Gorski Consulting Website

Archived News - 2015 - November

November 26, 2015

Various Municipalities and Province of Ontario Quietly Stop Installing ET-Plus Terminals

Without any notice to the public various municipalities in Ontario, as well as the Province of Ontario appear to have stopped installing ET-Plus terminals manufactured by Trinity Highway Products and appear to have chosen a new terminal, an SKT, as their choice. Gorski Consulting has observed this process taking place in the vicinity of London, Ontario and we provide a further discussion on the issue in a newly uploaded article to the Articles page of this website.

Small Over-Lap Frontal Impacts - An Issue With A Long History Of Missed Opportunity

It has only been in recent years that agencies such as the U.S. National Highway Traffic Safety Administration (NHTSA) and the Insurance Institute for Highway Safety (IIHS) have begun to explore the issue of serious injuries and deaths resulting from small overlap frontal impacts. Differing test protocols have been devised with the belief that these will properly imitate the real-life collisions. That belief stems from reviewing large databases of real-life collisions such as the National Accident Sampling System (NASS).

At Gorski Consulting we understood the seriousness of the problem early in our studies while working at the University of Western Ontario Multi-Disciplinary Accident Research Team. It was there that Zyg Gorski began his study of the intricate details of physical evidence that is created when two vehicles collide, crush and separate. In the 1980s Zyg Gorski was used to sitting in front of a drafting table and creating scale diagrams from the detailed field measurements that he obtained during vehicle examinations. That process was time-consuming. As shown below (circa 1980s) a pencil, base drawing was created of the original-dimensions vehicle as well as its crushed shape.



Zyg Gorski creating a pencil, base drawing of a vehicle involved in a small over-lap, frontal impact (circa 1980s).

Following that, colour diagrams were created on clear plastic sheet, as shown below.



View of Zyg Gorski creating vehicle diagrams on plastic sheet. (circa 1980s)

The diagrams made note of specific points of physical evidence that we called "Mutual Contact Points". These specific points of evidence were created by discrete objects on one vehicle whose motion and contact was imprinted onto the surface of the other vehicle. As an example, the imprint and sliding action of a metal screw from one vehicle is shown below being imprinted onto the surface of the other vehicle.



Example of a Mutual Contact Point - the imprint of the head of screw onto the surface of the other vehicle. (circa 1980s)

Evidence like these Mutual Contact Points provided very specific indications of the motions of the two vehicles. For example, from the photo above, the head of a screw slid across from right to left and dug into the metal surface, it then released during rotation from maximum engagement. The location of such specific evidence on the surface of a vehicle can say a great deal about what was taking place between the vehicles during their contact.

Zyg Gorski explored these vehicle motions by matching vehicles from initial contact through to their separation, as indicated in the example shown below.



View of two vehicles at their point of initial contact in a small over-lap frontal impact. (circa 1980s)



View of vehicles in a secondary stage of contact where their orientations have been determined from matching mutual contact points.



View of vehicles in the latter stage of their contact based on the matching of mutual contacts points. (circa 1980s)

During the 1980s the procedures for measurement of vehicles were focused on determining the extent of crush so that the severity of a collision could be determined vet little thought was put into determining how the crush was created in terms of how the shape of vehicles was being changed. It was Gorski's belief that considerable information about the collision phrase of a reconstruction was lost because investigators failed to document this specific deformation and shape of the vehicle. This is particularly so in small over-lap frontal impacts where the overall change-in-velocity (Delta-V) of the vehicle is less important than understanding how the impacting vehicles move with respect to each other and how intrusion is developed into the driver's space. The most critical fact that was missed, and continues to be ignored, is that pre-impact yaw, or rotation about the vehicle's vertical axis, plays a prominent role in producing the dangerous conditions in real-life, small over-lap frontal impacts. As shown in the diagrams above, pre-impact rotation is what causes the additional sideward penetration into the driver's seated area. This pre-impact rotation is not considered in either of the NHTSA or IIHS test protocols and therefore the tests' links to real-life collisions are weakened. Again, relying on NASS data files where detailed measurements of the deformed vehicles have not been taken will not lead to a proper connection between what actually takes place in real-life collisions because valuable information about a vehicle's deformation has not be collected in NASS.

