPROVED BY SAFEROAD
4. SYSTEM HAS A V.I. RATING OF VI3
5. VERGE AND CENTRAL RESERVE POSTS ARE HANDED AND **NOT** INTERCHANGEABLE.
6. WHERE A KERB IS PRESENT THE MAXIMUM HEIGHT IS 100mm. SHOULD THE KERB BE HIGHER THAN 100mm AND THE BARRIER SETBACK LESS THAN 250mm FROM FACE OF KERB, THE SYSTEM HEIGHT IS MEASURED FROM THE CARRIAGEWAY. IF THE SETBACK IS GREATER THAN 250mm FROM THE FACE OF KERB, THE SYSTEM HEIGHT IS MEASURED FROM THE TOP OF THE KERB OR ADJACENT GROUND LEVEL.

07	22/09/22	NOTE 6 ADDED	A.D
06	08/07/22	DETAILS CHANGED	A.D
05	19/11/19	BEAM DETAILS ADDED	M.T
04	01/04/19	BEAM DETAILS REVISED	M.T
03	12/02/19	TITLEBLOCK REVISED	H.B
02	31/01/17	STOCK & CODES REVISED	L.L
1.3	20/05/15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

# MegaRail bs H1 W2 (VI 3)

H1.W2 VEHICLE RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

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DRAWING NUMBER:	REVn:
H1W2-GA-00	07

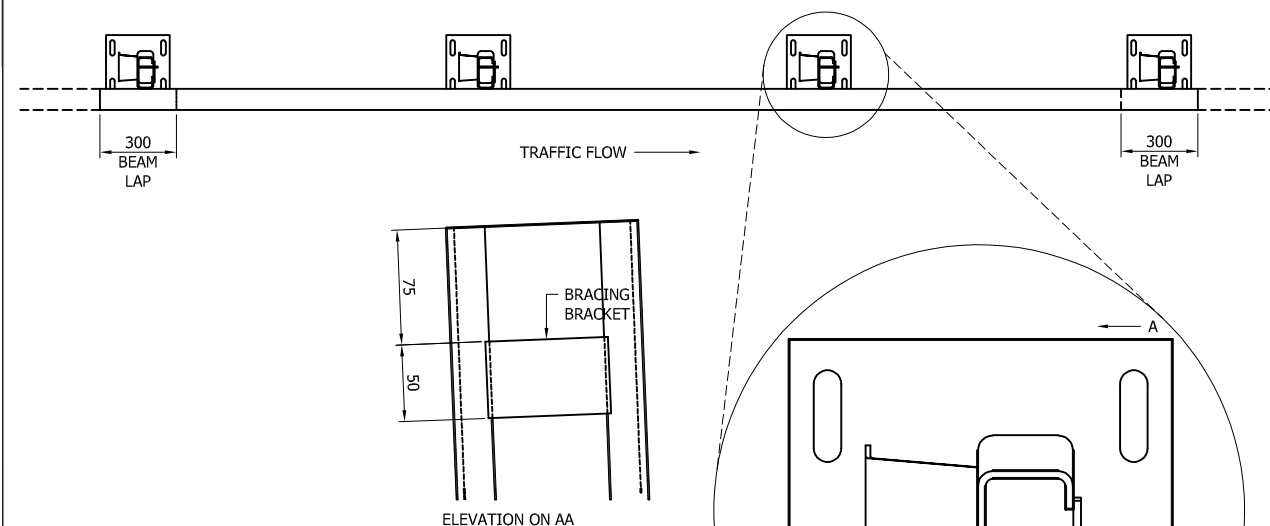
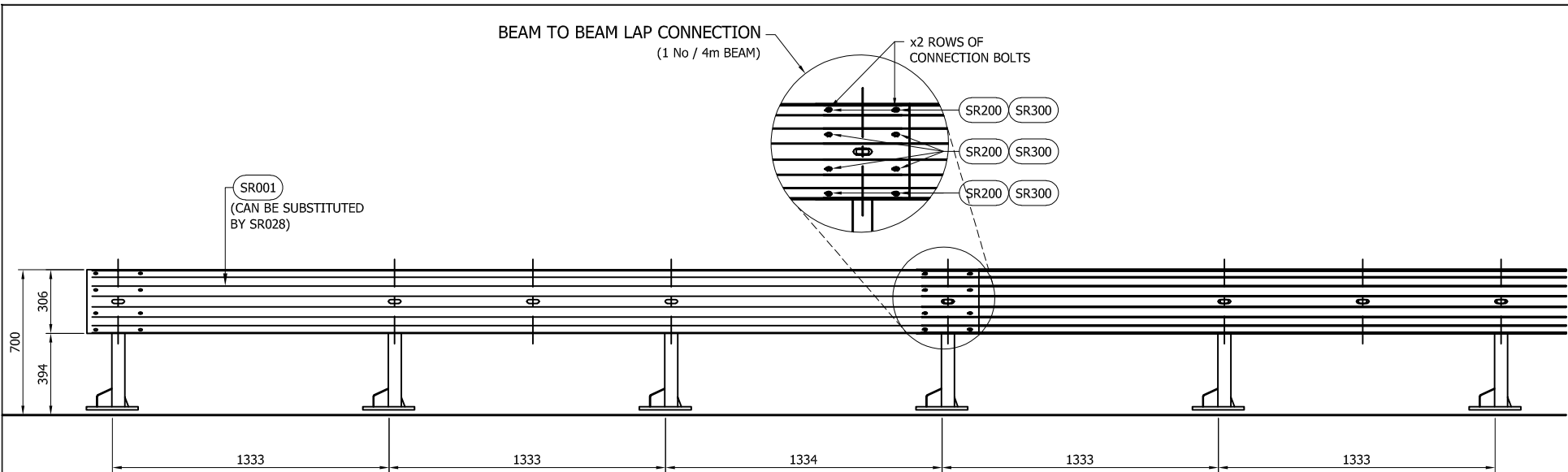
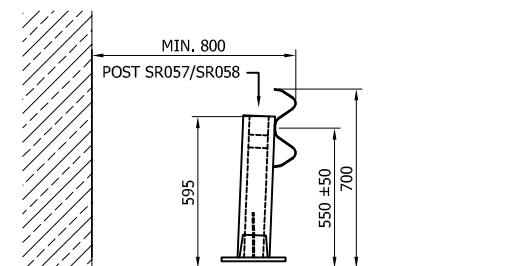
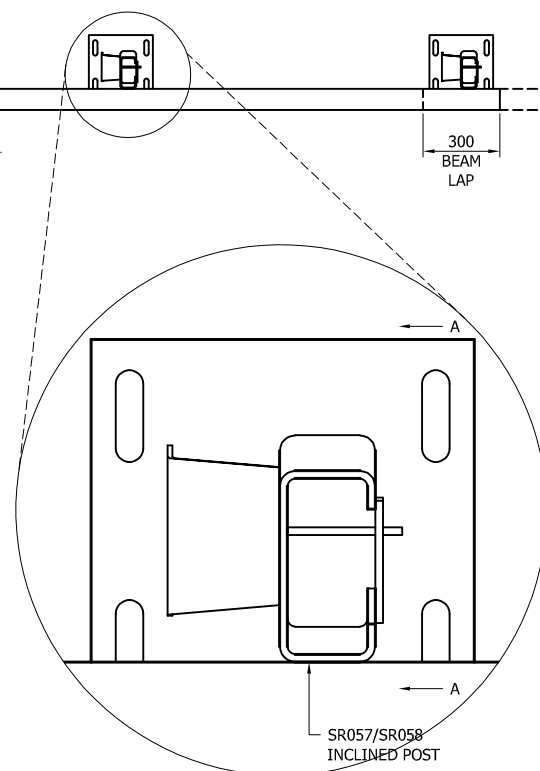


TABLE 'A' - SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
SR001	3mm BEAM (CAN BE SUBSTITUTED BY SR028)	1
SR057/SR058	POST "C" 125 c/w BRACKET	3
SR115	GASKET (NEOPRENE)	3
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER H1W2-GA-02		



- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  2. USE AN M16 FIXING ABLE TO RESIST A TENSILE LOAD OF 50kN
  3. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
  4. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 100mm.
  5. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.

REVn	DATE	DETAILS	INITIAL
04	19/11/19	BEAM DETAILS ADDED	H.B
03	12/02/19	MINOR CHANGES AND TITLEBLOCK REVISED	H.B
02	31/01/17	DETAILS & CODES REVISED	L.L
1.4	20/05/15	DETAILS REVISED	M.T

## MegaRail bs H1 W2 (VI 3)

H1.W2 VEHICLE RESTRAINT SYSTEM  
ASSEMBLY AND SETTING OUT  
ARRANGEMENT

**SAFEROAD®**

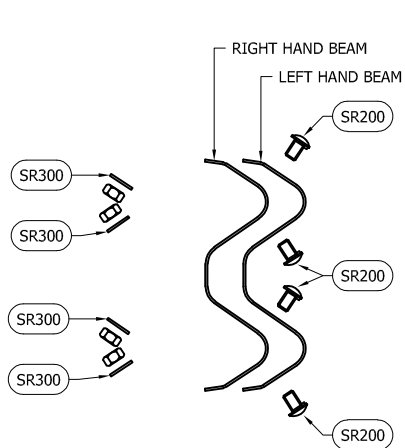
CONCORD HOUSE,  
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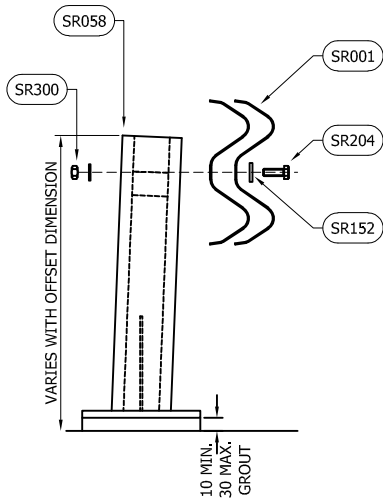
H1W2-GA-01

REVn:

04



BEAM TO BEAM CONNECTION  
ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:  
1. NUMBERS IN THE SCHEDULES SUFFIXED (+)  
DENOTES THE ADDITIONAL QUANTITY OF  
COMPONENTS REQUIRED FOR EXTREME ENDS  
OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
SR200	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
SR300	WASHER M16 18Ø HOLE	8 (+8)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR  
CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST		
SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
SR204	SETSCREW 4.6 M10 x 45 c/w NUT	1
SR152	WASHER PLATE 115 x 40 x 5 DIA. 12	1
SR301	M10 WASHER 11Ø HOLE	1
QUANTITY OF CONNECTION TYPES / 4m BEAM		
		3 (+1)

03	12/02/19	CODE CHANGES AND TITLEBLOCK REVISED	H.B
02	31/01/17	DETAILS REVISED	L.L
1.2	20/05/15	DETAILS REVISED	M.T
REVn	DATE	DETAILS	INITIAL

**MegaRail bs**  
**H1 W2 (VI 3)**  
H1.W2 VEHICLE RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

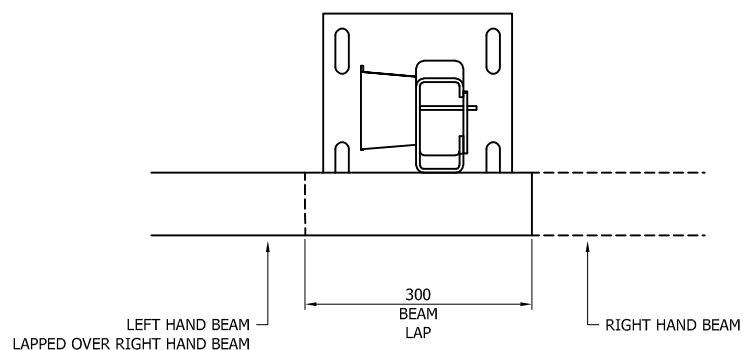
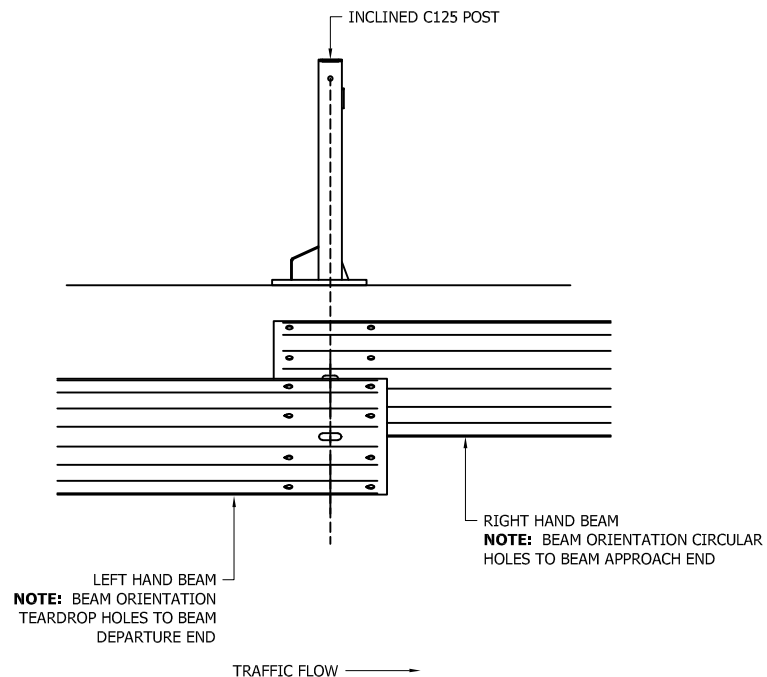
**SAFEROAD®**  
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DRAWING NUMBER:	REVn:
H1W2-GA-02	03



# GENERAL NOTES:

1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

REVn	DATE	DETAILS	INITIAL
03	12/02/19	TITLEBLOCK REVISED	H.B
02	31/01/17	DETAILS REVISED	L.L
1.1	20/05/15	DETAILS REVISED	M.T

## MegaRail bs H1 W2 (VI 3)

H1.W2 VEHICLE RESTRAINT SYSTEM.  
BEAM LAPPING DETAIL FOR H1 A W2  
SYSTEM.

