

CITY OF HAWTHORNE

SPECIFICATIONS FOR CONSTRUCTION OF CONCRETE CURBS, GUTTERS, SIDEWALKS AND DRIVEWAY APPROACHES WITHIN THE STREET RIGHT-OF-WAY

I. GENERAL

A. Permit

All work performed within the right-of-way shall be done under a permit issued by the Engineering Department.

B. Specifications

All work shall be done in accordance with the American Public Works Standards Plans and Specifications for Public Works Construction, except as herein specified.

C. Inspection

All work shall be inspected by a Public Works inspector. Form inspection is required on all work prior to the placement of concrete. This inspection will be made when the sub-grade and base (if required) have been prepared and forms have been installed. **Concrete placed without inspection will not be accepted and shall be removed by parties placing said concrete.** Inspections requested before 9:00 A.M. will be made the same day; those requested after 9:00 A.M. will be made the following day. No inspections will be made on Saturdays, Sundays or holidays.

II. MATERIALS

A. Concrete

Concrete shall be Class "B" 5-½ sack concrete. If mixed by hand, the proportions by volume shall be 1 part Portland Cement, 2-½ parts concrete sand and 3-½ parts rock. The maximum slump shall be 3".

B. Base Material

Base material shall be either sand or rock base at the option of the contractor. Rock base shall be commercially refined, untreated rock base consisting of broken stone and crushed gravel with 3/4" maximum aggregate. Decomposed granite shall not be used in the base. Sand base shall be a washed commercial fill sand, or concrete sand.

III. CONSTRUCTION DETAILS

A. Removals

Where the work consists of reconstruction of existing facilities, the entire section shall be removed to the first scoring line at or beyond the limit of work. If this line is not a cold joint or expansion joint, it shall be sawed to a minimum depth of 2 inches (2") before removal.

Existing four inch (4") sidewalk at drive approaches must be removed prior to construction of the new approach, except in R-1 zones where in the opinion of the Engineer the existing sidewalk is in satisfactory condition.

Curb/Sidewalk Specifications - (Continued)

B. Sub-Grade and Base

The sub-grade and base shall be constructed true to grade and cross-section. It shall be moistened and thoroughly compacted before the concrete is placed. All soft and spongy material shall be removed and replaced with suitable material.

C. Sidewalks

Sidewalks shall be a minimum of four-inch (4") Portland Cement concrete, except at driveways. They shall have a one-quarter inch (1/4") to the foot transverse slope downward toward the top of the curb. Sidewalk shall be constructed on four inches (4") of base material unless the existing soil is approved by the Engineer as having an adequate sand content.

Sidewalks at driveway approaches shall be constructed six inches (6") thick. When constructed in a "C" or "M" zone, these sidewalks shall be constructed on four inches (4") of base material.

D. Driveway Approaches

Driveway approaches shall be constructed in accordance with City of Hawthorne Standard Drawing No. A-604, and as herein specified.

Driveway approaches shall be constructed of six inch (6") thick Portland Cement concrete. Driveways shall be constructed on four-inches (4") of base material unless the existing soil is approved by the City Engineer as having an adequate sand content. When constructed in a "C" or "M" zone, approaches shall be constructed on four inches (4") of base material regardless of existing soil.

The width of any driveway approach, not including slopes, shall not exceed ten feet (10') in an "R-1" zone, seventeen feet (17') in an "R-1" zone where an attached garage exists in the front, thirty feet (30') in an "R-2", "R-3", "C" or "M" zone; and in any event shall not exceed 50% of the street frontage of any lot. Upon a proper showing, a variance to these standards may be granted by the City Engineer. The minimum intervening distance between the top of side slopes of adjacent driveway approaches serving the same lot or parcel shall be eighteen feet (18'); and the corresponding distance in the case of adjacent driveways serving two adjoining lots or parcels shall be three feet (3'), unless otherwise specifically permitted.

