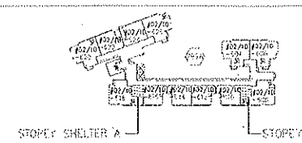
CASE STUDY 4

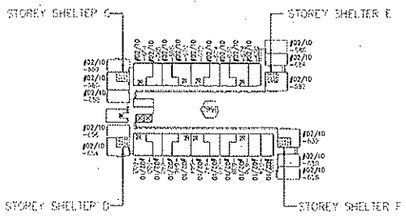
PROPOSED PUBLIC HOUSING DEVELOPMENT COMRISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDINGS (TOTAL: 378 UNITS) WITH COMMUNITY ACTIVITY SPACE AND & 1 BLOCK OF ESS

CD SHELTER ARCHITECTURAL PLANS



UNIT OF STOREY SHELTER										
	STOREY SHELTER NUMBER	UNIT NOS. OF 2-ROOM / 3-ROOM FLAT	GFA OF UNIT (m²)	PLANNING OCCUPANCY PER UNIT	TOTAL UNITS	TOTAL NOMINAL OCCUPANCY (PAX)		AREA OF SS (m²)		VOLUME OF SS (m³)	
								REQUIRED (PAX x 0.4m²)	PROVIDED	REQUIRED (PAX x 1.8m³)	PROVIDED
EACH FLOOR LEVEL	A	696, 602, 694	43	2	3	6	18	9	10.4	27.0	27.0
		618, 626, 826	63	3	3	9					
	B	640, 672, 814	43	2	3	6	18	9	10.4	27.0	27.0
		654, 708, 608	63	3	3	9					

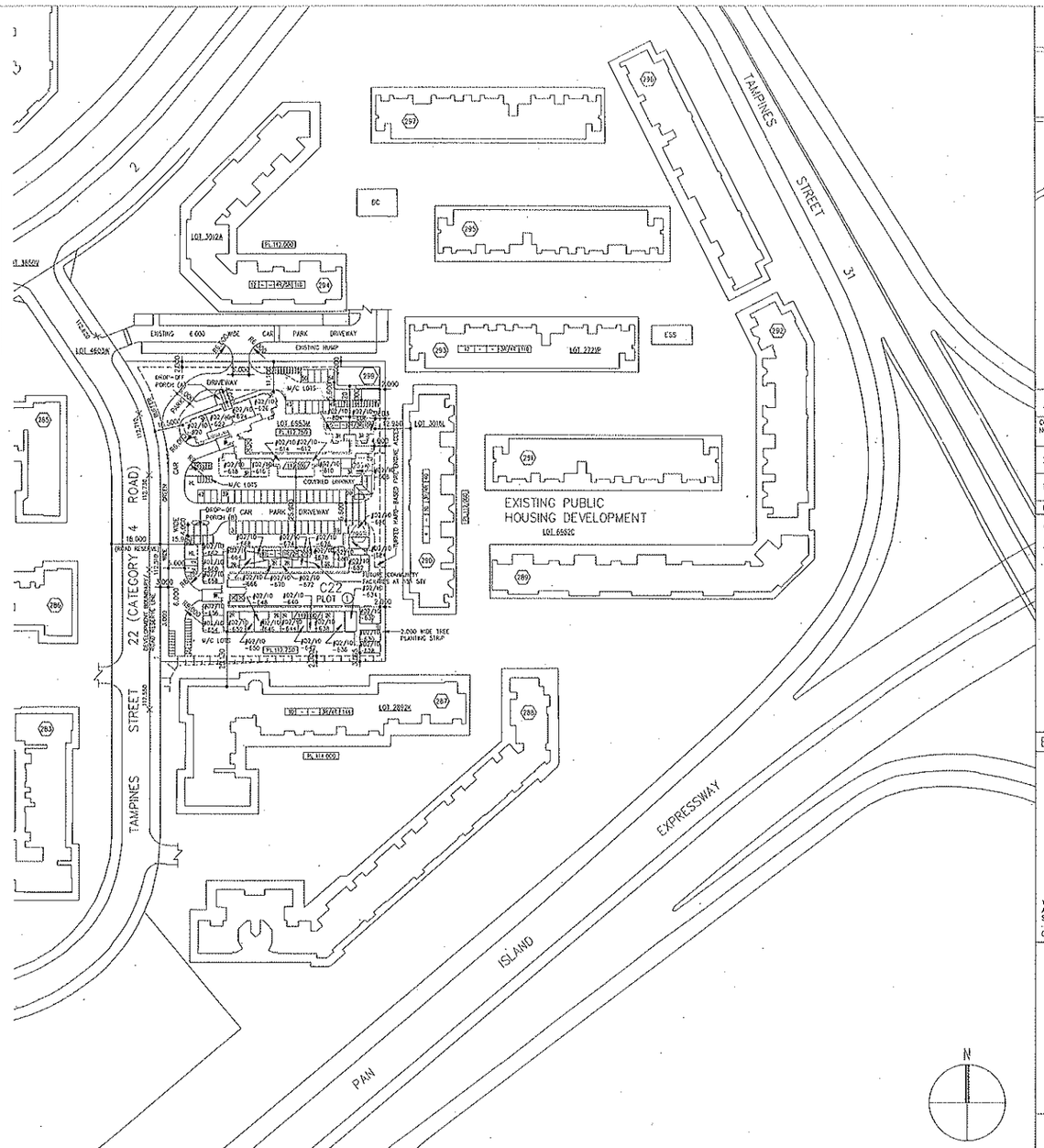
DATA OF FLATS UNIT		
DWELLING UNIT TYPE	GFA OF UNIT (m²)	NO. OF PERSON
2-ROOM	43	2
3-ROOM	63	3

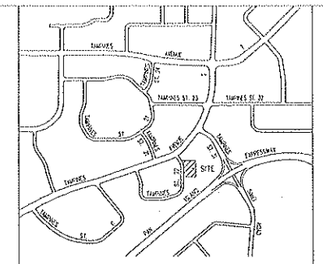


DATA OF STOREY SHELTER										
	STOREY SHELTER NUMBER	UNIT NO. OF 1-ROOM / 2-ROOM FLAT	GFA OF UNIT (m²)	OCCUPANCY PER UNIT	TOTAL UNITS	TOTAL NOMINAL OCCUPANCY (PAX)		AREA OF SS (m²)		VOLUME OF SS (m³)	
								REQUIRED (PAX x 0.4m²)	PROVIDED	REQUIRED (PAX x 1.8m³)	PROVIDED
EACH FLOOR LEVEL	C	668, 680, 682, 656, 688	30	2	5	10	16	4.0	11.13	28.8	28.8
		664, 670, 674	40	2	3	6					
	D	648, 650, 654, 656,	30	2	4	8	14	5.6	11.13	25.2	28.9
		644, 648, 652	40	2	3	6					
	E	624, 630, 640, 662, 664 & 686	30	2	6	12	14	5.6	11.13	25.2	28.9
		628	40	2	1	2					
	F	626, 632, 652, 674, 636 645 & 642	30	2	7	14	16	6.4	11.13	28.8	28.9
		638	40	2	1	2					

DATA OF FLATS UNIT		
DWELLING UNIT TYPE	GFA OF UNIT (m²)	NO. OF PERSON
2-ROOM	43	2
3-ROOM	63	3

0 10 20 30 40m
SCALE 1:1000





1 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CHAPTER 29)
Project Reference No : A1889-00002-2008-C002

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

ACCOMMODATION

CONST NO	EST BLK NO	NO OF STOREY	1 ROOM (30m²)		2 ROOM (40m²)		2 ROOM (43m²)		3 ROOM (63m²)		TOTAL NO OF D/U	REMARKS
			1ST	TYP	1ST	TYP	1ST	TYP	1ST	TYP		
22	299A	10	-	-	-	-	-	54	-	54	108	1ST STOREY FREE
	299B	10	-	198	-	72	-	-	-	-	270	1ST STOREY FREE
TOTAL			-	198	-	72	-	54	-	54	378	
			198		72		54		54			
FLAT DISTRIBUTION			52.4%		19.0%		14.3%		14.3%		100%	

OTHERS

ONE NO. OF 22 KV/LV E.S.S. (EST BLK NO. 299)

BCA CERTIFICATION

I, YUEN YI MAY, hereby submit the detailed civil defence shelter plans prepared by me and certify that :-

(a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and

(b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.

Total number of civil defence shelters plans submitted : 23 sheets

YUEN YI MAY
Assistant Vice President (Architecture)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-00816-AR-051 | REVISION: C
PRECINCT NAME: - | RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPRISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING (TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

PREPARED BY : TEAM
DATE :

LOT NO.: | MUKIM NO.:

JOB TITLE
TAMPINES NEIGHBOURHOOD 2 CONTRACT 22

DRAWING TITLE
LAYOUT & KEY PLANS (SETTING OUT)

SCALE: 1:1000, 1:20000 | DATE: JUNE 2008
DRAWN BY: ZAW MIN THET | CHECKED BY: TAY S.T.

AMENDMENT	DATE	DRAWN BY	DESIGN BY	DESIGN ARCHIT	QP

REFERENCE

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-00729-AR-051 | REVISION: C

WONG KIN YEW, DESIGN ARCHITECT | YUEN YI MAY, SENIOR ARCHITECT

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LEGEND

- RESIDENTIAL FLATS
- FLATS AT 1ST STOREY
- RESIDENTIAL BLOCKS WITH COMMERCIAL FACILITIES AT 1ST. STOREY
- FUTURE COMMUNITY FACILITIES AT 1ST STOREY
- PRECINCT PAVILION
- ESS — ELECTRICAL SUB-STATION
- UC — UTILITY CENTRE
- MULTI-STOREY CAR PARK
- OPEN SPACE WITH TREE PLANTING & TURFING
- CAR PARK DRIVEWAY
- SERVICE ROAD
- TURFED FIRE ENGINE ACCESS
- HARDSTANDING FOR FIRE ENGINE
- FUTURE PAVED CAR PARKING LOT FOR DISABLED PERSON
- OUTDOOR PLAY FACILITIES
- DRAINAGE RESERVE
- COVERED WALKWAY
- SEWER LINE
- 112.750 — ROAD LEVEL
- MPL 112.750 — MDE PLATFORM LEVEL
- PL 112.750 — PLATFORM LEVEL
- 149.000 — PLATFORM LEVEL PLUS BUILDING HEIGHT (MAX.)
- P28 — POSITION OF LIFTS
- LOCATION OF CENTRALISED REFUSE CHUTE
- 299A — ESTATE BLOCK NUMBER
- ELECTRICAL CABLE ENTRY
- CONTRACT BOUNDARY
- DEVELOPMENT BOUNDARY
- LOT BOUNDARY

10 - 1 - 2M/3R - 10B
- TOTAL UNITS
- TYPE OF FLATS
- FLATS AT 1ST. STOREY
- COMMERCIAL UNITS AT 1ST. STOREY
- NO. OF STOREY

PLOT (1) - PUBLIC HOUSING DEVELOPMENT

NOTES

GENERAL

- FIGURED DIMENSIONS TO BE USED IN PREFERENCE TO SCALED DIMENSIONS.
- PROVISIONAL HOUSE NUMBER ALLOCATED TO ESTATE BLOCK NOS. 299, 299A & 299B UNDER TAMPINES STREET 22.
- ALL 1ST STOREY FLOOR LEVELS TO BE AT 500MM FROM THE PLATFORM LEVEL FOR PLAY AREAS, 150MM FOR SHOPS AND 550MM FOR GROUND FLOOR FLATS.
- ROADS, DRIVEWAYS, CARPARKS AND COMPOSITE DRAINS ARE INCLUDED IN THIS CONTRACT.
- PLATFORM LEVELS SHOWN ARE PRECISE PLUS 100M.
- DIMENSIONS SHOWN ARE IN METRE.

BLOCK KEY

10 - 1 - 2M/3R - 10B
- TOTAL UNITS
- TYPE OF FLATS
- FLATS AT 1ST. STOREY
- COMMERCIAL UNITS AT 1ST. STOREY
- NO. OF STOREY

PLOT (1) - PUBLIC HOUSING DEVELOPMENT

ABBREVIATIONS

FLAT TYPE :

1RM -- 1 ROOM FLAT
2RM -- 2 ROOM FLAT
1A -- 1 ROOM MODEL 'A'
3I -- 3 ROOM IMPROVED
EA -- EXECUTIVE APARTMENT

DATA OF STOREY SHELTER FOR EST BLK NO. 299A:

DWELLING UNIT TYPE	GFA OF UNIT (m2)	NO. OF SS	AREA OF SS (m2)	VOLUME OF SS (m3)	SHELTER TYPE
2-C-1	43	16	10.39	27.0	3B
2-C-1(H)	43				
2-C-2	43				
2-C-2(H)	43				
3-CE-1	63				
3-CE-1(H)	63				
3-CE-2	63				
3-CE-3	63				
TOTAL NO. OF STOREY SHELTER		16			

*NOTE : THERE ARE 2 NOS OF STOREY-SHELTER PER STOREY (TOTAL 9 STOREYS/EXCLUDE 1ST STOREY).

DATA OF STOREY SHELTER FOR EST BLK NO. 299B:

DWELLING UNIT TYPE	GFA OF UNIT (m2)	NO. OF SS	AREA OF SS (m2)	VOLUME OF SS (m3)	SHELTER TYPE
1-CE-1	30	36	11.13	28.9	5S
1-CE-1(H)	30				
1-C-2	30				
1-C-2(H)	30				
1-CE-3	30				
1-CE-3(H)	30				
1-C-4	30				
1-C-4(H)	30				
1-C-5	30				
1-C-5(H)	30				
1-C-6	30				
1-CE-7	30				
1-CE-8	30				
1-CE-9	30				
1-C-10	30				
1-CE-11	30				
2-C-1	43				
2-C-1(H)	43				
2-C-4	43				
2-C-4(H)	43				
TOTAL NO. OF STOREY SHELTER		36			

*NOTE : THERE ARE 2 NOS OF STOREY-SHELTER PER STOREY (TOTAL 9 STOREYS)/EXCLUDE 1ST STOREY.

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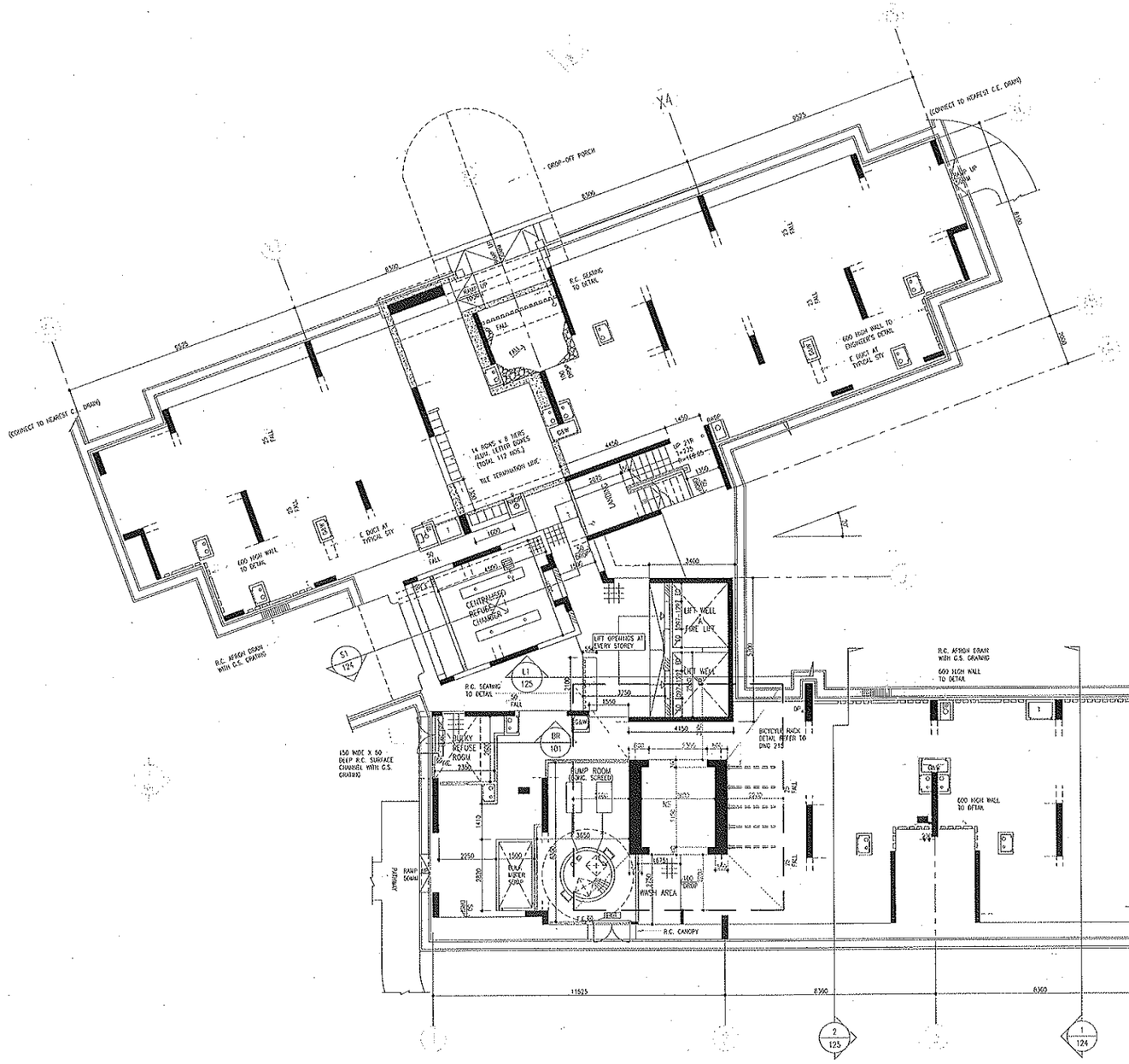
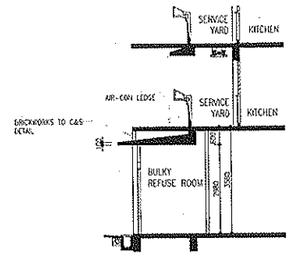
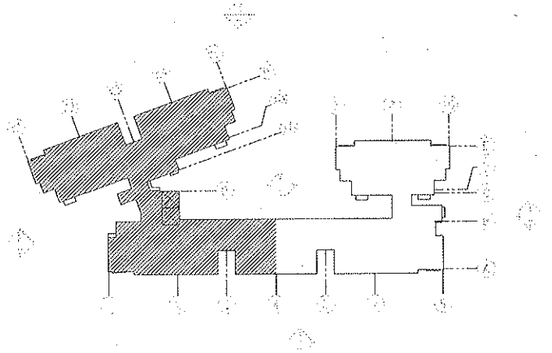


1ST STOREY FLOOR PLAN (PART 1 OF 2)
(FOR EST. NO. BLK 299A)



