

**SECTION 607 -- CONCRETE SIDEWALKS, BIKEWAYS, AND MEDIAN SURFACING**

**607.01 -- Description**

- 1. The Contractor shall furnish all materials and construct sidewalks, curb ramps, bikeways, and median surfacing of portland cement concrete on a prepared subgrade as prescribed in the plans.
- 2. Median surfacing shall be constructed on sand fill when shown in the plans.

**607.02 -- Material Requirements**

- 1. The concrete Class shall be specified in the contract bid proposal Schedule of Items.
- 2. Sand fill for medians shall be granular non-plastic aggregate.
- 3. All materials shall be furnished by the Contractor and shall conform to the requirements in Table 607.01.

**Table 607.01**

<b>Material Requirements</b>	
<b>Applicable Materials</b>	<b>Section</b>
Concrete .....	1002
Preformed Joint Filler.....	1015
Steel Bars for Concrete Reinforcement .....	1020

**607.03 -- Construction Methods**

- 1. Sidewalks, curb ramps, and bikeways shall be constructed as prescribed in the Americans with Disabilities Act.
- 2. a. The Contractor shall prepare the subgrade by excavating or filling to the elevation prescribed in the plans.
  - b. The subgrade shall be thoroughly compacted to insure stability.
  - c. In cuts, the excavation shall be made sufficiently wide to allow placing of forms and performing the required work.
  - d. In fills, the subgrade shall be made at least 300 mm wider on each side than required by the bikeway and/or sidewalk.
  - e. Concrete shall be deposited upon a thoroughly moistened subgrade.
  - f. Sand fill, when required, shall be uniformly compacted to facilitate placing the concrete median surfacing.

3.
  - a. Forms shall be wood or metal and a depth equivalent to the design thickness of adjacent concrete.
  - b. Forms shall be straight and able to support the concrete pressure without any deformation.
  - c. The forms shall be securely staked, braced, held firmly to the required line and grade, and sufficiently tight to prevent leakage of mortar.
  - d. All forms shall be thoroughly cleaned and oiled before the concrete is placed against them.
4.
  - a. The Contractor shall mix the concrete as prescribed in Section 1002 and then shall deposit it on the prepared subgrade so the concrete will not segregate.
    - b. The concrete shall be deposited for the full thickness of the slab in one operation and shall be consolidated by tamping. Excess concrete shall be screeded off level with the forms. The edges adjacent to all forms, expansion joints, curbs, or fixtures in the surface shall be thoroughly spaded their full depth.
    - c. After consolidation, the surface shall be alternately tamped and struck off with a strike board until all voids are removed and the surface has the required grade and cross section.
    - d.
      - (1) The surface of sidewalks shall be floated with a steel float to produce a smooth surface free from irregularities.
      - (2) The surface of median surfacing shall be finished with a wood float to a uniform granular texture.
      - (3) All edges and joints shall be rounded to a radius of 6 mm with an approved finishing tool.
      - (4) The surface shall then be brushed to slightly roughen the surface and remove the finishing tool marks.
    - e.
      - (1) Surfaces of sidewalks shall be marked off in square areas not less than 0.8 nor more than 3.4 m<sup>2</sup>. On these lines, the concrete shall be cut at least 25 percent of the slab thickness with approved tools; and it shall then be edged on both sides of the cut.
      - (2) Surfaces of median surfacing shall be jointed in accordance with the details and at the locations shown in the plans.
      - (3) Holes for sign posts shall be formed in the median surfacing in accordance with the plans.
      - (4) Expansion joints shall be placed as shown in the plans.

5. After the concrete has set, the side forms shall be removed and the spaces on both sides backfilled with moist earth. The backfill shall be graded and then compacted level with the walk surface.

6. The Contractor shall cure the concrete by one of the methods prescribed for curing concrete pavement in Subsection 603.03.

7. Slip-form methods described in Subsection 603.03 may also be used.

#### **607.04 -- Method of Measurement**

1. The area of concrete sidewalks, bikeways, curb ramps, and median surfacing shall be measured in square meters.

2. Curb ramp areas shall be included in the sidewalk quantity.

#### **607.05 -- Basis of Payment**

<u>Pay Item</u>	<u>Pay Unit</u>
Concrete _____ Sidewalks	Square Meter (m <sup>2</sup> )
_____ mm Concrete _____ Bikeways	Square Meter (m <sup>2</sup> )
Concrete _____ Median Surfacing	Square Meter (m <sup>2</sup> )

2. Sand fill, when shown in the plans, will not be measured for payment but shall be considered subsidiary to the items of work for which direct payment is made.

3. In the event that more than one type or thickness of sidewalk or median surfacing is shown in the plans, an appropriate designation will be added to the pay item to differentiate the type or dimensions required.

4. The necessary excavation for sidewalks, median surfacing, and bikeways shall not be paid for directly but shall be considered subsidiary to the construction of the sidewalk, bikeway, or median surfacing.

5. a. The 28-day compressive strength of each day's production will be determined from cylinder strength tests.

b. Payment shall be reduced by the amount prescribed in Table 603.02.

c. (1) The Contractor has the option to take 3 core samples at no additional cost to the Department. The average compressive strength of these cores will be used to determine the actual 28-day compressive strength of each day's production.

(2) Cores must be taken within 30 days from the date the concrete was poured.

(3) The Engineer shall select the site where the cores will be taken.

6. Payment is full compensation for all work prescribed in this Section.