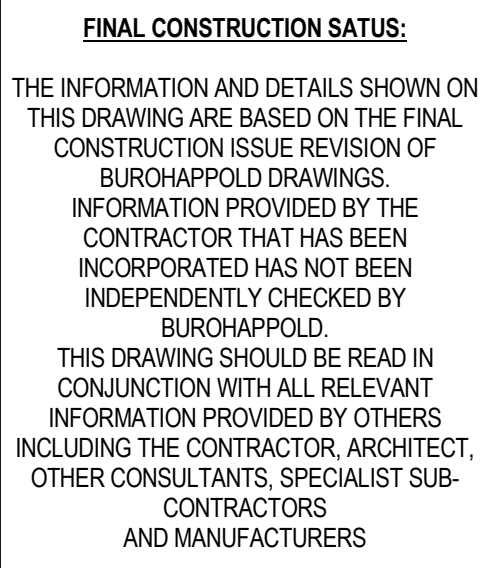




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CONSTRUCTION

MAINTENANCE/CLEANING/OPERATION

DECOMMISSIONING/DEMOLITION

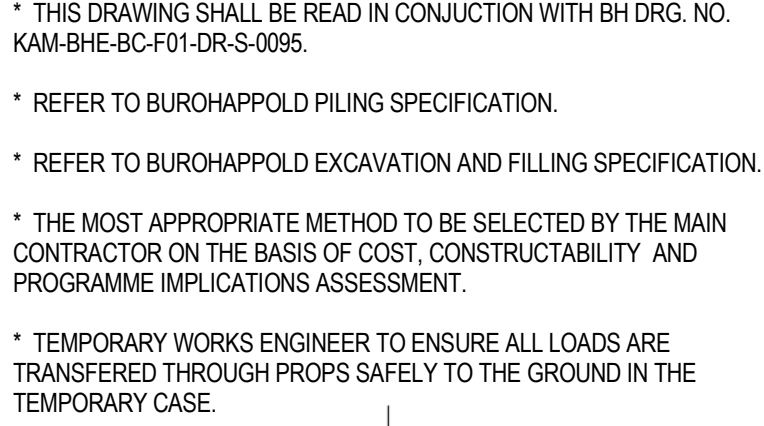
Notes	
KEY:	
 SMH	THIS DENOTES PROPOSED LOCATION OF SURFACE WATER MANHOLE
 WMH	THIS DENOTES PROPOSED LOCATION OF WASTE WATER MANHOLE
NOTE: FOR SETTING OUT AND DETAILS REGARDING THE MANHOLES SHOWN ON THIS DRAWING, REFER TO BURCHAPPOD CIVILS DRAWING SERIES C-0300	

REFERENCE DRAWINGS :

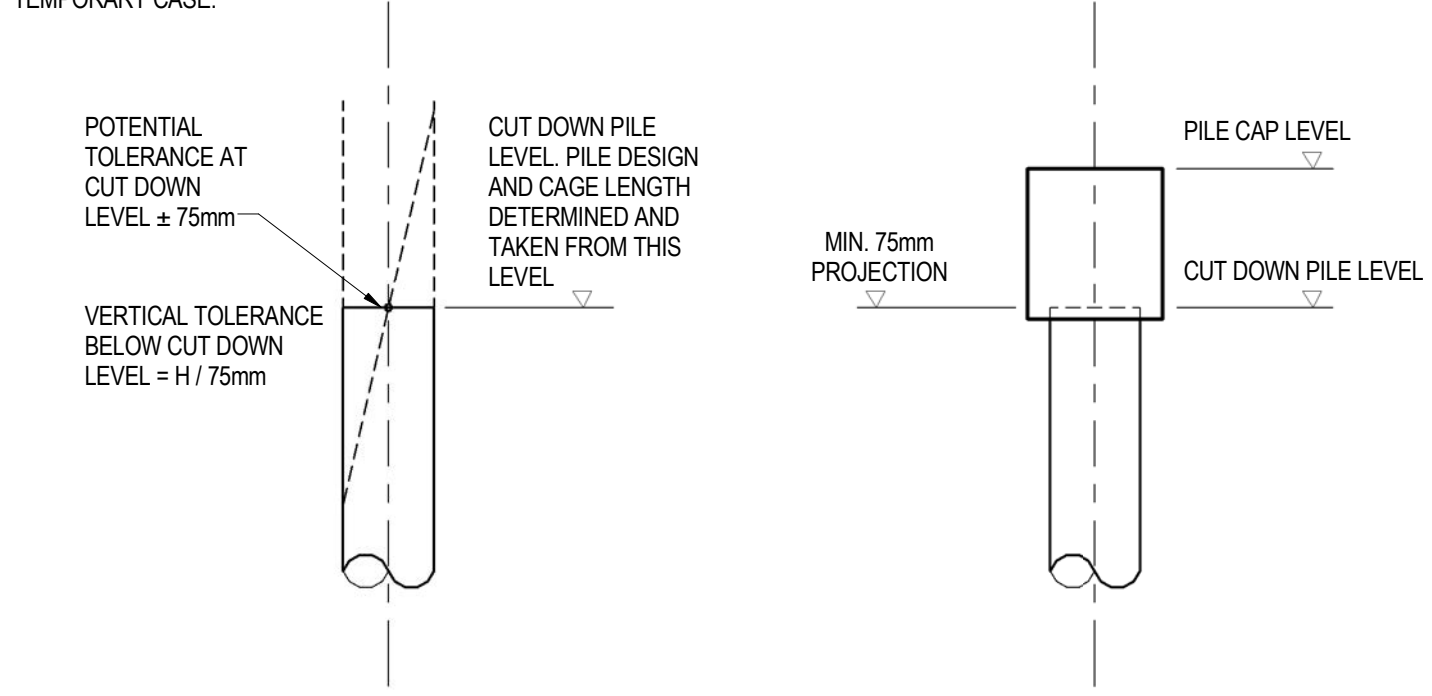
* REFER TO BH DRG. NO. **KAM-BHE-BC-F01-DR-S-0101**
FOR SETTING-OUT INFORMATION TO RC COLUMNS, RC WALLS
AND RC RAFT FOUNDATION SLAB.

* REFER TO BH DRG. NO. **KAM-BHE-BC-ZZ-DR-S-1300**
FOR SETTING-OUT INFORMATION TO MAIN CORE WALL AREA.

C09	FINAL CONSTRUCTION	07/11/2019	AT	MC
C08	Raking columns added in GL-C1	15/11/2017	AT	MC
C07	Sections and elevations added as clouded	09/10/2017	AT	MC
C06	Highlighted C28 Columns Reinstate	22/09/2017	AT	MC
C05	Section 012-012 added	12/09/2017	AT	MC
C04	Manhole's location updated regarding latest drainage layout	08/09/2017	AT	MC
C03	Service's voids added. RC walls for external staircase added. Lift's pit near GL-C8 TOC level revised. Column near GL-C6, GL-C8 added	31/08/2017	AT	MC
C02	1 No. - 300mm THK RC WALL ADDED TO SUIT LEVELS & STEPS IN SLABS AT LVL +43.00m ; LIFT SIZES AMENDED TO SUIT CT DRAWINGS; SETTING-OUT TO BASE OF EXTERNAL STAIRS UPDATED	25/07/2017	RE	MC
C01	ISSUED FOR CONSTRUCTION ; FOUNDATION DETAILS NEAR EXISTING WALL / CANAL UPDATED; FOUNDATION DETAILS BETWEEN GL CA TO CB, BETWEEN GL C1 TO C15 UPDATED; FOUNDATION DETAILS AT MAIN CORE / LIFT AREA UPDATED; RAFT SETTING-OUT UPDATED TO SUIT CT DRAWING	17/07/2017	RE	MC
T01	ADDENDUM TO TENDER STAGE DRAWINGS; UPDATED THE DRAWING NUMBER; UPDATED GRID SETTING-OUT & CALL-OUTS TO MATCH CHAPMAN TAYLOR GRIDS; UPDATED COLUMN SIZES & SETTING-OUT; UPDATED SLAB SETTING-OUT TO SUIT	18/05/2017	RE	MC
Rev	Description	Date	Des	Chk



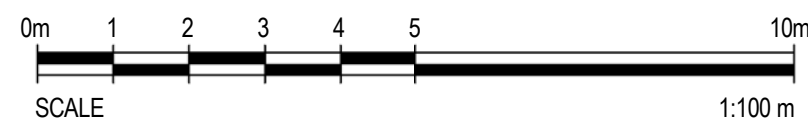
- * THE PILING CONTRACTOR SHALL PROVIDE A FULL METHOD STATEMENT FOR THE WORKS TO BURO HAPPOLD FOR APPROVAL PRIOR TO COMMENCEMENT.
- * PILES SHALL BE UNIFORMLY REINFORCED AROUND CIRCUMFERENCE.
- * POSITION OF EXISTING OBSTRUCTIONS SHOWN IS INDICATIVE. CONFIRMATION OF OBSTRUCTIONS TO BE CONFIRMED BY MAIN CONTRACTOR PRIOR TO COMMENCEMENT OF PILING
- * ALTERNATE PILE LOCATIONS TO BE SUBMITTED TO THE ENGINEER FOR AGREEMENT PRIOR TO CONSTRUCTION.



1 THIS DENOTES EXISTING LEVEL OF HIGHWAYS RETAINING WALL UNKNOWN. IF FILE CAPS ARE UNDER THE LEVEL, TEMPORARY WORKS UNDER PINNING/SHEET PILING IS REQUIRED TO CONSTRUCT PILECAPS. RISK - DESTABILISING EXISTING RETAINING WALL/PAI HIGHWAYS APPLICATION RISK.

2 THIS DENOTES ASSUMED LOCATION OF EXISTING PILED FOUNDATION UNDER EXISTING FRAME TO BE DEMOLISHED. DESIGN ASSUMES 450mm Ø PILES (DEPTH UNKNOWN). PILECAPS & GROUND BEAMS TO BE REMOVED DURING DEMOLITION. FURTHER INVESTIGATION REQUIRED ON-SITE TO DETERMINE ASSUMPTIONS SHOWN

3 THIS DENOTES NEW REINFORCED CONCRETE CANTILEVER RETAINING WALLS ADJACENT TO NEW STAIR ACCESS ON MINSHULL STREET. REFER TO BURHOUGH/ALD LOADING DOCUMENT FOR ALLOWABLE SURCHARGE. RISK - EXCAVATION RISK ADJACENT TO EXISTING CANAL/PARTY WALL.



FINAL CONSTRUCTION

Status of Drawing

BURO HAPPOLD
ENGINEERING

2nd Floor Eastgate, 2nd/2 Castle Street, Manchester, M3 4LZ, UK		Tel: +44 (0)161 233 5000 Fax: +44 (0)870 787 4143 Email: 0345692@burchappold.com Web: www.burchappold.com	
Architect Project Drg Title	CHAPMAN TAYLOR KAMPUS BLOCK C FOUNDATION GENERAL ARRANGEMENT		
Job No. 034592	Scales: @A1 As indicated		
Drawing No. KAM-BHE-BC-FD1-DR-S-0100			Revision C09



RAFT THICKNESS

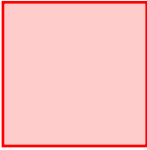
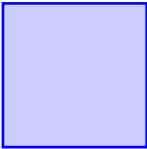
	RAFT THICKNESS	BASIC MESH
	600THK	B1, B2- H20 - 200 T1,T2- H16 - 200
	1200THK	B1, B2- H25 - 200 T1,T2- H25 - 200

TABLE OF LAP LENGTHS

		Bond condition	Reinforcement in tension, bar diameter, ϕ (mm)								Reinforcement in compression
			8	10	12	16	20	25	32	40	
Concrete class C32/40											
Anchorage length, l_{bd}	Straight bars only	Good	200	270	350	510	660	860	1100	1490	34 ϕ
		Poor	280	380	500	720	950	1230	1570	2130	49 ϕ
	Other bars	Good	270	350	420	550	690	860	1100	1490	34 ϕ
		Poor	390	490	590	790	980	1230	1570	2130	49 ϕ
Lap length, l_0	50% lapped in one location ($\alpha_6 = 1.4$)	Good	270	380	490	710	930	1200	1540	2090	48 ϕ
		Poor	390	540	690	1010	1320	1720	2200	2980	69 ϕ
	100% lapped in one location ($\alpha_6 = 1.5$)	Good	290	400	520	760	990	1290	1650	2240	51 ϕ
		Poor	420	570	740	1080	1420	1840	2350	3200	73 ϕ

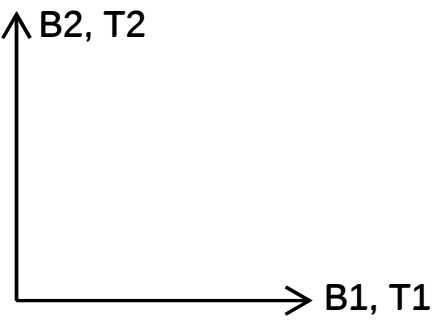
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MAINTENANCE/CLEANING/OPERATION

DECOMMISSIONING/DEMOLITION

Notes
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM.
ALL DETAILING TO BE IN ACCORDANCE WITH BS EN 1992
REFERENCE TO IStructE STANDARD METHOD OF DETAILING
STRUCTURAL CONCRETE 3rd ed 2006
CONCRETE COVER:
CAST ON BLINDING: 50mm
ALL CONCRETE COVER VALUES STATE ABOVE INCLUDE AN ALLOWANCE OF 10mm FOR $\Delta\alpha_{con}$
CONCRETE GRADE
C32/40
FOR CONCRETE SPECIFICATION REFER TO KAM-BHE-XX-XX-SP-S-0002
SIDE BARS TO BS EN 1992-1-1 CLAUSE 7.3.3 FOR CONCRETE GREATER THAN 1000mm IN DEPTH
REINFORCEMENT TO CONTINUE ANCHORAGE LENGTH PAST HATCHED ZONE, WHERE TWO HATCHED ZONES ARE COINCIDENT A LAP LENGTH OF THE SMALLER DIAMETER BAR MAYBE USED.
REFER TO TABLE BELOW FOR LAP LENGTHS, MORE SPECIFIC VALUES CAN BE PROVEN BY CALCULATION



Reinforcement direction U.N.O



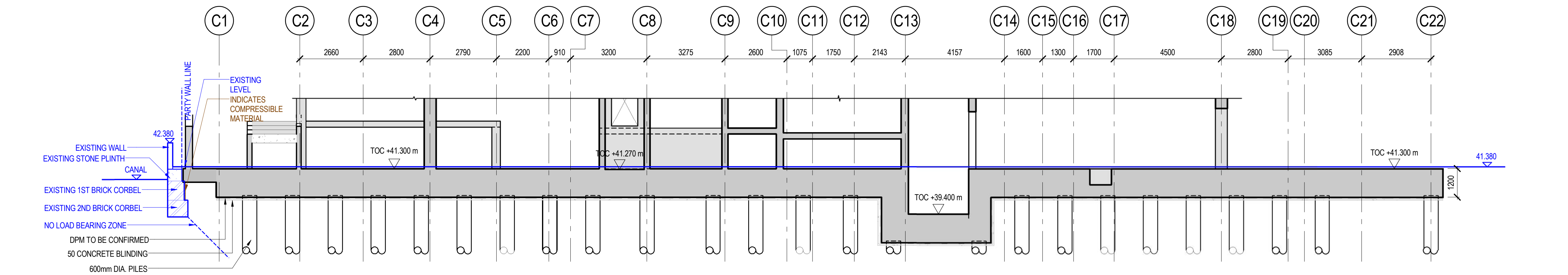
CO1	FIRST ISSUE FOR CONSTRUCTION	14.08.17	NK	MC
Rev	Status	Description	Date	CH's

CONSTRUCTION

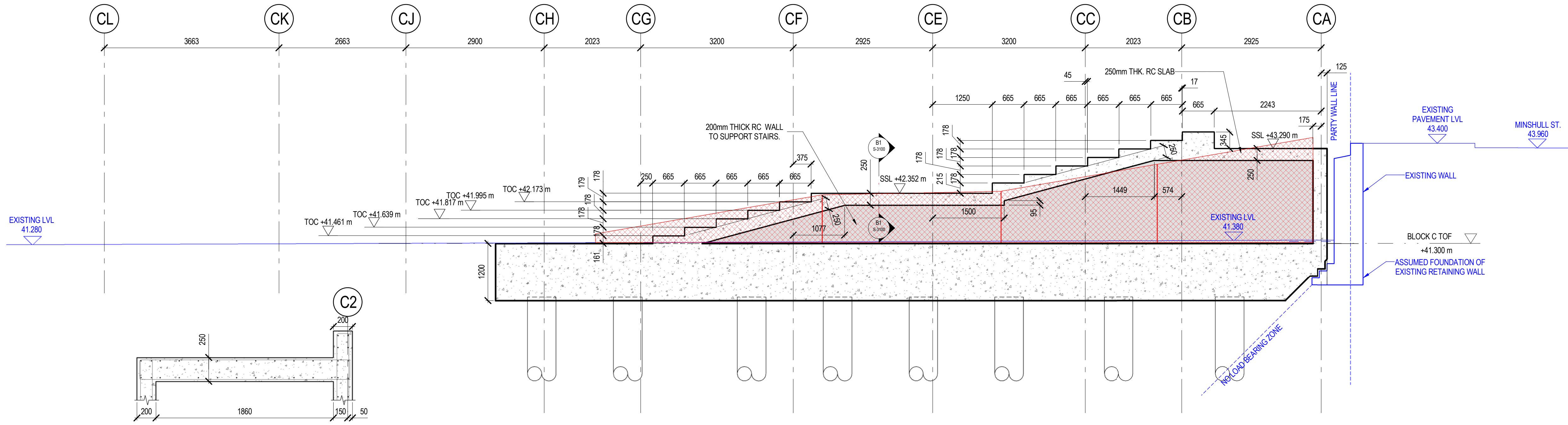
Status of Drawing

**BUROHAPPOLD
ENGINEERING**

2nd Floor Eastgate, 2 Castle Street, Manchester, M3 4LZ, UK		Tel: +44 (0)161 233 5000 Fax: +44 (0)161 787 4143 Email: 034592@burohappold.com Web: www.burohappold.com	
Architect CHAPMAN TAYLOR		Project KAMPUS	
Project BLOCK C FOUNDATION		General Mat RC INTENT	
Job No. 034592		Scales@A1 As indicated	
Drawing No. KAM-BHE-BC-F01-DR-S-R9000-02		Revision C01	

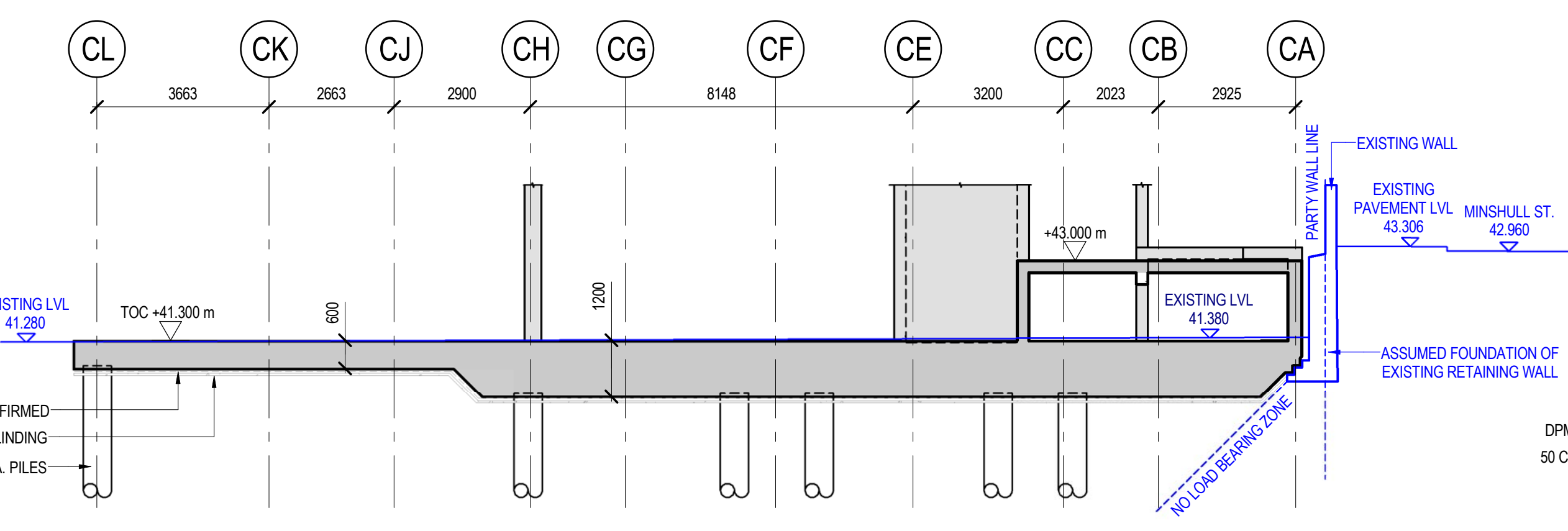


A-A SECTION A-A - BLOCK C FOUNDATION
SCALE 1 : 100

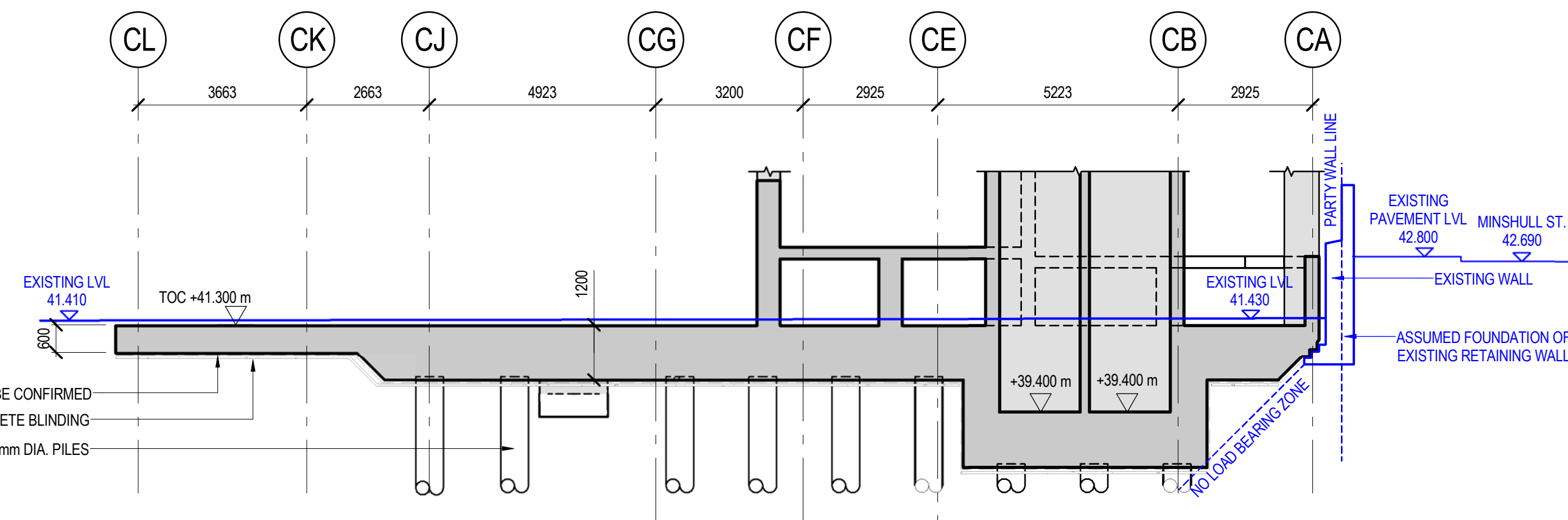


B-B SECTION B-B - BLOCK C FOUNDATION
SCALE 1 : 50

B1 Section B1-B1
SCALE 1 : 25



C-C SECTION C-C - BLOCK C FOUNDATION
SCALE 1 : 100



D-D SECTION D-D - BLOCK C FOUNDATION
SCALE 1 : 100

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C05	FINAL CONSTRUCTION	07/11/2019	AT	MC
C04	EXTERNAL STAIRCASE REVISED	29/11/2017	AT	MC
C03	AMENDMENTS AS CLOUDED	26/10/2017	AT	MC
C02	AMENDMENTS AS CLOUDED	31/08/2017	AT	MC
C01	ISSUED FOR CONSTRUCTION - FOUNDATION DETAILS NEAR EXISTING WALL / CANAL UPDATED; FOUNDATION DETAILS BETWEEN GL CA TO CB, BETWEEN GL C1 TO C13 UPDATED; FOUNDATION DETAILS AT MAIN CORE / LIFT AREA UPDATED; RAFT SETTING-OUT UPDATED TO SUIT CT DRAWING	17/07/2017	RE	MC
T02	REVISED AS CLOUDED, DETAILS TO EXISTING RETAINING WALL ALONG THE CANAL UPDATED AS PER ACTUAL SITE SURVEY, RAFT FOUNDATION AMENDED TO SUIT ACTUAL SITE CONDITIONS	15/06/2017	RE	MC
T01	ADDENDUM TO TENDER STAGE DRAWINGS; UPDATED THE DRAWING NUMBER	18/05/2017	RE	MC
Rev	Description	Date	Dm	C/D

FINAL CONSTRUCTION

Status of Drawing

BUROHAPPOLD ENGINEERING

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Tel: +44 (0)161 233 5000
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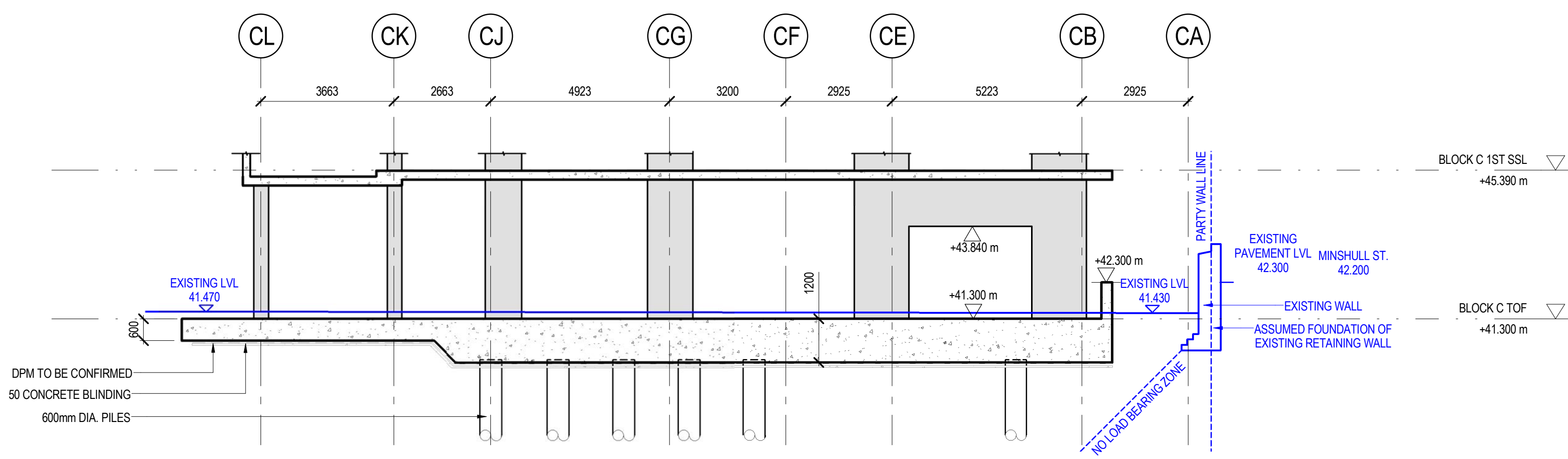
Architect **CHAPMAN TAYLOR**

Project **KAMPUS**

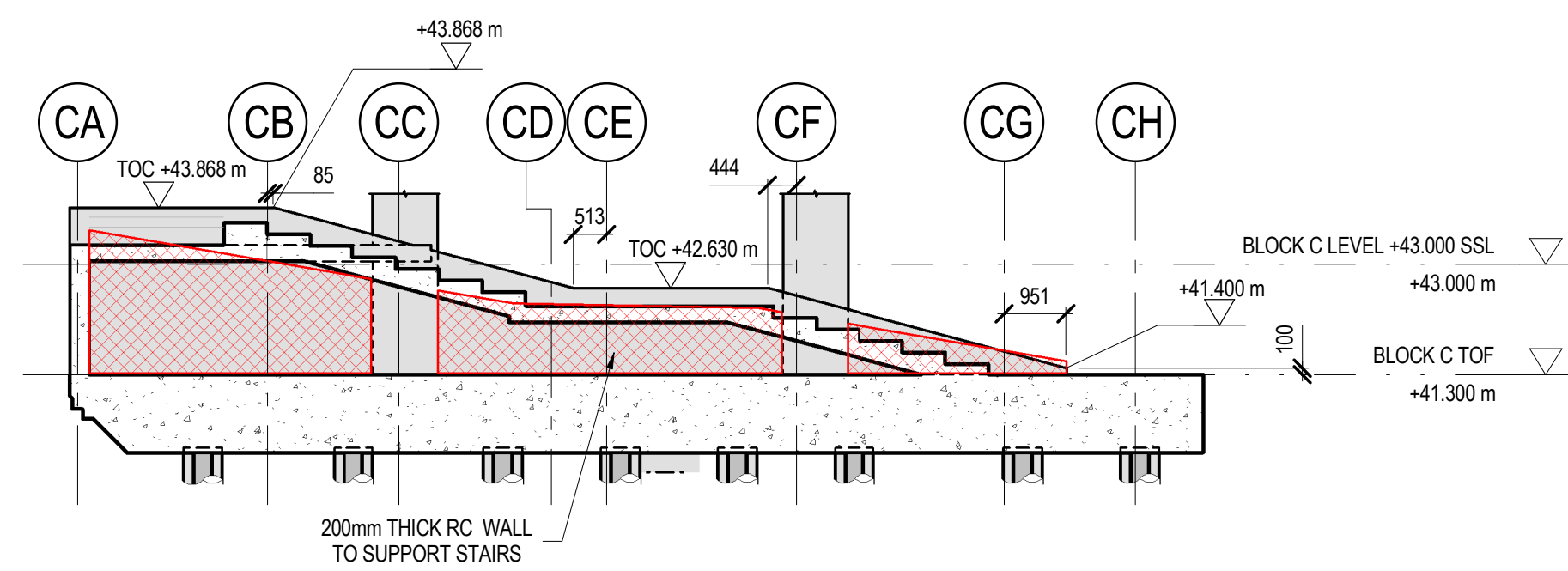
Org Title **BLOCK C FOUNDATION SECTIONS (SHEET 1)**

Job No. **034592** Scales@A1 **As indicated**

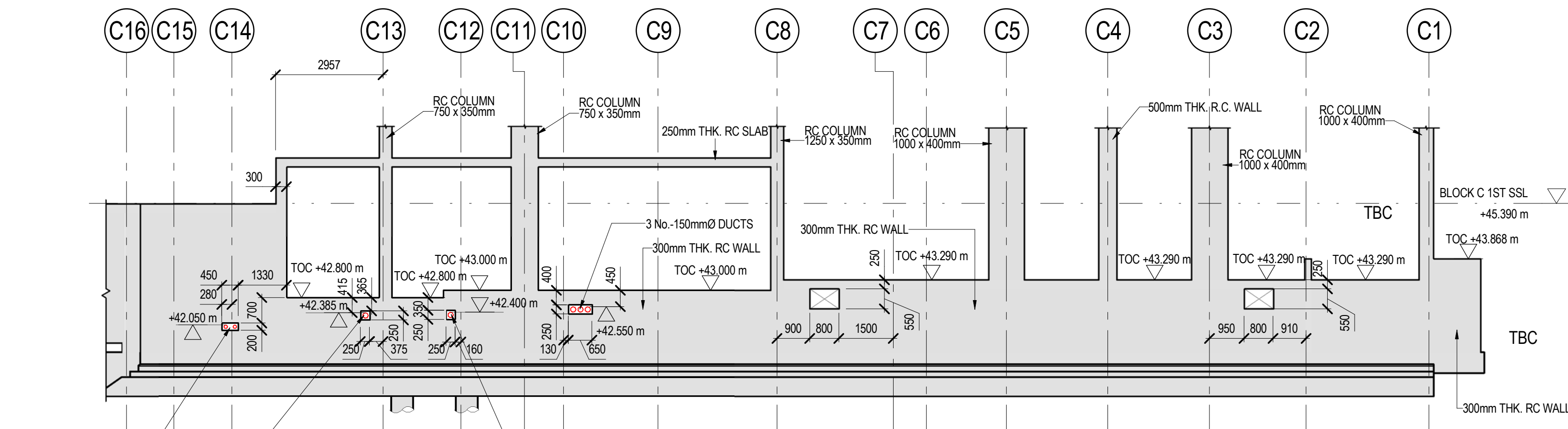
Drawing No. **KAM-BHE-BC-ZZ-DR-S-3100** Revision **C05**



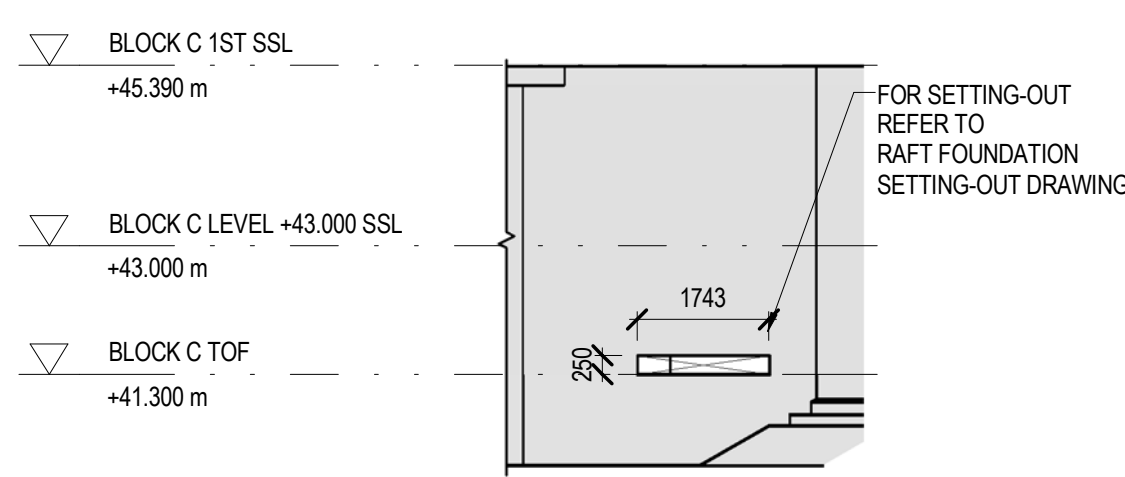
E-E SECTION E-E - BLOCK C FOUNDATION (THRO' GRIDLINE C18)
SCALE 1: 100



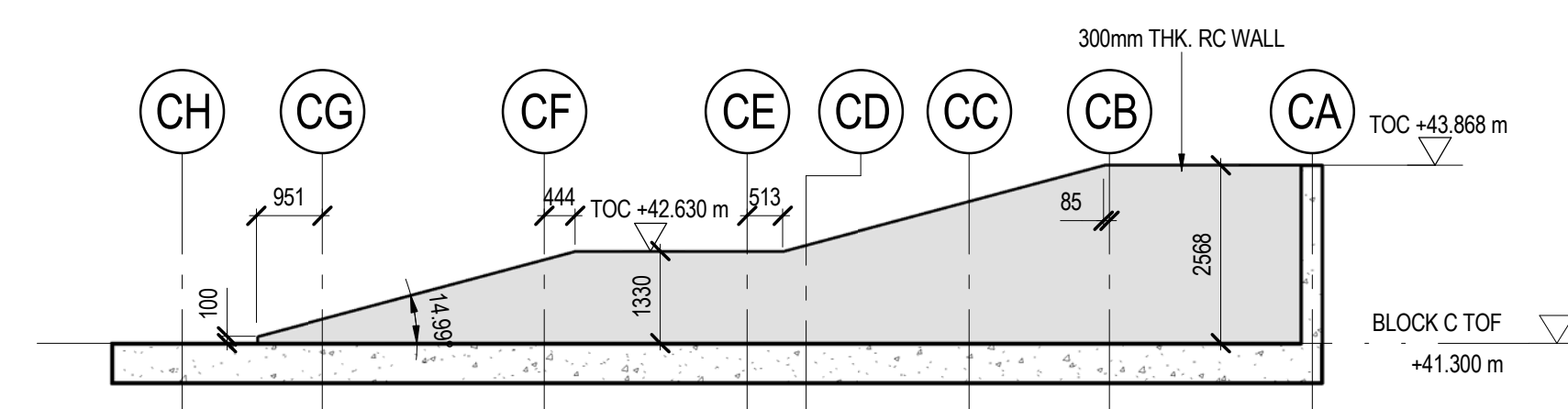
F-F SECTION F-F - BLOCK C FOUNDATION
SCALE 1: 100



G-G ELEVATION G-G
SCALE 1: 100

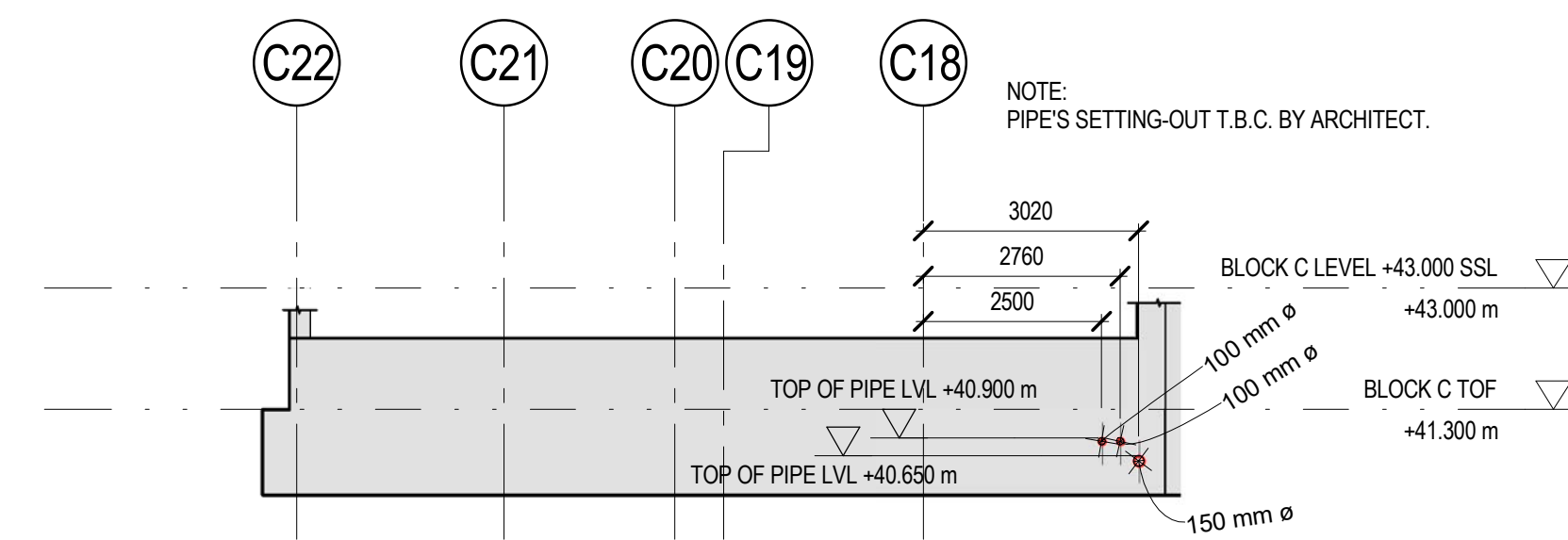


H-H ELEVATION H-H
SCALE 1: 100

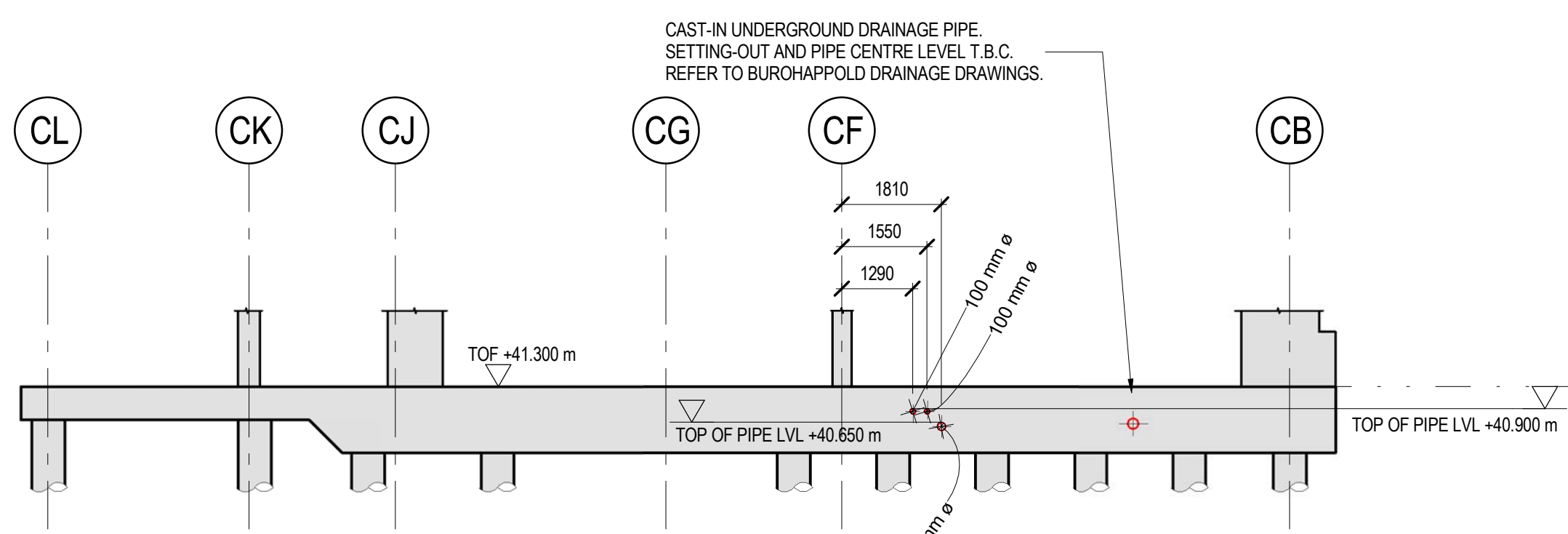


I-I SECTION I-I
SCALE 1: 100

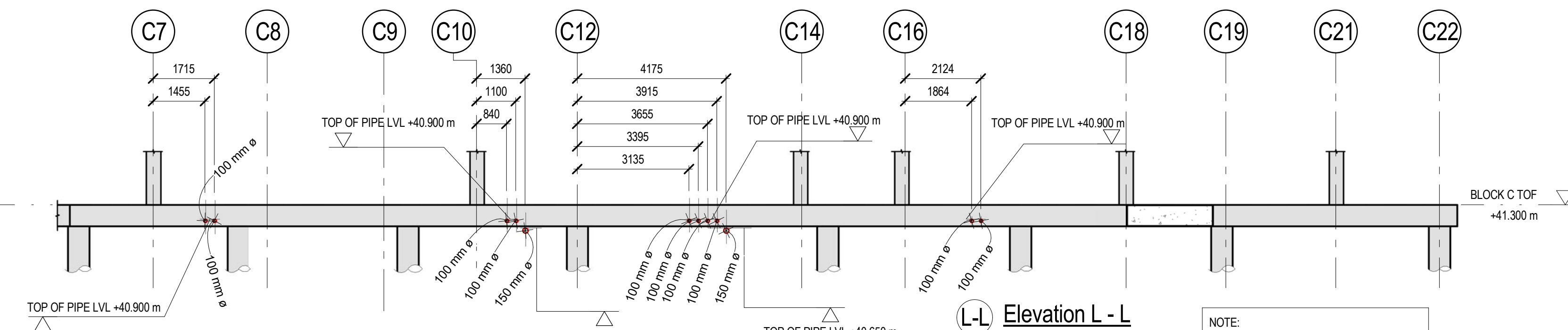
- NOTES:
- SIZE OF THE WALL OPENINGS SHOWN FOR RC DETAILING
 - DUCTS TO BE CAST-IN WALL WITH PUDDLE FLANGE
 - HOLE INFILLED WITH A393 MESH EACH FACE, CUT ON-SITE TO DUCT LOCATION AS SHOWN ON ARCHITECT'S DRAWINGS
 - SUB-CONTRACTOR TO PROVIDE & COORDINATE PUDDLE FLANGES FOR ALL REQUIRED DUCTS



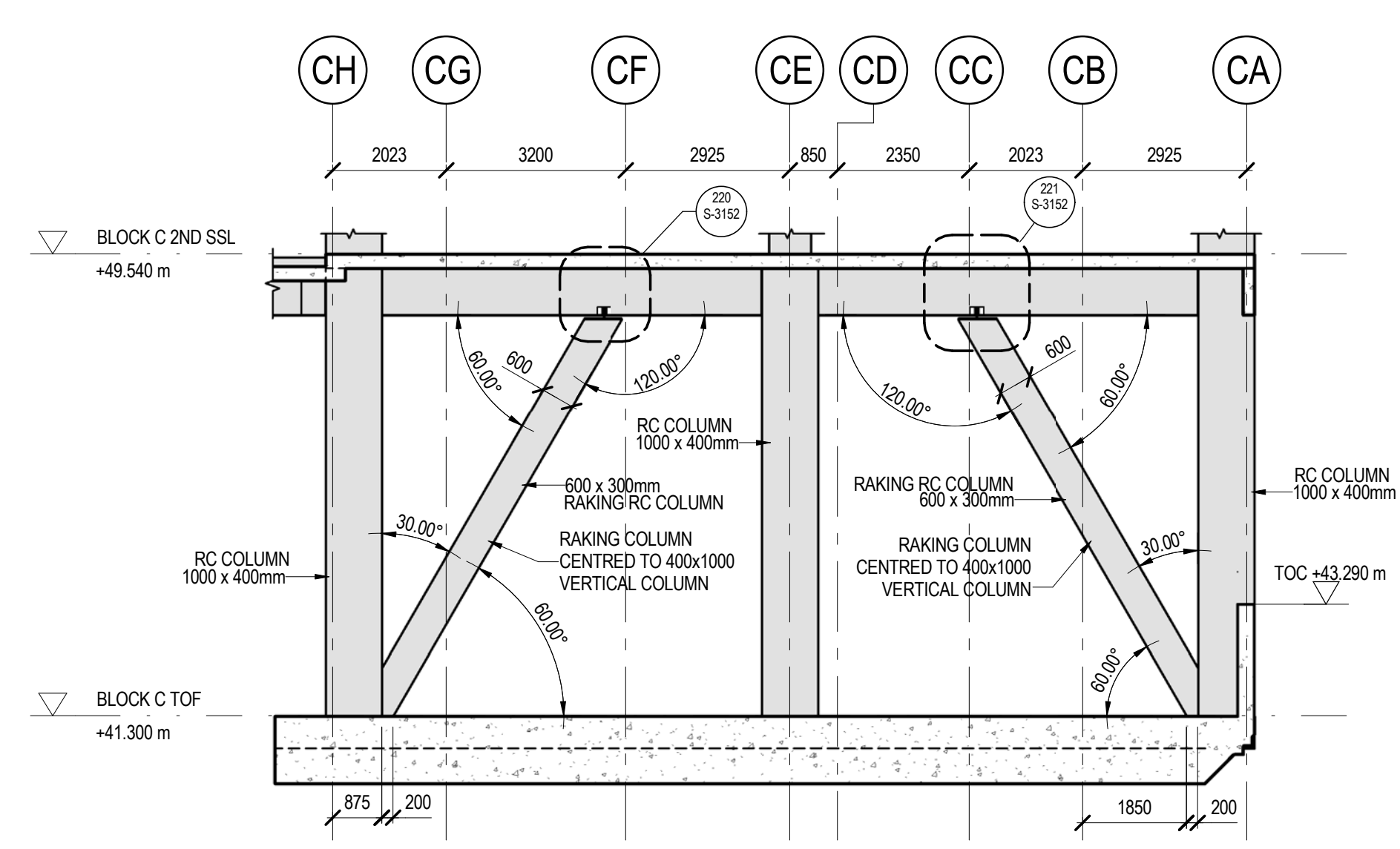
J-J ELEVATION J-J
SCALE 1: 100



K-K ELEVATION K-K
SCALE 1: 100



L-L ELEVATION L-L
SCALE 1: 100



M-M SECTION M-M
SCALE 1: 100

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CONTRACTOR THAT HAS BEEN INCORPORATED HAS NOT BEEN INDEPENDENTLY CHECKED BY BURROHAPPOLD.	MAINTENANCE/OPERATION
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Notes

C07	FINAL CONSTRUCTION	07/11/2019	AT	MC
C06	SECTION F-F REVISED	29/11/2017	AT	MC
C05	SECTION FOR RAKING COLUMNS ADDED	15/11/2017	AT	MC
C04	REVISED AS CLOUDED	26/10/2017	AT	MC
C03	ELEVATIONS ADDED AS CLOUDED	23/10/2017	AT	MC
C02	ELEVATIONS & SECTIONS ADDED AS CLOUDED	31/08/2017	AT	MC
C01	ISSUED FOR CONSTRUCTION: FOUNDATION DETAILS NEAR EXISTING WALL / CANAL UPDATED; FOUNDATION DETAILS BETWEEN GL CA TO CB; BETWEEN GL C1 TO C13 UPDATED; FOUNDATION DETAILS AT MAIN CORE / LEFT AREA UPDATED; RAFT SETTING-OUT UPDATED TO SUIT CT DRAWING	17/07/2017	RE	MC
P01	ISSUED FOR PLANNING	02/05/2017	RE	MC

Rev: Description Date: Approved:

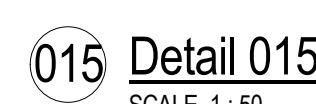
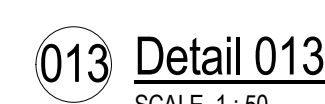
Status/Utility of Drawing

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Architect: **CHAPMAN TAYLOR**
Project: **KAMPUS**
Design Title: **BLOCK C FOUNDATION SECTIONS (SHEET 2)**

Job No: **034592**
Drawing No: **KAM-BHE-BC-ZZ-DR-S-3101**
Scale: **1: 100**
Revision: **C07**



Notes

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FOR DETAILS OF BUILDING SETTING OUT REFER TO ARCHITECT'S DRAWINGS. ALL GRID SETTING OUT, DIMENSIONS AND LEVELS SHOWN ON BURHOUPOLD ENGINEERING DRAWINGS SHOULD BE CONFIRMED BY THE ARCHITECT PRIOR TO START ON SITE.

ALL DETAILING TO BE IN ACCORDANCE WITH BS EN 1992 REFERENCE TO STRUCTURE STANDARD METHOD OF DESIGNING STRUCTURAL CONCRETE 3rd ed 2006

CONCRETE COVER:

INTERNAL: 30mm

EXTERNAL: 50mm

ALL CONCRETE COVER VALUES STATE ABOVE INCLUDE AN ALLOWANCE OF 10mm For sds.

CONCRETE GRADE C40/50

FOR CONCRETE SPECIFICATION REFER TO KAM-BHE-XX-XX-SP-S-0002

FOR FINAL MANHOLES SETTING OUT REFER TO BURHOUPOLD FINAL DRAWING. DRAWINGS.

MANHOLES COVER DETAILS T.B.C.

