EQUATIONS FOR CALCULATING STALL DIMENSIONS

$$S = \frac{W}{\sin \theta}$$

$$R = \frac{W}{\tan \theta}$$

$$D = (L + R) \sin \theta$$

FOR ONE DIRECTION AISLE:

$A = B \sin \theta$, min = 12'

FOR TWO DIRECTION AISLE:

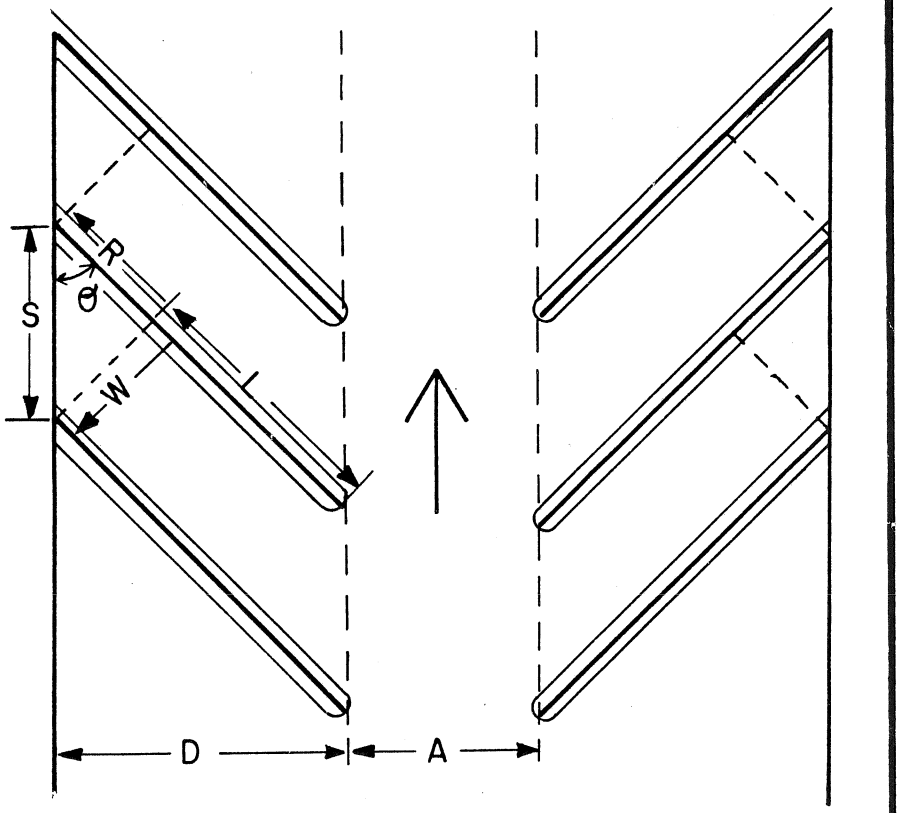
$A = B \sin \theta$, min = 22'

COMPACT STALLS:

W = 8', L = 17', B = 22'

STANDARD STALLS:

W = 8'6", L = 18', B = 24'



B = BACKUP DISTANCE

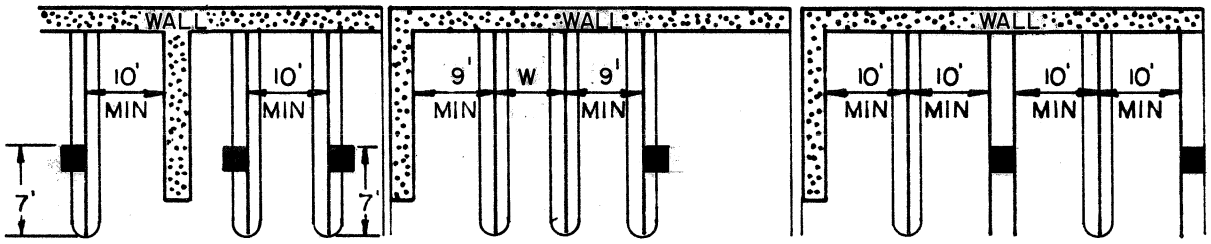
MINIMUM PARKING LOT DIMENSIONS (in ft.)

