

**HEALTH & SAFETY/
OPERATING & MAINTENANCE
MANUAL**

**LAW BUILDING
SALFORD UNIVERSITY**

**Structural Engineers
Drawings**

Buro Happold

Salford Law Faculty**Buro Happold Drawing List**

<u>Job No:</u>	<u>Drawing No:</u>	<u>Revision:</u>	<u>Drawing No:</u>	<u>Revision:</u>
10023:	S001	3	R01	1
	S002	2	R02	1
	S003	2	R03	1
	S004	1	R04	1
	S005	3	R05	1
	S006	2	R06	1
	S007	2	R07	1
	S010	2	R08	2
	S011	2	R09	1
	S012	2	R10	1
	S013	4	R11	1
	S014	5	R12	1
	S015	4	R13	1
	S016	2	R14	2
	S017	3	R15	1
	S018	1	R16	2
	S019	1		
	S020	3		
	S021	1		
	S022	4		
	S023	3		
	S024	2		
	S025	2		
	S026	2		
	S027	3		
	S050	1		
	S051	1		
	S052	1		
	S207	3		

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Notes

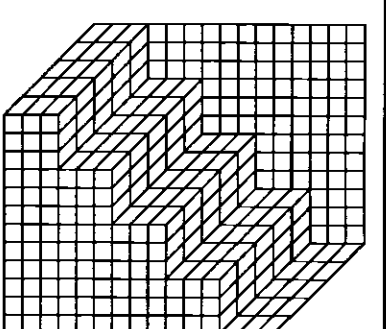
- 1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL THE RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- 2 ALL DIMENSIONS TO BE CHECKED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ALL DISCREPANCIES TO BE BROUGHT TO THE ARCHITECTS ATTENTION.
- 3 CONTRACTOR TO CO-ORDINATE THE INFORMATION SHOWN ON THIS DRAWING WITH ALL RELEVANT SUB-CONTRACTOR INFORMATION AND DESIGN INPUT.
- 4 DO NOT USE SCALED INFORMATION FROM THIS DRAWING FOR CONSTRUCTION AND FABRICATION.
- 5 ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH THE RELEVANT BRITISH STANDARDS.
- 6 ALL DIMENSIONS ARE IN MILLIMETRES.
- 7 ALL CONCRETE TO SUBSTRUCTURE TO BE CLASS 1 AND AS PER THE SPECIFICATION
- 8 ALL PILES TO BE 450Ø
- 9 ALL EXCAVATIONS SHALL BE CARRIED OUT IN A SAFE MANNER, COMPLYING WITH THE REQUIREMENTS OF THE HEALTH AND SAFETY REGULATIONS, BS 8000:PART 1 AND ANY LOCAL BY-LAWS.
- 10 THE FORMATION OF ALL THE FOUNDATIONS IS TO BE INSPECTED BY THE STRUCTURAL ENGINEER PRIOR TO CONCRETING.
- 11 BASES TO BE CENTRED ON COLUMN POSITIONS U.N.O.
- 12 ALL PILING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE I.C.E. 'SPECIFICATION FOR PILING'.
- 13 PILES TO BE DESIGNED FOR THE FOLLOWING WORKING LOADS :- AXIAL 1100KN
- 14 MAXIMUM PILE SETTLEMENT UNDER WORKING LOAD TO BE 10mm
- 15 CAST IN-SITU PILES TO BE CAST TO A MINIMUM OF 450mm ABOVE CUT-OFF LEVEL.
- 16 PILES TO PROJECT 75mm INTO PILECAP.
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02 AS BUILT	17.07.07	RC	AM	
01 CABLE PIT ADDED, DUCTS SHOWN STEP SET-OUT REVISED	03.08.06	LS	AM	
00 ISSUED FOR CONSTRUCTION	19.07.06	LS	AM	
Rev	Description	Date	Drn	Ch'd

AS BUILT

Status of drawing

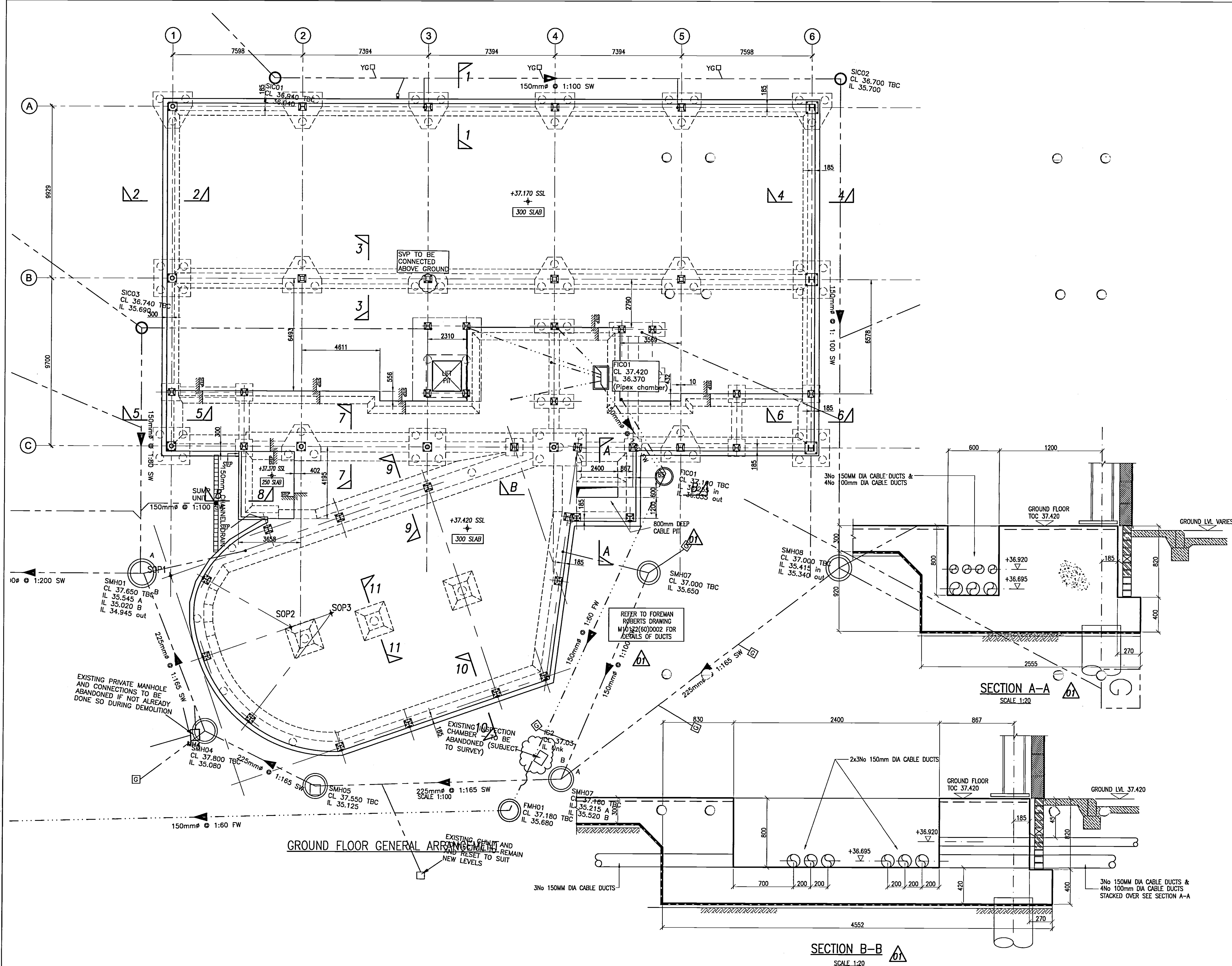
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Buro Happold
Consulting Engineers

Architect **UNIVERSITY OF SALFORD**
Project **NEW LAW FACILITY
GROUND LEVEL
GENERAL ARRANGEMENT**

Scales: A1 1:100	Job No. 010023
Drawn by LSIMONS	Drawing No. S003
Checked by RLT	Rev 02
Date JULY 2006	



Notes

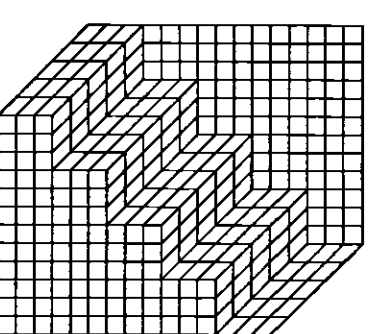
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02 AS BUILT	17.07.07 RC A.M
01 DUCTS SHOWN	03.08.06 I.S A.M
00 ISSUED FOR CONSTRUCTION	20.07.06 I.S A.M
Rev Description	Date Dm Ch'd

AS BUILT

Status of drawing

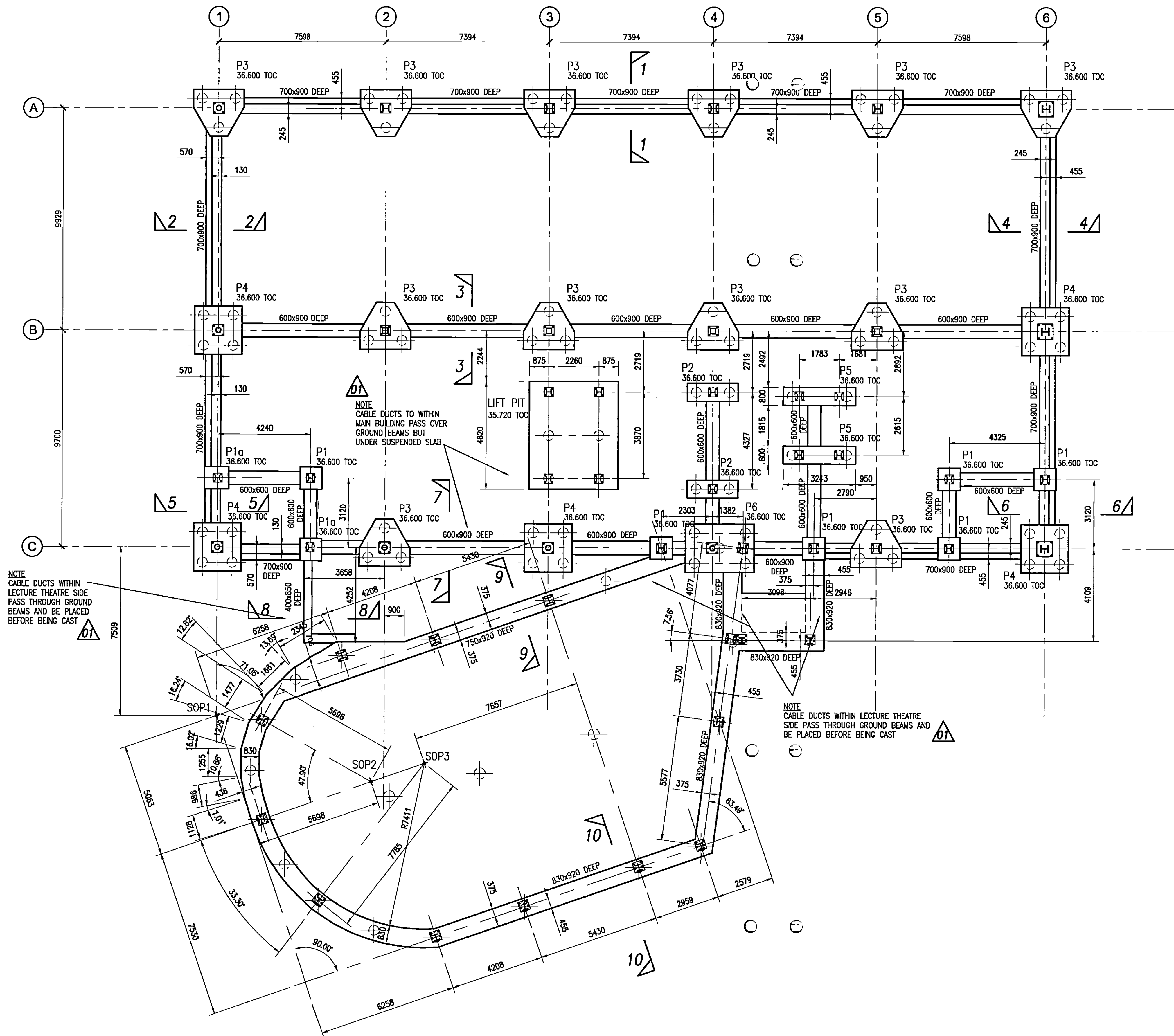
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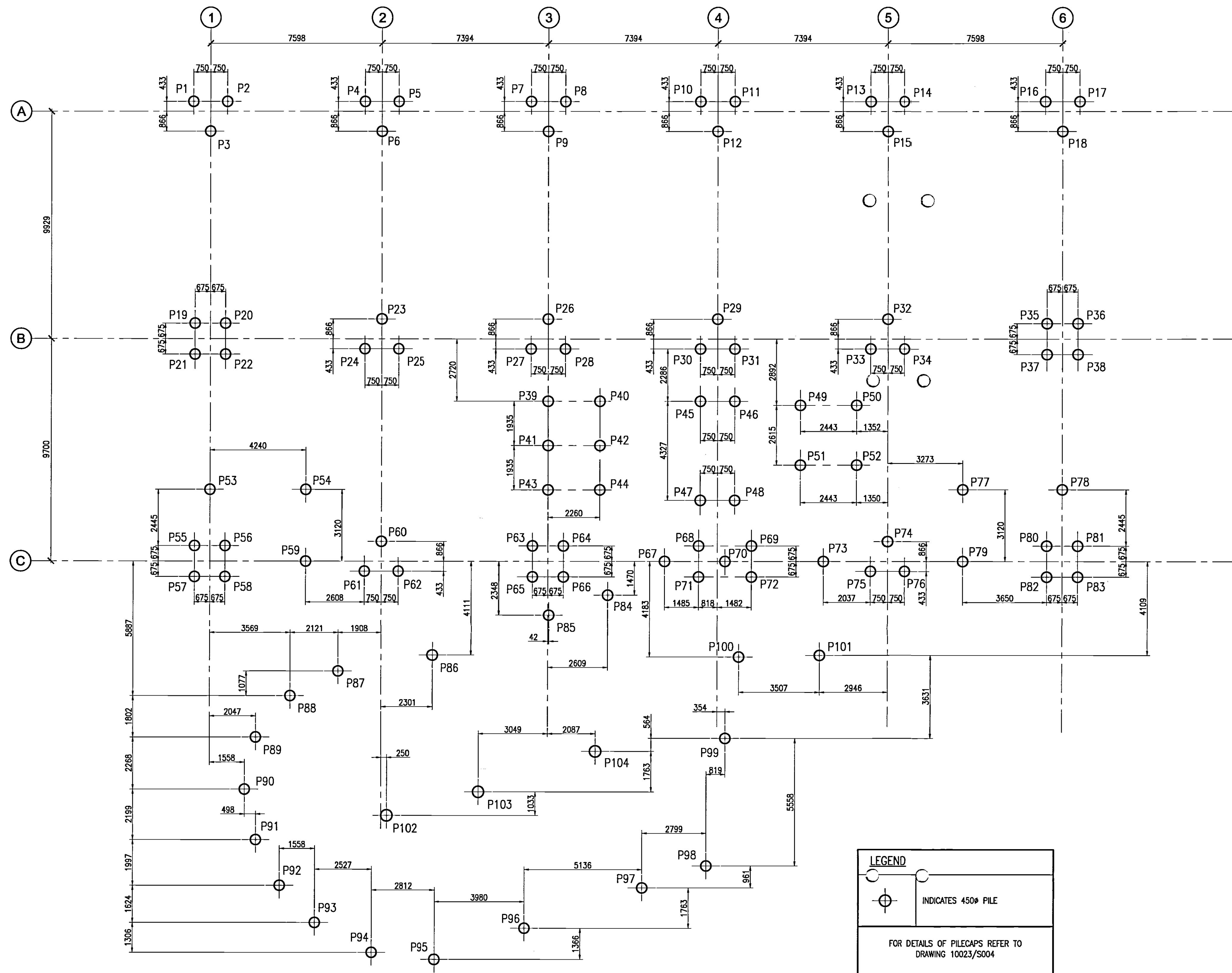


Buro Happold
Consulting Engineers

Architect UNIVERSITY OF SALFORD
Project **NEW LAW FACILITY**
FOUNDATION LEVEL
GENERAL ARRANGEMENT

Scale: A1 1:100	Job No. 010023
Drawn by L.SIMONS	Drawing No. S002
Checked by A.M	Rev 02
Date JULY 2006	





02

ALL PILE CO-ORDINATES ARE TO BE CHECKED BY CONTRACTOR BACK TO MAIN GRID DIMENSIONS AS SHOWN AND ANY DISCREPANCIES REPORTED TO SITE ENGINEER BEFORE PILING

PILE LOADS
ALL LOADS SHOWN ARE BASED ON SLS LOADS
ALL LOADS INCLUDE WEIGHT OF PILECAPS AND GROUND BEAMS

AXIAL LOAD (kN)			AXIAL LOAD (kN)			AXIAL LOAD (kN)			AXIAL LOAD (kN)		
REF.	COMP.	C.O. LVL.	REF.	COMP.	C.O. LVL.	REF.	COMP.	C.O. LVL.	REF.	COMP.	C.O. LVL.
P1	725	+35.775	P26	950	+35.775	P51	125	+35.775	P76	900	+35.775
P2	725	+35.775	P27	950	+35.775	P52	125	+35.775	P77	300	+35.775
P3	725	+35.775	P28	950	+35.775	P53	550	+35.775	P78	425	+35.775
P4	650	+35.775	P29	1000	+35.775	P54	375	+35.775	P79	900	+35.775
P5	650	+35.775	P30	1000	+35.775	P55	775	+35.775	P80	825	+35.775
P6	650	+35.775	P31	1000	+35.775	P56	775	+35.775	P81	825	+35.775
P7	700	+35.775	P32	975	+35.775	P57	775	+35.775	P82	825	+35.775
P8	700	+35.775	P33	975	+35.775	P58	775	+35.775	P83	825	+35.775
P9	700	+35.775	P34	975	+35.775	P59	900	+35.775	P84	400	+36.275
P10	700	+35.775	P35	875	+35.775	P60	825	+35.775	P85	750	+36.275
P11	700	+35.775	P36	875	+35.775	P61	825	+35.775	P86	700	+36.275
P12	700	+35.775	P37	875	+35.775	P62	825	+35.775	P87	625	+36.275
P13	650	+35.775	P38	875	+35.775	P63	900	+35.775	P88	200	+36.275
P14	650	+35.775	P39	300	+34.895	P64	900	+35.775	P89	225	+36.275
P15	650	+35.775	P40	300	+34.895	P65	900	+35.775	P90	200	+36.275
P16	750	+35.775	P41	300	+34.895	P66	900	+35.775	P91	300	+36.275
P17	750	+35.775	P42	275	+34.895	P67	575	+35.775	P92	200	+36.275
P18	750	+35.775	P43	275	+34.895	P68	1025	+35.775	P93	200	+36.275
P19	850	+35.775	P44	275	+34.895	P69	500	+35.775	P94	300	+36.275
P20	850	+35.775	P45	250	+35.775	P70	750	+35.775	P95	450	+36.275
P21	850	+35.775	P46	250	+35.775	P71	1025	+35.775	P96	475	+36.275
P22	850	+35.775	P47	150	+35.775	P72	500	+35.775	P97	575	+36.275
P23	950	+35.775	P48	150	+35.775	P73	550	+35.775	P98	400	+36.275
P24	950	+35.775	P49	100	+35.775	P74	900	+35.775	P99	600	+36.275
P25	950	+35.775	P50	100	+35.775	P75	900	+35.775	P100	475	+36.275
P101	200	+36.275	P102	700	+36.595	P103	700	+36.595	P104	750	+36.595

PILE CO-ORDINATES

CO-ORDS		CO-ORDS		CO-ORDS		CO-ORDS	
REF.	EASTING (X) NORTHING (Y)	REF.	EASTING (X) NORTHING (Y)	REF.	EASTING (X) NORTHING (Y)	REF.	EASTING (X) NORTHING (Y)
P1	381965579 388952105	P26	381982507 388944335	P51	381994294 388940184	P76	381999447 388936248
P2	381967063 388952317	P27	381981949 388943543	P52	381996712 388945330	P77	382001441 388940122
P3	381966505 388950825	P28	381983434 388943755	P53	381988721 388943440	P78	382005722 388940375
P4	381973100 388953181	P29	381989827 388943983	P54	381972919 388936040	P79	382001883 388937034
P5	381974585 388953394	P30	381989268 388944590	P55	3819868400 388938224	P80	382005401 388938219
P6	381974026 388952002	P31	381990753 388944803	P56	381969736 388933115	P81	382006737 388938411
P7	381980419 388954229	P32	381997146 388947030	P57	381986591 38893387	P82	382005592 388936883
P8	381981346 388953049	P33	381996388 388945638	P58	381969927 388933779	P83	382006928 388937074
P9	381981346 388953049	P34	381988072 388945850	P59	381973361 388932952	P84	381986795 388933390
P10	381987739 388955277	P35	382004026 388947822	P60	381976562 38894285	P85	381984379 388932157
P11	381989224 388955489	P36	382005363 388948013	P61	381978004 38893383	P86	381979545 388929684
P12	381988665 388954097	P37	3820047 388946885	P62	381977488 388933106	P87	381975477 388928396
P13	381995058 388956324	P38	382005554 388946876	P63	381983240 388935848	P88	381973530 388927030
P14	381996543 388956537	P39	381983015 388941886	P64	381984577 388933239	P89	381972279 388929530
P15	381995985 388955144	P40	381985252 388941706	P65	381983432 388933711	P90	381972116 388922715
P16	382002580 388957401	P41	381983289 388939470	P66	381984768 388933803	P91	381972920 388920609
P17	382004064 388957813	P42	381985527 388939790	P67	381989044 388933197	P92	381974248 388918781
P18	382003506 388956221	P43	381983563 388937555	P68	381990418 388936076	P93	381978020 388917394
P19	381967025 388942526	P44	381985801 388937875	P69	381992695 388936401	P94	381978706 388916459
P20	381968382 388942717	P45	381985592 388942827	P70	381991652 38893570	P95	381981533 388916557
P21	381967217 388941190	P46	381991077 388942540	P71	381990609 388934739	P96	381985279 388918473
P22	381968553 388941381	P47	381990205 388938043	P72	381992886 388935065	P97	381990113 388920946
P23	381975188 388943887	P48	381991777 388938256	P73	381996281 388936175	P98	381992748 388922894
P24	381974629 388942495	P49	381993922 388942772	P74	381998520 388937428	P99	381992771 388927912
P25	381976114 388942708	P50	381996340 388943119	P75	381997962 388936336	P100	381992848 388931515
P101	381996309 388932086	P102	381978505 388922476	P103	381982412 38894078	P104	381987246 388926551

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03 AS BUILT	17.07.07	RC	A.M
02 CO-ORDINATES ADDED	20.07.06	I.S	A.M
01 PILES REVISED AS NOTED	10.07.06	I.S	A.M
00 ISSUED FOR CONSTRUCTION	07.07.06	I.S	A.M
Rev Description	Date	Drn	Ch'd

AS BUILT

Status of drawing

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Consulting Engineers

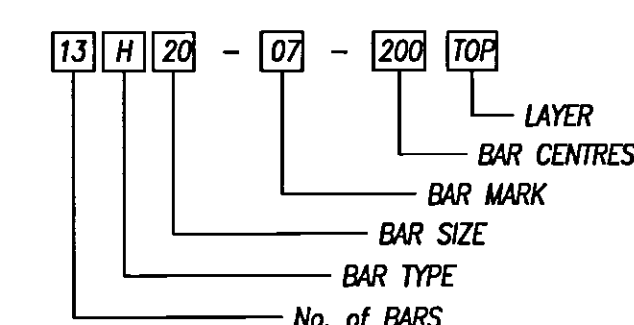
Architect: **UNIVERSITY OF SALFORD**
Project: **NEW LAW FACILITY
PILING LAYOUT
GENERAL ARRANGEMENT**

Scales: 0/1 1:100
Drawn by: I.SIMONS
Checked by: A.M

Job No: **010023**
Drawing No: **S001**
Date: JUNE 2006
Rev: 03

Notes

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- CONTRACTOR TO ALLOW FOR CO-ORDINATION OF BUILDERS WORK REQUIREMENTS FOR SERVICES SO THAT HOLES, SLEEVES, etc. CAN BE CAST INTO NEW CONCRETE WORK. NO POST DRILLING OF CONCRETE FOR SERVICE HOLES GREATER THAN 200mm DIA. WILL BE PERMITTED.
- FOR ALL SETTING OUT INFORMATION REFER TO THE ARCHITECTS DRAWINGS.
- COVER:
BOTTOM ... 00mm
TOP ... 35mm
- STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-



- THIS DRAWING HAS BEEN SCHEDULED IN ACCORDANCE WITH B.S. 8866 : 2000. SEE BAR SCHEDULES Ref. 10023-R/16

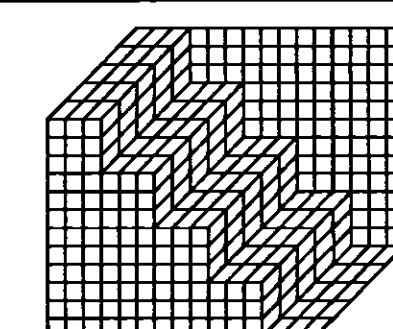
- ABBREVIATIONS
R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG DRAWING
NTS NOT TO SCALE
SFL STRUCTURAL FLOOR LEVEL
FFL FINISHED FLOOR LEVEL
DIA DIAMETER
- REINFORCED CONCRETE ABBREVIATIONS
EW EACH WAY
EF EACH FACE
T1, T2... TOP LAYER 1, 2, etc....
B1, B2... BOTTOM LAYER 1, 2, etc....
NF NEAR FACE
FF FAR FACE
STG STAGGERED
- REINFORCEMENT ABBREVIATIONS
H HIGH YIELD (GRADE 500) REINFORCEMENT

02 AS BUILT	17.07.07	RC	A.M
01 GENERAL AMENDMENT	08.01.07		
00 ISSUED FOR CONSTRUCTION	05.07.06		
Rev	Description	Date	Dm Ch'd

AS BUILT

Status of drawing

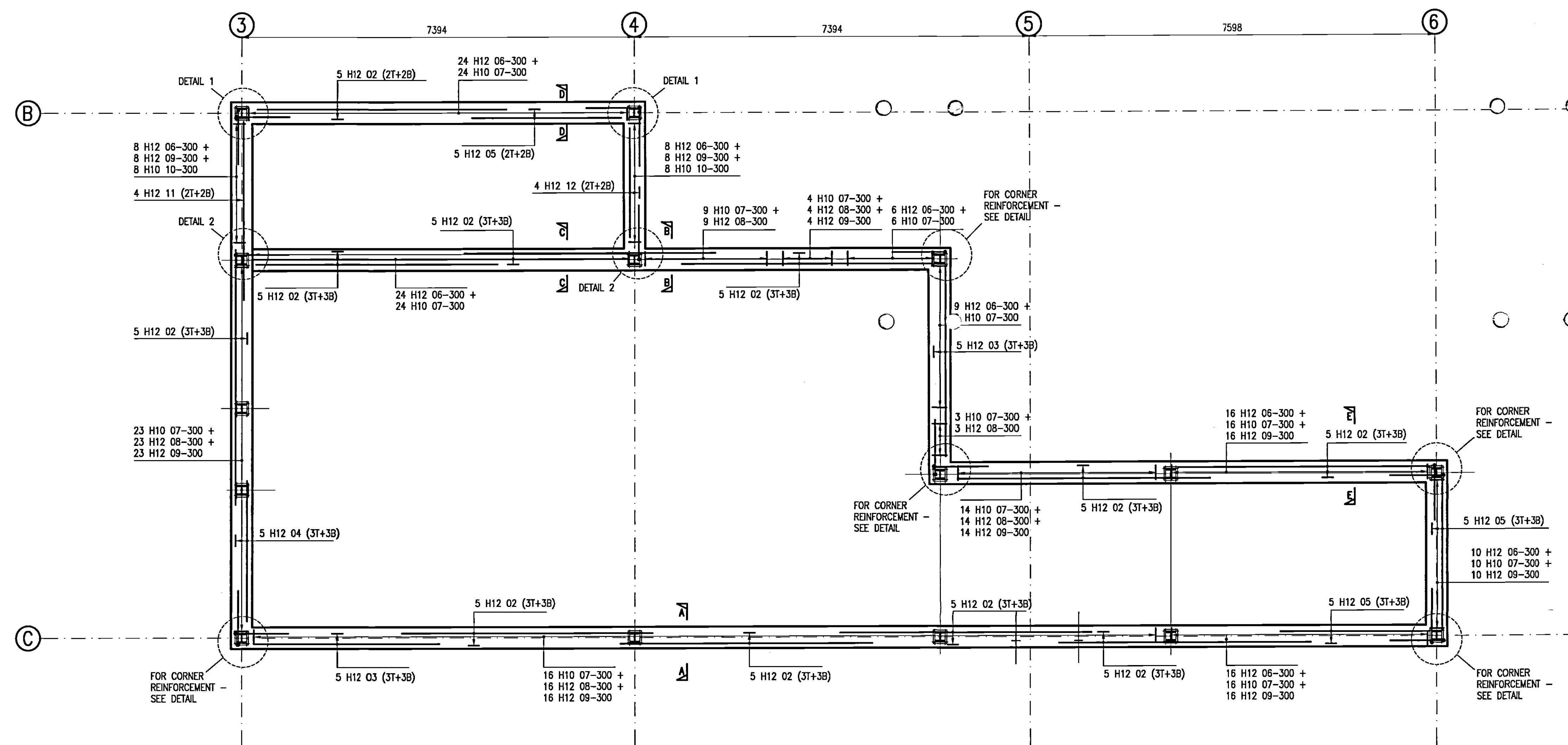
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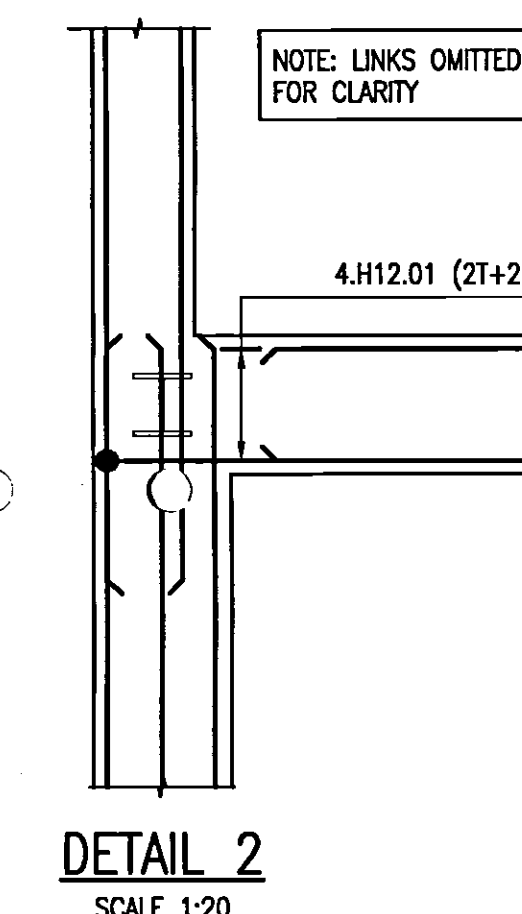
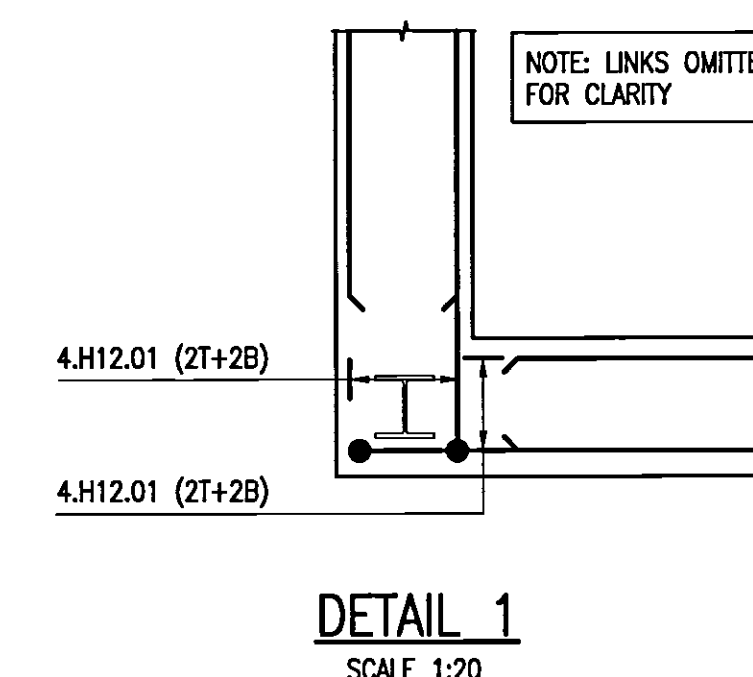
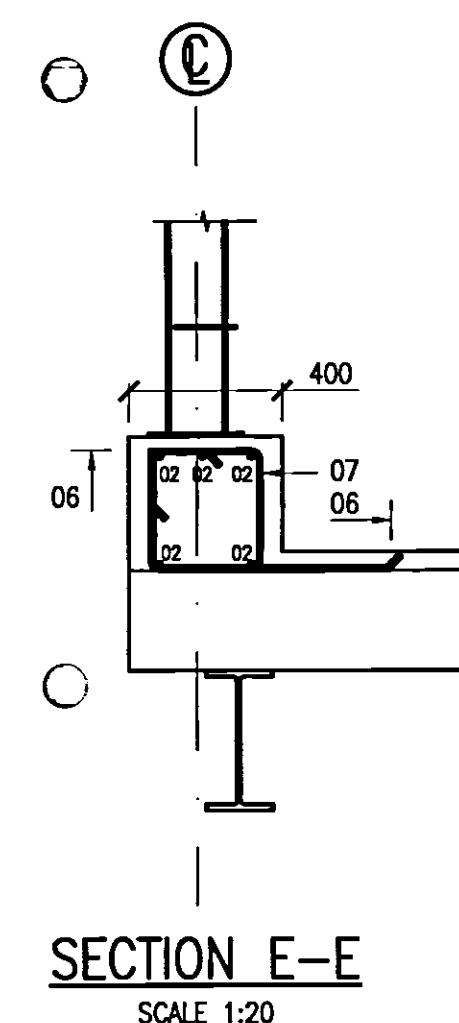
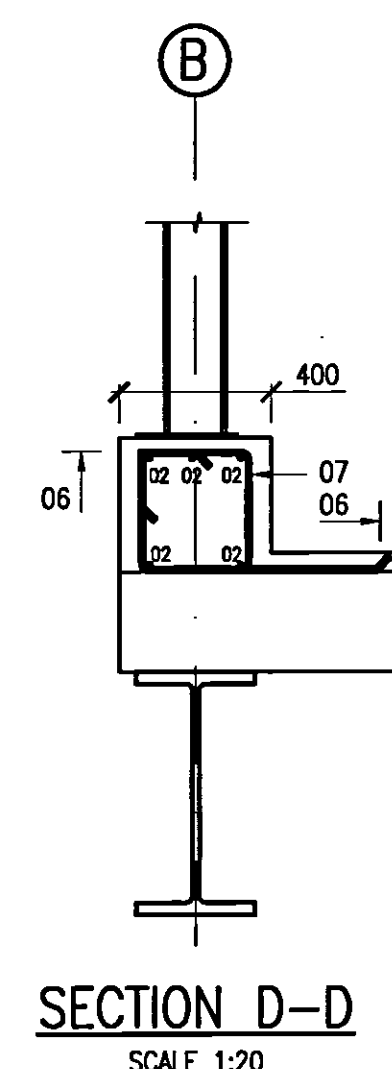
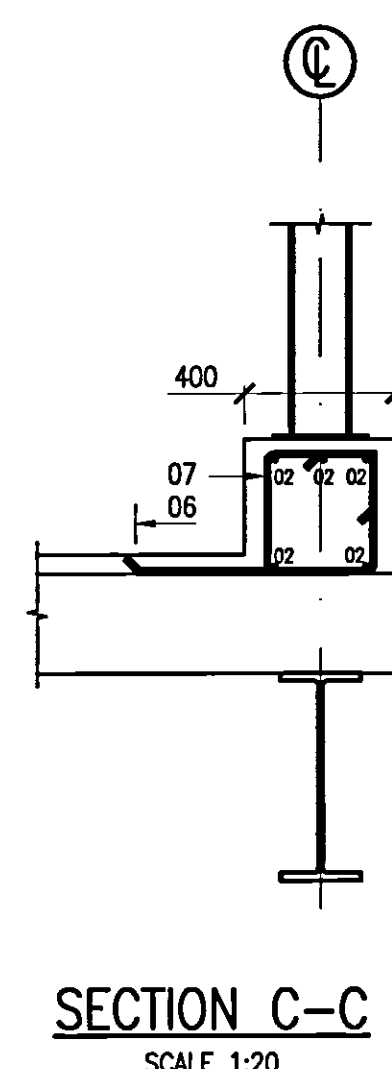
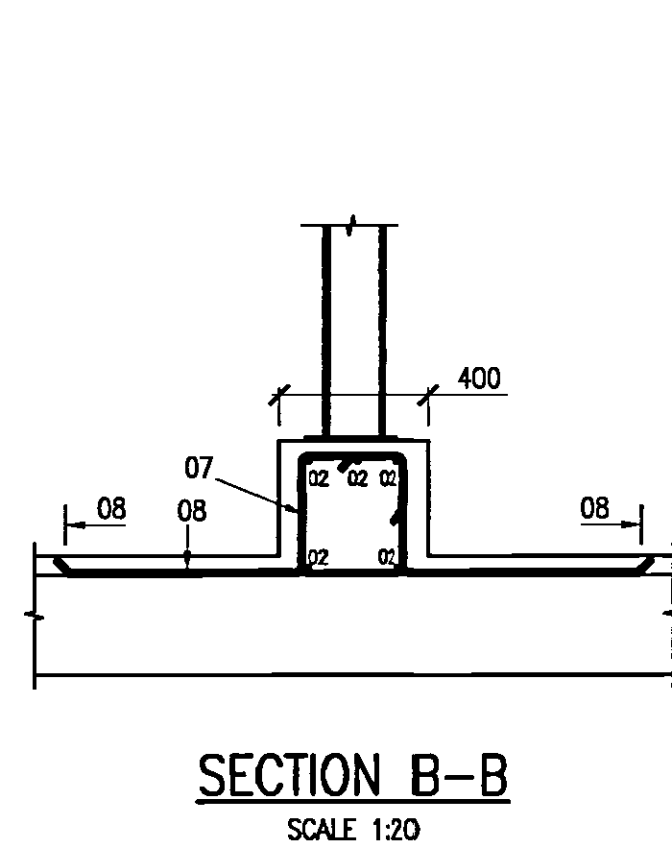
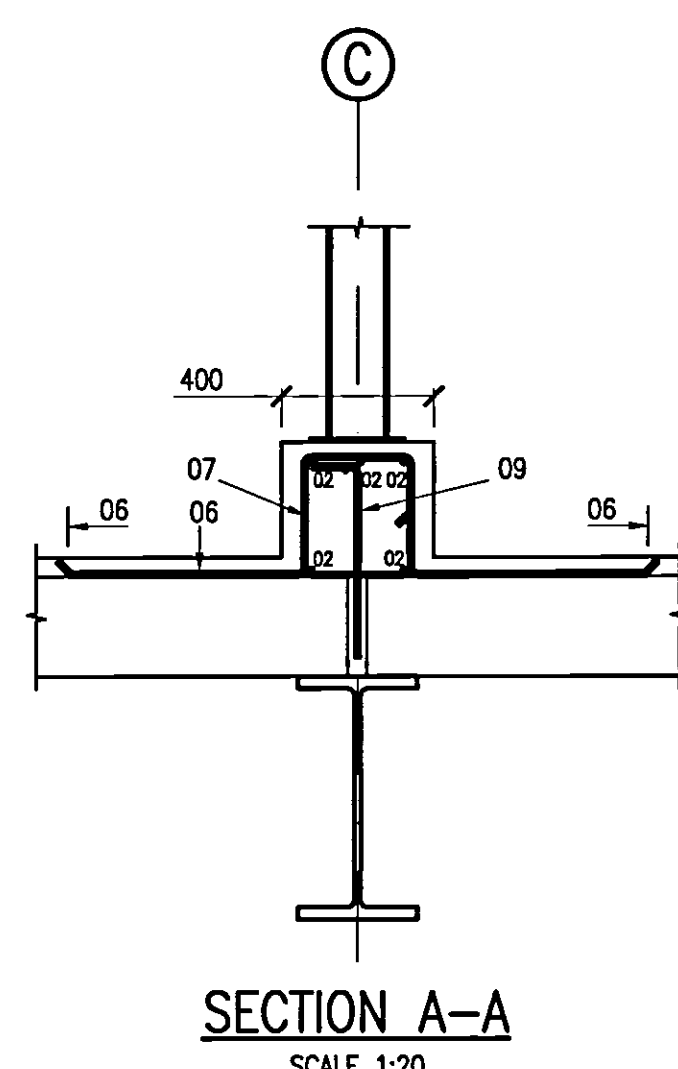
Buro Happold
Consulting Engineers

Architect ARCHITECT
Project NEW LAW FACULTY, SALFORD UNIVERSITY
Drg Title PLANT ROOM REINFORCEMENT

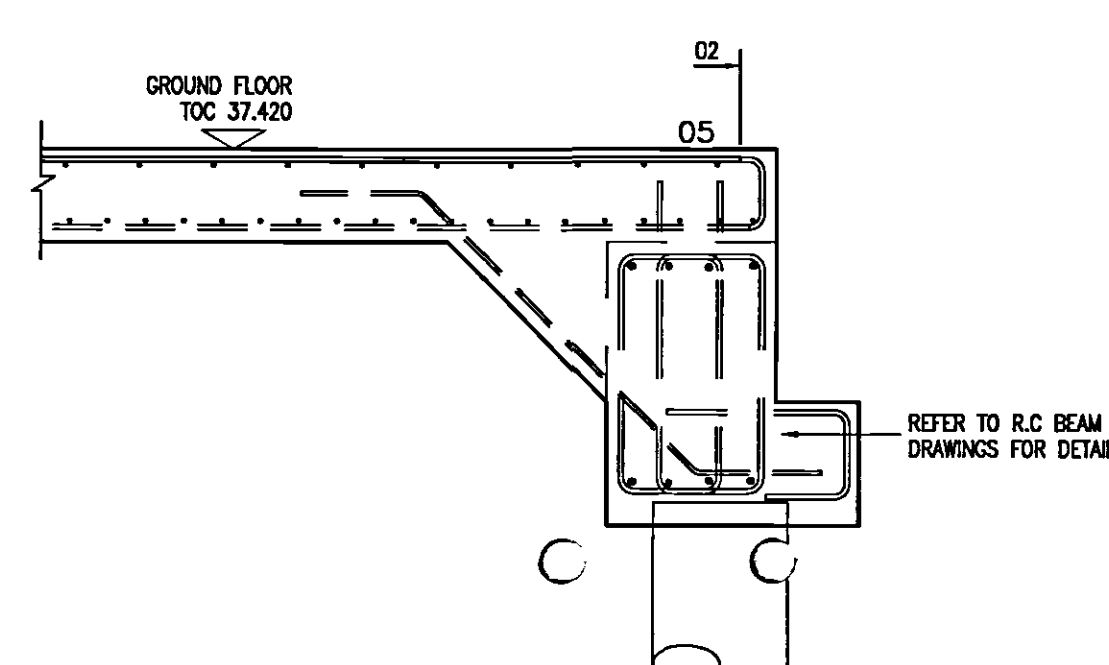
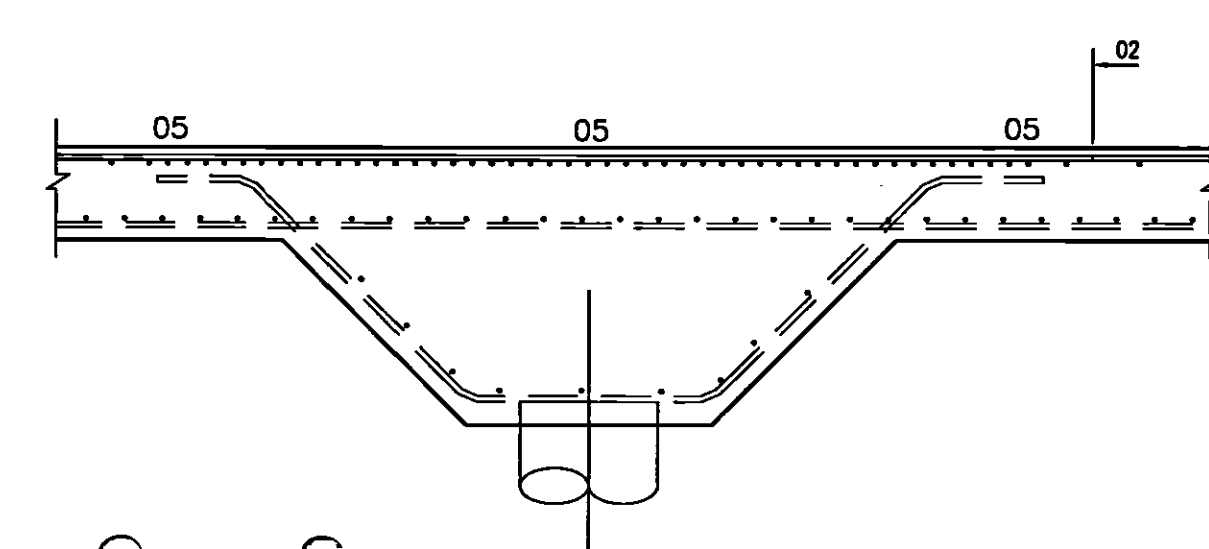
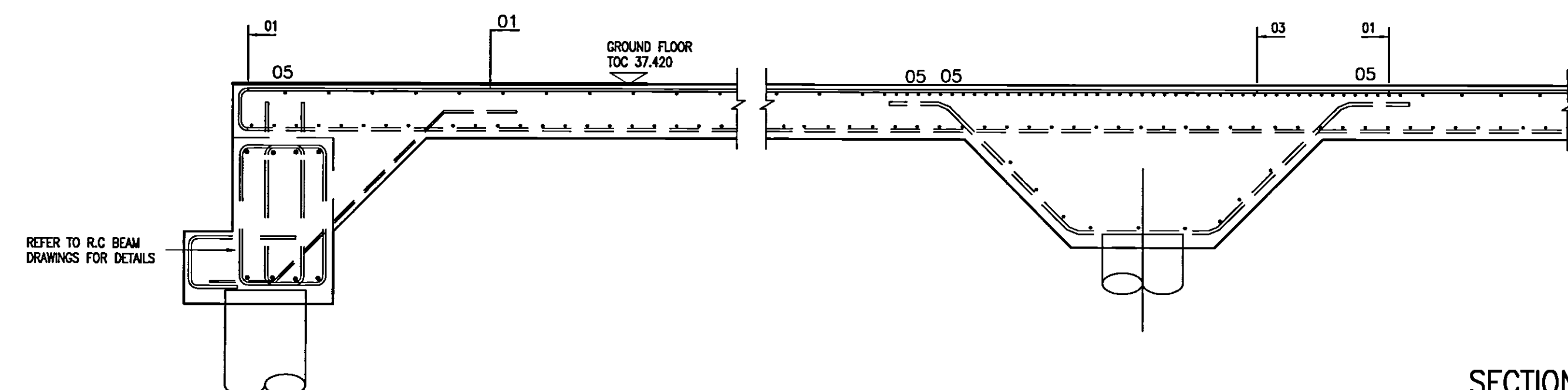
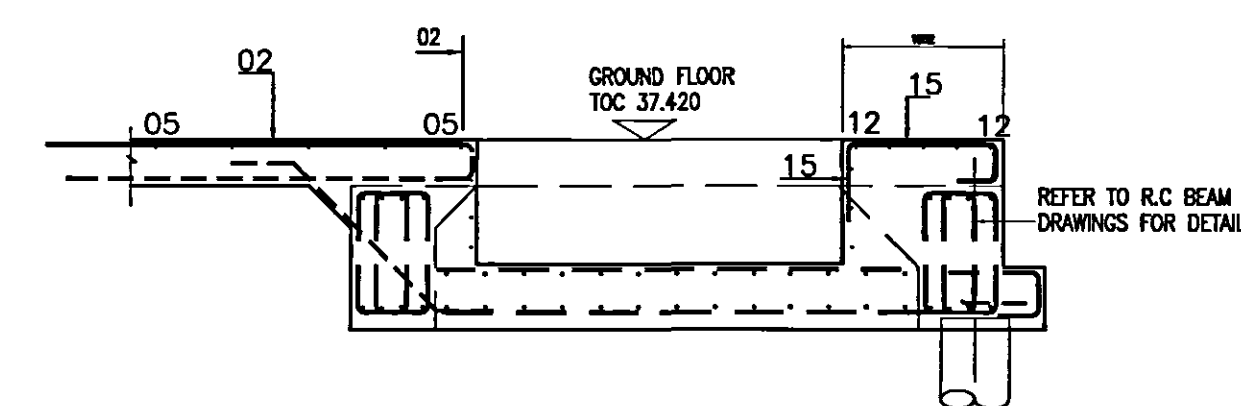
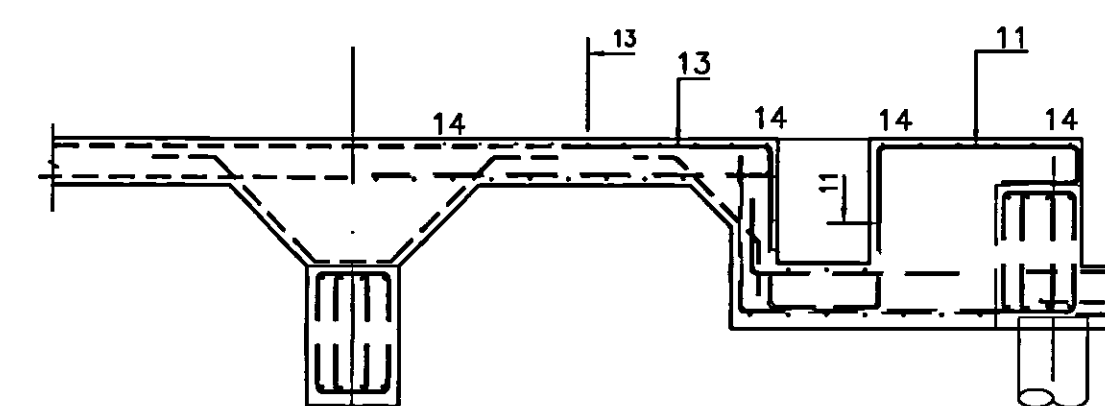
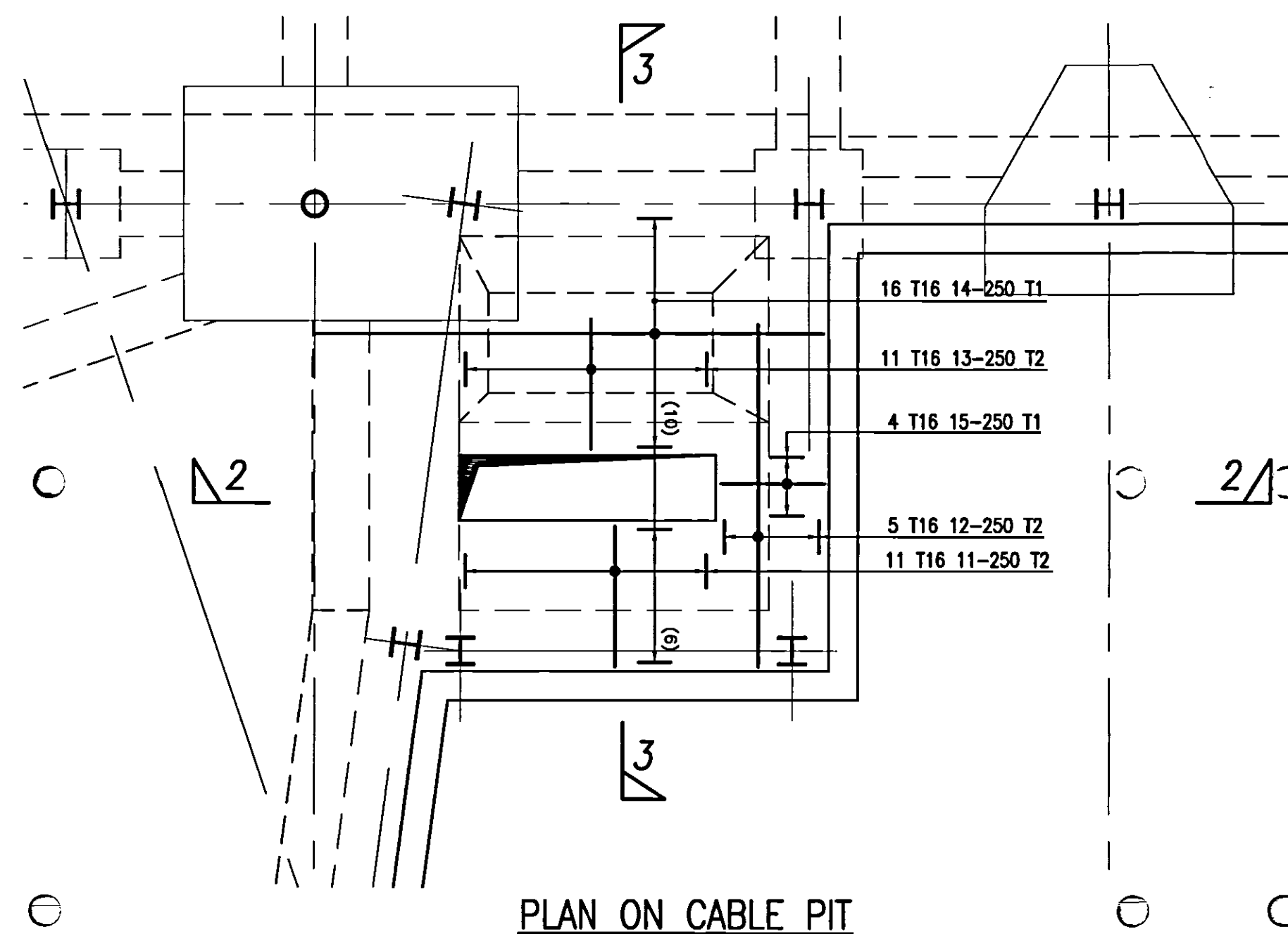
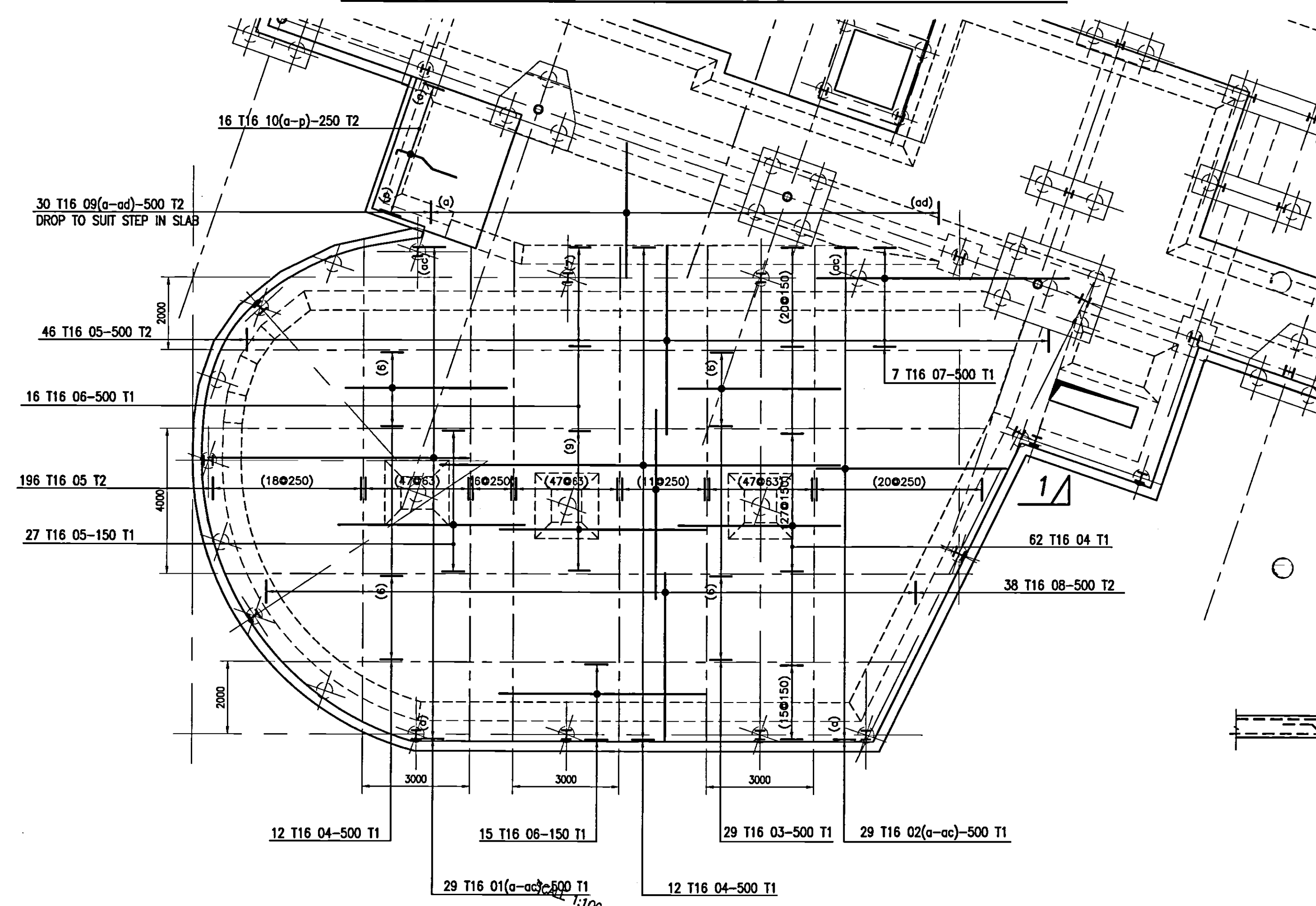
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Drawn by MOH	Drawing No. R16
Checked by	Rev 02
Date DEC 06	



PLANT ROOM REINFORCEMENT GA
SCALE 1:50



FOR CONTINUATION REFER TO DRAWING 10023-R04 FOR DETAILS

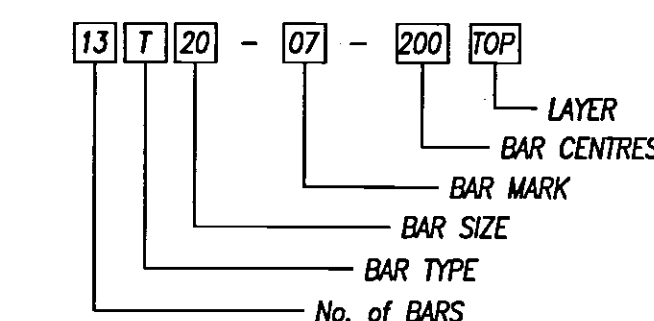


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- FOR ALL SETTING OUT INFORMATION REFER TO THE ARCHITECTS DRAWINGS.
- COVER:
BOTTOM ... 40mm
TOP ... 25mm
- STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-



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ABBREVIATIONS

R.C. REINFORCED CONCRETE
C.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

EW. EACH WAY
EF. EACH FACE
T1, T2... TOP LAYER 1, 2, etc...
B1, B2... BOTTOM LAYER 1, 2, etc...
NF. NEAR FACE
FF. FAR FACE
STG. STAGGERED

REINFORCEMENT ABBREVIATIONS

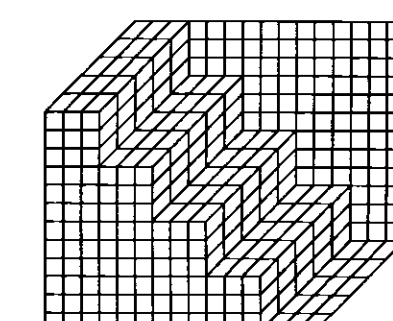
T. HIGH YIELD (GRADE 460) REINFORCEMENT
R. MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT	17.07.07	RC	A.M.	
00 ISSUED FOR CONSTRUCTION	16.08.06	LS	AM	
Rev	Description	Date	Dm	Ch'd

AS BUILT

Status of drawing

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Manchester M1 6EU
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Fax: +44 (0)161 233 5000
Email: info@burohappold.com
Web: www.burohappold.com

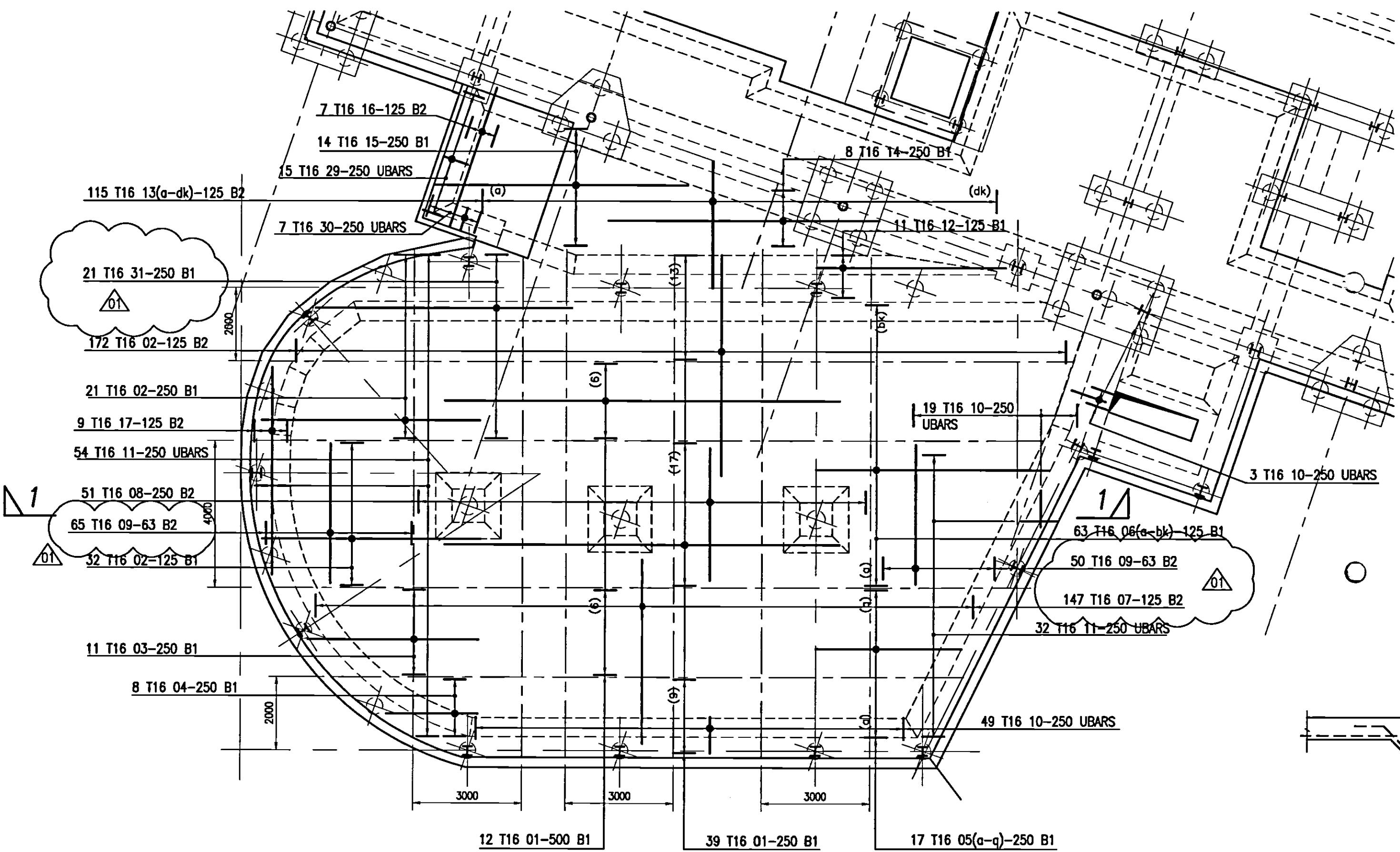


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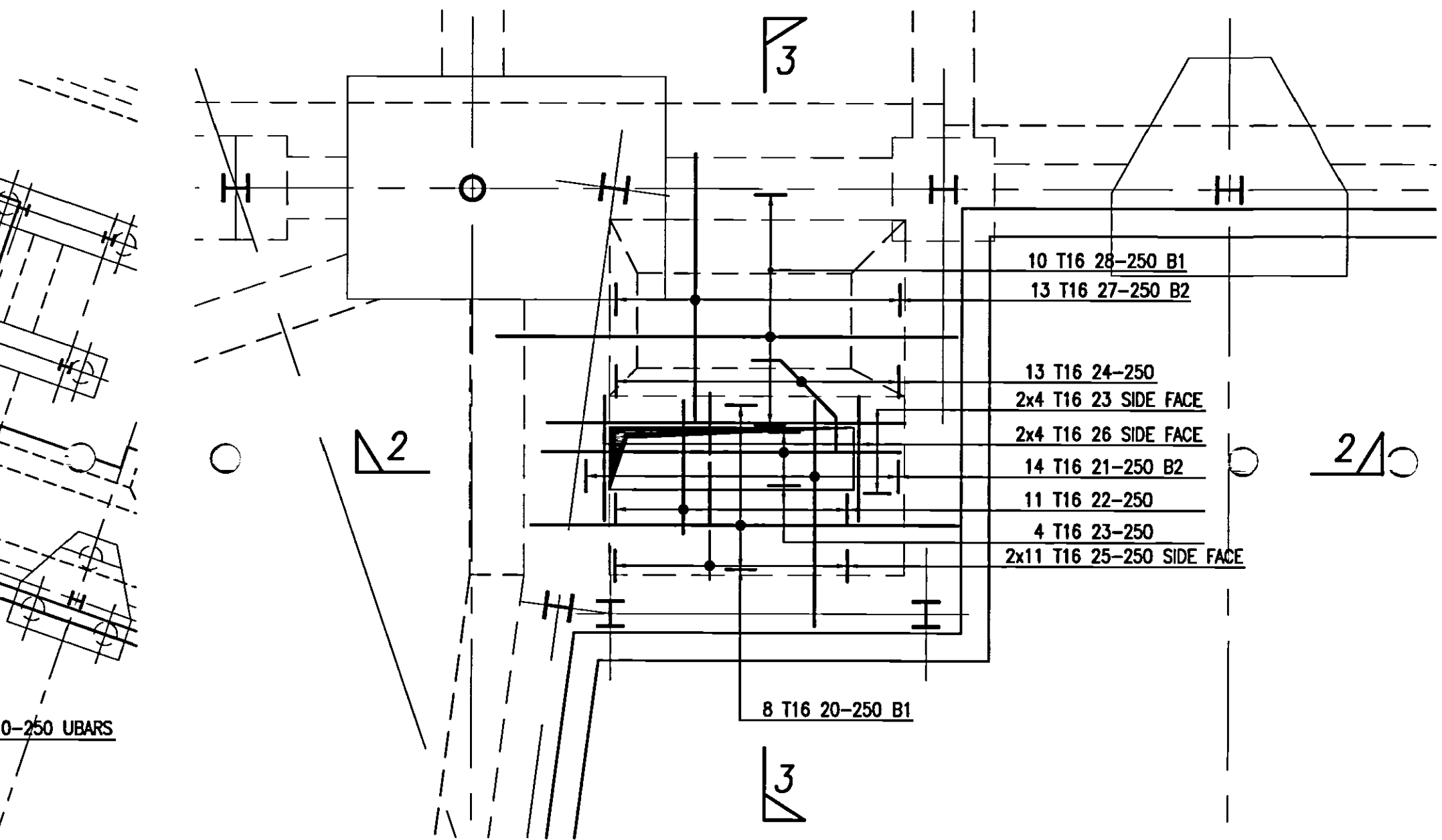
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NEW LAW FACULTY
R.C DETAILS OF GROUND FLOOR SLAB
(TOP STEEL)
SHEET 4 OF 4

Scales: A1 1:100, 25	Job No. 010023
Drawn by LSIMONS	Drawing No. R15
Checked by A.M.	Rev 01
Date JUNE 2006	

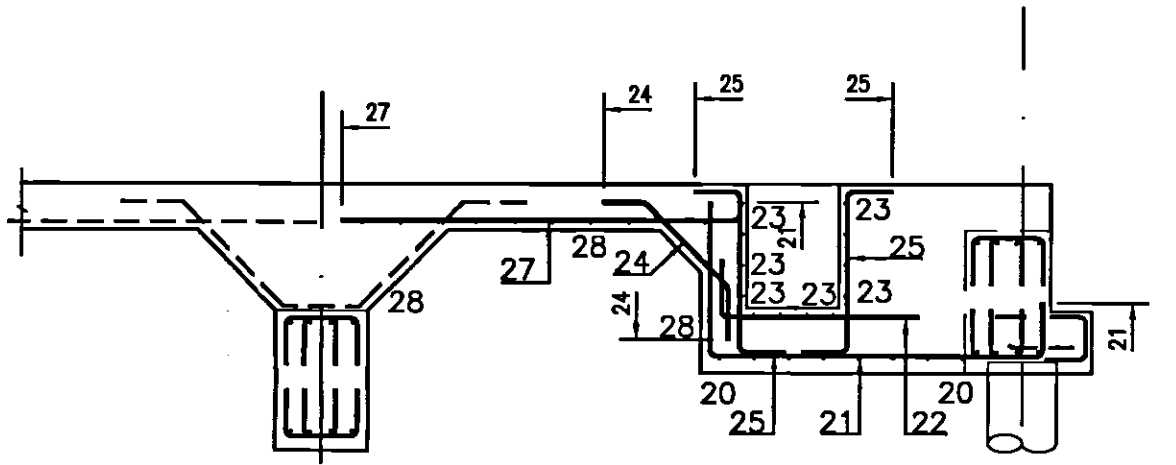
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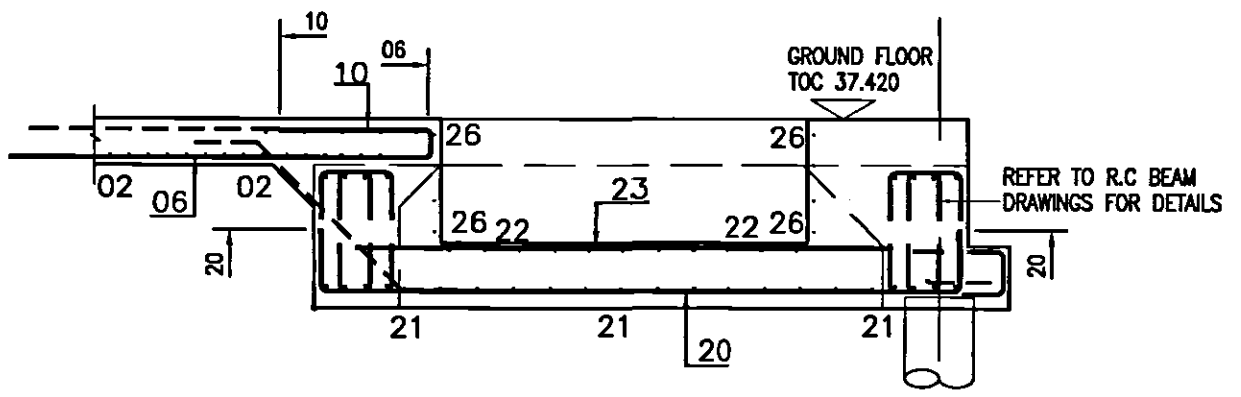
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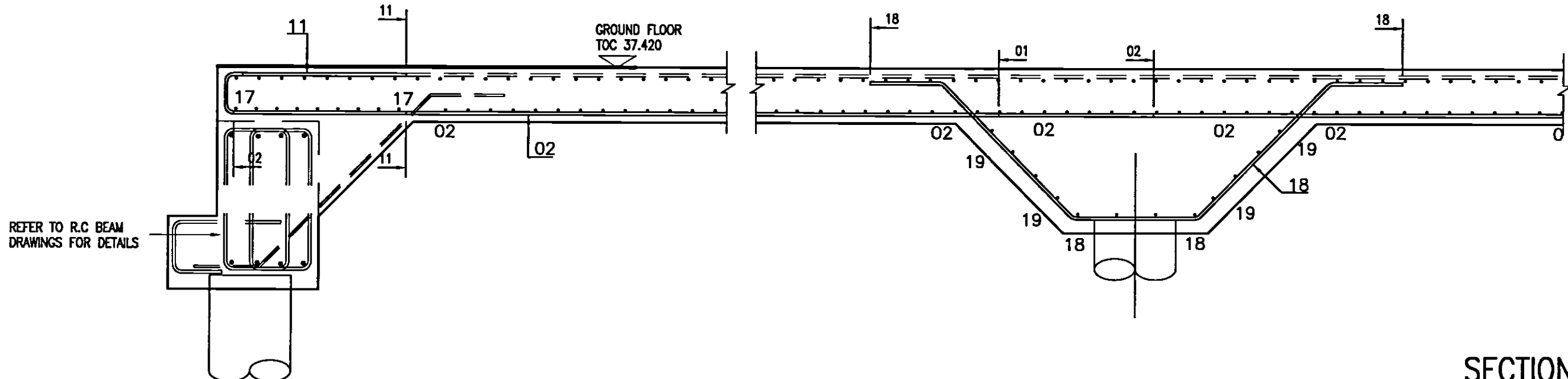
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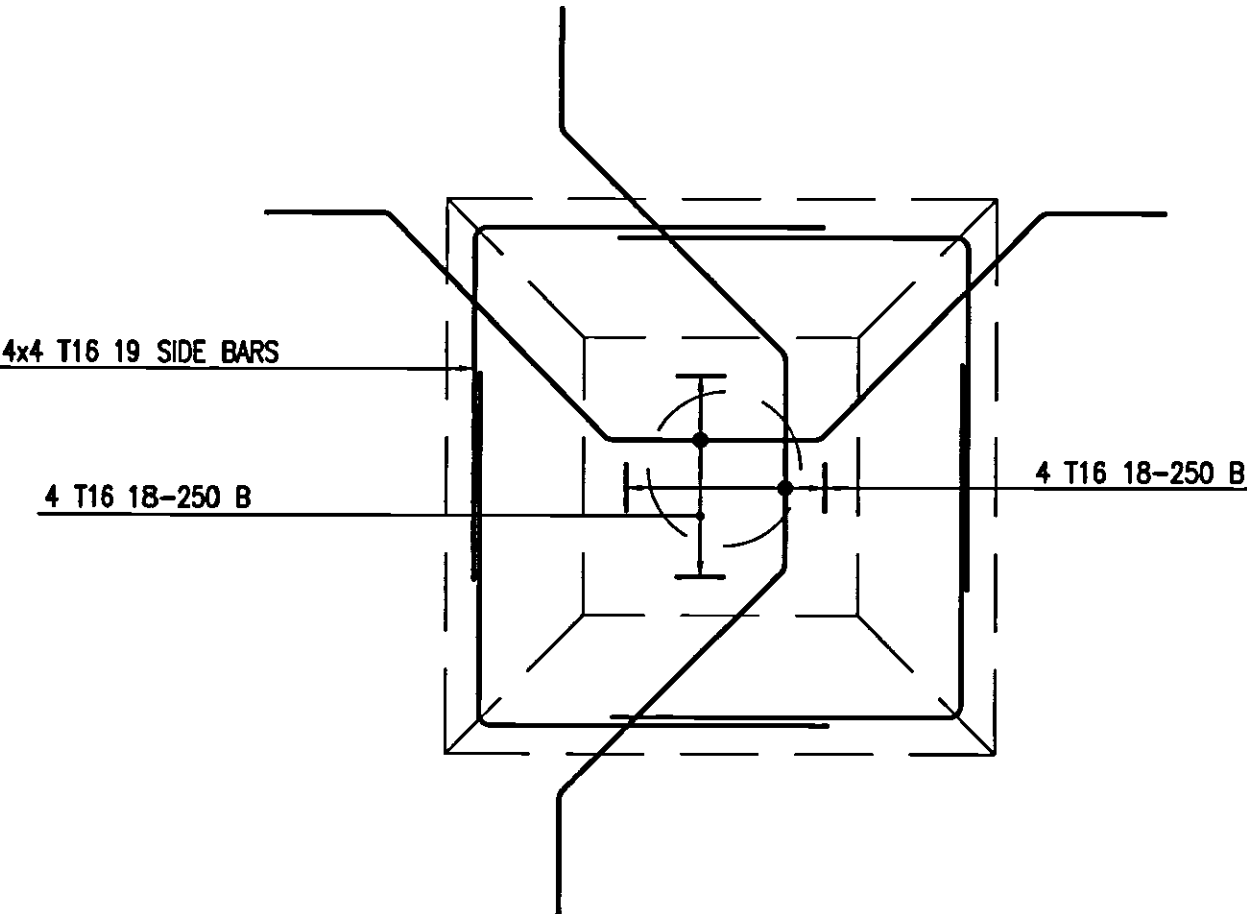
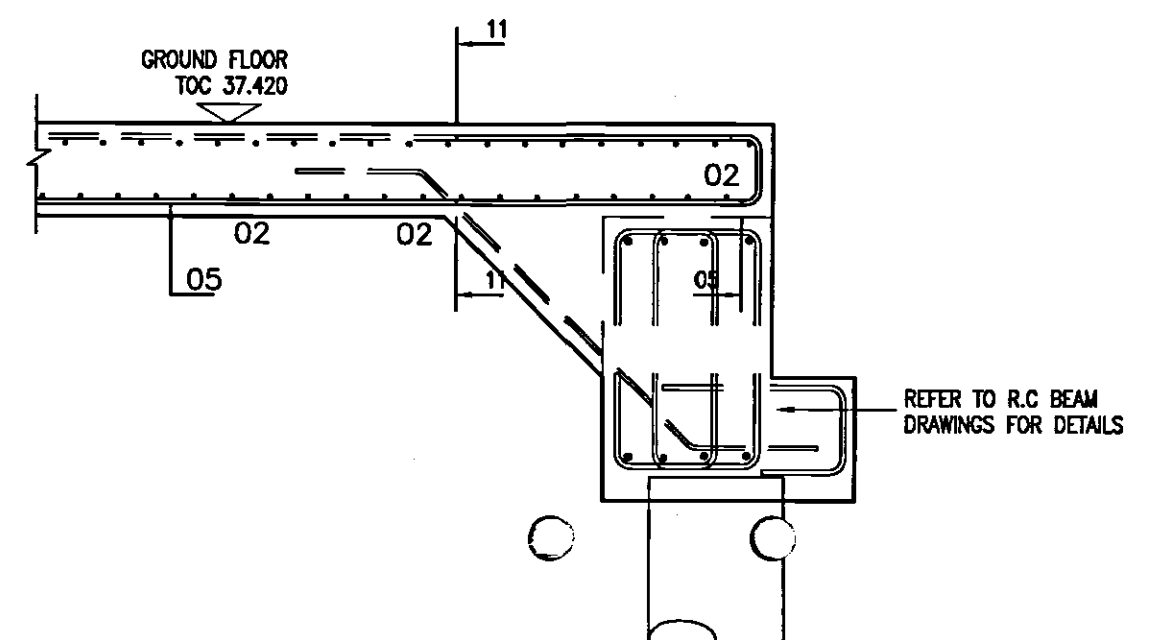
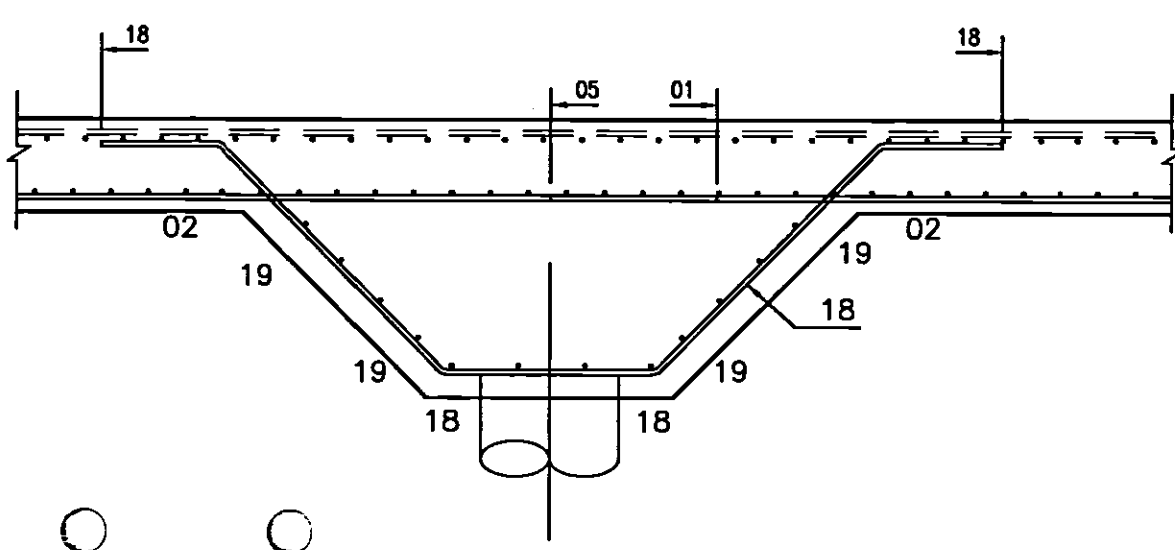
SECTION 3-3



SECTION 2-2



SECTION 1-1



PLAN ON SLAB THICKENING DETAIL
(3No)

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 - COVER:
BOTTOM ... 40mm
TOP ... 25mm
 - STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-

13	1	20	-	07	-	200	TOP
							LAYER
							BAR CENTRES
							BAR MARK
							BAR SIZE
							BAR TYPE
							No. of BARS
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 - ABBREVIATIONS
R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER

REINFORCED CONCRETE ABBREVIATIONS
EW EACH WAY
EF EACH FACE
T1, T2... TOP LAYER 1, 2, etc...
B1, B2... BOTTOM LAYER 1, 2, etc...
NF NEAR FACE
FF FAR FACE
STG STAGGERED

REINFORCEMENT ABBREVIATIONS
T HIGH YIELD (GRADE 460) REINFORCEMENT
R MILD STEEL (GRADE 250) REINFORCEMENT

02 AS BUILT	17.07.07	RC	A.M.
01 LAYER CONVENTION REVISED AS NOTED	NY1	I.S.	..
00 ISSUED FOR CONSTRUCTION	16.08.06	I.S.	AM
Rev. Description	Date	Dwn	Ch'd

AS BUILT

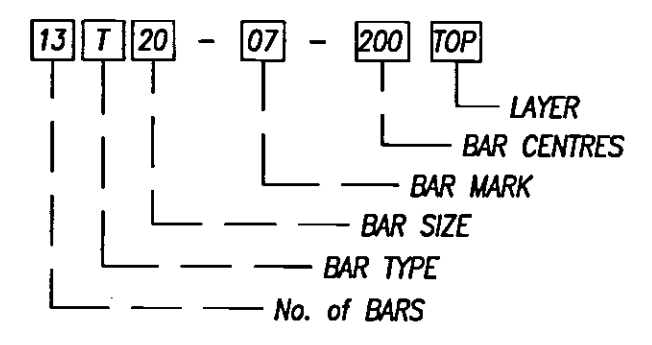
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NEW LAW FACULTY
R.C. DETAILS OF GROUND FLOOR SLAB
(BOTTOM STEEL)
SHEET 3 OF 4

Scale: 1:100, 25	Job No. 010023
Drawn by L.SIMONS	Drawing No. R14
Checked by A.M.	Rev. 02
Date JUNE 2006	

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 - FOR ALL SETTING OUT INFORMATION REFER TO THE ARCHITECTS DRAWINGS.
 - COVER:
BOTTOM AND TOP ... 50mm
SIDES ... 50mm
 - STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-



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- ABBREVIATIONS**
R.C. REINFORCED CONCRETE
C.A. GENERAL ARRANGEMENT
DRG DRAWING
NTS NOT TO SCALE
SFL STRUCTURAL FLOOR LEVEL
FFL FINISHED FLOOR LEVEL
DIA DIAMETER
- REINFORCED CONCRETE ABBREVIATIONS**
EW EACH WAY
EF EACH FACE
T1, T2... TOP LAYER 1, 2, etc...
B1, B2... BOTTOM LAYER 1, 2, etc...
NF NEAR FACE
FF FAR FACE
STG STAGGERED
- REINFORCEMENT ABBREVIATIONS**
T HIGH YIELD (GRADE 460) REINFORCEMENT
R MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT	17.07.07	RC	A.M
00 ISSUED FOR CONSTRUCTION	08.08.06	fk	A.M
Rev Description	Date	Dm	Ch'd

AS BUILT

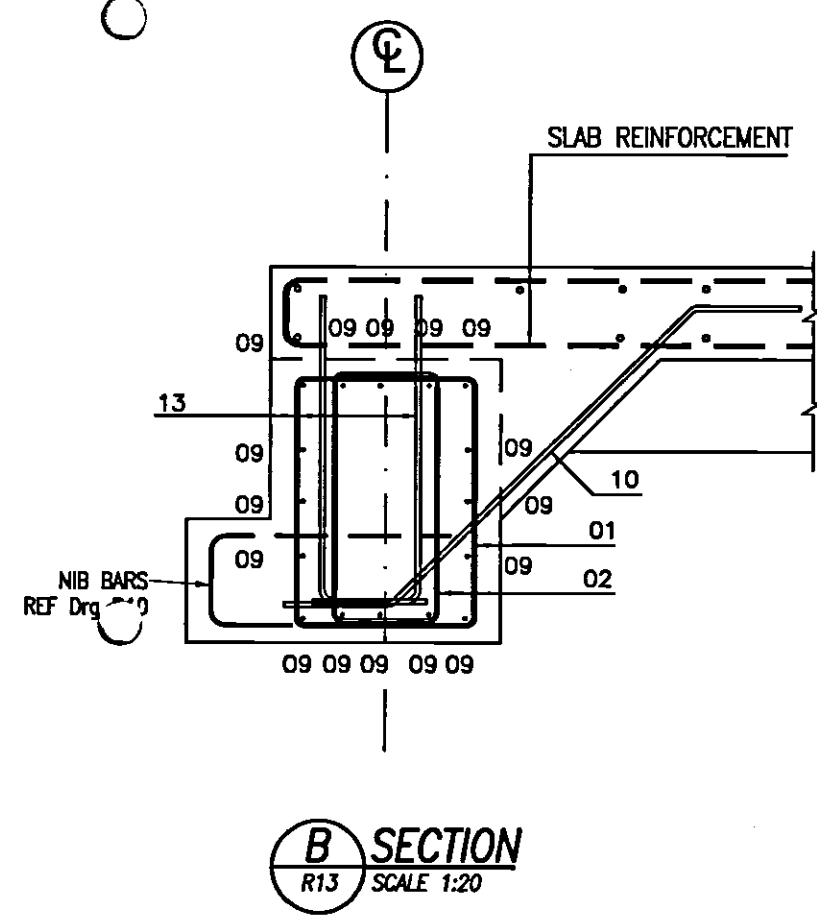
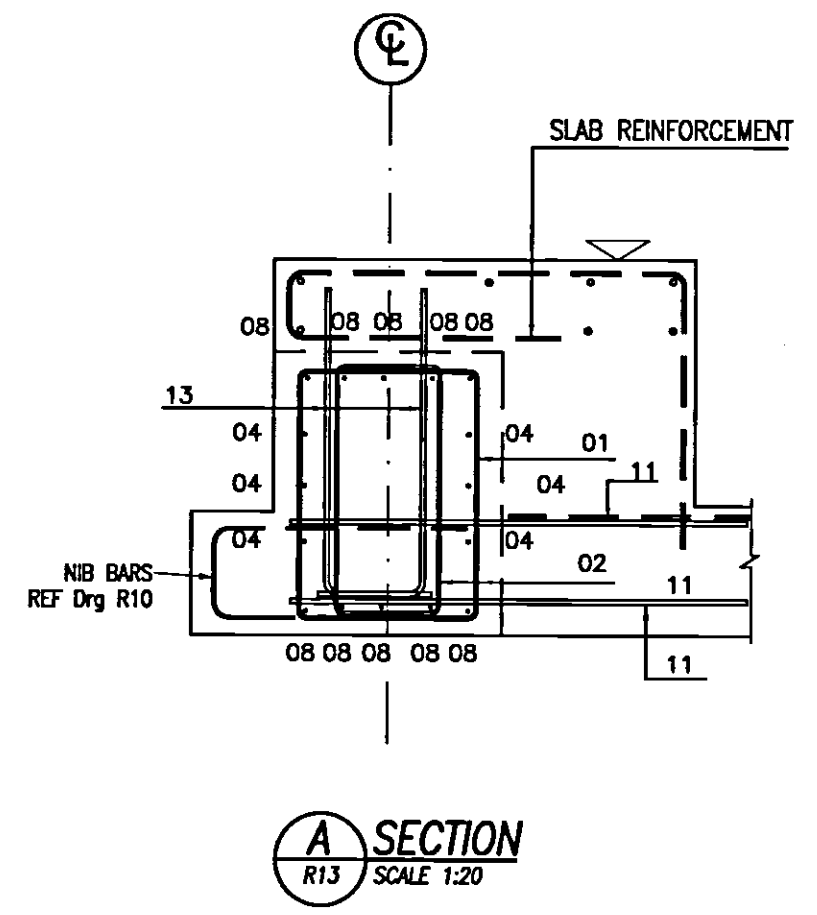
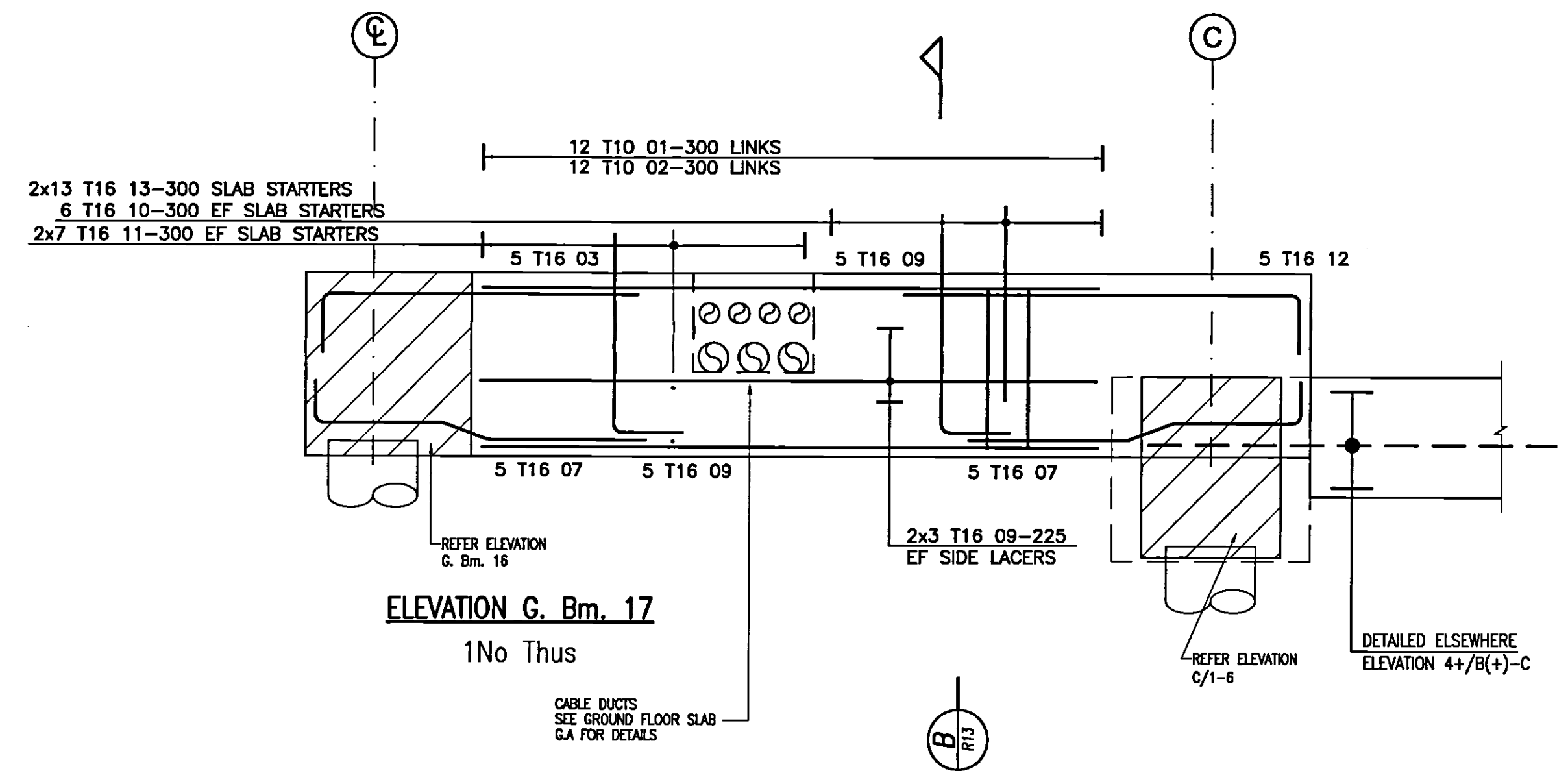
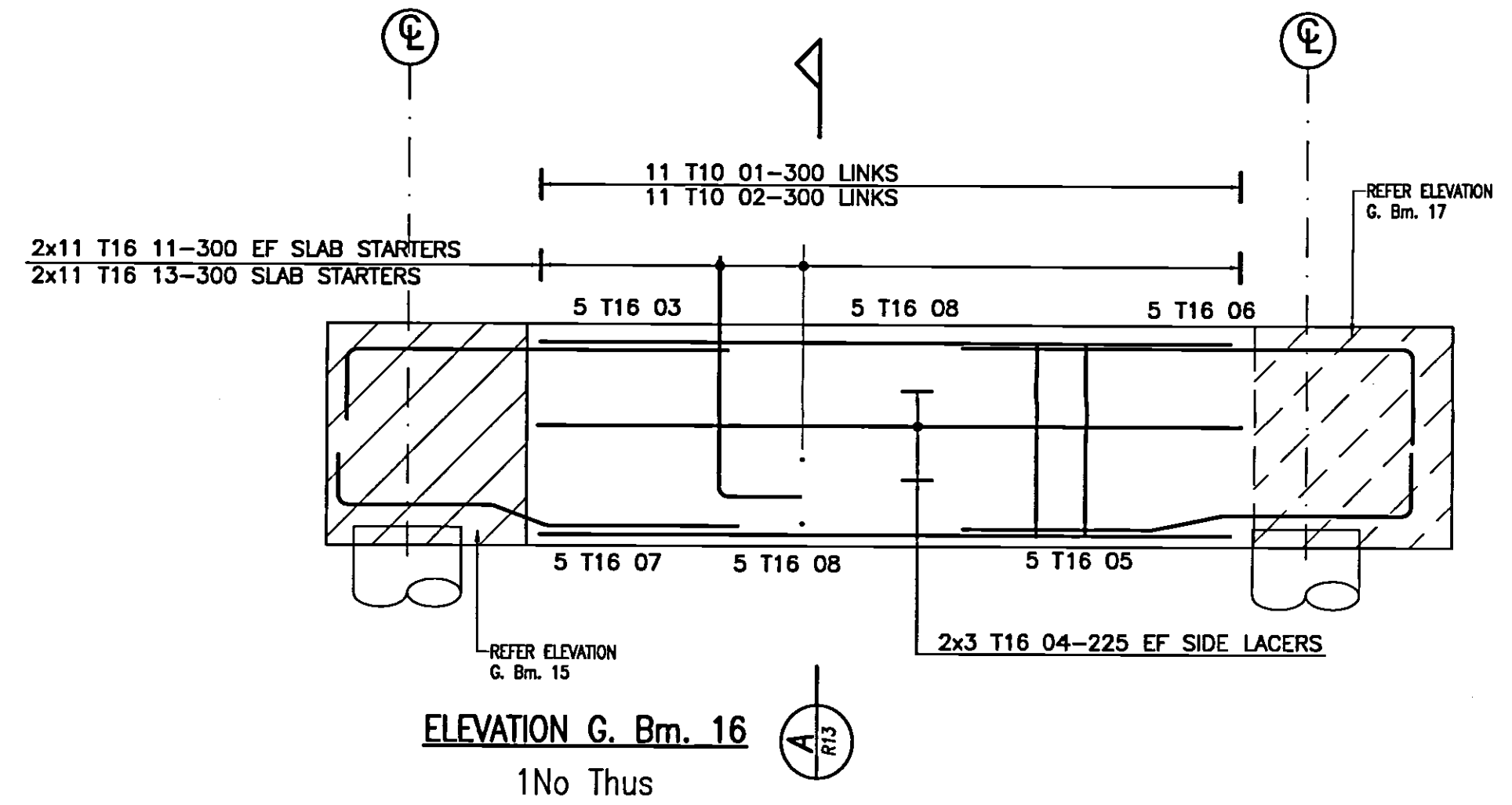
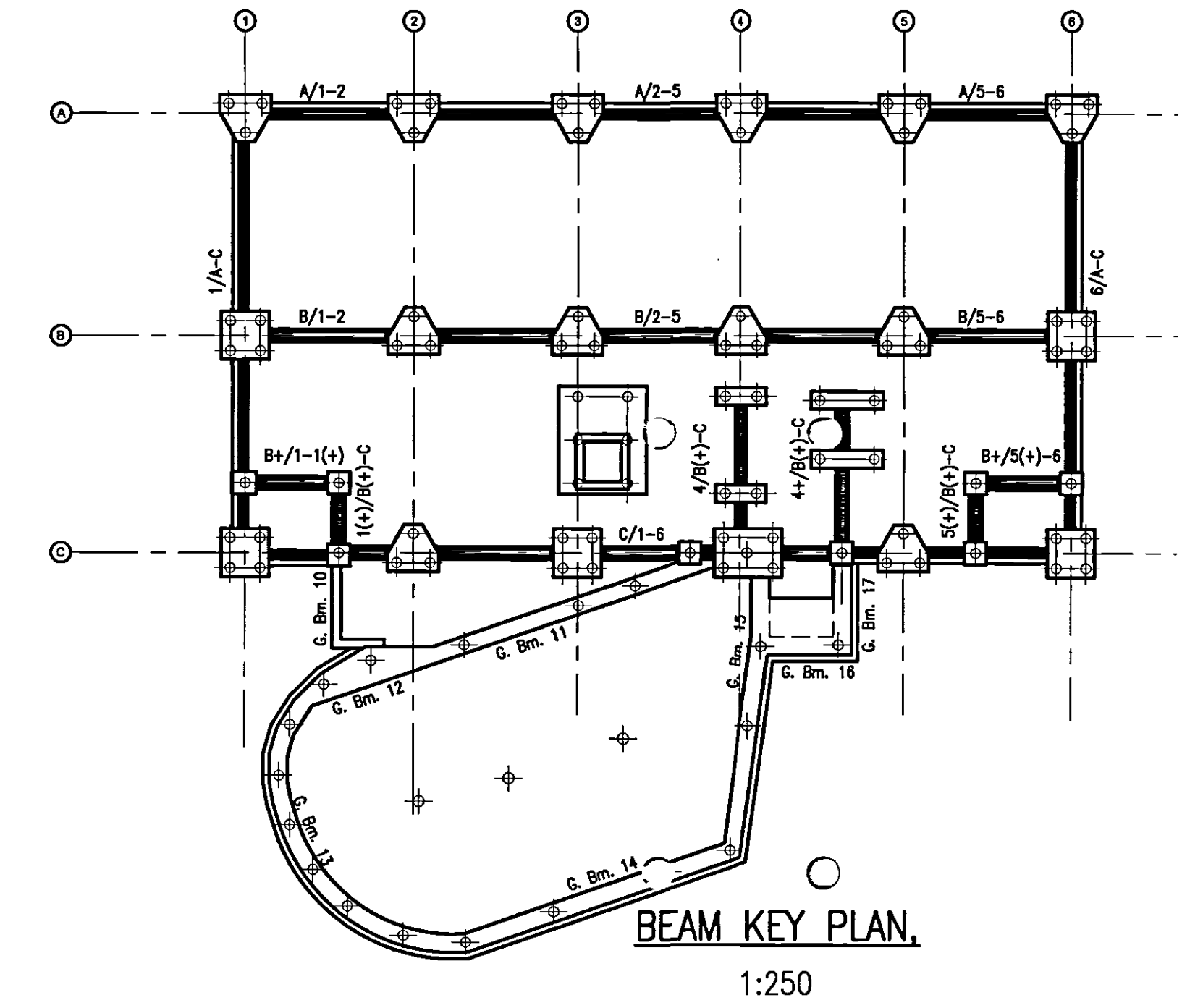
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R.C Details of Ground beams
Sheet 9 of 9

Scale: A1 1:25	Job No. 010023
Drawn by: fk	Drawn No. R13
Checked by: A.M	Rev 01
Date: July 06	



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ABBREVIATIONS

R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

EW EACH WAY
EF EACH FACE
T1, T2... TOP LAYER 1, 2, etc....
B1, B2... BOTTOM LAYER 1, 2, etc....
NF NEAR FACE
FF FAR FACE
STG STAGGERED

REINFORCEMENT ABBREVIATIONS

T HIGH YIELD (GRADE 460) REINFORCEMENT
R MILD STEEL (GRADE 250) REINFORCEMENT

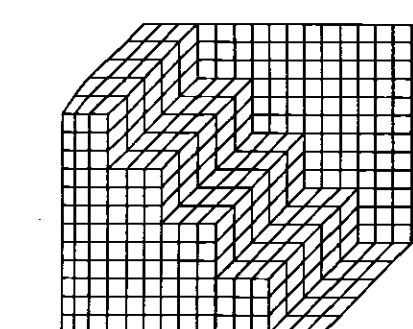
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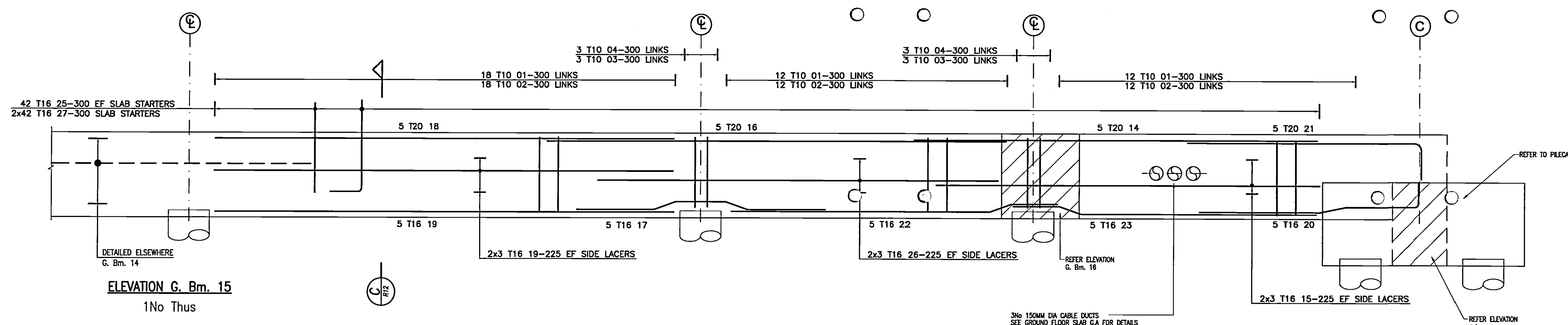
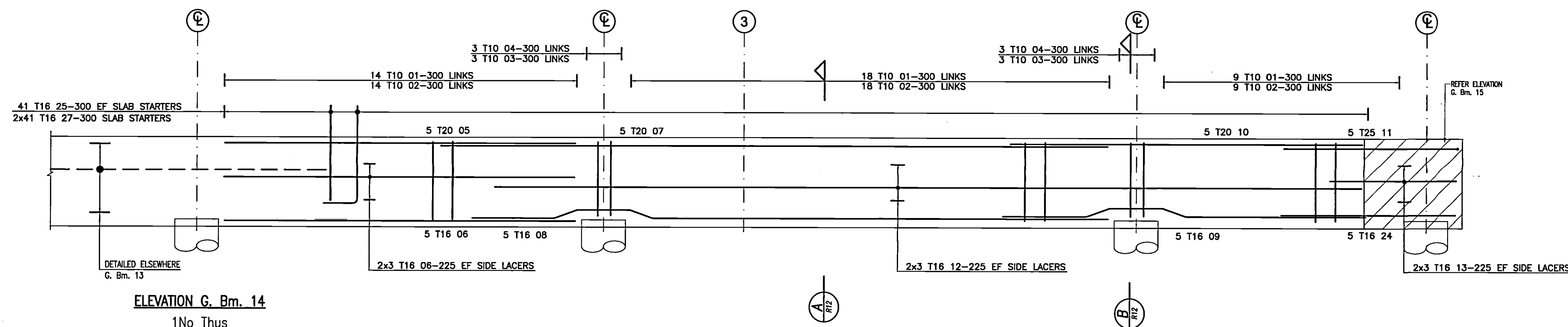
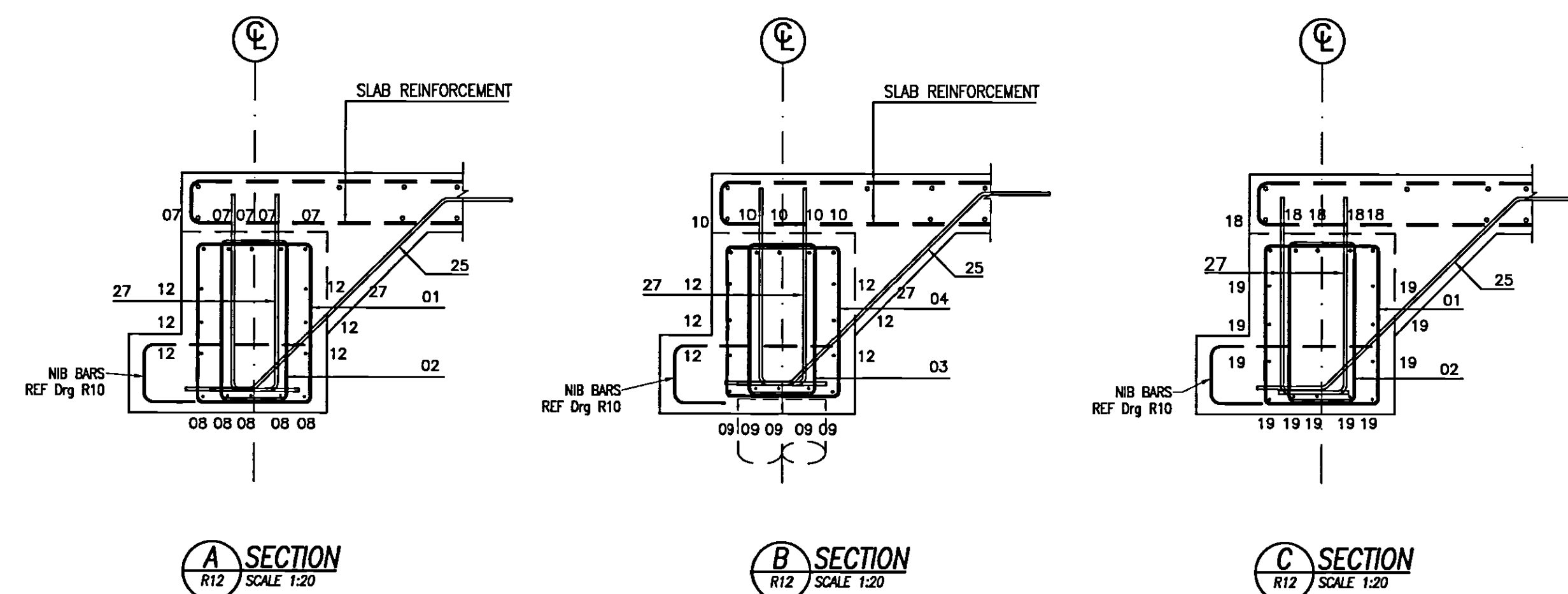
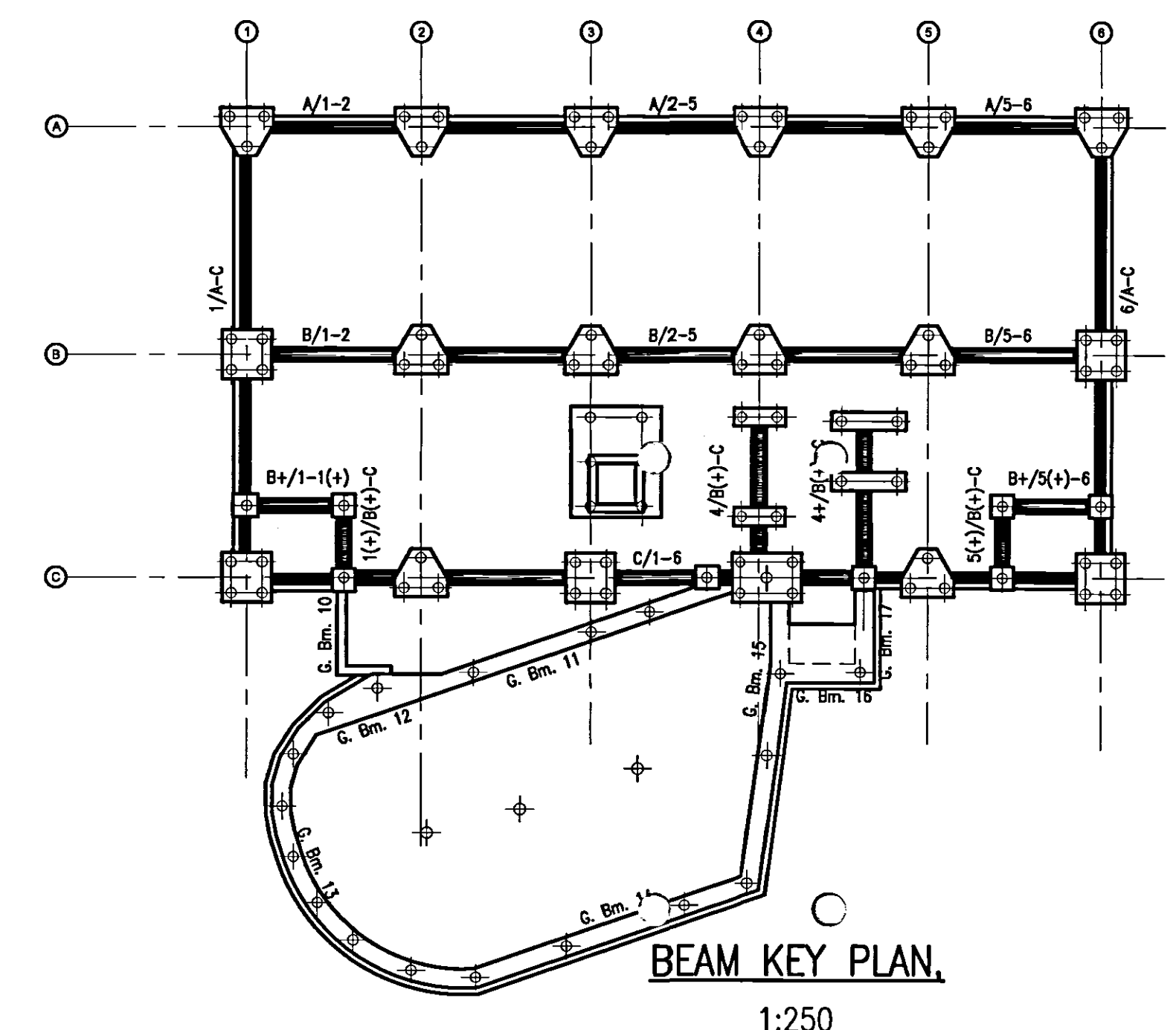
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R.C Details of Ground beams
Sheet 8 of 9

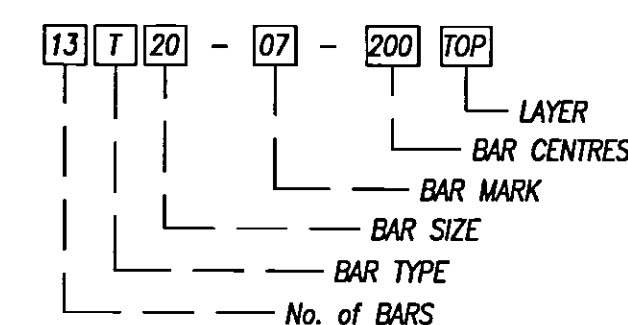
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Checked by: A.M	Rev 01
Date: July 06	



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- COVER:
BOTTOM AND TOP ... 50mm
SIDES ... 50mm
- STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-



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ABBREVIATIONS

R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG DRAWING
NTS NOT TO SCALE
SFL STRUCTURAL FLOOR LEVEL
FFL FINISHED FLOOR LEVEL
DIA DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

EW EACH WAY
EF EACH FACE
T1, T2... TOP LAYER 1, 2, etc....
B1, B2... BOTTOM LAYER 1, 2, etc....
NF NEAR FACE
FF FAR FACE
STG STAGGERED

REINFORCEMENT ABBREVIATIONS

T HIGH YIELD (GRADE 460) REINFORCEMENT
R MILD STEEL (GRADE 250) REINFORCEMENT

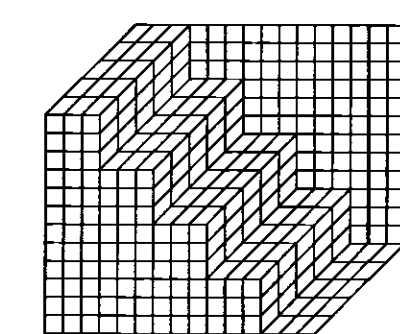
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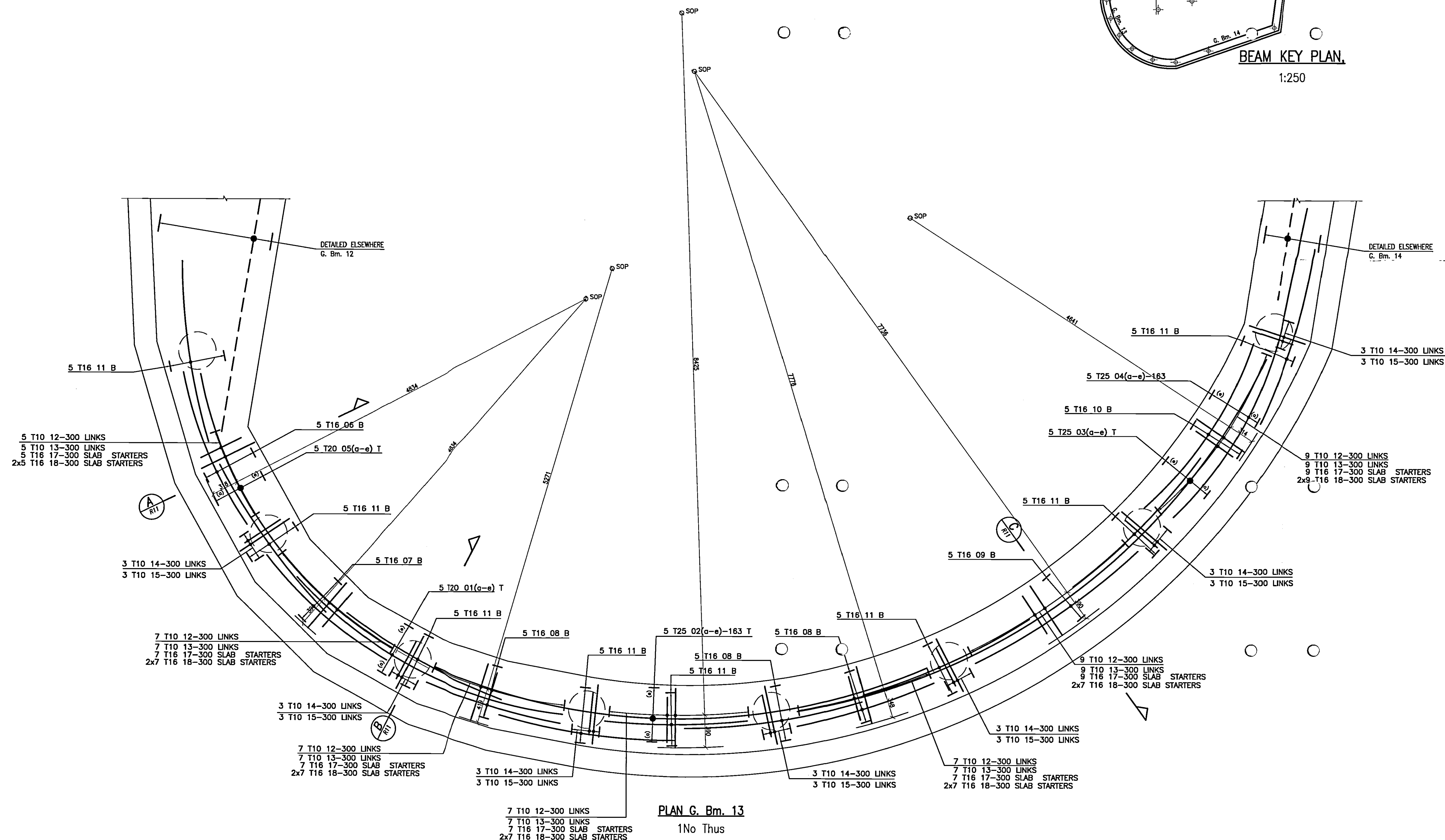
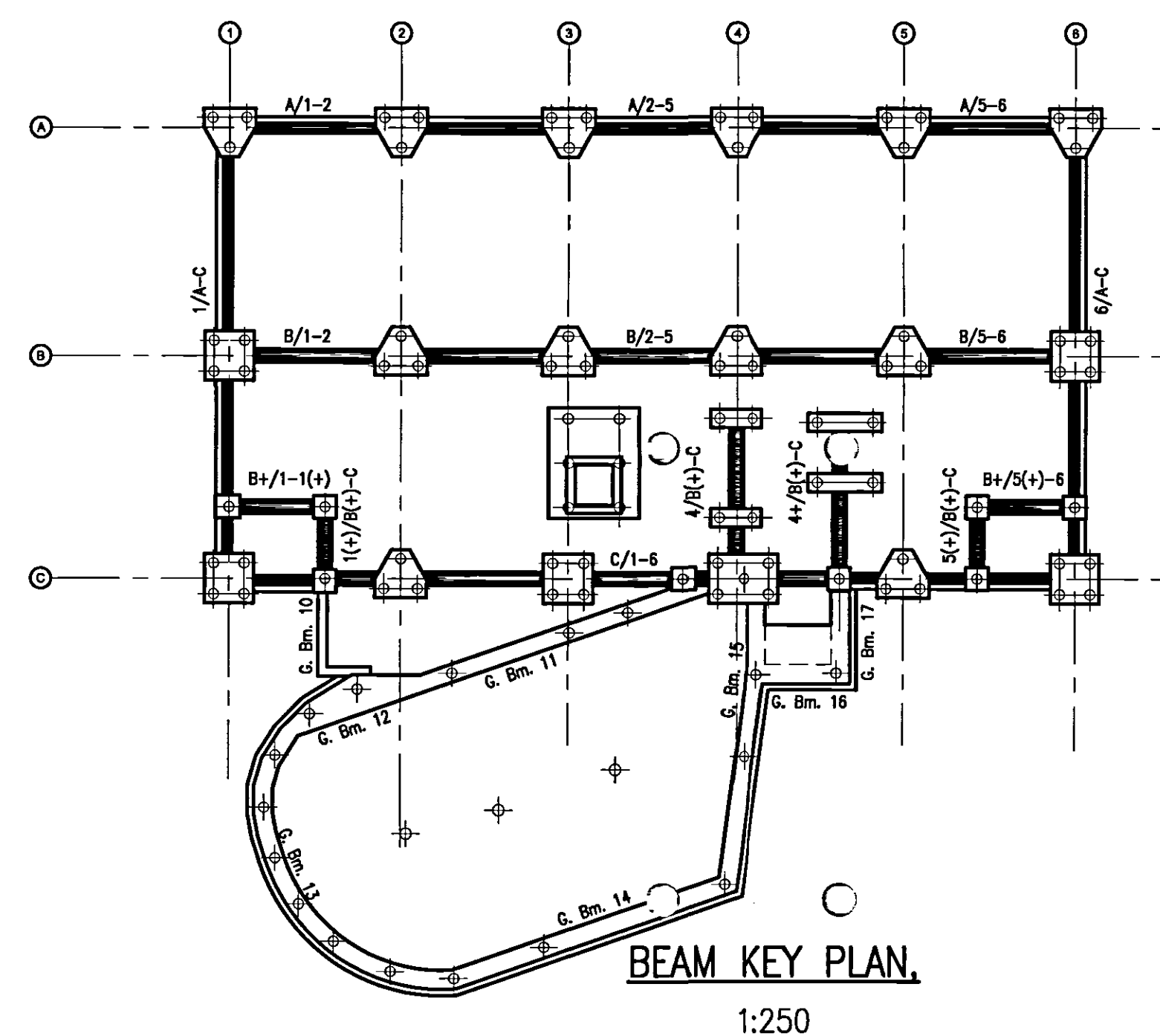
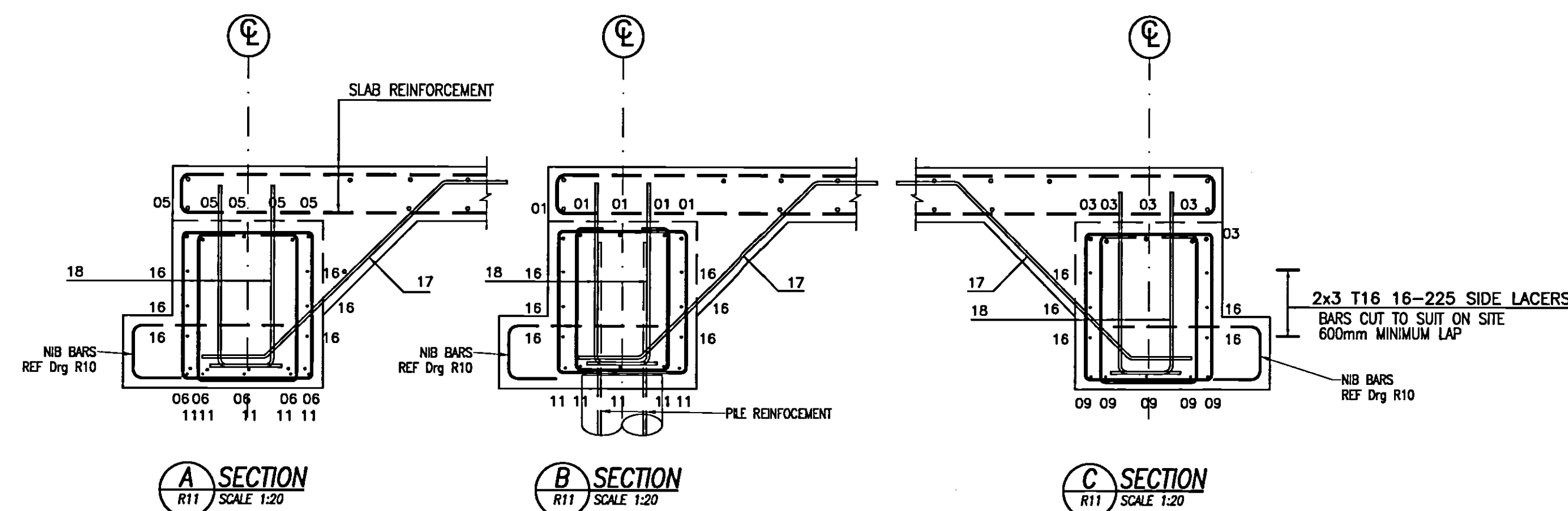
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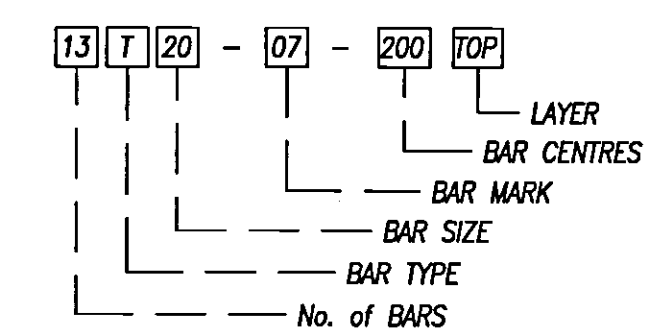
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R.C Details of Ground beams
Sheet 7 of 9

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Date July 06	



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- COVER:
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SIDES ... 50mm
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ABBREVIATIONS

R.C.	REINFORCED CONCRETE
C.A.	GENERAL ARRANGEMENT
DWG	DRAWING
N/S	NOT TO SCALE
SFL	STRUCTURAL FLOOR LEVEL
FFL	FINISHED FLOOR LEVEL
DIA	DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

EW	EACH WAY
EF	EACH FACE
T1, T2...	TOP LAYER 1, 2, etc...
B1, B2...	BOTTOM LAYER 1, 2, etc...
NF	NEAR FACE
FF	FAR FACE
STG	STAGGERED

REINFORCEMENT ABBREVIATIONS

T	HIGH YIELD (GRADE 460) REINFORCEMENT
R	MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT 17.07.07 RC A.M

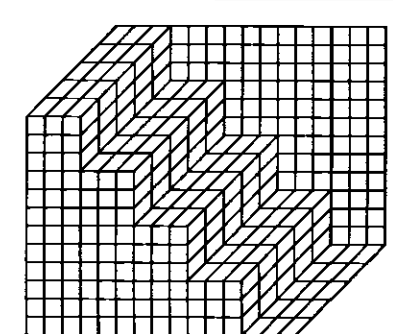
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R.C Details of Ground beams

Sheet 6 of 9

Scales: 1:25

Drawn by: fk

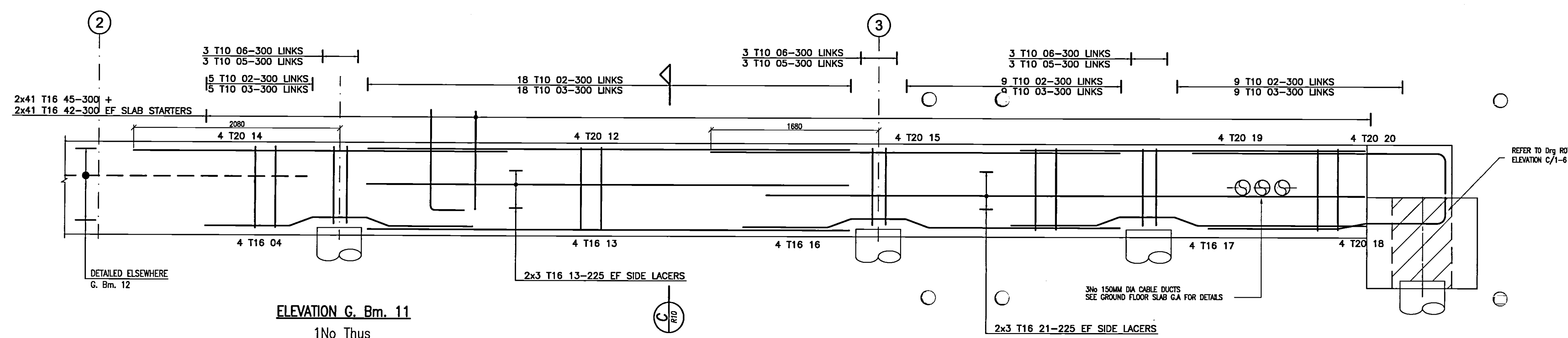
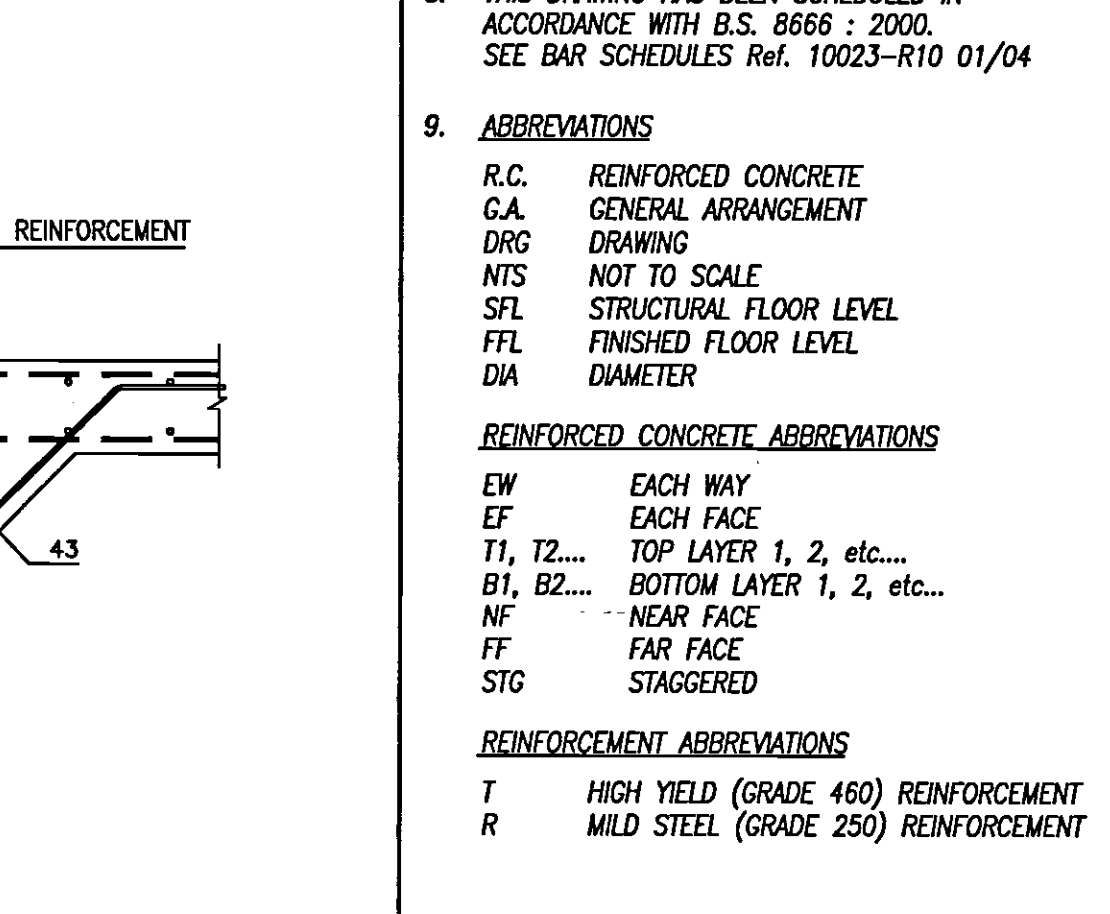
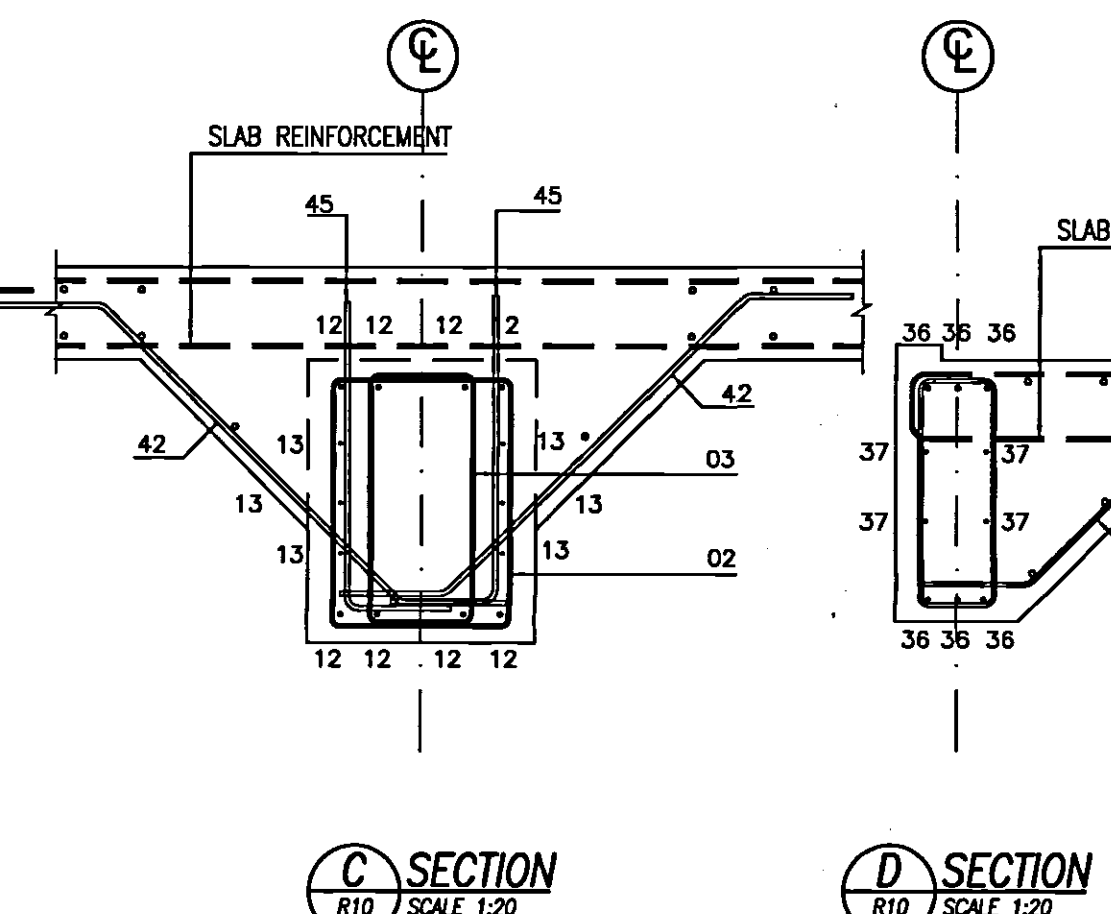
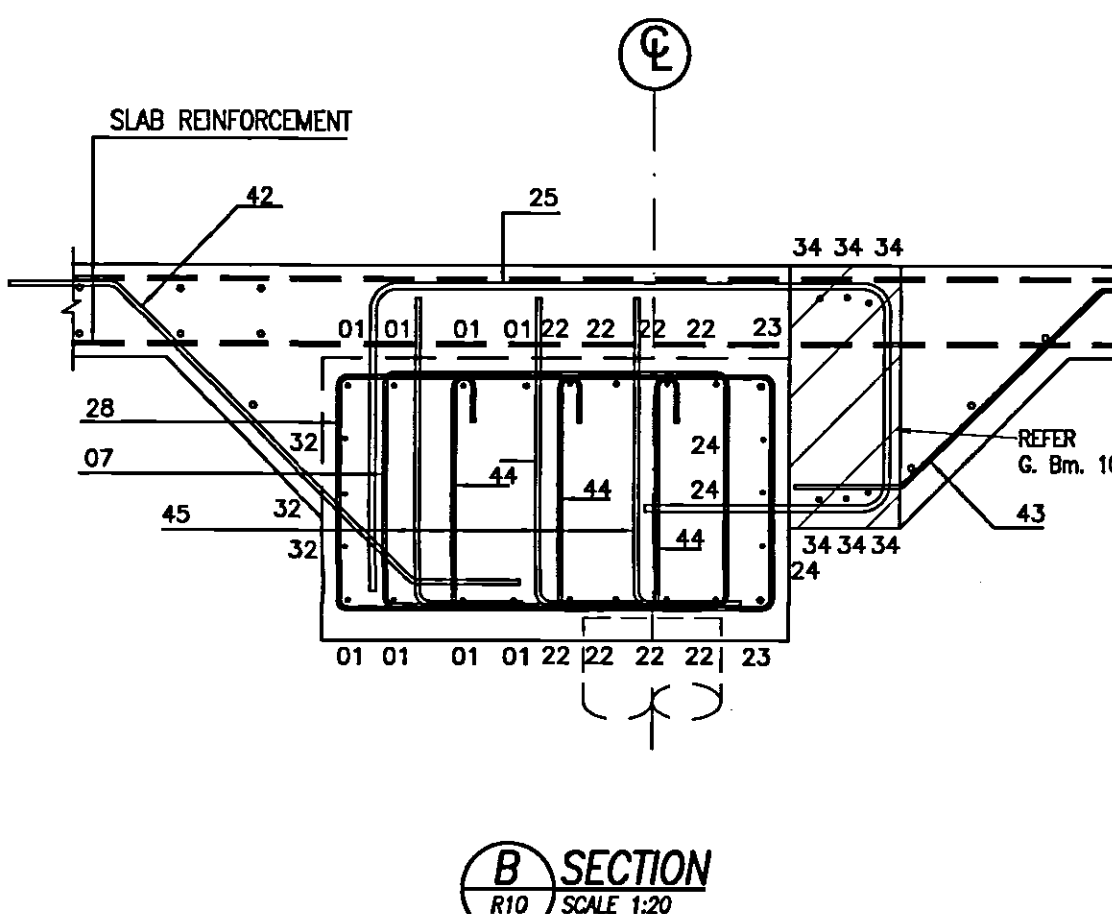
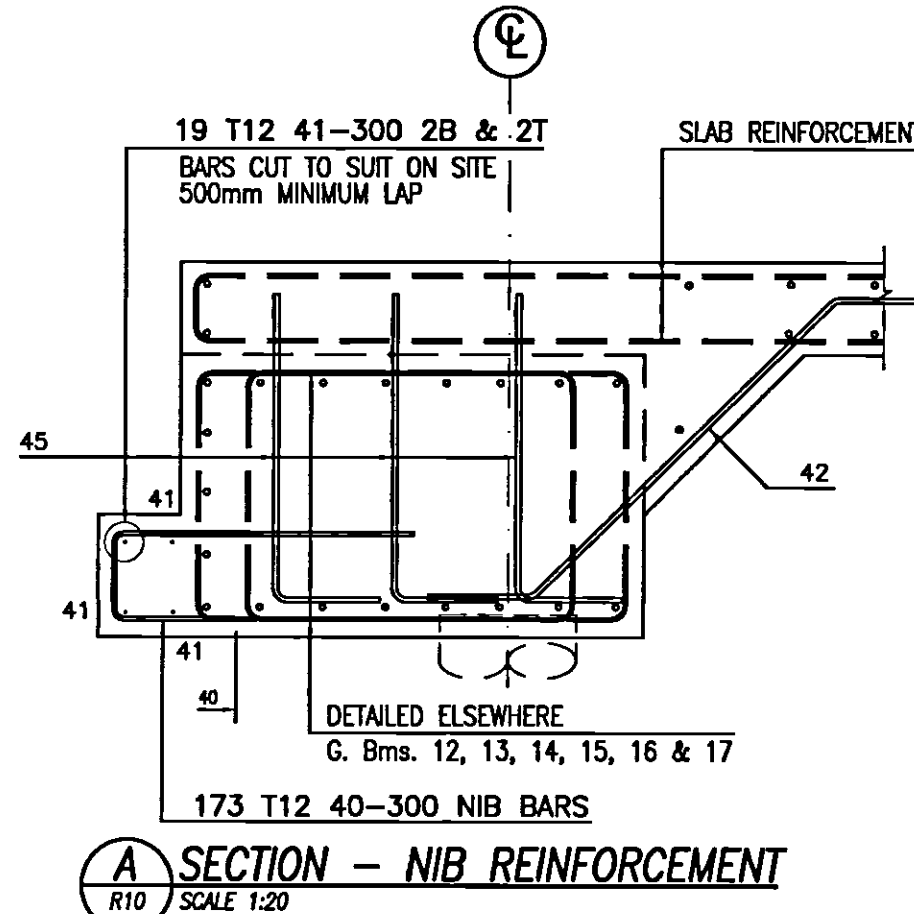
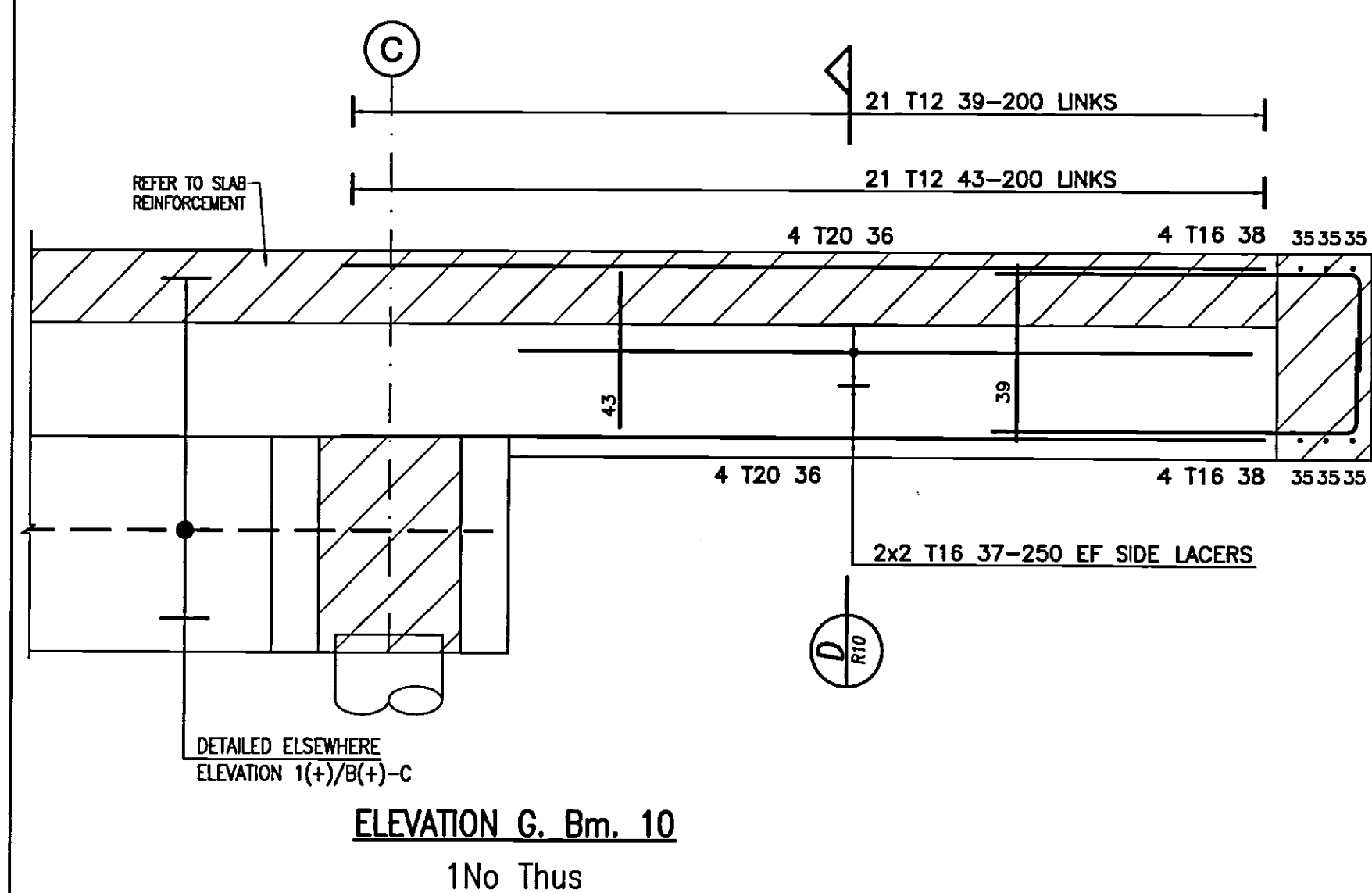
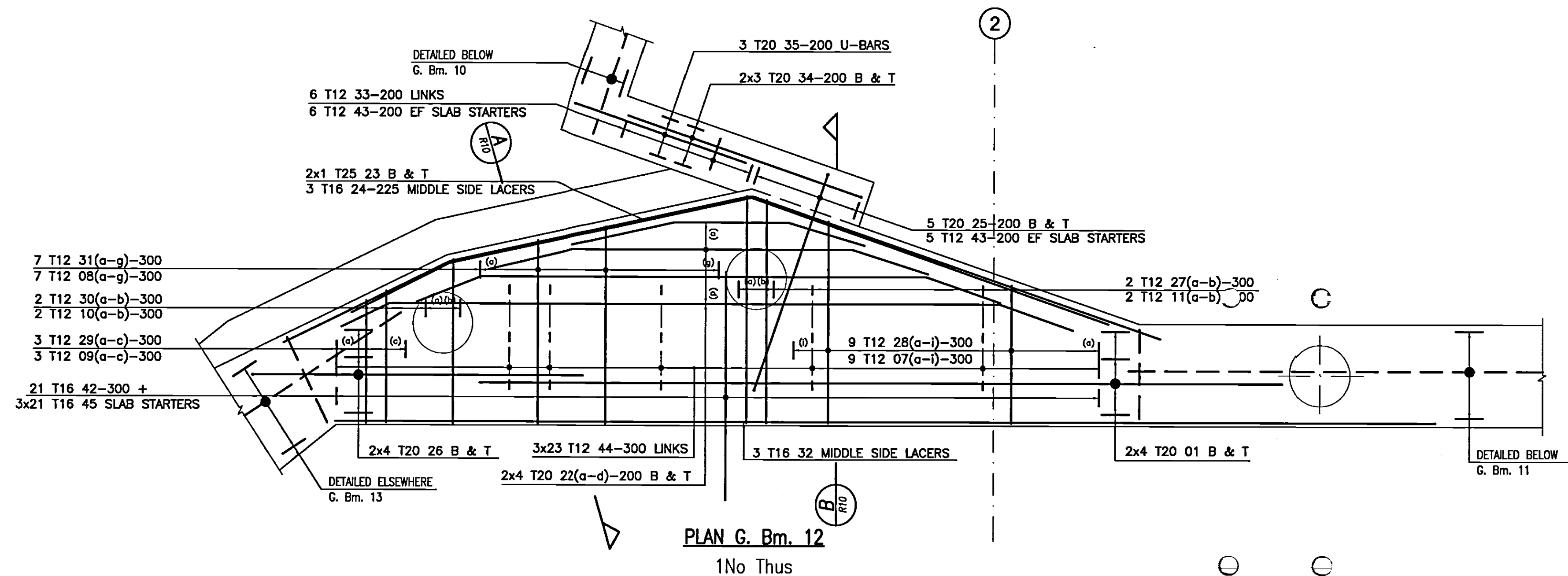
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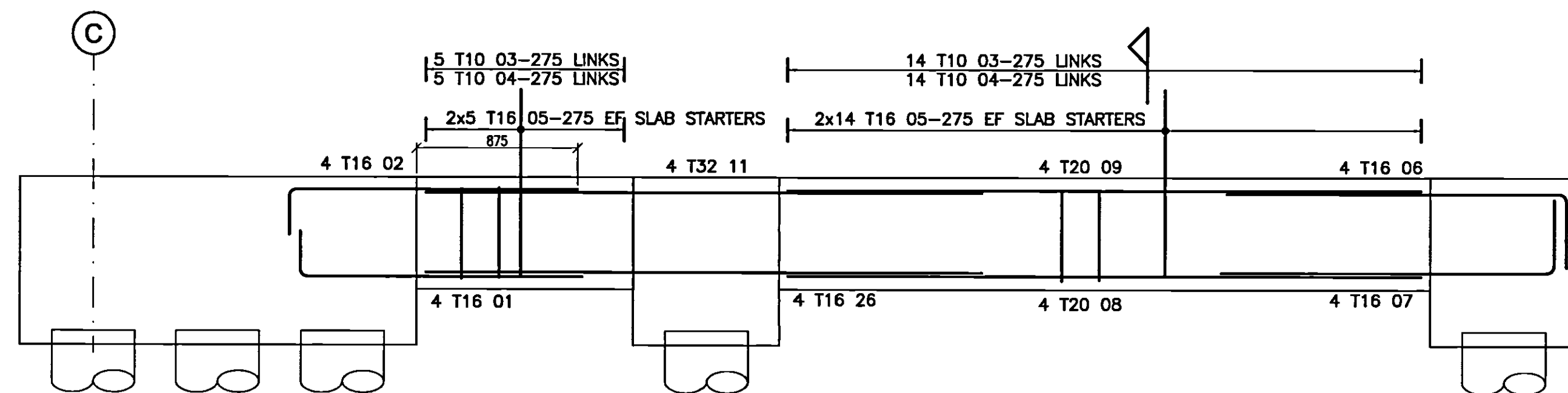
Date: July 06

Job No. 010023

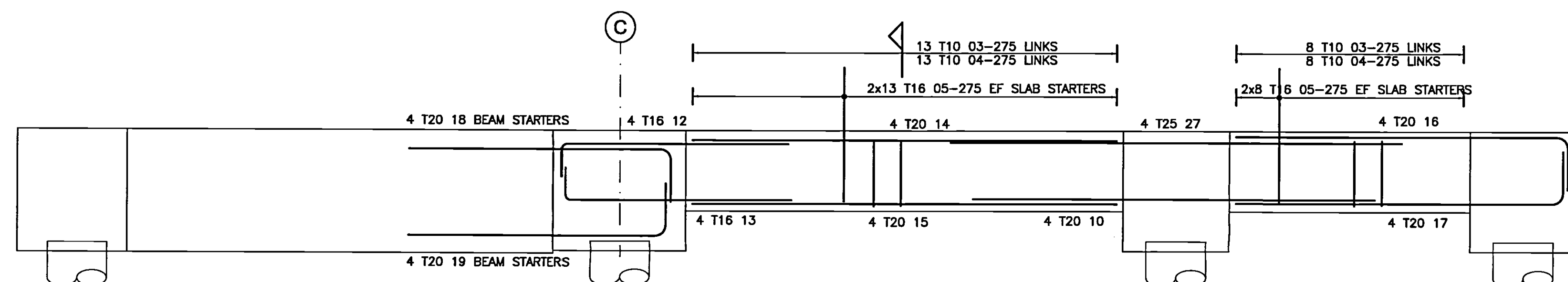
Drawing No. R10

Rev 01

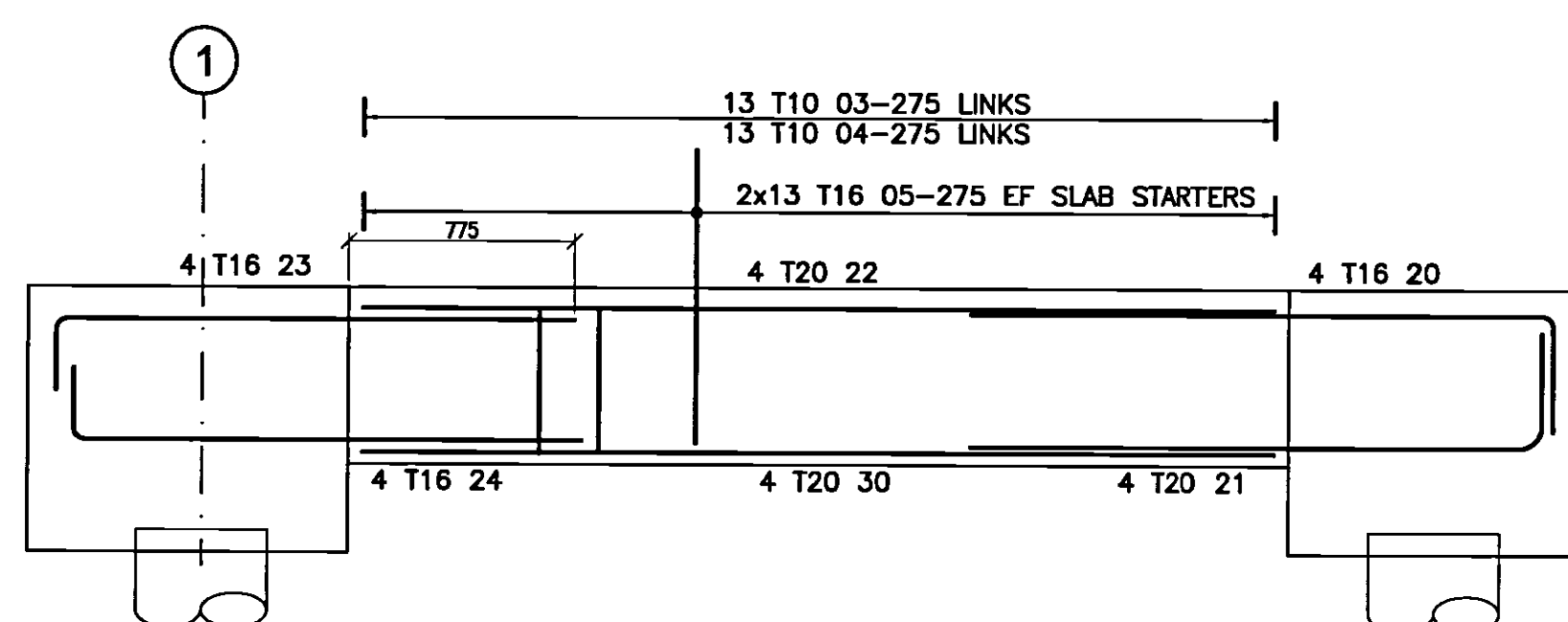




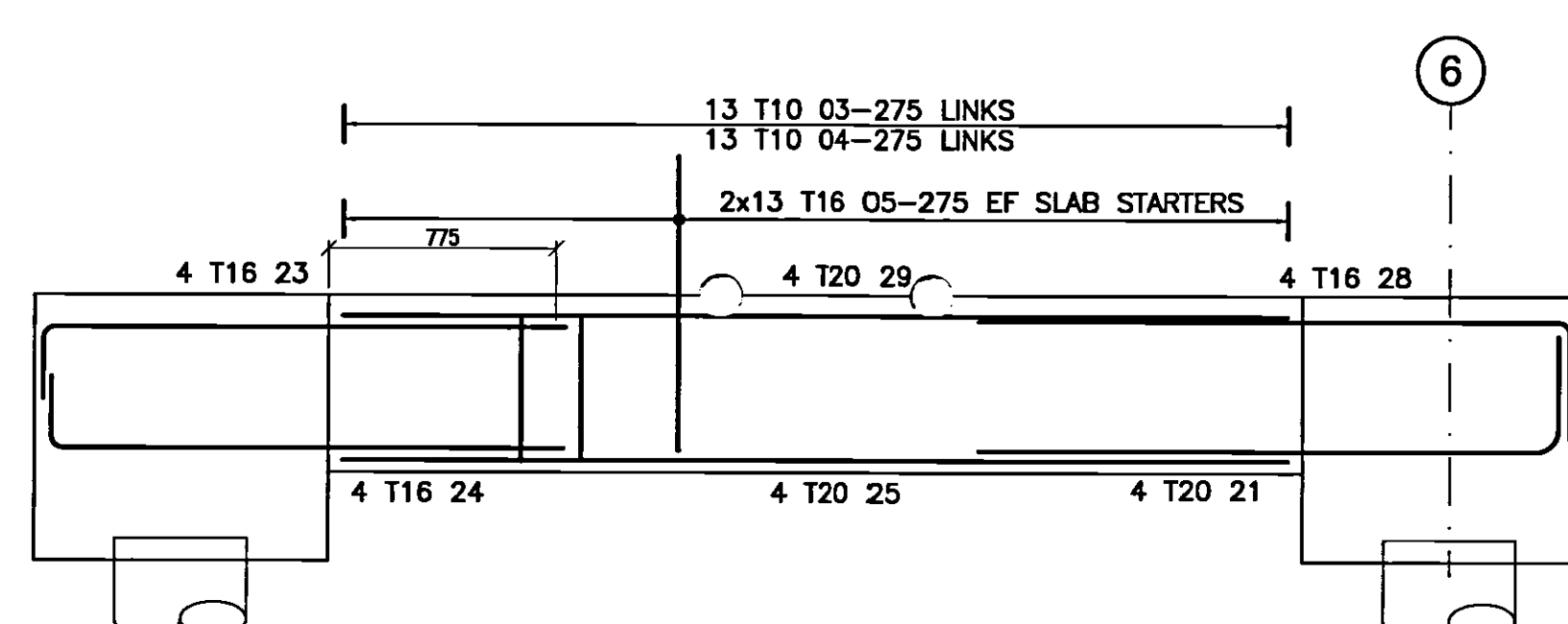
ELEVATION 4/B(+)-C



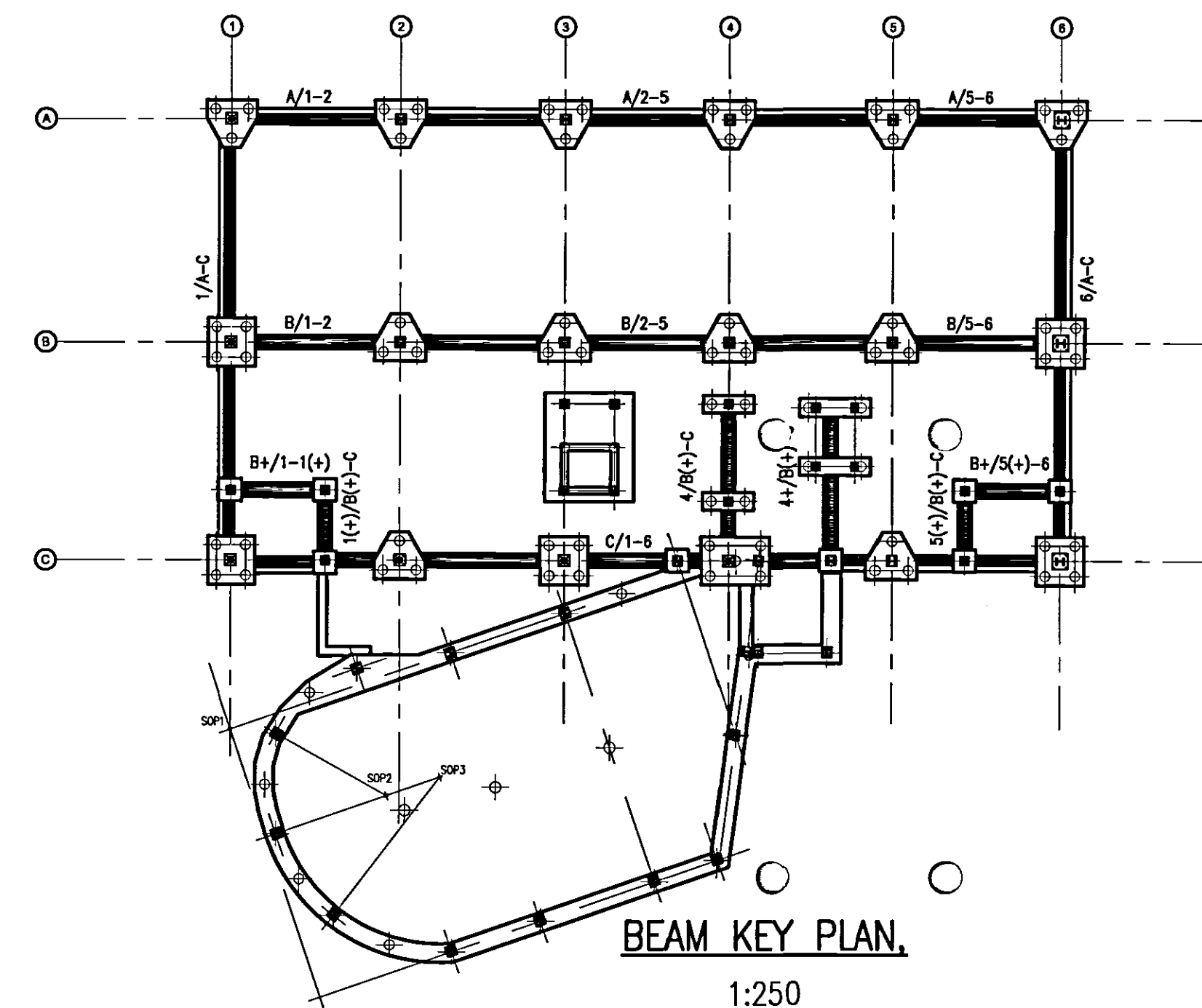
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ELEVATION B+/1-1(+)

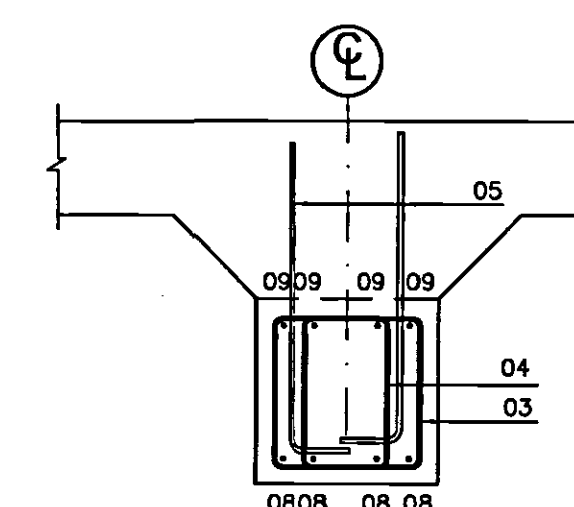


ELEVATION B+/5(+)-6



BEAM KEY PLAN.

1:250



SECTION A

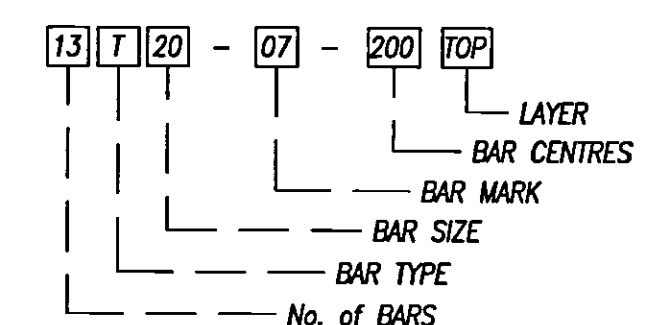
SCALE 1:20

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ABBREVIATIONS

R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

EW EACH WAY
EF EACH FACE
T1, T2... TOP LAYER 1, 2, etc...
B1, B2... BOTTOM LAYER 1, 2, etc...
NF NEAR FACE
FF FAR FACE
STG STAGGERED

REINFORCEMENT ABBREVIATIONS

T HIGH YIELD (GRADE 460) REINFORCEMENT
R MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT 17.07.07 RC A.M.