SECTION BR-BR





NOTES: (FOR ALL BLKS)
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.
2. WHILE EVERY CARE HAS BEEN EXERCISED IN HIGHLIGHTING THE AMENDMENTS VIA "CLOUDING", SURBANA INTERNATIONAL CONSULTANTS PTE LTD DOES NOT WARRANT THE ACCURACY AND COMPLETENESS OF SUCH HIGHLIGHTING. THE CONTRACTOR SHALL BE DEEMED TO HAVE VERIFIED AND SATISFIED HIMSELF AS TO THE ACTUAL AMENDMENTS TO THE DRAWINGS.
3. FOR PROVISION AND DIRECTION OF FLOW, DISCHARGE AND OUTLET OF APRON DRAIN REFER TO 1: 200 SCALE LAYOUT PLAN.
4. TO PROVIDE AND LOCATE AT THE LIFT LOBBY THE BLOCK KEY PLAN SIGNAGE INDICATING THE LOCATION OF DRY RISER.
5. MINIMUM 2 NOS. OF ILLUMINATED ESTATE BLOCK SIGNAGES TO BE PROVIDED TO EACH BLOCK.
6. 1800 HIGH GLAZED WALL TILE SHALL BE PROVIDED TO SURROUNDING WALL SURFACE OF WASH AREA AT 1ST. STOREY AND TO PARAPET HEIGHT AT WASH AREA AT CENTRALISED REFUSE CHUTE.
7. HANDRAIL MUST BE CONTINUOUS THROUGHOUT, MINIMUM 1 NO. TO STAIRCASE WITH >2m & INTERMEDIATE HANDRAIL NEED FOR EXIT STAIRCASE WIDTH >2m
8. EMERGENCY LIGHTING TO BE PROVIDED ALONG THE PATH LEADING TO ALL PROTECTED STAIRCASES/ESCAPE ROUTE AND TO ALL SERVICES ROOMS
9. EMERGENCY LIGHTING TO BE PROVIDED AT TELECOM EQUIPMENT ROOM, PUMP ROOM, BULKY REFUSE ROOM, CENTRALISED REFUSE CHUTE, LIFT MACHINE ROOM, STORE & OTHER SERVICES ROOMS
10. NO ELECTRICAL WIRING/GAS PIPE IS ALLOWED WITHIN ANY SERVICES ROOMS OR PROTECTED STAIRCASES.
11. ALL OPENINGS FOR PIPES, DUCTS, CONDUITS OR CABLE SHALL BE EFFECTIVELY FIRE STOPPED.
12. ALL DOORS OF SERVICES DUCTS WHICH ARE HALF-HR FIRE RATED SHALL BE BEARING PSB'S LABEL AND ALL DOORS OF SERVICES ROOMS WHICH ARE FIRE RATED SHALL BEAR PSB'S LABEL & FITTED WITH SELF CLOSING DEVICE
13. WHERE APPLICABLE R.C. FLOOR SHALL BE CASTED WITH RECESS TO RECEIVE FLOOR FINISHES TO MATCH THE SURROUNDING FLOOR FINISH.
14. R.C. LINTOL OR SHIFFENER TO PROVIDED TO ALL 90 /150 THK. BRICKWALL SPANNING MORE THAN 3500 HORIZONTALLY & VERTICALLY.
15. NO OPENING OR VOID IN ANY RAILING/PARAPET MAY PERMIT THE PASSAGE OF 1000 SPHERE.
16. ALL BATH/W.C. & KITCHEN TO BE PROVIDED FULL HEIGHT COLOR GLAZED CERAMIC WALL TILES AND CERAMIC FLOOR TILES FINISH TO SPECIFICATIONS
17. ALL WALLS OF SERVICE ROOMS SHALL BE 50/150 THK BRICKWALL WITH CEM1 PLASTERING UNLESS OTHERWISE STATED.
18. ALL "D&W DUCT WITH FIRE RATED DOOR TO PROVIDE FIXED LOUVRED VENT (300W x 900H) ABOVE DOOR AT 1ST STOREY & (615W x 400H) AT ROOF LEVEL
19. CONTRACTOR TO SUBMIT WORKSHOP DRAWINGS WITH PROFESSIONAL ENGINEER'S CERTIFICATION TO THE DESIGN STRUCTURAL ENGINEER FOR ALL CLADDING AND NON-STANDARD FIXED PANEL BELOW 1000mm CILL LEVEL ALL DRY RISERS SHALL BE 150Ø WITH 4-WAYS BREECHING INLET AT 1ST STOREY AND LANDING VALVES AT TYPICAL STOREY
20. ALL WALLS OF SERVICE DUCTS SHALL BE 90 THK SOLID BLOCK WALL WITH CEM1 PLASTERING UNLESS OTHERWISE STATED. FOR DUCTS EXPOSED TO WEATHER WALL SHALL BE 90 THICK BRICKWALL WITH CEM1 PLASTERING.
22. STRUCTURED/TEXTURED NON-SLIP HEAVY DUTY HOMOGENOUS FLOOR TILE FINISH TO PLAY AREA/KID DECK TO EDGE OF DRAIN, WASH AREA, CENTRALISED REFUSE CHAMBER, BULKY REFUSE AREA, WASH AREA AT REFUSE CHUTE, STAIRCASE BETWEEN 1ST. & 2ND STOREY INCLUDING HALF-LANDING AND EVERY ACCESS BALCONY AT TYPICAL STOREYS (LIFT LOBBY AREA ONLY) WITH MATCHING GLAZED SKIRTING TILE TO ALL COLUMNS, WALLS & PARAPETS. CEM1 SCREED FINISH TO BE PROVIDED TO ACCESS BALCONY AT TYPICAL STOREY OTHER THAN THE LIFT LOBBY AREA. FOR DESIGN & PATTERN OF FLOOR FINISH AT LIFT LOBBY, ETC TO REFER TO DETAIL DWGS. THE CONTRACTOR SHALL SUBMIT WORKSHOP DRAWINGS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
23. ALL RWDP, DPS, DP SHALL DISCHARGE TO THE NEAREST HOUSE DRAIN
24. CONTRACTOR IS TO PROVIDE EXPANSION JOINTS AT INTERVALS OF 3m FORMED BY PVC STRIPS FOR THE CASTING OF CEMENT SCREED AT LOCATION TO S/O REP APPROVAL .
25. ☒ FIRE EXTINGUISHER TO BE PROVIDED IN ACCORDANCE WITH SS232. CP50 & OTHER CURRENT CODES & REGULATIONS.
26. GAS PIPE AND DRY RISER PIPE HOUSING ACROSS FIRE ESCAPE AT 1ST STOREY & STEEL LIFT SHALL HAVE 2 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS.
27. GAS PIPE WITHIN FLAT AND IMMEDIATELY OUTSIDE FLAT ENTRANCE & ESCAPE ROUTE AT TYPICAL STOREYS SHALL HAS 1 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS (FOR GAS PIPE POSITION REFER TO ME DWGS).
28. STEEL LIFT TO GAS DETAIL AND SHALL BE 2 HOUR RATED IN ACCORDANCE WITH FSSD REQUIREMENTS.
29. THIS DRAWING SHALL NOT BE USED OTHER THAN FOR ITS INTENDED PURPOSE AS STATED HEREIN.
30. ANY OTHER NOTES AS SHOWN ON RELEVANT DRAWINGS.

FLAT NAMING LEGEND

FLAT TYPE
3A – 3 ROOM MODEL A
4A – 4 ROOM MODEL A
5I – 5 ROOM IMPROVED

CONFIGURATION :
PB(E) – PENT BLOCK END
G – GROUND

REFERENCE NUMBER :
2 – TYPE 2
2(H) – TYPE 2 (MIRRORED)

FLAT NAMING KEY
4A-FB(E)-2(H)
– REFERENCE NUMBER CONFIGURATION
– FLAT TYPE

(UNLESS OTHERWISE SPECIFIED)
DR 150 ø CAST STEEL CLASS 'C' DRY RISER PIPE
DPS 100ø UPVC DOWN PIPE WITH DOWNSPOUT OUTLET
DP 100ø UPVC DOWN PIPE
WDPS 100ø UPVC WASTE STACK WITH DOWNSPOUT OUTLET (AT REFUSE CHUTE)
R 200ø UPVC RAINWATER DOWN PIPE
W WATER DUCT
GDN GAS & WATER DUCT
E ELECTRICAL DUCT
T TELECOM RISER DUCT

LEGEND
☒ 2.3kg CO2 PRESSURE FIRE EXTINGUISHER AT EVERY MAIN SUBSTATION ROOM
☒ 2.0kg ABC CHEMICAL DRY POWDER PORTABLE FIRE EXTINGUISHER AT ALL OTHER SERVICES ROOMS
EXIT ILLUMINATED EXIT SIGN

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

	AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP
A	DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED	JUNE 2008		TAY S.L	YUEN YI MAY	
B	1. COLUMN UPDATED TO C&S COMMENT 2. UPDATED SECTION INCLUDED 3. LOCATION OF WASH AREA /SERVICE DUCT UPDATED 4. ENTRANCE, LETTER BOX LOCATION AND RC WALL/FOOTPRINTS UPDATED	JUNE 2008 JULY 2008	KHAIR KAY SHINE	TAY S.L TAY S.L	YUEN YI MAY YUEN YI MAY	

REFERENCE :

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2 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 9A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1889-00092-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

.....
for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-DOB16-AR-101	REVISION: B
PRECINCT NAME: -	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING (TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
1ST STOREY FLOOR PLAN
(PART 1 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MUHD KHAIR	CHECKED BY: TAY S.L

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62735090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HBM-D0729-AR-101	REVISION: B
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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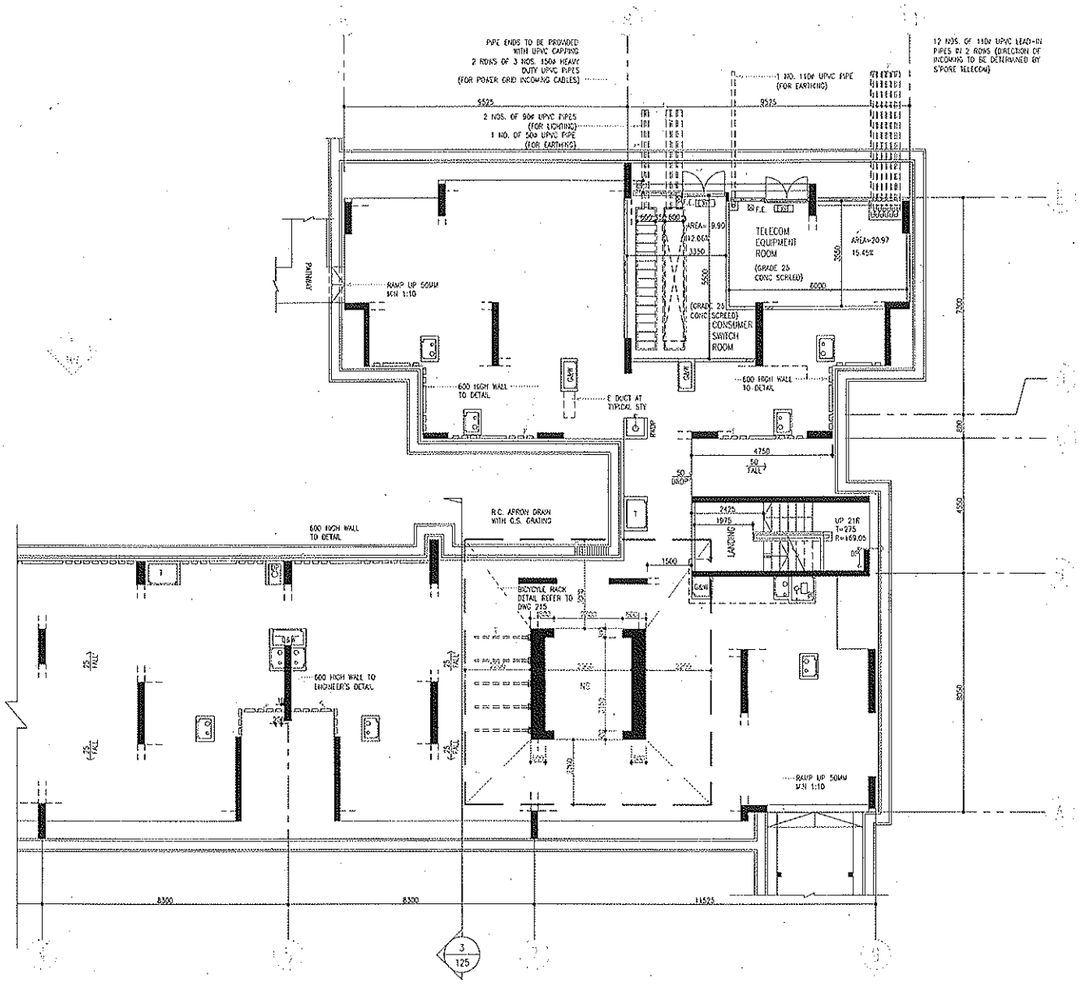
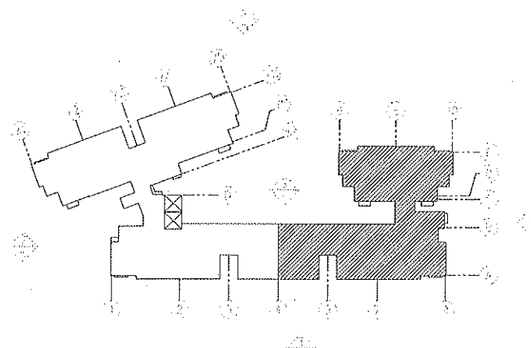


1ST STOREY FLOOR PLAN (PART 2 OF 2)
(FOR EST. NO. BLK 299A)



3 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : 61B09-00002-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-00816-AR-102	REVISION: B
PRECINCT NAME: -	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22).

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
1ST STOREY FLOOR PLAN
(PART 2 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MD KHALIL	CHECKED BY: TAY S.T.

NOTES: (FOR ALL BLKS)
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.
2. WHILE EVERY CARE HAS BEEN EXERCISED IN HIGHLIGHTING THE AMENDMENTS VIA "CLOUDING", SURBANA INTERNATIONAL CONSULTANTS PTE LTD DOES NOT WARRANT THE ACCURACY AND COMPLETENESS OF SUCH HIGHLIGHTING. THE CONTRACTOR SHALL BE DEEMED TO HAVE VERIFIED AND SATISFIED HIMSELF AS TO THE ACTUAL AMENDMENTS TO THE DRAWINGS.
3. FOR PROVISION AND DIRECTION OF FLOW, DISCHARGE AND OUTLET OF APRON DRAIN REFER TO 1: 200 SCALE LAYOUT PLAN.
4. TO PROVIDE AND LOCATE AT THE LIFT LOBBY THE BLOCK KEY PLAN SIGNAGE INDICATING THE LOCATION OF DRY RISER.
5. MINIMUM 2 NOS. OF ILLUMINATED ESTATE BLOCK SIGNAGES TO BE PROVIDED TO EACH BLOCK.
6. 1800 HIGH GLAZED WALL TILE SHALL BE PROVIDED TO SURROUNDING WALL SURFACE OF WASH AREA AT 1ST. STOREY AND TO PARAPET HEIGHT AT WASH AREA AT CENTRALISED REFUSE CHUTE.
7. HANDRAIL MUST BE CONTINUOUS THROUGHOUT, MINIMUM 1 NO. TO STAIRCASE WITH >2M & INTERMEDIATE HANDRAIL REQD FOR EXIT STAIRCASE WIDTH >2M
8. EXIT SIGN AND LIGHT TO BE PROVIDED TO ALL SERVICES ROOMS & ALONG THE PATH LEADING TO ALL PROTECTED STAIRCASES/ESCAPE ROUTE
9. EMERGENCY LIGHTING TO BE PROVIDED AT TELECOM EQUIPMENT ROOM, PUMP ROOM, BULKY REFUSE ROOM, CENTRALISED REFUSE CHUTE, LIFT MACHINE ROOM, STORE & OTHER SERVICES ROOMS
10. NO ELECTRICAL TRUNKING/GAS PIPE IS ALLOWED WITHIN ANY SERVICES ROOMS OR PROTECTED STAIRCASES.
11. ALL OPENINGS FOR PIPES, DUCTS, CONDUITS OR CABLE SHALL BE EFFECTIVELY FIRE STOPPED.
12. ALL DOORS OF SERVICES DUCTS WHICH ARE HALF-HR FIRE RATED SHALL BE BEARING PSB'S LABEL AND ALL DOORS OF SERVICES ROOMS WHICH ARE FIRE RATED SHALL BEAR PSB'S LABEL & FITTED WITH SELF CLOSING DEVICE
13. WHERE APPLICABLE R.C. FLOOR SHALL BE CASTED WITH RECESS TO RECEIVE FLOOR FINISHES TO MATCH THE SURROUNDING FLOOR FINISH.
14. R.C. LINTOL OR STIFFENER TO PROVIDED TO ALL 90 /100 THK. BRICKWALL SPANNING MORE THAN 3500 HORIZONTALLY & VERTICALLY.
15. NO OPENING OR VOID IN ANY RAILING/PARAPET MAY PERMIT THE PASSAGE OF 100Ø SPHERE.
16. ALL BATH/R.C. & KITCHEN TO BE PROVIDED FULL HEIGHT COLOR GLAZED CERAMIC WALL TILES AND CERAMIC FLOOR TILES FINISH TO SPECIFICATIONS
17. ALL WALLS OF SERVICE ROOMS SHALL BE 90/150 THK BRICKWALL WITH CEMT PLASTERING UNLESS OTHERWISE STATED.
18. ALL "G&W" DUCT WITH FIRE RATED DOOR TO PROVIDE FIXED LOUVRED VENT (300W x 900H) ABOVE DOOR AT 1ST STOREY & (615W x 400H) AT ROOF LEVEL
19. CONTRACTOR TO SUBMIT WORKSHOP DRAWINGS WITH PROFESSIONAL ENGINEER'S CERTIFICATION TO THE DESIGN STRUCTURAL ENGINEER FOR ALL CLADDING AND NON-STANDARD FIXED PANEL BELOW 1000mm CCL LEVEL. ALL DRY RISERS SHALL BE 150Ø WITH 4-WAYS BREECHING INLET AT 1ST STOREY AND LANDING VALVES AT TYPICAL STOREY
20. ALL WALLS OF SERVICE DUCTS SHALL BE 90 THK SOLID BLOCK WALL WITH CEMT PLASTERING UNLESS OTHERWISE STATED. FOR DUCTS EXPOSED TO WEATHER WALL SHALL BE 90 THICK BRICKWALL WITH CEMT PLASTERING.
22. STRUCTURED/TEXTURED NON-SLIP HEAVY DUTY HOMOGENOUS FLOOR TILE FINISH TO PLAY AREA/VOID DECK TO EDGE OF DRAIN, WASH AREA, CENTRALISED REFUSE CHAMBER, BULKY REFUSE AREA, WASH AREA AT REFUSE CHUTE, STAIRCASE BETWEEN 1ST. & 2ND STOREY INCLUDING HALF-LANDING AND EVERY ACCESS BALCONY AT TYPICAL STOREYS (LIFT LOBBY AREA ONLY) WITH MATCHING GLAZED SKIRTING TILE TO ALL COLUMNS, WALLS & PARAPETS. CEMT SCREED FINISH TO BE PROVIDED TO ACCESS BALCONY AT TYPICAL STOREY OTHER THAN THE LIFT LOBBY AREA. FOR DESIGN & PATTERN OF FLOOR FINISH AT LIFT LOBBY, ETC TO REFER TO DETAIL DWGS. THE CONTRACTOR SHALL SUBMIT WORKSHOP DRAWINGS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
23. ALL RWDP, DPS, DP SHALL DISCHARGE TO THE NEAREST HOUSE DRAIN
24. CONTRACTOR IS TO PROVIDE STAINLESS STEEL STRIP AT EVERY 6M (MAX) INTERVAL FOR THE CASTING OF CEMENT SCREED.
25. ☒ FIRE EXTINGUISHER TO BE PROVIDED IN ACCORDANCE WITH SS232, CP95 & OTHER CURRENT CODES & REGULATIONS.
26. GAS PIPE AND DRY RISER PIPE ROUTING ACROSS FIRE ESCAPE AT 1ST STOREY & STEEL LIFT SHALL HAVE 2 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS.
27. GAS PIPE WITHIN FLAT AND IMMEDIATELY OUTSIDE FLAT ENTRANCE & ESCAPE HOUSE AT TYPICAL STOREYS SHALL HAS 1 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS (FOR GAS PIPE POSITION REFER TO ME DWGS).
28. STEEL LIFT TO GAS DETAIL AND SHALL BE 2 HOUR RATED IN ACCORDANCE WITH FSSD REQUIREMENTS.
29. THIS DRAWING SHALL NOT BE USED OTHER THAN FOR ITS INTENDED PURPOSE AS STATED HEREIN.
30. AND OTHER NOTES AS SHOWN ON RELEVANT DRAWINGS.

