

W. R. SIMMERS
 24 MAY 2002

REV	BY	DATE	DETAILS	REV	BY	DATE

GENERAL NOTES

CLIENT CAIRNGORM CHAIRLIFT CO.
 PROJECT PTARMIGAN RESTAURANT
 TITLE CAIRNGORM FUNICULAR

DRAWN: WMSS 03/07/00
 CHECKED:

W. R. SIMMERS
 STRUCTURAL ENGINEER

Backmuir
 Keith
 AB55 3PE
 Tel: 44 (0)1542 882543
 Fax: 44 (0)1542 886065
 Email: wrsimmers.fenest.co.uk

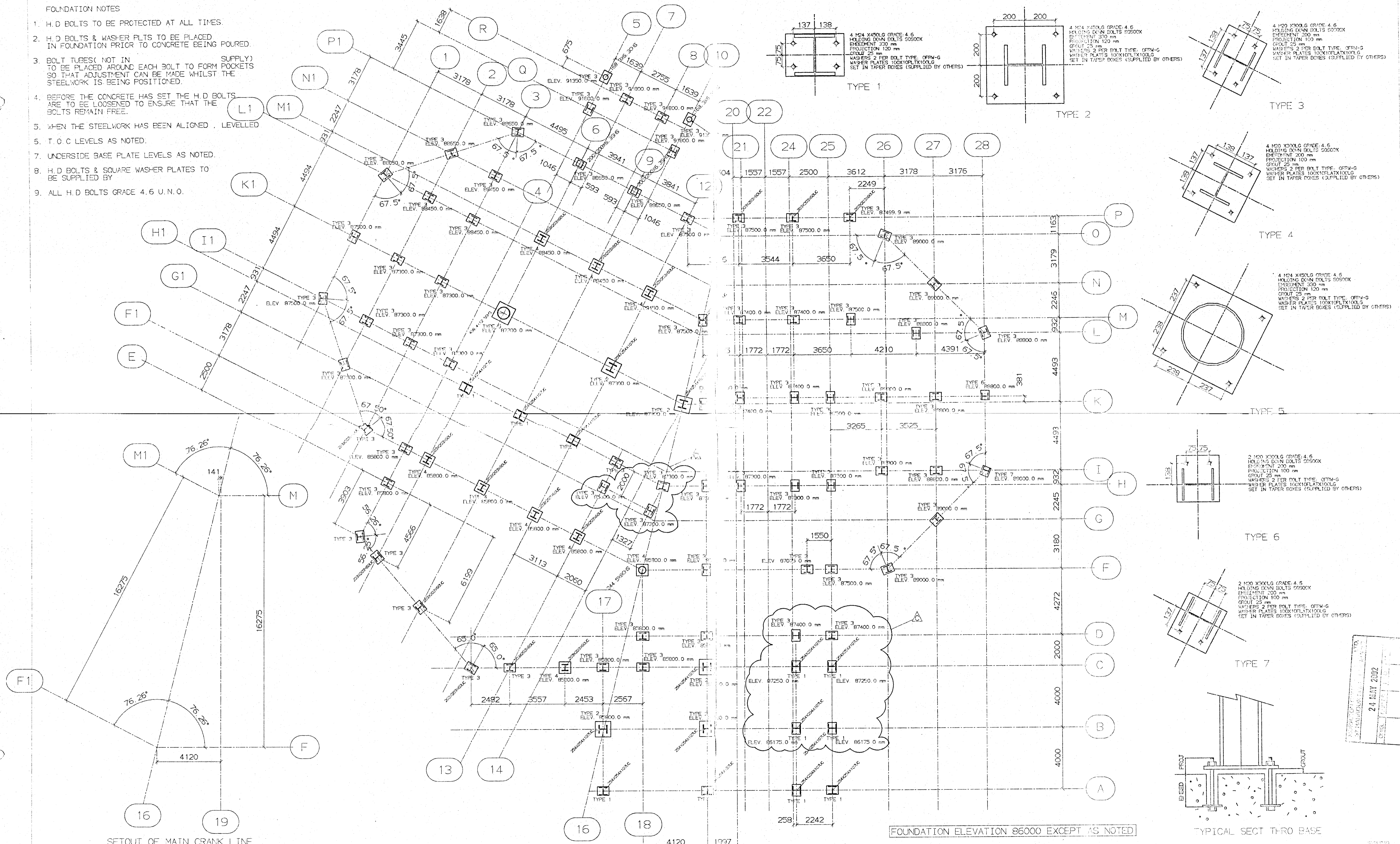
SCALE: JOB No. DIS. No. REV.
 NTS 12_2000 ga109

ISOMETRIC ON ROOF STRUCTURE

MODELLED ON STRUCAD - THE 3-D STRUCTURAL STEEL DETAILING SOLUTION.

FOUNDATION NOTES

- H.D BOLTS TO BE PROTECTED AT ALL TIMES.
- H.D BOLTS & WASHER PLTS TO BE PLACED IN FOUNDATION PRIOR TO CONCRETE BEING POURED.
- BOLT TUBES (NOT IN SUPPLY) TO BE PLACED AROUND EACH BOLT TO FORM POCKETS SO THAT ADJUSTMENT CAN BE MADE WHILST THE STEELWORK IS BEING POSITIONED.
- BEFORE THE CONCRETE HAS SET THE H.D BOLTS ARE TO BE LOOSENED TO ENSURE THAT THE BOLTS REMAIN FREE.
- WHEN THE STEELWORK HAS BEEN ALIGNED, LEVELLED
- T.O.C LEVELS AS NOTED.
- UNDERSIDE BASE PLATE LEVELS AS NOTED.
- H.D BOLTS & SQUARE WASHER PLATES TO BE SUPPLIED BY
- ALL H.D BOLTS GRADE 4.6 U.N.O.



SETOUT OF MAIN CRANK LINE

HD BOLT LAYOUT

FOUNDATION ELEVATION 86000 EXCEPT AS NOTED

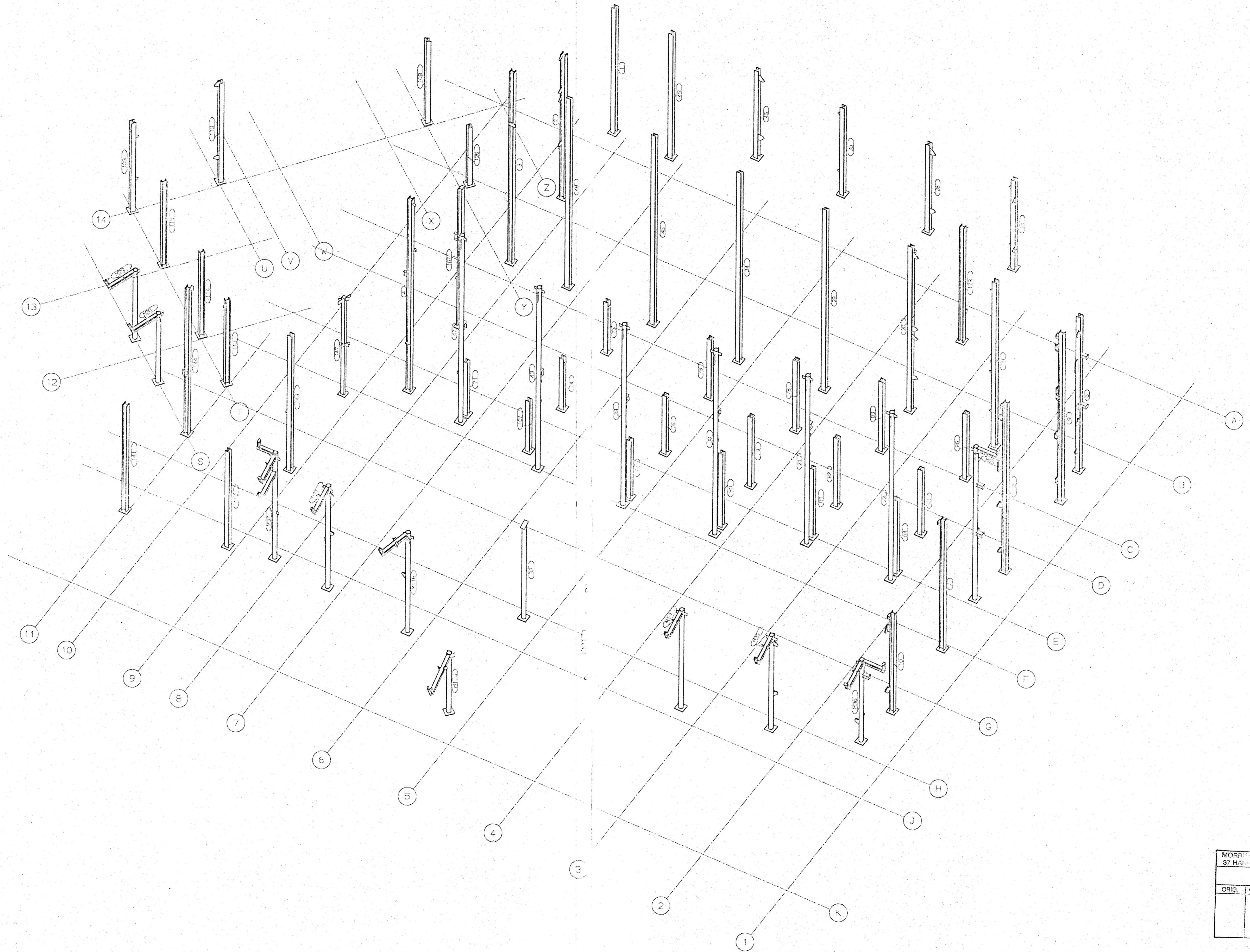
TYPICAL SECT THRO BASE

REV	NO	DATE	DESCRIPTION	BY	CHKD
B	WM	2/7/00	COLS AT G1/13, P1/12, & K/28 ROTATED		
			TYPES 6 & 7 ADDED. COL K/19 MOVED.		
A	WM	2/7/00	DRAWING UPDATED		

NO	DATE	DESCRIPTION
18	18/7/00	COLS AT D24/25, C24/25, & B24/25 BASE
19		LEVELS CHANGED, COLS AT G1-13/14
20		OFFSET, COLS AT H1-14 & G1-14 BASE
21		LEVELS CHECKED

CLIENT	CAIRNGORM CHAIRLIFT CO.
PROJECT	PTARMIGAN RESTURANT
DRAWN	WMS
CHECKED	
DATE	30/05/00

WR SIMMERS		Backmuir Keith A655 9PE	
BRIDGE HOUSE 17, BRIDGE HOUSE		Tel: 44 (0)1542 862543 Fax: 44 (0)1542 860645 Email: wr@simmers.fsnet.co.uk	
SCALE	1:2000	DWG NO	04/01



COLUMN ISOMETRIC

COLUMN ISOMETRIC

MORF	37 MAY 2002
ORIG	

REV	BY	DATE	DETAILS
A	WY	30/5/00	MARKINGS UPDATED

GENERAL NOTES

CLIENT
CATRACOBY CHAIRLIFT CO.

