

GENERAL NOTES

- THE WHOLE DRAINAGE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE BUILDINGS ORDINANCE AND BUILDING REGULATIONS AND THE CURRENT REGULATIONS OF HONG KONG ENVIRONMENTAL PROTECTION DEPARTMENT.
- ALL DIMENSIONS AND PIPE SIZES SHOWN ON THE DRAWINGS ARE IN mm UNLESS OTHERWISE STATED.
- WHERE THE WASTE PIPE FROM A WASTE FITMENT IS CONNECTED TO A SOIL PIPE, THE TRAP PROVIDED FOR EACH FITMENT SHALL HAVE A WATER SEAL NOT LESS THAN 80mm AND BE VENTED BY MEANS OF ANTISYPHONAGE PIPE OR ANTISYPHONAGE TRAP.
- HORIZONTAL VENT PIPE SHALL BE INSTALLED IN A MANNER THAT THERE IS A CONTINUOUS FALL BACK AT A GRADIENT OF NOT LESS THAN 1 IN 300 INTO THE DISCHARGE PIPE SYSTEM. UNLESS OTHERWISE STATED GRADIENT OF DRAIN PIPES SHALL BE AS FOLLOWS:-

Ø100	FALL 1 : 40
Ø150	FALL 1 : 70
Ø225	FALL 1 : 100
Ø300 OR ABOVE	FALL 1 : 150

- ALL UNDERGROUND PIPES SHALL BE PROVIDED WITH PIPE HAUNCHING OR SURROUNDED BY CONCRETE AS SHOWN ON DETAILS DRAWINGS. THE DRAINAGE SUB-CONTRACTOR SHALL CHECK THE SITE BEFORE CONSTRUCTION AND RECTIFY THE PROPOSED PIPE ROUTING.
- INSPECTION PANELS OF ADEQUATE SIZE SHALL BE PROVIDED AT PIPE DUCTS AND SHAFTS FOR INSPECTION AND MAINTENANCE OF PIPES.
- ALL BACK INLET TRAPPED GULLIES SHALL BE VENTILATED BY MEANS OF 80mm DIA. VENT PIPE.
- ALL SOIL WASTE AND VENT STACKS SHALL BE CARRIED UP TO THE ROOF AND TERMINATED AT NOT LESS THAN 1000mm ABOVE THE ROOF OR AS SHOWN IN DRAWINGS.
- EVERY ANTI-SYPHONAGE PIPE SHALL BE CONNECTED WITH BRANCH SOIL PIPE OR BRANCH WASTE PIPE AT A POINT NOT MORE THAN 300mm FROM TRAP OUTLET.
- WHETHER SHOWN ON THE DRAWINGS OR NOT, SUFFICIENT ACCESS SHALL BE PROVIDED BY MEANS OF CLEANING EYES OR OTHER APPROVED METHOD TO ENABLE ALL DRAINAGE PIPES TO BE CLEARED OF ANY OBSTRUCTION. SUCH ACCESS POINTS SHALL BE SO SITED AT TO ALLOW CLEARANCE FOR THE EASY ENTRY OF CLEANING ROD.
- ALL BENDS IN SOIL PIPES AND WASTE PIPES SHALL HAVE AN OBTUSE ANGLE AND HAVE THE LARGEST PRACTICABLE RADIUS OF CURVATURE. THE BENDS SHALL NOT CHANGE IN ANY WAY OF THE SECTION OF THE PIPE AND A CLEANING EYE SHALL BE PROVIDED AT OR NEAR THE BEND.
- ALL FLOOR DRAINS ARE TO BE COMPLETED WITH FLAT GRATING. THEIR SIZE ARE NOTED AS FOLLOWS:

OUTLET SIZE	GRATING SIZE
Ø100	Ø100
Ø150	Ø150
Ø225	Ø225
Ø300 OR ABOVE	Ø300

FOR REFERENCE ONLY

- THE SUB-CONTRACTOR SHOULD CHECK AND ALLOW ADEQUATE FALL FOR THE SOIL/WASTE PIPE RUNNING ON FLOOR LEVEL.
- ALL PIPES PASSING THROUGH EXIT STAIRCASES, FIRE PROTECTED LOBBIES SHALL BE ENCLOSED IN FRR -60/60 MATERIAL & BASEMENT IN FRR -120/120 MATERIAL BY MAIN CONTRACTOR.
- EXPANSION JOINTS SHALL BE PROVIDED FOR PIPEWORK PASSING THROUGH BUILDING EXPANSION JOINTS.
- UNLESS OTHERWISE STATED, BRANCH PIPE SIZE SHALL BE AS FOLLOWS:
WASTE BRANCH FOR EACH WASH BASIN 32mm
WASTE BRANCH FOR EACH KITCHEN SINK 40mm
WASTE BRANCH FOR EACH FLOOR DRAIN IN TOILET 50mm
WASTE BRANCH FOR EACH SHOWER DRAIN IN TOILET 50mm
WASTE BRANCH FOR EACH BATH IN TOILET 40mm
WASTE BRANCH FOR EACH FLOOR DRAIN IN PLANT RM. 100mm
SOIL BRANCH FOR EACH URINAL 40mm
SOIL BRANCH FOR EACH WATER CLOSET 100mm
VENT BRANCH FOR EACH WATER CLOSET 50mm
VENT BRANCH FOR EACH URINAL 32mm
- ALL MANHOLE AND BITG FRAMES AND COVERS (INCLUDING CAST IRON COVER AND MATCHING COVER) SHALL BE OF AN APPROVED DESIGN CONFORMING TO THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE INDICATED:
a. INDOOR CARPARK AREA/DRIVE WAY - HEAVY DUTY TYPE DOUBLE SEAL
b. OUTDOOR CARPARK AREA/DRIVE WAY - HEAVY DUTY TYPE SINGLE SEAL
c. INSIDE BUILDING - MEDIUM DUTY TYPE DOUBLE SEAL
- ALL UNDERGROUND DRAINS ARE TO BE LAID ON A CONCRETE BED NOT LESS THAN 100mm THICK AND AT LEAST 150mm WIDER THAN THE PIPE BORE AND LAUNCHED UP BOTH SIDES WITH CONCRETE TO MEET THE PIPE BARREL TANGENTIALLY.

- ALL INVERT LEVELS SHOWN ON MANHOLES ARE THE INVERT LEVEL OF THE MAIN CHANNELS IN THE CENTRE OF MANHOLES.
 - ALL UNDERGROUND DRAINS SHALL BE DULY TESTED AND COMPLIED WITH THE REQUIREMENT STATED ON PNRC 11 & PNAP APP-58 PRIOR TO THE BACKFILLING OF TRENCHES.
 - WHETHER SHOWN ON THE DRAWING OR NOT, SUFFICIENT PROTECTIVE GUARD SHALL BE SUPPLIED AND INSTALLED BY MAIN CONTRACTOR.
 - POSITION OF MANHOLES SHALL BE CO-ORDINATE WITH OTHER TRADES/SERVICES. EXACT POSITION AND SET-OUT TO BE DETERMINED ON SITE.
 - CAST IRON AIRTIGHT BOLTED COVER SHALL BE USED TO BACK INLET TRAPPED GULLIES WHICH ARE SITUATED INSIDE BUILDING AND THE AIR TIGHT TRAPPED GULLIES SHALL BE VENTILATED.
 - EVERY STORM WATER PIPE WHICH DISCHARGE TO A CHANNEL OR A TRAP SHALL DISCHARGE AT A POINT NOT MORE THAN 150MM ABOVE THE TOP OF THE CHANNEL OR DISCHARGE INTO A TRAPPED AND VENTED INSPECTION CHAMBER.
 - SIZE OF TRAPS FOR FITMENTS SHALL BE THE SAME AS THE PIPE SIZE NOTED FOR FITMENTS.
 - FACES OF EVERY MANHOLE WITHIN SITE SHALL BE RENDERED WITH CEMENT MORTAR SO AS TO PROVIDE A SMOOTH AND IMPERVIOUS SURFACE.
 - UPON THE COMPLETION OF DRAINAGE CONNECTION WORKS BY THE SUB-CONTRACTOR, A JOINT INSPECTION WITH D.S.D SHALL BE CARRIED OUT AND THE AS BUILT SEWER AND STORMWATER DRAINS RECORDS WILL BE FURNISHED TO D.S.D.
 - ALL BENDING RADIUS OF THE UNDERGROUND PIPE SHOULD BE GREATER THAN 6 TIMES OF THE PIPE DIA.
 - ALL CONDENSATE DRAIN PIPES SHALL BE CONNECTED TO THE STORM WATER PIPE IS NOT REQUIRED TO CONNECT WITH ANTI SYPHONIC TRAP.
 - UNLESS OTHERWISE SPECIFIED, ALL FINISHED FLOOR GRADIENT SHALL BE 1 IN 100 FALL.
 - UNDERGROUND DRAIN SHALL HAVE AN INTERNAL DIAMETER OF NOT LESS THAN 100mm DIA.
 - BEFORE CONSTRUCTION OF THE DRAINAGE WORKS, THE SUB-CONTRACTOR SHOULD CHECK THE EXACT LOCATION AND INVERT LEVELS OF THE EXISTING GOVERNMENT PIPELINES AND MANHOLES.
 - ALL PIPES SHALL BE SURROUNDED WITH 150mm CONCRETE WHEN COVER DEPTH IS LESS THAN 900mm UNDER ROAD AND 450mm UNDER FOOTWAY.
 - NO PIPE JOINTS SHALL BE PERMITTED WITHIN THE THICKNESS OF WALLS OR FLOORS. FRESH AIR INLETS SHALL BE STRONG CAST IRON APPROX. 50MM(W)x115MM(H) x140(D) WITH CURVED BACK FIXING EATS CASTED ON FOR CONNECTION PIPE 100MM DIAMETER WITH POLISHED STAINLESS STEEL SKILLED FRONT SCREWED ON AND FITTED WITH THIN ALUMINIUM-FLAP VALVE FIXED AT MINIMUM 2.5M ABOVE GROUND LEVEL OR SHOWN ON THE DRAWINGS.
 - TRAPPED GULLIES SHALL BE WITH HINGED CAST IRON GRATING OR COVER WITH FRAME. CAST IRON GULLY TRAP OF APPROPRIATE SIZE SHALL MATCH WITH THE DRAIN PIPES AND PROVIDE A MIN. 75MM DEEP WATER SEAL AND WITH MIN. 50MM DIAMETER VENT PIPE FOR SEALED COVER GULLY.
 - FLOOR DRAINS OR VERTICAL GRATINGS SHALL BE SET IN POSITIONS AND SEAL THE CLEARANCE BETWEEN THE FLOOR DRAINS AND THE FLOOR SLABS AFTER INSTALLATION.
 - DRAINAGE WORKS OUTSIDE LOT BOUNDARY ARE FOR BD REFERENCE ONLY.
 - CCTV AND MANHOLE SURVEY SHALL BE CARRIED OUT AT THE EARLY STAGE OF THE CONSTRUCTION AND THE COMPLETION OF THE WHOLE DRAINAGE SERVICES SYSTEM. THE EXTENT OF CCTV SURVEY SHALL SUBJECT TO ARCHITECT/ENGINEER'S APPROVAL.
- EARLY STAGE - FROM GOVERNMENT MANHOLE FMH4055942 TO FMH4055943
- FROM GOVERNMENT MANHOLE SMH4074523 TO SMH4074524
- FROM GOVERNMENT MANHOLE SMH4074527 TO SMH4074529
- COMPLETION OF SYSTEM - FROM FOUL WATER TERMINAL MANHOLE T.FMH-B01 TO FMH4055942
- FROM GOVERNMENT MANHOLE FMH4055942 TO FMH4055943
- FROM STORM WATER TERMINAL MANHOLE T.SMH-101 TO SMH4074523
- FROM GOVERNMENT MANHOLE SMH4074523 TO SMH4074524
- FROM STORM WATER TERMINAL MANHOLE T.SMH-B01 TO SMH-B13
- FROM GOVERNMENT MANHOLE SMH-B13 TO SMH4074527
- FROM GOVERNMENT MANHOLE SMH4074527 TO SMH4074529
- SUNKEN TRENCH SHALL BE BACKFILL WITH LIGHT WEIGHT CONCRETE. CLEANING EYE SHALL BE PROVIDED FOR PIPEWORKS INSIDE SUNKEN TRENCH.

LEGENDS

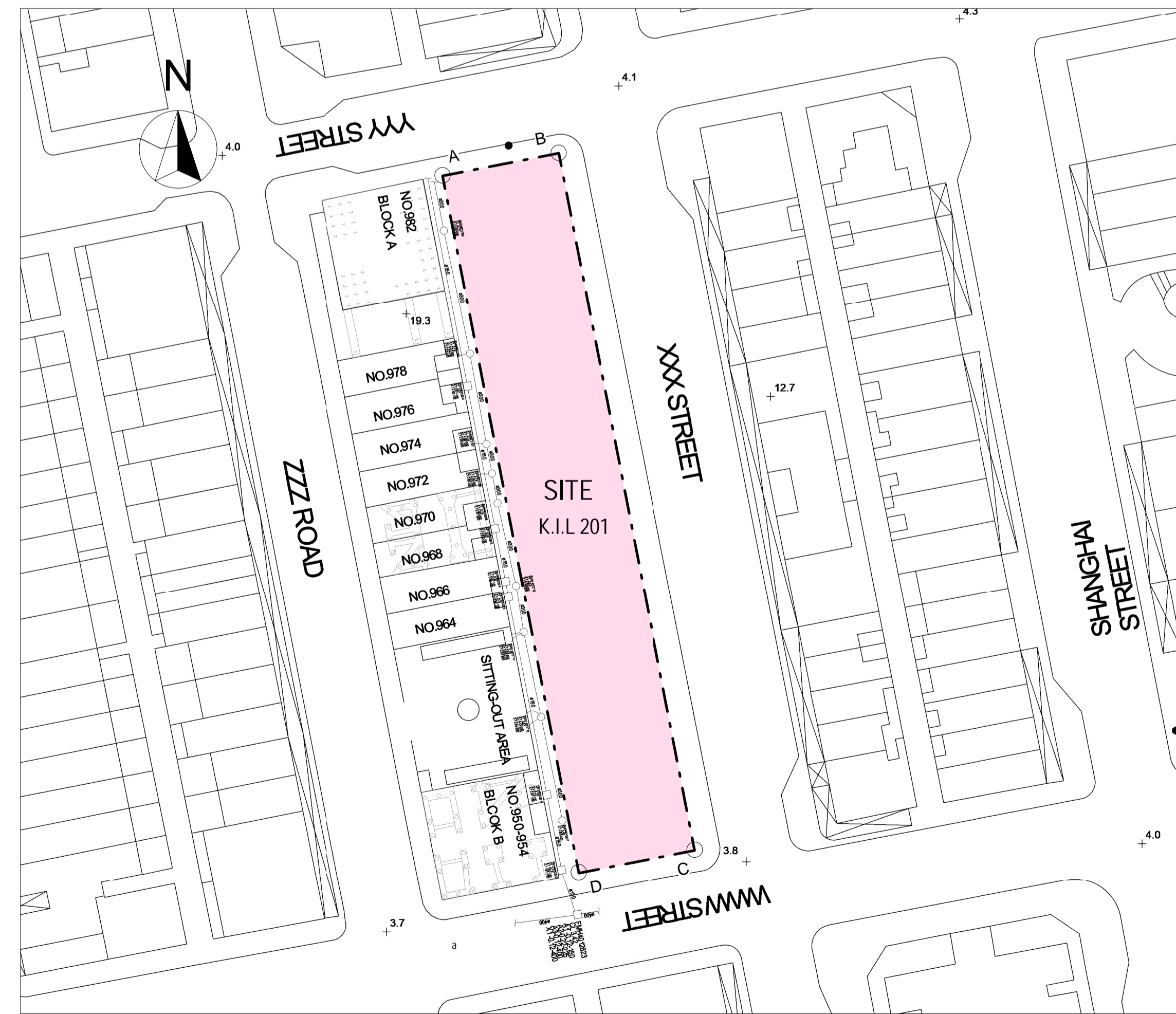


PIPEWORK MATERIAL SCHEDULE

PIPEWORK MATERIAL SCHEDULE	ABOVEGROUND: Ø32 - Ø40 (INSIDE PIPE DUCT / PODIUM AREA)	GALVANIZED STEEL TUBE TO BS EN 10255 MEDIUM GRADE WITH SCREW JOINT FOR INSIDE PIPE DUCT & PODIUM AREA OR UPVC PIPE TO BS EN 465-1 / BS 4514 FOR INTERNAL AREA.
ABOVEGROUND SOIL / WASTE / SOIL & WASTE / RAIN WATER VENT PIPE	Ø50 - Ø300 (INSIDE PIPE DUCT / PODIUM AREA / WITHIN 2m FROM TRANSFER PLATE)	CAST IRON TO BS 416 / BS 437
	ALL SIZES (INSIDE SUNKEN SLAB / WITHIN SAME COMPARTMENT AREA)	UPVC PIPE TO BS 4514 / BS EN 1329-1
	Ø32 TO Ø40	UPVC PIPE TO BS 5255 & BS EN 1329
	Ø80 - Ø150 (EXTERNAL & ABOVE 2m ABOVE TRANSFER PLATE))	UPVC PIPE TO BS 4514 / BS EN 1329-1
	Ø350 AND	DUCTILE IRON TO BS EN 598 WITH INTERNAL HIGH ALUMINA CEMENT COATING
PUMPED DRAINAGE PIPE	UP TO Ø100 FOR REFERENCE ONLY	G.I. PIPES TO BS EN 10255 MEDIUM GRADE FOR ABOVEGROUND, HEAVY GRADE FOR UNDERGROUND
	Ø80 AND	DUCTILE IRON TO BS EN 598 WITH INTERNAL HIGH ALUMINA CEMENT LINING
A/C CONDENSATE DRAIN SYSTEM	EXTERNAL AND ALL SIZES	UPVC PIPES AND FITTINGS TO BS EN 1329-1 / BS 4514
	INSIDE PIPE DUCT / PODIUM AREA / TRANSFER PLATE AND ALL SIZES	G.I. PIPE TO BS EN 10255 MEDIUM GRADE C/W 9mm ELASTOMERIC THERMAL INSULATION CLASS 0
UNDERGROUND SOIL / WASTE / SOIL & WASTE / RAIN WATER VENT PIPE	Ø100 - Ø250 - Ø400 AND	CAST IRON TO BS 437 CAST IRON TO BS 1211 / BS 4622 DUCTILE IRON TO BS EN 598
UNDERGROUND SOIL AND WASTE PIPE CONNECT TO PUBLIC DRAINAGE SYSTEM	ALL SIZE	HIGH DENSITY POLYETHYLENE PIPES TO BS EN 12201-2:2011, PE 100.
UNDERGROUND RAIN WATER PIPE CONNECT TO PUBLIC DRAINAGE SYSTEM	ALL SIZE	CONCRETE PIPE TO BS EN 5911 PART 100 CLASS H

ABBREVIATION

T/A	TO ABOVE	STG	SEAL TRAPPED GULLY	P.D.	PLANTER DRAIN
T/B	TO BELOW	OTG	OPEN TRAPPED GULLY	S.S.	STAINLESS STEEL
F/A	FROM ABOVE	WP	WASTE PIPE	S.W.P.	SOIL & WASTE PIPE
F/B	FROM BELOW	SP	SOIL PIPE	R.W.P.	RAINWATER PIPE
US	UNDERSLAB	RW	RAIN WATER	G.S.P.	GALVANIZED STEEL PIPE
		VP	VENT PIPE	D.I.P.	DUCTILE IRON PIPE
F/L	FLOOR LEVEL	U/G	UNDERGROUND	F.D.	FLOOR DRAIN
H/L	HIGH LEVEL	AFFL	ABOVE FINISHED FLOOR LEVEL	V.G.	VERTICAL GRATING
M/L	MID LEVEL	C/W	COMPLETE WITH	C.L.	COVER LEVEL
L/L	LOW LEVEL	P.I.	PETROL INTERCEPTOR	I.L.	INVERT LEVEL
A/G	ABOVE GROUND	F.M.H.	FOUL WATER MANHOLE	A/C	AIR CONDITIONING
		S.M.H.	STORM WATER MANHOLE	C.E.	CLEANING EYE
		A1	DRAIN INLET PIPE 1	TFD	TOP ACCESS FLOOR DRAIN
		A2	DRAIN INLET PIPE 2	TSO	TOP ACCESS SHOWER DRAIN
		A3	DRAIN INLET PIPE 3	VRWO	VERTICAL RAIN WATER OUTLET
		X1	DRAIN OUTLET PIPE 1		
DN	DIAMETER(MM)	UPVC.P.	UNPLASTICIZED POLYVINYL CHLORIDE PIPE		
GOVT.	GOVERNMENT	BITG	BACK INLET TRAPPED GULLY		
R.W.O.	RAIN WATER OULET	M.H.	MANHOLE		
C.I.P.	CAST IRON PIPE	D.T.I.L.	DISCONNECTING TRAP		
C.D.P.	CONDENSATE DRAIN PIPE		INVERT LEVEL		
CON. PIPE	CONCRETE PIPE				
AP	ACCESS PANEL				



BLOCK PLAN
1 : 500

BD REF :

BIM REF :

REV DATE AMENDMENT

PROJECT
CIC SAMPLE PROJECT

DRAWING TITLE
GENERAL NOTES FOR DRAINAGE

SCALE

DRAWING NO. M001 REV. NO.