FLAT NAMING LEGEND

FLAT TYPE :
3A – 3 ROOM MODEL A
4A – 4 ROOM MODEL A
5I – 5 ROOM IMPROVED

CONFIGURATION :
PD(E) – POINT BLOCK END
G – GROUND

REFERENCE NUMBER :
2 – TYPE 2
2(M) – TYPE 2 (MAIDROOD)

FLAT NAMING KEY
4A-PD(E)-2(M)
REFERENCE NUMBER
CONFIGURATION
FLAT TYPE

EXPRESS GRAPHICS SELECTED

DR	150 ø GALV. STEEL CLASS 'E' DRY RISER PIPE
DPS	100ø UPVC DOWN PIPE WITH DOWNSPOUT OUTLET
DP	100ø UPVC DOWN PIPE
WDPS	100ø UPVC WASTE STACK WITH DOWNSPOUT OUTLET (AT REFUSE CHUTE)
R	200W UPVC RAINWATER DOWN PIPE
W	WATER DUCT
G&W	GAS & WATER DUCT
E	ELECTRICAL DUCT
T	TELECOM RISER DUCT

LEGEND

☒	2.5kg CO2 PORTABLE FIRE EXTINGUISHER AT CONTAINER SUBSTATION ROOM
☒	25kg ABC CHEMICAL DRY POWDER PORTABLE FIRE EXTINGUISHER AT ALL OTHER SERVICES ROOMS
EXIT	ILLUMINATED EXIT SIGN

AMENDMENT	DATE	DRAWN BY	DESIGNED BY	DESIGN ARCHIT	QP

AMENDMENT	DATE	DRAWN BY	DESIGNED BY	DESIGN ARCHIT	QP
A DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED.	JUNE 2008	KHALIL	TAY S.T.	KOH YEN	YUEN YI MAY
B 1. COLUMN UPDATED TO GAS COMPLIANT 2. UPDATED SECTION INCLUDED 3. LOCATION OF WASH AREA /SERVICE DUCT UPDATED 4. LOR WALL/FOOTINGS UPDATED	JUNE 2008	KHALIL	TAY S.T.	KOH YEN	YUEN YI MAY
	JULY 2008	KAY KHINE	TAY S.T.	KOH YEN	YUEN YI MAY

REFERENCE :

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62461288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z .

DRAWING NO. SD-DP-HATM-00729-AR-102	REVISION: B
WONG KIM YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

THE OWNERSHIP OF THE COPYRIGHT IN THIS DRAWING IS RETAINED BY SURBANA INTERNATIONAL CONSULTANTS PTE LTD WHOSE CONSENT MUST BE SOUGHT BEFORE ANY USE OR REPRODUCTION OF THIS DRAWING OR ANY PART THEREOF CAN BE MADE

DwgPath: S:\00729_TAP_N2C22\AR\04_Submission\BCA\HS\03_Revsd\Drg\
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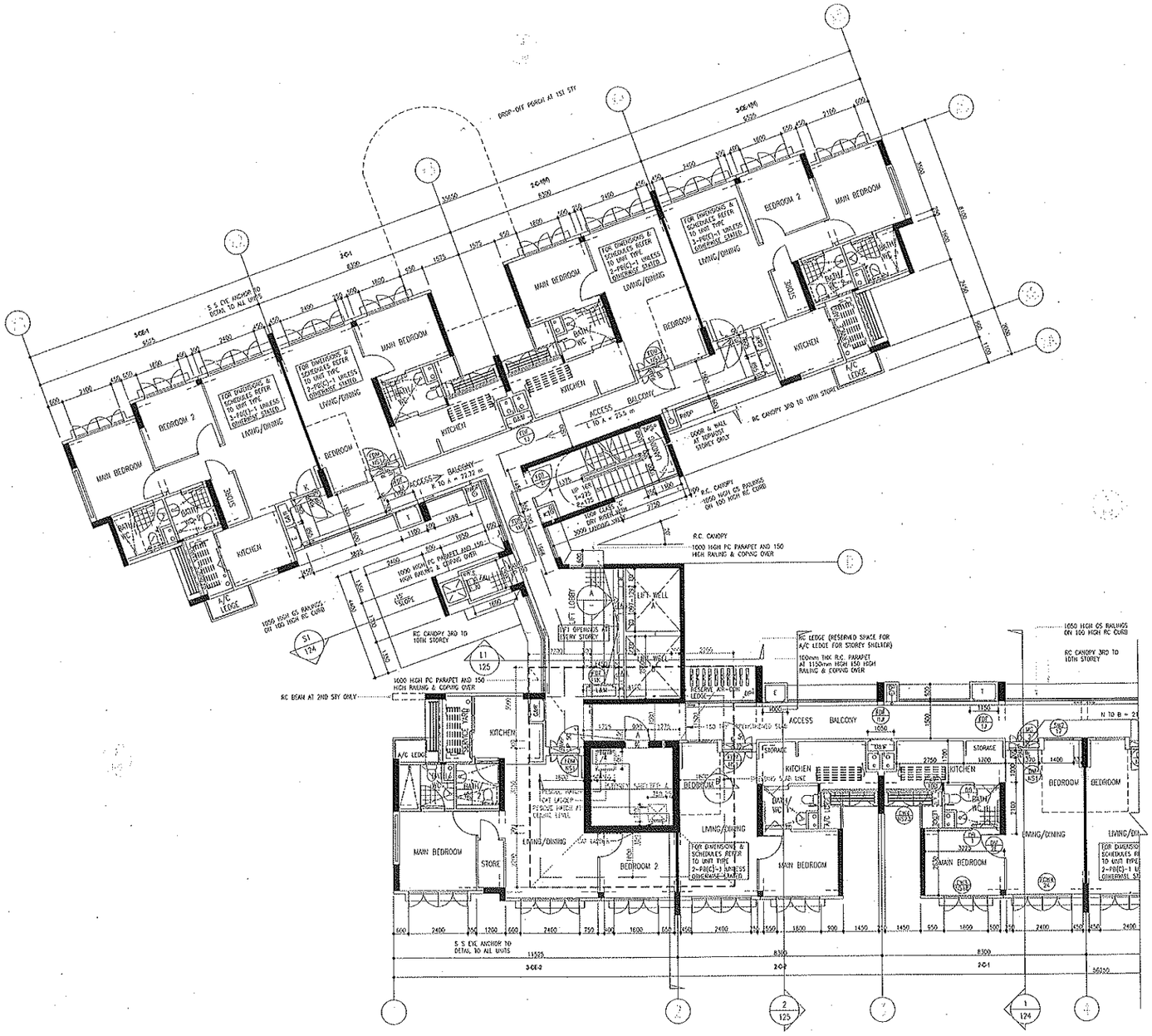
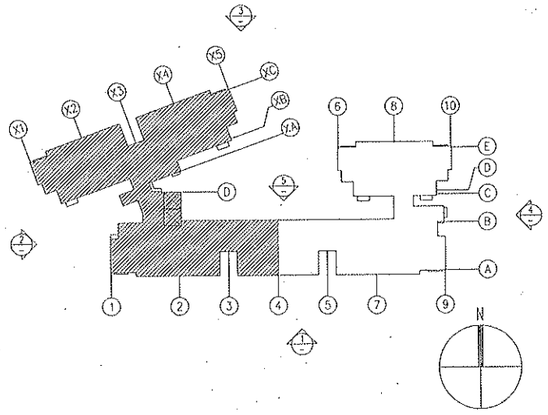


TYPICAL FLOOR PLAN OF 2ND TO 10TH STOREY (PART 1 OF 2)
(FOR EST BLK NO. 299A)



NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP
A DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED	JUNE 2008	KHALIL	TAY S.T.	KIN YEW	YUEN YI MAY

REFERENCE :

DwgFileName: D0729_A-103-S01_BD02MP-A.dwg

4 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A
OF THE BUILDING CONTROL ACT (CAP 29)

Project Reference No : 61889-00002-2008-C002

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Tao Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-DOB16-AR-103	REVISION: –
PRECINCT NAME: –	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
TYPICAL FLOOR PLANS OF 2ND TO 10TH STOREY (PART 1 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MUHD KHALIL	CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-D0729-AR-103	REVISION: –
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

THE OWNERSHIP OF THE COPYRIGHT IN THIS DRAWING IS RETAINED BY SURBANA INTERNATIONAL CONSULTANTS PTE LTD WHOSE CONSENT MUST BE SOUGHT BEFORE ANY USE OR REPRODUCTION OF THE DRAWING OR ANY PART THEREOF CAN BE MADE.

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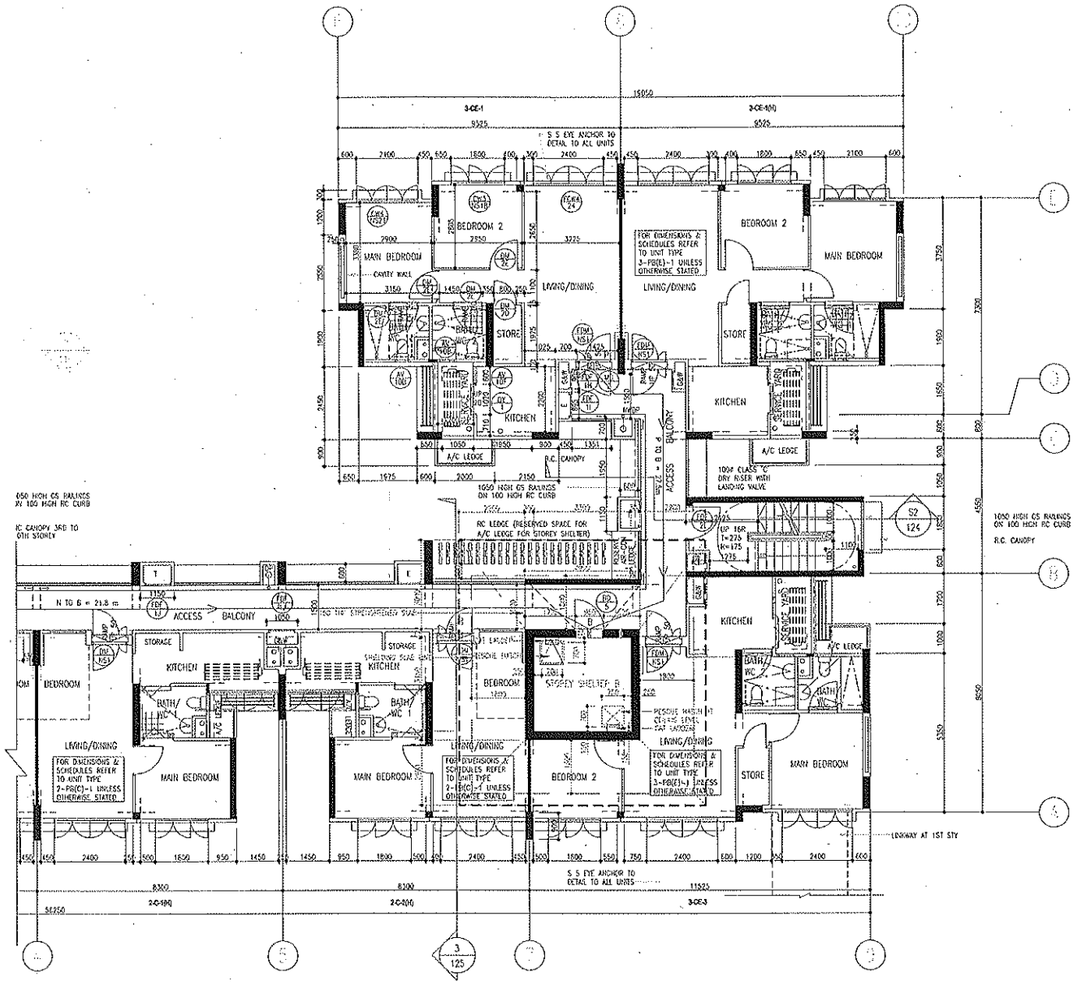
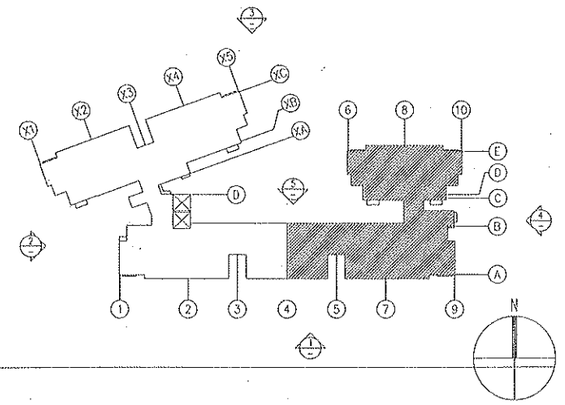


TYPICAL FLOOR PLAN OF 2ND TO 10TH STOREY (PART 2 OF 2)
(FOR EST BLK NO. 299A)



5 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A
OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1889-00002-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

.....
for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd
Qualified Person's Signature and stamp

12/12/2008
Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-D0816-AR-104	REVISION: –
PRECINCT NAME: –	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
TYPICAL FLOOR PLANS OF 2ND TO 10TH STOREY (PART 2 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MUHD KHALIL	CHECKED BY: TAY S.T.

NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP	AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP	AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

REFERENCE :

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-D0729-AR-104	REVISION: –
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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DwgFileName: D0729_A-104-S01_B002TMP-A.dwg

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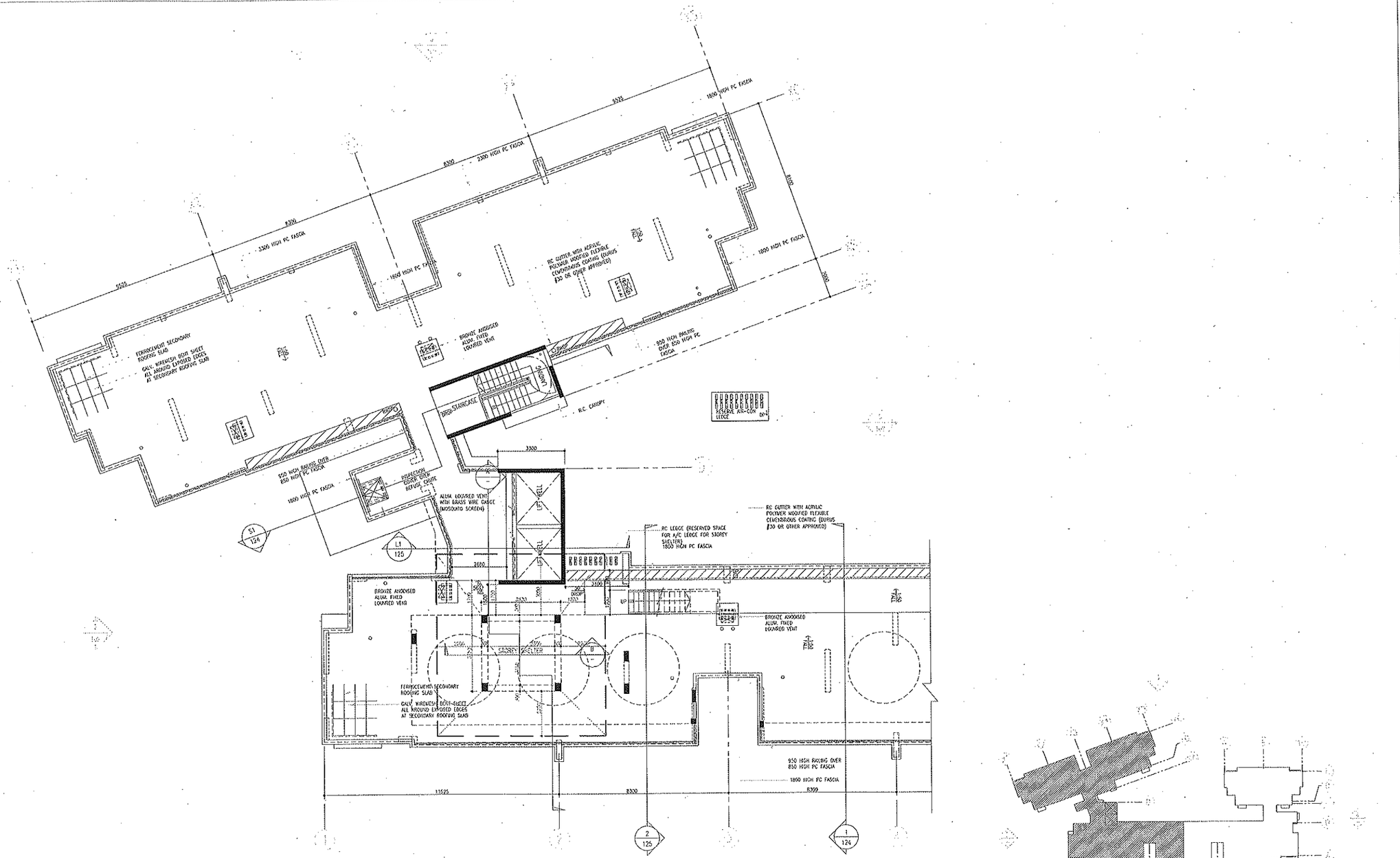

MAIN ROOF PLAN (PART 1 OF 2)
(FOR EST. BLK NO. 299A)

N

0 1 2 3 4 5m
SCALE 1:100

NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

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AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP
A DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED	JUNE 2008	KHAIR	TAY S.T.	KIM YEW	YUEN YI MAY
B RAILING OVER PC FASCIA & PC FASCIA UPDATED	JULY 2008	KIM KHAIR	TAY S.T.	KIM YEW	YUEN YI MAY

REFERENCE :

DwgFileName: D0729_A-105-SD1_BDMRTM-B.dwg

DwgPath: S:\D0729_TMP_M2022\ARY\04_Submission\BCA\HDB\03_Revised\Dwg\

6 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : 61888-00002-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-00816-AR-105	REVISION: B
PRECINCT NAME: –	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES NEIGHBOURHOOD 2 CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
MAIN ROOF PLAN (PART 1 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MUHD KHAIR	CHECKED BY: TAY S.T.

