



**SPECIAL PROVISIONS  
FOR  
RETAINING WALL RAILING**

**Linn County  
NHSN-000-S(778)--2R-57**

**Effective Date  
May 19, 2015**

**THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**120307.01 DESCRIPTION.**

- A.** Specification includes furnishing and installation of retaining wall railing.
- B. Submittals.**
  - 1. Submit color samples and product literature for retaining wall railing.
  - 2. Submit shop drawings for retaining wall railing.

**120307.02 MATERIALS.**

- A. Rails and Posts.**
  - 1. Provide 2 1/2 inch by 2 1/2 inch tubular high strength steel with 1/4 inch minimum wall thickness. Comply with ASTM A 500, Grade B.
  - 2. Black Powder Coated finish.
- B. Attachment.**
  - 1. **Anchor plate:** 1/4 inch thick, 5 inch by 8 inch steel anchor plate with a 46,000 psi yield strength. Black powder coated anchor plate to safety rail.
  - 2. **Bolts:** Provide 3/8 inch galvanized anchor bolts or threaded rod with length as required to provide a 3 inch embedment. Comply with ASTM A 36.

**3. Adhesive Anchoring Material.**

- a. Epoxy complying with ASTM C 881, Type IV. Provide appropriate epoxy class based upon concrete temperature at time of installation.
- b. Grout on approved products list in [Materials I.M. 491.11, Appendix C.](#)

**120307.03 CONSTRUCTION.**

**A. General.**

1. Install railing continuously with no gaps or breaks along the length specified in the contract documents.
2. Use welded connections between railing components. Grind connections to remove sharp or abrasive edges and to remove other irregularities.

**B. Safety Rail.**

Install the railing a minimum of 4 inches above the finished wall.

**C. Posts.**

1. Install posts at a maximum spacing of 8 feet.
2. **Bolted Connection.**
  - a. Weld anchor plate to the bottom of the handrail posts.
  - b. Layout location and drill four 7/16 inch holes for anchor bolts at each post attachment point. Drill holes with a carbide drill bit; do not core drill anchor bolt holes.
  - c. Apply adhesive anchoring material according to manufacturer's published recommendations and install threaded rod or anchor bolts.

**120307.04 METHOD OF MEASUREMENT.**

No Measurement will be made for Railing, Retaining Wall, As Per Plan.

**120307.05 BASIS OF PAYMENT.**

Payment for Railing, Retaining Wall, As Per Plan will be on a lump sum basis. Lump sum price includes, but is not limited to, posts, pickets, mounting hardware, epoxy grout, and finishing (painted, galvanized, or powder coated) and all other hardware required to install safety rail.