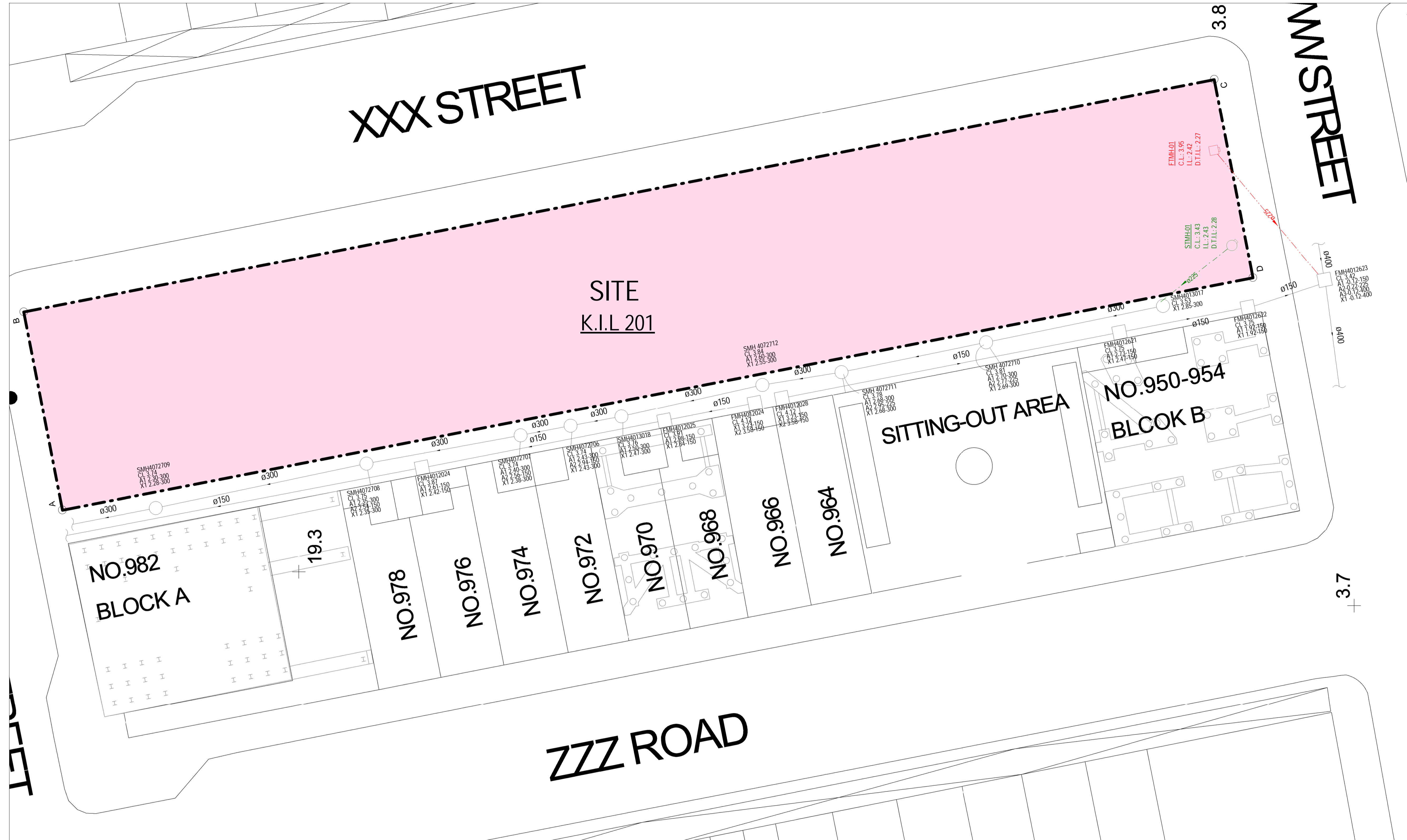
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90mm (W) x 40mm (H) space for COMPANY LOGO

90mm (W) x 60mm (H) space for AP's signature/ and stamp chop

BD'S OFFICAL USE

90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)



BD REF :
BIM REF :

REV	DATE	AMENDMENT

PROJECT
CIC SAMPLE PROJECT

DRAWING TITLE
Site Drainage Layout

SCALE
DRAWING NO. M001A
REV. NO.

SOURCE ---

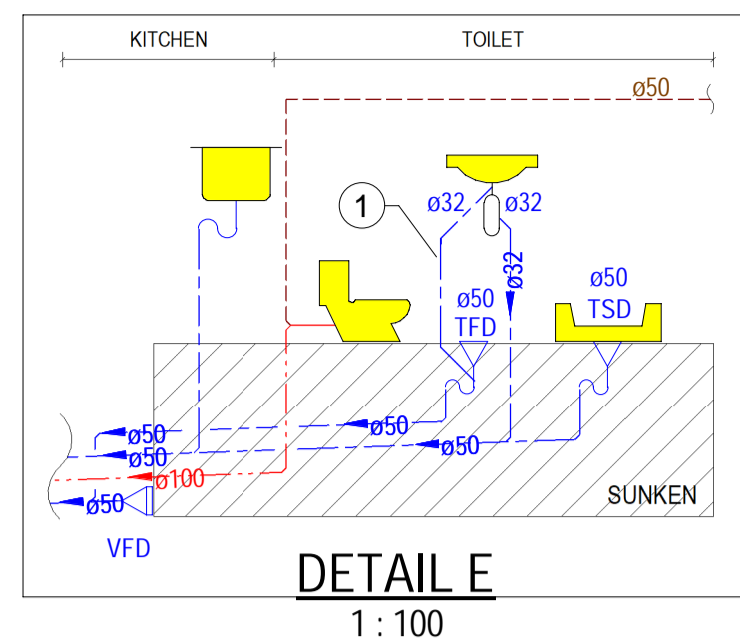
90mm (W) x 40mm (H) space
for COMPANY LOGO

90mm (W) x 60mm (H) space
for AP's signature/ and stamp chop

BD'S OFFICIAL USE

90mm (W) x 150mm (H) space
for BD's approval stamp /
certification of copies of
approved plans
(PNAP ADM-10 APP A)