Especially now, when new technology such as laser scanners can document the deformed vehicle shape in exponentially greater detail, the focus on the character of vehicle deformation should be brought forward. Yet, to this day, the old methods of

minimal documentation continue. Thus a much delayed opportunity continues to be missed.

November 23, 2015

Ruth Burger of London Costco Fatal Collision Appealing Her Conviction

The London Free Press has reported that Ruth Burger, the driver whose vehicle reversed and killed two children in a London Ontario Costco retail outlet on July 25, 2014, is appealing her convictions. The collision caused an outpouring of emotions when Addison Hall, 6, was struck and killed while her mother, Danah McKinnon-Bozek, and her 3-year-old sister Miah Bozek were injured. McKinnon-Bozek was pregnant at the time of the collision and the collision resulted in the death of the new born.

Gorski Consulting had reviewed the judgment of Justice George and we uploaded an article to the Articles page of this website on October 28, 2015. While the events were tragic for all involved it is our view that the tragedy was intensified by the fact that there was no clear determination why Burger's 2004 Chevrolet Monte Carlo entered into an unintended, high acceleration.

Admission That Slippery Road Caused Fatality in Hamilton Ontario



Slippery roads occurred in south-central Ontario on Sunday evening such as this section of the Kitchener-Waterloo Expressway.

In an unusually rare form of openness, police in Hamilton, Ontario confirmed that slippery road surface conditions were likely a factor in a fatal collision on Fiddler's Green Road on Sunday evening at approximately 1845 hours. Both the Hamilton Spectator Newspaper and Hamilton's CHCH television station reported this fact as it could only have come from a police source that would have access to the accident site. The specific location of the collision site on Fiddler's Green Road, reportedly located between Garner and Book Roads, was not identified and it was reportedly closed to public traffic for a number of hours for the police investigation. The distance between Garner and Book Roads is about 2 kilometres thus such information provides little information about the specific location of the crash. Thus, without the police notification, the public would have been unaware of this important circumstance. Other than the fact that two vehicles were involved nothing further has been revealed about the circumstances of the crash.

In times of snowfall drivers must take precautions that they do not mis-understand the condition of the road surface. Road surface conditions do not remain constant but change from one minute to the next. Alternatively, under some circumstances, it can be very difficult to detect when the dark sheen in the tire paths of a road is an indication of a wet surface or if it is a more dangerous indication that ice has formed.



While arm-chair quarterbacks will state that drivers should drive for the road conditions, in reality it is often difficult to detect whether a road surface is just damp or dangerously icy.

A de-icing solution can be applied to a road surface before a snowfall is expected and road maintenance personnel should be monitoring the potential of snowfall that could

create icy conditions. The public has a right to know what actions were taken to prevent the development of dangerously icy road conditions.

November 21, 2015

Development of Roadway Sag at Highbury-Bradley Ramp - A Winter Hazard

The limits of roadway maintenance inspection are demonstrated through the development of a sag in the concrete surface of the southbound entrance ramp from Bradley Ave on to the southbound Highbury Ave just north of Highway 401 in London, Ontario.

The photo below was taken on November 20, 2015 as we travelled along the southbound ramp to enter onto southbound Highbury Ave. If one follows the right edge of the concrete ramp in the background there are two sags indicated by the "wave" in the regular curve of that edge. The second of these two sags is more prominent and this is located at a critical location where vehicles are changing lanes.



View, looking south, along the southbound Bradley Ave entrance ramp onto Highbury Ave just north of Highway 401 in London, Ontario.

The following 3 photos indicate the specific location of this sag.



View of Highbury Ave and Bradley Ave showing the entranced ramp where the sag is located.



Google Maps view of Bradley Ave entrance ramp onto Highbury Ave in the vicinity of the sagged concrete slab.

The photo below shows a closer view of the sagged concrete as evidenced by the change in the curve of the white edge line.



View, looking south, along the white edge line of the Bradley Ave entrance ramp showing the change in the curvature and therefore the indication of the sag.

The view below shows the grinding of the south edge of the sagged concrete slab so as to smooth out the transition at the junction of the two slabs.



View of the grinding of the edge of the concrete slab at the south end of the sag.