E. Forms shall be true and shall have a smooth, straight upper edge. The width of forms shall be equal to the full dimension of the surface they are forming. All forms shall be thoroughly cleaned and coated with form oil to prevent concrete from adhering to them.

Timber forms shall be surfaced on the side placed next to the concrete. For straight work, forms shall not be less than one and five-eighths inches (1-5/8") thick after being surfaced.

Forms for curb returns and other curves may be of lesser thickness, providing they are adequately supported.

Forms shall be carefully set to alignment, grade and dimension, and shall be stacked and braced to ensure rigidity.

F. Weakened Plane Joints

Weakened plane joints shall be constructed at intervals of from twelve to sixteen feet (12'-16'), to correspond with score lines. These joints shall be formed by a scoring tool and shall be one-eighth inch (1/8") wide and three-fourths inch (3/4") deep in sidewalks and one inch (1") deep in top of curbs and gutters. The edge of joints shall be finished with a one-quarter inch (1/4") edging tool.

G. Placing and Finishing

Concrete shall be placed in the forms without segregation and struck off and compacted until a layer of mortar has been brought to the surface. The surface shall then be finished to grade and cross-section and smoothed with a float. The final finish shall be applied with a soft broom. Brooming on driveways shall be transverse to the line of traffic.

The form on the front of curbs shall not be removed in less than two (2) hours, nor more than six (6) hours, after the concrete has been placed. In no event shall the form be removed while the concrete is sufficiently plastic to slump upon removal of the form. Holes or pockets appearing in the surface, after removing forms, shall be filled with mortar composed of one part Portland Cement to two parts sifted sand. When necessary to achieve the proper finish, the curb face shall be painted with a grout of this same composition. The face of the curb shall then be smoothed and finished with a steel trowel and given a final fine brush finish with brush strokes parallel to the line of the curb. The surface of sidewalks shall be marked to match other work in the area with a scoring tool which will leave the edges rounded. Curbs shall be scored to conform to score marks on adjacent sidewalk. In no event shall score marks be more than six feet apart.

Special finishes and markings must be approved by the Engineer prior to commencement of the work.

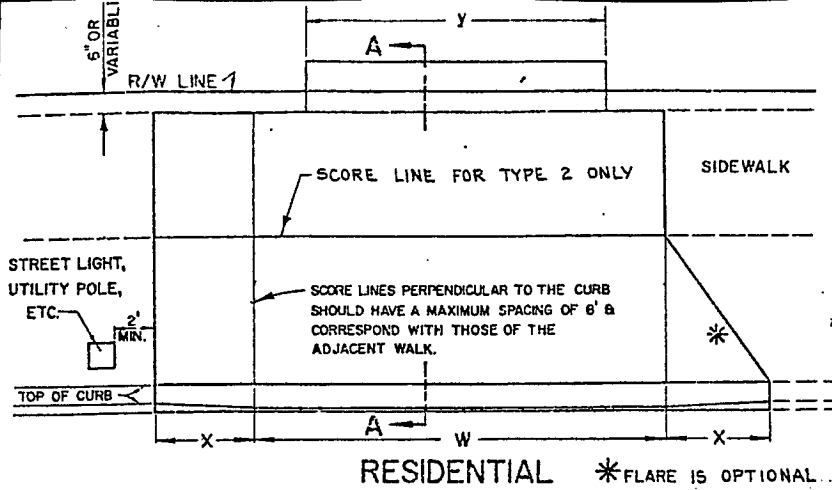
H. Protection and Curing

Exposed surfaces shall be sprayed uniformly with a pigmented curing compound at the rate of approximately one gallon per 150 square feet of area.

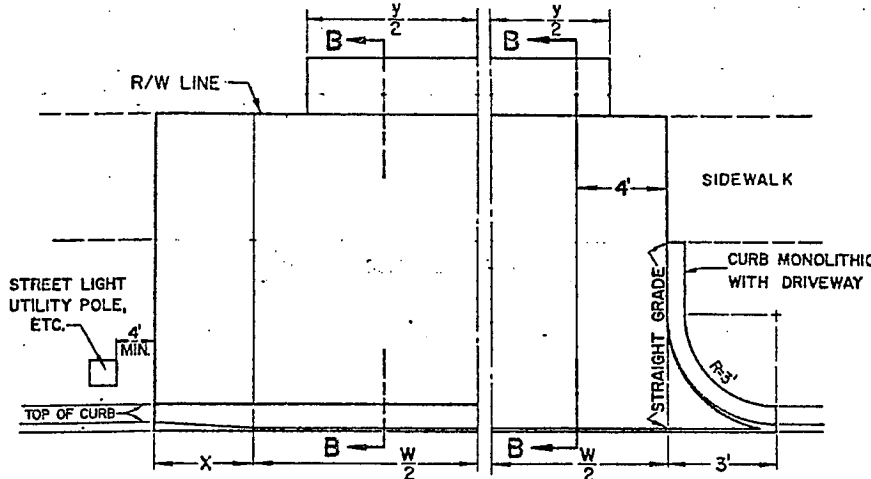
The contractor shall maintain suitable barriers to protect the concrete from traffic and any part of the work damaged by traffic or other causes shall be repaired or replaced by the contractor in a manner satisfactory to the City Engineer.

I. Final Clean-Up

The areas adjacent to the work shall be cleared of debris, filled as necessary with soil suitable for planting, and raked smooth and neat.

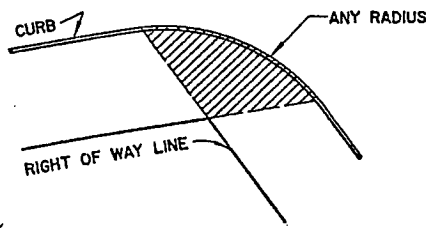


RESIDENTIAL * FLARE IS OPTIONAL

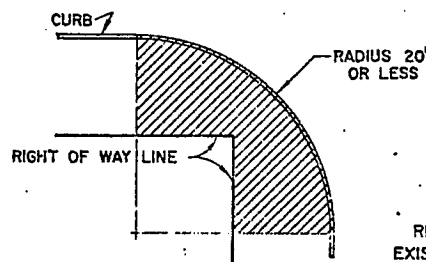


COMMERCIAL

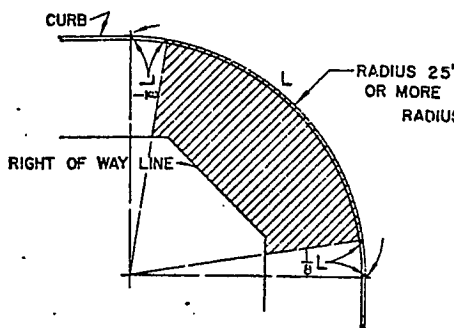
COMMERCIAL (ALTERNATE)
TO BE USED WHEN SPECIFIED



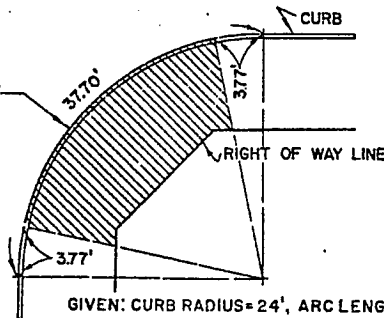
EXAMPLE I



EXAMPLE II

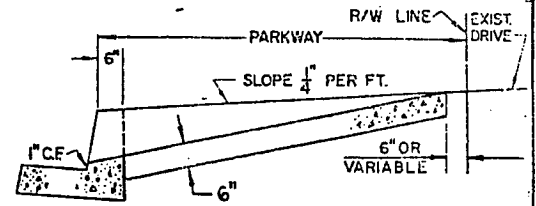


EXAMPLE IV



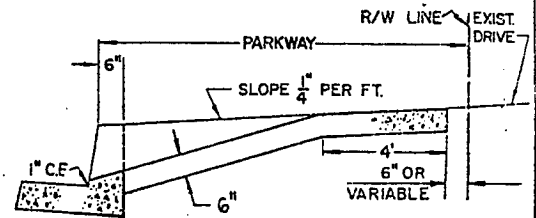
GIVEN: CURB RADIUS = 24', ARC LENGTH = 37.70'
FORMULA: MAXIMUM ENCROACHMENT = $\left(\frac{\text{CURB RADIUS} - 20'}{5} \right) \left(\frac{1}{8} \right) (\text{ARC LENGTH})$
 $= \left(\frac{24' - 20'}{5} \right) \left(\frac{1}{8} \right) (37.70') = 3.77'$

NOTE: DRIVEWAYS MAY NOT BE CONSTRUCTED WITHIN CROSS HATCHED AREA



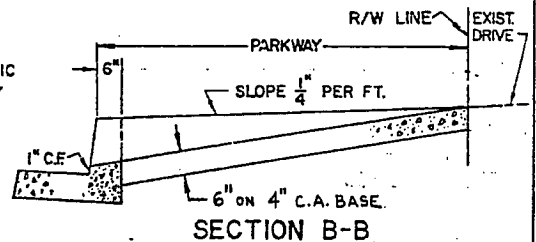
SECTION A-A (TYPE 1)

TYPE 1 MAY BE USED FOR ANY WIDTH PARKWAY BUT MUST BE USED FOR PARKWAYS LESS THAN TEN (10) FEET.

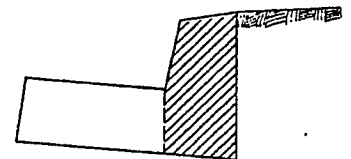


SECTION A-A (TYPE 2)

TYPE 2 MAY BE USED FOR PARKWAYS TEN (10) FEET OR GREATER



SECTION B-B



TYPICAL SECTION OF CURB & GUTTER

REMOVE CROSS-HATCHED PORTION OF EXISTING CURB TO CONSTRUCT DRIVEWAY

TABLE OF "X" DIMENSIONS		
CURB FACE	RESIDENTIAL	COMMERCIAL
6" OR LESS	3'	4'
7" TO 8"	4'	4'
8" TO 9"	4'	4'
9" OR MORE	4'	5'

CITY OF HAWTHORNE

MAY 1975

Driveways

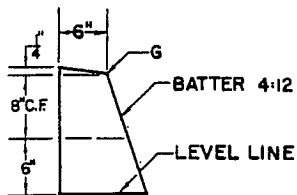
APPROVED

James H. Mitsch

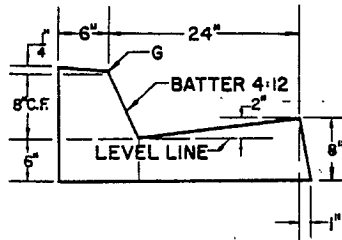
CITY ENGINEER

PLC 18593

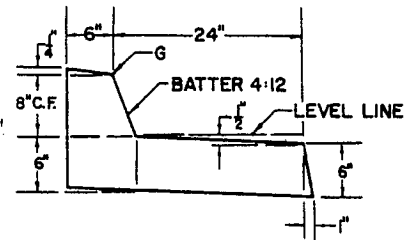
A-604



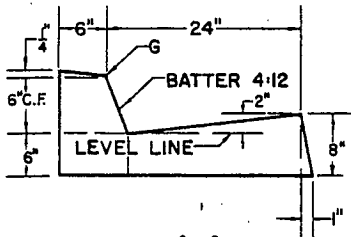
A1



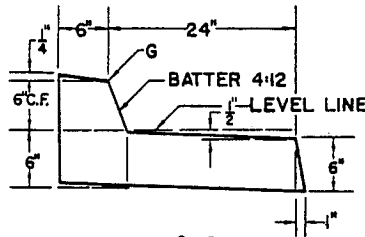
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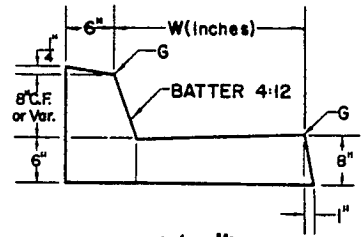
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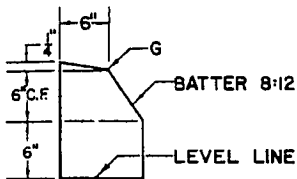
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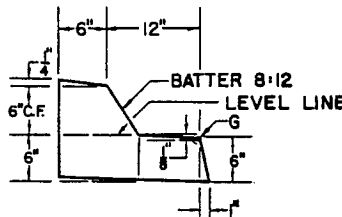
A5



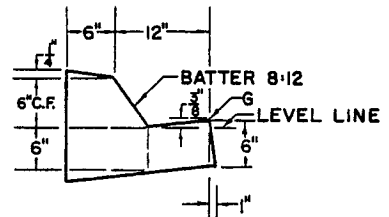
A(W'')



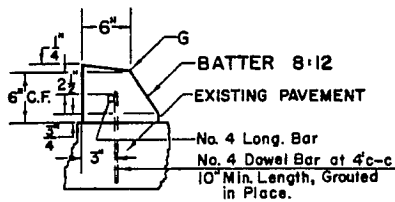
B1



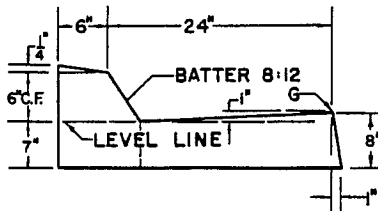
B2



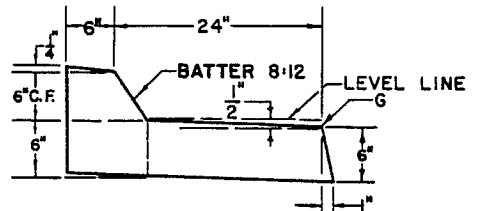
B3



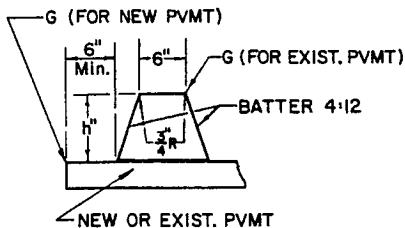
B4



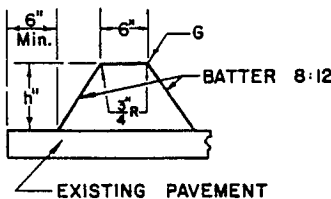
B5



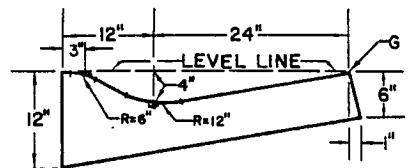
B6



C(h'')



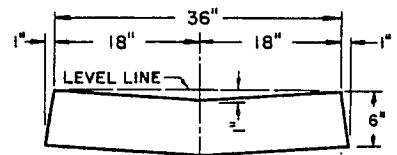
D(h'')



E

NOTES:

1. TYPE A,C BARRIER CURB.
2. TYPE B,D MEDIAN CURB.
3. G DESIGNATES GRADE LINE AND/OR OFFSET POINT.
4. W' DESIGNATES WIDTH OF GUTTER.
5. H' DESIGNATES HEIGHT OF TYPE C AND D ASPHALT CONCRETE CURB.
6. TYPES C AND D ARE CONSTRUCTED OF ASPHALTIC CONCRETE.
7. TYPES A, B,E,F, ARE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.
8. ALL EXPOSED CORNERS ON P.C.C. CURBS & GUTTERS TO BE ROUNDED WITH A 3/4" R.



F

LOS ANGELES COUNTY ROAD DEPARTMENT

CURB & GUTTER

STANDARD PLAN

28-01

APPROVED

J. S. Morha
ROAD COMMISSIONER

1 Dec 67
DATE