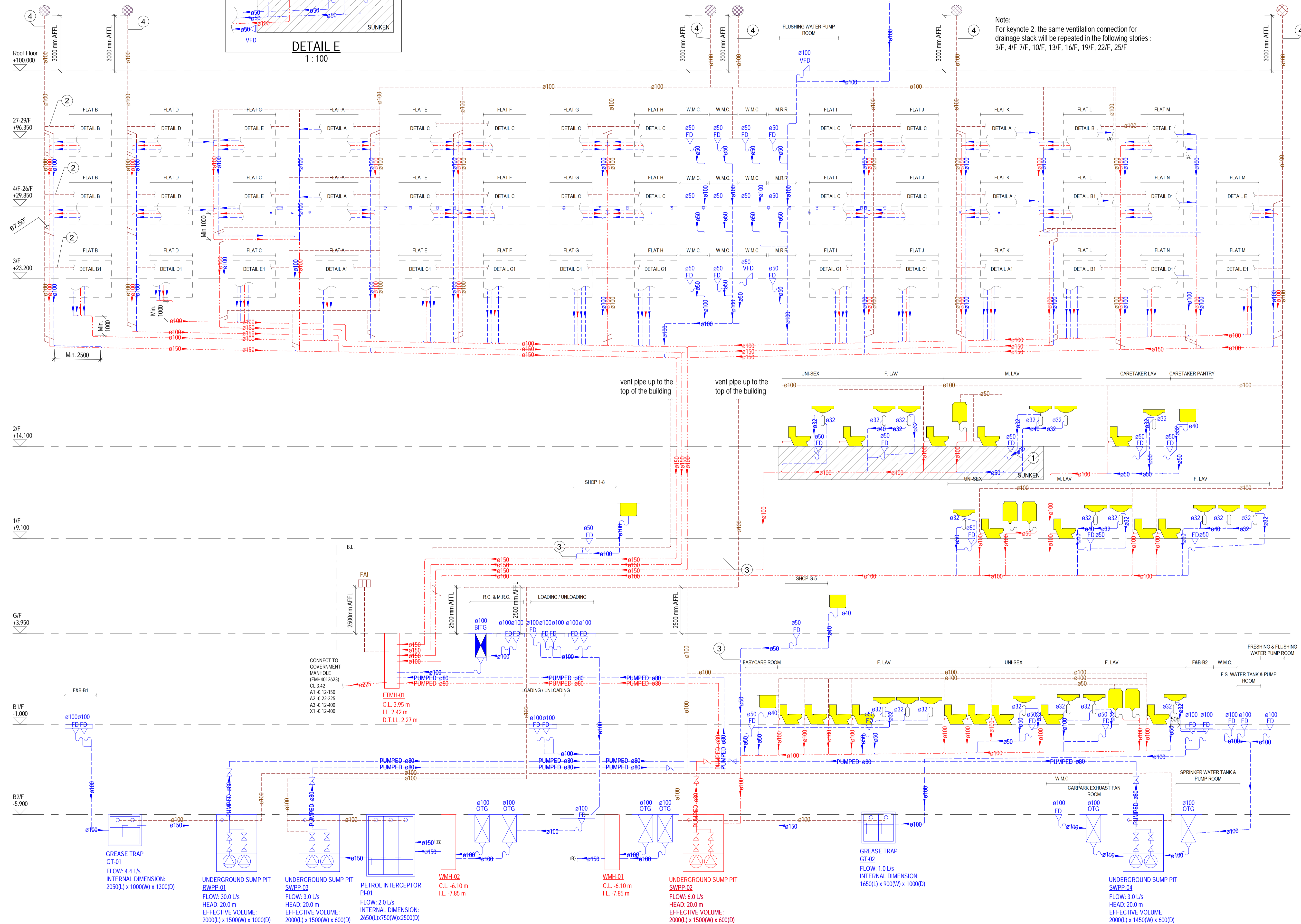
SITE DRAINAGE LAYOUT
1 : 150



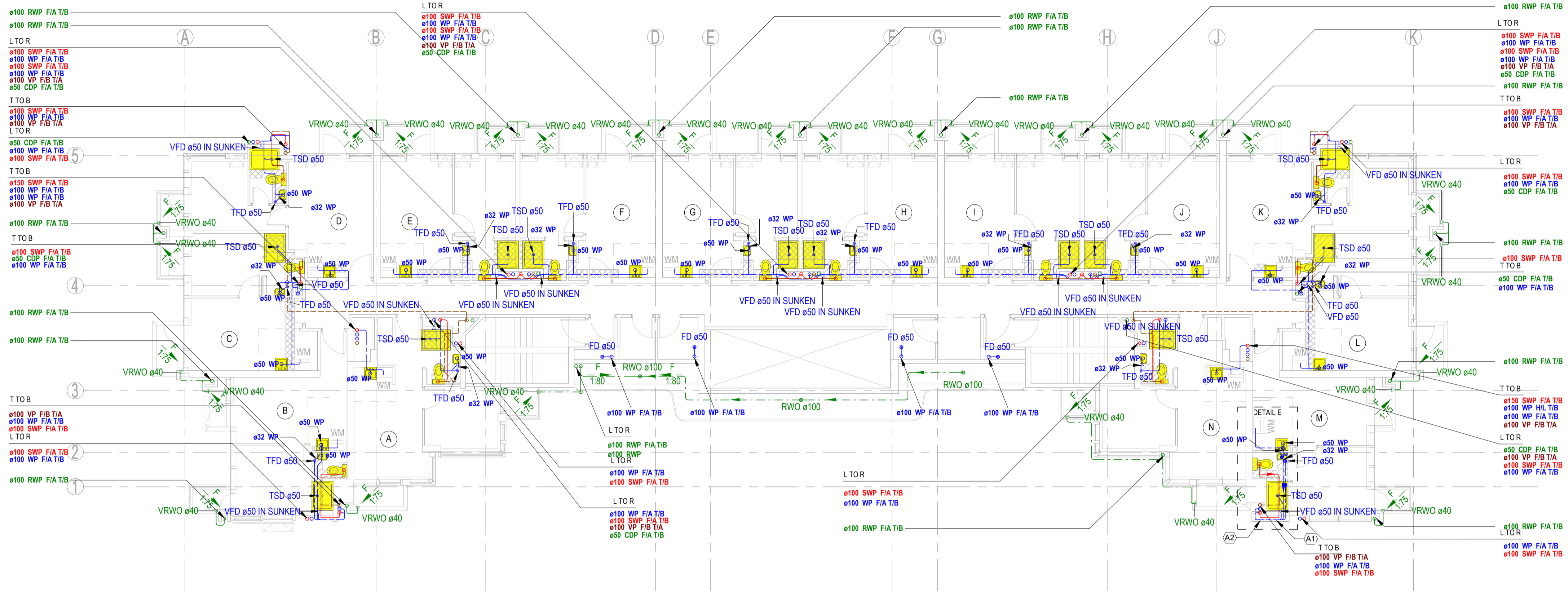
TRF +109.500
URF +106.300
3200

SCHEMATIC DIAGRAM KEYNOTE LEGEND	
Note #	Note Text
1	APP-164_Paragraph 2a - Water seal evaporation prevention
2	APP-164_Paragraph 2b - Anti-siphonage pipe for cross ventilation
3	APP-164_Paragraph 2e - Separate pipework for branch discharge pipe
4	APP-164_Paragraph 2e - Ventilating pipe not less than 3 m

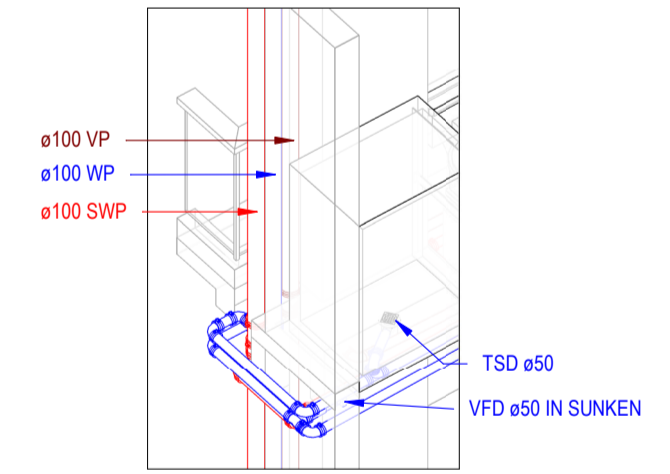
Note:
For keynote 2, the same ventilation connection for drainage stack will be repeated in the following stories :
3/F, 4/F, 7/F, 10/F, 13/F, 16/F, 19/F, 22/F, 25/F



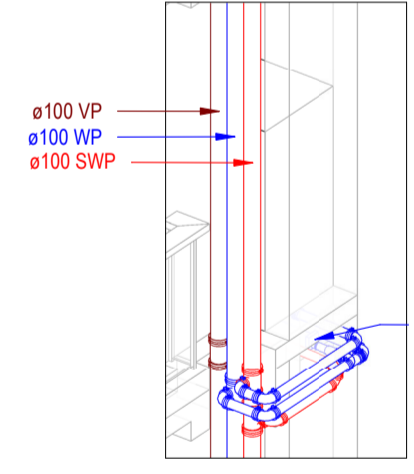
BD REF :		
BIM REF :		
REV	DATE	AMENDMENT
PROJECT CIC SAMPLE PROJECT		
DRAWING TITLE SCHEMATIC DIAGRAM OF DRAINAGE SYSTEM		
SCALE 1 : 100@A1		
DRAWING NO. M002	REV. NO.	
SOURCE ---		
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BD'S OFFICIAL USE		
90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)		



1 6/F FLOOR PLAN (New Approach)
 1 : 100
 (2D plan generated from 3D model on proposed new approach with supplementary elevation/ 3D views)



A1 3D View-Right (for reference only)
 (Not to scale)



A2 3D View-Left (for reference only)
 (Not to scale)

BD REF :		
BIM REF :		
REV	DATE	AMENDMENT
PROJECT CIC SAMPLE PROJECT		
DRAWING TITLE DRAINAGE LAYOUT PLAN FOR TYPICAL FLOOR		
SCALE 1 : 100@A1		
DRAWING NO. M003	REV. NO.	
SOURCE ---		
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90mm (W) x 60mm (H) space for AP's signature/ and stamp chop		
BD's OFFICIAL USE		
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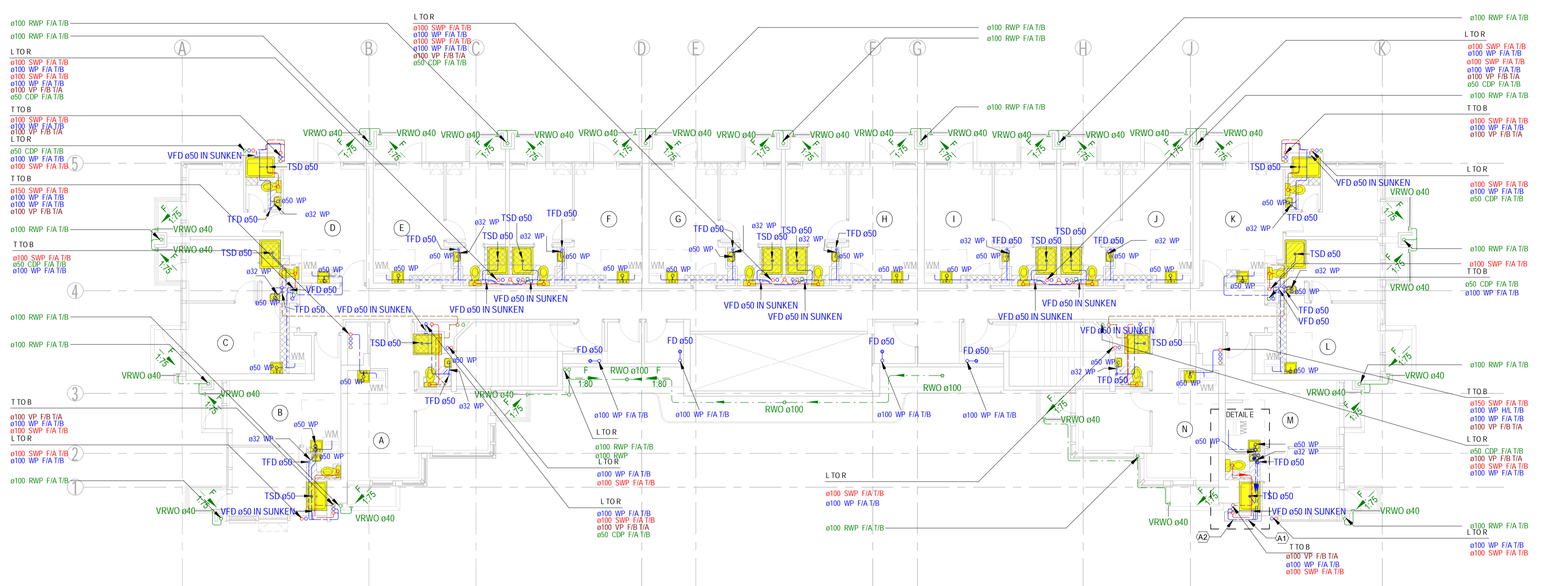
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BIM REF :		
REV	DATE	AMENDMENT
PROJECT CIC SAMPLE PROJECT		
DRAWING TITLE DRAINAGE LAYOUT PLAN FOR TYPICAL FLOOR		
SCALE 1 : 100@A1		
DRAWING NO. M003A	REV. NO.	
SOURCE ---		

