

BACKGROUND: Under section 1110 of SAFETEA-LU (adopted in 2005), Congress enacted 23 USC 109(e)(2) and 112(g) which call for positive protection "between" workers and motorized traffic. Congress further instructed FHWA to "issue regulations establishing the conditions for appropriate use of, and expenditure of funds for" the same. FHWA adopted Subpart K (23 CFR 630.1102 et seq.) in 2007 pursuant to that mandate. 23 CFR 630.1108(a) of Subpart K lists 5 circumstances under which practitioners need to ("shall") consider use of positive protection.

Barrier: The statutes and underlying regulations, read together, call for positive protection (barrier) *"between workers and motorized traffic"* which *"contain and/or redirect"* errant vehicles. 23 USC 112(g) and 23 CFR 1104 TMA's, alarms and rumble strips are good, but Congress was clearly providing for more when they were talking about protection "between" workers and traffic.

The regulations provide that "*At a minimum, positive protection devices shall be considered*" in various circumstances such as:

- 1. Work zones that provide workers *no means of escape* from motorized traffic (e.g., tunnels, bridges, etc.);
- 2. Long duration work zones (e.g., two weeks or more) resulting in substantial worker exposure to motorized traffic;
- 3. Projects with *high anticipated operating speeds* (e.g., 45 mph or greater), especially when combined with high traffic volumes;
- 4. Work operations that place workers close to travel lanes open to traffic; and
- 5. Roadside *hazards*, such as drop-offs or unfinished bridge decks, that will remain in place overnight or longer.
 - 23 CFR 630.1108(a)(1-5)

Separate Pay Items: Federal statutes require a "separate pay item" for positive protection. That was reiterated in the associated regulation. 23 USC 112(g) and 23 CFR 630.1108(f)(2)

ANSI Standard A10.47 (§4.4) likewise provides:

Positive Protection measures "shall be considered" when any of the following exist:

- 1. Work zones that provide employees **no means of escape** (e.g. tunnels, bridges, etc.) from external motorized traffic intruding into the work space.
- **2.** Long duration work zones (e.g. two weeks or more) resulting in substantial employee exposure to motorized traffic.
- 3. Projects with **high anticipated operating speeds** (e.g. ≥ 45 mph, 72 km/h) especially when combined with high traffic volumes (> 20,000 vehicles per day).
- 4. Work operations that place employees within one lane width to travel lanes open to traffic.
- 5. Roadside **hazards**, such as drop-offs or unfinished bridge decks, that will remain in place overnight or longer.

It further notes that there might be other circumstances not listed that merit the use of positive protection.