

## **GUARDRAIL.**

**(REV 2-22-17) (7-17)**

ARTICLE 536-1 is expanded by the following:

Remove, repair or replace damaged or destroyed sections of guardrail in accordance with the Contract Documents and the Design Standards. The work may include realigning of panels, posts, blocks and anchorages, and miscellaneous hardware.

ARTICLE 536-2 is expanded by the following new Subarticles:

**536-2.1 Materials Furnished to the Department:** When specified by the pay items that an item is to be furnished by the Department, the pay item will include compensation for the loading, transport, and installation of the items including all necessary incidental hardware required to complete the specified work.

**536-2.2 Guardrail Repair Requirements:** Damaged guardrail is required to be secured with proper maintenance of traffic at the time of identification. Permanent repairs to damaged guardrail must be completed within ten days, unless, due to the severity of damage, the Engineer determines a shorter time frame is necessary.

Replace damaged guardrail and accessories using materials of the same type, unless otherwise directed by the Engineer.

When directed by the Engineer, apply a paint coating over galvanized structural members and over areas of previously galvanized members on which the galvanizing has become significantly damaged. Use a galvanizing compound as specified in article 562. No direct payment will be made for paint costing of surfaces or for field repair of damaged paint coating.

Remove all debris, including the original guardrail materials, from the right-of-way at the end of each working day, unless approved by the Engineer. All salvageable guardrail materials, as determined by the Engineer, will be used within the limits of each worksite at no cost to the Department. Salvageable material not used will remain the property of the Department. Load, transport and unload all salvageable materials at locations designated by the Engineer. Provide location and dispose of debris or materials not a part of the installation or determined not to be salvageable by the Engineer, at no cost to the Department. Include all costs associated with removing, transporting, unloading, or disposing of debris or materials in the Contract unit price of the related item.

SUBARTICLE 536-5.1 is expanded by the following:

Guardrail repairs may vary according to the type of repair necessary and will be identified by the pay item(s) listed in the work document.

For miscellaneous guardrail, the quantity to be paid, whether single faced or double-faced guardrail, will be measured as a singular linear foot unit in one direction only.

ARTICLE 536-6.8 is deleted and the following substituted:

**536-6.8 Repair, Replace or Remove:** Price and payment for repair, replace, or remove guardrail and end anchorage assemblies will include all labor, equipment, materials, hardware, and incidentals necessary to complete the work.

Pay items used to replace guardrail will be for the payment of removing and replacing guardrail including posts, blocks and miscellaneous hardware unless otherwise directed by the Engineer.

End anchorage assembly removal pay items will be for the payment of removal and disposal of all material, hardware and incidental items included in the end anchorage assembly.

End anchorage assembly replacement items will be for removing and replacing the existing assembly with the assembly identified by the pay item. The pay item used will represent the type of end anchorage assembly being used.

The pay item for the removal of existing guardrail includes panels, posts, blocks, end anchorage assemblies and all miscellaneous hardware.

**536-6.9 Miscellaneous Guardrail Maintenance:** Price and payment for the Miscellaneous Guardrail Maintenance pay item will include all labor, equipment, materials, and incidentals necessary for the minor repair of existing guardrail. Washers and bolts are to be tightened or replaced, blocks straightened, and nails in blocks replaced as deemed necessary.

**536-6.10 Payment Items:** Payment will be made under the items specified in the Bid Price Proposal.