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168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
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www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-0P-HATM-D0729-AR-105	REVISION: B

WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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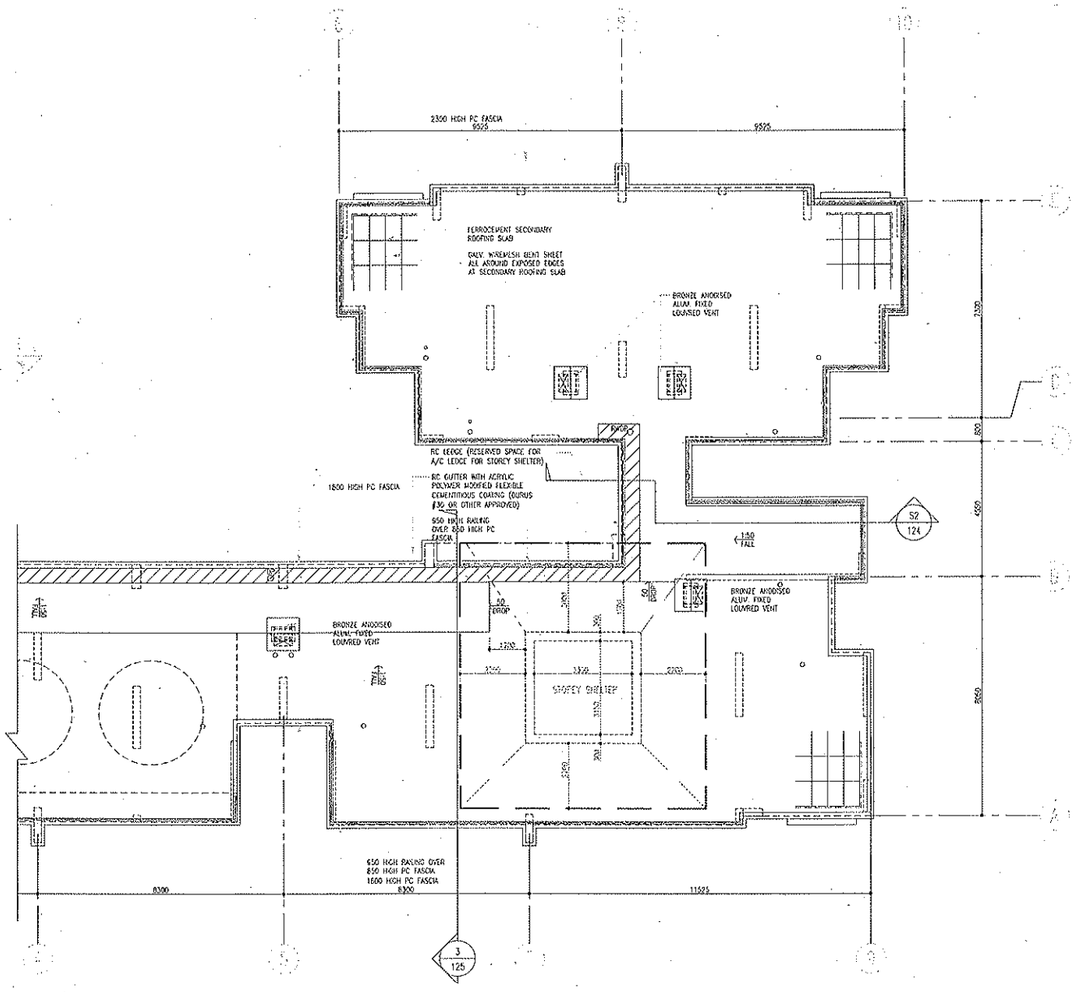
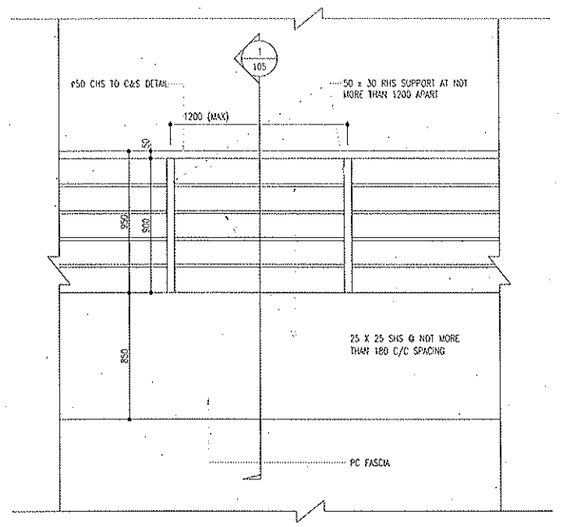
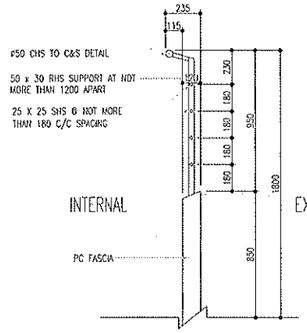


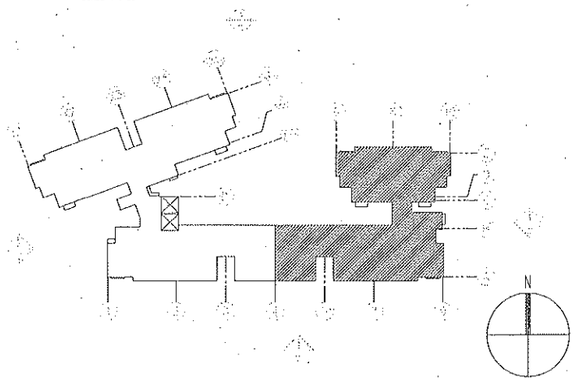
MAIN ROOF PLAN (PART 2 OF 2)
(FOR EST. BLK NO. 299A)



ELEVATION OF RAILING AT ROOF FASCIA
(FOR THICKNESS, FIXING, BASE PLATE ETC OF STEEL MEMBER REFER TO C&S DETAIL)
SCALE 1 : 20



SECTION 1-1 OF RAILING AT ROOF FASCIA
(FOR THICKNESS, FIXING, BASE PLATE ETC OF STEEL MEMBER REFER TO C&S DETAIL)
SCALE 1 : 20



NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP
A RAILING OVER PC FASCIA & PC FASCIA UPDATED	JULY 2008	KAY KHAUL	TAY S.T.	WONG KIN YEW	YUEN YI MAY
B HEIGHT OF PARAPET FASCIA AND RAILINGS UPDATED	JULY 2008	KHAUL	TAY S.T.	WONG KIN YEW	YUEN YI MAY

REFERENCE :

DwgFileName: D0729_A-106-S01_0DMREM-B.dwg

DwgPath: S:\D0729_TAP_N2C22\A\01_Submission\BCA\HS103_Revit\Dgs\

7 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1BS9-00002-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

.....
for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that :-
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd
Qualified Person's Signature and stamp — Date: 12/12/2008

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-DOB16-AR-106	REVISION: B
PRECINCT NAME: -	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 26

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
MAIN ROOF PLAN
(PART 2 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MUHD KHALIL	CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
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www.surbana.com
Company Regn No. 200304951Z

DRAWING NO. SB-DP-MKM-D0729-AR-106	REVISION: B
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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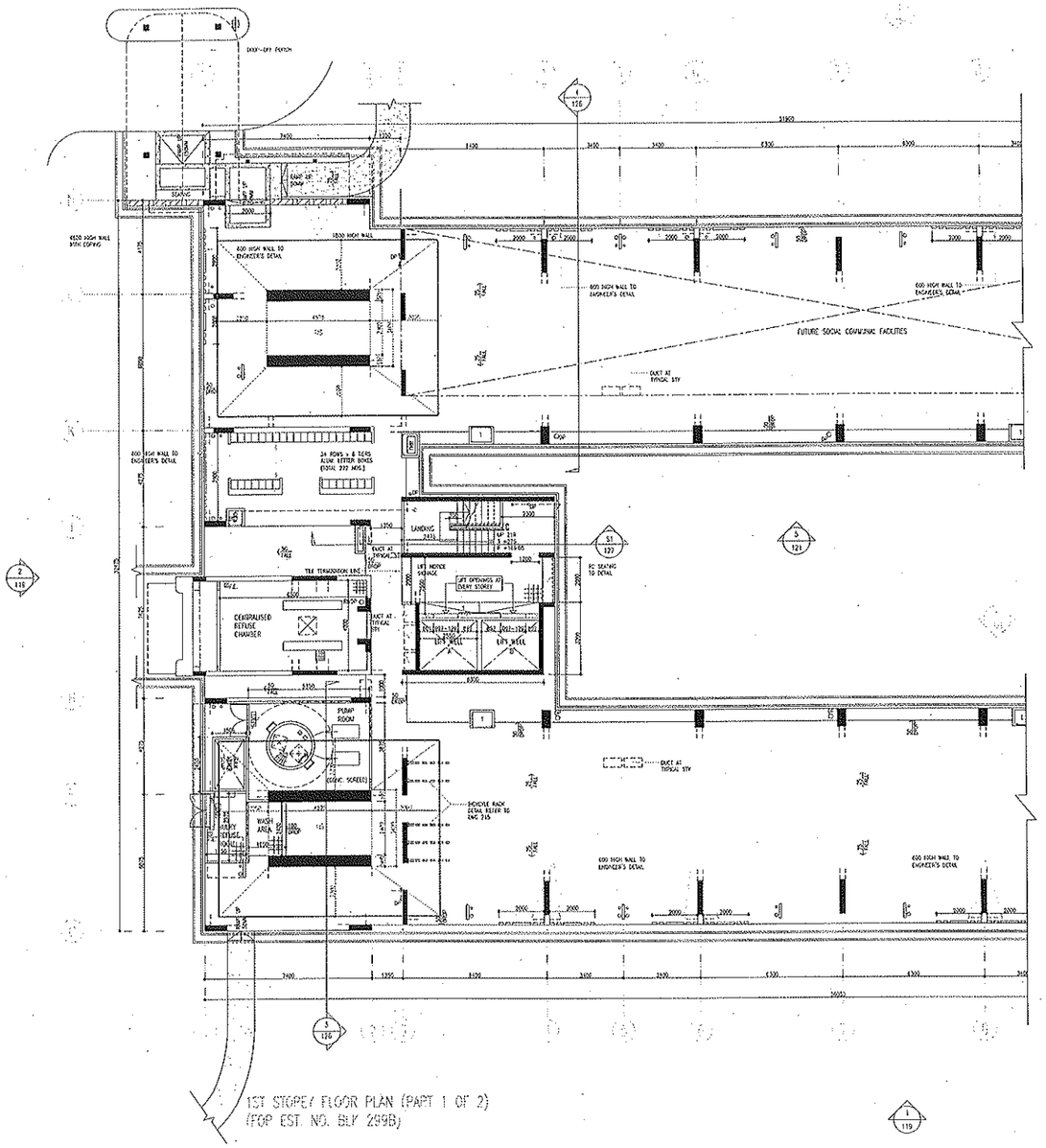

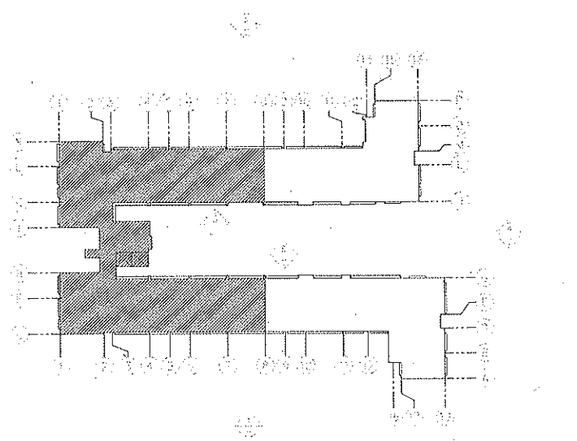

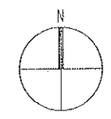

NOTES: (FOR ALL BLKS)

1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.
2. WHILE EVERY CARE HAS BEEN EXERCISED IN HIGHLIGHTING THE AMENDMENTS VIA "CLOUDING", SURBANA INTERNATIONAL CONSULTANTS PTE LTD DOES NOT WARRANT THE ACCURACY AND COMPLETENESS OF SUCH HIGHLIGHTING. THE CONTRACTOR SHALL BE DEEMED TO HAVE VERIFIED AND SATISFIED HIMSELF AS TO THE ACTUAL AMENDMENTS TO THE DRAWINGS.
3. FOR PROVISION AND DIRECTION OF FLOW, DISCHARGE AND OUTLET OF APRON DRAIN REFER TO 1: 200 SCALE LAYOUT PLAN.
4. TO PROVIDE AND LOCATE AT THE LIFT LOBBY THE BLOCK KEY PLAN SIGNAGE INDICATING THE LOCATION OF DRY RISER.
5. MINIMUM 2 NOS. OF ILLUMINATED ESTATE BLOCK SIGNAGES TO BE PROVIDED TO EACH BLOCK.
6. 1500 HIGH GLAZED WALL TILE SHALL BE PROVIDED TO SURROUNDING WALL SURFACE OF WASH AREA AT 1ST. STOREY AND TO PARAPET HEIGHT AT WASH AREA AT CENTRALISED REFUSE CHUTE.
7. HANDRAIL MUST BE CONTINUOUS THROUGHOUT, MINIMUM 1 NO. TO STAIRCASE WIDTH >1M & INTERMEDIATE HANDRAIL NEED FOR EXIT STAIRCASE WIDTH >2M
8. EXIT SIGN AND LIGHT TO BE PROVIDED TO ALL SERVICES ROOMS & ALONG THE PATH LEADING TO ALL PROTECTED STAIRCASES/ESCAPE ROUTE
9. EMERGENCY LIGHTING TO BE PROVIDED AT TELECOM EQUIPMENT ROOM, PUMP ROOM, BULKY REFUSE ROOM, CENTRALISED REFUSE CHUTE, LIFT MACHINE ROOM, STORE & OTHER SERVICES ROOMS
10. NO ELECTRICAL TRUNKING/GAS PIPE IS ALLOWED WITHIN ANY SERVICES ROOMS OR PROTECTED STAIRCASES.
11. ALL OPENINGS FOR PIPES, DUCTS, CONDUITS OR CABLE SHALL BE EFFECTIVELY FIRE STOPPED.
12. ALL DOORS OF SERVICES DUCTS WHICH ARE HALF-HR FIRE RATED SHALL BE BEARING PSB'S LABEL AND ALL DOORS OF SERVICES ROOMS WHICH ARE FIRE RATED SHALL BEAR PSB'S LABEL & FITTED WITH SELF CLOSING DEVICE
13. WHERE APPLICABLE R.C. FLOOR SHALL BE CASTED WITH RECESS TO RECEIVE FLOOR FINISHES TO MATCH THE SURROUNDING FLOOR FINISH.
14. R.C. CURTAIN OR SUSPENDED TO PROVIDED TO ALL 90 /150 THK. BRICKWALL SPANNING MORE THAN 3500 HORIZONTALLY & VERTICALLY.
15. NO OPENING OR VOID IN ANY RAILING/PARAPET MAY PERMIT THE PASSAGE OF 100Ø SPHERE.
16. ALL BATH/W.C. & KITCHEN TO BE PROVIDED FULL HEIGHT COLOR GLAZED CERAMIC WALL TILES AND CERAMIC FLOOR TILES FINISH TO SPECIFICATIONS
17. ALL WALLS OF SERVICE ROOMS SHALL BE 90/150 THK BRICKWALL WITH CEMT PLASTERING UNLESS OTHERWISE STATED.
18. ALL "DAW" DUCT WITH FIRE RATED DOOR TO PROVIDE FIXED LOUVRED VENT (300H x 900W) ABOVE DOOR AT 1ST STOREY & (615W X 400H) AT ROOF LEVEL
19. CONTRACTOR TO SUBMIT WORKSHOP DRAWINGS WITH PROFESSIONAL ENGINEER'S CERTIFICATION TO THE DESIGN STRUCTURAL ENGINEER FOR ALL CLADDING AND NON-STANDARD FIXED PANEL BELOW 1000mm CCL LEVEL ALL DRY RISERS SHALL BE 150Ø NOM 4-WAYS BREECHING INLET AT 1ST STOREY AND LANDING VALVES AT TYPICAL STOREY
20. ALL WALLS OF SERVICE DUCTS SHALL BE 90 THK SOLID BLOCK WALL WITH CEMT PLASTERING UNLESS OTHERWISE STATED. FOR DUCTS EXPOSED TO WEATHER WALL SHALL BE 60 THICK BRICKWALL WITH CEMT PLASTERING.
22. STRUCTURED/TEXTURED NON-SLIP HEAVY DUTY HOMOGENEOUS FLOOR TILE FINISH TO PLAY AREA/VOID DECK TO EDGE OF DRAIN, WASH AREA, CENTRALISED REFUSE CHAMBER, BULKY REFUSE AREA, WASH AREA AT REFUSE CHUTE, STAIRCASE BETWEEN 1ST. & 2ND STOREY INCLUDING HALF-LANDING AND EVERY ACCESS BALCONY AT TYPICAL STOREYS (LIFT LOBBY AREA ONLY) WITH MATCHING GLAZED SKIRTING TILE TO ALL COLUMNS, WALLS & PARAPETS. CEMT SCRIED FINISH TO BE PROVIDED TO ACCESS BALCONY AT TYPICAL STOREY OTHER THAN THE LIFT LOBBY AREA. FOR DESIGN & PATTERN OF FLOOR FINISH AT LIFT LOBBY, ETC TO REFER TO DETAIL DWGS. THE CONTRACTOR SHALL SUBMIT WORKSHOP DRAWINGS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
23. ALL RWDP, DPS, DP SHALL DISCHARGE TO THE NEAREST HOUSE DRAIN
24. CONTRACTOR IS TO PROVIDE EXPANSION JOINTS AT INTERVALS OF 3m FORMED BY PVC STRIPS FOR THE CASTING OF CEMENT SCREED AT LOCATION TO S.O REP APPROVAL.
25. ☒ FIRE EXTINGUISHER TO BE PROVIDED IN ACCORDANCE WITH SS232, CP55 & OTHER CURRENT CODES & REGULATIONS.
26. GAS PIPE AND DRY RISER PIPE ROUTING ACROSS FIRE ESCAPE AT 1ST STOREY & STEEL LIFT SHALL HAVE 2 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS.
27. GAS PIPE WITHIN FLAT AND IMMEDIATELY OUTSIDE FLAT ENTRANCE & ESCAPE ROUTE AT TYPICAL STOREYS SHALL HAS 1 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS (FOR GAS PIPE POSITION REFER TO M.E DWGS).
28. STEEL LIFT TO C&S DETAIL AND SHALL BE 2 HOUR RATED IN ACCORDANCE WITH FSSD REQUIREMENTS.
29. THIS DRAWING SHALL NOT BE USED OTHER THAN FOR ITS INTENDED PURPOSE AS STATED HEREON.
30. AND OTHER NOTES AS SHOWN ON RELEVANT DRAWINGS.