## SAFEROAD®

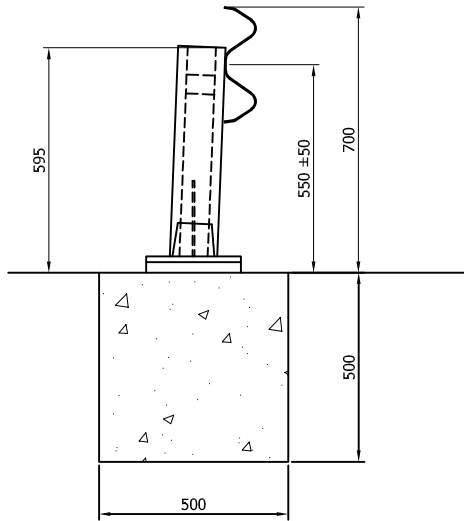
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t: 01724 289119  
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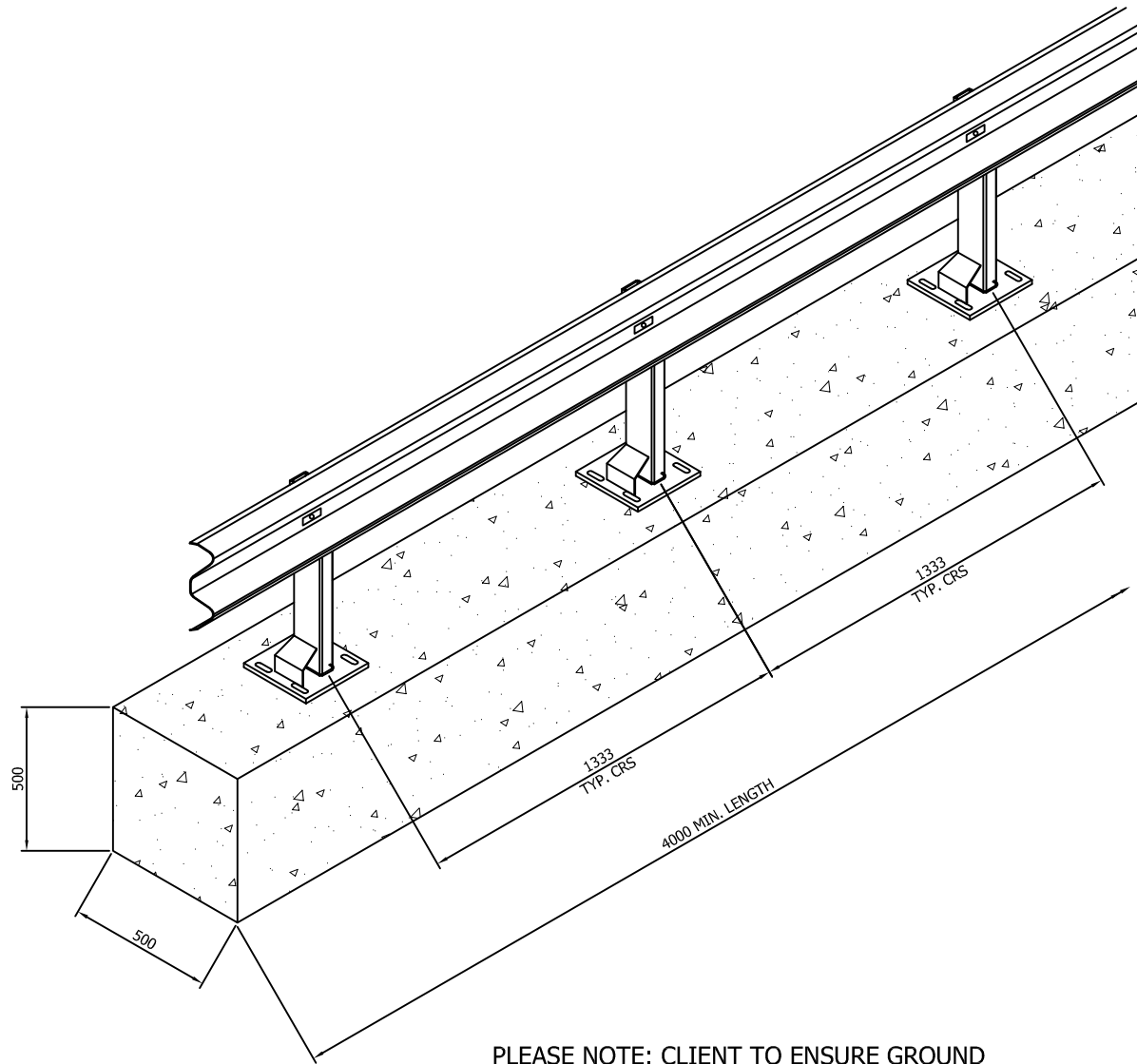
H1W2-GA-03

REVn:

03



TYPICAL SECTION THROUGH



PLEASE NOTE: CLIENT TO ENSURE GROUND  
CONDITIONS ARE SUITABLE PRIOR TO INSTALLATION.  
IF UNSURE PLEASE SEEK ADVICE

MINIMUM CONCRETE GRADE: ST5 C20/C25

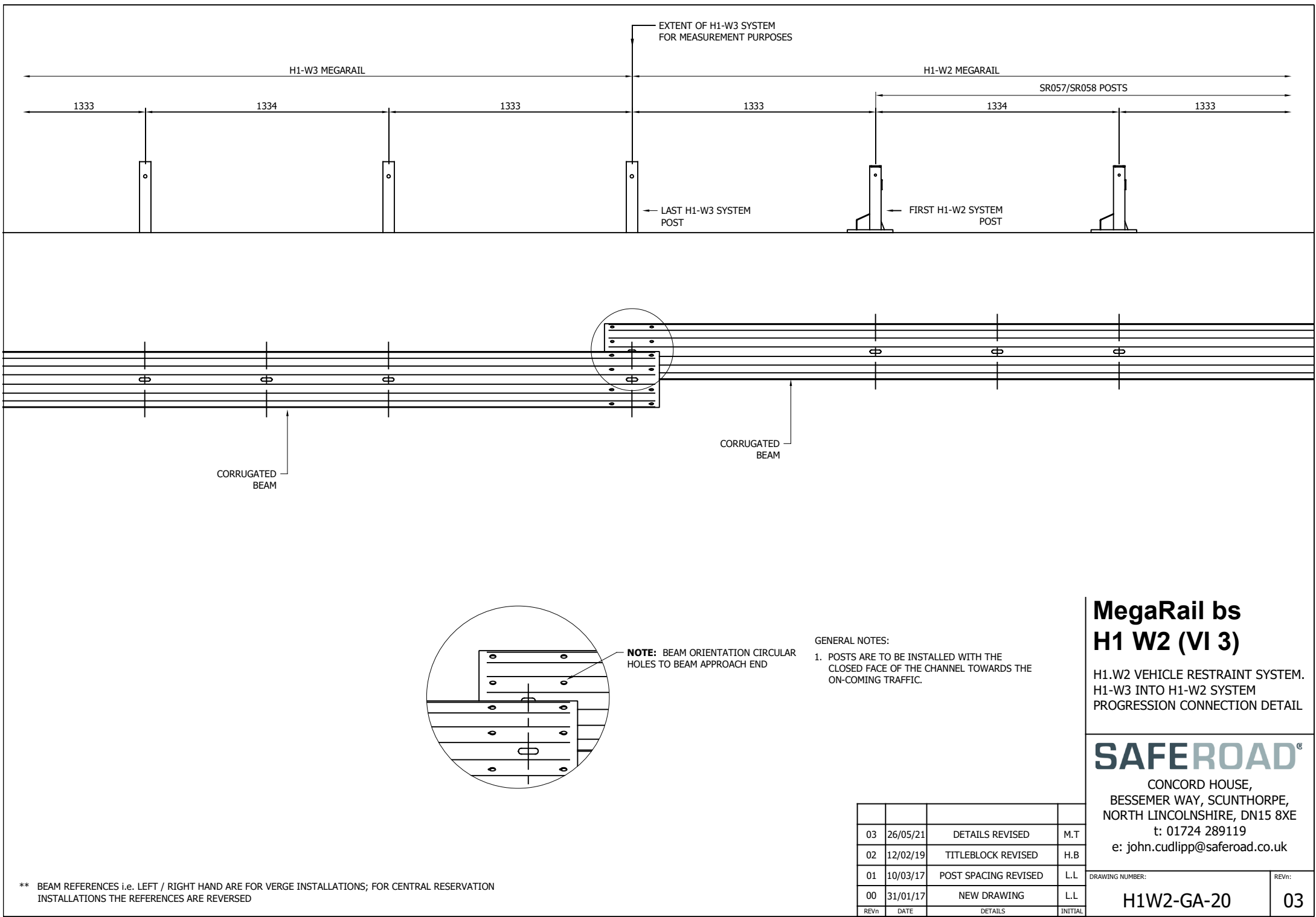
REVn	DATE	DETAILS	INITIAL
02	31/01/17	DETAILS REVISED	L.L
1.4	20/05/15	DETAILS REVISED	M.T

**MegaRail bs  
H1 W2 (VI 3)**

**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
H1W2-GA-04	02



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

REVn	DATE	DETAILS	INITIAL
03	26/05/21	DETAILS REVISED	M.T
02	12/02/19	TITLEBLOCK REVISED	H.B
01	10/03/17	POST SPACING REVISED	L.L
00	31/01/17	NEW DRAWING	L.L

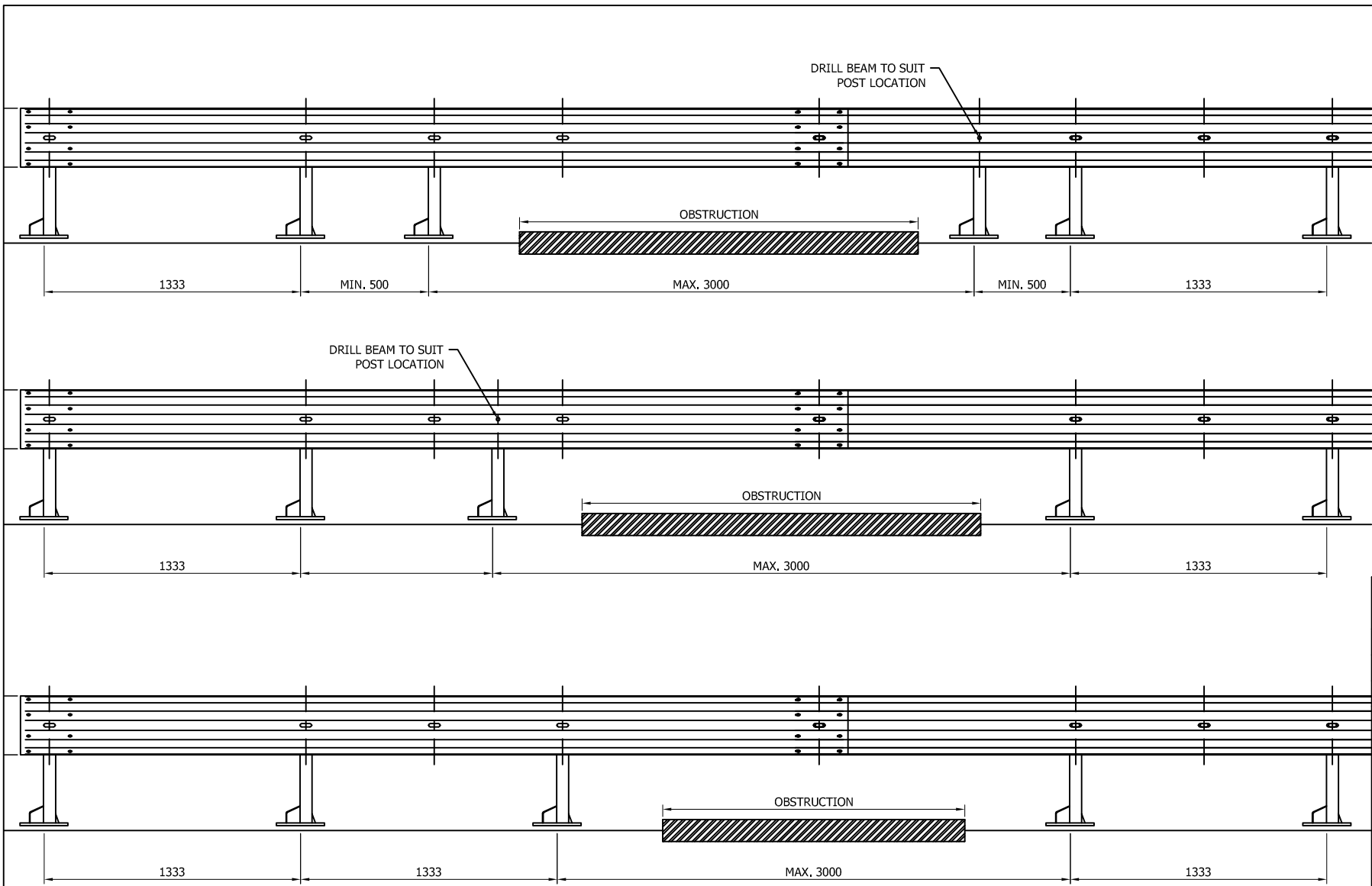
# MegaRail bs H1 W2 (VI 3)

H1.W2 VEHICLE RESTRAINT SYSTEM.  
H1-W3 INTO H1-W2 SYSTEM  
PROGRESSION CONNECTION DETAIL

**SAFEROAD®**

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BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
H1W2-GA-20	03



GENERAL NOTES:

1. IF THE SITE CONDITIONS DO NOT ALLOW A POST TO BE INSTALLED ON THE SYSTEM PITCH DEVIATIONS CAN BE APPLIED. THE OBSTRUCTED POST CAN BE LEFT OUT AND EXTRA POSTS INSTALLED TO SPAN THE OBSTRUCTION. THE NEW POST SPACING MUST NOT EXCEED 3000mm AND MUST NOT BE LESS THAN 500mm. ALTHOUGH IT WOULD BE BENEFICIAL TO USE THE HOLES ALREADY IN THE BEAM IT IS ACCEPTABLE TO DRILL NEW HOLES IN THE DESIRED POSITIONS AND TREAT WITH ZINC RICH PAINT.

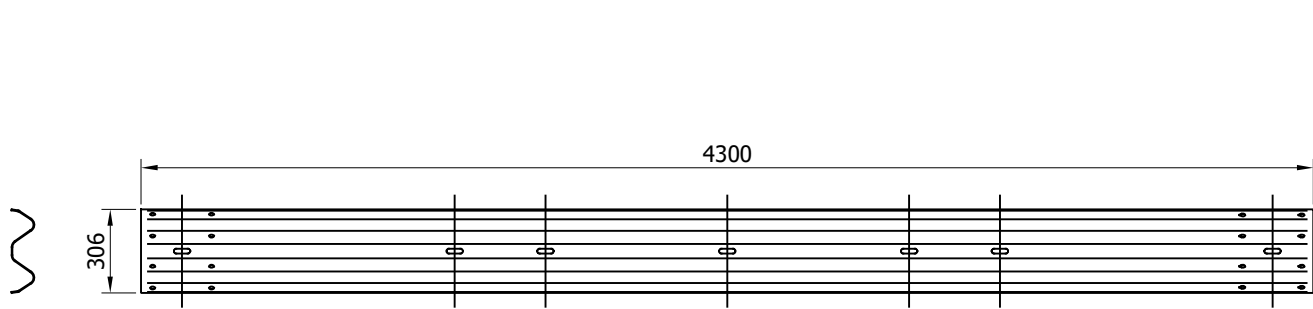
REVn	DATE	DETAILS	INITIAL
02	12/02/19	MINOR CHANGES AND TITLEBLOCK REVISED	H.B
01	10/03/17	NOTES REVISED	L.L
00	31/01/17	NEW DRAWING	L.L

# MegaRail bs H1 W2 (VI 3)

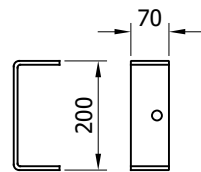
H1.W2 VEHICLE RESTRAINT SYSTEM  
DEVIATION SETTING OUT  
ARRANGEMENT

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NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
e: john.cudlipp@saferoad.co.uk

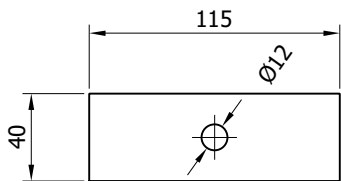
DRAWING NUMBER:	REVn:
H1W2-GA-40	02



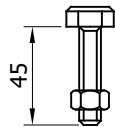
SR028 - A PROFILE 3mm BEAM



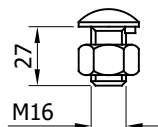
004.00 - SUPPORT BRACKET



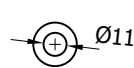
SR152 - WASHER PLATE  
115 x 40 x 5 DIA. 12



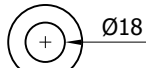
SR204 - SETSCREW 4.6  
M10x45 c/w NUT



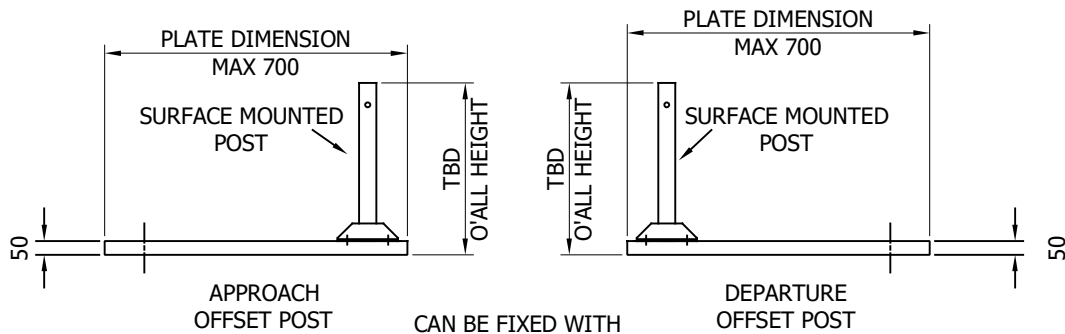
SR200 - SETSCREW 4.6  
LIP M16x27 c/w NUT



