

GENERAL NOTES :

1. CODE OF PRACTICE FOR FIRE SAFETY IN BUILDING 2011 TO BE COMPLIED WITH.
2. DESIGN MANUAL BARRIER FREE ACCESS 2008 TO BE COMPLIED WITH.

FIRE SERVICES NOTES :

Fire Hydrant/Hose Reel System

1. Fire hydrant/hose reel system shall be provided for the entire building in accordance with FSI Code and Circular Letter no. 2/2013.
2. One 36m3 FS tank with FS pump set shall be provided on B1/F.
3. There shall be sufficient hydrants and hose reels on each floor to ensure that every part of the building can be reached by a length of not more than 30m of Fire Services hose and hose reel tubing.
4. All FS inlets shall be inter-connected.

Sprinkler System

1. Sprinkler system shall be provided in accordance with the LPC Rules incorporating BS EN 12845: 2003, Circular Letters no. 3/2006 and 3/2012 to protect the G/F-2/F except E & M plant rooms.
2. The hazard group of the sprinkler system :-
- OH 3 for basement floors to 2/F;
- OH 1 for 3/F to 22/F.
3. One 107m3 sprinkler water tank and sprinkler pump set shall be provided on B2/F.
4. Sprinkler system signal shall be transmitted to the Fire Services Communications Centre via a direct telephone link.
5. Fast response type sprinkler heads shall be provided for the basement floors.
6. Fast response type sprinkler heads shall be provided and extended to 2 floors above/below non-domestic floors (3/F-4/F) for staircase connecting the domestic and non-domestic portion of the development.

Fire Alarm System

Fire alarm system shall be provided to the entire building. One actuating point and one audio warning device shall be provided at each hose reel point. Visual fire alarm system shall be provided in accordance with current Design Manual: Barrier Free Access 2008 and Circular Letter no. 2/2012. This actuating point shall include facilities for fire pump start and audio/visual warning device initiation.

Fire Detection System

1. Fire detection system shall be provided in accordance with BS 5839 Part I: 2002 + A2: 2008, Circular Letters no. 1/2009, 3/2010 and 2/2012 as follows:-
- smoke detectors shall be provided in area not covered by automatic fixed installation.
- heat detectors shall be provided for all E/M plant rooms of the entire building / G/F to 2/F.
- the entire basement area shall be covered by fire detection system except car parking area.
2. Main fire alarm panel shall be provided inside the Fire Control Centre. All fire alarm signals including manual and AFA signals shall be connected to Fire Services Communications Centre through direct telephone link.

Emergency Generator

An independently powered generator of sufficient electrical capacity shall be provided to meet the fire service installations and fireman's lifts.

Secondary power supply

The secondary electricity supply shall be arranged to be tee-off before the incoming main switch for the essential FSI service.

Exit Sign

Sufficient directional sign and exit sign shall be provided to ensure that all exit routes from any floor within the building are clearly indicated as required by the configuration of staircases serving the building / public areas to staircases are clearly indicated in accordance with FSI Code and Circular Letter no. 5/2008.

Emergency Lighting

Sufficient emergency lightings shall be provided throughout the entire building and all exit routes leading to ground level / to all staircases, passages and public areas including lift lobbies on all floors and refuge areas in accordance with FSI Code, BS 5266 Part I: 2011 and BS EN 1838: 2013.

Portable Hand-operated Approved Appliance

Portable fire extinguishers shall be provided as indicated on plan.

Ventilation/Air Conditioning Control System

A ventilation / air conditioning control system shall be provided to stop mechanically induced air movement within a designated fire compartment.

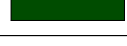
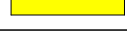
Fire Shutter

Fire shutters shall be provided as indicated on plans and operated by smoke detectors and the manual control devices on both sides of wall opening for automatic and manual operation respectively in accordance with FSI Code.

FS Requirement for Open Kitchen

1. Smoke detector(s) fitted with sounder base shall be provided inside the flat with open kitchen. The alarm signal of the smoke detector(s) shall be connected to the local fire services control panel of the building and shall not be linked to Fire Services Communications Centre.
2. Smoke detector(s) shall be provided at the common area outside the flat with open kitchen. The alarm signal of the smoke detector(s) shall be connected to the local fire services control panel and Fire Services Communications Centre.
3. Sprinkler head(s) shall be provided to cover the notional open kitchen area. The alarm signal of the system shall be connected to the local fire services control panel and the Fire Services Communications Centre.

COLOUR INDICATION :

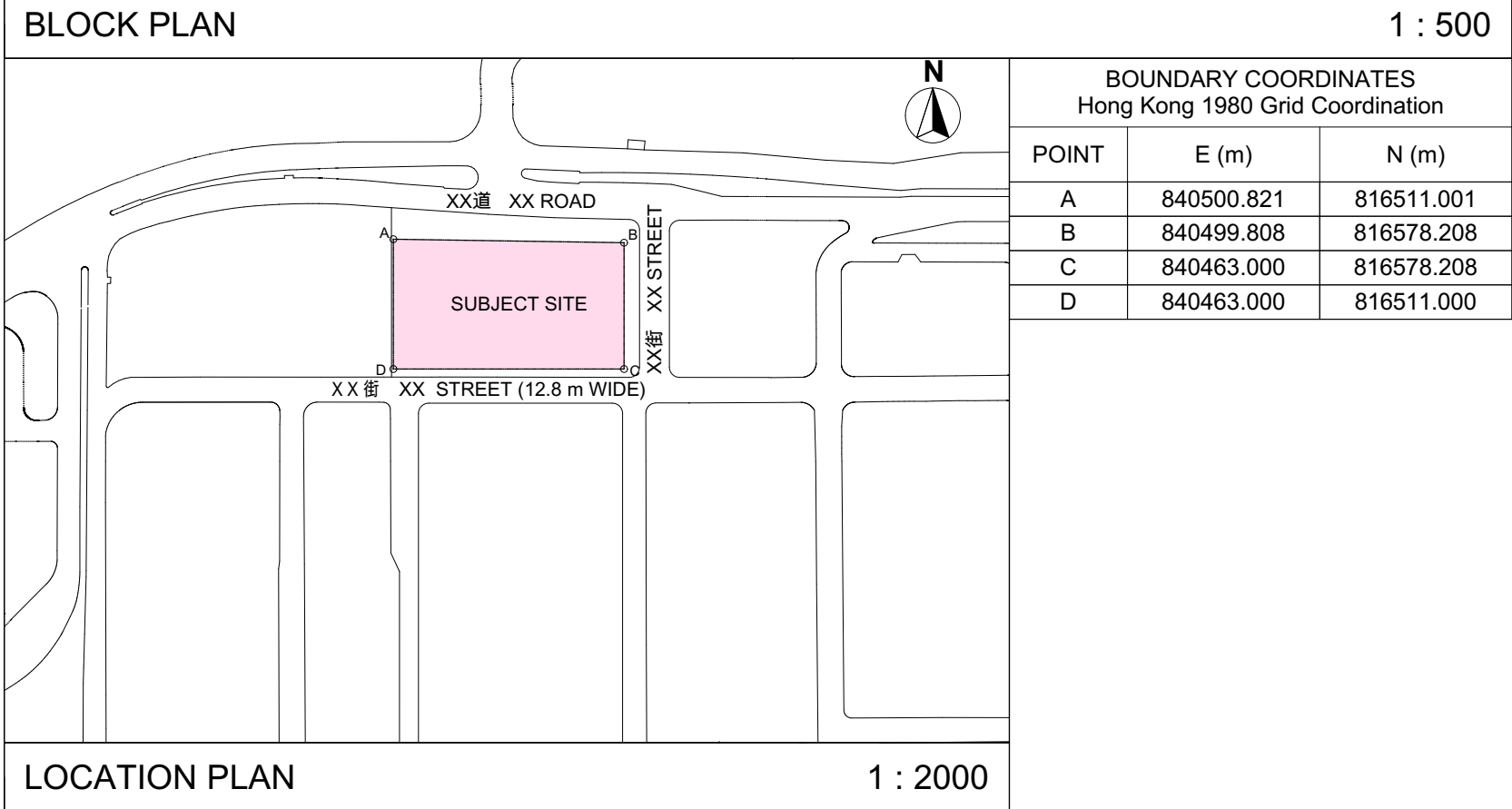
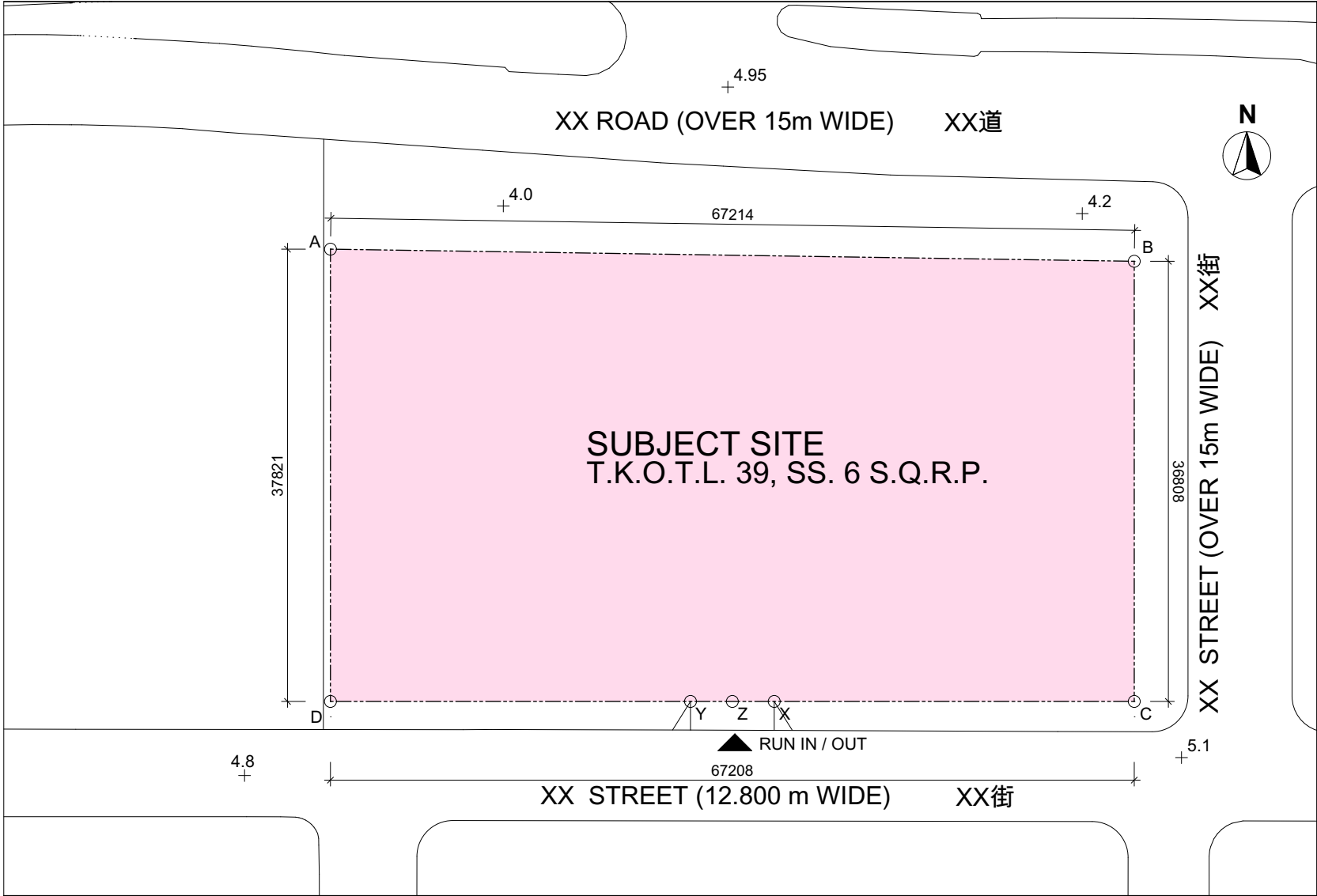
COLOUR	RGB COLOUR	MATERIAL / DESCRIPTION
	204,178,102	HARDCORE OR DRY FILL
	255,63,0	BRICK
	223,255,127	CONCRETE SLAB (LIGHTER WASH)
	0,76,38	CONCRETE (PLAIN OR REINFORCED)
	127,223,255	SOLID CONCRETE BLOCKS
	191,127,255	HOLLOW CONCRETE BLOCKS
	255,191,127	LIGHTWEIGHT PARTITION
	204,204,102	PLASTER OR CEMENT RENDERING
	255,127,223	IMPERMEABLE / NON-ABSORBENT FLOOR OR WALL
	127,255,255	GLASS
	153,133,76	TIMBER
	233,127,255	METAL WORK OR STEEL
	173,173,173	STONE FINISH
	255,255,0	SANITARY FITTINGS
	0,63,255	DEMOLITION WORKS / DELETION OF APPROVED WORKS
	204,0,51	UNDERLINE FOR REVISION
	255,164,25	ACCOUNTABLE DOMESTIC GFA
	227,100,102	ACCOUNTABLE NON-DOMESTIC GFA
	191,0,255	DISREGARDED GFA NOT SUBJECT TO THE OVERALL CAP OF 10% a) CONCESSION ITEMS SPECIFIED IN PNAP APP-151 (OTHER THAN CARPARK, LOADING AND UNLOADING AREAS)
	222,184,135	DISREGARDED GFA NOT SUBJECT TO THE OVERALL CAP OF 10% b) CARPARK, LOADING AND UNLOADING AREAS AND OTHERS
	30,144,255	DISREGARDED GFA SUBJECT TO THE OVERALL CAP OF 10% a) CONCESSION ITEMS SPECIFIED IN PNAP APP-151
	144,214,236	DISREGARDED GFA SUBJECT TO THE OVERALL CAP OF 10% b) OTHERS

LEGEND :

	SFL (STRUCTURAL FLOOR LEVEL)
	FFL (FINISHED FLOOR LEVEL)
	ACCESSIBLE FACILITIES FOR PERSONS WITH A DISABILITY
	ACCESSIBLE UNISEX TOILET
	ACCESSIBLE URINAL
	LEVEL DIFFERENCE
	DROP KERB
	OPENABLE WINDOW
	IRRIGATION POINT
	EV CHARGING STATION
	NON-STRUCTURAL PREFABRICATED WALL

LEGEND FOR F.S. EQUIPMENT :

	EXIT SIGN AT HIGH LEVEL
	HOSE REEL
	FIREMAN'S LIFT
	NO PARKING SIGN
	EVA LAYOUT SIGN
FSI	FIRE SERVICE INLET
CP	CONTROL PANEL
FE	4.5 kg CO ₂ FIRE EXTINGUISHER
FEH	9.0 L H ₂ O FIRE EXTINGUISHER
FH	FIRE HYDRANT
SB	SAND BUCKET
FB	FIRE BLANKET
SFH	STREET FIRE HYDRANT
FSAP	FIRE SERVICES ACCESS POINT
	F.S. SHUTTER



BD REF		2/1234/18	
BIM REF		2-1234-18-A21-01	
FSD REF		FP 8/	
Rev.	Date	Amendment	Purpose

DOOR & FIRE SHUTTER MARKS :

(D1)	-/60/60 F.R.R. SELF CLOSING DOOR
(D2)	-/60/60 F.R.R. SELF CLOSING DOOR WITH SMOKE SEAL
(D3)	-/60/60 F.R.R. SELF CLOSING DOOR WITH F.R.R. TRANSPARENT GLASS UPPER PANEL
(D4)	-/60/60 F.R.R. SELF CLOSING DOOR WITH F.R.R. TRANSPARENT GLASS UPPER PANELAND SMOKE SEAL
(D5)	-/120/120 F.R.R. SELF CLOSING DOOR WITH F.R.R. TRANSPARENT GLASS UPPER PANEL
(D6)	-/120/120 F.R.R. SELF CLOSING DOOR WITH F.R.R. TRANSPARENT GLASS UPPER PANELAND SMOKE SEAL
(D7)	-/120/120 F.R.R. SELF CLOSING DOOR
(D8)	-/120/120 F.R.R. SELF CLOSING DOOR WITH SMOKE SEAL
(D9)	-/120/120 F.R.R. SELF CLOSING LIFT SHAFT EMERGENCY ACCESS DOOR WITH SMOKE SEAL
(D10)	-/-/ F.R.R. SELF CLOSING DOOR WITH SMOKE SEAL
(D11)	-/-/ F.R.R. SELF CLOSING DOOR WITH TRANSPARENT GLASS UPPER PANELAND SMOKE SEAL
(D12)	-/-/ F.R.R. GLASS PANEL DOOR
(D13)	-/60/60 F.R.R. GLASS PANEL DOOR
(D14)	-/60/60 F.R.R. SELF CLOSING DOOR WITH PANIC BOLT-ON INSIDE
(D15)	-/-/ F.R.R. DOOR WITH PANIC BOLT-ON INSIDE
(D16)	-/60/60 F.R.R. METAL DOOR
(D17)	-/120/120 F.R.R. METAL DOOR
(D18)	-/-/ F.R.R. DOOR
(D19)	-/-/ F.R.R. DOOR FOR MAINTENANCE ONLY
(D20)	-/120/- F.R.R. LIFT LANDING DOOR
(D21)	-/60/- F.R.R. STEEL LOUVRES DOOR
(D22)	-/120/120 F.R.R. ACCESS PANEL WITH SMOKE SEAL
(D32)	DOOR WITH FIXED LOUVRE PANEL WITH A MINIMUM SIZE OF 1/20 OF THE FLOOR AREA OF THE ROOM