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for COMPANY LOGO

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BD'S OFFICIAL USE

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(PNAP ADM-10 APP A)

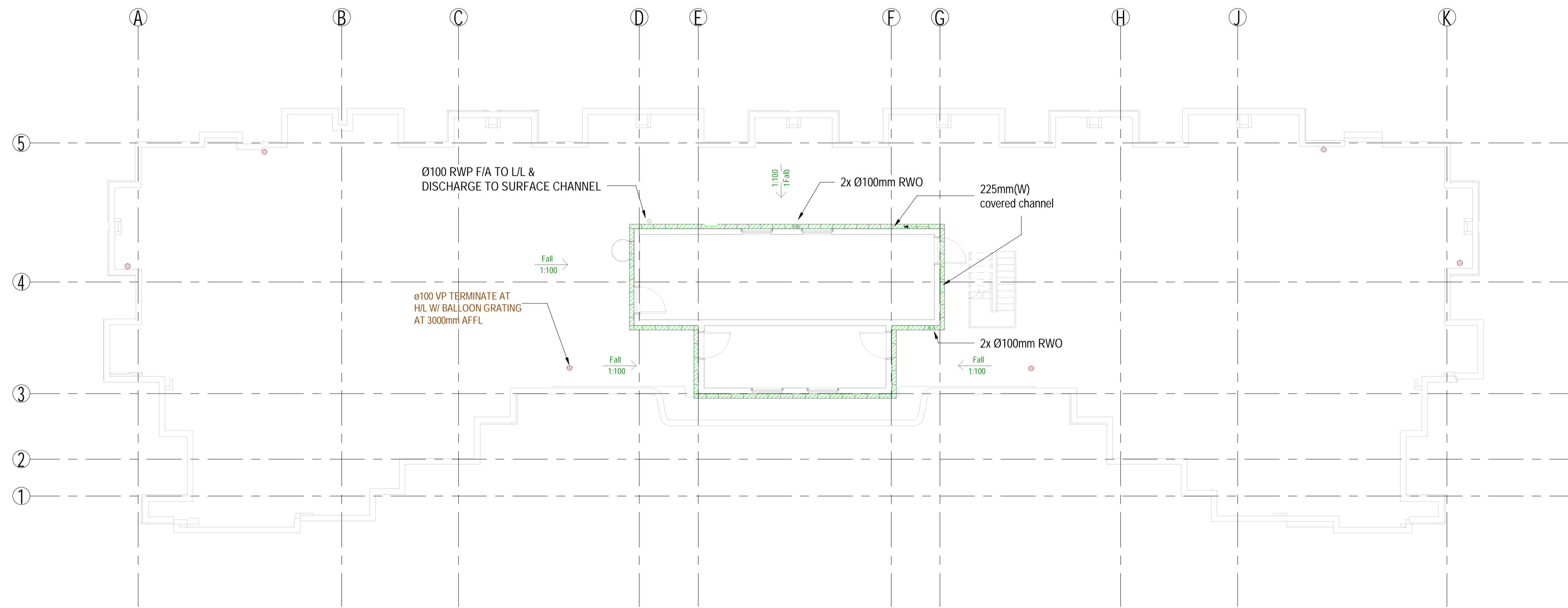


1 6/F FLOOR PLAN (TRADITIONAL PRESENTATION STYLE)
1 : 100

(2D plan generated from 3D model based on traditional presentation style with manual updating)

BD REF :

BIM REF :



REV	DATE	AMENDMENT

PROJECT
CIC SAMPLE PROJECT

DRAWING TITLE
DRAINAGE LAYOUT PLAN FOR ROOF FLOOR

SCALE

DRAWING NO. M004
REV. NO.

SOURCE ---

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for COMPANY LOGO

90mm (W) x 60mm (H) space
for AP's signature/ and stamp chop

BD'S OFFICIAL USE

90mm (W) x 150mm (H) space
for BD's approval stamp /
certification of copies of
approved plans
(PNAP ADM-10 APP A)

1 Roof Floor
1:100

BD REF :

BIM REF :

REV DATE AMENDMENT

PROJECT
CIC SAMPLE PROJECT

DRAWING TITLE
DRAINAGE LAYOUT PLAN FOR TOP ROOF FLOOR

SCALE

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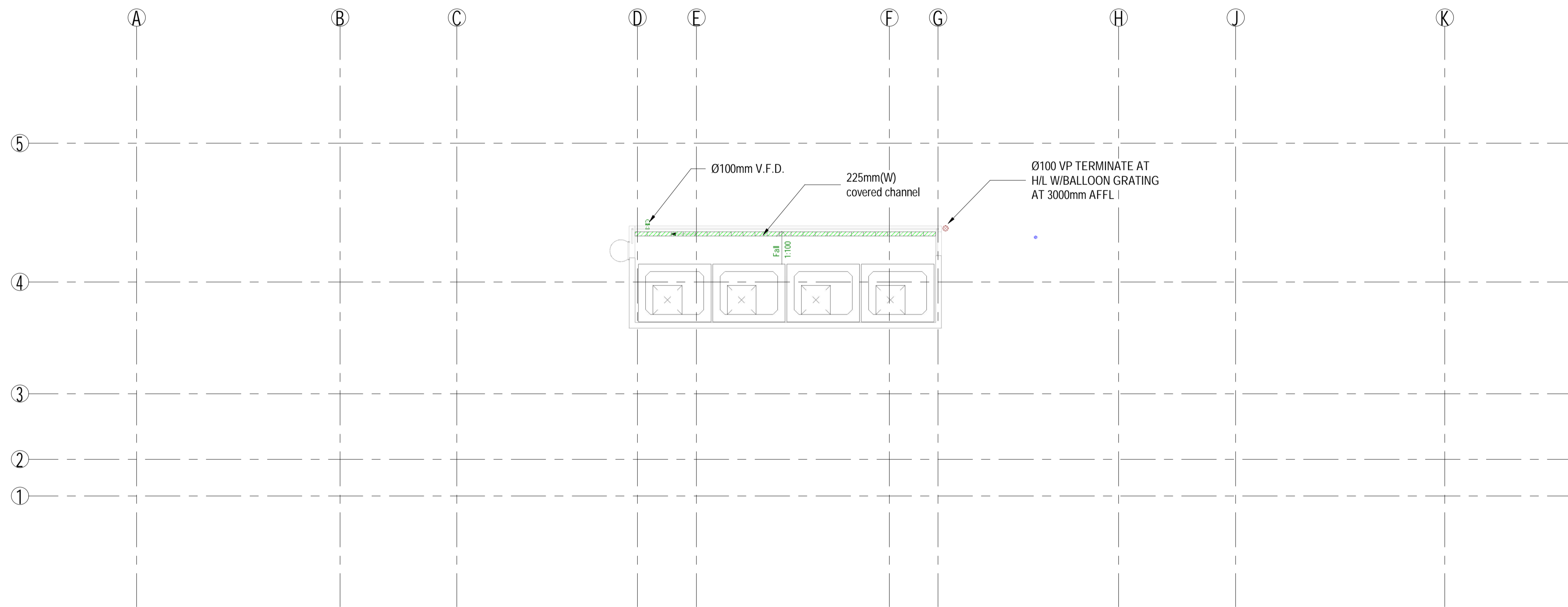
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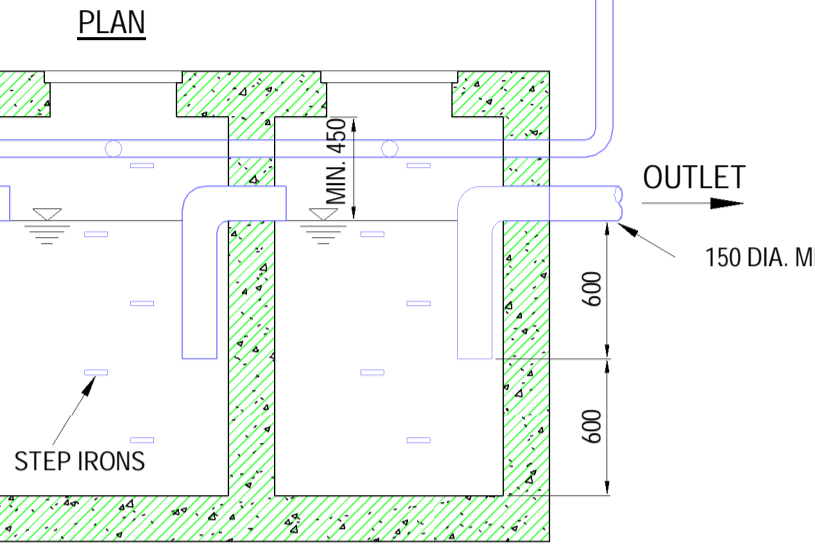
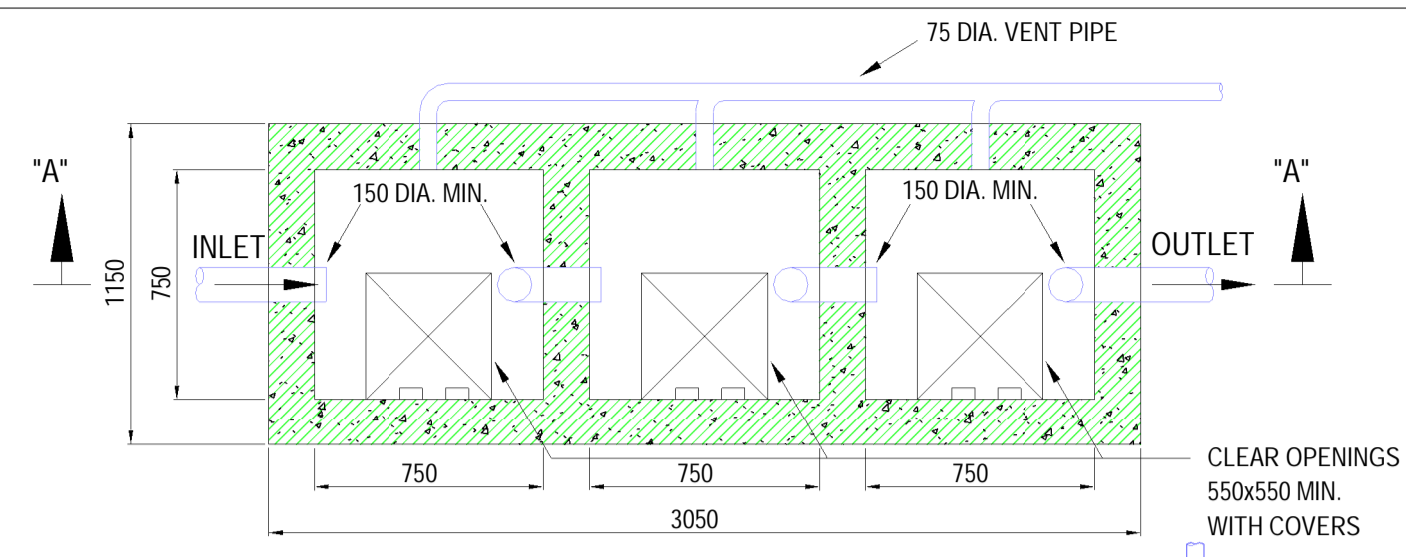
90mm (W) x 60mm (H) space
for AP's signature/ and stamp chop

