

City of Los Angeles
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

General Information Concerning the Construction of Curbs, Driveways and Sidewalks Under Class “A” Permits

PERMITS: No person shall remove or construct any curb, sidewalk, driveway, gutter, pavement, roof drain, or other improvements in a city street without first obtaining a permit from the Engineering office in the district wherein the work will be done. All work is to be performed accordance with the latest adopted Standard Specifications. **Permits must be kept on the job site at all times.** (Per LAMC SEC. 62.105. STREETS, SIDEWALKS AND OTHER IMPROVEMENTS – PERMITS REQUIRED)

BUREAU OF ENGINEERING DISTRICT OFFICES:

Central District, 201 N. Figueroa Street, 3rd Floor, Station #23, Los Angeles 90012-2601
Phone: (213) 482-7030

West Los Angeles District, 1828 Sawtelle Blvd., 3rd Floor, Los Angeles 90025
Phone: (310) 575-8384

Valley District, 6262 Van Nuys Blvd., Room 251, Van Nuys 91401
Phone: (818) 374-5090

Harbor District, 638 S. Beacon St., Suite 402, San Pedro 90731
Phone: (310) 732-4677

INFORMATION REQUIRED BEFORE A PERMIT CAN BE ISSUED:

Before applying for a permit, measure the following dimensions at the job site and make note:

- (1) Lineal feet of curb to be constructed.
- (2) Length and width (square feet) of sidewalk to be constructed.

For driveway construction the following additional information shall be furnished.

- (3) Height of curb face (CH).
- (4) Distance from curb face to front edge of existing sidewalk (B).
- (5) Width of existing sidewalk (C).
- (6) Distance from curb face to front property line (A).
- (7) Use of property.

Note existing conditions or obstructions that are in or within 10 feet of the job site, such as street light standard, fire hydrant, traffic signal, tree in parkway (In addition, if it is necessary to remove a tree from the parkway a tree removal permit must be obtained from **Urban Forestry Division of the Bureau of Street Services at (213) 847-3077**, 1149 S. Broadway, Suite 400, Los Angeles, 90017), utility pole, guy wire, gas meter, water, storm drain structure, bus loading zone, etc. This information along with a sketch will expedite issuance of the permit and inspection of the work. Standard Plans covering curbs, sidewalk, driveways, expansion joint, etc., may be secured from the Permit Office.

WATER METER BOXES, GAS SHUT-OFF VALVE BOXES, STREET LIGHT AND TRAFFIC SIGNAL CONDUIT AND PULL BOXES, AND PARKING METERS: Consult agency having jurisdiction over any utility box affected. The top surface of such boxes shall meet standard sidewalk slope. Alterations or relocations may be necessary if a box is located within the limits of a proposed driveway. Provide the necessary forms to omit concrete in an area measuring 30 inches by 36 inches around any water meter box in the area being improved. Arrange with **City’s Department of Water and Power at (213) 367-1218** to relocate the water meter from the proposed driveway approach location. Call **Department of Transportation at (213) 928-9640** for existing traffic signals or **at (213) 473-8270** for parking meters or **ATSAC at (213) 982-9691** 24 hours in advance of starting construction. All street light work, including pull box or conduit modification requires prior approval of **Bureau of Street Lighting at (213) 847-1456**. Fees for street lighting modifications must be paid for work completed by the Bureau of Street Lighting before any concrete may be poured.

INSPECTION: After a permit has been issued, **CALL FOR INSPECTION PRIOR TO COMMENCING ANY WORK.** Telephone the Bureau of Contract Administration (See below) for an Inspector, according to job location.

ALL OTHER AREAS: (213) 485-5080

Note: If starting time is changed, notify the appropriate office immediately.