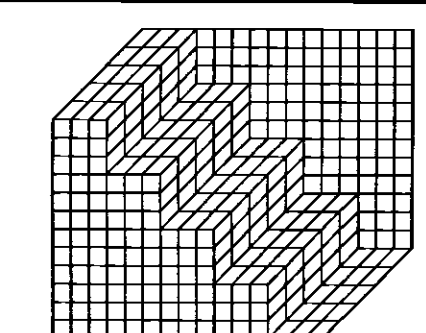
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Rev Description Date Dm Ch'd

Status of drawing

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Project NEW LAW FACILITY
R.C Details of Ground beams
Sheet 1 of --

Scale: 0/1 1:25

Drawn by fk

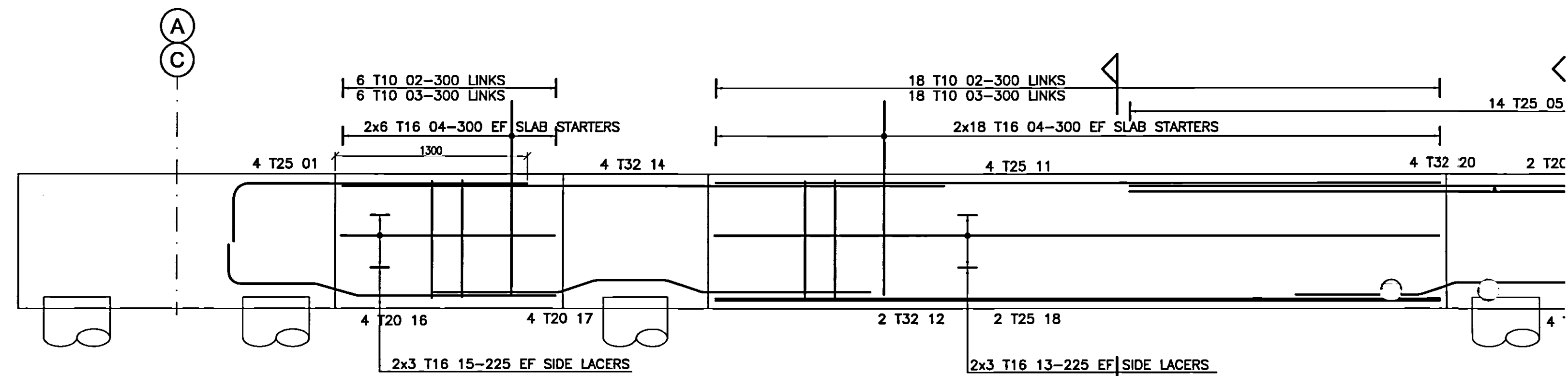
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Date July 06

Job No. 010023

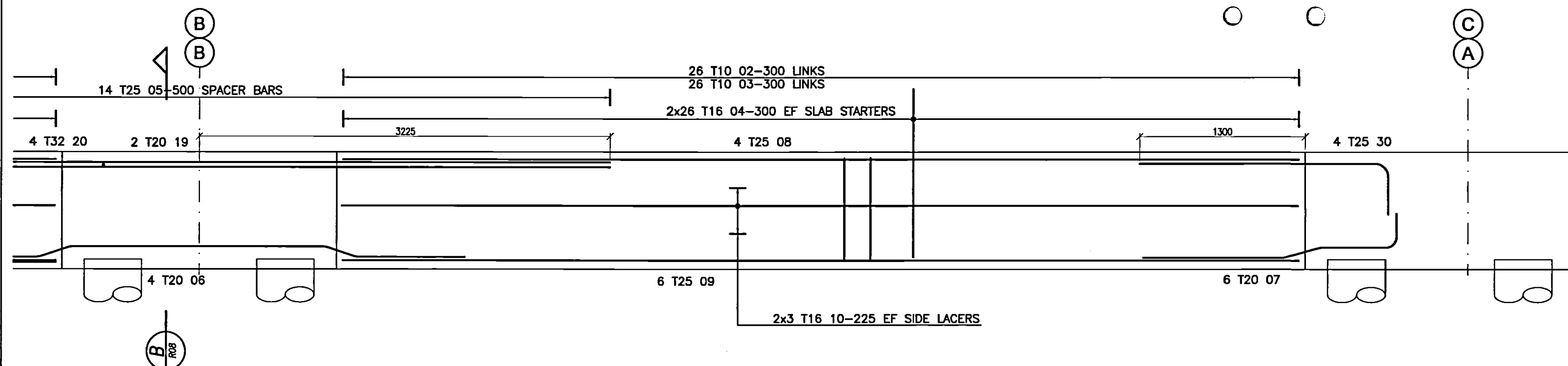
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Rev 01

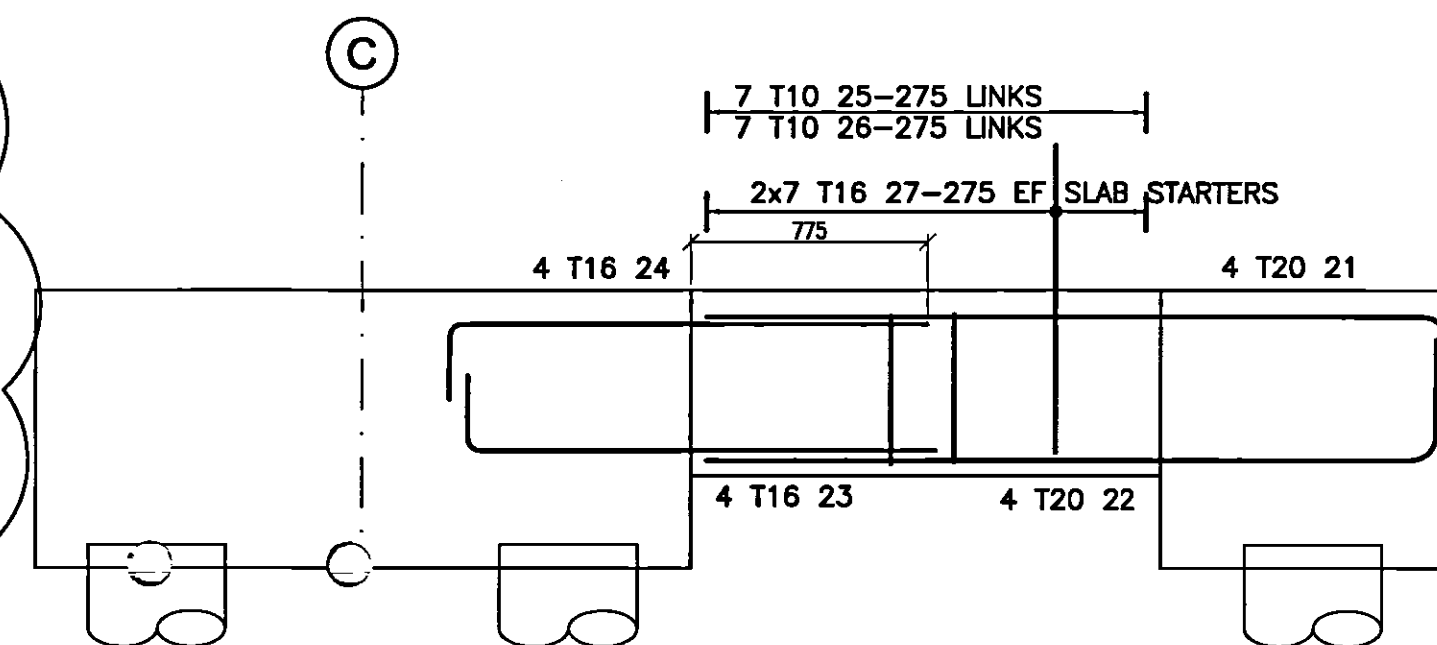


ELEVATION 1/A-C & 6/A-C

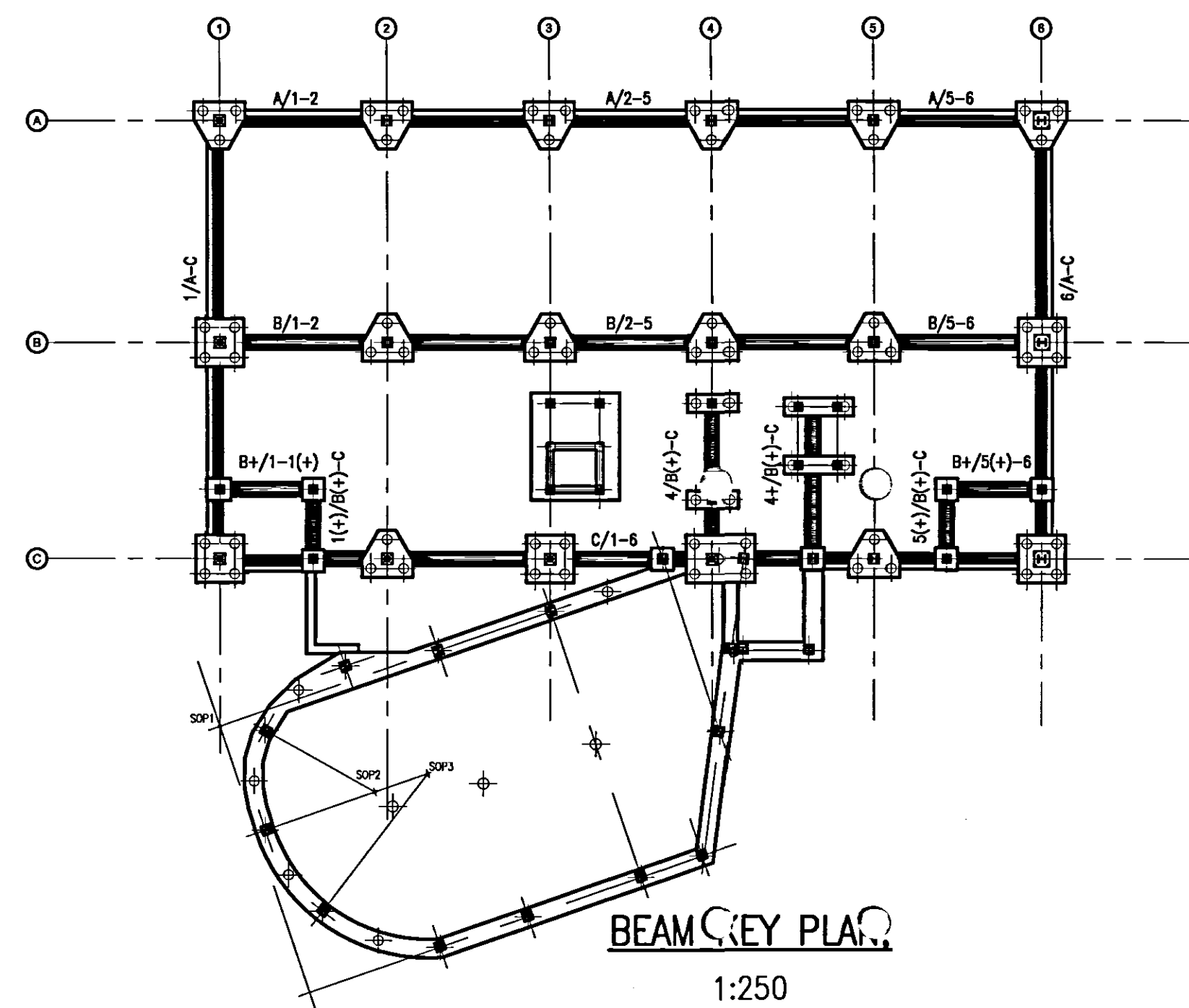
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ELEVATION 1+/B(+)-C



ELEVATION 5+/B(+)-C



BEAM KEY PLAN

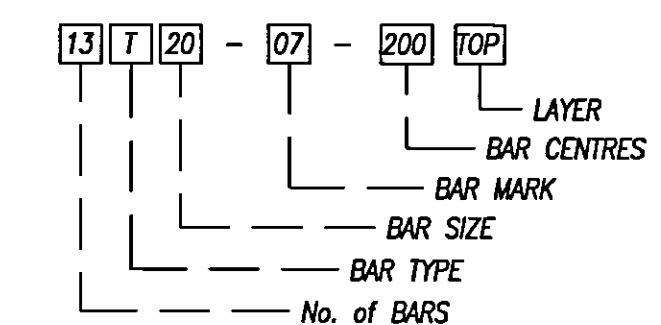
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ABBREVIATIONS

R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG DRAWING
NTS NOT TO SCALE
SFL STRUCTURAL FLOOR LEVEL
FFL FINISHED FLOOR LEVEL
DIA DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

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EF EACH FACE
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B1, B2... BOTTOM LAYER 1, 2, etc....
NF NEAR FACE
FF FAR FACE
STC STAGGERED

REINFORCEMENT ABBREVIATIONS

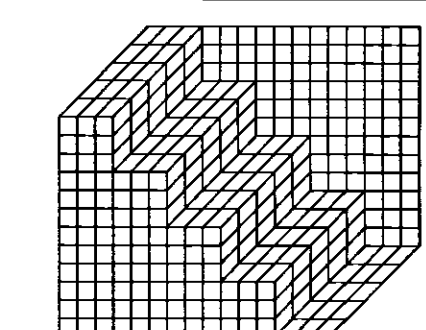
T HIGH YIELD (GRADE 460) REINFORCEMENT
R MILD STEEL (GRADE 250) REINFORCEMENT

02 AS BUILT	17.07.07	RC	A.M.
01 BEAM 1(+)/B(+)-C REVISED	02.08.06	fk	A.M.
00 ISSUED FOR CONSTRUCTION	25.07.06	fk	A.M.
Rev	Description	Date	Drn Ch'd

AS BUILT

Status of drawing

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Project NEW LAW FACULTY

R.C Details of Ground beams
Sheet 4 of 9

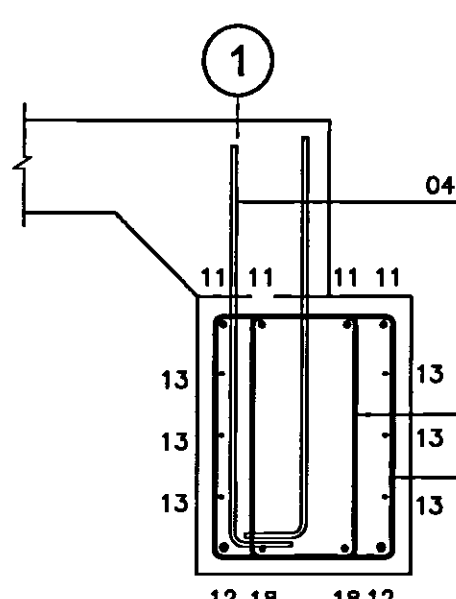
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Checked by A.M.

Date July 06

Job No. 010023

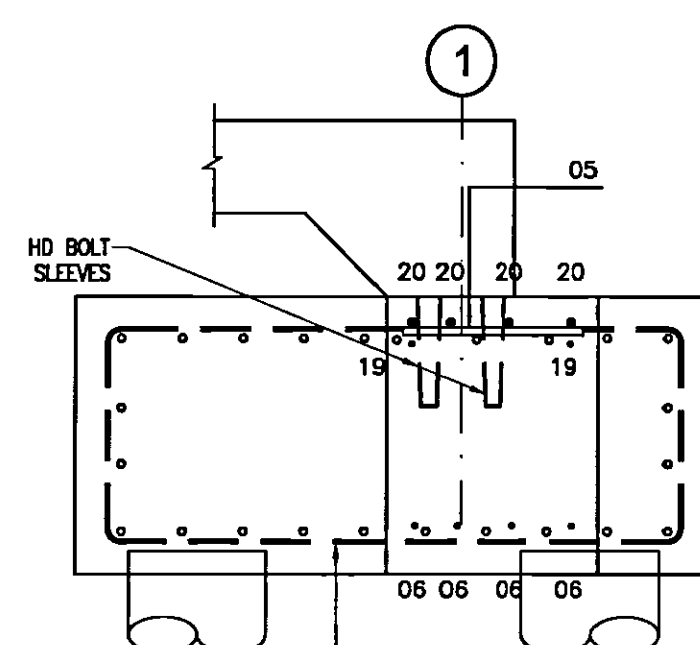
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Rev 02



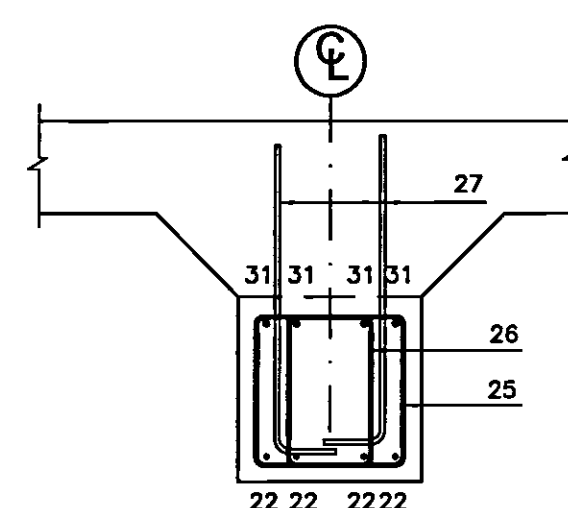
SECTION A

SCALE 1:20



SECTION B

SCALE 1:20

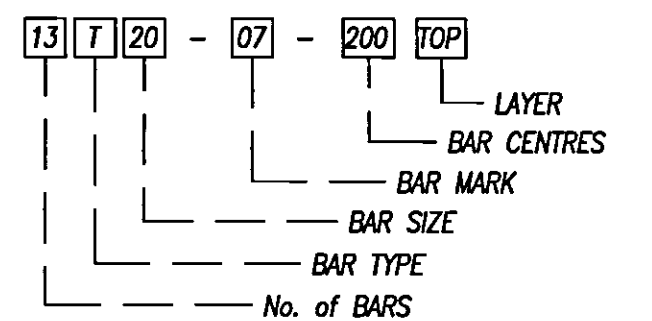


SECTION C

SCALE 1:20

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ABBREVIATIONS

R.C.	REINFORCED CONCRETE
G.A.	GENERAL ARRANGEMENT
DRG	DRAWING
NTS	NOT TO SCALE
SFL	STRUCTURAL FLOOR LEVEL
FFL	FINISHED FLOOR LEVEL
DIA	DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

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FF	FAR FACE
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REINFORCEMENT ABBREVIATIONS

T	HIGH YIELD (GRADE 460) REINFORCEMENT
R	MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT 17.07.07 RC A.M

00 ISSUED FOR CONSTRUCTION 25.07.06 fk A.M

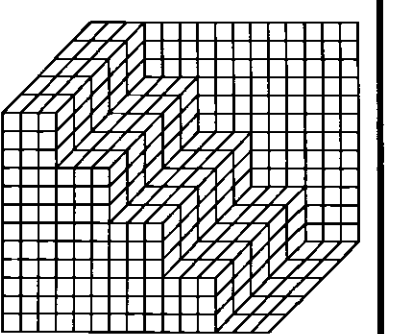
Rev Description Date Dm Chd

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Project **NEW LAW FACULTY**
R.C Details of Ground beams
Sheet 1 of --

Scale: A1 1:25

Drawn by fk

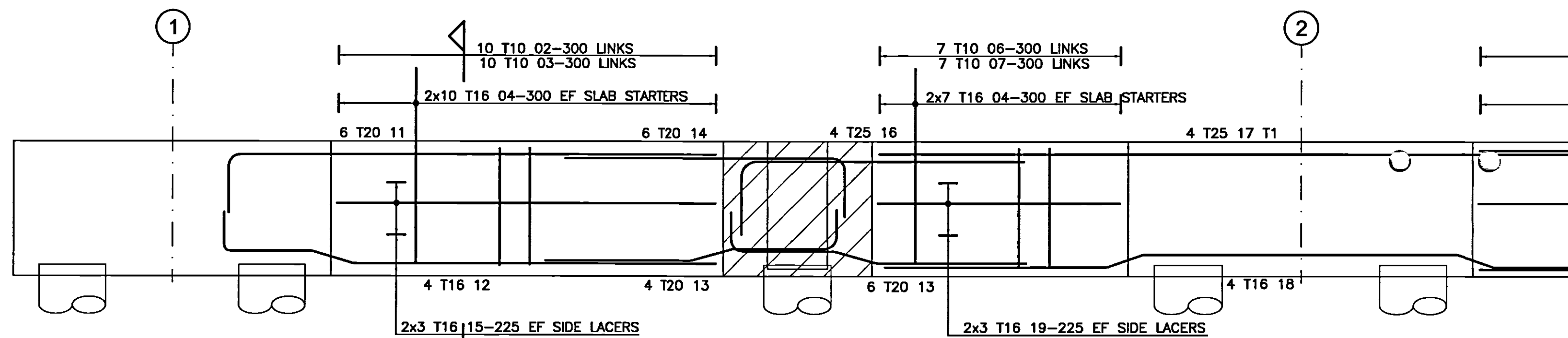
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Date July 06

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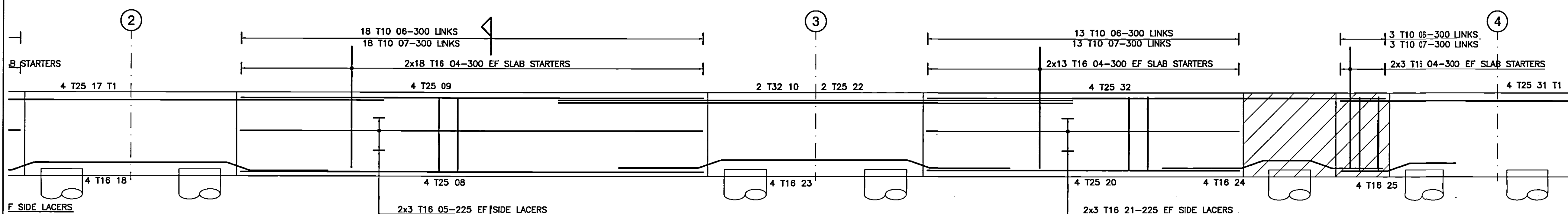
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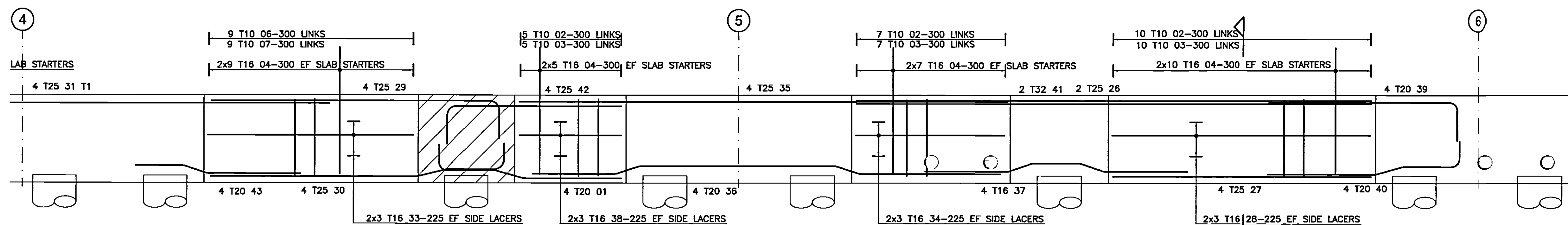


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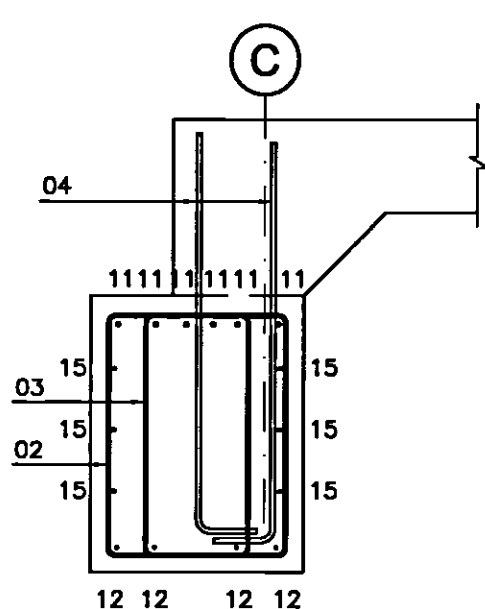
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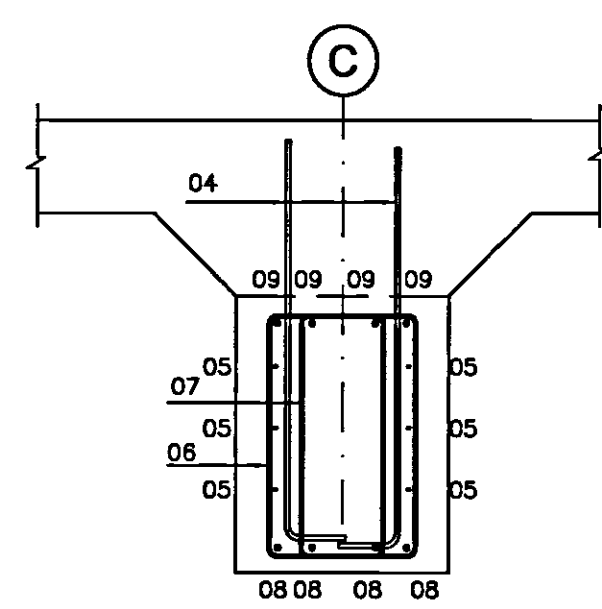
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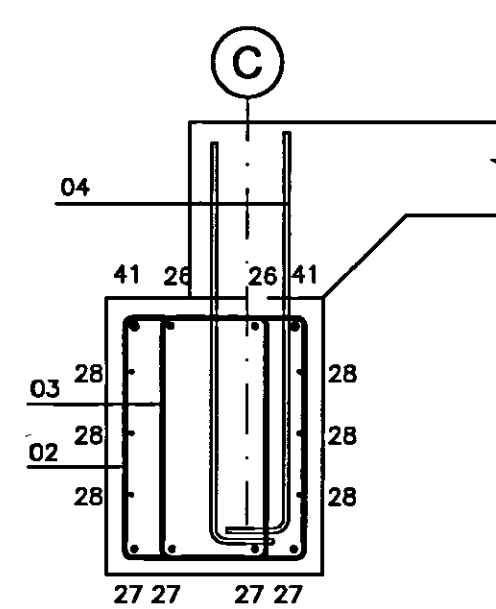
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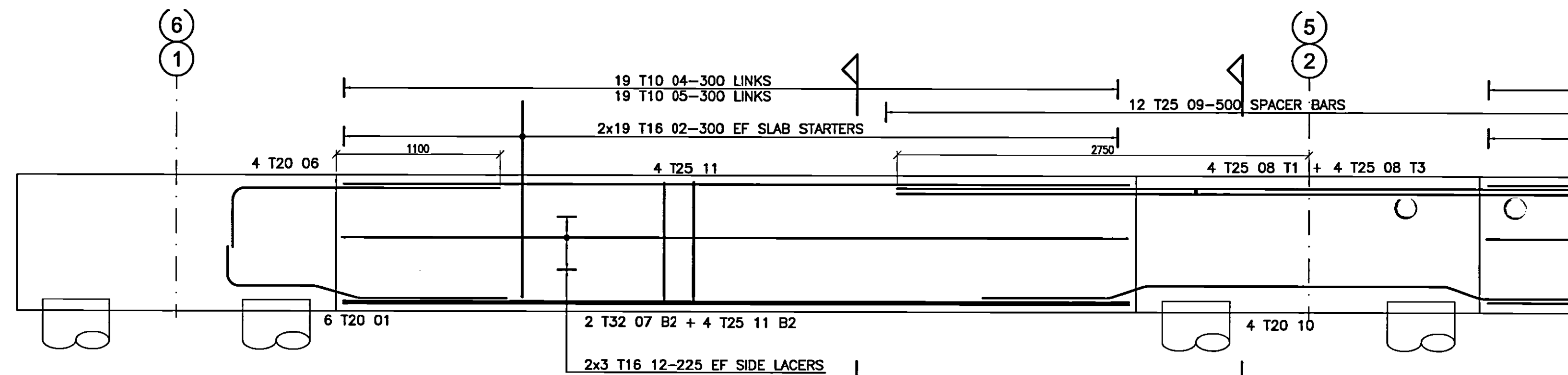
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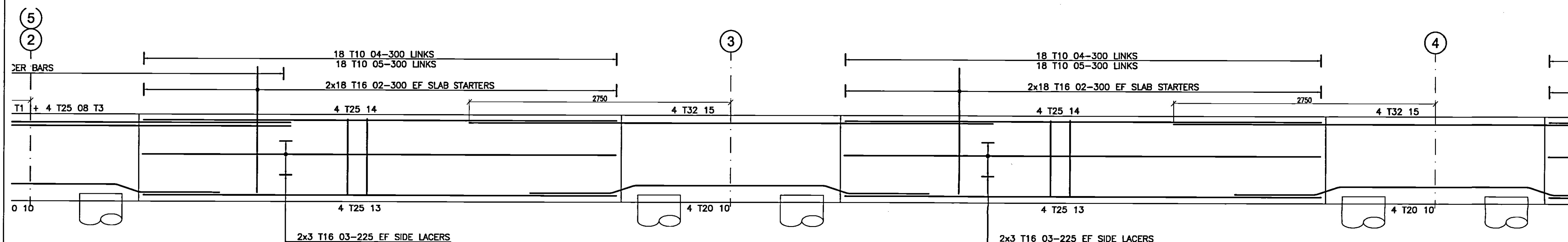
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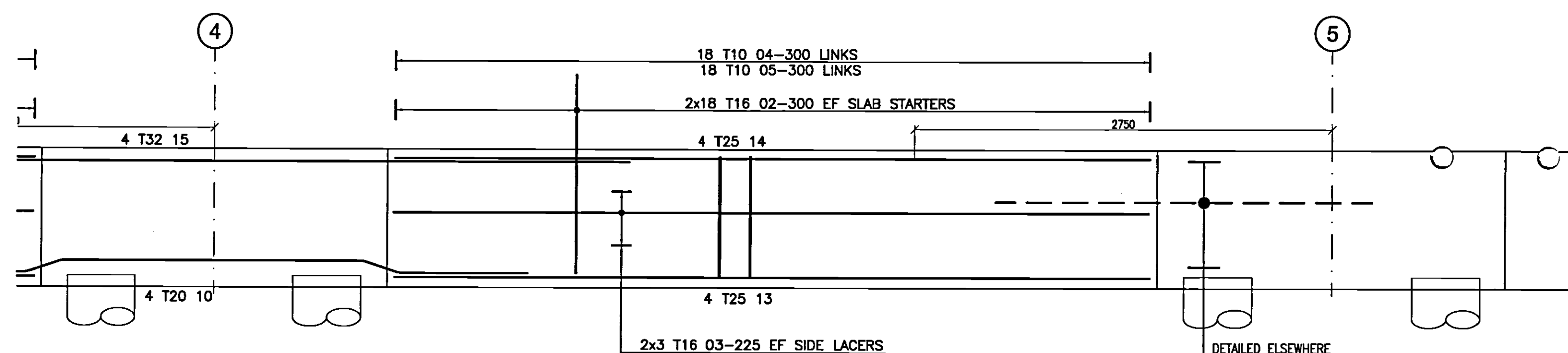
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ELEVATION B/1-2, B/5-6 SIMILAR
2No Thus

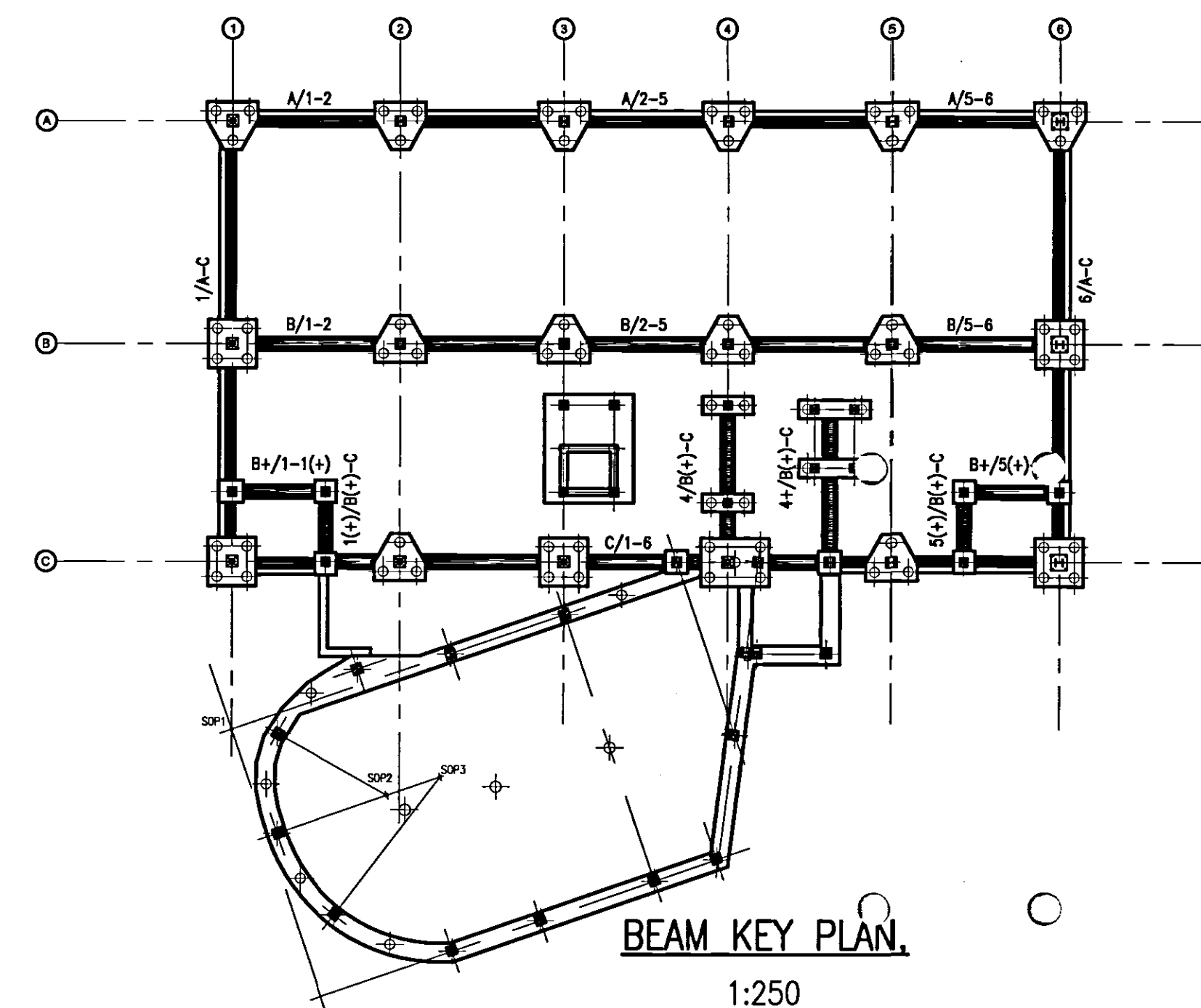


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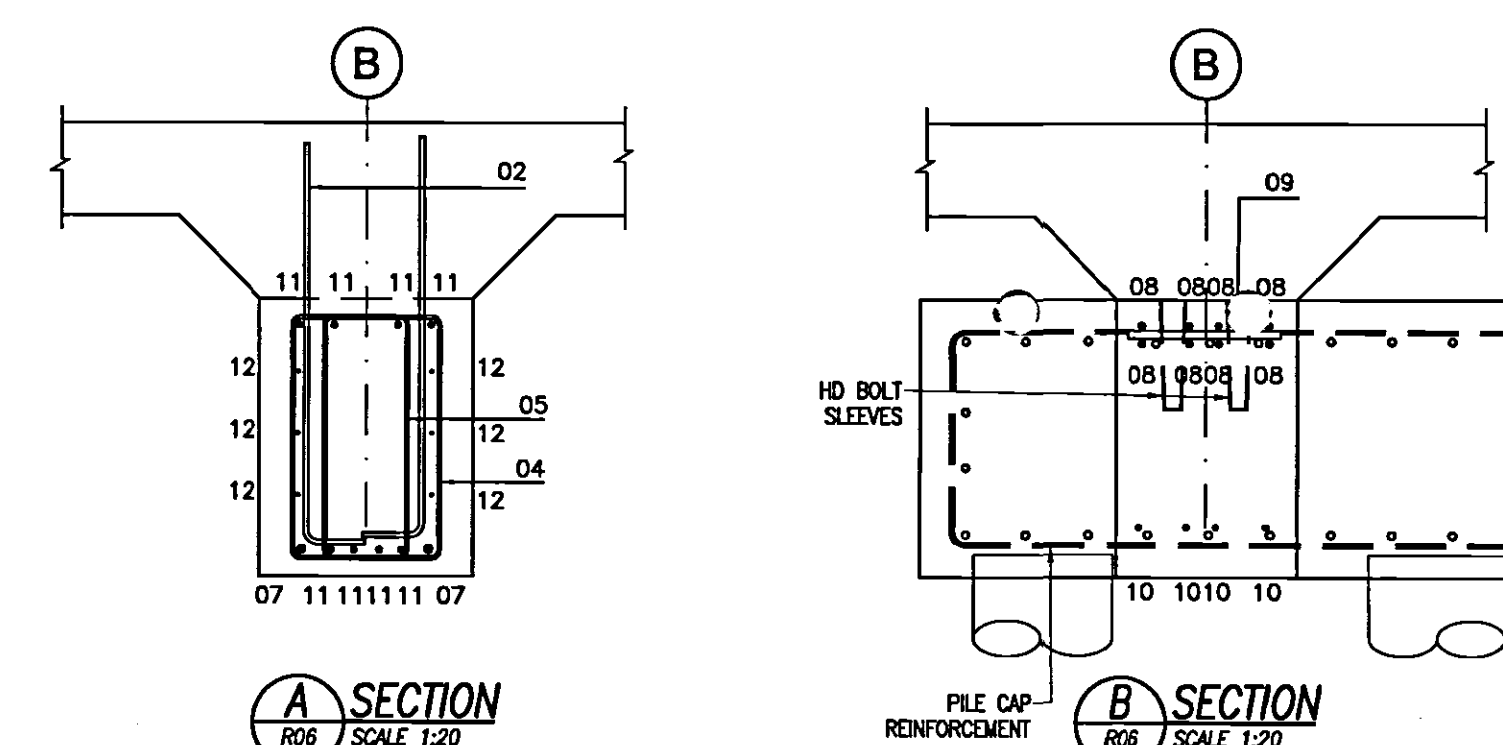


ELEVATION B/2-5 Contd.

DETAILED ELSEWHERE
ELEVATION B/5-6



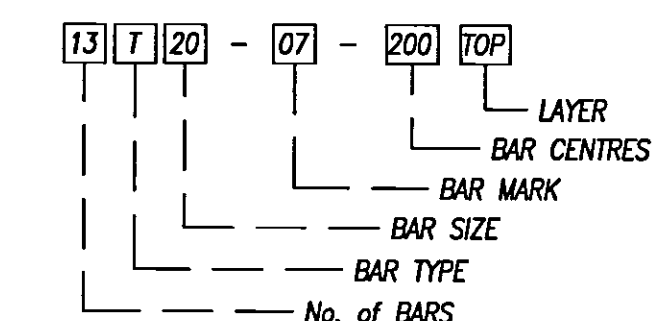
BEAM KEY PLAN
1:250



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ABBREVIATIONS

R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER

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REINFORCEMENT ABBREVIATIONS

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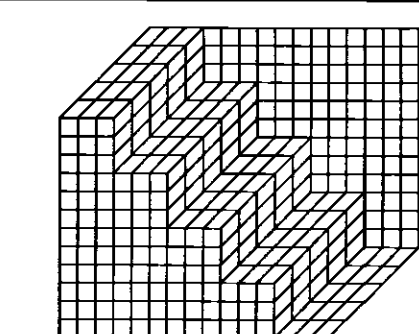
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Rev	Description	Date	Dm	Ch'd

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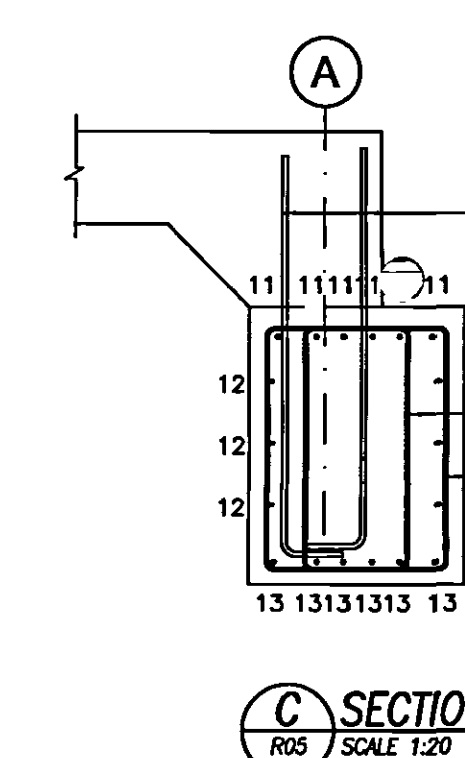
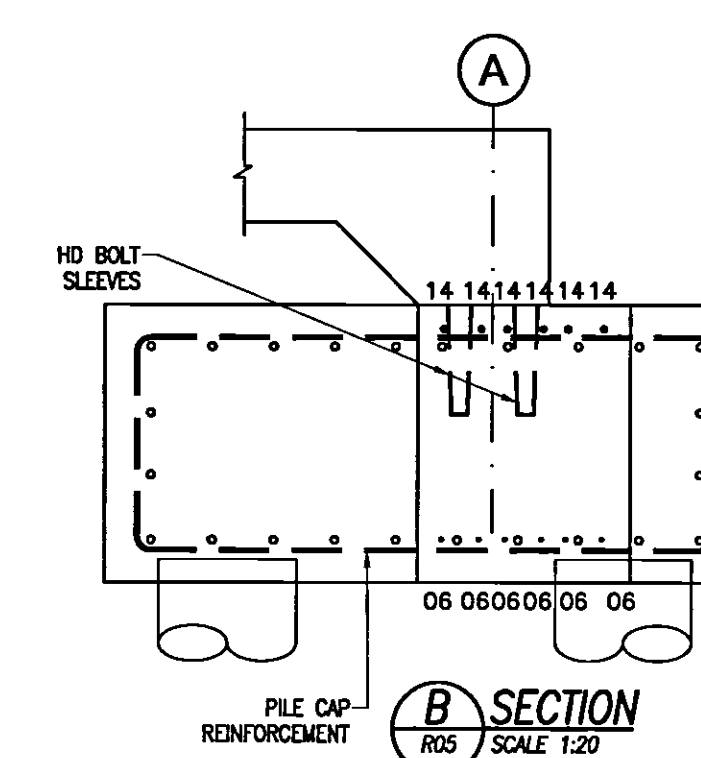
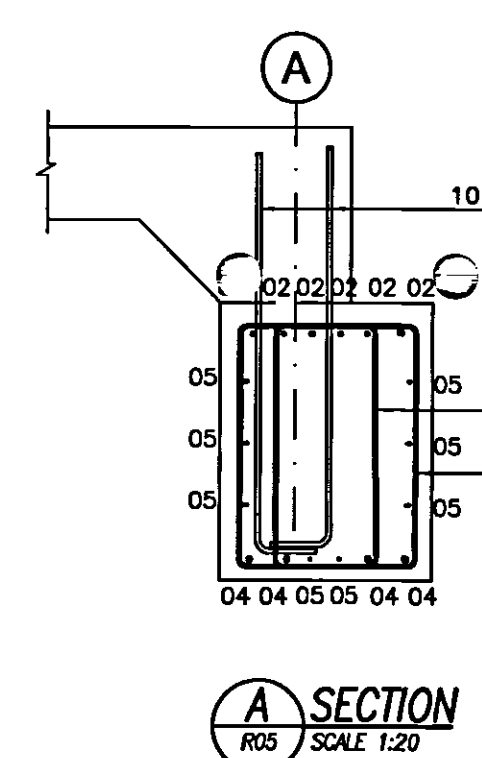
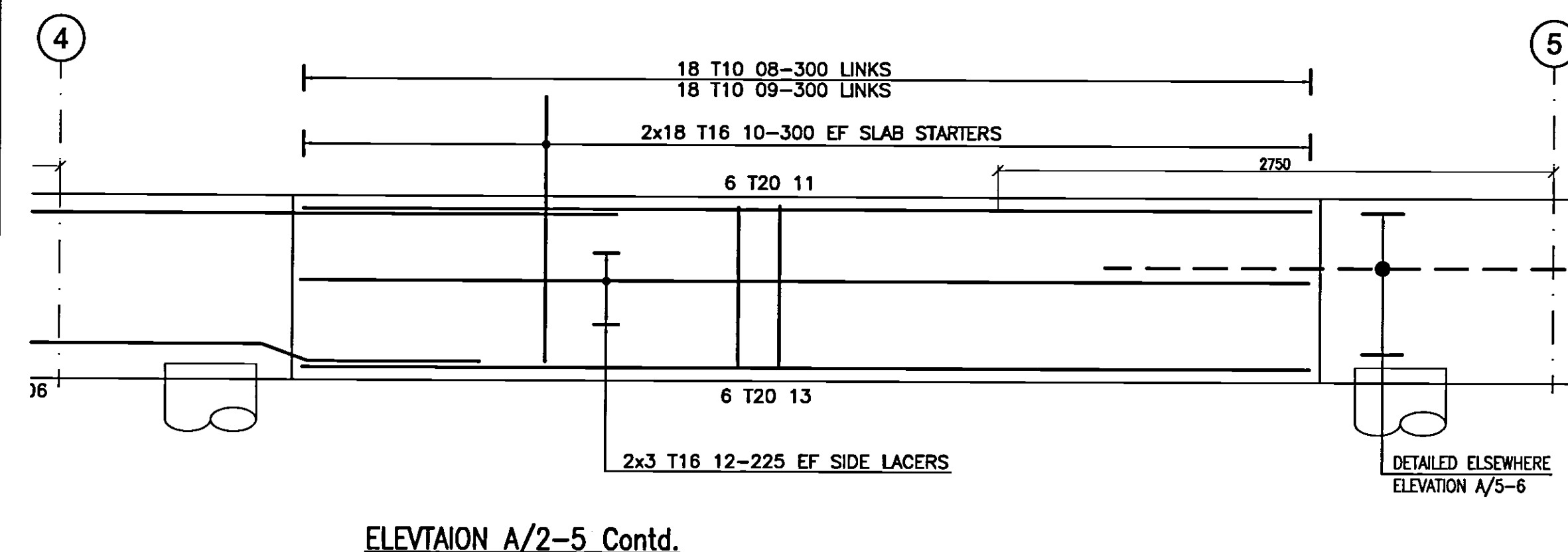
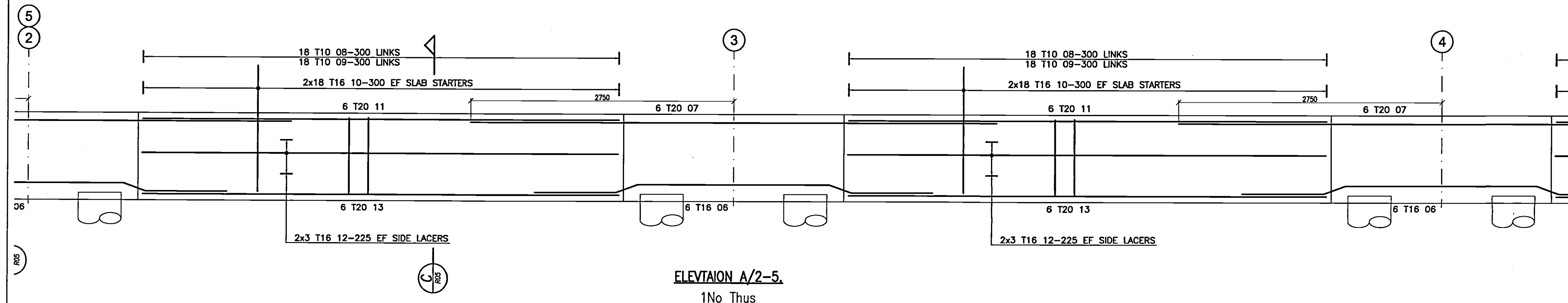
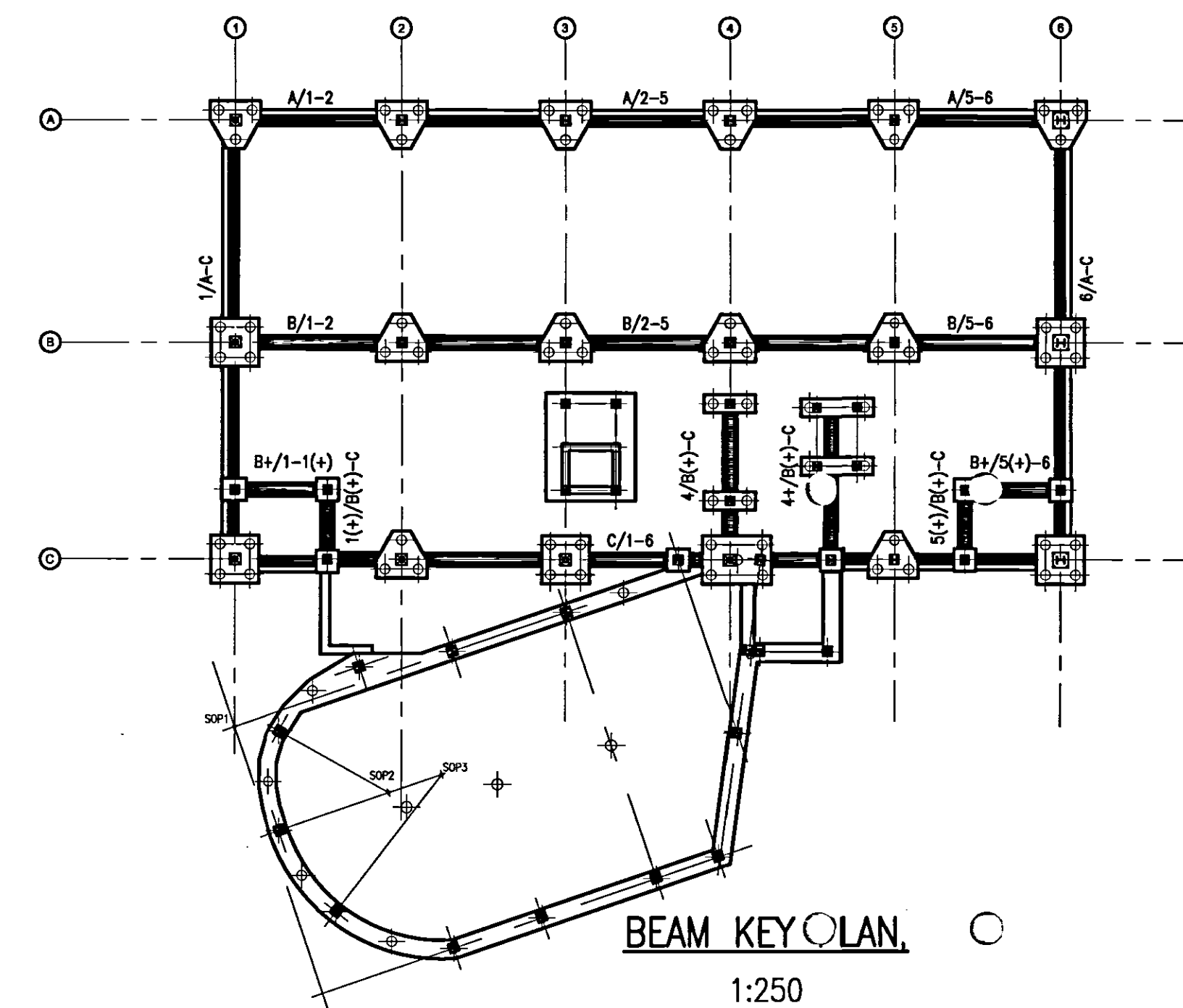
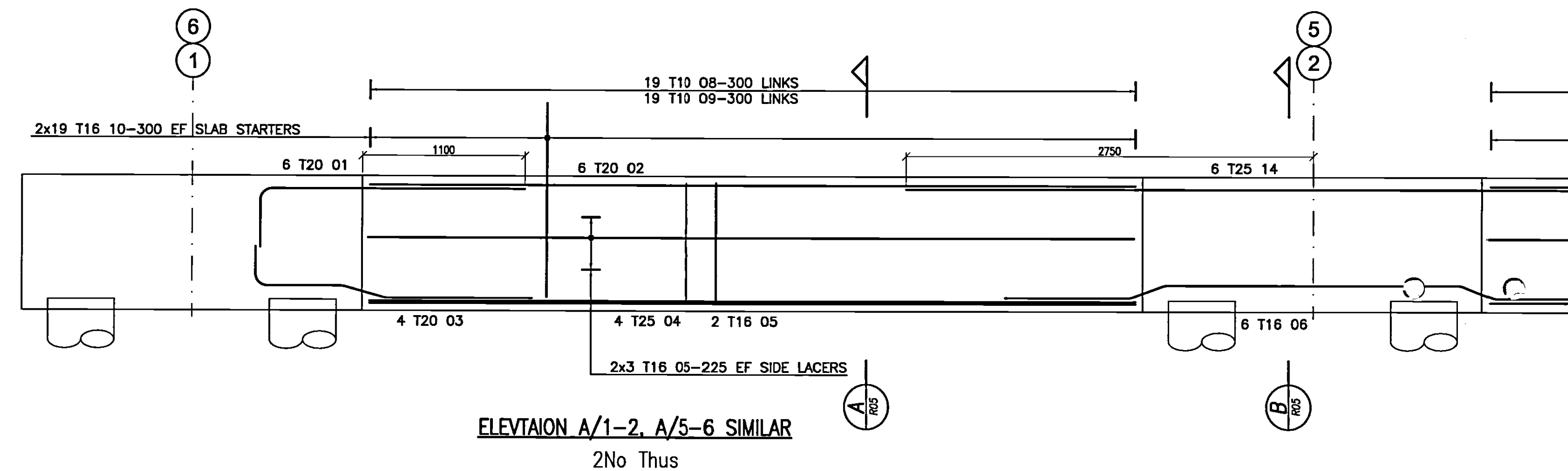
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Project NEW LAW FACULTY

R.C Details of Ground beams
Sheet 1 of --

Scales: A1 1:25
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Date July 06

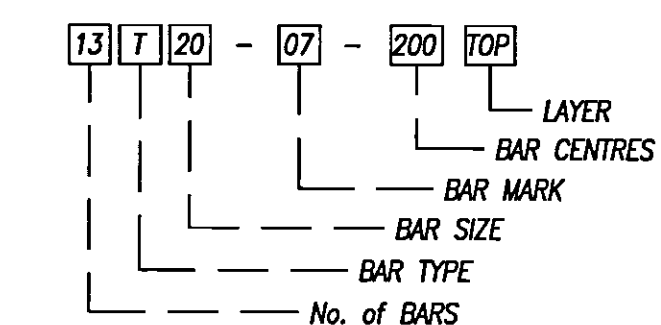
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R. MILD STEEL (GRADE 250) REINFORCEMENT

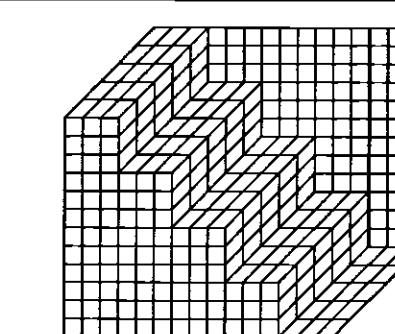
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Project NEW LAW FACULTY

R.C Details of Ground beams

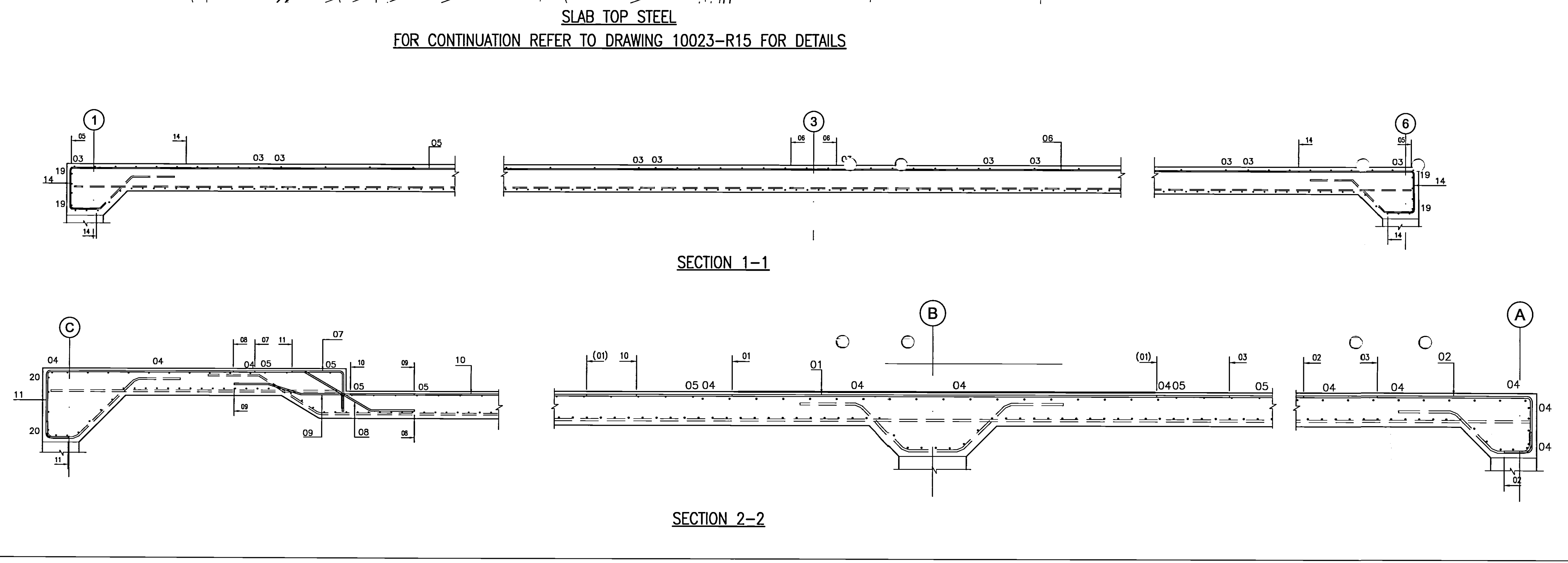
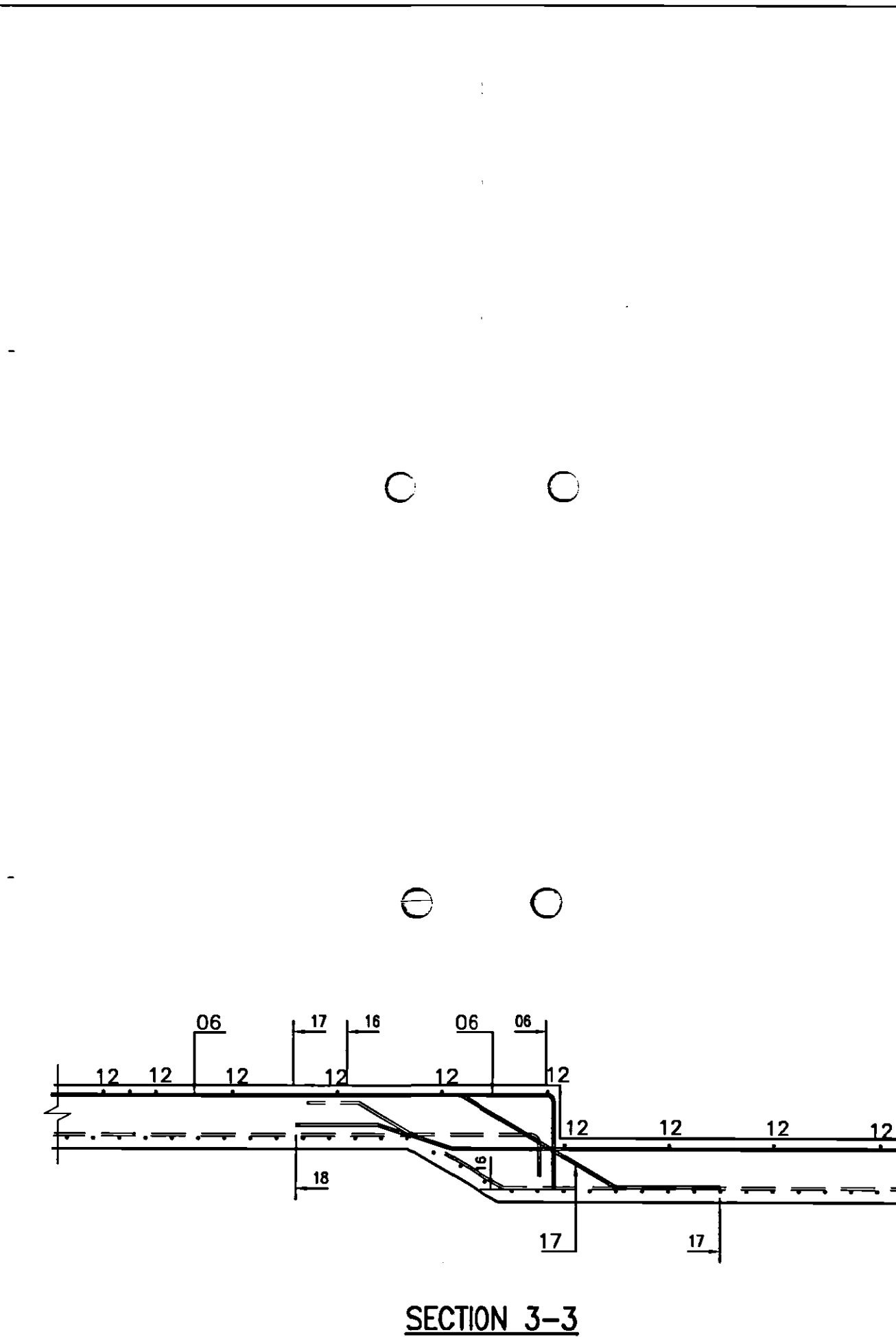
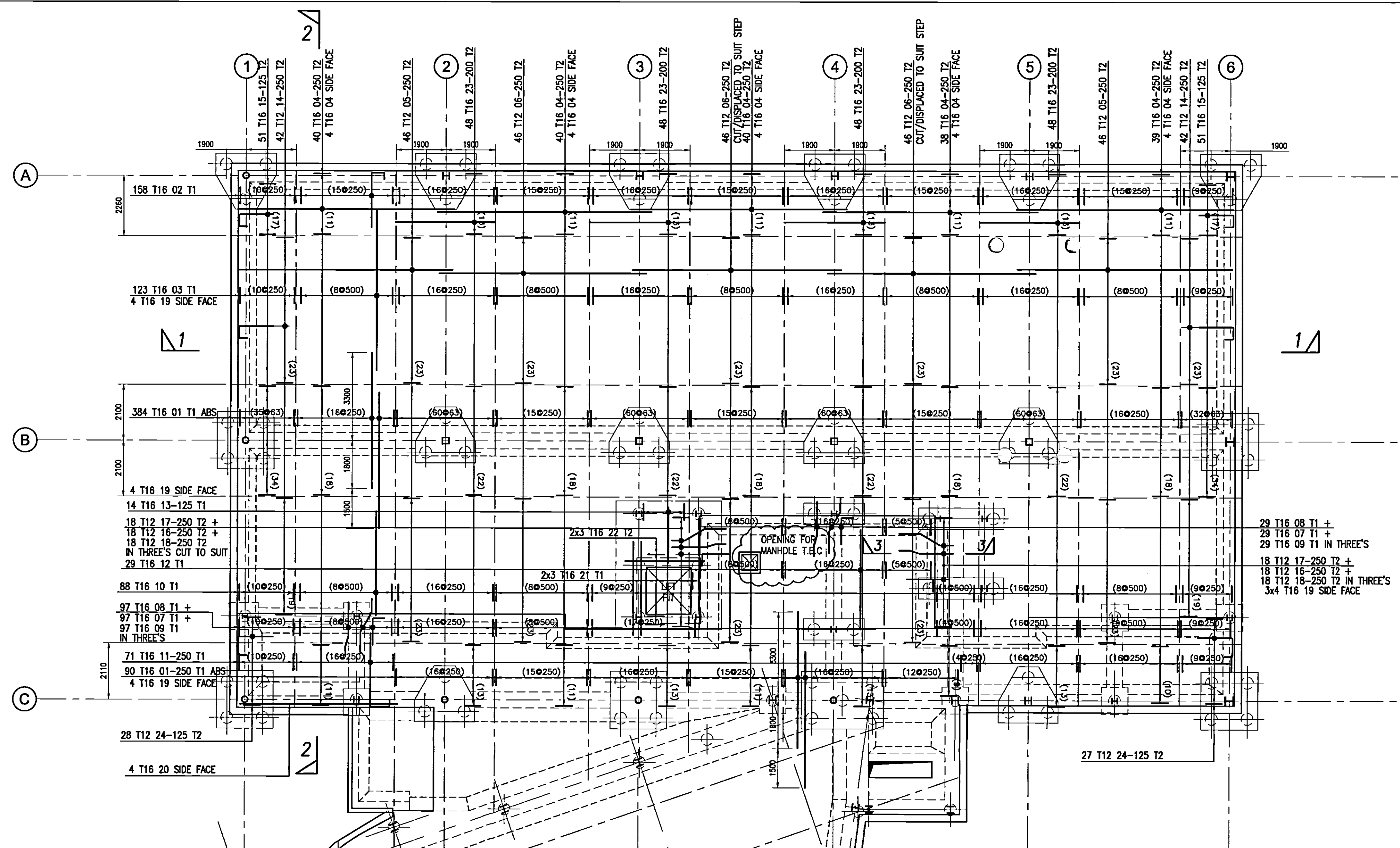
Sheet 1 of --

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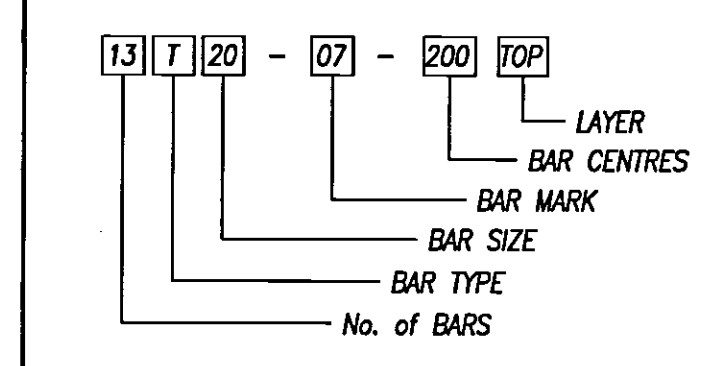
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Rev 01



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 - FOR ALL SETTING OUT INFORMATION REFER TO THE ARCHITECTS DRAWINGS.
 - COVER:
BOTTOM ... 40mm
TOP ... 25mm
 - STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-



8. THIS DRAWING HAS BEEN SCHEDULED IN ACCORDANCE WITH B.S. 8666 : 2000. SEE BAR SCHEDULES Ref. 10023-R/04 01 & 02.

9. ABBREVIATIONS
- R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER
- REINFORCED CONCRETE ABBREVIATIONS
- EW. EACH WAY
EF. EACH FACE
T1, T2... TOP LAYER 1, 2, etc....
B1, B2... BOTTOM LAYER 1, 2, etc....
NF. NEAR FACE
FF. FAR FACE
STG. STAGGERED
- REINFORCEMENT ABBREVIATIONS
- T. HIGH YIELD (GRADE 460) REINFORCEMENT
R. MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT	17.07.07	RC	A
00 ISSUED FOR CONSTRUCTION	11.08.06	LS	A
Rev	Description	Date	Dm

AS BUILT

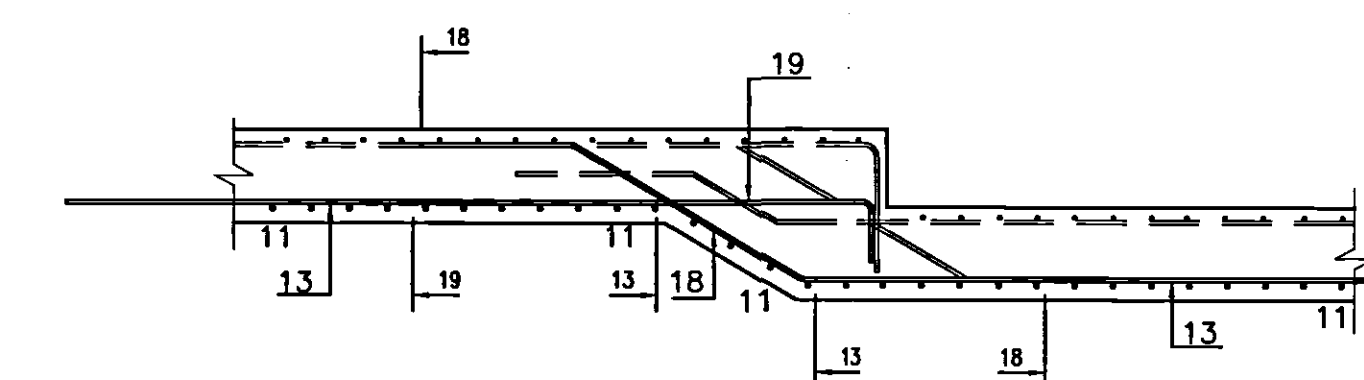
Status of drawing

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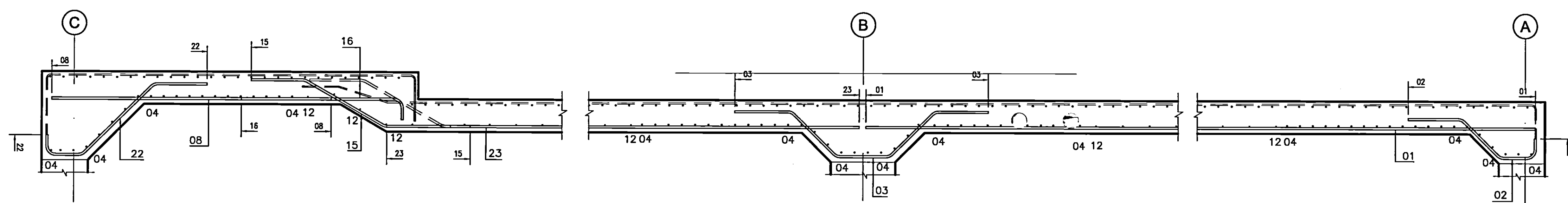
Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACULTY
R.C. DETAILS OF GROUND FLOOR SLAB (TOP STEEL)
SHEET 2 OF 4

Scales: A1 1:100, 20	Job No. 010023
Drawn by: LSIMONS	Drawing No. R04
Checked by: A.M.	Rev. 01
Date: JUNE 2006	



SECTION 5-5

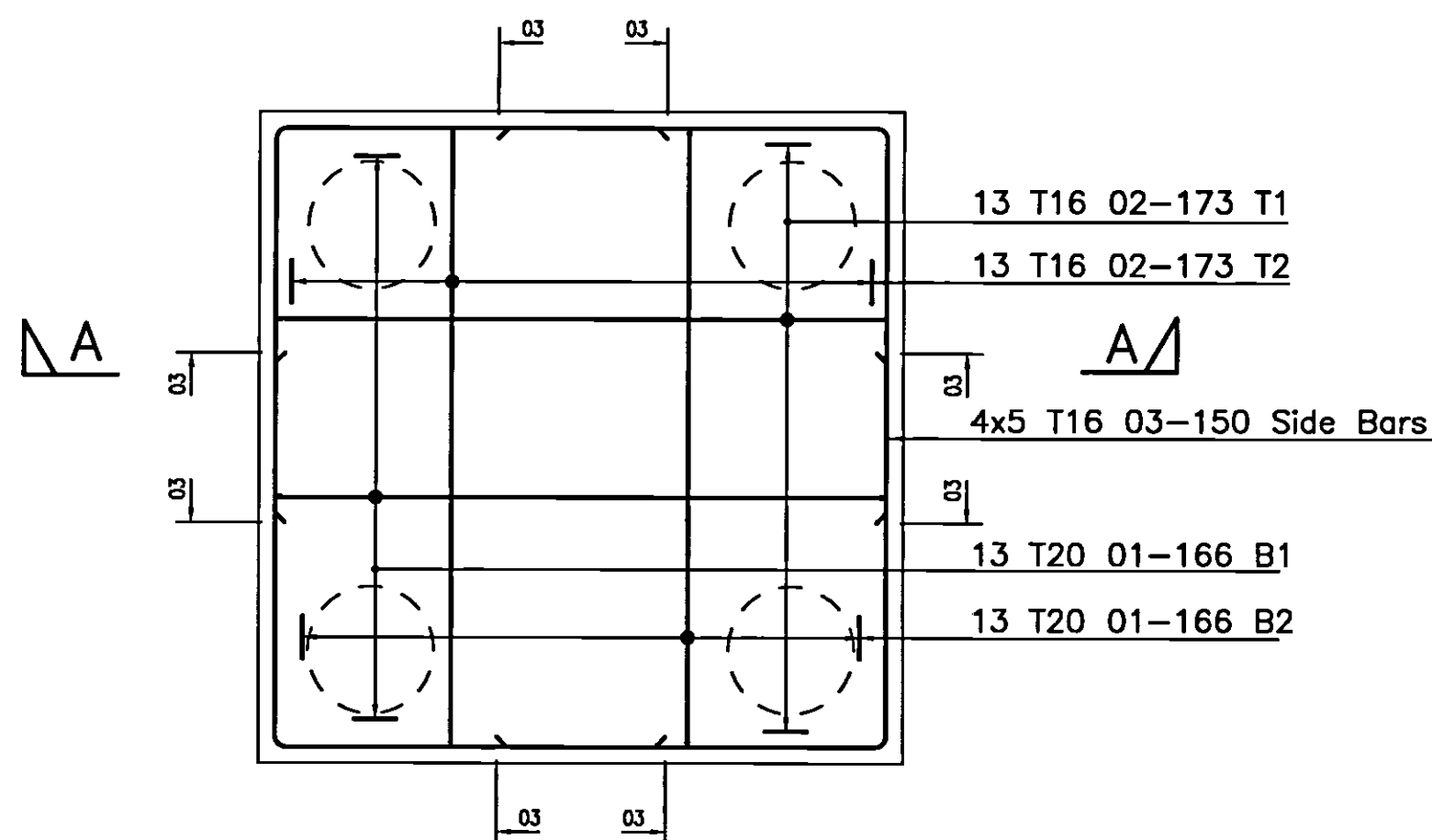
FOR CONTINUATION REFER TO DRAWING 10023-R14 FOR DETAILS



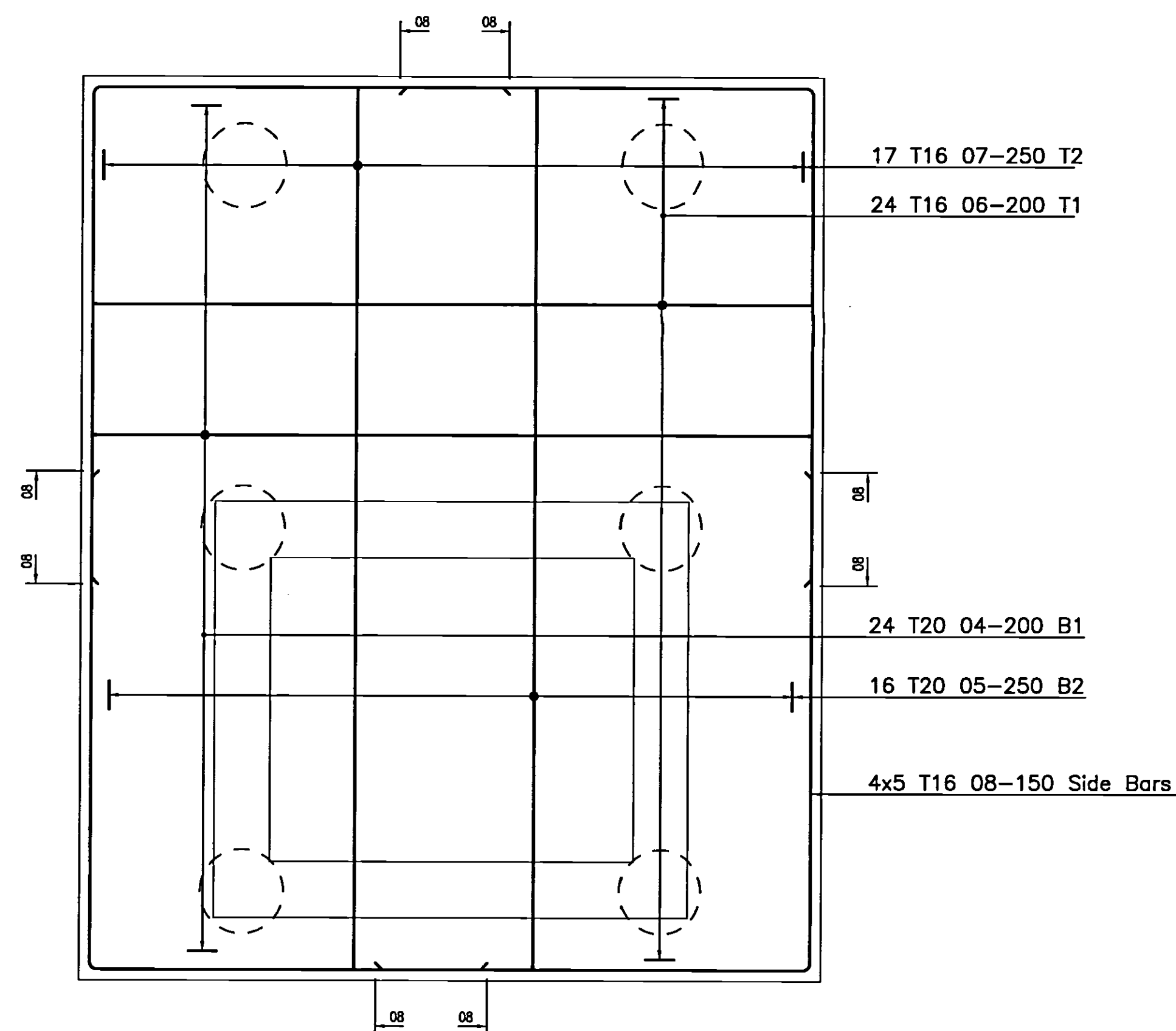
SECTION 2-2

- | | |
|---|--------------------------------------|
| T | HIGH YIELD (GRADE 460) REINFORCEMENT |
| R | MILD STEEL (GRADE 250) REINFORCEMENT |

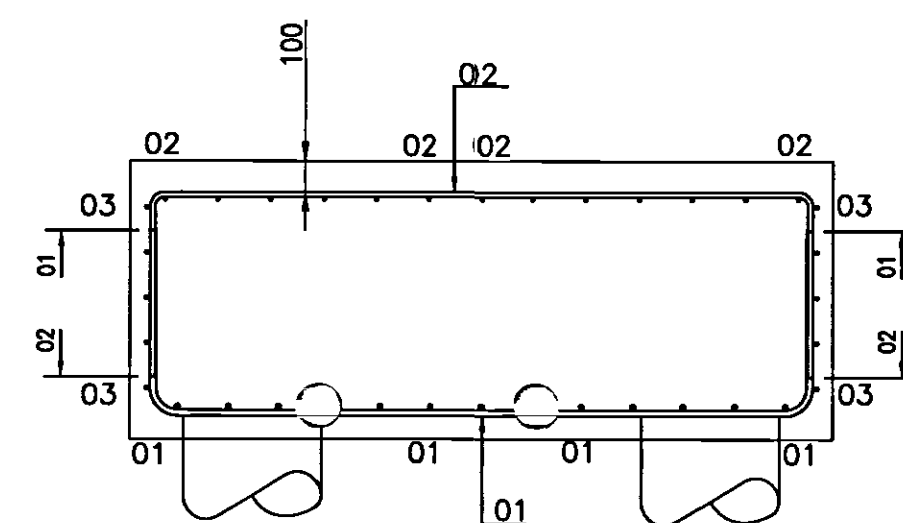
Job No.	010023
Drawing No.	R03
Rev	01



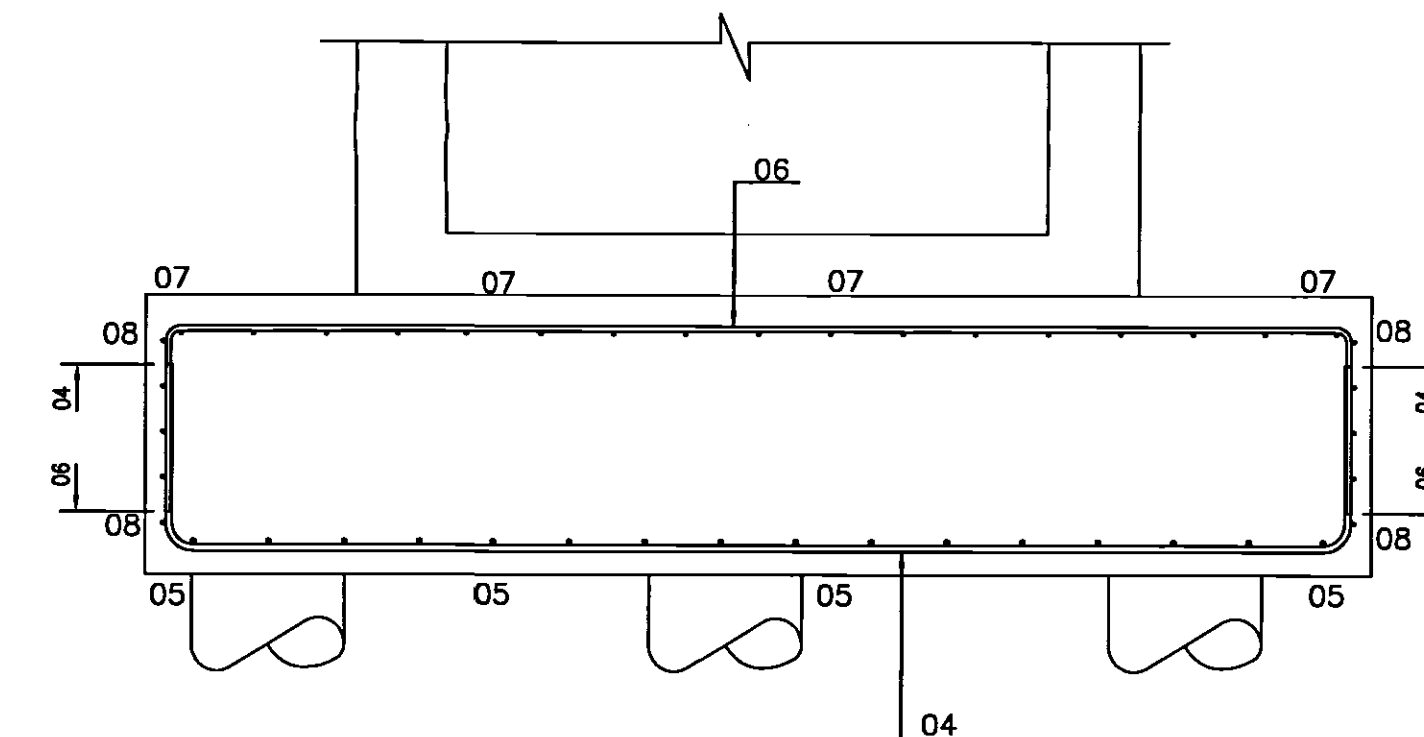
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PILECAP TYPE 'F'
(1No)