BD's OFFICAL USE

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certification of copies of
approved plans
(PNAP ADM-10 APP A)

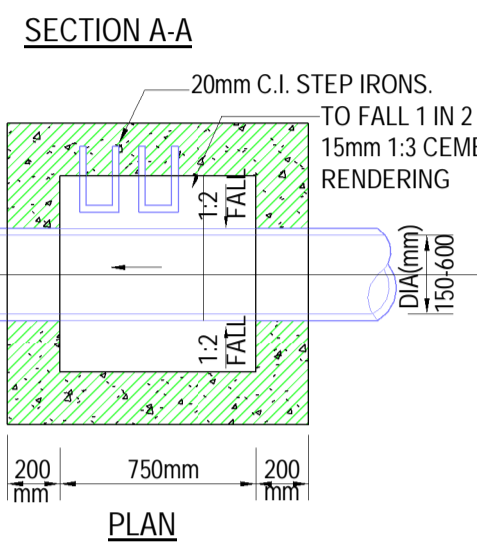
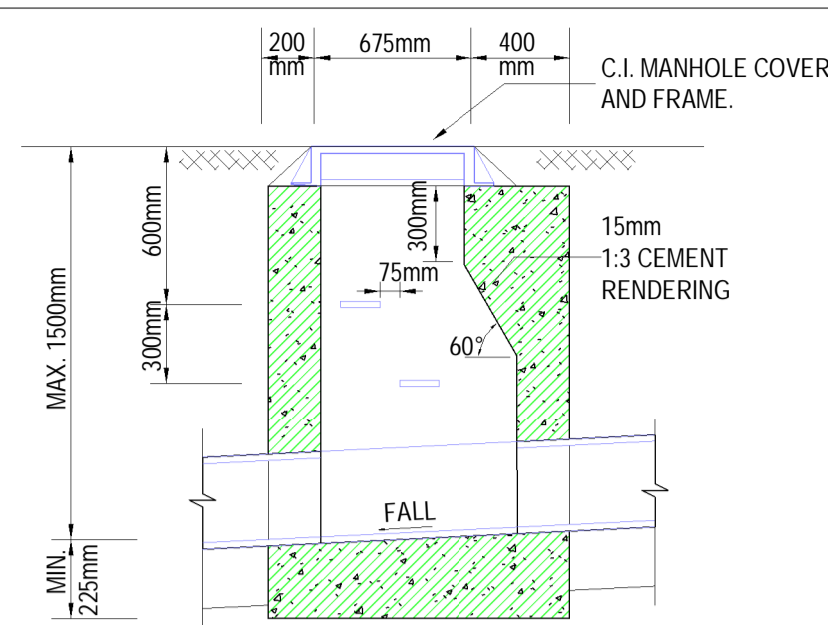


1 Top Roof Floor
1 : 100

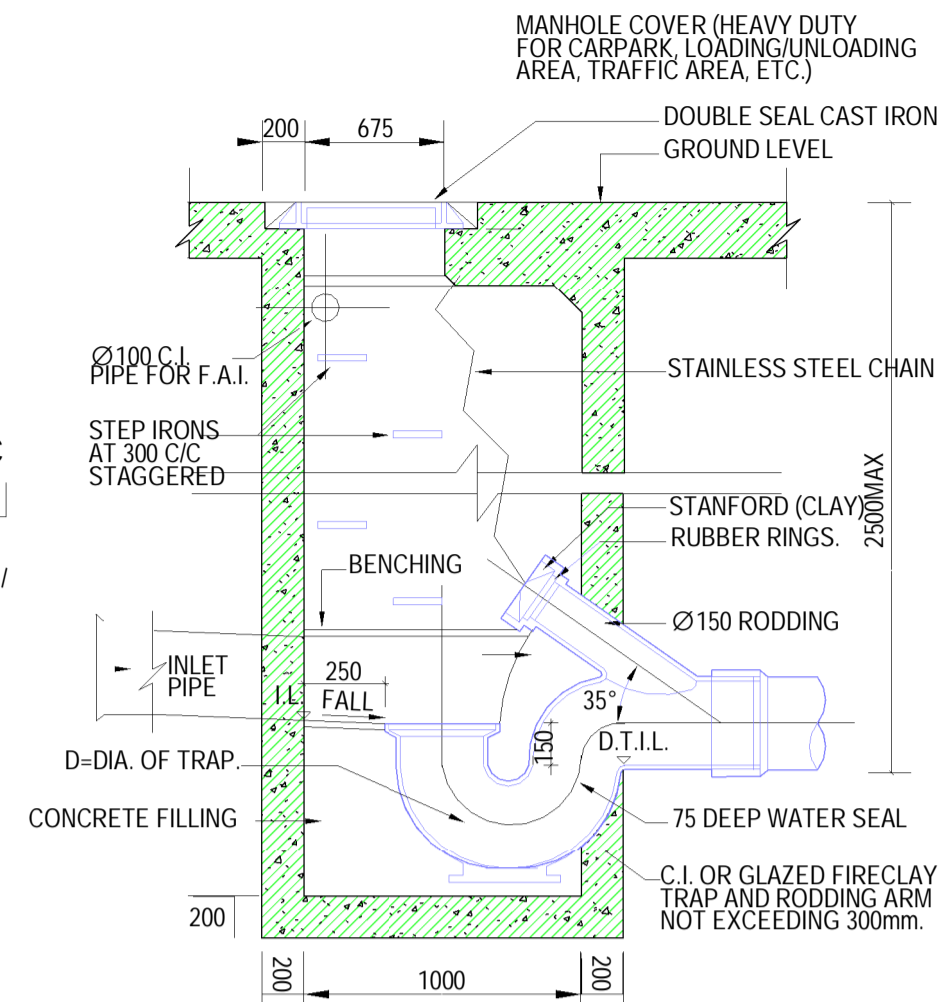
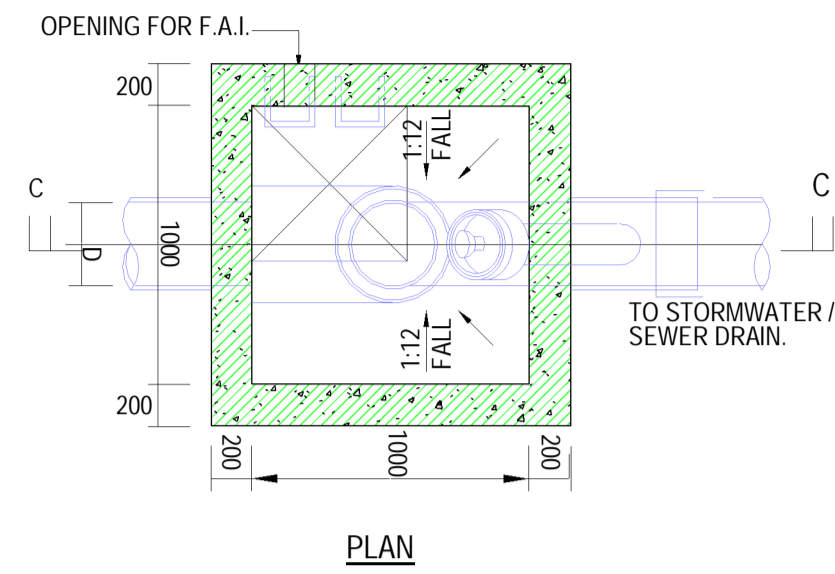


SECTION A-A

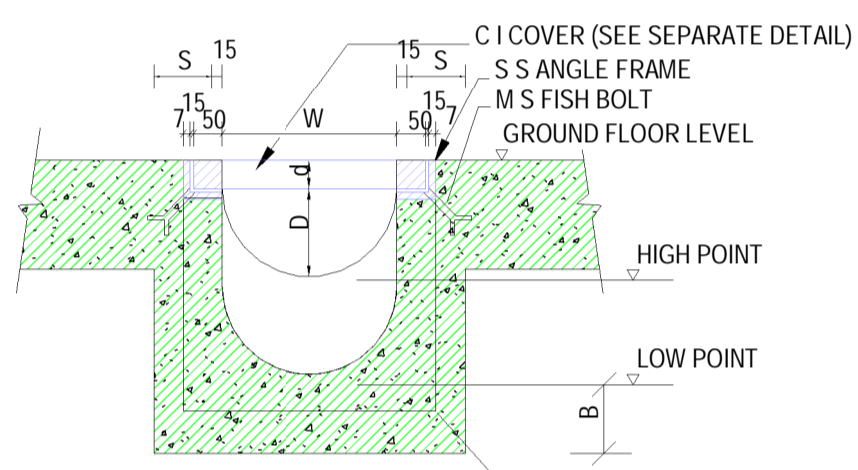
TYPICAL DETAILS OF PETROL INTERCEPTOR



STANDARD DETAILS OF MANHOLE TYPE D1



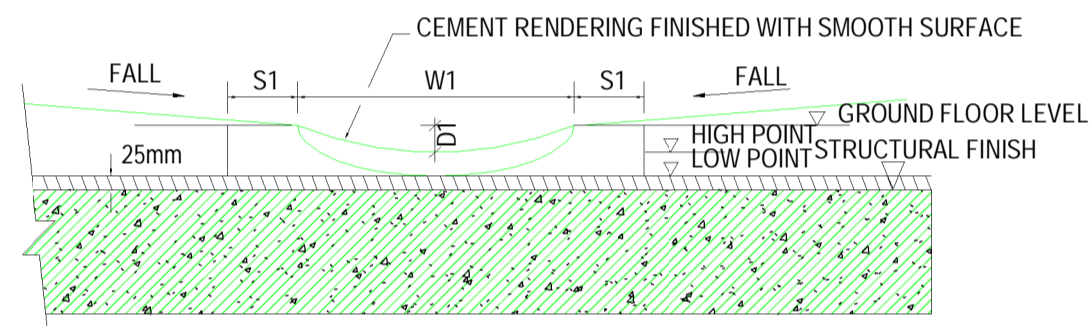
TERMINAL MANHOLE (TYPE T1_1)