PROJECT
BOTTOM STATION

FILE
CATRACOBM.PUNTLIF.AB

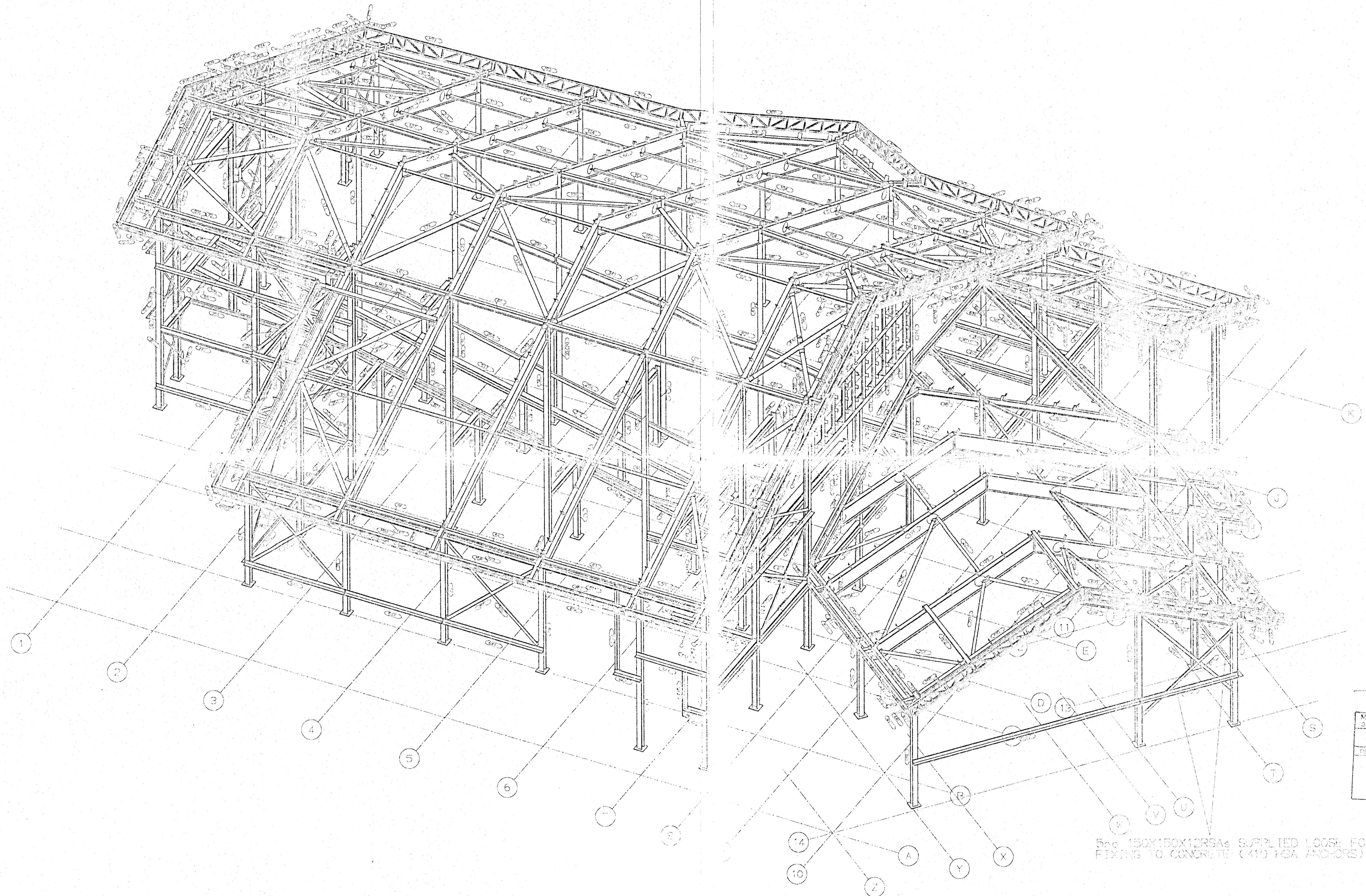
DRAWN
WJSS
18/05/00

CHECKED
18/05/00

WR SIMMERS
BANKMOR 1211H

Backman
Keith
ASS' SPE
Tel: 44 (0) 1542 882543
Fax: 44 (0) 1542 882055
Email: wr@simmers.fsnet.co.uk

SCALE	JOB No.	DWG No.	REV
NTS	12_2000	CA13	A



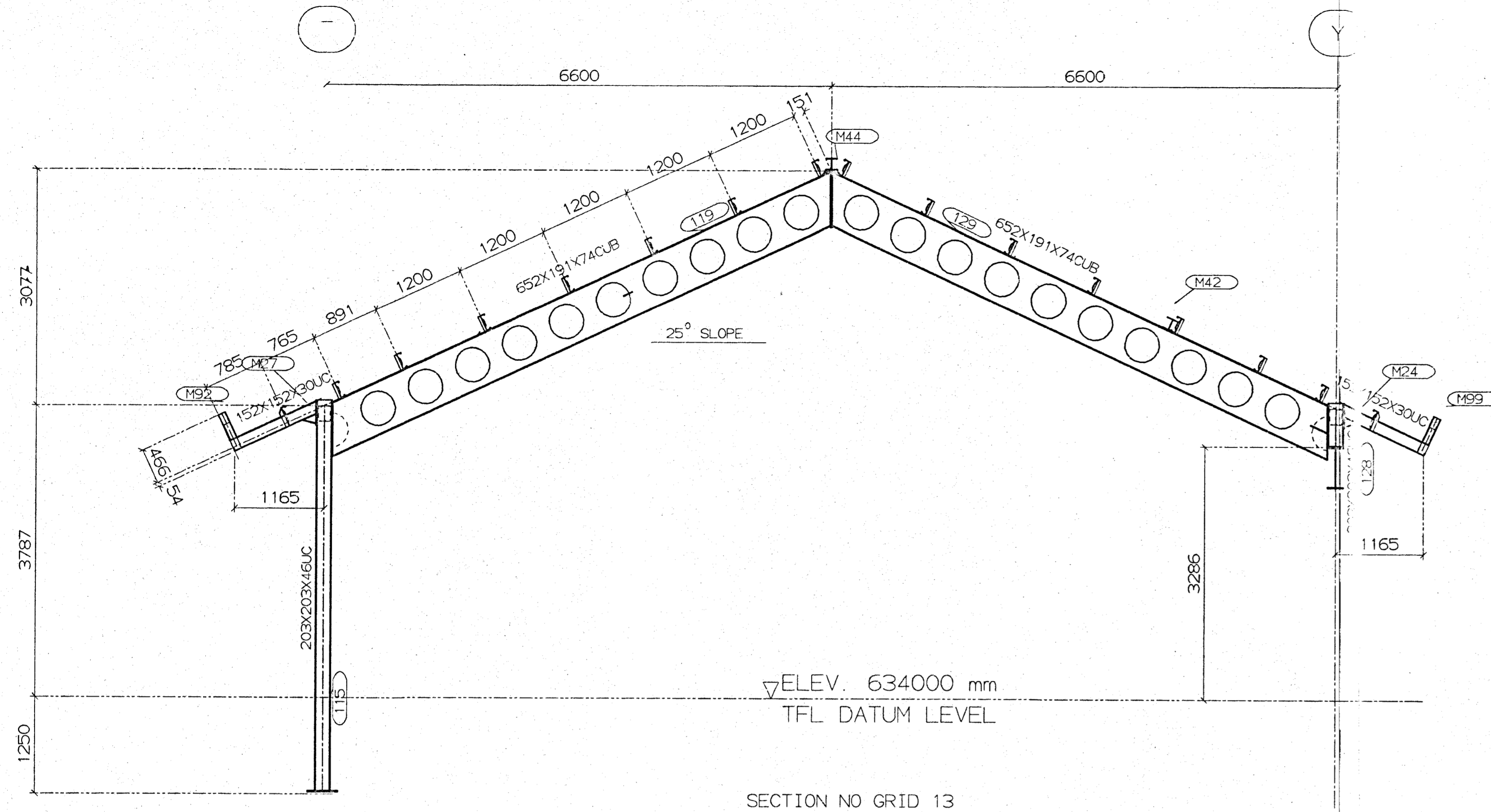
5pc 150X150X12RSAe SUPPLIED LOOSE FOR FIXING TO CONCRETE (410 FGA ANCHORS)

ERECTION 13042710

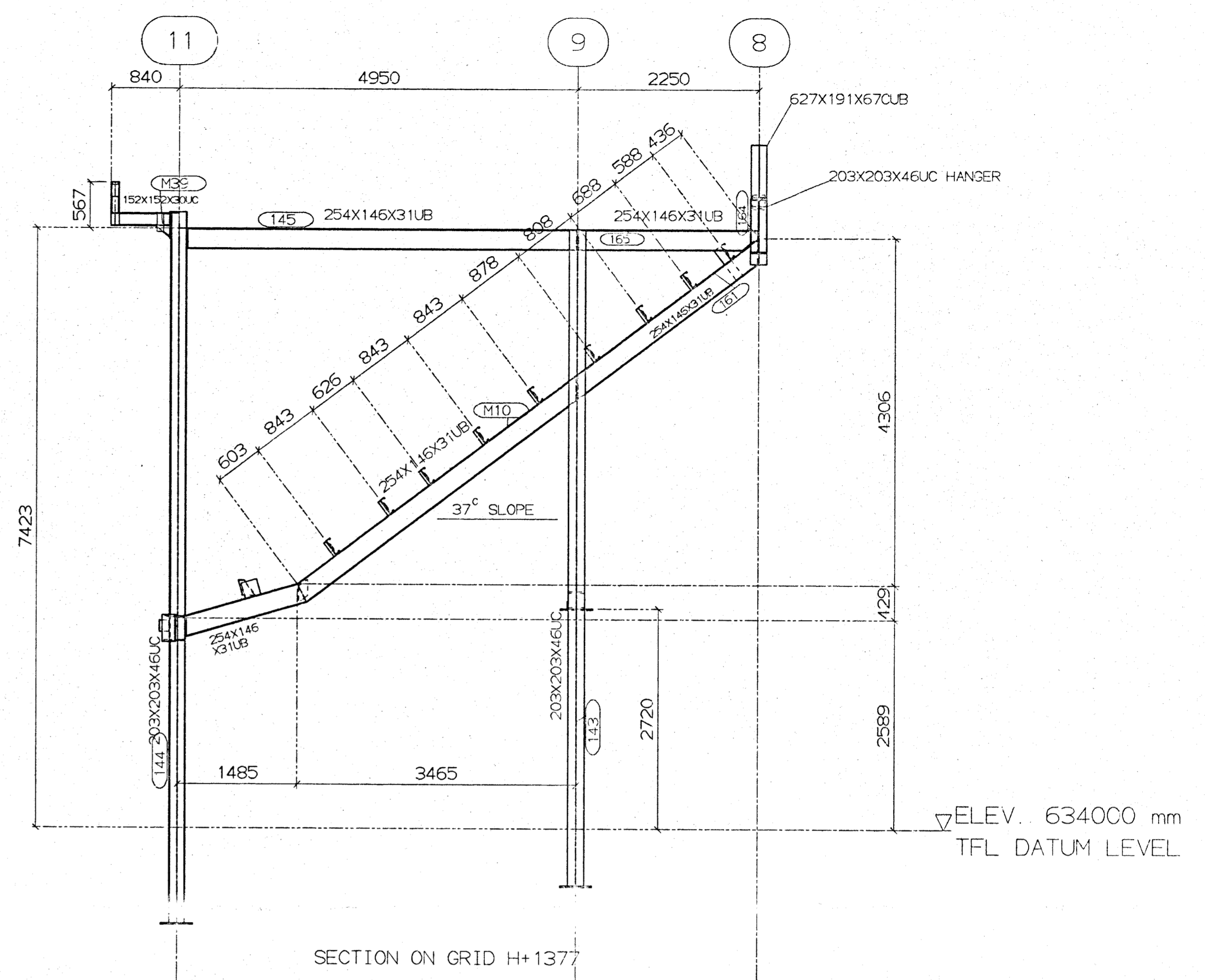
REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS
R	MM	1/5/00	MARKINGS UPDATED				
A	MM	30/5/00	MARKINGS UPDATED				

GENERAL NOTES

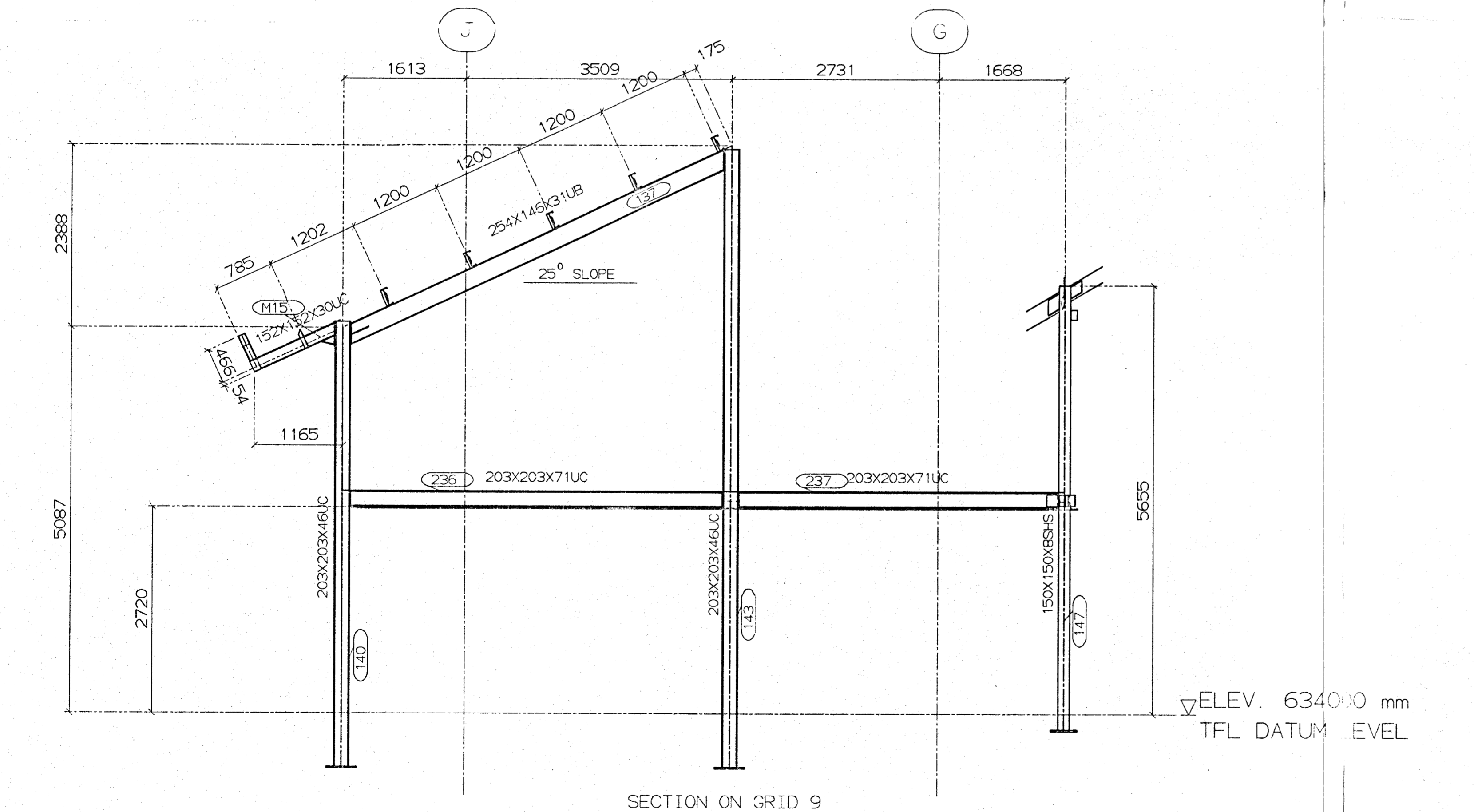
CLIENT	CAIRNGORY CHAIRLIFT CO	DRAWN	MM	19/05/00	WE SIMMONS 12/2000 4112 13/05/00	Beckwith Keith ABSC SPE Tel: 44 (0)1542 852549 Fax: 44 (0)1542 852551 Email: we@simmons-ferret.co.uk
PROJECT	BOTTO STATION	CHECKED	MM	19/05/00		
TITLE	CAIRNGORY FUNICULAR	SCALE	1:100	DATE	12_2000	13



SECTION NO GRID 13



SECTION ON GRID H+1377



SECTION ON GRID 9

DATE	24 MAY 2002
BY	KEITH
CHECKED	
APPROVED	

REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS

GENERAL NOTES

CLIENT
CAIRNGORM CHAIRLIFT CO.

