



Construction, Repair and Replacing of Sidewalks, Curbs, and Driveways

2019 Specifications

**TO ALL CONTRACTORS OR PERSONS ENGAGED IN SUCH WORK IN THE
CITY OF LOUISVILLE, OHIO**

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100 – GENERAL CONDITIONS

I - PURPOSE:

These specifications shall govern the construction, repair and/or replacement of any curb, sidewalk or drive to be built within the Right-of-Way or Easement for any street, alley, thoroughfare or on other public property of the City of Louisville, Ohio in accordance with any applicable City Ordinances in effect or as amended.

II - SCOPE:

The City of Louisville Standard Drawings are incorporated as part of these specifications. The latest “State of Ohio Department of Transportation Construction and Materials Specifications” (HEREINAFTER REFERRED TO AS ODOT CMS) and ODOT Standard Construction Drawings are incorporated herein for reference purposes and are to be used as directed by the Service Director. The Service Director shall decide any and all question arising as to the quality of and acceptance of any materials furnished or work performed.

III- DEFINITIONS:

SERVICE DIRECTOR- The Authorized Representative of the City of Louisville who is responsible for the implementation and enforcement of those sections of CODIFIED ORDINANCES OF LOUISVILLE PART NINE- STREETS, UTILITIES, AND PUBLIC SERVICES CODE as are the subject of these specifications.

INSPECTOR- The person or persons designated by the Service Director to perform onsite inspections of the construction project and who monitors contractor compliance with Plans approved by the Service Director, Directives from the Service Director and conformance with these specifications.

CONTRACTOR (AKA SIDEWALK CONTRACTOR) – Any person, firm or entity performing the work of constructing, repairing or replacing any curb, sidewalk or drive within the Right-of-Way or Easement for any street, alley or on other public property in the City of Louisville who holds a current Permit and current License issued by the City Planning Director to perform such construction.

OWNER- The City of Louisville or private person, firm or entity or their authorized representative who enters into contract or agreement with a contractor to construct, repair or replace any curb, sidewalk or drive within the Right-of-Way or Easement for any street, alley or on other public property in the City of Louisville or who has entered a contract with the City of Louisville for any Curb or Sidewalk Program.

IV - HAZARDOUS OR DETERIORATED SIDEWALK CRITERIA

A hazardous sidewalk is defined for the purposes of the Sidewalk Replacement Program as a sidewalk which exhibits any of the following criteria:

A. A vertical separation of more than 1 inches at either a crack or joint;

- B. A horizontal separation or crack greater than 1 inch;
- C. The cross slope of the sidewalk is unnecessarily greater than 1-1/2 inch per foot;
- D. Water accumulation due to insufficient grade of the sidewalk;
- E. Severely rough, uneven surface due to spalling;
- F. Severe cracking;
- G. Missing pieces;
- H. Gross deterioration due to tree roots or other decay caused by the pressure of trees;
- I. Deterioration due to unauthorized vehicular traffic or parking on a sidewalk; and
- J. Other conditions not listed above which render the sidewalk hazardous for public use as determined by the City Service Director.

V. DISCHARGE OF WATER FROM PREMISES

No person shall allow to be discharged from the premises of such person, the water from any fountain, sink or pipe from any building, or the storm water runoff from parking lots or driveways, upon the surface of any part of any sidewalk, street or public ground within the City, when in the opinion of the Service Director a public nuisance is caused by so doing. The Service Director may, when in his judgement it is necessary, notify any person not to allow water to be discharged upon any sidewalk, street or other public ground in violation of this section.

200 – CONTROL OF THE WORK

I – CONSTRUCTION SITE:

The Construction Site is considered to be the immediate area of Grubbing, Clearing, Demolition, Excavation, Embankment and Construction as well as immediately surrounding lands and streets used for such activities and for the storage of construction materials, temporary parking of construction vehicles, staging areas for equipment or material delivery, construction zone signage and barricades.

The Contractor is to maintain the Construction Site at all times in a presentable condition acceptable to the Service Director until the completion and acceptance of the construction. Remove all rubbish and construction debris immediately. Maintain adjoining streets, sidewalks and drives free of soil, mud and excess construction materials. Broom sweep or wash as needed or directed.

The Contractor is responsible for repairing or replacing damaged utilities, pavements, structures, landscaping, street signs and monuments within the Construction Site caused by the Contractor, Sub Contractor, Suppliers or Workers. Such repair or replacement shall be “in kind” as directed. Protect all work and property within the Construction Site.

The Contractor is to contact the City Planning Department the day prior to any work being performed in the Construction Site in order to provide for Inspection. No concrete installation is to be performed within the Construction Site unless an Inspector confirms that the conditions and requirements of these specifications are being met.

The Contractor is to contact the Ohio Utilities Protection Service a minimum of 48 hours in advance of work to be performed within the Construction Site and is responsible for coordinating any relocations or adjustment/replacement of affected utilities and appurtenances.

II- INSPECTION

The Contractor shall notify the City Planning Department the day prior to any work to be performed to allow for inspection. No materials are to be placed until the subgrade, base, forms and materials to be placed are approved by the Inspector. All work and materials shall conform to these Specifications, City of Louisville, ODOT Construction and Materials Specifications as directed and approved by the Service Director.

All work and materials found to be in nonconformance with the specifications herein and/or unacceptable to the Service Director shall be removed and replaced at the Contractor's expense. Work performed and materials placed without the Inspector's approval are subject to be removed at the Contractor's expense, as may be directed by the Service Director.

Inspection is to be performed on Demolition, Subgrade Preparation, Base Placement, Forming and Concrete Placement. Work may be performed on any phase previously inspected and released.

The Contractor shall provide, upon request, Load Tickets from Concrete Suppliers, Aggregate Suppliers or Asphalt Suppliers showing the grading and mix of the materials used. If requested, the Contractor shall provide Material Testing, at its expense, for questionable materials proposed or used in the construction.

The City Service Director will decide questions concerning the quality and acceptability of materials furnished.

300- EXCAVATION/SITE PREPARATION

I- DEMOLITION – CONTRACTOR PERFORMED

The Contractor shall saw cut the limits of the walk and curb removal which shall be 1 foot off of the existing face of curb, 1 foot off the existing face of building or structure which is to remain after walk removal, and the limits of the walk removal if not occurring at an existing joint. The saw cut shall be the full depth of the walk or pavement structure including brick or concrete base.

The Contractor shall be responsible for clearing and grubbing and the removal of any construction debris remaining above the subgrade elevation per ODOT CMS Items 201 & 202. All subgrade soil disturbed during demolition is to be considered embankment material and is subject to the requirements of ODOT CMS Item 203. No embankment material over 4 inch size will be permitted within the top 8 inches of subgrade embankment. Voids left by stump or root removal or removal of other structures are to be replaced ODOT CMS 703.11 Structural Backfill Type I or Type III compacted.

The Owner/Contractor is responsible for the abandonment or salvage of any vault or basement areas encountered during demolition. If the vault or basement area is to be salvaged, the owner shall prepare a salvage/reconstruction plan for review by the Service Director. If the vault or basement area is to be abandoned, demolish the walls to a depth 2 feet below finish grade and perforate the floor slab. The void is to be filled with compacted ODOT CMS Structural Backfill Type I or III or low Strength Mortar (LSM). All fill materials are to be approved the Service Director before placement.

II- SUBGRADE PREPARATION

The contractor shall prepare the subgrade to the proposed line and grade prior to inspection and sidewalk construction. The subgrade preparation is to be according to pertinent sections of ODOT CMS Items 203 (Excavation and Embankment) and 204 (Subgrade Compaction). This includes, among other requirements, the removal and replacement (or drying and compacting) of soft or unsuitable soils to a depth of 6 inches below subgrade as directed by the Service Director. Use Structural Backfill Type I or III.

ODOT CMS 204 IS MODIFIED AS FOLLOWS: Compaction will be determined by visual inspection by the Service Department. In the event of disagreement of inspection results, the Contractor shall be responsible for testing by an independent testing agency certified by AASHTO Materials Reference Laboratory (AMRL). This includes scheduling and expenses associated with the third party testing.

The Contractor shall pay particular attention to ODOT Item 203.04.A (Drainage and Maintenance of the Work). The Contractor shall place base materials as soon as practicable after the inspection of the subgrade to prevent subsequent rutting, erosion or water ponding requiring regrading, redrying and recompacting.

All trench construction for the repair/replacement or installation of public utilities, repair/replacement or installation of sanitary and storm sewer and drains or the placement of conduits and foundations for electrical circuits and lighting shall be performed prior to the placement of the base materials. The trench construction shall be per *Louisville City Drawing*. No in situ materials are to be used for backfill material unless approved by the Service Director.

III- BASE PREPARATION

Aggregate base materials are to be placed according to the gradation and compaction requirements of ODOT CMS Item 304 except as follows:

No Open Hearth Basic Oxygen Steel or 57 Granular Slag shall be used. (OH), (GS)

No Foundry Sand or Air Cooled Blast Furnace Slag shall be used. (FS), (ACBFS)

Under certain circumstances, No. 57 or 67 angular stone may be used if approved in advance by the Service Director.

The Contractor shall protect the base material, prior to inspection and walk installation, according to ODOT CMS Item 203.04.A.

400- CONCRETE WALK, DRIVE AND CURB CONSTRUCTION

I- GENERAL CONSTRUCTION AND MATERIALS

(A)- The Contractor shall construct all concrete walks and drives according to the requirements of ODOT CMS Item 608 except as follows:

The use of wooden forms will be permitted only after they have been inspected and approved by the City. Wooden forms must be straight and cut to a full depth of 4", 6", or 7" as the case may be.

Expansion joint filler is not permitted between walk/drive and curb unless approved by the Service Director. (See City of Louisville Standard Drawing 10, 11, and 12).

Concrete mix aggregate shall be No. 57 or 67, limestone only.

Concrete shall be Class C. With approval by the Service Director Class C Option 1 (Cement and Fly Ash) may be used between April 1 and October 15.

Cold weather practices shall be submitted to the Service Director for approval. Contractor shall place and protect all concrete in accordance with the latest edition of ACI 306.

Asphalt or crushed aggregate walks are only permitted for temporary repairs over trench constructions as directed and approved by the Service Director. Walks that need repaired or replaced are to be of concrete construction only and according to these Standards and Specifications.

The Contractor shall provide for the reconnection of existing roof drains discovered or damaged during excavation or as directed by the Service Director. The drain is to be replaced through the walk area to the curb or existing drainage structure using 3 inch PVC Schedule 40 Drain Pipe. Use appropriate Fernco or other manufactured connectors and adaptors as directed and approved by the Service Director. See City of Louisville Standard Drawings 7 and 8.

A transverse contraction joint shall be placed over the PVC pipe when used.

II- GENERAL DIMENSIONAL CRITERIA

(A)- All walks and drives are to be constructed according to the dimensions as shown in the City of Louisville Standard Drawings and/or Construction Plans and Specifications as submitted to, reviewed by and approved by the Planning Director.

All positional layout of line and grade including the location of pedestrian ramps, drive approaches and walk alignment is the responsibility of the contractor subject to inspection and approval by the Service Director.

The following dimensional criteria shall be used. Exceptions or variances shall be approved by the Service Director prior to construction.

1. **Concrete walks in residential areas shall be 4 inches thick.** Drive and approach areas are to be 6 inches thick. Increased thickness is subject to the approval of the Service Director.
2. **Concrete walks in commercial areas shall be 5 inches thick.** Drive and approach areas are to be 7 inches thick. Increased thickness is subject to the approval of the Service Director.
3. **The minimum width of sidewalk is to be 5 feet** unless otherwise approved by the Service Director. Repair of individual sections of sidewalks can conform to existing walk width.
4. Contraction control joints in sidewalks are to be placed at 5 foot intervals unless indicated otherwise by approved plans and the Service Director.
5. Expansion joints (1/2 inch) are to be placed at a maximum of 60 foot intervals and at existing walks and drives. Expansion joints for repair walk sections are to be placed as needed or as directed by the Service Director.
6. Sidewalk repair or replacement is to be performed at a minimum of 25 square feet or entire block section widths and lengths as approved by the Service Director. The intent being that an existing section of concrete should not be divided into two or more sections as a result of the work.
7. **Cross slope for sidewalks is to be ¼ inch per foot** standard from back of curb to back of walk. The Service Director may approve a variance to this specification (i.e. to conform to existing walks and at intersections). Any variance shall be obtained prior to walk construction. Longitudinal slope shall follow the curb or edge of pavement, unless otherwise approved by the Service Director.
8. The location of new drive connections to the public right-of-way must be approved by the Planning Director prior to construction.
9. The Standard Minimum Width for a Residential Drive Approach is 14 feet plus tapered curbs, resulting in an 8 foot wide private drive. The Maximum Width for a residential Drive Approach is 24 feet plus tapered curbs, resulting in an 18 foot wide private drive. Wider residential drive widths must be approved by the Planning Director prior to approach construction. See City of Louisville Drawing 10 and 11.
10. The Standard Maximum Width for a Commercial Drive Approach is 36 feet plus tapered curbs, resulting in a 30 foot wide private drive (see City of Louisville Standard

Drawing 10 and 11). There shall be a minimum of 10 feet between drive approaches in a commercial area. Any deviation from this standard must be approved in advance by the Planning Director prior to approach construction.

11. See City of Louisville Standard Drawing 10 and 11 for Typical Walk and Drive Approach Sections. Deviations from this standard must be approved by the Service Director prior to construction.

500- HANDICAP RAMPS

I- RAMP, CURB AND WALK CONSTRUCTION AND DIMENSIONAL CRITERIA

All Handicap Ramps must conform to the Americans with disabilities Act (ADA).

Handicap Ramps shall be constructed per City of Louisville Standard Drawing 14 (ODOT SCD # BP-7.1 Modified) except as follows:

No expansion joint is to be placed between the curb and ramp. The curb and ramp is to be connected with 6 x6 No. 10 mesh on No. 3 Deformed Bars 9 inches in length, 2 feet O.C. and 3 inches below top of concrete.

Concrete walks and curbs within Handicap Ramp Areas are to be constructed to the material and construction standards for walks and curbs previously stated.

Cross slope for the ramp is to be per ADA Standards as incorporated in City of Louisville Standard Drawing 14.

The standard truncated dome mat must be a replaceable truncated dome panel/s set in wet concrete. Alternate materials such as truncated dome bricks or adhesive mats are subject to the Service Director's approval. See City of Louisville Standard Drawing 14, sheet 4 of 4. The Service Director has the final decision as to the detectable warning system used.