SECTION A-A



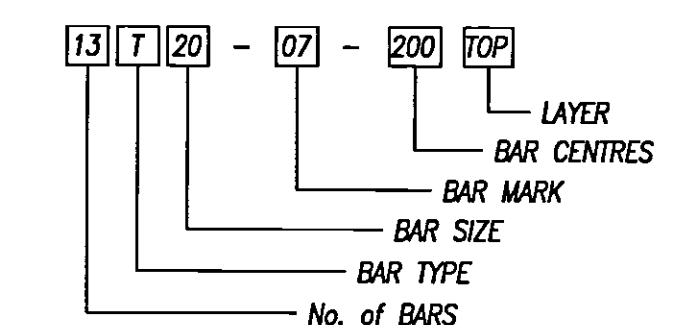
SECTION B-B

NOTE
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INCOMING GROUND BEAM
REINFORCEMENT. REFER TO BEAM
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BOTTOM AND TOP ... 100mm
SIDES ... 50mm
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ABBREVIATIONS

R.C. REINFORCED CONCRETE
G.A. GENERAL ARRANGEMENT
DRG. DRAWING
NTS. NOT TO SCALE
SFL. STRUCTURAL FLOOR LEVEL
FFL. FINISHED FLOOR LEVEL
DIA. DIAMETER

REINFORCED CONCRETE ABBREVIATIONS

EW. EACH WAY
EF. EACH FACE
T1, T2... TOP LAYER 1, 2, etc...
B1, B2... BOTTOM LAYER 1, 2, etc...
NF. NEAR FACE
FF. FAR FACE
STG. STAGGERED

REINFORCEMENT ABBREVIATIONS

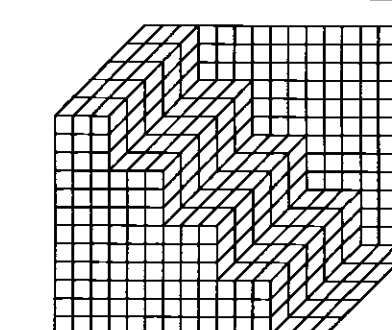
T. HIGH YIELD (GRADE 460) REINFORCEMENT
R. MILD STEEL (GRADE 250) REINFORCEMENT

01 AS BUILT	17.07.07	RC	A	
00 ISSUED FOR CONSTRUCTION	25.07.06	LS	A	
Rev	Description	Date	Dim	Ch

AS BUILT

Status of drawing

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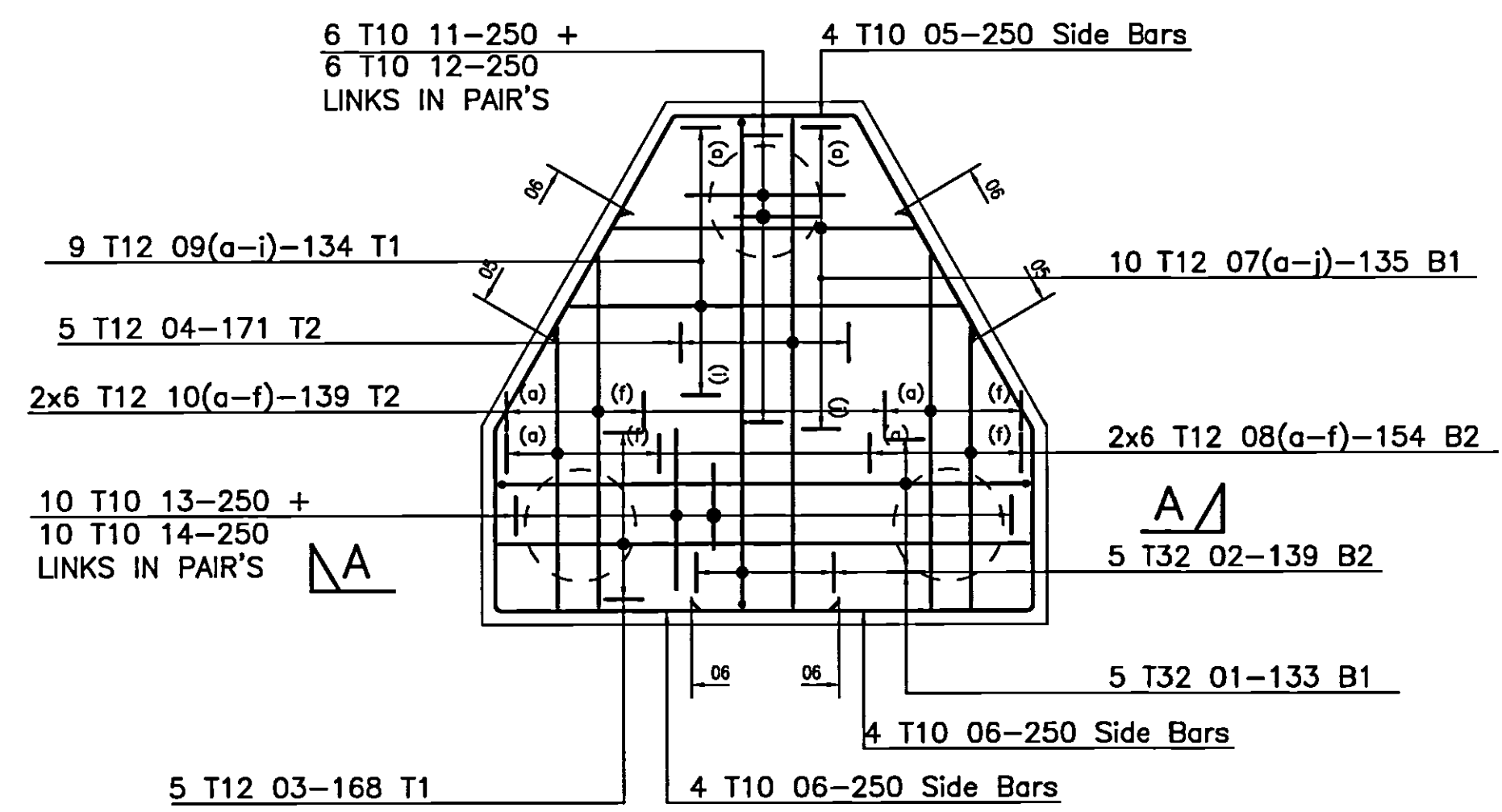


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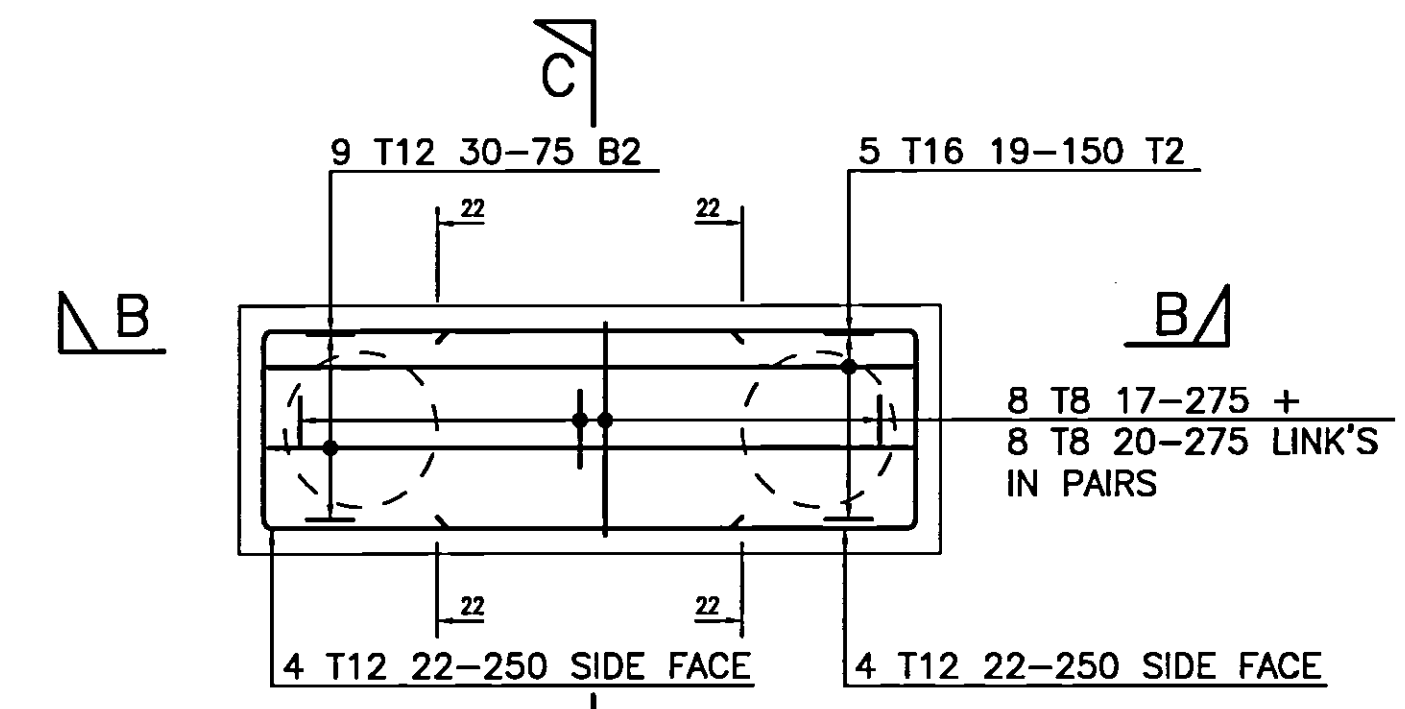
UNIVERSITY OF SALFORD
NEW LAW FACULTY
R.C Details of Pilecaps
Sheet 2 of 2

Scales: A1 1:25
Drawn by: L.SIMONS
Checked by: A.M.
Date: JUNE 06

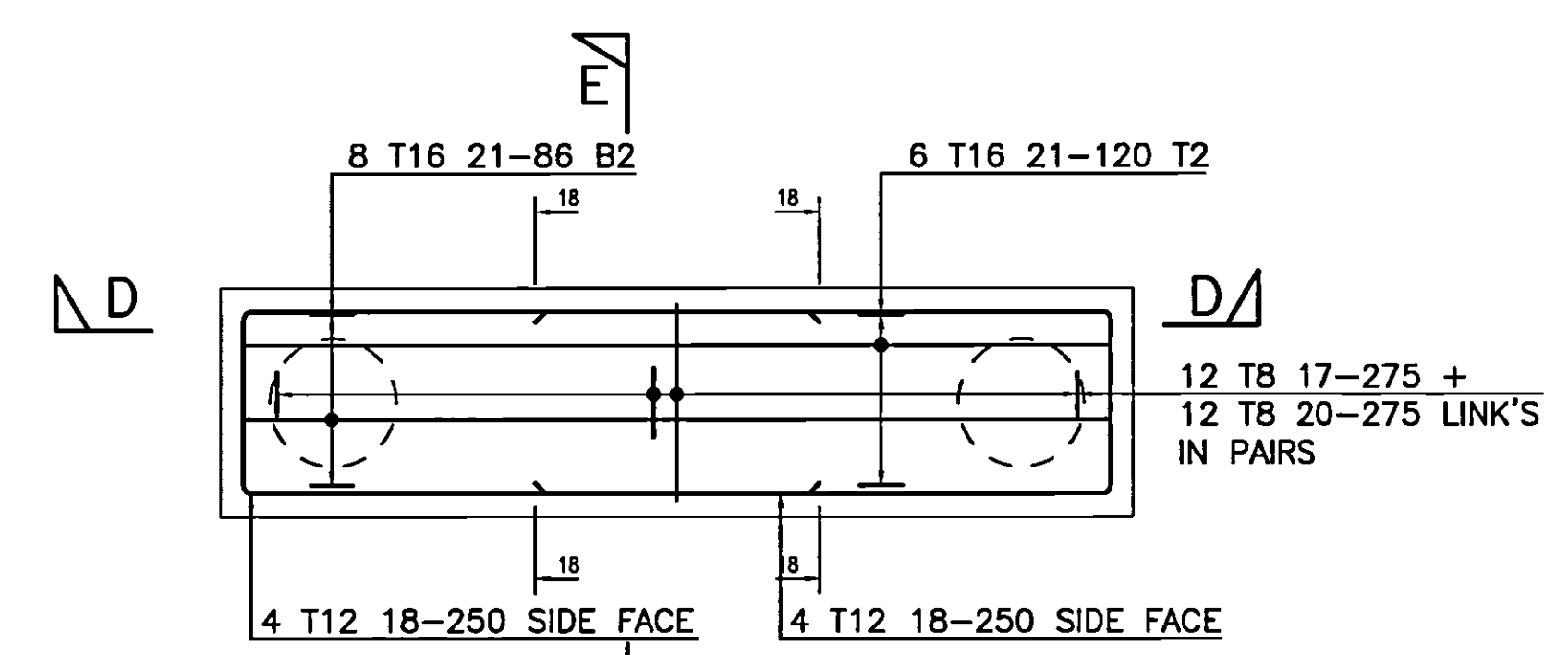
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Drawing No. **R02**
Rev **01**



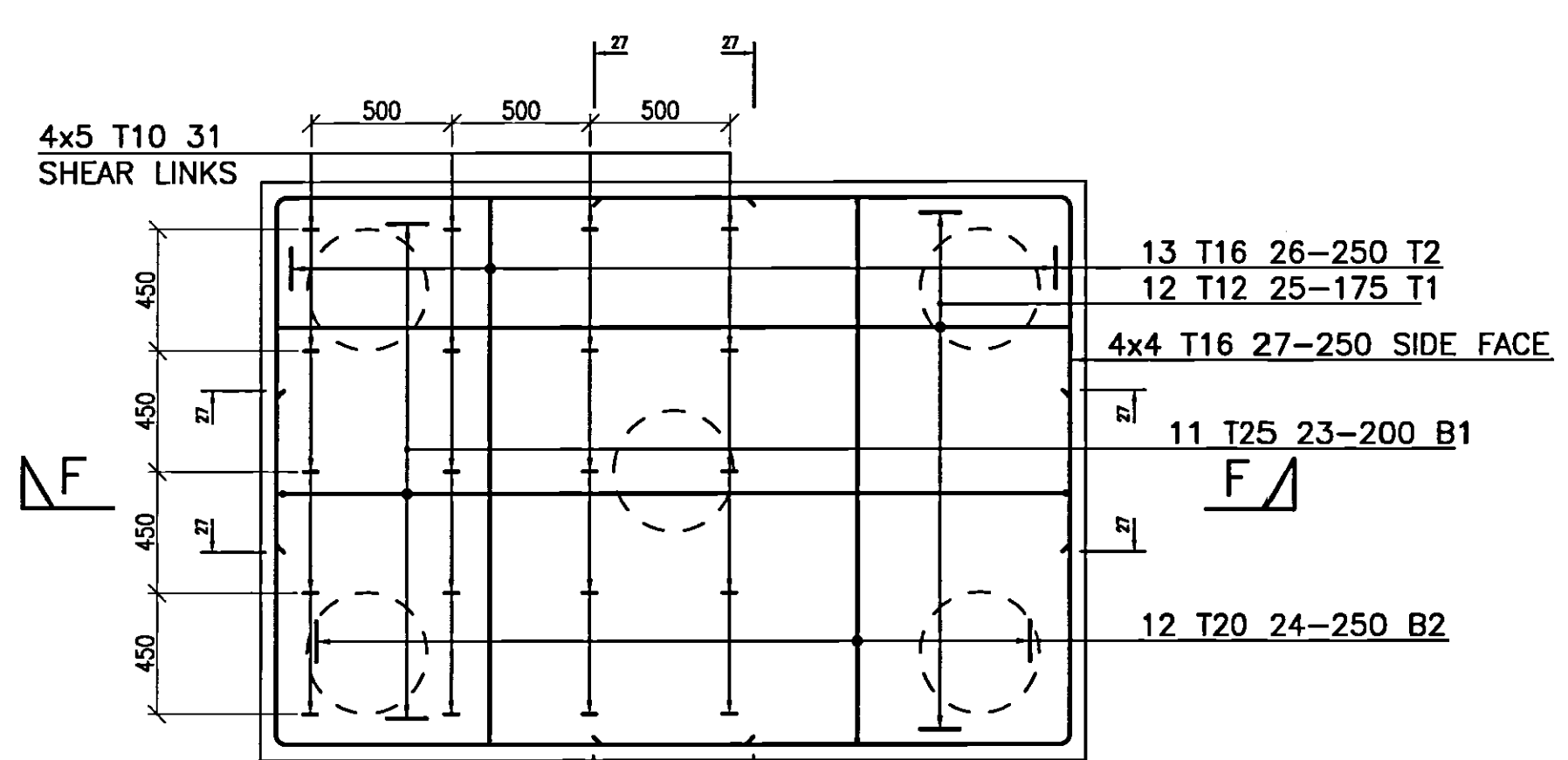
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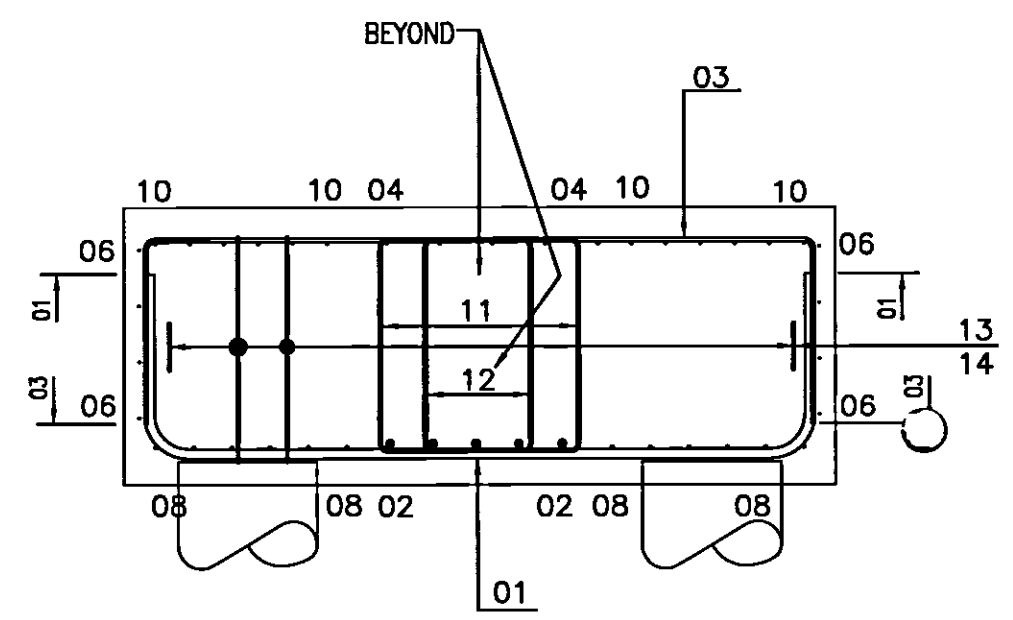
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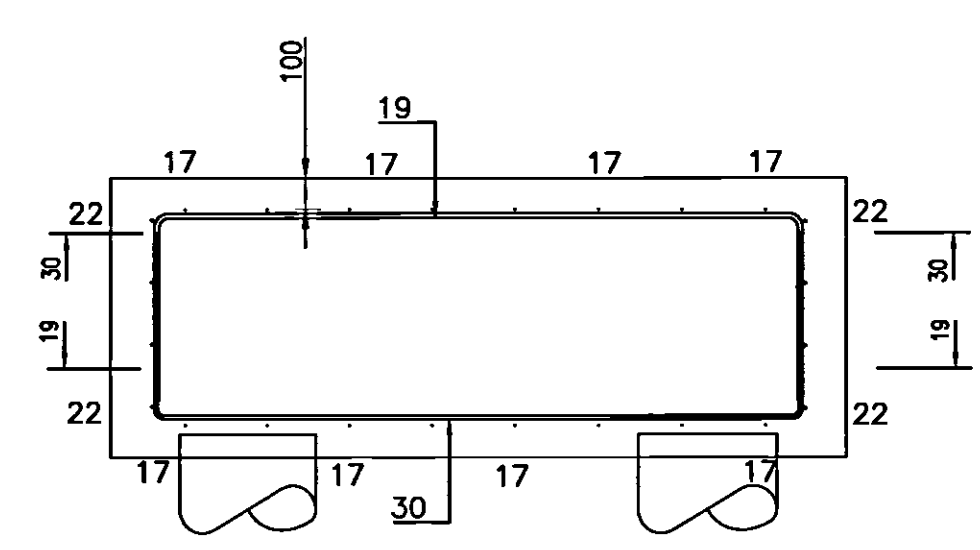
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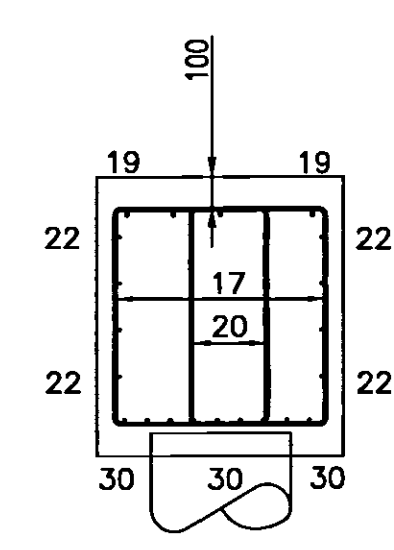
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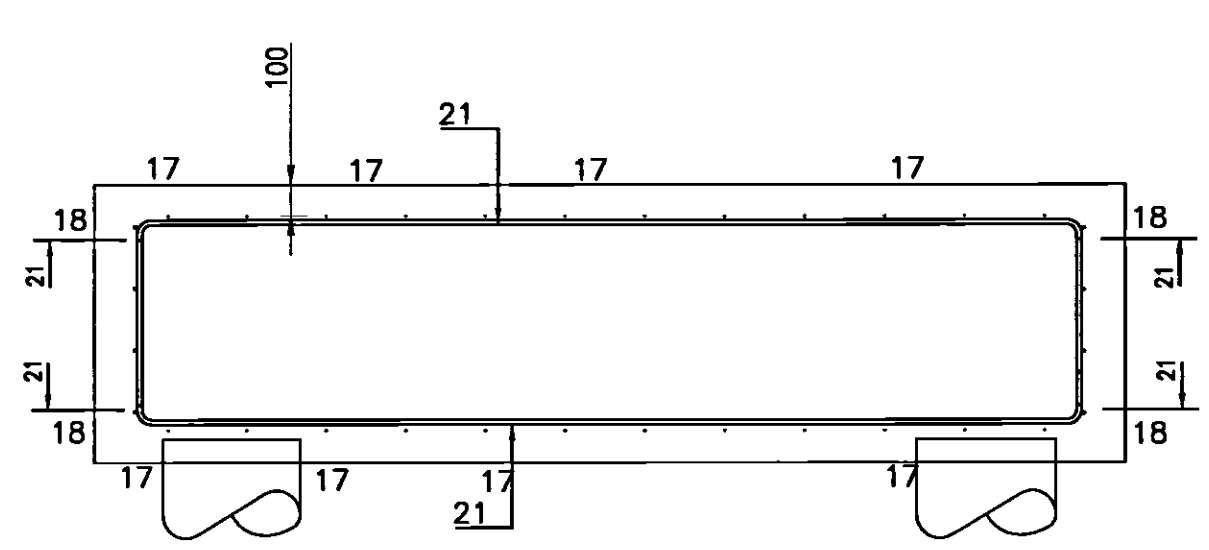
SECTION A-A



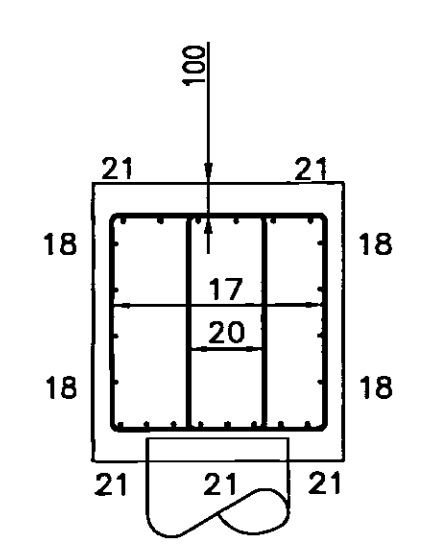
SECTION B-B



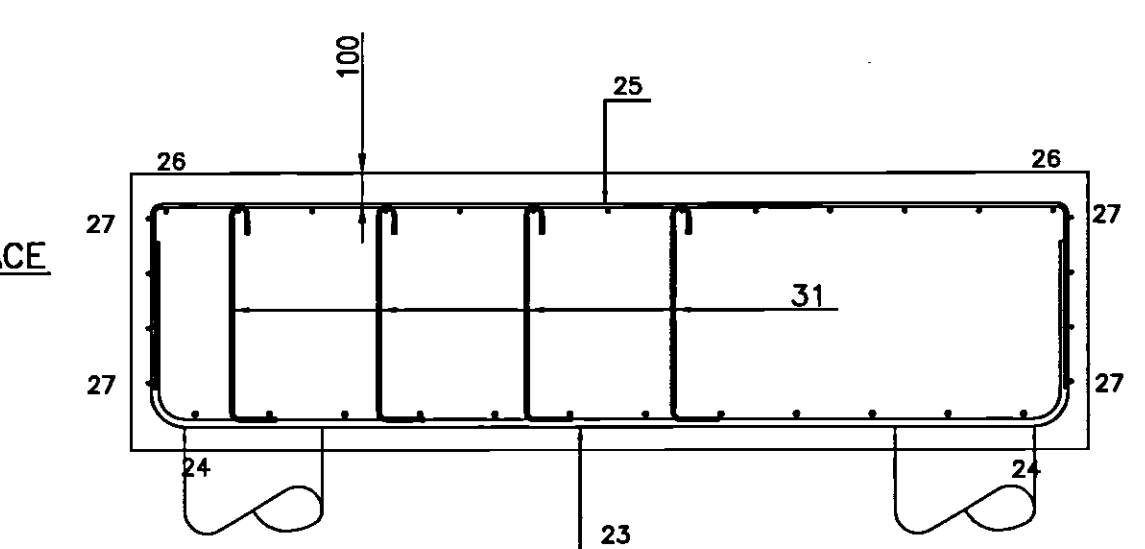
SECTION C-C



SECTION D-D

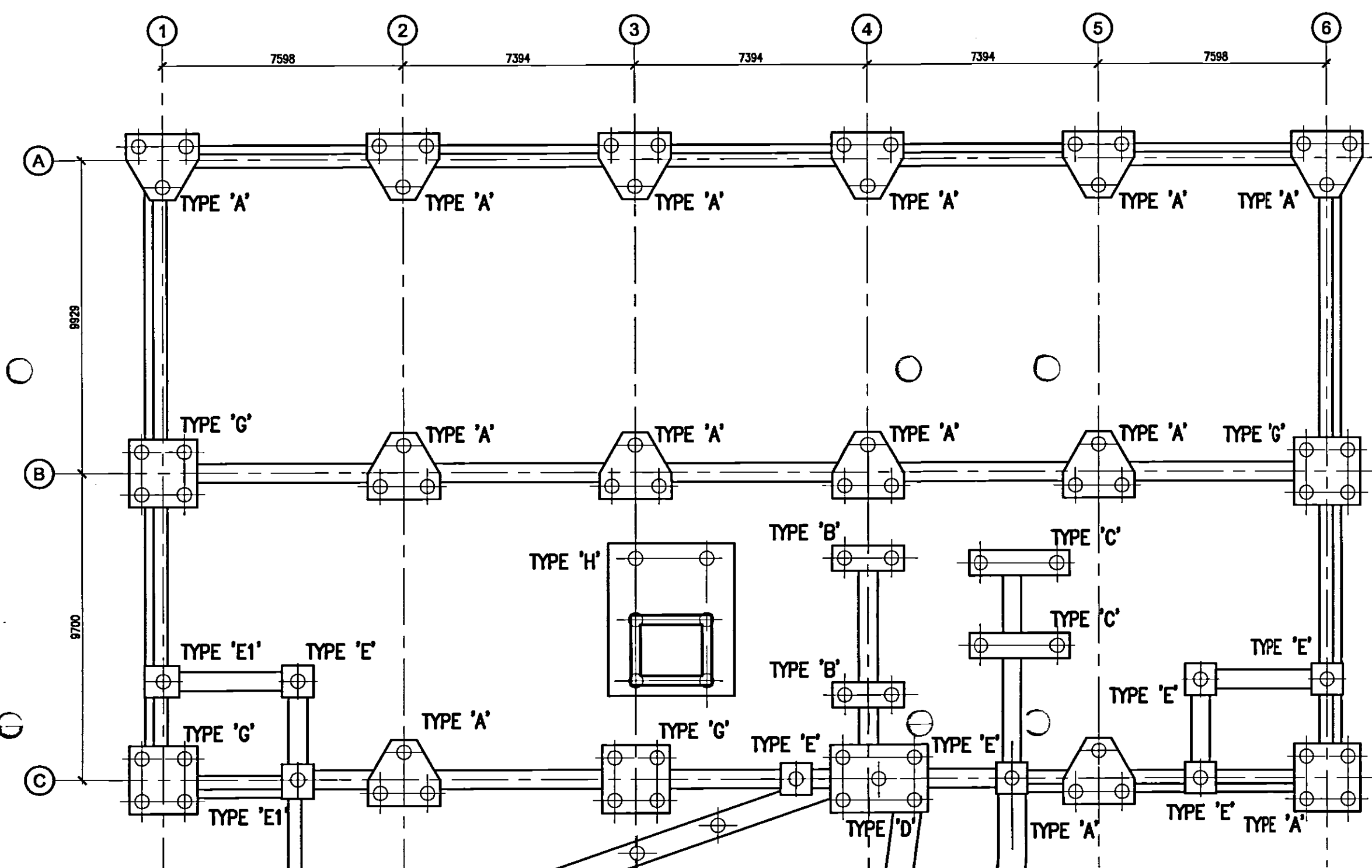


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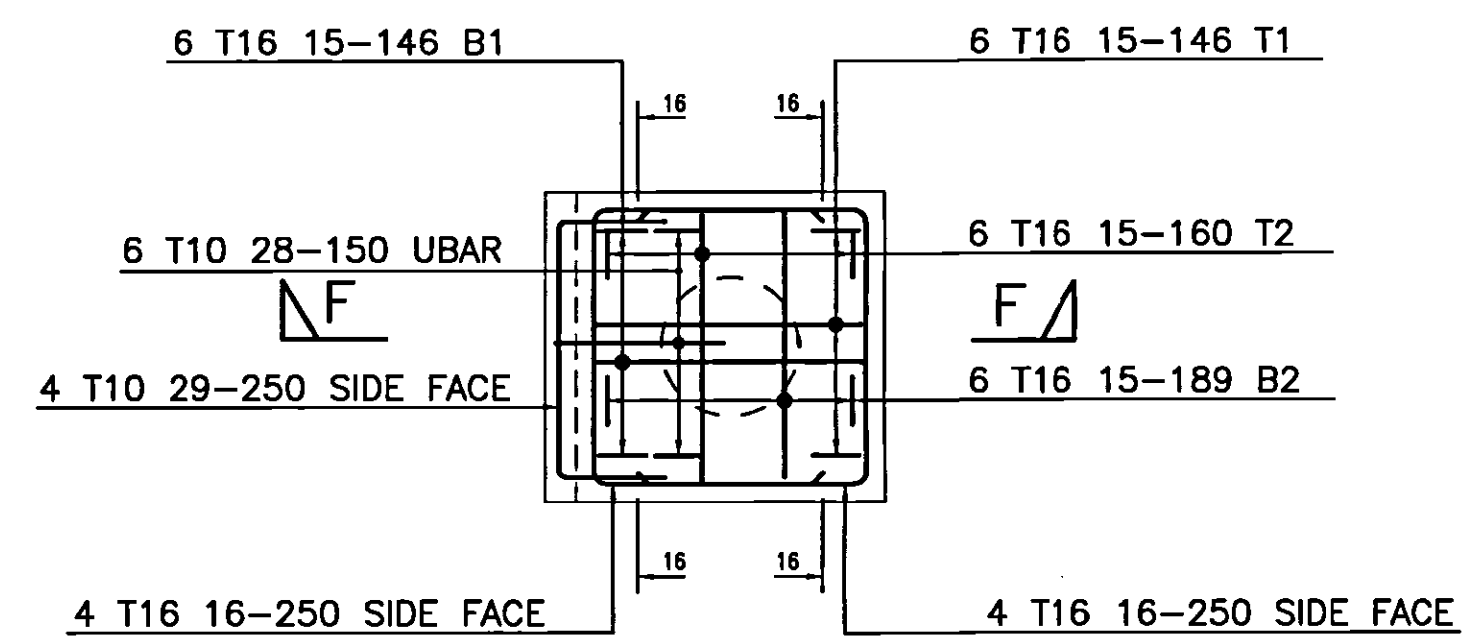


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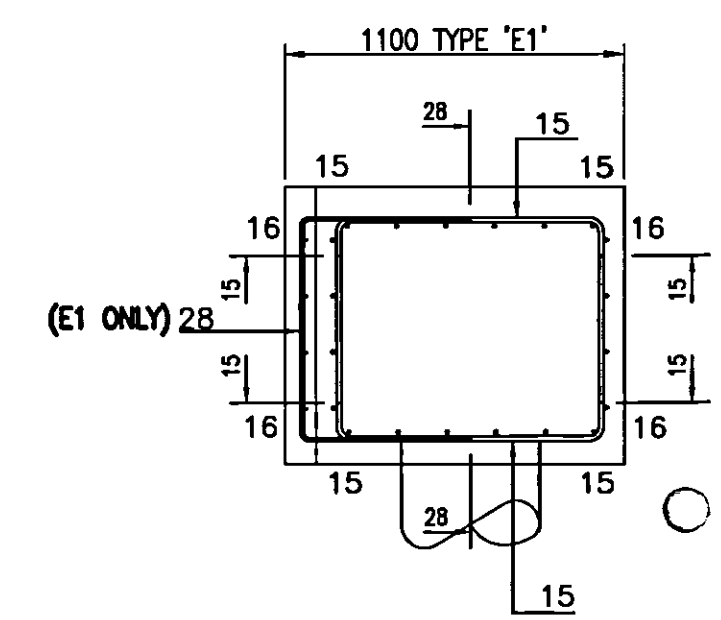
NOTE
ALL PILECAPS SUBJECT TO
INCOMING GROUND BEAM
REINFORCEMENT. REFER TO BEAM
REBAR DRAWINGS FOR DETAILS



PILE CAP TYPE KEY PLAN



PILECAP TYPE 'E' & 'E1'
(8No THUS)



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 - COVER:
BOTTOM AND TOP ... 100mm
SIDES ... 50mm
 - STANDARD NOTATION AS SHOWN ON THIS DRAWING IS AS FOLLOWS :-
- | | | | | | | | |
|----|---|----|---|----|---|-----|-------------|
| 13 | T | 20 | - | 07 | - | 200 | TOP |
| | | | | | | | LAYER |
| | | | | | | | BAR CENTRES |
| | | | | | | | BAR MARK |
| | | | | | | | BAR SIZE |
| | | | | | | | BAR TYPE |
| | | | | | | | No. of BARS |
- THIS DRAWING HAS BEEN SCHEDULED IN ACCORDANCE WITH B.S. 8866 : 2000. SEE BAR SCHEDULES Ref. 10023-R/01 01-03.
 - ABBREVIATIONS
- | | |
|------|------------------------|
| R.C. | REINFORCED CONCRETE |
| G.A. | GENERAL ARRANGEMENT |
| DRG | DRAWING |
| NTS | NOT TO SCALE |
| SFL | STRUCTURAL FLOOR LEVEL |
| FFL | FINISHED FLOOR LEVEL |
| DIA | DIAMETER |
- REINFORCED CONCRETE ABBREVIATIONS
- | | |
|-------------|----------------------------|
| EW | EACH WAY |
| EF | EACH FACE |
| T1, T2, ... | TOP LAYER 1, 2, etc.... |
| B1, B2, ... | BOTTOM LAYER 1, 2, etc.... |
| NF | NEAR FACE |
| FF | FAR FACE |
| STG | STAGGERED |
- REINFORCEMENT ABBREVIATIONS
- | | |
|---|--------------------------------------|
| T | HIGH YIELD (GRADE 460) REINFORCEMENT |
| R | MILD STEEL (GRADE 250) REINFORCEMENT |

01 AS BUILT	17.07.07	RC	A.M	
00 ISSUED FOR CONSTRUCTION	25.07.06	LS	A.M	
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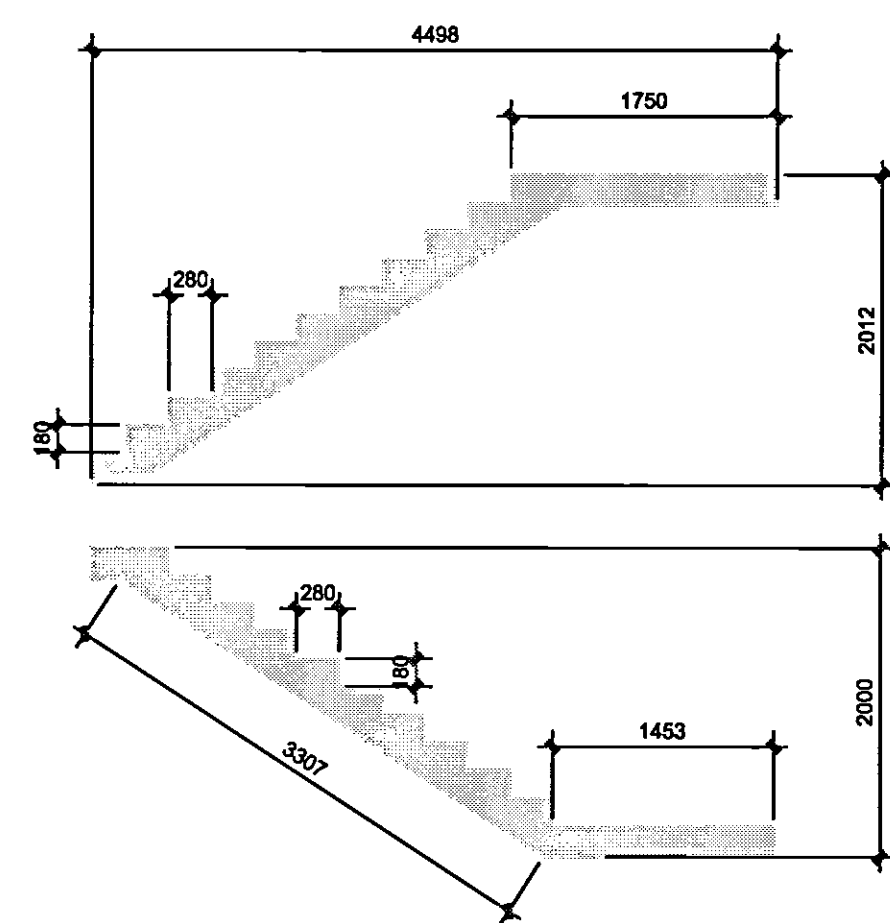
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Consulting Engineers

Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACULTY
R.C Details of Pilecaps
Sheet 1 of 2

Scales: A1 1:25	Job No. 010023
Drawn by: L.SIMONS	Drawing No. R01
Checked by: A.M.	Rev 01
Date: JUNE 06	

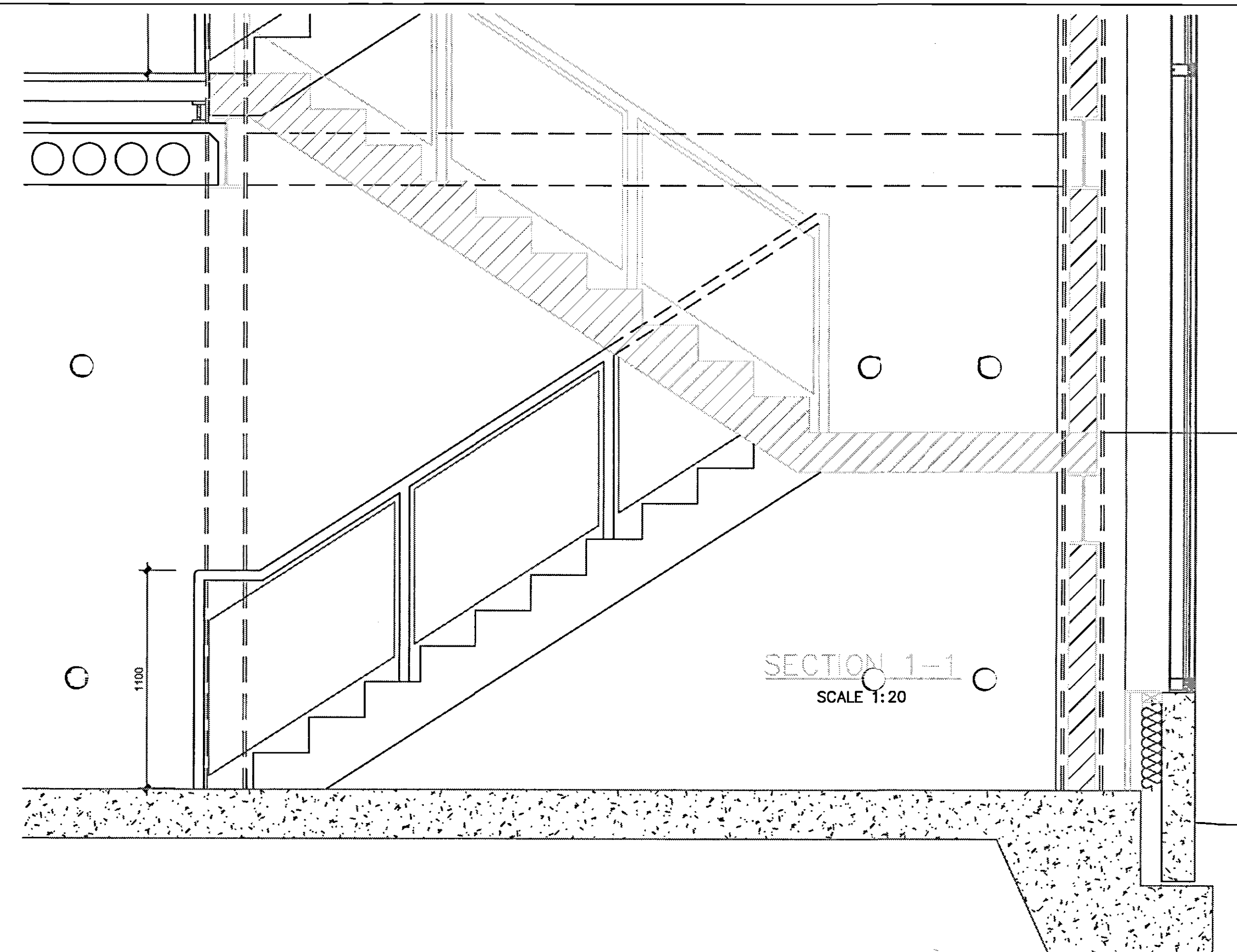
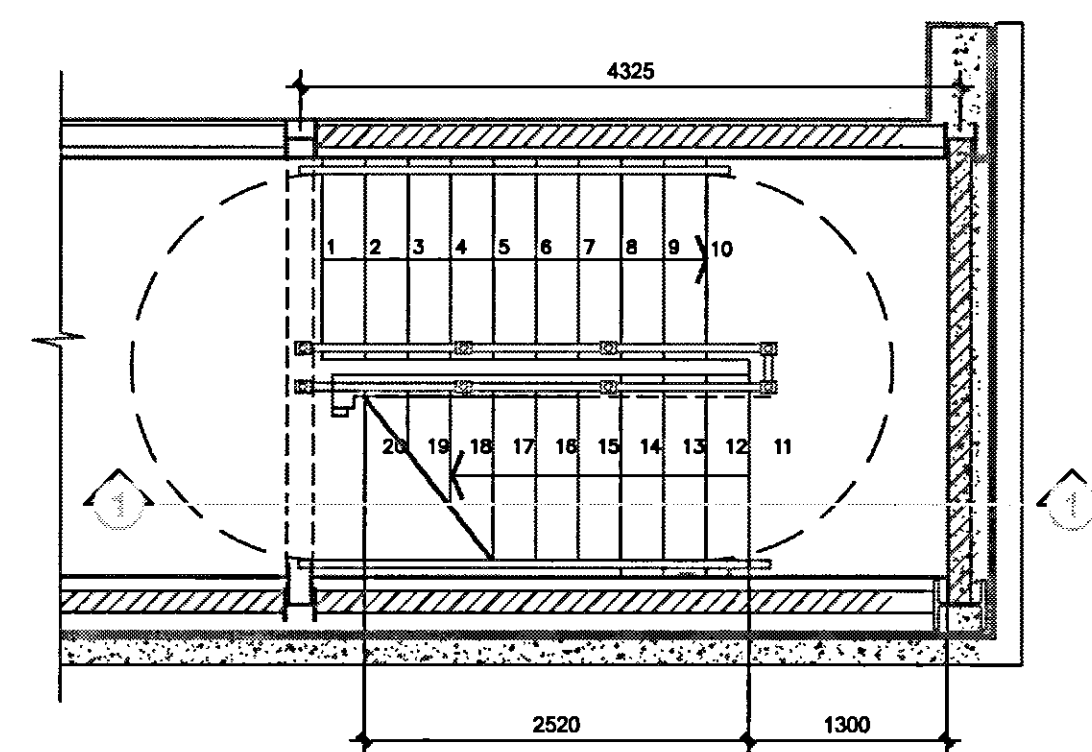
PRECAST UNITS

SCALE 1:50



STAIRCASE PLAN

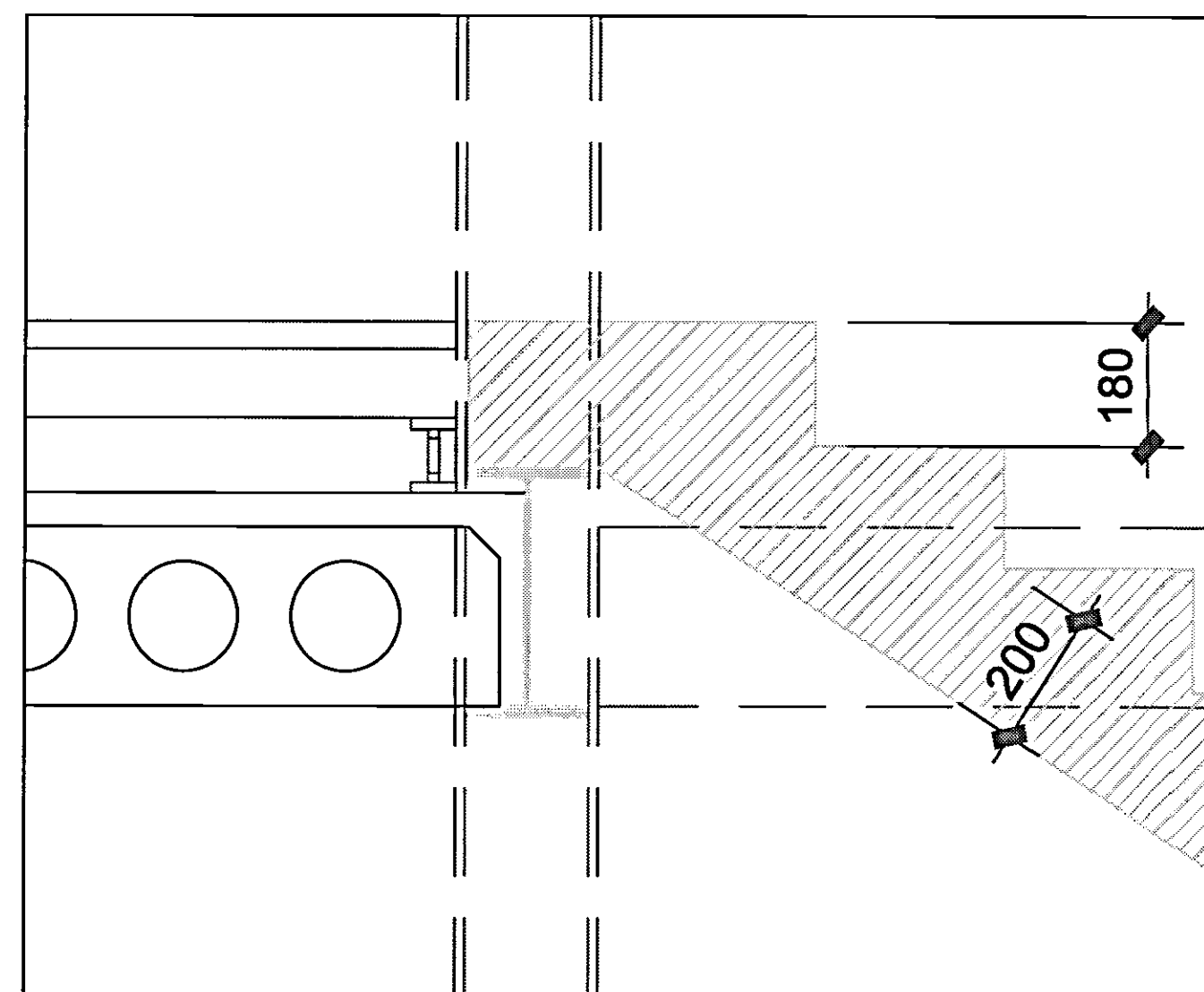
SCALE 1:50



SECTION 1-1
SCALE 1:20

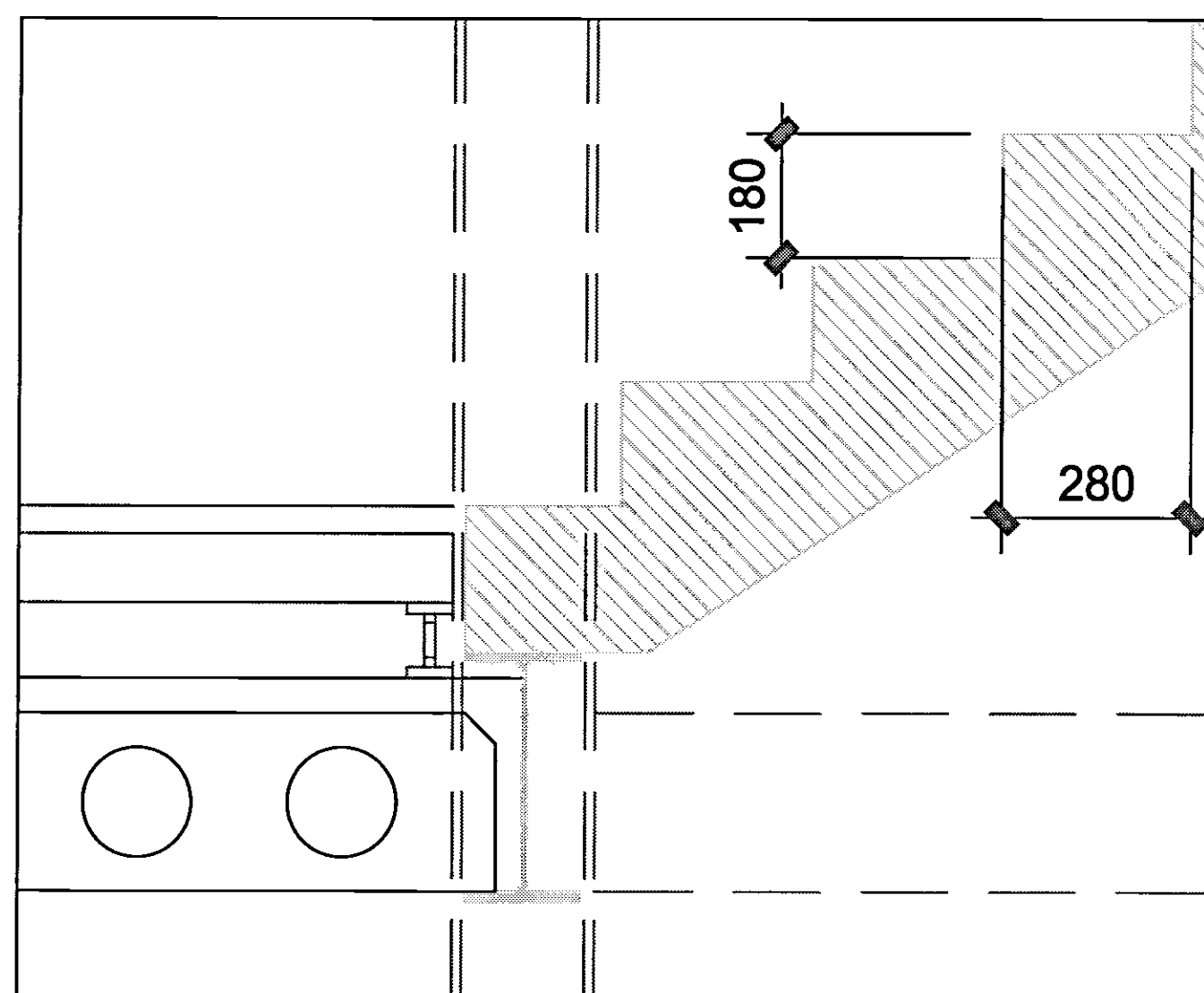
DETAIL 1

SCALE 1:10

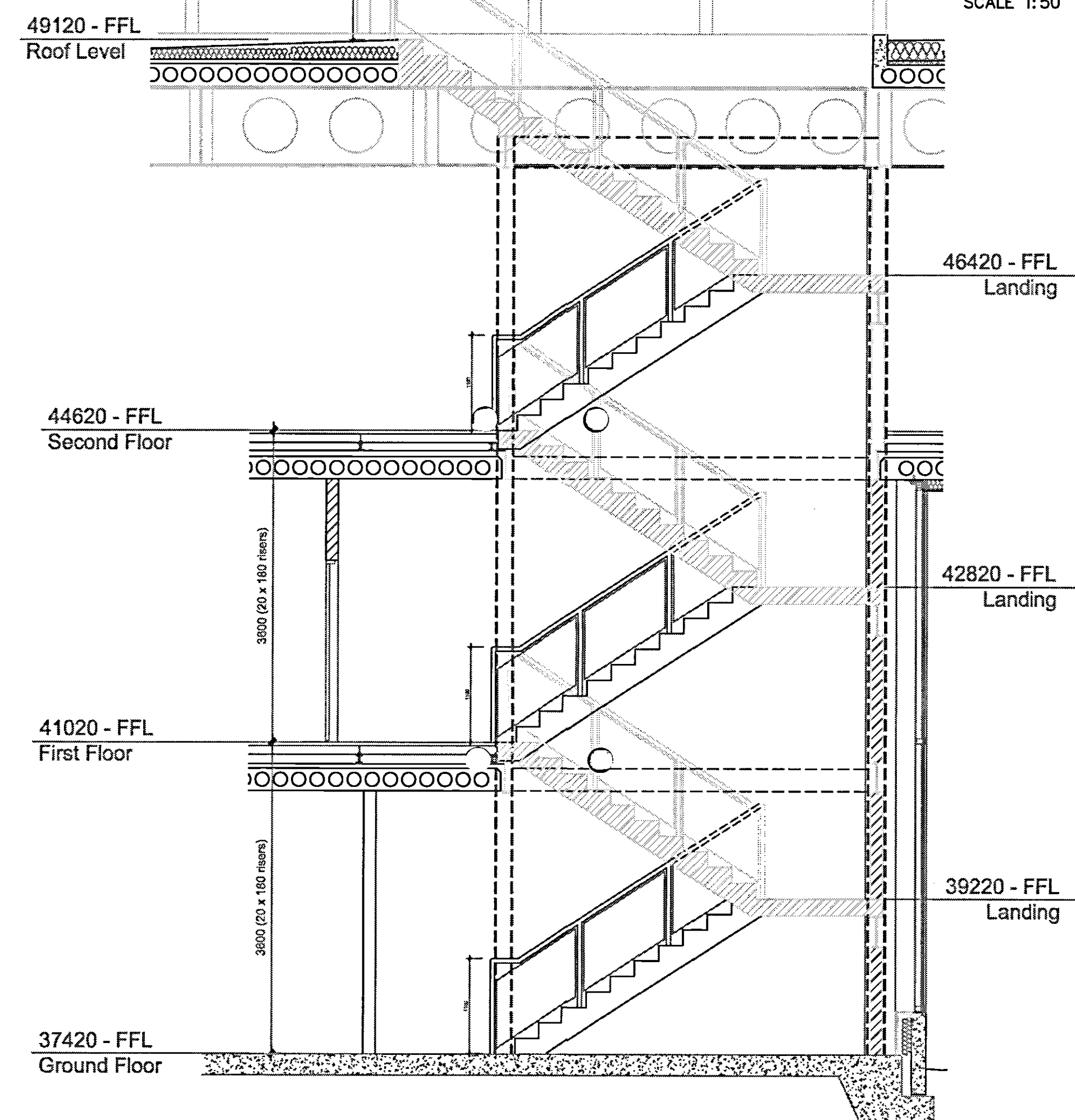


DETAIL 2

SCALE 1:10



SECTION 1-1
SCALE 1:50



44620 - FFL
Second Floor

41020 - FFL
First Floor

37420 - FFL
Ground Floor

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SEE DRAWING S103 FOR STEELWORK NOTES.

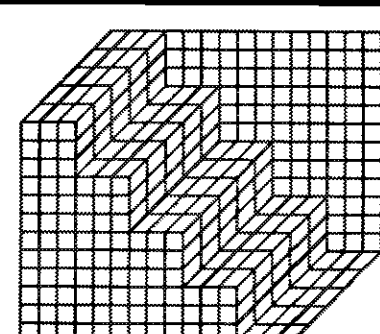
PRE-CAST UNITS TO SPECIALIST CONTRACTOR DESIGN AND SPECIFICATIONS.

03 AS BUILT	17.07.07	RC	A.M
02 STAIR REVISED FROM 2ND FLOOR	06.03.06	P.D.H.A.M	
TO ROOF			
01 ISSUED FOR TENDER PURPOSES	27.02.06	PDH	A.M
Rev	Description	Date	Dm Ch'd

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Consulting Engineers

Architect UNIVERSITY OF SALFORD
Project NEW LAW FACILITY
STAIR SECTIONS
& DETAILS PRECAST STAIRCASE

Scale: A1 1:100 uno	Job No. 010023
Drawn by PDH	Drawing No. S207
Checked by RLT	Rev 03
Date	

Notes

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SEE DRAWING S103 FOR STEELWORK NOTES.

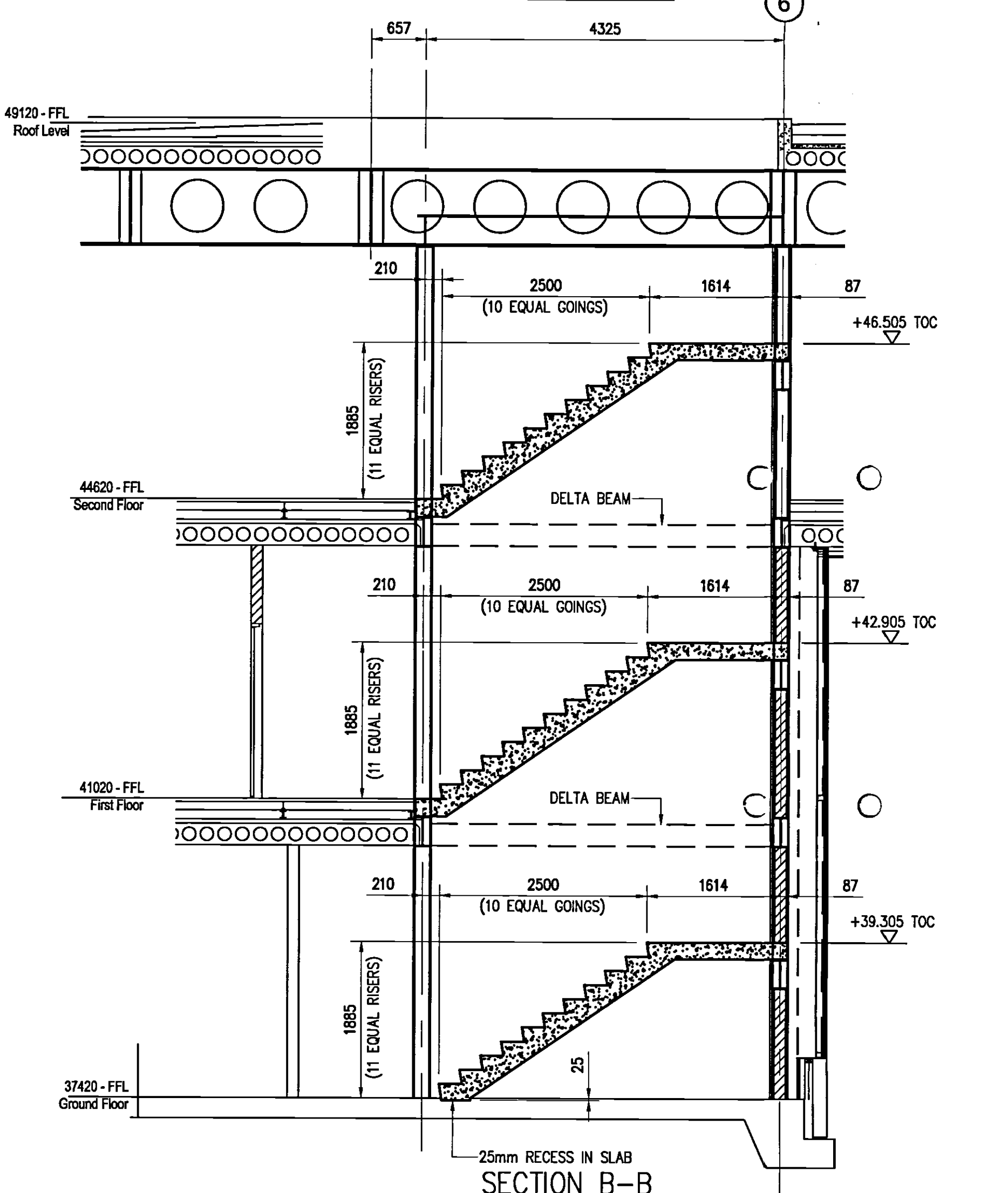
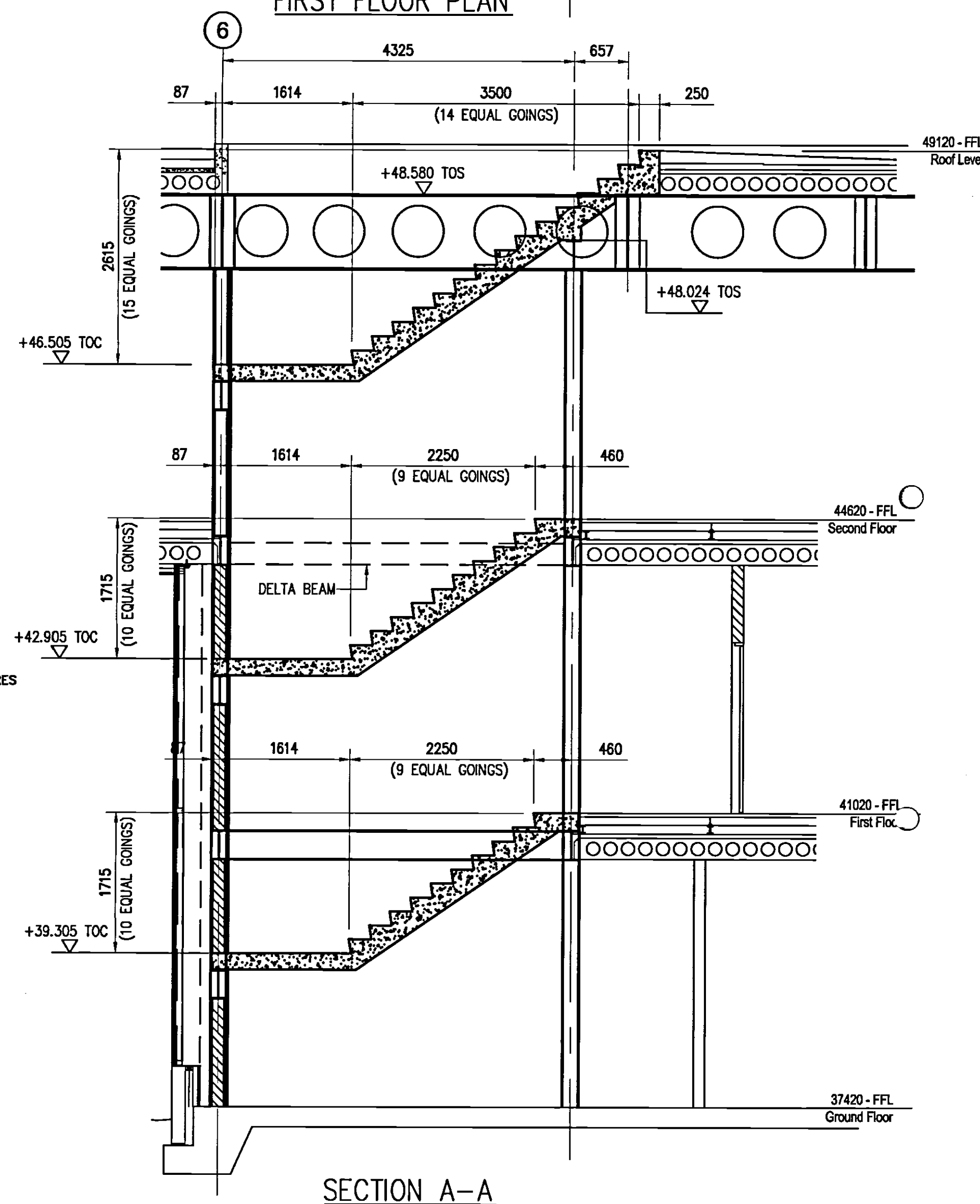
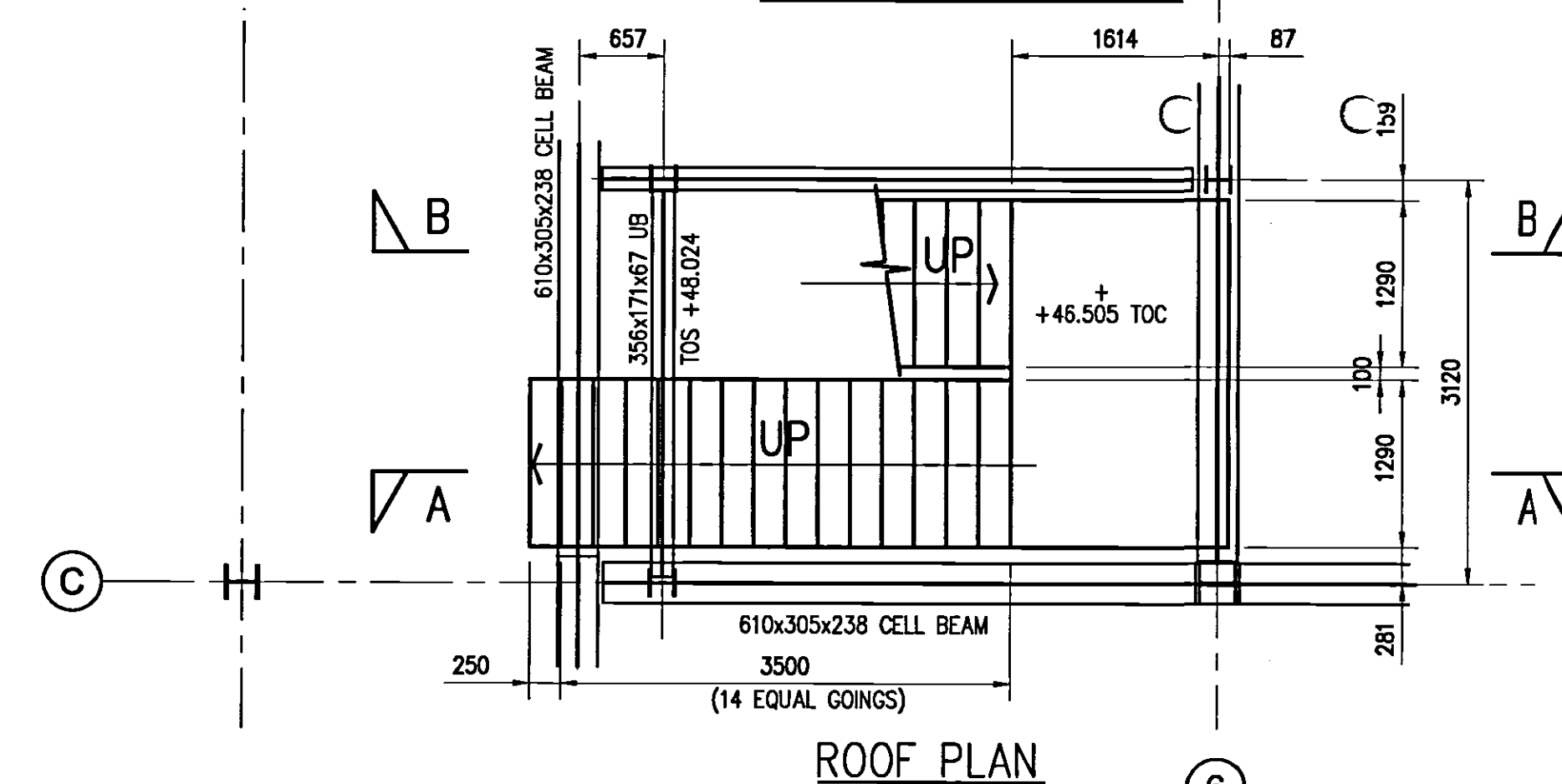
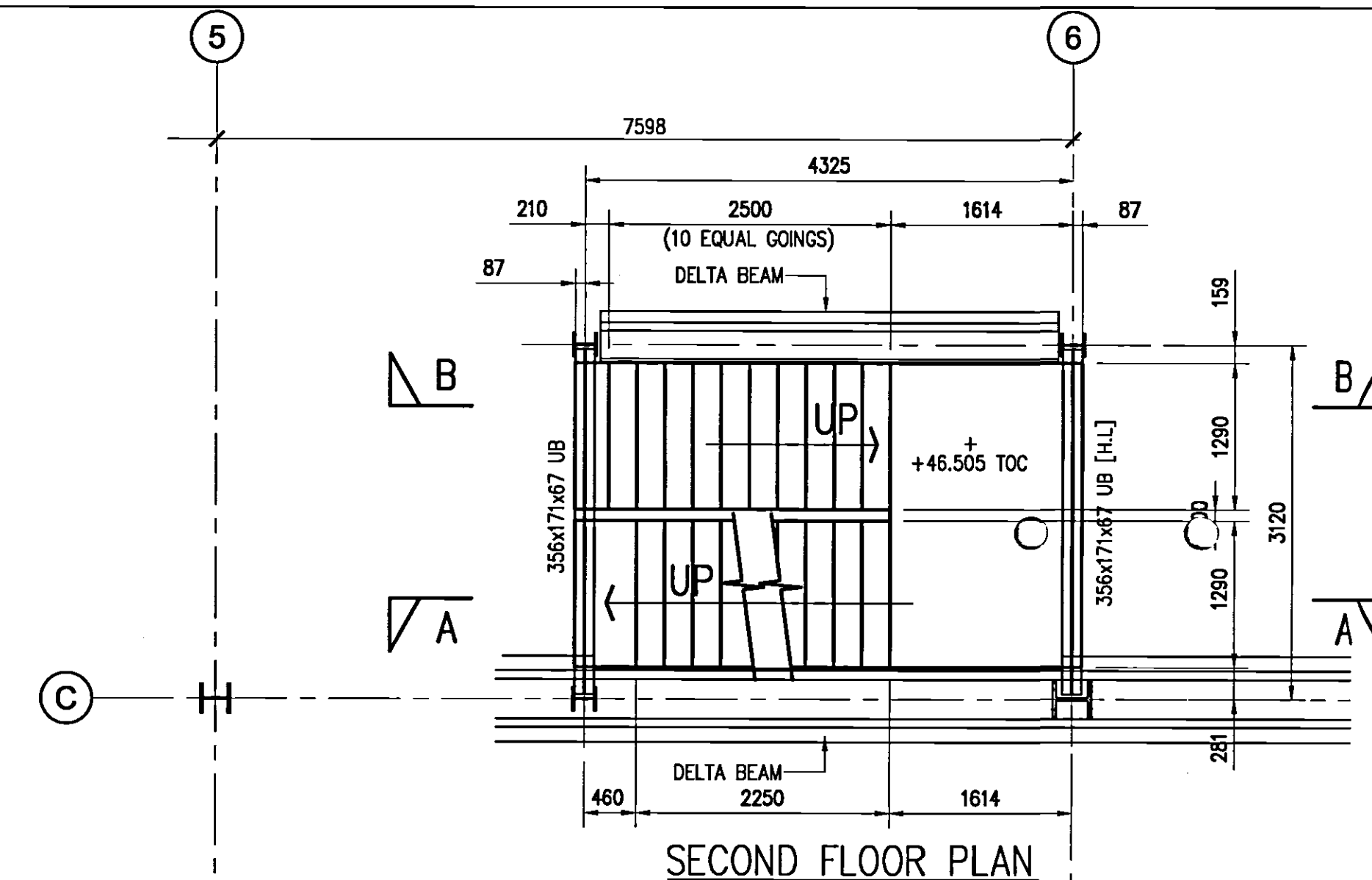
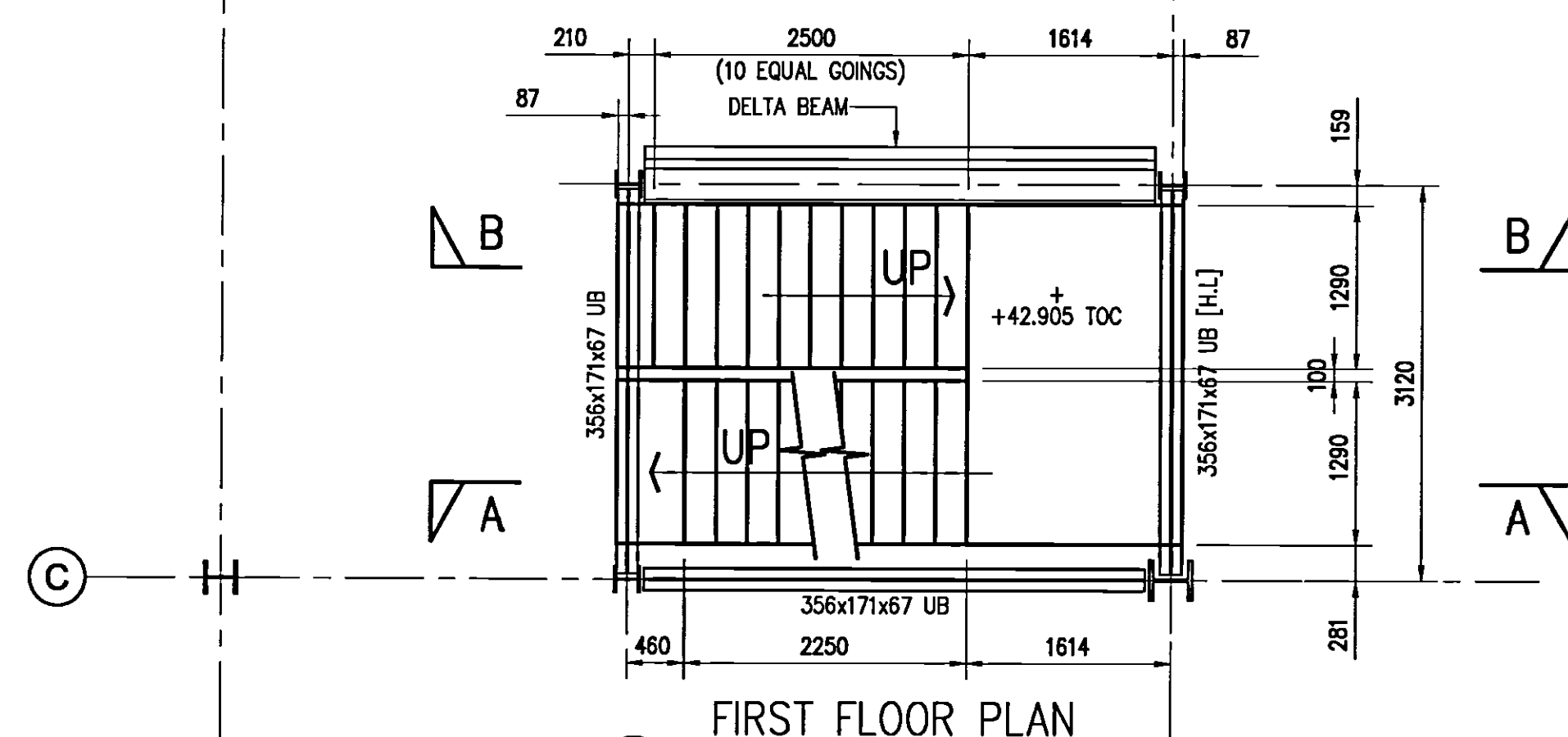
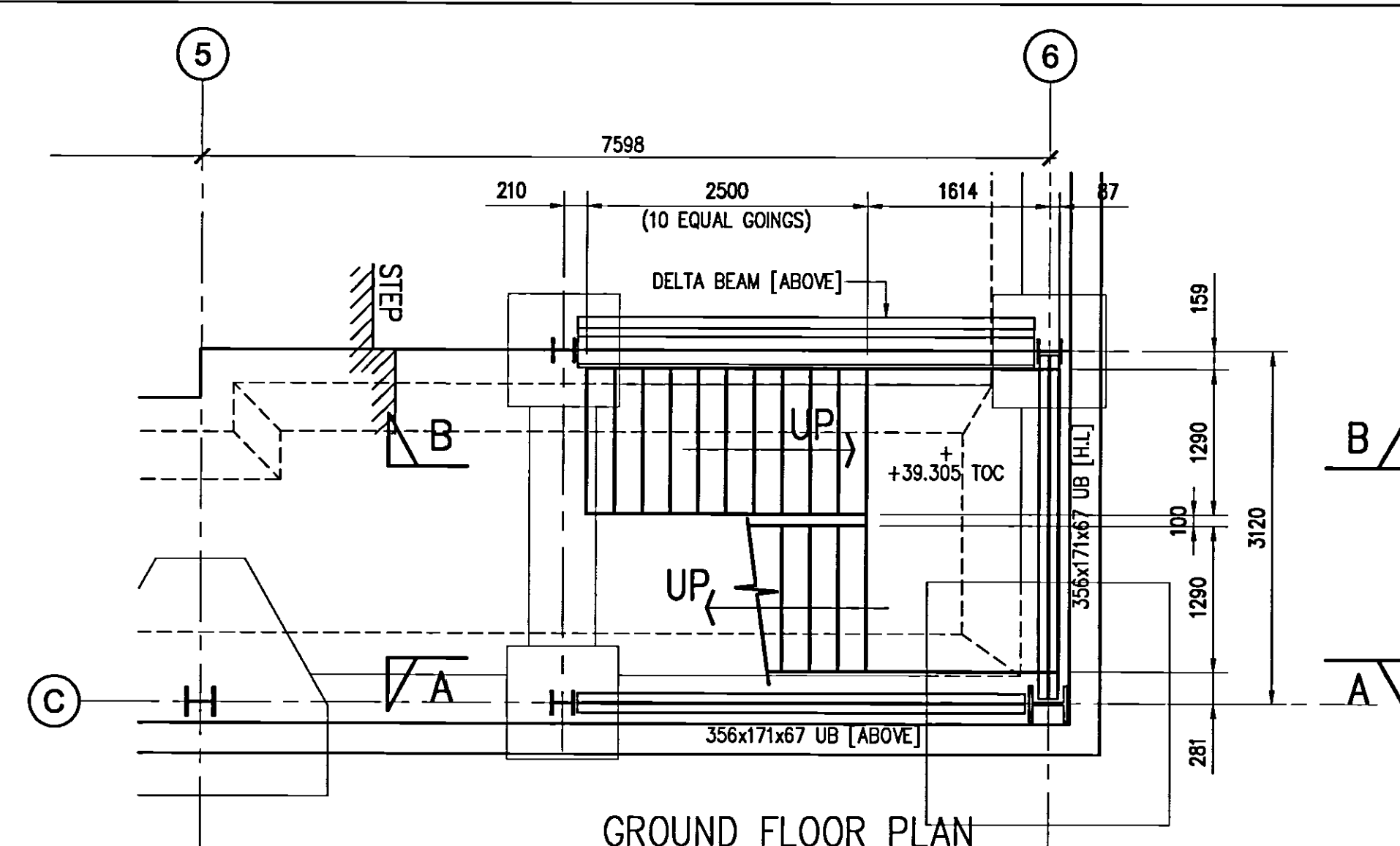
PRE-CAST UNITS TO SPECIALIST CONTRACTOR DESIGN AND SPECIFICATIONS.