PROJECT
BOTTOM STATION

TITLE
CAIRNGORM FUNICULAR

DRAWN
WMSS 04/05/00

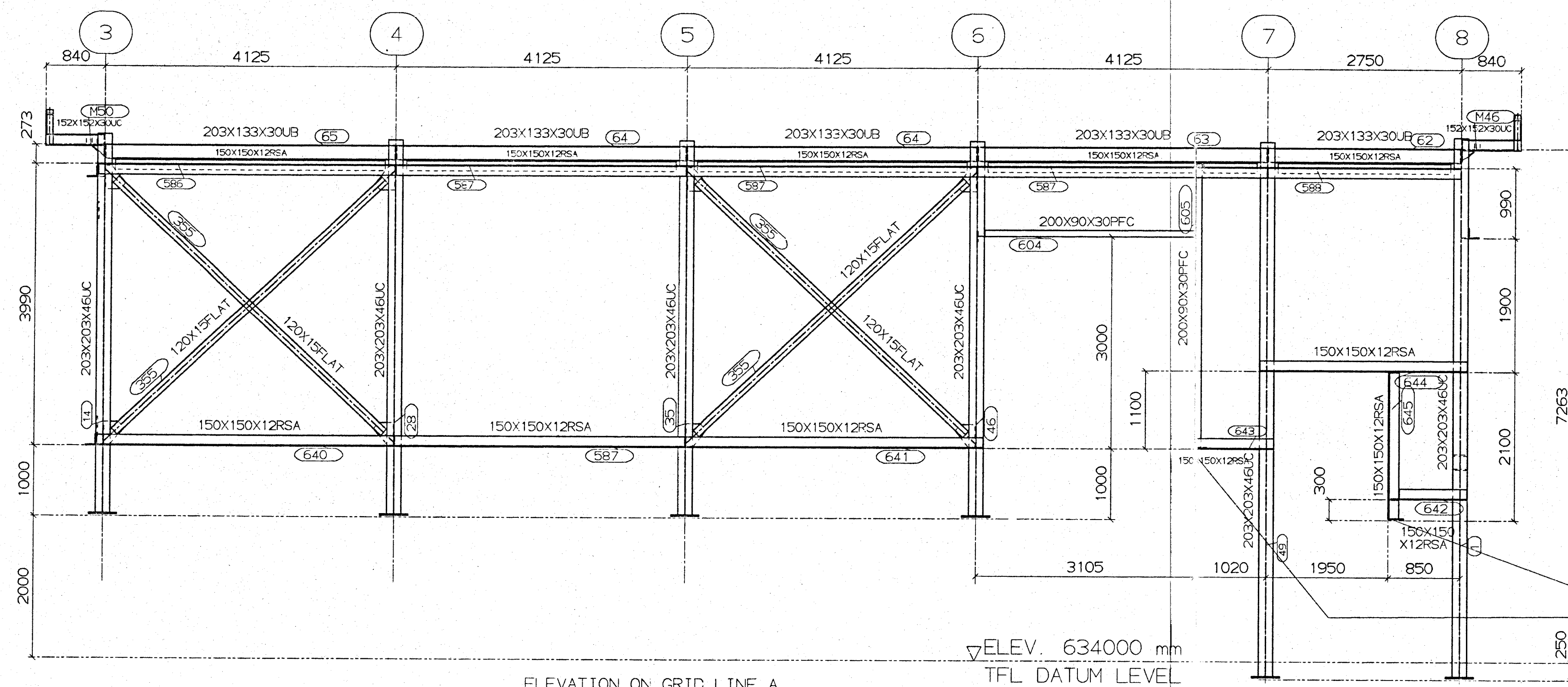
CHECKED

STRUCAD

WR SIMMERS
Backmuir Keith
AB55 3PE
Tel: 44 (0)1542 882543
Fax: 44 (0)1542 886065
Email: wr@simmers.fsnet.co.uk

SCALE	JOB No	DWG No.	REV
NTS	12_2000	GA11	

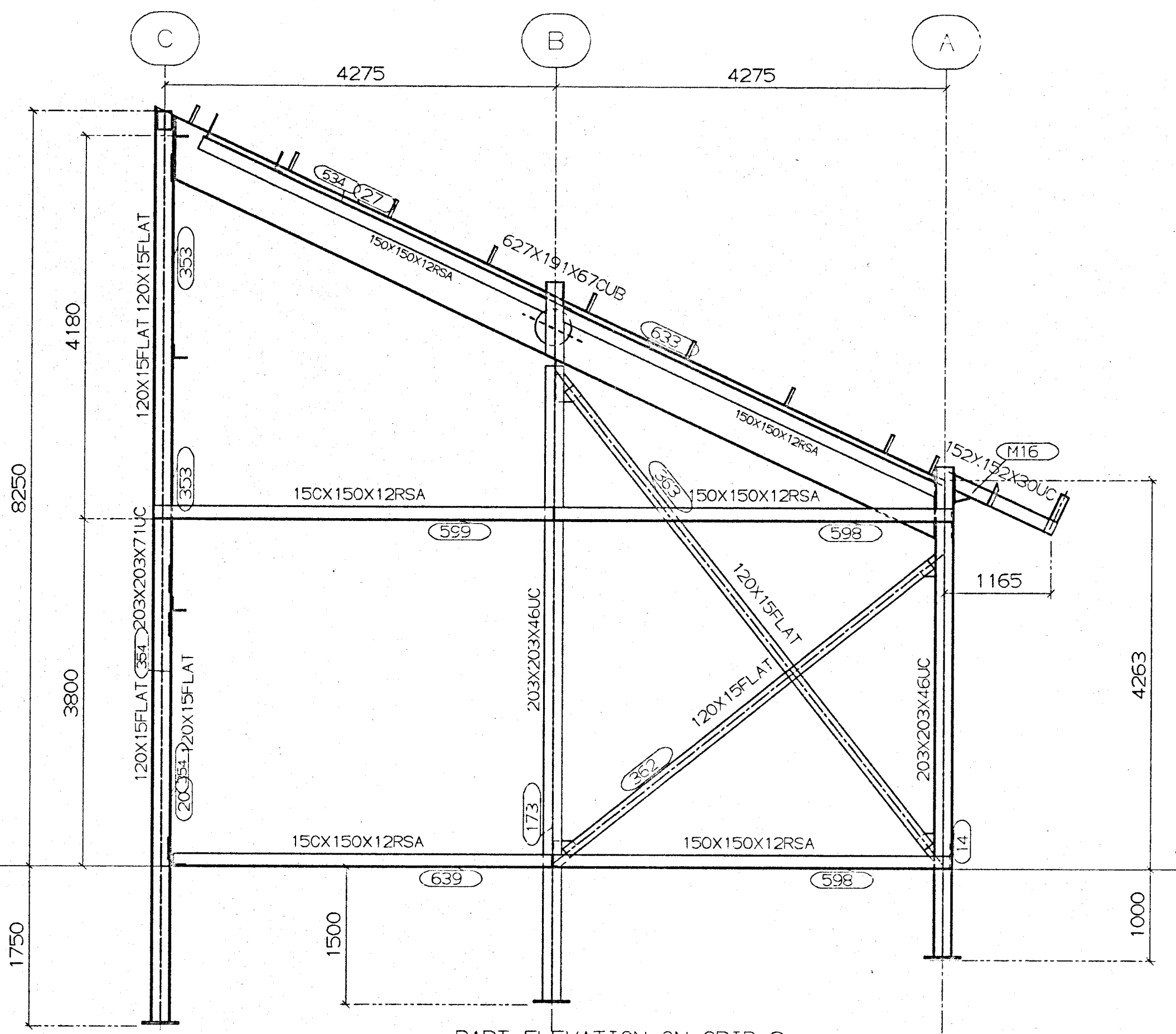
MODELLED ON STRUCAD - THE 3-D STRUCTURAL STEEL DETAILING SOLUTION.



ELEVATION ON GRID LINE A

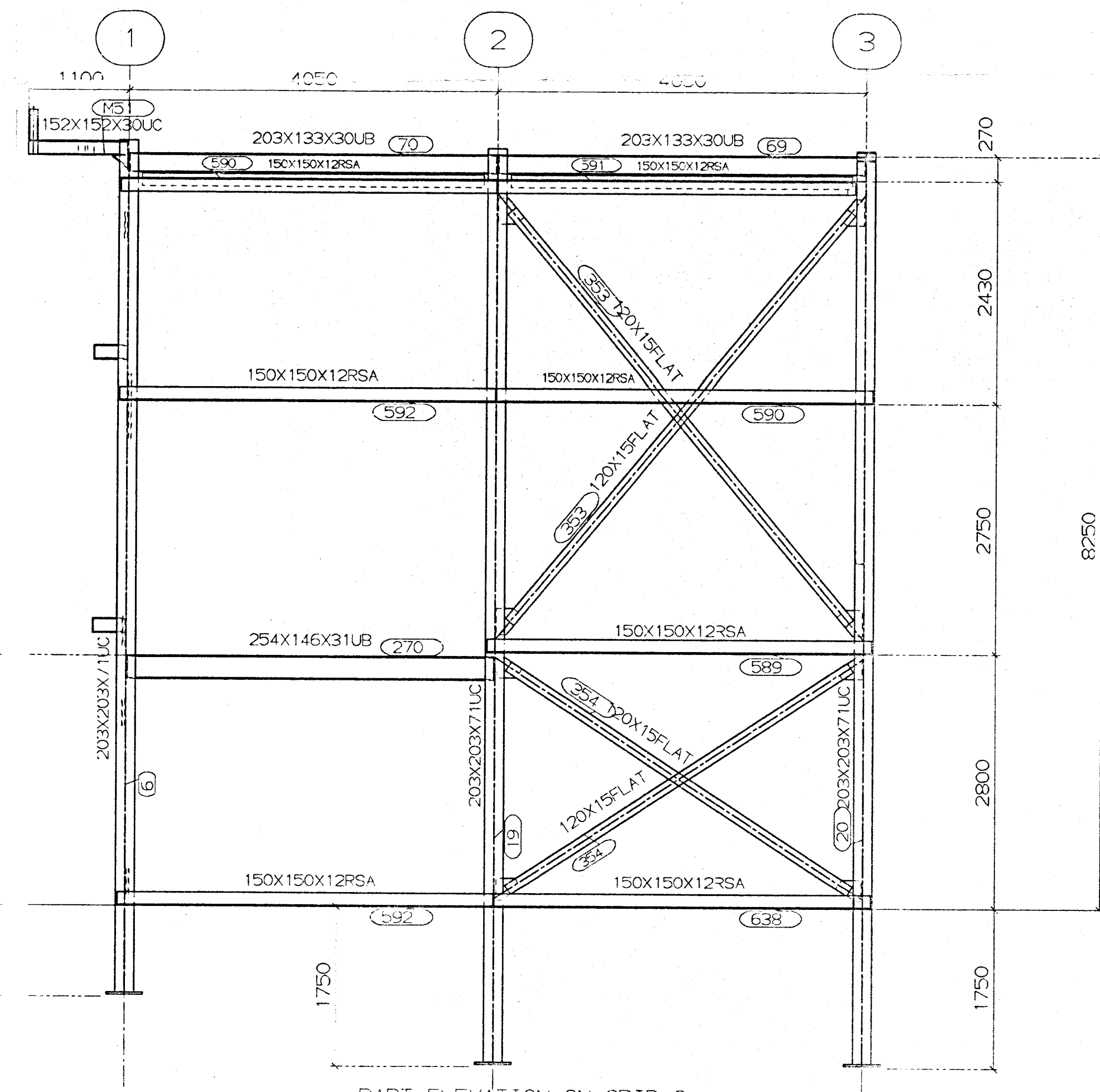
▽ELEV. 634000 mm
TFL DATUM LEVEL

DOORPOSTS FIXED TO CONCRETE WITH
M16 HILTI HSL ANCHORS.



