ITEM #0602936A – DRILLING AND GROUTING REINFORCING BARS

Description:

Work under this item shall consist of drilling, coring or a combination of coring and drilling of holes in the existing structural concrete or masonry and grouting reinforcing bars into the holes. All work shall be as shown on the plans and as directed by the Engineer.

Materials:

The grout shall be a non-shrink grout conforming to Article M.03.05.

Prior to fabricating any materials, the Contractor shall submit manufacturer's specifications and installation for the chemical anchoring material to the Engineer in accordance with Article 1.05.02. A Materials Certificate shall be required for the adhesive bonding material in accordance with Article 1.06.07, certifying the conformance of this material to the requirements stated herein.

Construction Methods:

Holes for the reinforcement shall be drilled or cored, and shall be located and sized as shown on the plans. The holes shall clear the existing reinforcement as applicable and provide the minimum cover as shown on the plans. A pachometer shall be used to locate existing reinforcing steel where drilling in reinforced concrete is required. If existing reinforcing is encountered during the drilling operation, the holes shall be relocated and the incomplete holes shall be filled with grout and finished smooth and flush with the adjacent surface.

Unless noted on the plans, the depth and diameter of a hole shall conform to the grout manufacturer's recommendations for the diameter of the rebar being anchored such that the grouted rebar will be able to develop in tension 125 percent of its specified yield strength. The minimum compressive strength of the existing concrete shall be assumed to be 3,000 psi for purposes of calculating minimum embedment depths unless otherwise noted.

Hole drilling methods shall not cause spalling, cracking or other damage to the existing concrete. The Contractor is responsible for the type of drilling or coring equipment used and those areas damaged by the Contractor during drilling or coring shall be repaired by him in a manner suitable to the Engineer and at no expense to the State. If the drilling method causes spalling, cracking or other damage, the Contractor shall stop work with that method and submit another method for approval prior to proceeding further.

In some cases, drill holes will be required at intersecting angles. Plan out the location of the holes to avoid drilling through newly placed bars or holes.

Each finished hole shall be blown clean with an air jet, then flushed with clean water. In the water-flushing operation, the pressure hose shall be extended to the bottom/end of the hole several times

and withdrawn gradually each time. After flushing, the holes shall be left full of clean water for a minimum period of 2 hours. Immediately prior to the grouting operation, all water shall be removed and the free water on the wall of the hole shall be removed with an air jet or clean rags.

The grout shall be mixed and placed strictly in accordance with the recommendations of the manufacturer. The grout shall completely fill the space around the reinforcing bar.

Method of Measurement:

This work will be measured for payment by the number of linear feet of drilled or cored holes in which bars are embedded and accepted. Holes encountering reinforcing steel that are terminated and patched will not be measured for payment.

Basis of Payment:

This work will be paid for at the contract unit price per linear foot for "Drilling and Grouting Reinforcing Bars", which price shall include drilling or coring and preparing holes, and grouting the reinforcing bars. It shall also include all material, except reinforcement and all equipment, tools and labor incidental thereto.

Reinforcing bars will be paid for under item "Deformed Steel Bars - Epoxy Coated".

Pay Item	Pay Unit
Drilling and Grouting Reinforcing Bars	L.F.