DPH UNDER FOUNDATION SLAB TO BE CONFIRMED

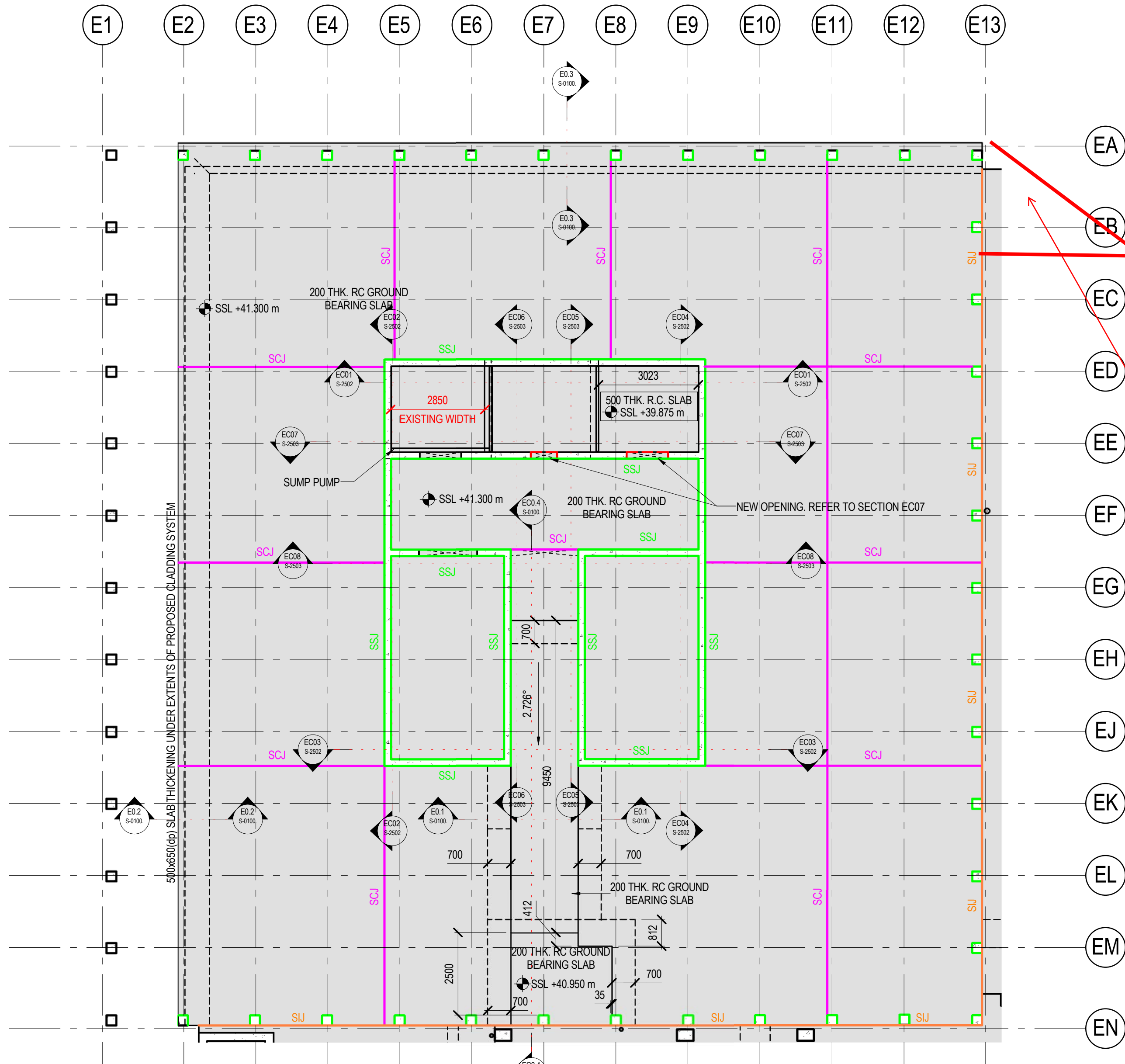
FINAL CONSTRUCTION

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Manchester, M3 4LZ,
UK

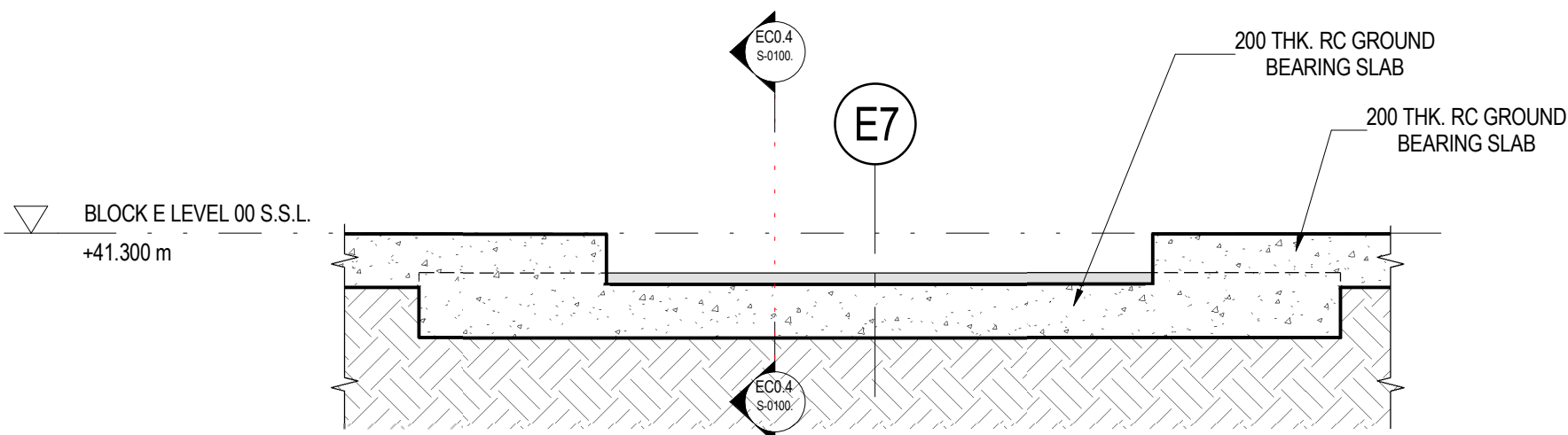
Tel: +44 (0)161 233 5000
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Email: 034592@burchappold.com
Web: www.burchappold.com

Architect	CHAPMAN TAYLOR
Project	KAMPUS
Dwg Title	BLOCK C

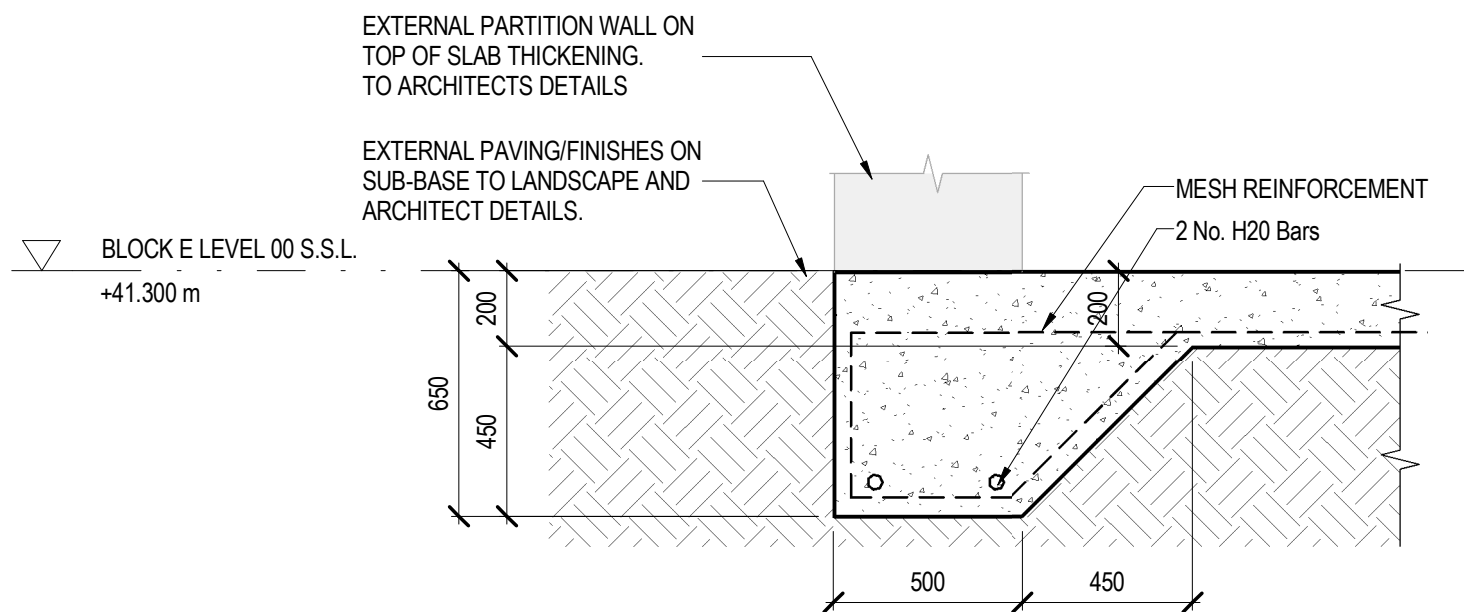
Job No. 034592	Scale@A0 As indicated
Drawing No. KAM-BHE-BC-ZZ-DR-S-3150	Revision C08



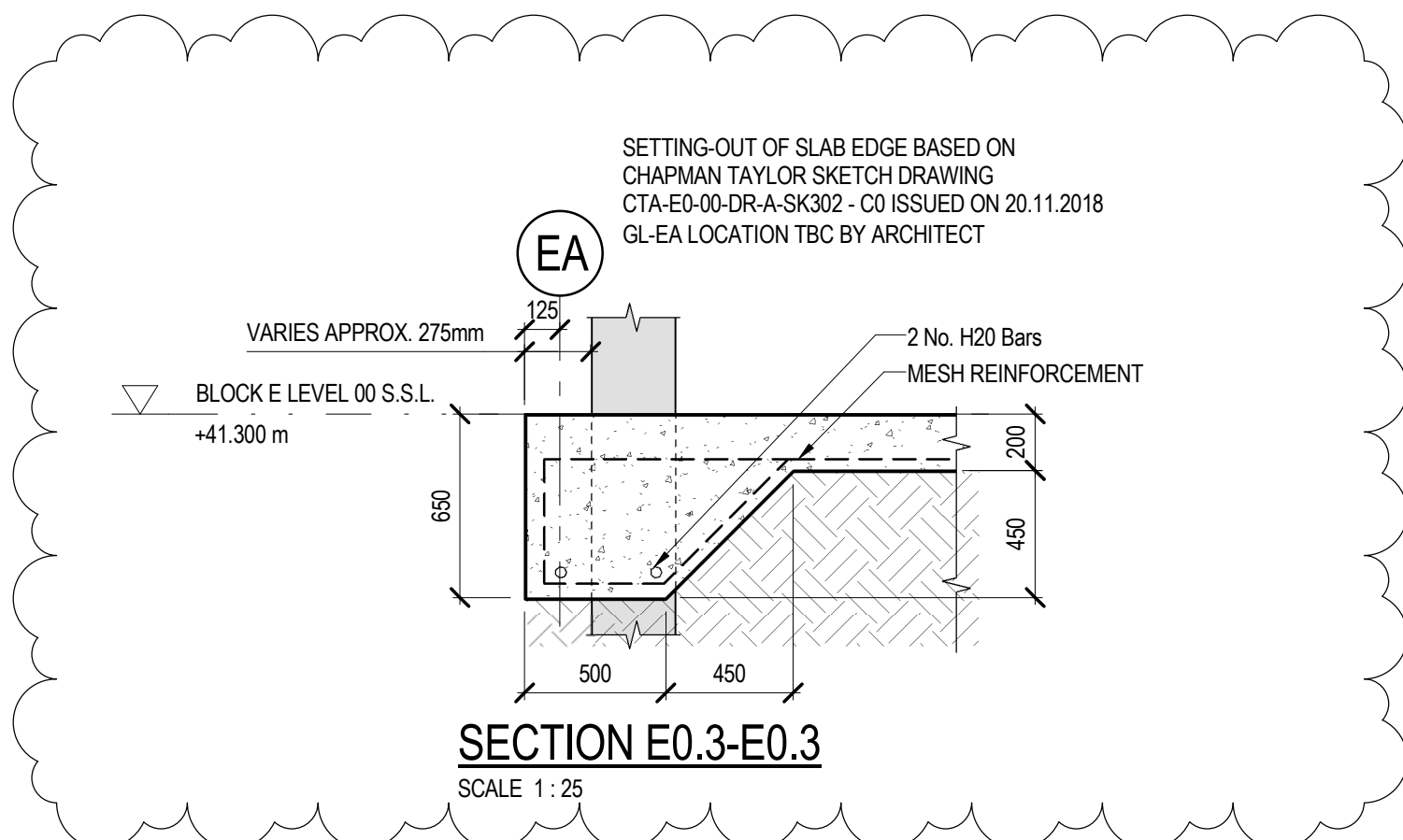
BLOCK E GROUND FLOOR G.A.
SCALE 1: 100



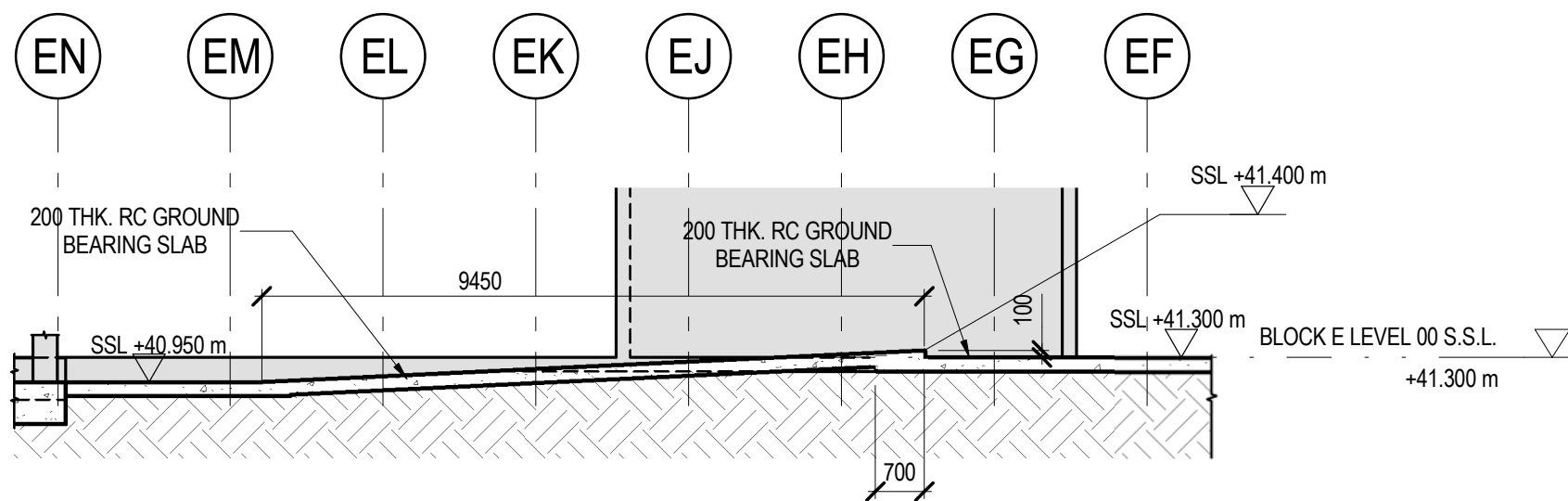
SECTION E0.1-E0.1
SCALE 1: 25



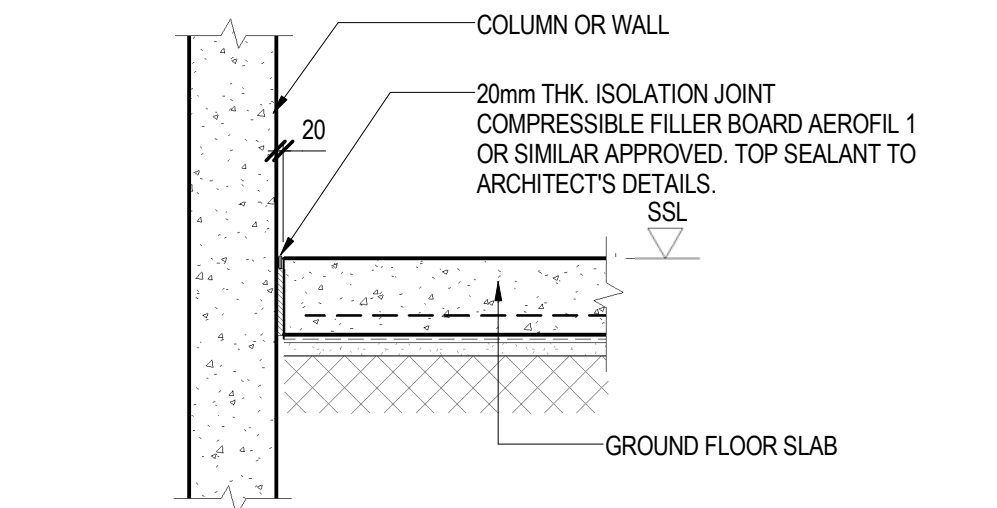
Section E0.2-E0.2
SCALE 1: 20



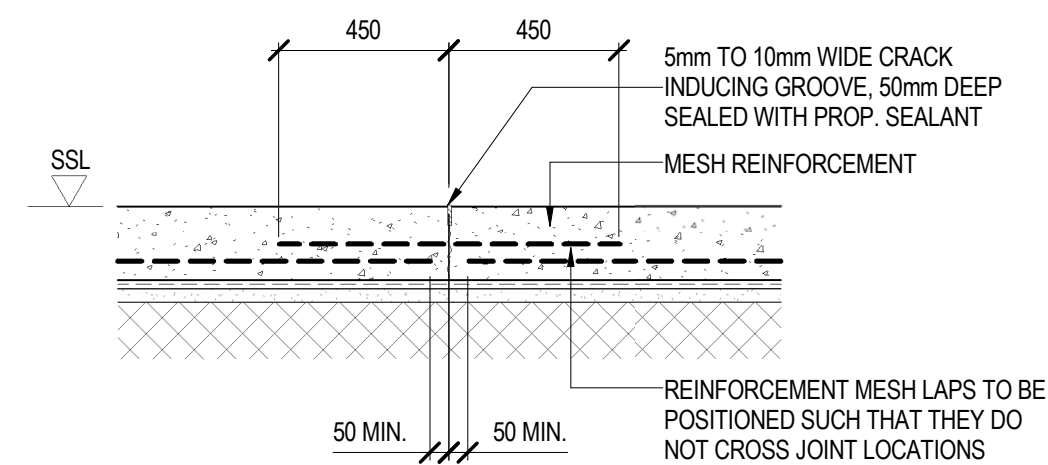
SECTION E0.3-E0.3
SCALE 1: 25



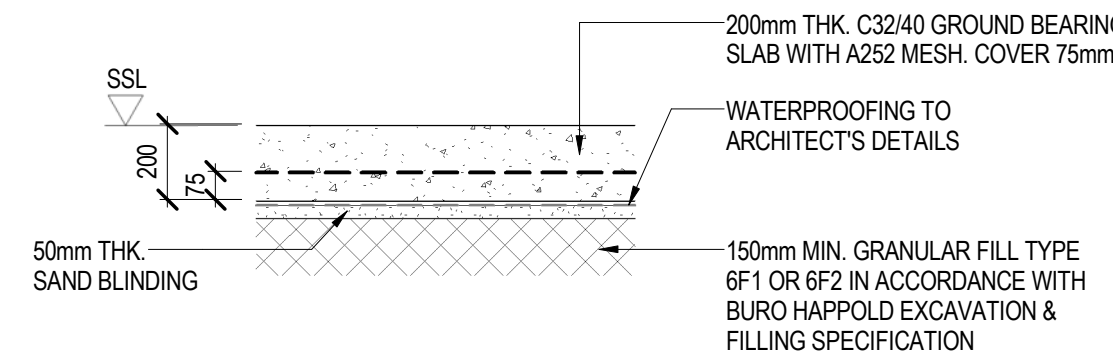
SECTION E0.4-E0.4
SCALE 1: 100



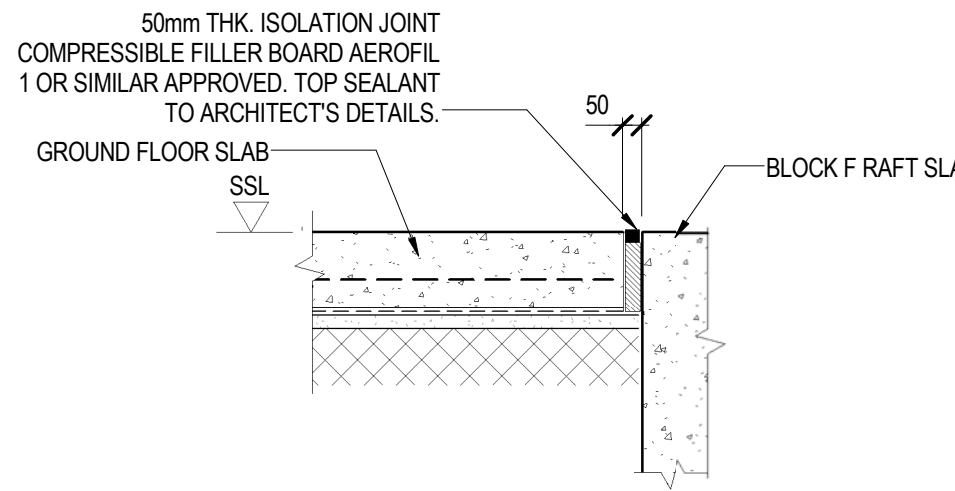
TYPICAL SLAB SOFT JOINT (SSJ)
SCALE 1: 20



TYPICAL SAW CUT JOINT (SCJ)
SCALE 1: 20



TYPICAL GROUND BEARING SLAB CONSTRUCTION.
SCALE 1: 20



TYPICAL SLAB SOFT JOINT (SIJ)
SCALE 1: 20

Infill will be require at the corner junction of the new lv 00 tower slab and the lv 00 podium slab - extent TBA on site

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CONSTRUCTION

MAINTENANCE/CLEANING/OPERATION

DECOMMISSIONING/DEMOLITION

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SETTING OUT OF COLUMNS TO SITE DIMENSIONS. T.B.C. ON CONTRACTOR'S STEELWORK FABRICATION DRAWINGS.

REFER TO BUROHAPPOLD STAGE 3 REPORT FOR ASSUMED STRUCTURAL DESIGN CRITERIA AND LOADING.

ALL EXTERNAL STEELWORK TO BE GALVANISED.

REFER TO BUROHAPPOLD STEELWORK SPECIFICATION

LEGEND



NOTES:

1. 200mm THK. GROUND BEARING SLAB TO BE REINFORCED WITH A252 MESH. COVER 75mm. CONCRETE C32/40.

2. FOR SERVICES PENETRATIONS REFER TO ARCHITECTURAL DRAWINGS.

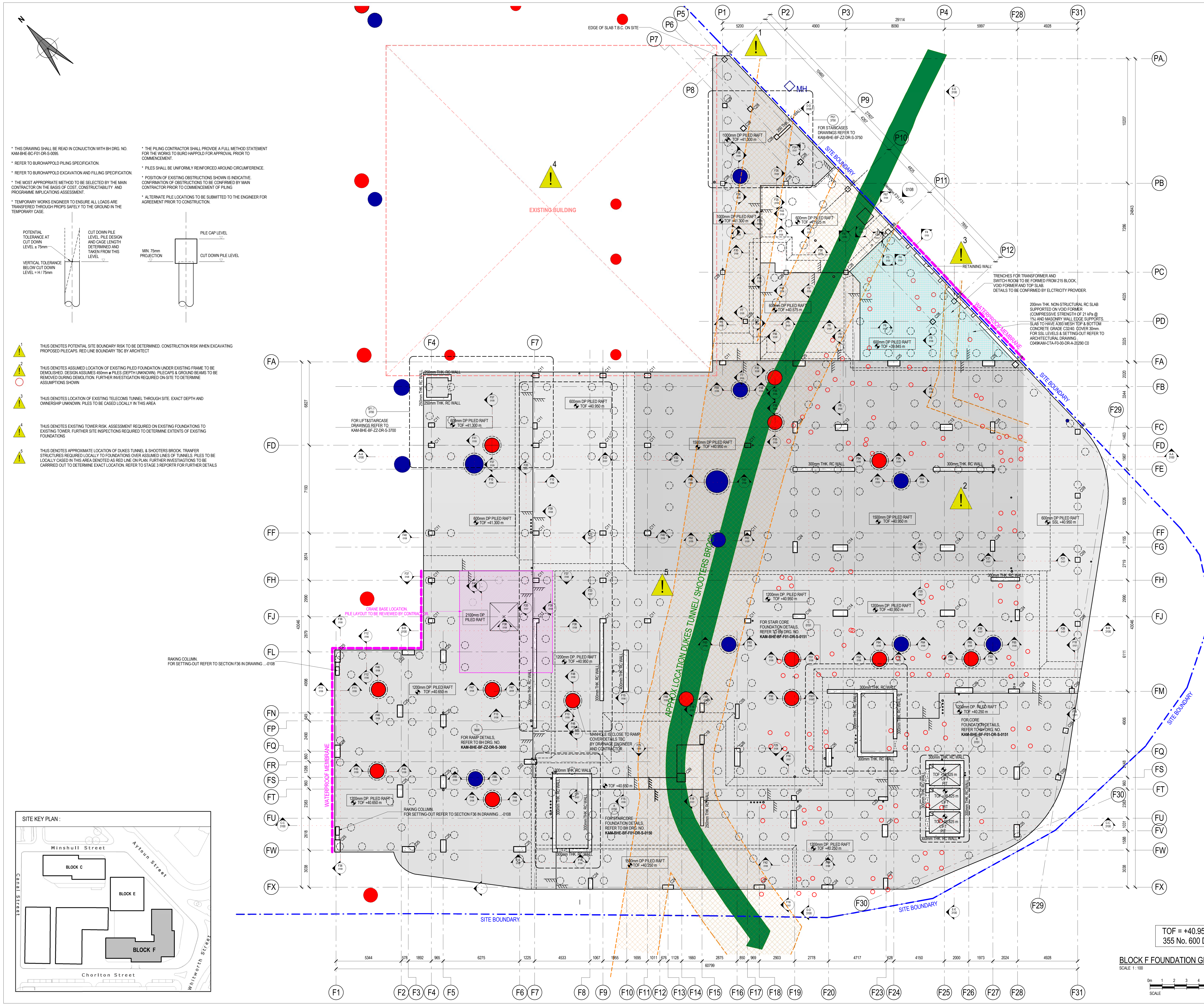
C03	SLAB EDGE NEAR GL-EA REVISED	05.12.2018	AT	MC
C02	SLAB EDGE NEAR GL-E1 REVISED	09.10.2018	AT	MC
C01	ISSUED FOR CONSTRUCTION	29.06.2018	AT	MC
Rev	Description	Date	Dm	Cyld

CONSTRUCTION

Status of Drawing

BUROHAPPOLD ENGINEERING

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Architect Project Drg Title	CHAPMAN TAYLOR KAMPUS BLOCK E TOWER EXTENSION GROUND FLOOR LEVEL GENERAL ARRANGEMENT
Job No. 034592	Scales@A1 As indicated
Drawing No. KAM-BHE-BE-00-DR-S-0100.	Revision C03



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ALL BURCHAPPOLE ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND BUILDING SPECIFICATIONS.

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ALL COLUMNS TO BE SET OUT WITH GRID LINO. ALL BEAMS AND BRACING SUPPORTED AT COLUMNS TO BE SET OUT TO COLUMN CENTRE LINES UNO.

IN-SITU CONCRETE NOTES

CONCRETE GRADE FOR FOUNDATIONS RC 32 / 40

CONCRETE GRADE FOR RETAINING WALLS RC 32 / 40

CONCRETE GRADE FOR RC COLUMNS BETWEEN LEVEL 1 AND ROOF RC 40 / 50

CONCRETE GRADE FOR RC WALLS RC 40 / 50

CONCRETE GRADE FOR ALL OTHER ELEMENTS UNO

ALL COLUMNS ARE POSITIONED CENTRALLY ABOUT GRID LINES UNO.

IN-SITU CONCRETE REINFORCEMENT ESTIMATES

THE FOLLOWING RATES ARE INDICATIVE AND WILL BE CONFIRMED DURING THE TENDER OF RAFT.

RETAINING WALL 150kg/m³

SHEAR WALLS 200kg/m³

COLUMNS 240kg/m³

TRANSFER BEAMS 125kg/m³

FLAT SLABS - MAIN 30kg/m³

RAFT 170kg/m³

REINFORCING ESTIMATES ARE PROVIDED FOR COSTING PURPOSES ONLY. THESE RATES ARE TO BE CONFIRMED UPON COMPLETION OF THE REINFORCEMENT SCHEDULES.

ESTIMATES PROVIDE ENGINEERING REQUIREMENTS ONLY, AND DO NOT INCLUDE ADDITIONAL REBAR FOR SHEAR STUDS (OR RALS), TEMPORARY WORKS, SUPPORT CHAIRS ETC. THESE ALLOWANCES DO NOT INCLUDE HEIGHTS OF CAST-IN ITEMS SUCH AS BRACKETS, FAÇADE FIXINGS ETC.

ESTIMATES TAKE INTO ACCOUNT REASONABLE AND EFFICIENT DETAILING AND SCHEDULING METHODS USING LONG BARS TO MINIMISE SPLICES.

RE-BAR QUANTITIES ARE TO BE BASED ON THE CONCRETE VOLUMES FOR EACH ELEMENT, WITH SOME VOLUMES OF CONCRETE AT JUNCTIONS BEING INCLUDED 2 OR 3 TIMES.

KEY:

THIS DENOTES EXISTING PILES. DIAMETER BETWEEN 300MM AND 400MM.

THIS DENOTES PROPOSED LOCATION OF SURFACE WATER MANHOLE.

THIS DENOTES PROPOSED LOCATION OF WASTE WATER MANHOLE.

NOTES

FOR SETTING OUT AND DETAILS REGARDING THE MANHOLES SHOWN ON THIS DRAWING, REFER TO BURCHAPPOLE CIVILS DRAWING SERIES C4000.