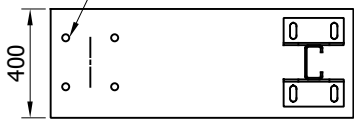
SR301 - M10  
WASHER 11Ø  
HOLE



SR300 - WASHER  
18Ø



CAN BE FIXED WITH  
CAST IN ANCHORS, DRILL  
AND FIX ANCHORS OR  
PUSHED IN ANCHORS  
AT 180x180 CENTERS



\*BASEPLATE DRILL  
& TAPPED FOR  
LIFTING EYE

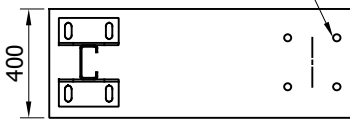
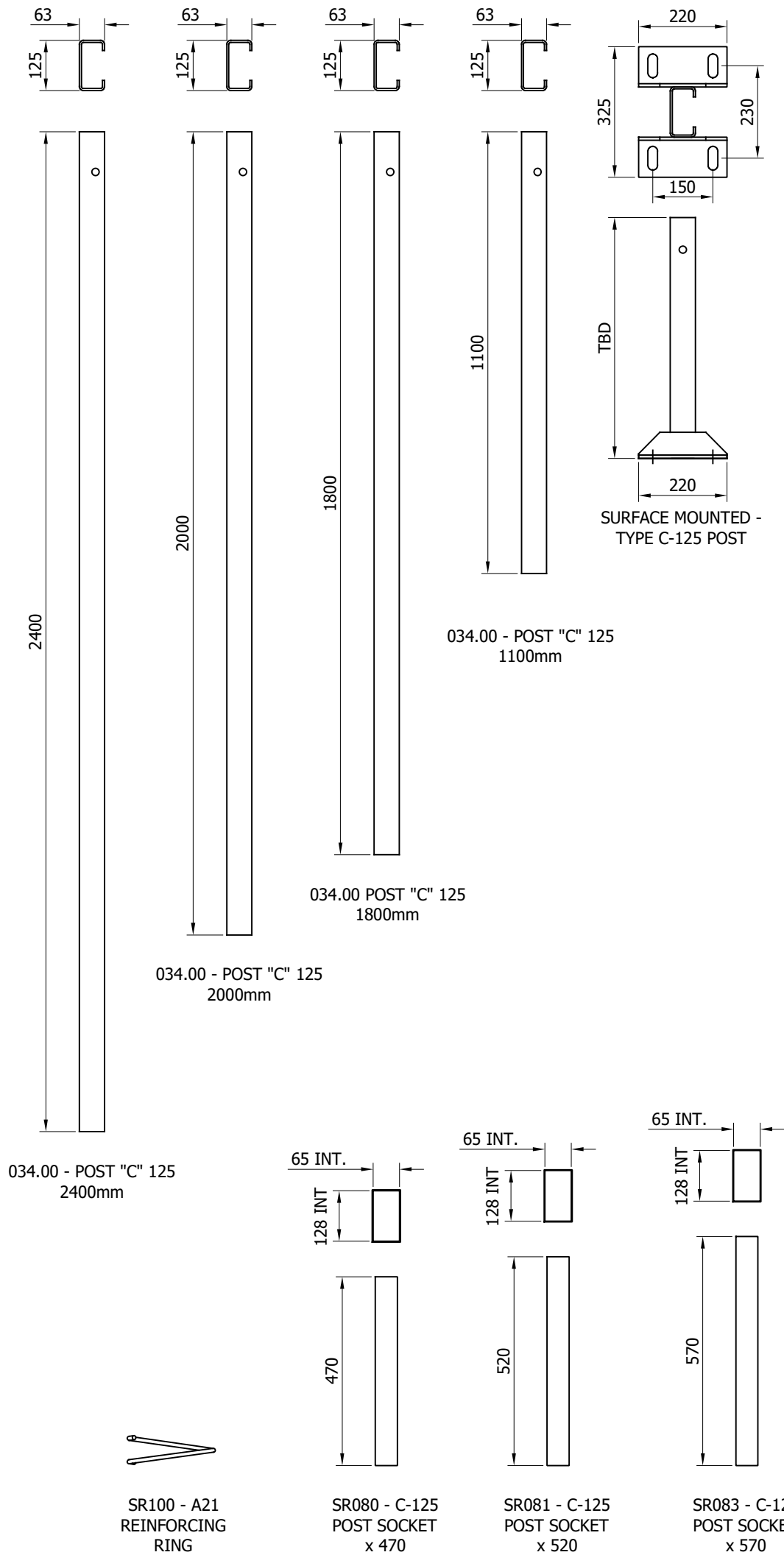
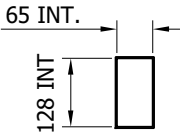


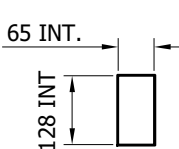
PLATE DIMENSION  
700 MAX



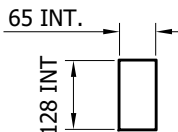
SR100 - A21  
REINFORCING  
RING



SR080 - C-125  
POST SOCKET  
x 470



SR081 - C-125  
POST SOCKET  
x 520



SR083 - C-125  
POST SOCKET  
x 570

02	31/05/22	OFFSET PLATE DETAIL CHANGED	A.D
01	25/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
00	15/01/20	DRAWING CREATED	M.T
REVn	DATE	DETAILS	INITIAL

# Super-Rail ES 1.0 L1 W2

VEHICLE RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

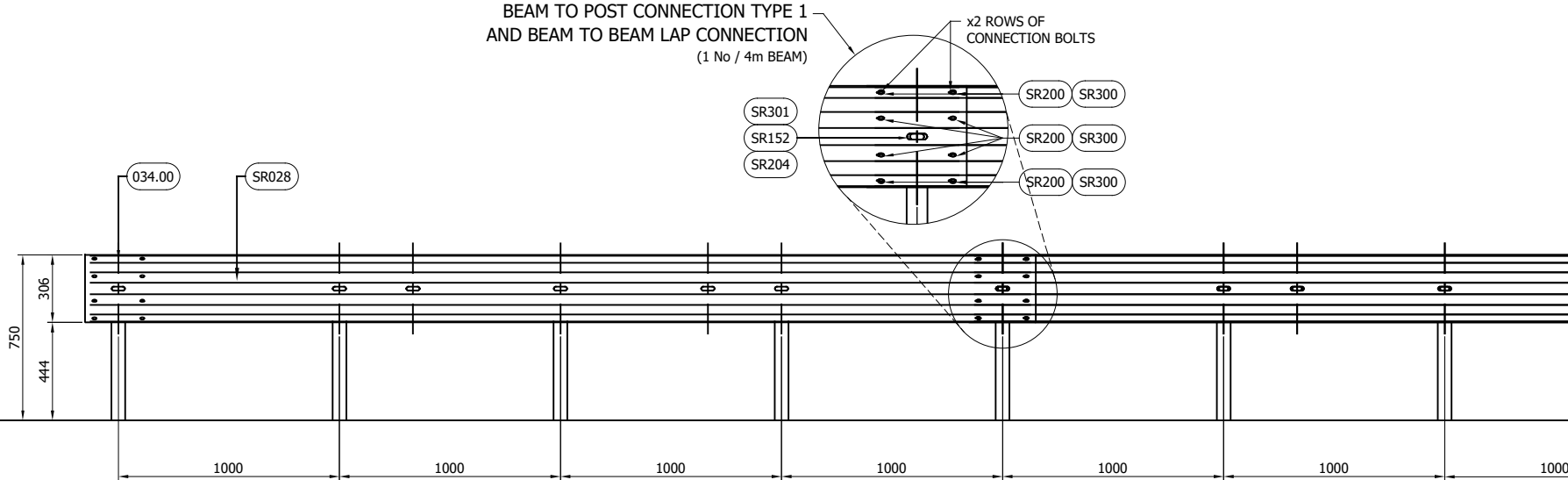
**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

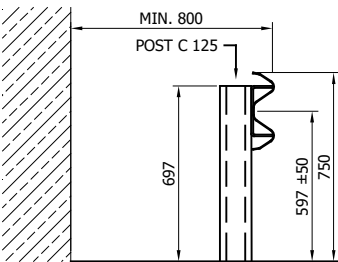
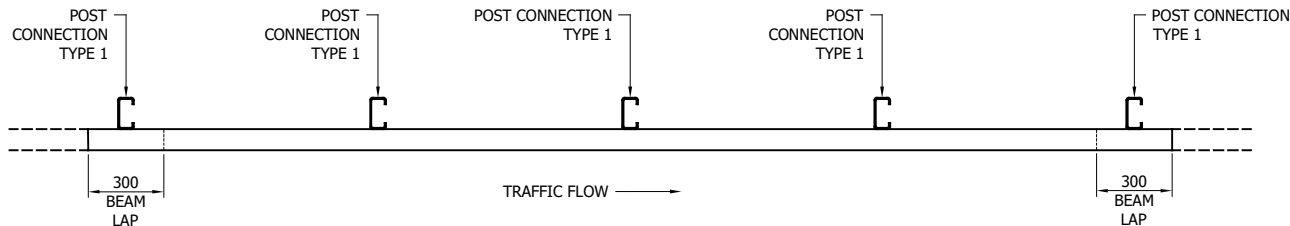
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
SRL1W2-GA-00	02

BEAM TO POST CONNECTION TYPE 1  
AND BEAM TO BEAM LAP CONNECTION  
(1 No / 4m BEAM)



- GENERAL NOTES:
1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
  2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
  3. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
  4. FOR DEVIATIONS IN SYSTEM POST PITCH REFER TO DRAWING SRL1W2-GA-40
  5. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
  6. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 100mm. SHOULD THE KERB BE HIGHER THAN 100mm AND THE FENCE IS SETBACK LESS THAN 250mm FROM FACE OF KERB THE SYSTEM HEIGHT IS MEASURED FROM THE CARRIAGEWAY. IF THE SETBACK IS MORE THAN 250mm FROM THE FACE OF KERB THE SYSTEM HEIGHT IS MEASURED FROM THE TOP OF THE KERB. SEE MR-GA-002.
  7. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.



00	15/01/20	DRAWING CREATED	M.T
REVn	DATE	DETAILS	INITIAL

**Super-Rail ES 1.0  
L1 W2**

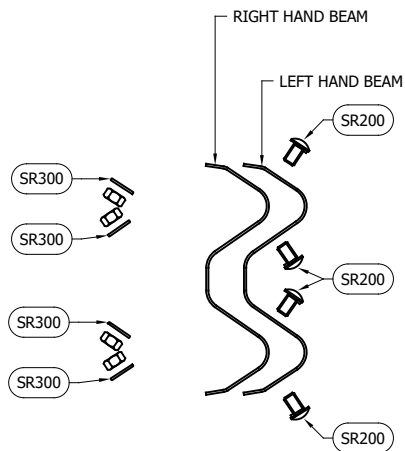
VEHICLE RESTRAINT SYSTEM  
ASSEMBLY AND SETTING OUT  
ARRANGEMENT

**SAFEROAD®**

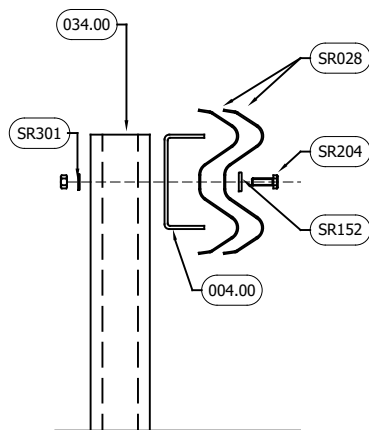
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

TABLE 'A' - SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
SR028	BEAM "A" PROFILE 3mm	1
034.00	POST "C" 125	4
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER SRL1W2-GA-02		

DRAWING NUMBER:	REVn:
SRL1W2-GA-01	00



BEAM TO BEAM CONNECTION  
ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:

- NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
SR200	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
SR300	WASHER M16 18Ø HOLE	8 (+8)

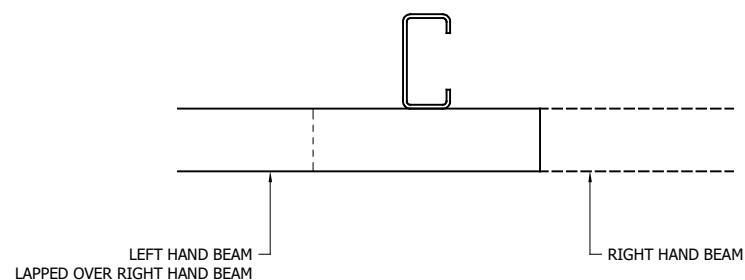
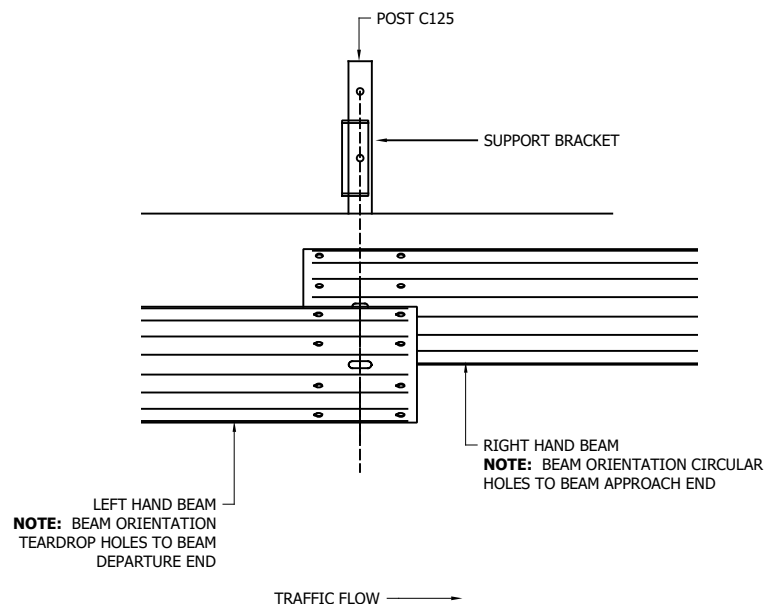
BOLTING COMPONENT SCHEDULE - QUANTITIES / POST		
SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
SR204	SETSCREW 4.6 M10 x 45 c/w NUT	1
SR152	WASHER PLATE 115 x 40 x 5 DIA. 12	1
SR301	WASHER M10 12Ø HOLE	1

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

00	15/01/20	DRAWING CREATED	M.T
REVn	DATE	DETAILS	INITIAL
<b>Super-Rail ES 1.0 L1 W2</b> VEHICLE RESTRAINT SYSTEM BOLTING ARRANGEMENTS			
<b>SAFEROAD®</b> CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE t: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
SRL1W2-GA-02			00

GENERAL NOTES:

1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.

