5360000 GUARDRAIL COMMENTS FROM INTERNAL/INDUSTRY REVIEW

John Fowler 850-330-1450

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Comments: (4-28-16)

Section 536-5.1 states that payment includes the full length of end treatments and connections to rigid barrier. I notice in Index 400 that there are small overhangs beyond the limits of guardrail measurement for both end treatments and rigid barrier connections. Consider saying something like, "Payment will include the full length of guardrail end treatments and rigid barrier connections as detailed in the Design Standards."

Response:

Cheryl Hudson FDOT

Comments: (4-28-16)

I read 536 last, and it seems to me that it repeats stuff in 538 (resetting). I don't know enough about how projects are done, but if it is new guardrail then everything is included (by the payment paragraph-highlighted) if they are moving/resetting wouldn't that be 538? Response: I recommend reading the description for 536-6.6 for Removal of Existing Guardrail to know what's included. This only involves removing guardrail on a project (and NOT reusing it). Resetting guardrail in 538 is a different concept and Pay Item involving relocating guardrail and reusing some of its components.

I also noticed that thrie-beam in not mentioned (except modified), just w-beam's. Correct. Thrie-Beam is no longer an option.

I understand the removal costs for new, but not the connections. Rub rails etc that seem to be included in 536-6.1 for new installs, but that is not clear. Maybe the BOE would further clarify this but thought I'd mention it.

536-8-6 Basis of Payment.

536-6.1 Guardrail: Price and payment will be full compensation for all work specified under this Section, including furnishing and installing posts, panels, barrier delineators, and all other materials as defined in the Plans and the Design Standards. The price and payment will include any reduced post spacing, nested panels, shop-bent panels, trailing end transition connections (to rigid barrier), and CRT posts as segments as specified required in the Plans.

The type of guardrail specified will be that which comprises the basic guardrail

run between end treatments a<mark>nd approach transitionstransition connections to rigid barrier</mark> (including, but not limited to, \(\Psi w\text{-Bbeam general}\), \(\Psi w\text{-Bbeam double face}\), \(\Psi w\text{-Bbeam low-beam double face}\),

5360000 All Jobs

speed, modified Ithrie-Bbeam). For guardrail systems with direct connections between end treatments and approach transitions transition connections to rigid barrier, the type of guardrail specified will be \(\psi_w\)-Bbeam general for single faced guardrail applications or double faced \(\psi_w\) Bbeam for double face guardrail applications.

536-6.9 Payment Items: Payment will be made under:

Guardrail - per foot. Item No. 536- 1-Are these in addition the cost of the guard Item No. 536 2 Guardrail with Shop Bent Panels or is this for retrofitti Item No. 536- 5-Rub Rail - per foot. Pipe Rail - per foot. Item No. 536- 6-Item No. 536- 7-Special Guardrail Post - each. Bridge Anchorage Assembly-/-Approach Transition Item No. 536- 8-Connection to Rigid Barrier - each. Removal of Existing Guardrail - per foot. Item No. 536- 73-Guardrail Post Replacement- each. Item No. 536-83-538? Item No. 536-85-Guardrail End Treatment - each.

This is a good point you make on 536-6.1. It is explains what's is included in 536-6.1, however I think that we might need an exclusionary statement of what is not included from the Standard and Spec. Essentially, all of the separate Pay Items in 536-6.2 through 536-6.8 are not included. The version you've reviewed is set up in the same way the currently published 536 has handled it in years past. However, as with most everything else in that older Spec, it needs improvement! Thanks for pointing this out. So far, most comments I've received are from concepts we've carried forward from the previous Spec.

John Fowler 850-330-1450 john.fowler@dot.state.fl.us Comments: (4-28-16)

Section 536-6.9: It appears that the separate payments for various types of guardrail end anchorages are going away. Please consider when this spec is intended to be implemented. All ongoing plans will require updates of guardrail quantities, so please allow enough time for implementation.

Response:

Sherry Valdes 414-4249

sherry.valdes@dot.state.fl.us

Comments: (5-4-16)

Under 536-5.1 - Method of Measurement, We need to stay away from the word "measured" when it comes to plan quantity. I suggest to say "the length of guardrail is calculated from end-to-end following". Calculated is from designer.

Response:

D3 (via Barbara Strickland)

Comments: (5-4-16)

1. Section 536-5.1 states that payment includes the full length of end treatments and connections to rigid barrier. I notice in Index 400 that there are small overhangs beyond the limits of guardrail measurement for both end treatments and rigid barrier connections. Consider saying something like, "Payment will include the full length of guardrail end treatments and rigid barrier connections as detailed in the Design Standards."

Response:

2. Section 536-6.9: It appears that the separate payments for various types of guardrail end anchorages are going away. Please consider when this spec is intended to be implemented. All ongoing plans will require updates of guardrail quantities, so please allow enough time for implementation.

Response:

D5 Construction Operations

Comments: (5-6-16)

536-3.3 Setting Posts: At end of the third paragraph add – Each post with hot bituminous mixture from FDOT approved source/plant and thoroughly temp or compact to the satisfaction of the engineer.

Response:

Maria Connolly FDOT, TP (954) 934-1209

Comments: (6-2-16)

Section 536-6 Basis of Payment

536-6.1 Guardrail:

Recommending including "blocks" – Price and payment will be full compensation for all work specified under this Section, including furnishing and installing posts, panels, barrier delineators, blocks, and all other materials as defined in the Plans and the Design Standards.

536-6.7 Guardrail Post Replacement:

Recommend including "new hardware" – Price and payment will include all labor, materials, and equipment required for the removal and disposal of existing posts in areas provided by the Contractor. Price and payment will include the backfilling and compaction of existing holes and the post replacement with new posts and new hardware.

Response: