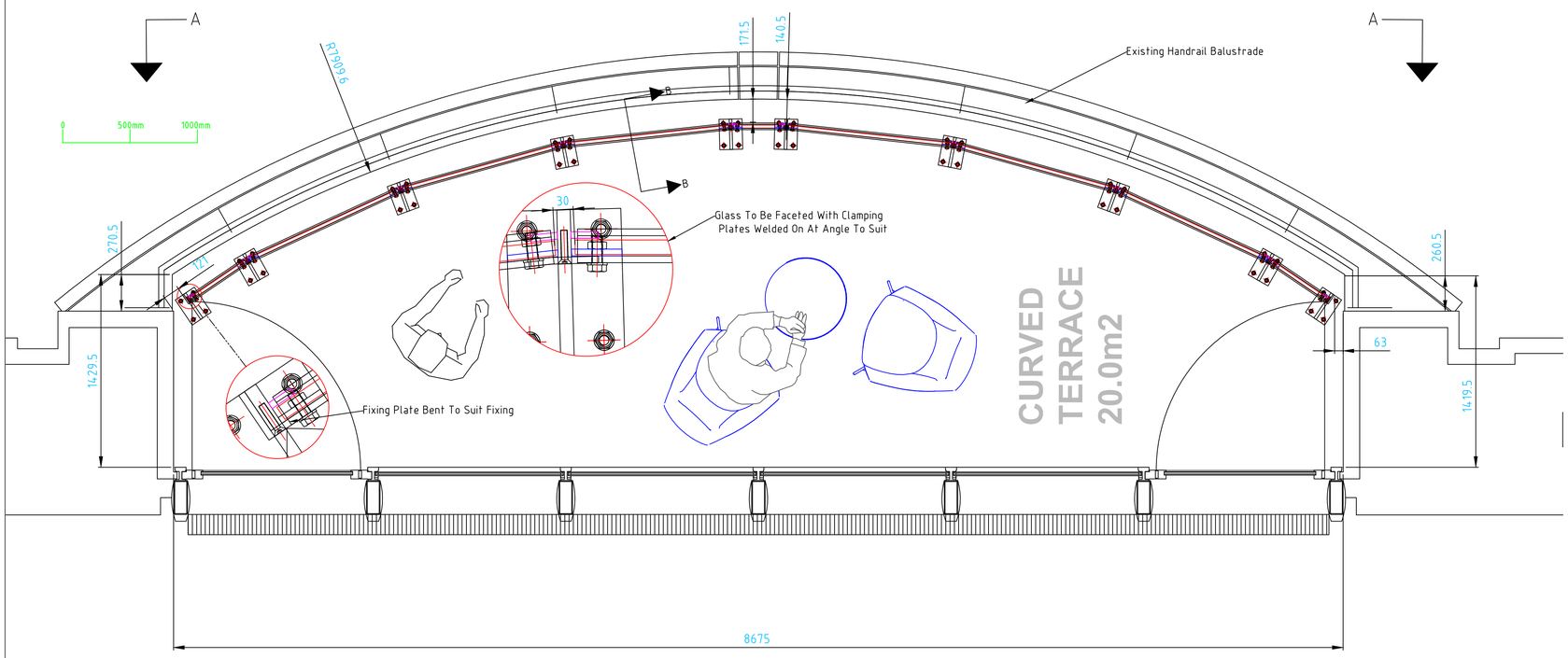
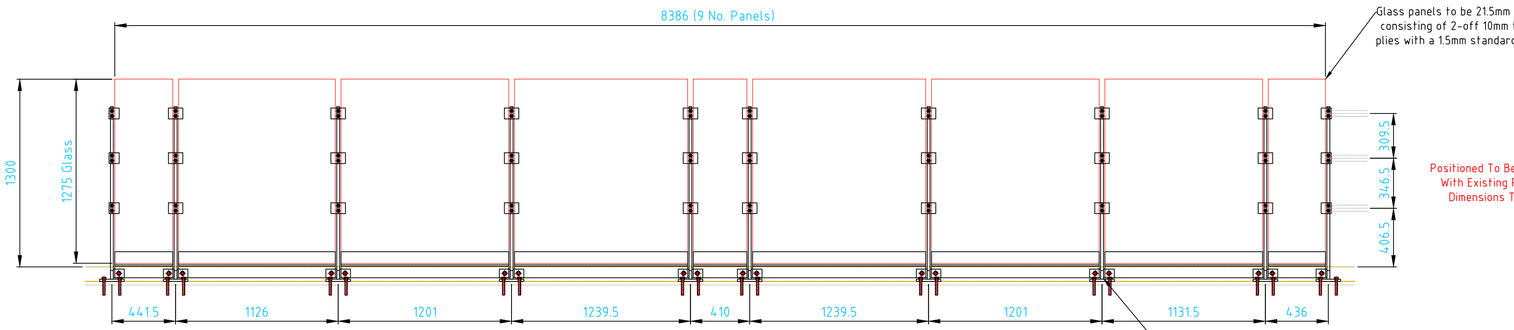
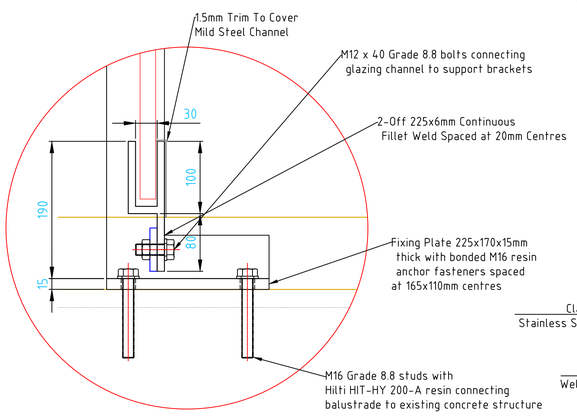
THIRD ANGLE PROJECTION	IF IN ANY DOUBT, PLEASE ASK	DO NOT SCALE	SEEK WRITTEN APPROVAL BEFORE USING THIS DRAWING FOR OTHER TRADES OR DIMENSIONAL SETTING OUT	ALL PAINTED OR PPC LASER CUT PARTS MUST HAVE ALL EDGES SANDED/CLEANED	WELDED GOODS WILL BE MANUFACTURED TO EXECUTION CLASS 2