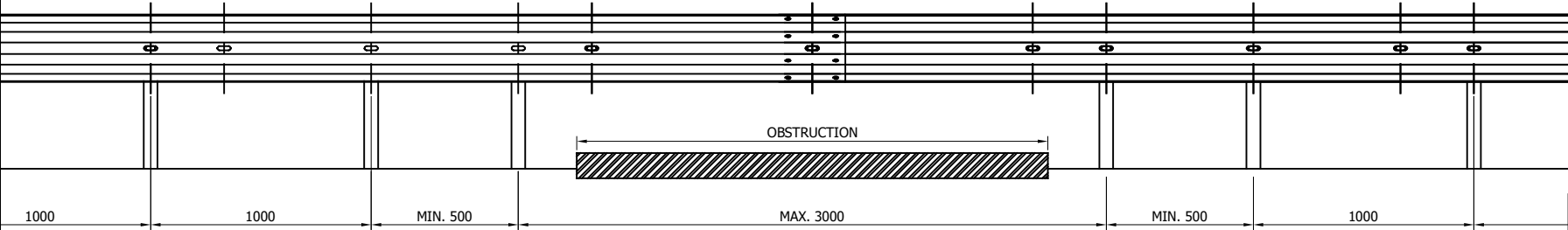


\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

00	15/01/20	DRAWING CREATED	M.T
REVn	DATE	DETAILS	INITIAL
<b>Super-Rail ES 1.0 L1 W2</b>  VEHICLE RESTRAINT SYSTEM. BEAM LAPPING DETAIL FOR L1W2 SUPER-RAIL ES 1.0 SYSTEM			
<b>SAFEROAD®</b>  CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE t: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
SRL1W2-GA-03			00



- GENERAL NOTES:
1. IF THE SITE CONDITIONS DO NOT ALLOW A POST TO BE INSTALLED ON THE SYSTEM PITCH DEVIATIONS CAN BE APPLIED. THE OBSTRUCTED POST CAN BE LEFT OUT AND EXTRA POSTS INSTALLED TO SPAN THE OBSTRUCTION. THE NEW POST SPACING MUST NOT EXCEED 3000mm AND MUST NOT BE LESS THAN 500mm. ALTHOUGH IT WOULD BE BENEFICIAL TO USE THE HOLES ALREADY IN THE BEAM IT IS ACCEPTABLE TO DRILL NEW HOLES IN THE DESIRED POSITIONS AND TREAT WITH ZINC RICH PAINT.
  2. OFFSET POSTS SHOWN ON DRAWING SRN2W2-GA-00 CAN BE USED. INSERT THE ORIGINAL POST SPACING INSTEAD OF 3000mm



00	15/01/20	DRAWING CREATED	M.T
REVn	DATE	DETAILS	INITIAL

# Super-Rail ES 1.0 L1 W2

VEHICLE RESTRAINT SYSTEM  
DEVIATION SETTING OUT  
ARRANGEMENT

**SAFEROAD®**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

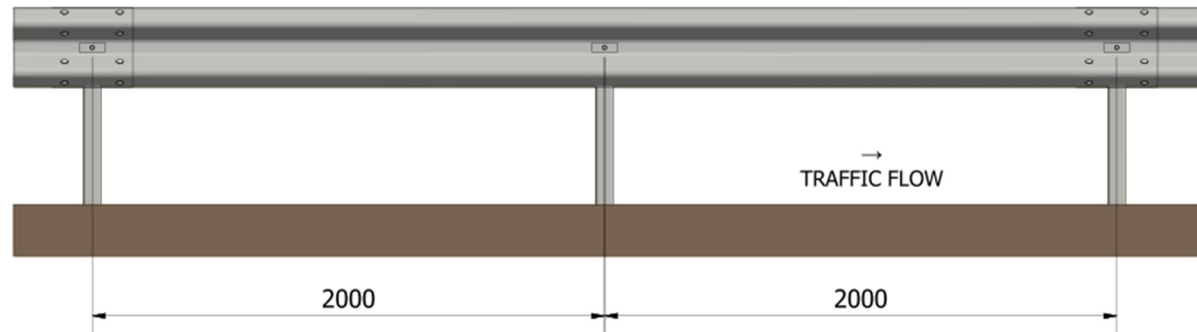
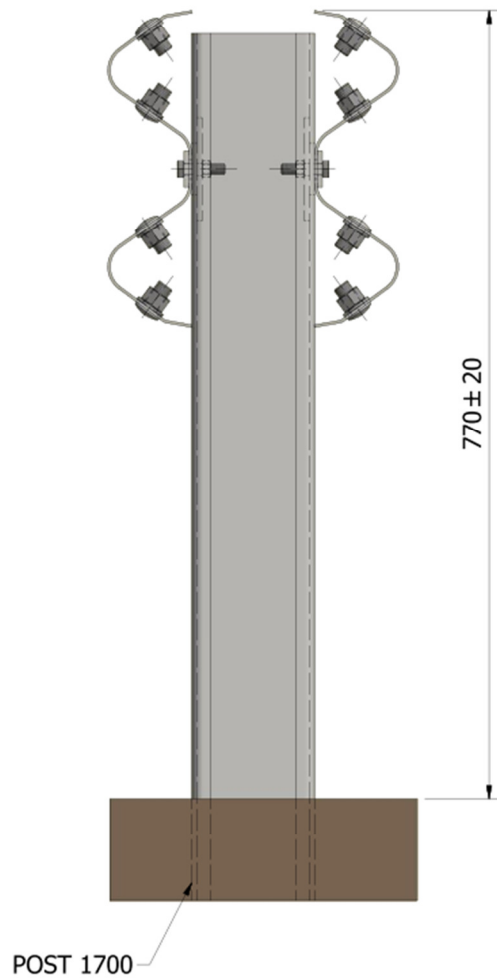
DRAWING NUMBER:	REVn:
SRL1W2-GA-40	00

# BMIDH1C2

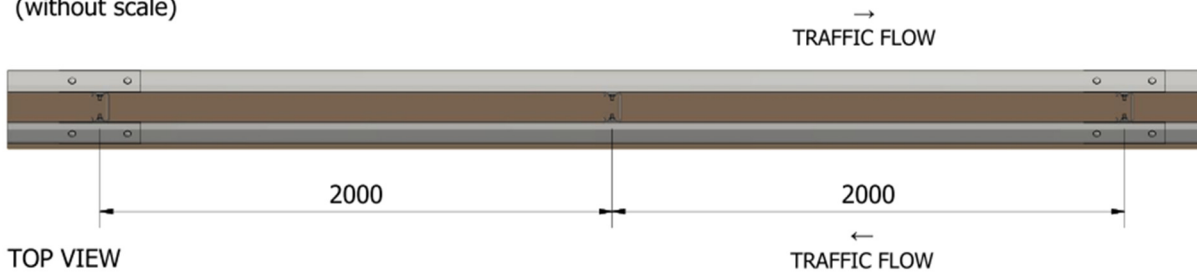
Double sided safety barrier



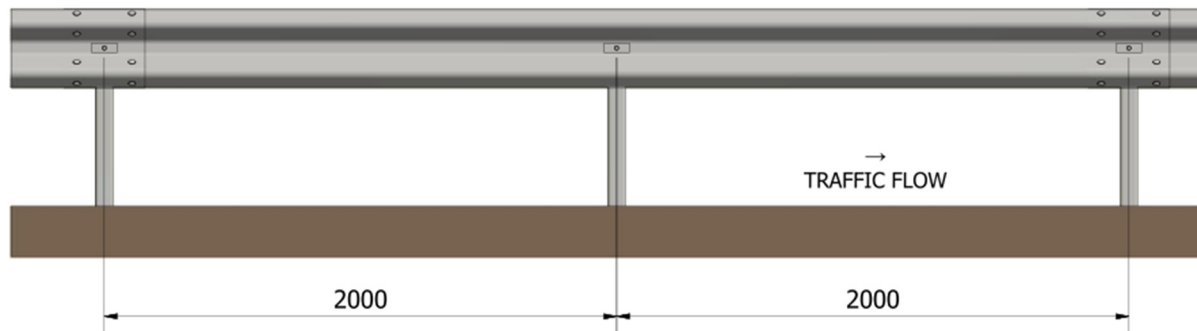
## BARRIER



FRONT VIEW  
(without scale)



TOP VIEW  
(without scale)



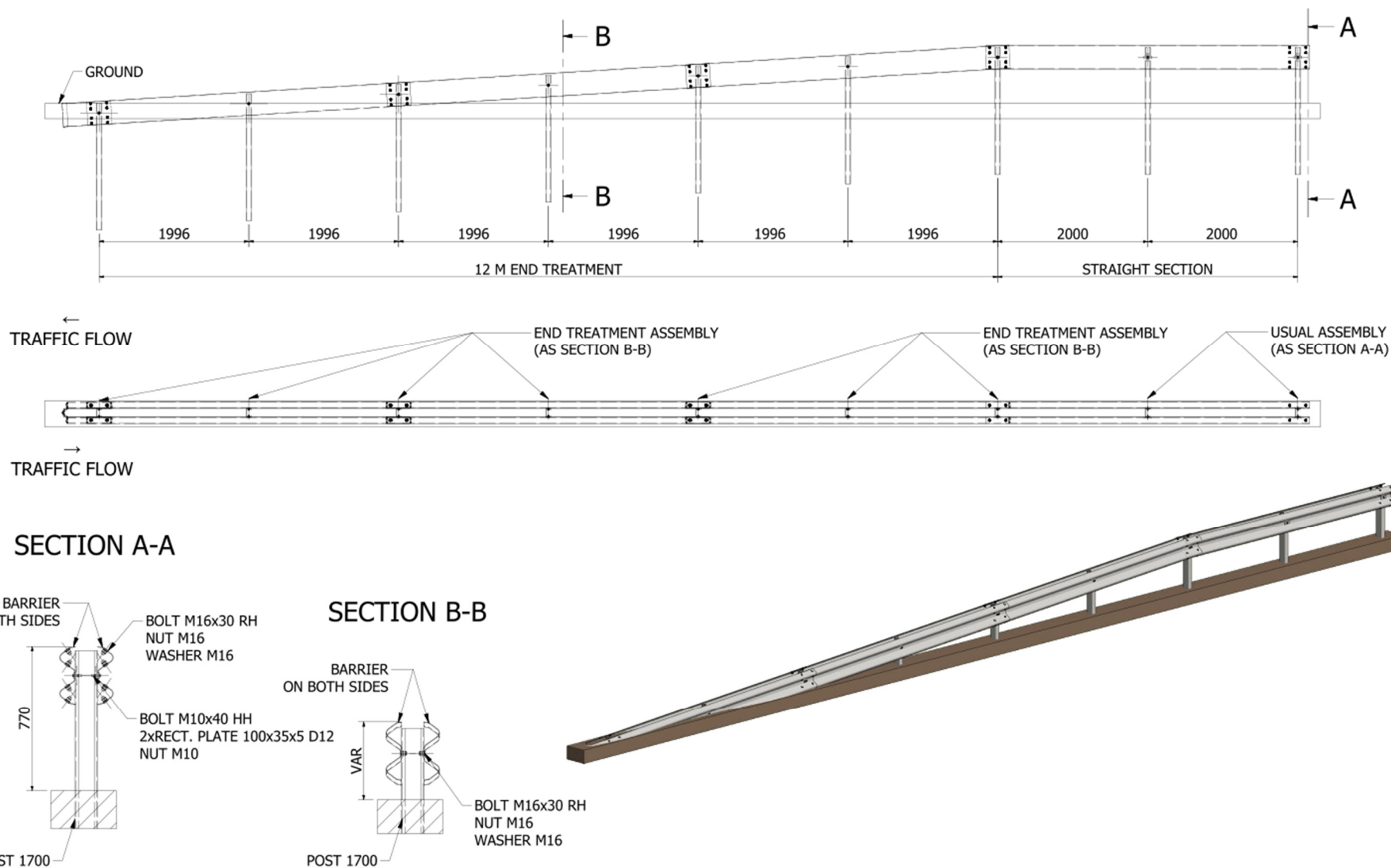
BACK VIEW  
(without scale)