C07	FINAL CONSTRUCTION	20/11/2019	GB	MC
C06	RC SLAB NOTES FOR ENERGY CENTER AREA ADDED.	14/09/2018	AT	MC
C05	NEW MANHOLE INTRODUCED NEAR GL-P10	06/06/2018	AT	MC
C04	STAIRCASES DETAILS. ADDITIONAL COLUMNS LAYOUT REVISED IN CLOUDED AREAS. THICKNESS OF SHEAR WALL IN GL-F10 REVISED.	14/05/2018	AT	MC
C03	CRANE BASE RELOCATED. CLOUDED COLUMNS SLIGHTLY MOVED FOLLOWING COORDINATION WITH ARCHITECTURE. MANHOLES LAYOUT REVISED. LIFT SHAFT BASE REVISED. RETAINING WALL NEAR GL-F1 LIMITED.	05/03/2018	AT	MC
C02	POOL AREA GRID REVISED TO SUIT. WEST ARCH. GRID. WALL NEAR GL-P9 INTRODUCED. SLAB EDGE REVISED TO SUIT LATEST ARCH. SETTING-OUT. S.S.L. REVISED BETWEEN GL-P8 & GL-P9. WALLS IN GL-F9 AND GL-F7 INTRODUCED AS RAMP BARRIERS. CRANE BASE INTRODUCED.	29/01/2018	AT	MC
C02	POOL AREA GRID REVISED TO SUIT. WEST ARCH. GRID. WALL NEAR GL-P9 INTRODUCED. SLAB EDGE REVISED TO SUIT LATEST ARCH. SETTING-OUT. S.S.L. REVISED BETWEEN GL-P8 & GL-P9. WALLS IN GL-F9 AND GL-F7 INTRODUCED AS RAMP BARRIERS. CRANE BASE INTRODUCED.	29/01/2018	AT	MC
C01	REVISED WITH CONSTRUCTION INFO	15/08/2017	AT	MC
T01	ADDENDUM TO TENDER STAGE DRAWINGS. UPDATED THE DRAWING NUMBER, UPDATED GRID SETTING-OUT & CALL-OUTS TO MATCH CHAPMAN TAYLOR GRIDS. UPDATED COLUMN SIZES & SETTING OUT. UPDATED SLAB SETTING-OUT TO SUIT.	19/05/2017	RE	MC

FINAL CONSTRUCTION

Block F Foundation Level General Arrangement

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Web: www.burhappold.com

Architect: CHAPMAN TAYLOR

Project: KAMPUS

Dwg Title: BLOCK F FOUNDATION LEVEL GENERAL ARRANGEMENT

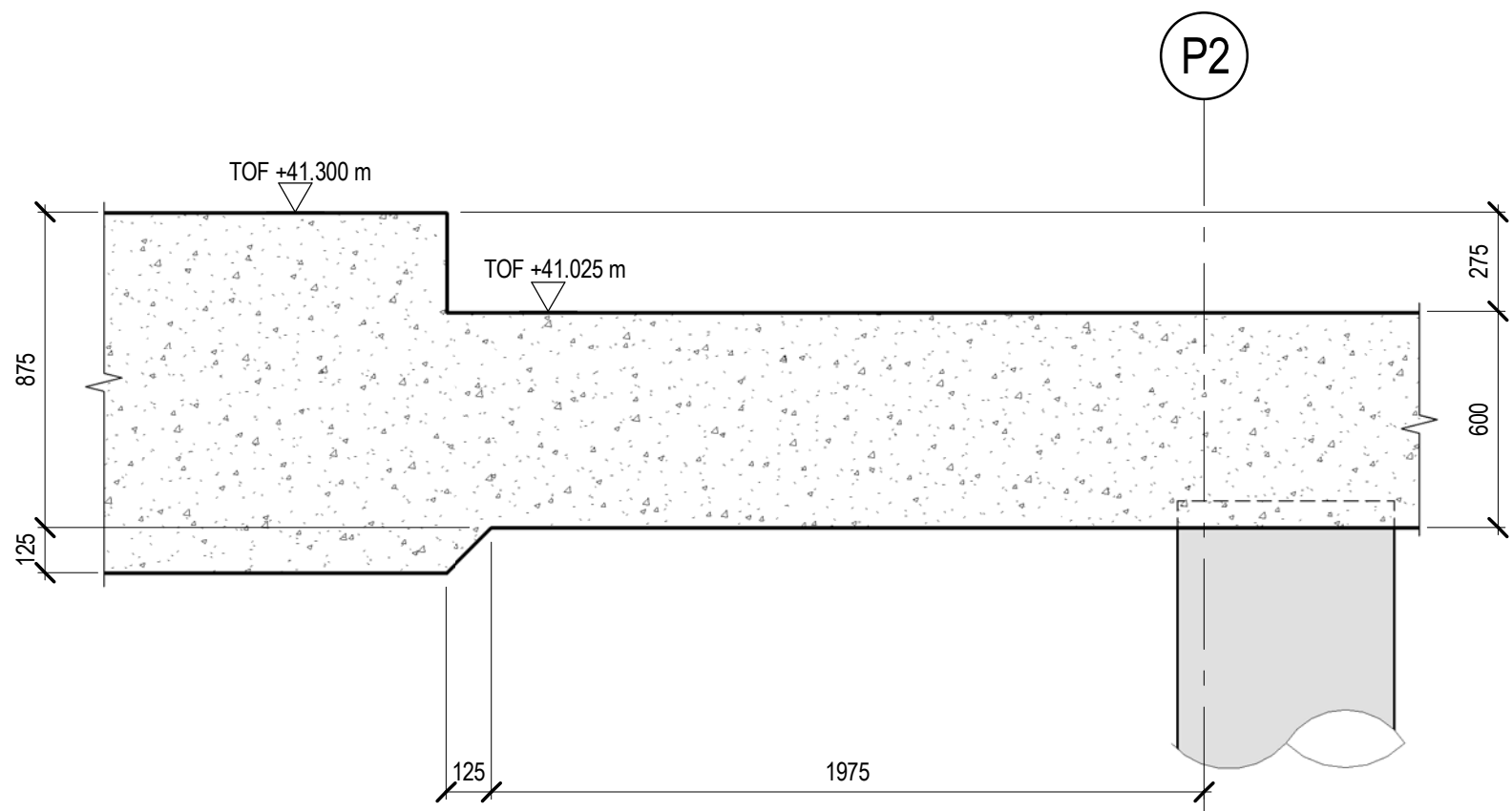
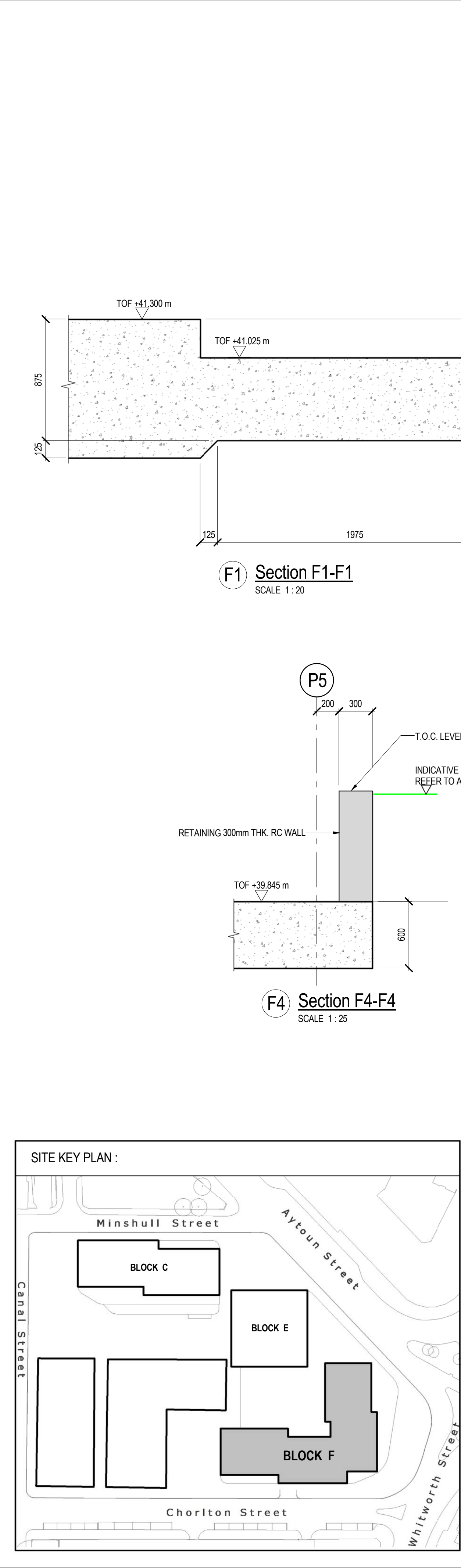
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Drawing No: KAM-BHE-BF-F01-DR-S-0100

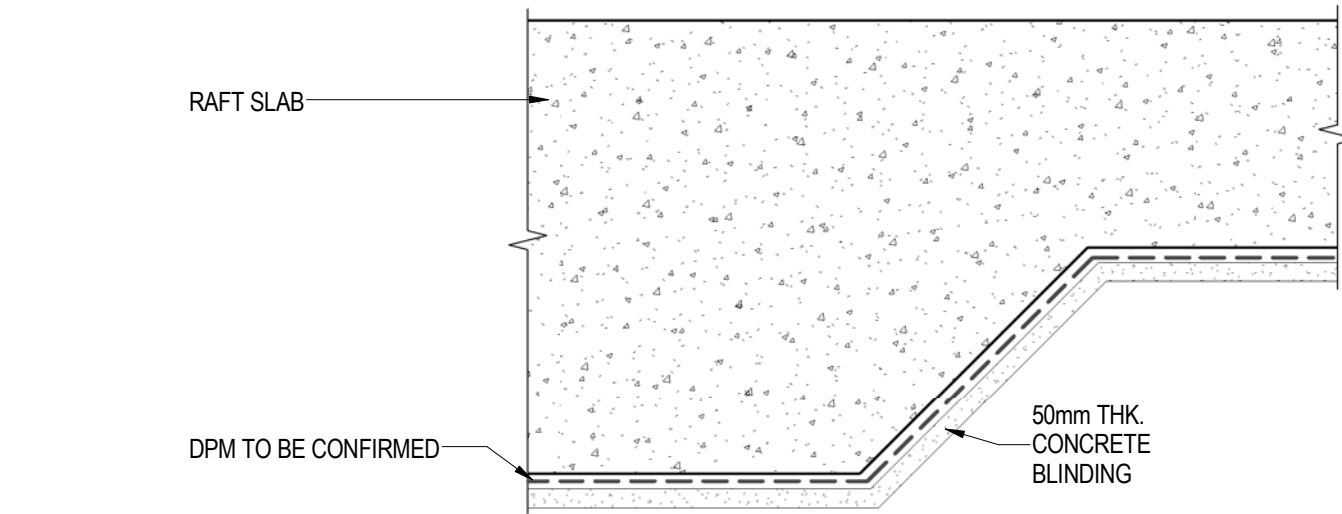
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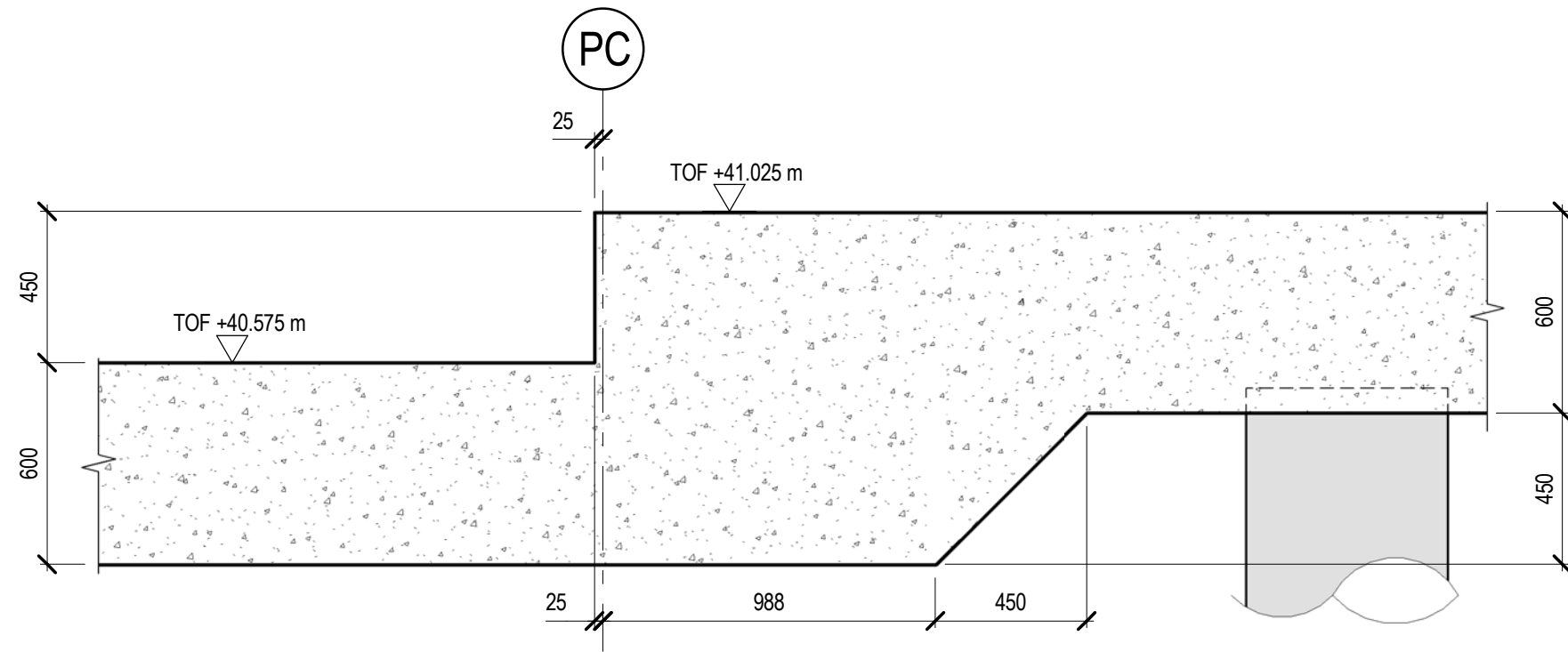
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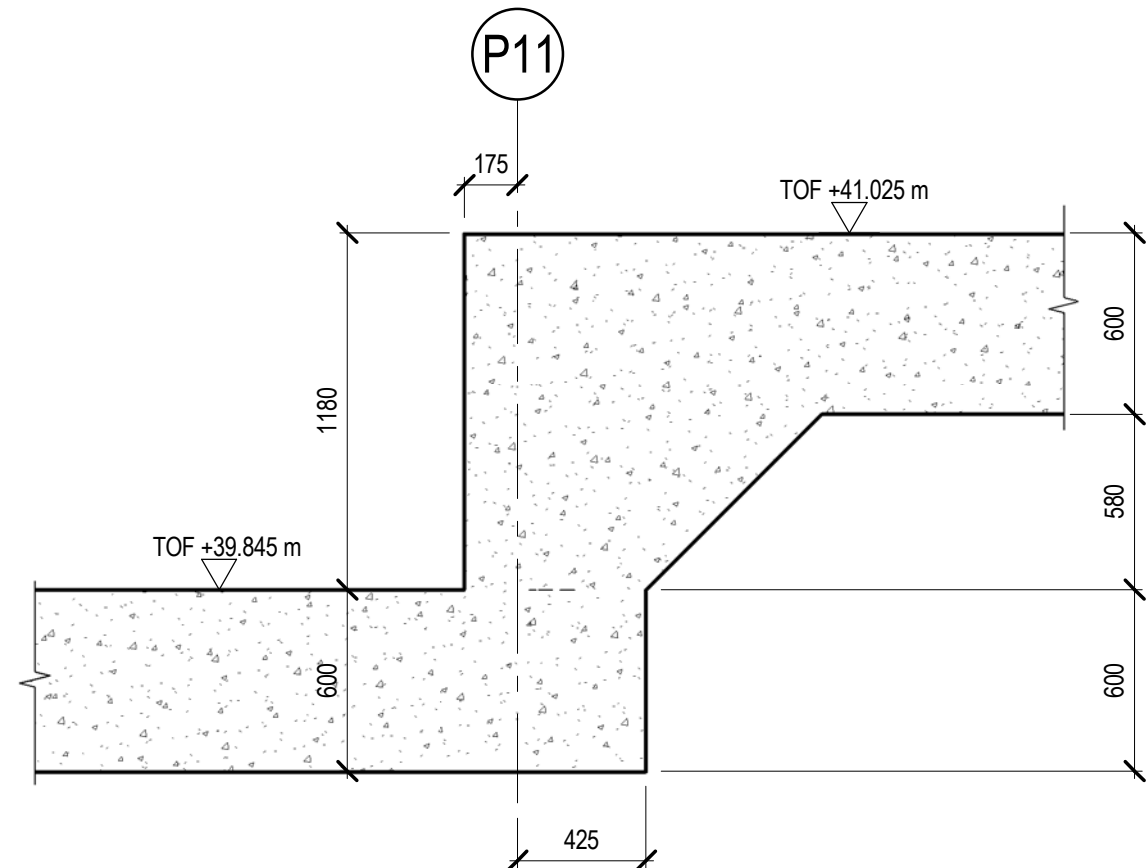
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SCALE 1 : 20



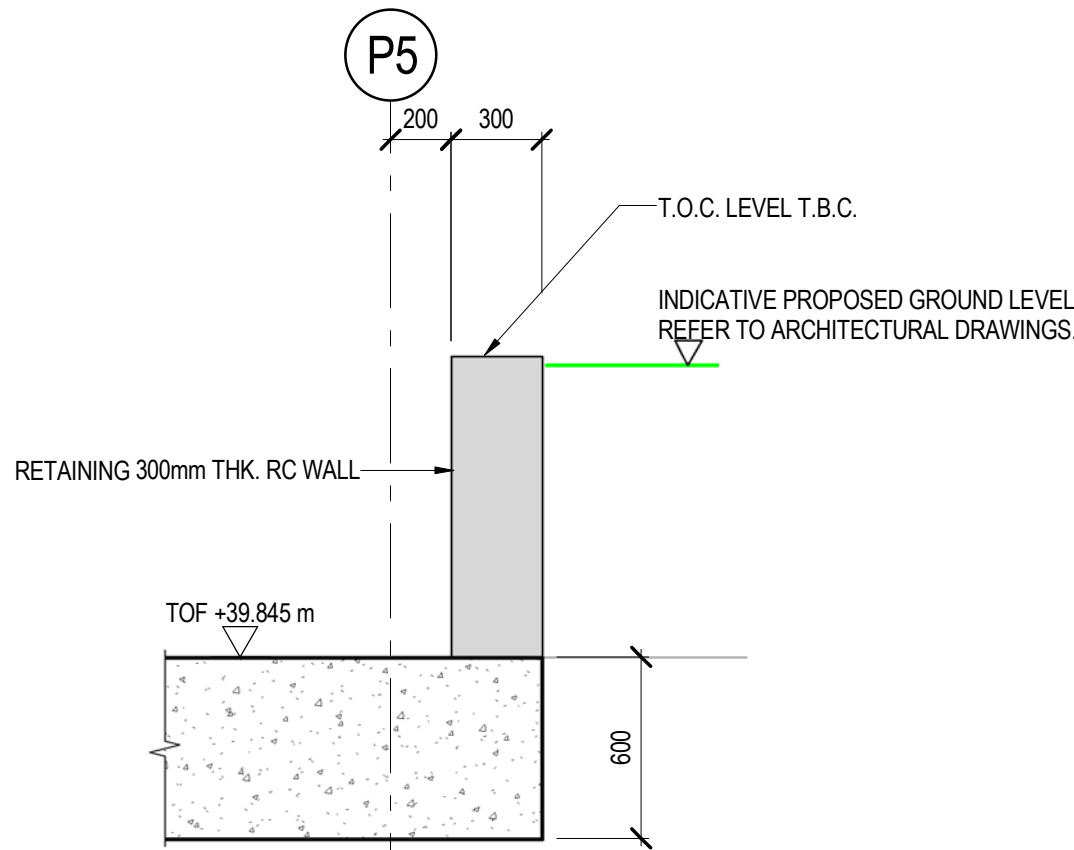
TYPICAL DETAIL OF CONCRETE BLINDING AND WATERPROOFING UNDER THE RAFT SLAB



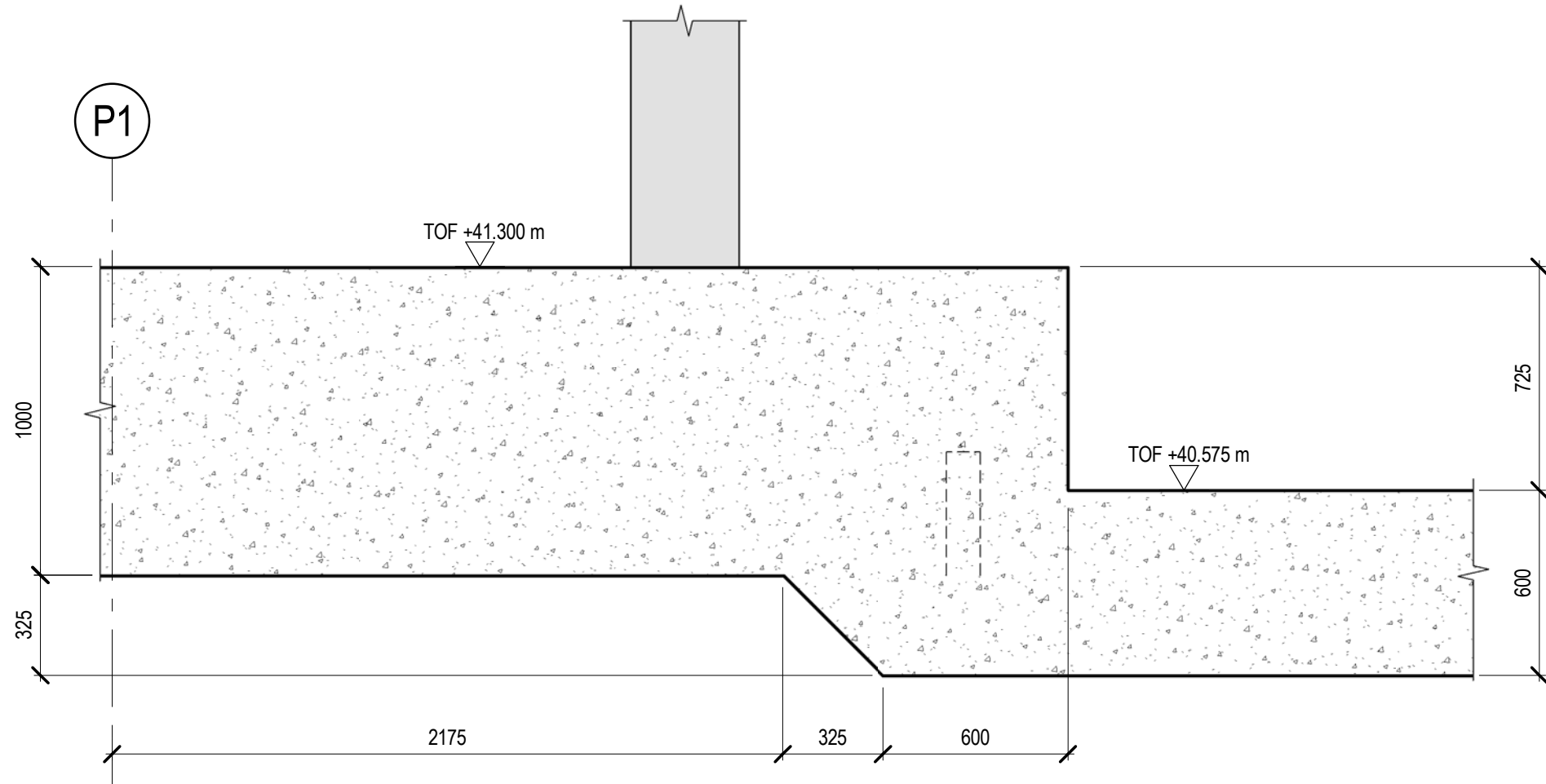
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SCALE 1 : 20



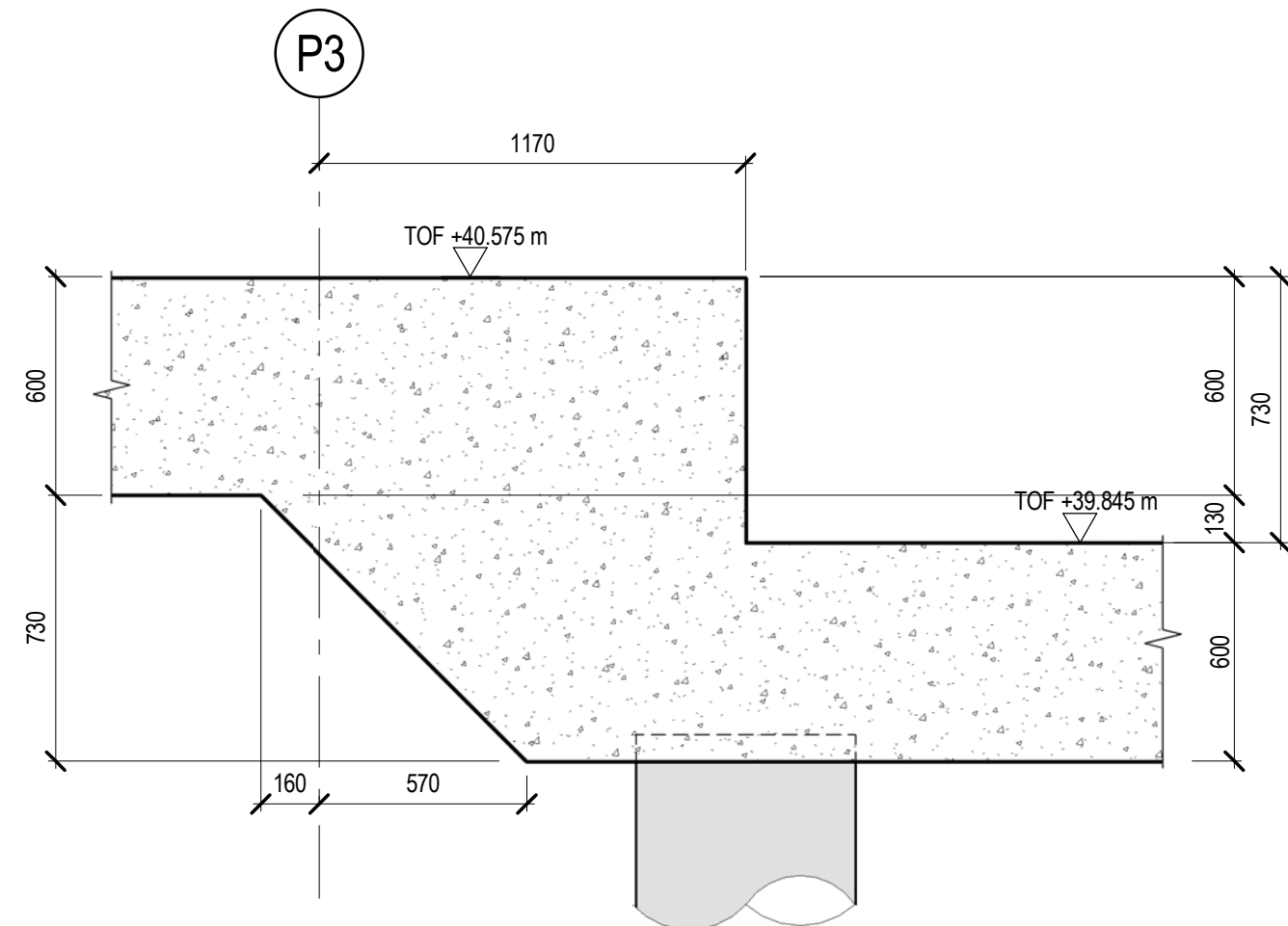
F3 Section F3-F3
SCALE 1 : 25



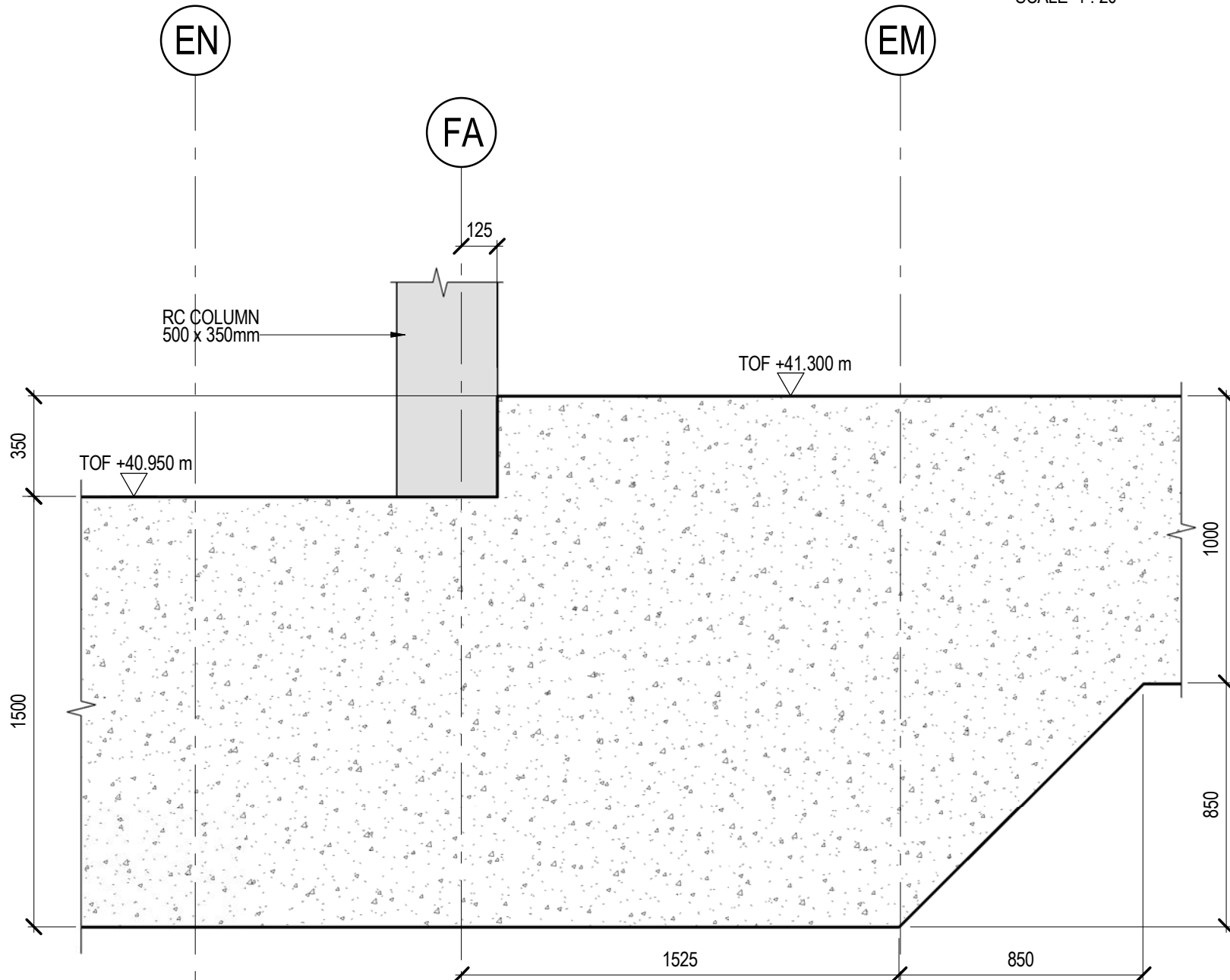
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SCALE 1 : 25