NOTE

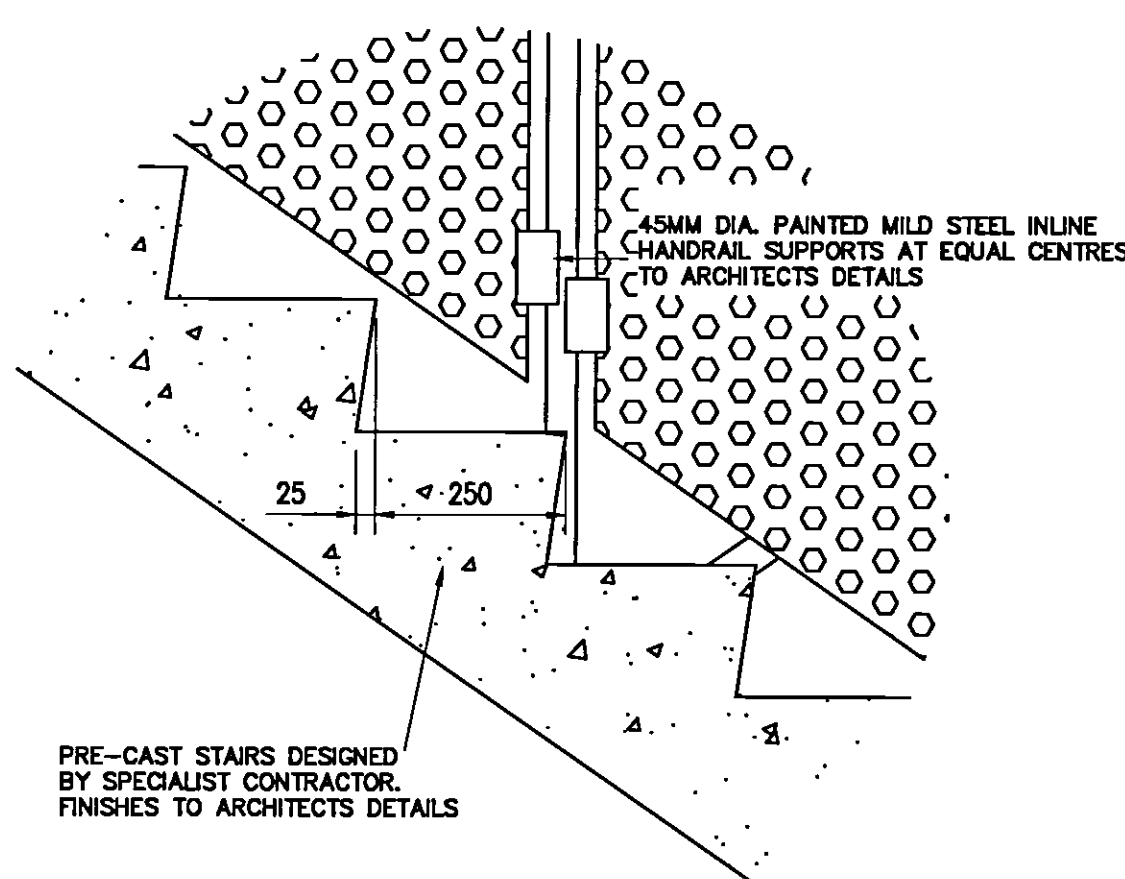
ALL PRE-CAST STAIR FLIGHTS HALF LANDINGS STEELWORK LEVELS ASSUMED ON 200mm WAST. IMPOSED LOAD TO STAIRS TO BE 4.0 KN/m², DEAD LOAD TO INCORPORATE SELF WEIGHT + 0.25KN/m² SERVICE LOAD TO THE SOFFIT.

FLIGHTS TO BE DESIGNED FOR LIFTING AND INSTALLATION

ARCHITECT TO CONFIRM FINISH TO LANDINGS AND STAIRS



NOTE
HANDRAIL AND BALUSTRADE
SET OUT TO ARCHITECTS
DETAILS



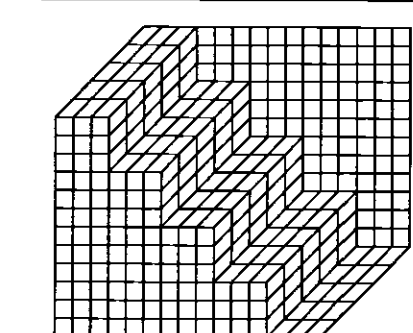
PRE-CAST STAIRS DESIGNED BY SPECIALIST CONTRACTOR. FINISHES TO ARCHITECTS DETAILS

01 AS BUILT	17.07.07	RC	A.M	
00 ISSUED FOR CONSTRUCTION	27.07.06	I.S	A.M	
Rev	Description	Date	Drn	Ch'd

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Architect UNIVERSITY OF SALFORD
Project NEW LAW FACILITY
GENERAL ARRANGEMENT OF
STAIR CASE 2

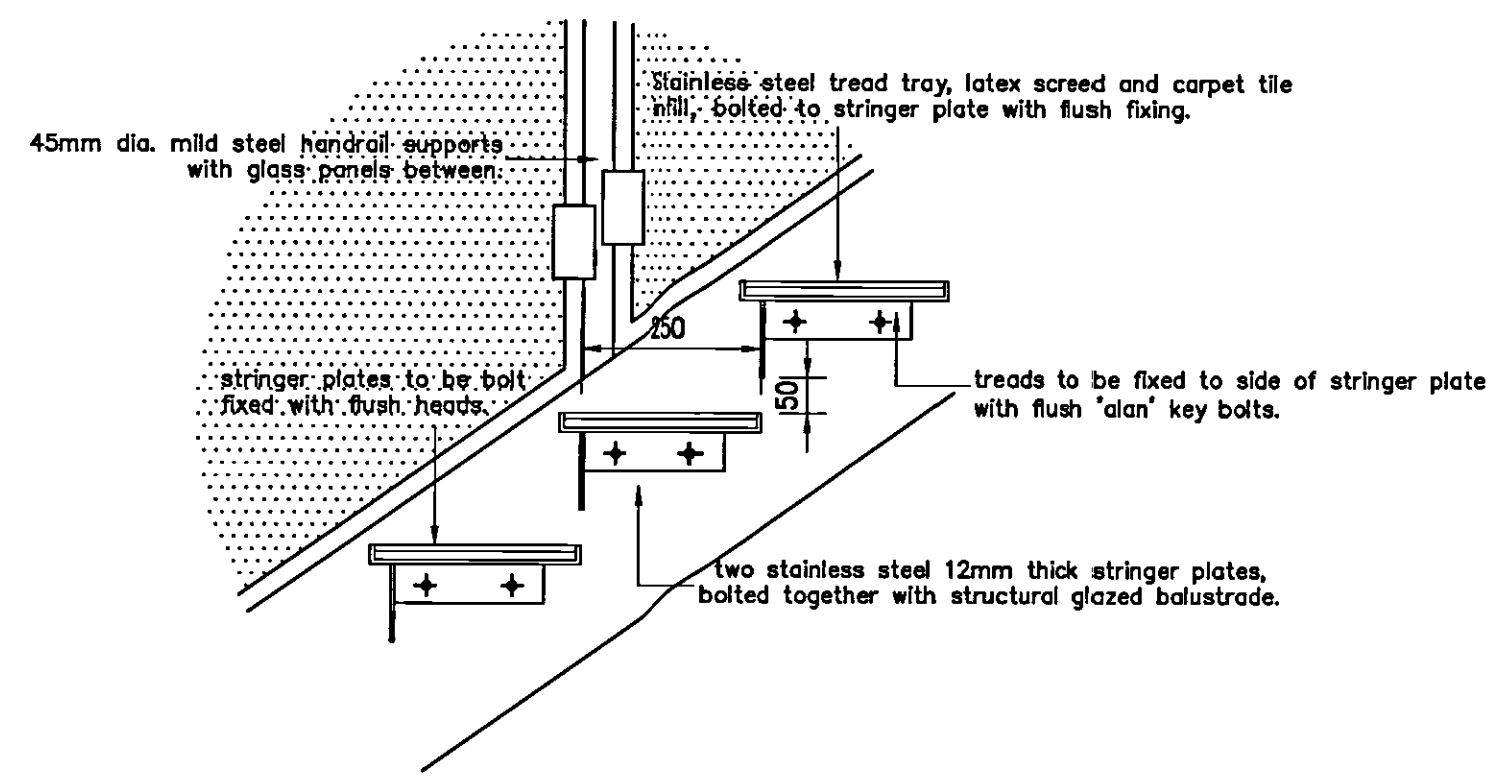
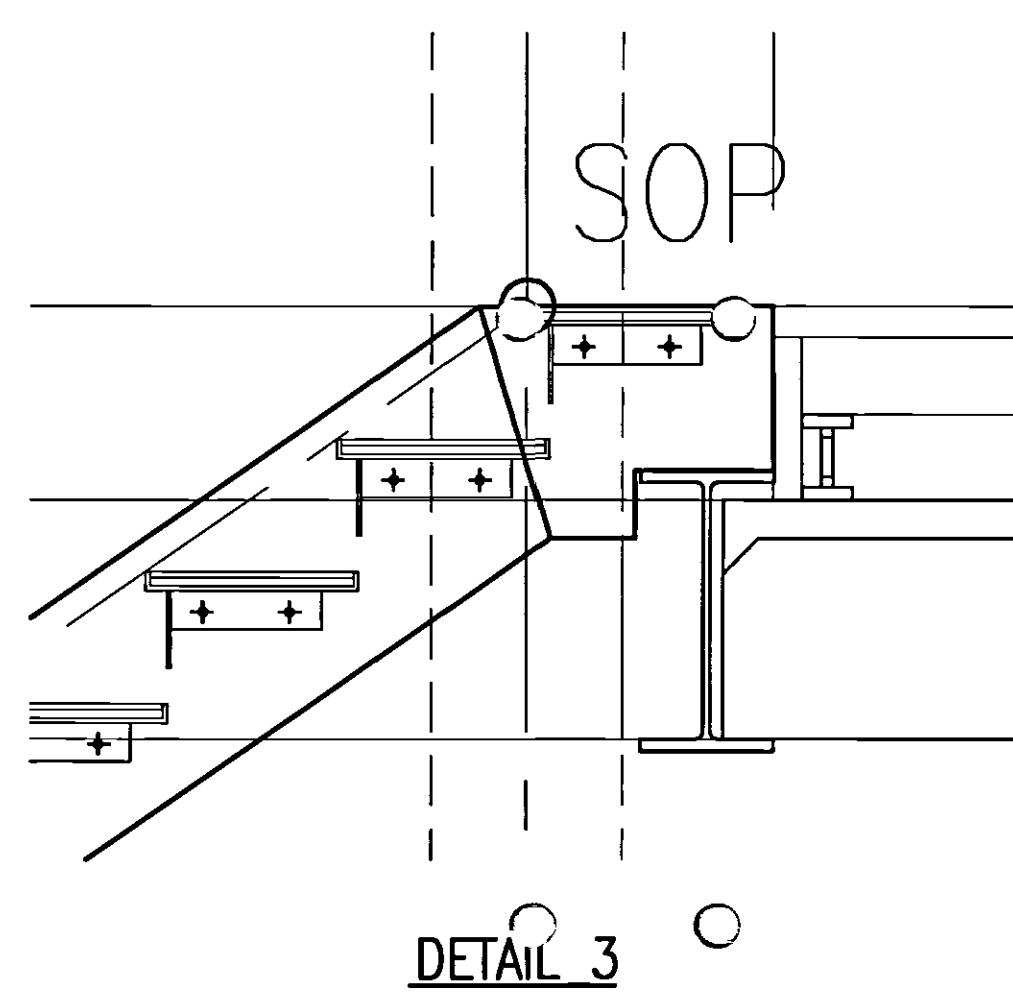
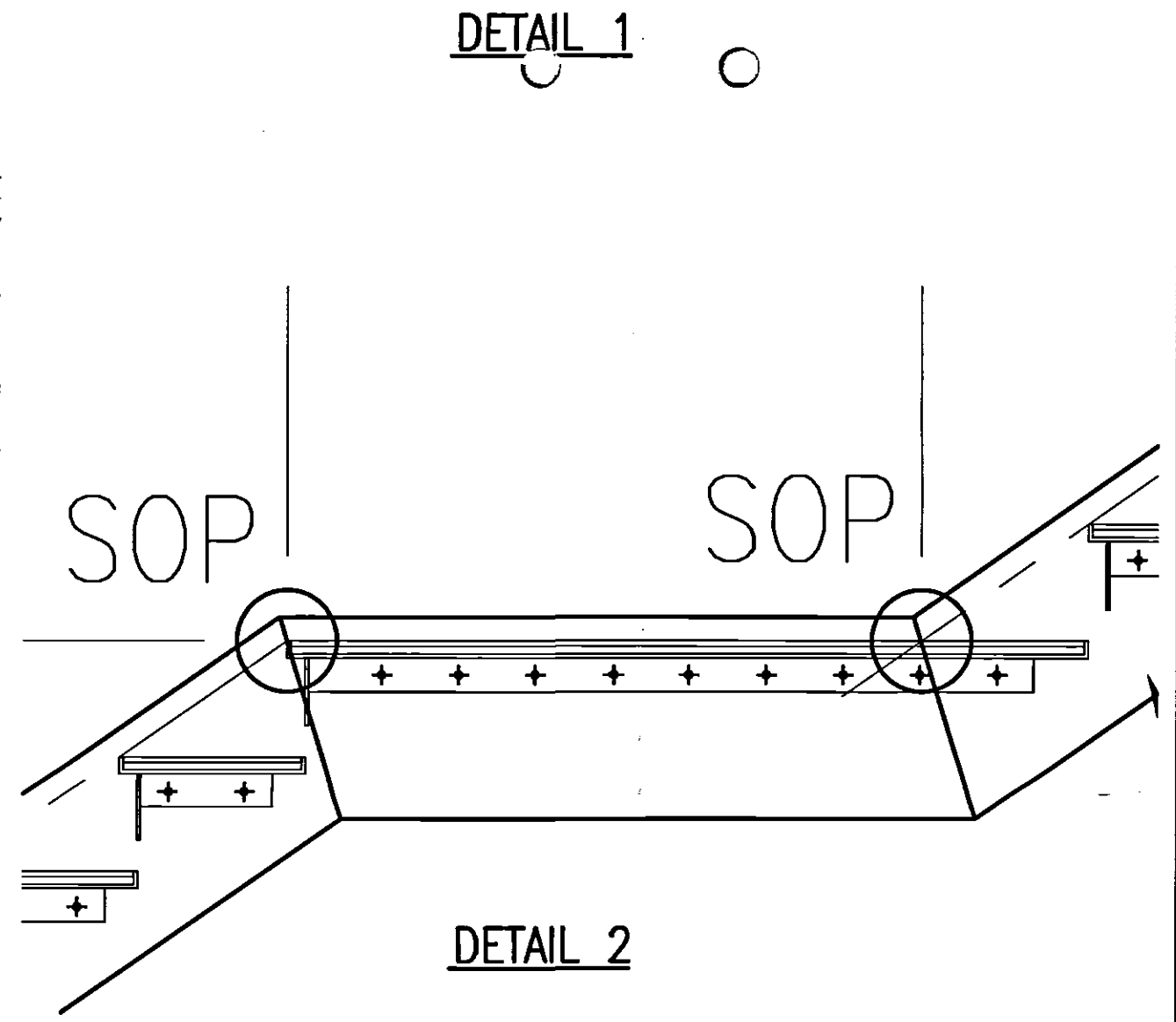
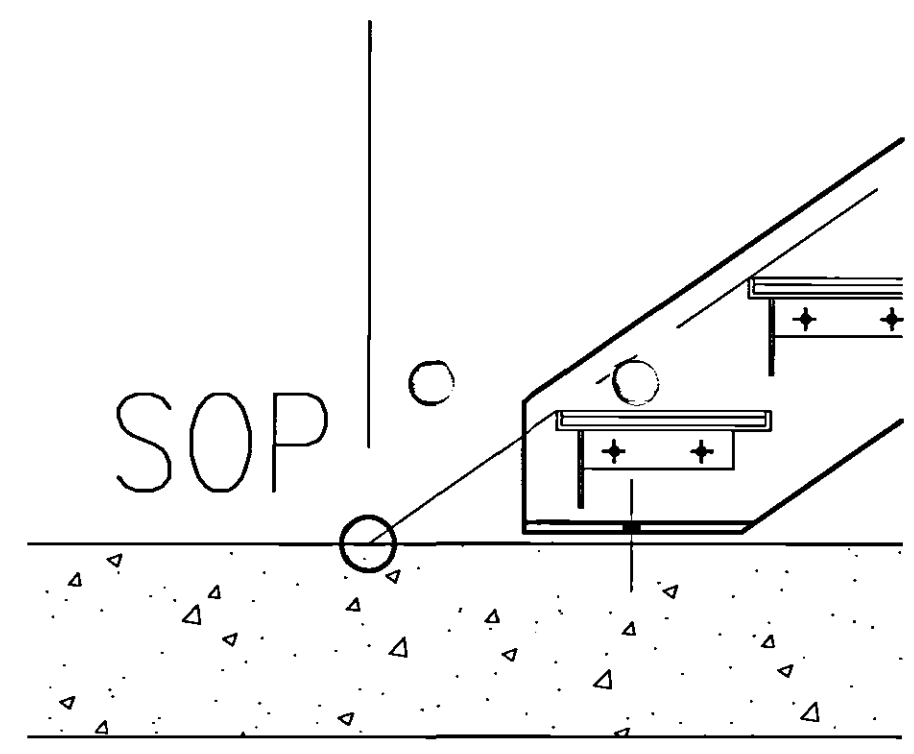
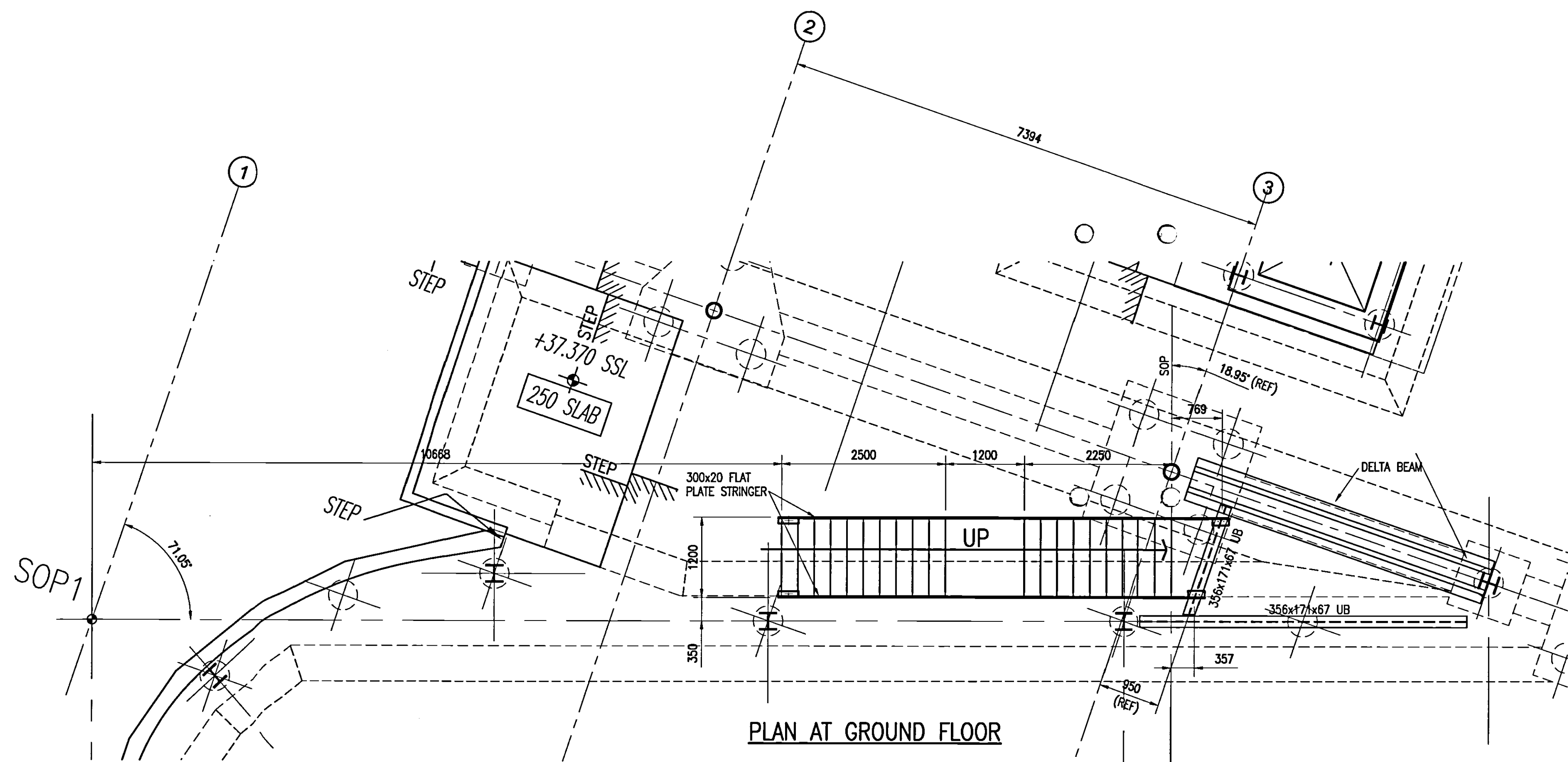
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Drawn by LSIMONS
Checked by A.M
Date JULY 2006

Job No. 010023
Drawing No. S52
Rev 01

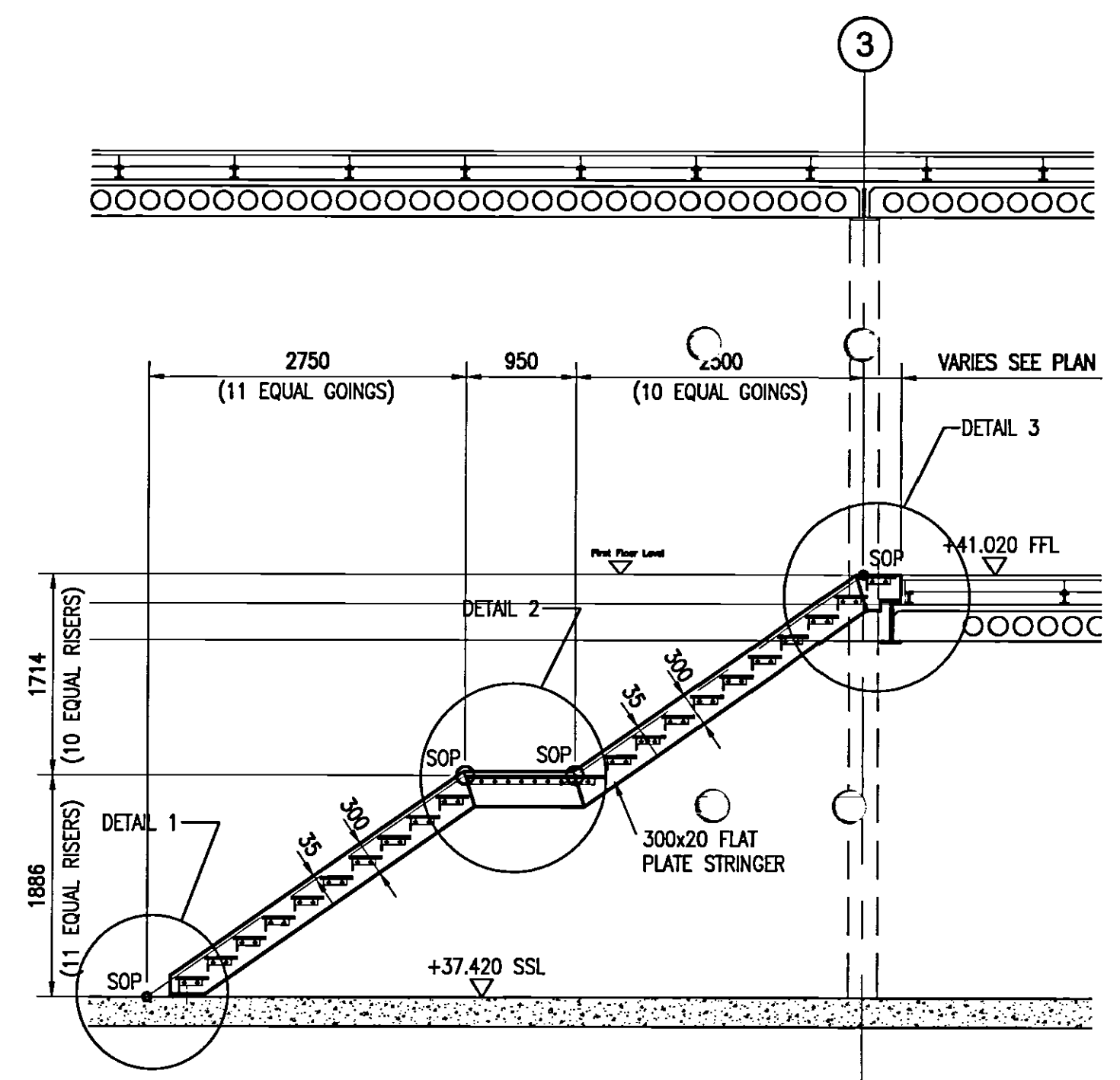
Notes

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS AND THE SPECIFICATION.

SEE DRAWING S13 FOR STEELWORK NOTES



NOTE
HANDRAIL AND BALUSTRADE
SET OUT TO BE CONFIRMED BY
ARCHITECT



SECTION 1-1

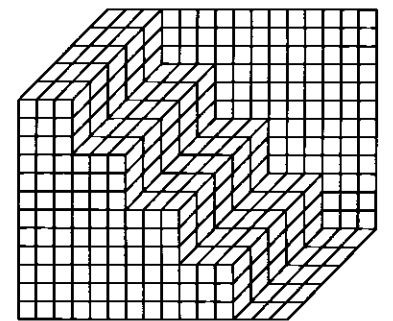
01 AS BUILT	17.07.07	RC	A.M.
00 ISSUED FOR CONSTRUCTION	25.07.06	I.S	A.M.
Rev	Description	Date	Dim

AS BUILT

Status of drawing

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Fax: +44 (0)161 233 5000
Email: info@burohappold.com
Web: www.burohappold.com



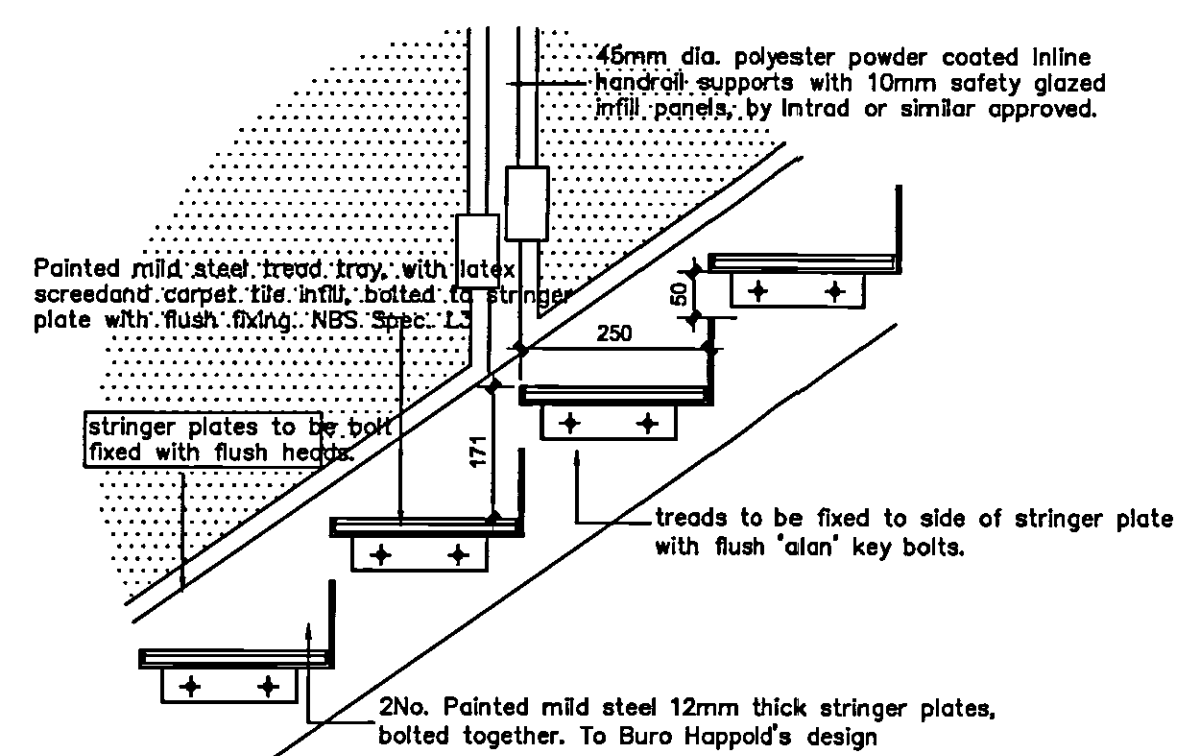
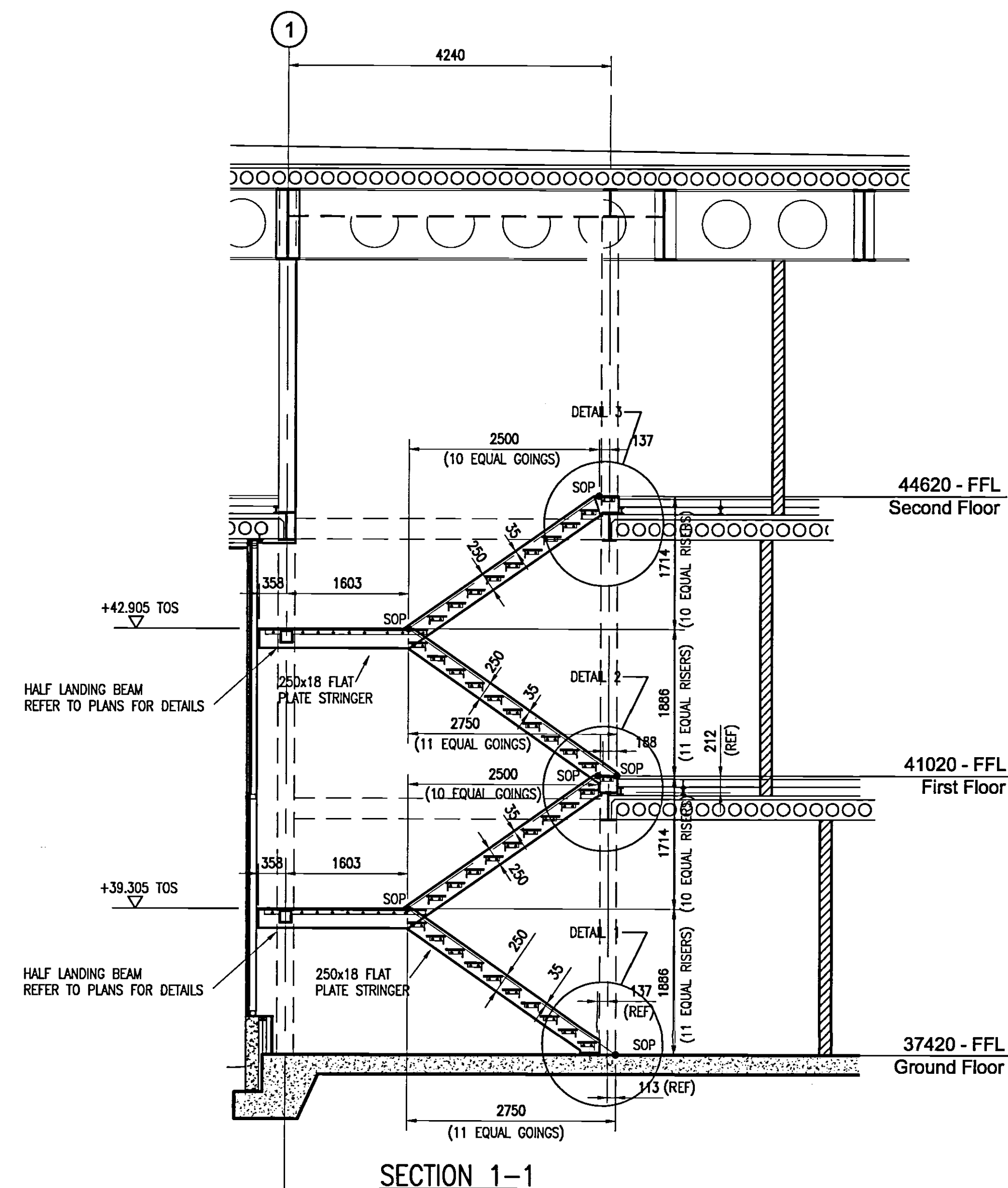
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Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACULTY
GENERAL ARRANGEMENT OF
STAIR CASE 3

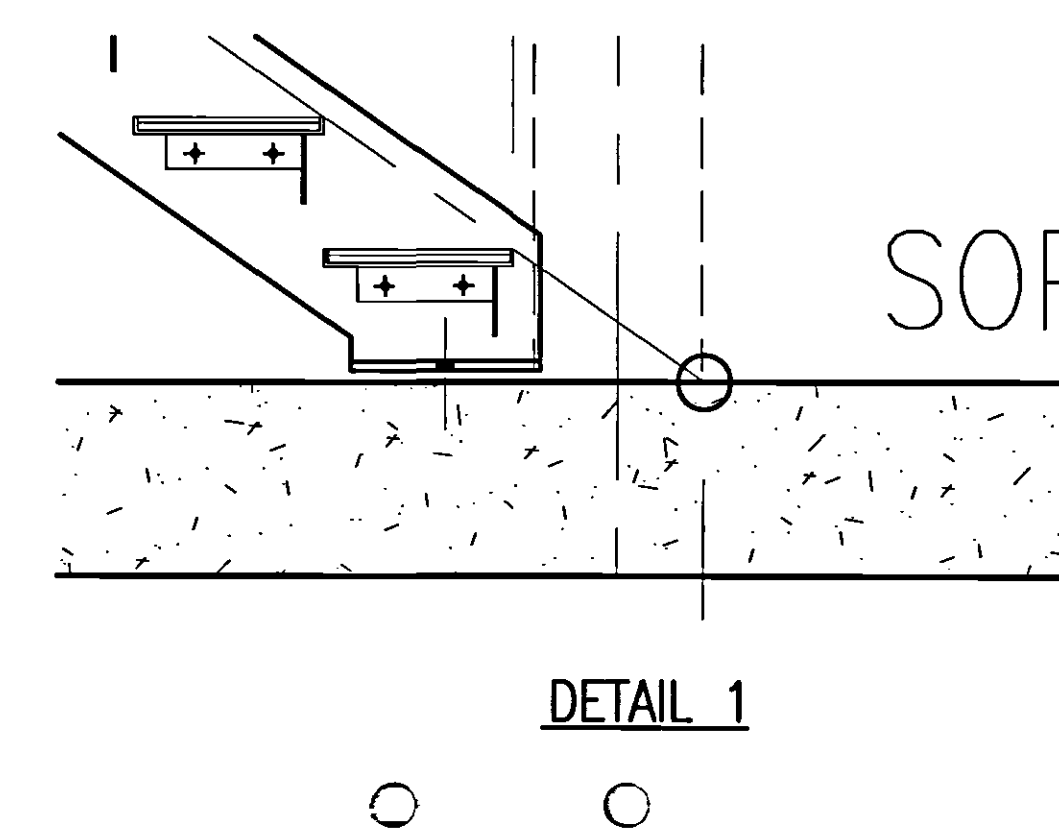
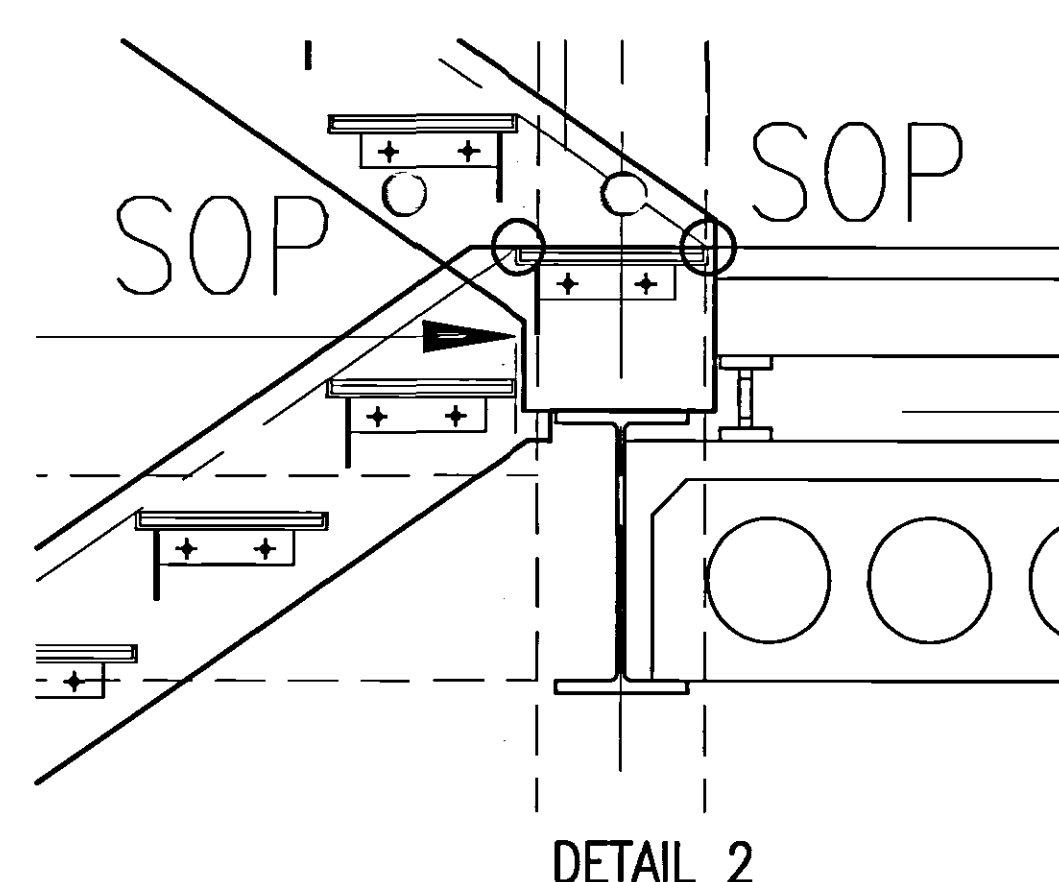
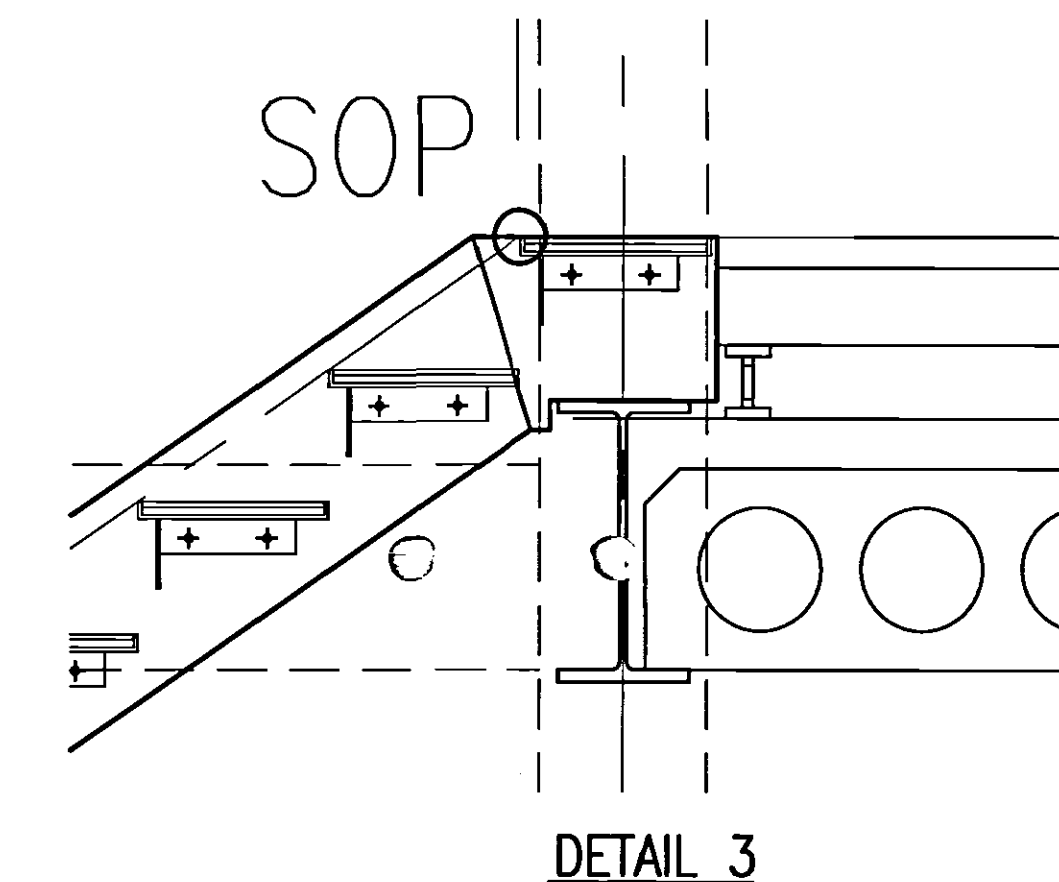
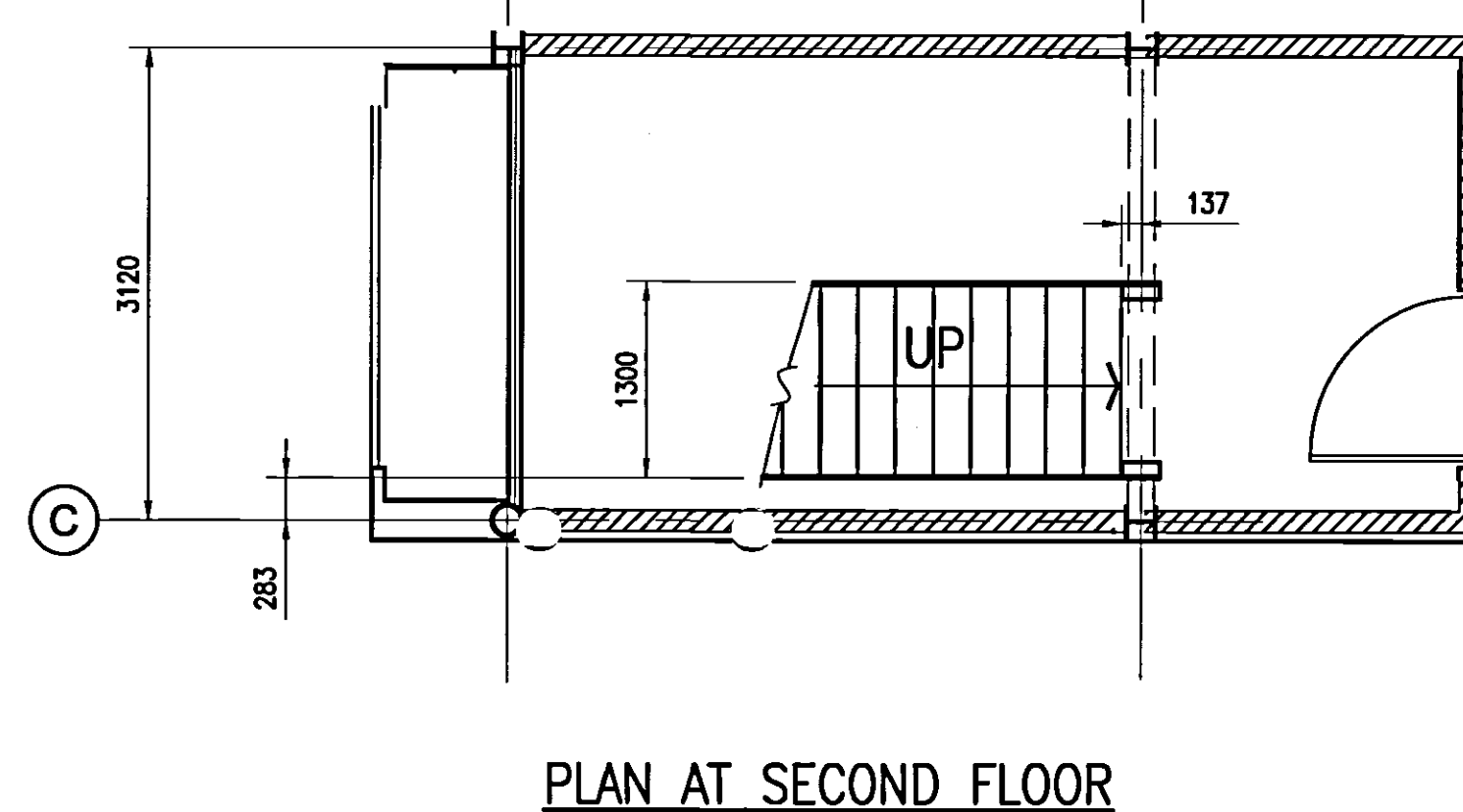
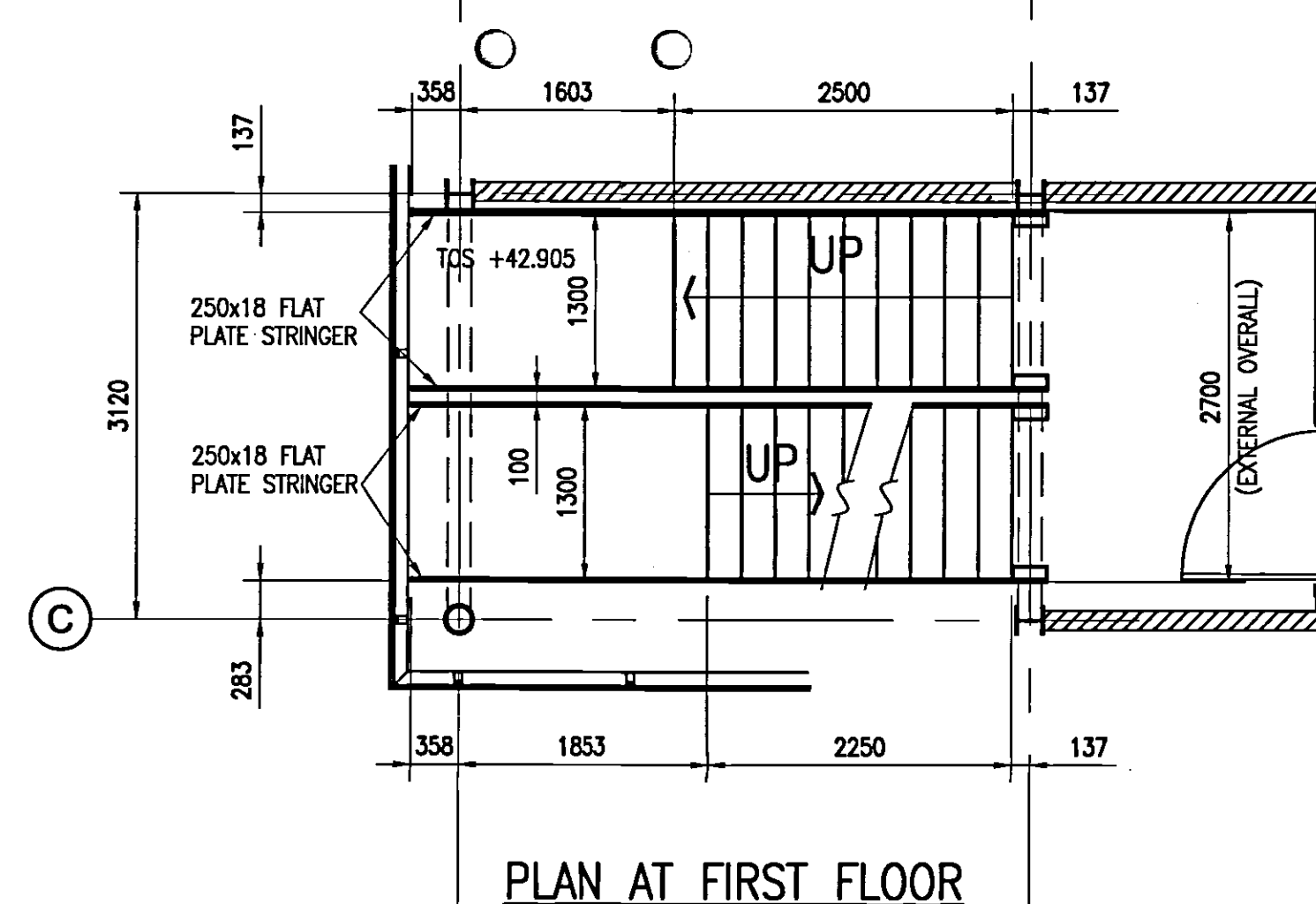
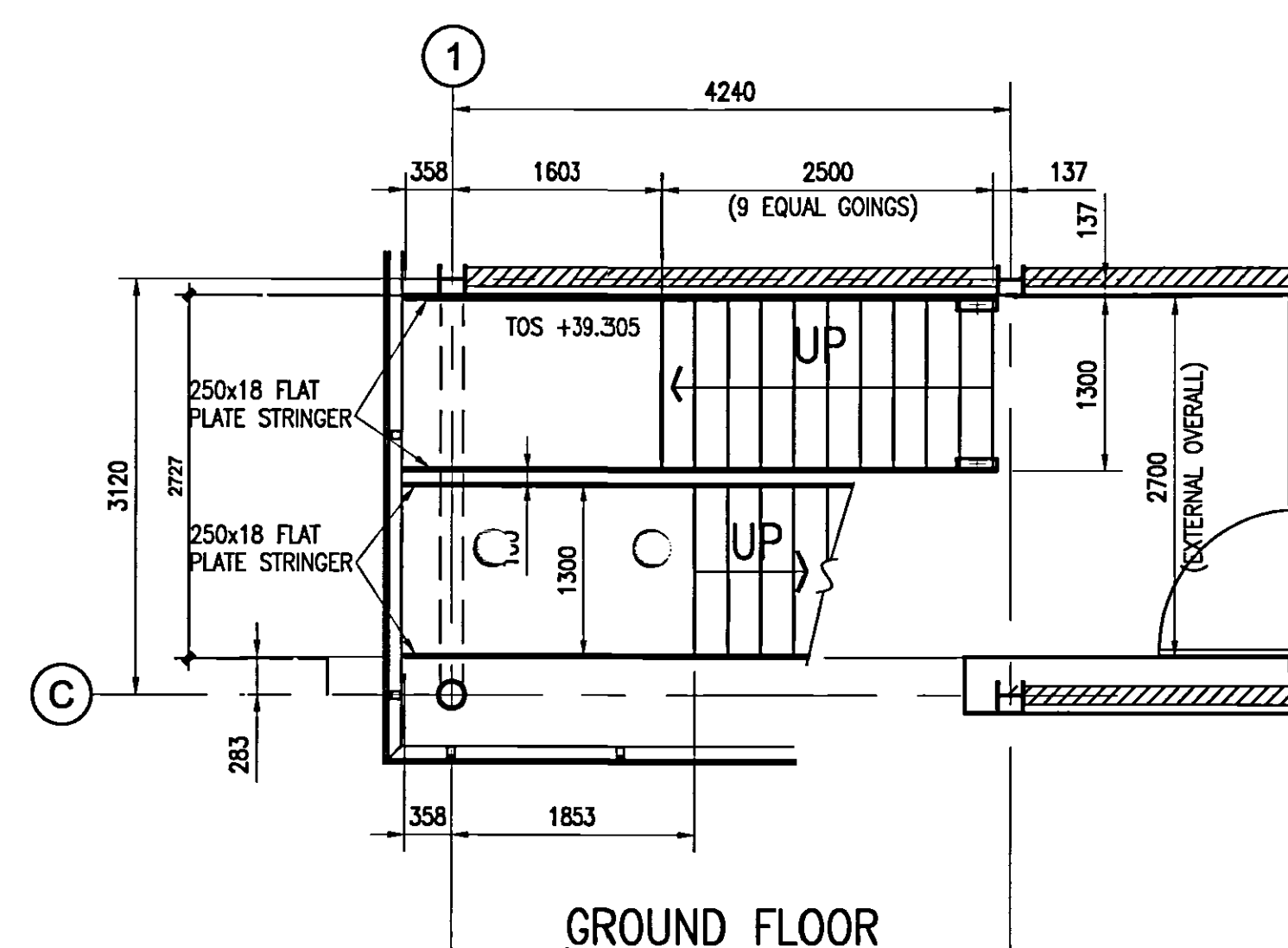
Scales: 0/1 1:50	Job No. 010023
Drawn by: I.SIMONS	Drawing No. S051
Checked by: A.M.	Rev 01
Date: JULY 2006	

Notes

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH
THE ARCHITECTS DRAWINGS AND THE SPECIFICATION.
SEE DRAWING S13 FOR STEELWORK NOTES



NOTE
HANDRAIL AND BALUSTRADE
SET OUT TO BE CONFIRMED BY
ARCHITECT



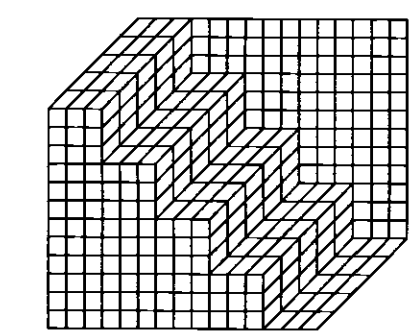
01 AS BUILT	17.07.07 RC A.M
00 ISSUED FOR CONSTRUCTION	10.07.06 I.S A.M
Rev Description	Date Dm Ch'd

AS BUILT

Status of drawing

Canal Suite
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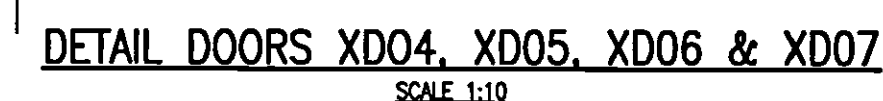
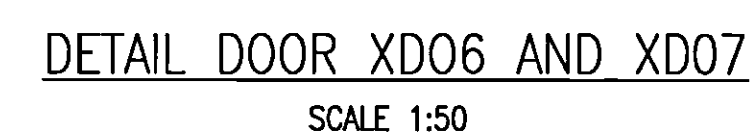
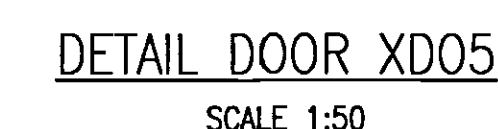
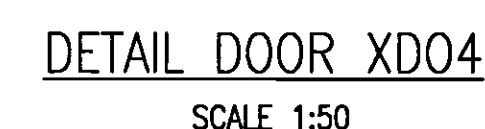
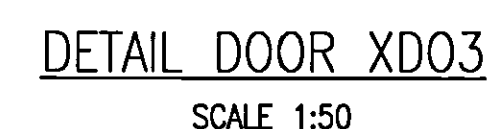


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Consulting Engineers

Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACILITY
GENERAL ARRANGEMENT OF
STAIR CASE 1

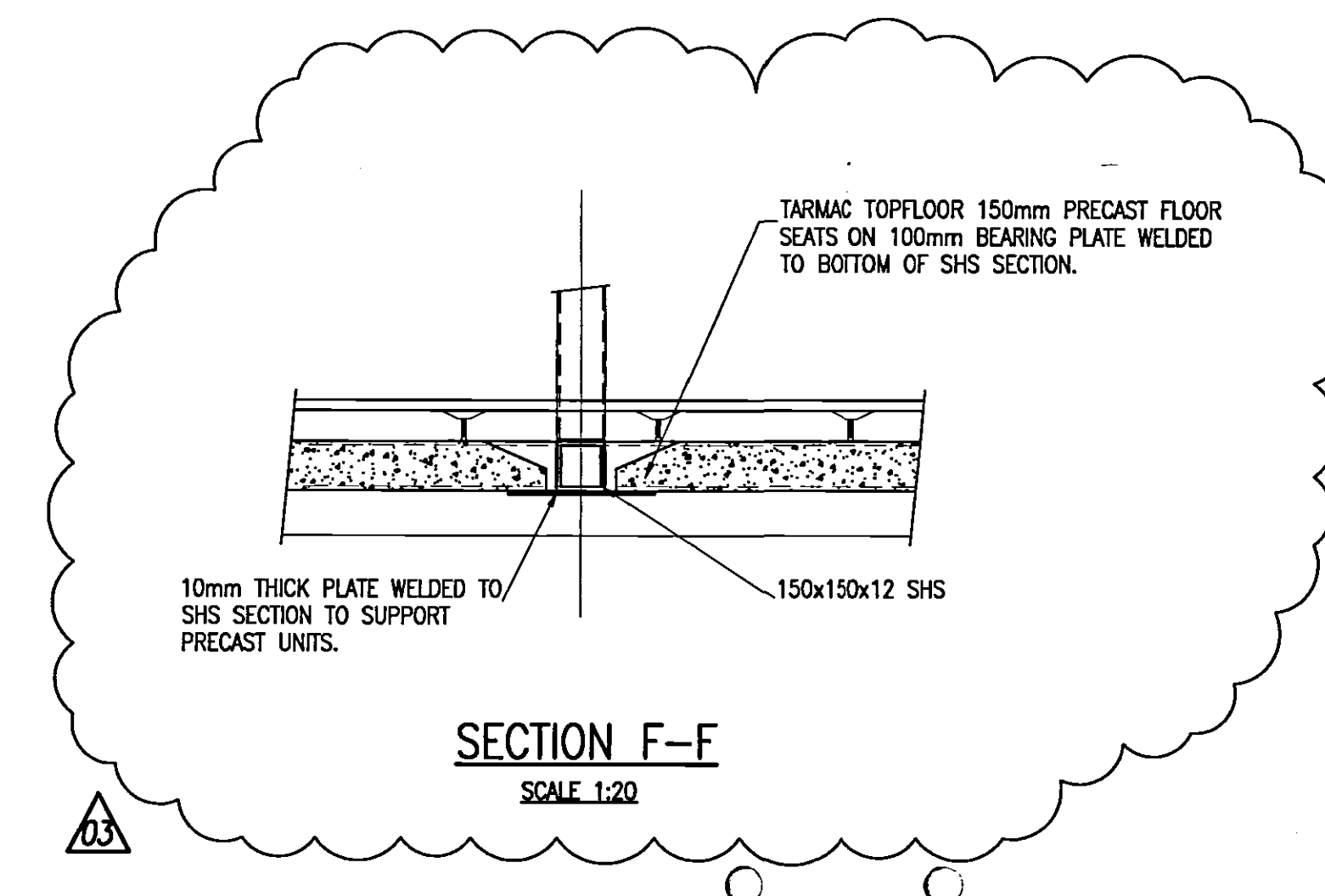
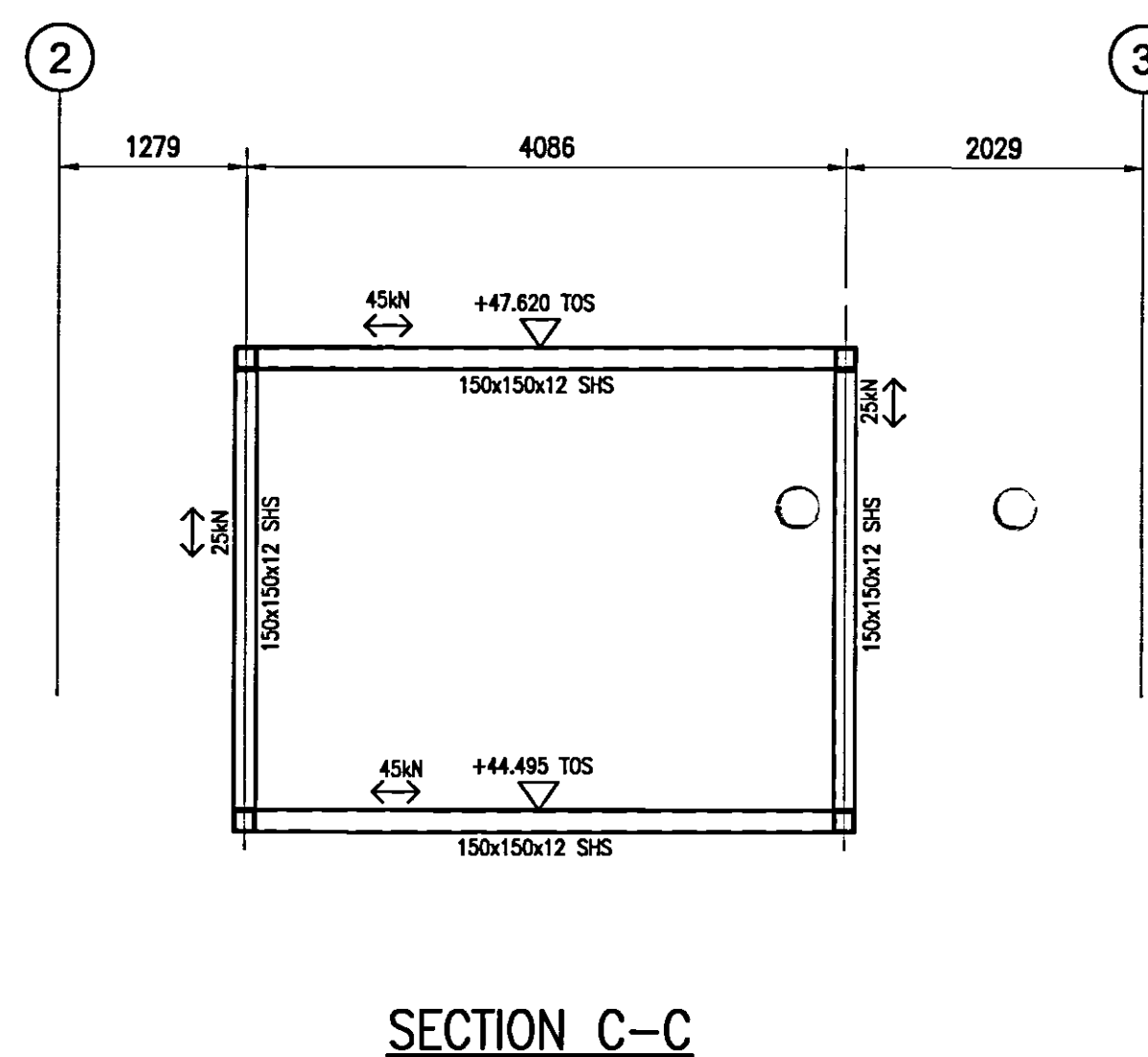
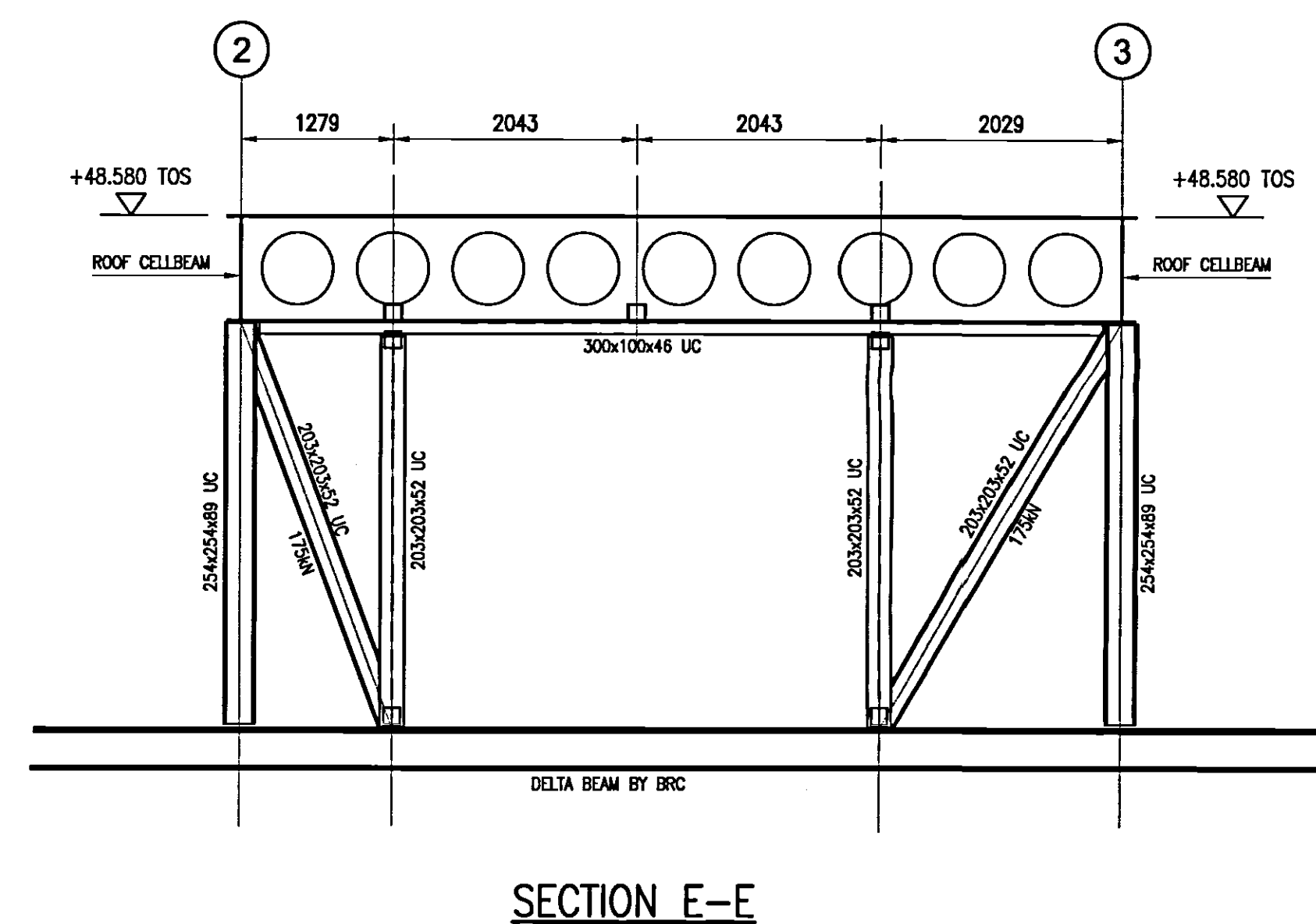
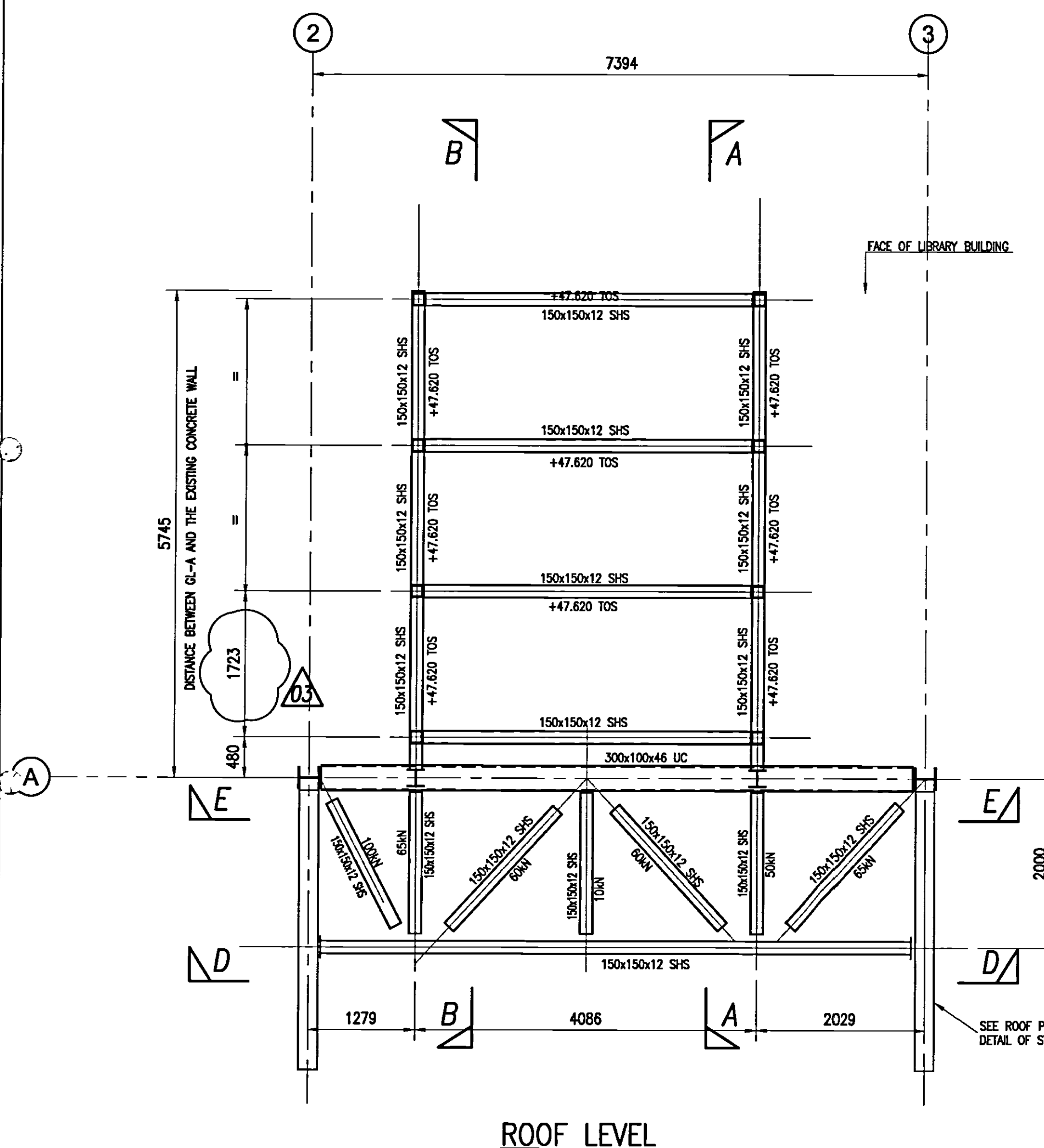
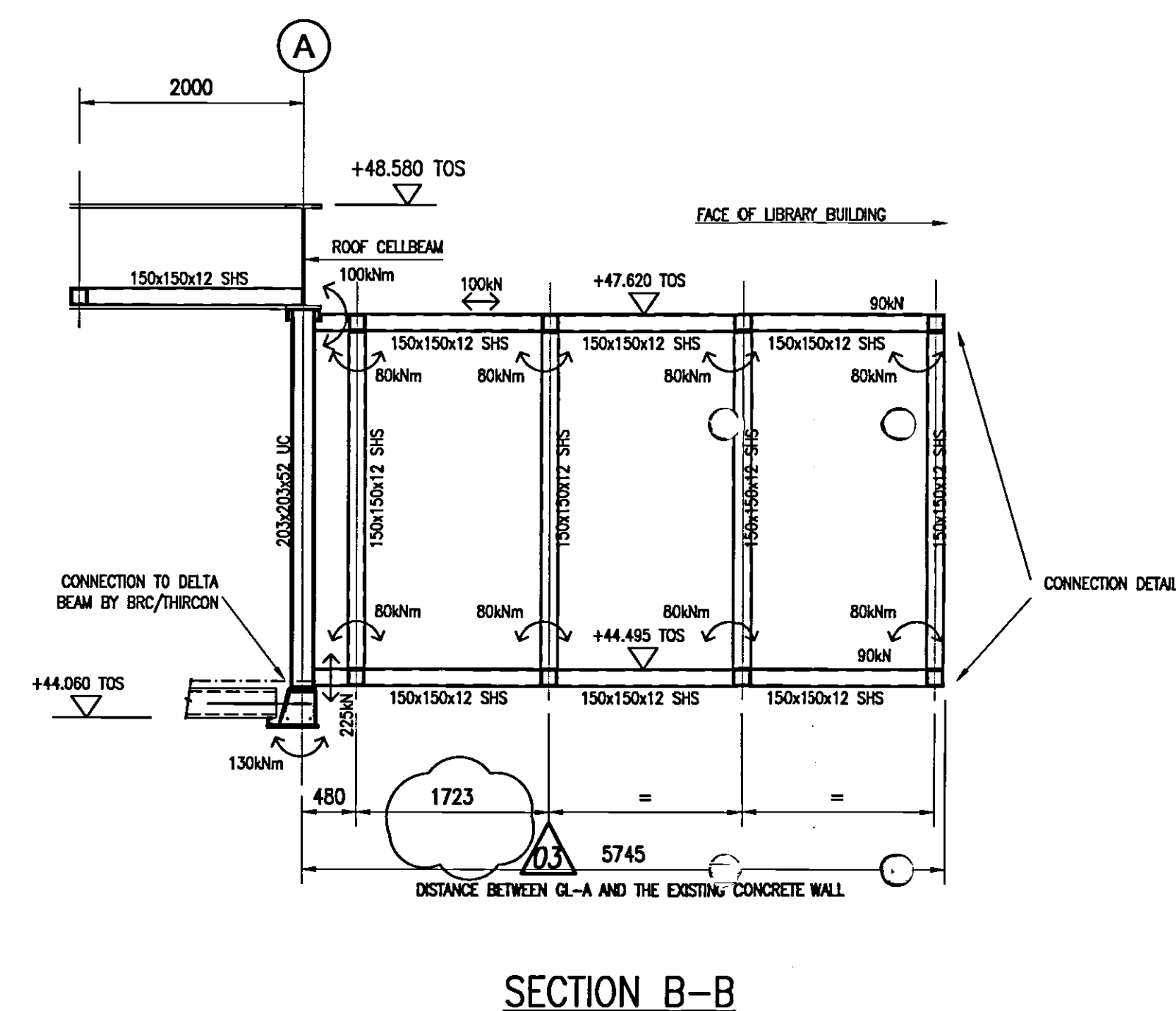
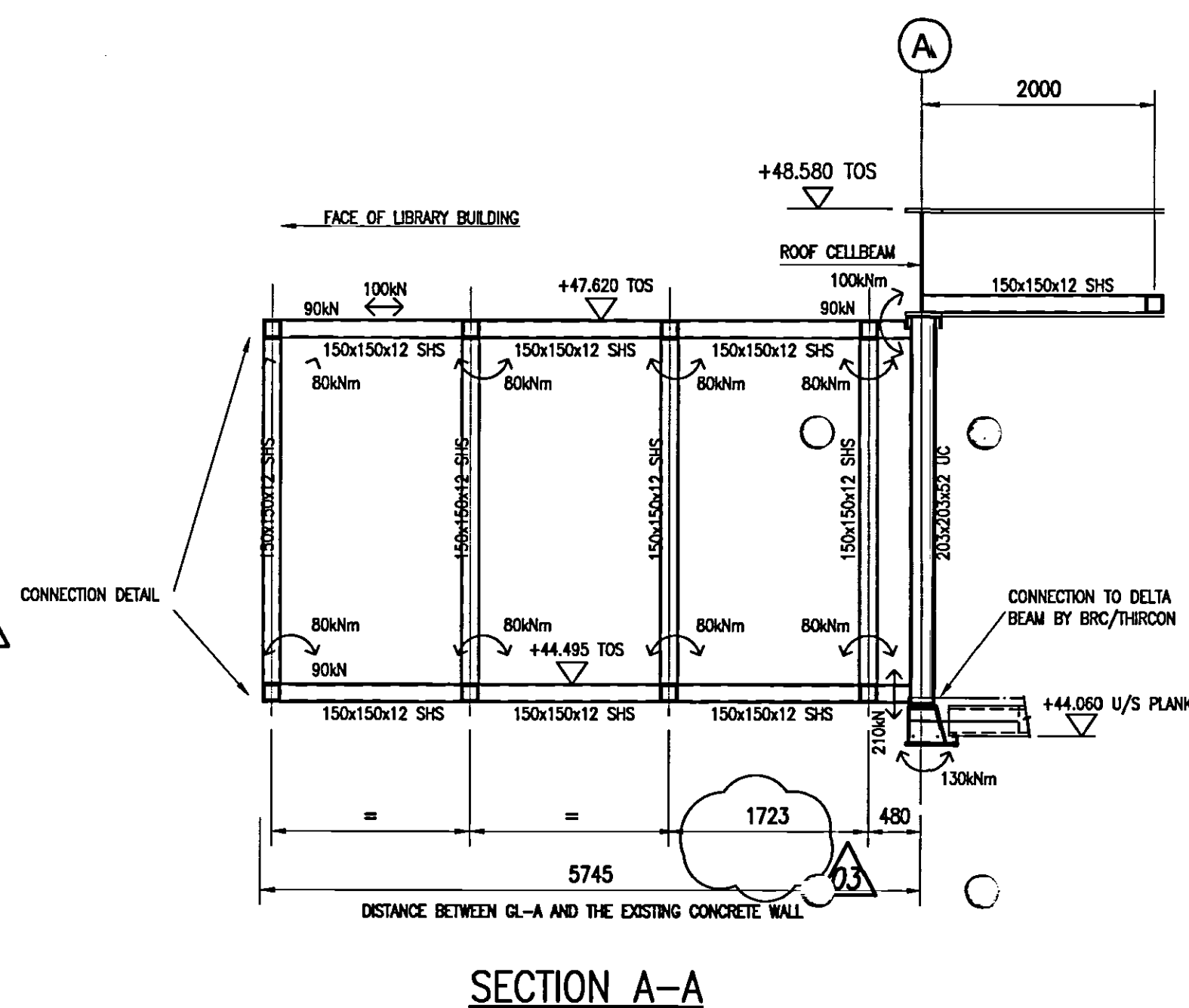
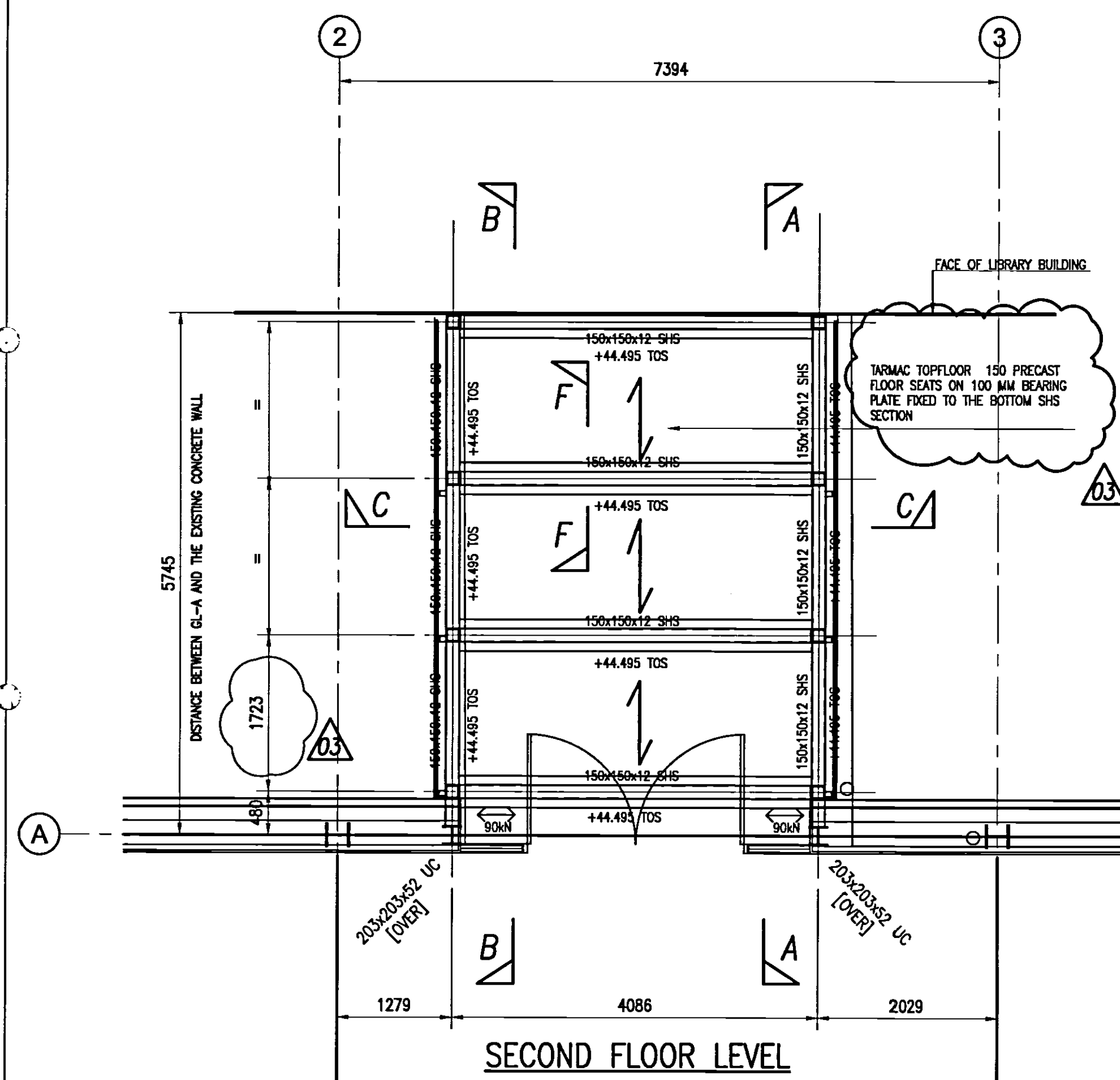
Scales: BA1 1:100
Drawn by: L.SIMONS
Checked by: A.M
Date: JULY 2006