FLAT NAMING LEGEND

FLAT TYPE :
3A – 3 ROOM MODEL A
4A – 4 ROOM MODEL A
5 – 5 ROOM IMPROVED

CONFIGURATION :
PB(E) – POINT BLOCK END
G – GROUND

REFERENCE NUMBER :
2 – TYPE 2
2(H) – TYPE 2 (HANDED)

FLAT NAMING KEY
4A-E(H)-2(H)
4A-E(H)-2(H) ..... REFERENCE NUMBER
..... CONFIGURATION
..... FLAT TYPE

	(UNLESS OTHERWISE SPECIFIED)
DR	150 ø GALV. STEEL GRATED 'C' DRY RISER PIPE
DPS	100H UPVC DOWN PIPE WITH DOWNSPOUT OUTLET
DP	100H UPVC DOWN PIPE
WDPS	100H UPVC WASTE SLACK WEH DOWNSPOUT OUTLET (AT REFUSE CHUTE)
P	300H UPVC RAINWATER DOWN PIPE
W	WATER DUCT
GAS	GAS & WATER DUCT
E	ELECTRICAL DUCT
T	TELECOM ROOM DUCT

LEGEND
- ☒ 2.3kg CO2 PORTABLE FIRE EXTINGUISHER AT CONSUMER SWITCH ROOM
- ☒ 2.5kg ABC CHEMICAL DRY POWDER PORTABLE FIRE EXTINGUISHER AT ALL OTHER SERVICES ROOMS
- EXIT ILLUMINATED EXIT SIGN

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHI	QP

REFERENCE :

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHI	QP
A DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED	JUNE 2008	KHAIRUL	TAY S.T.	KIN YEW	YUEN YI MAY
B LOCATION OF SERVICES ROOM & LOW WALL/FOOTNOTES UPDATED	JULY 2008	KHAIRUL	TAY S.T.	KIN YEW	YUEN YI MAY

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10 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 6A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : 4)B89-00002-2008-C002

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-[illegible]-AR-111 | REVISION: B
PRECINCT NAME: –

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M | MUKIM NO.: 28

JOB TITLE
TAMPINES NEIGHBOURHOOD 2 CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
1ST STOREY FLOOR PLAN (PART 1 OF 2)

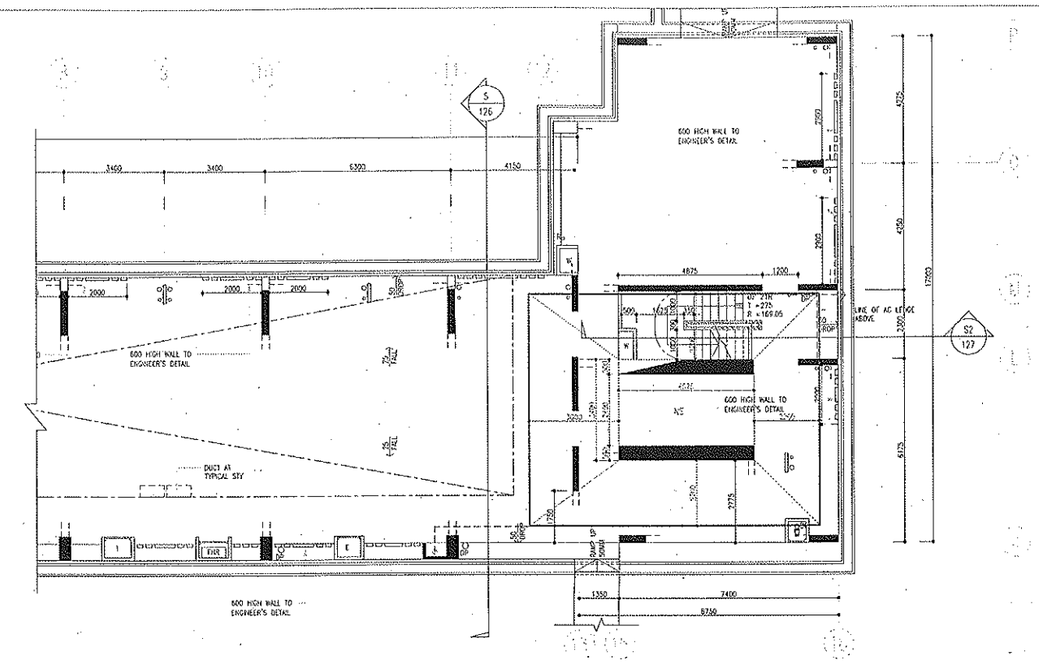
SCALE: 1:100 | DATE: JUNE 2008
DRAWN BY: MUHAMMAD KHAIRUL | CHECKED BY: TAY S.T.

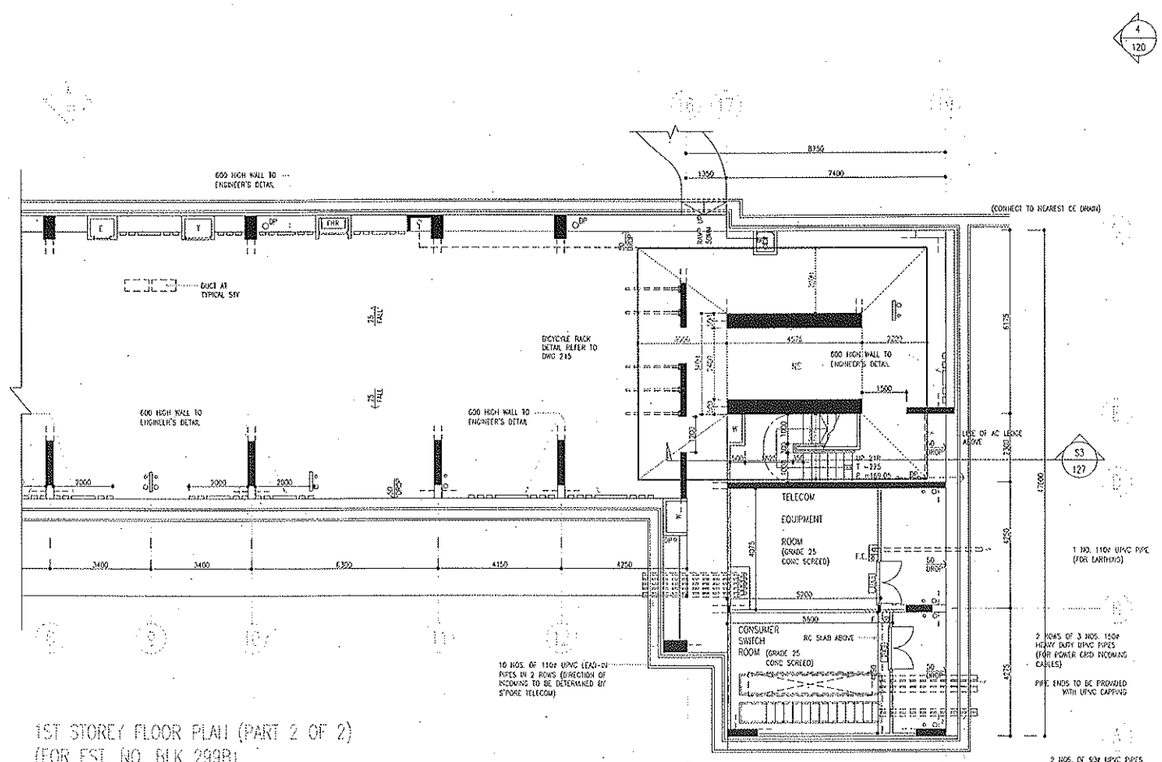
Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62736090
www.surbana.com
Company Regn No: 200304951Z

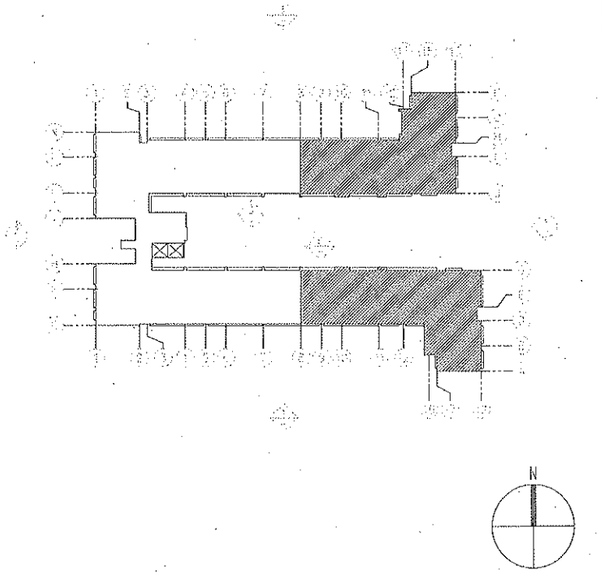
DRAWING NO. SB-DP-HABE-00729-AR-111 | REVISION: B

WONG KIN YEW, DESIGN ARCHITECT | YUEN YI MAY, SENIOR ARCHITECT

THE OWNERSHIP OF THE COPYRIGHT IN THIS DRAWING IS RETAINED BY SURBANA INTERNATIONAL CONSULTANTS PTE LTD WHOSE CONSENT MUST BE SOUGHT BEFORE ANY USE OR REPRODUCTION OF THE DRAWING OR ANY PART THEREOF CAN BE MADE.







1ST STOREY FLOOR PLAN (PART 2 OF 2)
(FOR EST. NO. BLK 299B)

N

NOTES: (FOR ALL BLKS)

1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.
2. WHILE EVERY CARE HAS BEEN EXERCISED IN HIGHLIGHTING THE AMENDMENTS VIA 'CLOUDING', SURBANA INTERNATIONAL CONSULTANTS PTE LTD DOES NOT WARRANT THE ACCURACY AND COMPLETENESS OF SUCH HIGHLIGHTING. THE CONTRACTOR SHALL BE DEEMED TO HAVE VERIFIED AND SATISFIED HIMSELF AS TO THE ACTUAL AMENDMENTS TO THE DRAWINGS.
3. FOR PROVISION AND DIRECTION OF FLOW, DISCHARGE AND OUTLET OF APRON DRAIN REFER TO 1: 200 SCALE LAYOUT PLAN.
4. TO PROVIDE AND LOCATE AT THE LIFT LOBBY THE BLOCK KEY PLAN SIGNAGE INDICATING THE LOCATION OF DRY RISER.
5. MINIMUM 2 NOS. OF ILLUMINATED ESTATE BLOCK SIGNAGES TO BE PROVIDED TO EACH BLOCK.
6. 1600 HIGH GLAZED WALL TILE SHALL BE PROVIDED TO SURROUNDING WALL SURFACE OF WASH AREA AT 1ST. STOREY AND TO PARAPET HEIGHT AT WASH AREA AT CENTRALISED REFUSE CHUTE.
7. HANDRAIL MUST BE CONTINUOUS THROUGHOUT, MINIMUM 1 NO. TO STAIRCASE WITH 55th & INTERMEDIATE HANDRAIL REQD FOR EXIT STAIRCASE WIDTH >2M
8. EXIT SIGN AND LIGHT TO BE PROVIDED TO ALL SERVICES ROOMS & ALONG THE PATH LEADING TO ALL PROTECTED STAIRCASES/ESCAPE ROUTE
9. EMERGENCY LIGHTING TO BE PROVIDED AT TELECOM EQUIPMENT ROOM, PUMP ROOM, BULKY REFUSE ROOM, CENTRALISED REFUSE CHUTE, LIFT MACHINE ROOM, STORE & OTHER SERVICES ROOMS
10. NO ELECTRICAL TRUNKING/GAS PIPE IS ALLOWED WITHIN ANY SERVICES ROOMS OR PROTECTED STAIRCASES.
11. ALL OPENINGS FOR PIPES, DUCTS, CONDUITS OR CABLE SHALL BE EFFECTIVELY FIRE STOPPED.
12. ALL DOORS OF SERVICES DUCTS WHICH ARE HALF-HR FIRE RATED SHALL BE BEARING PSB'S LABEL AND ALL DOORS OF SERVICES ROOMS WHICH ARE FIRE RATED SHALL BEAR PSB'S LABEL & FITTED WITH SELF CLOSING DEVICE
13. WHERE APPLICABLE R.C. FLOOR SHALL BE CASTED WITH RECESS TO RECEIVE FLOOR FINISHES TO MATCH THE SURROUNDING FLOOR FINISH.
14. R.C. LINTOL OR STIFFENER TO PROVIDED TO ALL 90 /190 THK. BRICKWALL SPANNING MORE THAN 2500 HORIZONTALLY & VERTICALLY.
15. NO OPENING OR VOID IN ANY RAILING/PARAPET MAY PERMIT THE PASSAGE OF 100Ø SPHERE.
16. ALL BATHS/WC. & KITCHEN TO BE PROVIDED FULL HEIGHT COLOR GLAZED CERAMIC WALL TILES AND CERAMIC FLOOR TILES FINISH TO SPECIFICATIONS
17. ALL WALLS OF SERVICE ROOMS SHALL BE 90/190 THK BRICKWALL WITH CEMI PLASTERING UNLESS OTHERWISE STATED.
18. ALL 'CAN' DUCT WITH FIRE RATED DOOR TO PROVIDE FIXED LOUVRED VENT (500W x 600H) ABOVE DOOR AT 1ST STOREY & (610W X 400H) AT ROOF LEVEL
19. CONTRACTOR TO SUBMIT WORKSHOP DRAWINGS WITH PROFESSIONAL ENGINEER'S CERTIFICATION TO THE DESIGN STRUCTURAL ENGINEER FOR ALL CLADDING AND NON-STANDARD FIXED PANEL BELOW 1000mm CILL LEVEL.
20. ALL DRY RISERS SHALL BE 150ø WITH 4-WAYS BREECHING INLET AT 1ST STOREY AND LANDING VALVES AT TYPICAL STOREY
21. ALL WALLS OF SERVICE DUCTS SHALL BE 90 THK SOLID BLOCK WALL WITH CEMI PLASTERING UNLESS OTHERWISE STATED. FOR DUCTS EXPOSED TO WEATHER WALL SHALL BE 90 THICK BRICKWALL WITH CEMI PLASTERING.
22. STRUCTURED/TEXTURED NON-SLIP HEAVY DUTY HOMOGENOUS FLOOR TILE FINISH TO PLAY AREA/WOOD DECK TO EDGE OF DRAIN, WASH AREA, CENTRALISED REFUSE CHAMBER, BULKY REFUSE AREA, WASH AREA AT REFUSE CHUTE, STAIRCASE BETWEEN 1ST. & 2ND STOREY INCLUDING HALF-LANDING AND EVERY ACCESS BALCONY AT TYPICAL STOREYS (LIFT LOBBY AREA ONLY) WITH MATCHING GLAZED SKIRTING TILE TO ALL COLUMNS, WALLS & PARAPETS. CEMI SCREED FINISH TO BE PROVIDED TO ACCESS BALCONY AT TYPICAL STOREY OTHER THAN THE LIFT LOBBY AREA. FOR DESIGN & PATTERN OF FLOOR FINISH AT LIFT LOBBY, ETC TO REFER TO DETAIL DWGS. THE CONTRACTOR SHALL SUBMIT WORKSHOP DRAWINGS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
23. ALL RWDP, DPS, DP SHALL DISCHARGE TO THE NEAREST HOUSE DRAIN
24. CONTRACTOR IS TO PROVIDE STAINLESS STEEL STRIP AT EVERY 6M (MAX) INTERVAL FOR THE CASTING OF CEMI'W SCREED.
25. FIRE EXTINGUISHER TO BE PROVIDED IN ACCORDANCE WITH SS232. CMDS & OTHER CURRENT CODES & REGULATIONS.
26. GAS PIPE AND DRY RISER PIPE ROUTING ACROSS FIRE ESCAPE AT 1ST STOREY & STEEL LIFT SHALL HAVE 2 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS.
27. GAS PIPE WITHIN FLAT AND IMMEDIATELY OUTSIDE FLAT ENTRANCE & ESCAPE ROUTE AT TYPICAL STOREYS SHALL HAS 1 HOUR FIRE RATED BOX-UP IN ACCORDANCE WITH FSSD'S REQUIREMENTS (FOR GAS PIPE POSITION REFER TO ME DWGS).
28. STEEL LIFT TO GAS RISER AND SHALL BE 2 HOUR RATED IN ACCORDANCE WITH FSSD REQUIREMENTS.
29. THIS DRAWING SHALL NOT BE USED OTHER THAN FOR ITS INTENDED PURPOSE AS STATED HEREIN.
30. AND OTHER NOTES AS SHOWN ON RELEVANT DRAWINGS.

FLAT NAMING LEGEND

FLAT TYPE :
- 3A – 3 ROOM MODEL A
- 4A – 4 ROOM MODEL A
- 5A – 5 ROOM APPROVED

CONFIGURATION :
- PB(E) – POINT BLOCK END
- G – GROUND

REFERENCE NUMBER :
- 2 – TYPE 2
- 2(H) – TYPE 2 (HANDED)

FLAT NAMING KEY
4A–PB(E)–2(H)
... REFERENCE NUMBER CONFIGURATION
FLAT TYPE

(UNLESS OTHERWISE SPECIFIED)

SR	150 x GRV. STEEL CLASS 'C' DRY RISER PIPE
DPS	100ø UPVC DOWN PIPE WITH DOWNSPOUT OUTLET
DP	100ø UPVC DOWN PIPE
WDPS	100ø UPVC WASTE STACK WITH DOWNSPOUT OUTLET (AT REFUSE CHUTE)
R	200ø UPVC RAINWATER DOWN PIPE
W	WATER DUCT
G&W	GAS & WATER DUCT
E	ELECTRICAL DUCT
T	TELECOM RISER DUCT

LEGEND
- 2.3kg CO2 PORTABLE FIRE EXTINGUISHER AT EACH ELEC. SWITCH ROOM
- 2.5kg ABC CHEMICAL DRY POWDER PORTABLE FIRE EXTINGUISHER AT ALL OTHER SERVICES ROOMS
- EXIT ILLUMINATED EXIT SIGN

AMENDMENT	DATE	DRAWN BY	DESIGN BY	DESIGN ARCHT	OP

REFERENCE :

OP	AMENDMENT	DATE	DRAWN BY	DESIGN BY	DESIGN ARCHT	OP
A	DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED	JUNE 2008	KHALIL	TAY S.T.	KEN YEW	YUEN YI MAY
B	LOCATION OF SERVICES ROOM & LOW WALL/FOOTNOTES UPDATED	JULY 2008	KAY KHINE/ KHALIL	TAY S.T.	KEN YEW	YUEN YI MAY

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BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1889-00002-2008-C1022

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-00816-AR-112 | REVISION: B

PRECINCT NAME: .. | BH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 69B3M | MUKIM NO.: 26

JOB TITLE
TAMPINES NEIGHBOURHOOD 2 CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
1ST STOREY FLOOR PLAN (PART 2 OF 2)

SCALE: 1:100 | DATE: JUNE 2008

DRAWN BY: MUHAMMAD KHALIL | CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-00729-AR-112 | REVISION: B

