Bojeski, Cathy

From:

Cooper, Stephen

Sent:

October-04-13 1:51 PM

To:

Becke, Michael; Jazvac, Alan J

Cc:

Andoga, Richard

Subject:

RE: RHVP- re-surface date

Thanks Gents

From: Becke, Michael

Sent: October-04-13 12:38 PM **To:** Cooper, Stephen; Jazvac, Alan J

Cc: Andoga, Richard

Subject: RE: RHVP- re-surface date

http://www.swpavementmarkings.com/PDF/sell sheets/E SW SHER-ENDURE SALES SHT.pdf

http://www.swpavementmarkings.com/products.html

another link...

Also... since we are on this.. I noticed you guys are doing the "zebra stripes" at the cross walks... have you thought about using "Street Print" for this? Its similar to the stuff on York Blvd. and the new product is improved over when it was installed down at Mac. The expected life of the product is ~10 years... the upfront cost is more, but there is less maintenance involved... just a thought...

http://www.ennisflint.com/Products/StreetPrint

From: Becke, Michael

Sent: October-04-13 12:31 PM **To:** Cooper, Stephen; Jazvac, Alan J

Cc: Andoga, Richard

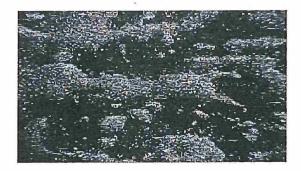
Subject: RE: RHVP- re-surface date

You're talking about the "Cat eyes"?

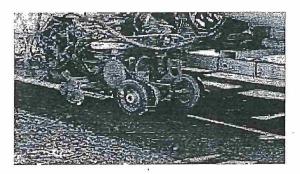
Have you guys looked into the splatter paint that the MTO is using? It is supposed bot be much better reflectivity and I noticed the MTO have been using it on more projects now so the price may be coming down. Drive the westbound QEW between Guelph line and 403... they have installed it there for both the orange construction markings and now the new paint for the re-alignment.

http://www.mto.gov.on.ca/english/transtek/roadtalk/rt15-3/b/#a9

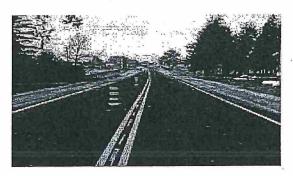
Splatter Painting the way to Safer Roads



A close up view: The application of uneven splatter markings offers good durability and retroreflectivity in both wet and dry conditions.



Splatter markings are applied using a unique ride-on machine which moves at approximately 6km/h.



When splattered material is viewed from a few feet away, the droplets form a solid line identical to the solid lines formed by conventional painting techniques

Conventional pavement markings in Ontario consist of waterborne paint and glass beads applied to the road surface. These markings are reapplied frequently because they are susceptible to damage from snow plows, winter sand, and traffic effecting their visibility and retro-reflectivity (the light bounced back to the driver). Furthermore, during wet conditions, the markings are less visible to road users. When the pavement marking is covered in water, it does not reflect light back to the driver because the water distorts the path of light. To increase the durability and visibility under wet conditions, MTO is testing three-dimensional splatter markings.

Splatter markings are uneven droplets of methylmethacrylate paint and glass beads offering good durability and retro-reflectivity in both wet and dry conditions. In wet conditions, there is more drainage due to the uneven texture which leaves a large portion of the reflective surface of the markings exposed or raised out of the water.

Glass beads on the surface of conventional markings are exposed to scraping from snow plows and abrasion from traffic. With splatter markings, only the glass beads on the top surface of the paint droplets are exposed. The glass beads on the vertical faces are recessed and protected from potential damage improving the dry and wet retro-reflectivity.

These markings are applied using a unique ride-on machine which moves at approximately 6km/h. In the machine, two parts of the methylmethacrylate paint are mixed together in a tube over a reservoir box which transfers the paint to a rotating spiked bar which tosses the uneven droplets onto the pavement. The density of the droplets can be adjusted by varying the speed of the machine and"/"or the material flow rate. Immediately behind the spiked bar, a glass bead gun applies glass beads to the surface of the droplets. When this splattered material is viewed from a few feet away, the droplets form a solid line identical to the lines formed by conventional painting techniques.