If this was done by road maintenance personnel then it reflects a lack of understanding that, at high speeds, it is not necessarily the abrupt change in height of the junction that is the critical point. Rather, at high speed, a vehicle will experience the rather long area of sag in a shorter time thus compressing the sag and giving a vehicle suspension a different experience. In winter-time when snow and ice may form on the ramp surface, drivers are changing direction over the area where the tire force is likely to be limited. A larger area of sag like this may not be taken up solely by the vehicle's suspension but the full vehicle mass may drop and lift. This can be dangerous when the limited tire force is needed and being used to change the vehicle's direction of travel.

Although this is an entrance ramp and the belief is that vehicles may be travelling slowly that is not the case. Southbound vehicles on Highbury Avenue also use this ramp to exit onto Highway 401. In this specific location vehicles have been observed to travel well beyond 100 km/h as some drivers attempt to use the ramp as a passing lane to enter Highway 401. Although the higher traffic volume of Highbury Ave might cause snow plows and sanders to create a bare road surface, the ramp may not be cleared and snow and ice could exist on the ramp causing drivers to be caught off guard.

Gorski Consulting will be monitoring this location, whether the sag is increasing and whether this will pose a safety problem.

November 20, 2015

Ontario SIU Investigation of Eastbound Hwy 401 Collision West of Foldens Road, Oxford County

The only information, presently available, with respect to the activities surrounding a collision on Highway 401 near Foldens Road is what was provided in the London Free Press and CTV News London. That information is very basic.

Apparently the incident occurred in the eastbound lanes of the highway and involved three vehicles. It occurred when police tried to stop one of the involved vehicles and a collision occurred when that vehicle was "pulling over". A passenger in one of the vehicles reportedly sustained life-threatening injuries. The collision occurred a few minutes before midnight on Thursday, November 19th, 2015. The news agencies indicated that, because the SIU was involved, no further details would be forthcoming from the police.

The Ontario SIU becomes involved whenever there is police involvement that leads to serious injuries. There is an obvious concern when such incidents occur and therefore the public should not be left out of the information loop. As a result Gorski Consulting attended the collision site to provide some further insight into the circumstances.

Obviously there is a limit to what can be determined from an accident site after the involved vehicles have been removed and the site may have been contaminated by the work of emergency personnel and other traffic and activities. However, the most likely location of the collision would appear to be in the eastbound lanes of the Highway 401 just west of the Foldens Road exit. The photo below shows those eastbound lanes on the morning of November 20th, or less than 12 hours after its occurrence. There is evidence of a significant impact in the curb lane just beyond the location of the flatbed truck and trailer shown in the photo.



View, looking east along the eastbound lanes of Highway 401, just west of the Foldens Road interchange.

Although there are tire marks in the curb lane from the braking of a heavy truck there is no specific indication at this time that these tire marks were part of the collision events, although there is also no indication that they are unrelated.

The photo below shows the area of an impact in the curb lane followed by the typical, dark fluid spray that occurs following such an impact.



View of the collision evidence in the eastbound curb lane of Highway 401.

The point of impact is evidenced by the light-coloured gouges located toward the right (south) portion of the curb lane. The character of the debris would suggest that at least one of the vehicles was a large, heavy truck.

The photo below shows an area of dark staining that is often associated with the final rest position of a large truck. Noting the large number of dark foot prints in the vicinity of this stain would suggest that there was considerable interest in the results around this area.



The large quantity of dark staining on the south paved should indicates the probable rest position of a truck after it was involved in the impact.

The photo below shows a close-up of the gouges at the point of impact. The depth and prominence of these gouges suggests that, either there was a large difference in speed of the contacting vehicles or one vehicle was much higher than the other as would occur for example if the front end of a truck were to strike a smaller passenger car. It is not possible to know which of these possibilities occurred, or if both occurred.



Close-up view of gouges in the curb lane. These gouges are deep and prominent.

The photo below shows our vehicle parked east of the area of dark staining that was likely the final rest position of the large truck. Tire marks can be seen that lead from that dark stain in the background, past our parked vehicle and continuing into the foreground of this view. Some of these markings would be created after the impact as vehicles travelled over the dark stain. However, at present, we are undecided whether all the evidence is from post-crash events.