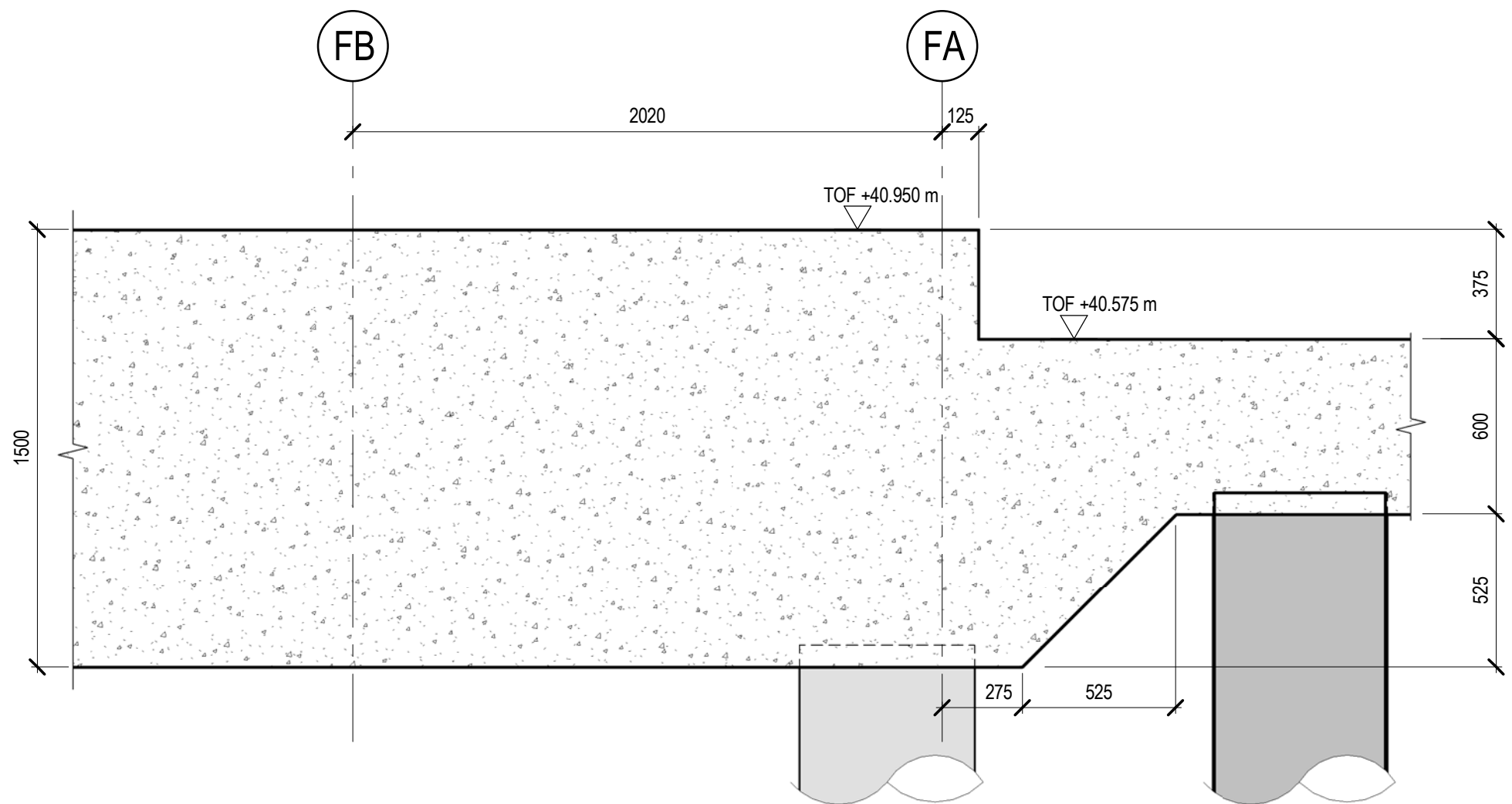
F5 Section F5-F5
SCALE 1 : 20



F6 Section F6-F6
SCALE 1 : 20



F7 Section F7-F7
SCALE 1 : 20



F8 Section F8-F8
SCALE 1 : 20

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CONSTRUCTION

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Notes

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C04	FINAL CONSTRUCTION	20/11/2019	GB	MC
C03	SHEET NAME REVISED	05/03/2018	AT	MC
C02	REVISED TO SUIT G.A. DRAWING	29/01/2018	AT	MC
C01	ISSUED FOR CONSTRUCTION	08/08/2017	AT	MC
Rev	Description	Date	Dm	C'd

**FINAL
CONSTRUCTION**

Status of Drawing

**BUROHAPPOLD
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Architect **CHAPMAN TAYLOR**

Project **KAMPUS**

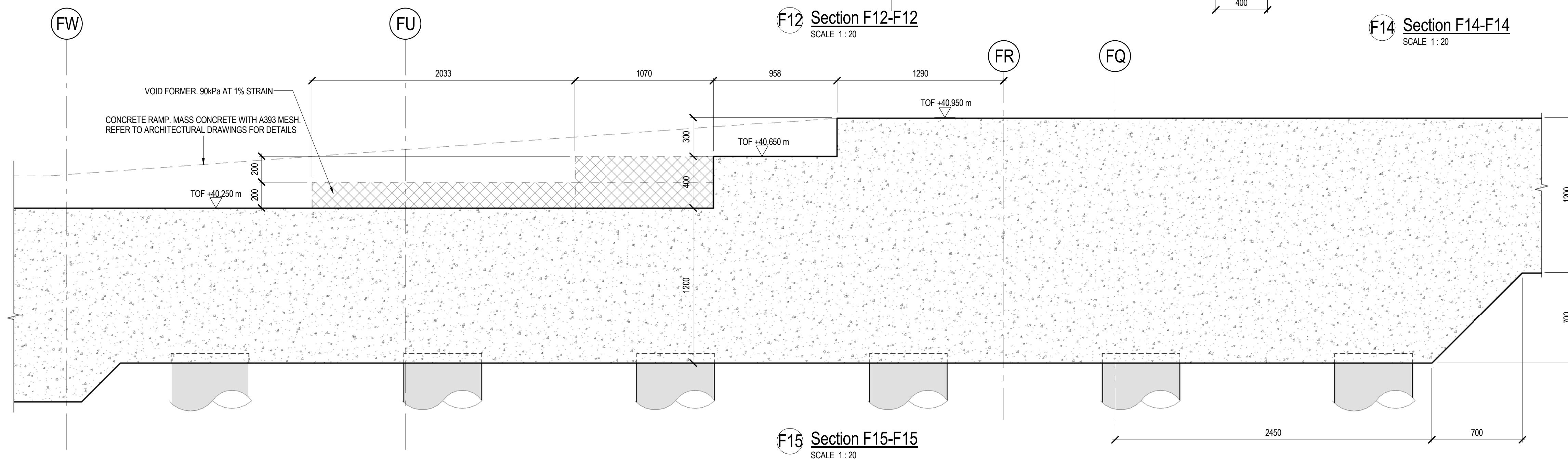
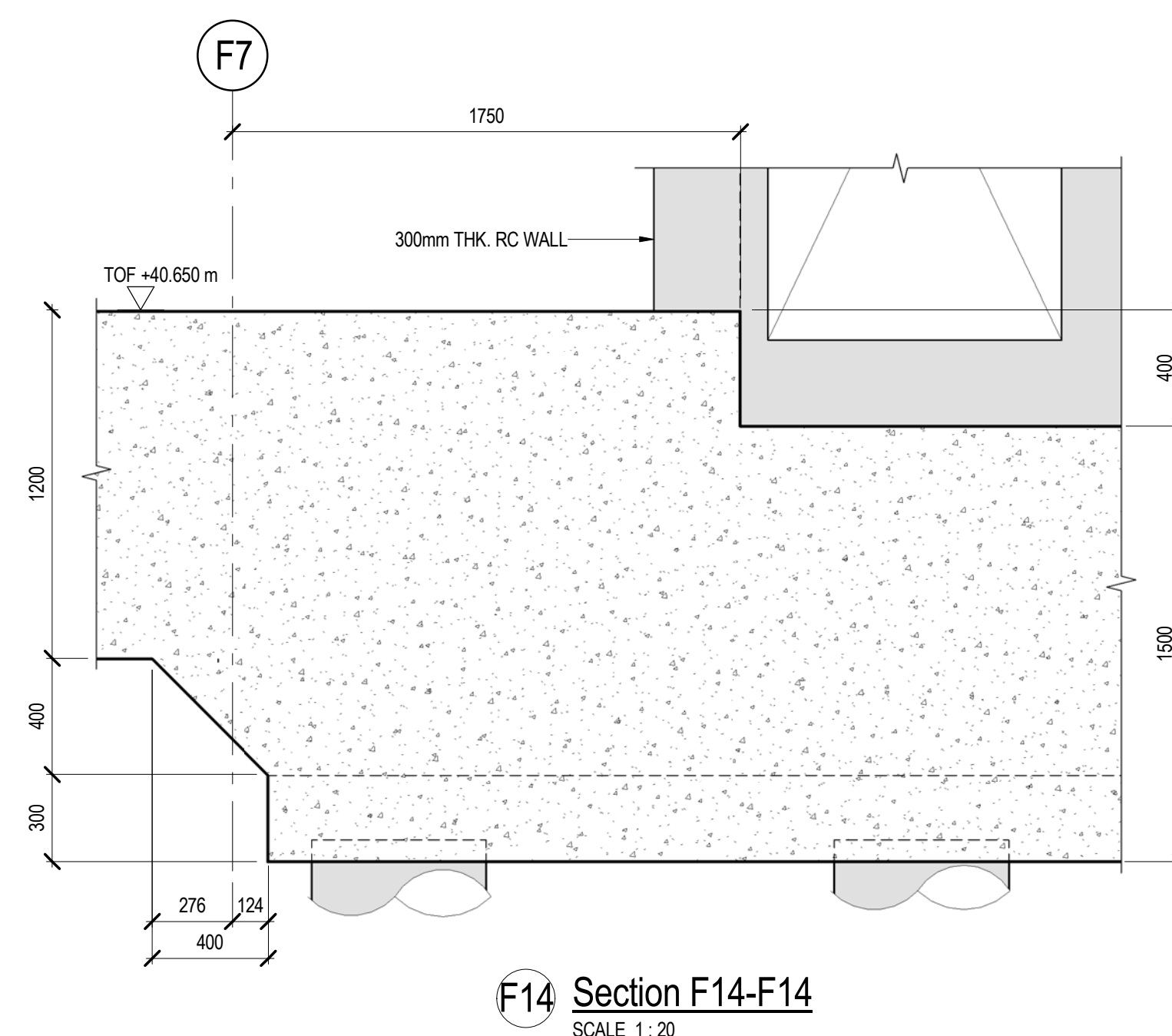
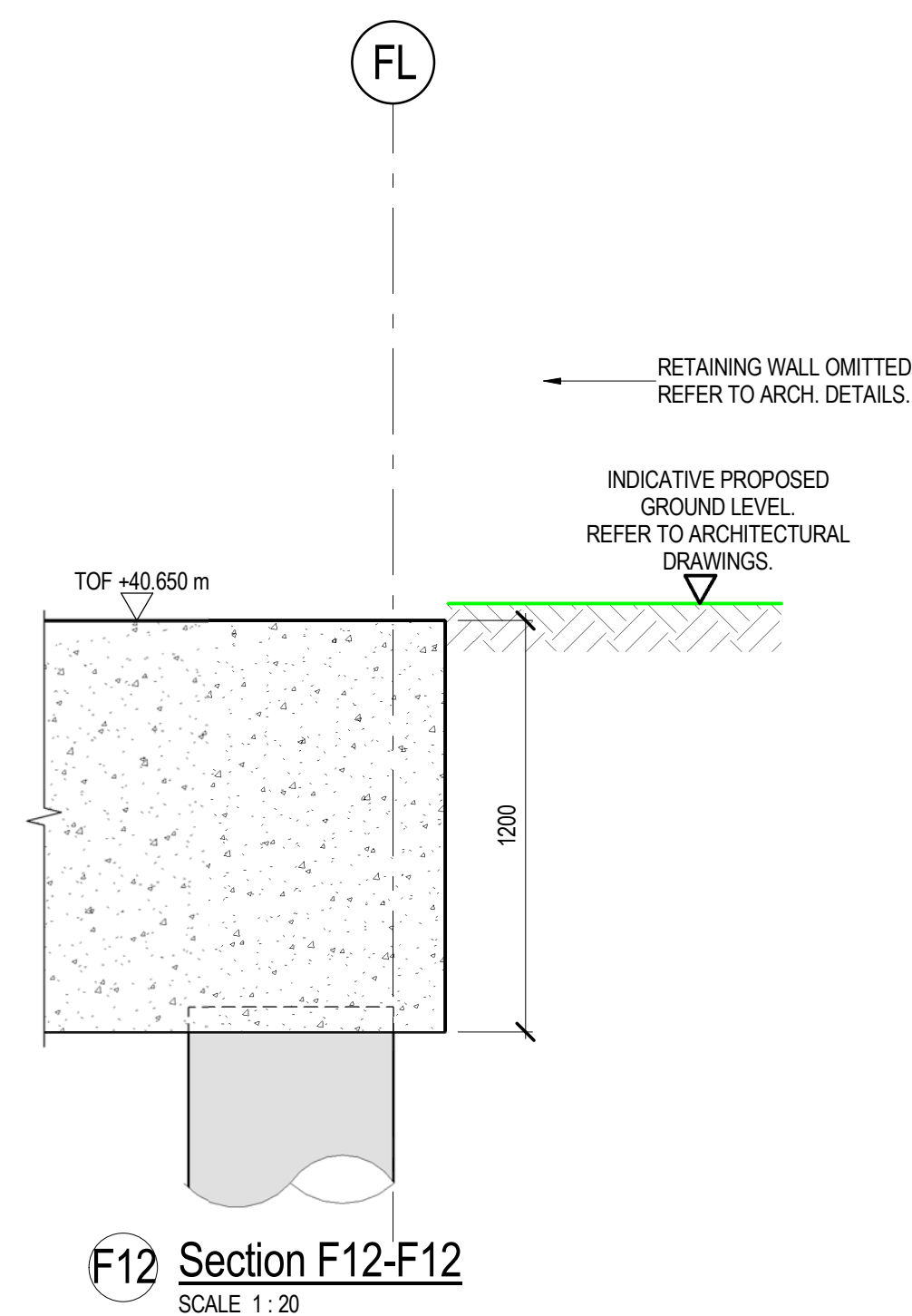
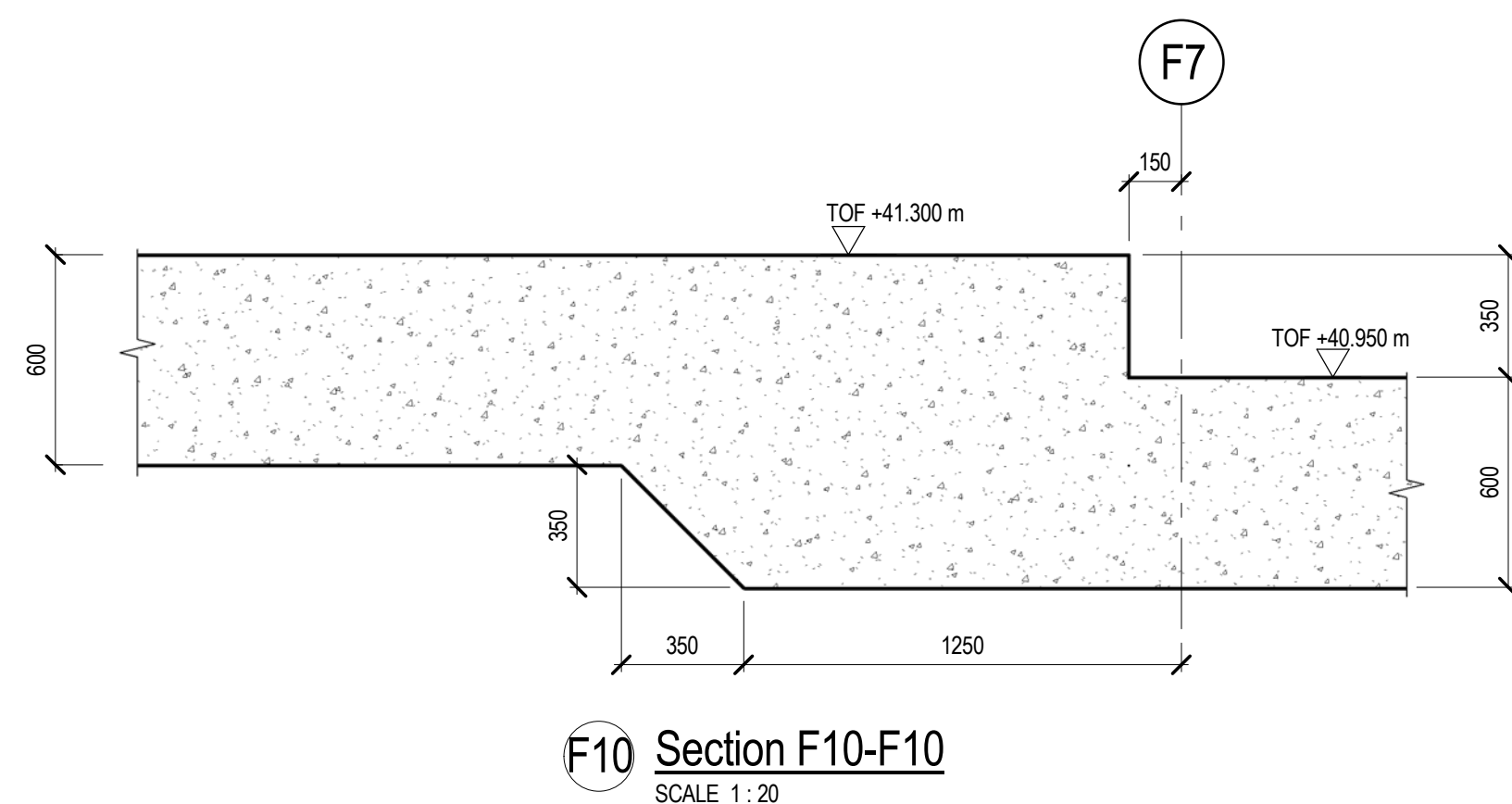
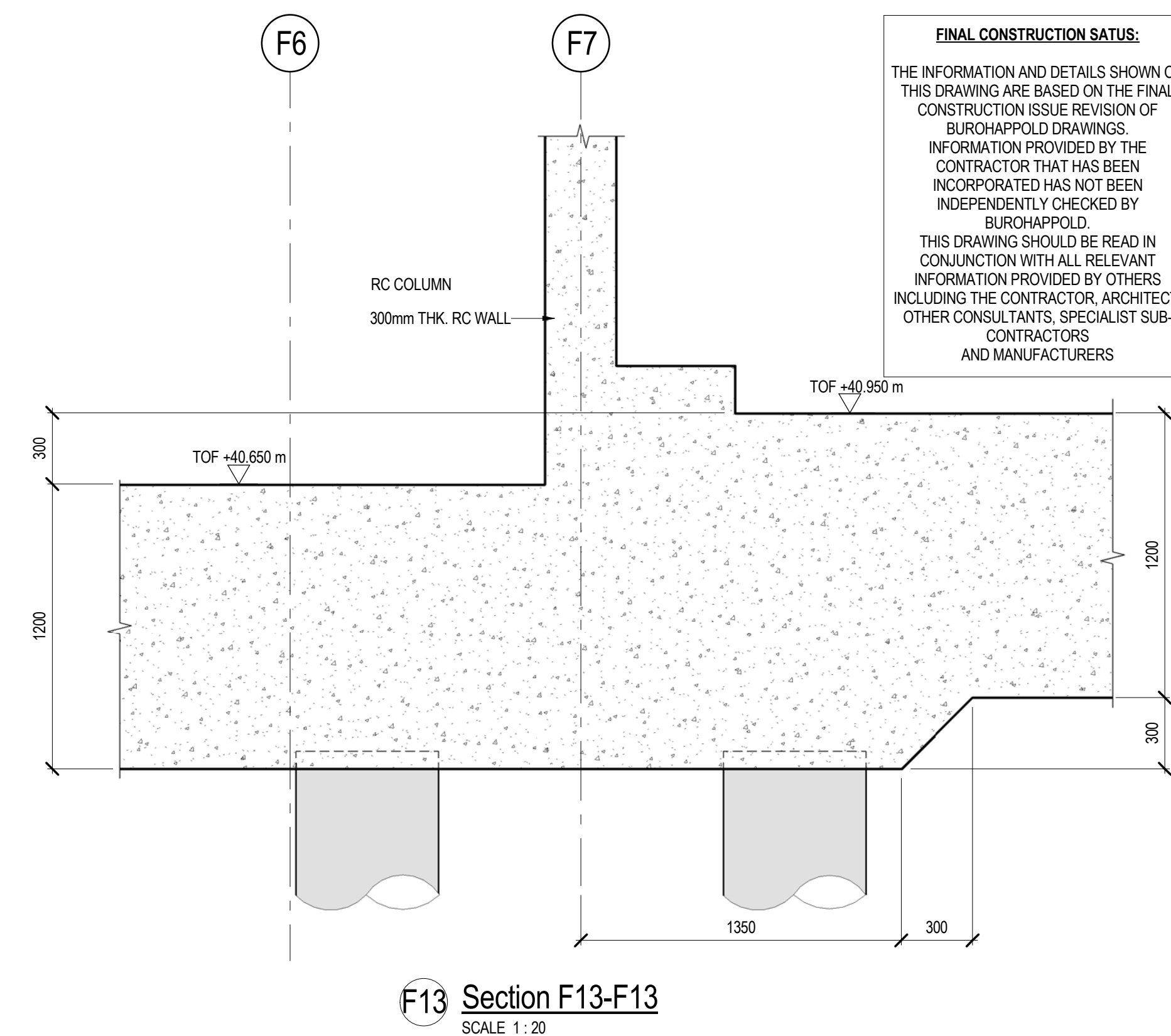
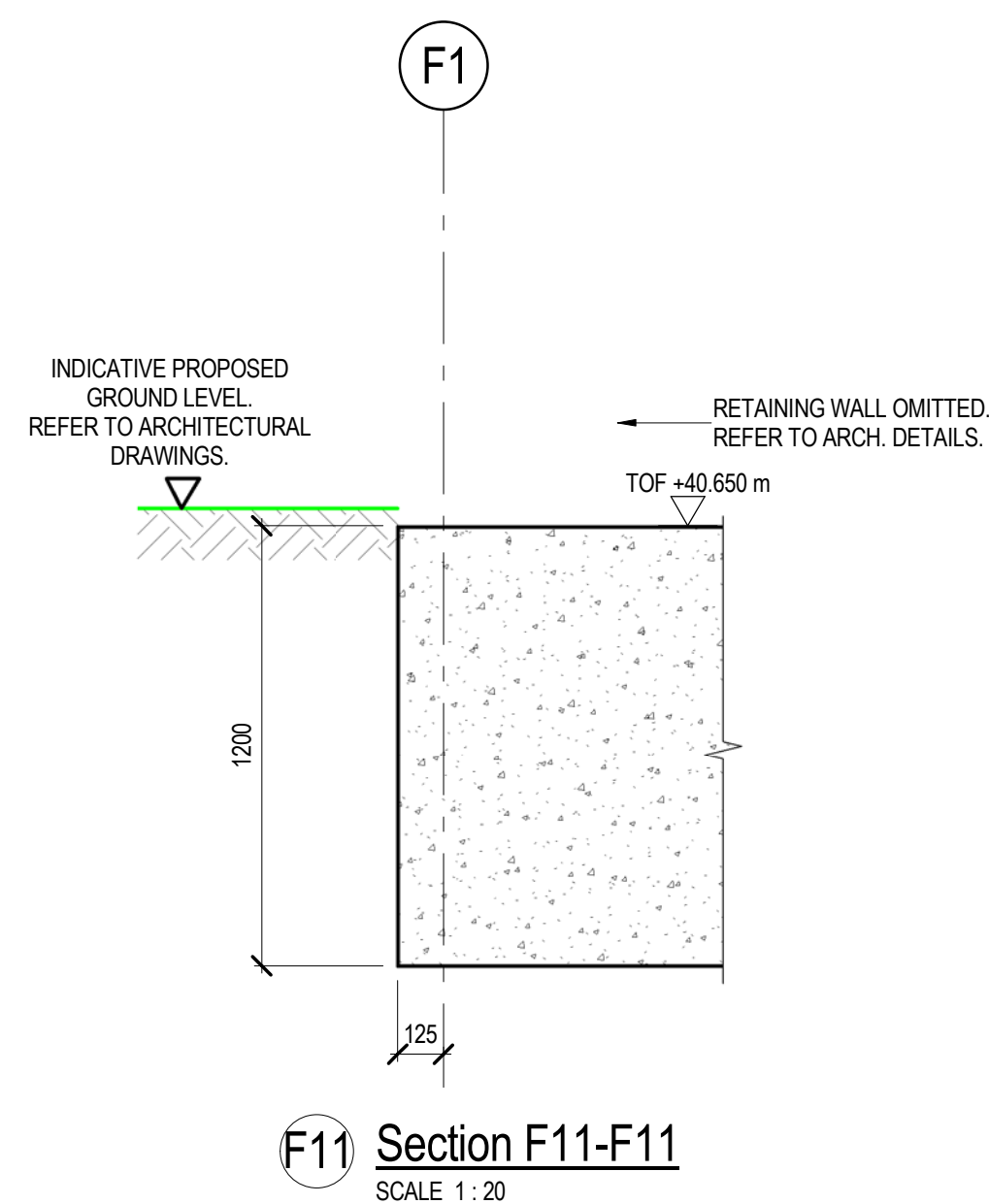
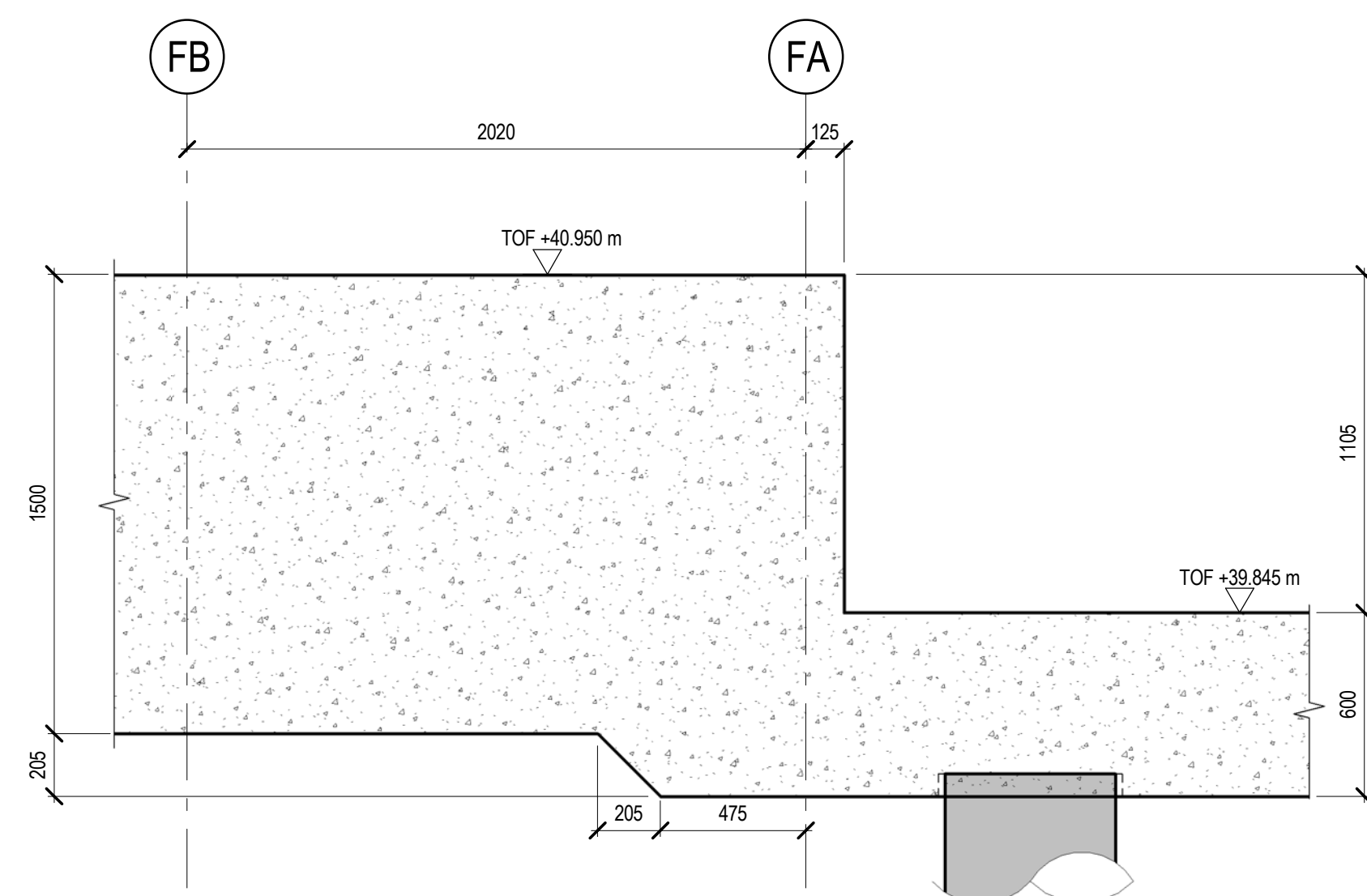
Orig Title **BLOCK F
FOUNDATION
DETAILED SECTIONS SHEET 1 OF 5**