PART ELEVATION ON GRID 3

▽ELEV. 637000 mm
TFL DATUM LEVEL



PART ELEVATION ON GRID C

ELEVATIONS

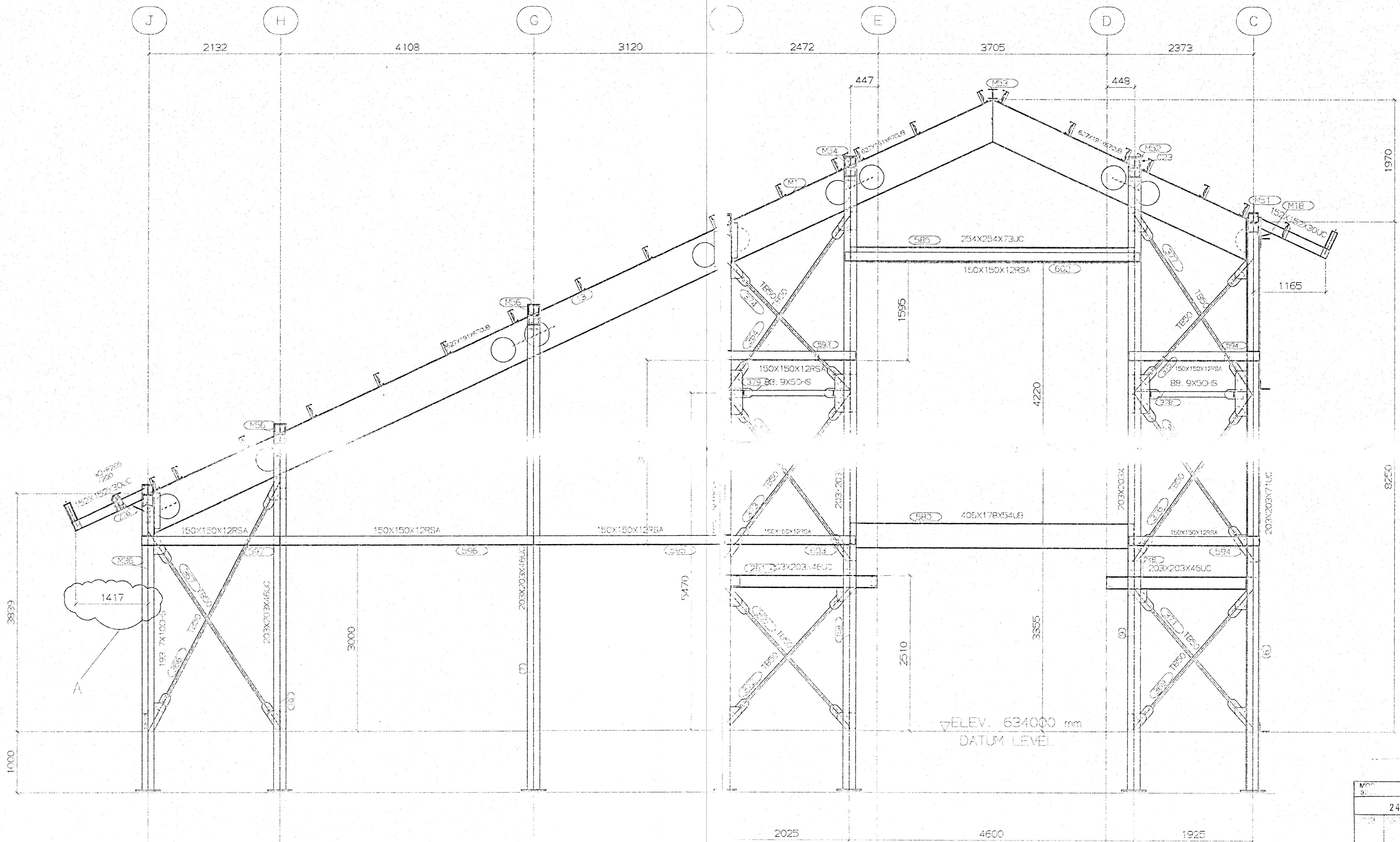
MORRISON ENGINEERING LTD
37 HARBOUR STREET
GLASGOW G7 7LQ
24 MAY 2002
DRG. CHECKED BY: [Signature] APPROVED BY: [Signature]

REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS

GENERAL NOTES

CLIENT	CAIRNGORM CHAIRLIFT CO.	DATE	04/05/00
PROJECT	BOTTOM STATION	DRAWN	WJSS
TITLE	CAIRNGORM FUNICULAR	CHECKED	

<p>WJ SIMMERS Structural Engineers 158/159, 22nd St Glasgow G1 1JH</p>	<p>Beckmuir Keith AB55 3PE Tel 44 (0)1542 892543 Fax 44 (0)1542 896065 Email wj@simmers.faret.co.uk</p>
	<p>DATE: 10.2000</p>
	<p>GA10</p>



ELEVATION ON GRID LINE 1

ELEVATION ON GRID LINE 1

DATE	24 MAY 2002
BY	
CHECKED	

REV	DATE	REVISIONS	REV	BY	DATE	DETAILS
1	20/05/02	LEAVES OVERHANG SIZE ALTRND				

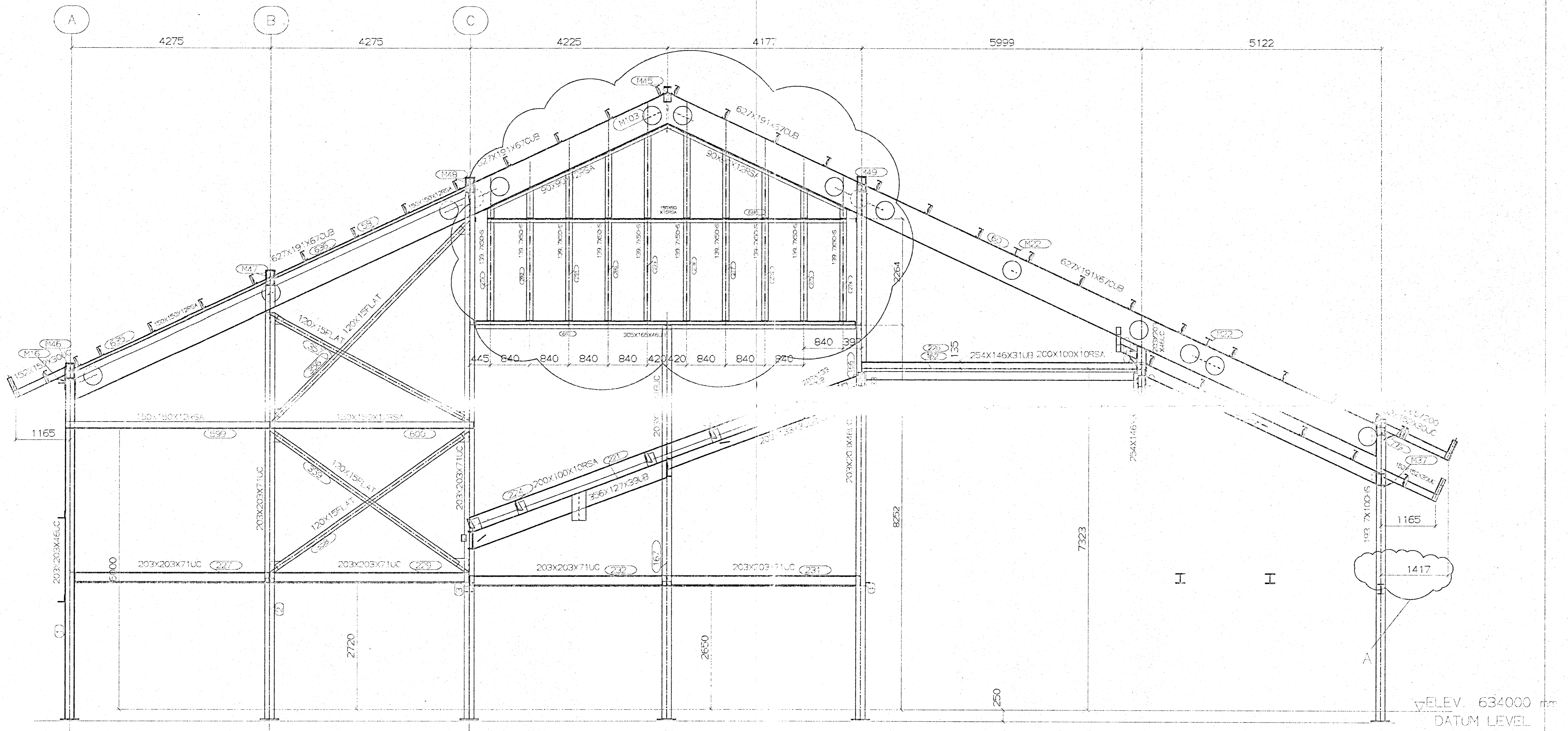
GENERAL NOTES

CLIENT	CARRIZORN & STRAIT CO
PROJECT	BOTTOM STATION
TITLE	CARRIZORN BUILDING

DRAWN	MS	01/05/02
CHECKED		

WR SIMMONS	
DIPLOMA	KEITH
SCALE	1:200
NTS	12_2000

Bechmar
 Keith
 AB55 3PE
 Tel: 44 (0)1542 892543
 Fax: 44 (0)1542 895065
 Email: wrsimmons@fnat.co.uk



ELEVATION ON GRID LINE 8

ELEV. 634000 mm
DATUM LEVEL

Approved	16
Checked	15
24 MAY 2002	
WR SIMMERS	

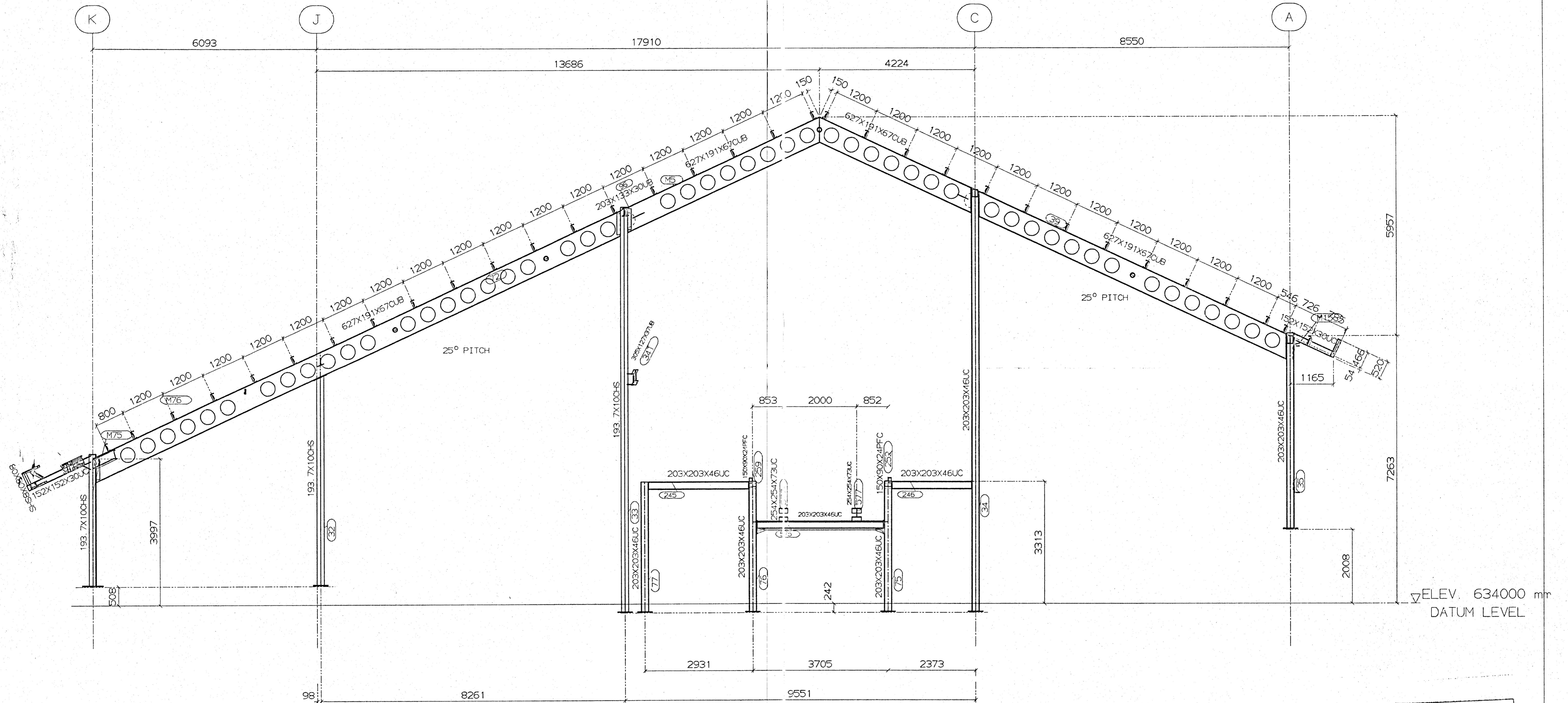
ELEVATION ON GRID LINE 9

REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS
0	WV	30/5/00	EAVES OVERHANG SIZE ALTERED				
1	CM	18/05/00	GLAZING PANEL REVISED (VR2101)				