W	S	D	B
200	100	100	100
225	100	115	100
250	100	125	100
300	100	150	100
350	100	170	100
400	100	200	100
450	100	225	100

- NOTES:
1. ALL SURFACE CHANNELS SHALL BE FINISHED SMOOTH WITH 1:2 CEMENT AND SAND RENDERING.
2. GRADIENT OF CHANNEL SHALL BE NOT LESS THAN 1 IN 100.
3. DEPTH OF LOW POINT DEPEND ON THE LENGTH OF CHANNELS.
4. ALL CHANNEL SHALL BE CONSTRUCTED IN GRADE 30D/20 CONCRETE.

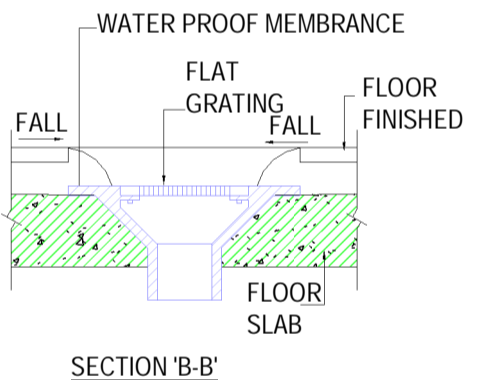
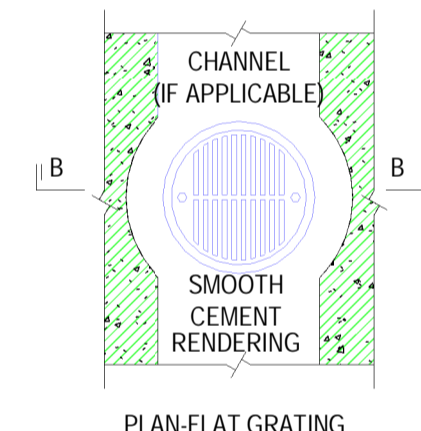
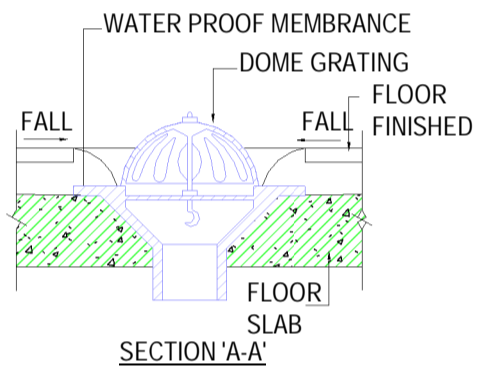
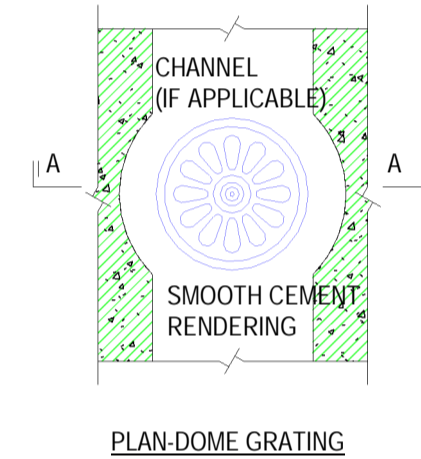
DETAIL OF SURFACE CHANNEL



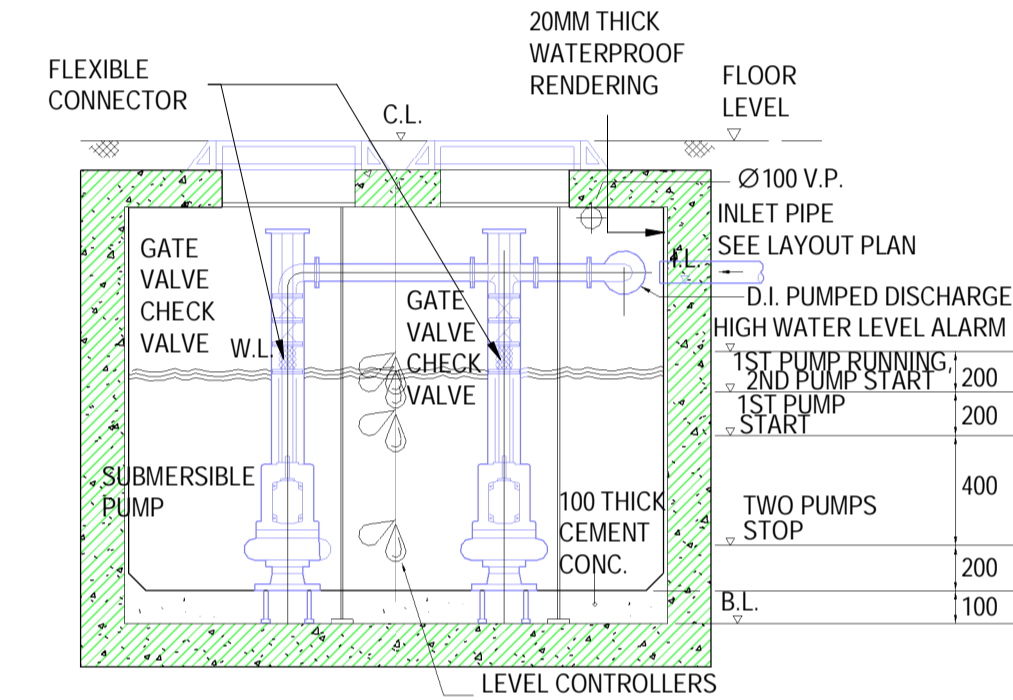
W1	S1	MIN. D1	MAX. D1
200	100	25	
225	100	25	
250	100	25	
300	100	25	
350	100	25	
400	100	25	
450	100	25	

CHANNEL SCHEDULE
(NOTE: MAX., DEPEND ON FALL)

DETAIL OF DISC CHANNEL

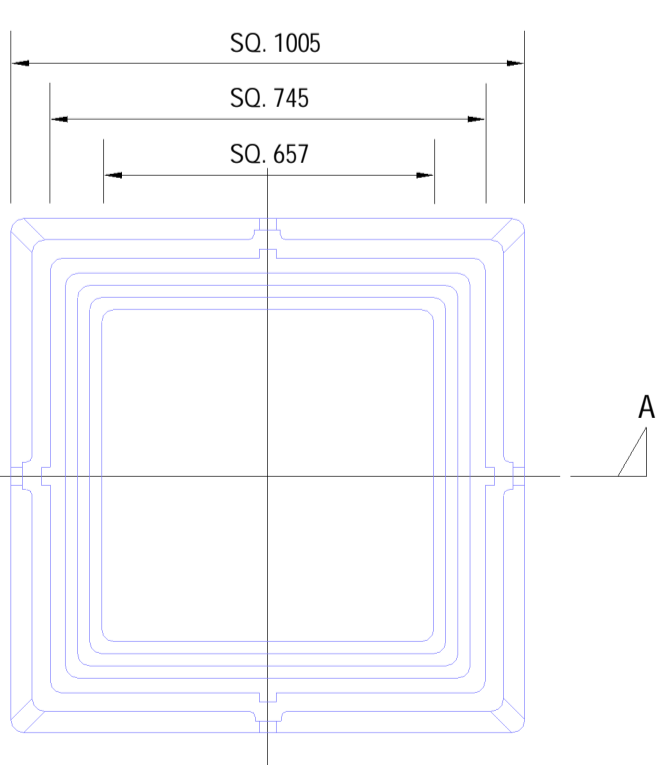
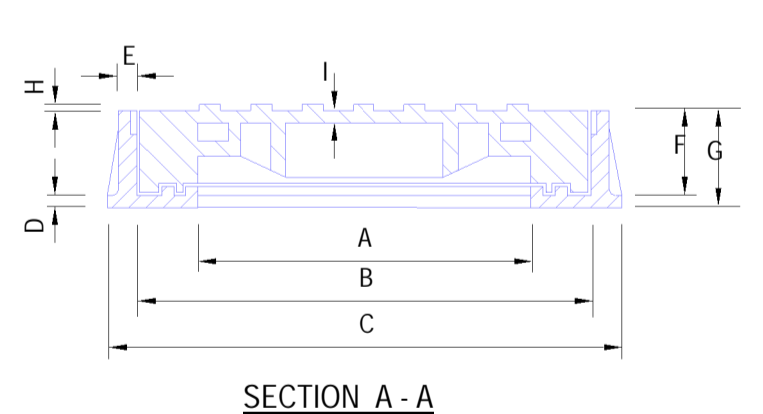
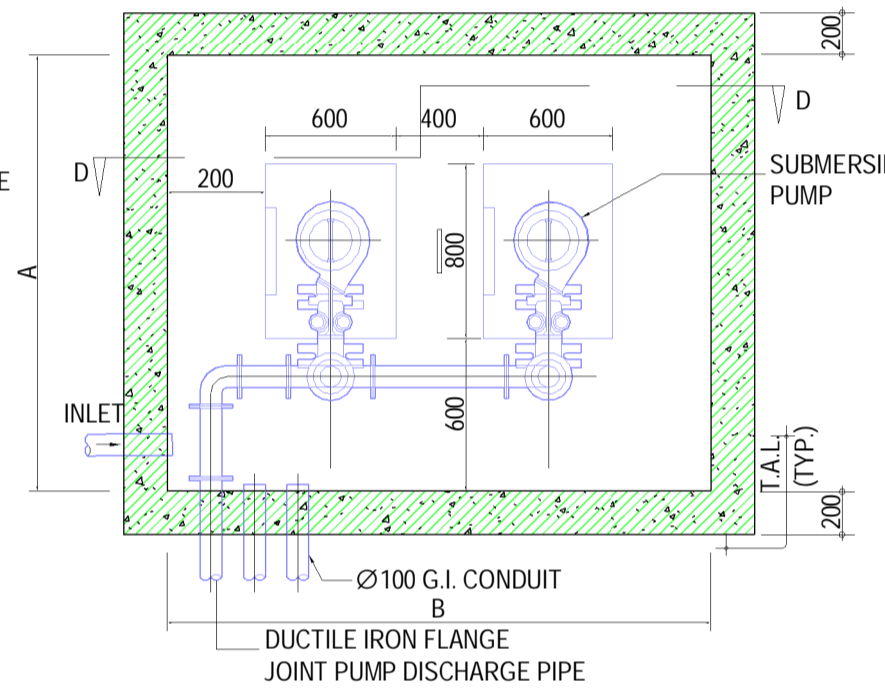


VERTICAL GRATING DETAIL



- NOTES:
1. THE SUMP PUMPS SHALL BE AUTOMATIC START AND STOP WHEN WATER LEVEL REACH THE PUMPS START LEVEL AND THE PUMP CUT-OFF LEVEL.
2. START/STOP CONTROL OF THE SUMP PUMPS SHALL BE PROVIDED ON THE CONTROL PANEL.
3. SUMP PUMPS CONTROL CIRCUIT DIAGRAM SHALL BE FRAMED AND DISPLAYED NEXT TO THE SUMP PUMPS CONTROL PANEL.

DETAILS OF SUMP PIT

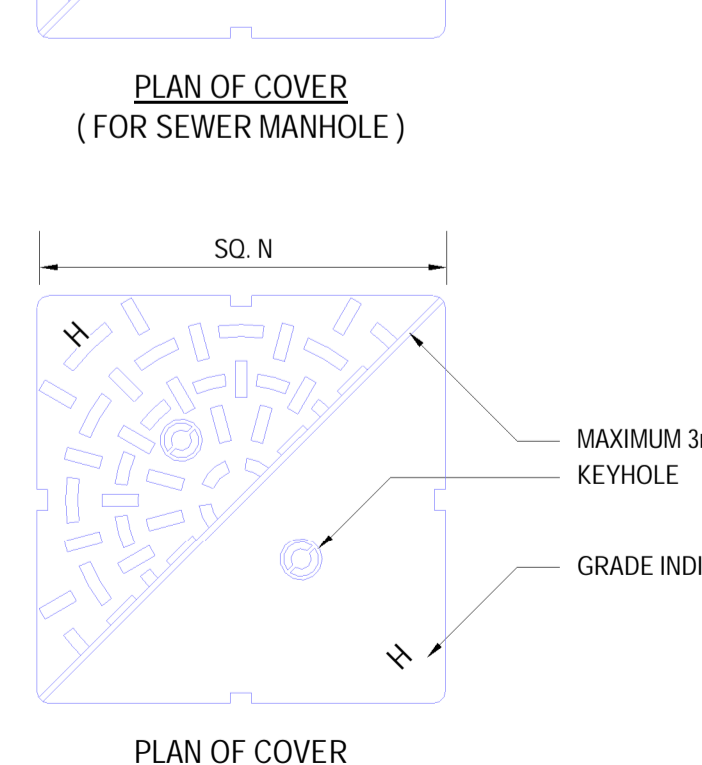
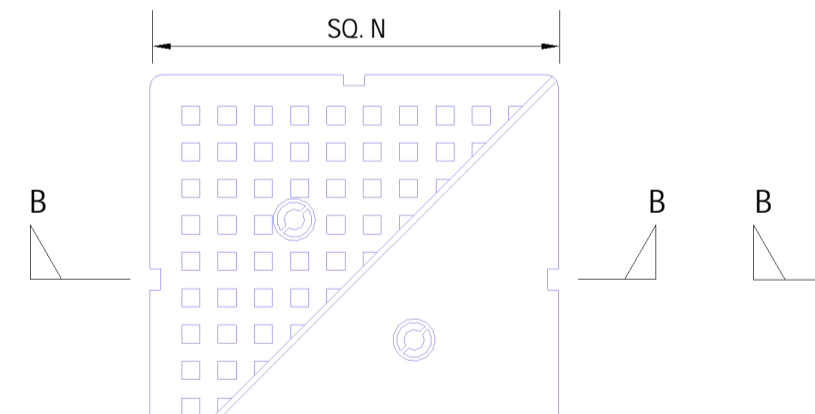


DIMENSION LETTER	A	B	C	D	E	F	G	H	I	J	
DIMENSIONS	H	675	815	1005	16	22	134	150	5	32	811
	M	675	720	1005	16	22	109	125	5	22	811

- NOTES:
H INDICATES HEAVY DUTY
M INDICATES MEDIUM DUTY

DETAIL OF MANHOLE COVER AND FRAME (DOUBLE SEAL)

(N.T.S.)



DIMENSION LETTER	K	M	N	O	P	Q	R	S	T	
DIMENSIONS	H	679	875	675	22	16	134	150	5	32
	M	679	875	675	22	16	109	125	5	22

- NOTES:
H INDICATES HEAVY DUTY
M INDICATES MEDIUM DUTY

DETAIL OF MANHOLE COVER AND FRAME (DOUBLE TRIANGULAR)

(N.T.S.)

BD REF :

BIM REF :

REV DATE AMENDMENT

PROJECT
CIC SAMPLE PROJECT

DRAWING TITLE
DRAINAGE INSTALLATION DETAILS

SCALE AS SHOWN@A1

DRAWING NO. M006
REV. NO.

SOURCE ---

90mm (W) x 40mm (H) space
for COMPANY LOGO

90mm (W) x 60mm (H) space
for AP's signature/ and stamp chop

BD'S OFFICAL USE

90mm (W) x 150mm (H) space
for BD's approval stamp /
certification of copies of
approved plans
(PNAP ADM-10 APP A)

STORM WATER MANHOLE SCHEDULE					
MANHOLE NO.	DRAIN DIAMETER (mm)	C.L.	I.L.	DEPTH (mm)	TYPE
SMH-01	150	-6.15	-7.9	1750	D1

PETROL INTERCEPTOR SCHEDULE				
PETROL INTERCEPTOR NO.	C.L.	I.L.	B.L.	DEPTH (mm)
PI-01	-5.9	-6.9	-8.4	2500

FOUL WATER MANHOLE SCHEDULE					
MANHOLE NO.	DRAIN DIAMETER (mm)	C.L.	I.L.	DEPTH (mm)	TYPE
WMH-01	150	-6.1	-7.85	1750	D1
WMH-02	150	-6.1	-7.85	1750	D1

SUMP PIT SCHEDULE							
SUMP PIT NO.	SUMP PIT SIZE (LxWxD)	C.L.	I.L.	B.L.	PUMP NO.	PUMP DUTY (EACH)	
						FLOW (l/s)	HEAD (m)
RWPP-01	2000(L) x 1500(W) x 1000(D)	-5.85	-6.5	-8	RSP01-01,02	30.0	20
SWPP-02	2000(L) x 1500(W) x 600(D)	-5.85	-6.5	-7.5	SSP02-01,02	6.0	20
SWPP-03	2000(L) x 1500(W) x 600(D)	-5.85	-6.5	-7.5	SSP03-01,02	3.0	20
SWPP-04	2000(L) x 1450(W) x 600(D)	-5.85	-6.5	-7.5	SSP04-01,02	3.0	20

FOUL WATER TERMINAL MANHOLE SCHEDULE						
MANHOLE NO.	DRAIN DIAMETER (mm)	C.L.	I.L.	D.T.I.L.	DEPTH (mm)	TYPE
FTMH-01	225	+3.95	+2.42	+2.27	1680	T1_1

GREASE TRAP SCHEDULE			
GREASE TRAP NO.	C.L.	B.L.	DEPTH (mm)
GT-01	-5.9	-7.2	1300
GT-02	-5.9	-6.9	1000

STORM WATER TERMINAL MANHOLE SCHEDULE						
MANHOLE NO.	DRAIN DIAMETER (mm)	C.L.	I.L.	D.T.I.L.	DEPTH (mm)	TYPE
STMH-01	225	+3.43	+2.43	+2.28	1150	T1_1

SUMMARY OF MODIFICATIONS OF AND/OR EXEMPTION APPROVED IN FORM BD 106, PERMIT SECTION 42

Description	Condition	Location with Modification/Exemption Granted	Date of Submission	Permit No.	Date of Modifications Granted			
					Month	Year	Rev.	Rev.
1	Building (Planning) Regulations 20 & Exclusion of projections from site coverage & plot ratio calculations (PNAP APP-19, 67 & 15)	All architectural features at level 3,4,5,6,7,8 & 9	24/12/2013	599/2013(MOD)	#	√	X	△
2	Building (Planning) Regulation 36 Omission of reduction in standard of natural lighting and ventilation to rooms containing a soil or waste fitment (PNAP ADM-2)	1. Mechanical means of ventilation to be provided in the building is capable of supplying fresh air at the rates stipulated in Annex 1 of PNAP ADM-2.	2. Compliance with the requirements set out in Annex 2 for the fresh air intake	(i) Lavatories and restrooms on level 1 to 9	#	√	X	△
		(ii) Cafeteria, sick room and cleaner's room on level 1 to 3		#	√	X	△	

Legend : # First Granted √ Still Applicable X Not Applicable △ Amendment to the location of the exemption/modification previously granted.

BD REF :
BIM REF :

PROJECT
CIC SAMPLE PROJECT

DRAWING TITLE
DRAINAGE SCHEDULES / TABLE FOR MODIFICATIONS

SCALE AS SHOWN@A1

DRAWING NO. M007 REV. NO.

SOURCE ---

90mm (W) x 40mm (H) space for COMPANY LOGO

90mm (W) x 60mm (H) space for AP's signature/ and stamp chop

BD'S OFFICIAL USE

90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)