Job No. **034592**

Scales@A1
As indicated

Drawing No. **KAM-BHE-BF-F01-DR-S-0105**

Revision **C04**



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<u>MAINTENANCE/CLEANING/OPERATION:</u>
<u>DECOMMISSIONING/DEMOLITION:</u>
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C04	FINAL CONSTRUCTION	20/11/2019	GB	MC
C03	NOTES ADDED AS CLOUDED	05/03/2018	AT	MC
C02	REVISED TO SUIT G.A. DRAWINGS	29/01/2018	AT	MC
C01	ISSUED FOR CONSTRUCTION	08/08/2017	AT	MC
Rev	Description	Date	Dm	CmId

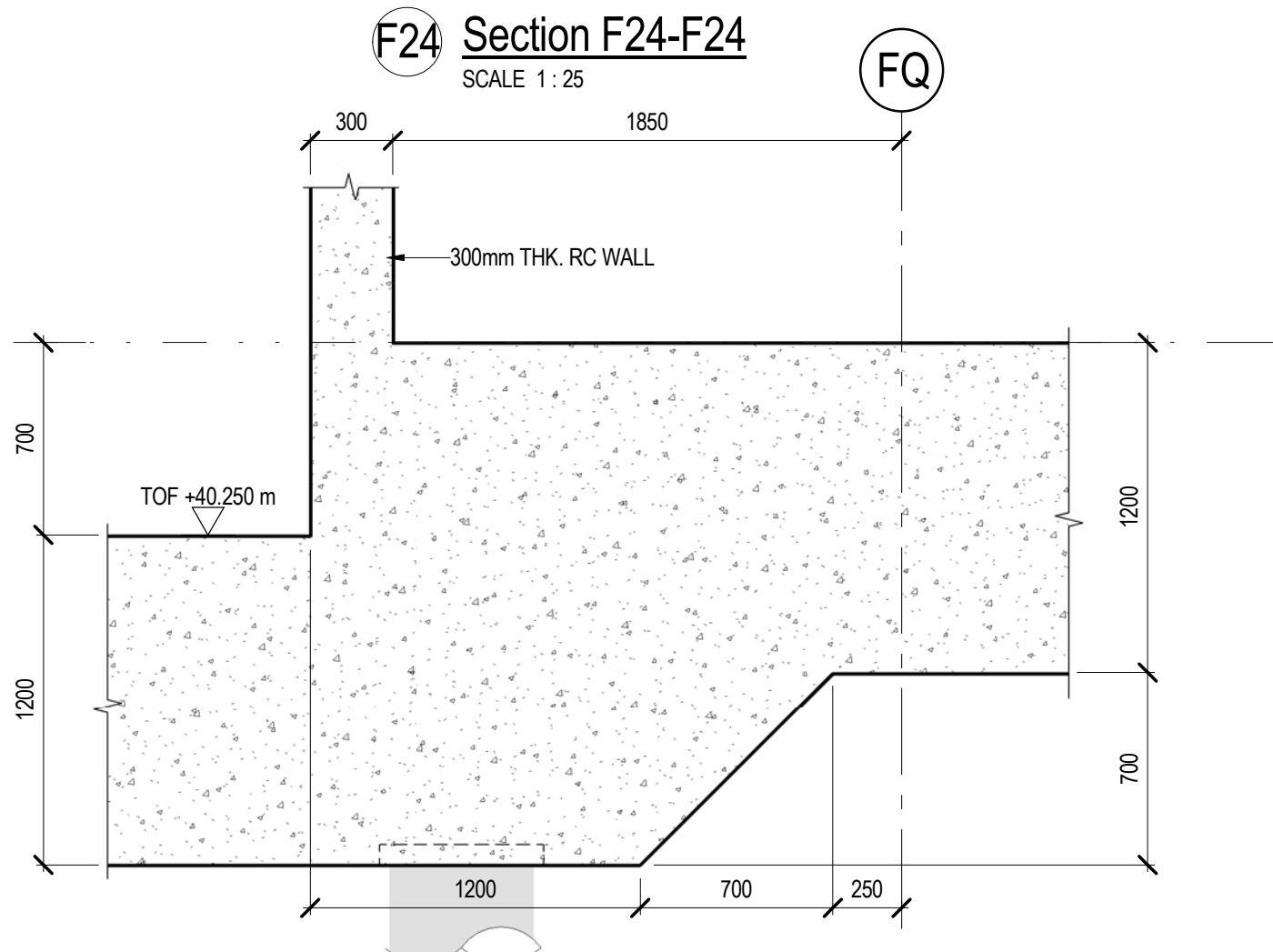
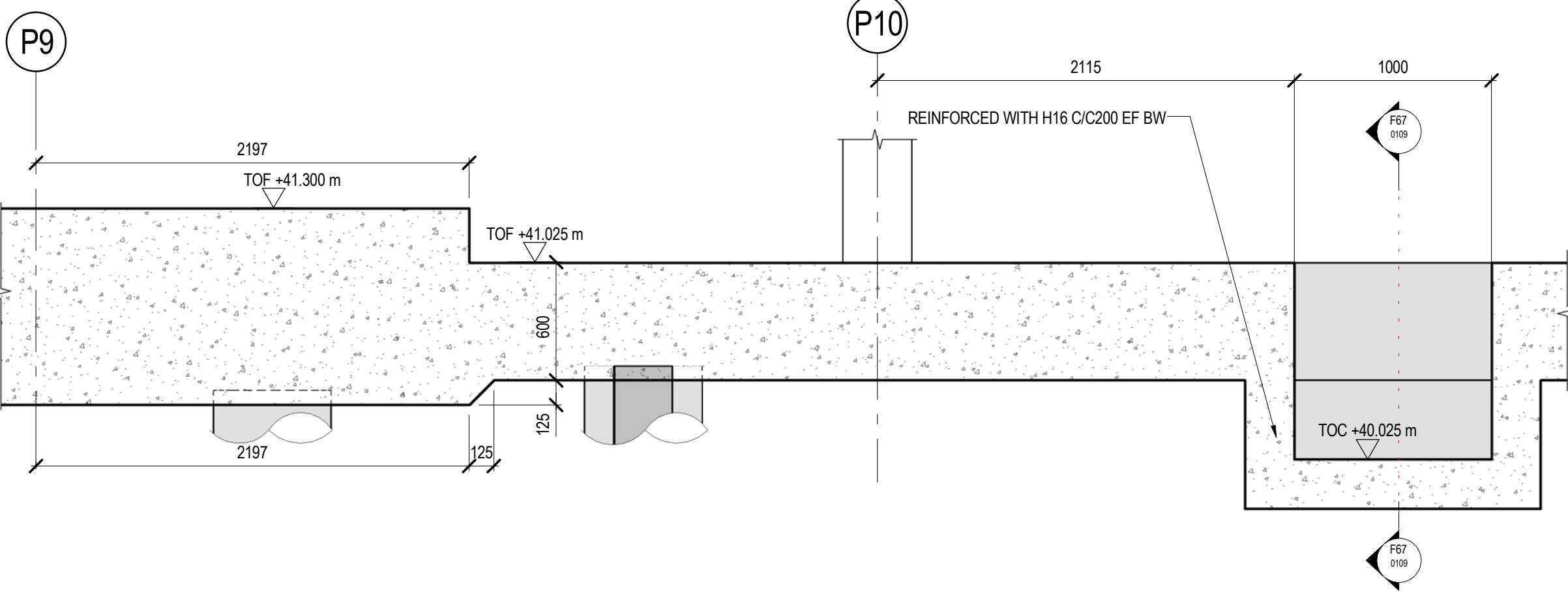
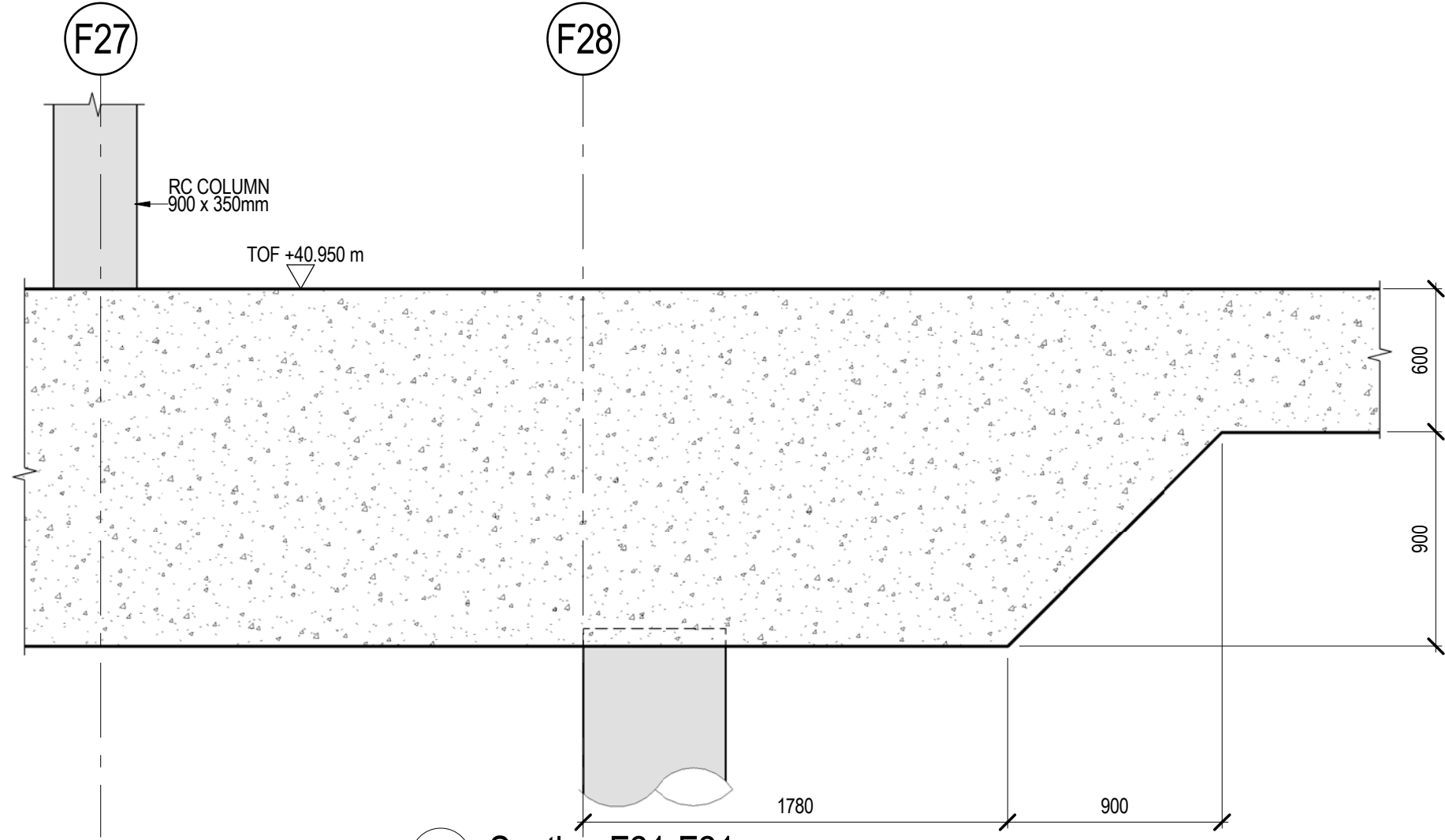
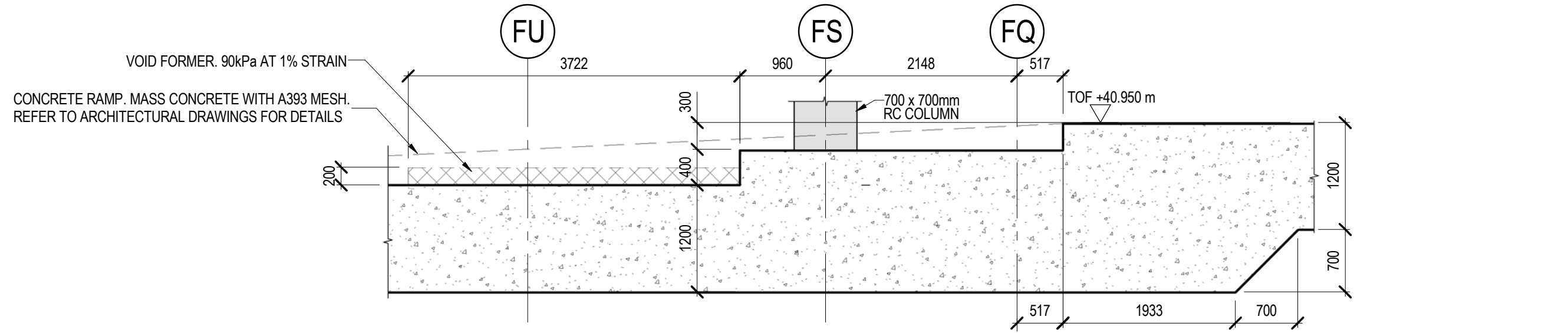
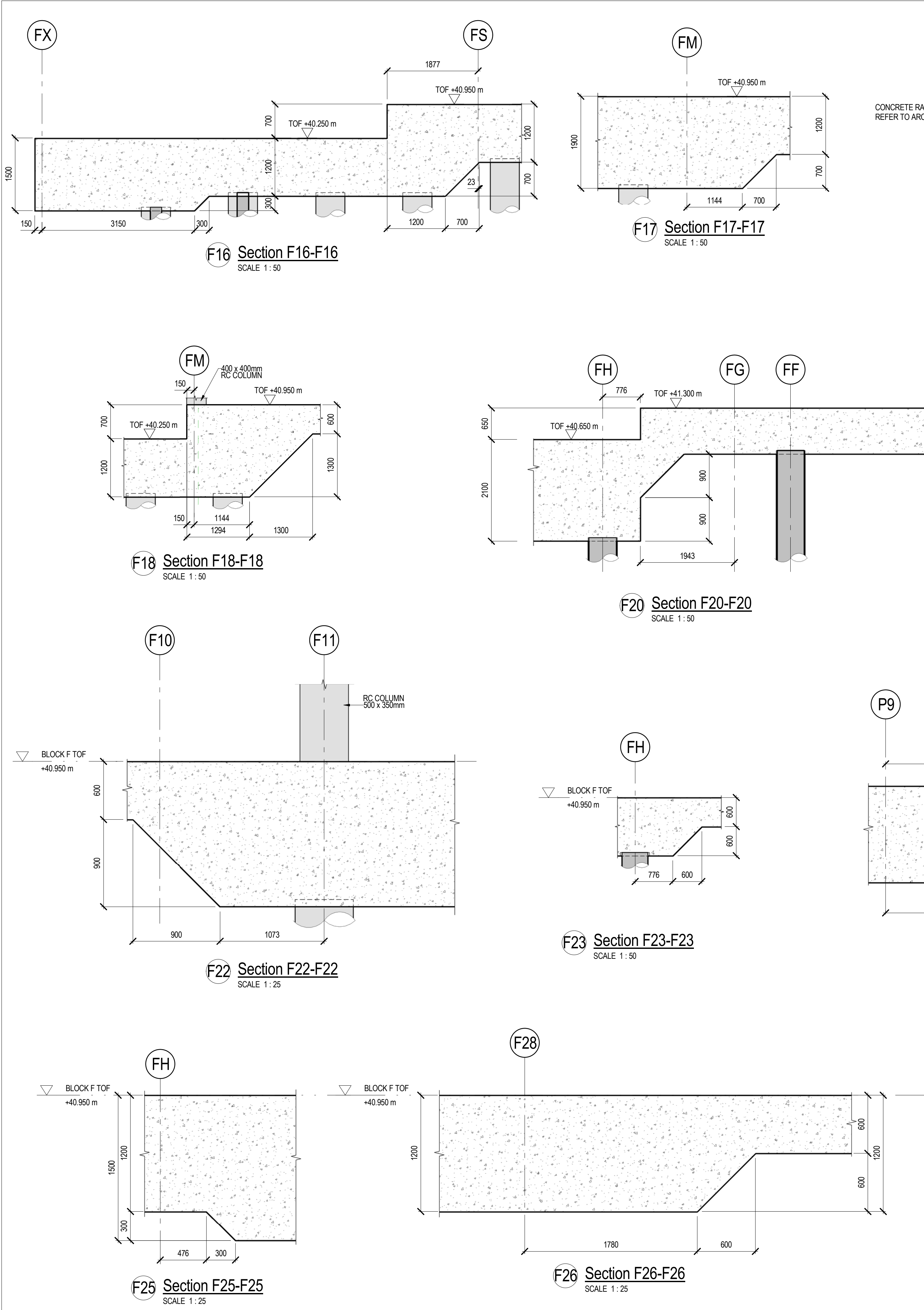
FINAL CONSTRUCTION

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Architect CHAPMAN TAYLOR
Project **KAMPUS**
Dwg Title
BLOCK F
FOUNDATION
DETAILED SECTIONS SHEET 2 OF 5

Job No. 034592	Scales@A1 As indicated
Drawing No. KAM-BHE-BF-F01-DR-S-0106	Revision C04



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C05	FINAL CONSTRUCTION	20/11/2019	GB	MC
C04	SECTION F24 REVISED	06/06/2018	AT	MC
C03	REVISED FOLLOWING AMENDMENTS IN G.A. COMMENTS ADDED AS CLOUDED	05/03/2018	AT	MC
C02	REVISED TO SUIT G.A. DRAWING	29/01/2018	AT	MC
C01	ISSUED FOR CONSTRUCTION	08/08/2017	AT	MC
Rev	Description	Date	Dm	C/d