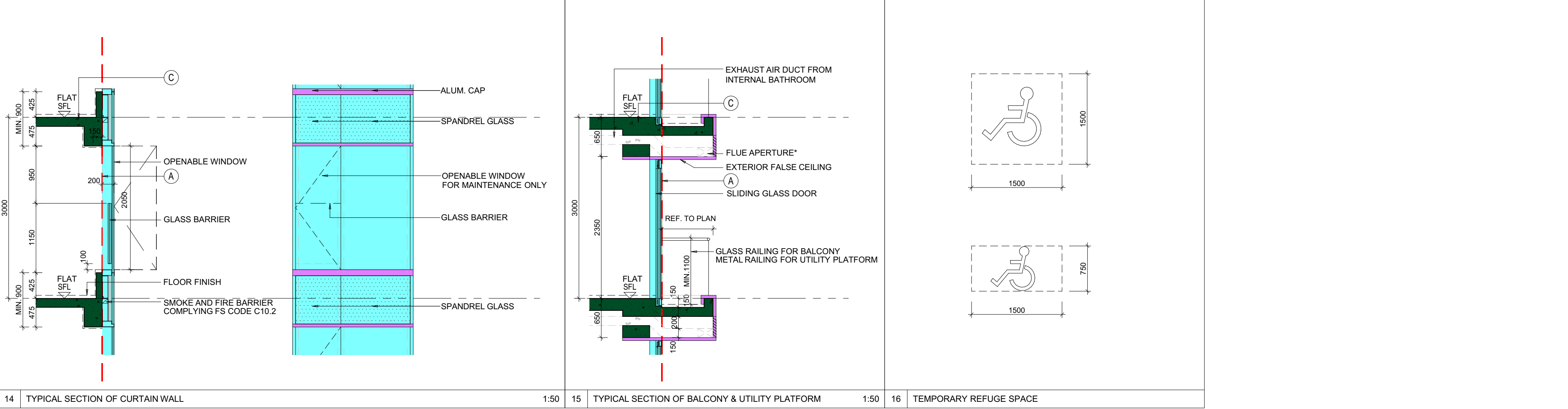
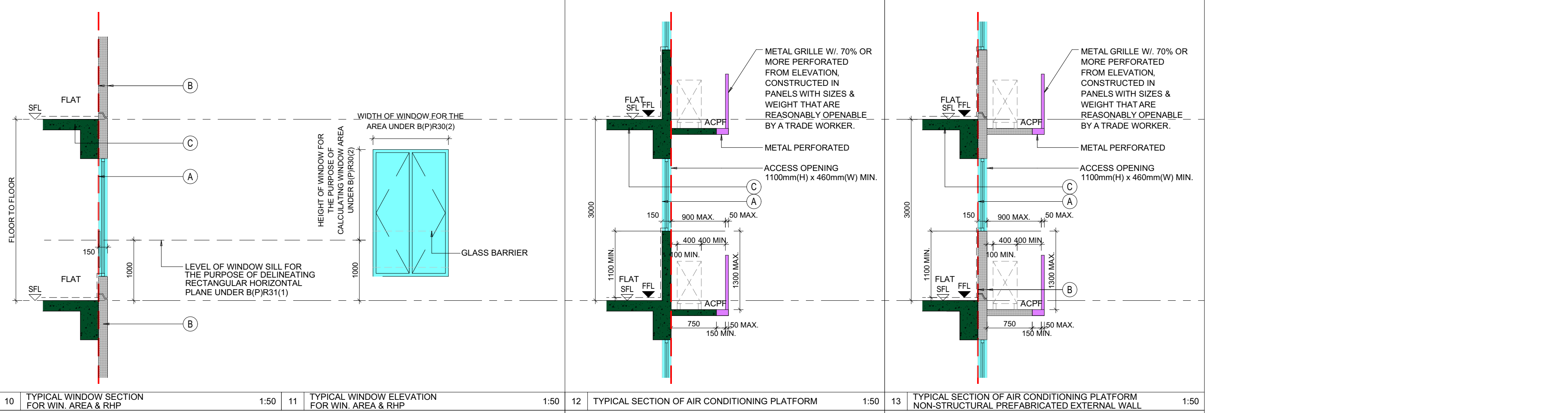
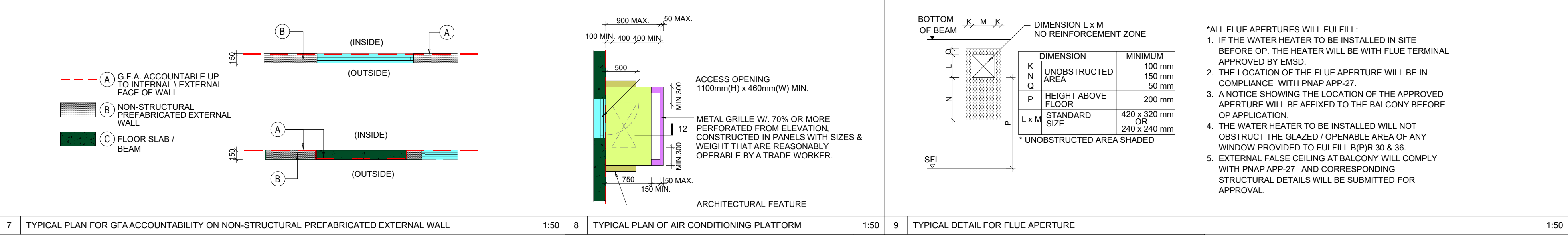
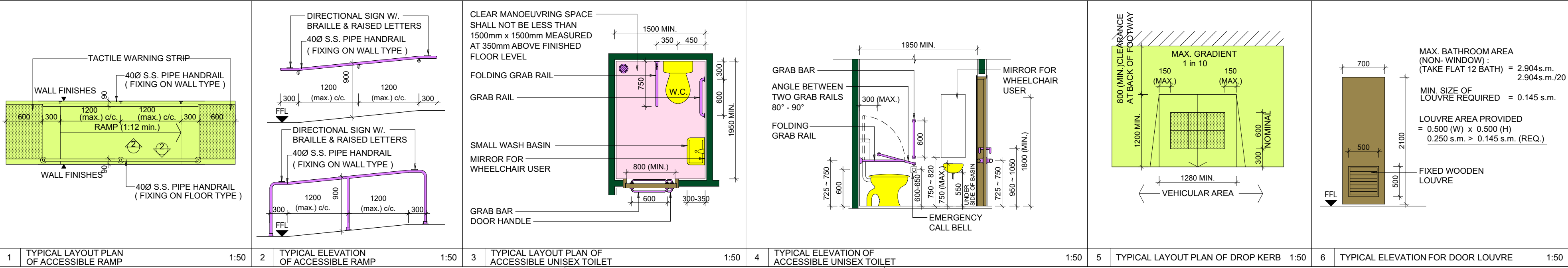
(R1)	-/120/- HORIZONTAL FIRE SHUTTER
(R2)	-/120/- F.R.R. STEEL FIRE SHUTTER
(R3)	-/60/60 F.R.R. STEEL FIRE SHUTTER
(R4)	-/240/- F.R.R. STEEL FIRE SHUTTER
(R6)	-/240/240 F.R.R. STEEL FIRE SHUTTER

Abbreviation	Full Name
@HL	AT HIGH LEVEL
@LL	AT LOW LEVEL
ACPF	AIR CONDITIONER PLATFORM
ACPR	AIR CONDITIONING PLANT ROOM
AF	ARCHITECTURAL FEATURE
AHU	AIR HANDLING UNIT ROOM
AP	ACCESS PANEL
BAL	BALCONY
BHR	BUILDING HEIGHT RESTRICTION
BR	BEDROOM
C/C	CENTRE TO CENTRE
CAP	CAPACITY
CB	CANTILEVERED BEAM
CL	CAT LADDER
CLA	COVERED LANDSCAPE AREA
CLD	CLADDING
CMC	CHECK METER CABINET
COA	COMMON AREA
COF	COMMON FLAT ROOF
CORR	CORRIDOR
CS	CANTILEVERED SLAB
CSB	CANTILEVERED SLAB BALCONY
CSC	COVERED SURFACE CHANNEL
CW	CURTAIN WALL
CWPR	CLEANSING WATER PUMP ROOM
DG	DANGEROUS GOODS STORE
DI	DRENCHER INLET
DOM	DOMESTIC
DR	DOOR
EGR	EMERGENCY GENERATOR ROOM
ELR	ELECTRIC ROOM
ENT	ENTRANCE
EVCR	ELECTRIC VEHICLE CHARGER ROOM
FAI	FRESH AIR INLET
FBG	FIBREGLASS
FCC	FIRE CONTROL CENTRE
FCG	FIXED CLEAR GLASS
FLA	FLUE APERTURE
FLAV	FEMALE LAVATORY
FL	FIREMAN LIFT LOBBY
FMCR	FEMALE CHANGING ROOM
FPR	FILTRATION PLANT ROOM
FS	FIRE SERVICE
FSCR	FIRE SERVICE CONTROL ROOM
GB	GLASS BALUSTRADE
GMC	GAS METER CABINET / CHAMBER
GW	GLASS WALL

Abbreviation	Full Name
GYM	GYMNASIUM
ICOF	INACCESSIBLE COMMON FLAT ROOF (FOR MAINTENANCE ONLY)
IFR	INACCESSIBLE FLAT ROOF (FOR MAINTENANCE ONLY)
IRR	IRRIGATION
KIT	KITCHEN
LUL	LOADING / UNLOADING
LAV	LAVATORY
LCL	LOCKABLE CAT LADDER
LFS	LIFT SHAFT
LIV / DIN	LIVING & DINING
LL	LIFT LOBBY
LMR	LIFT MACHINE ROOM
M BATH	MASTER BATHROOM
MB	METAL BALUSTRADE
MBR	MASTER BED ROOM
MCR	MALE CHANGING ROOM
MXR	MULTI FUNCTION ROOM
ML	METAL LOUVRE
MLAV	MALE LAVATORY
MSFL	MEAN SITE FORMATION LEVEL
MSL	MEAN STREET LEVEL
MVAL	MECHANICAL VENTILATION & ARTIFICIAL LIGHTING
MW	MAINTENANCE WINDOW
NDOM	NON-DOMESTIC
O KIT	OPEN KITCHEN
OCO	OWNERS' COMMITTEE OFFICE
P	PLANTER
PAU	PRIMARY AIR HANDLING UNIT
PD	PIPE DUCT
PFWTPR	POTABLE & FLUSHING WATER TANK & PUMP ROOM
PRM	PUMP ROOM
PRPW	PARAPET WALL
RC	REINFORCED CONCRETE
RHP	RECTANGULAR HORIZONTAL PLANE
RM	ROOM
RRF	RESIDENTS' RECREATIONAL FACILITIES
RSMRC	REFUSE STORAGE & MATERIAL RECOVERY CHAMBER
RSMRR	REFUSE STORAGE & MATERIAL RECOVERY ROOM
RT	ROOF TILES WITH WATERPROOF MEMBRANE FELT ON CEMENT SAND SCREEDING LAID TO FALL

Abbreviation	Full Name
SCLD	STONE CLADDING
SC	SITE COVERAGE
SFH	STREET FIRE HYDRANT
SH	SHOWER
SI	SPRINKLER INLET
SKP	SUNKEN PLANTER
SML	SMOKE LOBBY
SPR	SPRINKLER
SS	STAINLESS STEEL
STO	STORE
SVI	SMOKE VENT INLET
SVO	SMOKE VENT OUTLET
SWMP	SWIMMING POOL
TI	TOP OF
TBE	TELECOMMUNICATION AND BROADCASTING EQUIPMENT
TD	TRAVEL DISTANCE
TDR	TRAP DOOR
TL	TOP LEVEL
TLD	TELEPHONE DUCT
TOS	TOP OF SOIL
TP	TRANSFER PLATE
TPA	TRANSFER PLATE ABOVE
TPB	TRANSFER PLATE BELOW
TRS	TEMPORARY REFUGE SPACE
TX	TRANSFORMER
UFA	USABLE FLOOR AREA
UFS	USABLE FLOOR SPACE
UP	UTILITY PLATFORM
UTR	UTILITY ROOM
WC	WATER CLOSET
WL	WATER LEVEL
WMC	WATER METER CABINET
WPRML	WATERPROOF METAL LOUVRE
WPT	WATER POINT
WT	WATER TANK

DRAWING LIST				
Drawing No.	Drawing Title	Size	Rev.	
1	A001 SITE PLAN AND NOTES	A1	-	
2	A002 TYPICAL DETAILS	A1	-	
3	A003 BASEMENT 2 FLOOR PLAN	A1	-	
4	A004 BASEMENT 1 FLOOR PLAN	A1	-	
5	A005 GROUND FLOOR PLAN	A1	-	
6	A006 FIRST FLOOR PLAN	A1	-	
7	A007 SECOND FLOOR PLAN	A1	-	
8	A011 THIRD FLOOR PLAN	A1	-	
9	A012 TYPICAL FLOOR PLAN (4/F TO 22/F)	A1	-	
10	A013 MAIN ROOF PLAN	A1	-	
11	A014 UPPER ROOF 1 FLOOR PLAN (UR1F)	A1	-	
12	A015 UPPER ROOF 2 FLOOR PLAN (UR2F)	A1	-	
13	A021 TOWER ELEVATION A	A1	-	
14	A022 TOWER ELEVATION B	A1	-	
15	A023 TOWER ELEVATION C	A1	-	
16	A024 TOWER ELEVATION D	A1	-	
17	A031 PODIUM SECTION 1-1	A1	-	
18	A032 PODIUM SECTION 2-2	A1	-	
19	A033 TOWER SECTION 3-3 & 4-4	A1	-	
20	C041 CALCULATIONS	A1	-	
21	C042 SCHEDULE	A1	-	
22	C051 CALCULATIONS (1)	A1	-	
23	C052 CALCULATIONS (2)	A1	-	
24	C053 CALCULATIONS (3)	A1	-	
25	C054 CALCULATIONS (4)	A1	-	
26	C055 CALCULATIONS (5)	A1	-	
27	C056 CALCULATIONS (6)	A1	-	
28	C057 CALCULATIONS (7)	A1	-	
29	C061 FIRE COMPARTMENT DIAGRAMS & CALCULATIONS (1)	A1	-	
30	C062 FIRE COMPARTMENT DIAGRAMS & CALCULATIONS (2)	A1	-	
31	C063 FIRE COMPARTMENT DIAGRAMS & CALCULATIONS (3)	A1	-	
32	C071 SUSTAINABLE BUILDING DESIGN DEMONSTRATION DIAGRAMS & CALCULATIONS	A1	-	
33	C072 GREENERY DIAGRAMS & CALCULATIONS	A1	-	
34	C073 E.V.A. PLAN DIAGRAMS & CALCULATIONS	A1	-	



BD REF2/1234/18

BIM REF2-1234-18-A21-01

FSD REFFP 8/

Rev. DateAmendmentPurpose

9/11/20193:51 PM

PROJECT

BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO

DRAWING TITLE

TYPICAL DETAILS

SCALE1:50 (A1)

DRAWING NO. A002

REV. NO. -

SOURCE

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

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

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



BASEMENT 2 FLOOR PLAN

- NOTES:**
1. IMPOSED LOAD FOR E & M ROOM = 7.5 kpa
 2. IMPOSED LOAD FOR CARPARK = 4.0 kpa
 3. AUTOMATIC SPRINKLER SYSTEM TO BE PROVIDED IN ACCORDANCE WITH THE L.P.C. RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS AND RELEVANT CIRCULAR LETTERS ISSUED BY THE HKFSD.
 4. ARTIFICIAL LIGHTING TO BE PROVIDED FOR ALL STAIRCASES.
 5. MECHANICAL VENTILATION TO BE PROVIDED FOR CARPARK.
 6. SIZE OF PRIVATE CAR PARKING SPACE TO BE 5m x 2.5m x 2.4m(H)
 7. SIZE OF MOTOR-CYCLE PARKING SPACE TO BE 2.4m x 1m x 2.4m(H)
 8. EV CHARGER RECESSED IN WALL TO BE PROVIDED FOR ALL CARPARKING SPACE IN ACCORDANCE WITH THE REQUIREMENT UNDER THE TECHNICAL GUIDELINES ON CHARGING FACILITIES FOR ELECTRIC VEHICLES (EV) ISSUED BY E.M.S.D.
 9. SMOKE VENT SIZE SHALL REFER TO CALCULATIONS & COMPARTMENT AREA DIAGRAM.
 10. 150H, CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN.
 11. ALL LOCKING DEVICE WHICH IS ELECTRICALLY OPERATED SHOULD BE CAPABLE OF AUTOMATIC RELEASE UPON ACTUATION OF AN AUTOMATIC HEAT OR SMOKE DETECTION SYSTEM OR THE OPERATION OF AN ALARM SYSTEM OR A CENTRAL MANUAL OVERRIDE. UPON POWER FAILURE @H/L, THE ELECTRIC LOCKING DEVICE SHOULD BE RELEASED AUTOMATICALLY.

B2F BASEMENT FLOOR SMOKE VENT CALCULATION :

B2-A AREA FOR SMOKE VENT
REQUIRED AREA :
= 1558.596 s.m. x 0.5 %
= 7.793 s.m.

PROVIDED AREA :
= SV-B2-01 + SV-B2-02
= (2.745 x 1.7) s.m. + (2 x 1.75) s.m.
= 4.667 s.m. + 3.500 s.m.
= 8.167 s.m. > 7.793 s.m.

B2F BASEMENT FLOOR PARKING SCHEDULE

TOTAL NOS. OF CARPARK FOR RESIDENTIAL (2500 W. x 5000 L. x 2400 H.)	=	13 NOS. (1 ~ 13)
TOTAL NOS. OF CARPARK FOR VISITOR'S (2500 W. x 5000 L. x 2400 H.)	=	5 NOS. (14 ~ 18)
TOTAL NOS. OF CARPARK FOR ACCESSIBLE PARKING SPACE (3500 W. x 5000 L. x 2400 H.)	=	1 NO. (34)
TOTAL NOS. OF CARPARK FOR RETAIL (2500 W. x 5000 L. x 2400 H.)	=	15 NOS. (19 ~ 33)
TOTAL NOS. OF MOTORCYCLE FOR RESIDENTIAL (1000 W. x 2400 L. x 2400 H.)	=	3 NOS. (M1 ~ M3)
TOTAL NOS. OF MOTORCYCLE FOR RETAIL (1000 W. x 2400 L. x 2400 H.)	=	2 NOS. (M4 ~ M5)

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP B/		
Rev.	Date	Amendment	Purpose

9/11/2019 3:51 PM

PROJECT	BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO
DRAWING TITLE	BASEMENT 2 FLOOR PLAN

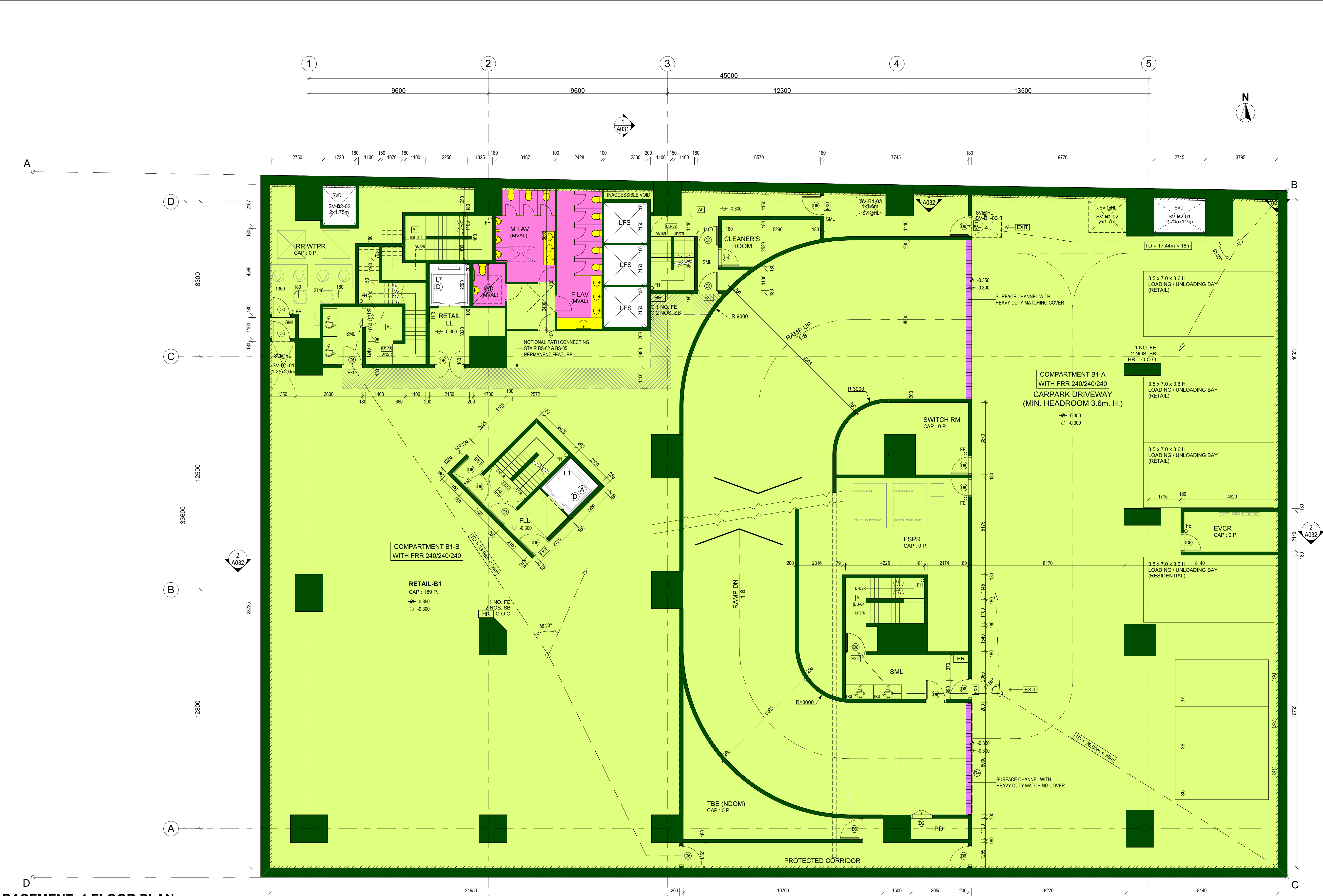
SCALE	1:100 (A1)
DRAWING NO.	A003
REV. NO.	-

SOURCE

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

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

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



BASEMENT 1 FLOOR PLAN

- NOTES:
- IMPOSED LOAD FOR E & M ROOM = 7.5 kpa
 - IMPOSED LOAD FOR CARPARK = 4.0 kpa
 - AUTOMATIC SPRINKLER SYSTEM TO BE PROVIDED IN ACCORDANCE WITH THE L.P.C. RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS AND RELEVANT CIRCULAR LETTERS ISSUED BY THE HKFSD.
 - ARTIFICIAL LIGHTING TO BE PROVIDED FOR ALL STAIRCASES.
 - MECHANICAL VENTILATION TO BE PROVIDED FOR CARPARK.
 - SIZE OF PRIVATE CAR PARKING SPACE TO BE 5m x 2.5m x 2.4m(H)
 - SIZE OF MOTOR-CYCLE PARKING SPACE TO BE 2.4m x 1m x 2.4m(H)
 - EV CHARGER RECESSED IN WALL TO BE PROVIDED FOR ALL CARPARKING SPACE IN ACCORDANCE WITH THE REQUIREMENT UNDER THE TECHNICAL GUIDELINES ON CHARGING FACILITIES FOR ELECTRIC VEHICLES (EV) ISSUED BY E.M.S.D.
 - SMOKE VENT SIZE SHALL REFER TO CALCULATIONS & COMPARTMENT AREA DIAGRAM.
 - 150H. CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN.
 - ALL LOCKING DEVICES WHICH ARE ELECTRICALLY OPERATED SHOULD BE CAPABLE OF AUTOMATIC RELEASE UPON ACTUATION OF AN AUTOMATIC HEAT OR SMOKE DETECTION SYSTEM OR THE OPERATION OF AN ALARM SYSTEM OR A CENTRAL MANUAL OVERRIDE. UPON POWER FAILURE @H/L, THE ELECTRIC LOCKING DEVICE SHOULD BE RELEASED AUTOMATICALLY.

B1F BASEMENT FLOOR SMOKE VENT CALCULATION:

B1-A AREA FOR SMOKE VENT				B1-B AREA FOR SMOKE VENT			
REQUIRED AREA:				REQUIRED AREA:			
=	861.17	s.m.	x 0.5 %	=	605.07	s.m.	x 0.5 %
=	4.306	s.m.		=	3.025	s.m.	
PROVIDED AREA:				PROVIDED AREA:			
=	SV-B1-02	+	SV-B1-03	=	SV-B1-01		
=	(2 x 1.7)	s.m. +	(1 x 1.6)	=	(1.25 x 2.6)	s.m.	
=	3.400	s.m. +	1.600	=	3.250	s.m.	3.025 s.m.
=	5.000	s.m.	> 4.306 s.m.				

B1F BASEMENT FLOOR PARKING SCHEDULE

TOTAL NOS. OF CARPARK FOR RETAIL (2500 W. x 5000 L. x 2400 H.)	=	3 NOS. (35 - 37)
TOTAL NOS. OF LOADING / UNLOADING FOR RESIDENTIAL (3500 W. x 7000 L. x 3600 H.)	=	1 NOS.
TOTAL NOS. OF LOADING / UNLOADING FOR RETAIL (3500 W. x 7000 L. x 3600 H.)	=	3 NOS.

BD REF2/1234/18

BIM REF2-1234-18-A21-01

FSD REFFP B/

Rev.

Date

Amendment

Purpose

9/11/20193:51 PM

PROJECT

BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO

DRAWING TITLE

BASEMENT 1 FLOOR PLAN

SCALE1:100 (A1)

DRAWING NO.

A004

REV. NO.

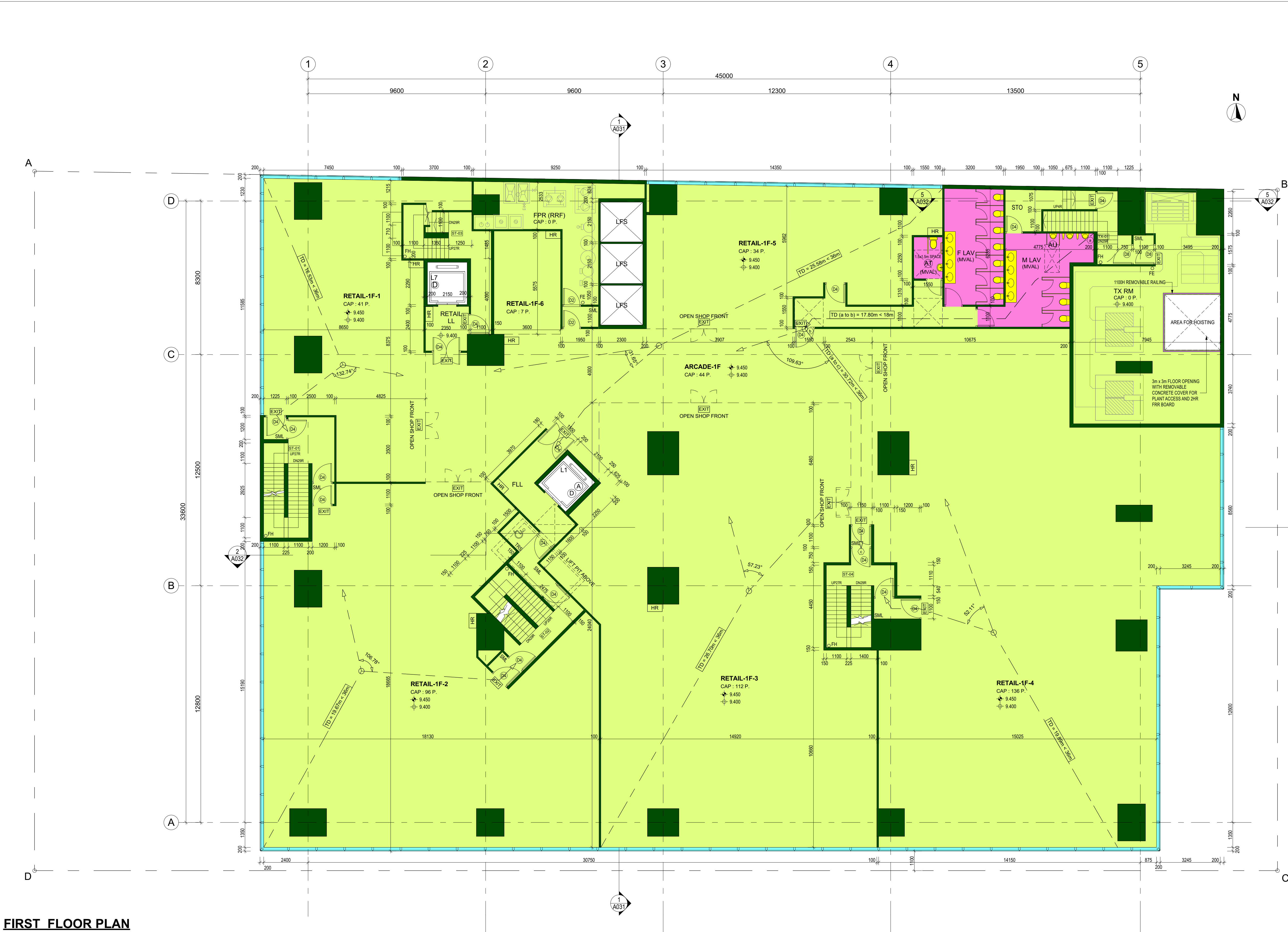
-

SOURCE

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

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

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



FIRST FLOOR PLAN

- NOTES :
1. IMPOSED LOAD FOR LIFT LOBBIES = 3.0 kpa
 2. IMPOSED LOAD FOR E & M = 7.5 kpa
 3. AUTOMATIC SPRINKLER SYSTEM TO BE PROVIDED IN ACCORDANCE WITH THE L.P.C. RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS AND RELEVANT CIRCULAR LETTERS ISSUED BY THE HKFSD.
 4. ARTIFICIAL LIGHTING TO BE PROVIDED FOR ALL STAIRCASES.
 5. MECHANICAL VENTILATION AND ARTIFICIAL LIGHTING TO BE PROVIDED TO ACCESSIBLE UNISEX TOILET (AT) , MALE LAVATORY & FEMALE LAVATORY.
 6. 150H. CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose

BD REF2/1234/18

BIM REF2-1234-18-A21-01

FSD REF

FP B/

Rev.

Date

Amendment

Purpose

9/11/20193:51 PM

PROJECT

BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO

DRAWING TITLE

SECOND FLOOR PLAN

SCALE1:100 (A1)

DRAWING NO.
A007

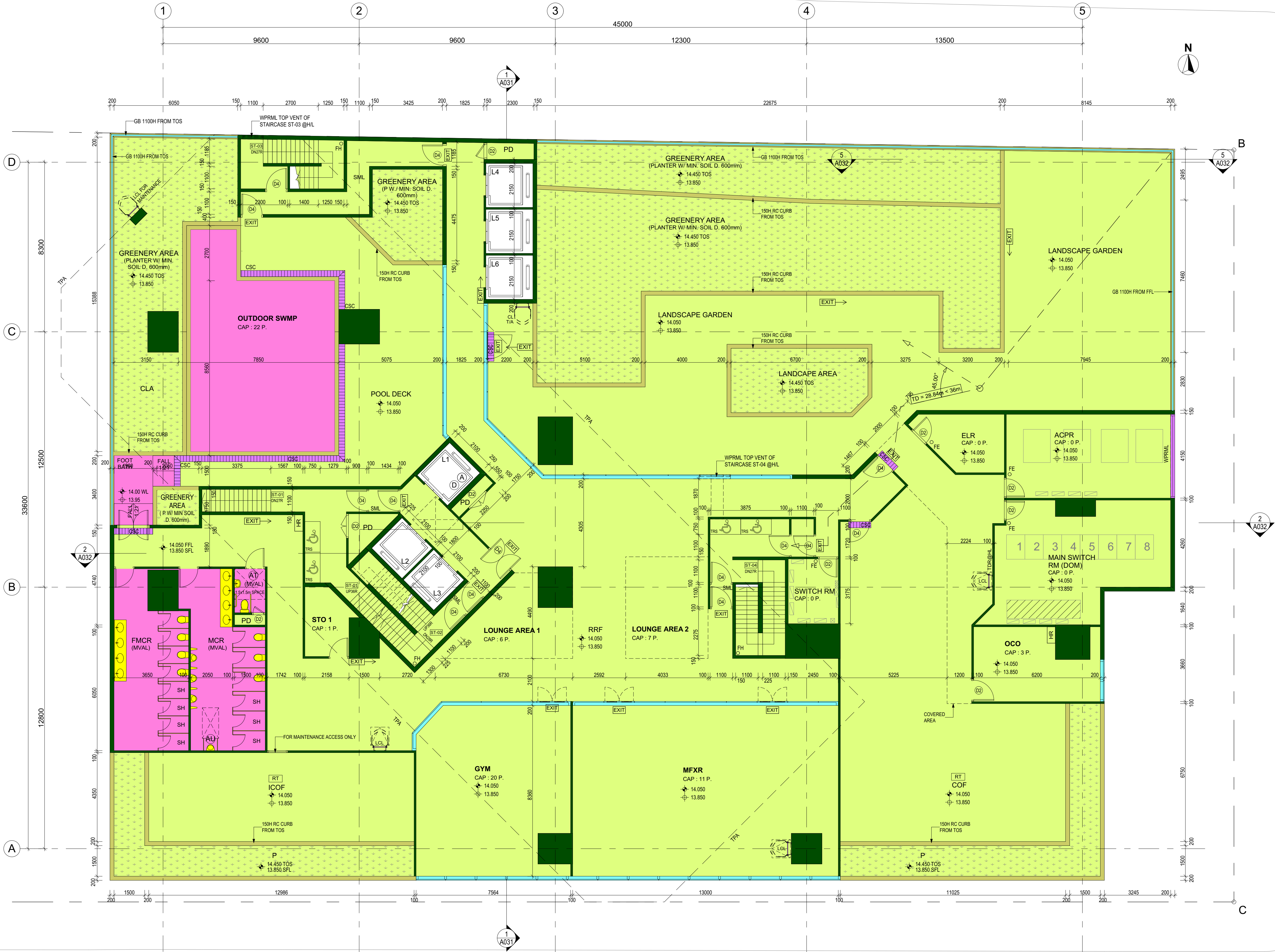
REV. NO.
-

SOURCE

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

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

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



SECOND FLOOR PLAN

- NOTES:
- IMPOSED LOAD FOR LIFT LOBBIES = 3.0 kpa
 - IMPOSED LOAD FOR E & M = 7.5 kpa
 - AUTOMATIC SPRINKLER SYSTEM TO BE PROVIDED IN ACCORDANCE WITH THE L.P.C. RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS AND RELEVANT CIRCULAR LETTERS ISSUED BY THE HKFSD.
 - ARTIFICIAL LIGHTING TO BE PROVIDED FOR ALL STAIRCASES.
 - MECHANICAL VENTILATION AND ARTIFICIAL LIGHTING TO BE PROVIDED TO ACCESSIBLE UNISEX TOILET (AT), MALE LAVATORY & FEMALE LAVATORY.
 - 150H. CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN.

FLAT 7 - BR. 1 (3/F TO 22/F)
UNOBSTRUCTED VISION AREA (UVA) PROVIDED:
(UVA) OF WINDOW
HEIGHT OF FACADE FOR DOMESTIC - HABITABLE ROOM
= 80.00 (R/F) - 20.00 (3/F) + 1.50 - 2.40
= 59.10 m
UNOBSTRUCTED VISION AREA (UVA) REQUIREMENT
FOR DOMESTIC HABITABLE ROOM (6 % VDF)
HEIGHT OF FACADE (m) 10% UFA 15% UFA 20% UFA
= 59.10 m 873 682 491
PERFORMANCE-BASED APPROACH CALCULATIONS
= C1 x 4
= 261.507 s.m. x 4
= 1046.028 s.m. > 873 s.m. (10% of UFA)

X X 道 X X ROAD

WINDOW FACING TO STREET

X X 街 X X STREET (12.8 WIDE)

CENTRE LINE OF STREET

THIRD FLOOR PLAN

STOREY HEIGHT = 3000 mm

NOTES:

- IMPOSED LOAD = 2.5 kpa
- IMPOSED LOAD FOR FLAT ROOF = 2.0 kpa
- LIFT DOOR OPENING ARRANGEMENT:
LIFT NO. L1, L2 & L3 SERVED ALL FLOORS
(LIFT NO. L1 FOR FIREMAN'S LIFT & ACCESSIBLE LIFT)
- NOTES FOR INTERNAL BATHROOMS:
A SYSTEM OF ARTIFICIAL LIGHTING AND MECHANICAL VENTILATION PRODUCING 5 AIR CHANGES PER HOUR) IS
IN OPERATION AT TIME WHEN THE BATHROOM IS IN USE.
- 150H. CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN.
AUTOMATIC SPRINKLER SYSTEM TO BE PROVIDED IN ACCORDANCE WITH THE L.P.C. RULES FOR AUTOMATIC
SPRINKLER INSTALLATIONS AND RELEVANT CIRCULAR LETTERS ISSUED BY THE HKFSD.
- ALL BATHROOM / MVAL WITH * MARK HAVE TRANSFER AIR DUCT AT H/L.
- ALL KITCHEN WITH * MARK ARE EQUIPPED WITH ELECTRIC FUEL.

LEGEND:

- B** -/30/30 F.R.R. FULL HEIGHT FIRE RESISTING BARRIER
- O KIT** OPEN KITCHEN
- SUNKEN SLAB / DRAINAGE TRENCH / E & M TRENCH**

BD REF 2/1234/18

BIM REF 2-1234-18-A21-01

FSD REF FP 8/

Rev. Date Amendment Purpose

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PROJECT
**BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO**

DRAWING TITLE
THIRD FLOOR PLAN

SCALE 1:100 (A1)

DRAWING NO.
A011

REV. NO.

SOURCE

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

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

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

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose

Rev.	Date	Amendment	Purpose
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9/11/2019 3:51 PM

PROJECT BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO
DRAWING TITLE TYPICAL FLOOR PLAN (4/F TO 22/F)

SCALE 1:100 (A1)

DRAWING NO.	REV. NO.
A012	-

SOURCE

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

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

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



TYPICAL FLOOR PLAN

(4F~22F TOTAL 19 STOREYS)

NOTES :

1. IMPOSED LOAD = 2.5 kpa
2. LIFT DOOR OPENING ARRANGEMENT :
LIFT NO. L1, L2 & L3 SERVED ALL FLOORS
(LIFT NO. L1 FOR FIREMAN'S LIFT & ACCESSIBLE LIFT)
3. NOTES FOR INTERNAL BATHROOMS :
A SYSTEM OF ARTIFICIAL LIGHTING AND MECHANICAL VENTILATION PRODUCING 5 AIR CHANGES PER HOUR) IS IN OPERATION AT TIME WHEN THE BATHROOM IS IN USE.
4. 150H. CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN.
5. AUTOMATIC SPRINKLER SYSTEM TO BE PROVIDED IN ACCORDANCE WITH THE I.P.C. RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS AND RELEVANT CIRCULAR LETTERS ISSUED BY THE HKFSD.
6. ALL BATHROOM / MVAL WITH * MARK HAVE TRANSFER AIR DUCT AT H/L.
7. ALL KITCHEN WITH * MARK ARE EQUIPPED WITH ELECTRIC FUEL.

LEGEND :

B -/30/30 F.R.R. FULL HEIGHT FIRE BARRIER

O KIT OPEN KITCHEN

 SUNKEN SLAB / DRAINAGE TRENCH / E & M TRENCH

BD REF	2/1234/18	
BIM REF	2-1234-18-A21-01	
FSD REF	FP 8/	
Rev.	Date	Amendment
		Purpose
9/11/2019 3:51 PM		
PROJECT BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO		
DRAWING TITLE MAIN ROOF PLAN		
SCALE 1:100 (A1)		
DRAWING NO.	REV. NO.	
A013	-	
SOURCE		
90mm (W) x 40mm (H) space for COMPANY LOGO		
90mm (W) x 60mm (H) space for AP/RSE/RGE's signature/ and stamp chop		
90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)		

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose



A

B

D

C

9/11/2019 3:51 PM

PROJECT
BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO
DRAWING TITLE
UPPER ROOF 1 FLOOR PLAN (UR1F)

SCALE	1:100 (A1)
DRAWING NO.	REV. NO.
A014	-

SOURCE

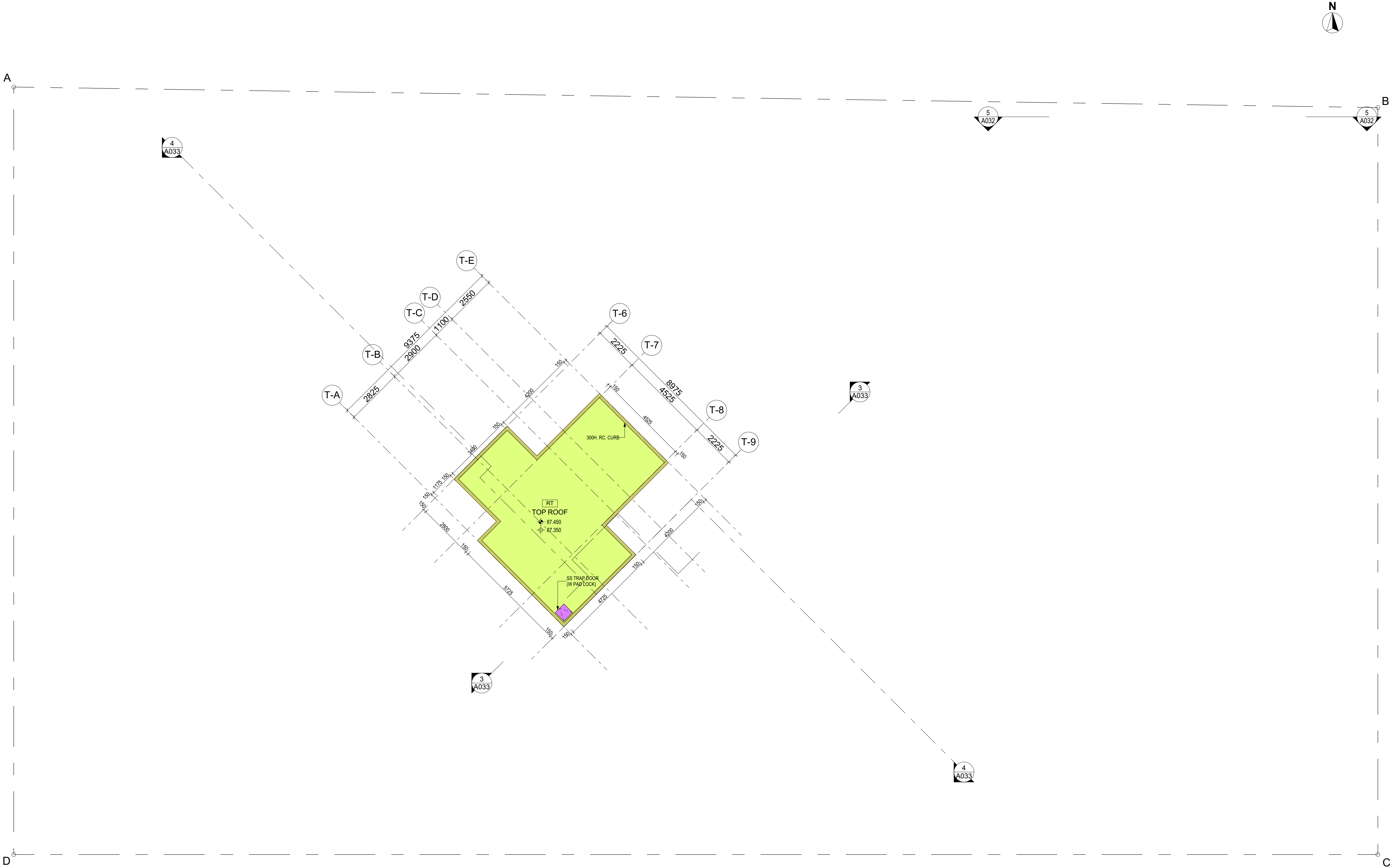
90mm (W) x 40mm (H) space
for COMPANY LOGO

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

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

UPPER ROOF 1 FLOOR PLAN (UR1F)

- NOTES :
- IMPOSED LOAD = 2.0 kpa
 - IMPOSED LOAD FOR E&M ROOM = 7.5 kps
 - 150H. CONCRETE CURB TO E&M ROOMS TO BE PROVIDED AS INDICATED ON THE PLAN



BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose

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PROJECT
BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO
DRAWING TITLE
UPPER ROOF 2 FLOOR PLAN (UR2F)

