



# **GP4**

## **GUIDELINES FOR CARPARK & INTERNAL TRAFFIC CIRCULATION**

**JABATAN PERANCANGAN INFRASTRUKTUR  
DEWAN BANDARAYA KUALA LUMPUR**

# **2018**

# GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018

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# **GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018**

## **INTRODUCTION**

1. Car Parking Guidelines and Internal Traffic Circulation to provide the uniformity and fulfill Kuala Lumpur City Hall requirement within proposal process for approval.
2. Guidance for architect and consultant, to design and prepare car parking as per requirement, and guidelines to Kuala Lumpur City Hall staff within process and preparation approval for car parking plan.
3. This guidelines also to clear the requirement and submissive technical of car parking based on Kuala Lumpur Planning Act (Act 267)

## PART 1

### GENERAL GUIDELINES FOR CAR PARK AND TRAFFIC CIRCULATION PLAN SUBMISSION

- 1.1 Two (2) sets plans, signed by both the owner and Engineer or Architect, are required.
- 1.2 All designed requirements set out in Part 2, 3, 4 and 5 must be complied.
- 1.3 The number of car parks provided must be complied with planning approval
- 1.4 All plans must be colored; car parking spaces and driveway must be colored differently for clear identification (including visitors and disabled car park bay).
- 1.5 All dimensions e.g. width of driveways, size of parking spaces, radius and gradient of ramps etc., must be indicated on plans.
- 1.6 Levels of the car parking floors shall be shown
- 1.7 Degree of angled car parking spaces must be indicated.
- 1.8 All drawings of basements car parks must be certified by the M & E Engineer as follows:  
  
*"I hereby certify that the minimum scale of fresh air ventilation in conjunction with mechanical ventilation shall be a minimum of six (6) air changes per hour, and I take full responsibility for the proper installation and performance of the same".*
- 1.9 Location for CCTV and safety mirror must be indicated on plans.
- 1.10 Walk path 600 mm must be indicated on plans

Note : For more details refer Standard Drg. No. JPIF/TLK/2014

# GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018

## DESIGN STANDARD FOR CAR PARK

### PART 2 STATIC REQUIREMENTS FOR CAR PARK

#### 2.1 Dimension of Stalls

Minimum stall width	:	2400mm (8' 0")
Minimum stall length	:	4800mm (16'0")
Minimum stall length for Lateral parking	:	6000mm (20' 0")

#### 2.2 Dimension of Access way

Minimum Clear/effective Width	:	3300mm (11ft. )
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#### 2.3 Aisle Width

Parking Angle	One Direction Traffic (Bay on one side or both side)	Two Direction Traffic (Bay on both side)
90°	6100mm (20'0")	7300mm (23'11")
60°	4800mm (15'9")	6700mm (22'0")
45°	4200mm (13'9")	6700mm (22'0")
30°	3700mm (12'2")	6100mm (20'0")
Lateral	3700mm (12'2")	6100mm (20'0")

#### 2.4 Ramps

Ramps are required for multi-level and basement car parks and should be confirm to follow minimum geometric design standard.

The specification for two-way ramps traffics streams shall be separated by a kerb of width 230mm (9') and clear height of 150mm (6") or provided continuous double lines.

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Description	Minimum Geometric Standard
<b>1. <u>Clearway Ramps/effective Width</u></b> i) On straights ii) On curves	3300mm (11' 0") per lane 3700mm (12' 2") per lane
<b>2. <u>Radius of Curves Ramps</u></b> Minimum inside radius of lane <u>Gradient</u> i) Preferred Grade on Straights Ramps ii) Absolute Maximum Grade on Straights Ramps iii) Ramps of Curved Section (absolute)	4600mm (15'1")  1 : 10 (10%) 1 : 7 (14.3%) 1 : 10 (10%)
<b>3. <u>Parking Ramps (Sloping Floor)</u></b> Widths  Radius of Curves Ramps	Similar to standards for parking aisle Similar to standards for clearway ramp
<b>4. <u>Gradient</u></b> i) Preferred Grade on Straights Ramps ii) Absolute Maximum Grade on Straights Ramps iii) Ramps of Curved Section	1 : 25 (4%) 1 : 20 (5%)  No Stalls Allowed



## GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018

### 2.5 Headroom

In those parts of a building (above or below ground floor level) used or intended to be used for the parking of wheeled vehicles, the minimum clear height of such part of the building shall be not less than 2300mm (7'7"). The underside of beams, directional signs, sprinkler heads, fittings and other similar items may be allowed to project below this height provided that under side of such items shall be not less than 2000mm (6'7") from the floor level.

### 2.6 Stalls

The area within stalls shall be flat and free from columns, kerbs, raised pedestrian refuges and other encumbrances. Each stall shall be marked on the surface of the parking area with thermoplastic paint or other approved materials.

### 2.7 Sign and Floor Markings

Illumination of direction signs and provision of floor marking to facilities circulation will be required. Reference markers are also necessary to enable users to retrieve their vehicles.





**2.8 Ventilation**

The basement and underground car parks ventilation system shall be required to provide a minimum rate of six air changes per hour throughout the garage. The mechanical ventilation system shall comply with the Building By-Laws.





### 2.9 Entrances and Exits

The entrances and exits shall be designed to give good visibility at all changes of direction both horizontal and vertical.

The controlled entrance for a car park accommodating 500 cars and above should have a minimum of 2 lanes. The exit shall be a minimum of 2 lanes. Maximum car parking stalls allowable for one point of access shall be 600 cars.

It is desirable to avoid locating entry-exit points where vehicles entering or leaving the site would conflict with large number of pedestrians and heavy street traffic flow.

Entry and exit points shall be located in order to provide maximum storage space and maximum distance from intersections. Combined access ways shall be located at mid-block. When entrances and exits are separated, the exit shall be placed in the down-streams portion of the block, and the entrances shall be placed as far upstream as possible.



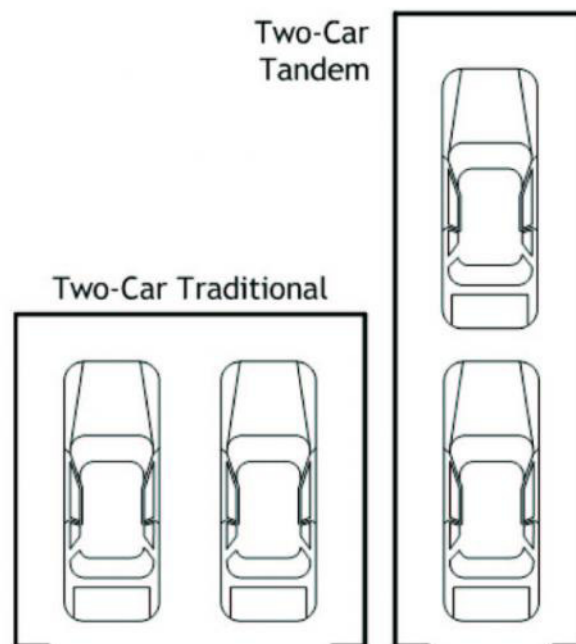
**PART 3**      **GENERAL REQUIREMENTS FOR PARKING AREA**

3.1 Parking spaces for disabled people (disabled parking) shall be provided base on the ratio of one bay for every 50 parking bays and minimum one bay for total car parks less than 50 bays



3.2 'Tandem Parking 'or detached parking spaces are not permitted or will not be considered for commercial development such as offices and shopping complex.

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- 3.3 'Tandem Parking' or detached parking spaces may be considered for residential development such as medium cost apartments, luxurious apartments and service apartments. In this regard special parking bay for visitors and disabled people shall be single bay rather than tandem.
- 3.4 Parking bays for disabled people and visitors can not be sold or rented to the occupants condominium or to the public
- 3.5 Car parking area shall be provided lighting especially at the basement and ensure that the brightness of the light at least 120 LUX
- 3.6 Car parking area shall be provided CCTV and other safety features such as safety mirrors, signboard directions, etc. - refer to standard plans JPIF/TLK/2014



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- 3.7 Each of the parking lots on the multi-storey car park and facing to the outer wall shall be provided 'stopper'.