FINAL CONSTRUCTION

Status of Drawing

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UK

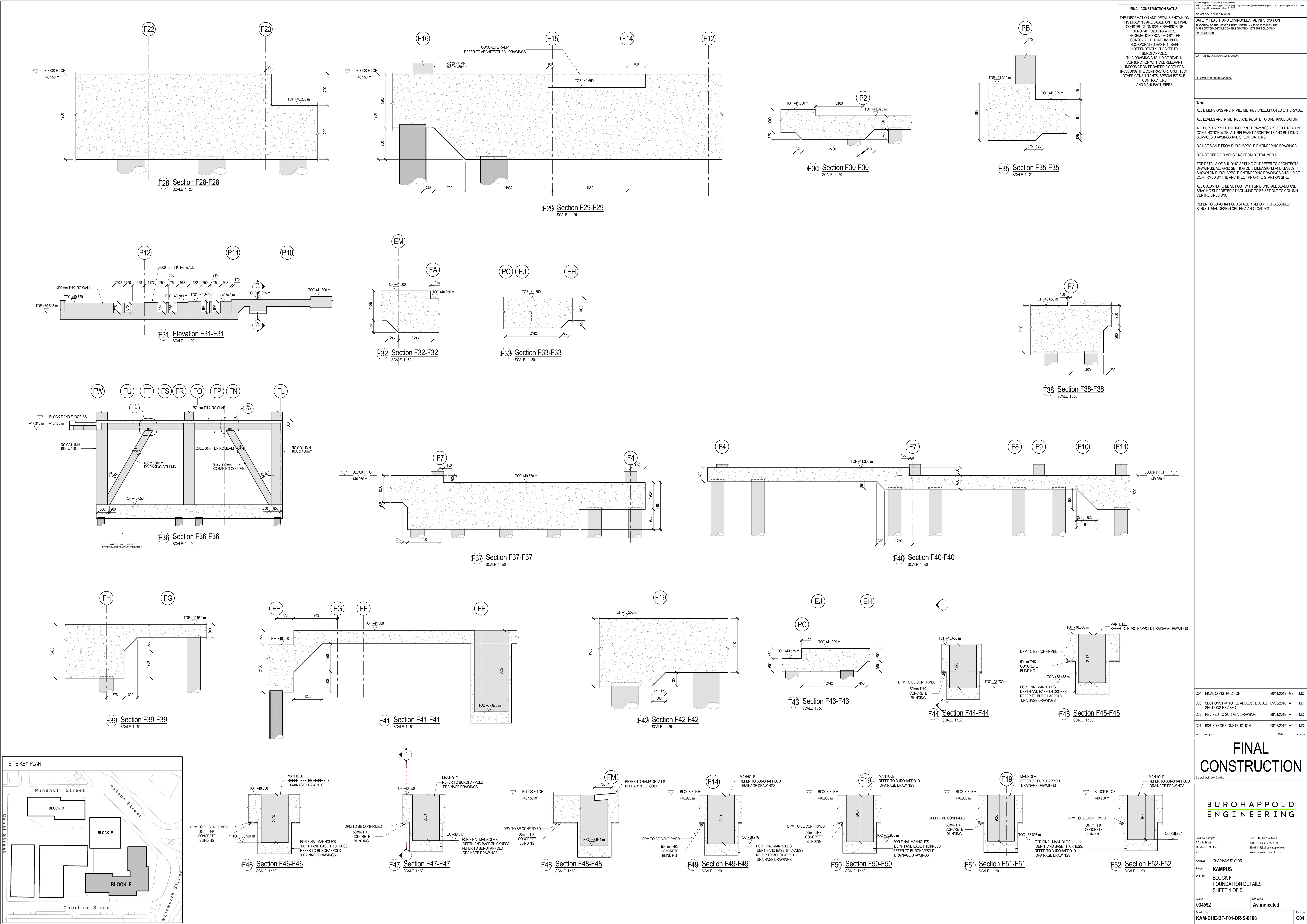
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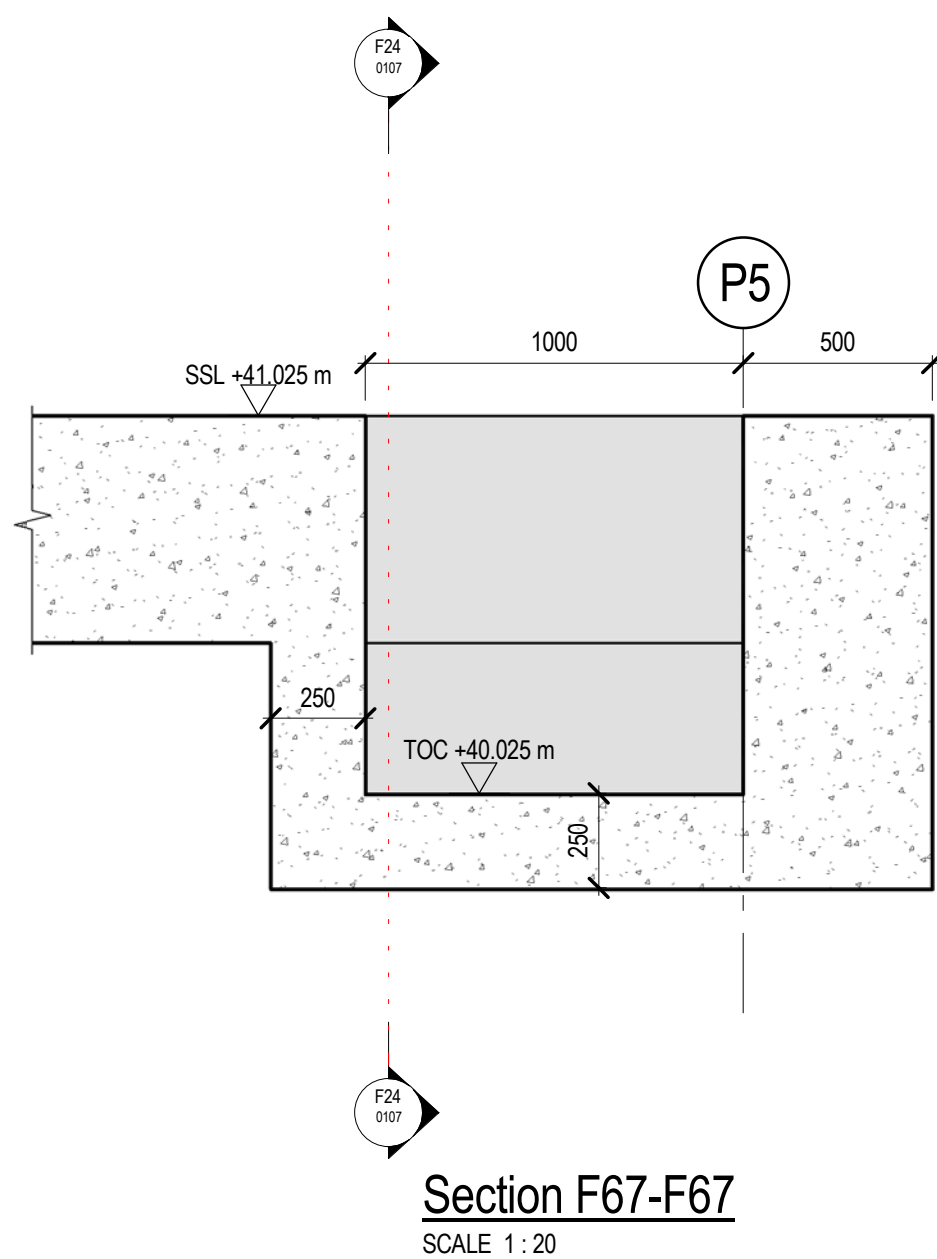
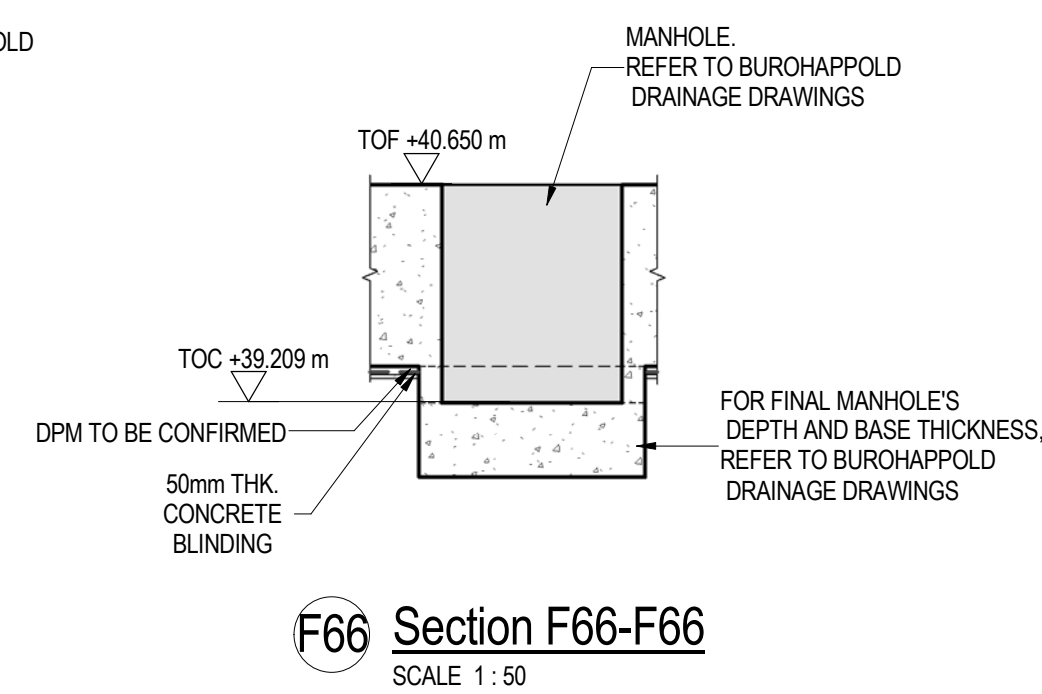
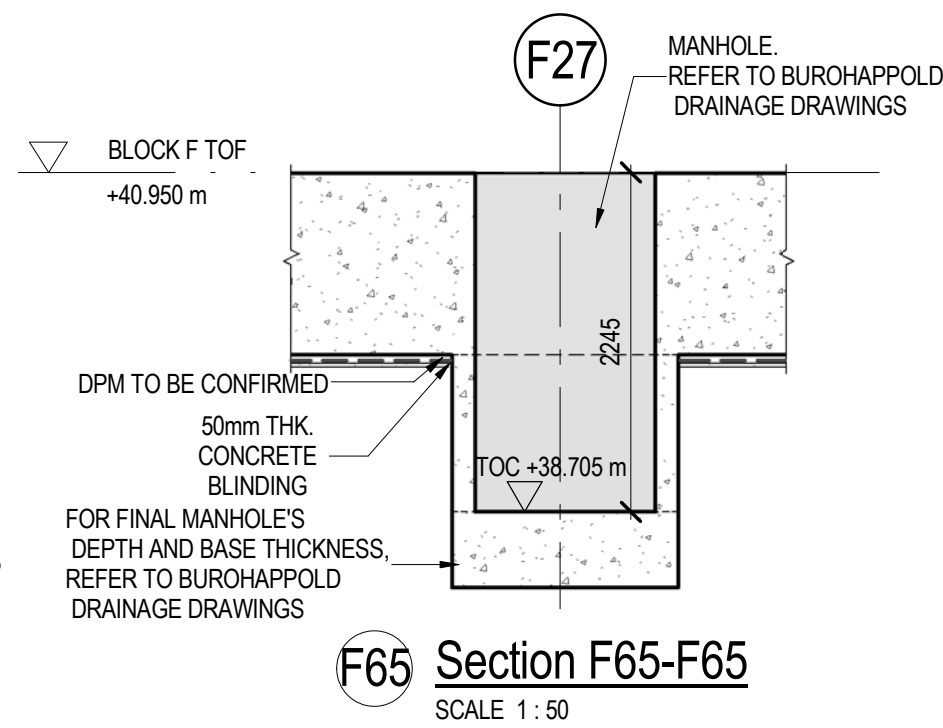
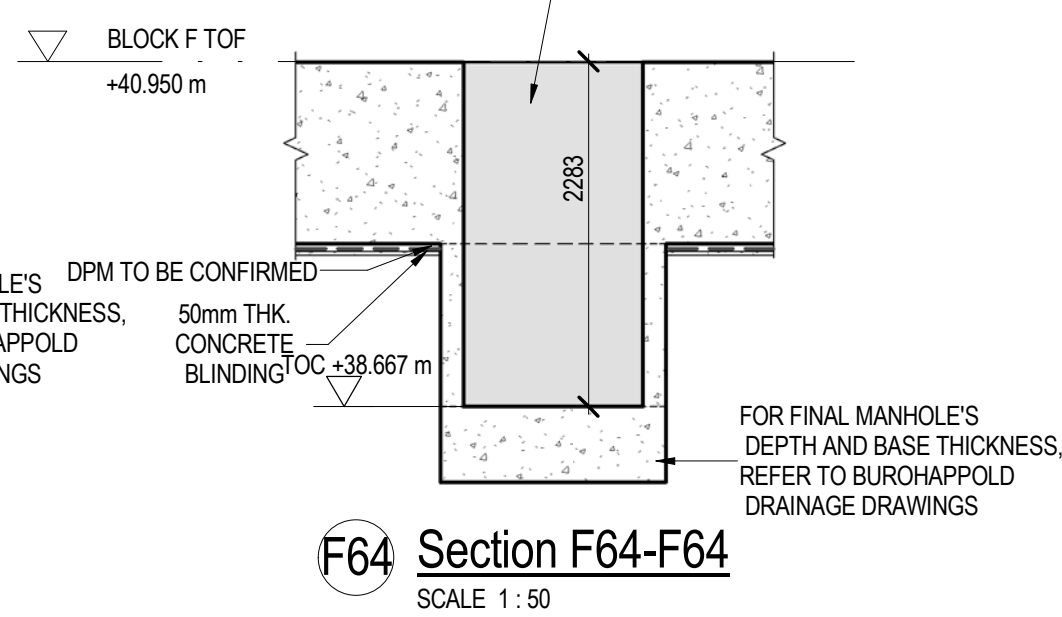
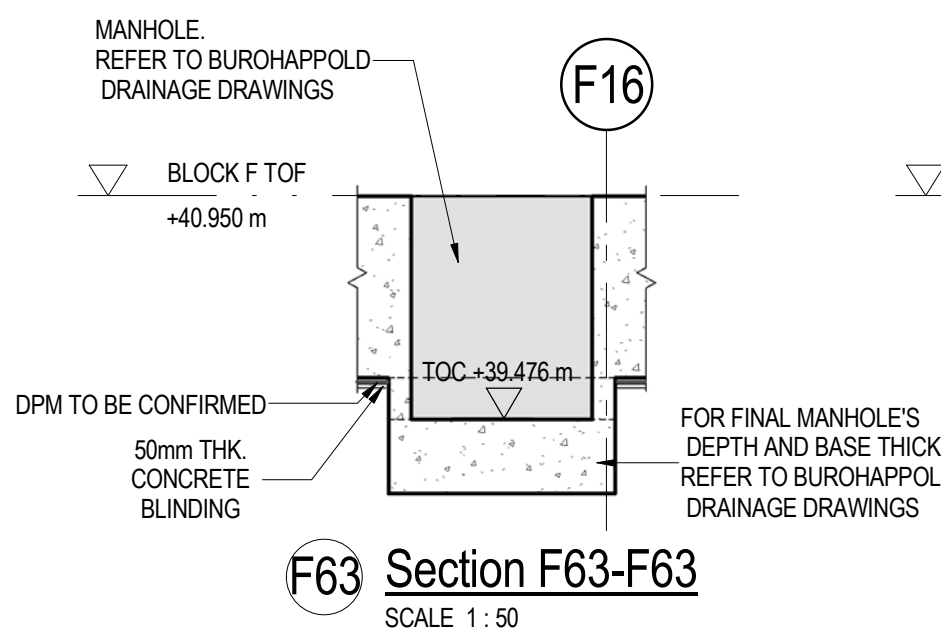
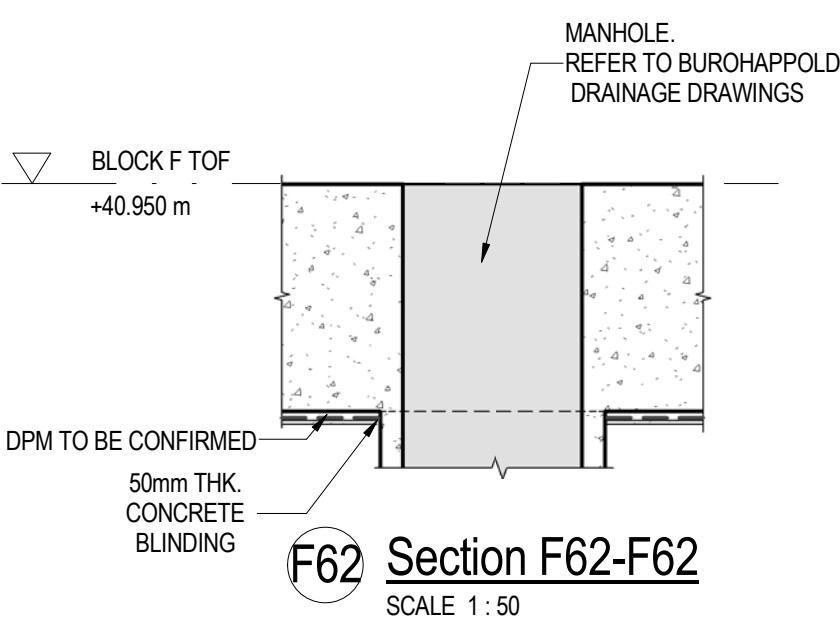
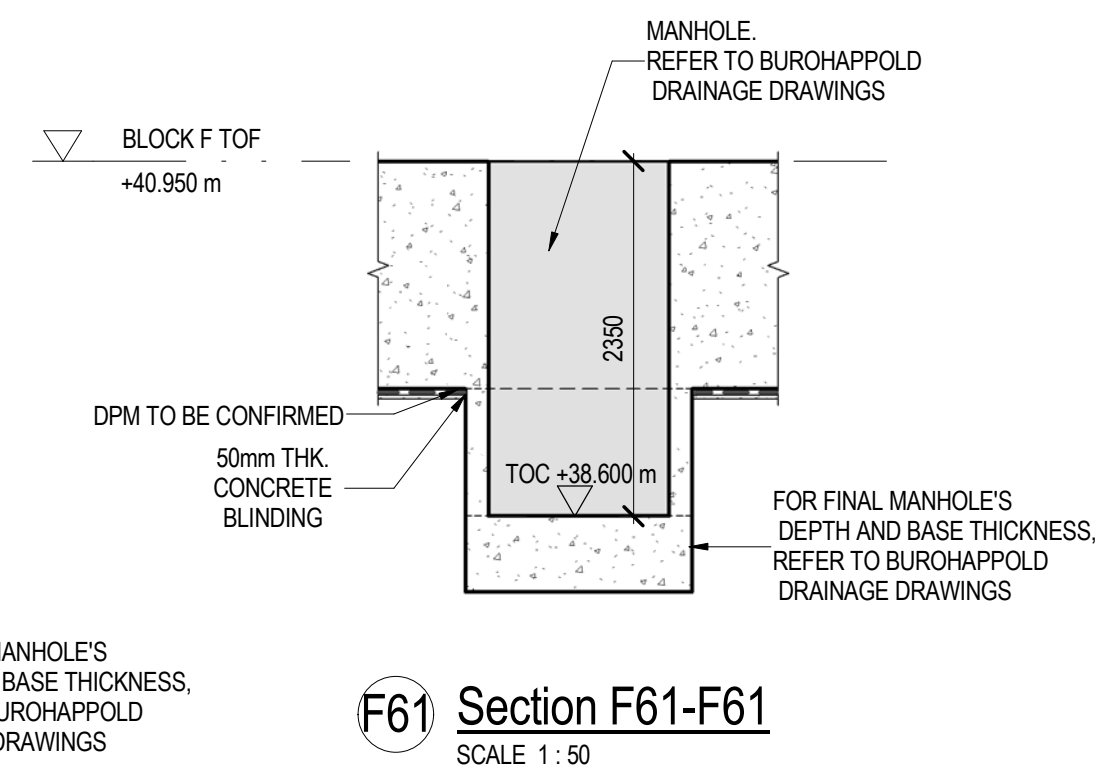
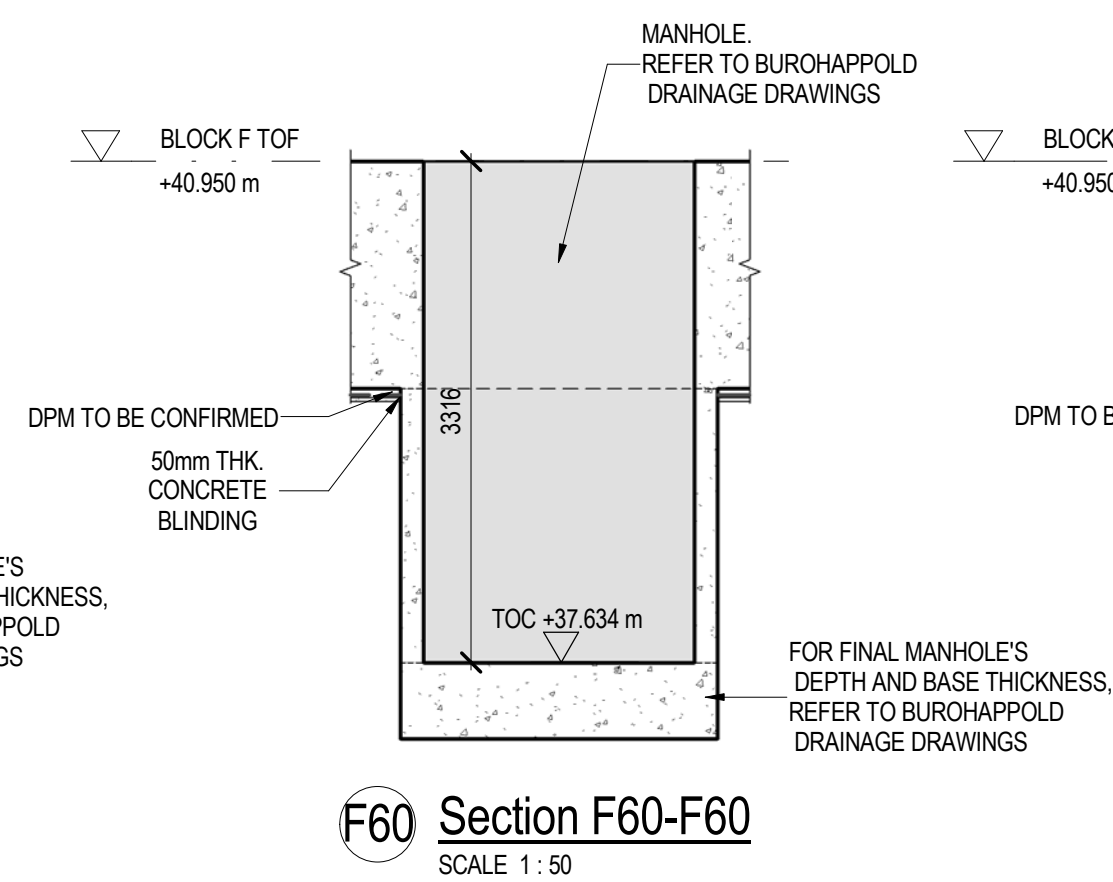
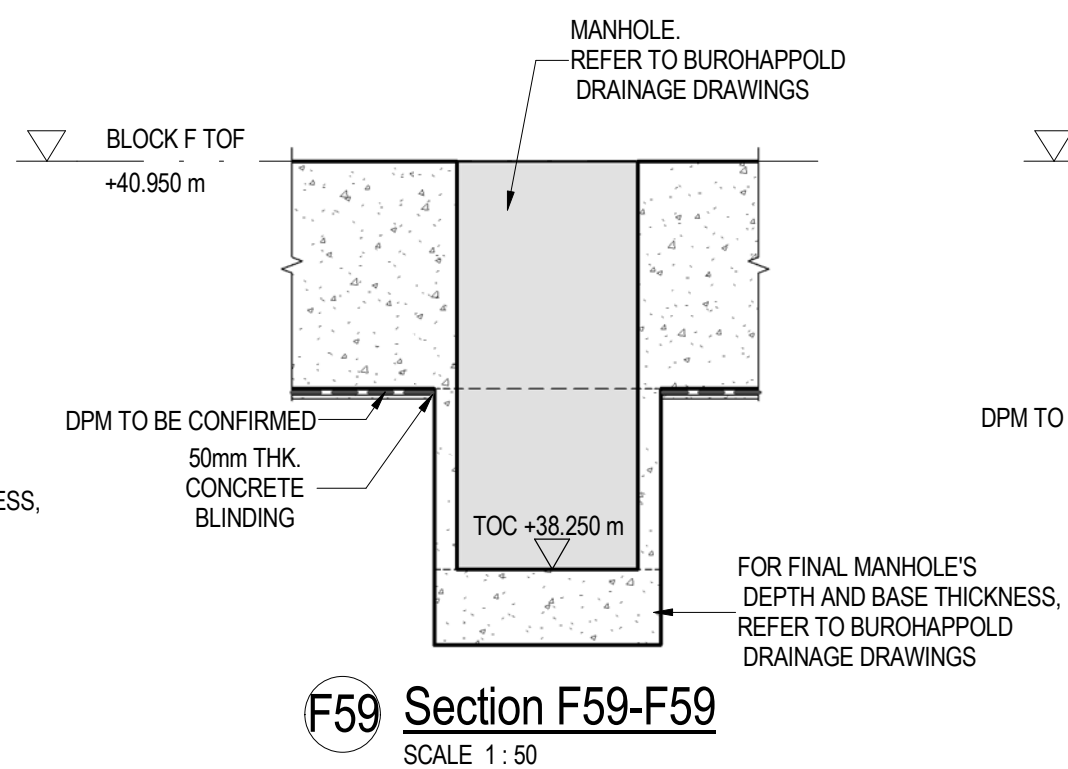
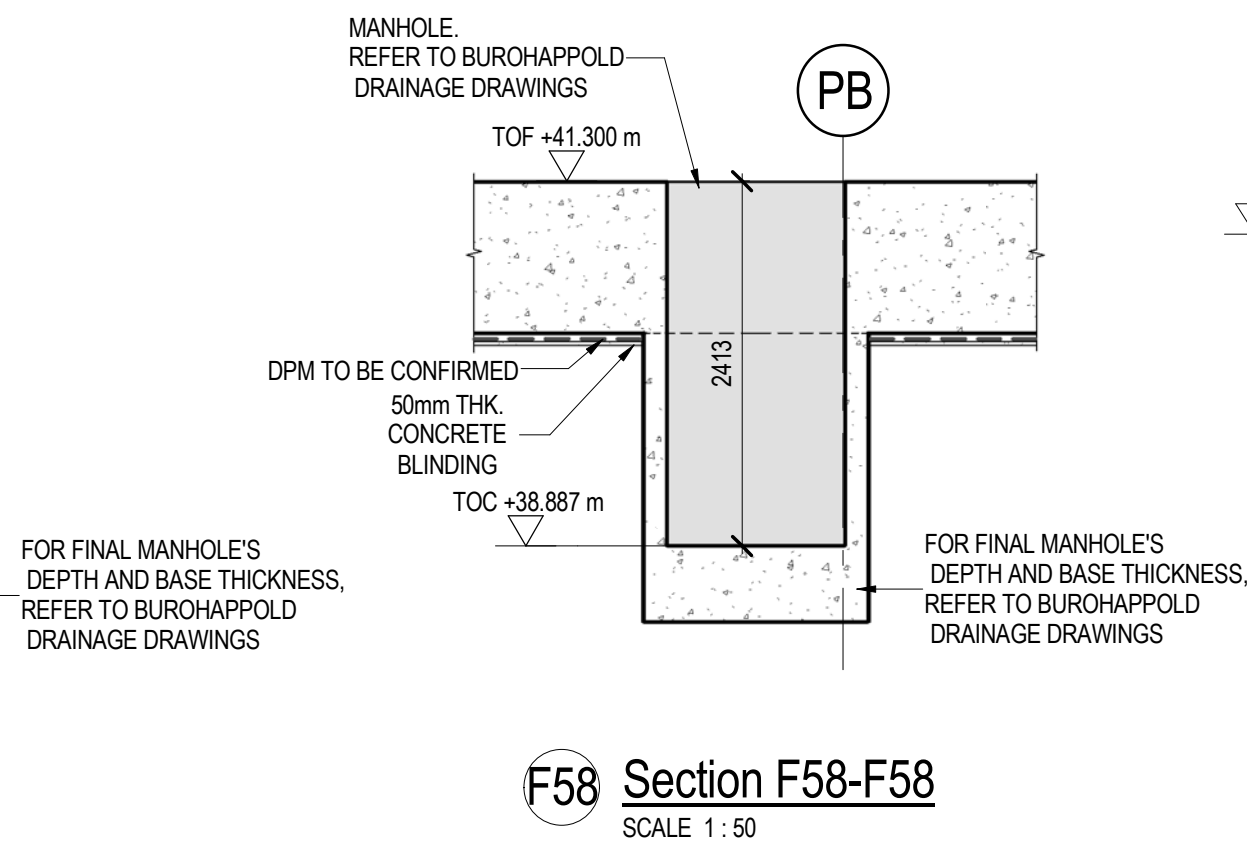
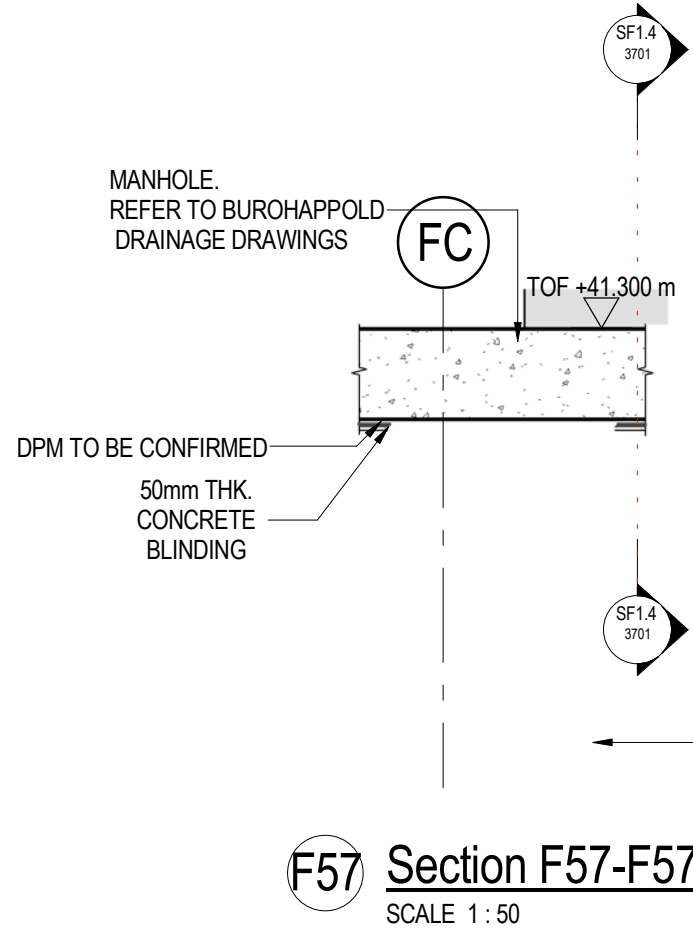
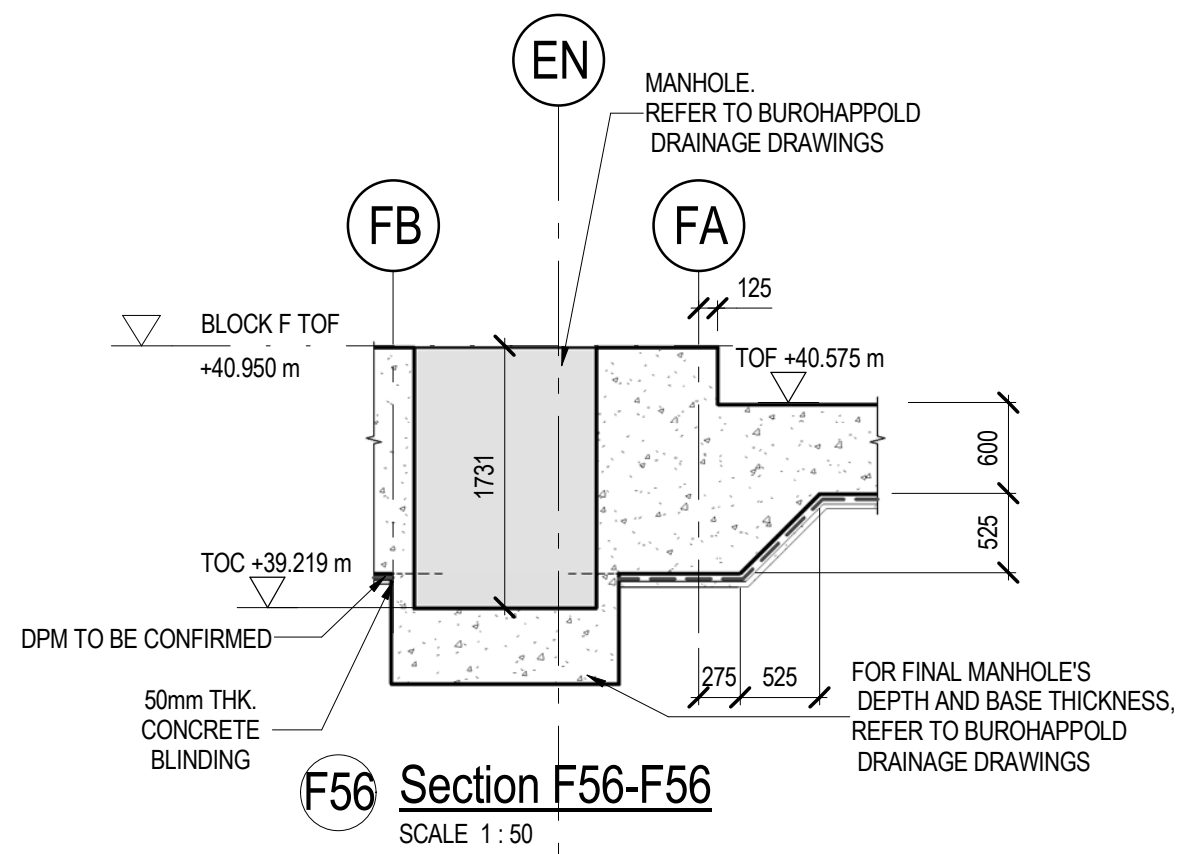
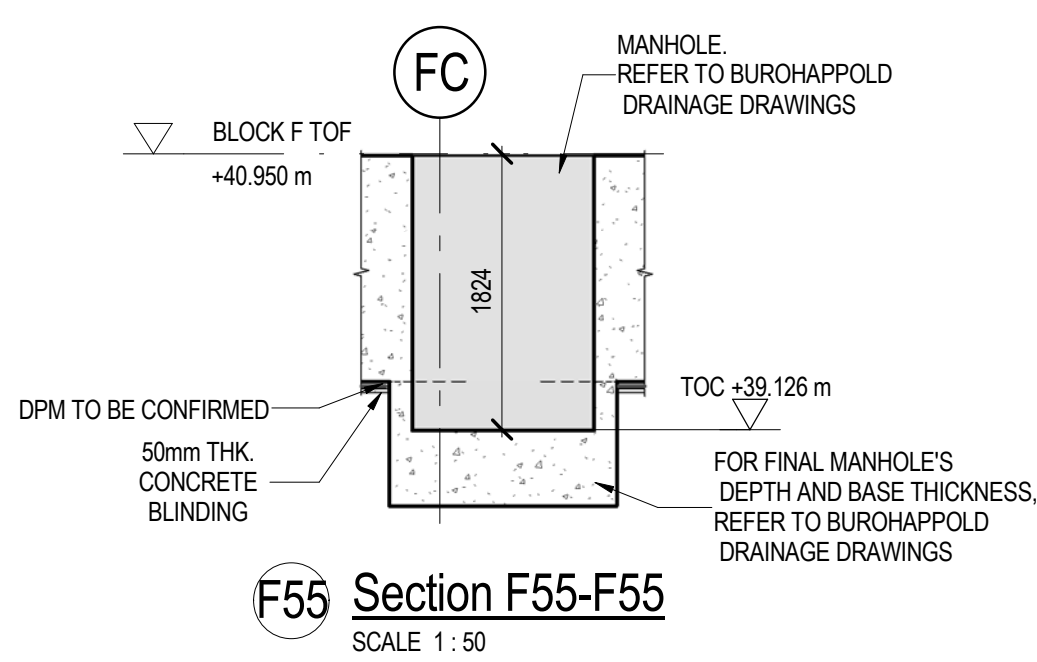
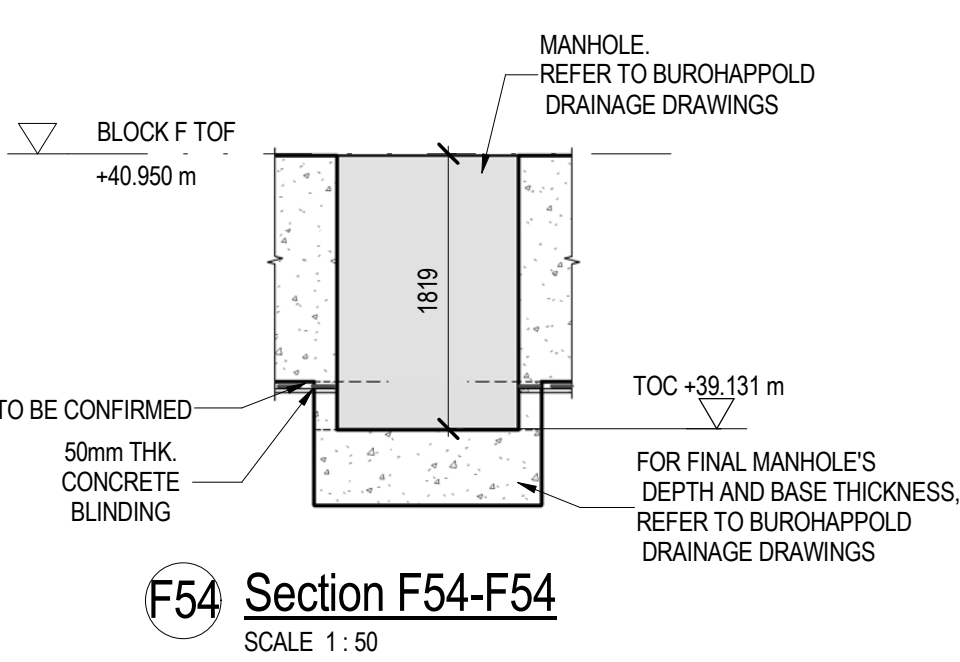
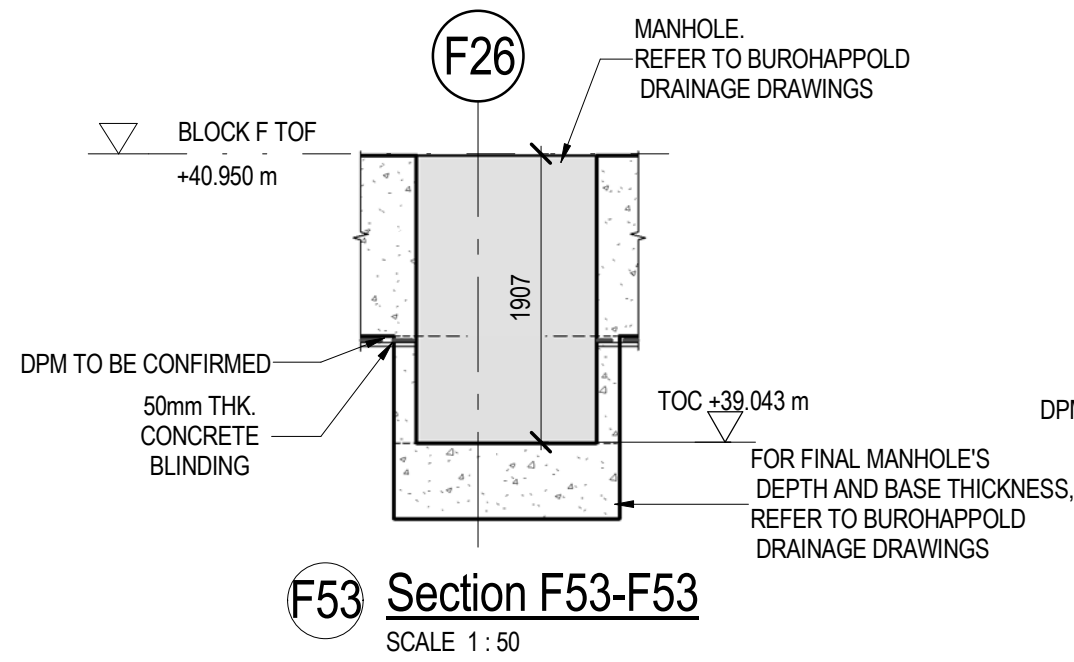
Architect **CHAPMAN TAYLOR**