WONG KIN YEW, DESIGN ARCHITECT | YUEN YI MAY, SENIOR ARCHITECT

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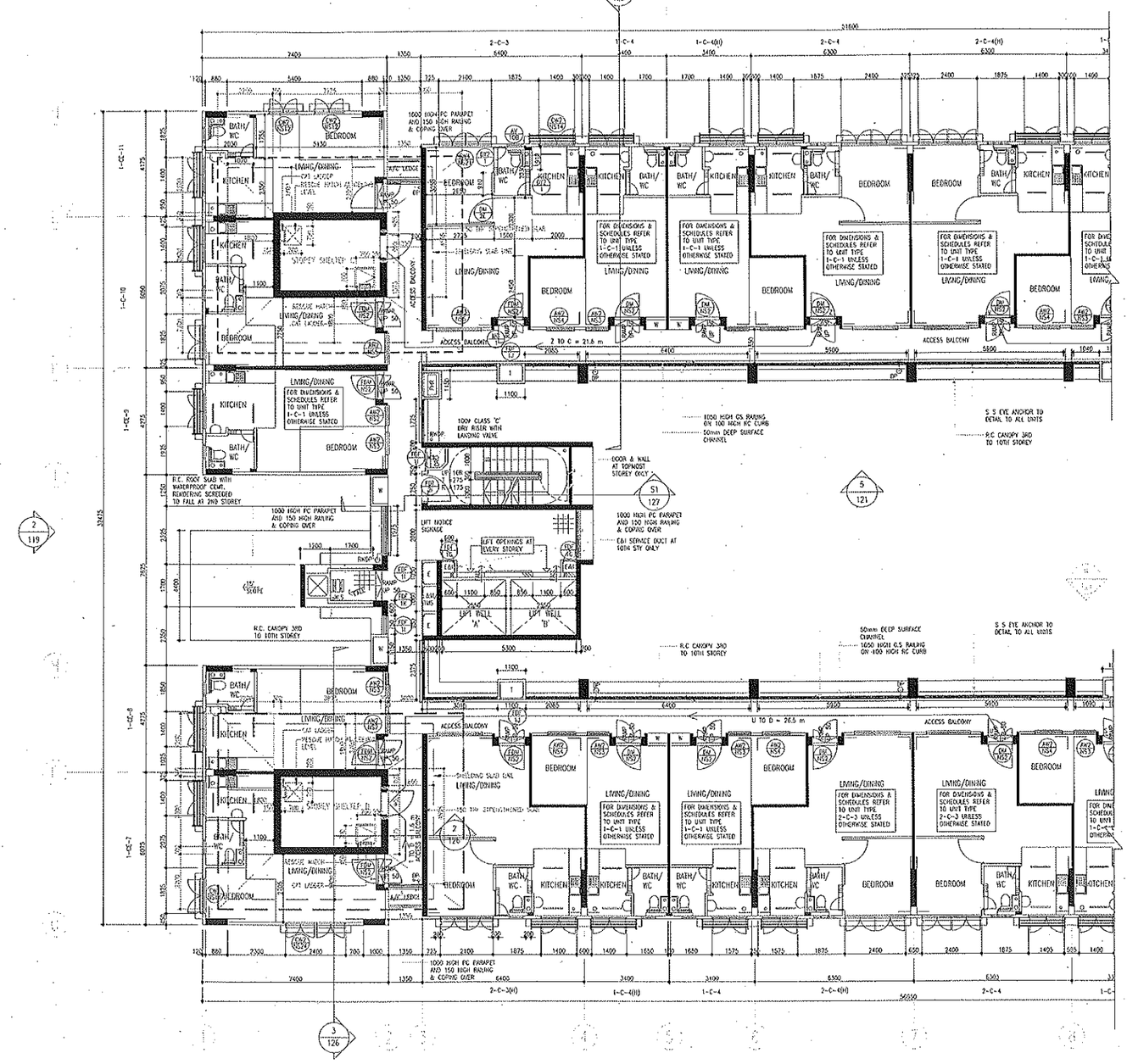
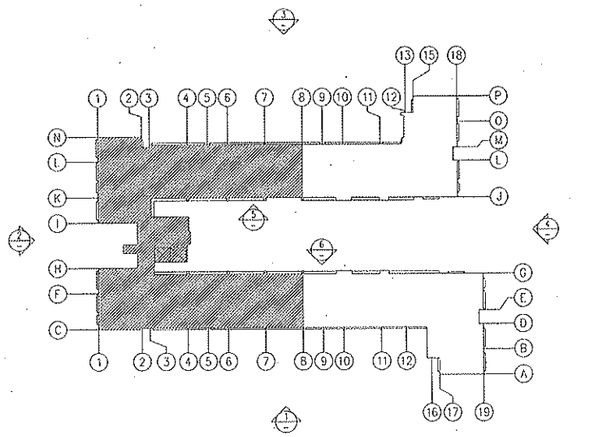


TYPICAL FLOOR PLAN OF 2ND TO 10TH STOREY (PART 1 OF 2)
(FOR EST BLK NO. 299B)



N

NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	DES'D BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	DES'D BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	DES'D BY	DESIGN ARCHT	QP

REFERENCE :

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12 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1BB9-02002-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architecture)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-DOB16-AR-113	REVISION: –
PRECINCT NAME: –	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
TYPICAL FLOOR PLANS OF
2ND TO 10TH STOREY
(PART 1 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: KAY KHINE LINN	CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62461288 Fax: +65 62739980
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-D0729-AR-113	REVISION: –
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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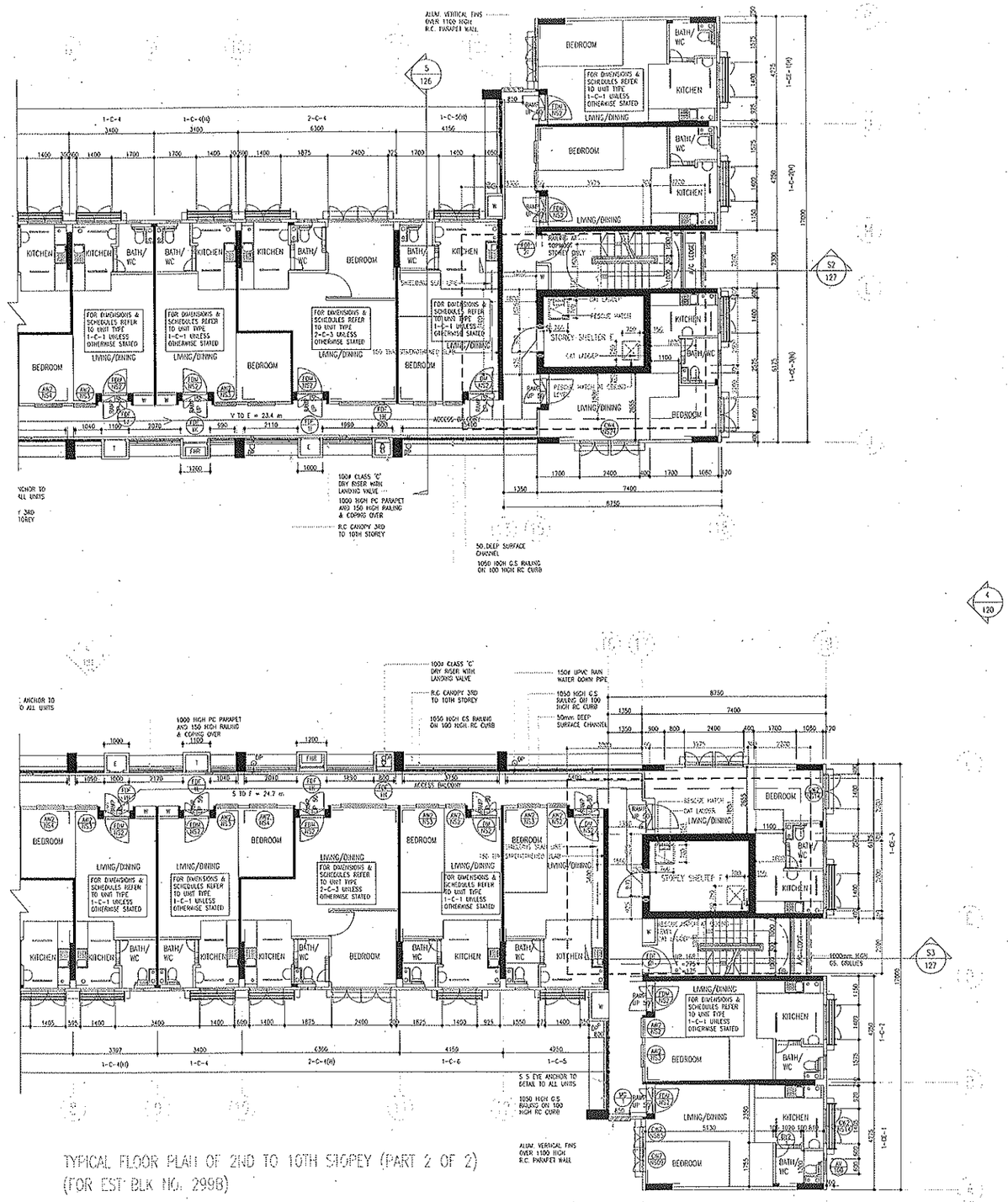
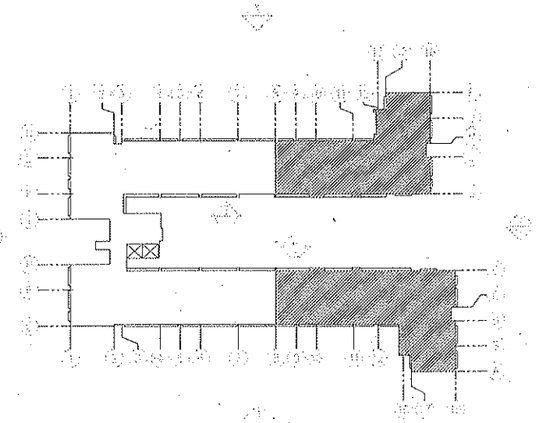
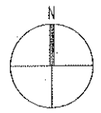


TYPICAL FLOOR PLAN OF 2ND TO 10TH STOREY (PART 2 OF 2)
(FOR EST BLK NO. 299B)





NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	QP
A DOOR & WINDOW SCHEDULE UPDATED SERVICES DUCT DOOR SCHEDULE AND DIMENSION UPDATED	JUNE 2008	KHAUL	TAY S.T.	KIN YEW	YUEN YI MAY
B EYE ANCHOR LOCATION/WINDOW SCHEDULE UPDATED DRY RISER LOCATION UPDATED	JULY 2008	KHAUL	TAY S.T.	KIN YEW	YUEN YI MAY

REFERENCE :

DwgFileName: D0729_A-114-S01_BD02TM-B.dwg

13 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1889-00002-2008-CDG2

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd
Qualified Person's Signature and stamp

12/12/2008
Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-D0816-AR-114 | REVISION: B
PRECINCT NAME: – | RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M | MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
TYPICAL FLOOR PLANS OF 2ND TO 10TH STOREY (PART 2 OF 2)

SCALE: 1:100 | DATE: JUNE 2008
DRAWN BY: MUHAMMAD KHAUL | CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
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Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-D0729-AR-114 | REVISION: B

WONG KIN YEW
DESIGN ARCHITECT

YUEN YI MAY
SENIOR ARCHITECT

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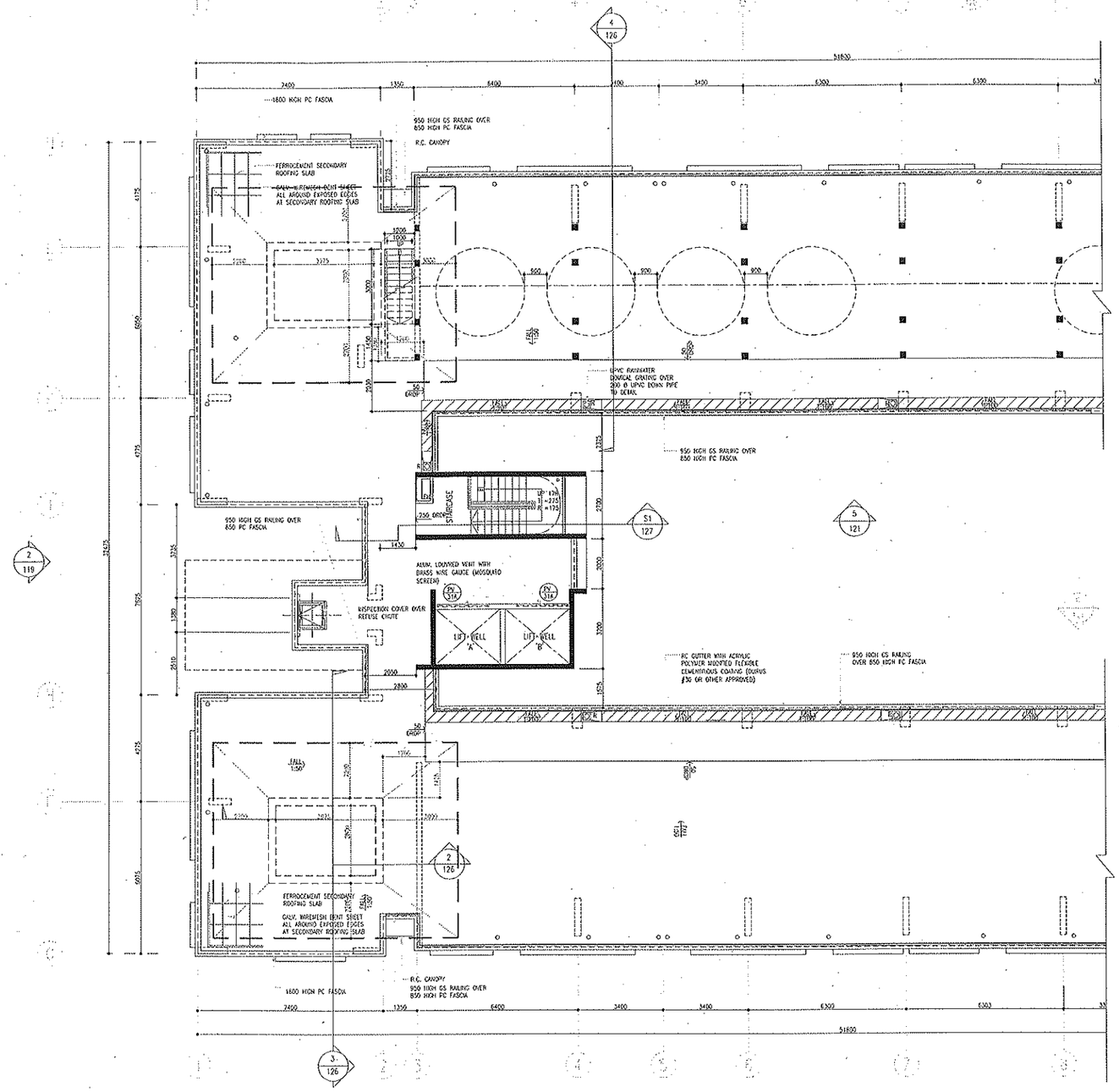
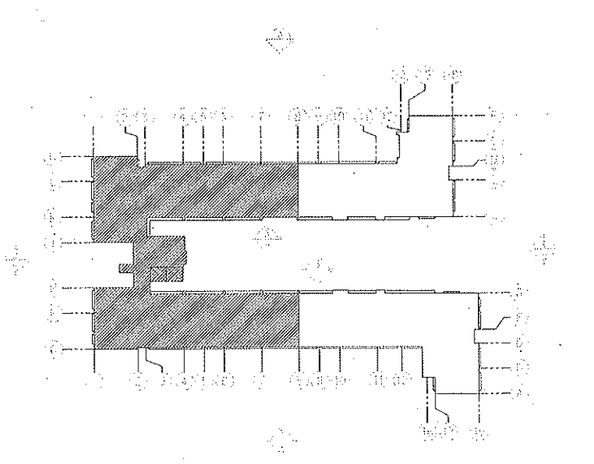


MAIN ROOF PLAN (PART 1 OF 2)
(FOR EST BLK NO. 299B)



14 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A
OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : 6J889-09002-2008-C902

Approval granted herein is with respect to civil defence shelter works only.

.....
for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480
OWNER SIGNATURE:

DRAWING NO. HB-[illegible]-AR-115 | REVISION: B
PRECINCT NAME: -

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M | MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
MAIN ROOF PLAN
(PART 1 OF 2)

SCALE: 1:100 | DATE: JUNE 2008
DRAWN BY: MUHAMMAD KHALIL | CHECKED BY: TAY S.T.

NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. OR NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	DESIGN BY	DESIGN ARCHI	QP
A	ANNOTATION AND SCHEDULE UPDATED	JUNE 2008	KHALIL	TAY S.T.	KIN YEW	YUEN YI MAY
B	GUTTER LOCATION UPDATED	JULY 2008	KHALIL	TAY S.T.	KIN YEW	YUEN YI MAY

REFERENCE :

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SR-DP-HATM-00729-AR-115 | REVISION: B

WONG KIN YEW
DESIGN ARCHITECT

YUEN YI MAY
SENIOR ARCHITECT

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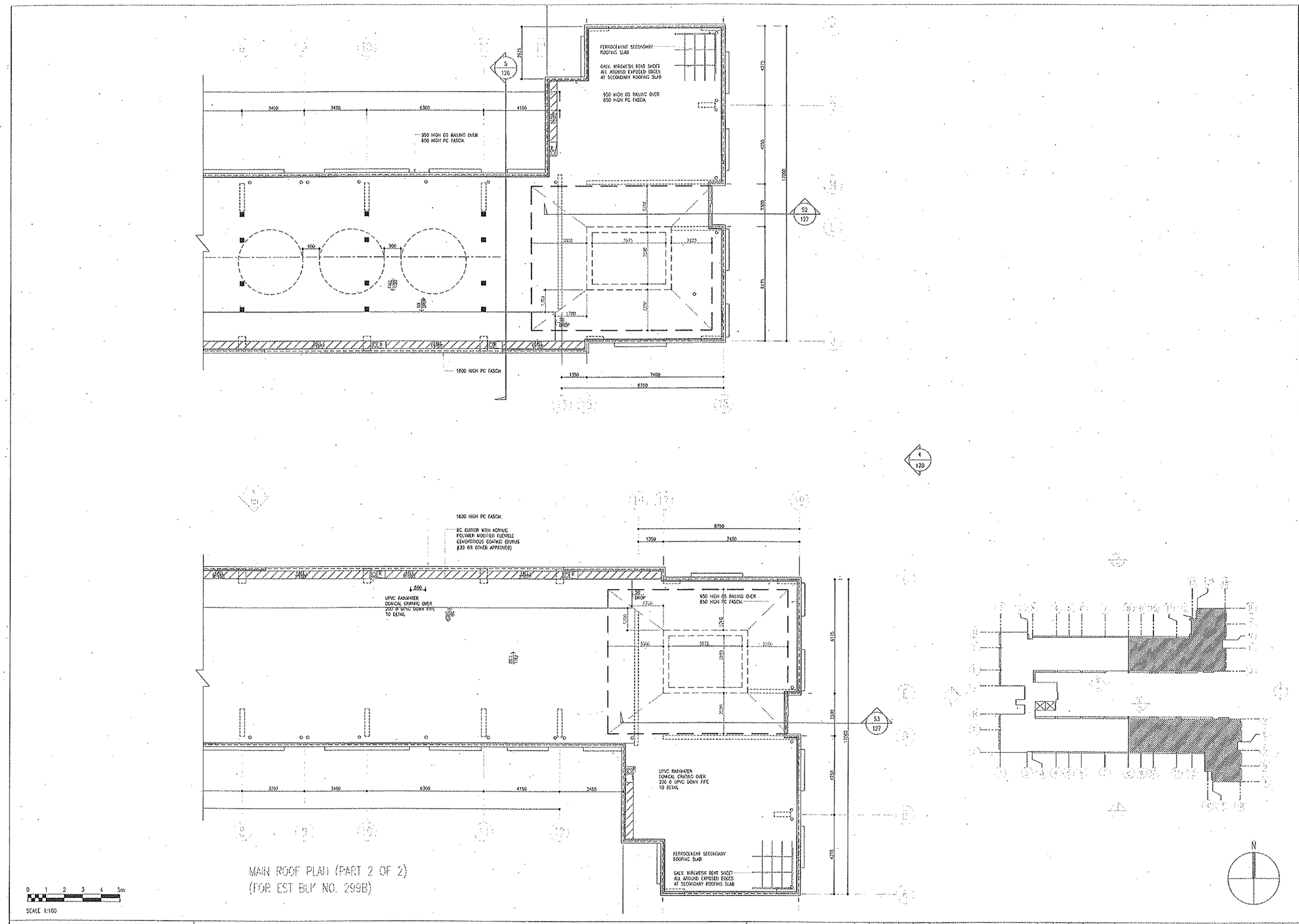
DwgFileName: 00729_A-115-S01_BDMRTM-B.dwg

DwgPath: S:\00729_TMP_N2C22\ARCH\04_Submission\BCA\HS\03_Resub\Dwg\



NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	OP	AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	OP

	AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHT	OP
A	ANNOTATION AND SCHEDULE UPDATED	JUNE 2008	KHAUL	TAY S.T.	KIN YEW	YUEN YI MAY
B	GUTTER LOCATION UPDATED	JULY 2008	KHAUL	TAY S.T.	KIN YEW	YUEN YI MAY

REFERENCE :

DwgFileName: D0729_A-116-S01_BDMRTM-B.dwg

15 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1889-00002-2006-CD02

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that : –
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd
Qualified Person's Signature and stamp — Date: 12/12/2008

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-D0816-AR-116	REVISION: B
PRECINCT NAME: –	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES NEIGHBOURHOOD 2 CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
MAIN ROOF PLAN (PART 2 OF 2)

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: MUHAMMAD KHAUL	CHECKED BY: TAY S.T.