Job No. 010023
Drawing No. S050
Rev 01



ALL DETAILS AND DIMENSIONS TO BE
BY ARCHITECTS

Job No.	010023
Drawing No.	S027
Rev	03



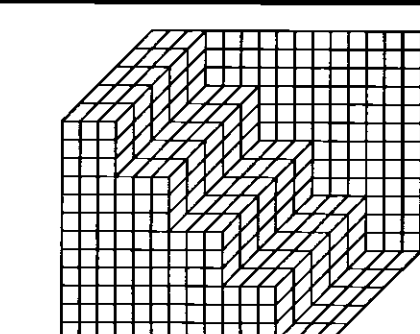
NOTE
ALL SET OUT DIMENSIONS TO BE CONFIRMED BY ARCHITECT
AND MAIN CONTRACTOR PRIOR TO FABRICATION

04 AS BUILT	17.07.07	RC	A.M.
03 SLAB DETAILS &	26.09.06		A.M.
STEELWORK DIMENSIONS ADDED			
02 TRUSS CHANGES	20.09.06		A.M.
01 BRACING ADDED	03.08.06	IS	A.M.
00 ISSUED FOR CONSTRUCTION	24.07.06	IS	A.M.
Rev	Description	Date	Dm

AS BUILT

Status of drawing

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Consulting Engineers

Architect UNIVERSITY OF SALFORD
Project NEW LAW FACILITY
(MAIN BUILDING)
LINK BRIDGE

Scale: 1:50
Drawn by L.SIMONS
Checked by A.M.
Date JULY 2006

Job No. 010023
Drawing No. S022
Rev 04



SEE DRAWING S013 FOR STEELWORK NOTES

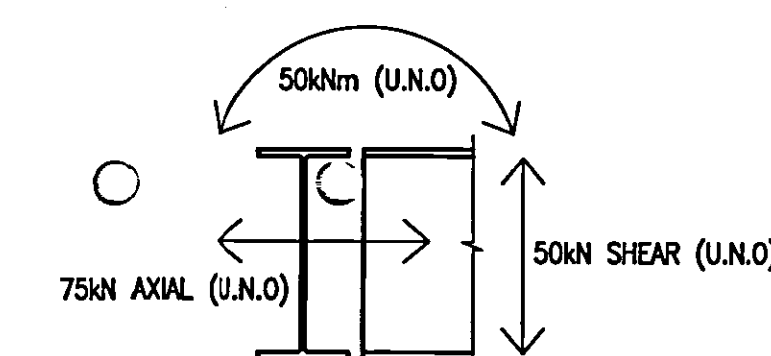
AS BUILT

	Status of drawing
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Scales: A1 1-50	Job No. 010023
Drawn by LSIMONS	Drawing No. S021
Checked by A.M	Rev 01
Date JULY 2006	

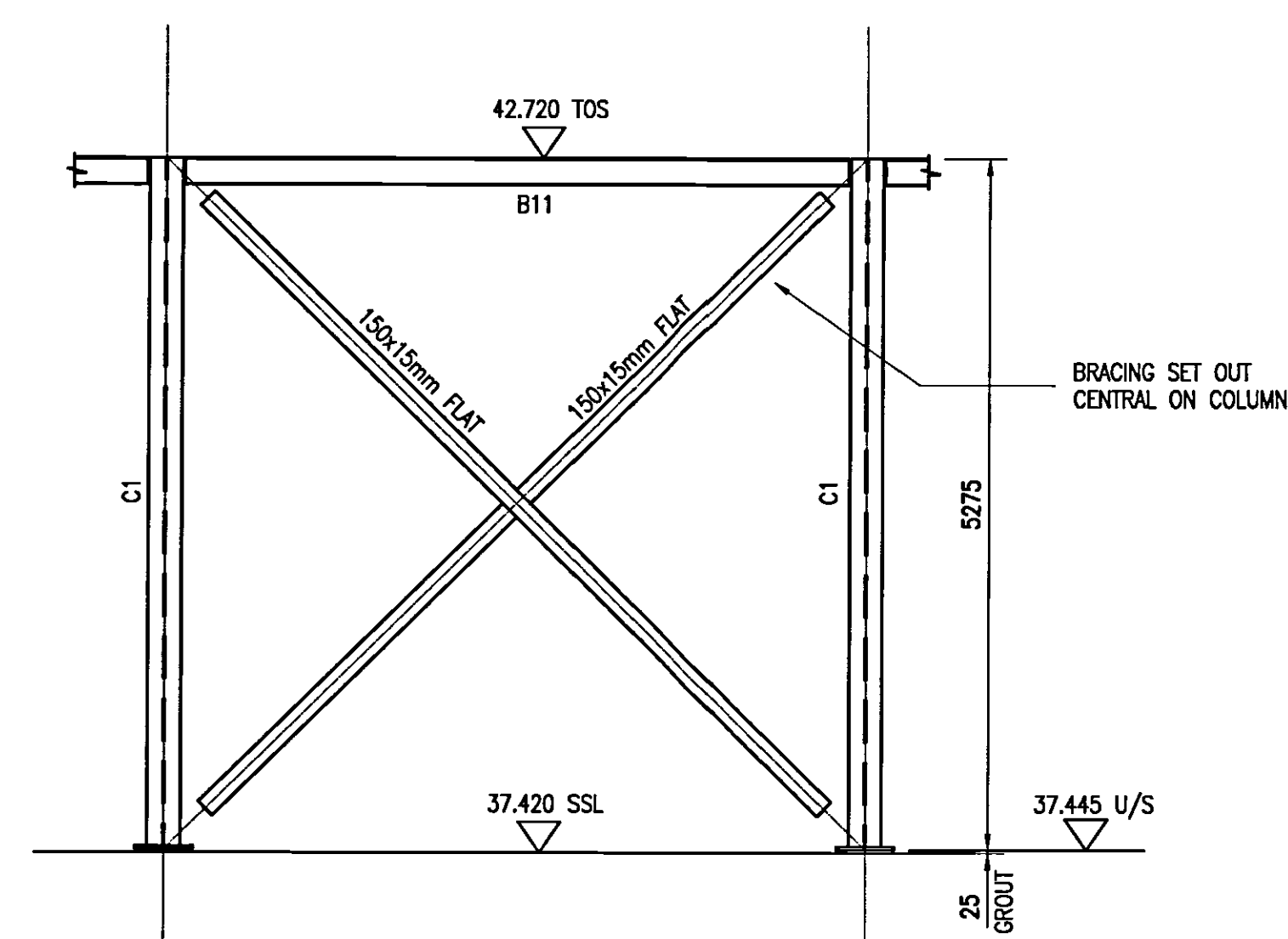
SEE DRAWING S013 FOR STEELWORK NOTES



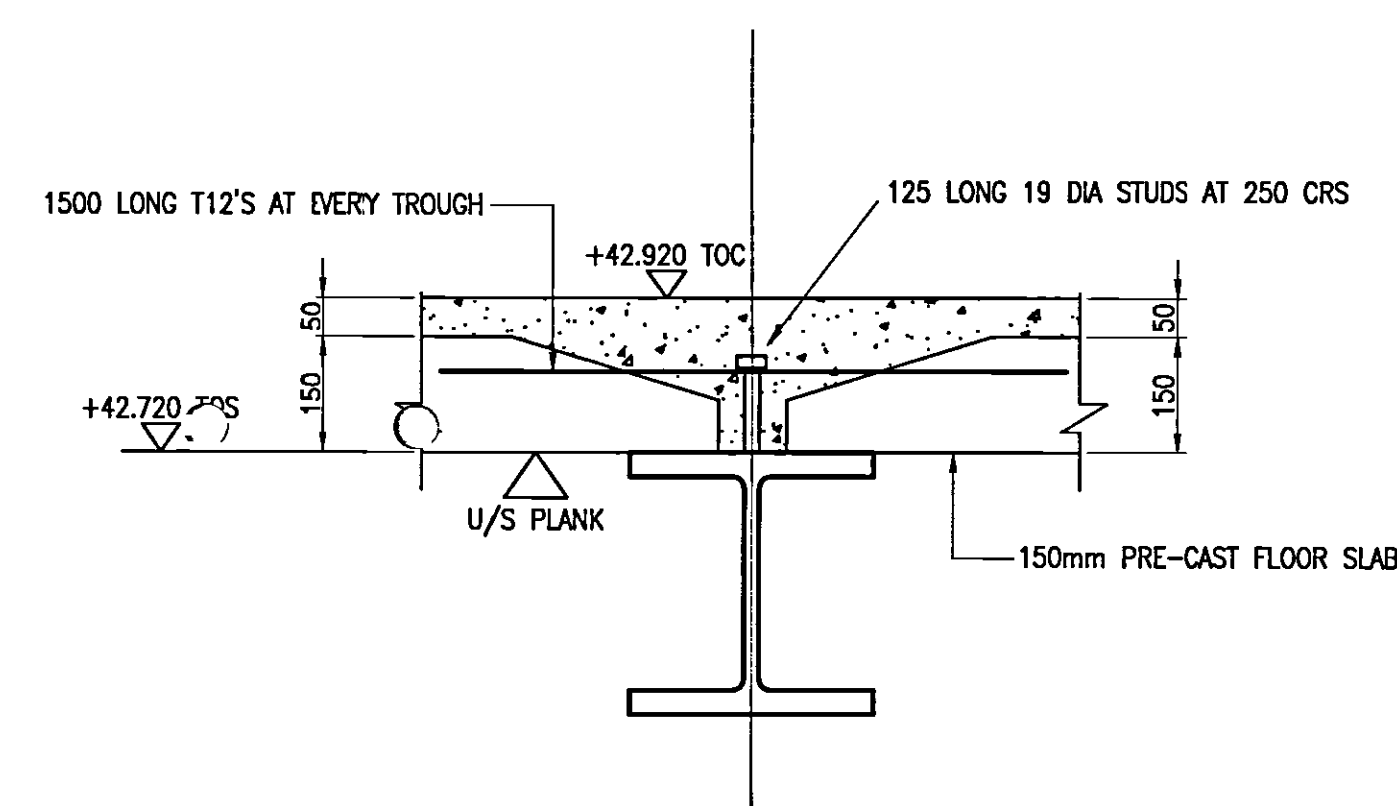
ALL CONNECTIONS TO BE
DESIGNED FOR LOADS SHOWN
(U.N.O)

LEGEND	
	INDICATES SPAN OF TARMAC TOPTFLOOR 260 PRECAST FLOOR SLAB WITH 50mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
	INDICATES SPAN OF TARMAC TOPTFLOOR 260 PRECAST FLOOR SLAB WITH 65mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
	INDICATES SPAN OF TARMAC TOPTFLOOR 150 PRECAST FLOOR SLAB WITH 50mm GRADE 30 STRUCTURAL SCREED WITH A142 MESH.
	INDICATES SPAN OF RIBDECK-E60 COMPOSITE STEEL DECK 140 MM/0.9 MM
	VERTICALLY BRACED BAYS 150x15
	VERTICALLY BRACED BAYS 152x152x23 UC
	TEMPORARY BRACED BAYS 150x15
	INDICATES 150x150x6 PARAPET POST

LECTURE ROOF LEVEL GENERAL ARRANGEMENT
(42.720 TOS)



TYPICAL ELEVATION ON BRACED BAY
(PERMANENT AND TEMPORARY)



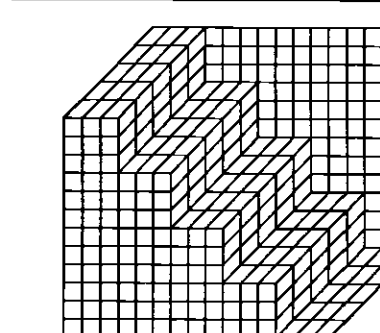
SECTION 1-1

MEMBER SCHEDULE		
MARK	SECTION	COMMENT
B1	610x305x238	CELLFORM, 60 MINS FIRE PROTECTION (918.6 D, 600# HOLE, 800 PITCH)
B2	406x178x60 UB	60 MINS FIRE PROTECTION
B3	533x210x109 UB	
B4	D26-509	DELTABEAM
B5	D26-400	DELTABEAM
B6	356x171x67 UB	60 MINS FIRE PROTECTION
B7	210x267x46 TEE	60 MINS FIRE PROTECTION
B8	305x305x198 UC	COMPOSITE BEAM 19 DIA, 125mm LONG STUDS AT 250 CRS
B9	150x150x6 SHS	
B10	305x305x283 UC	
B11	203x133x30 UB	
B12	305x160x40 UB	
B13	610x229x101 UB	CELLFORM, 60 MINS FIRE PROTECTION (885.4 D, 600# HOLE, 800 PITCH)
B14	152x152x37 UC	
B15	DR26-325	DELTABEAM
B16	DR26-230	DELTABEAM
B17	D32-400	DELTABEAM
B18	193.7x6.0 CHS	60 MINS FIRE PROTECTION
B19	160x160x12 SHS	

03	AS BUILT	17.07.07	RC	A
02	TRIMMING STEEL AXED FOR OPENINGS	16.08.06	IS	A
01	TRIMMING STEEL AXED FOR OPENING	25.07.06	IS	A
00	ISSUED FOR CONSTRUCTION	27.06.06	IS	A
Rev	Description	Date	Des	Chk

AS BUILT

	Status of drawing
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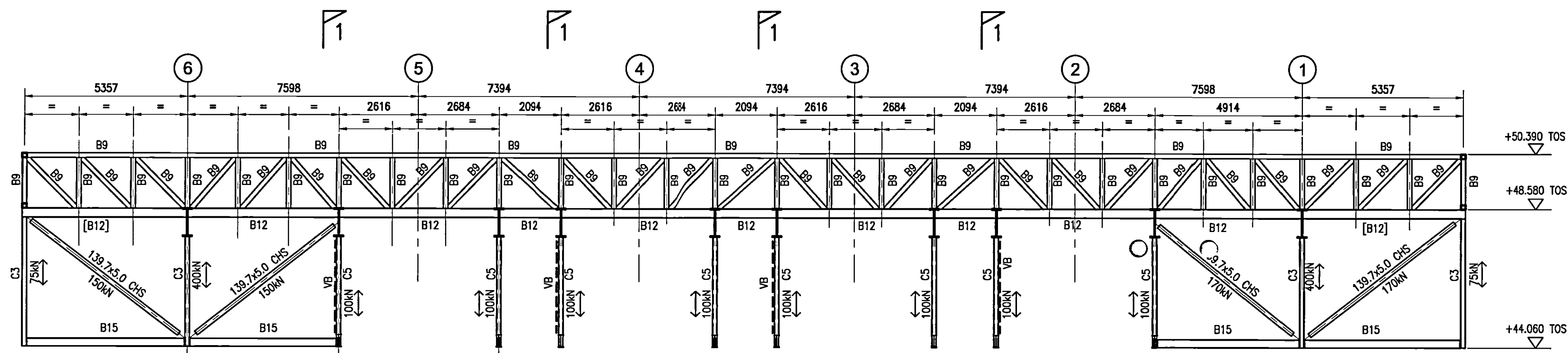


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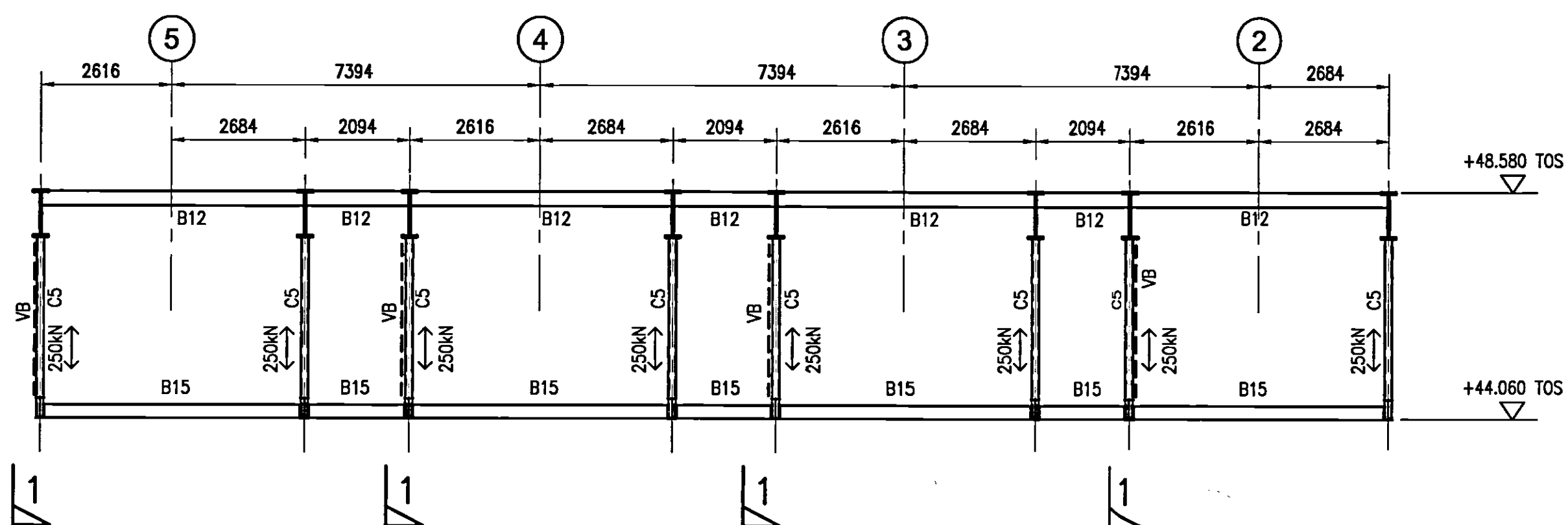
Architect *UNIVERSITY OF SALFORD*
Project **NEW LAW FACULTY**
LECTURE THEATRE
ROOF GENERAL ARRANGEMENT

Scales 0A1 1-100 uno	Job No. 010023
Drawn by L.SIMONS	Drawing No. S020
Checked by A.M	Rev 03
Date JUNE 2006	

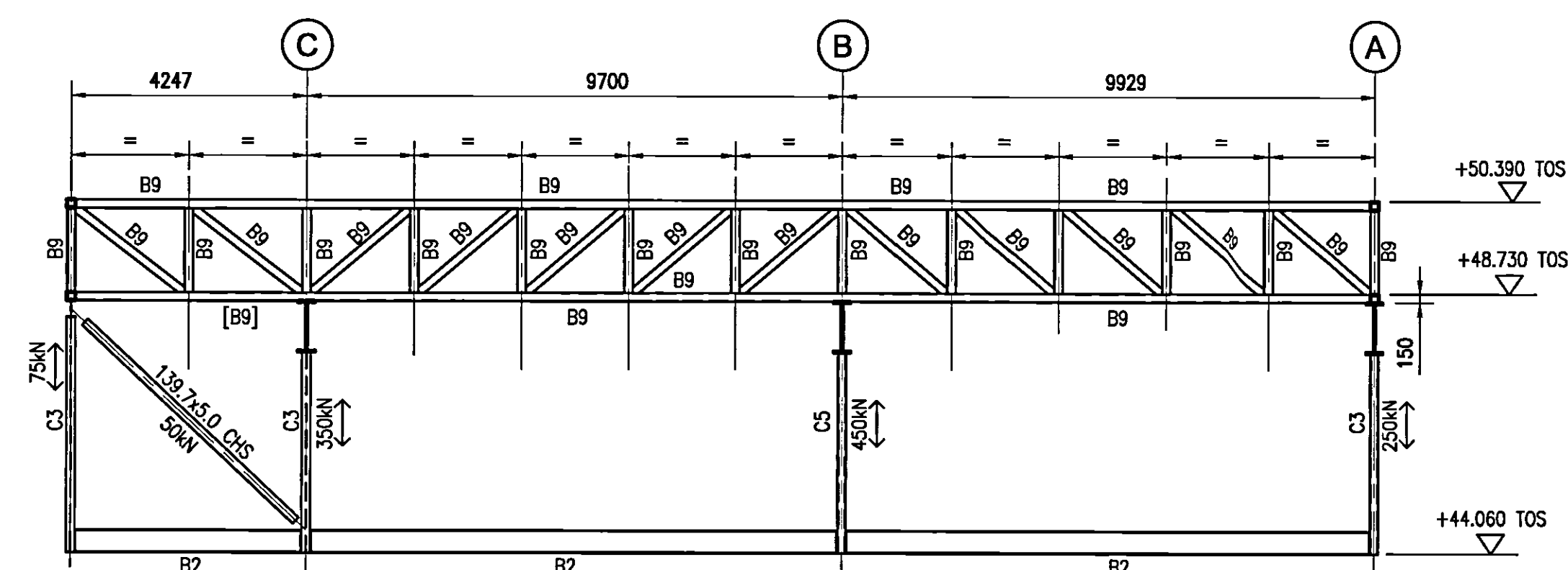
Job No.	010023
Drawing No.	S020
Rev	03



ELEVATION ON HANGAR ADJACENT GRIDLINE C

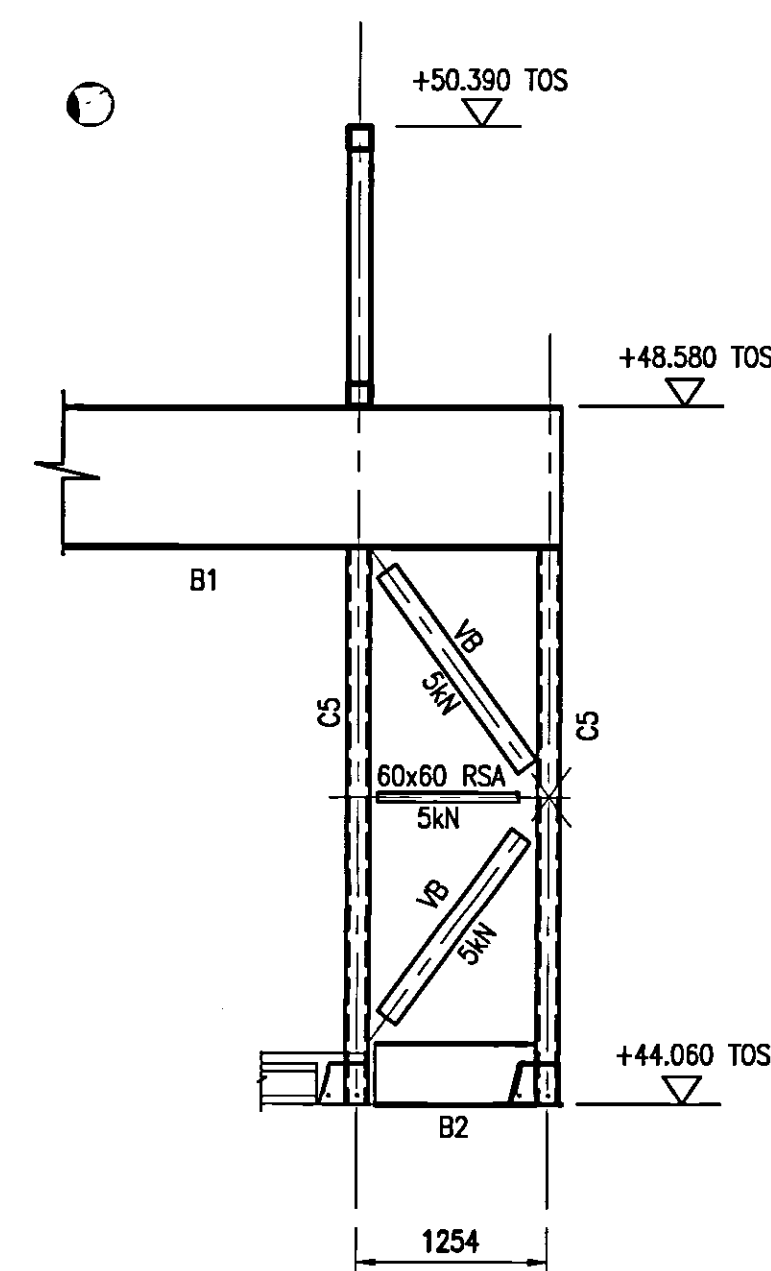


ELEVATION ON HANGAR ADJACENT GRIDLINE C



ELEVATION ON HANGAR ADJACENT GRIDLINE 1 & 6

ALL FORCES FACTORED U.N.O



SECTION 1-1

COLUMN SCHEDULE

REF.	SECTION SIZE
C1	254x254x89 UC
C2	203x203x60 UC
C3	152x152x37 UC
C4	305x305x198 UC
C5	150x150x8 SHS
C6	244.5x16 CHS
C7	250x250x10 SHS
C8	244.5x20 CHS

LEGEND

	INDICATES SPAN OF TARMAC TOPFLOOR 260 PRECAST FLOOR SLAB WITH 50mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
	INDICATES SPAN OF TARMAC TOPFLOOR 260 PRECAST FLOOR SLAB WITH 65mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
	INDICATES SPAN OF TARMAC TOPFLOOR 150 PRECAST FLOOR SLAB WITH 50mm GRADE 30 STRUCTURAL SCREED WITH A142 MESH.
	INDICATES SPAN OF RIBDECK-E60 COMPOSITE STEEL DECK 140 MM/0.9 MM
	VERTICALLY BRACED BAYS 150x15
	VERTICALLY BRACED BAYS 152x152x23 UC
	TEMPORARY BRACED BAYS 150x15
	INDICATES 150x150x6 PARAPET POST

MEMBER SCHEDULE

MARK	SECTION	COMMENT
B1	610x305x238	CELLFORM, 60 MINS FIRE PROTECTION (918.6 D, 600# HOLE, 800 PITCH)
B2	406x178x60 UB	60 MINS FIRE PROTECTION
B3	533x210x109 UB	
B4	D26-500	DELTABEAM
B5	D26-400	DELTABEAM
B6	356x171x67 UB	60 MINS FIRE PROTECTION
B7	210x267x46 TEE	60 MINS FIRE PROTECTION
B8	305x305x198 UC	COMPOSITE BEAM 19 DIA, 125mm LONG STUDS AT 250 CRS
B9	150x150x6 SHS	
B10	305x305x283 UC	
B11	203x133x30 UB	
B12	305x165x40 UB	
B13	610x229x101 UB	CELLFORM, 60 MINS FIRE PROTECTION (885.4 D, 600# HOLE, 800 PITCH)
B14	152x152x37 UC	
B15	DR26-325	DELTABEAM
B16	DR26-230	DELTABEAM
B17	D32-400	DELTABEAM
B18	193.7x6.0 CHS	60 MINS FIRE PROTECTION
B19	160x160x12 SHS	

MEMBERS NOTED '*' ON PLAN ARE ALSO COMPOSITE BEAMS WITH 19 DIA, 125mm LONG STUDS AT 150 CRS

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Notes

SEE DRAWING S013 FOR STEELWORK NOTES

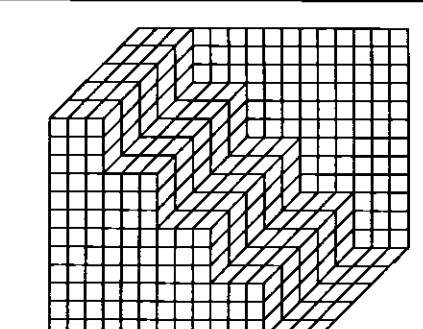
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00 ISSUED FOR CONSTRUCTION	07.07.06	I.S	A.M	
Rev	Description	Date	Dm	Ch'd

AS BUILT

Status of drawing

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Fax: +44 (0)161 233 5000
Email: info@burohappold.com
Web: www.burohappold.com

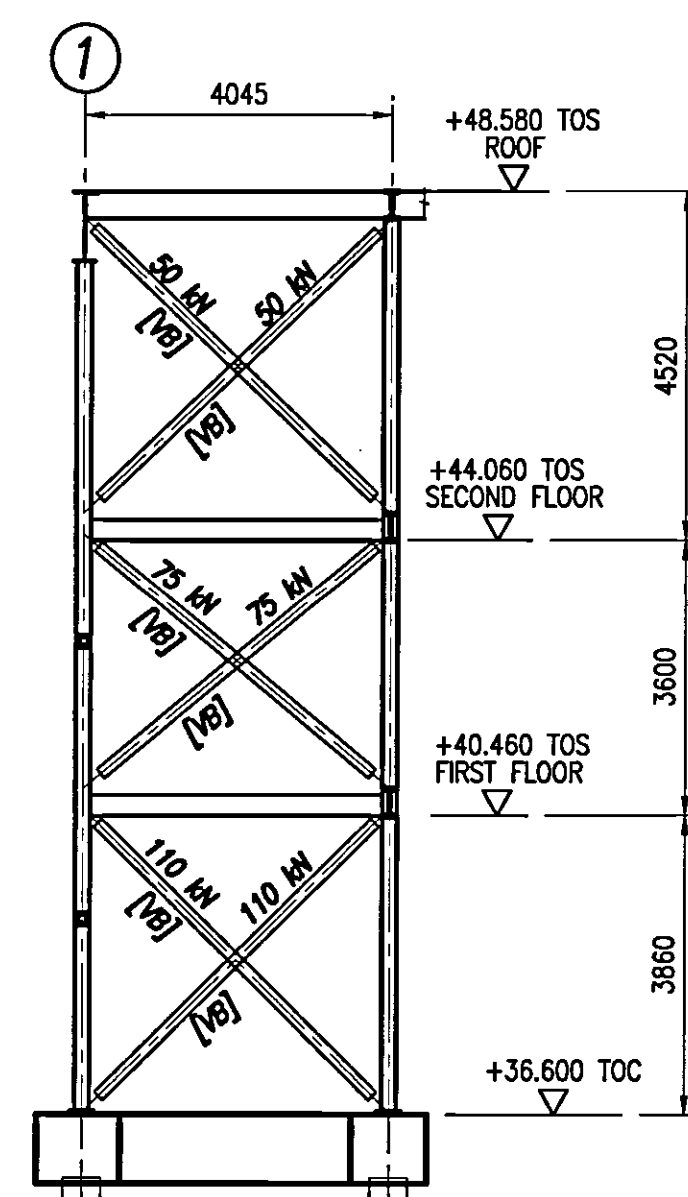
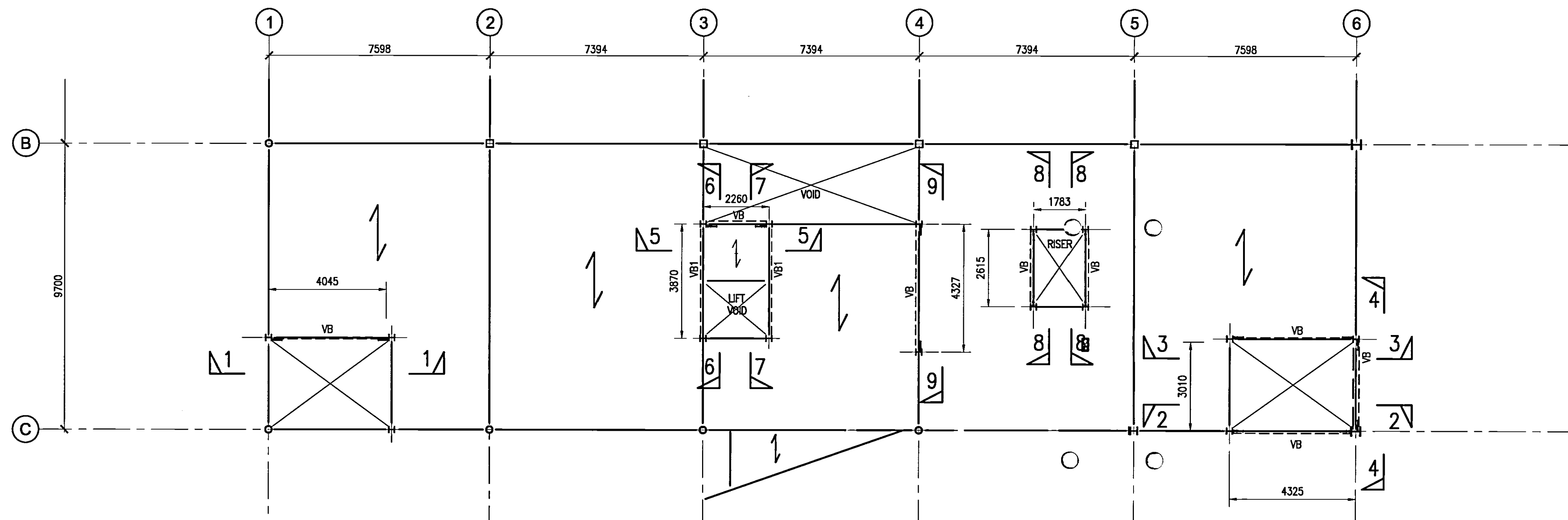


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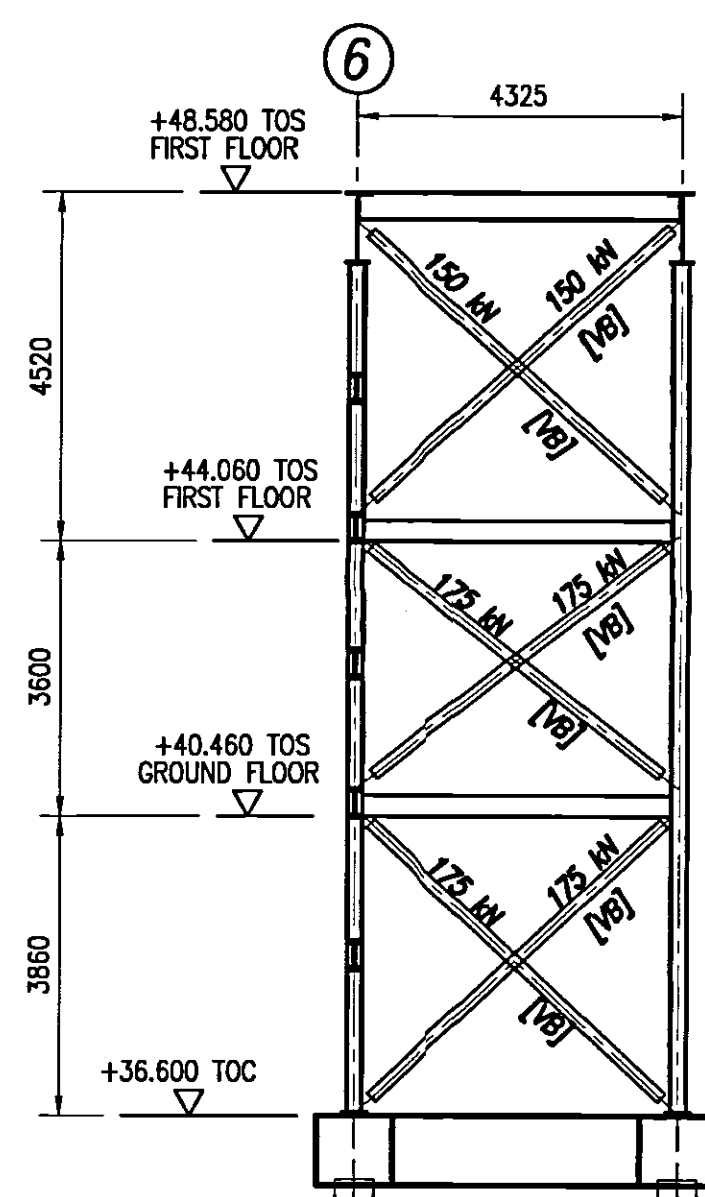
Architect UNIVERSITY OF SALFORD
Project NEW LAW FACULTY
MAIN BUILDING
HANGAR GENERAL ARRANGEMENT

Scale: A1 1-100 uno
Drawn by L.SIMONS
Checked by A.M
Date JUNE 2006

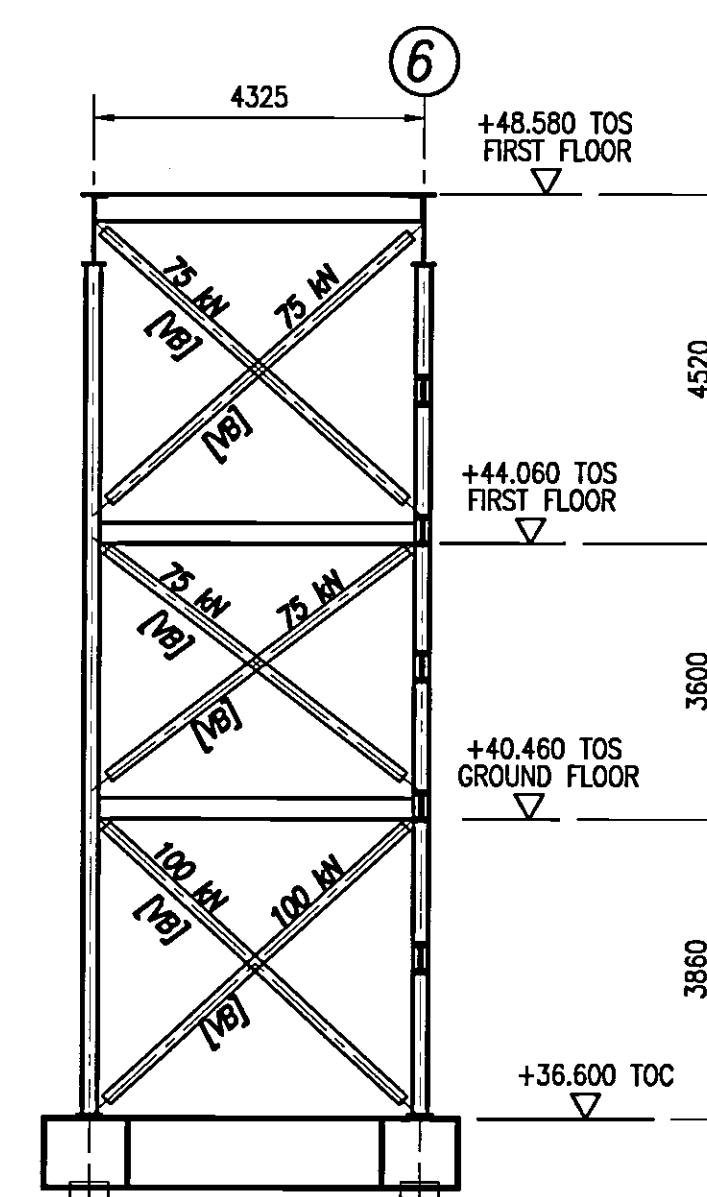
Job No. 010023
Drawing No. S019
Rev 01



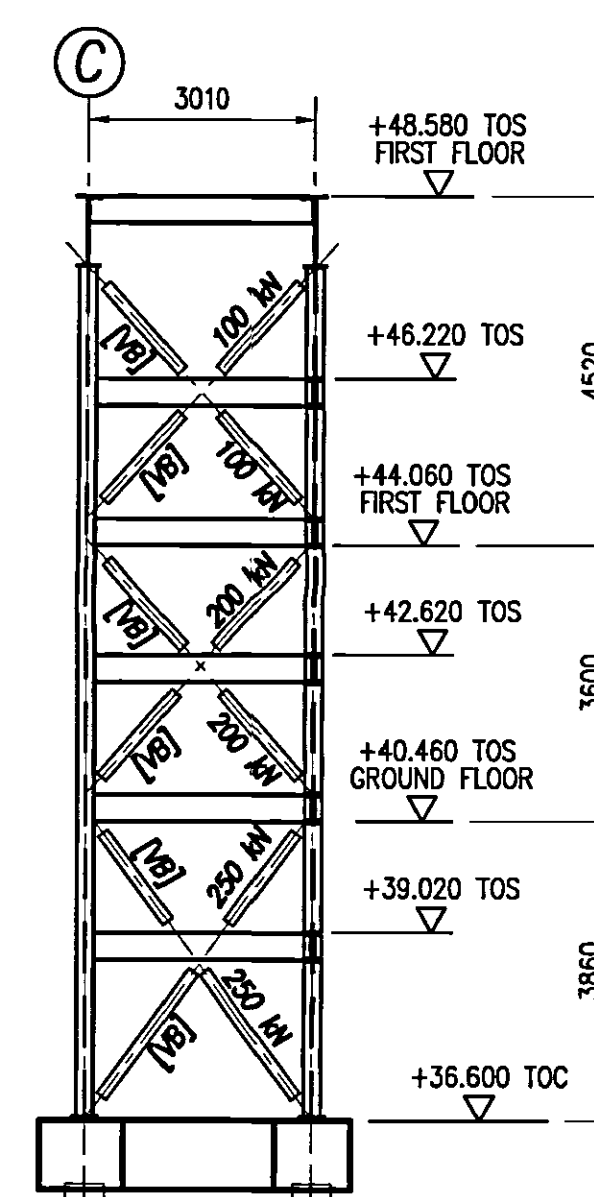
ELEVATION 1-1



ELEVATION 2-2

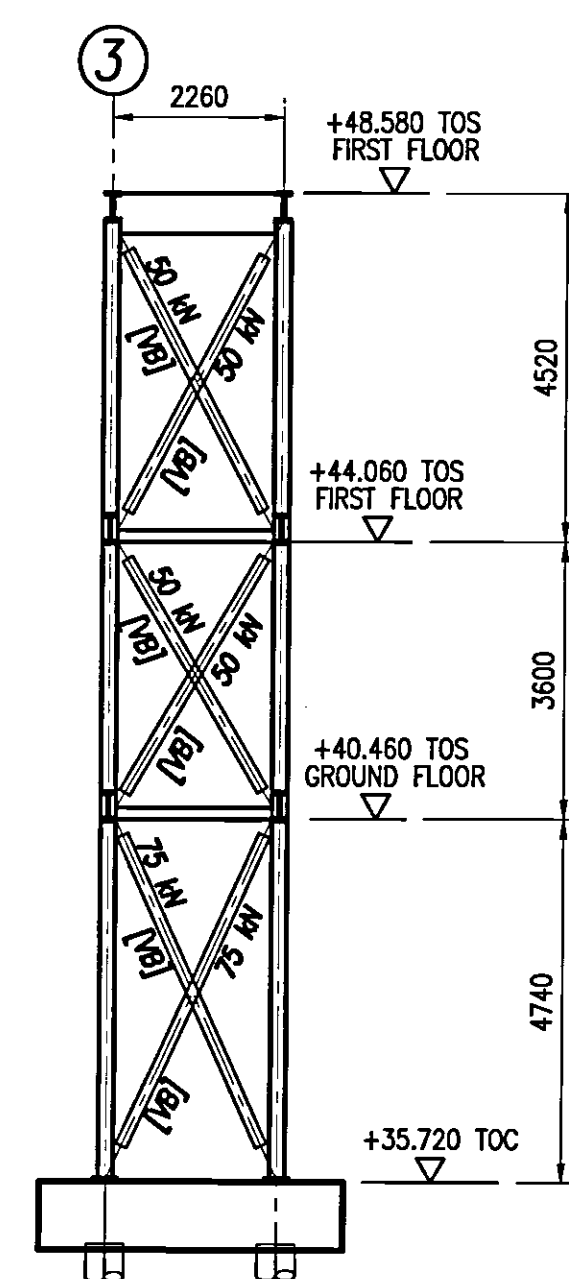


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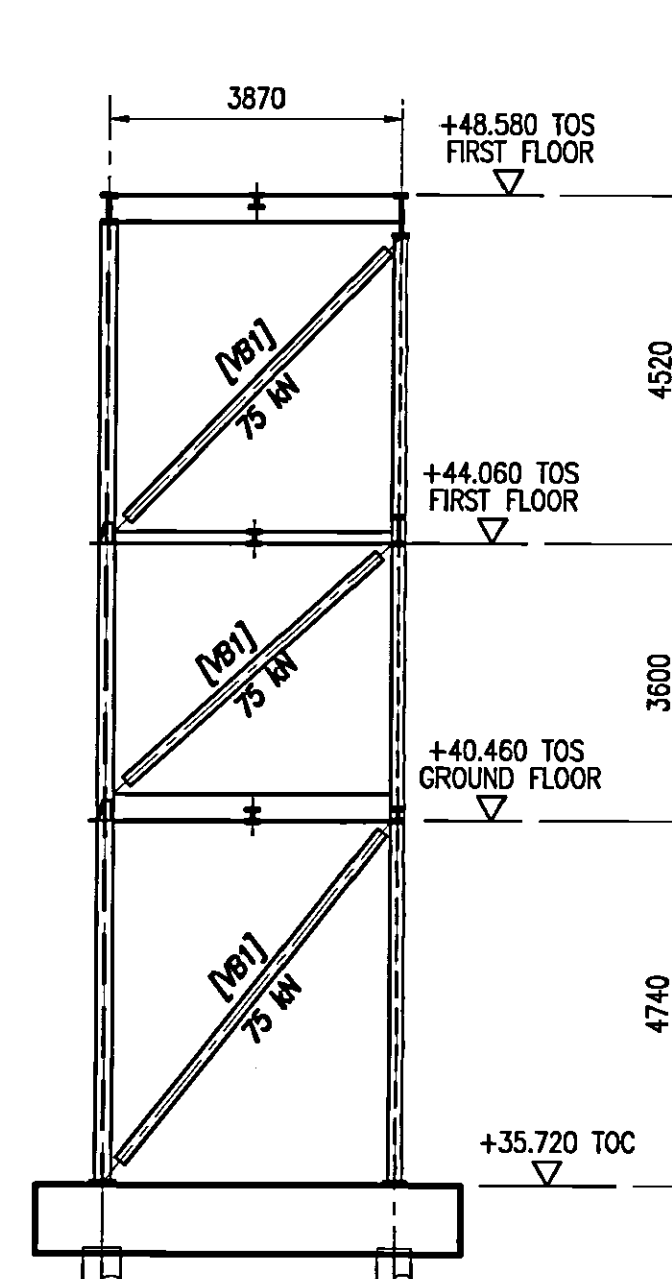


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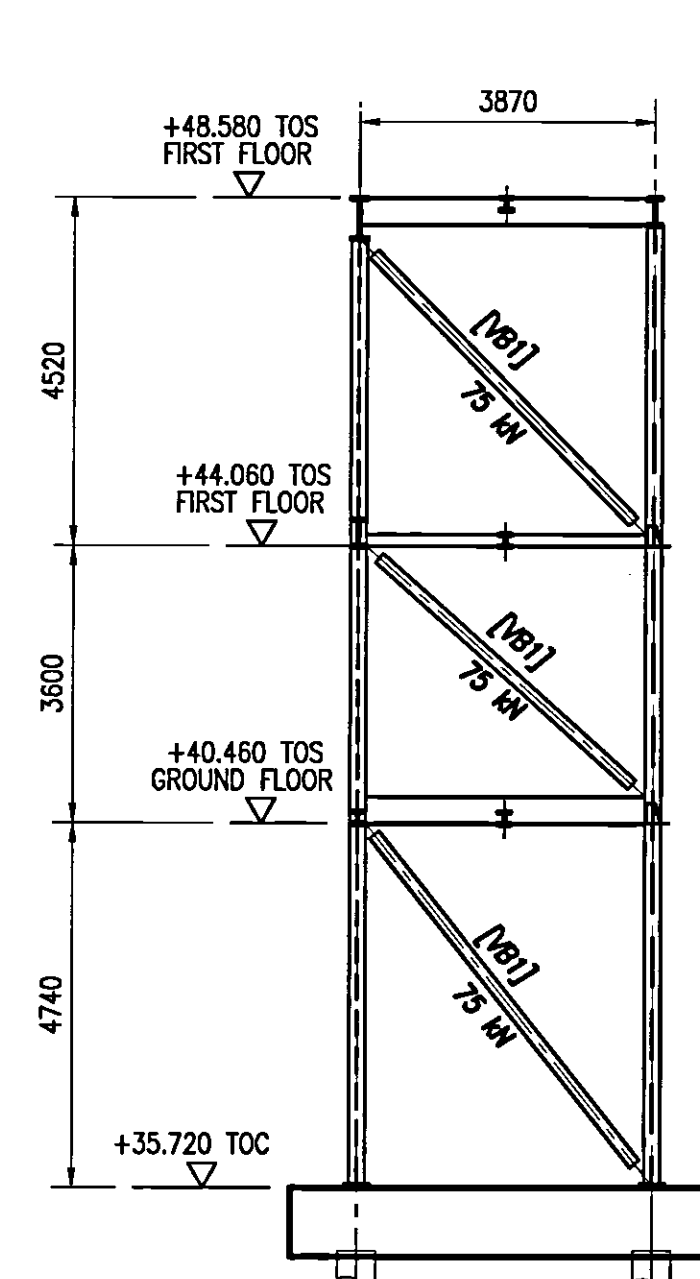
ALL FORCES FACTORED U.N.O



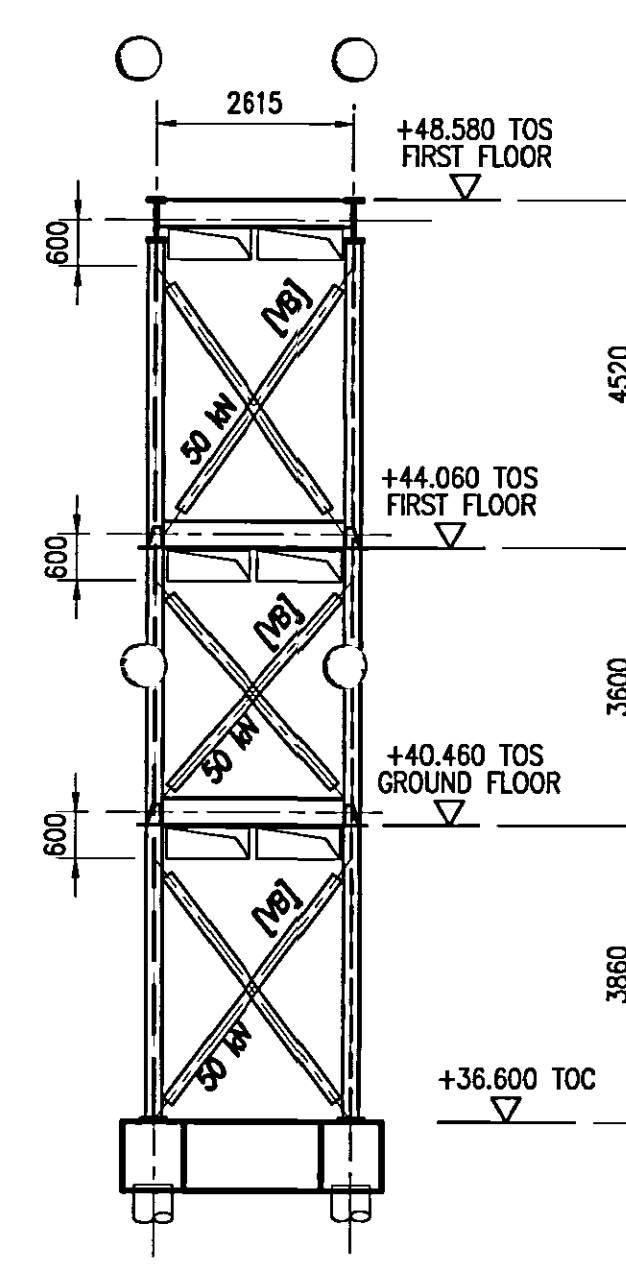
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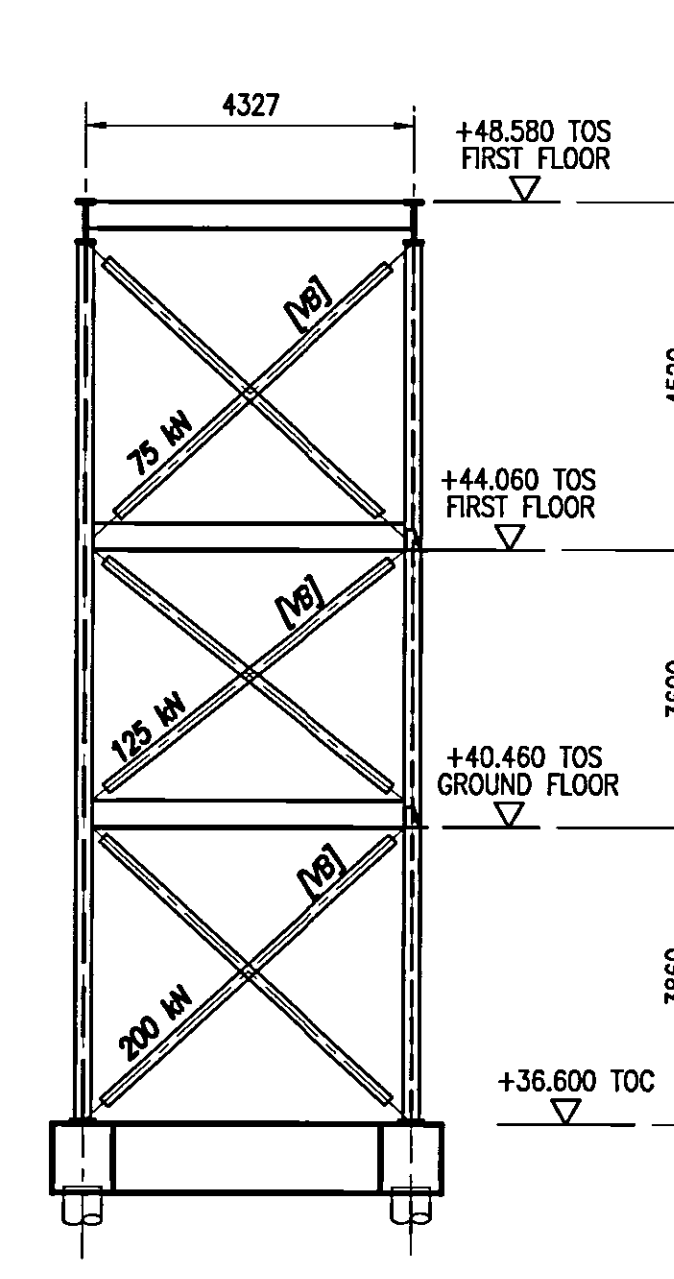
ELEVATION 6-6



ELEVATION 7-7



ELEVATION 8-8



ELEVATION 9-9

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Notes

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00 ISSUED FOR CONSTRUCTION 30.06.06 LS A.M

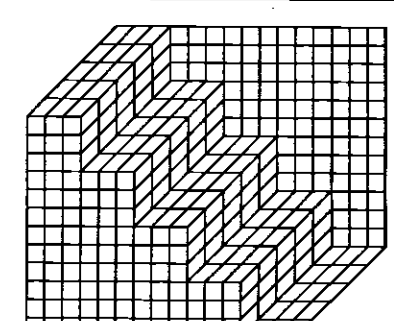
Rev Description Date Dm Chvd

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Status of drawing

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Architect UNIVERSITY OF SALFORD

Project **NEW LAW FACULTY**
BRACING FORCES (MAIN BUILDING)
GENERAL ARRANGEMENT

Scales: BA1 1:100.50

Drawn by LSIMONS

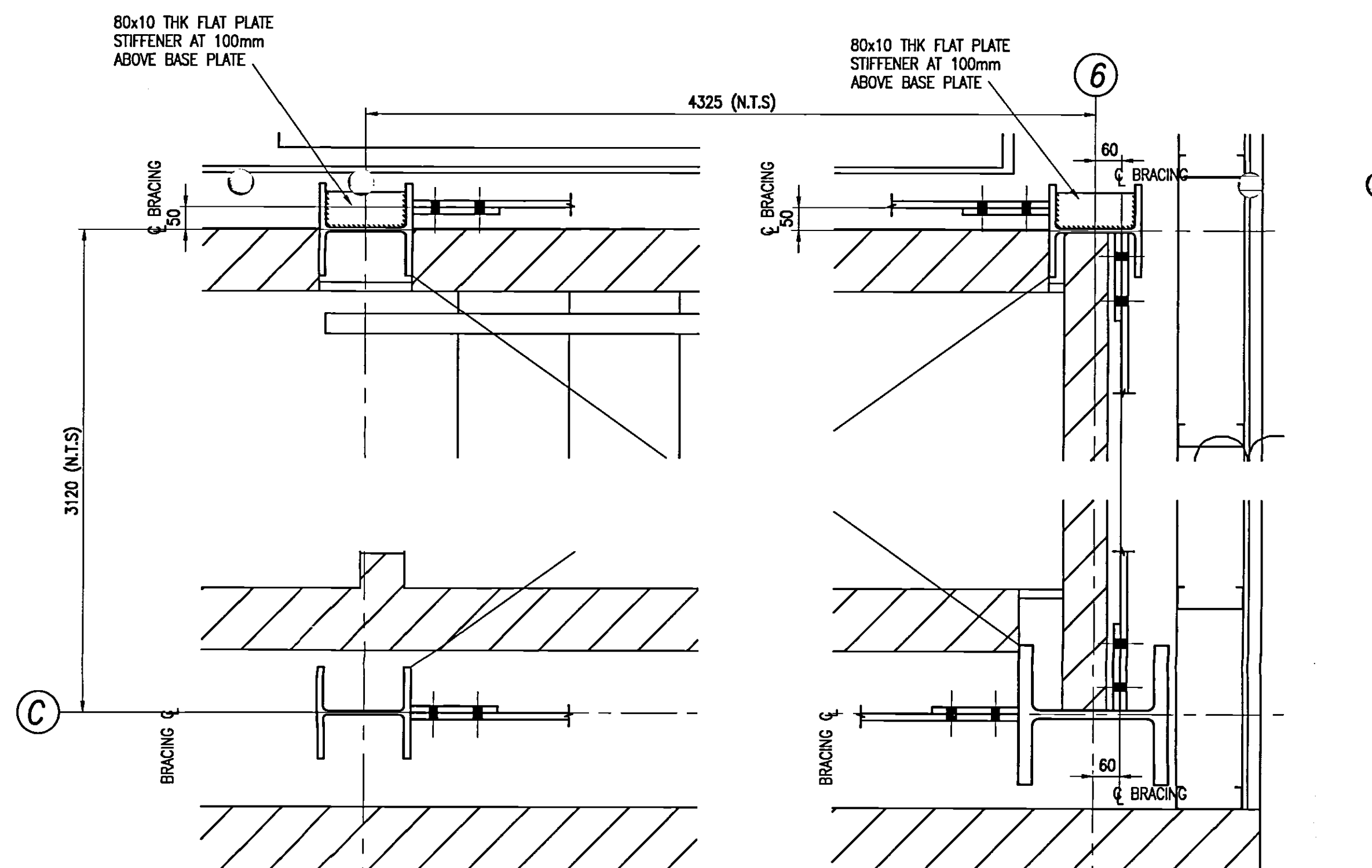
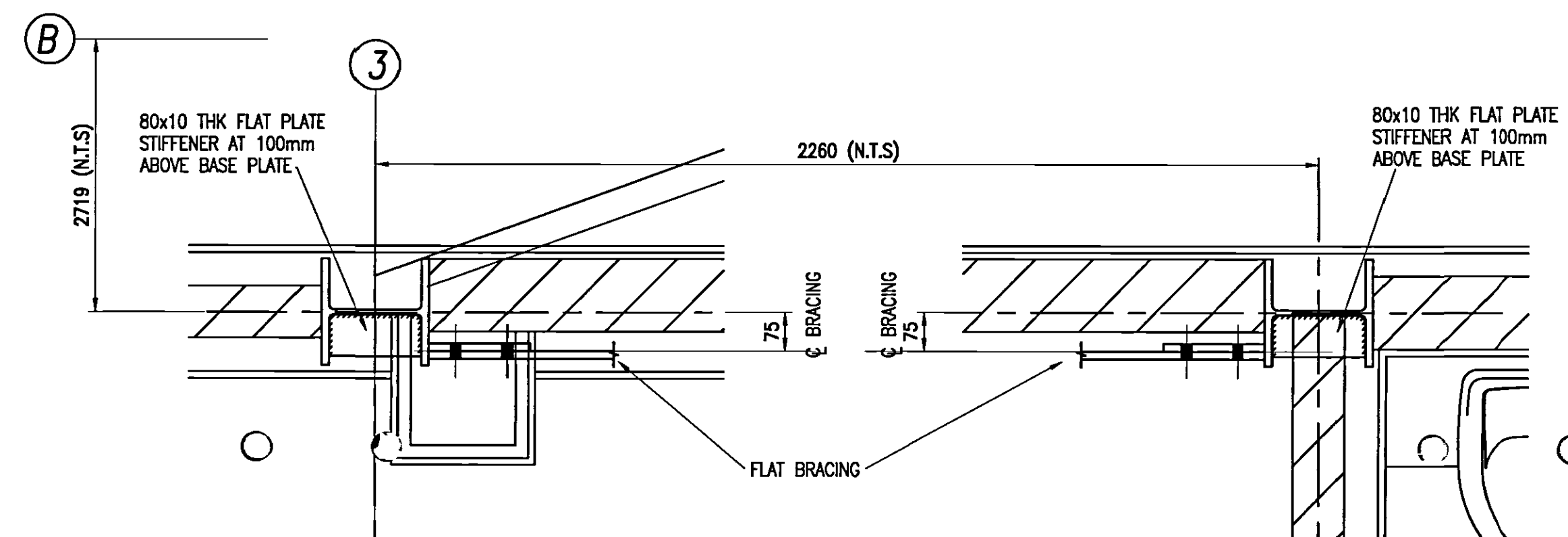
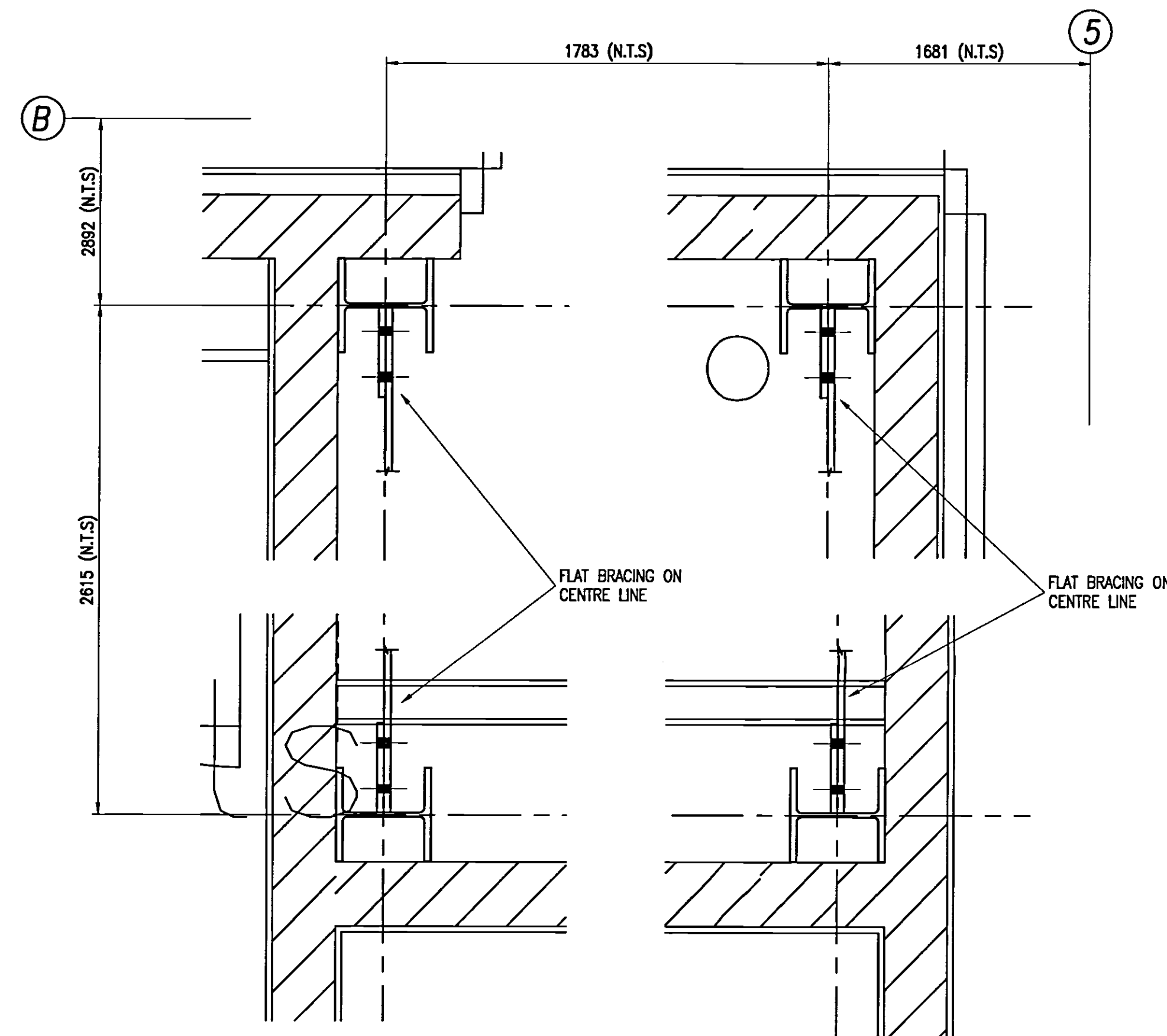
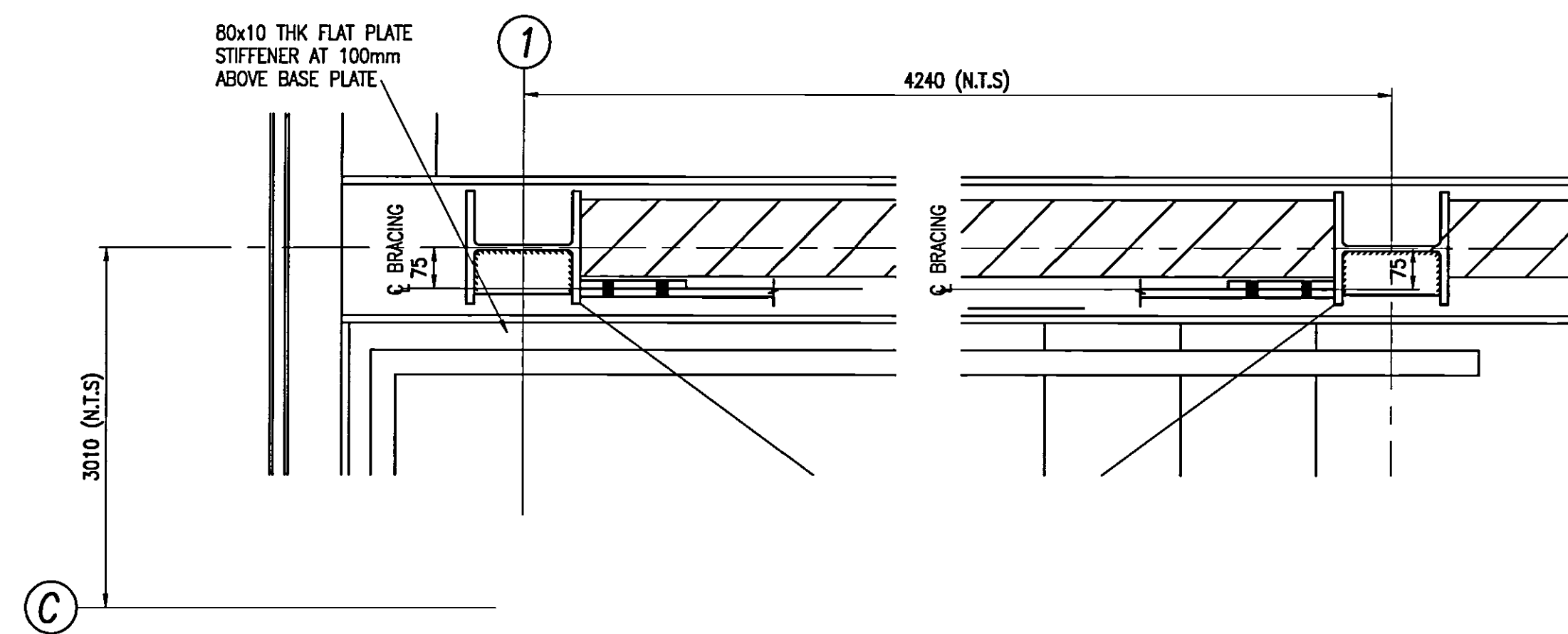
Checked by A.M

Date JUNE 2006

Job No. 010023

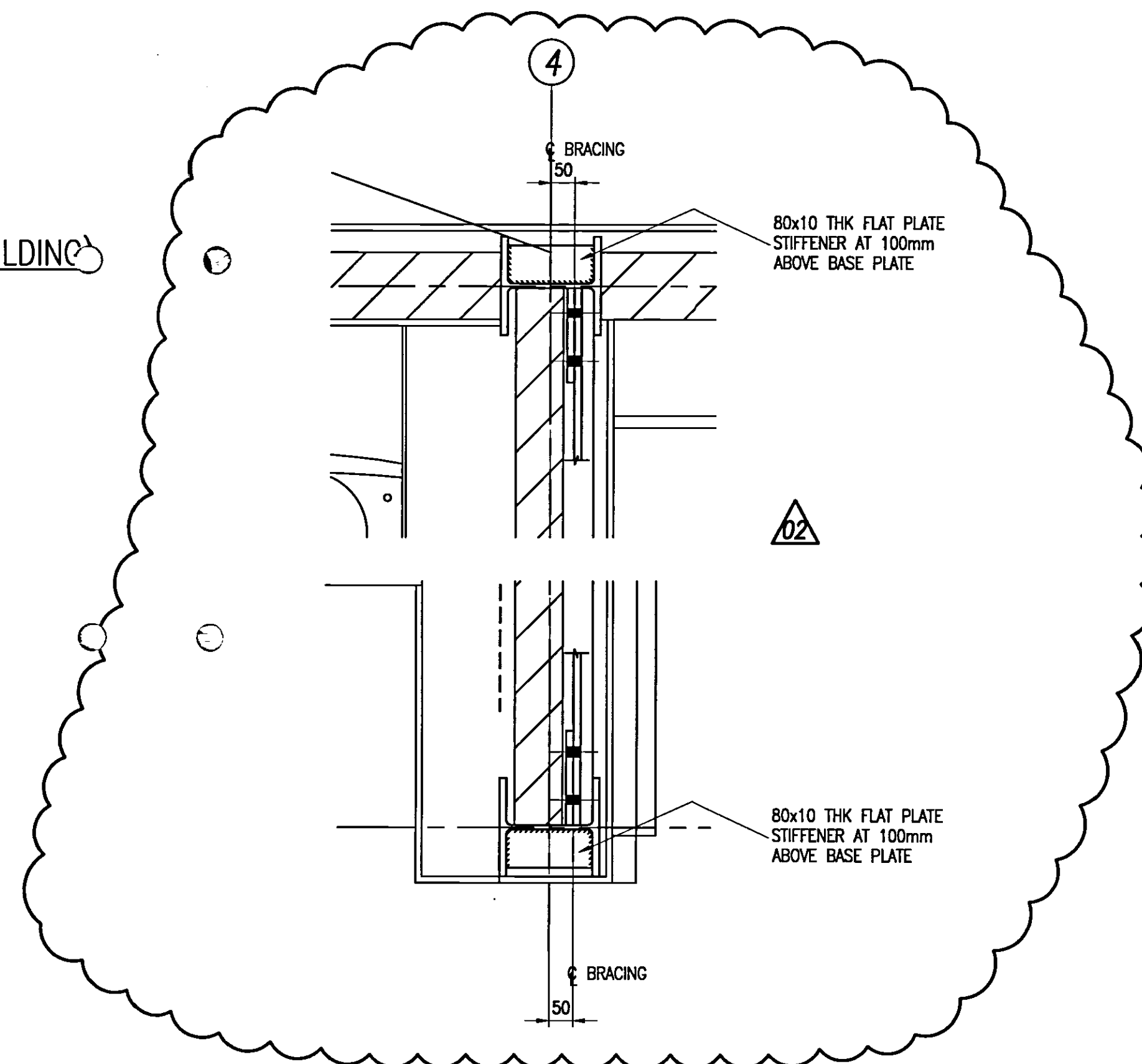
Drawing No. S018

Rev 01



BRACING GENERAL ARRANGEMENT (MAIN BUILDING)
SCALE 1:10

NOTE
ALL VB1 BRACING TO LIFT CORE IS
ON COLUMN CENTRE LINE



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DO NOT SCALE THIS DRAWING.