# BMIDH1C2

Double sided safety barrier



## 12m END TREATMENT TO GROUND

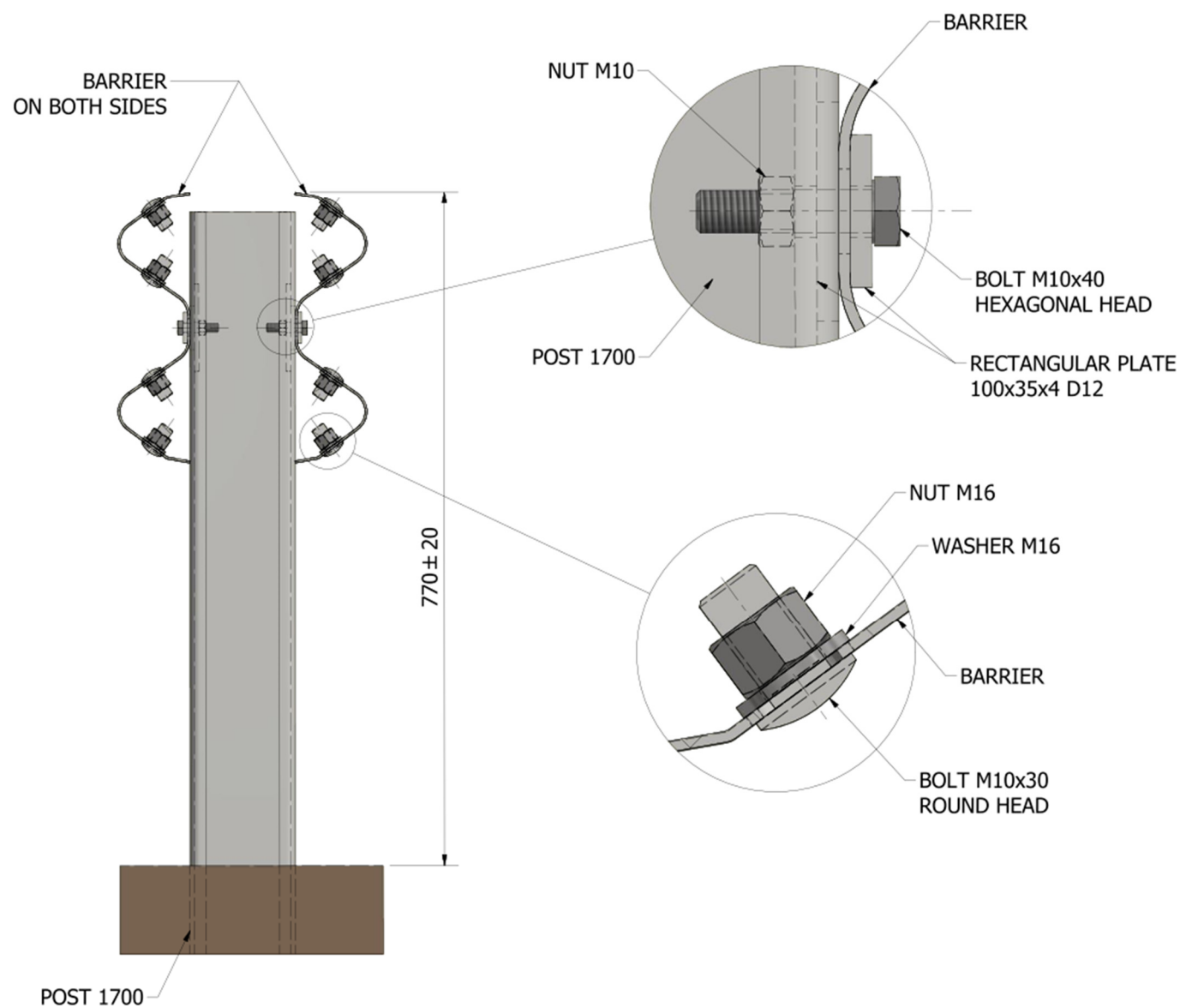


# BMIDH1C2

Double sided safety barrier



## JOINTS

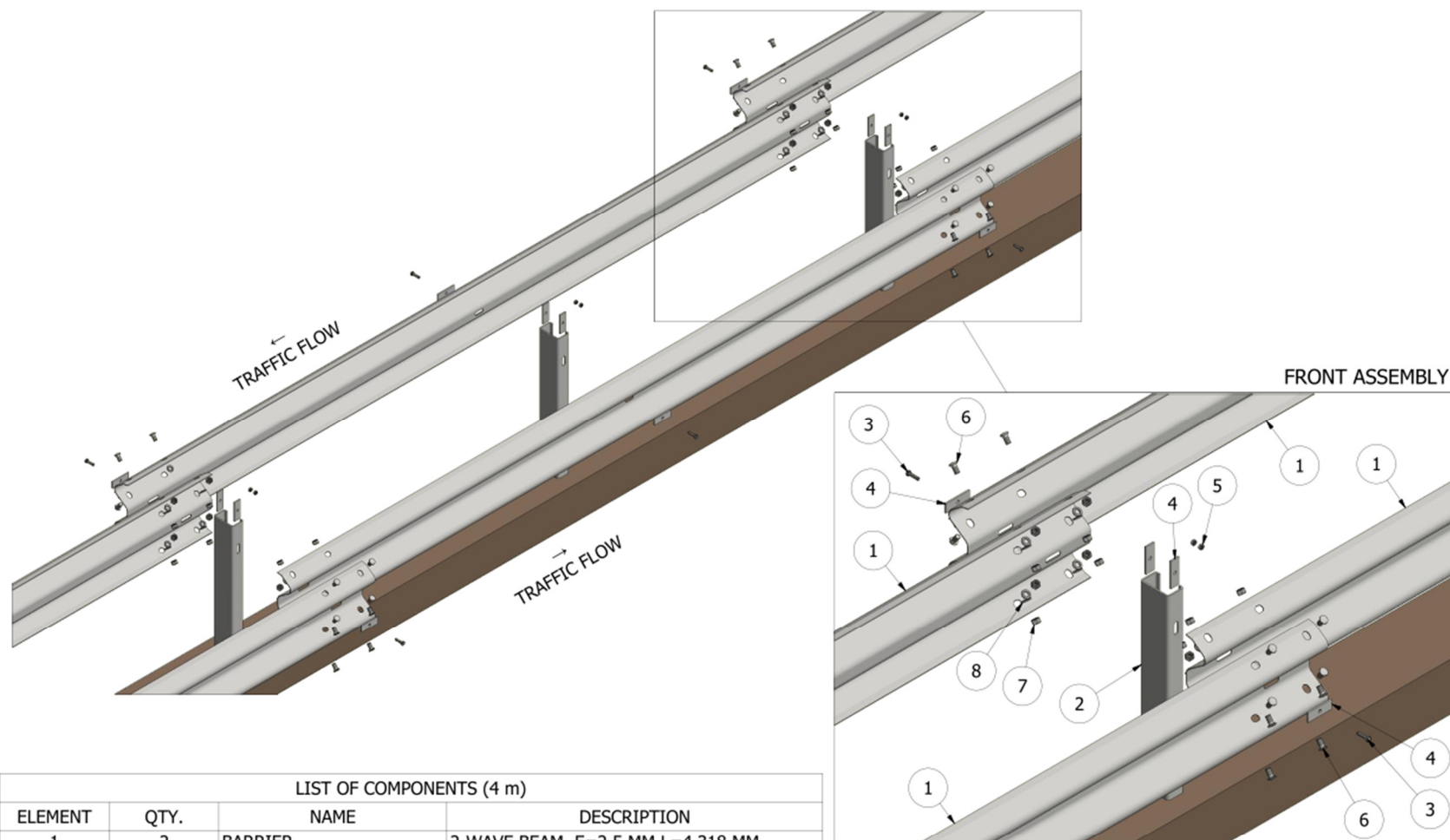


# BMIDH1C2

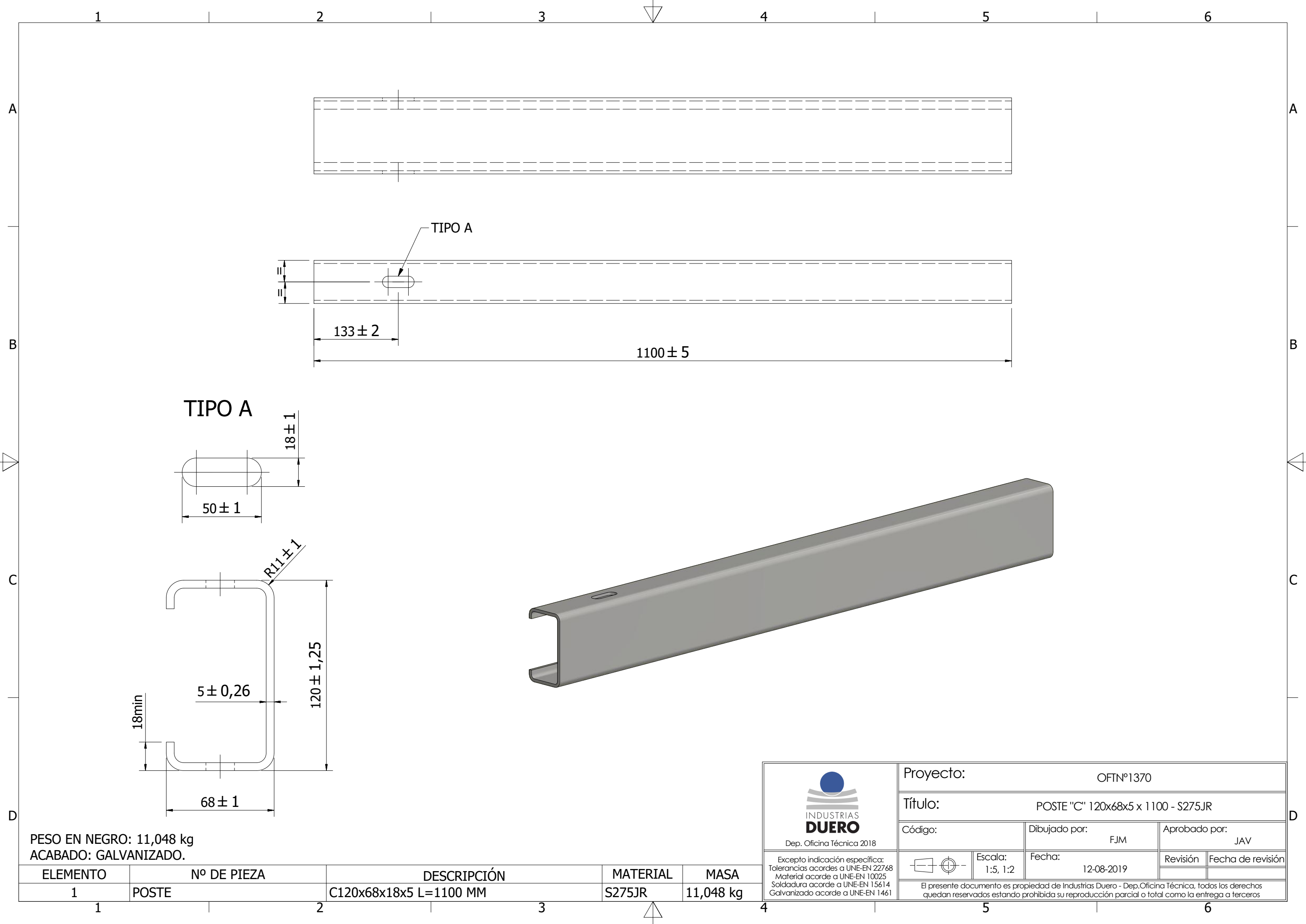
Double sided safety barrier



## ASSEMBLY


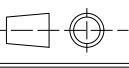


LIST OF COMPONENTS (4 m)			
ELEMENT	QTY.	NAME	DESCRIPTION
1	2	BARRIER	2-WAVE BEAM E=2,5 MM L=4,318 MM
2	2	POST	C120x68x18x5 L=1700 MM
3	4	BOLT M10x40	HEXAGONAL HEAD - ISO 4017
4	8	PLATE	RECTANGULAR - 100x35x5 D12
5	4	NUT M10	HEXAGONAL - ISO 4032
6	16	BOLT M16x30	ROUND HEAD M16x30
7	16	NUT M16	HEXAGONAL - ISO 4032
8	16	WASHER M16	FLAT - ISO 7089

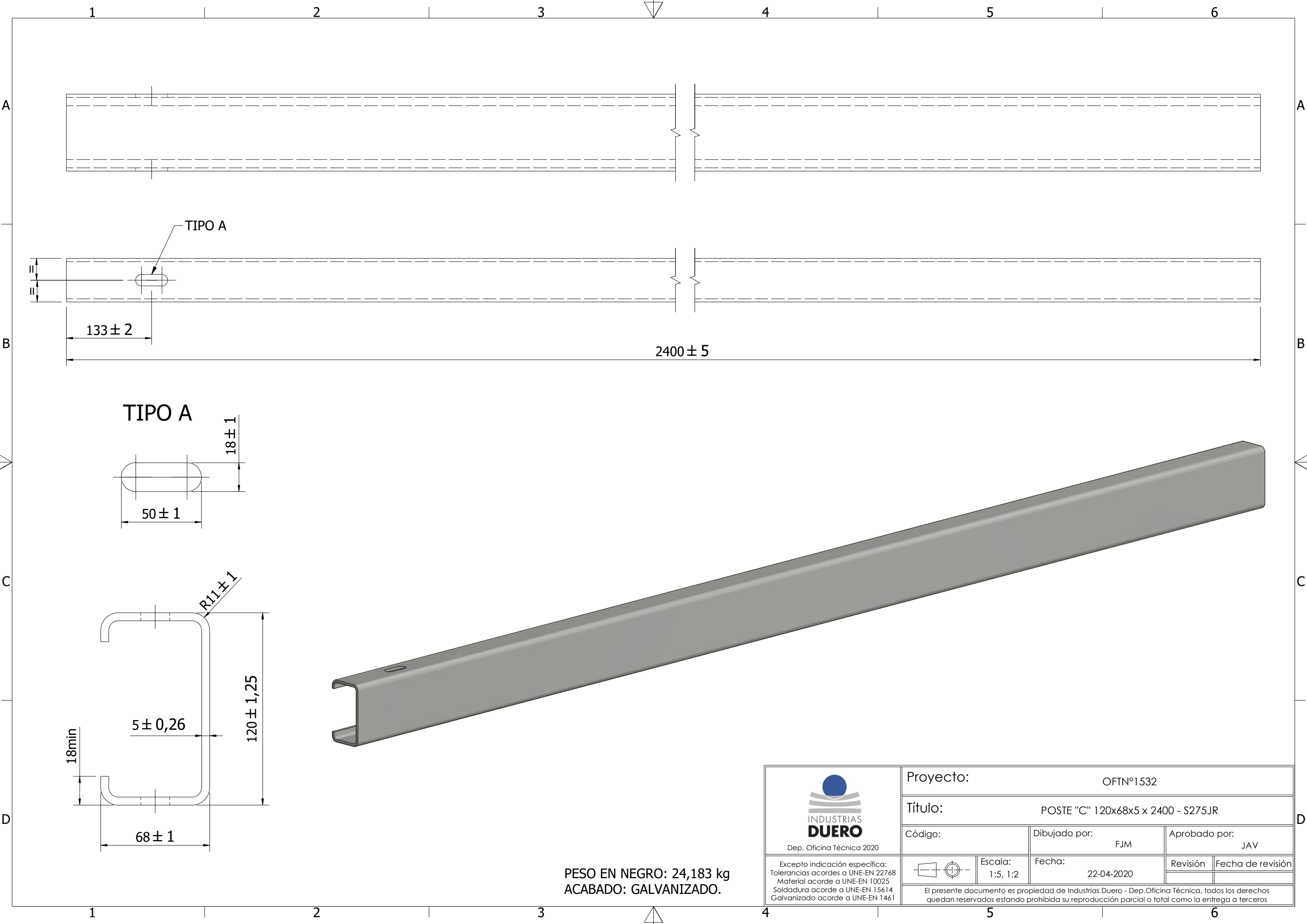


PESO EN NEGRO: 11,048 kg  
ACABADO: GALVANIZADO.


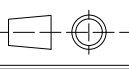
ELEMENTO	Nº DE PIEZA	DESCRIPCIÓN	MATERIAL	MASA
1	POSTE	C120x68x18x5 L=1100 MM	S275JR	11,048 kg

 Dep. Oficina Técnica 2018	Proyecto: OFTNº1370			
	Título: POSTE "C" 120x68x5 x 1100 - S275JR			
	Código:		Dibujado por: FJM	Aprobado por: JAV
		Escala: 1:5, 1:2	Fecha: 12-08-2019	Revisión
			Fecha de revisión	

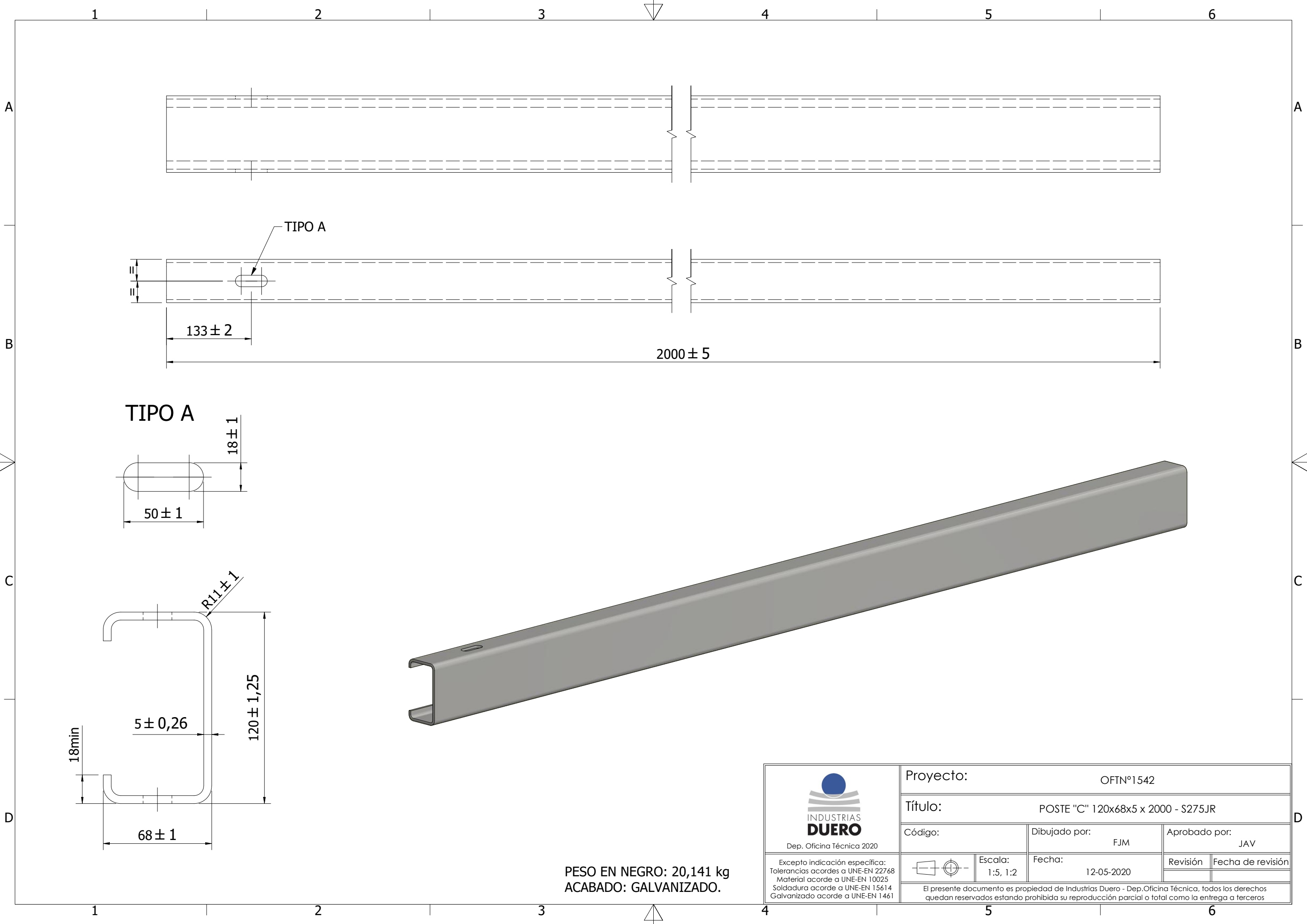
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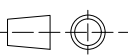


PESO EN NEGRO: 24,183 kg  
ACABADO: GALVANIZADO.