View of tire marks on the south shoulder at a location a couple of hundred metres east of the area of impact.

The photo below shows a closer view of the tire marks located behind our parked vehicle.



View of some of the tire marks located behind our parked vehicle and toward the dark stain on the shoulder.

The photo below shows tire marks in the middle lane that might indicate that a truck driver attempted to avoid the collision events in the curb lane.



Truck tire marks in the middle lane suggest that there could have been some emergency actions by a truck driver to avoid the collision events in the curb lane.

This is about as far as we would like to comment on the findings from the site. Although not particularly detailed, this discussion should provide at least a little more information to the public than was provided in the official news media.

November 16, 2015

Another (Almost) Fatal Truck Tire Impact on Highway 401

The difference between the latest incident and the fatality of November 6, 2015 was mere coincidence.

The London Free Press (LFP) has reported that a group of Michigan residents, including several boy scouts, were travelling eastbound in a van west of Woodstock, Ontario when their vehicle was struck by one of two wheels that had separated from a westbound truck. A photo of the damage at the front of the van confirmed that, had the wheel been any higher multiple fatalities would have been generated. Even though this incident reportedly occurred on Thursday evening, November 12th, it was not reported until

now. Meanwhile, up to now, other local major news reporting agencies such as CTV News have made no report of the incident. The fact that two such events occurred within about 20 kilometres of each other is bad enough, but the lack of timely reporting of this second event is unacceptable.

The LFP indicated that the apparent increase in truck wheel separations in Ontario in the last couple of years was alleged to be a result of the Ontario Ministry of Transportation closing several truck inspection stations. The LFP then quoted a Ministry spokesperson: "But the actual number of provincial inspections hasn't gone down, with 110,000 conducted a year, said a ministry spokesperson".

We question the accuracy of this information. It was only on November 8th that the same LFP quoted a ministry spokesperson with respect to the previous fatal collision in which the spokesperson explained why the Putnam truck inspection station was not inspecting trucks at the time of the crash: "A ministry spokesperson said the station was open at the time and staff were on site, but not conducting inspections due to heavy rain". Gorski Consulting demonstrated that this information was false as there was no rain occurring at the truck inspection station at the time of the fatal crash. This discussion can be seen its entirety in our post on this page("Fatal Truck Tire Impact On Hwy 401 at Putnam Scales - Ministry Explanation That Rain Closed Putnam Scales Does Not Match Weather Data") for November 8, 2015.

While the LFP is entitled to provide these responses it should also investigate whether those responses are accurate. However, in some cases where the Ministry is the only source of such data, it is not possible to determine whether such information is accurate or truthful. Such a situation clearly needs the attention of elected officials.

November 14, 2015

Complaints of Traffic Chaos During Police Emergency Response - A New Reality In Face of Increased Terrorist Threats?

Traffic deaths from accidental collisions have been the historic problem in Southern Ontario. Yet, in recent times that traffic has changed with respect to the numbers of militarized police and military vehicles mixing with the general population.

Last evening a major terrorist attack occurred in Paris France. The death toll certainly surpassed 100 although that number is likely to be higher once all the facts are sorted out. In light of such dramatic incidents it would seem pointless to discuss traffic problems that occur when emergency personnel might need to respond such major threats. Yet the issue is not of minimal importance.

As society changes to a hair trigger readiness, unintended mistakes inevitably happen. Those mistakes may vary but innocent bystanders become potential unintended victims. As an example, we came across the following incident in London, Ontario just a few hours before the Paris terrorist attack.

While driving southbound on Clarke Road in the curb lane there was other southbound traffic ahead including a southbound van in the passing lane that was slightly ahead and blocked our view of northbound traffic. Suddenly, without any warning, the traffic in the southbound passing lane began to brake abruptly. Catching up to this traffic in the blindness of the curb lane we instinctively also began to brake without any indication that this braking was required. Well, it was required.

Just as we approached the van that was blocking our view, a dark SUV turned into our lane, directly in front of us. Obviously the driver of the SUV had no view of us and vise versa. Our immediate thought was to the suicidal intent of the driver as we came to a blindingly hard stop without striking the turning vehicle. Yet, as the vehicle continued its turn into a driveway we saw the flashing red and blue lights on the side of the police "ghost" vehicle, as shown in the photo below, taken just after we came to our stop.