- 3.8 Two numbers of parking bay which located at the end of the cul-de-sac may be permitted if the size of each parking lot at least 3000mm x 4800mm and shall be arranged vertically
- 3.9 The size of parking lots located between columns or walls which the columns or walls are within the 'barrier-free zones area' should be at least 2700mm x 4800mm or 3000mm x 4800mm
- 3.10 Parking bays for 'Single Lady Driver' shall be provided in each parking level located near to the lift area and the total numbers is at least 7% of the total parking spaces

This parking bays specially allocated for ladies shall be provided for commercial development only.



# GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018

## PART 4 ATTACHED DRAWING

## DIMENSION OF CAR PARKING STALLS AND CIRCULATION AISLES

### (i) One - way Traffic

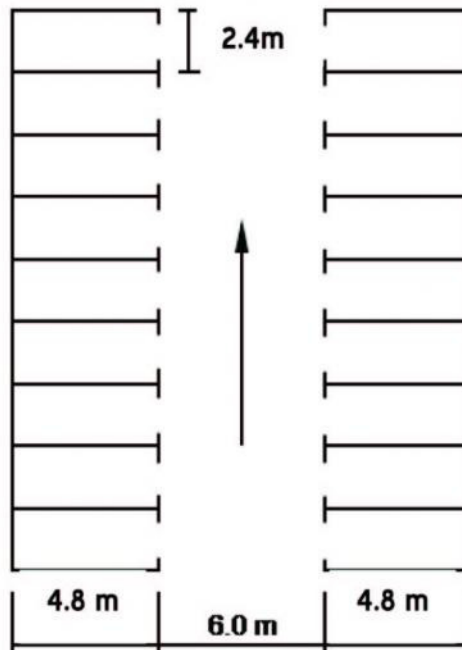
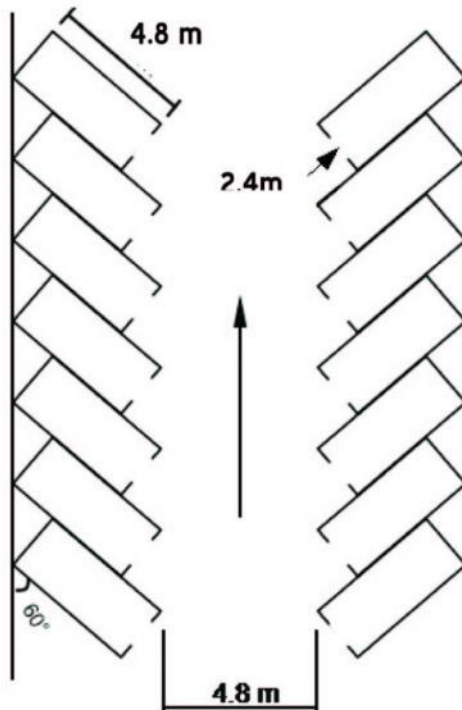


