When a Stop Sign Causes Millions in Legal Headaches

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Recently, there has been a number of incidents where pedestrians were killed by ongoing construction activities at work sites. A man was killed in Toronto in April 2021 after being struck by a dump truck; in August 2017, a woman was killed on her way to a nearby train station in Norwood Massachusetts by a construction vehicle; and a cement truck struck and killed a 54-year-old woman in Toronto (again) sparking outrage by the community for improving construction site safety standards.

Sadly, policies and procedures frequently do not change until there is an accident. Despite the best efforts of agencies such as *OSHA* (Occupational Health and Safety Administration) and the *FHWA* (Federal Highway Administration) drafting new requirements for both worker and civilian safety on or near construction sites, there seem to be simply too many variables to take into account during the organized chaos of a work zone—especially where monumental skyscrapers are involved in the hearts of congested cities.

According to the Massachusetts personal injury law firm *Breakstone, White & Gluck*, "Pedestrians walking by construction activity also face dangerous conditions, such as falling debris, equipment or moving construction vehicles."

They cite a huge incident in New York City back in February 2016 where a 38-year-old pedestrian was killed by a collapsing crane that was 565 feet tall.

In incidents such as these, ultimately the responsibility lies with the construction company and the building's owner. Great care must be taken to ensure that there is proper signage posted from stop signs (at clearly visible heights) to fully enclosed pedestrian walkways allowing access to nearby intersections and local street-level businesses—among many, many other requirements.

Ryan Starr, Marketing and Communications Director for CB Richard Ellis (one of the world's largest commercial real estate holdings company) had this to say about traffic control (pedestrian and vehicular) at all of their major and minor development sites, "We take this responsibility very seriously. Workplace safety benefits not only our contractors but the general public at large. Our buildings are as safe as we can make them both before and after they're built."

Regs are Not Enough

Have you ever noticed that most types traffic signs in the US–regardless of your location—are generally in the same proximity and size? That uniformity of traffic signs, or sometimes referred to as traffic control devices, is largely due to the *Manual on Uniform Traffic Control Devices*, or MUTCD for short. The MUTCD contains the national standards and guidance for governing traffic control devices, for both permanent and temporary (i.e., construction work zones) applications. Its key purpose is to ensure uniformity on roadways to increase the safety of the traveling public.

The FHWA's MUTCD has been largely adopted by every state in the US and fed downward through counties, cities, towns, etc. Throughout the last 20 years, there have been few Editions of the MUTCD, with revisions being drafted and adopted along the way—the last one made in 2009.

Why is this important?

In 2019, the FHWA reported that there were 842 work zone fatalities by transportation mode in the US, mostly due to drivers and passengers. Furthermore, there were 140 fatalities to both pedestrians and bicyclists that year. And finally, in the US, one work zone fatality occurs for every 4 billion vehicle-miles of travel and for every $112 million worth of roadway construction expenditures.

Could those fatalities in 2019 have been avoided by proper use of traffic control? Perhaps. But at the end of the day, it certainly couldn't hurt in preventing contractors and owners from being sued for their lack of protecting the traveling public from their work zone.

Best practices in any given operation act like cardiovascular exercise helping to ensure the overall health of a complex building project at scale and under tight deadlines—especially where millions or hundreds of millions of dollars in completion bonds are involved.

For example, according to the National Cooperative Highway Research Program's (NCHRP) 2005 *Report 500* , such best practice strategies cited were:

- Reducing the exposure of travelers to work zones and of workers to traffic will lessen the opportunities for crashes to occur.
- The devices used to convey information to drivers and to alert them to the presence of workers and potential roadway hazards need to be visible and have a clear and consistent meaning.
- Positive protection of the workspace from the traffic separation can help reduce potential for conflicts between road users and/or workers. The design of work zones can help improve safety for all users by providing cues for, and accommodation of, both motorized vehicles and nonmotorized travelers.

These among many other recommendations are valid attempts to reduce the number of work zone accidents and fatalities.

Armed with Facts, Fueled for Change

The very same NCHRP report cited above also made note of a few insightful facts that help to fuel changes in both policy and behavior, such as:

- More than half of all fatal work zone crashes occurred during the day.
- More than twice as many work zone fatal crashes occurred on weekdays as on weekends. Fatal work zone crashes occurred most often during the summer months.
- Almost 30 percent of fatal work zone crashes occurred on Interstate roadways.
- Almost 60 percent of fatal work zone crashes occurred on roads with a posted speed limit of 55 mph or greater.
- Single-vehicle crashes accounted for over half of all fatal work zone crashes.
- Ten percent of work zone fatalities were pedestrians and bicyclists.
- Heavy trucks were involved in more than 20 percent of fatal work zone crashes.

Owners, Designers, Engineers, and Contractors alike need to understand the traffic control requirements of their jobsite–regardless if it's a private or public project. Not only does it help to protect the traveling public after a job is complete, but it also protects the construction crews who could be working around temporary traffic control devices during the project. Understanding where a flagger needs to be, or where the shifting taper needs to begin, or what height a stop sign needs to be placed is more important than one would think.

Numerous cases that have involved everything from temporary traffic control being installed incorrectly during construction, to signage being used at incorrect locations in private developments, have led to some sort of

accident. In most cases when there is a vehicular or pedestrian accident, traffic control devices are often the first things everyone looks at to ensure they were in compliance.

According to the National Institutes of Health, the total annual cost of all construction injuries currently stands at **$11.5 billion**!

OSHA penalties can cost anywhere from **$13K**+ to north of **$136K**.

And, these stats do not even include the total valuation of lawsuits brought about by private individuals and their families, such as the ones levied by the families of some of the victims mentioned at the beginning.

The bottom line is that despite your engineers' and project managers' best efforts, accidents can and will happen; however, with careful planning and adopting of best practices put forth by agencies such as the FHWA and OSHA your organization can mitigate some of these risks, fines, lawsuits, and potentially save lives in the process.