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www.surbana.com
Company Regn. No: 200304951Z

DRAWING NO. SB-DP-HATM-D0729-AR-116	REVISION: B
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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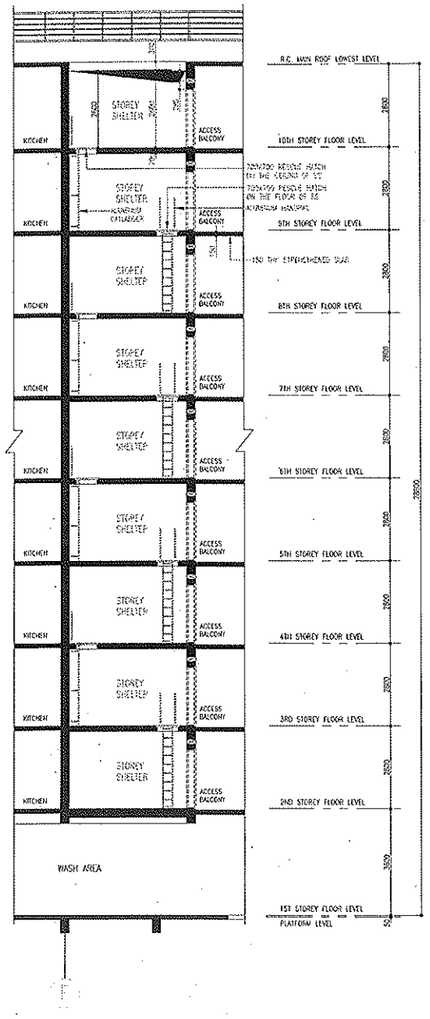
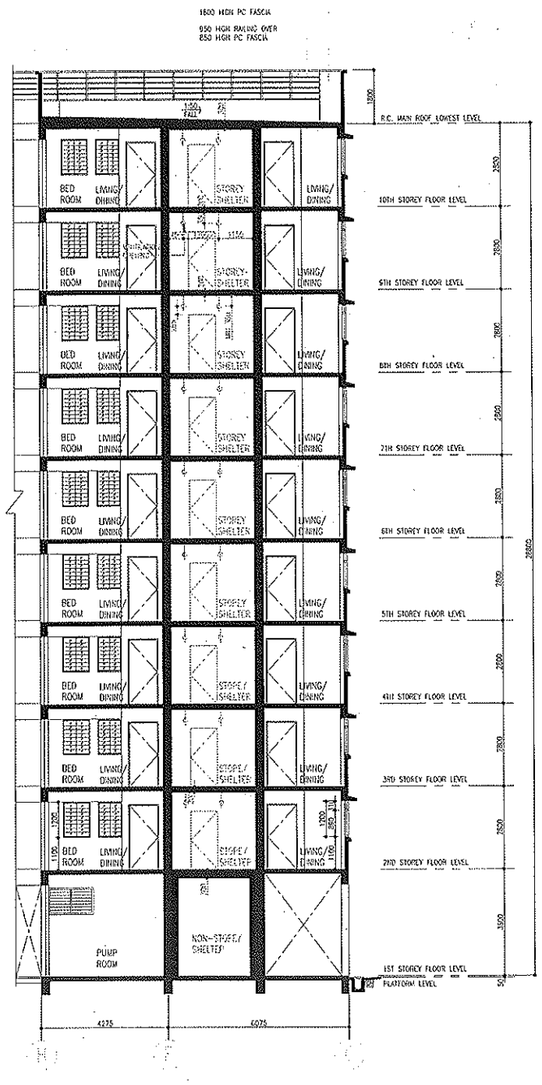
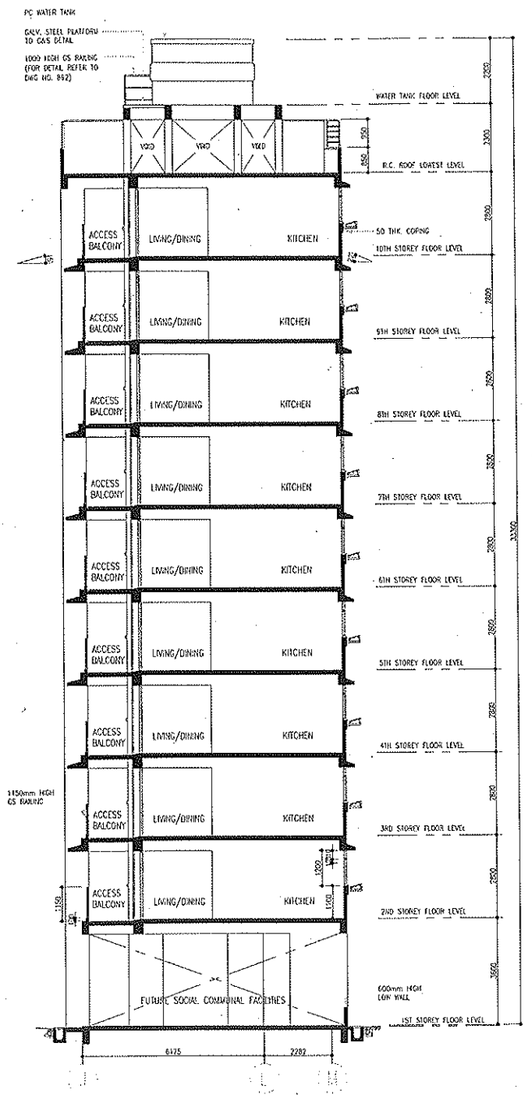
DwgPath: SB\D0729_TMP_N2C22\AR\04_Submission\BCA\HS\03_Resub\Dwg\



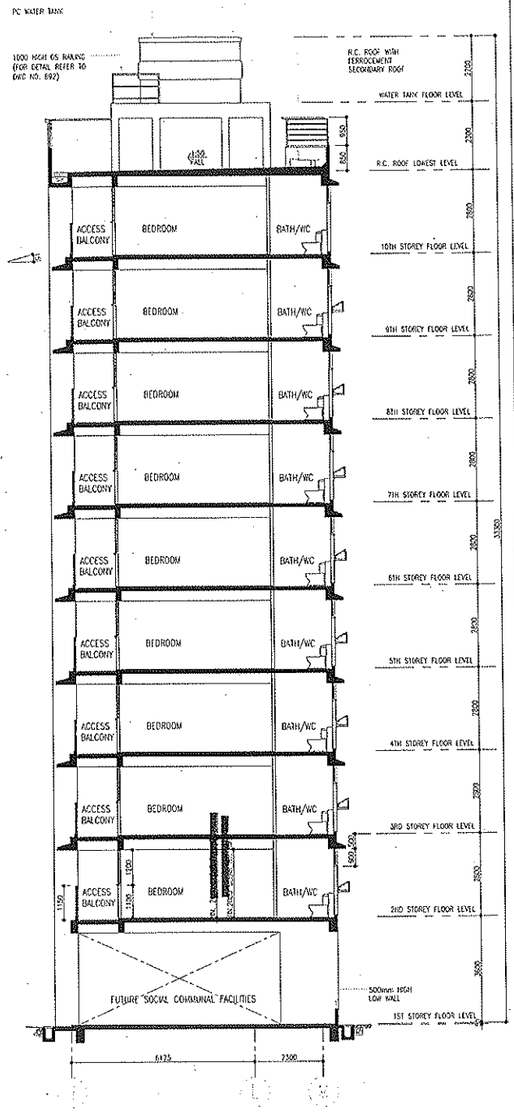
SECTION 2-2
FOR EST. BLK. 299B



SECTION 3-3
FOR EST. BLK. 299B



SECTION 4-4
(FOR EST. BLK. 299B)



SECTION 5-5
(FOR EST. BLK. 299B)

NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHIT	QP

AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHIT	QP

	AMENDMENT	DATE	DRAWN BY	CHECKED BY	DESIGN ARCHIT	QP
A	SECTIONS UPDATED TO C&S COMMENTS	JUNE 2008	KHAIRIL	TAY S.T.	KAN YEW	YUEN YI MAY
B	1. CANOPY UPDATED TO C&S COMMENTS 2. RAILING & PARAPET HIGH UPDATED TO TALLY WITH PLAN 3. WINDOWS UPDATED TO TALLY WITH SCHEDULE 4. WATER TANK PLATFORM UPDATED TO TALLY WITH PLAN 5. PUMP ROOM UPDATED TO TALLY WITH PLAN	JULY 2008	KAY AKINE	TAY S.T.	KAN YEW	YUEN YI MAY

REFERENCE :

DwgTitleName: D0729_A-126-S01_BDSCEM-B.dwg

21 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 6A OF THE BUILDING CONTROL ACT (CAP 29)
Project Reference No : A1885-00002-2008-CD02

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May , hereby submit the detailed civil defence shelter plans prepared by me and certify that : -
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd — 12/12/2008
Qualified Person's Signature and stamp — Date

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB--DOB16-AR-126	REVISION: B
PRECINCT NAME: -	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299B)
SECTION 3-3, 4-4 & 5-5

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: ZAW MIN THET	CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-D0729-AR-126	REVISION: B
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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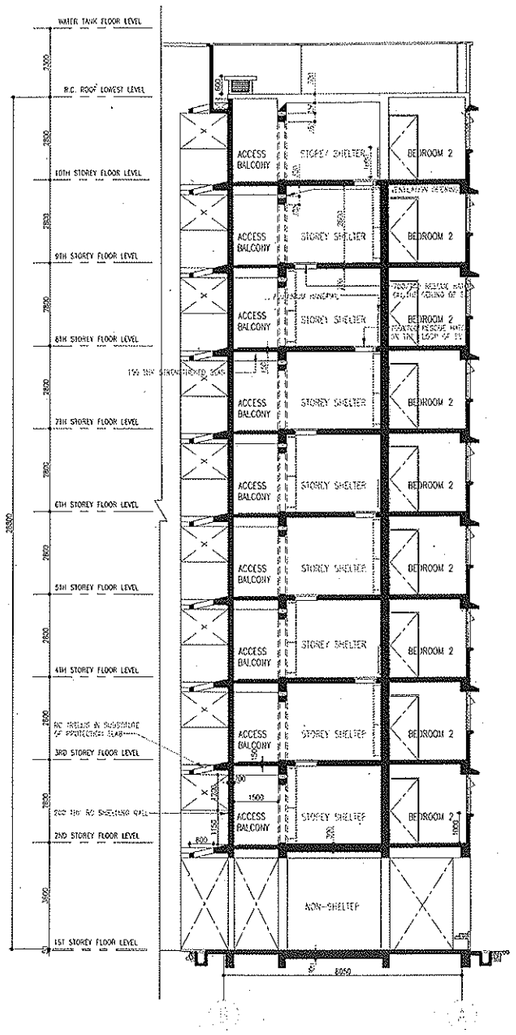
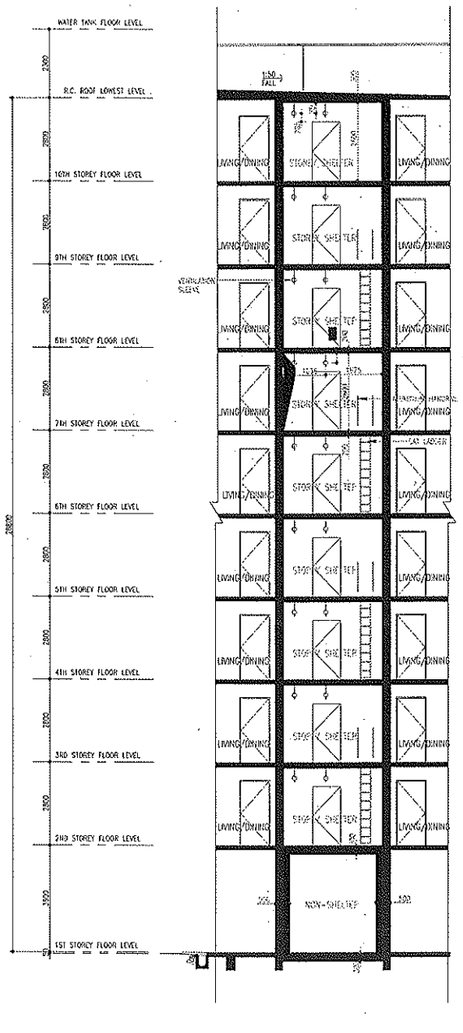
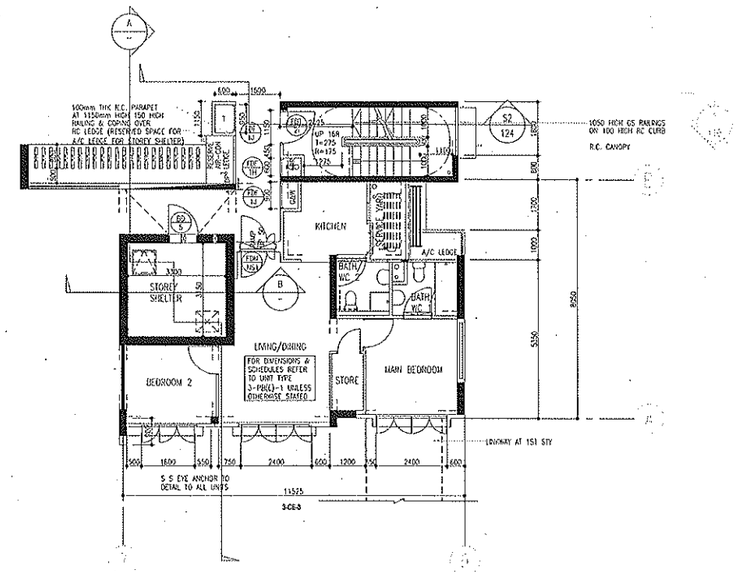


SECTION A-A THRU STOREY-SHELTER
(BLK 299A)



SECTION B-B THRU STOREY-SHELTER
(BLK 299A)



23 Sheet of 23

BUILDING AND CONSTRUCTION AUTHORITY
APPROVED UNDER SECTION 5 / SECTION 5A
OF THE BUILDING CONTROL ACT (CAP 29)

Project Reference No : A1B89-00002-2008-C002

Approval granted herein is with respect to civil defence shelter works only.

for Commissioner of Building Control

BCA CERTIFICATION

1. I, Yuen Yi May, hereby submit the detailed civil defence shelter plans prepared by me and certify that :-
   (a) the preparation of these civil defence shelter plans are in accordance with the Building Control Regulations; and
   (b) the civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements.
2. Total number of civil defence shelters plans submitted : 23 sheets

Yuen Yi May
Assistant Vice President (Architectural)
Surbana International Consultants Pte Ltd
Qualified Person's Signature and stamp — Date: 12/12/2008

BCA CD SHELTER PLANS SUBMISSION

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-00729-AR-128	REVISION: B
PRECINCT NAME: -	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPROMISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING(TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE (EST. BLK. 299A)
SECTION ACROSS STOREY SHELTER

SCALE: 1:100	DATE: JUNE 2008
DRAWN BY: KAY KHINE LWIN	CHECKED BY: TAY S.T.

Surbana
Surbana International Consultants Pte. Ltd.
168 Jalan Bukit Merah #01-01 Surbana One, Singapore 150168
Tel: +65 62481288 Fax: +65 62739090
www.surbana.com
Company Regn No: 200304951Z

DRAWING NO. SB-DP-HATM-00729-AR-128	REVISION: B
WONG KIN YEW DESIGN ARCHITECT	YUEN YI MAY SENIOR ARCHITECT

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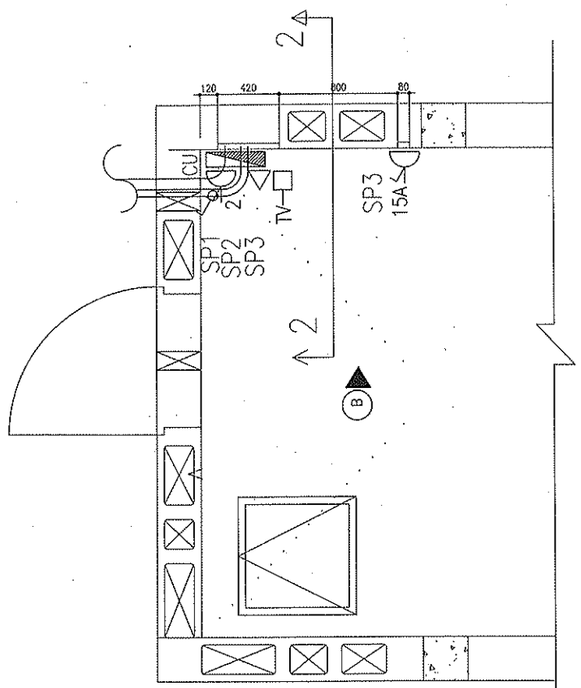
NOTES:
1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE. ANY DISCREPANCIES IN THE FIGURED DIMENSIONS ARE TO BE REPORTED IMMEDIATELY TO THE ARCHITECT OR ENGINEER. ON NO ACCOUNT MUST THIS DRAWING BE SCALED.

