

CITY OF MEMPHIS – STANDARD CONSTRUCTION SPECIFICATIONS
SECTION 02830 CONCRETE RETAINING WALLS, COPING WALLS, AND STEPS

PART 1 – SCOPE

This work shall consist of constructing retaining walls, coping walls, and steps of Portland cement concrete in accordance with these Specifications and in conformity with the dimensions, lines, and grades shown on the Plans, or as directed by the Owner.

PART 2 – MATERIALS AND EQUIPMENT

2.01 MATERIALS

A. Concrete Materials: Concrete materials shall meet the requirements of Specification Section 03050, Portland Cement Concrete for Class A concrete.

B. Reinforcing Steel: Reinforcing steel, unless otherwise specified shall be billet steel bars conforming to the requirements of ASTM A 615, Grade 60.

2.02 EQUIPMENT

Equipment, tools, and form materials necessary for the satisfactory performance of this construction shall be on the Project and approved before work will be permitted to begin.

PART 3 – CONSTRUCTION REQUIREMENTS

3.01 FINAL GRADE PREPARATION

All major excavation for retaining walls, coping walls, and steps shall be performed under other Sections of these Specifications. Only the final grade preparation for this Work shall be included in this Section. It shall be performed to the satisfaction of the Owner and will be considered incidental to the Work.

3.02 FORMING FOR RETAINING WALLS

Forming for retaining walls, either reinforced or gravity, shall be in accordance with the applicable provisions of Specification Section 03310, "Structural Concrete", or as directed by the Owner.

3.03 FORMING FOR COPING WALLS

Forming for coping walls shall be in accordance with the applicable provisions of Specification Section 03310, "Structural Concrete", or as directed by the Owner.

3.04 FORMING FOR STEPS

Forming for steps shall be in accordance with the applicable provisions of Specification Section 03310, "Structural Concrete", or as directed by the Owner.

3.05 REINFORCEMENT FOR RETAINING WALLS

Reinforcement for retaining walls shall be in accordance with the applicable provisions of Specification Section 03310, "Concrete Structures".

3.06 WEEP HOLES – RETAINING WALLS

Weep holes for retaining walls shall be as shown on the Plans and Design Standards or as directed by the Owner.

3.07 PLACING AND CONSOLIDATING CONCRETE

Placing and consolidating concrete shall be performed in accordance with the applicable provisions of Specification Section 03310, "Concrete Structures".

3.08 EXPOSED SURFACES

Exposed surfaces of retaining walls, coping walls, and steps shall be given a Class 2, Rubbed Finish and surfaces to be backfilled shall be given a Class 1, Ordinary Surface Finish, as specified in Specification Section 00310 Paragraph 3.11.

3.09 TESTING CONCRETE

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Concrete for retaining walls, coping walls, and steps shall be tested by test specimens made and cured in accordance with AASHTO Designation T 23 for cylinders at the frequency stipulated in the Plans or as directed by the Owner. The Contractor shall furnish the concrete necessary for casting test specimens in the field. The City will supply all molds and labor necessary to cast and test specimens.

3.10 CURING CONCRETE

Concrete for retaining walls, coping walls, and steps shall be cured in accordance with the applicable provisions of Specification Section 03310 Paragraph 3.13, "Curing Concrete", or as directed by the Owner.

3.11 DRAINAGE SYSTEM FOR CONCRETE RETAINING WALLS

Weep hole inserts of P.V.C. pipe, granular material for weep hole backfill, expansion joint material, fence inserts, handrail inserts, guard rail inserts, and corner bars for plain concrete (gravity) retaining walls shall be considered incidental to the Work. Where the Plans indicate a drainage system behind the wall (s) consisting of perforated pipe, filter cloth, and granular backfill, such system(s) shall be considered incidental to the Work.

PART 4 – MEASUREMENT

4.01 CONCRETE RETAINING WALLS

Concrete for Concrete Retaining Walls will be measured for payment by the cubic yard, complete in place. Reinforcing steel will not be measured but shall be considered incidental to the Work.

4.02 CONCRETE COPING WALLS

Concrete for Concrete Coping Walls will be measured for payment by the cubic yard, complete in place.

4.03 CONCRETE STEPS

Concrete steps will be measured for payment by the linear feet of tread for the type shown on the Plans, complete in place.

PART 5 – PAYMENT

5.01 CONCRETE RETAINING WALLS

The accepted quantities of concrete for Concrete Retaining Walls will be paid for at the contract unit price per cubic yard, which price will be full compensation for preparing the grade; forming; furnishing, placing, finishing, and curing the concrete; furnishing and placing reinforcing steel; providing weep holes and specified drainage systems behind the walls; providing and placing fence inserts, guard rail inserts, and handrail inserts when shown on the Plans; and protection until final acceptance.

5.02 CONCRETE COPING WALLS

The accepted quantities of concrete for concrete coping walls will be paid for at the contract unit price per cubic yard, which price will be full compensation for preparing the grade; forming; furnishing, placing, finishing, and curing the concrete; and protection until final acceptance, complete in place.

5.03 CONCRETE STEPS

The accepted quantities of concrete steps will be paid for at the contract unit price per linear foot of tread for the type shown on the Plans, which price will be full compensation for forming; furnishing, placing, finishing, and curing the concrete; providing and placing railing when shown on the Plans (unless specified as a separate pay item for the project); and protection until final acceptance, complete in place.

5.04 PAYMENT WILL BE MADE UNDER:

<u>Item No.</u>	<u>Pay Item</u>	<u>Pay Unit</u>
02830-01	Concrete Retaining Walls	Cubic Yard

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02830-02	Concrete Coping Walls	Cubic Yard
02830-03	Concrete Steps	Foot
02830-03._____	Description _____	Foot

END OF SECTION 02830