GENERAL NOTES

CLIENT	CAIRNGORM CHAIRLIFT CO.
PROJECT	BOTTOM STATION
TITLE	CAIRNGORM FUNICULAR

DRAWN	WVSS	04/05/00	WR SIMMERS	Beckmair Keith AB55 GPE Tel: 44 (0)1542 892543 Fax: 44 (0)1542 896055 Email: wrsimmers.fsnet.co.uk
CHECKED				
SCALE	JOB No	DWG No	NTS	12.2000
			GAS	



SECTION ON GRID LINE 5

Mo	
St	
24 MAY 2002	

SECTION ON GRID LINE 5

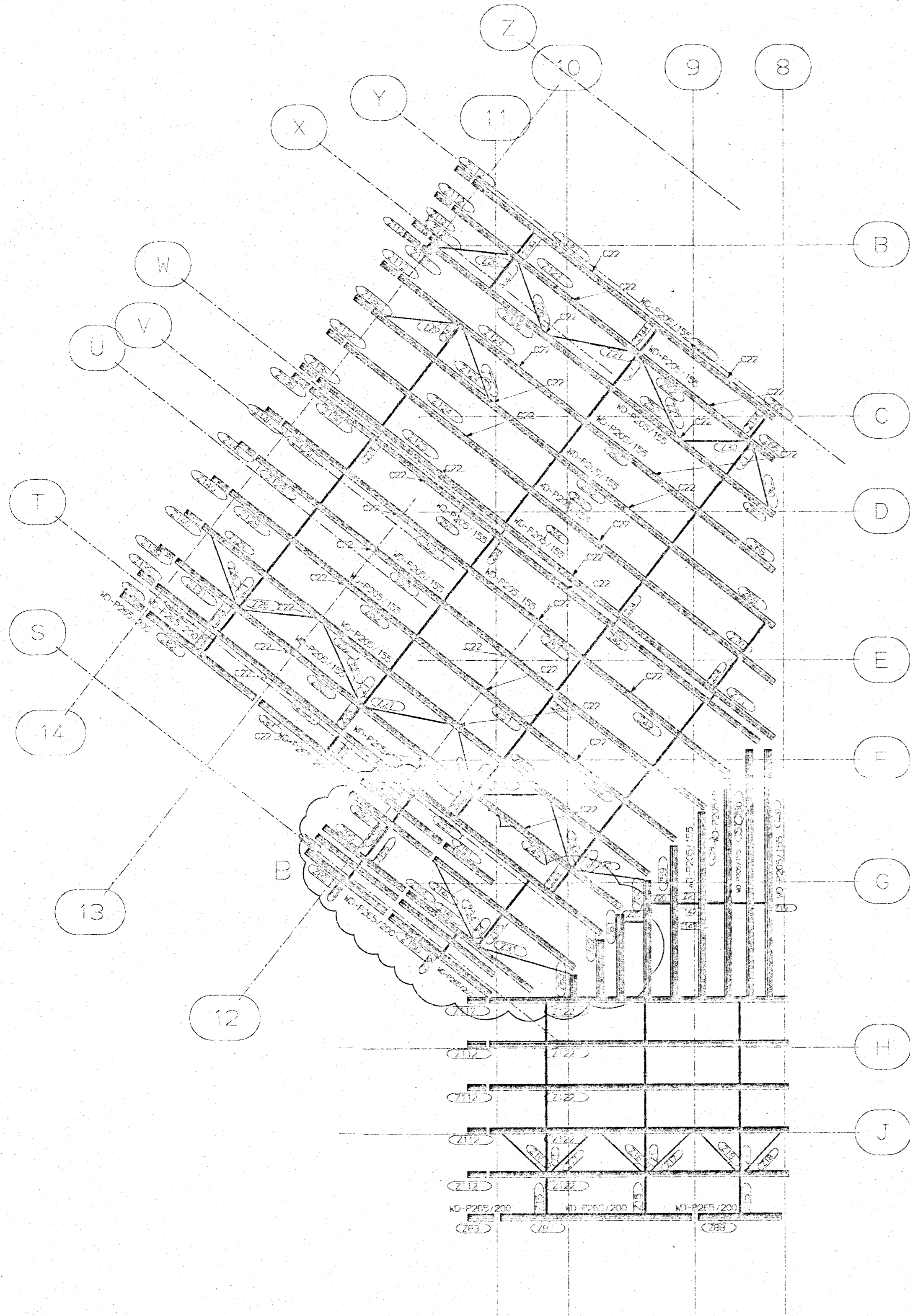
REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS

GENERAL NOTES

CLIENT	CAIRNGORM CHAIRLIFT CO.
PROJECT	BOTTOM STATION
TITLE	CAIRNGORM FUNICULAR

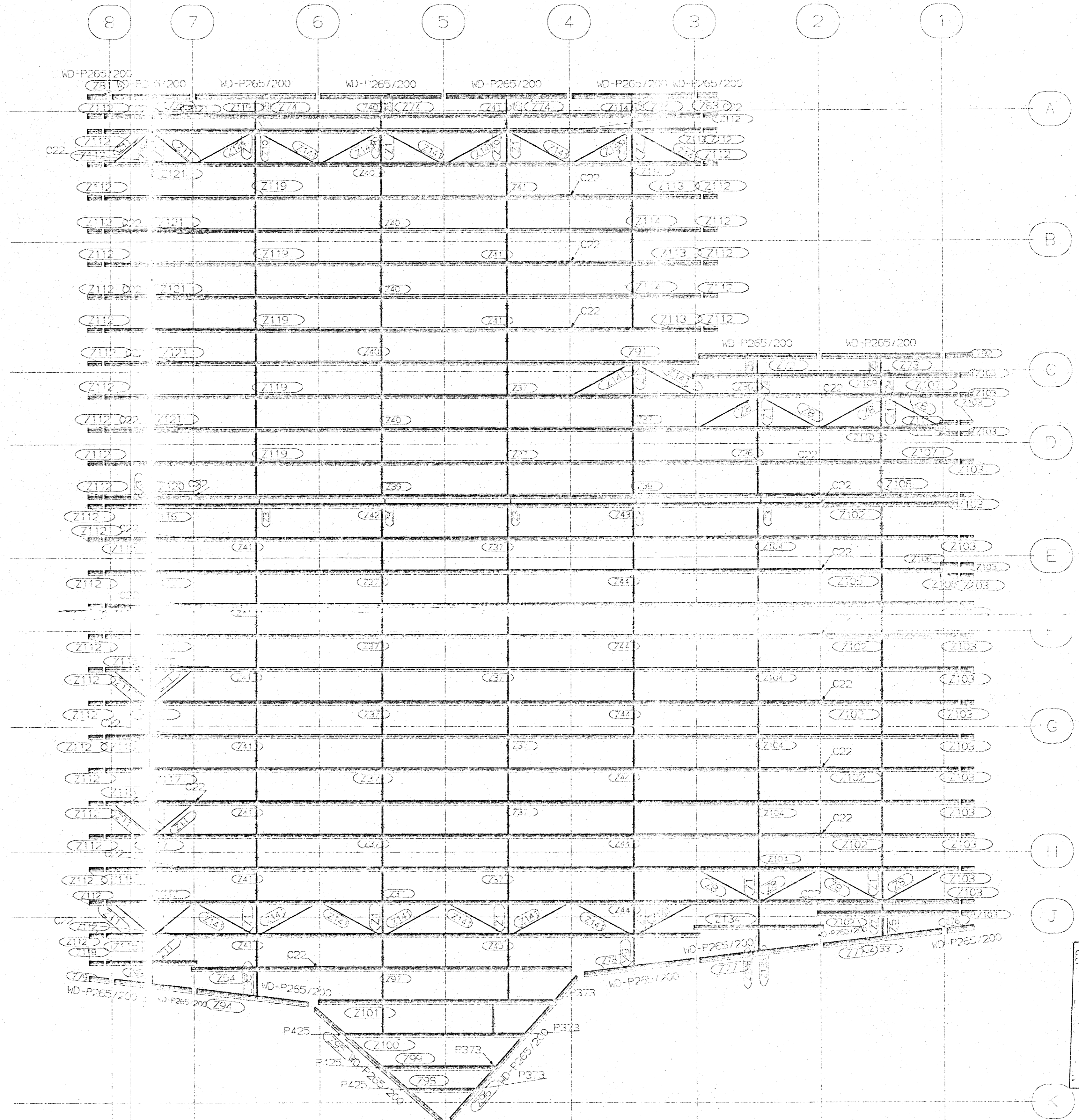
DRAWN	WMSS	04/05/00
CHECKED		

WR SIMMERS		Backmuir Keith AB55 3PE	
BACKMUIR, KEITH		Tel: 44 (0)1542 882543 Fax: 44 (0)1542 886065 Email: wr@simmers.fsnet.co.uk	
SCALE	JOB No	DWG No.	REV
NTS	12_2000	GA7	



PURLIN PLAN (LOW LEVEL)

COLD ROLLED WD-P205/145 U.N.O.
COLD ROLLED MARKED Z2 U.N.O.



PURLIN PLAN (MAIN BUILDING)

COLD ROLLED WD-P205/145 U.N.O.
COLD ROLLED MARKED Z2 U.N.O.

PURLIN PLANS

REV	BY	DATE	REVISION	BY	DATE	DETAILS
B	MM	1/6/00	GRID S FASCIA ALTERED			
A	DM	18/05/00	LOW ROOF PURLINS OMITTED (102/101)			