AMENDMENT	DATE	DRAWN BY	DESIGNED BY	DESIGN ARCHT	QP
AMENDMENT	DATE	DRAWN BY	DESIGNED BY	DESIGN ARCHT	QP
AMENDMENT	DATE	DRAWN BY	DESIGNED BY	DESIGN ARCHT	QP

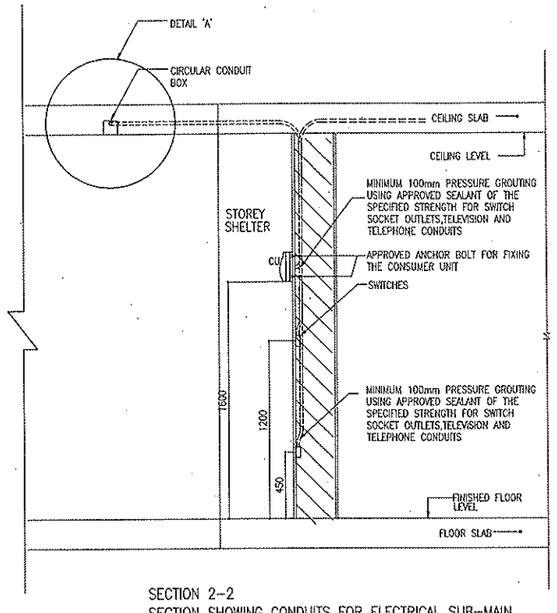
REFERENCE :

DrgFileName: D0729_A-128-S01_BDSCTM-B.dwg

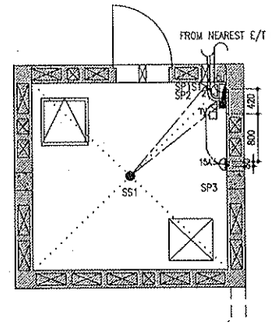
DrgPath: SB\D0729_RNP_N2C22\ARY04_Submission\BCA\HS\03_Result\Dwg\



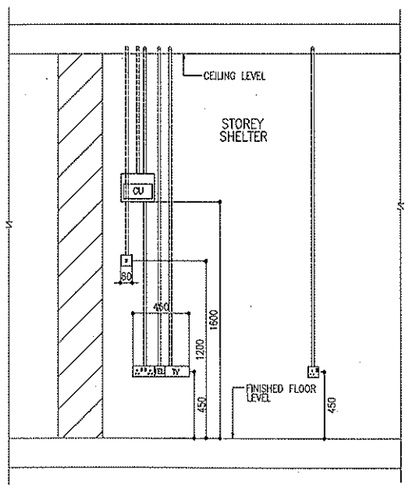
PART FLOOR PLAN OF
STOREY SHELTER
(SCALE : 1:20)



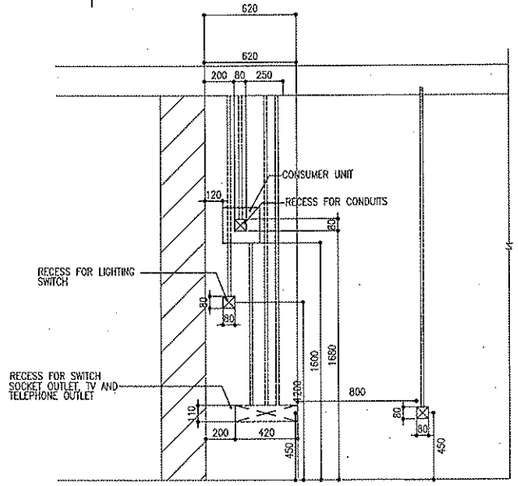
SECTION 2-2
SECTION SHOWING CONDUITS FOR ELECTRICAL SUB-MAIN AND CATV/TELEPHONE ENTERING THE STOREY SHELTER
SCALE 1:20



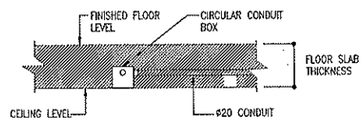
STOREY SHELTER
CONCEALED CONDUITS IN CEILING SLAB
(LIGHTING, SWITCH SOCKET OUTLETS, TV & TEL. OUTLETS)
(SCALE 1:50)



VIEW B
ELEVATION SHOWING CONSUMER UNIT, LIGHTING SWITCH, SWITCH SOCKET OUTLETS, TV AND TELEPHONE OUTLET IN STOREY SHELTER
(SCALE : 1:20)



ELEVATION B
(SCALE : 1:20)



DETAIL 'A'
SECTION SHOWING CONDUIT CONCEALED IN CEILING FROM CONDUIT BOX
(NOT TO SCALE)

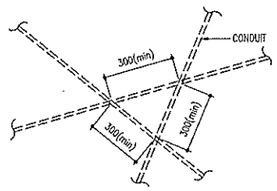


ILLUSTRATION OF CONDUITS CROSSING AT ANY ONE POINT
(NOT TO SCALE)

ELECTRICAL NOTES

1. THE CONTRACTOR IS REQUIRED TO SUBMIT DETAILED CONSTRUCTION DRAWINGS SHOWING THE ROUTING & DEPTH OF ALL THE CONCEALED CONDUIT OF THE ACTUAL DWELLING UNIT FOR APPROVAL BEFORE THE COMMENCEMENT OF THE WORK.
2. THE DETAILED CONSTRUCTION DRAWINGS TO BE SUBMITTED BY THE CONTRACTOR SHALL INCLUDE THE FLOOR PLAN, ELEVATION & SECTION AS SHOWN IN THIS STANDARD DETAILS OF CONCEALED CONDUIT FOR ELECTRICAL WIRINGS.
3. THE LAYOUT OF INSTALLATION SHOWN IS ONLY INDICATIVE. ACTUAL LOCATIONS ARE SUBJECTED TO SITE CONDITIONS AND EXACT POSITIONS SHALL BE DETERMINED AT SITE.
4. CONSUMER UNIT SHALL BE MOUNTED AT ABOUT 1600mm ABOVE FINISHED FLOOR LEVEL (FFL, WHICH IS 50mm ABOVE ROUGH FLOOR FINISH)
5. SWITCH SOCKET OUTLETS, TELEVISION OUTLETS AND TELEPHONE OUTLETS SHALL BE MOUNTED AT 450mm ABOVE FFL.
6. ALL LIGHTING SWITCHES SHALL BE MOUNTED AT 1200mm ABOVE FFL
7. UNLESS OTHERWISE STATED IN THE DRAWING, ALL ELECTRICAL ACCESSORIES eg. SWITCHES, SWITCH SOCKET OUTLETS, ISOLATOR, BELL POINT, TELEVISION OUTLET AND HEATER POINT MUST BE 100mm AWAY FROM ALL THE ENTRIES/DOORS/EDGE OF WALL.
8. ALL ELECTRICAL WIRINGS TO BE RUN IN CONCEALED CONDUITS OF MINIMUM ø20mm.
9. WHERE CONCEALED CONDUIT CROSSES EACH OTHER, THEY SHOULD NOT RESULT IN MORE THAN 2 LAYERS OF CONDUITS WITHIN A DISTANCE OF 300mm. NO CROSSING IS ALLOWED OVER CONDUIT BOX/JOINTS.
10. NO CONDUIT SHALL PASS THRU' OR BE EMBEDDED IN THE COLUMN UNLESS APPROVED BY SUPERVISING ENGINEER.
11. ALL WIRING IN SERVICE DUCTS ARE TO BE RUN IN TRUNKING OR CONDUIT.
12. SIZE OF OUTLETS SHOWN ARE NOT TO SCALE.
13. ELECTRICAL ACCESSORIES MOUNTED ON SHELTER WALLS, BOTH ON THE INSIDE OR OUTSIDE, SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
    - (i) ANY MOUNTING BOXES MOUNTED BACK TO BACK IN THE SAME SHELTER WALL BUT ON DIFFERENT FACES SHALL BE SPACED MINIMUM 350mm EDGE DISTANCE APART.
    - (ii) GALVANISED STEEL MOUNTING BOXES SHALL BE USED.
    - (iii) THE GALVANISED STEEL MOUNTING BOXES SHALL BE ANCHORED AS SHOWN IN THE DRAWING.
    - (iv) SUCH CONCEALED CONDUITS MUST FOLLOW STRICTLY TO THE APPROVED DETAILING GIVEN IN THE STRUCTURAL DRAWINGS.
14. OVERIDING REQUIREMENTS :-
    (i) CODE ON ACCESSIBILITY IN THE BUILT ENVIRONMENT STATES THAT SWITCHES AND SOCKET OUTLETS SHALL BE PROVIDED AT A HEIGHT OF BETWEEN 450 mm AND 1200 mm FROM THE FLOOR LEVEL; ALL MEASUREMENTS SHALL BE TO THE CENTRE LINE OF THE SWITCHES AND SOCKET OUTLETS.,

HOUSING & DEVELOPMENT BOARD
HDB Hub 480 Lorong 6 Toa Payoh
Singapore 310480

OWNER SIGNATURE:

DRAWING NO. HB-D0729-ME-324	REVISION: B
PRECINCT NAME:	RH

PROJECT TITLE
PROPOSED PUBLIC HOUSING DEVELOPMENT COMPRISING 2 BLOCKS OF 10-STOREY RESIDENTIAL BUILDING (TOTAL 378 UNITS) & 1 BLOCK OF ESS AT TAMPINES STREET 22 (TAMPINES N2 C22)

LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE
TYPICAL DETAILS OF STOREY SHELTER
CONCEALED WIRING
(FOR BLOCK 299A ONLY)

SCALE: AS SHOWN	DATE: JUNE 2008
DRAWN BY: NGEKEW	CHECKED BY: ROSNAH

NOTES :
1. THIS DRAWING SERVES AS A GUIDE ONLY.
2. ALL DIMENSIONS ARE IN mm.

ELECTRICAL LEGEND

S	LIGHTING POINT COMPLETE WITH CONNECTOR & CONDUIT BOX (CEILING MOUNTED)	2	2 GANG 13AMP SWITCH SOCKET OUTLET
	CONDUIT BOX	TV	TELEVISION & FM RADIO OUTLET
	6AMP ONE WAY BIG ROCKER SWITCH		TELEPHONE OUTLET
	ELECTRICAL METER BOX		
CU	CONSUMER UNIT		
15A	15AMP SWITCH SOCKET OUTLET		

LEGEND FOR CONCEALED CONDUIT

o	CONDUIT/ CONDUITS RUN VERTICALLY
-X-X-	ø25mm CONCEALED CONDUIT LAID IN CEILING SLABS (INCOMING SERVICE CABLE)
-----	ø20mm CONCEALED CONDUIT LAID IN CEILING SLABS.
-----	ø20mm CONCEALED CONDUIT LAID IN CEILING (FROM SERVICE DUCT TO TV/TELEPHONE POINTS)

AMENDMENT		DATE	DRAWN BY	CE	AE
A	DRAWING UPDATED	OCT 08	BDD SB	NA KA	TING IH
B	DRAWING UPDATED	DEC 08	BDD SB	NA KA	TING IH

While every care has been exercised in highlighting the amendments via 'cloudings', Surbana International Consultants Pte Ltd does not warrant the accuracy and completeness of such highlighting. The Contractor shall be deemed to have verified and satisfied himself as to the actual amendments to the drawings

Surbana
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Company Regn No: 2003049512

DRAWING NO. SB-DP-MATM-D0729-ME-324	REVISION: B
NA KAY AUN ALVIN DESIGN ENGINEER	TING IK HING STEPHEN APPROVING ENGINEER

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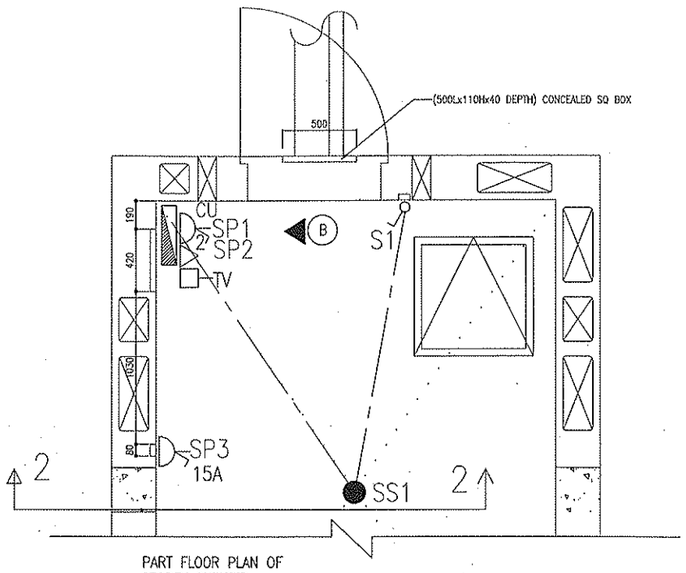
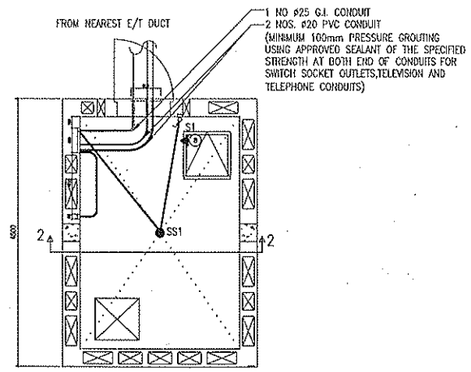
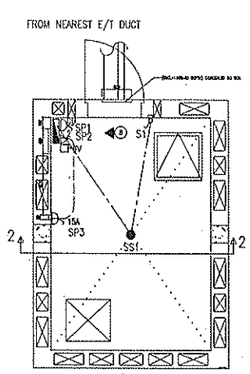


PART FLOOR PLAN OF
STOREY SHELTER
(SCALE : 1:20)





STOREY SHELTER
CONCEALED CONDUITS IN CEILING SLAB
(LIGHTING, SWITCH SOCKET OUTLETS, TV & TEL. OUTLETS)
(SCALE 1:50)

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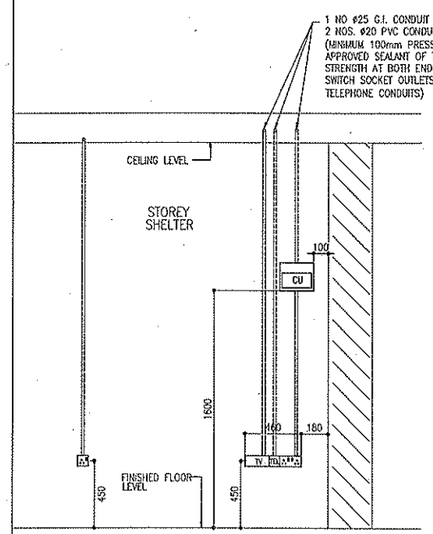
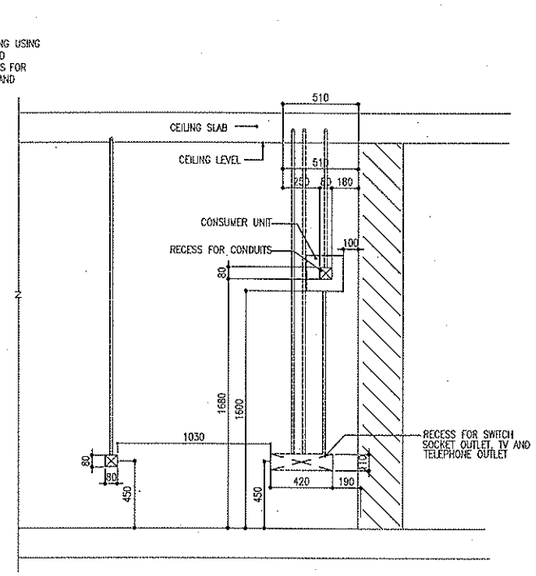
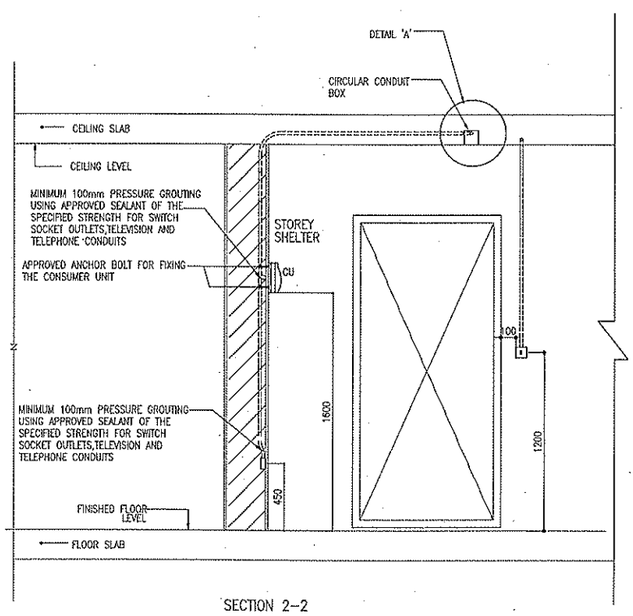


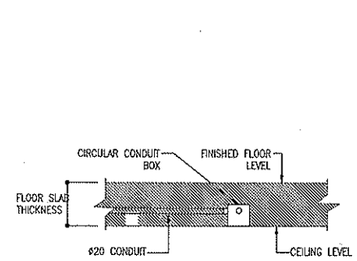
VIEW B
ELEVATION SHOWING CONSUMER UNIT, LIGHTING SWITCH, SWITCH SOCKET OUTLETS, TV AND TELEPHONE OUTLET IN STOREY SHELTER
(SCALE : 1:20)



ELEVATION B
(SCALE : 1:20)



SECTION 2–2
SECTION SHOWING CONDUITS FOR ELECTRICAL SUB–MAIN AND CATV/TELEPHONE ENTERING THE STOREY SHELTER
SCALE 1:20



DETAIL 'A'
SECTION SHOWING CONDUIT CONCEALED IN CEILING FROM CONDUIT BOX
(NOT TO SCALE)

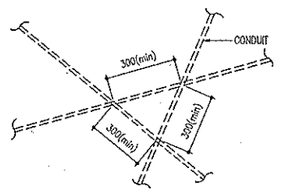


ILLUSTRATION OF CONDUITS CROSSING AT ANY ONE POINT
(NOT TO SCALE)

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LEGEND FOR CONCEALED CONDUIT	
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	ø20mm CONCEALED CONDUIT LAID IN CEILING SLABS.
	1 NO 60 x 32 PVC MULTI-COMPARTMENT TRUNKING (FOR TV AND TELEPHONE)
	METAL TRUNKING

AMENDMENT		DATE	DRAWN BY	DC	AC
A	SUBSTITUTE DRG ISSUED	AUG 08	EDI	HA KA	TING IH
B	DRAWING UPDATED	OCT 08	EDI	HA KA	TING IH
C	DRAWING UPDATED	DEC 08	EDI	HA KA	TING IH

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HOUSING & DEVELOPMENT BOARD
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LOT NO.: 6983M	MUKIM NO.: 28

JOB TITLE
TAMPINES
NEIGHBOURHOOD 2
CONTRACT 22

DRAWING TITLE
TYPICAL DETAILS OF STOREY SHELTER
CONCEALED WIRING
(FOR BLOCK 299B ONLY)

SCALE: AS SHOWN	DATE: JUNE 2008
DRAWN BY: NSEKBW	CHECKED BY: ROSNAH

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DRAWING NO. SB–DP–HATM–D0729–ME–325	REVISION: C

HA KAY AUN ALVIN DESIGN ENGINEER	TING IK HING STEPHEN APPROVING ENGINEER

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