On October 6, 2004, MTO began testing splatter markings on Highway 7 between Opmar Road and Taylor Corners. Both edgelines and the centreline were painted using the splatter marking technique. The markings were observed in November 2004, April 2006, and December 2006. The westbound edgelines had been damaged due to winter plowing, while the centerline and eastbound edgelines remained in good condition. Only the peaks of the paint droplets were shaved by traffic and maintenance over time. Overall, maintenance caused only 10-15% damage to the splatter markings which was considerably less than the 35-50% damage observed on the adjacent section of regular flat line water borne paint.

Further splatter paint testing is planned to start in September 2009, on Highway 403. These trials will test different types of glass beads in the splatter markings with the goal of further improving retro-reflectivity.

Splatter markings appear to be a good solution to the durability and visibility problems of conventional markings. They have better visibility in wet conditions, and resist maintenance damage. In the future, MTO anticipates implementing this pavement application as an option for highways with high traffic volumes.

For more information, please contact:

• Grant Ridley, Chemical Engineer, Materials Engineering & Research Office, Highway Standards Branch, at (416) 235-3728

From: Cooper, Stephen

Sent: October-04-13 12:24 PM — **To:** Becke, Michael; Jazvac, Alan J

Cc: Andoga, Richard

Subject: Re: RHVP- re-surface date

Thanks gents. The reason i ask is we are considering raised reflector pavement markings in this section and wanted to coordinate with a re-surface project- if one was in the near future. Also, we were wondering if the installation of these devices would compromise any warranty on the pavement- is there any warranty and if so, would this type of installation have any effect?

From: Becke, Michael

Sent: Friday, October 04, 2013 12:09 PM **To**: Jazvac, Alan J; Cooper, Stephen

Cc: Andoga, Richard

Subject: RE: RHVP- re-surface date

Al is correct, we went all the way to where the RHVP left off...

Not all of the ramps were completed in this project due to the amount of paving to be done and the budget we had. The ramps along the LINC that were not completed will need to be done in the near future.

I too am curious why you are asking?

Thanks,

Mike.

From: Jazvac, Alan J

Sent: October-04-13 12:07 PM **To:** Cooper, Stephen; Becke, Michael

Cc: Andoga, Richard

Subject: RE: RHVP- re-surface date

Hi Steve,

We just resurfaced the LINC back in 2011, and I'm quite certain that the east limit of the resurfacing was approximately at Mud St. Therefore, the section that you are inquiring about is within these limits, and was done in 2011. Mike Becke can confirm this.

Our next resurfacing of the LINC would be scheduled for sometime around 2025-2027 (hopefully not sooner).

The RHVP will be done before the LINC's next resurfacing. I can suggest that the RHVP might be resurfaced around 2021.

I'm not sure why you're asking, but if you have critical needs, then they might be able to be coordinated with the 2021 RHVP resurfacing. Otherwise, I suppose stand-alone Traffic works would be a consideration.

Al

From: Cooper, Stephen Sent: October-03-13 3:04 PM

To: Jazvac, Alan J Cc: Andoga, Richard

Subject: RHVP- re-surface date

Gents:

Do either of you know or have heard about a date for re-surface on the RHVP, particularly between Mud and Dartnall? Even the year would be a good starting point?

