

IMPRINTED CONCRETE SIDEWALK, 5 INCH

****From Bristol HES 021-1(28)(Re-advertised)**

- xx. DESCRIPTION. This work shall consist of furnishing and installing imprinted concrete sidewalk at the locations shown in the Plans and as directed by the Engineer.

The work under this Section shall be performed in accordance with these provisions, the Plans, and Section 618 of the Standard Specifications.

- xx. MATERIALS.

- (a) General. Where imprinted concrete sidewalk is specified in the Plans, a pattern that mimics rustic staggered cobble blocks shall be used to imprint the concrete, and a dark gray color shall be applied to the concrete. The color shall be fully integrated into the concrete.

Alternative imprinting patterns or colors may be used if approved by the Engineer. If alternative products are to be used, they shall be of equal quality, detail, function, and performance to that specified.

All materials, color, and the imprinted pattern shall be approved by the Engineer prior to use.

- (b) Sidewalk Reinforcement. Sidewalk reinforcement shall be 150 mm x 150 mm (6 inch x 6 inch) 10 gage welded wire steel grid meeting the requirements of Subsection 713.05.

Dowels shall be 300 mm (1 foot) long #16 (#5) reinforcing bars meeting the requirements of Subsection 713.01.

- xx. CONSTRUCTION REQUIREMENTS. Imprinted concrete sidewalk shall be constructed to the depths and widths shown in the Plans, as recommended by the manufacturer and as directed by the Engineer.

- (a) Preparation. The Contractor shall plan the pattern layout in order to coordinate slab dimensions and construction joint locations with stamping pattern dimensions. The Contractor shall provide for approval by the Engineer a graphic of available patterns and colors (gray and red brick) for the imprinted concrete. Once approved, the Contractor shall also provide a 0.5 m x 1.2 m (1.5 foot x 4 foot) mock-up to the Engineer to demonstrate methods of obtaining consistent visual appearance. The mock-up shall be constructed a minimum of one month prior to the start of final work, using materials and methods to be used in the final work. The mock-up shall be located on site in a location determined by the Engineer. Samples of materials used in the mock-up shall be retained for comparison with materials used in the final work. The accepted mock-up will constitute a visual standard for the final work. The mock-up shall be removed by the Contractor when no longer required for comparison with the final work.

- (b) Dowels shall be placed in the construction joints between the imprinted and the standard non-imprinted concrete sidewalk and at all other sidewalk construction joints, 600 mm (2 feet) on center, and mid-depth in the pour. Adjacent sidewalk surfaces shall be set flush with one another.
- (c) Where imprinted concrete sidewalk is poured adjacent to new non-imprinted concrete sidewalk, the existing concrete sidewalk shall be masked and covered to prevent discoloring from the wet colored imprinted concrete sidewalk pour. Conversely, the set imprinted sidewalk shall be protected from discoloring due to pouring new concrete sidewalks in adjacent areas. Any discoloring of adjacent surfaces shall be removed by the Contractor at no additional compensation.
- (d) Finishing. A color hardener shall be broadcast evenly over a freshly screed and floated concrete surface. The color hardener shall be worked into the concrete surface, integrating the color with the concrete. The hardener shall be allowed to be wet out with bleed water prior to floating. If necessary, additional material shall be broadcast and worked into the surface to intensify the final color appearance.

The concrete set time shall be monitored carefully. When concrete is set adequately to support worker's weight, color release shall be broadcast evenly over the slab surface at the rate of 3 lbs/100 ft² (1.46 kg/10 m²).

The imprinting operation shall be performed using the imprinting tool kit, and shall be performed quickly and continuously across the entire pour as follows:

- (1) Place each tool on slab surface, aligned with each other and slab edges as pattern requires.
- (2) Step on back of stamping tool to create full depth impression in concrete.
- (3) Use special half tools and texture mats at slab edges, walls, and corners.
- (4) Broom texture surface where required.

The concrete slab shall be allowed to thoroughly cure prior to rinsing residual powder release from the surface. Ensure the surface is clean and apply protective waterproofing sealer to flush sidewalk only.

xx. QUALIFICATIONS. The Contractor shall be ACI certified and have constructed a minimum of 8 concrete imprinting projects. The Contractor shall submit a resume, including a minimum of 3 references from concrete imprinting projects constructed within 3 years prior to the commencement of this project, to the Engineer for review and approval. The work under this Section shall not commence until the Engineer approves Contractor qualifications.

68. METHOD OF MEASUREMENT. The quantity of Special Provision (Imprinted Concrete Sidewalk, 5 Inch) to be measured for payment will be the number of square meters (square yards) of imprinted concrete sidewalk placed in the complete and accepted work.
69. BASIS OF PAYMENT. The accepted quantity of Special Provision (Imprinted Concrete Sidewalk, 5 inch) will be paid for at the Contract unit price per square meter (square yard) for the specified depth. Payment will be full compensation for furnishing, handling, and placing the materials specified, including concrete, reinforcing steel, dowels, and expansion material, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.675 Special Provision (Imprinted Concrete Sidewalk, 125 mm (5 Inch))	Square Meter (Square Yard)