Project **KAMPUS**

Drg Title **BLOCK F FOUNDATION DETAILED SECTIONS SHEET 3 OF 5**

Job No. 034592	Scales@A1 As indicated	Revision C05
Drawing No. KAM-BHE-BF-F01-DR-S-0107		





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MAINTENANCE/CLEANING/OPERATION
DECOMMISSIONING/DEMOLITION
Notes

C03	FINAL CONSTRUCTION	20/11/2019	GB	MC
C02	SECTION F67 ADDED	06/06/2018	AT	MC
C01	ISSUED FOR CONSTRUCTION	05/03/2018	AT	MC
Rev	Description	Date	Dm	C'd

**FINAL
CONSTRUCTION**

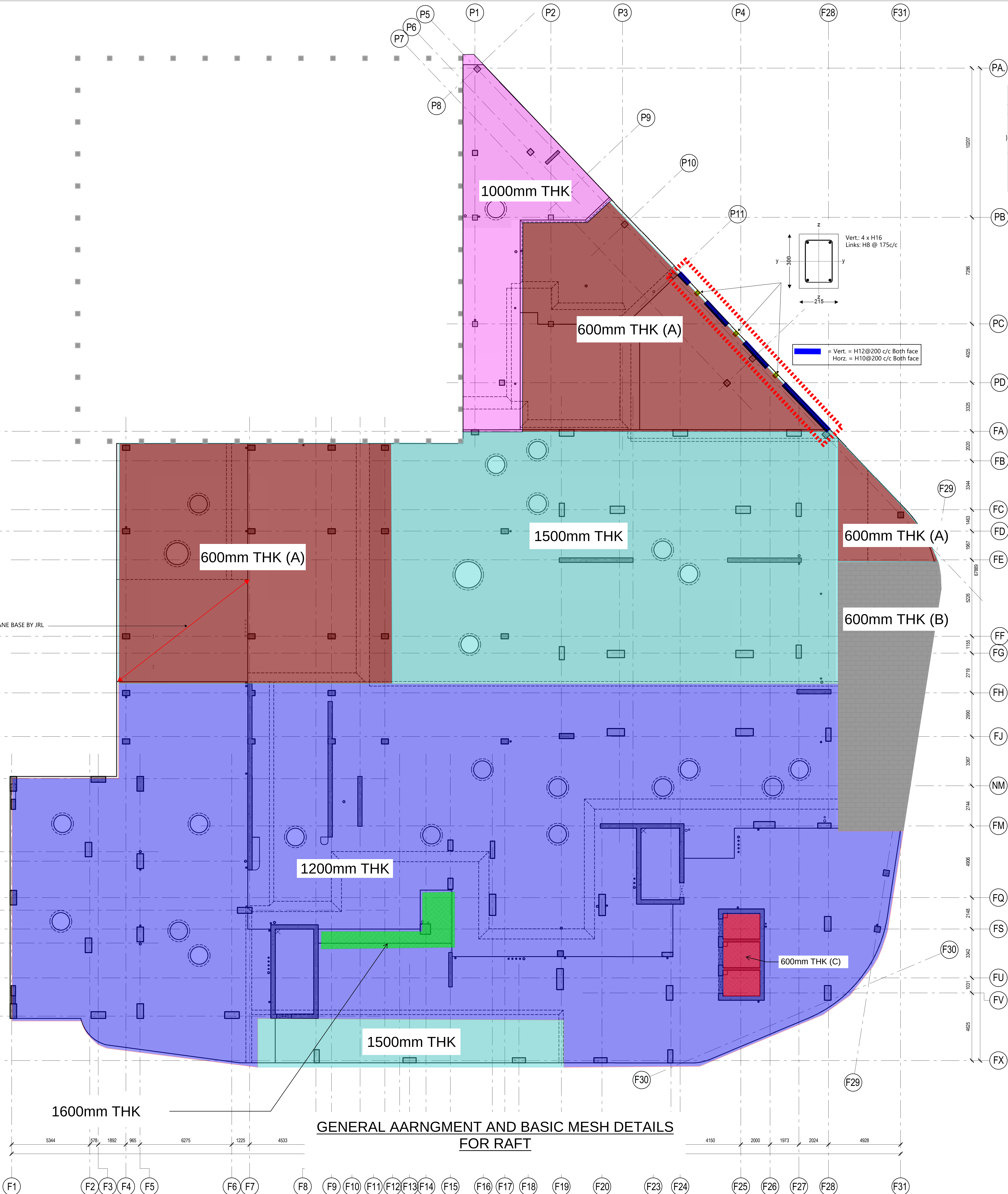
Status of Drawing

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Architect Project Drg Title	CHAPMAN TAYLOR KAMPUS BLOCK F FOUNDATION DETAILS SHEET 5 OF 5
Job No. 034592	Scales@A1 As indicated
Drawing No. KAM-BHE-BF-F01-DR-S-0109	Revision C03

BASIC MESH	
RAFT THICKNESS (mm)	BOTTOM MESH
600 (A)	B1- H25 - 200 B2- H25 - 200
600 (B)	B1- H25 - 200 B2- H25 - 200
1000	B1- H25 - 200 B2- H25 - 200
1200	B1- H32 - 200 B2- H32 - 200
1500	B1- H32 - 200 B2- H32 - 200
600 (C)	B1- H32 - 200 B2- H32 - 200

BASIC MESH-	
RAFT THICKNESS (mm)	TOP MESH
600 (A)	T1- H25 - 200 T2- H25 - 200
600 (B)	T1- H20 - 200 T2- H20 - 200
1000	T1- H25 - 200 T2- H25 - 200
1200	T1- H25 - 200 T2- H25 - 200
1500	T1- H32 - 200 T2- H32 - 200
600 (C)	T1- H20 - 200 T2- H20 - 200



		Bond condition	Reinforcement in tension, bar diameter, ϕ (mm)								Reinforcement in compression
			8	10	12	16	20	25	32	40	
Concrete class C32/40											
Anchorage length, l_{ad}	Straight bars only	Good	200	270	350	510	660	860	1100	1490	34 ϕ
	Poor	Poor	280	380	500	720	950	1230	1570	2130	49 ϕ
Lap length, l_b	Other bars	Good	270	350	420	550	690	860	1100	1490	34 ϕ
	Poor	Poor	390	490	590	790	980	1230	1570	2130	49 ϕ
	50% lapped in one location ($a_s = 1.4$)	Good	270	380	490	710	930	1200	1540	2090	48 ϕ
	Poor	Poor	390	540	690	1010	1320	1720	2200	2980	69 ϕ
	100% lapped in one location ($a_s = 1.5$)	Good	290	400	520	760	990	1290	1650	2240	51 ϕ
	Poor	Poor	420	570	740	1080	1420	1840	2350	3200	73 ϕ

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CONSTRUCTION

MAINTENANCE/OPERATION

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Notes

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM

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ALL DETAILING TO BE IN ACCORDANCE WITH BS EN 1992
REFERENCE TO BS EN 1992
STRUCTURAL CONCRETE 3:1992

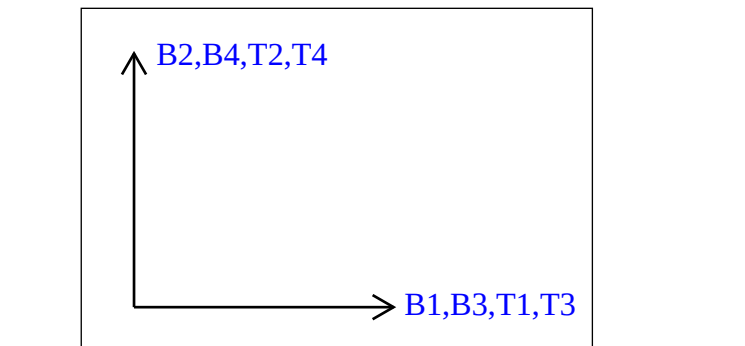
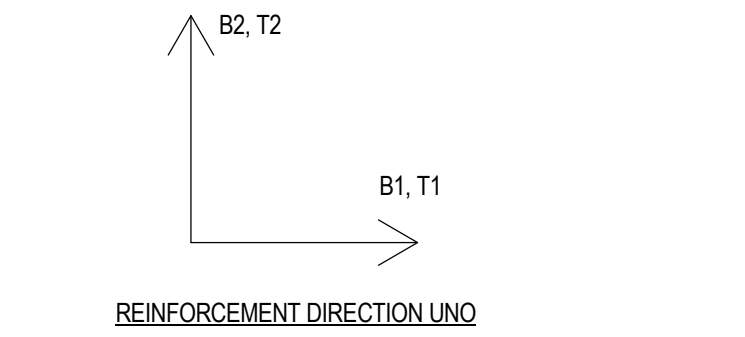
CONCRETE COVER:
INTERNAL: 30mm
EXTERNAL: 50mm

ALL CONCRETE COVER VALUES STATE ABOVE INCLUDE AN ALLOWANCE OF 10mm FOR Δc_{min}

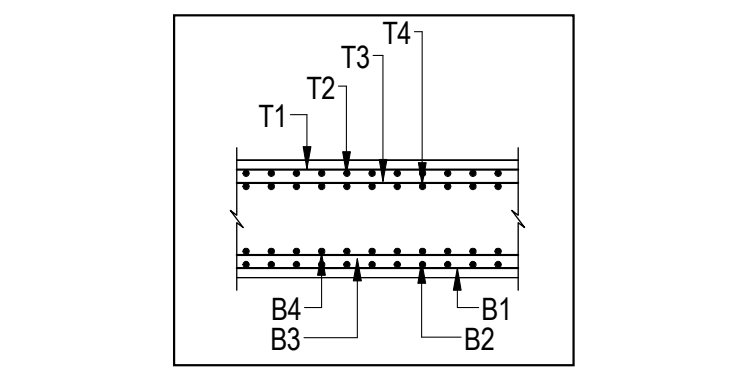
CONCRETE GRADE
C32/40

FOR CONCRETE SPECIFICATION REFER TO
KAM-BHE-XX-XX-SP-S0002

REINFORCEMENT TO CONTINUE ANCHORAGE LENGTH PAST HATCHED ZONE, WHERE TWO HATCHED ZONES ARE CONCURRENT A LAP LENGTH OF THE SMALLER DIAMETER BAR MAY BE USED.



- Reinforcement direction U.N.O**
- abbreviation for top outer layer **T1**
 - abbreviation for top second layer **T2**
 - abbreviation for bottom second layer **B2**
 - abbreviation for bottom outer layer **B1**



C04	RETAINING WALL/STUB COLUMN RC INTENT ADDED	28/02/2018	FK	MC
C03	ISSUED FOR CONSTRUCTION	02/02/2018	DP	MC
C02	ALL REDESIGNED FOR DUKES TUNNEL ENERGY CENTRE AND SHOOTERS BROOK	31/01/2018	DP	MC
C01	FOR CONSTRUCTION	07/09/2017	NK	MC
Rev	Description	Date	Approved	

CONSTRUCTION

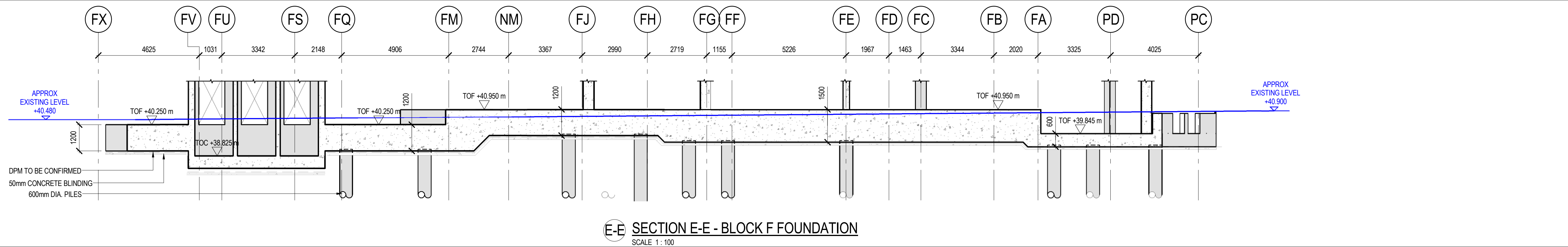
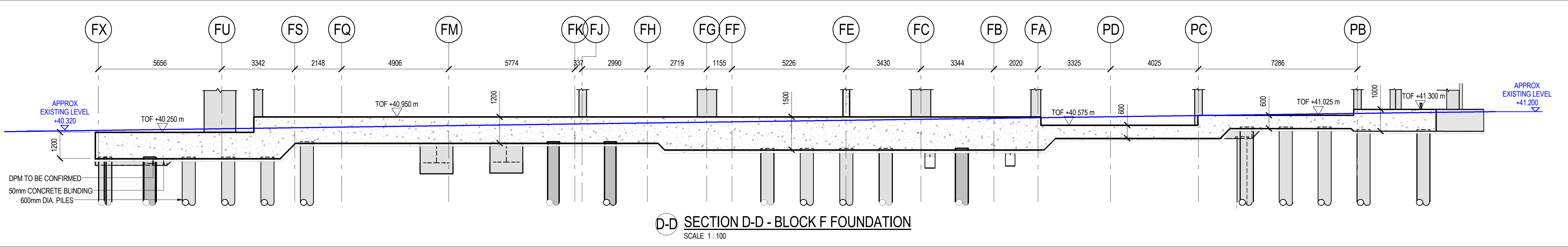
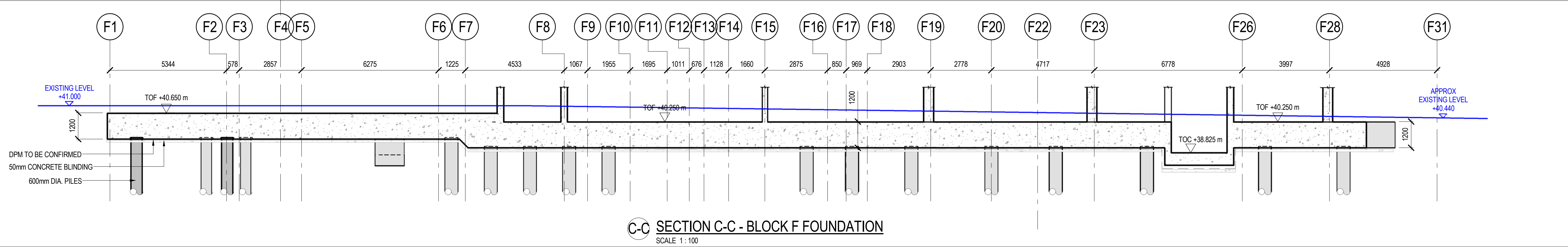
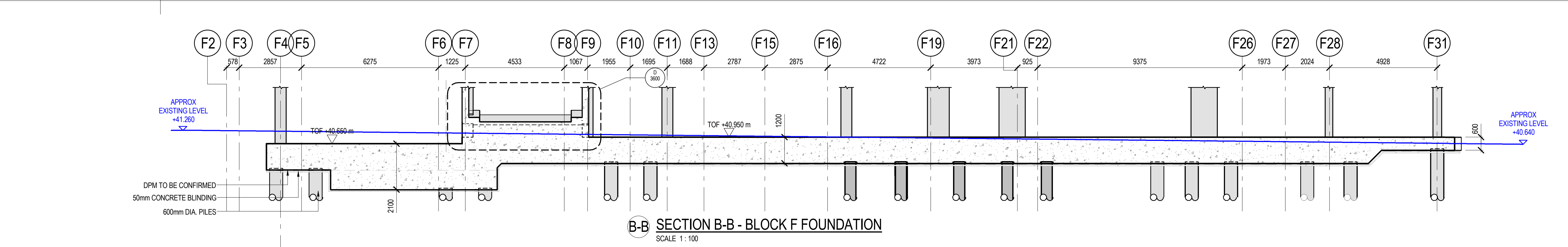
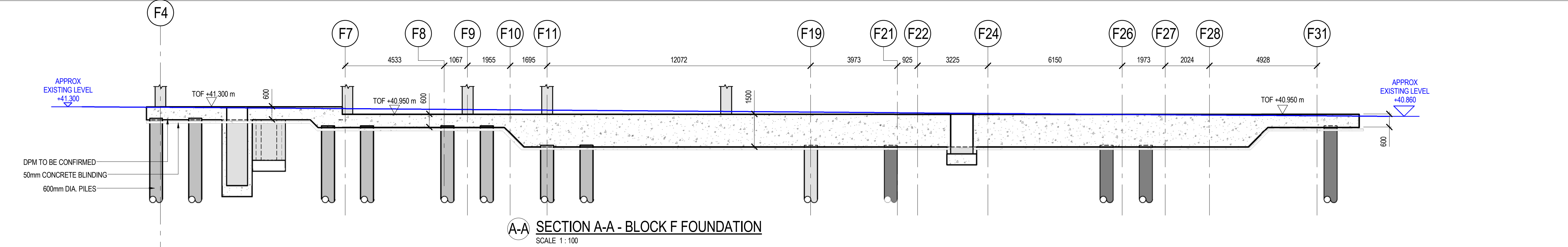
Status/Utility of Drawing

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Architect: CHAPMAN TAYLOR
Project: KAMPUS
Block F
Raft Foundation
RC INTENT BASIC MESH

Job No: 034592
Drawing No: KAM-BHE-BF-F01-DR-S-R9000
Scale: As indicated
Revision: C04



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DECOMMISSIONING/DEMOLITION

Notes

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NOTE :
THIS DRAWING SUPERSEDES
DRG. NO. KAM-F-S3100rev01

C03	FINAL CONSTRUCTION	20/11/2019	GB	MC
C02	LIFT SHAFT PIT TOC LEVEL REVISED	05/03/2018	AT	MC
C01	ISSUED FOR CONSTRUCTION	29/01/2018	AT	MC
Rev	Description	Date	Dm	Cv'd

FINAL CONSTRUCTION

Status of Drawing

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Architect **CHAPMAN TAYLOR**
Project **KAMPUS**
Drg Title **BLOCK F FOUNDATION SECTIONS**

Job No. 034592	Scales@A1 1 : 100
Drawing No. KAM-BHE-BF-ZZ-DR-S-3100	Revision C03



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Job No. 034592	Scale: 1/4"=1'-0" As indicated	Revision C0
Drawing No. KAM-BHE-BF-ZZ-DR-S-3600		