SCALE	1:100 (A1)
DRAWING NO.	REV. NO.
A015	-

SOURCE

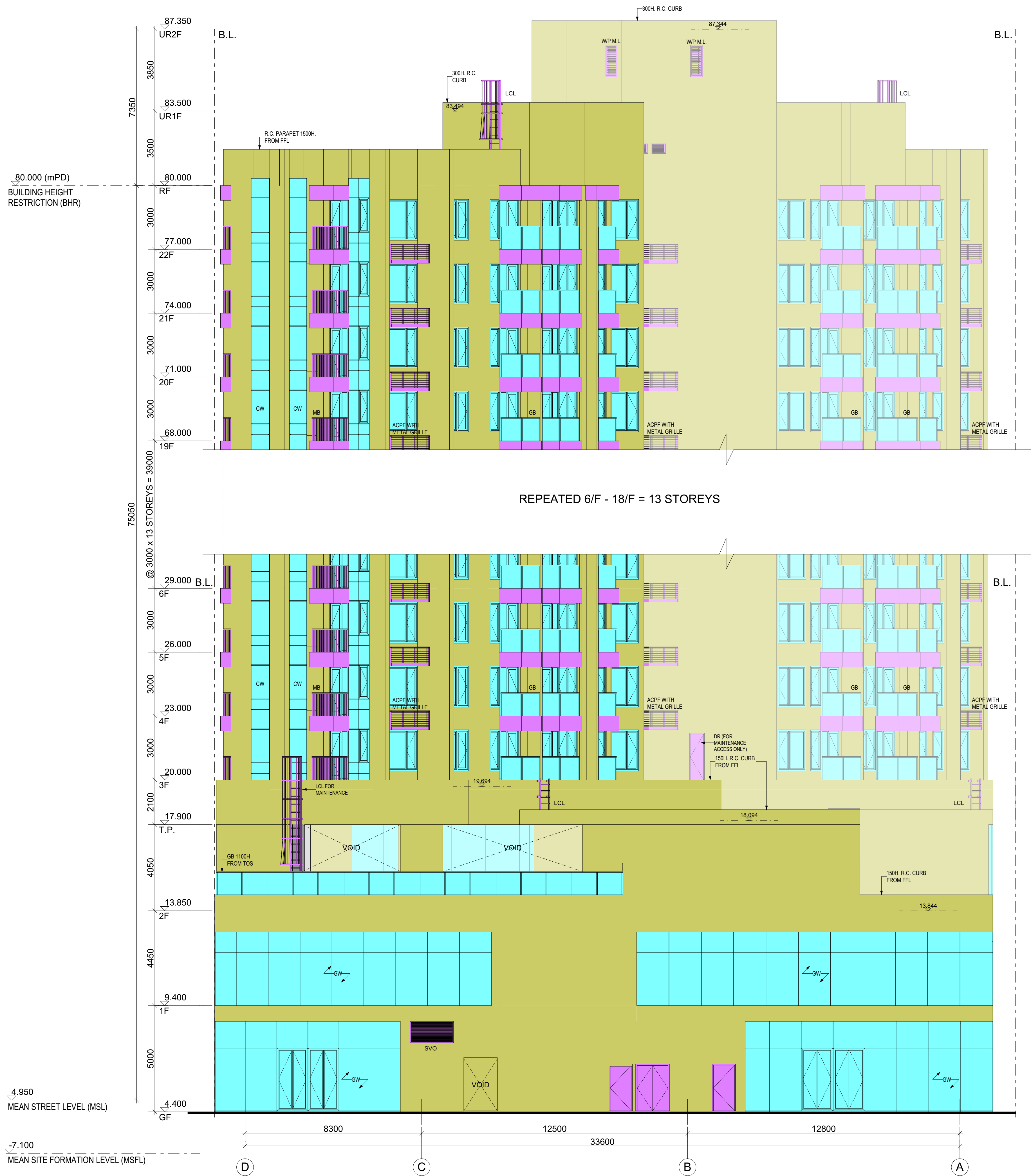
90mm (W) x 40mm (H) space
for COMPANY LOGO

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

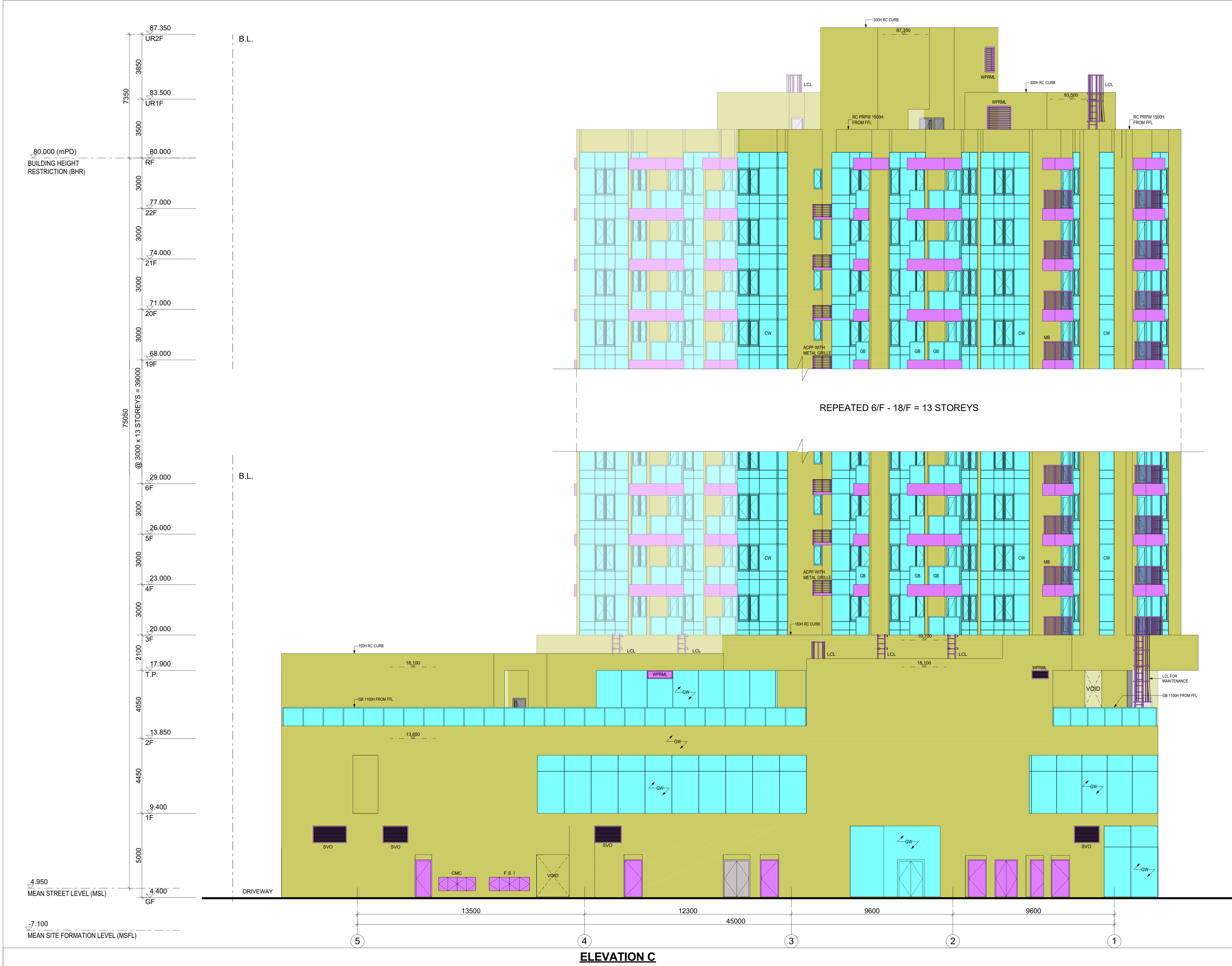
90mm (W) x 150mm (H) space
for BD's approval stamp /
certification of copies of
approved plans
(PNAP ADM-10 APP A)

UPPER ROOF 2 FLOOR PLAN (UR2F)

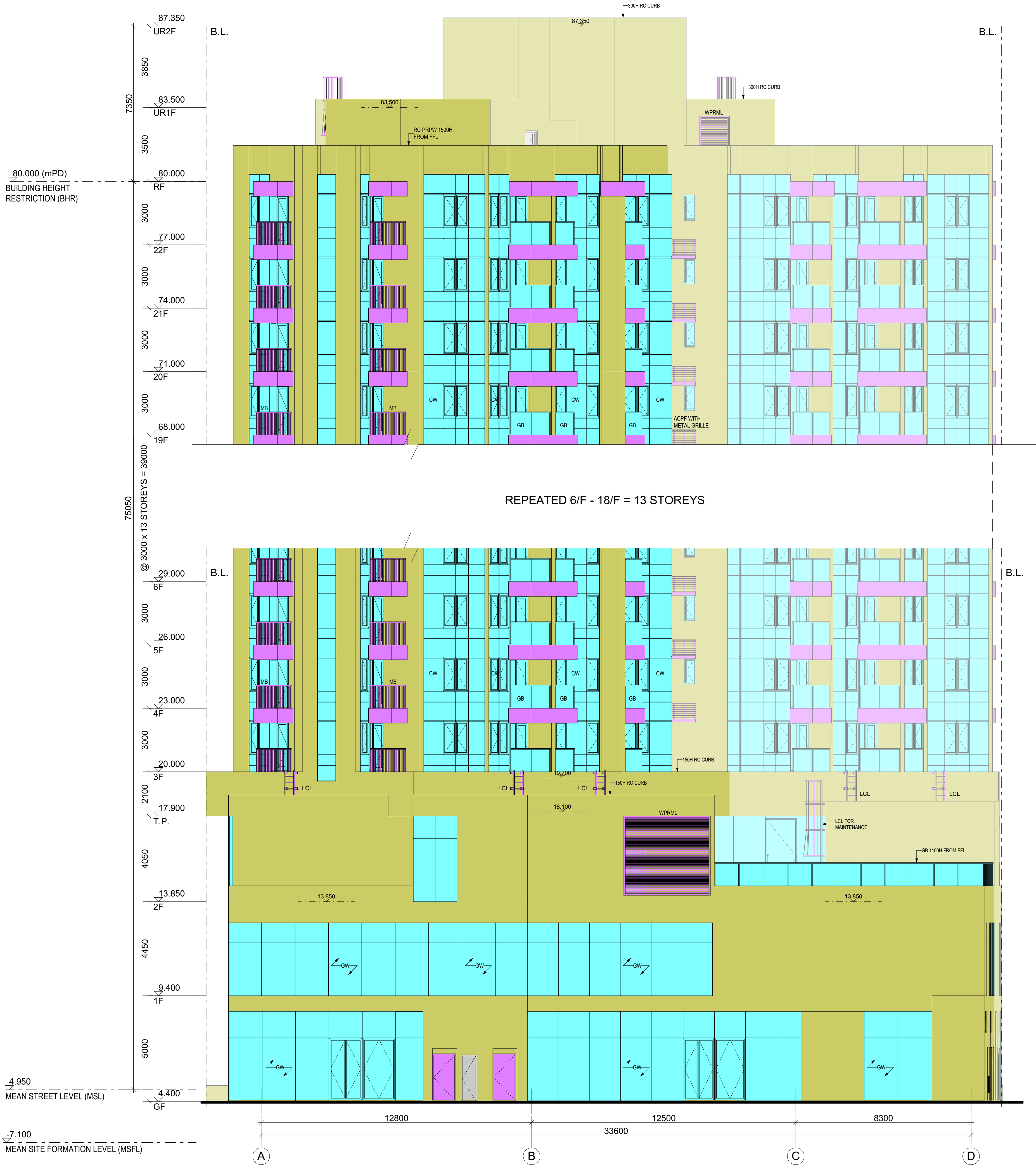
NOTES:
1. IMPOSED LOAD = 2.0 kpa



BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose
9/11/2019 3:52 PM			
PROJECT			
BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO			
DRAWING TITLE			
TOWER ELEVATION B			
SCALE 1:100 (A1)			
DRAWING NO. A022		REV. NO. -	
SOURCE			
90mm (W) x 40mm (H) space for COMPANY LOGO			
90mm (W) x 60mm (H) space for AP/RSE/RGE's signature/ and stamp chop			
90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)			

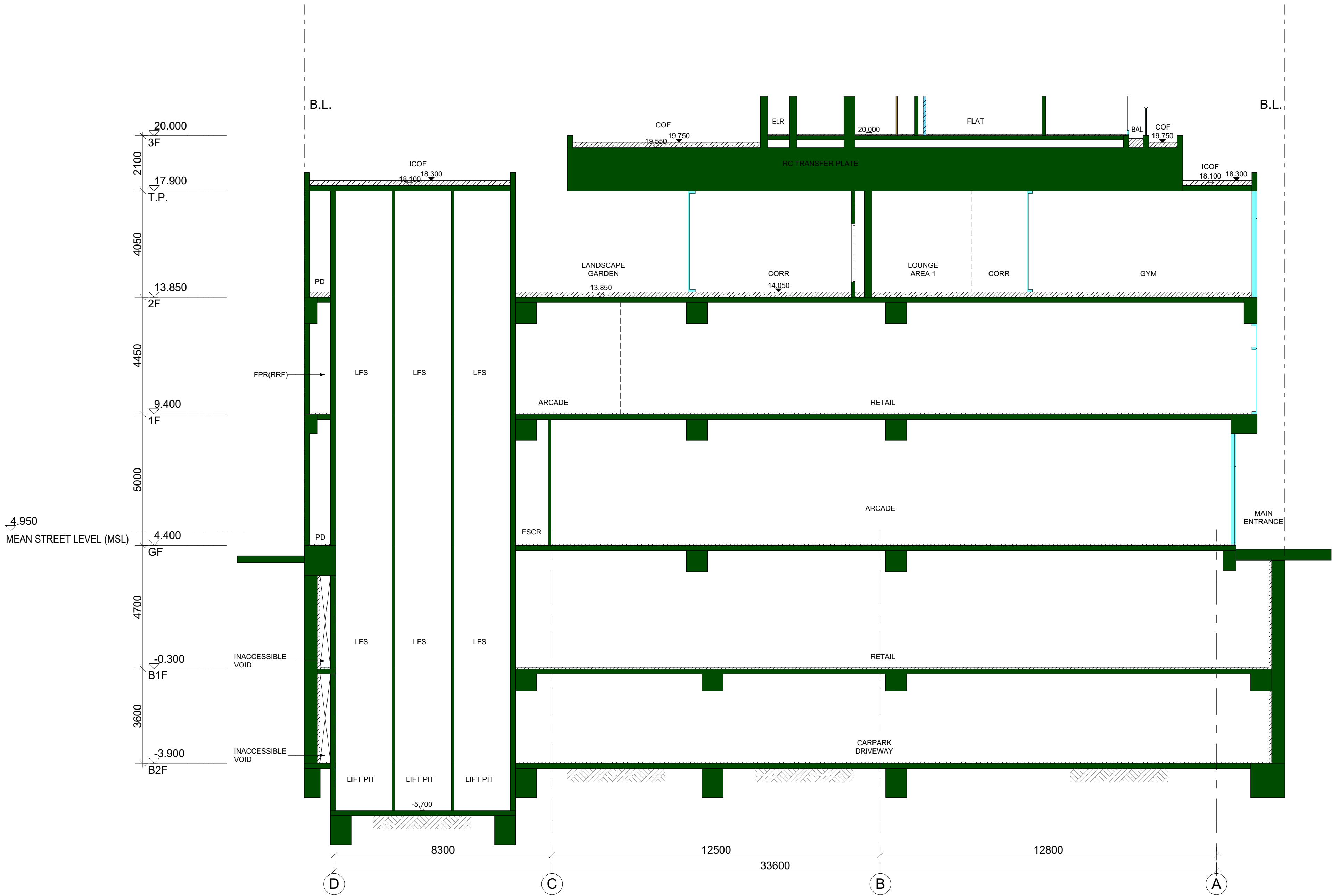


BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose



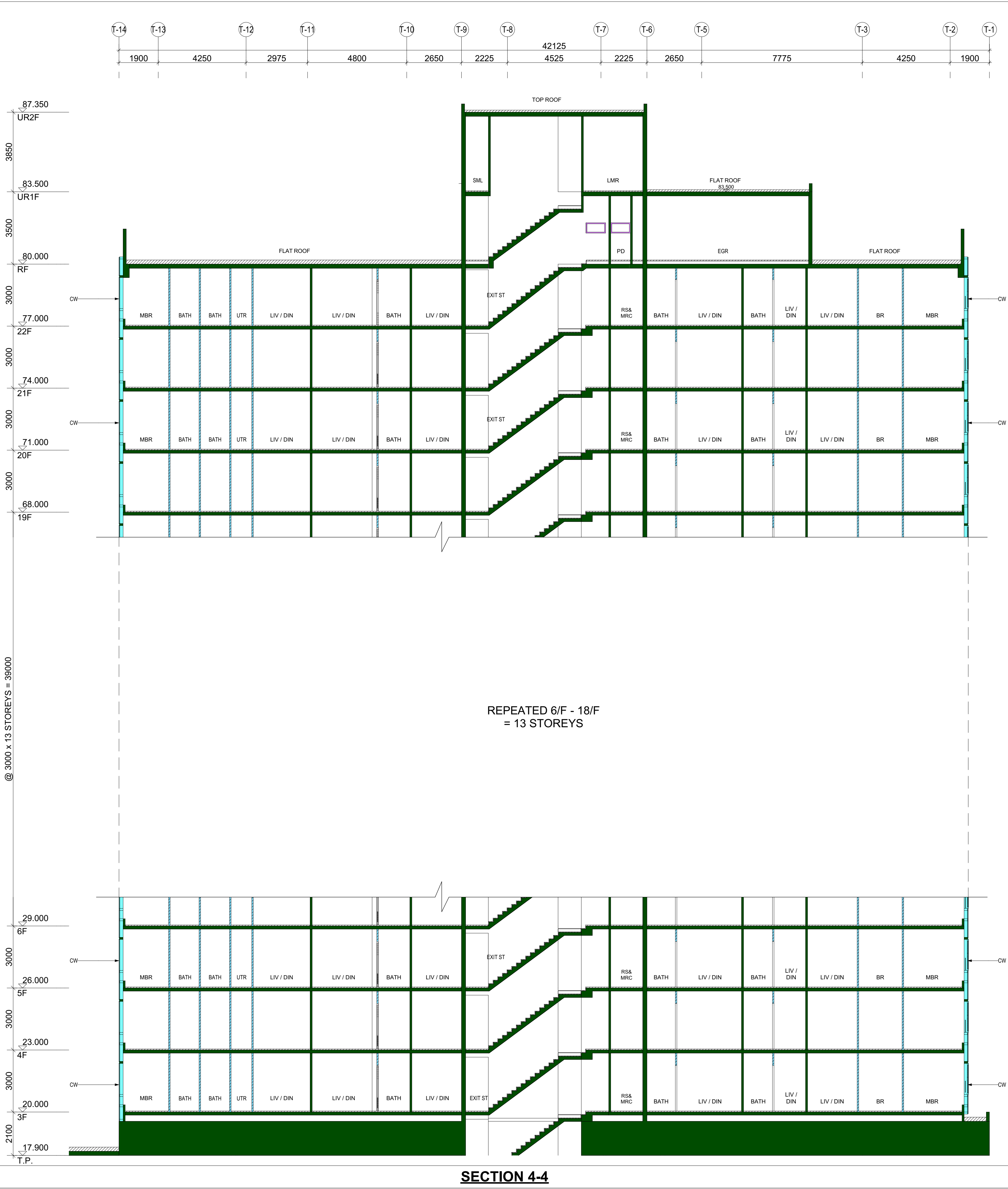
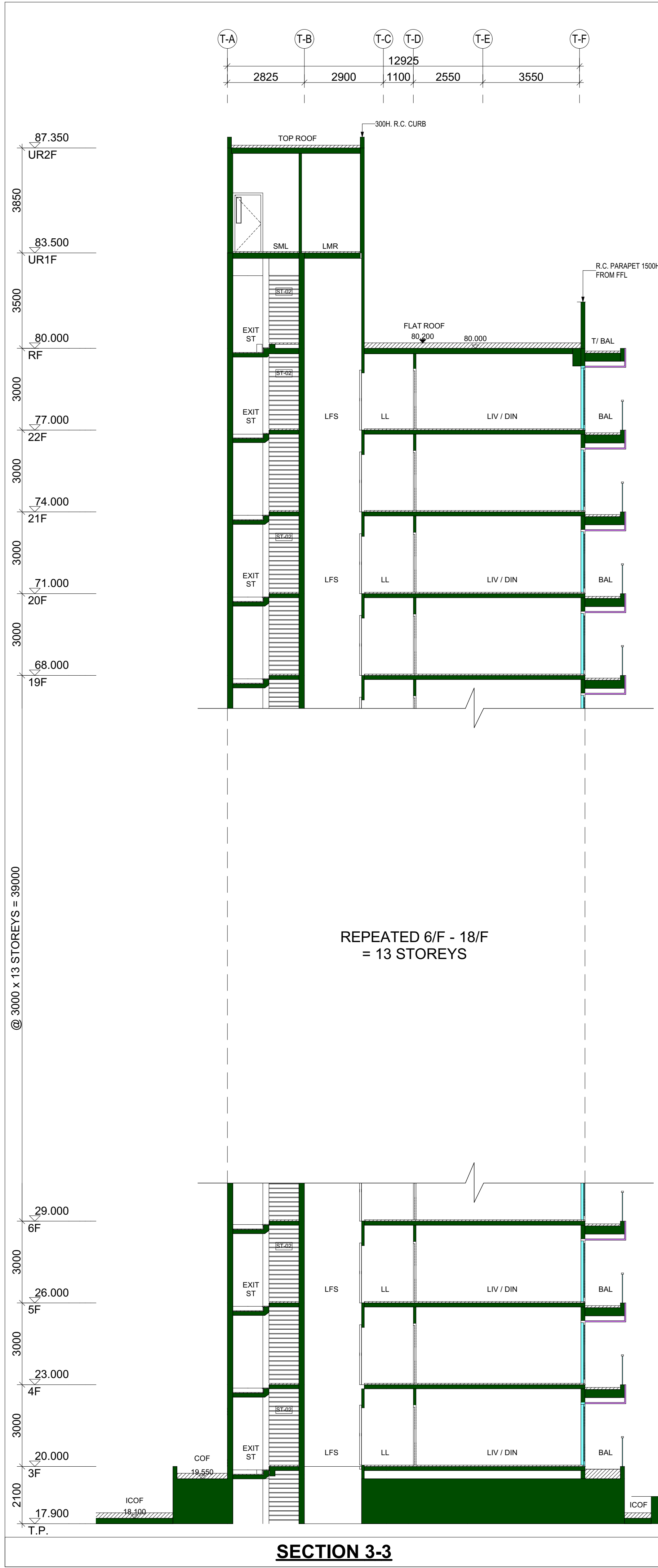
ELEVATION D