DIAGRAM 1  
90° Angled Parking

DIAGRAM 2  
60° Angled Parking



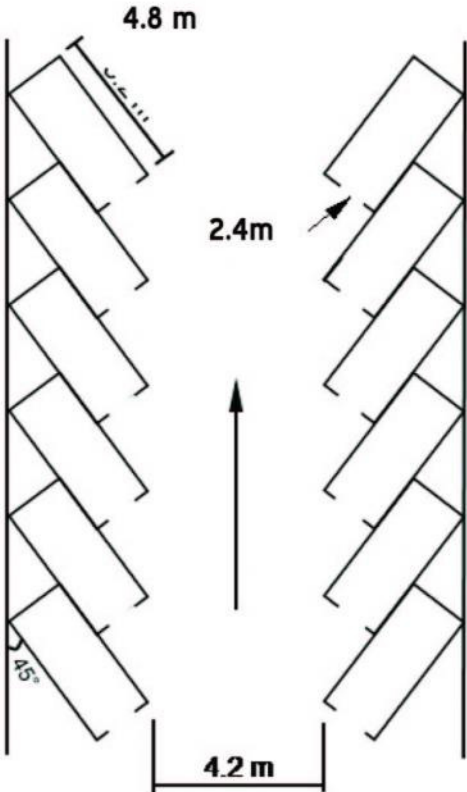


DIAGRAM 3  
45° Angled Parking

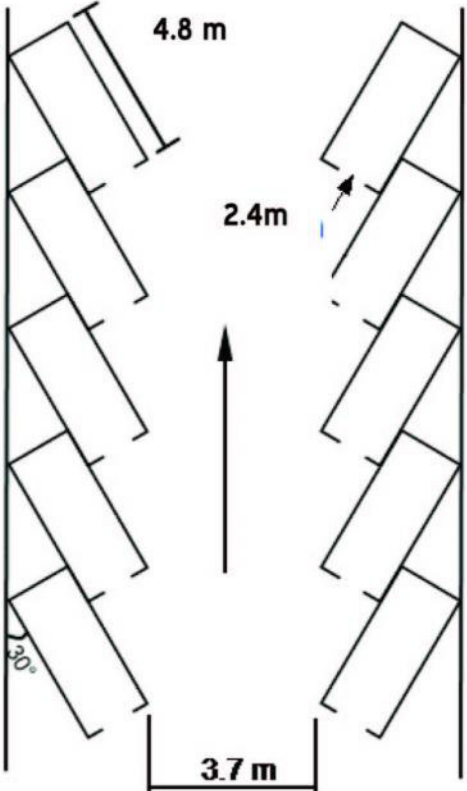


DIAGRAM 4  
30° Angled Parking

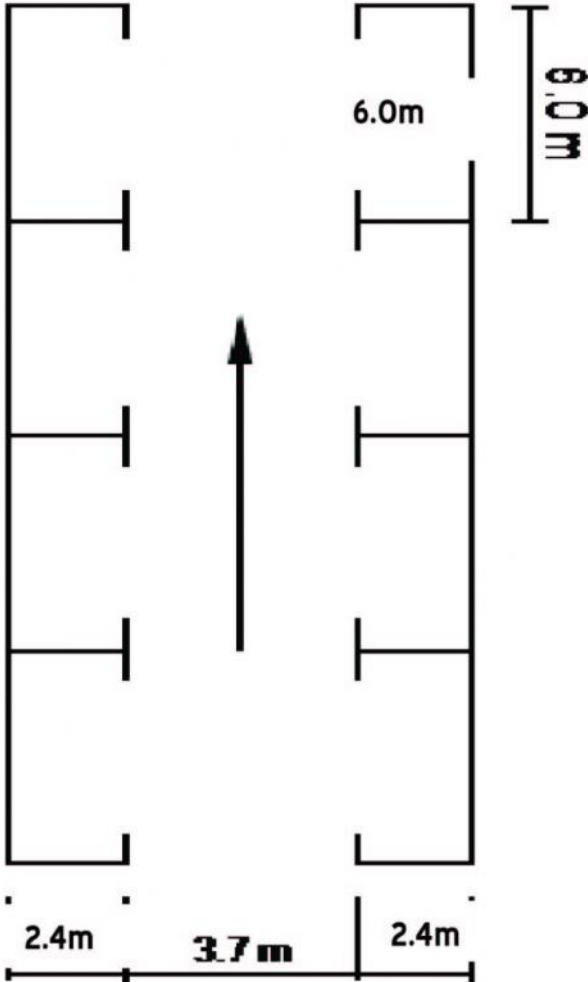


DIAGRAM 5  
Parallel Parking

# GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018

## (ii) Two - way Traffic

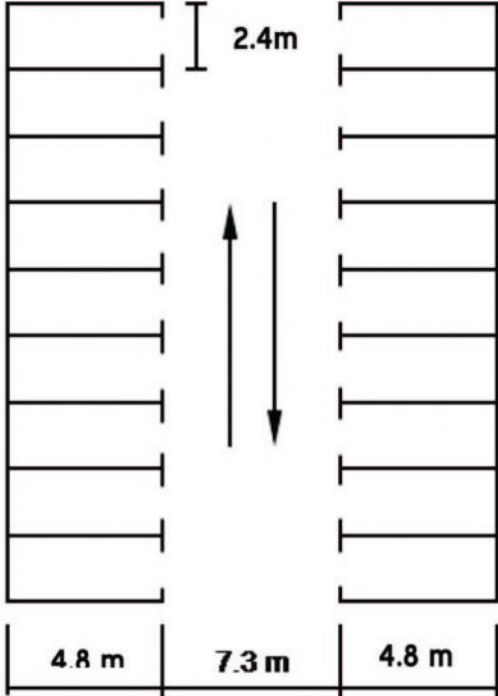
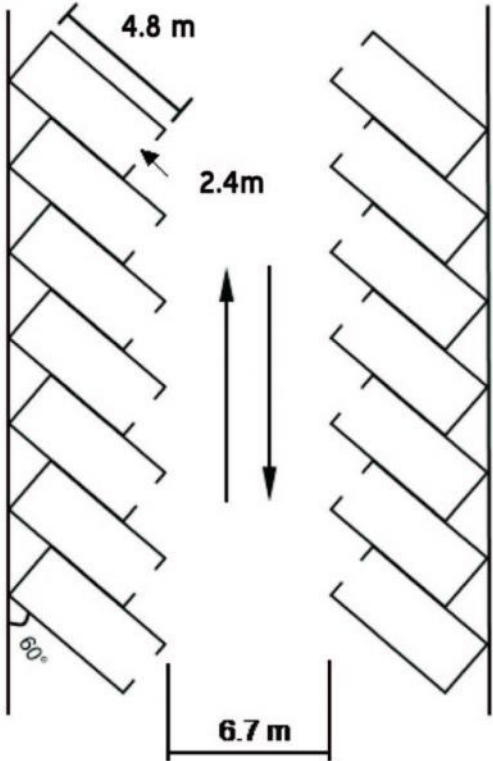