STANDARD SLOPE: Unless otherwise specified on the permit, the sidewalk grade shall be sloped upward from the existing curb at a rate of 1/4 inch per foot (2%). New work required to join existing off-grade improvements may necessitate ramping or warping in order to construct the walk or driveway in a safe condition. (Consult Inspector from Contract administration.) (See Standard Plan S-444-0)

REMOVALS: When an existing curb is to be removed, the saw cut or joint shall be vertical and extend to the sub-soil. The curb which remains must be on grade, in good condition, and in proper alignment. If a driveway is to be constructed, two other methods of curb removal are acceptable: 1) the gutter may be saw cut within 4 inch of the flow line; or 2) the depressed curb may be saw cut from the existing curb, with the edges ground to a 1/2 inch radius. The top of curb must then be roughened by bush hammering, grinding, sandblasting or other approved method. When existing sidewalk or driveway is removed, cuts shall be made along scoring lines, if cut would fall within 12 inches of the scoring lines. If the saw cut should fall within 30 inches of a joint or edge, the concrete shall be removed to the joint or edge. The concrete shall be neatly sawed to minimum depth of 1-1/2 inches in straight lines parallel with, and/or right angles to, the alignment of the sidewalk, and the concrete removed and reconstructed within the saw cuts.

LIGHTS AND BARRICADE: A passageway for pedestrians through, over, or around the work shall be provided and maintained at all times. Adequate fences, barriers, lights, and signs shall be provided and maintained in accordance with the current edition of the **Work Area Traffic Control Manual** from the beginning of removals and excavation through final cleanup after the curing period. Light shall be kept burning from sunset each day until sunrise the following day. If, due to the permittee's negligence, it is necessary for **Bureau of Street Services - StreetsLA at (213) 847-6000** to provide barriers, lights, etc., there will be a charge for this service.

PREPARATION OF SUBGRADE: Remove all roots, broken concrete, trash, etc. Excavate soil to the required depth; thoroughly tamp the entire area; water the sub-grade thoroughly the day before, and moisten the sub-grade immediately before placing concrete. Where existing improvements have been damaged by tree roots the following procedure shall be used. Cut roots causing damage at the tree trunk and remove to a depth of 10 inches below official sub-grade. Backfill the excavated area with sand or aggregate, in addition, where expansive soil is present a specified base material may be required.

CAUTION: If there are unusual circumstances or it appears that removal of the roots may endanger the tree, call **Urban Forestry Division, Bureau of Street Services - StreetsLA, at (213) 847-3077** and for instructions.

FILLS: Any embankment or fill on which improvements are to be constructed, shall be made using suitable material subject to approval by the Inspector. Clods or hard lumps of earth shall be broken up and no rocks or lumps of material over 2-1/2 inches in size shall remain in the upper six inches of the fill. The relative compaction of the earthy material composing each layer of fill shall not be less than 90% behind the curb and not less than 95% compaction at the curb & gutter.

TOOLS: The following tools are required to be on the job:

Carpenter's level

Wood float, steel trowel, edging tool, scoring tool

Grid or screen tamper, or other tamping device, to develop at least 3/8 inch of mortar

1"x6"x10-foot straight edge, for use in checking grade and guiding scoring tool

FORMS: Forms shall be nominal 2-inch lumber properly set and substantially held to the correct grade and line. Curb forms shall be full depth in back as well as in front. Front forms for driveway side slopes may be nominal 1-inch lumber. Freehand shaping of driveway side slopes is not permissible; the forms must be cut on an angle to the proper length.

MEASUREMENT OF CONCRETE MATERIALS: Transit Mixed Concrete is acceptable on all permit work, provided that class 520-C-2500 concrete is furnished from an approved bunker. Each deliver of transit mixed concrete shall be accompanied by a delivery ticket, setting forth the weights of the material in the concrete. Class 520-C-2500 concrete shall be used for the construction of curbs, sidewalks, driveways, gutters, catch basins, and local depressions.

CONCRETE MATERIALS FOR MIXING AT JOB SITE: Portland cement concrete shall consist of Portland cement (delivered in original sacks), washed concrete sand, and washed and graded screened gravel and/or crushed rock. Sand and rock shall be kept separate during delivery and when stockpiled at the job site. Consult the Inspector regarding the proportions of materials to be used in the mix and the method of measurement to be employed. Broken concrete shall not be mixed with or embedded in new concrete.

THICKNESS OF CONCRETE:

- Minimum thickness for sidewalk (see note below, Standard Plan S-444-0). 3 inches
- Minimum thickness for driveway in R-1 or R-2 Zone..... 4 inches
- Minimum thickness for all other driveways..... 6 inches

Note: **New** sidewalk to be constructed in line with a new or existing driveway apron shall be of the same thickness as required for a new driveway at that location. **Existing** sidewalk in line with a new or existing driveway apron in an R1 or R-2 zone may be left in place, provided such a sidewalk is in good condition and lies on standard slope, and the apron has adequate "Y" distance.

SEPARATION OF CURB AND SIDEWALK: Curb and adjacent sidewalk shall not be constructed monolithically. When it is desired to construct adjoining curb and sidewalk the same day, the curb shall be constructed first; then a layer of building paper, held in proper position and extending the full thickness of the sidewalk, shall be used as a separator between the concrete of the curb and the concrete of the walk. Exception: The depressed curb for a driveway may be poured monolithically with driveway.

EXPANSION JOINT: Approved expansion joint filler material shall be placed only around utility poles located in the sidewalk. The expansion joint filler strips shall extend the full depth of the sidewalk being placed.

WEAKENED-PLANE JOINT: Only approved plastic control joints shall be placed at the following locations:

- (1) **Driveway:** Plastic control joint shall be installed on both sides of a driveway and at approximately 10-foot intervals within the driveway if the driveway exceeds 15 feet. (See Standard Plan S-440-4)
- (2) **Sidewalk:** Plastic-control joints shall be perpendicular to curb and at regular intervals not exceeding 10 feet. Joints for the full walk width shall be placed at the BCR, MCR and ECR of all walk returns except at the BCR of alleys and the ECR of alleys if walk is not full width of parkway. They shall be located for the full walk width each side of tree wells.
- (3) **Curb and Gutter:** Plastic-control joints shall be installed at regular intervals not exceeding 20 feet. They shall also be located at the ECR of alley returns where walk is full width of parkway and at the BCR, MCR and ECR of all other returns. Where gutter is adjacent to concrete pavement, the joints shall be aligned with the pavement joints where practical. In lieu of plastic-control joints, 1-inch deep saw cuts may be used. Concrete sawing shall take place within 24 hours after the concrete is placed.

BCR = Beginning of Curb Return MCR = Middle of Curb Return ECR = End of Curb Return

SIDEWALK COLORING: Coloring of sidewalk or driveway is permitted only when authorized by the permit. A separate Revocable permit with approval from the Cultural Affairs Division and Design Standards and Investigation Group is required to authorize the colored concrete. When colored sidewalk or driveway is authorized, only subdued colors such as lamp black, red oxide, slate blue, or similar colors may be used. The same solid color shall extend along the full frontage of the lot, including driveways (if any). Partial coloring or checkerboard patterns of two or more colors will not be permitted.

Coloring of full height curb will not be permitted, but authorization may be granted for coloring depressed curb which is poured monolithically with a colored driveway.

Colored sidewalk of driveway may be constructed in one or two courses. If constructed in one course, the coloring shall extend throughout the full thickness. Dusting the top surface of the concrete with the coloring material will not be

permitted. If construction is to be in two courses the second or top course shall be of colored mortar 1/2 inch thick (1 part cement to 1-1/2 parts sand, with color added to suit). This mortar must be mixed in a concrete mixer. The second course shall be placed on the first course within one hour after placing the first course.

When reconstructing portions of a colored sidewalk or driveway, the existing color shall be matched as closely as possible.

CURB DRAINS: Drain pipes shall be constructed beneath the sidewalk to connect building and area drains to curb outlets as shown on the Plans or as directed by the City Engineer.

The drain shall be 3-inch diameter pipe for a 6-inch curb face and a 4-inch diameter pipe for an 8-inch curb face or greater. The invert of the drain shall be located 1/2-inch above the gutter flowline. The drainpipe shall have a minimum 2-inch clearance from top of curb and be laid on a straight grade with a minimum slope of 1/8-inch per foot and terminate 1-inch back of the curb face.

Curb drains may be constructed using pipe materials specified in Section 207 of the Greenbook or other pipe materials approved by the Engineer. The pipes shall be suitably joined in accordance with the manufacturer's standard jointing system.

DRAINAGE OUTLET THROUGH EXISTING CURBS AND SIDEWALKS:

A drain to be constructed through an existing concrete curb must be installed either through a drilled hole or by removing a section of curb down to sub-grade and at least 7" from each side of the outside surface of the pipe. A drain to be constructed under existing concrete sidewalk requires removal (with saw cut edges) and reconstructing of full squares of the sidewalk or minimum width of 30 inches. All concrete curb or sidewalk which is cracked by the above operations must be removed and reconstructed.

(Per LAMC SEC. 62.80. DRAINAGE OF WATER INTO STREETS, Special Order Numbers SO 19-0569, SC 27-1278)

CONCRETE FINISHING:

| Work Finish Required | Finish Required |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Sidewalk finish on level of nearly level streets (where slope is less than 6% grade). | Fine hair-broom finish |
| Sidewalk on streets where slope is over 6%. | Wood float finish. |
| "Y"-slope and "X"-slope area of driveways, including top surfaces of curb. | Wood float finish (roughen curb when depression is saw cut). |
| All curb except top of depressed curb. | Fine hair-broom finish. |

NOTE: Side slope (X-slope) curb forms for all driveways shall be removed during or immediately after finishing the surface of the driveway. The curb face within the side slope area shall then be given a fine hair broom finish.

SCORING LINES: Scoring lines shall have a minimum depth of 1/4 inch and a radius of 1/8 inch. Walk 20 feet or more in width shall have a longitudinal center scoring line. The longitudinal scoring line shall be parallel to, or concentric with, the curb line. However, when new walk is constructed adjacent to existing sidewalk, scoring lines shall correspond to existing scoring.

PARKWAY FILL-IN (WHEN PERMITTED UNDER CITY STANDARDS):

- (1) Portland cement concrete is the most desirable material for paving in the parkway area.
- (2) Existing sidewalk and curb to be joined must be on grade and in good condition.
- (3) The forms at each end shall be set at right angles to the curb and in line with scoring lines (if any) in the existing sidewalk. This may necessitate paving a small portion of the parkway in front of adjoining property.
- (4) Case I side slopes at existing driving driveways may have to be reconstructed to Case II side slopes as part of the parkway paving operation.
- (5) Trees may be required as a conditional allowing parkway fill-in.

QUALITY OF WORK: All work is to be done in accordance with the current edition of Standard Specification for Public Works construction, and Standard Plan No. S-610; otherwise it will not be accepted.

CURING: All new concrete shall be watered and kept moist for a minimum of five days, or an approved curing compound may be sprayed on the newly finished work. (Consult Inspector).

WASTE: Wash-water or waste material from concrete mixers or trucks shall not be dumped into the gutter or into any sewer or storm drain. All form lumber, broken concrete, surplus dirt, sand and rock shall be removed from the job site as soon as the construction work is completed.

LAYOUT OF DRIVEWAYS

WIDTHS OF DRIVEWAYS (City Standard Plan S-440-4): The minimum width of an apron shall be 10 feet in the A, RE, RS, R1, R2, and RW zones, and 12 feet in the RD, R3, R4, R6, C, M, P, and PB zones, measured along the existing or proposed curb line or, if neither exists, then measured as directed by the Engineer. The maximum width of an apron shall be 18 feet, measured along the curb line, when serving a lot in the "A" or "R" Zones and 30 feet when serving a lot in the "C", "M", "P" or "PB" Zones, as said zones are provided for by Article 2, Chapter 1 of the Los Angeles Municipal Code. Exceptions to such limits may be granted by the Board of Public Works upon recommendation by the City Engineer. (SEC. 62.105.2. WIDTH OF DRIVEWAY APPROACH APRON).

Where a utility pole restricts an area in which a driveway is to be constructed, a Case 3 driveway may be constructed to abut the pole.

Not less than 20 feet of full-height curb shall be retained between driveways located to serve the same lot. Not less than 20 feet of continuous curb space shall be retained in front of each lot where street frontage of the property served is greater than 40 feet. Where such frontage is 40 feet or less, continuous curb space shall be retained in front of each lot equal to one-half the length of the frontage, except that this provision shall not be applied to prevent the construction of one driveway having a minimum width of 10 feet in the "A", "R", "RS", "R1", "R2", and "RW" Zones and 12 feet in the "RD", "R3", "R4", "R5", "C", "M", "P" and "PB" Zones.

Where driveways serve separate lots, and are so located that at least two feet of full-height curb cannot be constructed separating said driveways then the two driveways shall be merged into one. This necessitates removal of the entire existing side slope. (SEC. 62.105.3. LENGTH OF CURB SPACE)

The Engineer shall enumerate any exceptions to the above listed requirements on the permit.

EFFECT OF SIDE LOT LINES ON DRIVEWAYS: (Per SEC. 62.105.1. LOCATIONS OF DRIVEWAY APPROACHES.)

The side slope of Case I or Case II driveway, or the 3 foot radius curb return of a Case II driveway, may extend in front of an adjoining lot without the consent of the owner of the adjoining lot. No other portion of a driveway approach may extend in front of an adjoining lot without the written consent of the owner of said adjoining lot. For this purpose, the division between two lots shall be a line passing through the common lot corner at right angles or radial to the curb line regardless of the direction of the side lot line.

All driveways shall be constructed at right angles to the curb. Where the curb line is curved, the driveway shall be constructed on a line radial to the curb.

PROHIBITED LOCATIONS FOR DRIVEWAYS: (SEC. 62.105.1. LOCATIONS OF DRIVEWAY APPROACHES)

- (1) No portion of a driveway shall be constructed between the prolonged intersecting property lines at any street or alley intersection or between the points of curvature of any curb return having a radius of 20 feet or less. The permit shall enumerate any exceptions. Under certain conditions a driveway may be merged with an adjacent alley intersection. Consult Permit Office.
- (2) No driveway shall be located where only partial ingress of vehicles onto private property is possible. (Examples are loading docks or doorways adjoining the public sidewalk, where vehicles parked across the sidewalk would prevent full and free use of the sidewalk by pedestrians.)
- (3) No driveways shall be located where ingress of vehicles onto private property is impossible.

(4) No driveways shall be permitted for front yard parking. (LAMC Sec 12.21 C (g))

ABANDONED DRIVEWAY: Driveways or depressed curbs, abandoned and no longer in use, shall be removed and replaced with full-height curb and sidewalk. Class "A" permits for new improvements will not be valid until all abandoned driveways at the job location are closed as outlined above.

EXISTING DEPRESSED CURB: Existing depressed curb must be in conformance with the latest standards plan before a new approach may be constructed adjacent thereto. A nonconforming existing depressed curb shall be rebuilt in accordance with current standards.

DRIVEWAYS ON UNIMPROVED AND PARTIALLY IMPROVED STREETS:

- (A) **Curb Only - Street Not Paved:** At locations where curb has been constructed but the street is not paved, the driveway depression shall be constructed 7-1/2 inches below the top of the curb, unless otherwise specified by the permit. The front form for the driveway depression shall extend to the bottom of the depressed curb across the full width of the driveway.
- (B) **Street Paved - No Curb:** At locations where streets are surfaced but no curb has been installed, concrete is not permitted. If asphalt or rock and oil are used, a recorded waiver signed by the owner is required at the time he applies for the permit. (Consult Permit Office.) Driveways of this type are considered temporary improvements.
- (C) **No Curb - Street Not Paved:** Consult Permit Office for the established elevation and grade of street abutting your property. The driveway shall then be constructed to the elevations furnished by the Bureau of Engineering.
- (D) **Curb With Street Paved:** Construct depressed portion of the curb 1/2 inch above the existing pavement. Where the curb face is 6 inches or less, if the pavement adjacent to the curb is asphalt or rock and oil, construct the depressions flush with the pavement, omitting the 1/2 inch lip.

Where full height or depressed curb for a driveway is constructed next to an existing asphalt surface, the permittee will be responsible for paving the minimum 2 ft slot resulting from removal of the curb form.

Where no sidewalk exists, unless otherwise specified on the permit, the back edge of the driveway (the top of the "Y" slope) shall be set at a grade upward from the existing curb at rate of inch per foot (2%).

NON-STANDARD CONSTRUCTION: When standard plans cannot be followed because of local conditions, a waiver must be signed by property owner before the permit is issued and the permit shall include an approved sketch or plan that specify deviations from standard construction. (See LAMC SEC. 62.105.5. APPLICATION FOR DEVIATIONS FROM THE PROVISIONS OF SECTIONS [62.105.1\(a\)](#), [\(b\)](#), [\(c\)](#) AND [\(d\)](#), [62.105.2](#), [62.105.3](#) AND [62.105.4](#).)