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose
9/11/2019 3:52 PM			
PROJECT			
BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO			
DRAWING TITLE			
TOWER ELEVATION D			
SCALE 1:100 (A1)			
DRAWING NO. A024		REV. NO. -	
SOURCE			
90mm (W) x 40mm (H) space for COMPANY LOGO			
90mm (W) x 60mm (H) space for AP/RSE/RGE's signature/ and stamp chop			
90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)			



SECTION 1-1

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose
9/11/2019 3:52 PM			
PROJECT			
BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO			
DRAWING TITLE			
PODIUM SECTION 1-1			
SCALE 1:100 (A1)			
DRAWING NO.		REV. NO.	
A031		-	
SOURCE			
90mm (W) x 40mm (H) space for COMPANY LOGO			
90mm (W) x 60mm (H) space for AP/RSE/RGE's signature/ and stamp chop			
90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)			



BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose

FIRE RESISTANCE REQUIREMENT FOR ELEMENTS OF CONSTRUCTION													
LOCATION	TYPE OF ACCOMMODATION	USE CLASSIFICATION	COMPARTMENT OF BUILDING		FIRE RESISTANCE RATING (minutes) FOR ELEMENTS OF CONSTRUCTION	MINIMUM DIMENSION OF ELEMENTS OF CONSTRUCTION							
			FLOOR AREA (m²)	VOLUME (m³)		R.C. SLAB		R.C. BEAM		R.C. COLUMN		R.C. WALL	
						THICKNESS	CONCRETE COVER TO REINFORCEMENT	THICKNESS	CONCRETE COVER TO REINFORCEMENT	THICKNESS	CONCRETE COVER TO REINFORCEMENT	THICKNESS	CONCRETE COVER TO REINFORCEMENT
B2F & B1F	CARPARK	7	NOT EXCEEDING 10500	NOT EXCEEDING 7000 FOR F.S.D.	240 / 240 / 240	170	55* (simply supported 45* (continuous))	280	80* (simply supported) 60* (continuous))	450	35	180	25
B1F	RETAIL	4b	NOT EXCEEDING 2500	NOT EXCEEDING 7000 FOR F.S.D.	240 / 240 / 240	170	55* (simply supported 45* (continuous))	280	80* (simply supported) 60* (continuous))	450	35	180	25
G/F - 1/F	RETAIL & ARCADE	4b	NOT EXCEEDING 2500	NOT EXCEEDING 7000 FOR F.S.D.	60	100	20 (simply supported 20 (continuous))	200	30 (simply supported) 30 (continuous))	200	25	75	15
2/F	RRF	5d	NOT EXCEEDING 2500	NOT EXCEEDING 7000 FOR F.S.D.	60	100	20 (simply supported 20 (continuous))	200	30 (simply supported) 30 (continuous))	200	25	75	15
TOWER (3/F - 22/F)	EACH FLOOR DOMESTIC FLATS	1	NOT LIMITED	NOT LIMITED	60	100	20 (simply supported 20 (continuous))	200	30 (simply supported) 30 (continuous))	200	25	75	15
BASEMENT, PODIUM & TOWER	ALL E&M ROOMS	8	-	-	120	125	35 (simply supported 25 (continuous))	200	50* (simply supported) 40 (continuous))	300	35	100	25
REMARKS : 1. * Reinforcement consisting of expanded metal lath or a wire fabric not lighter than 0.5kg/m² with 2mm diameter wire at not more than 100mm centers or a continuous arrangement of links not more than 200mm centers shall be incorporated in the concrete cover at a distances not exceeding 20mm from the face. 2. * All floors transformer rooms, switch rooms, pump rooms, the rooms, lift machine rooms, emergency generator rooms and all electrical and special hazards rooms, tower roof lift machine room, pump rooms, wall & floor adjoining to the required staircases wall thickness 180mm cover to steel 25mm, floor thickness 170mm cover to steel 55mm*. 3. The special hazard room's or floors which adjoining to the exit staircase to be of -/240/240 minutes F.R.R. 4. Slab between B/F carpark and G/F should have an F.R.R. of less than - / 240 / 240.													

PROVISIONS OF EXIT DOORS & EXIT ROUTES FROM ROOM, FIRE COMPARTMENT OR STOREY															
LOCATION	USE CLASSIFICATION	TYPE OF ACCOMMODATION	TOTAL USABLE FLOOR AREA (m²)	FACTOR REPRESENTING s.m. OF UFA PER PERSON	TOTAL CAPACITY PER FLOOR (PERSON)	MIN. NO OF EXIT DOOR / ROUTE (FROM STOREY)		MIN. TOTAL WIDTH (mm)				MIN. WIDTH OF EACH (mm)			
								EXIT DOOR		EXIT ROUTE		EXIT DOOR		EXIT ROUTH	
						REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.		
B2F	7	CARPARK	1554.014	30	52	2	4	1750	3600	2100	4200	850	900	1050	1050
B1F	7	CARPARK	861.170	30	29	2	2	1750	3600	2100	4200	850	900	1050	1050
	4b	RETAIL-B1	565.752	3	189	2	2	1750	3600	2100	4200	850	900	1050	1050
G/F	4b	ARCADE-G1	141.475	3	48	DIRECT EXIT TO ULTIMATE PLACE OF SAFETY									
		RETAIL-G1	121.852		41										
		RETAIL-G2	206.995		69										
		RETAIL-G3	373.048		125										
		RETAIL-G4	171.957		58										
		RETAIL-G5	39.995		14										
	TOTAL OCCUPANCY FOR G/F SHOPS & ARCADE				TOTAL = 355 P.										
1/F	4b	ARCADE-1F	129.333	3	44	2	4	3000	4200	3000	4200	1050	1050	1050	1050
		RETAIL-1F-1	122.278		41										
		RETAIL-1F-2	286.417		96										
		RETAIL-1F-3	334.367		112										
		RETAIL-1F-4	407.605		136										
		RETAIL-1F-5	99.338		34										
		RETAIL-1F-6	20.069		7										
	TOTAL OCCUPANCY FOR 1/F SHOPS & ARCADE				TOTAL = 470 P.										
RECREATIONAL FACILITIES															
2/F	-	LOUNGE AREA 2	20.072	3	7	2	4	1750	4200	2100	4200	850	900	1050	1050
	-	LOUNGE AREA 1	17.779	3	6										
	4a	MFXR	106.398	10	11										
	5d	GYM	59.889	3	20										
		OUTDOOR SWMP	64.563	3	22										
	6c	STO 1	6.987	30	1										
	-	OCO	19.972	9	3										
TOTAL OCCUPANCY FOR 2/F SHOPS & ARCADE				TOTAL = 70 P.											
TOWER 3/F - 22/F (TOTAL = 20 S.)	1b	FLAT 1 ~ 12 (TOTAL = 12 FLATS)	261.690	4.5	TOTAL = 59 P.	2	2	1750	1800	2100	2100	850	900	1050	1050
TOTAL = (59 x 20) = 1180 P.															
REMARKS : 1. ALL PLANT ROOM TAKE LARGEST AREA OF EACH FLOOR, ROOM AREA AS INDICATED ON PLAN 2. FOR CLASSIFICATION 8, IF THE NET FLOOR AREA OF A ROOM DOES NOT EXCEED 100m², THE OCCUPANT CAPACITY IS CONSIDERED TO BE ZERO.															

SCHEDULE OF SANITARY FITMENT																								MARK O INCLUSIVE ACCESSIBLE UNISEX TOILET																			
LOCATION	TYPE OF ACCOMMODATION	TOTAL USABLE FLOOR AREA (m²)	FACTOR REPRESENTING s.m. OF UFA PER PERSON	CAPACITY (PERSONS)	RATIO OF MALE TO FEMALE			W.C. PAN				BASIN				URINAL		BATH / SHOWER																									
					TOTAL	RATIO	MALE	FEMALE	MALE		FEMALE		MALE		FEMALE		MALE		MALE		FEMALE																						
									REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.																							
B1F	RETAIL-B1	REFER TO MEANS OF ESCAPE		189	1.1.5	76	113	1	3	2	⑥	1	3	1	⑤	1	3	-	-	-	-																						
G/F	ARCADE-G1			48																																							
	RETAIL-G1			41																																							
	RETAIL-G2			69																																							
	RETAIL-G3			125																																							
	RETAIL-G4			58																																							
	RETAIL-G5			14																																							
1/F	ARCADE-1F			44																				TOTAL = 825 P.	1.1.5	330	495	3	3	8	⑧	3	4	4	⑤	2	3	-	-	-	-		
	RETAIL-1F-1			41																																							
	RETAIL-1F-2			96																																							
	RETAIL-1F-3			112																																							
	RETAIL-1F-4			136																																							
	RETAIL-1F-5			34																																							
	RETAIL-1F-6			7																																							
2/F	RECREATIONAL FACILITIES																																										
	LOUNGE AREA 2																								7																		
	LOUNGE AREA 1			6																																							
	MPXR			11																																							
	GYM			20																																							
	OUTDOOR SWMP			22																																							
	STO 1			1																																							
	OCO			3																																							
(FOR RESIDENTIAL TOWERS)								REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.	REQ.	PRO.																						
TOWER 3/F ~ 22/F (20 STOREYS)	DOMESTIC FLAT NO. 1 (TAKE LARGEST AREA FLAT)	36.793	4.5	9 P.	-	-	-	1	2	1	2	1	2	-	1	2																											

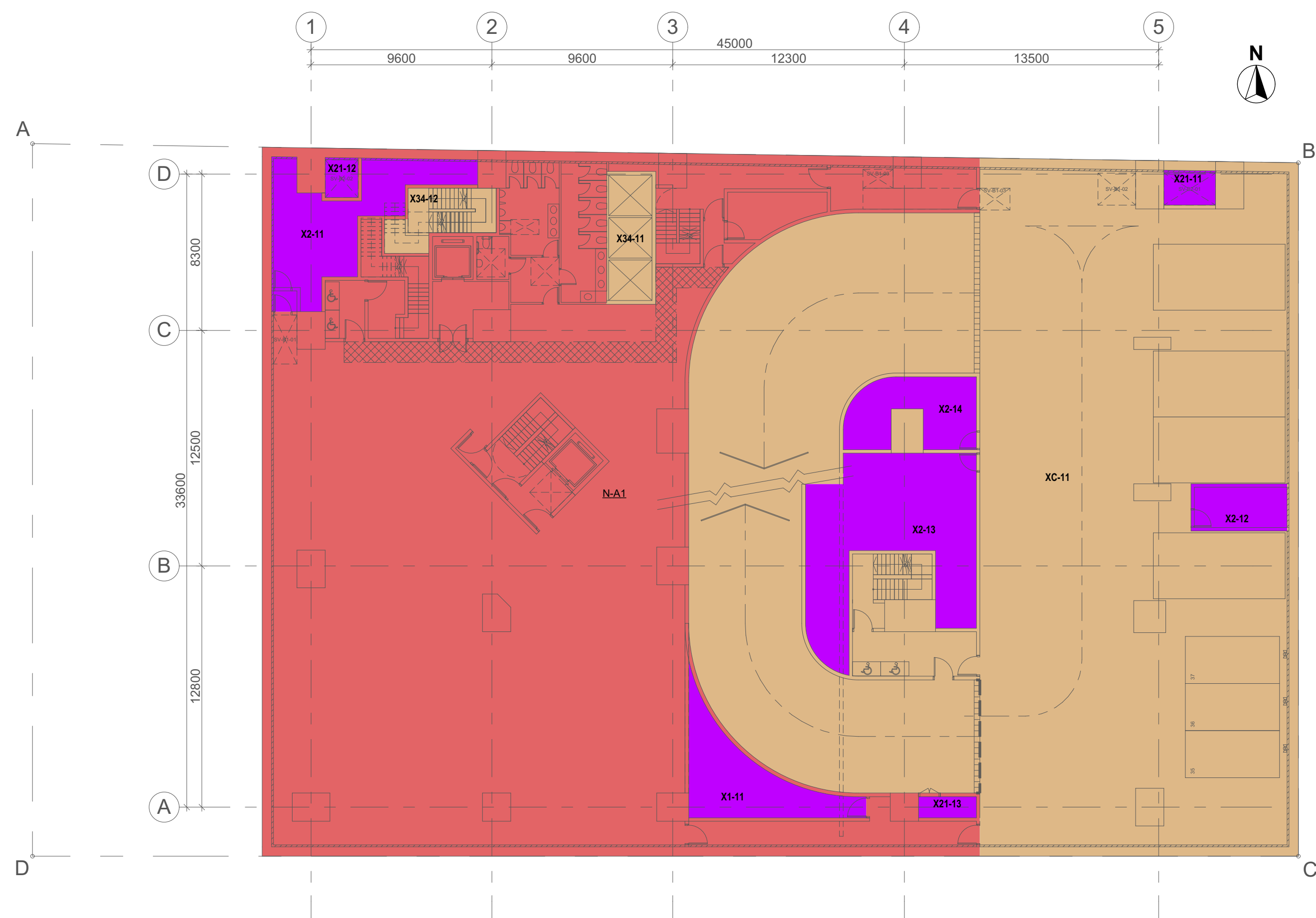


CONCESSION ITEM 1			CONCESSION ITEM 2.2		
AREA NO.	Name	(S.M.) ②	AREA NO.	Name	(S.M.) ②
XC-1	CARPARK	1900.881	X2-1	EVCR	25.19
			X2-2	SPR WTPR	35.25
			X2-3	FPWTR	62.57
			X2-4	CWPR	11.25
			X2-5	FAN RM	8.11
			X2-6	SPR PR	4.45
		1900.881			146.91

NON-DOMESTIC AREA	
AREA NO.	(S.M.) ①
N-A1	875.406
	875.406

CONCRESSION CALCULATION AT B1F									
CONCRESSION ITEM 1			CONCRESSION ITEM 2.1			CONCRESSION ITEM 2.2			
AREA NO.	Name	(S.M.) (Q.)	AREA NO.	Name	(S.M.) (Q.)	AREA NO.	Name	(S.M.) (Q.)	
XC-11	CARPARK	959.533	X1-11	TBE (NDOM)	27.144	X2-11	IRR WTPFR	39.544	
						X2-12	EVCVR	12.75	
						X2-13	FSPR	66.36	
						X2-14	SWTCH RM	22.06	
		959.533			27.144			140.70	

CONCESSION CALCULATION AT B1F					
CONCESSION ITEM 21			CONCESSION ITEM 34		
AREA NO.	Name	(S.M.) (2)	AREA NO.	Name	(S.M.) (3)
X21-11	SV-B2-01	5.046	X34-11	LFS	18.33
X21-12	SV-B2-02	3.700	X34-12	BS-01	14.49
X21-13	PD	3.444			
		12.190			32.82



BD REF	2/1234/18
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BIM REF 2-1234-18-A21-01

FSD REF FP 8/

Rev.	Date	Amendment	Purpose
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PROJECT
BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO

DRAWING TITLE
CALCULATIONS (1)

SCALE 1:200 (A1)

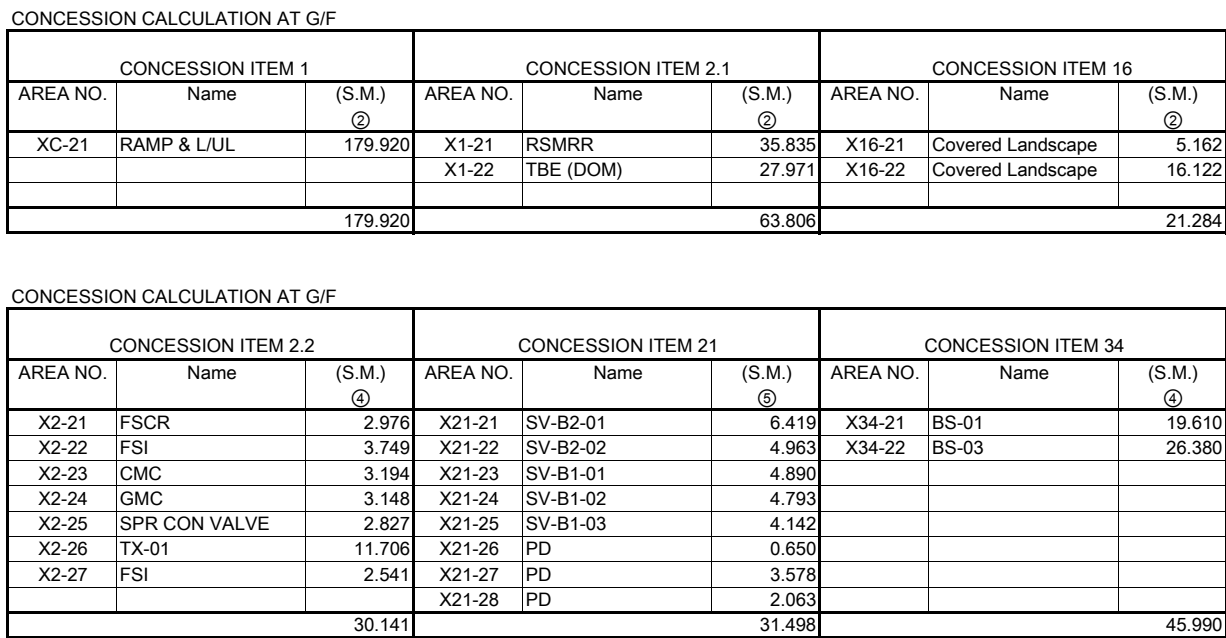
DRAWING NO.	REV. NO.
C051	-

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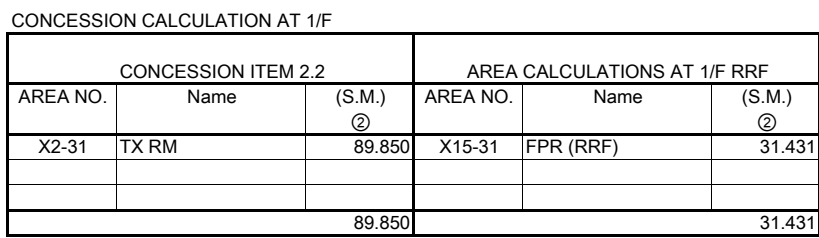
90mm (W) x 40mm (H) space
for COMPANY LOGO