 Dep. Oficina Técnica 2020	Proyecto: OFTNº1532			
	Título: POSTE "C" 120x68x5 x 2400 - S275JR			
	Código:		Dibujado por: FJM	Aprobado por: JAV
		Escala: 1:5, 1:2	Fecha: 22-04-2020	Revisión
				Fecha de revisión

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<div> Dep. Oficina Técnica 2020</div>	Proyecto: OFTNº1542				
	Título: POSTE "C" 120x68x5 x 2000 - S275JR				
	Código:		Dibujado por: FJM	Aprobado por: JAV	
		Escala: 1:5, 1:2	Fecha: 12-05-2020	Revisión	Fecha de revisión
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## **INSTALLATION PROCEDURE**

This document describes the procedure to follow for the installation of the H1 double sided safety barrier with posts every 2 metres. The installation consists of the following stages:

1. Material distribution and preparation.
2. H1 barrier assembly.
3. 12 m end terminal assembly.
4. Barrier disassembly.

### **1.- Material distribution and preparation.**

1. Unload the materials which make up the system longitudinally along the length of the section where it is to be installed
2. Post-driving machine guided by barrier elements:
  - a. Place the elements face up and overlapping so that the drill holes of the double wave beams coincide with the edge of the road to be protected and spaced from the post-driving line a minimum of 40 cm and a maximum of 70 cm.
  - b. Align the beams on the ground.

Post-driving machine with automatic guiding system:

Lay out the post-driving line according to the final position of the barrier on the ground plan.

### **2.- Driving the posts and assembling the components**

1. Place the guide wheels of the post-driving machine in the previously aligned beams.
2. Lay out the post-driving distance as compared to the ground plan position of the barrier on the road: 201 mm from the rear face of the post.
3. Drive the C120x68x18x5x1700 mm posts every 2000  $\pm$ 55 mm at a height of 748 mm measured from the road level.
4. Assemble the overlapping of the 2-wave beams nearest to the carriageway. The final position of the beam overlaps will be such that the 2-wave beam seen from the direction of the traffic flow must overlap the one immediately after it and there are no protrusions in the safety barrier.
5. Fasten the central mounting hole of the post with an M10x40 5.8 hexagonal head bolt, two 100x35x5 plates (one placed horizontally between the head of the bolt and the beam and the other vertically between the post and the nut), an M10-5 nut at the back tightened to 20 $\pm$ 4 Nm torque.

6. Fasten the overlap (without tightening) using 8 M16x30 8.8 round head bolts and M16-8 nuts + 17x35x4 rear washers. The height of the upper part of the barrier relative to the road level must be  $770 \pm 20$  mm.
7. Level the beam and tighten the M16x30 8.8 bolts with a torque of  $150 \pm 10$  Nm.
8. Assemble the overlapping of the 2-wave beams furthest to the carriageway. The final position of the beam overlaps will be opposite to the one previously installed on the other side.
9. Fasten the central mounting hole of the post with an M10x40 5.8 hexagonal head bolt, two 100x35x5 plates (one placed horizontally between the head of the bolt and the beam and the other vertically between the post and the nut), an M10-5 nut at the back tightened to  $20 \pm 4$  Nm torque.
10. Fasten the overlap (without tightening) using 8 M16x30 8.8 round head bolts and M16-8 nuts + 17x35x4 rear washers. The height of the upper part of the barrier relative to the road level must be  $770 \pm 20$  mm.
11. Level the beam and tighten the M16x30 8.8 bolts with a torque of  $150 \pm 10$  Nm.

### **3.- 12 m end terminal assembly.**

1. Drive the posts so that the distance between them is 1996 mm in elevation and the height is such that the upper part of the end of the terminal piece is at the road level.
2. Install the buffer end piece at the end of the last two parallel beams using 16 M16x30 8.8 round head bolts and M16-8 nuts + 17x35x4 rear washers with a tightening torque of  $150 \pm 10$  Nm.
3. Fasten the remaining beams with 8 M16x30 8.8 round head bolts and M16-8 nuts + 17x35x4 rear washers with a tightening torque of  $150 \pm 10$  Nm.
4. Excavate the ditch at the end of the section to house the buffer end element and part of the last two parallel beams.
5. Place the beams into the ground and fasten them to the posts with M16x30 8.8 round head bolts and M16-8 nut + 17x35x4 rear washer with a tightening torque of  $150 \pm 10$  Nm.

### **4.- Barrier disassembly**

1. Remove all the fastening elements of the barrier overlaps (M16X30 8.8).
2. Unfasten the bolts and nuts that join the beams to the posts.
3. Remove the beams.
4. Take the posts out of the ground.

## TIGHTENING TORQUES

The following table contains the tightening torques for the various joints of the Double Sided Safety Barrier, indicating the components involved and the type of bolt used for each one:

DESCRIPTION OF THE JOINT	TYPE OF BOLT	TIGHTENING TORQUE (Nm)
<b>2-WAVE BEAM / 2 WAVE BEAM</b> (also in terminals)	Round-head Bolt M16x30-8.8 / C4-00202	150±20
<b>2-WAVE BEAM / BUFFER END</b>	Round-head Bolt M16x30-8.8 / C4-00202	150±20
<b>2-WAVE BEAM / RECTANGULAR PLATE 100x35x5 / POST</b>	Hexagonal-head Bolt M10x40-5.8 UNE-EN ISO 4017	20±4
<b>POST / 2-WAVE BEAM</b> (in terminals)	Round-head Bolt M16x30-8.8 / C4-00202	150±20

**BMIDH1C2***H1 Double Sided Safety Barrier. Component Weights.***COMPONENT WEIGHTS**

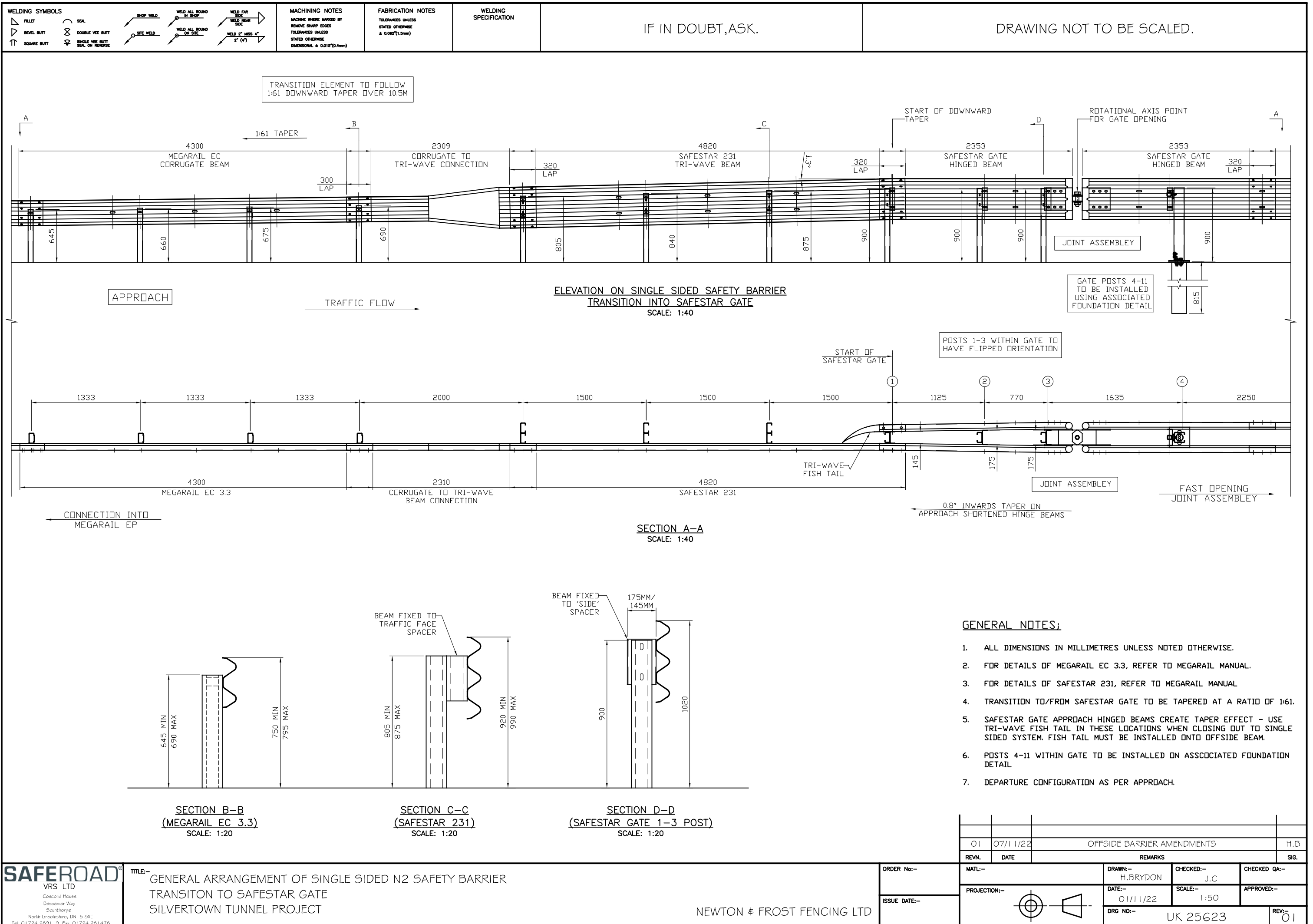
SAFETY BARRIER BMIDH1C2		
CODE	DESCRIPTION	GALVANIZED WEIGHT (kg)
C4-00192	FLAT WASHER 17X35x4	0,025
C3-00199	POST C120x68x18x5 L=1700mm	17,85
C3-00200	2-WAVE BEAM e=2,5mm	41,54
C4-00201	RECTANGULAR PLATE 100x35x5	0,135
C4-00202	M16x30 8.8 ROUND HEAD BOLT	0,085
C4-00213	M10x40 5.8 HEX BOLT	0,03
C4-00214	M10-5 HEX NUT	0,01
TC4-00284	BUFFER END	15
UNE-EN ISO 4034	M16-8 HEX NUT	0,035