Thx

Steve

Customer Service (/contacts) | News & Events | Company Profile (/company-profile) | Login | Global Home (/splash.php)

SEARCH

Select Language Powered by Google Translate (https://translate.google.com)

THE MARK OF TRAFFIC SAFETY

(https://www.ennisflintamericas.com/)

PRODUCTS

DOCUMENTS (/product-documents)

PROJECT PROFILES (/PROJECT-PROFILES)

FIND A REP (/FIND-A-REP)

CONTACT

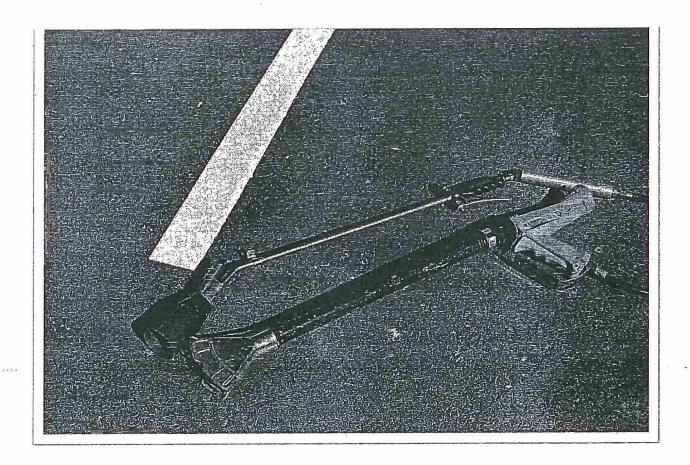
(/CONTACTS)

SEARCH

| Home (https://www.enr | nisflintamerica | as.com/) / E | y Category L | ist (https://www.e | ennisflintame | ricas.com/by | -category) | |
|-----------------------|-----------------|--------------|--------------|--------------------|---------------|--------------|------------|-------|
| Heaters and Torches | A 18 | | * ** | 3. 3. | W. | | | ş * · |
| | | | | 7. | | | | |
| | | | | *************** | | ******* | | |

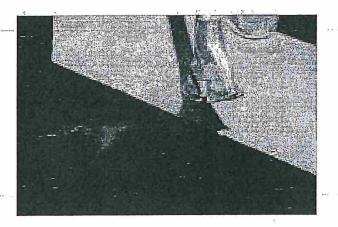
Heaters and Torches

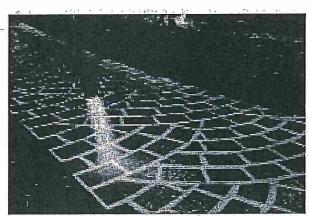
| - | PHOTO GALLERY (/gallery/category/?cat=97) FIND A REP (/find-a-rep) | |
|---|--|--|
| | | |
| 1 | | |
| | | |



Ennis-Flint® offers two specially designed propane heat torches for installing preformed thermoplastic pavement markings and adhesives.

SORT BY: Position VIEW AS: 3 Item(s) SHOW: 12 VIEW AS:



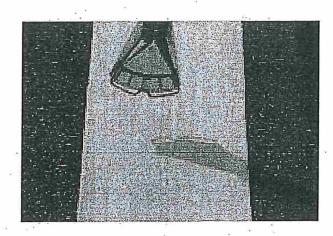


Flint 2000EX
(https://www.ennisflintamericas.com/by-category/heaters-and-torches/2000-ex)

READ MORE

Magnum Heat Torch
(https://www.ennisflintamericas.com/by-category/heaters-and-torches/magnum)

READ MORE



Ennis-Flint 3000EX
(https://www.ennisflintamericas.com/by-category/heaters-and-forches/3000ex)

READ MORE

SORT BY: Position VIEW AS: 3 Item(s) SHOW: 12 V

Contact Ennis-

Customer Service

Flint, Inc.

Find a Rep (/find-a-rep)

1-800-331-8118 (tel:1-8800-

Product Documents

331-8118)

(/product-documents)

sales@ennisflint.com

Careers

(mailto:sales@ennisflint.com) (http://ennisflint.iapplicants.com/searchjobs.php)

Terms & Conditions (/terms-CONTACT US (HTTPS://www.ENNISFLINTAMERICAS.COM/CONTACTS)

Privacy (/privacy-statement)

News & Events

Ennis News (/news)

Tradeshow Events (/events)

About Ennis Flint

Company Profile (/company-profile)

© 2018 Ennis Flint, Inc. All Rights Reserved.

Sitemap (/sitemap) | California Transparency in Supply Chains Act (/california-transparency-in-supply-chains

Canada Policy (/canada-policy)