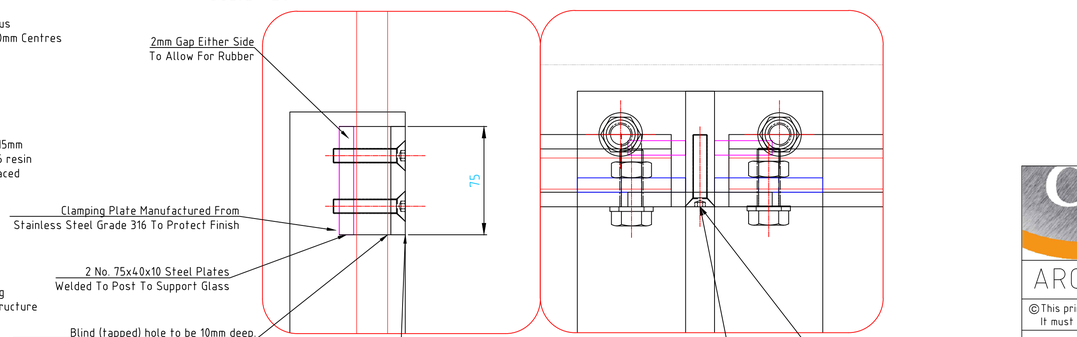




View On A-A
Proposed Faceted Glass Balustrade
Scale 1:20



Foot Of Post General Detail
Scale: (1:4)



Clamping Detail
Scale 1:2

View On B-B
Scale: (1:8)

Finish - Zinc Primer & PPC Finish
- Ral No. TBC

GENERAL NOTES

GLASS

ALL BALUSTRADE TO BE MADE FROM 21.5mm LAMINATED GLASS PANELS TO CONSIST OF 2 No. 10mm THERMALLY TOUGHENED PLIES WITH A 1.5mm STANDARD GRADE PVB INTERLAYER.

MANUFACTURING MARKS/STAMPS TO BE PLACED ON THE EDGE OF THE PANEL (NOT ON THE FACE) 100mm UP FROM THE BOTTOM CORNER. STANDARDISE LHS OR RHS, DO NOT ALTERNATE.

FFL to FFL & WALL FINISHES ETC TO BE CONFIRMED BY CLIENT/REPRESENTATIVE WHEN GIVING DRAWING APPROVAL. ALTHOUGH, WHERE POSSIBLE, CANAL SITE SURVEYS THE STRUCTURAL LEVELS, FINAL RESPONSIBILITY FOR CONFIRMATION OF FINISHES FALLS WITH THE CLIENT AND/OR REPRESENTATIVE.

BALUSTRADE POSTS TO BE 80x20MM GRADE S275 STEEL PLATE CONTINUING TO 60x20MM PLATE AT FIXING PLATE.

BASEPLATE SIZE - 225 x 170 x 15mm

UNLESS OTHERWISE STATED IN THE FINAL STRUCTURAL CALCULATIONS.

DESIGN STANDARDS AND REGULATIONS

REGULATION K - PROTECTION FROM FALLING.
REGULATION M - ACCESS TO AND USE OF BUILDINGS.
BS5395 - CODE OF PRACTICE FOR SPIRAL/HELICAL STAIRS.
BS6180 - CODE OF PRACTICE FOR BARRIERS IN AND ABOUT BUILDINGS.
BS6399 - CODE OF PRACTICE FOR LOADINGS FOR BUILDINGS.
BS5950 - CODE OF PRACTICE FOR STRUCTURAL USE OF STEELWORK IN BUILDING.