DIAGRAM 1  
90° Angled Parking

DIAGRAM 2  
60° Angled Parking



**Note : Lateral parking and angled parking less than 30° is not recommended**



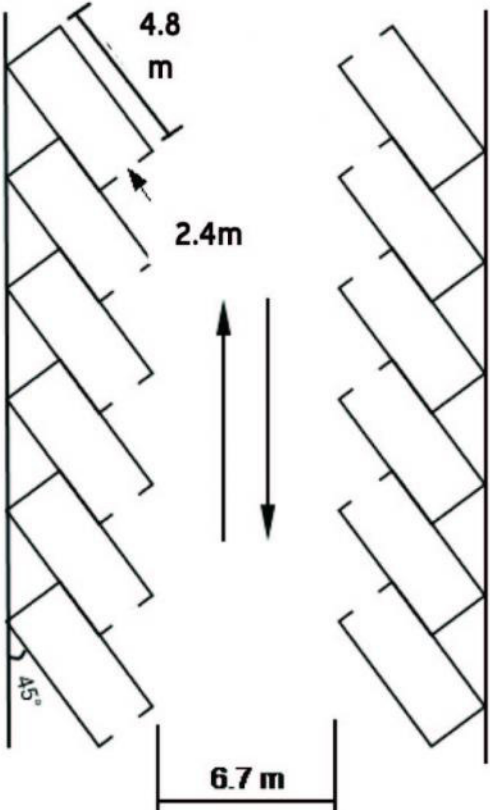


DIAGRAM 3  
45° Angled Parking

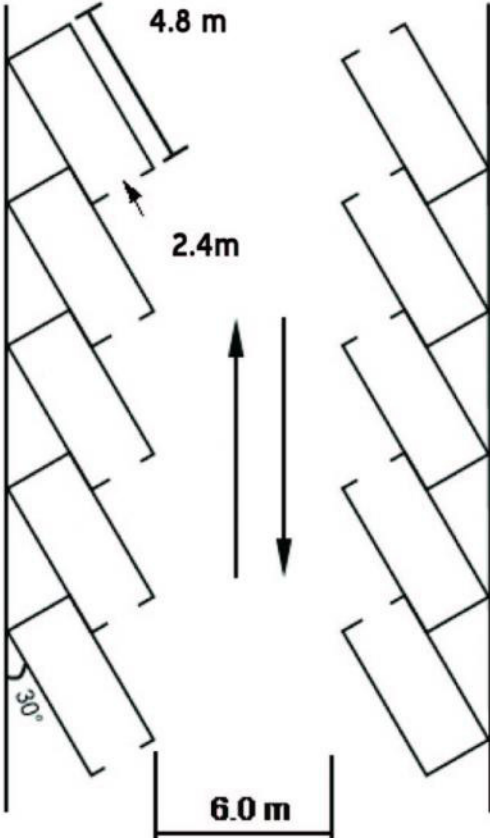


DIAGRAM 4  
30° Angled Parking

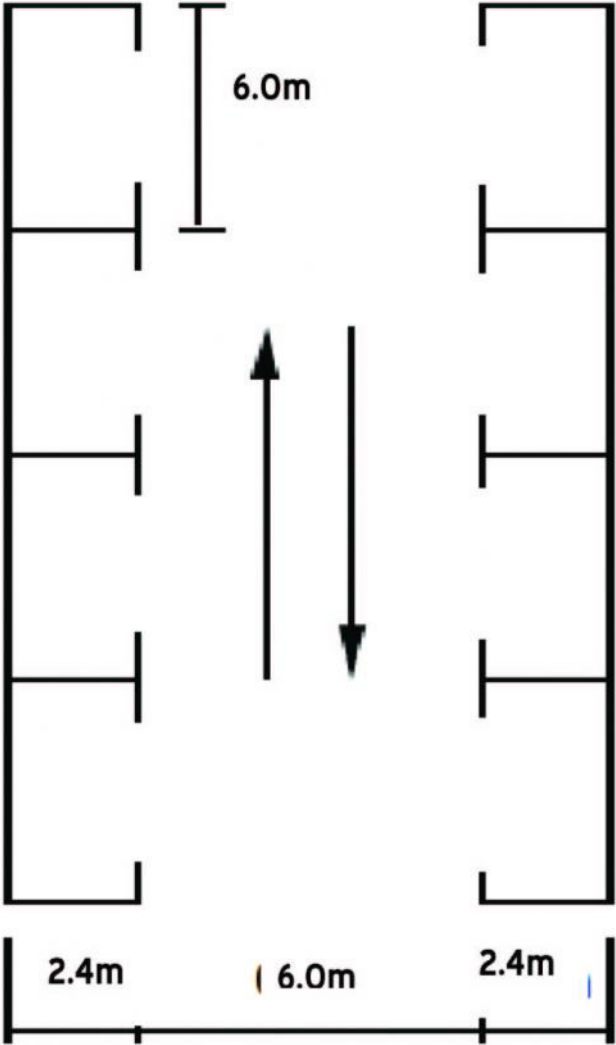
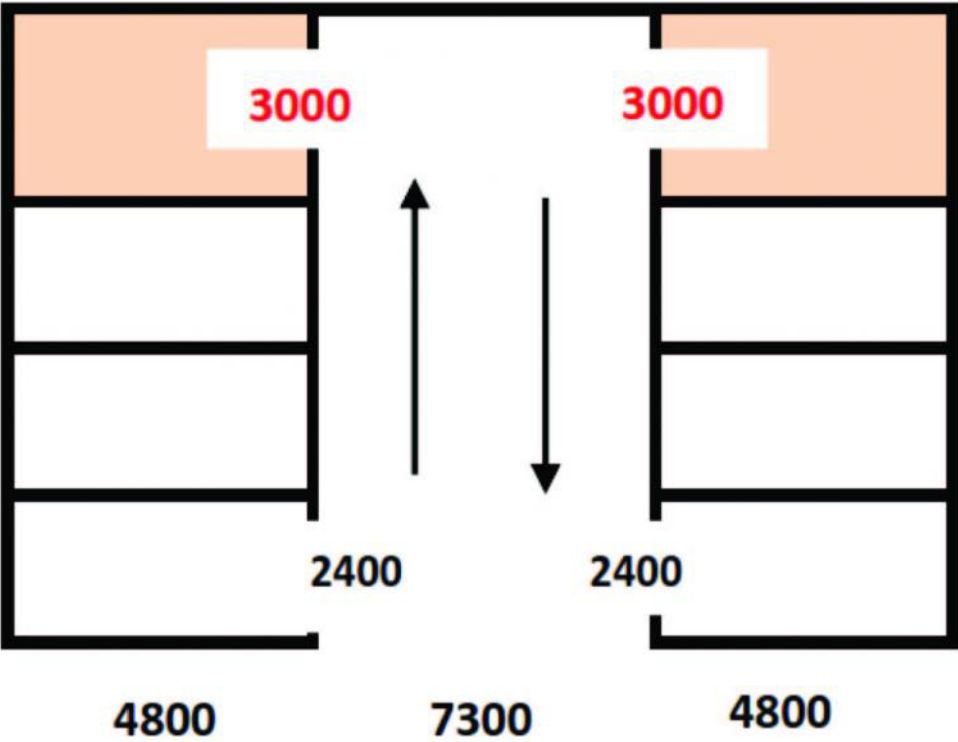
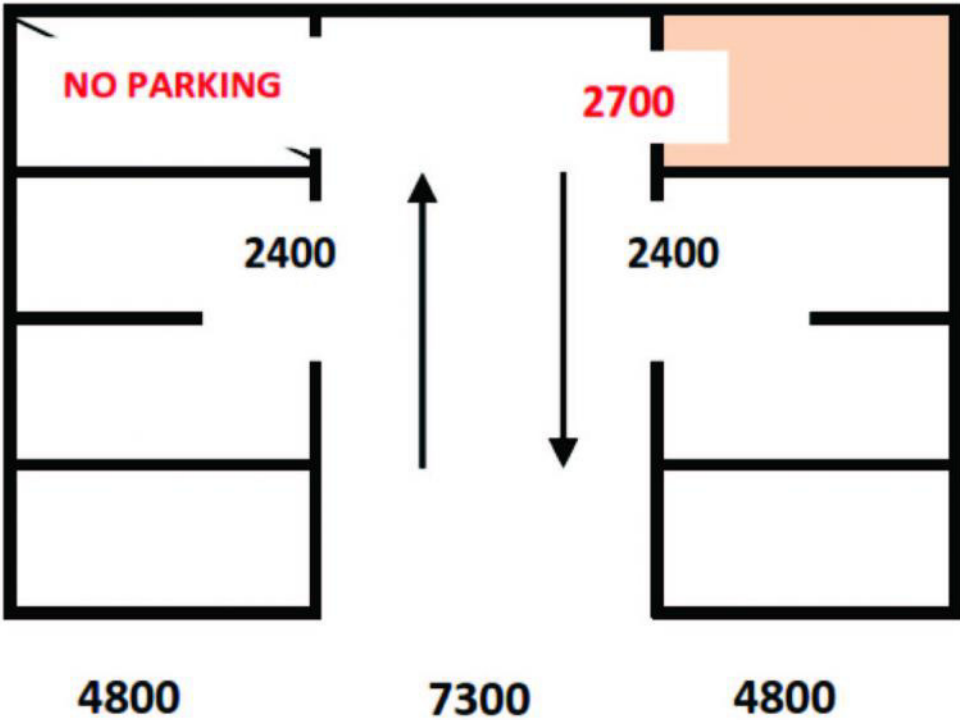


DIAGRAM 5  
Parallel Parking

(iii) Parking at Cul-De-Sac

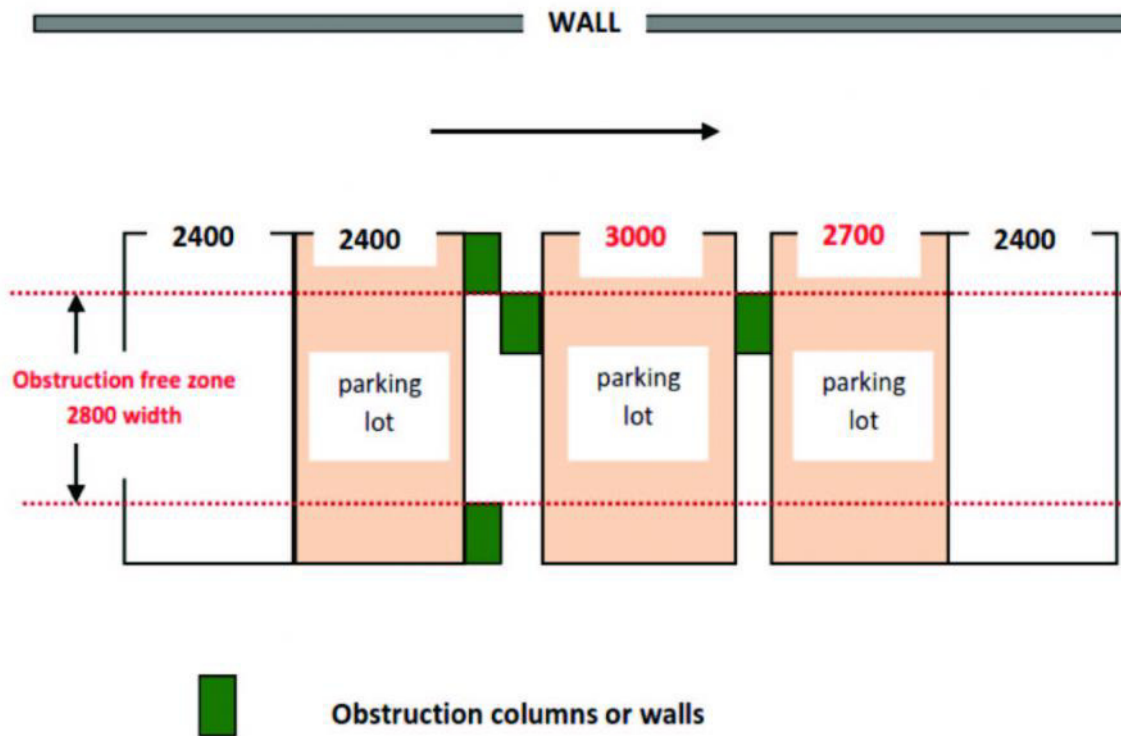


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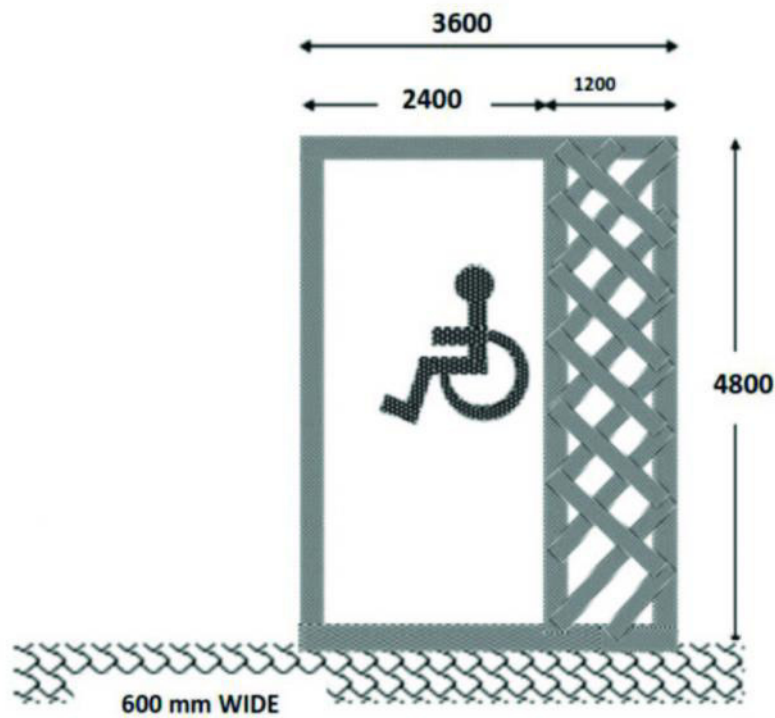


# GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018

## (iv) Parking stalls with adjacent obstruction



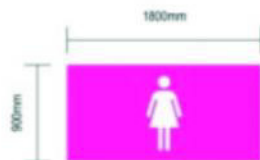
## (v) Disabled parking lot



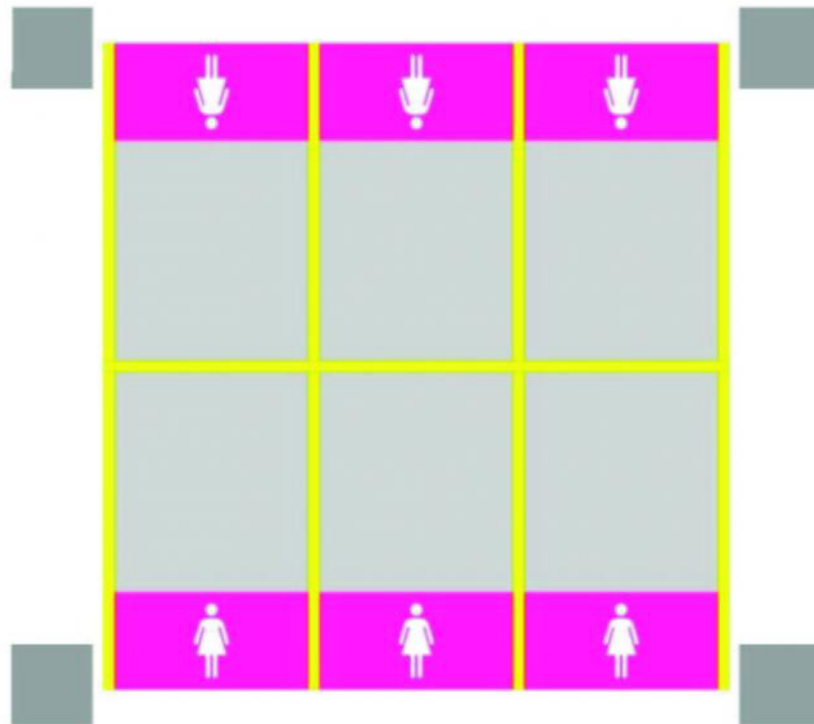
(vi) 'Single Lady Driver' reserved parking signages

 Pink color

Type 1 : floor painted



Epoxy floor painted graphic.



<b>PART 5 ATTACHED DRAWING (A)</b>	<b>STATIC REQUIREMENTS FOR LORRY AND MOTORCYCLE</b>
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**5.1 Dimension of Stall**

**Minimum Stall Width : 3000mm (9'10")**

**Minimum Stall Length**

**i) Angled Parking : 8000mm (26'3")**

**ii) Parallel Parking: 9000mm (29'6")**

**5.2 Dimension of Access way**

**Minimum Clear Width : 3500mm (11'6")**

**5.3 Aisle Width (see drawing attached Part 5.0)**

Parking Angle	Aisle Width
90°	11000mm (35'1")
45°	7500mm (24'7")
Lateral	7500mm (24'7")

**5.4 Radius**

**Minimum inside radius of lane : 9000mm (29'6")**

**5.5 Motorcycle Parking Space**

The dimension for motorcycle parking space shall be 1000mm x 2000mm (3'3" x 6'7"). There is no specific requirements on the width of access way, aisle etc. The satisfactory arrangement of motorcycle parking spaces shall be subjected to the approval by Dewan Bandaraya Kuala Lumpur.