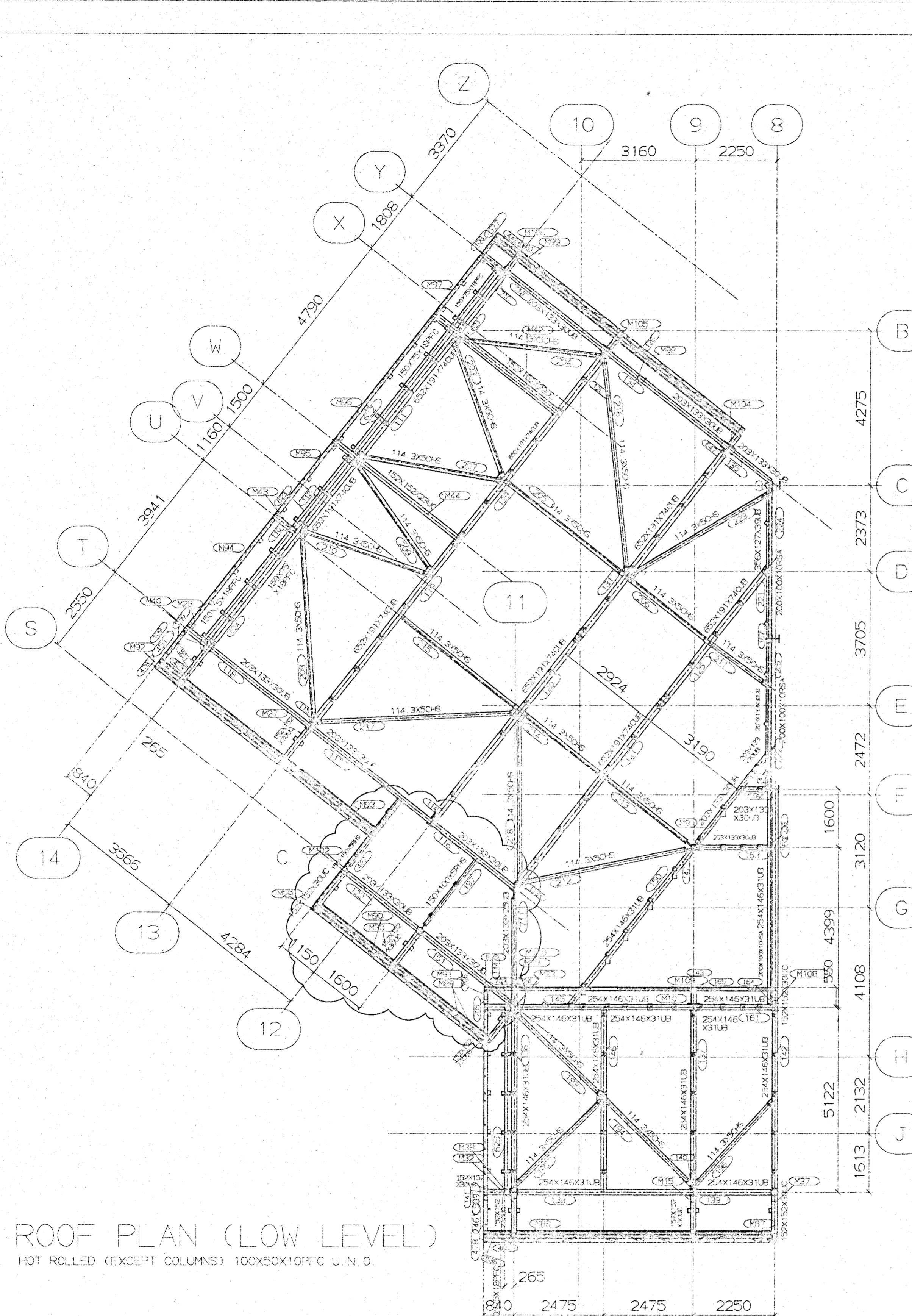
GENERAL NOTES

CLIENT	CAIRNGORY CHAIRLIFT CO.	DATE	04/05/00
PROJECT	BOTTOM STATION	DRAWN	WIM
TITLE	CAIRNGORY FUNICULAR	CHECKED	

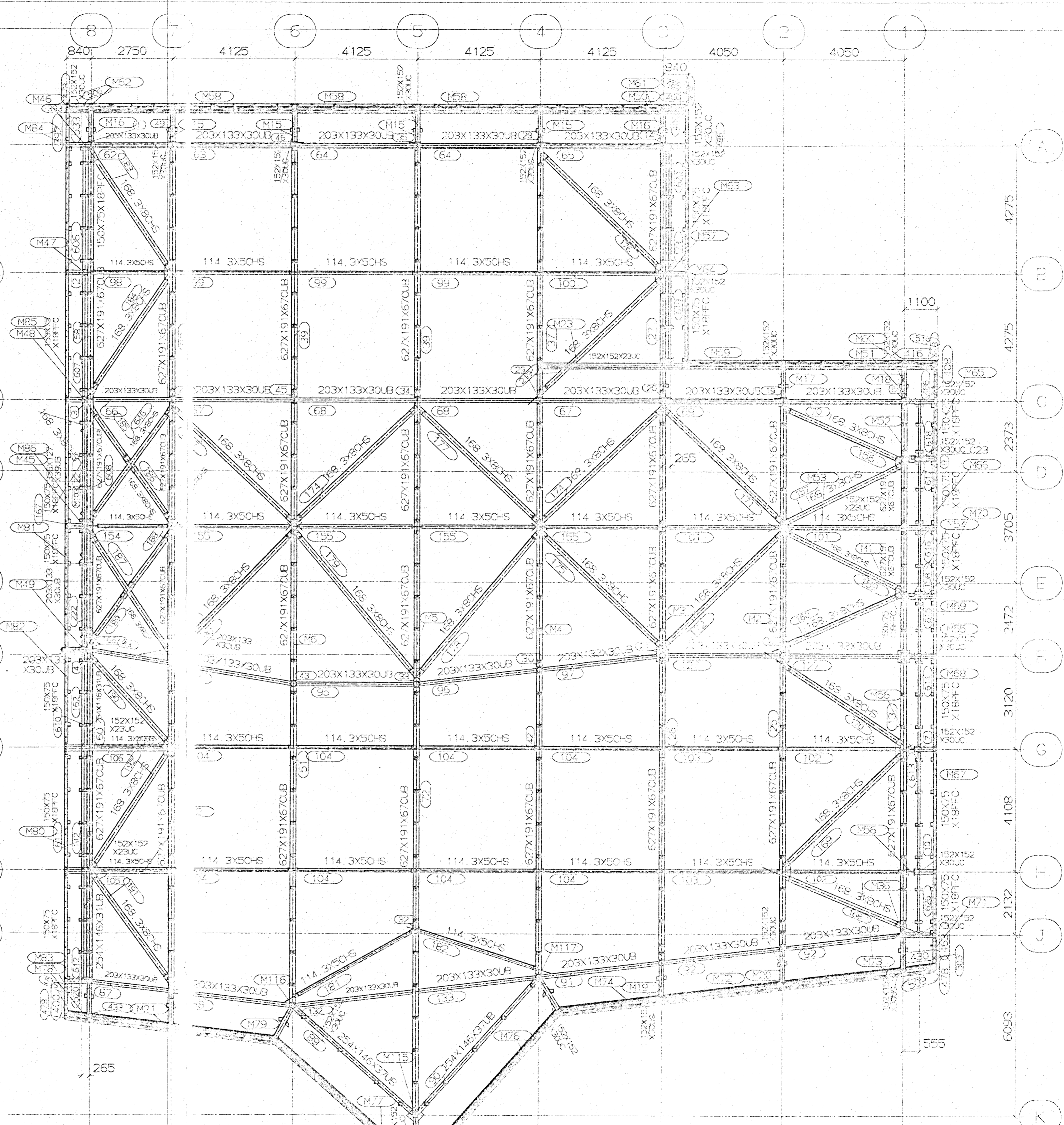
WIM SIMMONDS

Beckmuir
Kiln
Aberdeen
Tel 44 (0)1542 882543
Fax 44 (0)1542 882065
Email wsimmonds@fastnet.co.uk

21 MAY 2002
 DATE CODES INFO ACTION



ROOF PLAN (LOW LEVEL)
HOT ROLLED (EXCEPT COLUMNS) 100X50X10FPC U.N.D.



ROOF PLAN (MAIN BUILDING)
HOT ROLLED (EXCEPT COLUMNS) 100X50X10FPC U.N.D.

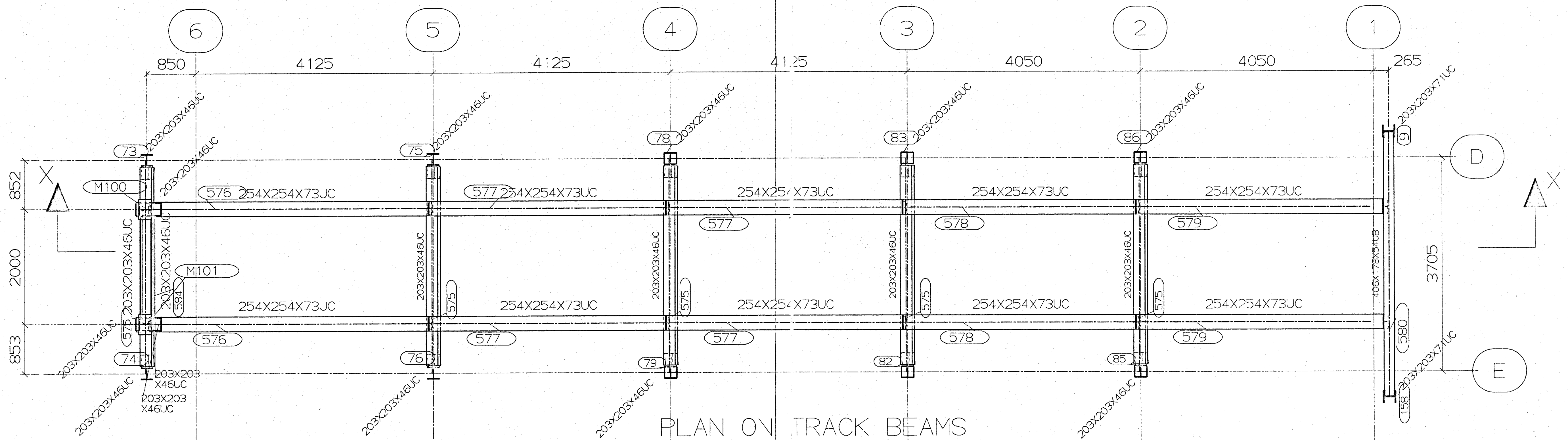
MORRISON ENGINEERING
37 HARRISON ROAD, SINGAPORE
24 MAY 2002
DWG NO. 11-30

REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS
C	NM	1/6/00	GRID 8 FASCIA AND RAFTERS ALTERED				
B	MM	30/5/00	MARKINGS UPDATED				
A	DM	17/05/00	RAFTER BRACING OMITTED, FASCIAS REVISED (VR2/01)				

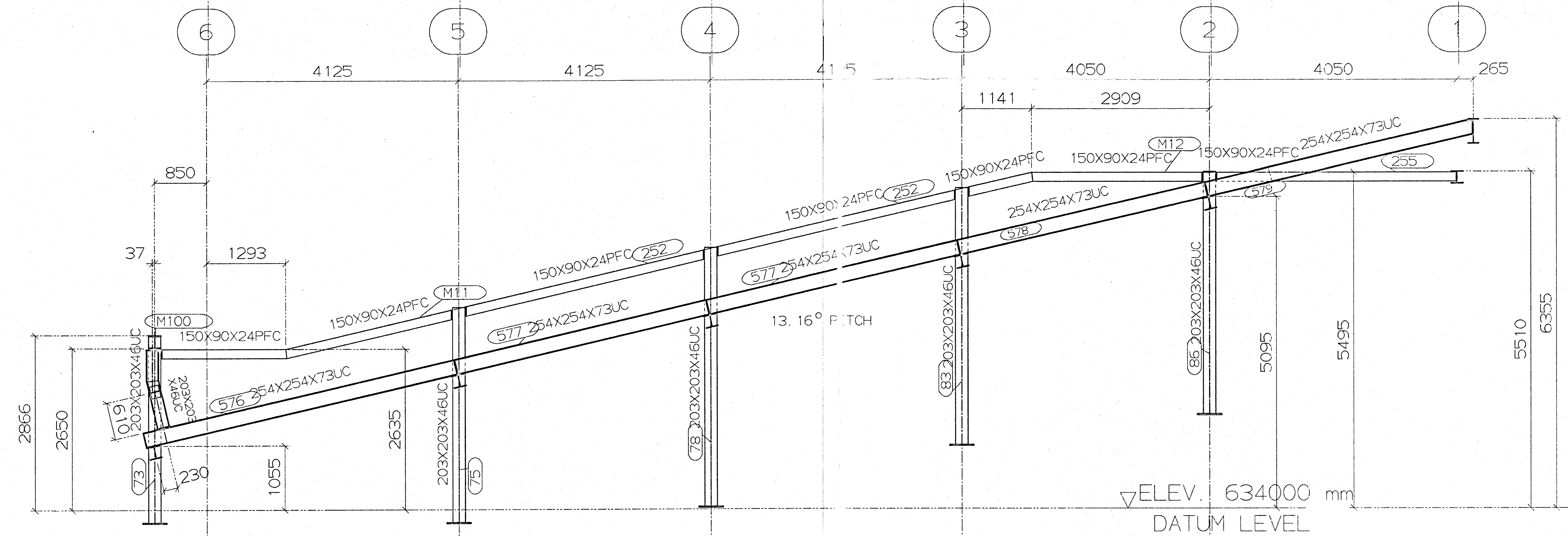
GENERAL NOTES

CLIENT: CHANGYI CHAIRLIFT CO.
PROJECT: BOTTOM STATION
DRAWN: WISS 04/05/00
CHECKED: []
SCALE: 1:2000
DATE: 24 MAY 2002

WR SIMMERS
Backmuir Keith
AB55 9PE
Tel 44 (0)1542 882543
Fax 44 (0)1542 882055
Email: wr@simmers.fsnet.co.uk



PLAN ON TRACK BEAMS



SECTION ON X-X

PLAN ON TRACK BEAMS

STRUCAD

MCHAMBER CONSTR	
97 HARBOUR ROAD	
24 MAY 2002	
ORIG	COPIES

▽ELEV. 634000 mm
DATUM LEVEL

GENERAL NOTES

CLIENT

CAIRNGORRAN CHAIRLIFT CO.

PROJECT

BOTTOM STATION

TITLE

CAIRNGORRAN FUNICULAR

DRAWN

WMSS

04/05/00

CHECKED

WR SIMMERS

BACKMUR, KEITH

Backmuir
Keith
AB55 3PE

Tel: 44 (0) 1542 882543

Fax: 44 (0) 1542 886065

Email: wr@simmers.fsnet.co.uk

SCALE

JOB No

DWG No.