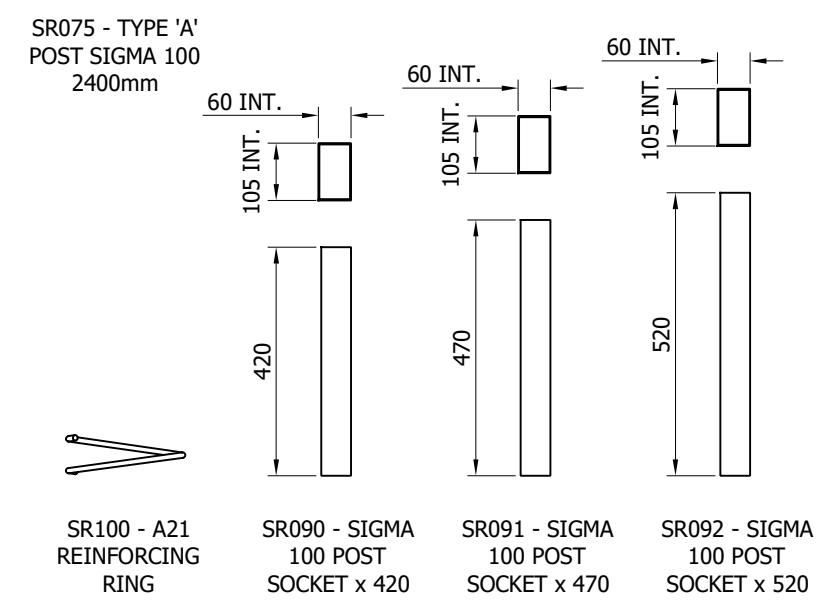
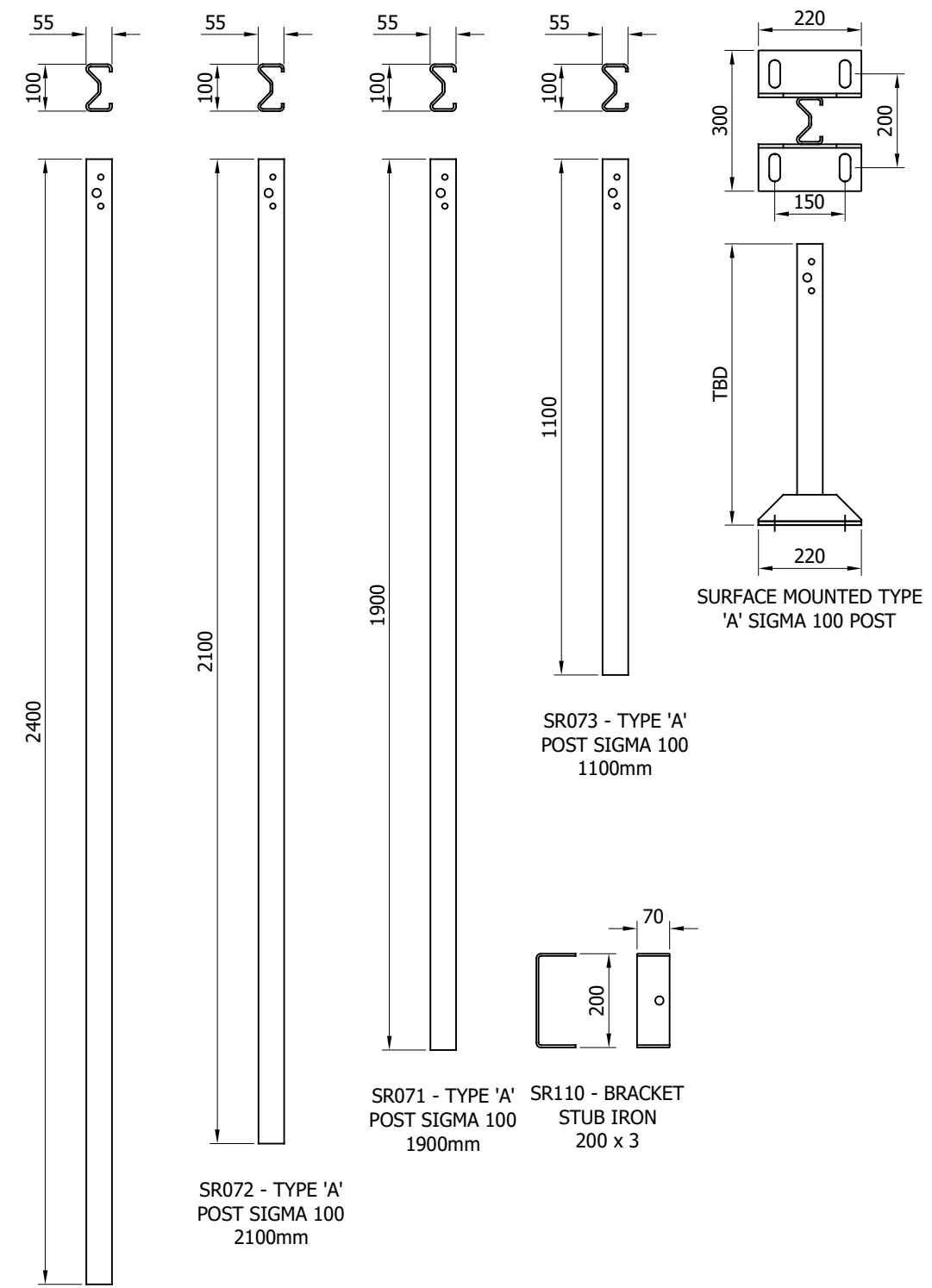
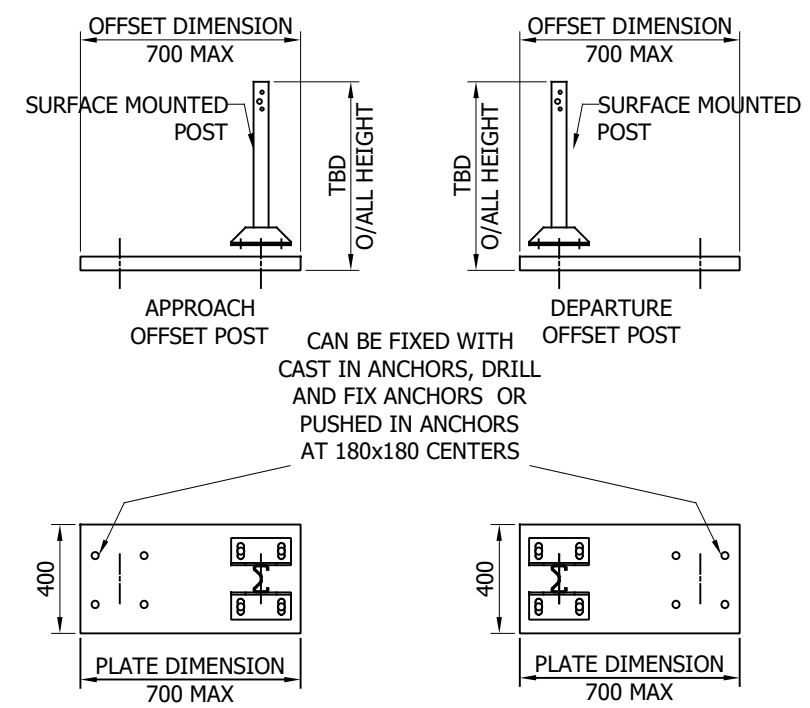
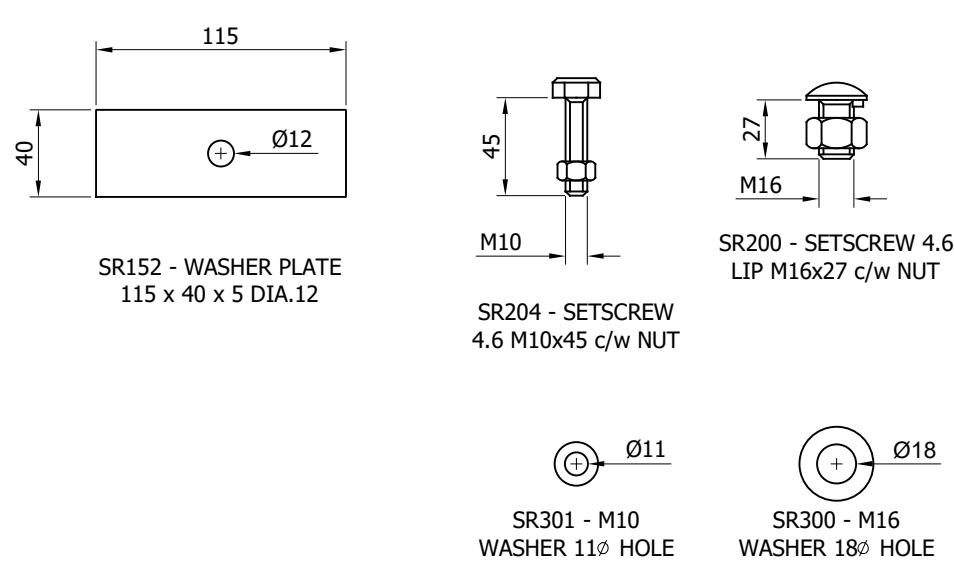
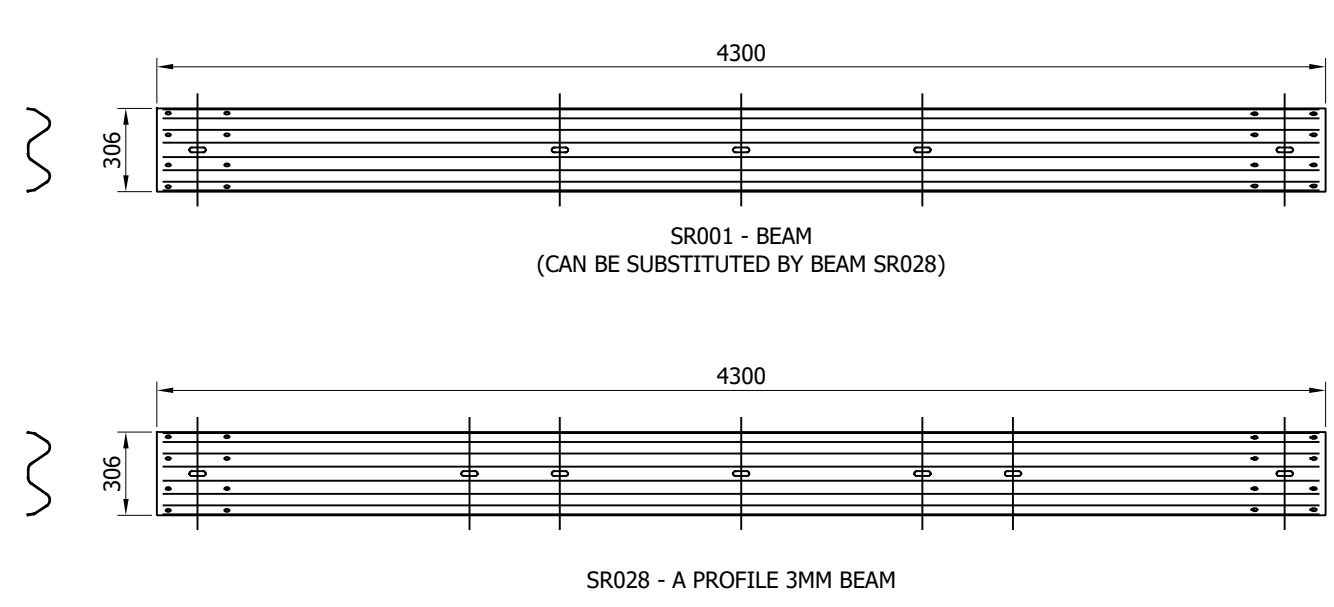
## **NOTES ON COATINGS**

The various components that make up the H1 Double Sided Safety Barrier presented in this document are hot-dip galvanized in compliance with EN ISO 1461.

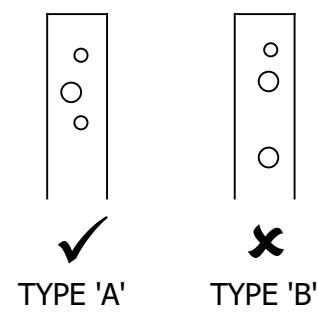
The system fastening elements are hot-dip galvanized in compliance with EN ISO 10684.

The component referred to as the 100x35x5 rectangular plate has a galvanization coating thickness in compliance with EN ISO 1461 for a centrifuged sample.





POST TOP DRILLING  
ARRANGEMENT



07	13/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
06	27/05/21	DETAILS REVISED	M.T
05	19/11/19	BEAM DETAILS ADDED	M.T
04	12/02/19	TITLEBLOCK REVISED	M.T
03	10/03/17	OFFSET POST REVISED	L.L
02	30/01/17	DETAILS REVISED	L.L
1.3	21/05/15	DETAILS REVISED	L.L
REVn	DATE	DETAILS	INITIAL

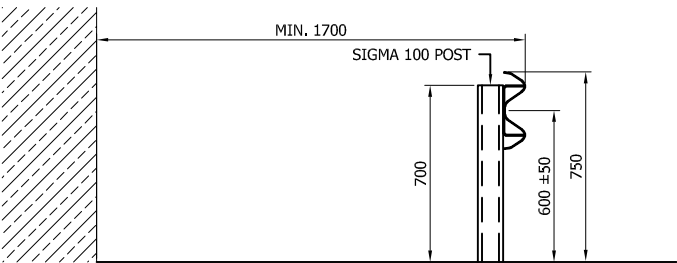
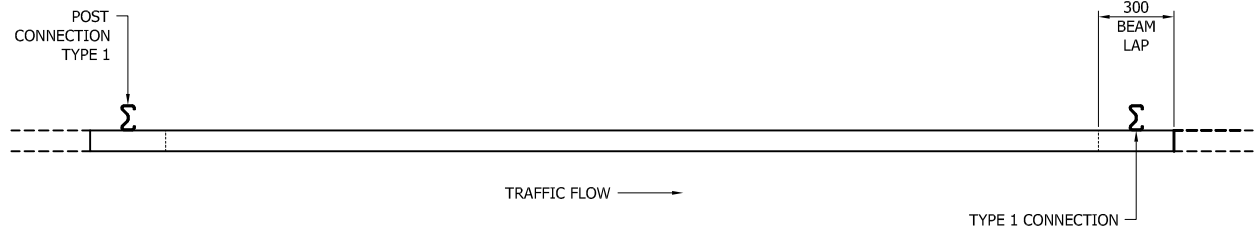
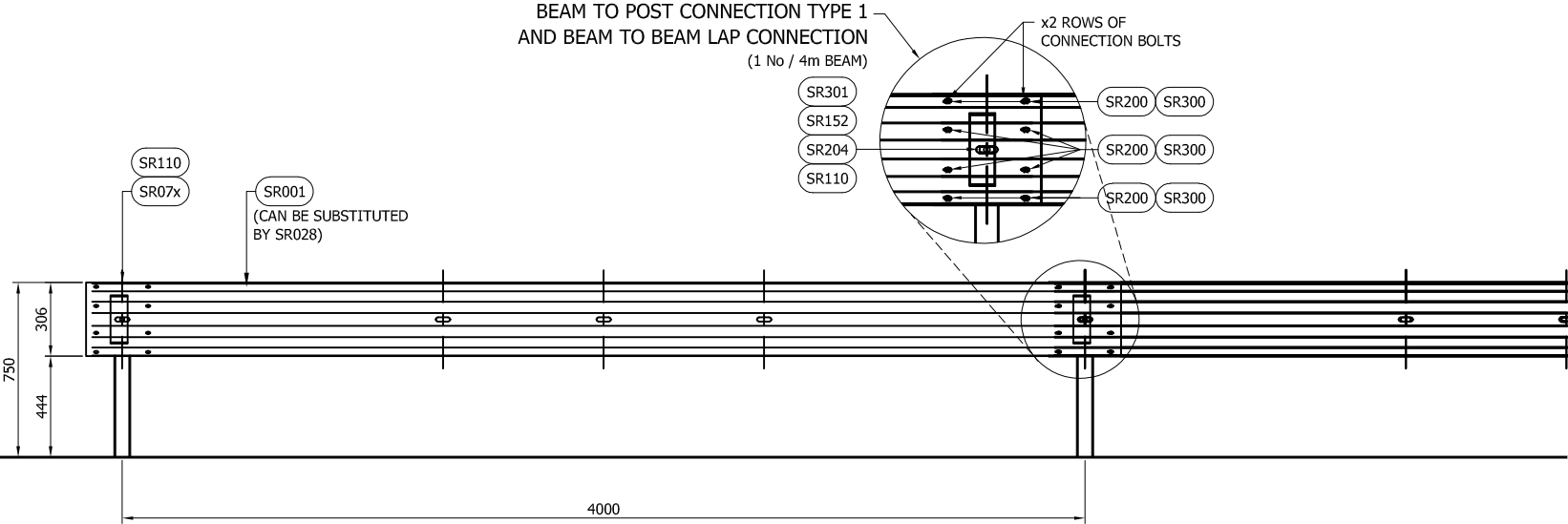
**MegaRail ESP4.0**  
**N2 A W5**  
N2.W5 ROAD RESTRAINT SYSTEM  
COMPONENTS SCHEMATIC

**SAFEROAD®**  
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
t: 01724 289119  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W5-GA-00	07

BEAM TO POST CONNECTION TYPE 1  
AND BEAM TO BEAM LAP CONNECTION

(1 No / 4m BEAM)



GENERAL NOTES:

1. P.S.B. = POINT FROM WHERE SET-BACK IS MEASURED.
2. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.
3. FOR OPTIONS ON POST FOUNDATIONS REFER TO DRAWING NUMBER MR-GA-020
4. FOR DEVIATIONS IN SYSTEM POST PITCH REFER TO DRAWING N2W5-GA-40
5. WHEN TYING INTO ADJACENT VRS ONLY ONE WORKING WIDTH DIFFERENCE IS PERMITTED.
6. WHERE A KERB IS PRESENT THE MAXIMUM KERB HEIGHT IS 100mm.
7. FOR MINIMUM LENGTH OF FULL HEIGHT VRS REFER TO SAFEROAD MEGARAIL MANUAL.

SYSTEM COMPONENT SCHEDULE - QUANTITIES / 4m BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	QUANTITY
SR001	BEAM "A" PROFILE (CAN BE SUBSTITUTED BY SR028)	1
SR110	BRACKET STUB IRON 200 x 3	1
	POST SIGMA 100	1
FOR SCHEDULE OF BOLTED CONNECTIONS REFER TO DRAWING NUMBER N2W5-GA-02		

TABLE 'B' - SCHEDULE OF POST REFERENCE NUMBERS AND LENGTHS	
SAFEROAD UK PART NUMBER	POST LENGTH
SR073	1100
SR071	1900
SR072	2100
SR075	2400

REVn	DATE	DETAILS	INITIAL
04	19/11/19	BEAM DETAILS ADDED	M.T
03	12/02/19	TITLEBLOCK REVISED	M.T
02	30/01/17	DETAILS REVISED	L.L
1.3	21/05/15	DETAILS REVISED	L.L

MegaRail ESP4.0  
N2 A W5

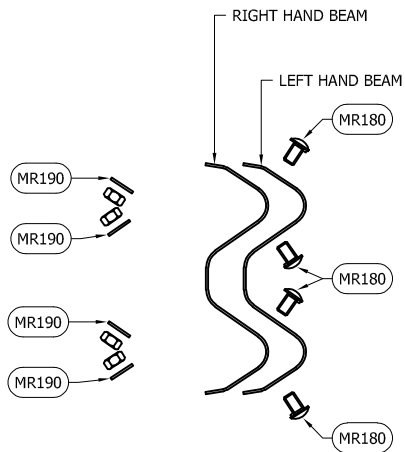
N2.W5 VEHICLE RESTRAINT SYSTEM  
ASSEMBLY AND SETTING OUT  
ARRANGEMENT

SAFEROAD®

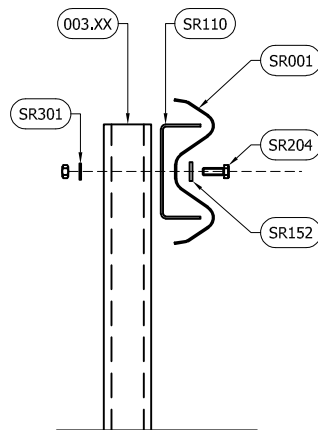
CONCORD HOUSE,  
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t: 01724 289119  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W5-GA-01	04





BEAM TO BEAM LAP  
CONNECTION ARRANGEMENT  
(x2 LOCATIONS / BEAM END)



BEAM TO POST  
CONNECTION TYPE 1

GENERAL NOTES:

- NUMBERS IN THE SCHEDULES SUFFIXED (+) DENOTES THE ADDITIONAL QUANTITY OF COMPONENTS REQUIRED FOR EXTREME ENDS OF INDIVIDUAL RUNS OF BARRIER.