FREQUENCY RESPONSE ANALYSIS IN LINE WITH SCI PUBLICATION **P354** AND ADDITIONAL DOCUMENTS **AD330** & **AD406**.

MATERIALS - UNLESS OTHERWISE STATED ON DETAIL DRAWINGS, IN LINE WITH SPECIFIC CUSTOMER INSTRUCTIONS :

ALL MILD STEEL COMPONENTS TO BE MANUFACTURED USING THE FOLLOWING GRADES :

NON STRUCTURAL ELEMENTS/SECTIONS : S235JR.
MAIN STRUCTURE (PLATE/UB/UC) : GRADE S275JR.
STEEL SECTIONS (CHS/SHS/RHS) : GRADE S355JR.

ALL STAINLESS STEEL COMPONENTS TO BE EITHER 304L / 316L & MUST HAVE A MINIMUM STRUCTURAL STRENGTH THUS : Material yield strength on the 0.2% proof strength of the material, in this case 275N/mm².

WELDING STANDARD
VISIBLE FILLET WELDS TO BE LEFT AS LAID.
WELDS TO BE ISO 4063:
PROCESS No. 111 - "MANUAL METAL ARC" or
PROCESS No. 135 - "MAGS" or
PROCESS No. 141 - "TAGS"
REFER TO QUALITY DOCUMENT IR79 "WELD PROCEDURES" FOR FULL LIST OF WPS PRACTICES. FOLLOW APPROPRIATE WPS FOR INDIVIDUAL WELDS. IF UNSURE SEEK GUIDANCE FROM WELDING ENGINEER.

NOTE
IT IS THE RESPONSIBILITY OF THE CLIENT/BUILDER TO ENSURE THE SUITABILITY OF ANY STRUCTURE SUPPORTING AND/OR OFFERING A FIXING POINT TO OUR STAIR CASE. A STRUCTURAL ANALYSIS OF OUR STAIR CASE WILL BE ISSUED IN DUE COURSE AND SHOULD BE PASSED TO YOUR BUILDING ENGINEER WHO CAN USE THE INFORMATION IN OUR ANALYSIS TO PROVE THE BUILDINGS SUITABILITY. NO RESPONSIBILITY WILL BE ACCEPTED BY CANAL ENGINEERING LTD. FOR DAMAGE TO THE STRUCTURE OR FABRIC OF THE BUILDING RESULTING FROM IMPOSED LOADINGS.

ADDITIONAL NOTE :

EXTRACT FROM BUILDING REGS - PART K2 :

3.2 Guarding should be provided in accordance with all of the following.

a. Ensure that guarding is, as minimum, the height shown in Diagram 3.1.

b. You can use any wall, parapet, balustrade or similar obstruction as guarding.

c. Ensure that guarding can resist, as a minimum, the loads given in **BS EN 1991-1-1** with its UK National Annex and **PD6688-1-1**.

d. Where glazing is used in the guarding, refer also to Section 5 in this approved document.
Note : Typical locations for guarding are shown in Diagram 3.2. For further guidance on the design of barriers and infill panels, refer to **BS6180**.

EXTRACT FROM BS6180:2011 :
8.5.2 Handrail attachment
Where the barrier protects a difference in level greater than 600mm, a handrail should always be used unless a laminated toughened glass construction is used that would remain in-situ if a panel fails. Continuous fixing should be used for fixing the handrail to the glass, or individual fixings where calculations or tests demonstrate the component failure will not occur.
Although BS6180 is NOT regulation/Law, please confirm your requirements and compliance with your particular building control office.

Rv.	DESCRIPTION	DATE
F	Updated To Suit Structural Calcs	29/10/2019
E	Glazing Channel Fixing Position	23/10/2019
D	Updated To Suit Calcs	22/10/2019
C	Glass Channel Altered	27/09/2019
B	Glass Height Altered	27/09/2019
A	First Issue For Comments	See Below

CANAL

ARCHITECTURAL

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All dimensions in mm U.O.S

Fabrication Tolerances :
0 ? 300mm +/- 3mm
300 ? 1000mm +/- 5mm
1000 ? 2000mm +/- 7.5mm (cumulative thereafter)

Installation Tolerances :

Positional	Per 1000mm +/- 5mm
Level	Per 1000mm +/- 0.7deg
Plumb	Per 1000mm +/- 0.7deg

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TITLE:
Modus Group
South 01 - Glass Balustrade
General Assembly

APPROVAL FOR MANUFACTURE		Drawn By: C.Ryder	Date: 27/09/2019
DATE:		Scale: 1:40 A1	Job No.: C76524
SIG:		Drawing No.: 01-2190-CR-LO-01	Rev : F