θ	S		R		D		A (1 DIR.)		A (2 DIR.)	
	COM.	STD.	COM	STD	COM	STD	COM	STD	COM	STD
0°	21	22	0	0	7.0	8.0	13.0	14.0	22.0	22.0
30°	16.0	17.0	13.9	14.7	15.5	16.4	12.0	12.0	22.0	22.0
45°	11.3	12.0	8.0	8.5	17.7	18.7	15.6	17.0	22.0	22.0
60°	9.2	9.8	4.6	4.9	18.7	19.8	19.1	20.8	22.0	22.0
90°	8.0	8.5	0	0	17.0	18.0	22.0	24.0	22.7	24.0

CITY OF SAN MATEO — CALIFORNIA 94403

PARKING STANDARDS
PARKING LOT DIMENSIONS

DATE	DRAWN BY	CHECKED	APPROVED	CASE	DRAWER	SET
DEC '85	DMB	E.B.	CITY ENGINEER	3	1	190

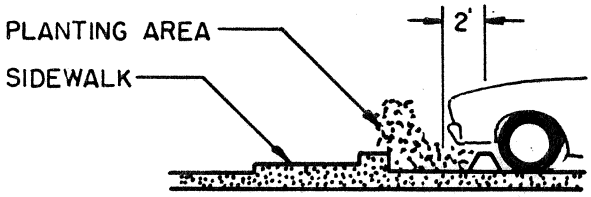


CONFINED STALLS RESTRICTED STALLS

TWO ADJACENT RESTRICTED OR END STALLS

STANDARD STALLS

(FOR COMPACT STALLS, SUBTRACT ONE FOOT FROM THE ABOVE DIMENSIONS)



PERMISSIBLE BUMPER OVERHANG

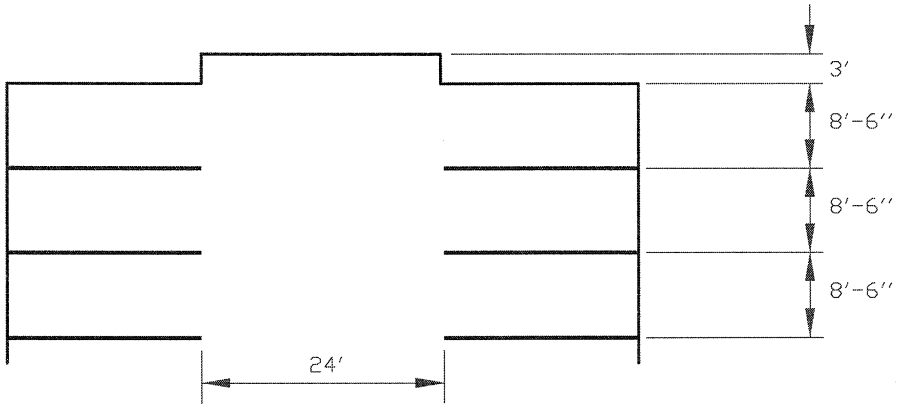
FOR ADDITIONAL INFO:
SEE S.M.M.C. Chapter 27.64
OFF-STREET PARKING
AND LOADING

PARKING STANDARDS
PARKING LOT LAYOUTS

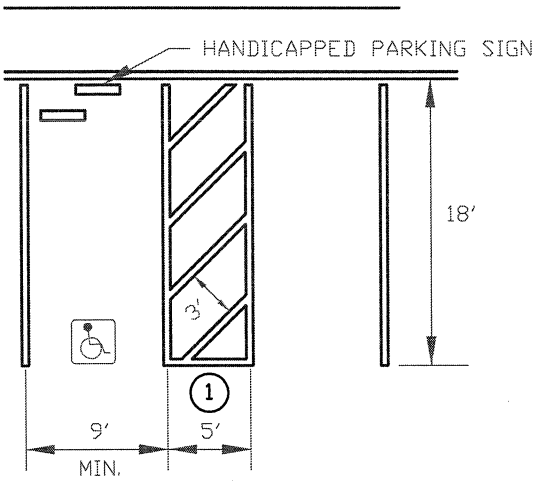
SAN MATEO, CALIF.

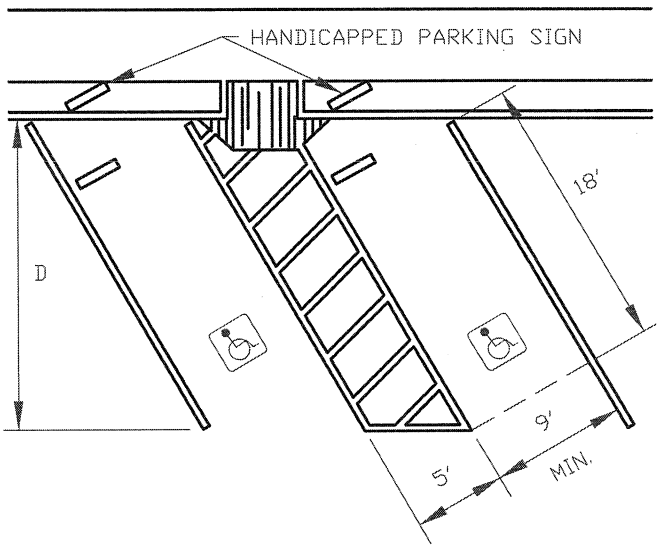
DATE	DRAWN BY	CHK. BY	APPROVED	PLAN CASE	DRAWER	SHEET
6-86	K.K.L.		CITY ENGINEER	3	1	191

NOTE: SUFFICIENT AREA WILL BE PROVIDED NEAR THE END OF DEAD-END AISLES FOR TURN AROUND UNDER FULL LOT CONDITIONS.



DEAD-END AISLES





HANDICAPPED PARKING

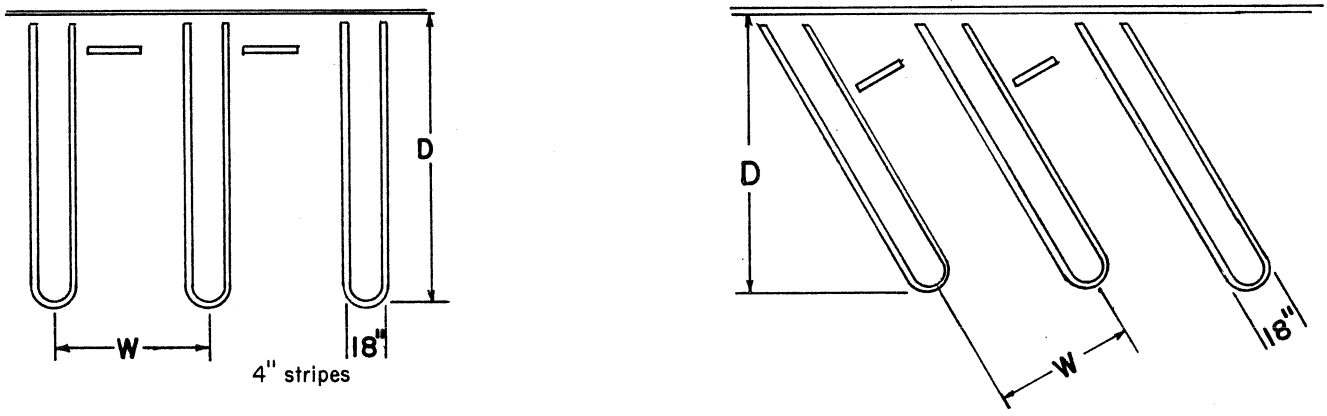
NOTE:

(1) 8' PASSENGER LOADING ZONE REQUIRED FOR VAN ACCESSIBLE SPACES. LOADING ZONE ON PASSENGER'S SIDE OF STALL UNLESS SHARED.

ENGINEERING DEPARTMENT — CALIFORNIA 94403

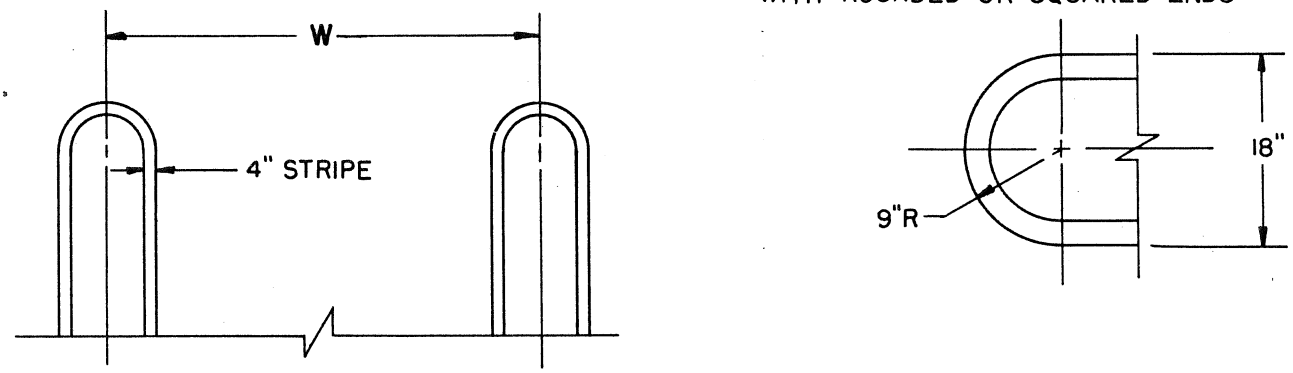
PARKING STANDARDS

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	CITY ENGINEER	3	1	192



DOUBLE STRIPING

NOTE: 4" STRIPE APPROXIMATELY 18" APART
WITH ROUNDED OR SQUARED ENDS



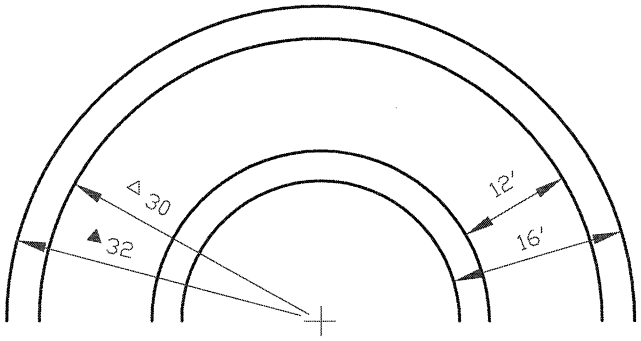
STALL DOUBLE STRIPING DETAIL

SEE SHEET 3-1-190

CITY OF SAN MATEO — CALIFORNIA 94403

PARKING STANDARDS
DOUBLE STRIPING

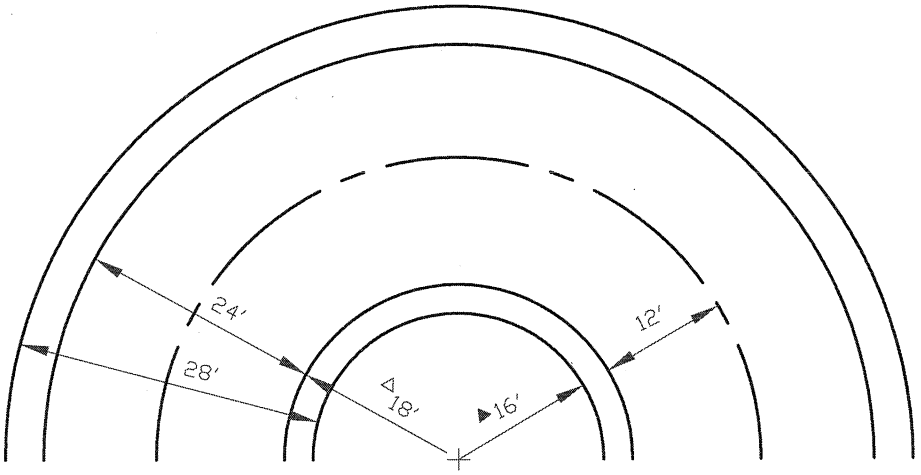
DATE	DRAWN BY	CHECKED	APPROVED	CASE	DRAWER	SET
6-86	K.K.L.		CITY ENGINEER	3	1	193



ONE WAY

△ RADIUS TO CURBS LOWER THAN 6" (WHEEL RADIUS)

▲ RADIUS TO COLUMNS, WALLS OR STRUCTURES. (BODY OVERHANG RADIUS)



TWO WAY

FOR ADDITIONAL INFORMATION:
SEE S.M.M.C. CHAPTER 27.64
OFF-STREET PARKING AND LOADING

MIN. WIDTH FOR RAMPS - TWO-WAY 24' CURB TO CURB; 28' WALL TO WALL
ONE-WAY 12' CURB TO CURB; 16' WALL TO WALL.

CITY OF SAN MATEO CALIFORNIA

ENGINEERING DEPARTMENT

CALIFORNIA 94403

PARKING STANDARDS
MINIMUM TURNING RADII ON RAMPS

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	CITY ENGINEER	3	1	194

PARKING STANDARDS
MECHANICAL AND AUTOMATED PARKING SYSTEMS

All mechanical and automated parking systems must comply with the specific standards and requirements set forth below, in addition to all applicable provisions of the City of San Mateo Municipal Code.

DEFINITIONS

1. MECHANICAL PARKING is a parking facility that uses mechanical devices or systems to retrieve or store one or more vehicle(s) by means of a lifting mechanism that vertically and/or horizontally stacks and stores the vehicle(s).

2. AUTOMATED PARKING is a parking facility where vehicular storage and retrieval is accomplished entirely through a mechanical conveyance system that does not require an attendant to park a vehicle(s).

APPLICABILITY

1. LOCATIONS PERMITTED. A mechanical and/or automated parking facility(ies) may be used to satisfy off-street parking requirements for residential uses in multi-family or mixed-use developments located outside of R1 (single-family) zoned areas. Such facilities are not permitted on surface lots and must be fully enclosed within a building or undergrounded.

2. COMPACT PARKING STALLS. Required parking provided in mechanical and/or automated parking facility(ies) are not considered compact stalls and are not subject to compact stall limitations outlined in Municipal Code Section 27.64.265.

VEHICLE BAY DIMENSIONS

All required off-street parking provided in a mechanical and/or automated parking facility(ies) shall be designed to conform with the following:

1. Width. Vehicle bays shall have a minimum unobstructed width of 6-feet 9-inches.
2. Length. Vehicle bays shall have a minimum unobstructed length of 17-feet 5-inches.
3. Vertical Clearance. Any vehicle loading bay or area where persons exit and/or enter a vehicle shall provide a minimum vertical clearance height of 6-feet 8-inches. All other vehicles bays shall have a minimum clearance height of 5-feet.
4. Backup Space. A minimum of 24-feet of backup space shall be provided for all vehicle bays that backout into a drive aisle.

PERFORMANCE STANDARDS

Mechanical and/or automated parking systems shall be subject to the following:

1. Mechanical and/or automated parking facilities may not be used to provide off-street visitor, loading, or accessible parking spaces.

2. Electric vehicle charging stations must comply with Municipal Code Sections 23.70.030 and 23.70.040. Electric vehicle charging stations can be located within mechanical or automated parking facility(ies) and/or provided in standard parking stalls.
3. All lifts and associated mechanical equipment shall be screened from public view.
4. All mechanical and/or automated parking facilities shall include an on-site alternative power source (e.g., a battery backup system) with sufficient capacity to store and retrieve cars in the event of an electrical power outage.
5. The facility shall be designed to contain vehicle liquids and/or debris from spilling onto other vehicles.
6. Signage shall be provided clarifying operations of the spaces to users and maximum vehicle heights permitted within the mechanical and/or automated parking system.
7. For off-street mechanical and/or automated parking facilities where entering vehicles are required to stop before a mechanically operated barrier before entering the parking facility, such barrier shall be placed a minimum of 18-feet from the parcel line where the entrance is accessed.

REQUIREMENTS

All mechanical and/or automated parking facilities shall be subject to the following requirements:

1. Compliance with all applicable local, state, and federal standards, including, but not limited to, Fire and Building Code requirements.
2. Recordation of an "Agreement Guaranteeing Maintenance of Mechanical Parking Facility" prior to building permit issuance.
3. The property owner shall enter into an agreement with the mechanical or automated facility manufacturer or other qualified service professional to provide on-call maintenance services to ensure that mechanical and/or automated parking facilities to be fully operational and usable with limited downtime. The agreement shall be valid immediately after installation and operation of the facility and shall be valid for as long as the use is on the property.
4. A maintenance inspection report for any automated, semi-automated or mechanical parking facility prepared at the sole expense of the property owner shall be submitted six (6) months after installation, and annually thereafter, to the Planning Division for review. At minimum, said report shall provide information on vehicle retrieval times and failure rates. The property owner shall make any necessary repairs to provide uninterrupted operation of the mechanical or automated parking facility.
5. An operations plan that at minimum includes details on how the facility will be accessed, retrieval efficiency, and operational details, schematic or technical drawings, and the location and specifications of an emergency back-up power source shall be required upon application submittal.