BOLTING COMPONENT SCHEDULE - QUANTITIES / BEAM		
SAFEROAD UK PART NUMBER	DESCRIPTION	BEAM TO BEAM CONNECTION
SR200	SETSCREW 4.6 LIP M16x27 c/w NUT	8 (+8)
SR300	WASHER M16 18Ø HOLE	8 (+8)

BOLTING COMPONENT SCHEDULE - QUANTITIES / POST		
SAFEROAD UK PART NUMBER	DESCRIPTION	TYPE 1 CONNECTION
SR204	SETSCREW 4.6 M10x45 c/w NUT	1
SR152	WASHER PLATE 115 x 40 x 5 DIA. 12	1
SR301	WASHER M10 11Ø HOLE	1
QUANTITY OF CONNECTION TYPES / 4m BEAM		
		1 (+1)

\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

REVn	DATE	DETAILS	INITIAL
03	12.02.19	DETAILS REVISED	M.T
02	30/01/17	DETAILS REVISED	L.L
1.3	21/05/15	DETAILS REVISED	L.L

## MegaRail ESP4.0 N2 A W5

N2.W5 VEHICLE RESTRAINT SYSTEM  
BOLTING ARRANGEMENTS

**SAFEROAD®**

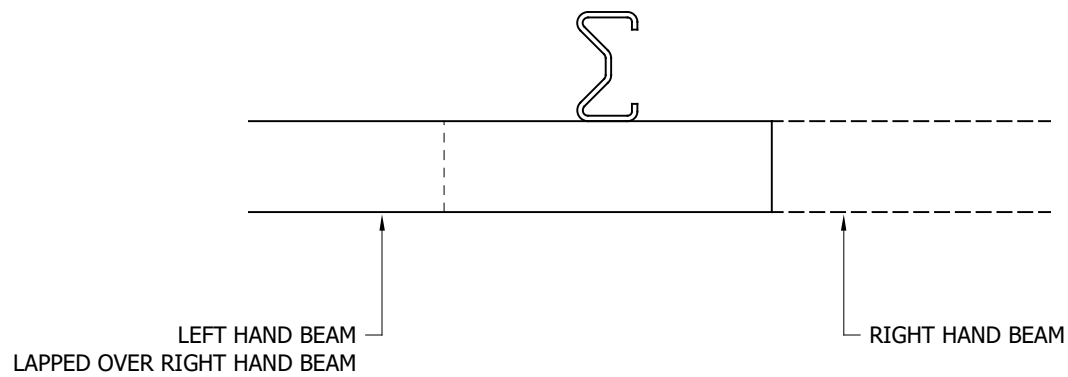
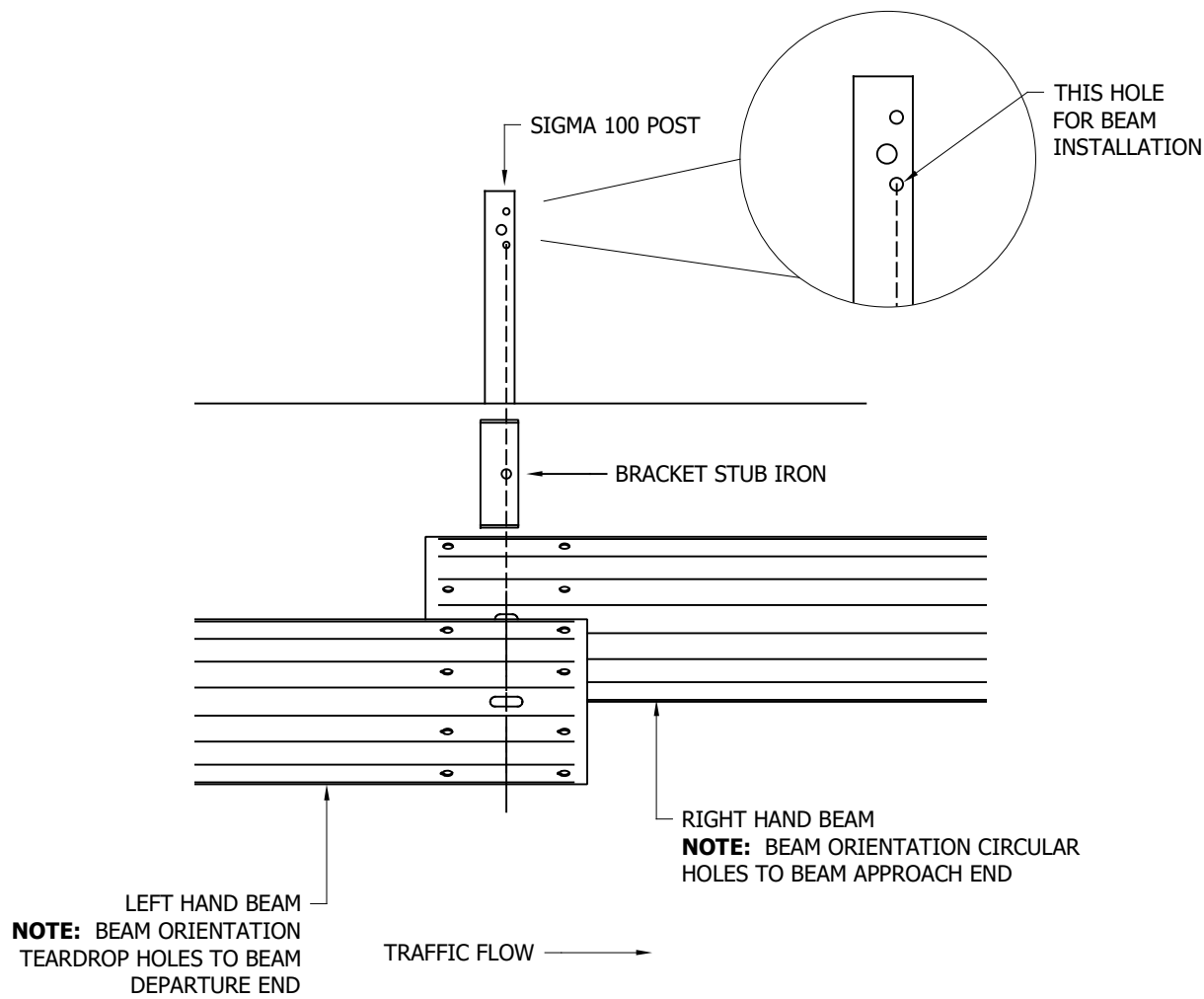
CONCORD HOUSE,  
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e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

N2W5-GA-02

REVn:

03



\*\* BEAM REFERENCES i.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

#### GENERAL NOTES:

1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.

REVn	DATE	DETAILS	INITIAL
04	17.12.21	DETAILS REVISED	A.D
03	12.02.19	DETAILS REVISED	M.T
02	30/01/17	DETAILS REVISED	L.L
1.3	21/05/15	DETAILS REVISED	L.L

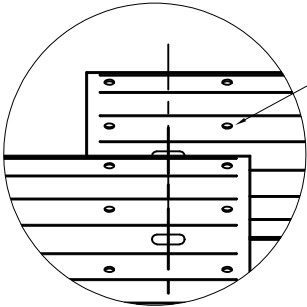
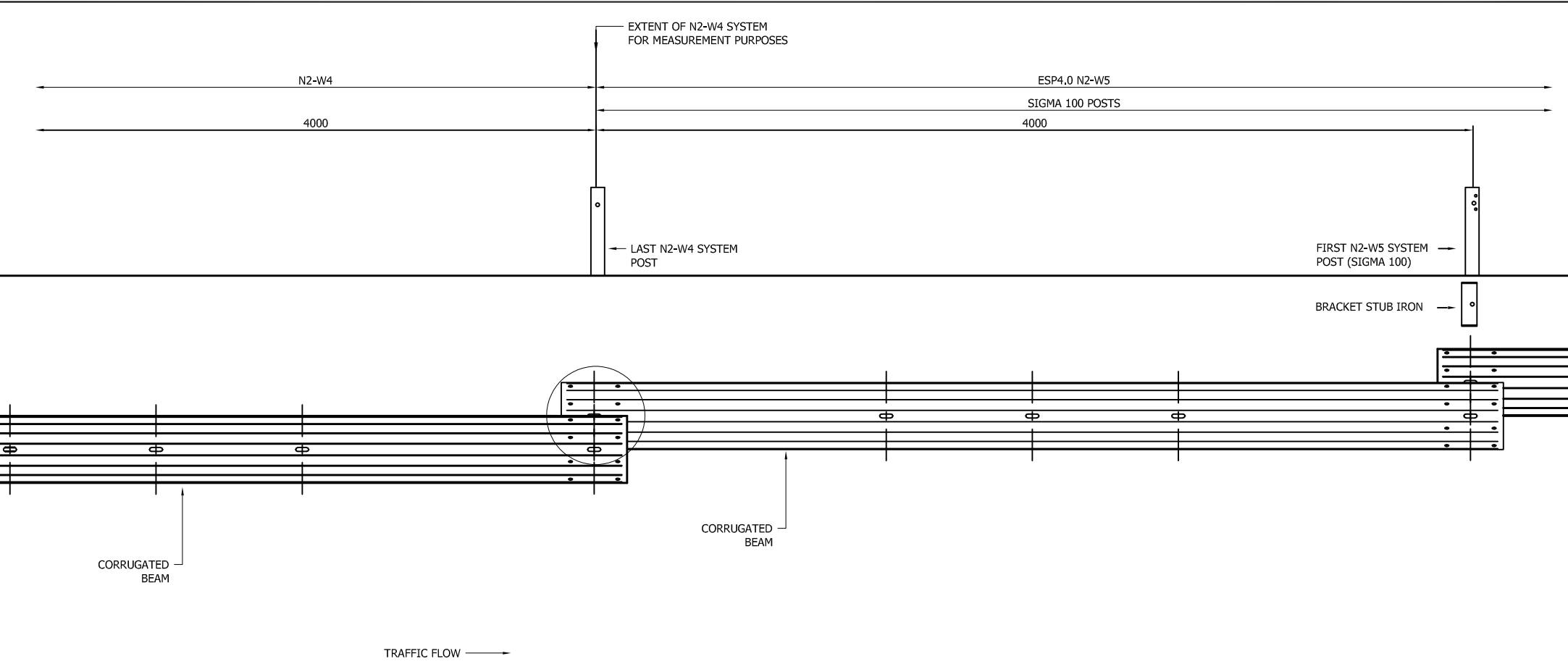
## MegaRail ESP4.0 N2 A W5

N2.W5 VEHICLE RESTRAINT SYSTEM.  
BEAM LAPPING DETAIL FOR W5  
MEGARAIL SYSTEM

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DRAWING NUMBER:	REVn:
N2W5-GA-03	04



**NOTE:** BEAM ORIENTATION CIRCULAR HOLES TO BEAM APPROACH END

- GENERAL NOTES:
1. POSTS ARE TO BE INSTALLED WITH THE CLOSED FACE OF THE CHANNEL TOWARDS THE ON-COMING TRAFFIC.

**MegaRail ESP4.0  
N2 A W5**  
VEHICLE RESTRAINT SYSTEM.  
SYSTEM PROGRESSION SCHEMATIC  
FOR W5 PROTECTION TO HAZARD

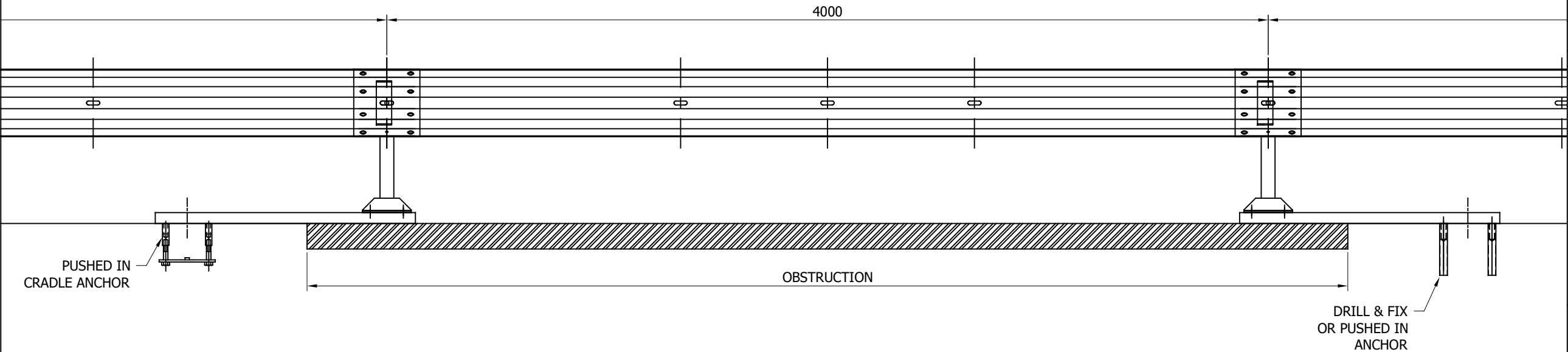
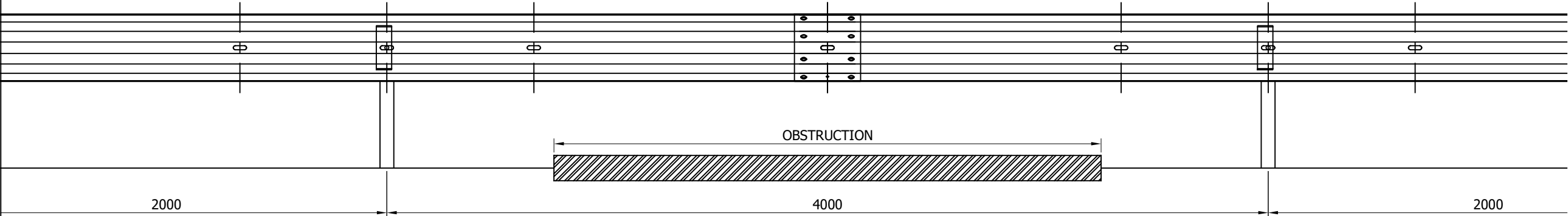
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\*\* BEAM REFERENCES I.e. LEFT / RIGHT HAND ARE FOR VERGE INSTALLATIONS; FOR CENTRAL RESERVATION INSTALLATIONS THE REFERENCES ARE REVERSED

REV#	DATE	DETAILS	INITIAL
02	12/02/19	TITLEBLOCK DESCRIPTION	M.T
01	10/03/17	POST DESCRIPTION	L.L
00	30/01/17	NEW DRAWING	L.L

DRAWING NUMBER:	REV#:
N2W5-GA-20	02

- GENERAL NOTES:
1. IF THE SITE CONDITIONS DO NOT ALLOW A POST TO BE INSTALLED ON THE SYSTEM PITCH DEVIATIONS CAN BE APPLIED. THE OBSTRUCTED POST CAN BE LEFT OUT AND EXTRA POSTS INSTALLED TO SPAN THE OBSTRUCTION AS PER THIS DRAWING. ALTHOUGH IT WOULD BE BENEFICIAL TO USE THE HOLES ALREADY IN THE BEAM IT IS ACCEPTABLE TO DRILL NEW HOLES IN THE DESIRED POSITIONS AND TREAT WITH ZINC RICH PAINT.
  2. OFFSET POSTS SHOWN ON DRAWING N2W5-GA-00 CAN BE USED.



04	13/05/22	SURFACE MOUNTED POST BASE CHANGED	A.D
03	23/07/21	SURFACE MOUNTED POST DETAIL ADDED	A.D
02	25/05/21	DETAILS REVISED	M.T
01	12/02/19	TITLEBLOCK REVISED	M.T
00	30/01/17	NEW DRAWING	L.L
REVn	DATE	DETAILS	INITIAL

# MegaRail ESP4.0 N2 A W5

N2.W5 VEHICLE RESTRAINT SYSTEM  
DEVIATION SETTING OUT  
ARRANGEMENT

**SAFEROAD®**  
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t: 01724 289119  
e: john.cudlipp@saferoad.co.uk

DRAWING NUMBER:	REVn:
N2W5-GA-40	04