PART ATTACHED DRAWING (B)	5	DIMENSION OF HEAVY VEHICLES STALLS AND CIRCULATION AISLES

(i) One-way / Two-way Traffic

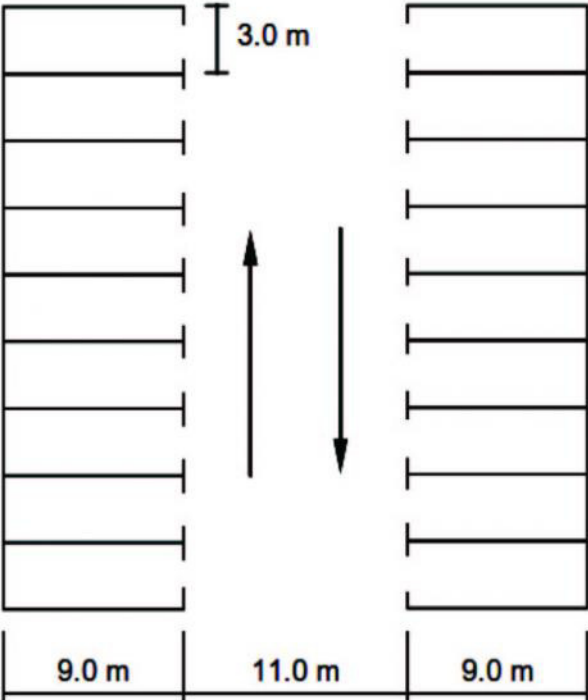


DIAGRAM 1  
90° Angled Parking



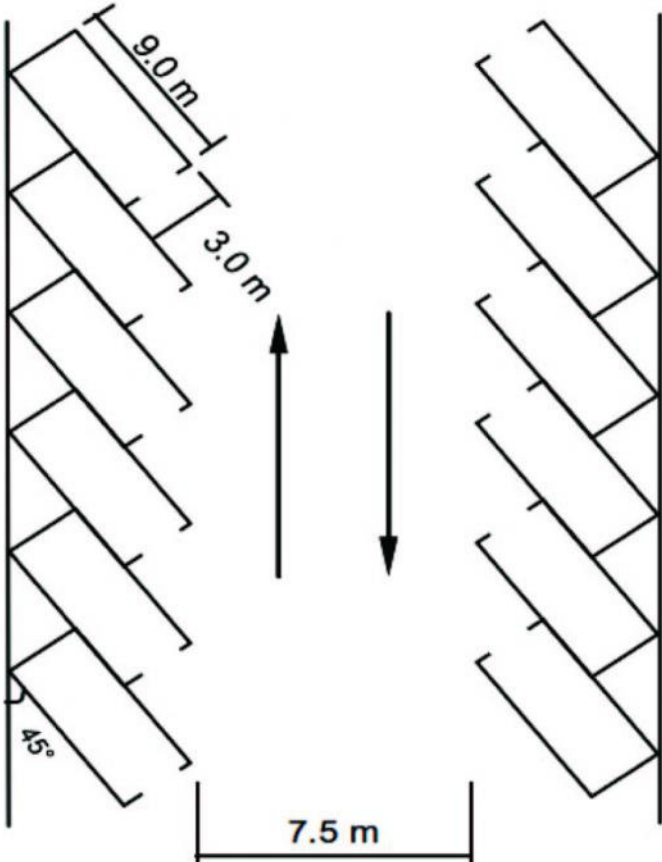


DIAGRAM 2  
45° Angled Parking





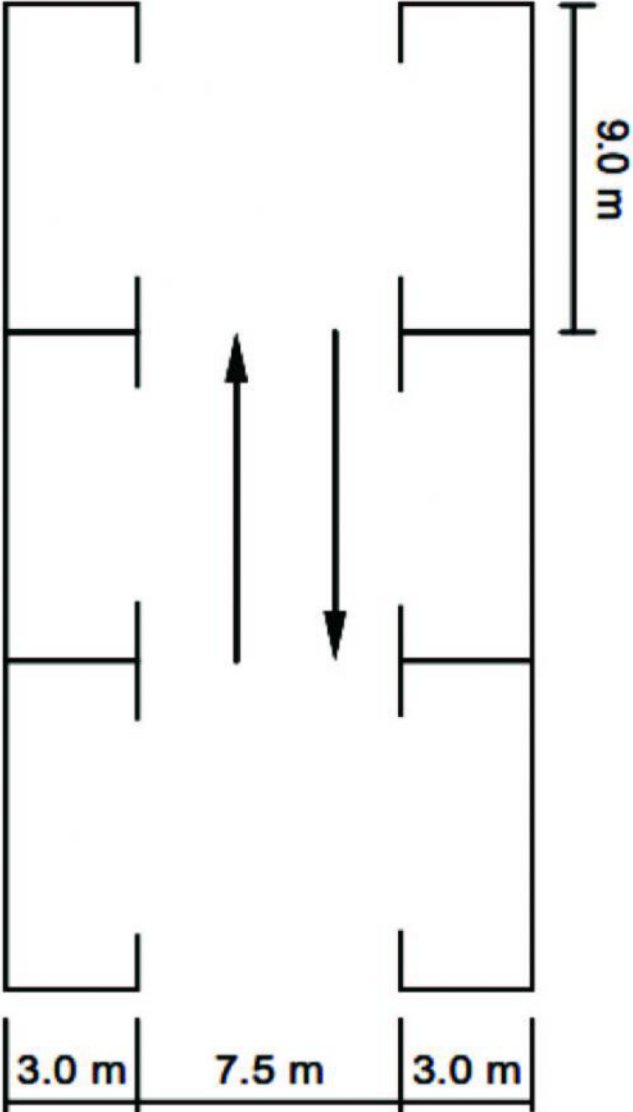


DIAGRAM 3  
Parallel Parking

**BORANG JPIF 8**

**SURAT PENGEMUKAAN CADANGAN OLEH ARKITEK / JURUTERA PERUNDING**

Pengarah  
Jabatan Perancangan Infrastruktur  
Dewan Bandaraya Kuala Lumpur

Saya / Kami dengan ini mengemukakan cadangan bagi kerja-kerja cadangan pembangunan seperti berikut:

Tajuk Pembangunan : \_\_\_\_\_  
(Lokasi pembangunan selaras dengan tajuk di atas pelan / perintah pembangunan / permohonan OSC) \_\_\_\_\_  
\_\_\_\_\_

- Jenis Kerja \* : 1) Tempat Letak Kereta / Lori / Motosikal / Basikal   
2) Skim Aliran Lalulintas   
3) Kemudahan Pengangkutan Awam / Pejalan Kaki / Lorong Basikal   
4) Laporan Penilaian Trafik Impak

No. Lukisan : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Saya / Kami bertanggungjawab sepenuhnya ke atas rekabentuk dan pelaksanaan kerja-kerja tersebut.

Tandatangan : \_\_\_\_\_  
(Jurutera / Arkitek Bertauliah)

Nama Penandatangan : \_\_\_\_\_

Tarikh : \_\_\_\_\_

No Pendaftaran : \_\_\_\_\_  
PAM / LJM

Nama dan Alamat : \_\_\_\_\_  
lengkap dengan \_\_\_\_\_  
poskod bagi Jurutera \_\_\_\_\_  
Perunding / Arkitek \_\_\_\_\_

\* Tandakan  mana-mana yang berkenaan.

**BORANG JPIF 9**

**SURAT PENGESAHAN PERLANTIKAN DARIPADA PEMAJU / PEMILIK**

Pengarah  
Jabatan Perancangan Infrastruktur  
Dewan Bandaraya Kuala Lumpur

Saya / Kami Pemilik / Pemaju projek yang tersebut di Borang JPIF/UPA/1(1) dengan ini mengesahkan bahawa Jurutera Perunding / Arkitek dalam borang tersebut dilantik untuk mengemukakan pelan-pelan dan bertanggungjawab menyelia kerja-kerja pembinaan bagi pihak saya / kami:

Saya / kami dengan ini berjanji seperti berikut:

- 1) Pegawai-pegawai dari Jabatan tuan berhak untuk memasuki pada bila-bila masa yang munasabah untuk memeriksa kerja serta bahan-bahan binaan dan tapak di mana kerja tersebut dijalankan.
- 2) Saya / Kami secara bersama-sama dan berasingan dengan Jurutera Perunding / Arkitek bertanggungjawab ke atas kerosakan harta benda dan lain-lain akibat dari kerja pembinaan tersebut.

Tandatangan : \_\_\_\_\_  
(Pemilik / Pemaju)

Nama Penandatangan : \_\_\_\_\_

Tarikh : \_\_\_\_\_

Nama dan Alamat : \_\_\_\_\_  
lengkap dengan \_\_\_\_\_  
poskod bagi Pemilik \_\_\_\_\_  
/ Pemaju \_\_\_\_\_

**Perhatian:**

- 1) Kegagalan pihak tuan mengisi borang ini dengan lengkap dan tepat akan melambatkan proses perakuan pelan tuan.
- 2) Pastikan penandatangan bagi pihak Pemilik / Jurutera Perunding / Arkitek di dalam borang ini adalah sama / selaras di atas pelan-pelan.

### BORANG JPIF 10

#### SURAT PENERIMAAN PERLANTIKAN OLEH ARKITEK / JURUTERA PERUNDING

Pengarah  
Jabatan Perancangan Infrastruktur  
Dewan Bandaraya Kuala Lumpur

Saya / Kami dengan ini mengesahkan bahawa saya / kami telah dilantik sebagai Arkitek / Jurutera Perunding yang bertanggungjawab bagi menyelia kerja-kerja pembinaan bagi projek tersebut di bawah ini:

Tajuk Pembangunan : \_\_\_\_\_  
(Lokasi pembangunan selaras dengan tajuk di atas pelan / perintah pembangunan / permohonan OSA) \_\_\_\_\_  
\_\_\_\_\_

Jenis Kerja \* :    1) Tempat Letak Kereta / Lori / Motosikal / Basikal      
                          2) Skim Aliran Lalulintas      
                          3) Kemudahan Pengangkutan Awam / Pejalan Kaki / Lorong Basikal      
                          4) Laporan Penilaian Trafik Impak   

Tandatangan : \_\_\_\_\_  
(Jurutera / Arkitek Bertauliah)

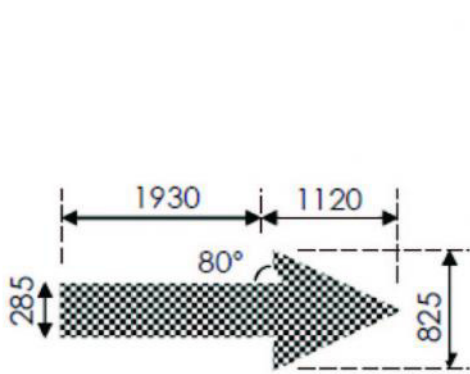
Nama Penandatangan : \_\_\_\_\_

Tarikh : \_\_\_\_\_

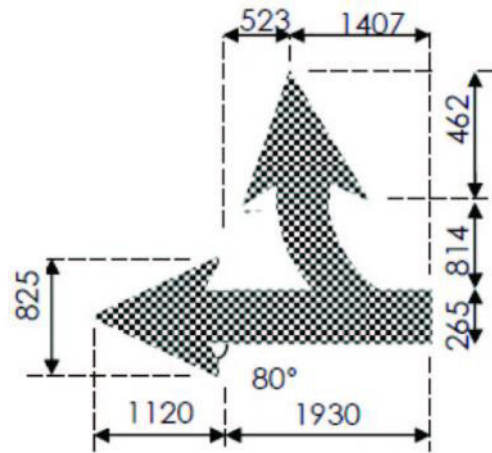
No Pendaftaran : \_\_\_\_\_  
PAM / LJM

Nama dan Alamat : \_\_\_\_\_  
lengkap dengan \_\_\_\_\_  
poskod bagi Jurutera \_\_\_\_\_  
Perunding / Arkitek \_\_\_\_\_

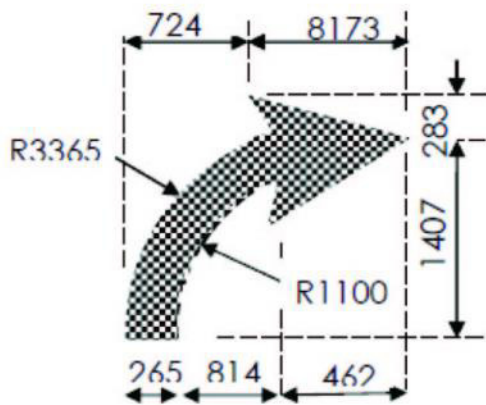
\* Tandakan  mana-mana yang berkenaan.