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

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



DOMESTIC & NON- DOMESTIC G.F.A. DIAGRAM OF G/F



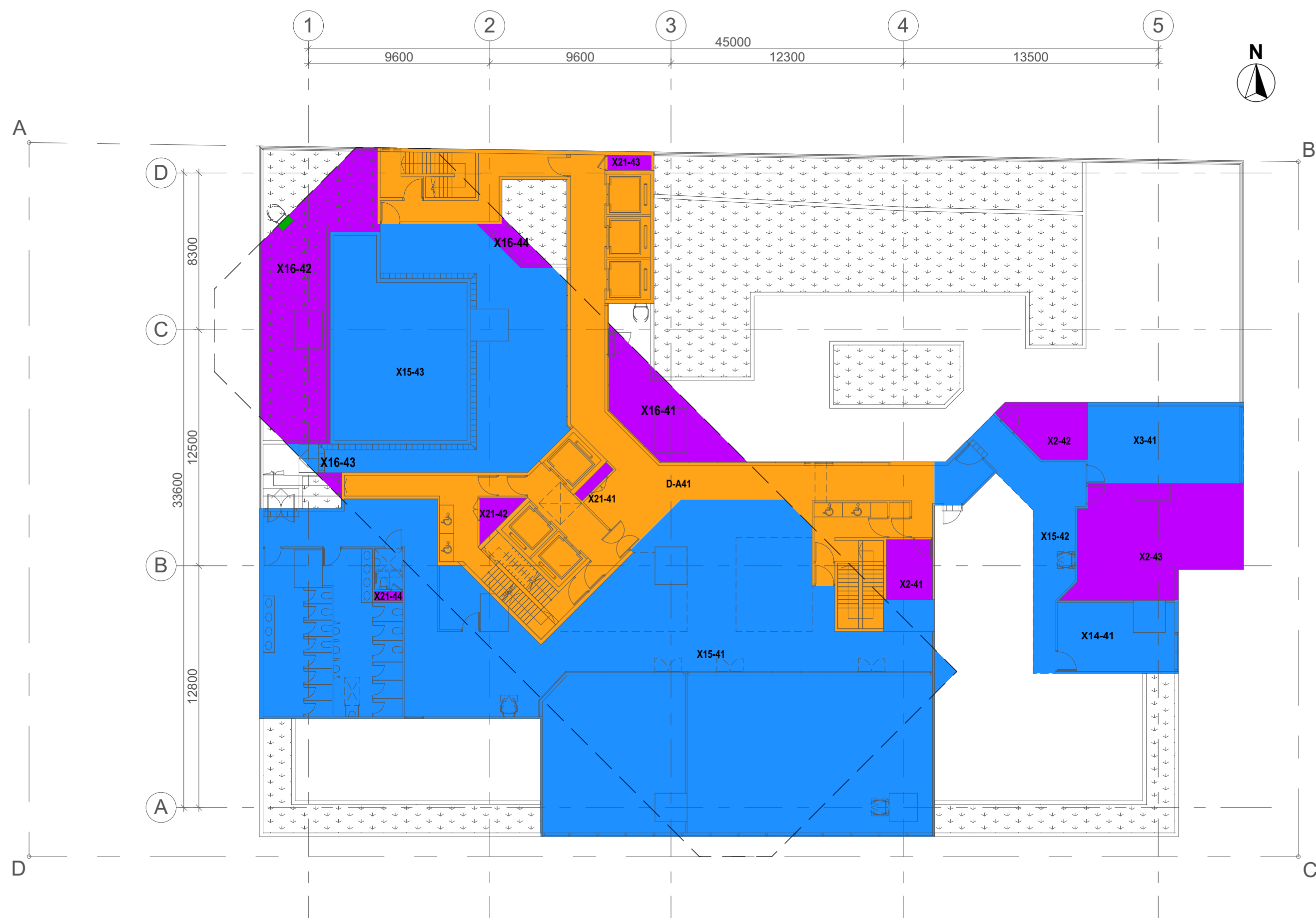
SOURCE

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

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

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

DOMESTIC & NON- DOMESTIC G.F.A. DIAGRAM OF 1/F



DOMESTIC G.F.A. CALCULATION AT 2/F	
DOMESTIC AREA	
AREA NO.	(S.M.) ①
D-A41	230.874
	230.874

CONCESSION CALCULATION AT 2/F								
CONCESSION ITEM 2.2			CONCESSION ITEM 2.3			CONCESSION ITEM 14		
AREA NO.	Name	(S.M) (%)	AREA NO.	Name	(S.M) (%)	AREA NO.	Name	(S.M) (%)
X2-41	SWITCH RM	7.779	X3-41	ACPR	35.454	X14-41	OCO	19.972
X2-42	ELR	11.846						
X2-43	MAIN SWITCH RM (D)	48.930						
68.555			35.454			19.972		

CONCESSION CALCULATION AT 2/F								
CONCESSION ITEM 16			CONCESSION ITEM 21			AREA CALCULATIONS AT 2/F R/RF		
AREA NO.	Name	(S/M)	AREA NO.	Name	(S/M)	AREA NO.	Name	(S/M)
X16-41	Covered Landscape	23.136	X21-41	Pd	1.293	X15-41	R/RF	448.512
X16-42	Covered Landscape	55.937	X21-42	Pd	3.120	X15-42	R/RF	43.898
X16-43	Covered Landscape	0.972	X21-43	Pd	1.831	X15-43	R/RF	155.407
X16-44	Covered Landscape	4.054	X21-44	Pd	0.750			
		84.099			6.994			647.777

AREA CALCULATION OF A/C PLANT ROOM AT 2/F (CONCESSION ITEM 2.3)
1% OF TOTAL NON-DOMESTIC GFA FOR A/C PLANT RM.
= 4163.493 s.m. x 1%
= 41.635 s.m. > 35.454 s.m.

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PROJECT
BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO

DRAWING TITLE
CALCULATIONS (3)

SCALE 1:200 (A1)

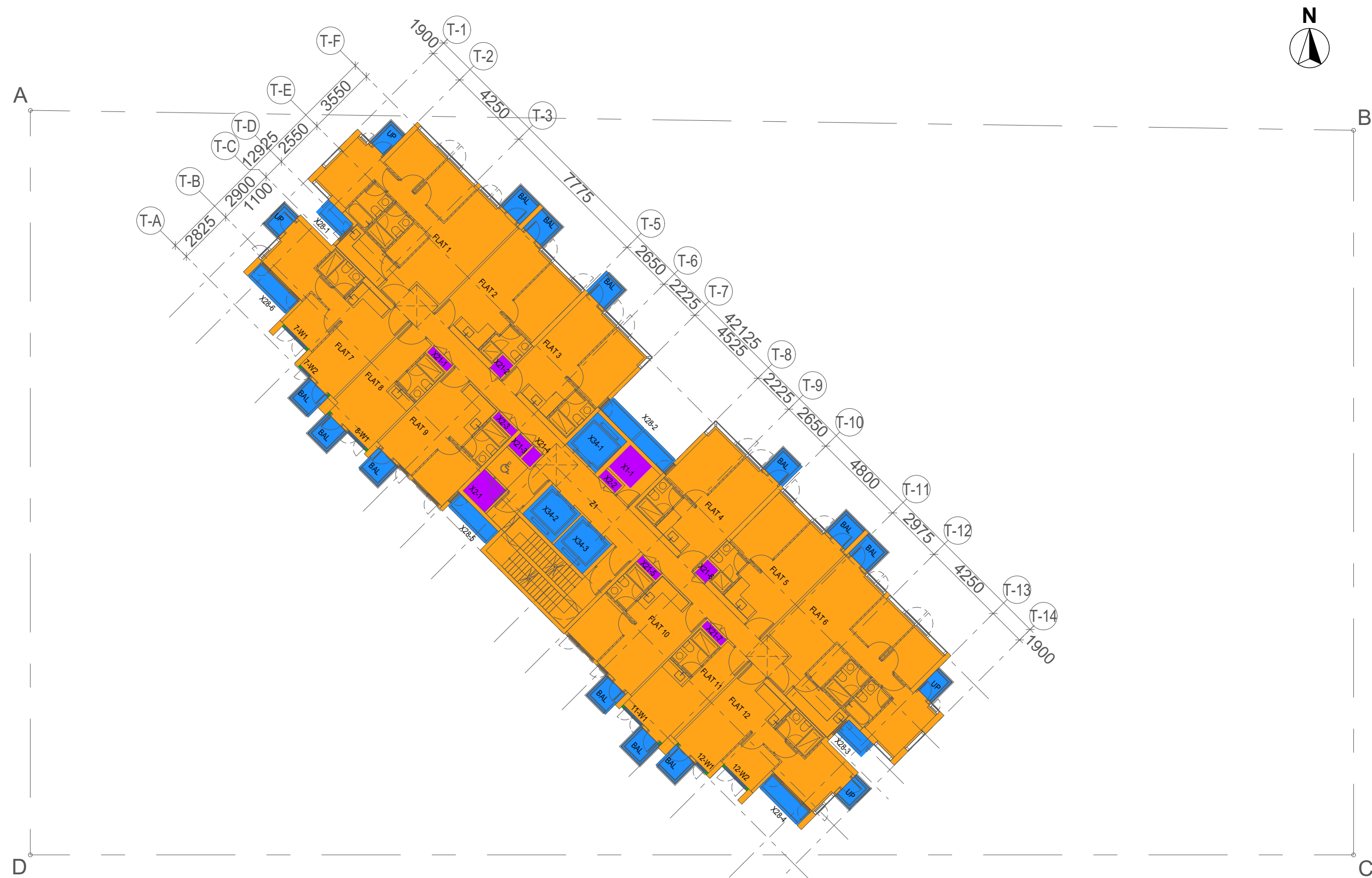
DRAWING NO.	REV. NO.
C053	-

SOURCE

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

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

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



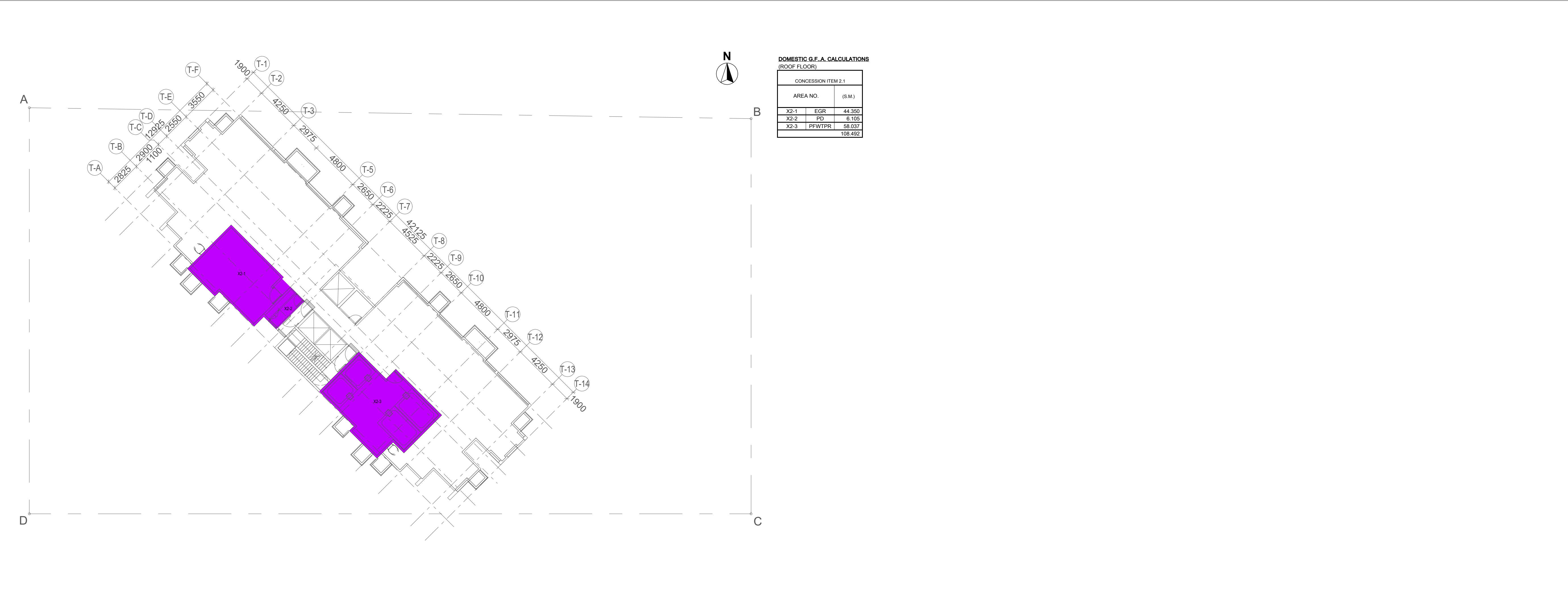
DOMESTIC G.F.A. CALCULATIONS									
FLAT NO.	BALCONY			U.P.			SUB-TOTAL FLAT AREA (S.M.)	COMMON AREA	
	NET FLAT AREA (S.M.)	CONCESSION ITEM 5		CONCESSION ITEM 12		AREA NO. (S)		(S.M.)	
		100% AREA (S.M.)	50% AREA (S.M.)	100% AREA (S.M.)	50% AREA (S.M.)				
									①
1	96.075	2,000	1,000	1,500	0.750	57,925	21	83.107	
2	29.988	2,000	1,000	-	-	29,988	-	-	
3	28.986	2,000	1,000	-	-	28,986	-	-	
4	28.986	2,000	1,000	-	-	28,986	-	-	
5	29.988	2,000	1,000	-	-	29,988	-	-	
6	96.075	2,000	1,000	1,500	0.750	57,925	-	-	
7	34.719	2,000	1,000	1,500	0.750	36,469	-	-	
8	18.654	2,000	1,000	-	-	19,654	-	-	
9	26.744	2,000	1,000	-	-	27,744	-	-	
10	25.694	2,000	1,000	-	-	26,694	-	-	
11	18.660	2,000	1,000	-	-	19,660	-	-	
12	34.719	2,000	1,000	1,500	0.750	36,469	-	-	
387.097		12,000		3,000		402.097	83.107		

TOTAL DOMESTIC G.F.A.
= 402.097 + 83.107
= 485.204

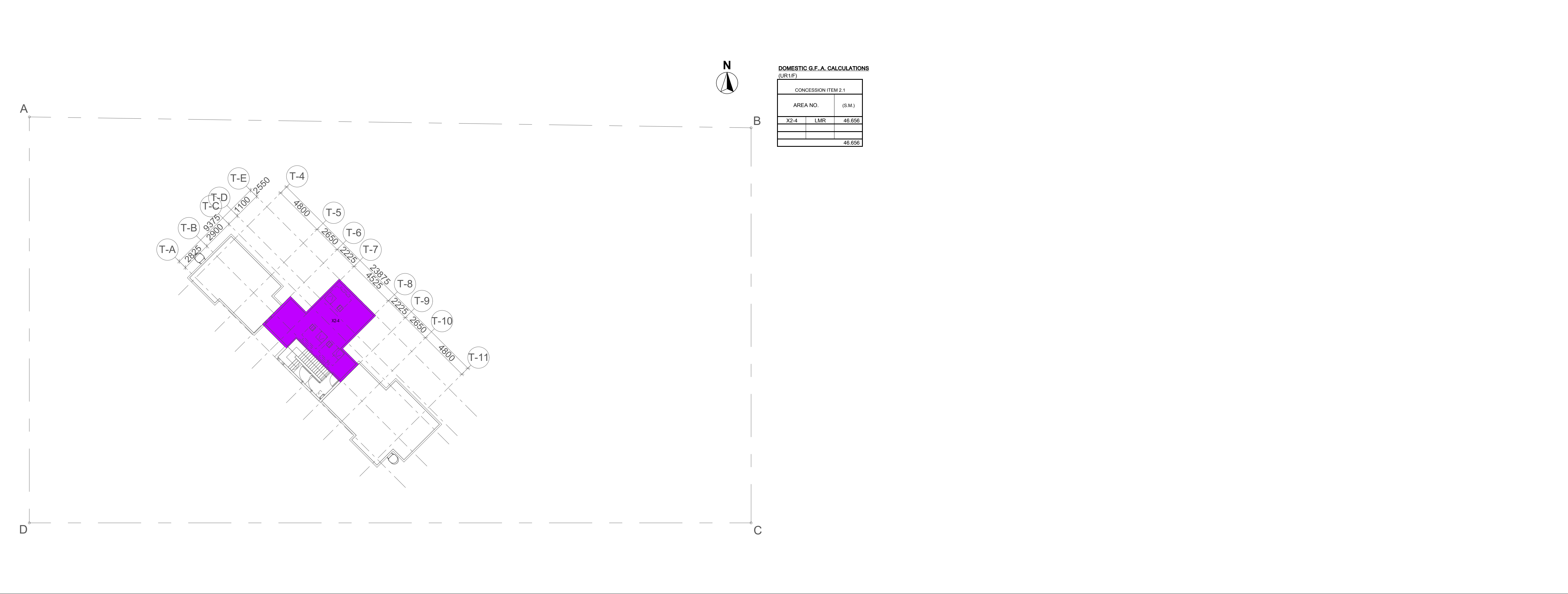
LIFT SHAFT AREA					
AREA NO.		(S.M.)		STOREYS	TOTAL
		①		②	③=① x ②
X34-1	LFS	4.725	GF-22F	23	108.68
X34-2	LFS	4.410	2F-22F	21	92.61
X34-3	LFS	4.410	2F-22F	21	92.61
		13.545			293.895

PRECAST FAÇADE CONCRESSION ITEM 11				
AREA NO.	(S.M.)	AREA NO.	(S.M.)	SUB-TOTAL (S.M.)
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
7-W1	0.266	7-W2	0.119	0.385
8-W1	0.209	-	-	0.209
-	-	-	-	-
-	-	-	-	-
11-W1	0.209	-	-	0.209
12-W1	0.119	12-W2	0.266	0.385
				1.188

[illegible]

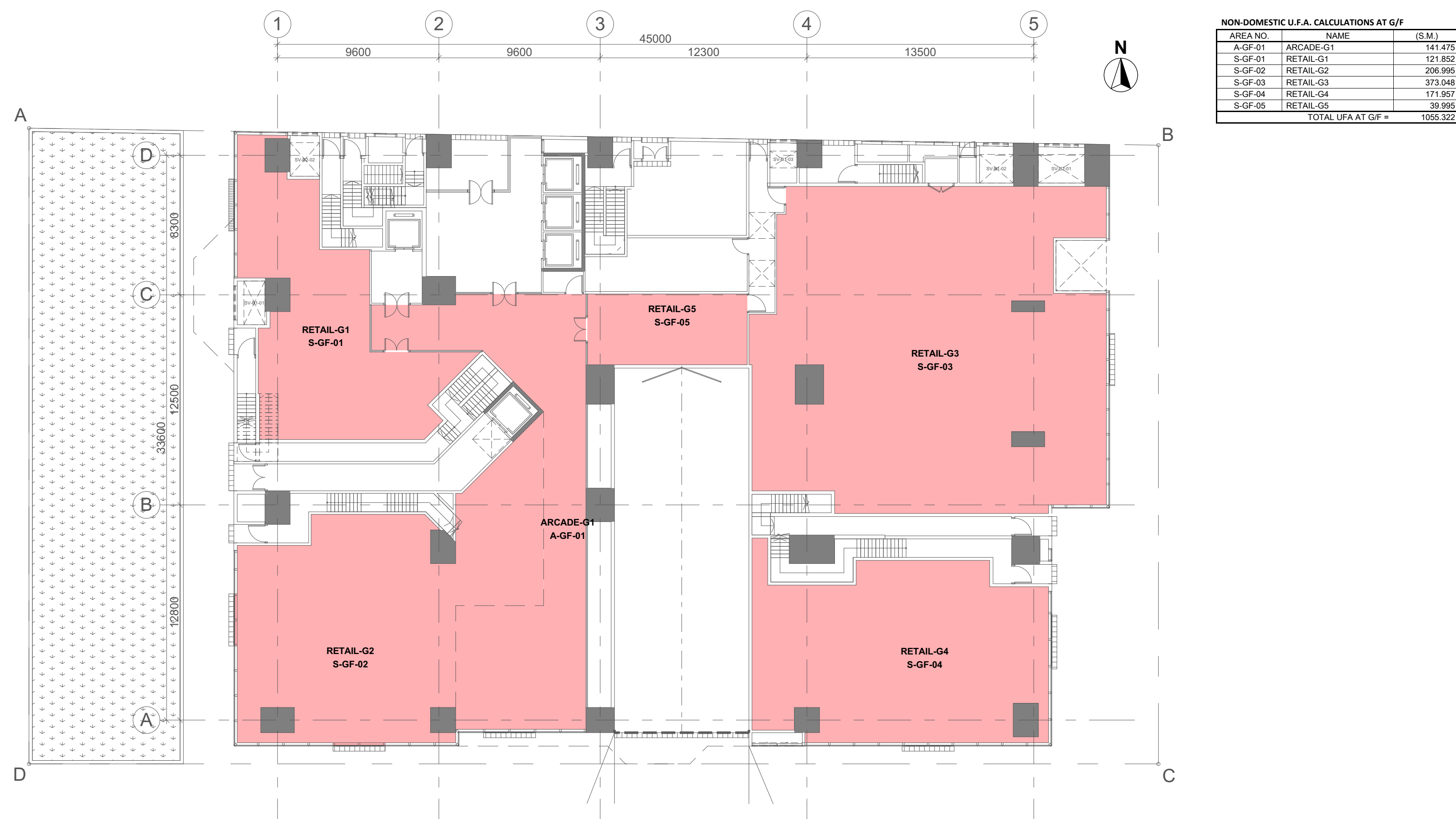
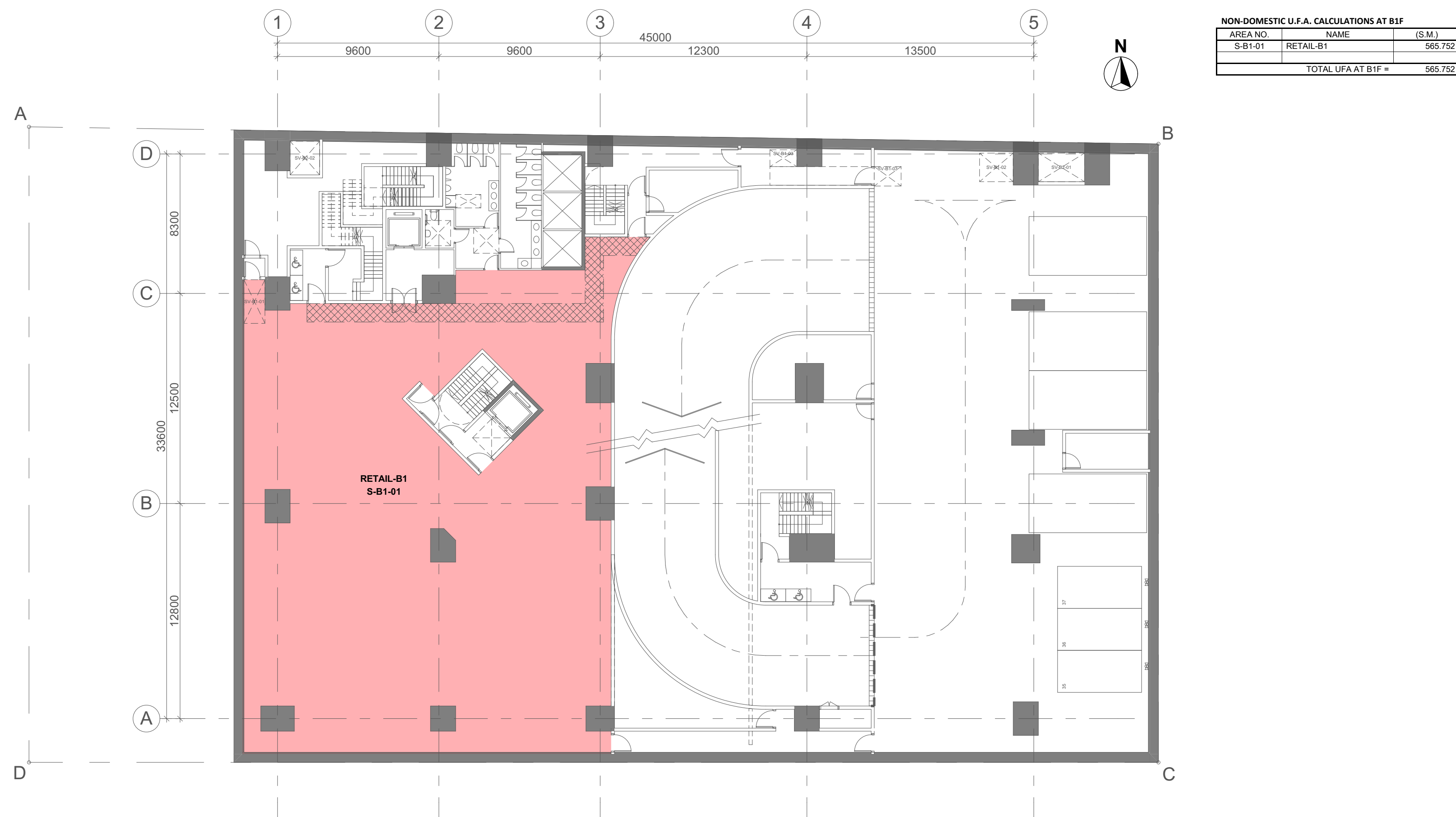