Notes

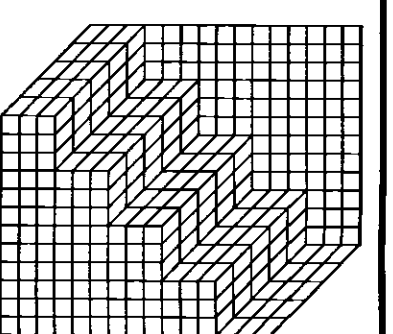
SEE DRAWING S013 FOR STEELWORK NOTES

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02 BRACING SET OUT GRIDLINE 4 ADDED	25.07.06	LS	A.M	
01 BRACING SET OUT REVISED AS NOTED	21.07.06	LS	A.M	
00 ISSUED FOR CONSTRUCTION	29.06.06	LS	A.M	
Rev	Description	Date	Dwn	Ch'd

AS BUILT

Status of drawing

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Fax: +44 (0)161 233 5000
Email: www.burohappold.com



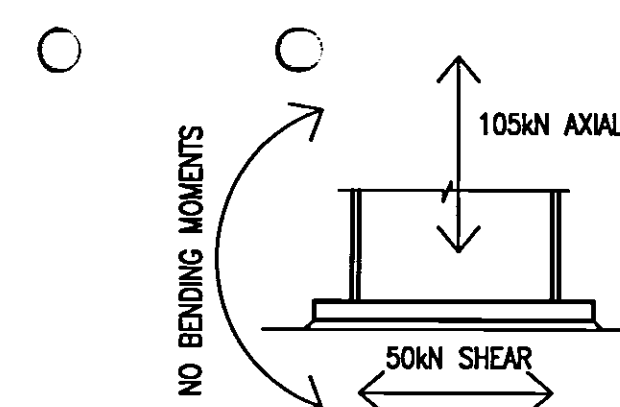
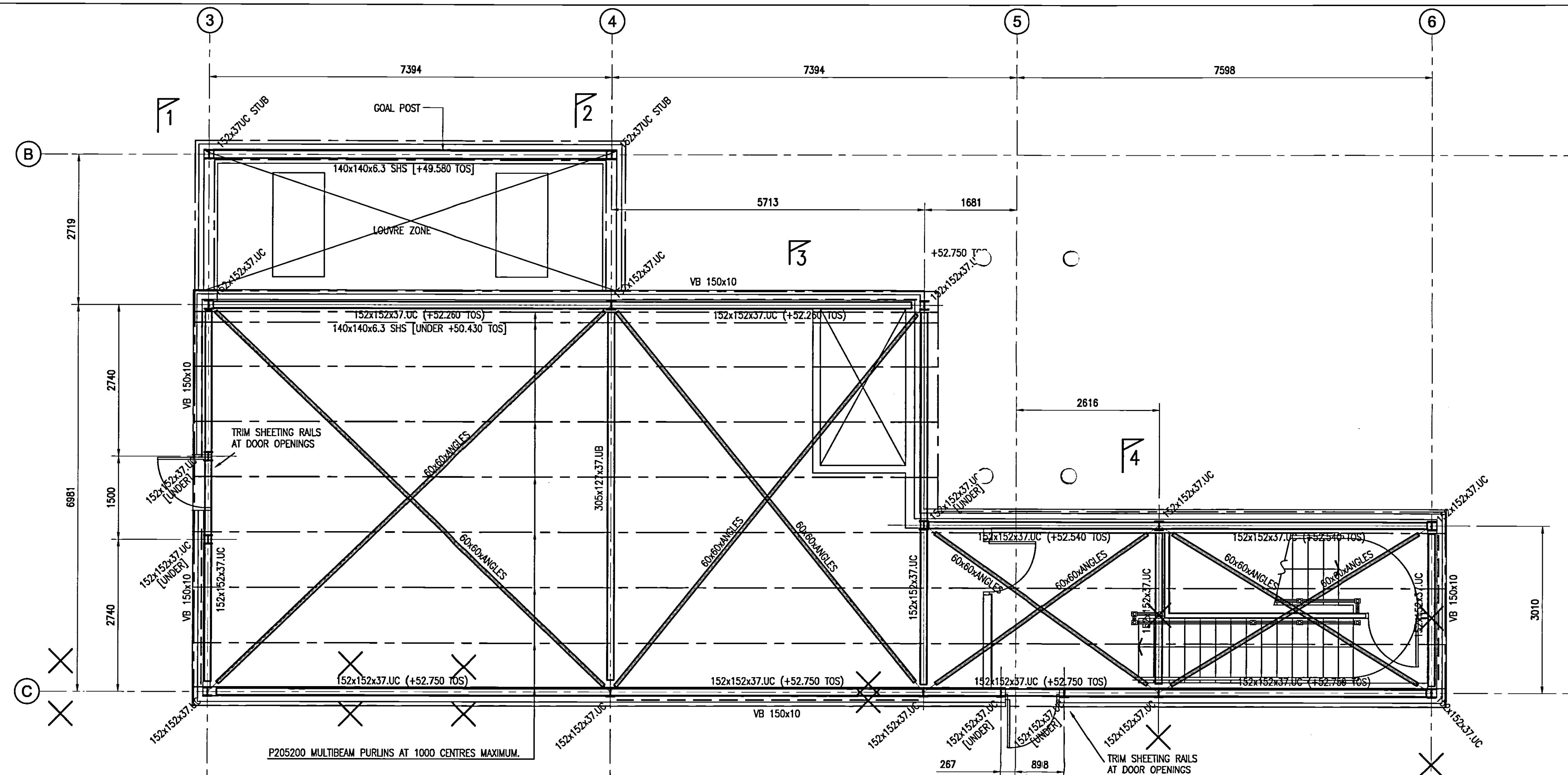
Buro Happold
Consulting Engineers

Architect UNIVERSITY OF SALFORD
Project NEW LAW FACULTY
BRACING SET OUT (MAIN BUILDING)
GENERAL ARRANGEMENT

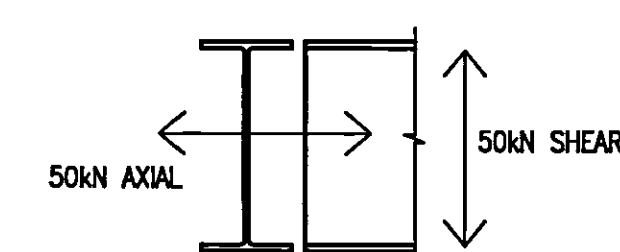
Scale/Rev	1-10	Job No.	010023
Drawn by	LSIMONS	Drawing No.	S017
Checked by	A.M.	Rev	03
Date	JUNE 2006		

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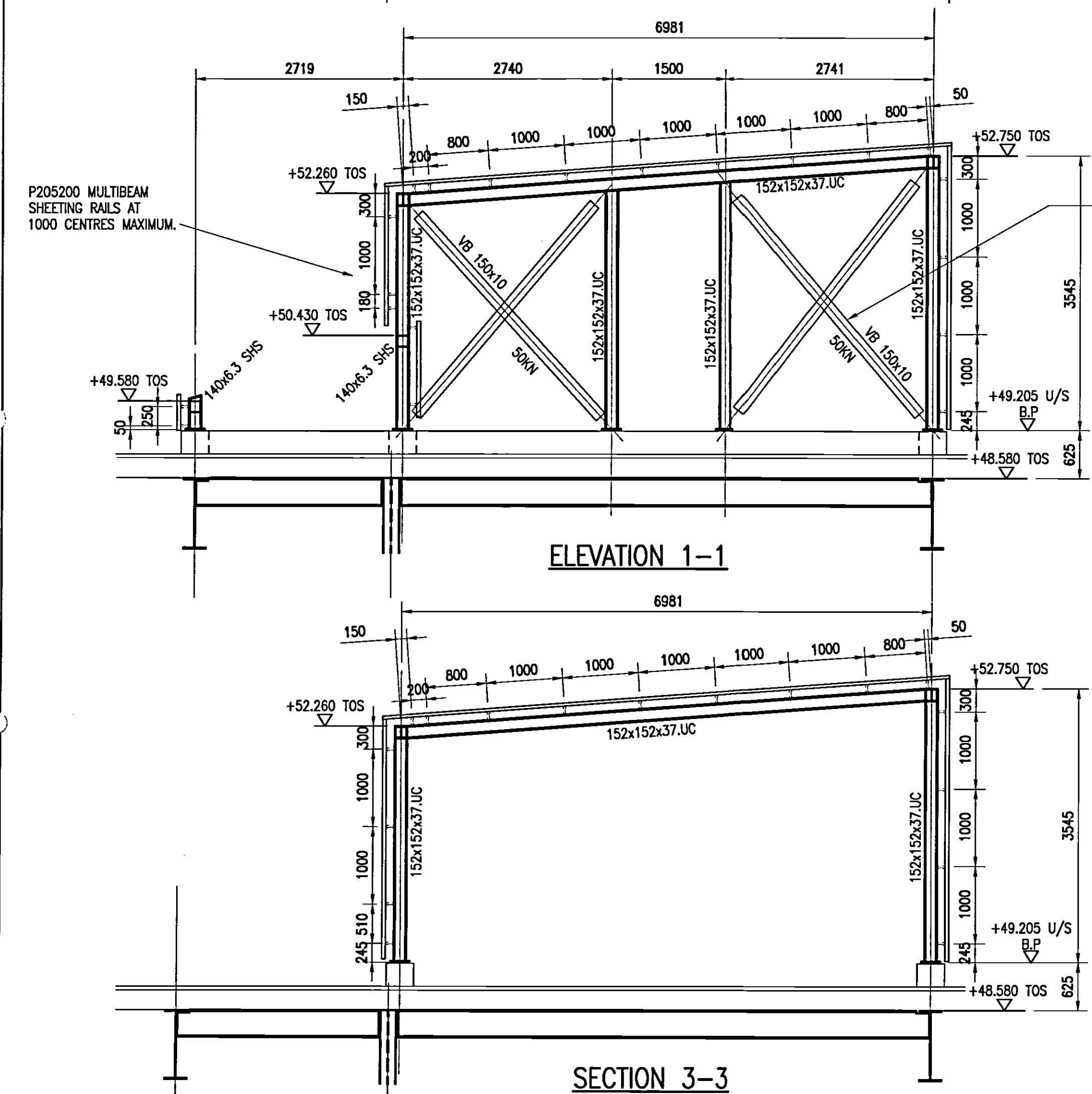
SEE DRAWING S013 FOR STEELWORK NOTES



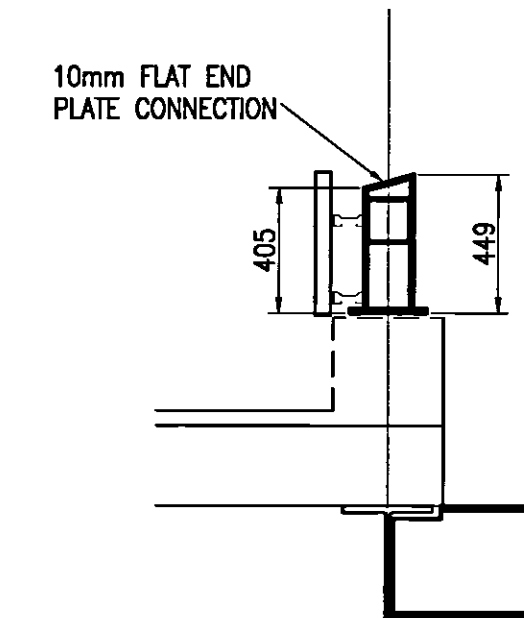
ALL BASE PLATES TO BE
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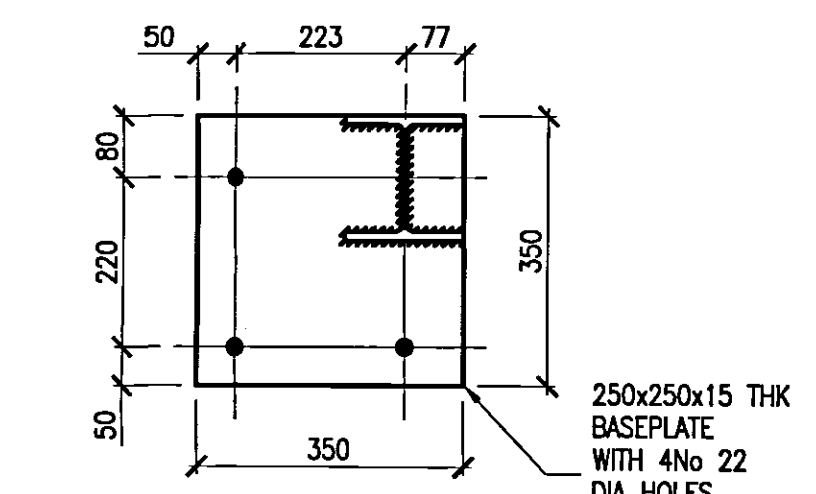
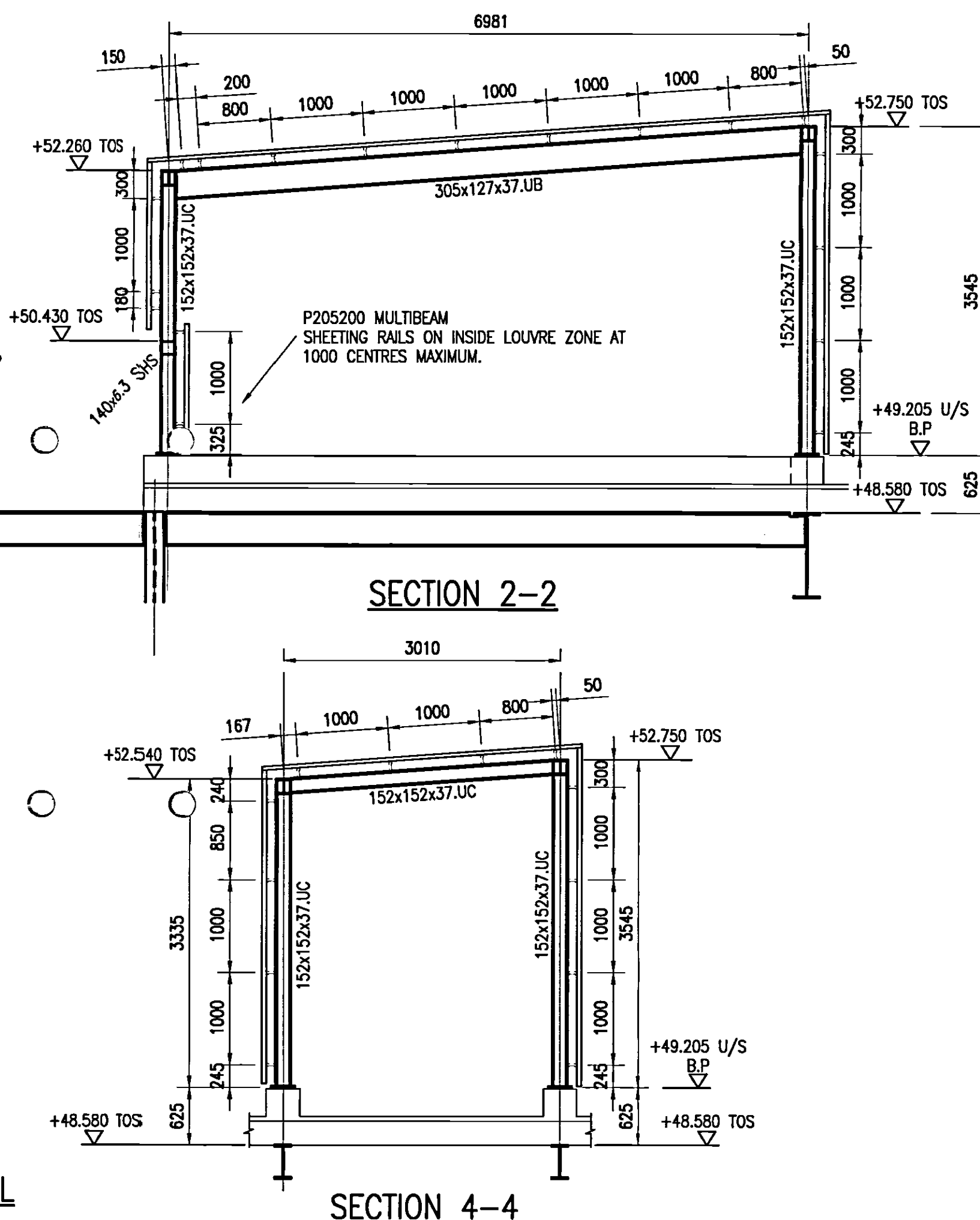
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DESIGNED FOR LOADS SHOWN
(U.N.O)



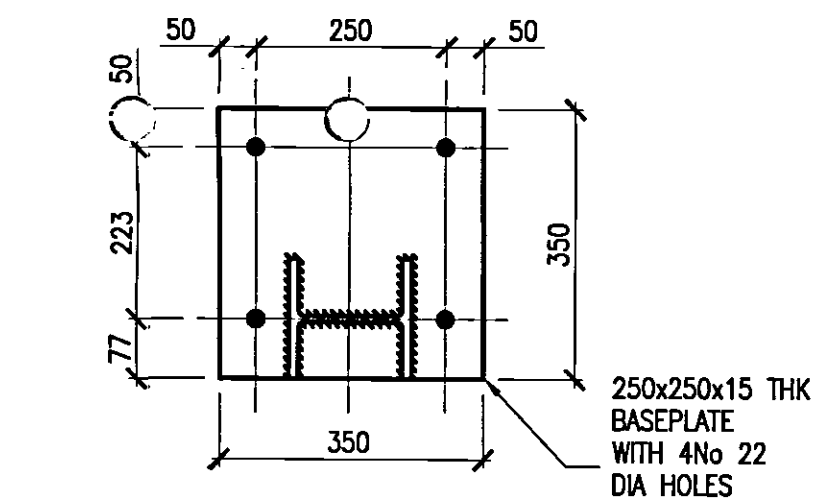
TYPICAL CROSS BRACING
IN ALL BAYS NOTED ON
PLAN AND FORCES SHOWN



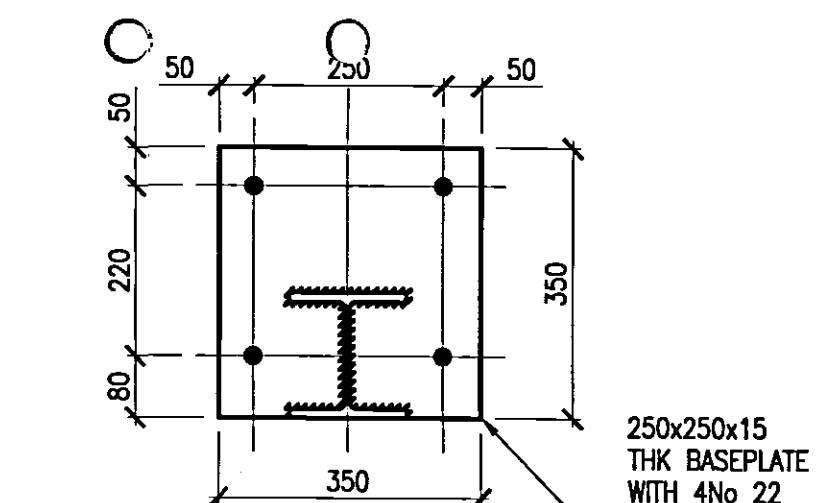
TYPICAL GOAL POST DETAIL
(2No)



CORNER BASEPLATE DETAIL



TYPICAL BASEPLATE DETAIL

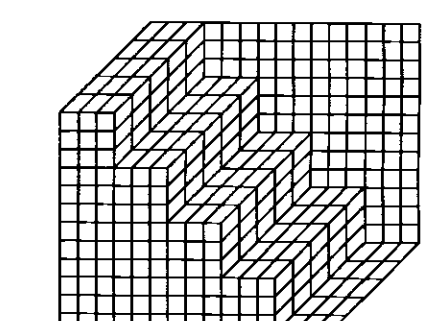


TYPICAL BASEPLATE DETAIL

02 AS BUILT	17.07.07	RC	A.M
01 BASE PLATE DETAIL AMENDED	NOT ISSUED		
00 ISSUED FOR CONSTRUCTION	04.07.06	I.S	A.M
Rev	Description	Date	Drn

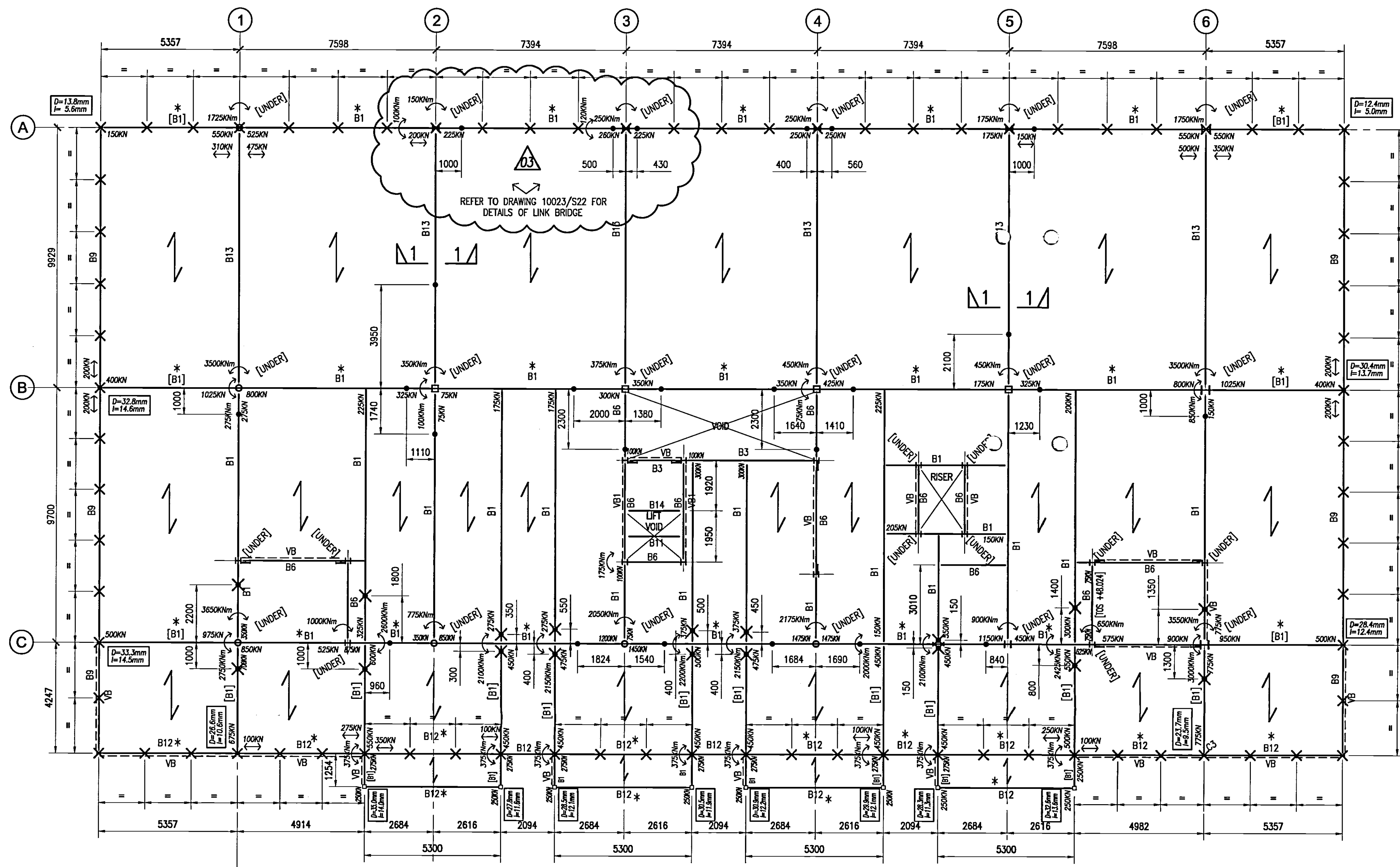
AS BUILT

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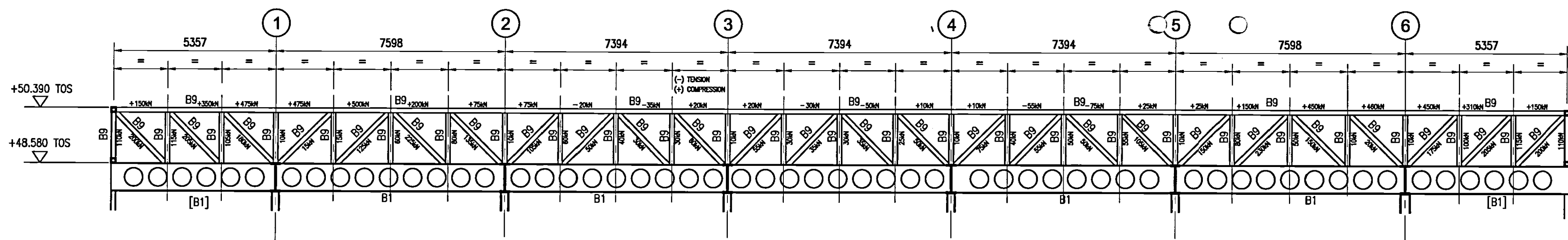
Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACILITY
ROOF LEVEL PLANT ROOM (MAIN BUILDING)
GENERAL ARRANGEMENT

Scale: 1:50 uno	Job No.	010023
Drawn by: L.SIMONS	Drawing No.	S016
Checked by: A.M	Rev	02
Date: JUNE 2006		

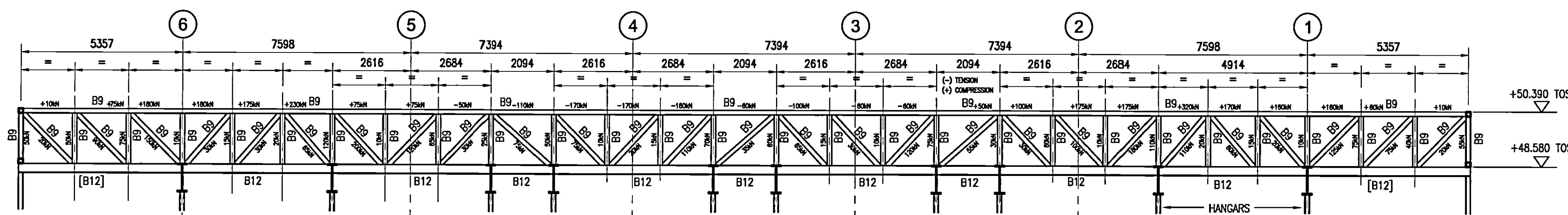


ROOF LEVEL GENERAL ARRANGEMENT (MAIN BUILDING)
SCALE 1:100

LEGEND
• INDICATES LOCATION OF ZERO BENDING MOMENT
X INDICATES LOCATION OF BENDING MOMENT < 2000kNm



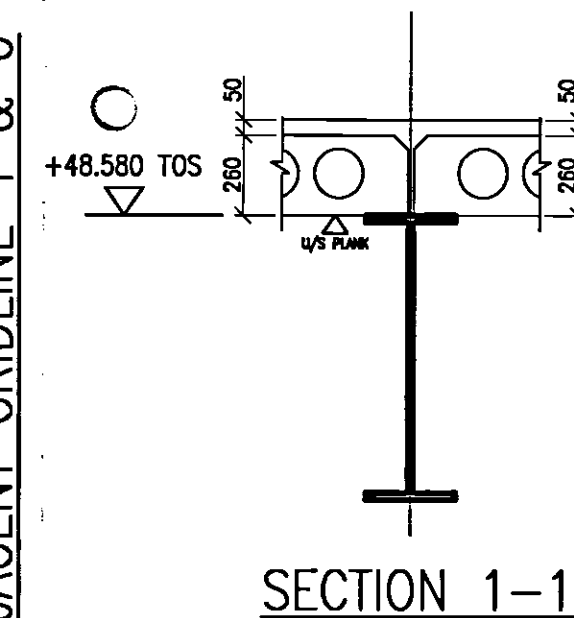
ELEVATION ON ROOF TRUSS ON GRIDLINE A



ELEVATION ON ROOF TRUSS ADJACENT GRIDLINE C

NOTE
FOR DETAILS OF HANGAR STEELWORK
REFER TO DRAWING 10023-S019

NOTE
BEAMS INDICATED THUS [B1] ARE CANTILEVER CELL BEAMS WITH IMPOSED AND DEAD LOAD DEFLECTIONS SHOWN IN BOX.
IT IS SUGGESTED THAT BEAMS ARE PRECAMBERED WITH APPROX 2/3 x D.L. DEFLECTION, SAY 20mm.
THIS SHOULD BE CONFIRMED BY THE STEEL FABRICATOR AS THEY DEVELOPE THE ERECTION METHOD STATEMENT FOR THE FRAME. PLEASE ALSO REFER TO BH STRUCTURAL DESIGN RISK ASSESSMENT TENDER ISSUE.



ELEVATION ON ROOF TRUSS ADJACENT GRIDLINE 1 & 6

LEGEND
INDICATES SPAN OF TARMAC TOPFLOOR 260 PRECAST FLOOR SLAB WITH 50mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
INDICATES SPAN OF TARMAC TOPFLOOR 260 PRECAST FLOOR SLAB WITH 65mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
INDICATES SPAN OF TARMAC TOPFLOOR 150 PRECAST FLOOR SLAB WITH 50mm GRADE 30 STRUCTURAL SCREED WITH A142 MESH.
INDICATES SPAN OF RIBDECK-E60 COMPOSITE STEEL DECK 140 MM/0.9 MM
VERTICALLY BRACED BAYS 150x15
VERTICALLY BRACED BAYS 152x152x23 UC
TEMPORARY BRACED BAYS 150x15
INDICATES 150x150x6 PARAPET POST

ALL CONNECTIONS TO BE DESIGNED FOR LOADS SHOWN (U.N.O.)

ROOF LEVEL
T.O.S +48.580 U.N.O

MEMBER SCHEDULE

MARK	SECTION	COMMENT
B1	610x305x238	CELLFORM, 60 MINS FIRE PROTECTION (918.6 D, 600H HOLE, 800 PITCH)
B2	406x178x60 UB	60 MINS FIRE PROTECTION
B3	533x210x109 UB	
B4	D26-500	DELTABEAM
B5	D26-400	DELTABEAM
B6	356x171x67 UB	60 MINS FIRE PROTECTION
B7	210x267x46 TEE	60 MINS FIRE PROTECTION
B8	305x305x198 UC	COMPOSITE BEAM 19 DIA, 125mm LONG STUDS AT 250 CRS
B9	150x150x6 SHS	
B10	305x305x283 UC	
B11	203x133x30 UB	
B12	305x165x40 UB	
B13	610x229x101 UB	CELLFORM, 60 MINS FIRE PROTECTION (885.4 D, 600H HOLE, 800 PITCH)
B14	152x152x37 UC	
B15	DR26-325	DELTABEAM
B16	DR26-230	DELTABEAM
B17	D32-400	DELTABEAM
B18	193.7x6.0 CHS	60 MINS FIRE PROTECTION
B19	160x160x12 SHS	

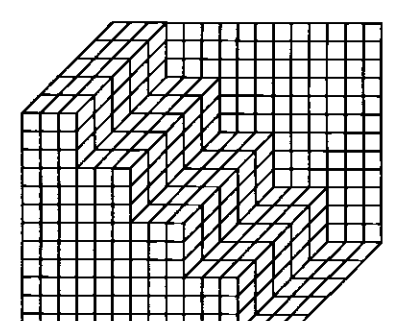
MEMBERS NOTED '*' ON PLAN ARE ALSO COMPOSITE BEAMS WITH 19 DIA, 125mm LONG STUDS AT 150 CRS

04 AS BUILT	17.07.07 RC A.M
03 FORCES ADDED/REVISED AS NOTED AT LINK BRIDGE	24.07.06 I.S A.M
02 FORCES ADDED AS NOTED	21.07.06 I.S A.M
01 TRUSS FORCES ADDED, FORCES REVISED AS NOTED	14.07.06 I.S A.M
00 ISSUED FOR CONSTRUCTION	23.06.06 I.S A.M
Rev Description	Date Dm Ch'd

AS BUILT

Status of drawing

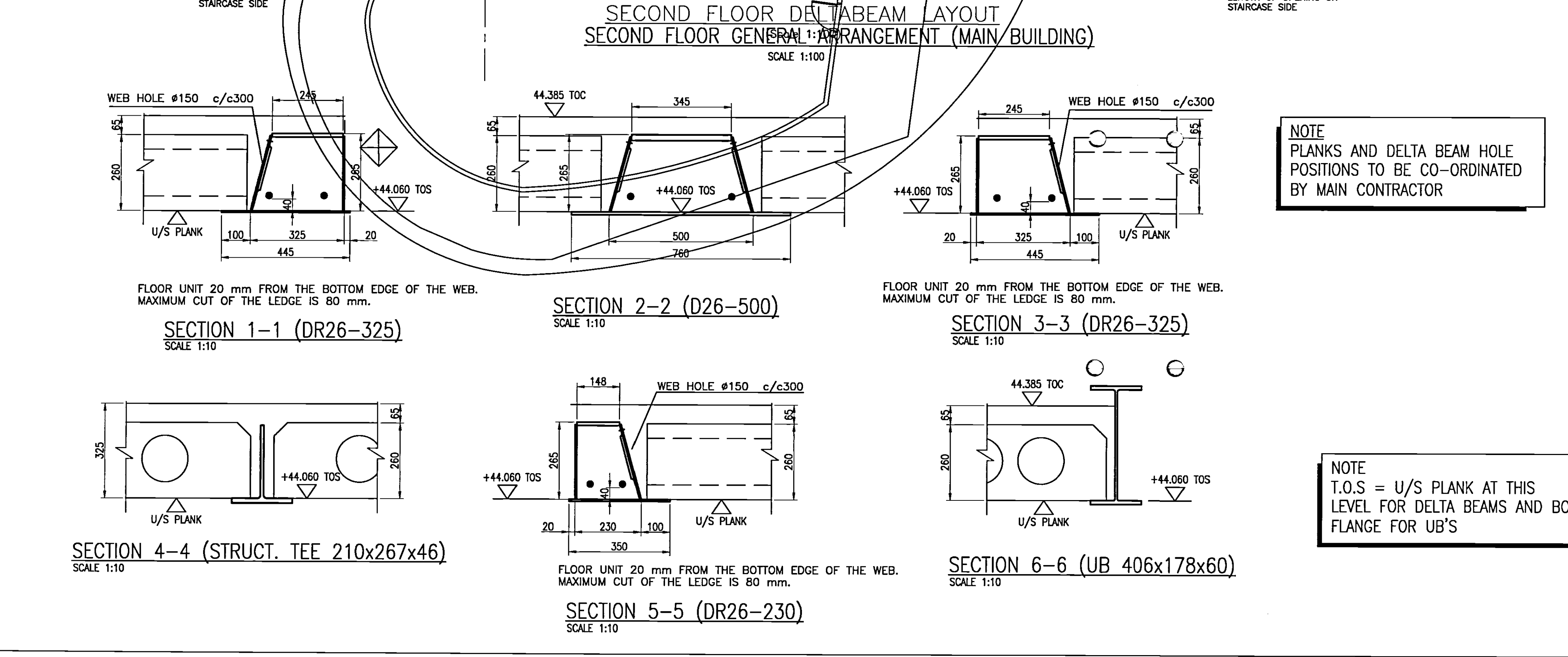
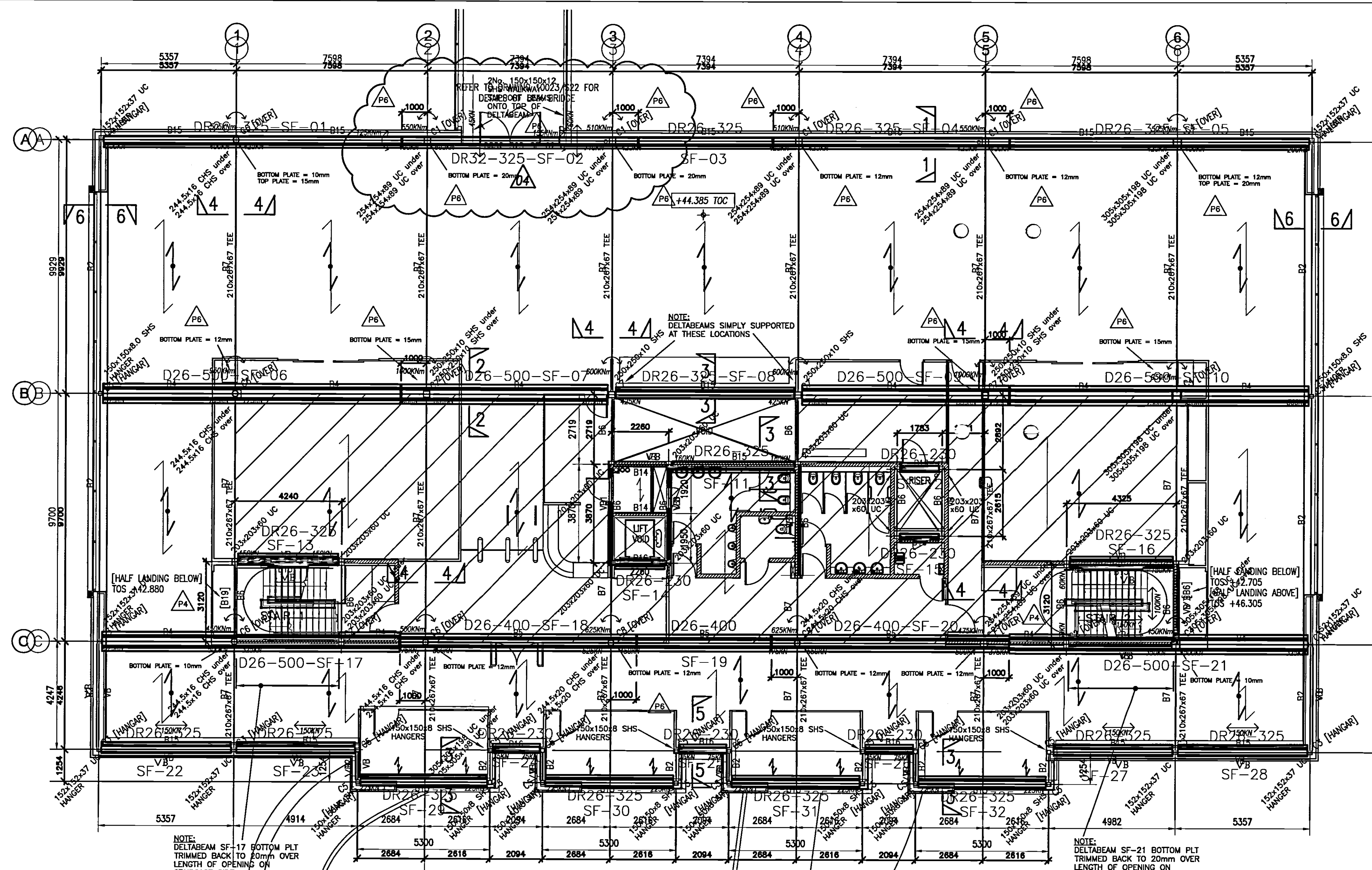
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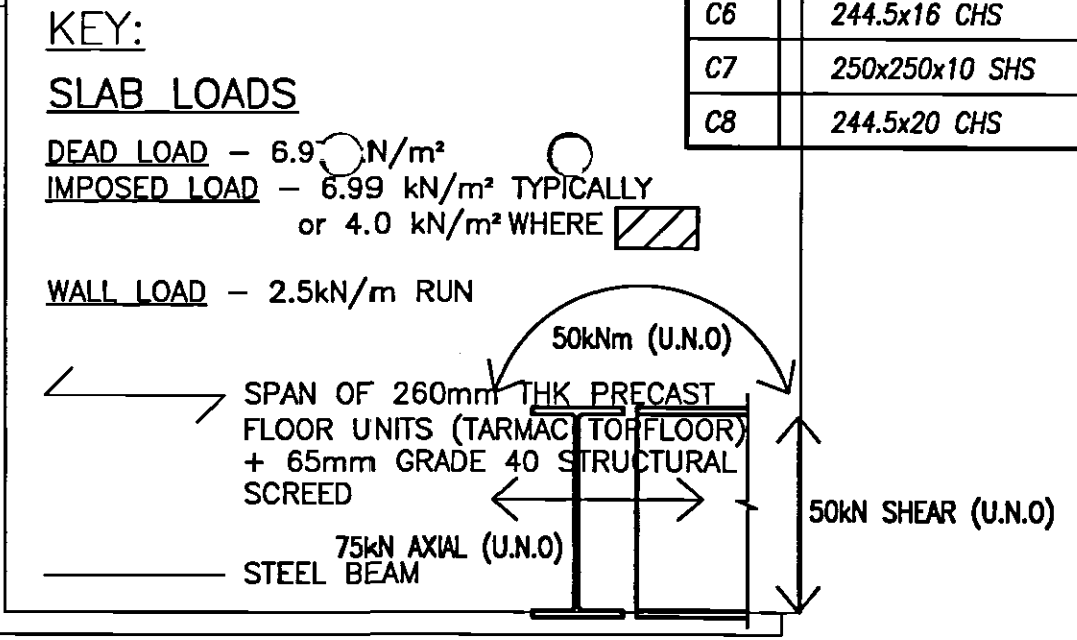
Buro Happold
Consulting Engineers

Architect UNIVERSITY OF SALFORD
Project NEW LAW FACILITY
ROOF LEVEL (MAIN BUILDING)
GENERAL ARRANGEMENT

Scaled @ A1 1:100 uno
Drawn by L.SIMONS
Checked by A.M.
Date JUNE 2006
Job No. 010023
Drawing No. S015
Rev 04



COLUMN SCHEDULE	
REF.	SECTION SIZE
C1	254x254x89 UC
C2	203x203x60 UC
C3	152x152x37 UC
C4	305x305x198 UC
C5	150x150x8 SHS
C6	244.5x16 CHS
C7	250x250x10 SHS
C8	244.5x20 CHS



ALL CONNECTIONS TO BE DESIGNED FOR LOADS SHOWN

CONSTRUCTION NOTE:

BEFORE ROOF PLANKS ARE LAID, DELTABEAMS ON GRIDS A & B FROM 1 TO 6 MUST BE FULLY CONCRETED. (CANTILEVER BEAMS TO BE CONCRETED AFTER PLANKS LAID FINAL STAGE).

BEAMS ON GRID C1, C2, C3, C4, C5 & C6 INDICATES SPAN OF TARMAC MUST BE CONCRETED 1000mm EITHER SIDE OF FLOOR 260 PRECAST FLOOR SLAB WITH 50mm GRADE 40 STRUCTURAL SCREED.

TERMODECK THROUGH PIPE TO BE IN PLACE WITH A98 MESH BEFORE CONCRETING DELTABEAMS.

INDICATES SPAN OF TARMAC TOPFLOOR 260 PRECAST FLOOR SLAB WITH 65mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.

INDICATES SPAN OF TARMAC TOPFLOOR 150 PRECAST FLOOR SLAB WITH 50mm GRADE 30 STRUCTURAL SCREED WITH A142 MESH.

INDICATES SPAN OF RIBDECK-E60 COMPOSITE STEEL DECK 140 MM/0.9 MM VERTICALLY BRACED BAYS 150x15 152x152x23 UC TEMPORARY BRACED BAYS 150x15 INDICATES 150x150x6 PARAPET POST

INTERNAL DELTABEAMS SF11-SF16 OFFSET TO POSITION VERTICAL SIDE PLATE IN LINE WITH COLUMN.

FOR CONNECTION DETAILS AND BEAM OFFSETS REFER TO DRAWING 204

MEMBER SCHEDULE		
MARK	SECTION	COMMENT
B1	610x305x238	CELLFORM, 60 MINS FIRE PROTECTION (918.6 D, 600# HOLE, 800 PITCH)
B2	406x178x60 UB	60 MINS FIRE PROTECTION
B3	533x210x109 UB	
B4	D26-500	DELTABEAM
B5	D26-400	DELTABEAM
B6	356x171x67 UB	60 MINS FIRE PROTECTION
B7	210x267x46 TEE	60 MINS FIRE PROTECTION
B8	305x305x198 UC	COMPOSITE BEAM 19 DIA, 125mm LONG STUDS AT 250 CRS
B9	150x150x6 SHS	
B10	305x305x283 UC	
B11	203x133x30 UB	
B12	305x165x30 UB	
B13	610x229x101 UB	CELLFORM, 60 MINS FIRE PROTECTION (885.4 D, 600# HOLE, 800 PITCH)
B14	152x152x37 UC	
B15	DR26-325	DELTABEAM
B16	DR26-230	DELTABEAM
B17	D32-400	DELTABEAM
B18	193.7x6.0 CHS	60 MINS FIRE PROTECTION
B19	160x160x12 SHS	

MEMBERS NOTED '* *' ON PLAN ARE ALSO COMPOSITE BEAMS WITH 19 DIA, 125mm LONG STUDS AT 150 CRS

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Notes

SEE DRAWING S013 FOR STEELWORK NOTES

AS BUILT

Status of drawing

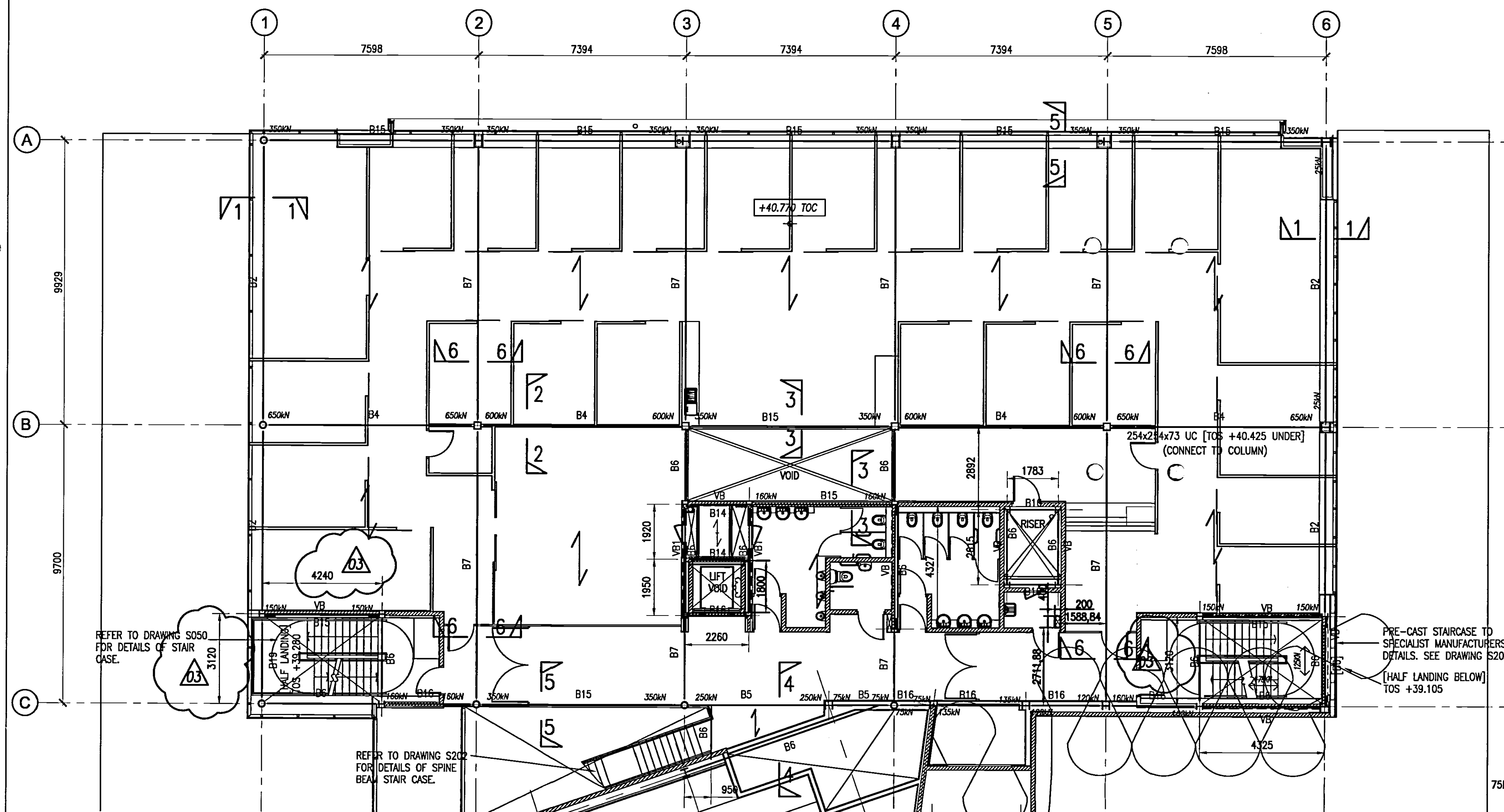
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Fax: +44 (0)161 787 4143
Email: www.burohappold.com

Buro Happold Consulting Engineers

Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACILITY SECOND FLOOR (MAIN BUILDING) GENERAL ARRANGEMENT

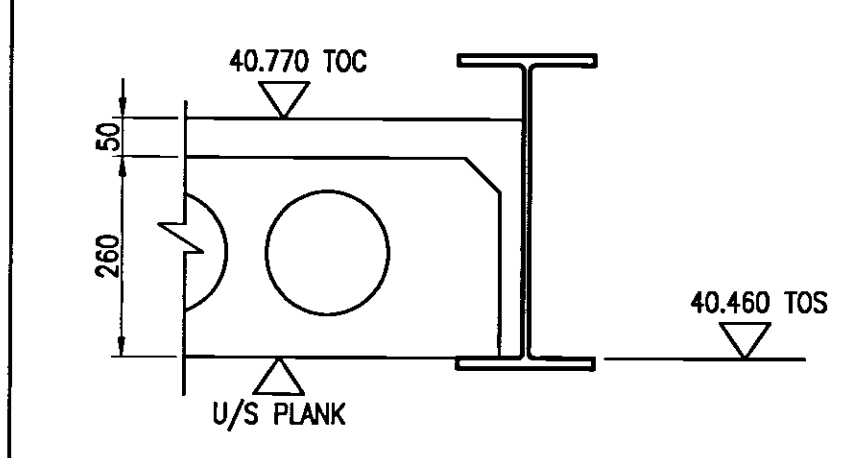
Scale: 1:100 un
Drawn by: LSIMONS
Checked by: A.M.
Date: JUNE 2006

Job No.: 010023
Drawing No.: S014
Rev: 05

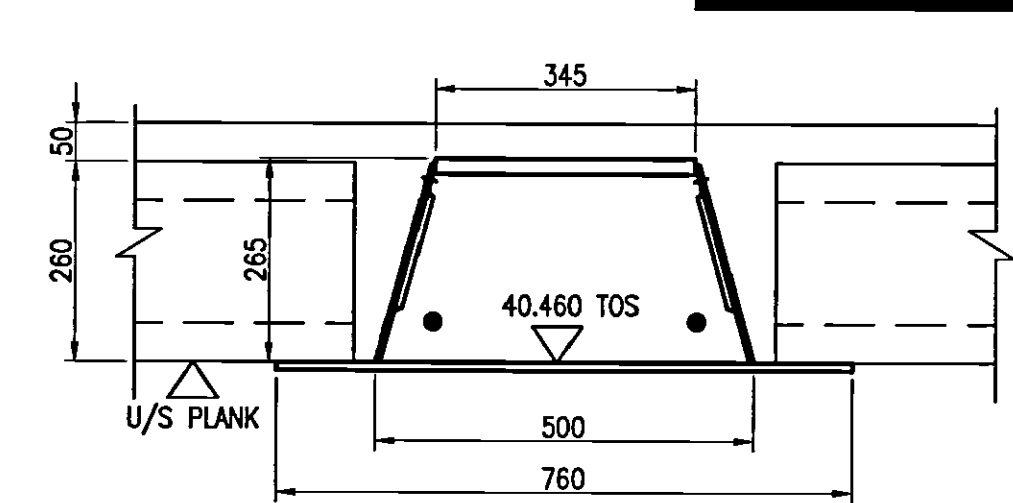


FIRST FLOOR GENERAL ARRANGEMENT (MAIN BUILDING)
SCALE 1:100

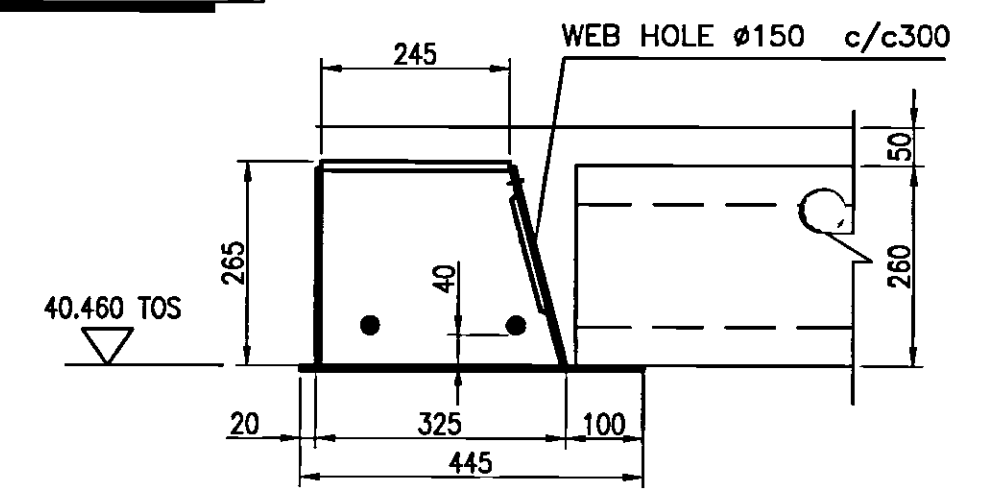
NOTE
PLANKS AND DELTA BEAM HOLE POSITIONS TO BE CO-ORDINATED BY MAIN CONTRACTOR



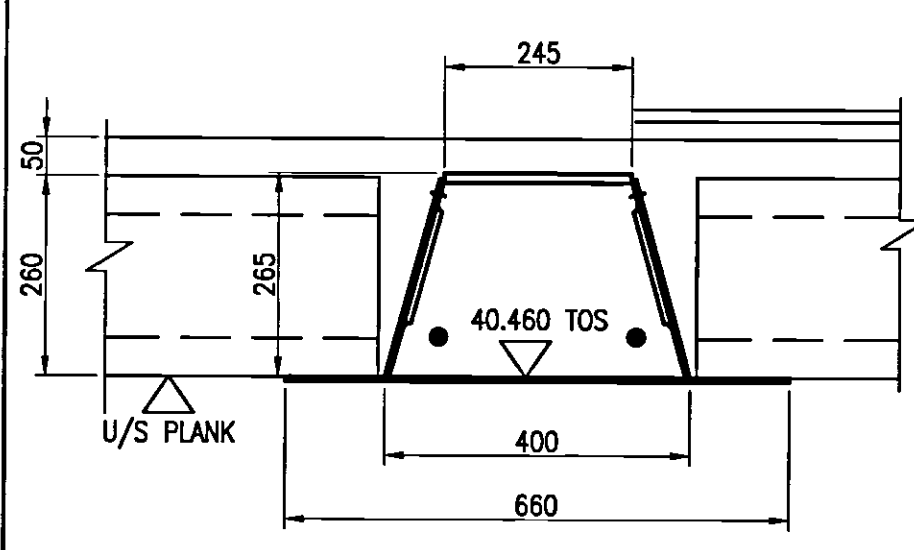
SECTION 1-1 (UB 406x178x60)
SCALE 1:10



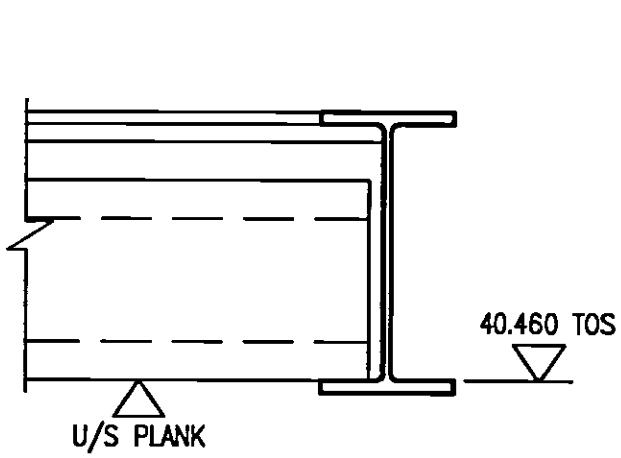
SECTION 2-2 (D26-500)
SCALE 1:10



FLOOR UNIT 20 mm FROM THE BOTTOM EDGE OF THE WEB.
MAXIMUM CUT OF THE LEDGE IS 80 mm.
SECTION 3-3 (DR26-325)
SCALE 1:10

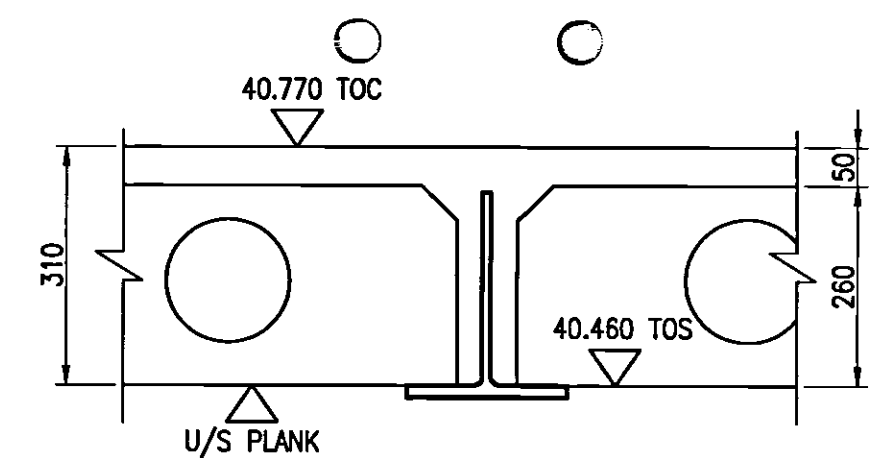


SECTION 4-4 (D26-400 and UB 356x171x67)
SCALE 1:10



FLOOR UNIT 20 mm FROM THE BOTTOM EDGE OF THE WEB.
MAXIMUM CUT OF THE LEDGE IS 80 mm.

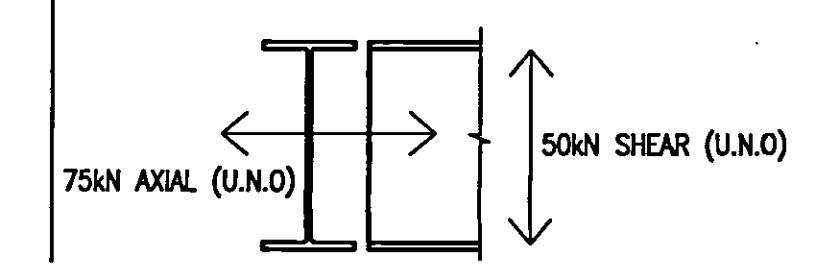
SECTION 5-5 (DR26-325)
SCALE 1:10



SECTION 6-6 (STRUCT. TEE 210x267x46)
SCALE 1:10

NOTE
T.O.S = U/S PLANK AT THIS LEVEL FOR DELTA BEAMS AND BOTTOM FLANGE FOR UB'S OR TEES

ALL CONNECTIONS TO BE
DESIGNED FOR LOADS SHOWN
(U.N.O)



- 19 CONTRACTOR TO COORDINATE THE INFORMATION SHOWN ON THIS DRAWING WITH ALL RELEVANT SUBCONTRACTOR INFORMATION AND DESIGN INPUT INCLUDING ALL HOLES IN STRUCTURAL HOLLOW SECTIONS FOR SERVICE FIXINGS ETC. TO BE SEALED WITH WATERTIGHT SEALING WASHERS.
- 20 REFER TO SPECIFICATION FOR REQUIRED PAINT SYSTEM FOR INTERNAL AND EXTERNAL MEMBERS. ALL STEELWORK ENCASED IN CONCRETE TO REMAIN UNPAINTED ie BLAST CLEAN 2
- 21 AFTER ERECTION ON SITE ALL AREAS OF DAMAGED PRIMER TO BE TOUCHED UP AND ALL BOLTS SHALL BE ADEQUATELY CLEANED AND THE FULL SPECIFIED PAINT SYSTEM APPLIED.
- 22 NO CUTTING OR WELDING OF STEELWORK MEMEBERS ON SITE WILL BE PERMITTED WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER. REFER TO ROADWAY MALAYAN NBS FOR REQUIRED FIRE PROTECTA TO STEELWORK.
- 23 ALLOWANCE HAS BEEN MADE IN THE DESIGN OF THE PERMANENT PERIMETER STEELWORK FOR TEMPORARY BALLISTER LOADING OF 1.0KN/M IN THE TEMPORARY CONDITION DURING CONSTRUCTION IN ACCORDANCE WITH CONSTRUCTION INDUSTRY COUNCIL CDM TECHNICAL GUIDANCE NOTE T20.002
- 24 AN ALLOWANCE HAS BEEN MADE IN THE DESIGN OF PRIMARY STEEL BEAMS, TO SUSTAIN TEMPORARY SAFETY NET ANCHOR LOADING OF 4.5KN AT 2.5m c/c. IN ACCORDANCE WITH CONSTRUCTION INDUSTRY COUNCIL CDM GUIDANCE. TECHNICAL GUIDANCE NOTE T20.002
- 25 ALLOWANCE SHOULD BE MADE FOR LIFTING HOLES TO STEEL BEAM FLANGES TO PERMIT USE OF QUICK RELEASE LIFTING EYE STRAPS. ERECTION METHODOLOGY TO BE CIRMED BY FABRICATOR.
- 26 DELTABEAMS TO HAVE 60 MINUTES FIRE PROTECTION. DELTABEAM TO PROVIDE SPECIFIC DETAILS OF REINFORCEMENT/STRUCTURAL REQUIREMENTS.
- 27 METSEC SECONDARY STEELWORK TO BE CONFIRMED

LEGEND	
	INDICATES SPAN OF TARMAC TOPFLOOR 260 PRECAST FLOOR SLAB WITH 50mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
	INDICATES SPAN OF TARMAC TOPFLOOR 250 PRECAST FLOOR SLAB WITH 65mm GRADE 40 STRUCTURAL SCREED WITH A98 MESH.
	INDICATES SPAN OF TARMAC TOPFLOOR 150 PRECAST FLOOR SLAB WITH 50mm GRADE 30 STRUCTURAL SCREED WITH A142 MESH.
	INDICATES SPAN OF RIBDECK-E60 COMPOSITE STEEL DECK 140 MM/0.9 MM
	VERTICALLY BRACED BAYS 150x15
	VERTICALLY BRACED BAYS 152x152x23 UC
	TEMPORARY BRACED BAYS 150x15
	INDICATES 150x150x6 PARAPET POST

MEMBER SCHEDULE		
MARK	SECTION	COMMENT
B1	610x305x238	CELLFORM, 60 MINS FIRE PROTECTION (918.6 D, 600# HOLE, 800 PITCH)
B2	406x178x60 UB	60 MINS FIRE PROTECTION
B3	533x210x109 UB	
B4	D26-500	DELTABEAM
B5	D26-400	DELTABEAM
B6	356x171x67 UB	60 MINS FIRE PROTECTION
B7	210x267x46 TEE	60 MINS FIRE PROTECTION
B8	305x305x198 UC	COMPOSITE BEAM 19 DIA, 125mm LONG STUDS AT 250 CRS
B9	150x150x6 SHS	
B10	305x305x283 UC	
B11	203x133x30 UB	
B12	305x165x4 UB	
B13	610x229x101 UB	CELLFORM, 60 MINS FIRE PROTECTION (885.4 D, 600# HOLE, 800 PITCH)
B14	152x152x37 UC	
B15	DR26-325	DELTABEAM
B16	DR26-230	DELTABEAM
B17	D32-400	DELTABEAM
B18	193.7x6.0 CHS	60 MINS FIRE PROTECTION
B19	160x160x12 SHS	

MEMBERS NOTED '* * ' ON PLAN ARE ALSO COMPOSITE BEAMS WITH 19 DIA, 125mm LONG STUDS AT 150 CRS

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- Notes
- 1 READ IN CONJUNCTION WITH THE ARCHITECTS AND SERVICES ENGINEERS DRAWINGS AND THE SPECIFICATION.
 - 2 ALL STEEL TO BE GRADE S355 TO BS 5950.
 - 3 BOLT ASSEMBLIES (INCLUDING HOLDING DOWN BOLTS) TO BE SHERADIZED TO B.S. 4921 CLASS 1 U.N.O.
 - 4 REFER TO ARCHITECTS DRAWINGS FOR REQUIRED FIRE PROTECTION TO STEELWORK.
 - 5 ALL SPECIFIED PRODUCTS MAY BE REPLACED WITH SIMILAR PRODUCTS APPROVED BY THE STRUCTURAL ENGINEER. THE CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION/ CALCULATIONS TO DEMONSTRATE THE SUITABILITY OF ANY SUBSTITUTE PRODUCT.
 - 6 ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH THE RELEVANT BRITISH STANDARDS
 - 7 ALL RELEVANT DIMENSIONS TO BE CHECKED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. ALL DISCREPANCIES TO BE BROUGHT TO THE ARCHITECTS ATTENTION.
 - 8 CONTRACTOR IS REQUESTED TO LIST IN THE CONTRACT START MEETING ANY ITEMS WHERE HE HAS COMMENTS ABOUT BUILDABILITY, SUCH THAT THESE CAN BE ADDRESSED PRIOR TO THE START OF CONSTRUCTION.
 - 9 STRUCTURE IS DESIGNED FOR THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR STABILITY OF THE STRUCTURE AND ADJACENT STRUCTURES IN TEMPORARY CONDITION DURING CONSTRUCTION. CONTRACTOR TO PROVIDE DRAWING AND METHOD STATEMENT SHOWING HOW TEMPORARY STABILITY IS ACHIEVED DURING ALL STAGES OF CONSTRUCTION.
 - 10 STEELWORK FABRICATION DRAWINGS AND CONNECTION DESIGN CALCULATIONS TO BE SUBMITTED FOR APPROVAL 2 WEEKS PRIOR TO FABRICATION.
 - 11 SPECIFIC CONNECTIONS ARE TO BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH BS 5950 FOR THE FACTORED FORCES SHOWN ON THE DRAWING.
 - 12 AFTER STEELWORK HAS BEEN LINED, LEVELLED AND PLUMBED BY THE STEELWORK CONTRACTOR AND ACCEPTED BY THE GENERAL CONTRACTOR, THE GENERAL CONTRACTOR WILL INSTALL THERMODECK AND GROUT IN ACCORDANCE WITH BS 8110 AND THE SPECIFICATION.
 - 13 ALL WELDS TO BE 6mm FILLET WELDS U.N.O
 - 14 ALL CONNECTIONS TO HAVE A MINIMUM 2No M20 BOLTS (U.N.O)
 - 15 ALL CONNECTIONS TO HAVE A TIE FORCE CAPACITY IN ACCORDANCE WITH BS5950
 - 16 STEELWORK BELOW GROUND SHALL BE CLEANED TO SPECIFICATION AND ENCASED IN 150mm MINIMUM CONCRETE.
 - 17 MAIN CONTRACTOR TO COORDINATE HOLES OR APPENDAGES REQUIRED BY OTHERS (PATENT GLAZING, BRACKETS ETC.)
 - 18 ALLOWANCE SHOULD BE MADE FOR NEOPRANE WASHERS AT ANY DISSIMILAR METALIC CONNECTIONS TO AVOID BIMETALLIC CORROSION.

04 AS BUILT	17.07.07	RC	A.M
03 SECONDARY COLUMNS REVISED	13.07.06	IS	A.M
02 NOTE ADDED, HALF LANDING LEVEL REVISED	04.07.06	IS	A.M
01 RISER SET OUT REVISED	26.06.06	IS	A.M
00 ISSUED FOR CONSTRUCTION	23.06.06	IS	A.M
Rev Description	Date	Drn	Ch'd

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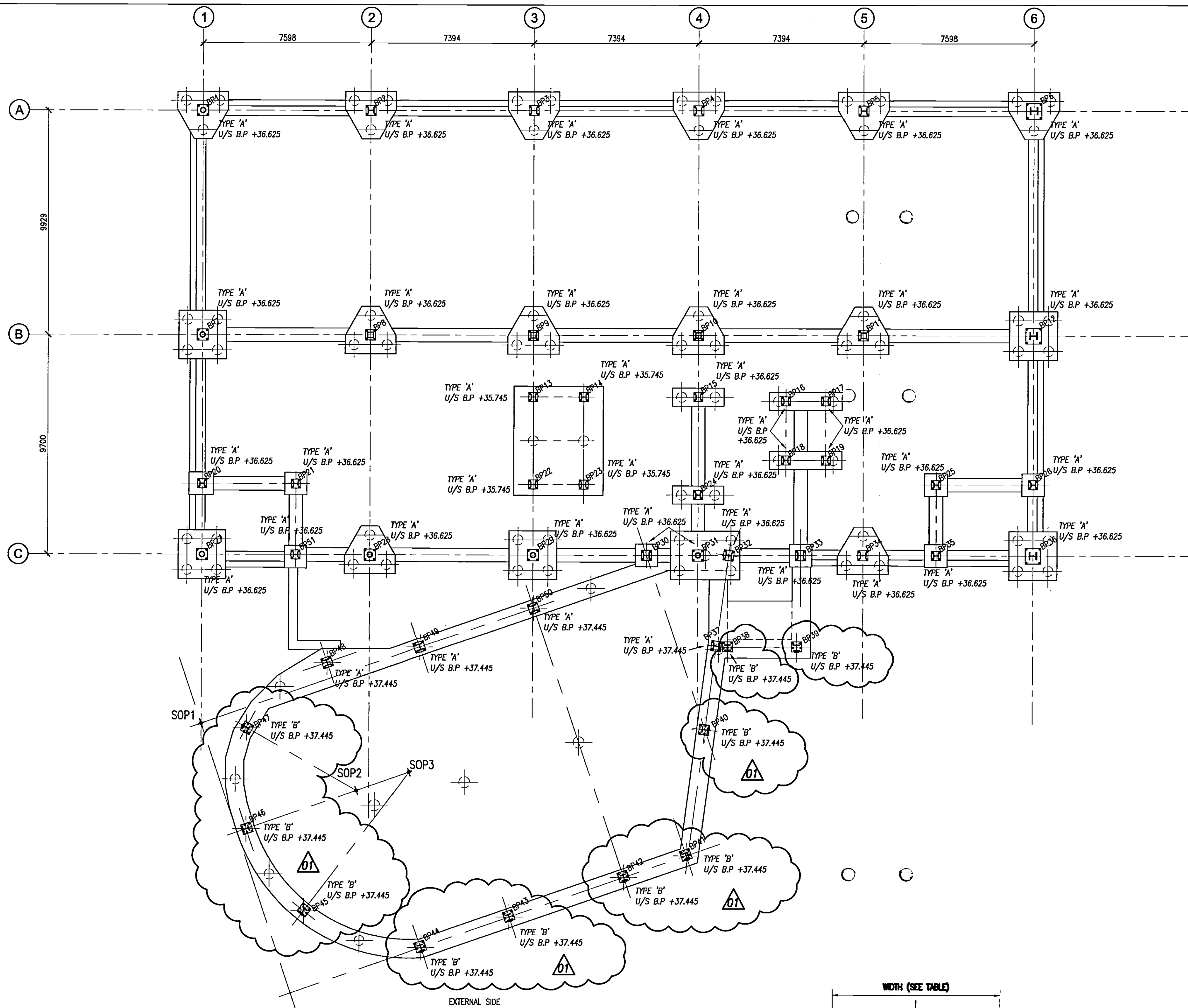
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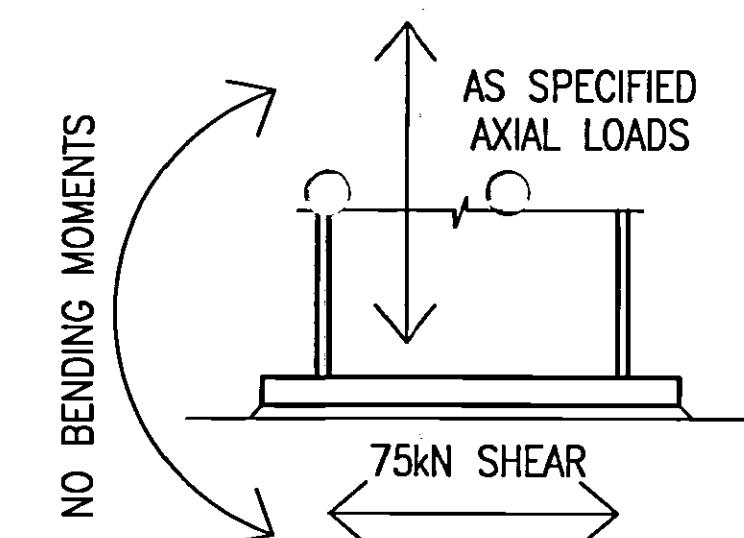
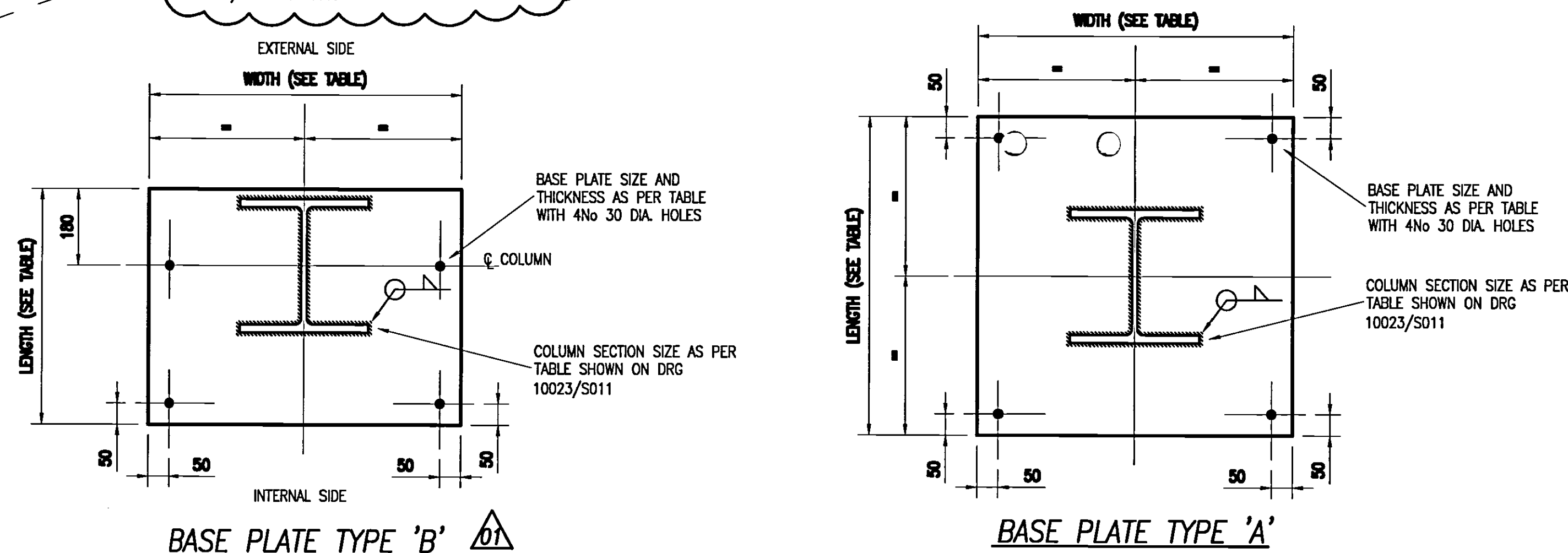
Architect UNIVERSITY OF SALFORD
Project NEW LAW FACULTY
FIRST FLOOR (MAIN BUILDING)
GENERAL ARRANGEMENT

Scales: A1 1:100 uno
Drawn by L SIMONS
Checked by A.M
Date JUNE 2006

Job No. 010023
Drawing No. S013
Rev 04



COLUMN BASE LOADS AND BASE PLATE SIZES					
ALL LOADS ARE U.L.S IN kN					
ALL BASE PLATES TO BE DESIGNED IN GRADE 50 STEEL					
REF.	AXIAL LOAD (U.L.S) kN	TYPE	BASE PLATE SIZE		THICKNESS
			WIDTH	LENGTH	
BP1	2425	A	500	500	60
BP2	1825	A	450	450	35
BP3	2075	A	450	450	35
BP4	2100	A	450	450	35
BP5	1800	A	450	450	35
BP6	2500	A	700	700	50
BP7	3675	A	500	500	60
BP8	2675	A	450	450	35
BP9	2675	A	450	450	35
BP10	2825	A	450	450	35
BP11	2710	A	450	450	35
BP12	3875	A	700	700	50
BP13	205	A	400	400	20
BP14	210	A	400	400	20
BP15	305	A	400	400	20
BP16	75	A	400	400	20
BP17	75	A	400	400	20
BP18	105	A	400	400	20
BP19	105	A	400	400	20
BP20	465	A	400	400	20
BP21	450	A	400	400	20
BP22	320	A	400	400	20
BP23	145	A	400	400	20
BP24	160	A	400	400	20
BP25	350	A	400	400	20
BP26	285	A	400	400	20
BP27	3750	A	500	500	60
BP28	2605	A	500	500	60
BP29	4205	A	500	500	60
BP30	170	A	450	450	25
BP31	4560	A	500	500	60
BP32	25	A	450	450	25
BP33	25	A	450	450	35
BP34	2905	A	450	450	35
BP35	905	A	400	400	20
BP36	4075	A	700	700	50
BP37	40	A	450	450	25
BP38	40	A	450	450	25
BP39	25	A	450	450	25
BP40	205	A	450	450	25
BP41	35	A	450	450	25
BP42	290	A	450	450	25
BP43	260	A	450	450	25
BP44	300	A	450	450	35
BP45	55	A	450	450	35
BP46	90	A	450	450	35
BP47	50	A	450	450	35
BP48	300	A	450	450	35
BP49	260	A	450	450	25
BP50	290	A	450	450	25
BP51	865	A	400	400	20



ALL CONNECTIONS TO BE
DESIGNED FOR LOADS SHOWN

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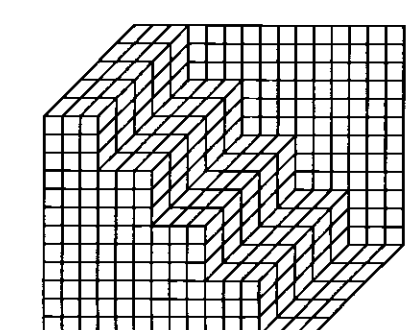
1 SEE DRAWING S010 FOR STEELWORK NOTES

02 AS BUILT	17.07.07 RC AM
01 TYPE B ADDED WHERE NOTED	13.07.06 IS AM
00 ISSUED FOR CONSTRUCTION	26.06.06 IS AM
Rev	Description
Date	Dm
Ch'd	

AS BUILT

Status of drawing

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Web: www.burohappold.com

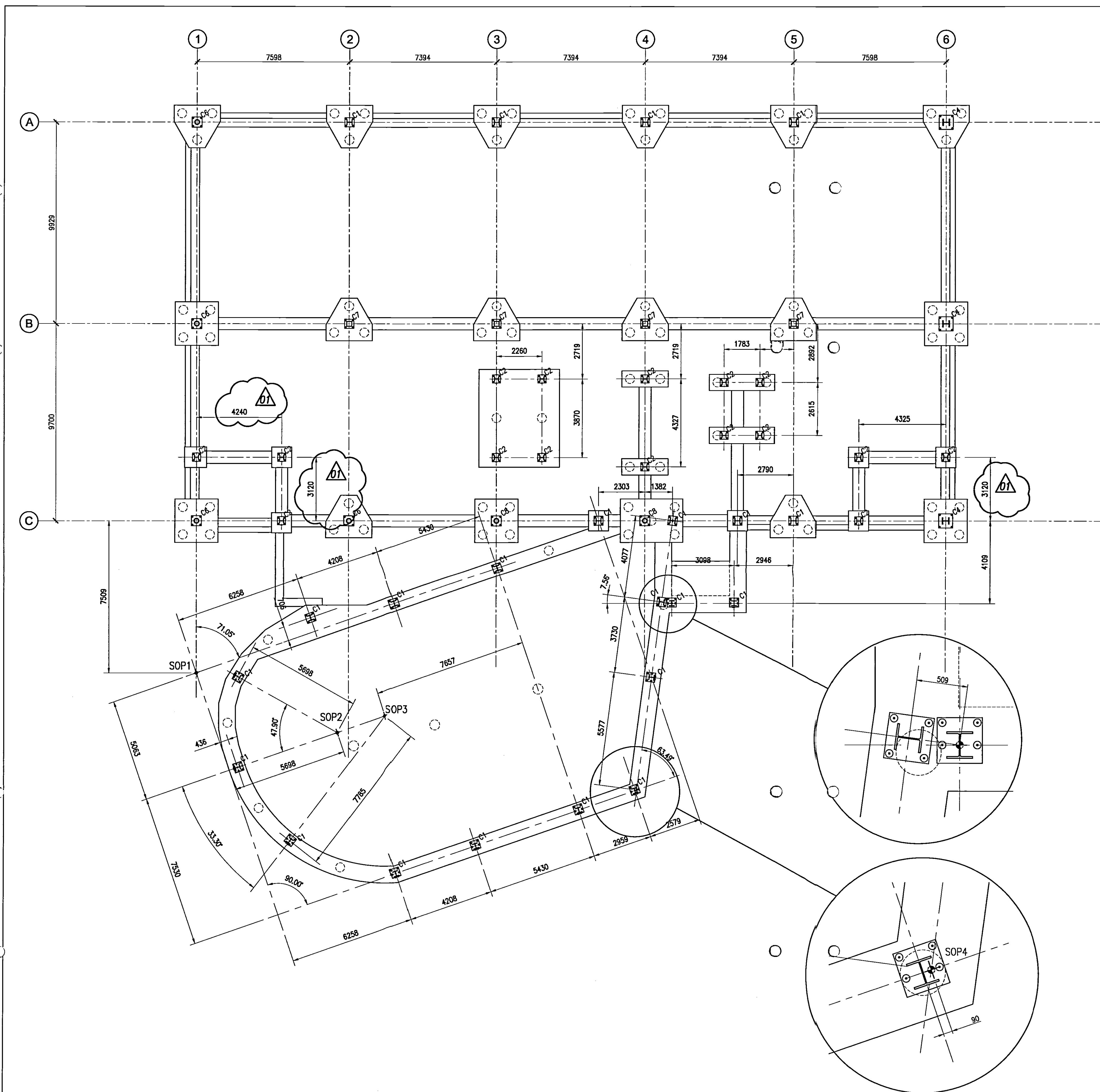


Buro Happold
Consulting Engineers

Architect UNIVERSITY OF SALFORD
Project NEW LAW FACULTY
BASE PLATE DETAILS

Scales BA1 1:100
Drawn by LISIMONS
Checked by AM
Date JUNE 2006

Job No. 010023
Drawing No. S012
Rev 02



COLUMN SCHEDULE		
REF.	SECTION	SIZE
C1	254x254x89	UC
C2	203x203x60	UC
C3	152x152x37	UC
C4	305x305x198	UC
C5	150x150x8	SHS
C6	244.5x16	CHS
C7	250x250x10	SHS
C8	244.5x20	CHS

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 Notes

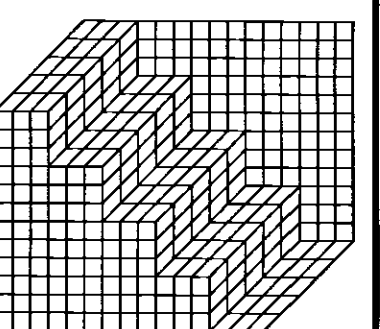
SEE DRAWING S010 FOR STEELWORK NOTES

02 AS BUILT	17.07.07	RC	A.M	
01 COLUMN SET OUT REVISED	13.07.06	IS	AM	
00 ISSUED FOR CONSTRUCTION	26.06.06	IS	AM	
Rev	Description	Date	Dm	Ch'd

AS BUILT

Status of drawing

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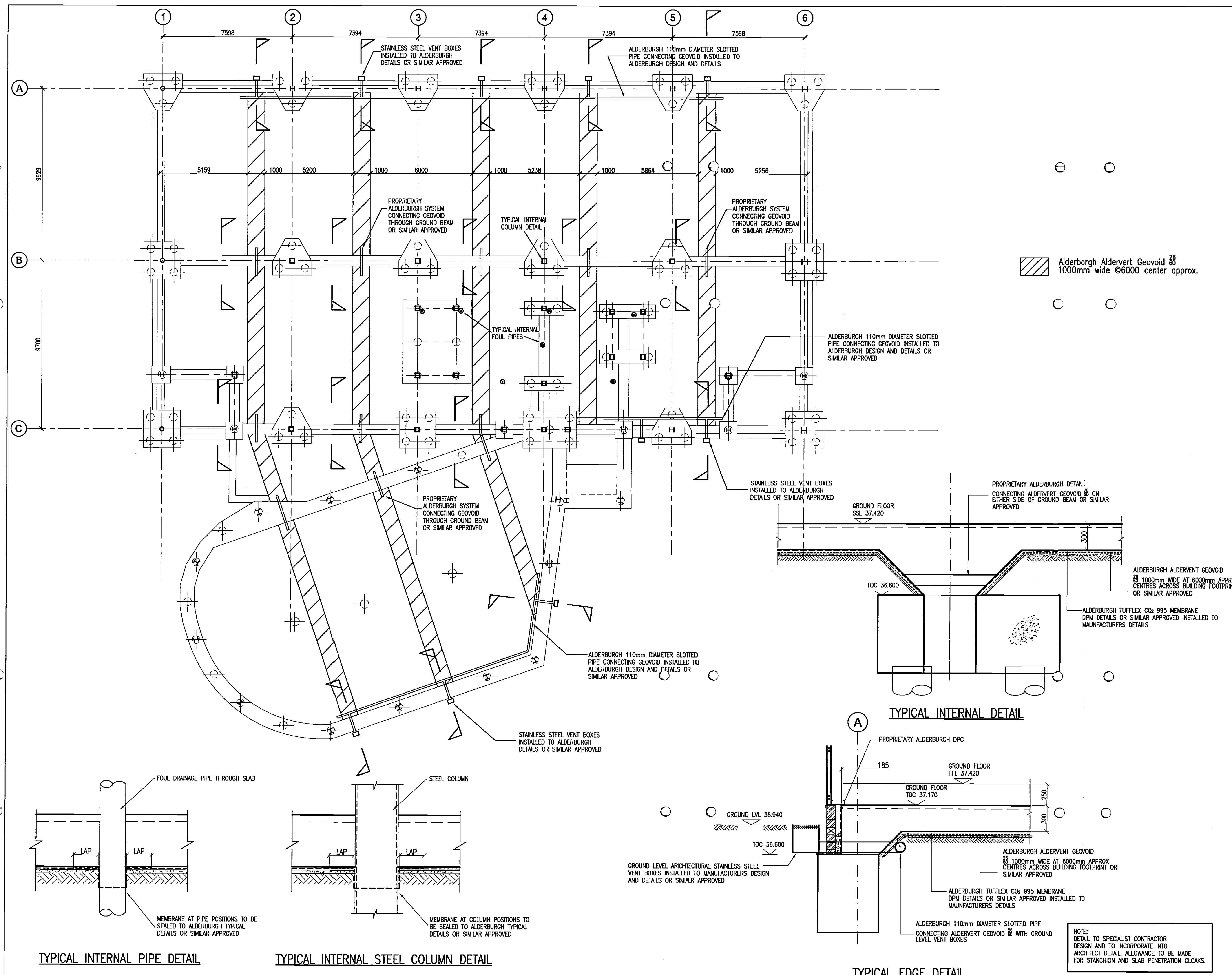
Buro Happold
 Consulting Engineers

Architect: UNIVERSITY OF SALFORD
 Project: NEW LAW FACULTY
 COLUMN SET OUT

Scales: A1 1:100 unc	Job No. 010023
Drawn by: LSIMONS	Drawing No. S011
Checked by: A.M	Rev 02
Date: JUNE 2006	



- | | |
|-------------|--------|
| Job No. | 010023 |
| Drawing No. | S010 |
| Rev. | 02 |



Notes

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL THE RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- ALL DIMENSIONS TO BE CHECKED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ALL DISCREPANCIES TO BE BROUGHT TO THE ARCHITECTS ATTENTION.
- CONTRACTOR TO CO-ORDINATE THE INFORMATION SHOWN ON THIS DRAWING WITH ALL RELEVANT SUB-CONTRACTOR INFORMATION AND DESIGN INPUT.
- DO NOT USE SCALED INFORMATION FROM THIS DRAWING FOR CONSTRUCTION AND FABRICATION.
- ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH THE RELEVANT BRITISH STANDARDS.
- ALL DIMENSIONS ARE IN MILLIMETRES.
- ALL CONCRETE TO SUBSTRUCTURE TO BE CLASS 1 AND AS PER THE SPECIFICATION
- ALL PILES TO BE 450Ø
- ALL EXCAVATIONS SHALL BE CARRIED OUT IN A SAFE MANNER, COMPLYING WITH THE REQUIREMENTS OF THE HEALTH AND SAFETY REGULATIONS, BS 8000:PART 1 AND ANY LOCAL BY-LAWS.
- THE FORMATION OF ALL THE FOUNDATIONS IS TO BE INSPECTED BY THE STRUCTURAL ENGINEER PRIOR TO CONCRETING.
- BASES TO BE CENTRED ON COLUMN POSITIONS U.N.O.
- ALL PILING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE L.C.E 'SPECIFICATION FOR PILING'.
- PILES TO BE DESIGNED FOR THE FOLLOWING WORKING LOADS :- AXIAL 1100KN
- MAXIMUM PILE SETTLEMENT UNDER WORKING LOAD TO BE 10mm
- CAST IN-SITU PILES TO BE CAST TO A MINIMUM OF 450mm ABOVE CUT-OFF LEVEL.
- PILES TO PROJECT 75mm INTO PILECAP.
- PILE REINFORCEMENT TO EXTEND A FULL TENSION LAP INTO THE PILECAP.
- ALL CAST IN-SITU PILES TO BE INTEGRITY TESTED AND LOAD TESTED AS PER THE SPECIFICATION.
- ALL SPECIFIED PRODUCTS MAY BE REPLACED WITH SIMILAR PRODUCTS APPROVED BY THE STRUCTURAL ENGINEER. THE CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION/CALCULATIONS TO DEMONSTRATE THE SUITABILITY OF ANY SUBSTITUTE PRODUCT.