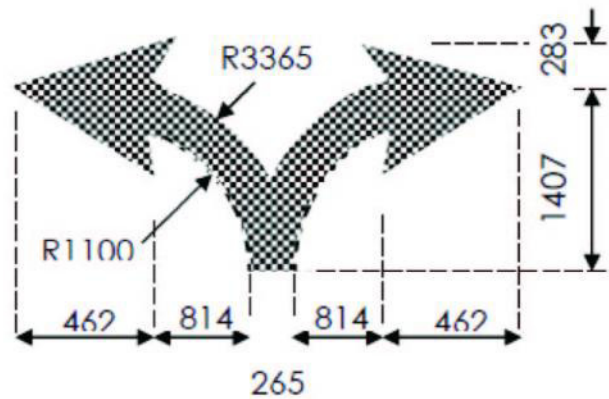
**STRAIGHT WAYS**



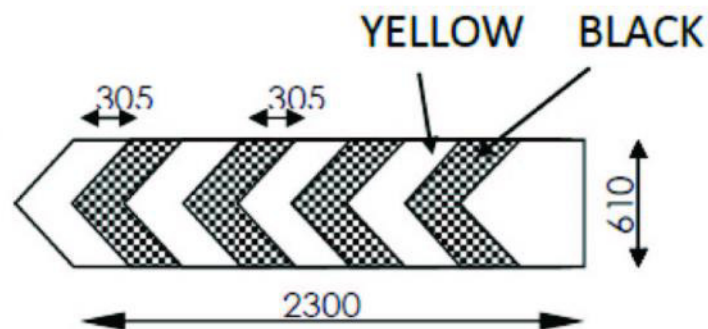
**STRAIGHT AND TURN**



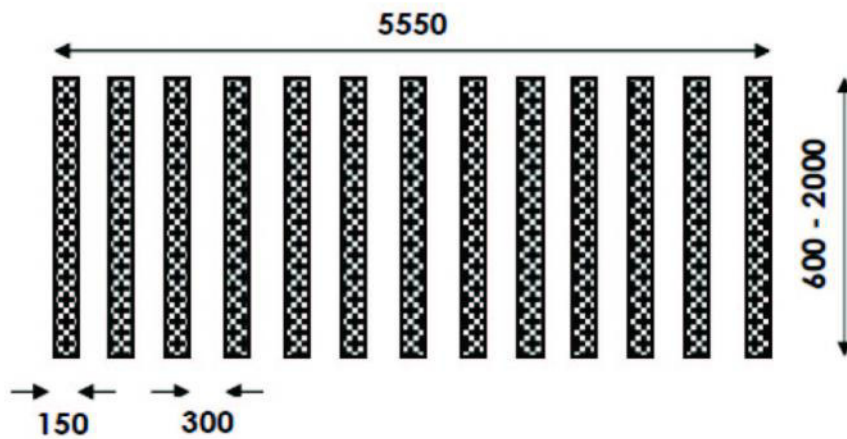
**TURN LEFT/RIGHT**



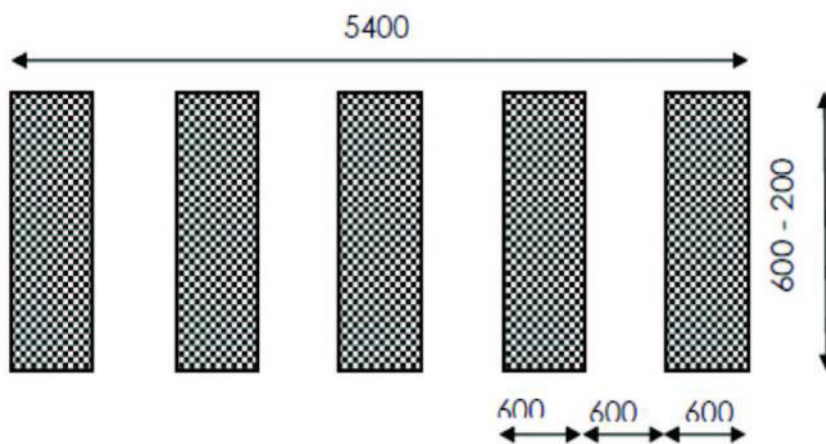
**TURN LEFT AND**



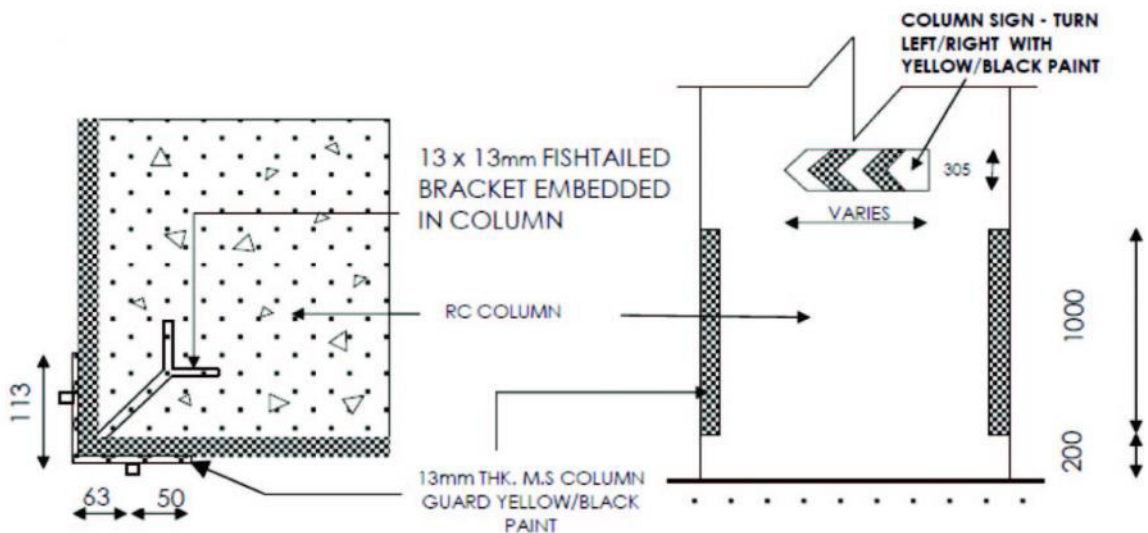
**PARAPET WALL SIGN - TURN**



**PEDESTRIAN CROSS**



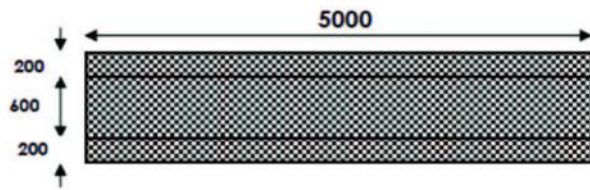
**ZEBRA CROSSING**



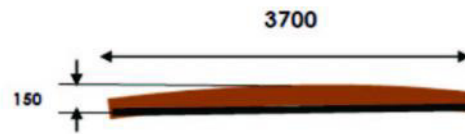
**COLUMN GUARD DETAIL**

**ELEVATION**

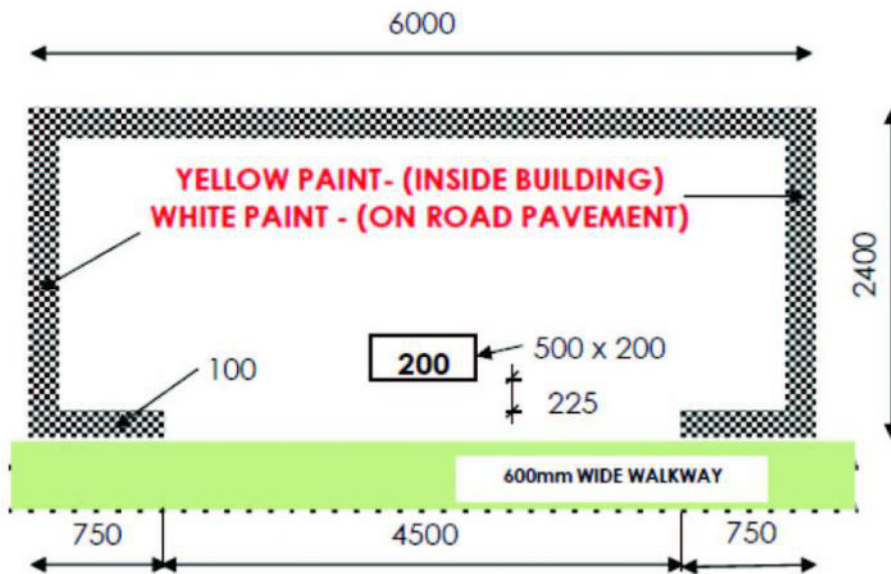
# GUIDELINES FOR CAR PARKING AND INTERNAL TRAFFIC CIRCULATION 2018



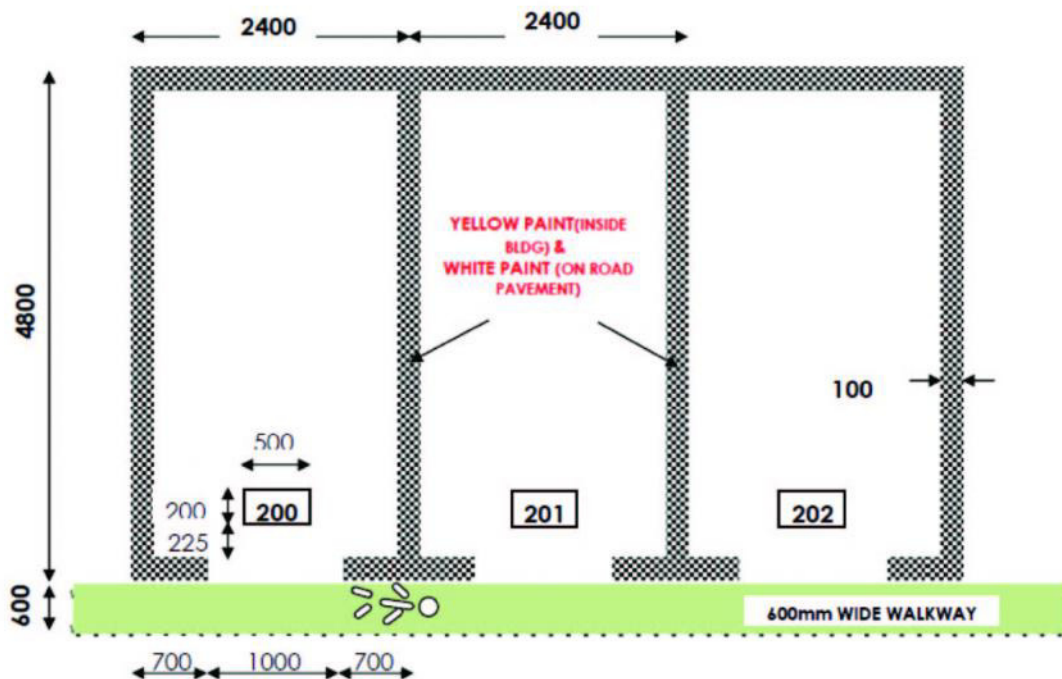
**SPEED HUMP PLAN**



**HUMP (OUTSIDE BUILDING)**



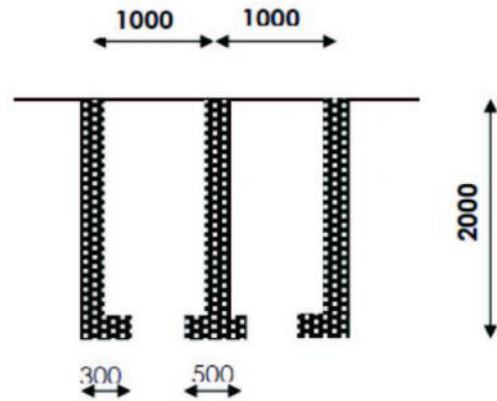
**SIDE PARKING (2.4m X 6.0m)**



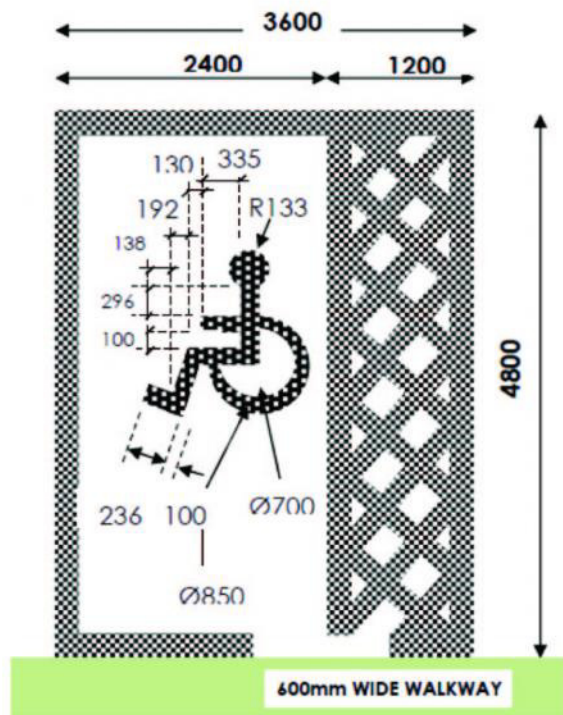
**PARKING (2.4m X 4.8m)**



**PETAK LETAK KERETA  
'PEMANDU WANITA BERSEORANGAN'**

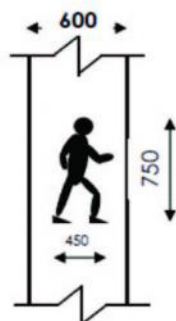


**MOTORCYCLE PARKING**



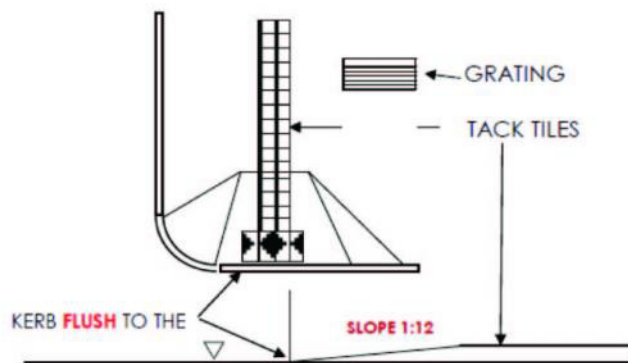
**HANDYCAP PARKING**

**COLUMN GUARD DETAIL**



**SIGNAGE AT 600mm  
WIDE WALK PATH**

**ELEVATION**



**PLAN & SECTION PEDESTRIAN WALKWAY**







## **Jabatan Perancangan Infrastruktur**

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