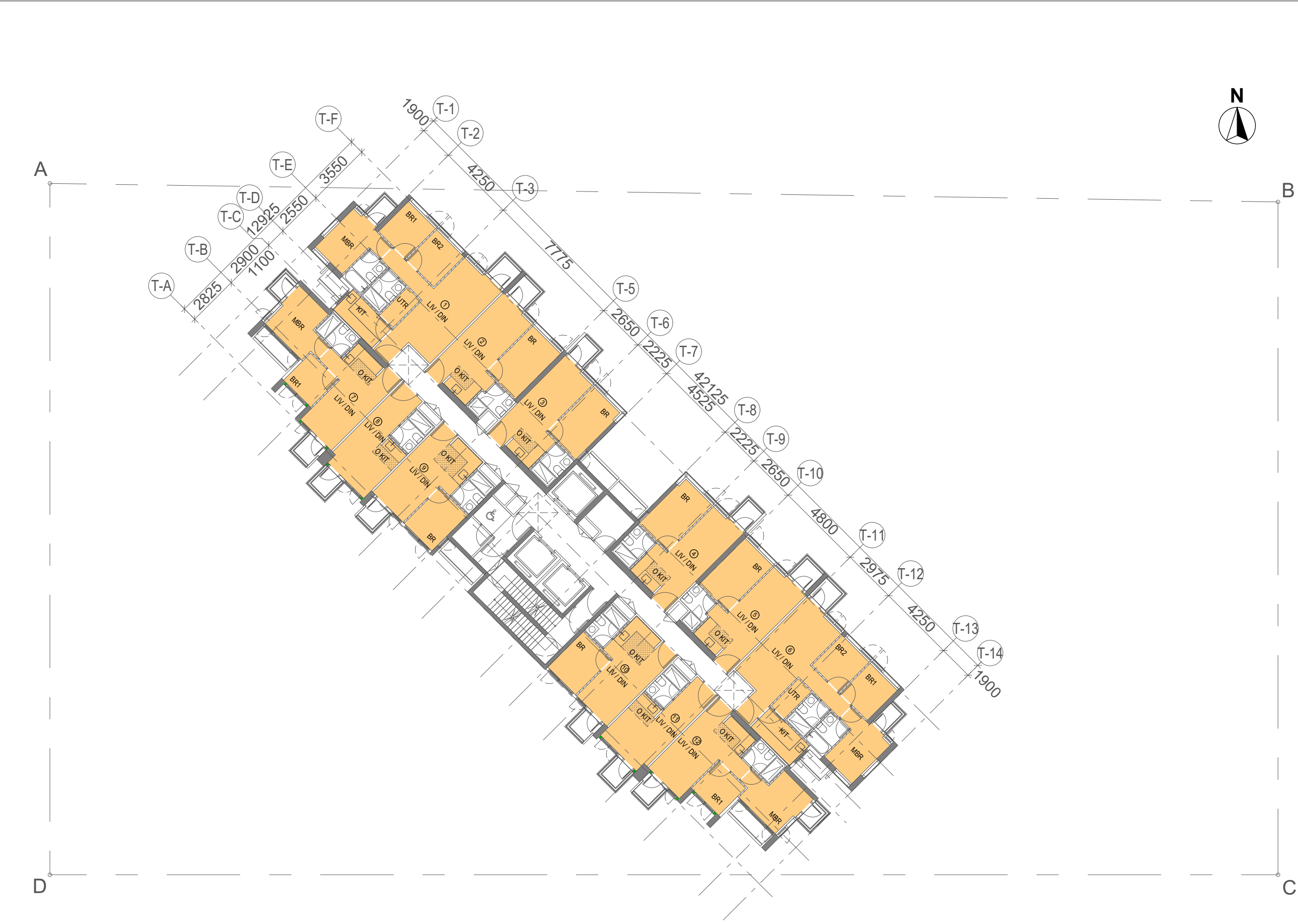
DOMESTIC G.F.A. DIAGRAM OF ROOF FLOOR



DOMESTIC G.F.A. DIAGRAM OF UR1/F

BD REF	2/1234/18		
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Rev.	Date	Amendment	Purpose
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PROJECT BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO			
DRAWING TITLE CALCULATIONS (4)			
SCALE 1:200 (A1)			
DRAWING NO. C054		REV. NO. -	
SOURCE			
90mm (W) x 40mm (H) space for COMPANY LOGO			
90mm (W) x 60mm (H) space for AP/RSE/RGE's signature/ and stamp chop			
90mm (W) x 150mm (H) space for BD's approval stamp / certification of copies of approved plans (PNAP ADM-10 APP A)			



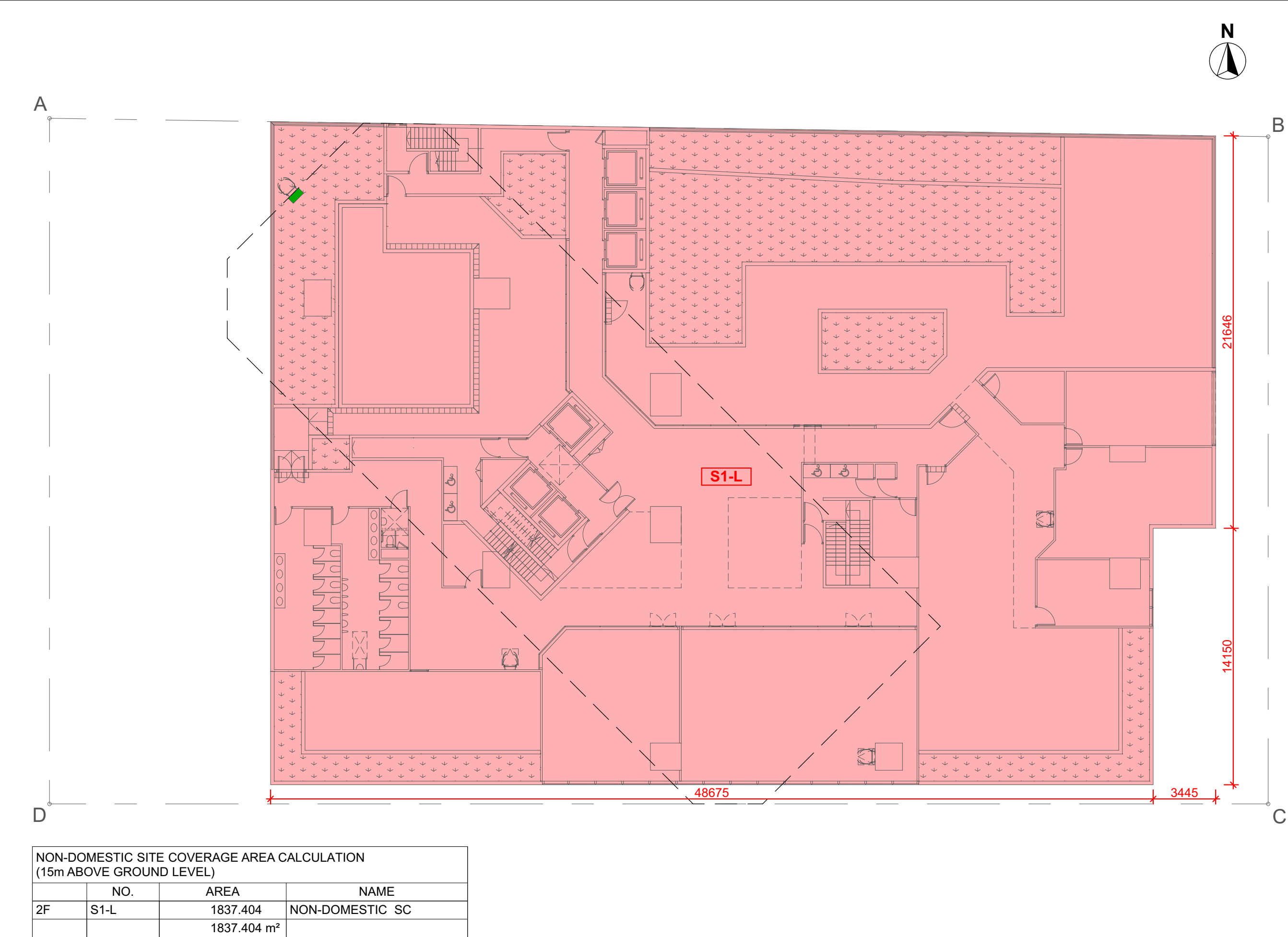


DOMESTIC U.F.A. CALCULATIONS						MEANS OF ESCAPE		U.F.S. CALCULATIONS			
(TOTAL)						(TOTAL)		(TOTAL)			
FLAT	LIV / DIN (S.M.)	M. BR / BR. (S.M.)	BR.1 (S.M.)	BR.2 (S.M.)	U.F.A. (S.M.)	OCCUPANCY FACTOR	CAPACITY (PERSONS)	OPEN KIT. (S.M.)	UTILITY (S.M.)	U.F.S. (S.M.)	
1	19.853	7.176	4.882	4.882	36.793	4.5	64	9	4.650	2.100	43.543
2	12.839	7.579	-	-	20.418			5	2.280	-	22.698
3	12.134	7.524	-	-	19.658			5	2.377	-	22.035
4	12.134	7.524	-	-	19.658			5	2.377	-	22.035
5	12.839	7.579	-	-	20.418			5	2.280	-	22.698
6	19.853	7.176	4.882	4.882	36.793			9	4.650	2.100	43.543
7	12.542	7.768	4.410	-	24.720			6	2.522	-	27.242
8	12.224	-	-	-	12.224			3	1.710	-	13.934
9	11.119	5.913	-	-	17.032			4	3.585	-	20.617
10	11.119	5.913	-	-	17.032			4	3.585	-	20.617
11	12.224	-	-	-	12.224			3	1.710	-	13.934
12	12.542	7.768	4.410	-	24.720			6	2.522	-	27.242
TOTAL U.F.A./U.F.S. PER EACH FLOOR					281.690						300.138

TOTAL U.F.A. (3/F~22/F) = 261.69 x 20 Storeys	=	5233.800
TOTAL U.F.S. = 300.138 x 20 Storeys	=	6002.760

TOWER WINDOW AREA & OPENABLE AREA CALCULATION					
FLAT	USE (EACH FLOOR)	U.F.A. (S.M.)	PRO. LIGHTING AREA (W) x (H) x 80%	REQ. LIGHTING U.F.A. (1/10)	REQ. OPENABLE AREA U.F.A. (1/16)
1 & 6	LIV / DIN	19.853	1.371 x 1.375 x 80% =	1.508	1.985
	*BATH 1	2.940	1.229 x 1.350 x 80% =	1.327	0.294
			Total =	2.835	2.279
	MBR	7.176	0.600 x 1.375 x 80% =	0.560	0.715
	*M BATH	2.940	1.000 x 1.350 x 80% =	1.080	0.294
			Total =	1.740	1.012
2 & 5	BR1	4.882	2.100 x 1.375 x 80% =	2.310	0.488
	BR2	4.882	2.100 x 1.375 x 80% =	2.310	0.488
	KIT	4.650	1.000 x 1.200 x 80% =	0.960	0.465
	UTR	2.100		0.210	
			Total =	0.960	0.675
				0.903	1.284
3 & 4	LIV / DIN	12.839	0.821 x 1.375 x 80% =	0.903	1.284
	O KIT	2.280	1.229 x 1.350 x 80% =	1.327	0.228
	*BATH	2.798		0.280	
			Total =	2.230	1.792
	BR	7.579	2.150 x 1.375 x 80% =	2.365	0.758
			Total =	2.365	0.758
7 & 12	LIV / DIN	12.134	0.971 x 1.375 x 80% =	1.068	1.213
	O KIT	2.377	1.079 x 1.350 x 80% =	1.165	0.238
	*BATH	2.888		0.289	
			Total =	2.233	1.460
	BR	7.524	2.150 x 1.375 x 80% =	2.365	0.752
			Total =	2.365	0.752
8 & 11	LIV / DIN	12.542	0.846 x 1.200 x 80% =	0.620	1.254
	O KIT	2.522	1.229 x 1.350 x 80% =	1.327	0.252
	*BATH	2.940		0.294	
			Total =	1.947	1.800
	MBR	7.768	1.400 x 1.375 x 80% =	1.540	0.777
	BR1	4.410	1.400 x 1.200 x 80% =	1.344	0.441
9 & 10	LIV / DIN	11.119	0.700 x 1.200 x 80% =	0.672	1.112
	O KIT	3.585	1.229 x 1.350 x 80% =	1.327	0.359
	*BATH	2.888		0.289	
			Total =	1.999	1.760
	BR	5.913	1.850 x 1.200 x 80% =	1.776	0.591
			Total =	1.776	0.591

UFA & UFS CALCULATION DIAGRAM OF 3/F ~ 22/F (20 STOREYS)



NON-DOMESTIC SITE COVERAGE CALCULATIONS DIAGRAM AT 2F (NOT EXCEEDING 15M)



OPEN SPACE & DOMESTIC SITE COVERAGE CALCULATIONS DIAGRAM AT 3F

BD REF	2/1234/18
BIM REF	2-1234-18-A21-01
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PROJECT
BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO

DRAWING TITLE
CALCULATIONS (7)

SCALE 1:200 (A1)

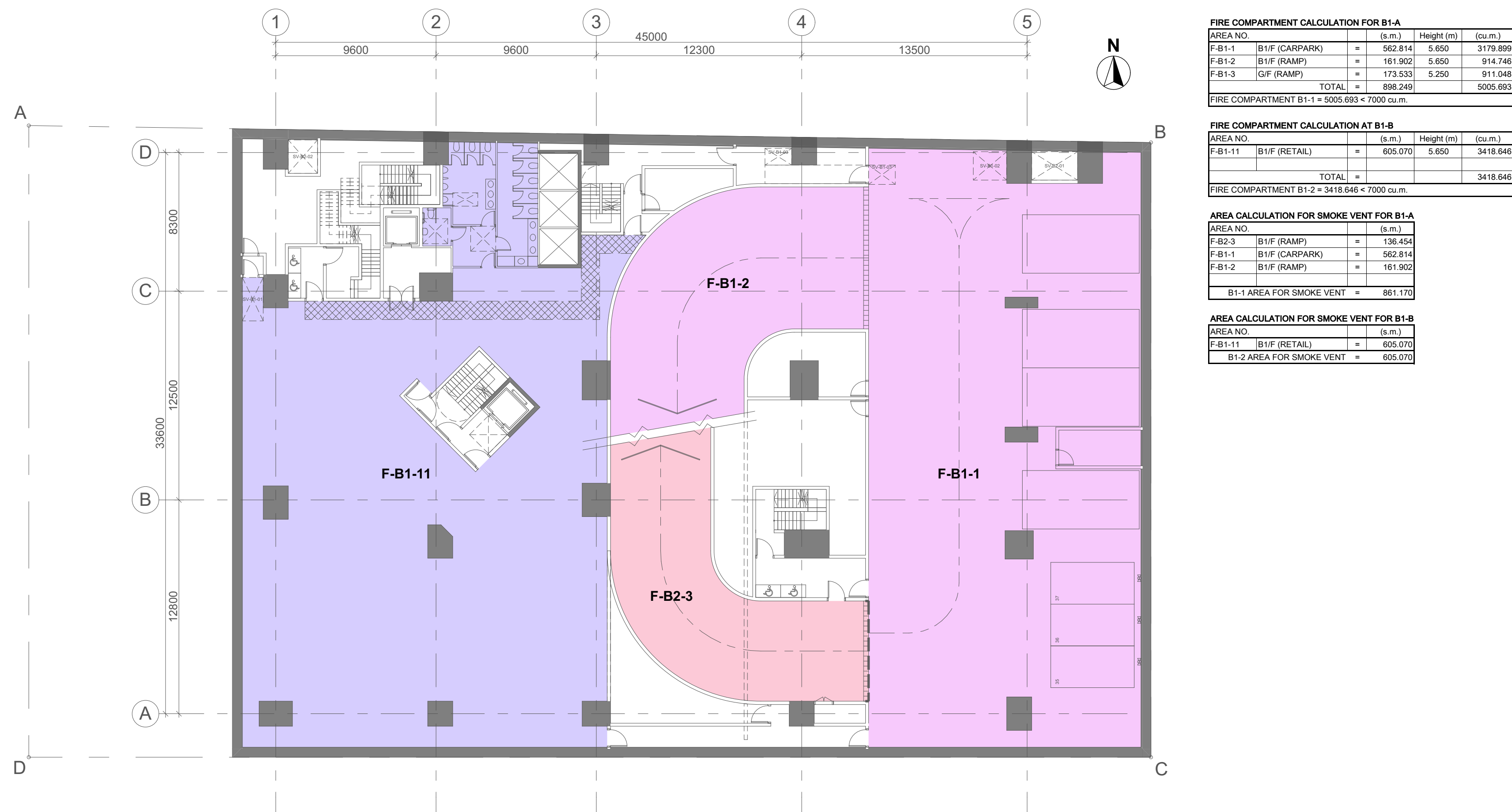
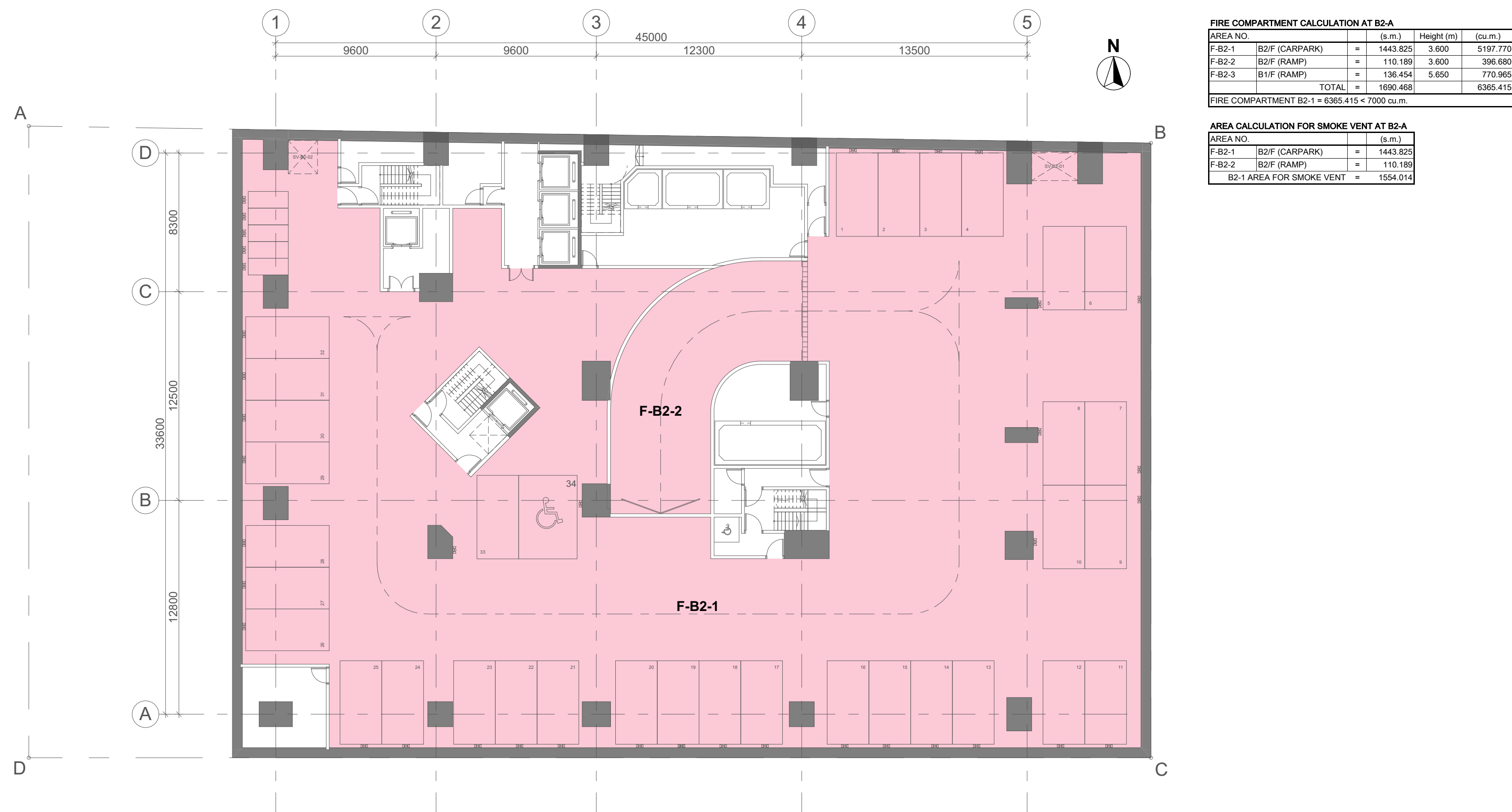
DRAWING NO.	REV. NO.
C057	-