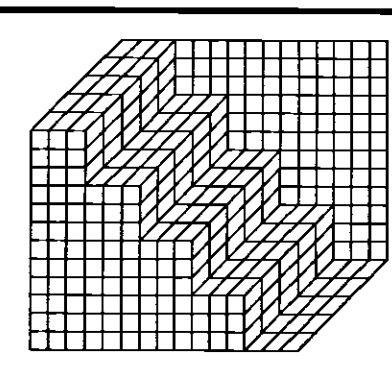
Rev	Description	Date	Drn	Chd
02	AS BUILT	17.07.07	RC	A.M.
01	ISSUED FOR INFORMATION	29.08.06	I.S.	A.M.
00	ISSUED FOR COMMENT	01.08.06	I.S.	A.M.

AS BUILT

Status of drawing

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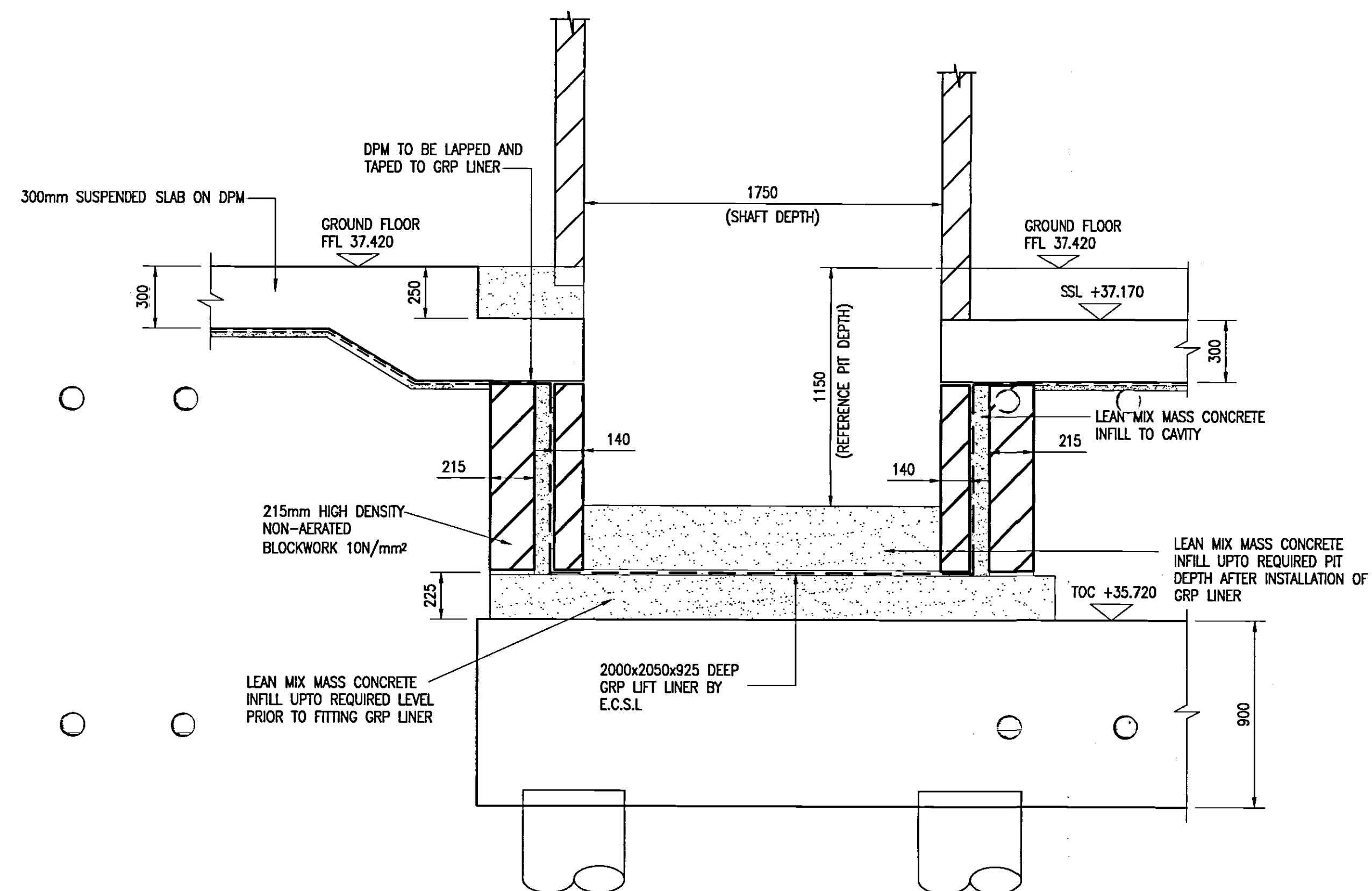


Buro Happold
Consulting Engineers

Architect: UNIVERSITY OF SALFORD
Project: NEW LAW FACULTY
UNDER GROUND FLOOR SLAB
GAS MEMBRANE DETAILS

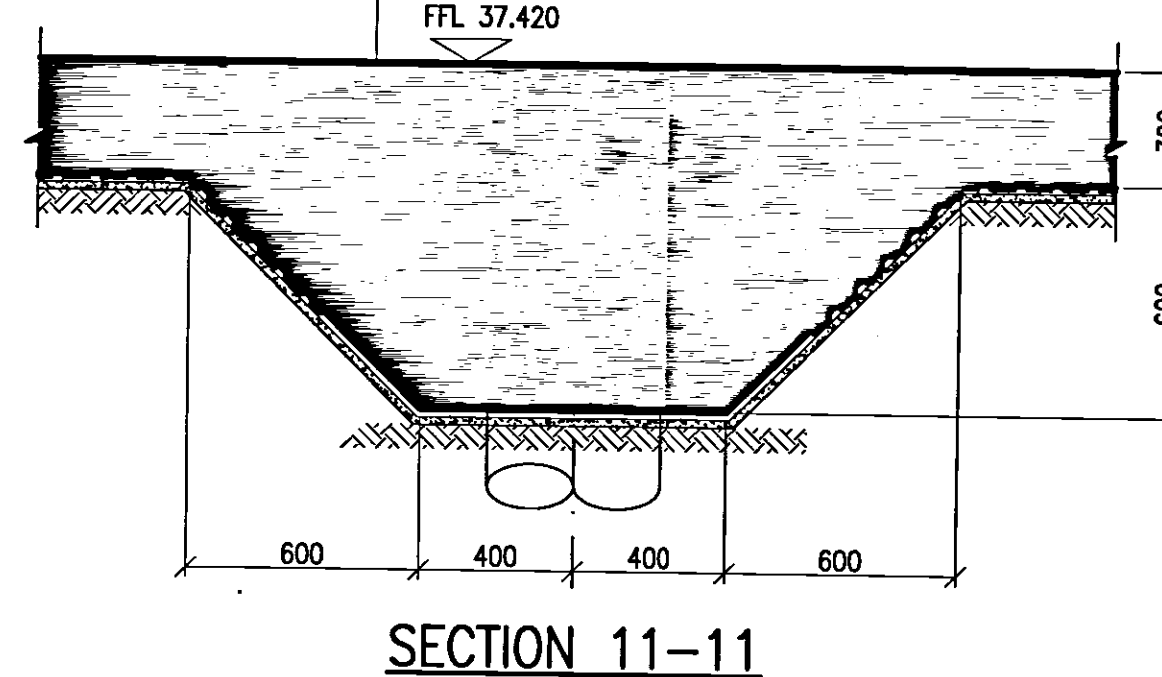
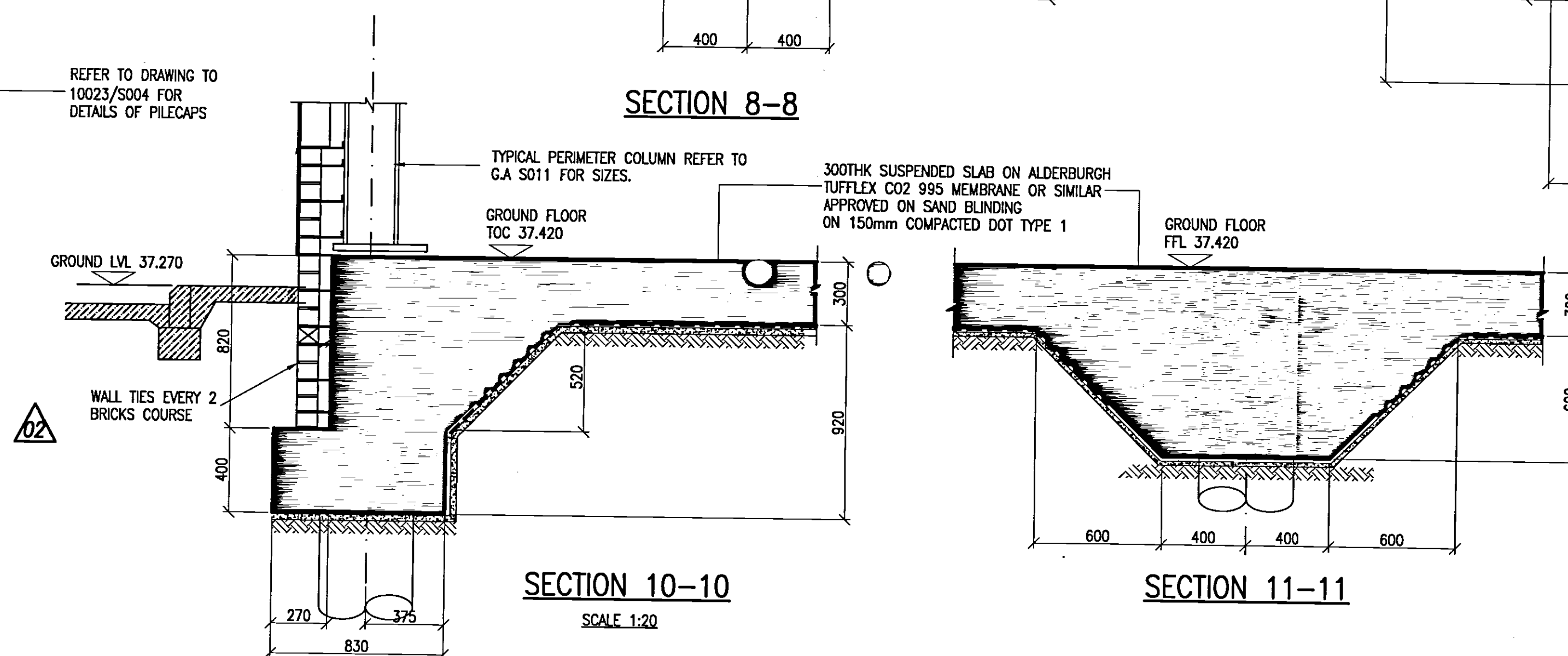
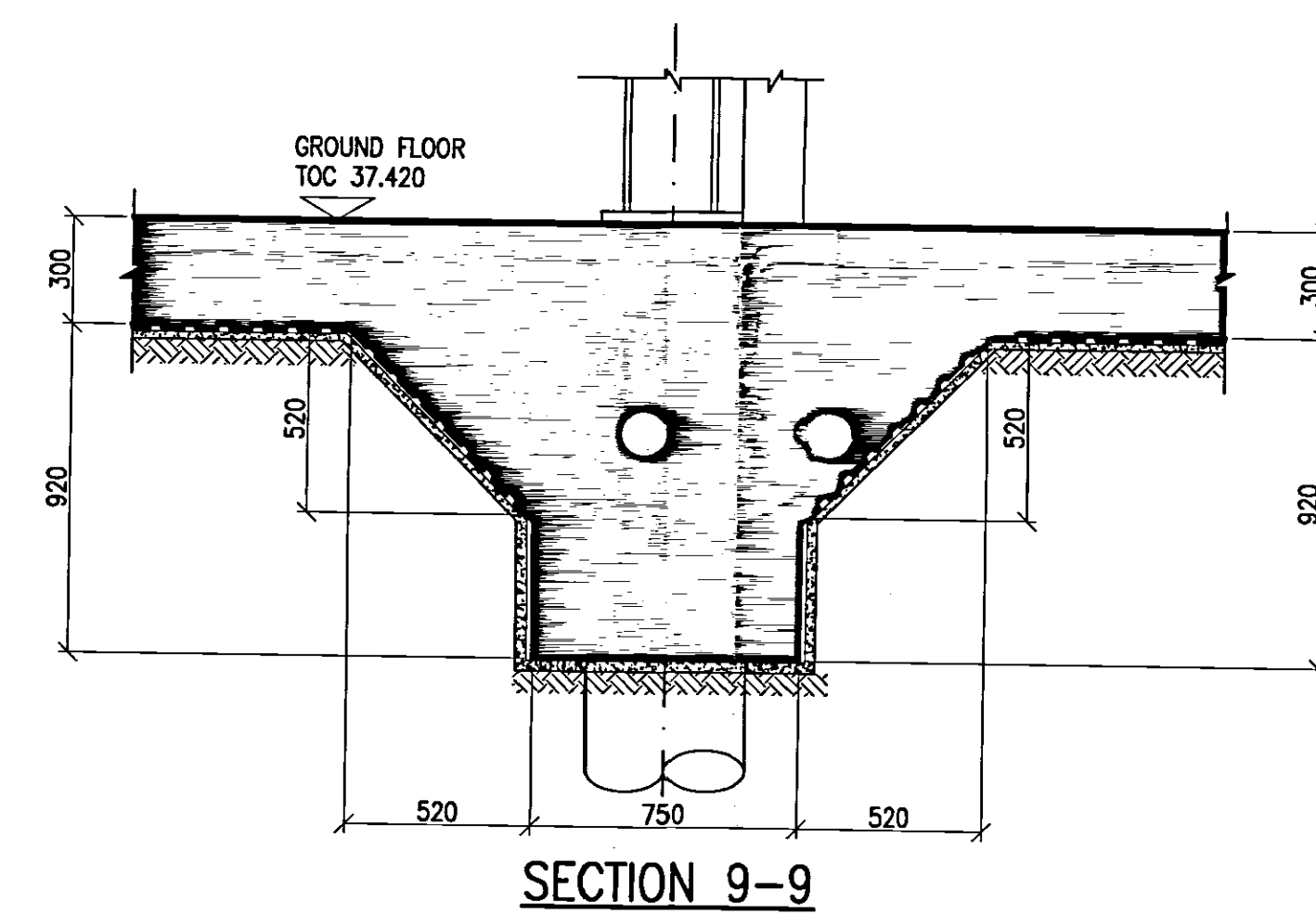
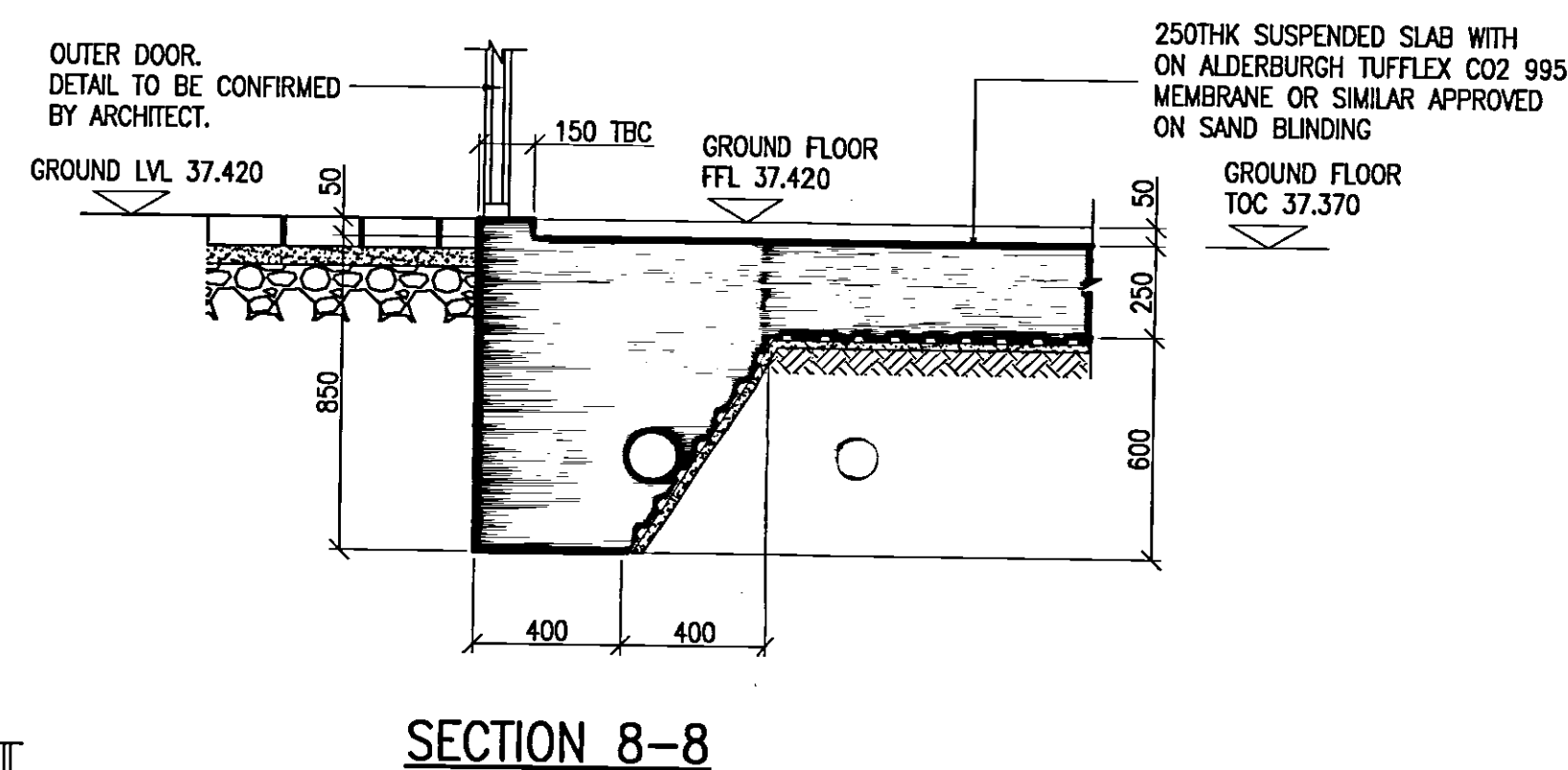
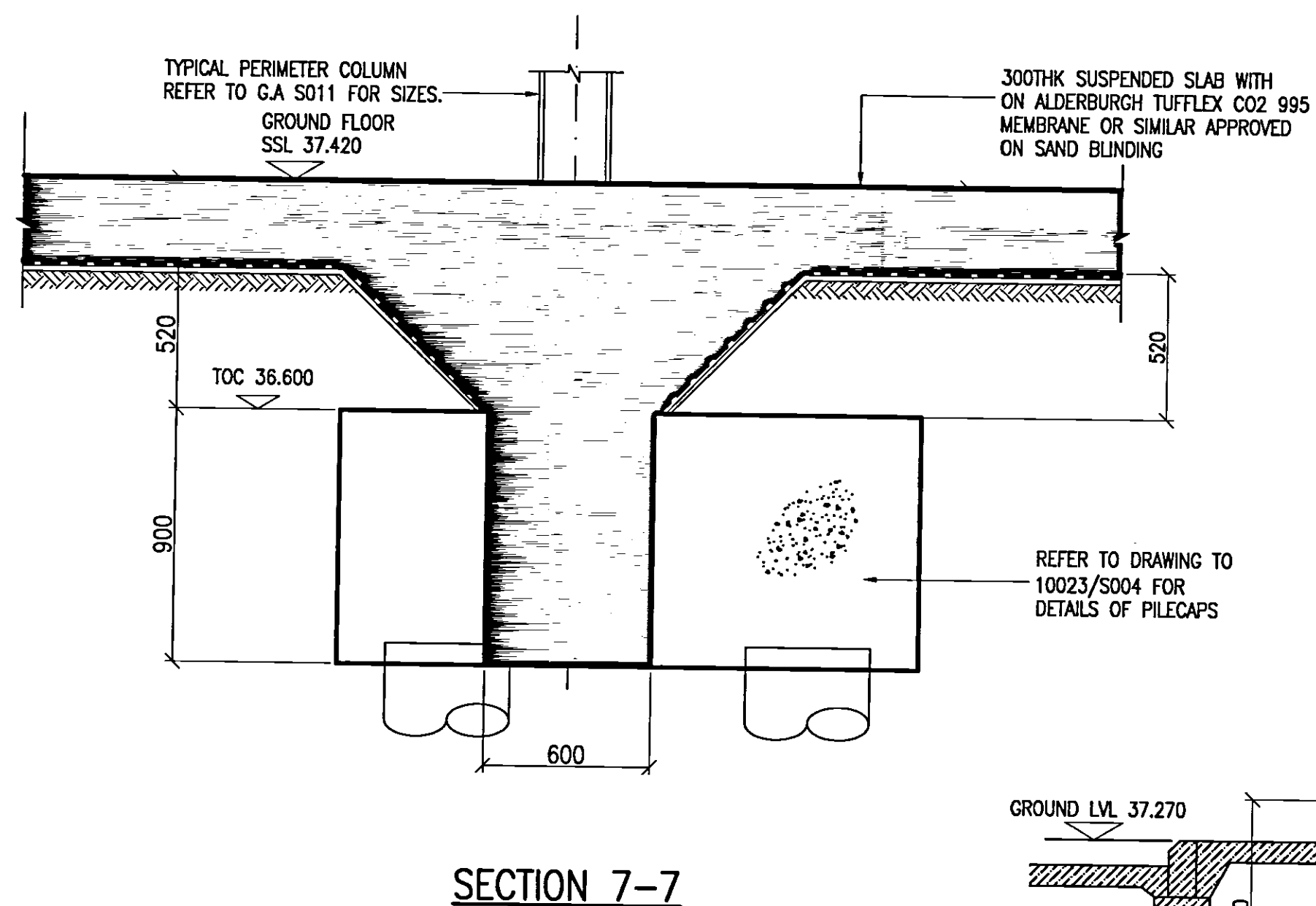
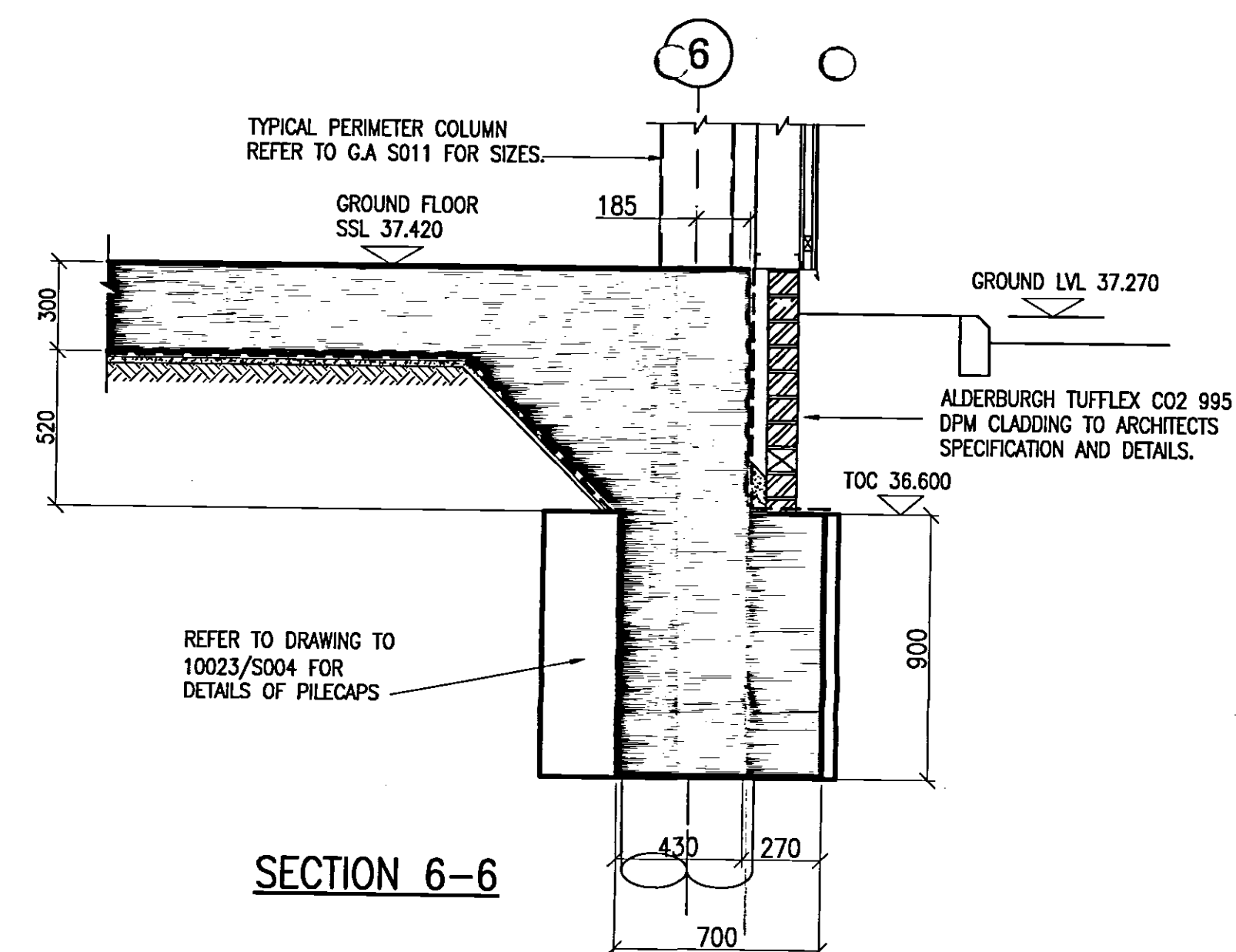
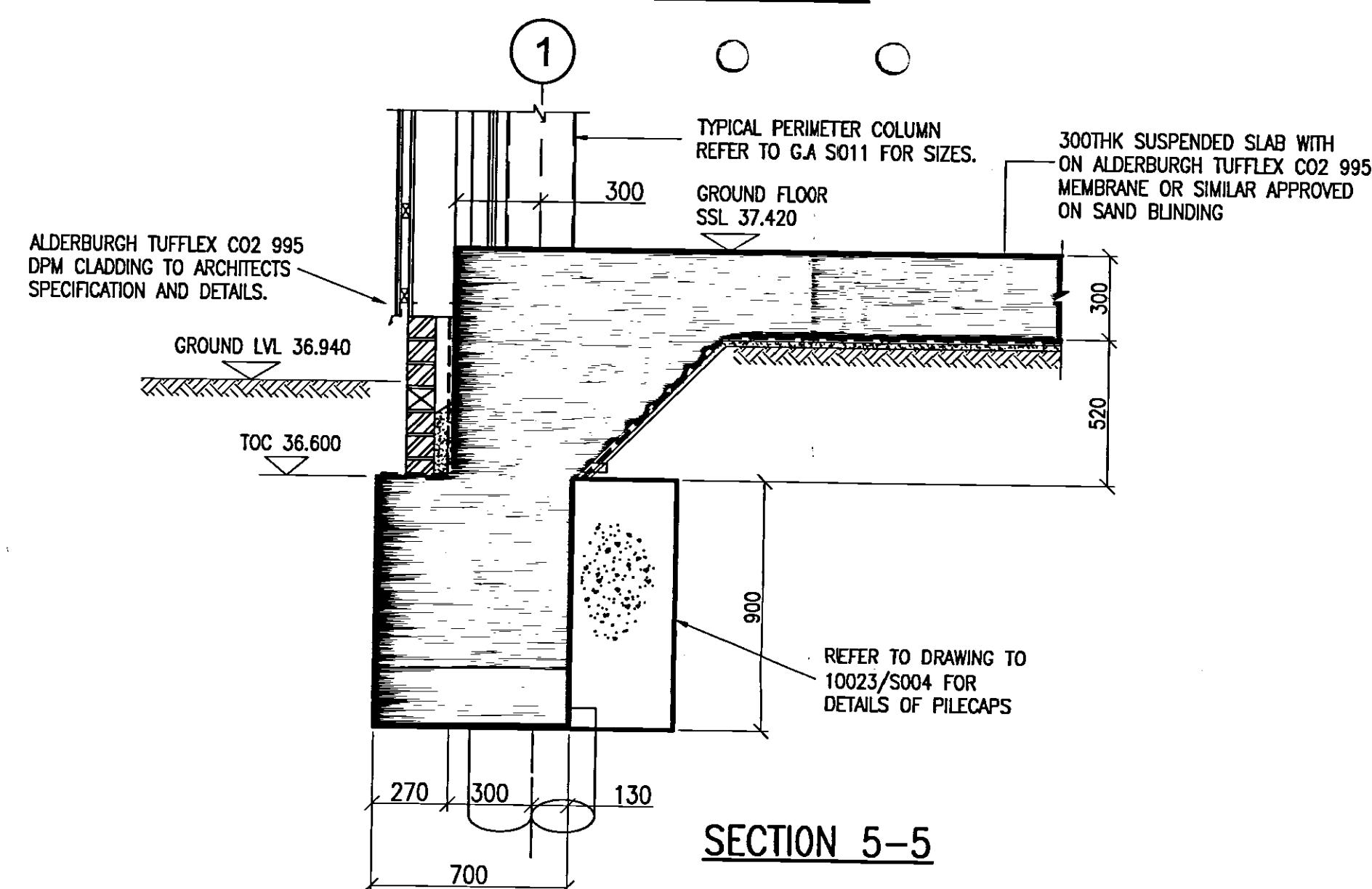
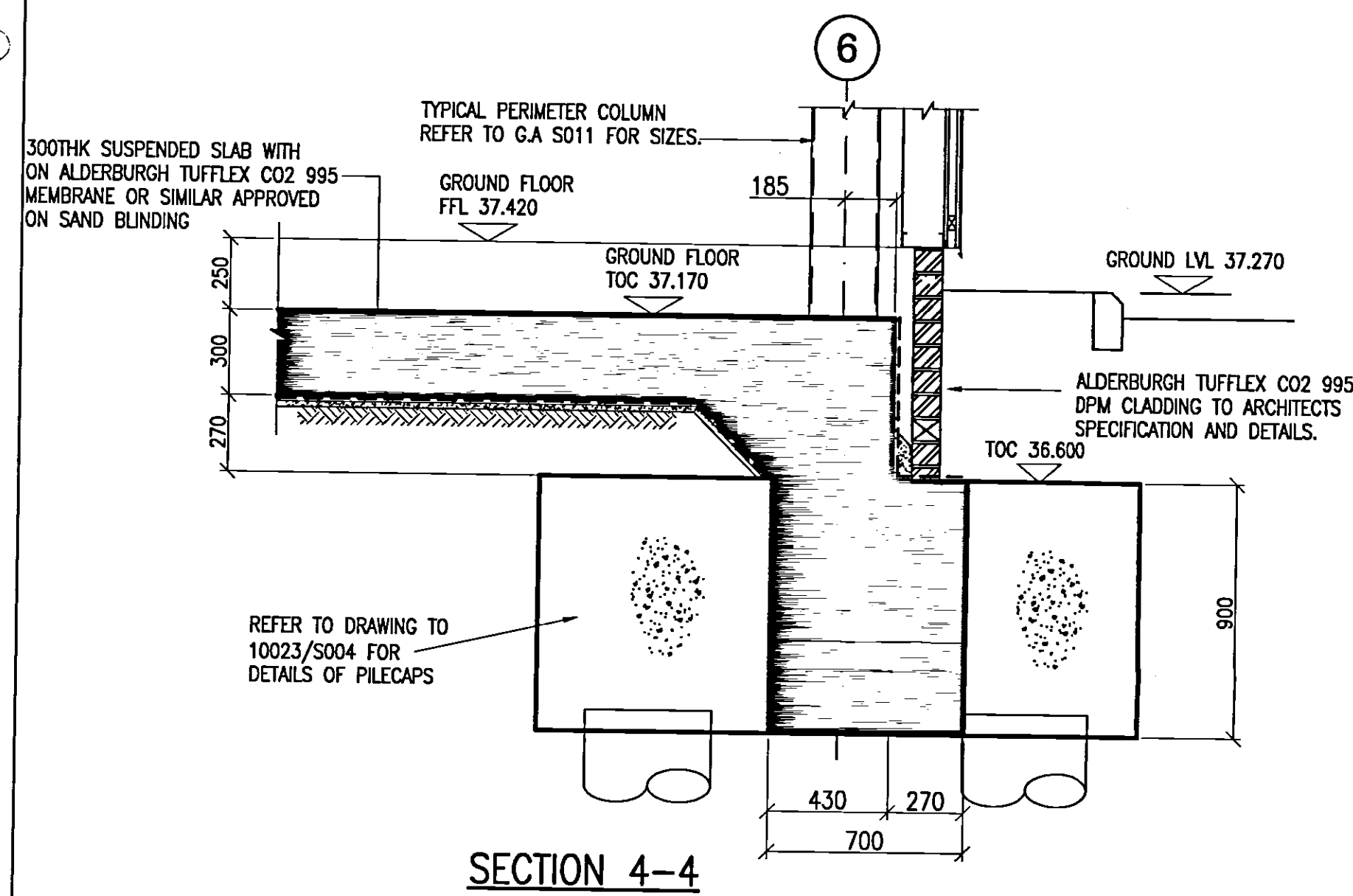
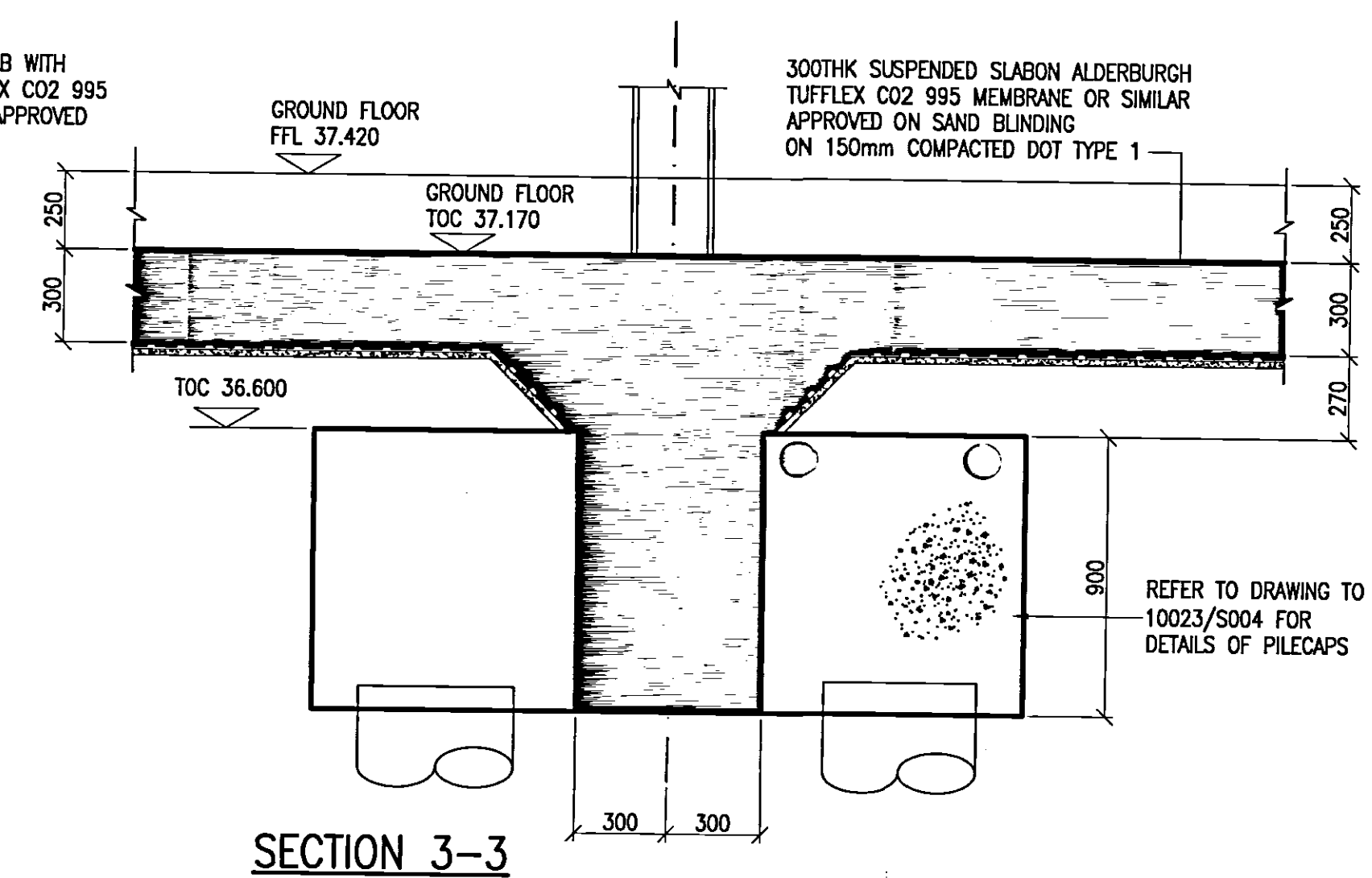
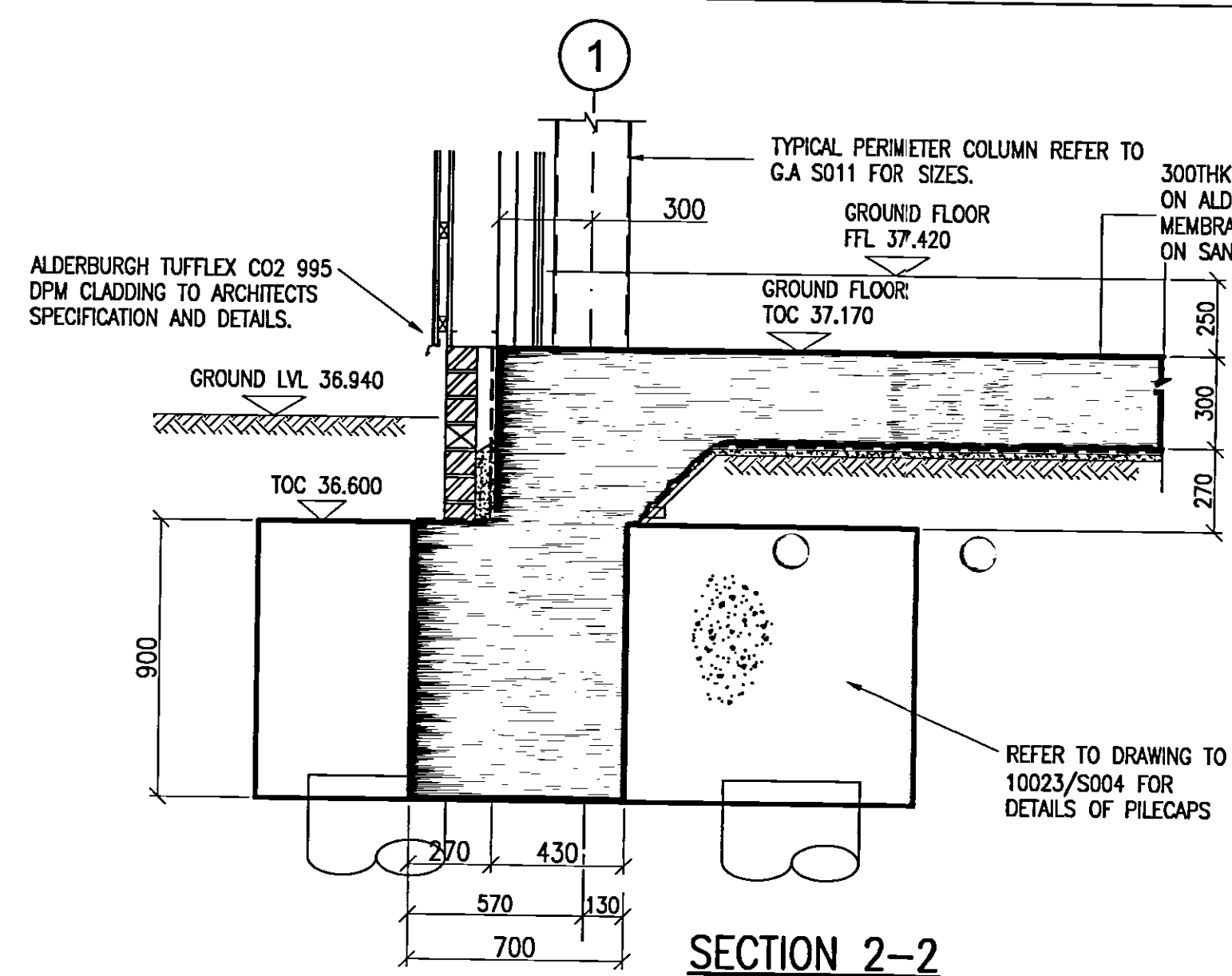
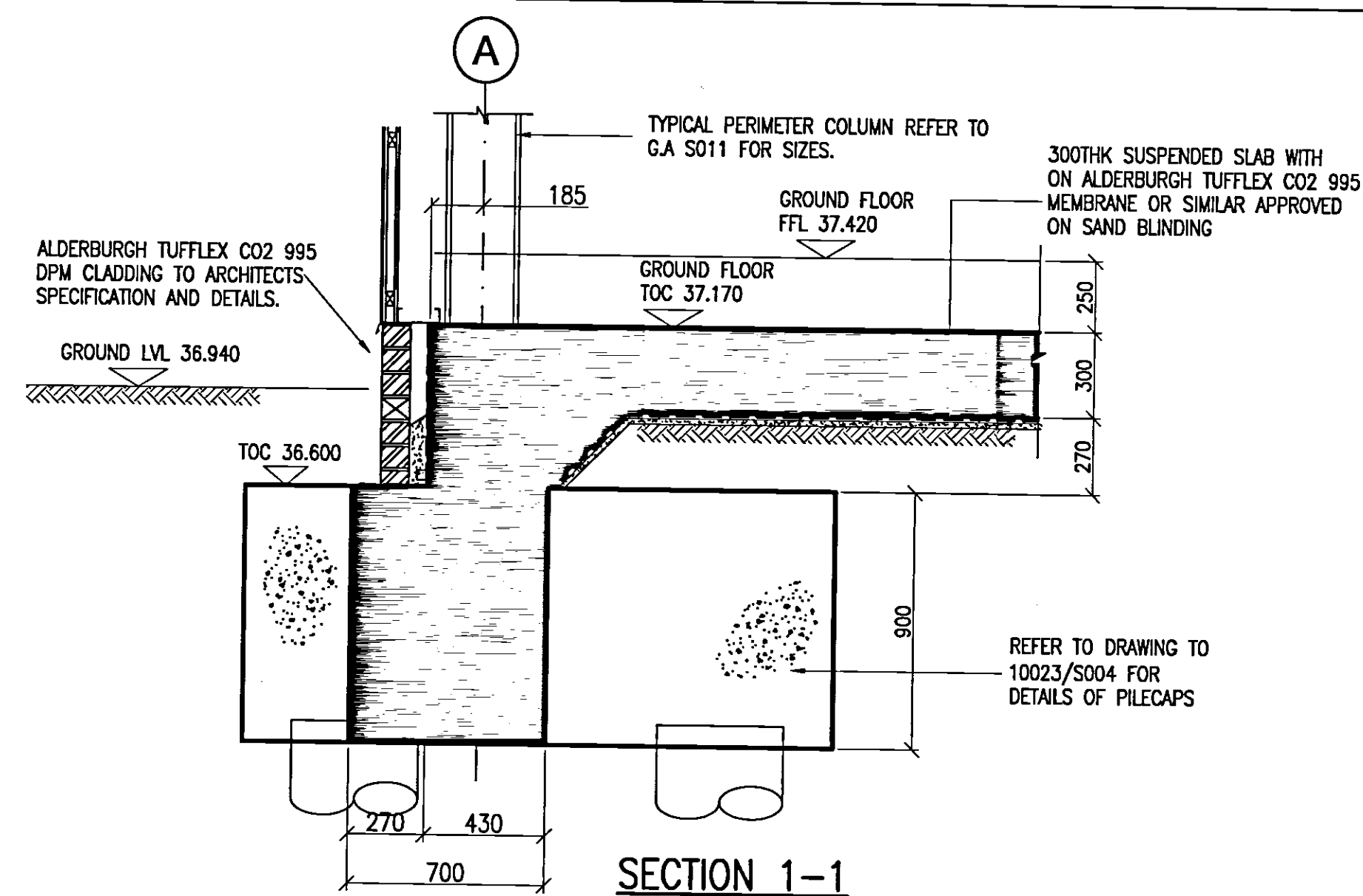
Scale	Job No.
Scale: 0/1 1-100	010023
Drawn by: LSIMONS	Drawing No. S007
Checked by: A.M.	Rev 02
Date: JULY 2006	

NOTE:
DETAIL TO SPECIALIST CONTRACTOR DESIGN AND TO INCORPORATE INTO ARCHITECT DETAIL. ALLOWANCE TO BE MADE FOR STANCHION AND SLAB PENETRATION CLOAKS.



SECTION B-B

Scales QA1 1-20 Drawn by LSIMONS Checked by AJM Date AUGUST 2006	Job No. 010023 Drawing No. S006 Rev 02
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Notes

REFER TO S001 & S002 FOR CONCRETE NOTES

03 AS BUILT	17.07.07	RC	A.M
02 SECTION 10-10 REVISED	26.09.06	AJ	A.M
01 DPM NOTE SPECIFIED	29.08.06	IS	A.M
00 ISSUED FOR CONSTRUCTION	20.07.06	IS	A.M
Rev Description	Date	Drn	C'd'd

AS BUILT

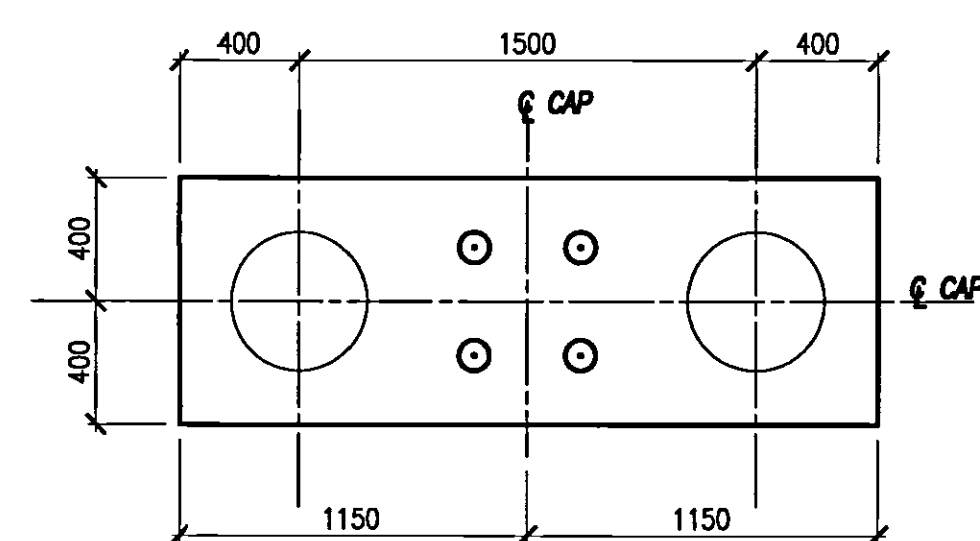
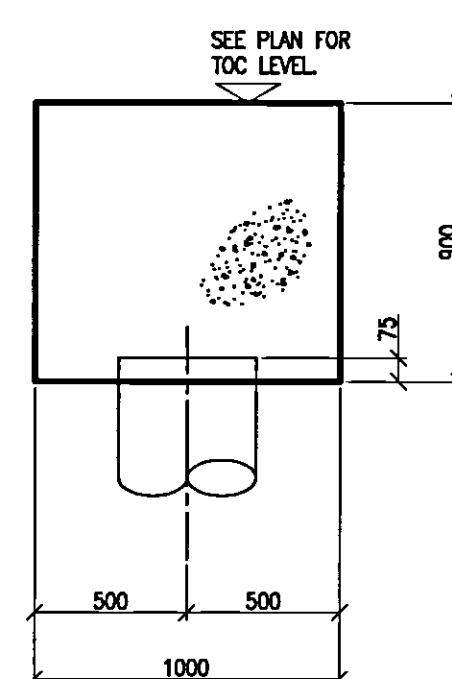
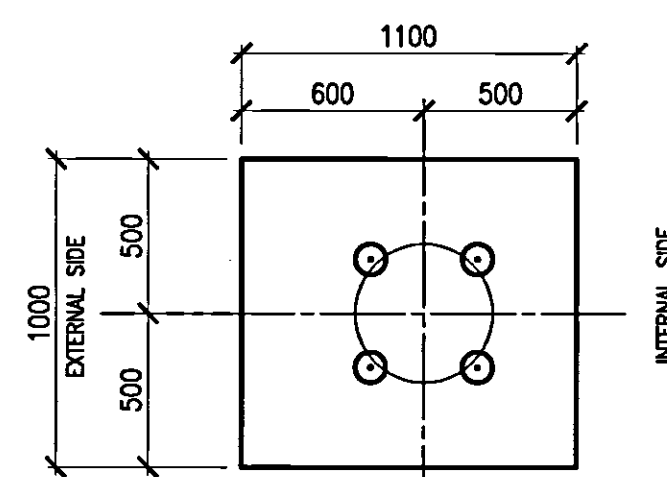
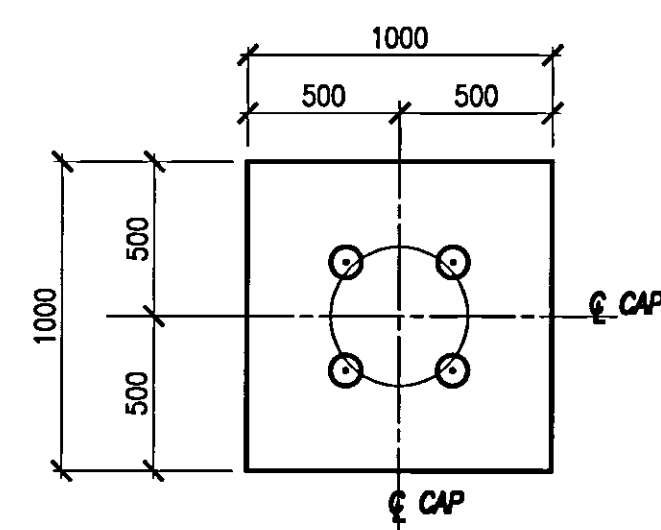
Status of drawing	Date	By	Checked by	Reviewed by	Approved by
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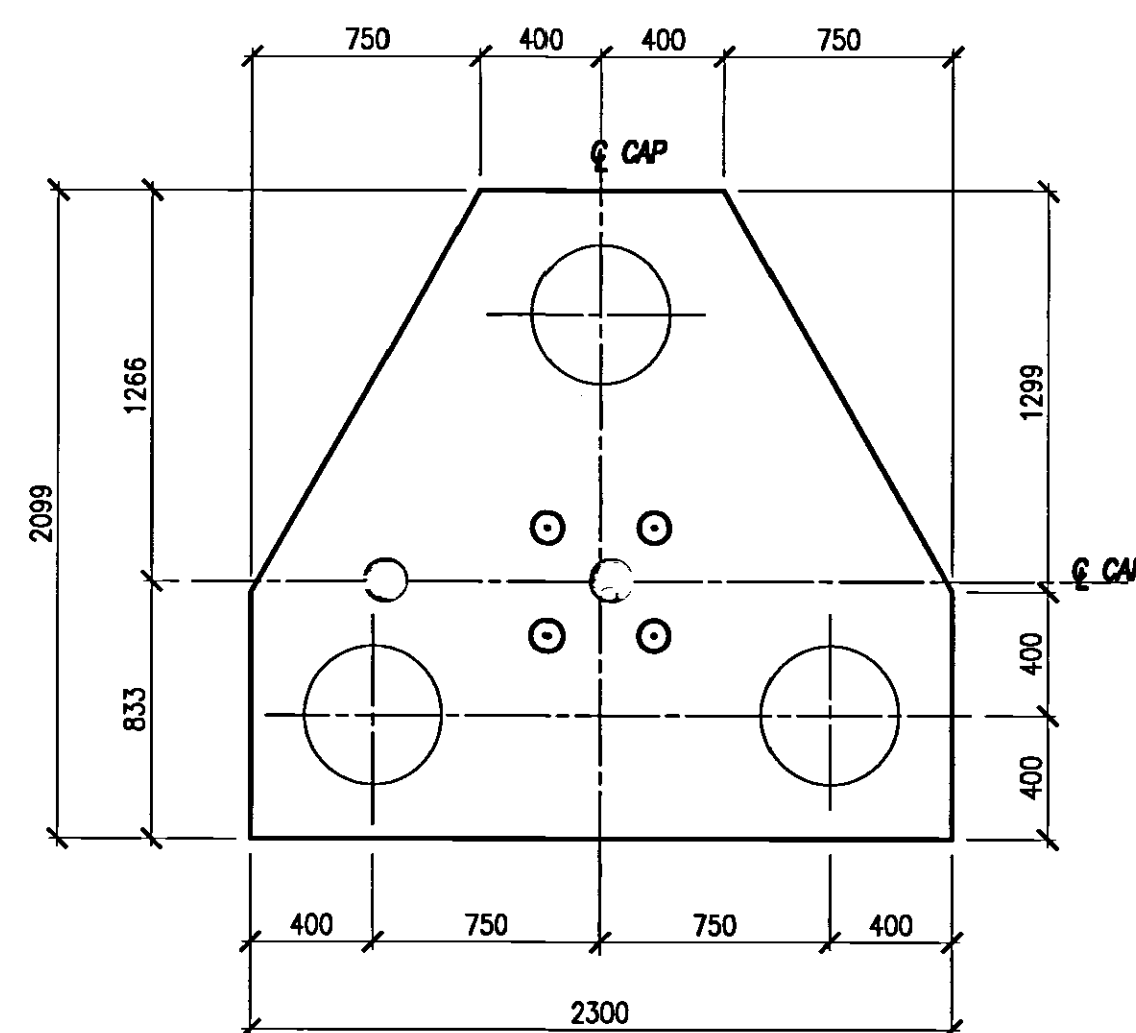
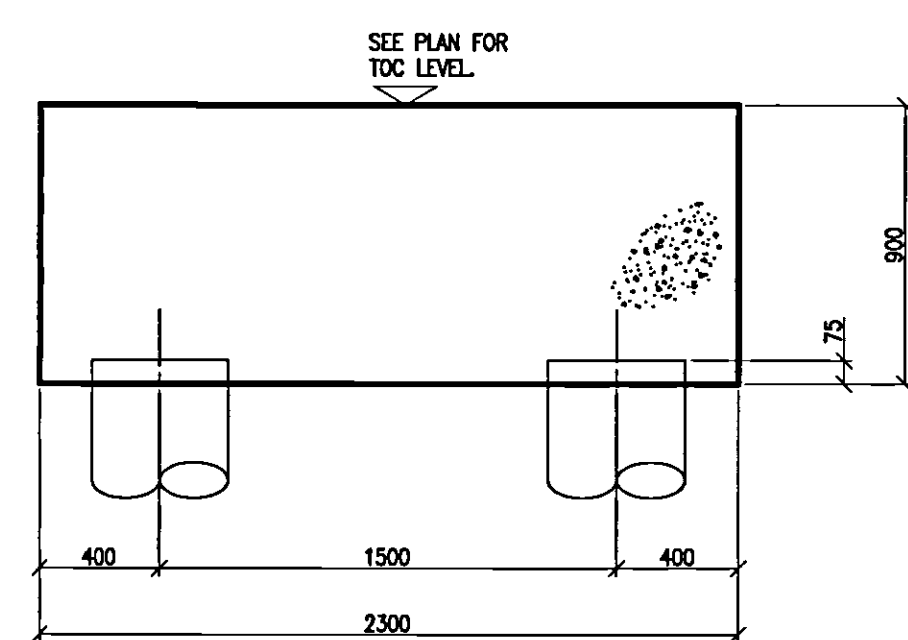
Buro Happold
Consulting Engineers

Architect **UNIVERSITY OF SALFORD**
Project **NEW LAW FACULTY**
GROUND LEVEL
SECTIONS & DETAILS

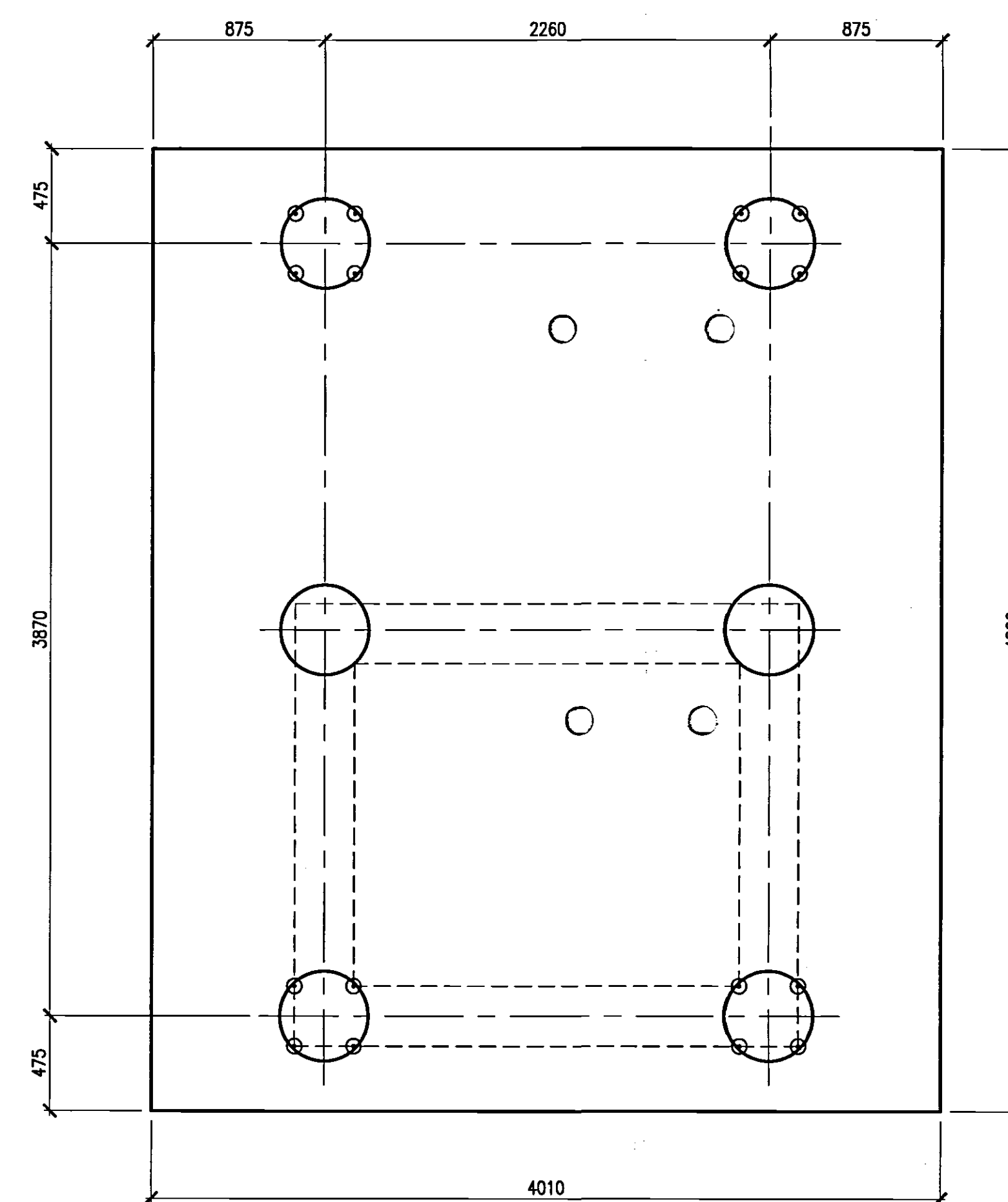
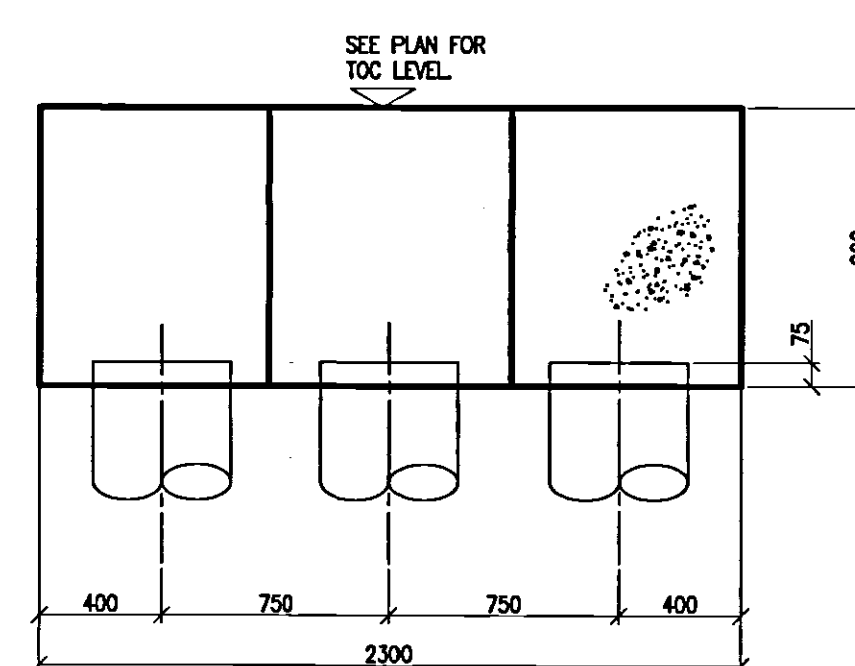
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Drawn by I.SIMONS	
Checked by A.M	Drawing No. S005
Date JULY 2006	Rev 03



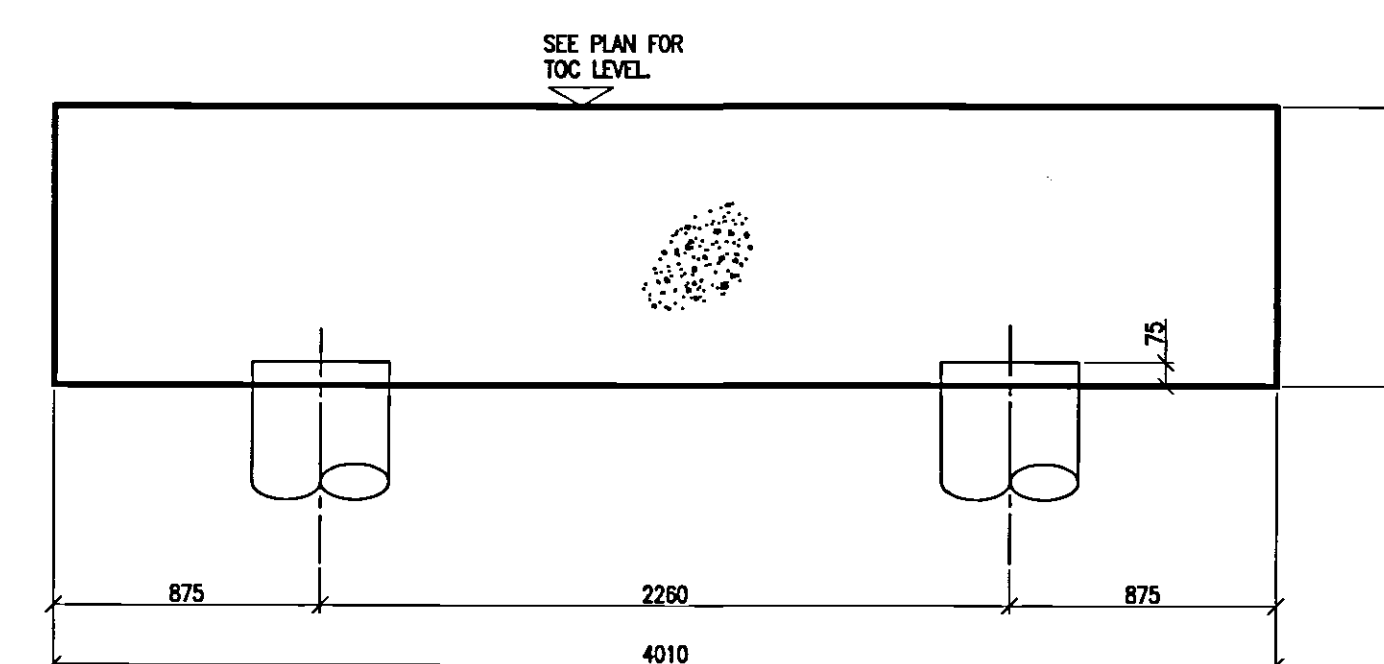
PILE TYPE P2



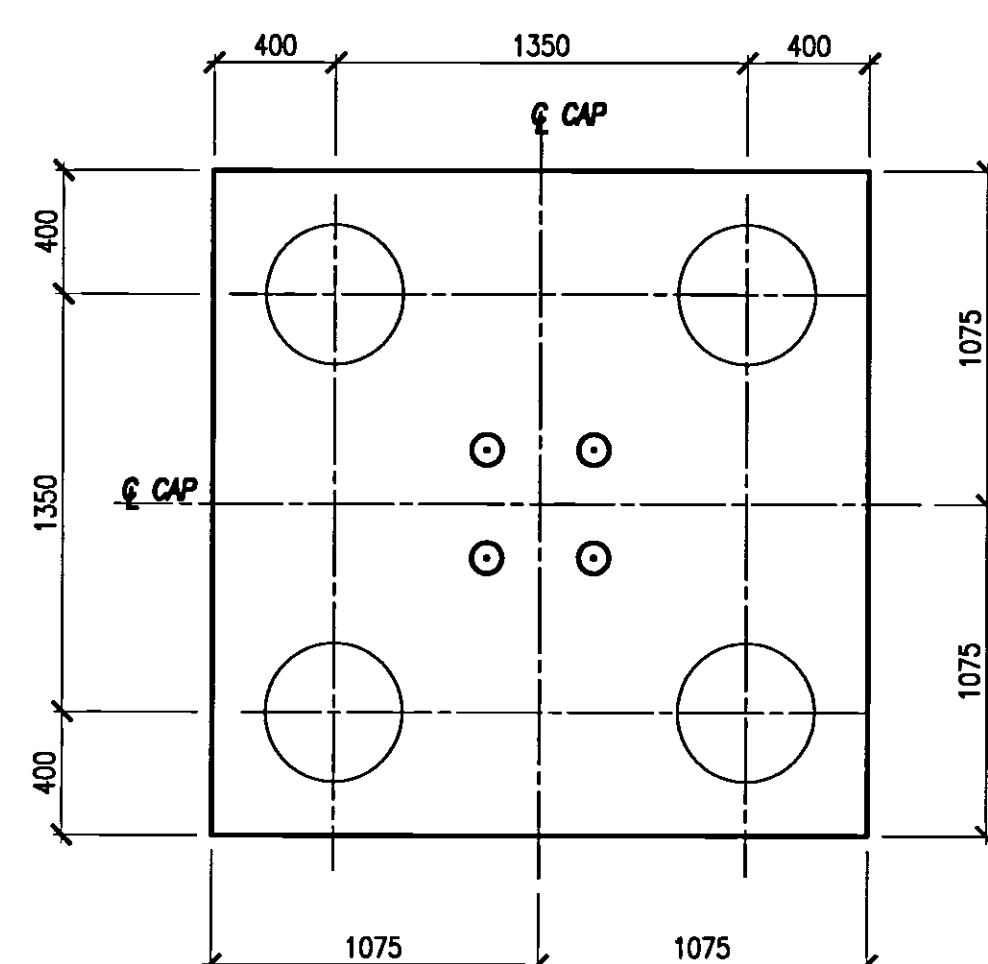
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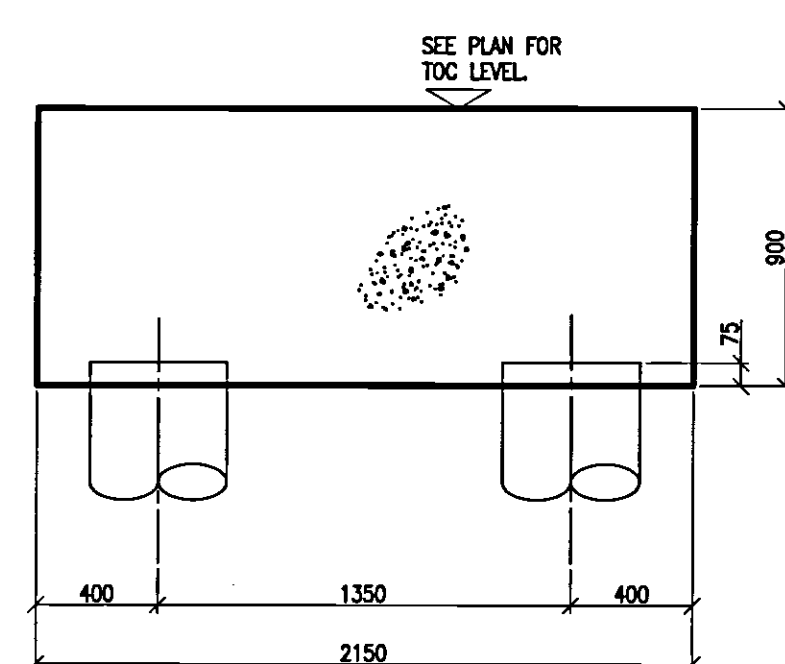
LIFT PILECAP



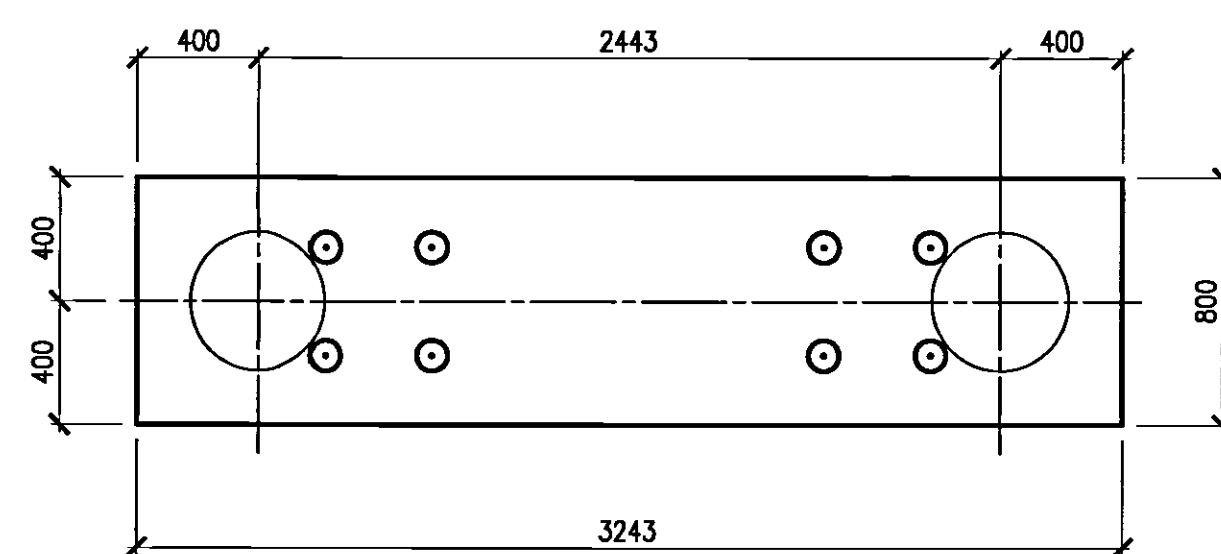
ELEVATION ON LIFT PILECAP



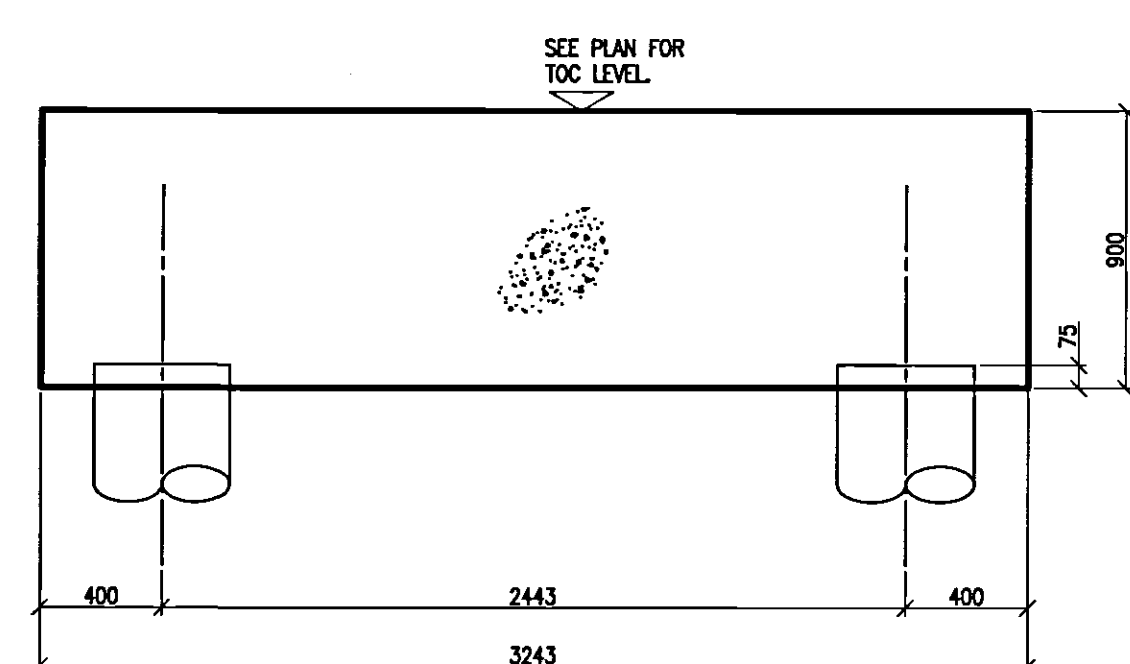
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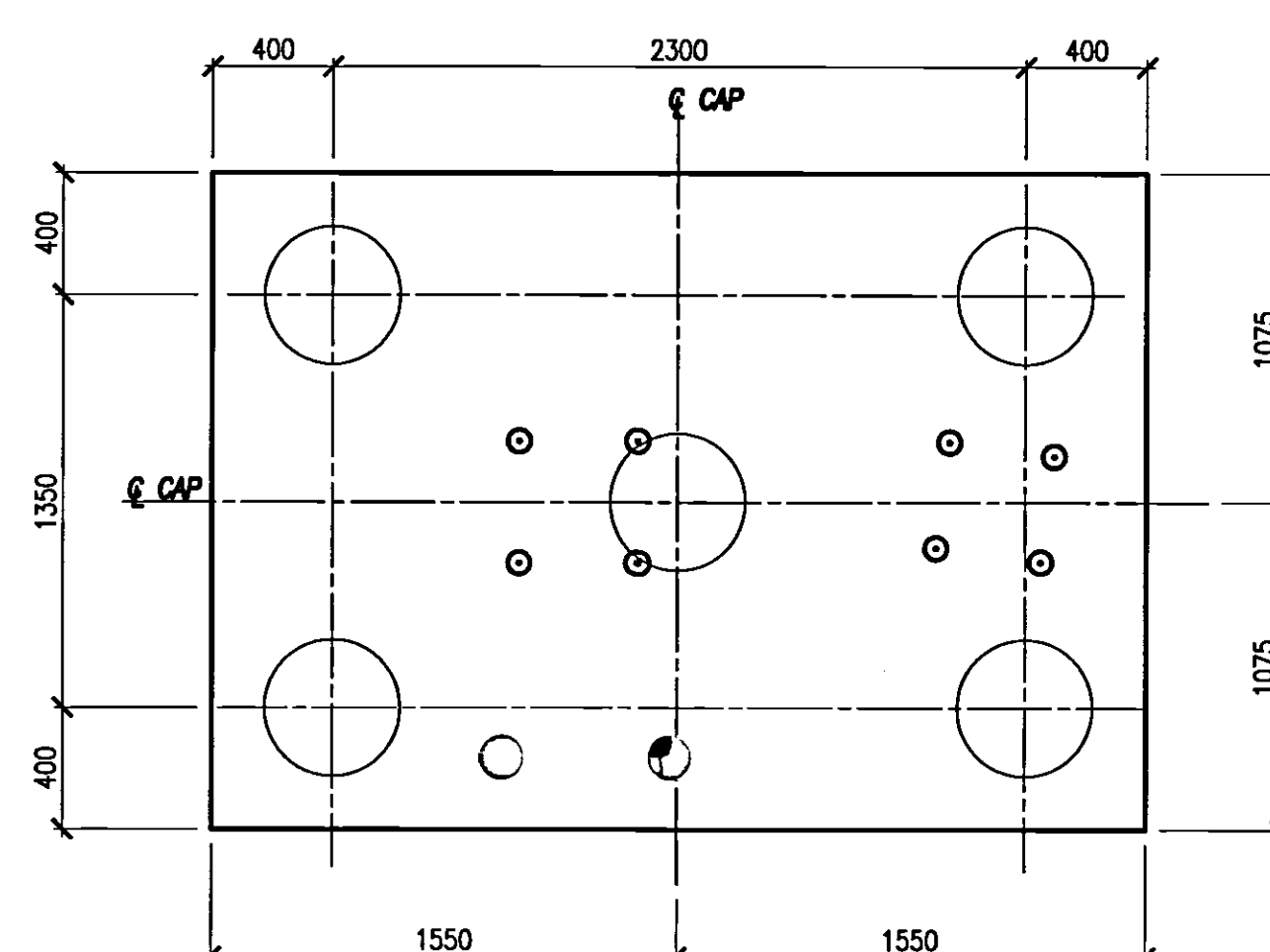
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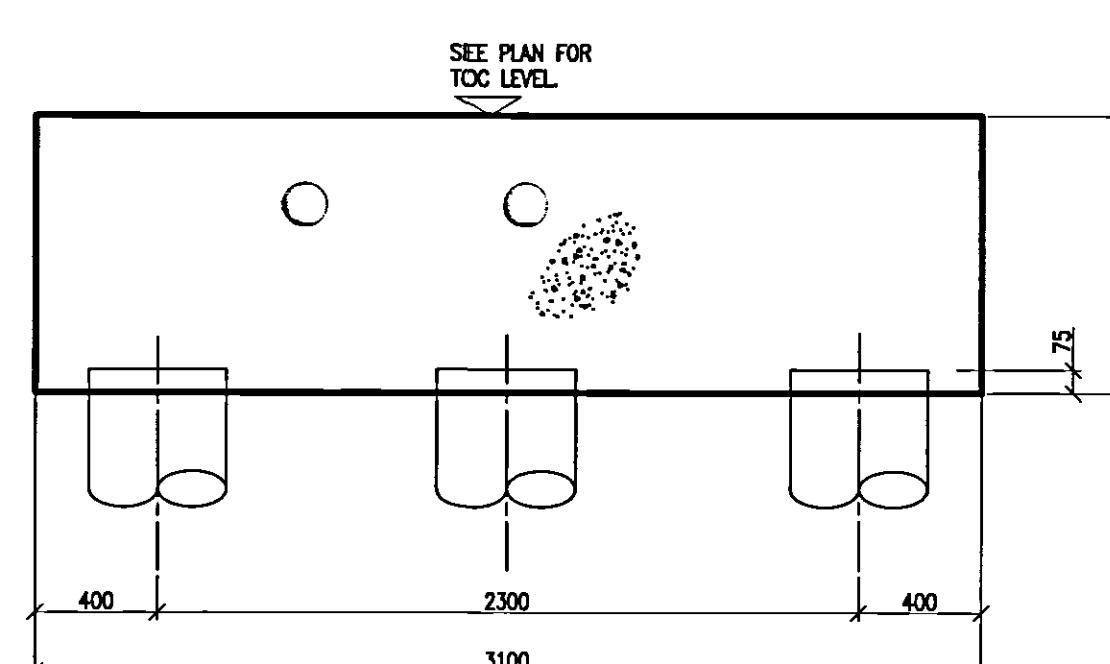
PILE TYPE P5



ELEVATION P5



PILE TYPE P6



ELEVATION ON P6

NOTE
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FOR H.D BOLT SET OUT

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01 AS BUILT	17.07.07	RC	A.M
00 ISSUED FOR CONSTRUCTION	20.07.06	IS	A.M
Row Description	Date	Drn	Ch'd

AS BUILT

Status of drawing

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Architect **UNIVERSITY OF SALFORD**
Project **NEW LAW FACULTY**
PILCAP DETAILS
SECTIONS & DETAILS

Scales QA1 1-25
Drawn by LSIMONS
Checked by A.M
Date JULY 2006

Job No.	010023
Drawing No.	S004
Rev	01

Drawing No. S004

Rev 0