

SECTION 619—PERMANENT IMPACT ATTENUATING DEVICES

619.1 DESCRIPTION—This work is furnishing and installing of permanent impact attenuating devices, including all appurtenances and hardware, as indicated.

619.2 MATERIAL—

- Permanent impact attenuating devices from a manufacturer listed in [Bulletin 15](#). Certify as specified in [Section 106.03\(b\)3](#).

619.3 CONSTRUCTION—

(a) **General.** Submit shop drawings as specified in [Section 105.02\(d\)](#).

(b) **Installation.** Install according to the manufacturer's specifications and installation instructions for full depth embedment only, and as follows:

Drive posts mechanically, unless otherwise directed by the Representative. Do not cut, batter, burr, separate galvanizing from steel, or distort the post. Driven post must be plumb. As directed, remove and replace posts bent or otherwise damaged.

In areas where random boulders, hardpan, or bedrock are encountered and the specified post cannot be driven to full depth embedment, remove the post, then drill a 300 mm (12-inch) minimum diameter hole to the required depth, as per manufacturer's recommendation for full depth embedment. Reset the post in the hole to the proper elevation and backfill to the ground line, using an acceptable embankment material thoroughly compacted in maximum 150 mm (6-inch) layers. If the placed material around the post cannot be satisfactorily compacted, backfill the hole in maximum 150 mm (6-inch) layers thoroughly compacted to ground line, and then redrive the post to proper elevation.

Type A or B flowable backfill as specified in [Section 220](#) Table A can be used to backfill the hole after resetting the post in place.

619.4 MEASUREMENT AND PAYMENT—Each
The price includes tail end treatment when required.