SOURCE

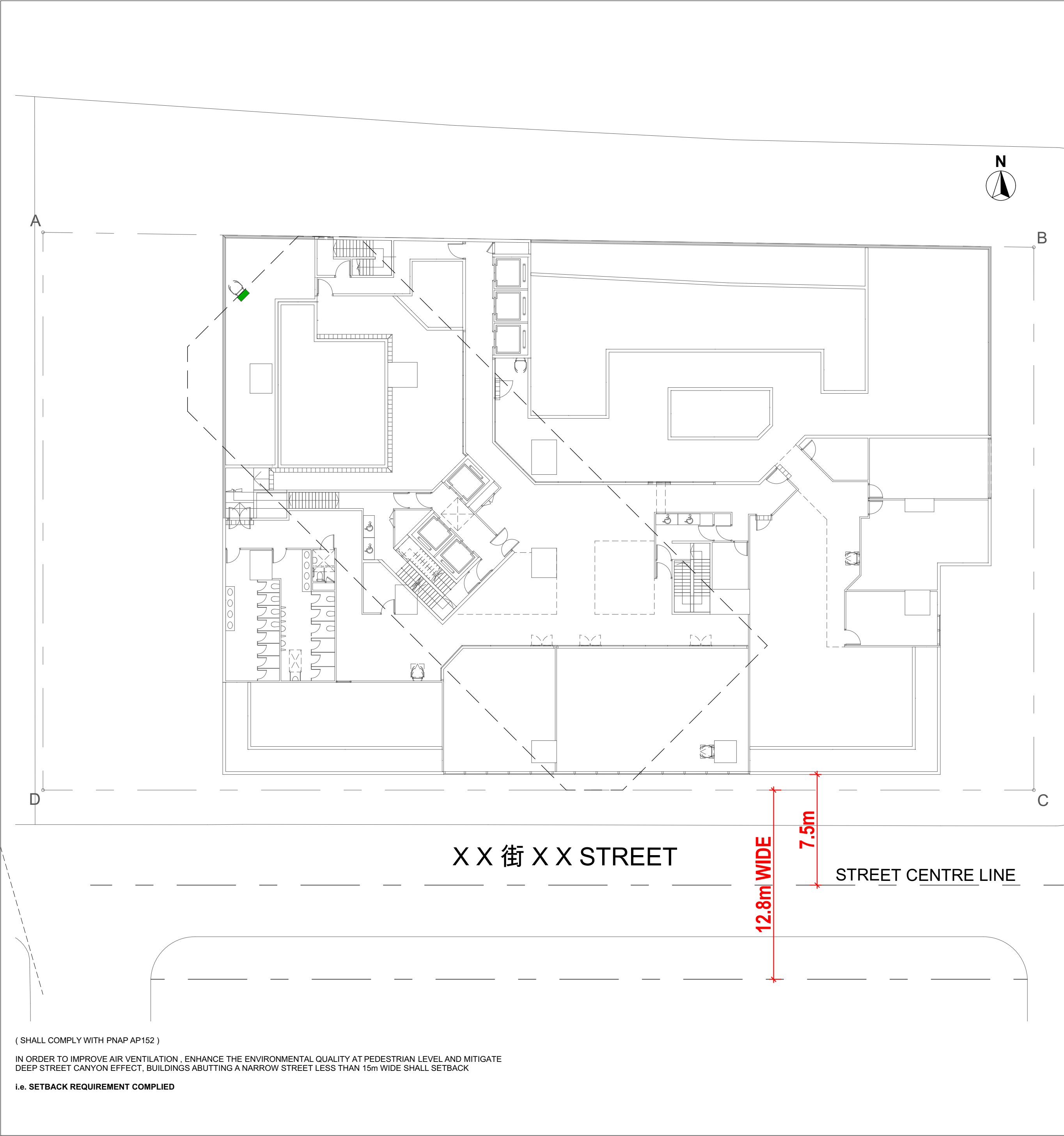
90mm (W) x 40mm (H) space
for COMPANY LOGO

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

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



FIRE COMPARTMENT DIAGRAM OF B1/F

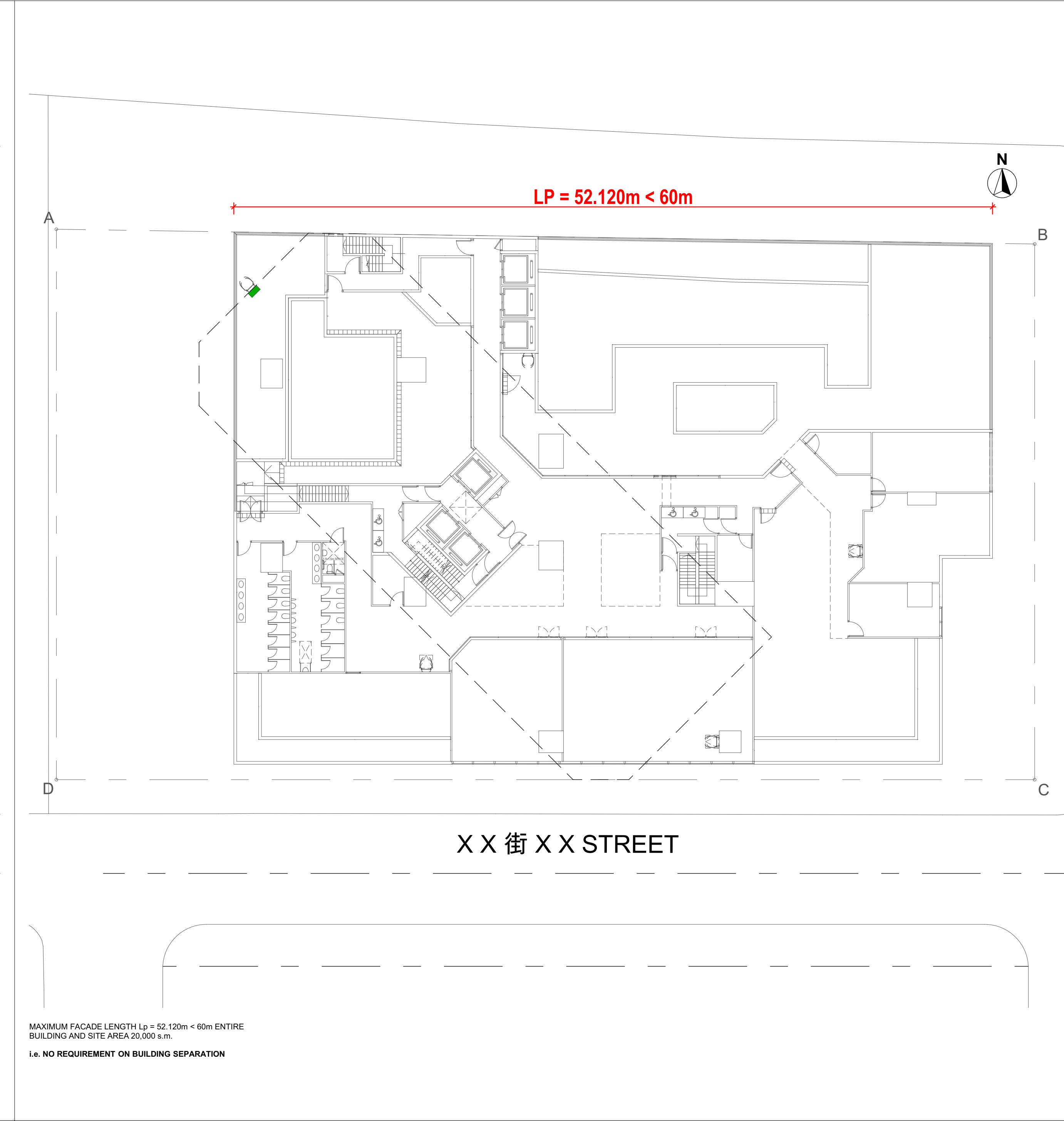


BUILDING SETBACK DIAGRAM

(SHALL COMPLY WITH PNAP AP152)

IN ORDER TO IMPROVE AIR VENTILATION , ENHANCE THE ENVIRONMENTAL QUALITY AT PEDESTRIAN LEVEL AND MITIGATE DEEP STREET CANYON EFFECT, BUILDINGS ABUTTING A NARROW STREET LESS THAN 15m WIDE SHALL SETBACK

i.e. SETBACK REQUIREMENT COMPLIED

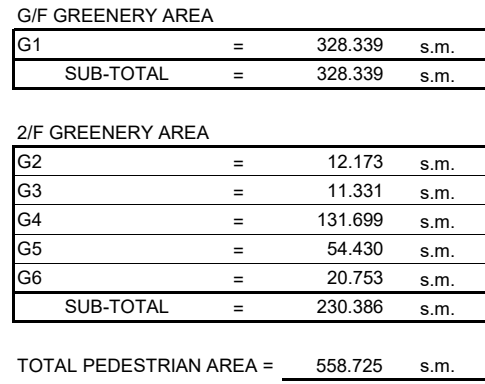


BUILDING SEPARATION DIAGRAM

MAXIMUM FACADE LENGTH $L_p = 52.120m < 60m$ ENTIRE BUILDING AND SITE AREA 20,000 s.m.

i.e. NO REQUIREMENT ON BUILDING SEPARATION

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TOTAL SITE COVERAGE OF GREENERY ON PRIMARY ZONE (UNDER APP-152)
SITE AREA = 2507.828 s.m. < 20000 s.m.
MIN. SITE COVERAGE OF GREENERY (PRIMARY ZONE = 10% & OVERALL 20%)

ACTUAL SITE COVERAGE OF GREENERY	=	$\frac{\text{GREENERY AREA ON PRIMARY ZONE}}{\text{SITE AREA}} \times 100 \%$
	=	$\frac{558.725}{2507.730} \times 100 \%$
	=	22.280% > 10%

TOTAL AREA OF GREENERY = GREENERY AREA ON PRIMARY ZONE + GREENERY AREA ON ROOF FLOOR
= 558.725 s.m.

$$\begin{aligned} \text{ACTUAL SITE COVERAGE OF GREENERY} &= \frac{\text{TOTAL AREA OF GREENERY}}{\text{SITE AREA}} \times 100 \% \\ &= \frac{558.725}{2507.730} \times 100 \% \\ &= 22.280\% > 20\% \end{aligned}$$

BD REF	2/1234/18		
BIM REF	2-1234-18-A21-01		
FSD REF	FP 8/		
Rev.	Date	Amendment	Purpose

PROJECT
BD SAMPLE -
PROPOSED 20-STOREY
RESIDENTIAL BUILDING OVER
3-STOREY PODIUM AT TKO

DRAWING TITLE
**GREENERY DIAGRAMS &
CALCULATIONS**

SCALE 1:200 (A1)

DRAWING NO.	REV. NO.
C072	-

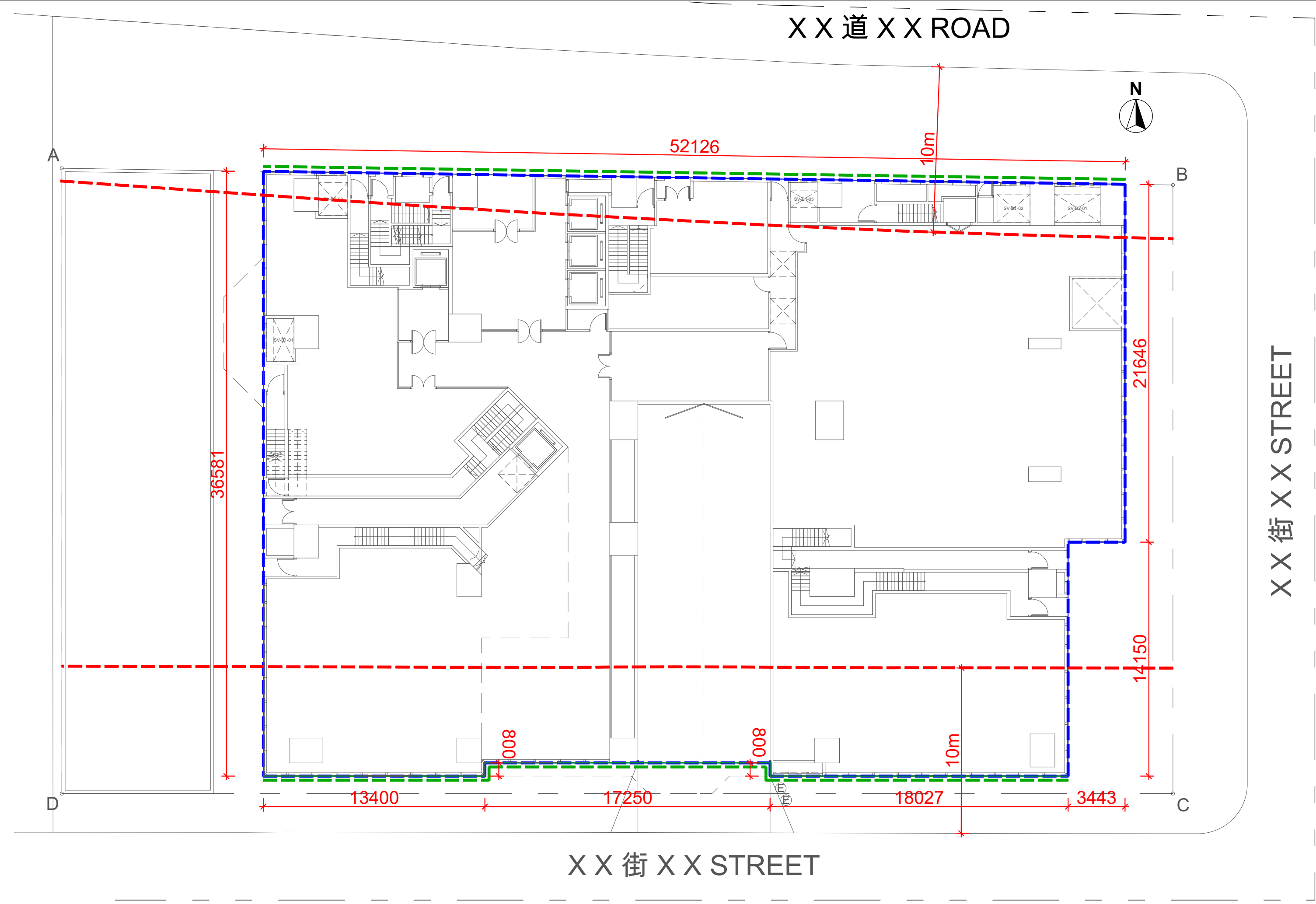
SOURCE

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

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

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

GREENERY DIAGRAM OF G/F & 2/F



EVA PLAN OF GF



EVA PLAN OF TYPICAL FLOOR

LEGEND :

- EMERGENCY VEHICULAR ACCESS (EVA)
- WITHSTAND LOADING 30000 KG
- HARD PAVE WIDTH - OPERATION ≥ 6M ; FOR PASSAGE ≥ 4.5M
- GRADIENT - OPERATION ≤ 1 : 10 ; FOR PASSAGE ≤ 1 : 6
- OVERALL HEADROOM MIN. 4.5M
- SITE BOUNDARY
- CENTRE LINE OF STREET
- LENGTH OF PERIMETER WALL FOR PODIUM
- LENGTH OF THE FACADE FOR PODIUM SERVED BY EVA

LENGTH CALCULATION OF FACADE TO BE SERVED BY E.V.A.

TOTAL LENGTH OF PERIMETER WALL FOR PODIUM PORTION (G/F-2/F)	=	178.22	m
TOTAL LENGTH OF THE FACADE FOR PODIUM PORTION (G/F-2/F)	=	102.40	m
SERVED BY THE XX ROAD & XX STREET			
PERCENTAGE OF PERIMETER WALL FOR PODIUM			
SERVED BY THE XX ROAD & XX STREET			
(102.40 / 178.22) x 100%	=	57.46	% > 25 %

LEGEND :

- EMERGENCY VEHICULAR ACCESS (EVA)
- WITHSTAND LOADING 30000 KG
- HARD PAVE WIDTH - OPERATION ≥ 6M ; FOR PASSAGE ≥ 4.5M
- GRADIENT - OPERATION ≤ 1 : 10 ; FOR PASSAGE ≤ 1 : 6
- OVERALL HEADROOM MIN. 4.5M
- SITE BOUNDARY
- CENTRE LINE OF STREET
- LENGTH OF PERIMETER WALL FOR TOWER
- LENGTH OF THE FACADE FOR TOWER SERVED BY EVA

LENGTH CALCULATION OF FACADE TO BE SERVED BY E.V.A.

TOWER (FROM 3/F TO 22/F)			
TOTAL LENGTH OF PERIMETER WALL FOR TOWER	=	137.70	m
TOTAL LENGTH OF THE FACADE FOR TOWER TO BE	=	35.062	m
SERVED BY THE XX ROAD & XX STREET			
PERCENTAGE OF PERIMETER WALL FOR TOWER			
SERVED BY THE XX ROAD & XX STREET			
(35.062 / 137.700) x 100%	=	25.463	% > 25 %

BD REF	2/1234/18
BIM REF	2-1234-18-A21-01
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PROJECT
BD SAMPLE - PROPOSED 20-STOREY RESIDENTIAL BUILDING OVER 3-STOREY PODIUM AT TKO
DRAWING TITLE
E.V.A. PLAN DIAGRAMS & CALCULATIONS

SCALE	1:200 (A1)
DRAWING NO.	REV. NO.
C073	-

SOURCE

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

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

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