View of the alternating blue and red emergency lights of the police SUV vehicle that turned blindly in front of us.

The above photo was taken as the ghost police vehicle began reversing back out of the driveway access to park in our curb lane and the van that was originally blocking our

view was stopped, out of camera view, just to our left. The photo below shows the police SUV as it came to its parked position in our curb lane.



View of unmarked police SUV as it parked in the curb lane of Clarke Road.

While considering our options we then observed two occupants emerge from the SUV wearing typical bullet-proof vests as one reached to gather materials from the back cargo area, as shown in the photo below.



Police in body armour exiting the parked SUV.

At this point, observing that there was an opportunity to move past the stopped police vehicle, we steered into the passing lane and continued on our way. Yet, looking back in the second-last photo it can be seen in the distance that two additional police cruisers are headed northbound, toward this location, and they do not have their emergency lights activated. We presume that this emergency situation required that police not have their emergency lights or sirens activated possibly not to alert some type of criminal that police were approaching. However we never stayed around to determine what transpired.

What is meaningful from this non-eventfully traffic conflict is how such emergencies, although crucial to the public's safety, can create unintended safety problems. Had we not been alert to braking for something that we could not see, there was the potential that we could have struck the turning SUV. If we were someone else who might have been speeding, the impact into the side of the police SUV might have been significant, possibly injuring the police occupants, and causing them to fail to attend to a potentially important emergency.

In the heat of the moment police and other emergency personnel have to make quick decisions that can result in major, unintended consequences. That must be an understandable reality that cannot be judged too harshly. Unfortunately we have observed past incidents where emergency personnel, primarily police, attempt, and

often succeed, in hiding that an unintended mistake was made. Such a result cannot be acceptable. Not because there should be intent to penalize police for their mistakes, but to improve their opportunity to correct an action that might protect them from harm and also allow them to help in the important emergency that they called to attend.

November 13, 2015

Friday The 13th In Port Dover Ontario



Who's Right? Police: "I told you to turn right" Rider: "I did turn right!"

Fun & mayhem. The theme of large motorcycle gatherings in Port Dover Ontario every Friday the 13th of the month. Here are some select photos from the gathering of June 13, 2014.



Police ponder how to get a 1000 motorcycles past a road closure.



100 motorcycles for every 4-wheeler.



Filling the parking meters.



Another 13th in Port Dover.

November 12, 2015

NHTSA: Tough Talk & \$200 Million, A Small Slap To Takata & No Repercussions To the Corporate Elite

NHTSA has stated on their website:

"For years, Takata has built and sold defective products, refused to acknowledge the defect, and failed to provide full information to NHTSA, its customers, or the public. The result of that delay and denial has harmed scores of consumers and caused the largest, most complex safety recall in history. Today's actions represent aggressive use of NHTSA's authority to clean up these problems and protect public safety."

Actually the \$200 million penalty imposed by NHTSA against Takata will not hurt those who made the decisions at the top of the corporation. It will only hurt the various employees of the company who likely had no say how Takata's exploding air bag canisters would be handled. Whether it was GM's ignition switch or so many other similar defects, those who truly should be punished are able to hide under the banner of the corporation such their names are not even made public.

November 11, 2015

Remembrance Day



Lest we forget to remember what it is that we are not to forget.



Respecting the shadows of our historical path includes the choice to follow a new one

November 9, 2015

Fatal Truck Tire Impact On Hwy 401 at Putnam Scales - Ministry Explanation That Rain Closed Putnam Scales Does Not Match Weather Data



The precise timing of heavy rain, as depicted here in east London, indicates that the Ontario Ministry of Transportation explanation for closure of their truck inspection station is false.