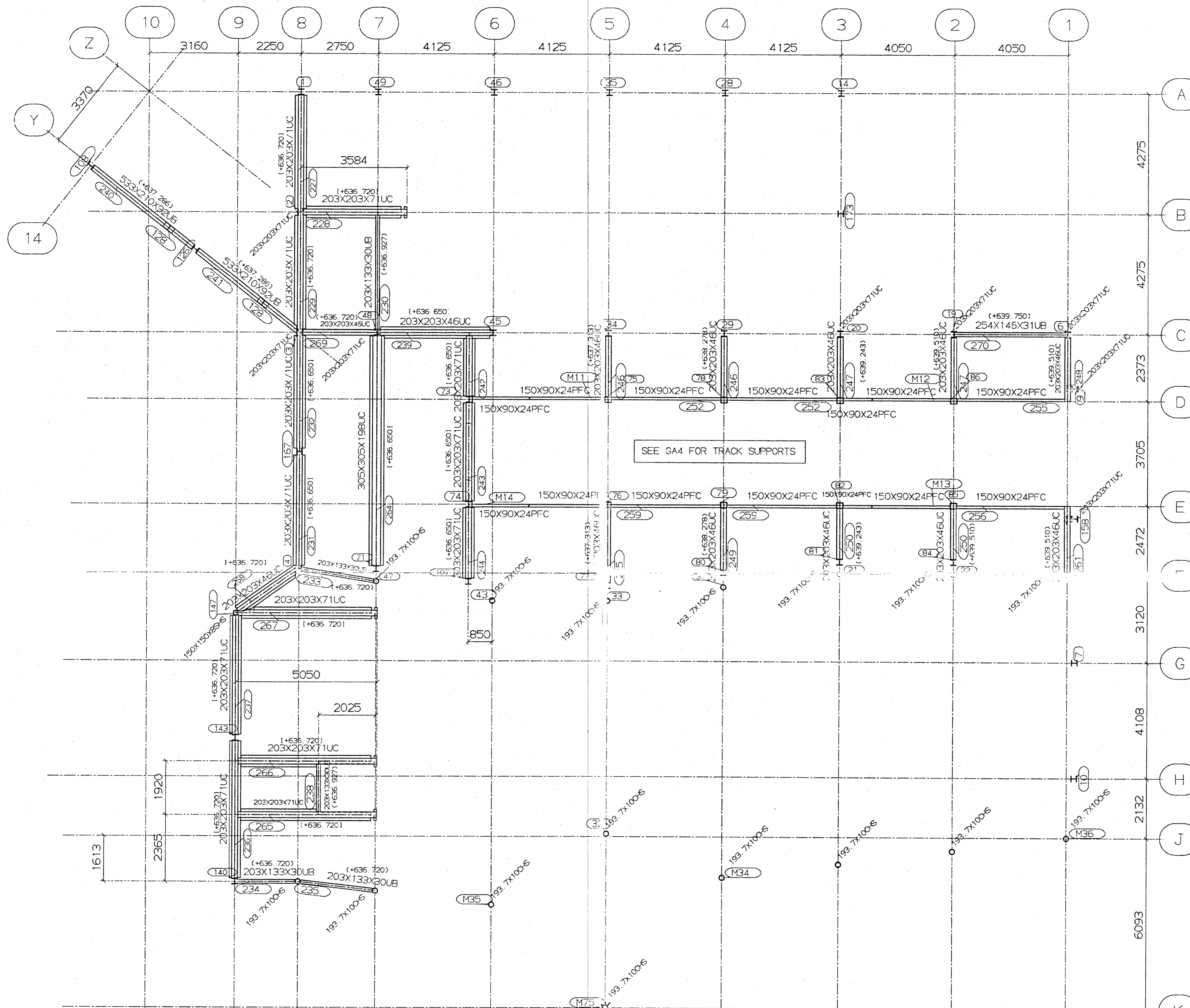
REV

NTS

12_2000

GA4

REV	BY	DATE	DETAILS



SEE GA4 FOR TRACK SUPPORTS

PLAN AT FLOOR LEVEL

HOT ROLLED COLUMNS 203X203X46UC U.N.O.
 BEAMS SHOWN WITH LEVELS THUS () ARE TAKEN TO TOP OF SLIMFLOOR PLATE.
 ALL OTHER BEAM LEVELS SHOWN THUS () ARE TO TOP FLANGE.

WRSIMMERS	24 MAY 2002

PLAN AT FLOOR LEVEL STRUCAD

REV	BY	DATE	DETAILS	REV	BY	DATE	DETAILS

GENERAL NOTES

CLIENT
 CAIRNGORM CHAIRLIFT CO.

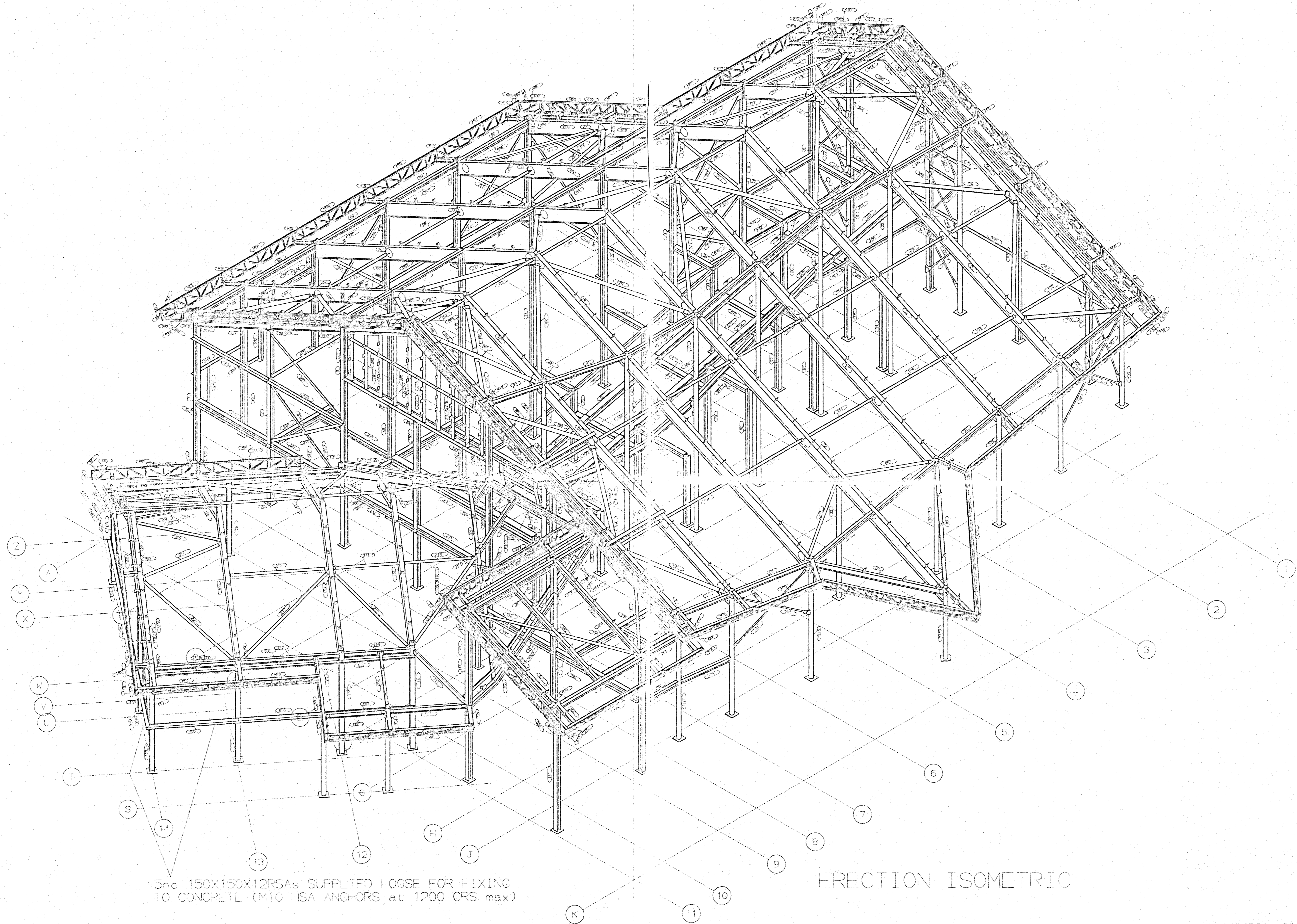
PROJECT
 BOTTOM STATION

TITLE
 CAIRNGORM FUNICULAR

DRAWN
 WMSS 04/05/00

CHECKED

WRSIMMERS		Backmuir Keith AB55 3PE	
BADMUR, KEITH		Tel: 44 (0)1542 882543 Fax: 44 (0)1542 886065 Email: wrsimmers.fsnet.co.uk	
SCALE	JOB No	DWG No.	REV
NTS	12_2000	GA3	



5no 150X150X12RSAs SUPPLIED LOOSE FOR FIXING TO CONCRETE (M10 HSA ANCHORS at 1200 CRS max)

ERECTION ISOMETRIC

TRISON (UK) LTD
 24 MAY 2002
 COPIES

ERECTION ISOMETRIC

NO	DATE	BY	DETAILS
c	1/6/00	MM	MARKINGS UPDATED
b	30/5/00	MM	MARKINGS UPDATED
a	17/5/00	DM	REDRAWN TO SUIT APPROVAL COMMENTS (LR2101)

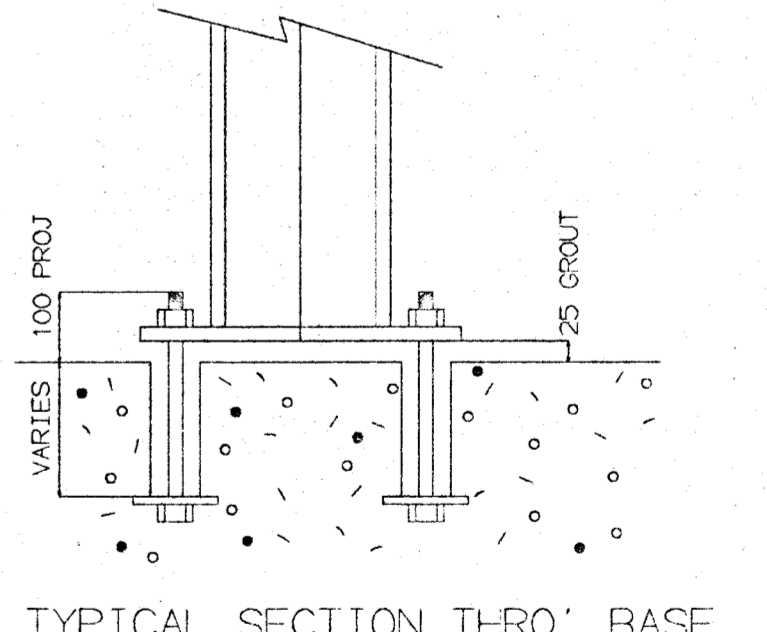
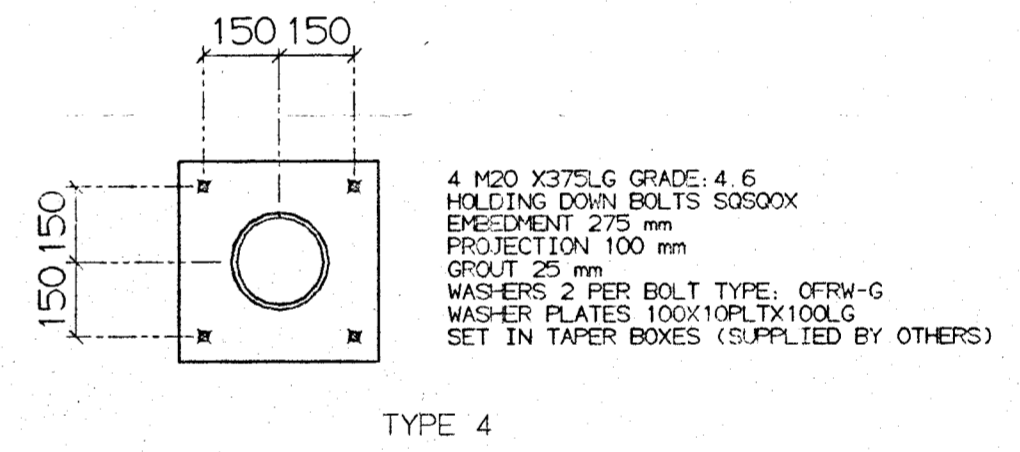
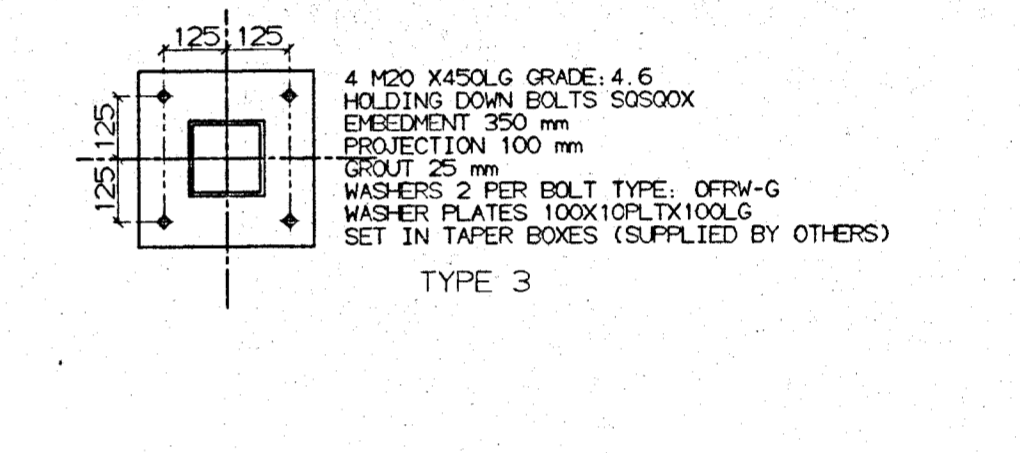
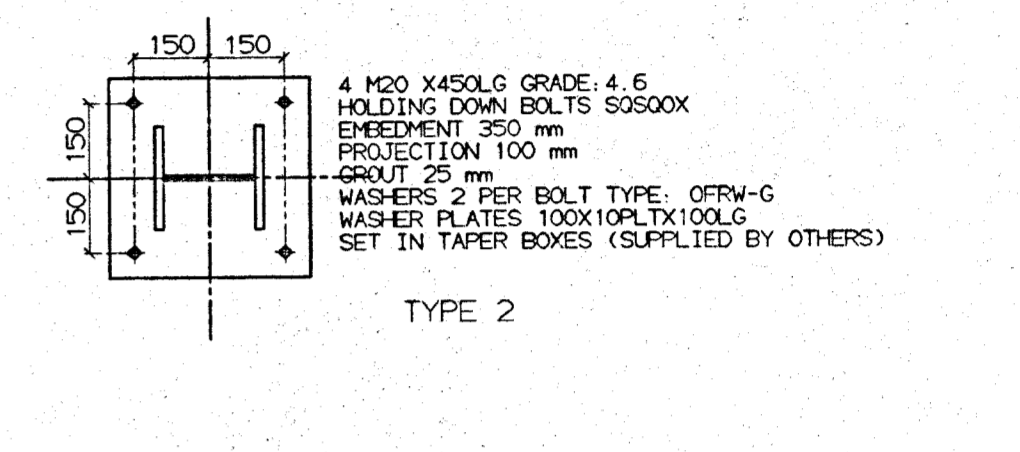
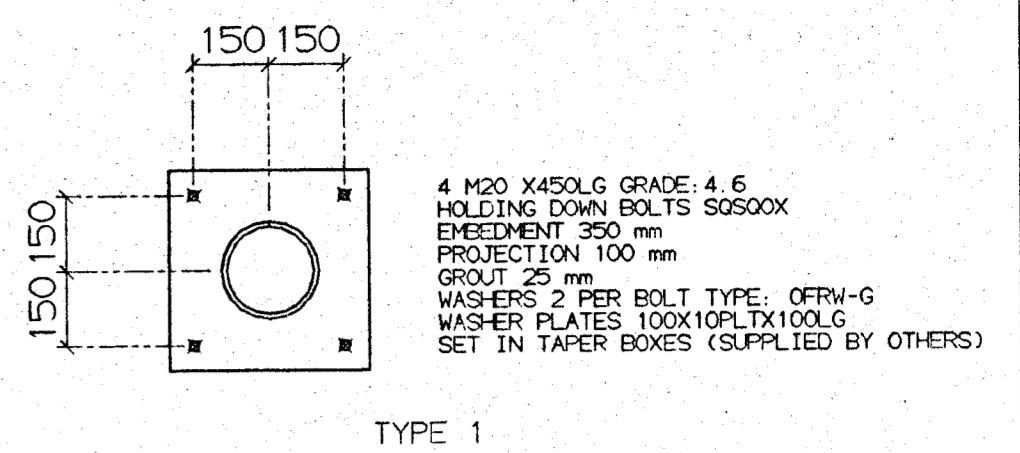
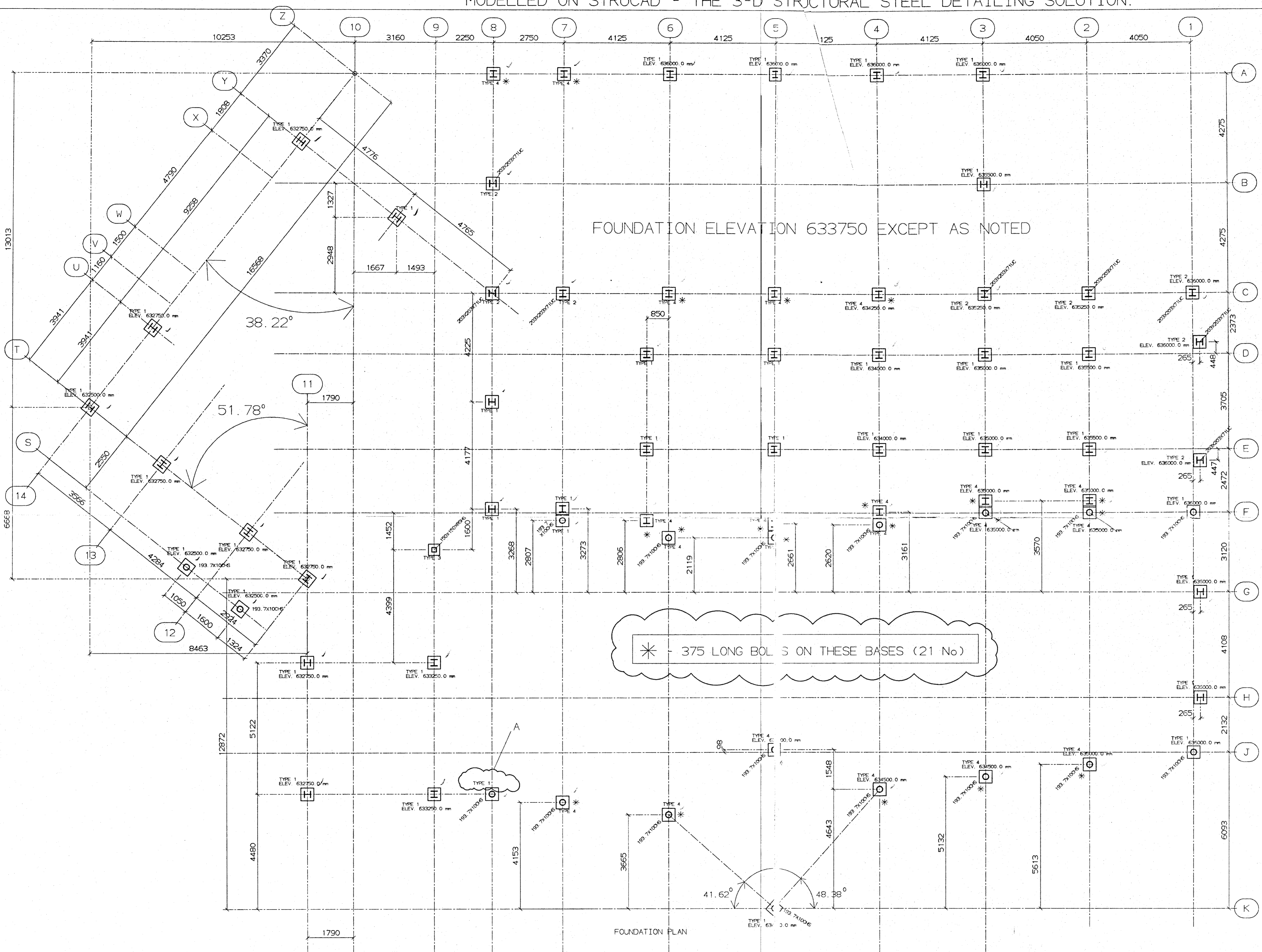
GENERAL NOTES

CLIENT	CAIRNGORM CHAIRLIFT CO.
PROJECT	BOTTOM STATION
TITLE	CAIRNGORM FUNICULAR

DRAWN	WSS	18/05/00
CHECKED		18/05/00

WE SIMMERS
 STRUCTURAL STEEL
 SCALE: 1:1000
 DATE: 12_2000

Beckwith
 Keith
 AB55 3PE
 Tel: 44 (0)1542 862543
 Fax: 44 (0)1542 893065
 Email: w@simmers.fanet.co.uk
 Dwg No: GA2



* - 375 LONG BOLTS ON THESE BASES (21 No)

WARRISON CONSTRUCTION LTD.
37 HARBOUR ROAD, INVERNESS
24 MAY 2002

FOUNDATION ELEVATION 633750 EXCEPT AS NOTED

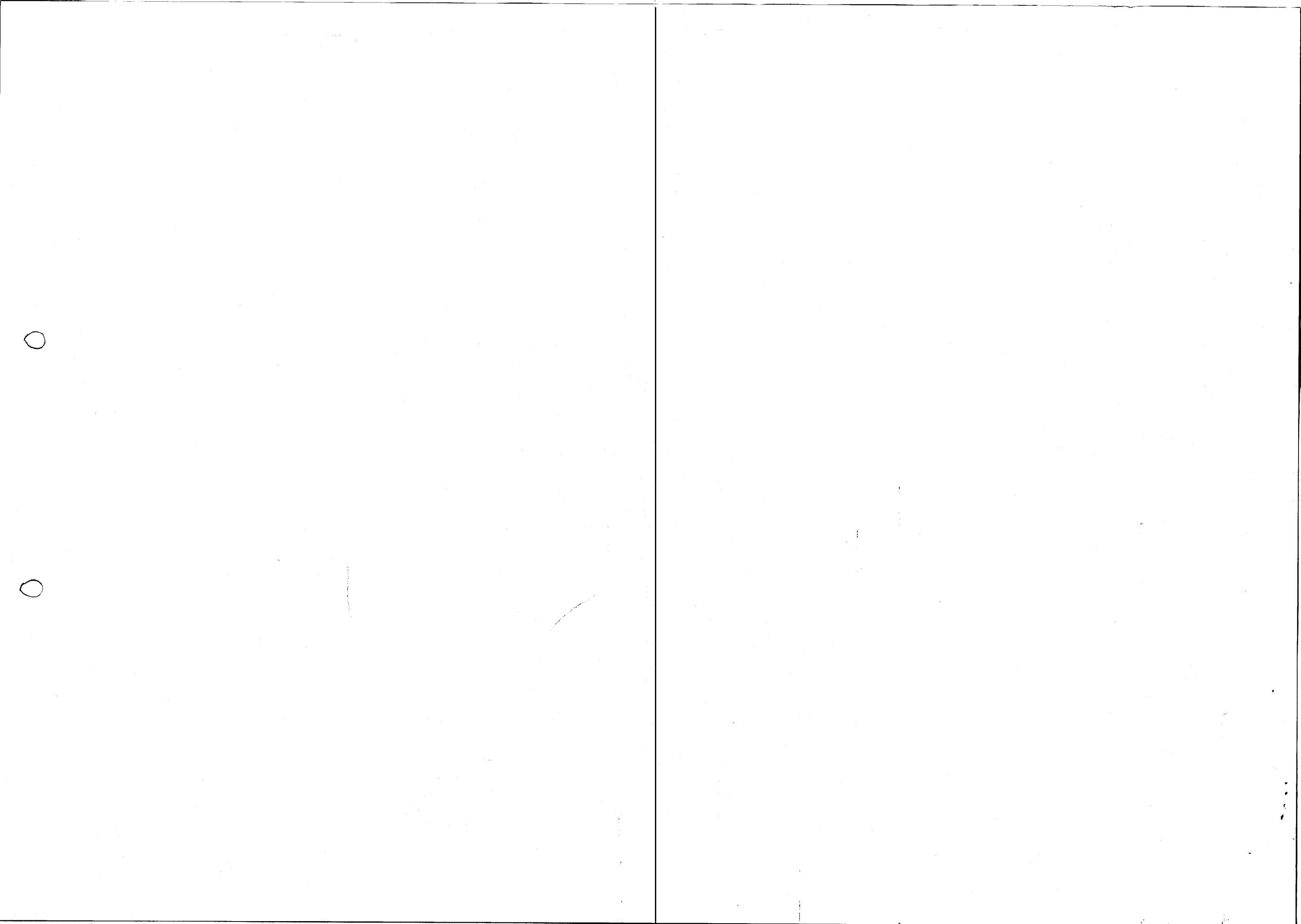
REV	BY	DATE	DETAILS
A	WMSS	27/04	ONE BASE LEVEL ALTERED * ADDED TO VARIOUS BASES

GENERAL NOTES
HOT ROLLED COLUMNS 203X203X46UC U.N.C.

CLIENT	CAIRNGORM CHAIRLIFT CO.
PROJECT	DAYLODGE STATION
TITLE	FOUNDATION PLAN

DRWN	WMSS	19/04/00
CHECKED		

WR SIMMERS		Backmuir Keith AES5 3PE Tel: 44 (0)1542 892543 Fax: 44 (0)1542 895055 Email: wrsimmers.fsnc@co.uk	
SCALE	JOB No	DATE	REV
NTS	12_2000	GA1	A



RICHARD LEES STEEL DECKING LTD

Moor Farm Road West, The Airfield
 Ashbourne, Derbyshire DE6 1HD
 Tel: 01335 300999
 Fax: 01335 300888

DRAWING ISSUE REGISTER

Client: Morrison Construction Ltd
 Contract: Cairgorm Funicular Railway

Our Ref: 0U508357

Please find enclosed drawings for your :-

Approval

Reference

Use

Draughtsman:
 C. Slack

Day
 Month
 Year

19	22	26	28																	
9	9	9	3																	
00	00	00	01																	

Drg. no.	Drawing Title	Revision																		
1	Ribdeck 210 Layout to Daylodge area	-	A																	
2	Holorib & Ribdeck 210 Layout to Ptarmigan Upper Station			-	A															
3	Notes & Sections to Upper Station			-	-															

Distribution	No. of copies																			
Morrison Construction - [Redacted]	2	2	2	2	2															
Morrison Construction - [Redacted]	2	2	2	2																

Comments: