## ITEM 608 WALKS, CURB RAMPS, AND STEPS

### 608.01 Description

### 608.02 Materials

608.03 Concrete Walks
608.04 Asphalt Concrete Walks
608.05 Crushed Aggregate Walks
608.06 Concrete Steps
608.07 Curb Ramps
608.08 Method of Measurement
608.09 Basis of Payment
608.01 Description. This work consists of constructing walks, curb ramps, and steps.
608.02 Materials. Furnish materials conforming to:

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\text { Aggregate Base ................................. } 304.01 \text { and } 304.02
$$

Asphalt concrete (surface course)............................ 448
Concrete, Class C........................................ 499 and 511
Reinforcing steel ................................................. 509.02
Crushed aggregate meeting
grading requirements of 703.10

Expansion joint material ..................................... 705.03
608.03 Concrete Walks. Construct concrete walks as follows:
A. Excavation. Excavate to the required depth and to a width that allows installation and bracing of forms. Shape and uniformly compact the subgrade to a surface conforming to the plans and the requirements of Item 203 or as directed by the Engineer.
B. Forms. Use either fixed forms or slip-form methods. For fixed-form construction, use wooden or metal forms that extend the full depth of the concrete and that do not spring under the concrete pressure. For slip-form construction, perform the work according to 609.04.C.
C. Placing and Finishing. Finish concrete surface according to Item 451. The contractor shall not use water or finishing agents to assist in the finishing of the concrete surface. If the contractor is observed using water or finishing agents, then the entire area will be subject to removal and replacement at no additional cost to the City.

Immediately before placing concrete, thoroughly moisten the subgrade. Deposit concrete in a single layer, strike it off with a template, and smooth it with a float to obtain a sandy texture. Do not plaster the concrete. Use a $1 / 4$-inch ( 6 mm ) radius edging tool to edge all outside edges and joints. Divide the surface of the walks into equally spaced rectangular blocks at approximately 5 -foot ( 1.5 m ) intervals. Saw or form transverse joints to a depth of not less than one-fourth the thickness of the slab and to a width of approximately $1 / 8$ inch ( 3 mm ). Install $1 / 2$-inch ( 13 mm ) thick expansion joint filler between the walk and any fixed structure that extends the full depth of the walk, and between appurtenances such as manholes or utility poles extending into and through the sidewalk. Install 1 -inch ( 25 mm ) thick expansion joint filler between the walk and the back of curb that is on a 250 -foot ( 75 m ) or smaller radius, such as at street
intersections. Place transverse expansion joint strips $1 / 2$ inch (13mm) in thickness and extending the full depth of the walk at intervals of not more than 30 feet $(9.1 \mathrm{~m})$.
D. Slope. Construct the surface of the walk with a maximum transverse slope rate of 0.02 and with the low side adjacent to the roadway.
E. Curing. Cure concrete according to Item 451.
608.04 Asphalt Concrete Walks. Construct asphalt concrete walks as follows:
A. Excavation and Forms. Excavate and construct forms according to 608.03.A and 608.03.B.
B. Base. Place and thoroughly compact aggregate base in layers not exceeding 4 inches ( 100 mm ) in depth.
C. Asphalt Placement and Compaction. Place asphalt concrete in one or more courses to provide the required depth when compacted using a hand roller or power roller of a type and weight acceptable to the Engineer.
608.05 Crushed Aggregate Walks. Construct crushed aggregate walks as follows:
A. Excavation. Excavate according to 608.03.A.
B. Forms. Construct forms of wood or metal of acceptable rigidity and to the depth of the necessary loose material. Backfill forms with compacted soil to the height of the completed walk.
608.06 Concrete Steps. Construct concrete steps as follows:
A. Excavation and Forms. Excavate and construct forms according to 608.03.A and 608.03.B.
B. Placement and Finishing. Place and finish concrete according to Item 511, except finish the treads of steps to produce a sandy texture.
C. Slope. Slope step treads at a rate of 0.02 (3/16" per foot) and toward the next lower step.
D. Curing. Cure steps according to 608.03.E. Use 705.07, Type 2 (White opaque) curing compound.
E. Railing. If specified, install hand railing according to Item 517.
608.07 Curb Ramps. Excavate, form, place, finish, and cure according to 608.03.A, 608.03.B, $608.03 . \mathrm{C}$, and 608.03 .E. Finish ramps to a rougher final surface texture than the adjacent walk and with striations transverse to the ramp slope using a coarse broom or other method approved by the Engineer. This work shall consist of constructing curb ramps, including ramps, flares, landings, and sidewalk transitions, in accordance with lines, grades and dimensions shown on the plans or established by the Engineer. Provide Detectable Warnings conforming to City Supplemental Specification 1551.
608.08 Method of Measurement. The City will measure Concrete Walk, Asphalt Concrete Walk, and Aggregate Walk by the number of square feet (square meters) of finished surface, complete in place.

The City will measure Curb Ramps in new or existing concrete walk by the number of each completed curb ramp and by the number of square feet (square meters) of

### 608.09

finished surface completed. The City will measure Concrete Steps by the number of feet (meters), along the front edge of each tread. Where steps are constructed with integral walls, the City will include the thickness of the integral walls with the tread width measurement.
608.09 Basis of Payment. Payment for walks, curb ramps, and steps is full compensation for excavation, backfill, base course material, reinforcing steel, hand railing, expansion joint material, and incidentals necessary to complete the specified items.

Payment for Curb Ramps in new concrete walk includes the cost of any additional materials, grading, forming and finishing not included in the new walk, which is measured through the curb ramp area. Payment for curb ramps in existing concrete walk includes all materials, grading, forming, and finishing of the curb ramp area and walk of the ramp.

The City will pay for accepted quantities at the contract prices as follows:

| Item | Unit | Description |
| :--- | :--- | :--- |
| 608 | Square Foot <br> (Square Meter) | Concrete Walk (_" or__") |
| 608 | Square Foot <br> (Square Meter) | Asphalt Concrete Walk |
| 608 | Square Foot <br> (Square Meter) | Aggregate Walk |
| 608 | Each, <br> Cost to Finish | Curb Ramps |
|  | Each, (2'x4') or Sq. Ft. |  |
| 608 | Foot (Meter) | Concrete Steps |