The London Free Press (LFP) uploaded an article on November 8, 2015 entitled "Why did safety laws fail victim of flying truck wheel?". This was in relation to the death of Kimberly Coordes, 50, of South-West Oxford Township who was killed on Friday morning, November 6th, when two tires from an eastbound truck trailer separated and one of the tires crossed into her westbound lane of Highway 401 and struck her vehicle. Ironically this fatality occurred precisely at the Ministry of Ontario's truck inspection station at Putnam Road. That truck inspection station was reportedly not receiving vehicles for inspection even through it was reported staffed and open, thus some have questioned why this was so. If the truck inspection station had been receiving vehicles for inspection then the offending truck would have had to enter the station for

inspection and would not have passed through the area where it lost its two tires. The looseness of the tires (or wheels?) should have been easy to detect as they would have been on the verge of separating.

The LFP article quoted an unnamed Ontario Ministry of Transportation spokesperson noting the following: "A ministry spokesperson said the station was open at the time and staff were on site, but not conducting inspections due to heavy rain".

There would be no reason for the general public to dispute this apparent fact. However this was not a fact, the information regarding the heavy rain was actually false. This false information can be settled without dispute by looking at the Environment Canada weather radar images from the nearest radar station near Exeter, Ontario.

Below we have attached the Exeter Radar images for the times of 0600 to 0900 hours, eastern standard time, at half hour intervals. The fatal truck tire collision reportedly occurred at 0730 hours. As can be seen in the radar images there was no rain in the area of the Putnam inspection station at the time of the crash.



View of Exeter Radar image at 0600 hours or about 1 1/2 hours before the reported fatal collision.



View of Exeter Radar image at 0700 hours or about 1/2 hour before the reported collision.



View of Exeter Radar image at 0800 hours or about 1/2 hour after the reported time of the collision.



View of Exeter Radar image at 0900 hours or about 1 1/2 hours after the collision.

Even though the radar images show that there was rain near the site about 1/2 an hour before the collision the light blue colour of the intensity of that rain indicates that it would have been at the lowest level of the Environment Canada precipitation scale. This is could be similar to a light drizzle. However no rain what-so-ever was indicated at 0730 hours at the Putnam truck inspection station which was the time of the reported collision.

These facts are confirmed because we took the photograph of the crossing guard shown at the beginning of this news item (and the previous news item of November 8th, below) at just before 0900 hours on Wavell Street at its intersection with Spruce Street in east London, just as a heavy downpour commenced as confirmed by the Exeter Radar image of 0900 hours.

The point is that you cannot always trust what you are being told especially when that information is coming from the transportation ministry that may be attempting to deflect any blame against it.

The question remains that if light rain, or rain nearby, is capable of stopping the operations of Ontario's truck inspections, can truck drivers time their travel to escape detection by travelling past truck inspection stations during rainy conditions? This would be doubly unsafe as an overloaded truck would be even more dangerous to the public in such poor weather conditions.

Will the public ever obtain a proper explanation for why the Putnam inspection station was closed at the time of this fatal crash? Or why it closes at particular times in the day and night? So far, no.

November 8, 2015



Weather Can Catch Us By Surprise

While this crossing guard may have appeared foolish standing in the torrential rain without protection, the reality is that the rain was unexpected.

Sometimes we do not appreciate that weather events can occur by surprise, leading to situations that are unexpected. While it is often said by official entities that we should drive for the road conditions this comment makes more headlines than sense. Weather conditions naturally change from minute to minute and from one location to the next. This is the message that needs to be delivered, not only to drivers, but also to pedestrians.

November 4, 2015

Unexplained Death of Pedestrian Who Sustained Minor Injuries In Dundas Street Impact Leads to Questions About Investigation



It was reported that this red SUV stuck two pedestrians before driving into a metal fence on Dundas Street west of English Street in East London, Ontario on October 30, 2015. One of those pedestrians later died.

It was initially reported as a minor and routine event. On October 30, 2015 the London Free Press reported that the driver of an SUV, westbound on Dundas Street, lost control of the vehicle and struck two pedestrians before crashing into a temporary fence surrounding an empty lot just west of English Street. Although one of the pedestrians reportedly sustained a head injury it was non-life-threatening. Just another traffic nonevent of little consequence.

However, on November 3, the struck pedestrian reportedly died.

While reporting on our investigation on this circumstances the detailed account became to lengthy to attach in this news page. Instead we have prepared a full article on the matter and this has now been uploaded to the Articles page of this Gorski Consulting website. We encourage visitors to review the unusual developments discussed in the article.

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