

SPECIAL SPECIFICATION**5184****Curb Ramp and Landing**

1. **Description.** This Item will govern for hydraulic cement concrete curb ramp and landing constructed on approved subgrade, foundation material or finished surface in accordance with the lines and grades established by the Engineer and in conformance with details shown on the plans.
2. **Materials.** All materials will conform to the pertinent requirements of the following items:

- Item 104, "Removing Concrete"
- Item 360, "Concrete Pavement"
- Item 420, "Concrete Structures"
- Item 421, "Hydraulic Cement Concrete"
- Item 440, "Reinforcing Steel"
- Item 531, "Sidewalks"

Concrete used will be Class "A" concrete or concrete as specified for concrete pavement. Concrete for extruded construction shall be Class "A" unless otherwise shown on the plans, except that the coarse aggregate shall meet the requirements of Grade 8. Other grades of coarse aggregate may be substituted, if approved by the engineer.

3. **Construction.** Prior to curb ramp and landing construction the subgrade, foundation or pavement surface will be shaped to the line, grade and cross section shown on the plans and, if considered necessary by the Engineer, hand tamped and sprinkled. When directed by the Engineer, the subgrade or foundation material will be sprinkled lightly immediately before concrete is deposited thereon.

Forms, where needed, will be of wood or metal, of a section satisfactory to the Engineer, straight, free of warp and of the depth required. Forms will be securely staked to line and grade and maintained in a true position during the placing of concrete.

The reinforcing steel will be placed in position as shown on the plans for curb ramp and landing construction. Care will be exercised to keep all steel in its proper location during concrete placement.

Curb ramp and landing elements will be separated from adjacent elements and sidewalk by premolded or board joint conforming to Item 420, Article 420.E "Expansion Joint Materials" and conforming to the requirements of DMS 6310 of the thickness shown on the plans, placed vertically and at right angles to the longitudinal axis of the sidewalk.

The completed work will be cured for a period of not less than 72 hours by one of the methods specified in Item 420, "Concrete Structures". Hand finishing will be permitted. All exposed surfaces will be brushed to a smooth and uniform surface.

Abrupt changes in elevation will not exceed ¼ inch either within an element or between elements within the curb ramp and landing unit. The cross slope on curb ramps and landings will not exceed 2%. Curb ramp grade will not exceed 8.3%. Flares adjacent to the ramp will not exceed 10% slope.

Detectable warnings will be provided as shown on the plans.

Removal and disposal of existing concrete, such as combined curb and gutter, curb and sidewalk, will be done in accordance with Item 104, "Removing Concrete", Article 104.2. Construction.

4. **Measurement.** Curb ramps and landings will be measured by the each unit, or by the square yard, complete in place. The unit will consist of the curb ramp, the landing, adjacent flares or curb, and detectable warning surface as shown on the plans.
5. **Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Curb Ramp and Landing" of the type specified. This price will be full compensation for furnishing all materials required; surface preparation of base; removal and disposal of existing concrete; excavation, hauling and disposal of excavated material; drilling and doweling into existing concrete curb, sidewalk and pavement; repair of adjacent street or pavement structure damaged by these operations; and for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.