Message

From: Tom Pate [tom.pate@rtmgp.ca]

Sent: 4/27/2020 3:59:53 PM

To: FRANCE Richard [richard.france@alstomgroup.com]; Murray Hill [murray.hill@rtmgp.ca]; Glen Hanlan

[glen.hanlan@rtmgp.ca]; James Robillard [james.robillard@rtmgp.ca]; Alex Turner [alex.turner@rtmgp.ca]; Bruce

Howie [bruce.howie@ottawa-lrt.ca]

CC: James Messel [james.messel@rtmgp.ca]; Peter Lauch [peter.lauch@rideautransitgroup.ca]; Steven Nadon

[Steven.Nadon@ottawa-lrt.ca]

Subject: FW: Proposed additional works

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Please see below. The shutdown periods of May 2-3 and May 9-13 are confirmed.

This is just a heads up for now. We will have to provide detailed plans for these periods. The plan for May 2-3 is almost complete.

Regards,

Tom

From: Morgan, Michael (Transit) <michaelj.morgan@ottawa.ca>

Sent: April-27-20 2:51 PM

To: Steven Nadon <Steven.Nadon@ottawa-lrt.ca>; Tom Pate <tom.pate@rtmgp.ca>

Cc: Peter Lauch <peter.lauch@rideautransitgroup.ca>; James Messel <james.messel@rtmgp.ca>; Charter, Troy <Troy.Charter@ottawa.ca>; Pieters, Matt <Matt.Pieters@ottawa.ca>; Pepin, Eric <Eric.Pepin@ottawa.ca>; Lacroix,

Alanna <Alanna.Lacroix@ottawa.ca> **Subject:** RE: Proposed additional works

Steve, we confirmed with the department today that we will go ahead with shutdowns on May 2&3 as well as May 9-13.

We should probably start having daily meetings to plan out the shutdown. We will need a detailed schedule showing hour by hour activities, shutdown activities, concurrent activities, resource (ERO and train) requirements, and restart testing ahead of startup on Monday, May 4th. Does a 4pm daily meeting work for you?

Thanks. Michael

From: Steven Nadon <Steven.Nadon@ottawa-lrt.ca>

Sent: April 27, 2020 1:08 PM

To: Morgan, Michael (Transit) <michaeli.morgan@ottawa.ca>; Tom Pate <tom.pate@rtmgp.ca>

Cc: Peter Lauch ce: Peter Lauch @rideautransitgroup.ca>; James Messel <james.messel@rtmgp.ca>; Charter, Troy

<Troy.Charter@ottawa.ca>; Pieters, Matt <Matt.Pieters@ottawa.ca>

Subject: RE: Proposed additional works

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Michael,

We have secured the OCS resources. There will be at least 4 high rail crews starting at 2am on May 2nd and working through till Monday, 3:30am. These crews will then be available again on the May 9th to 13th shutdown. We will be developing a more detailed plan for additional engineering windows to ensure the entire guideway is addressed as per our remedial plan submission.

As for the May 30-31, I just spoke with Thales and they do not believe they will be ready to deploy v6.01 software that early. Because this release is a combined v6.0 and v6.01 release, their QA department may need additional time to review the results.

I will push them for a delivery plan to ensure it is place as soon as possible.

Regards,

Steve

From: Morgan, Michael (Transit) [mailto:michaelj.morgan@ottawa.ca]

Sent: Monday, April 27, 2020 11:52 AM

To: Steven Nadon <<u>Steven.Nadon@ottawa-irt.ca</u>>; Tom Pate <<u>tom.pate@rtmgp.ca</u>>

Cc: Peter Lauch peter.lauch@rideautransitgroup.ca>; James Messel /games.messel@rtmgp.ca>; Charter, Troy

<Troy.Charter@ottawa.ca>; Pieters, Matt < Matt.Pieters@ottawa.ca>

Subject: RE: Proposed additional works

Steve, do you have your resources (4 high rail crews and 10 staff) locked in for the May 9-13 dates?

I assume we would go forward as follows:

May 2-3: Thales Software Testing; and secondary works during testing downtime

May 9-13: Comprehensive OCS inspection & cleaning; track works; and secondary works

May 30-31: Backup date for Thales software testing and other critical works (if there are issues with software or other items)

If you can confirm that you are ready to go for May 9-13, then I will request approval this afternoon. My meeting with the department team is at 2PM.

Thanks.

Michael

From: Steven Nadon < Steven. Nadon@ottawa-lrt.ca>

Sent: April 24, 2020 10:31 AM

To: Morgan, Michael (Transit) <michaeli,morgan@ottawa.ca>; Tom Pate <tom.pate@rtmgp.ca>

Cc: Peter Lauch peter.lauch@rideautransitgroup.ca>; James Messel <james.messel@rtmgp.ca>; Charter, Troy

<Troy.Charter@ottawa.ca>; Pieters, Matt <Matt.Pieters@ottawa.ca>

Subject: RE: Proposed additional works

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Michael,

I have attached an email from Duane Duquette (dated April 16th) to RTM specifically for fencing during a shutdown. There are certain station areas that need to be left active for circulations of pedestrian and other OCTranspo clients. We will be putting up construction fencing (to be delivered Thursday) to secure areas and we will also be bringing in Schindler to set the elevators at Blair from stopping on the platform level. This is the fencing referenced in our earlier message.

We are still gathering data on the Parafil. We are removing six in-service samples this weekend to perform tensile testing to see if they have been compromised. There was some arcing noticed on some of these assemblies that were heavily contaminated with salt spray from roads, primarily in the Blair area and areas where we have overpasses. We believe the process of cleaning the Parafil with alcohol, as per the O&M manual, adding the sleeve and sealing the terminal body with silicone will address this issue. Yes, this is all detailed in the plan coming today. Depending on the results of this test of the six in-service assemblies (and three newly built assemblies) we may need to modify our plan. We have 160 terminals in stock to effect replacements as required. Additional material is 10 to 12 weeks out.

Regards, Steve

From: Duquette, Duane <duane.duquette@ottawa.ca>

Sent: April-16-20 12:38 PM

To: Steven Nadon <<u>Steven.Nadon@ottawa-irt.ca</u>>; Matthew Slade <<u>Matthew.Slade@ottawa-irt.ca</u>>; James Messel <<u>james.messel@rtmgp.ca</u>>; Peter Lauch@rideautransitgroup.ca>

Cc: Pieters, Matt < Matt. Pieters@ottawa.ca>; Charter, Troy < Troy. Charter@ottawa.ca>

Subject: Station closure plans for Thales upgrade

Importance: High

Good day

In regard to your planned shutdown on May 2nd and 3rd for the Thales upgrade there are a few outstanding items related to station closure and customer routing.

OC Transpo needs a plan that outlines how you are planning on securing <u>ALL</u> stations during the shutdown.

I'm sure it will be easier at some then others, bellow is a list of items we would need to see address specifically. This may not be all the issues so please review each station in order to make sure all possible issues are identified and addressed in the plan. Should a station need no further mitigation please indicate that in the plan as well.

Please submit your plan by **April 21**st in order for OCT to have enough time to review, provide comment and make changes should it be necessary

- 1. Tunney's Station the after hours doors will be required to be opened for the duration of the shutdown
- 2. Hurdman Station the after hours gate will be required to be opened for the duration of the shutdown
- 3. Bayview Station As our Line 2 is still operational, our customers still require access into the station to use the Line 2 train and platform on Saturday May 2nd.
- a. Access from the lower concourse to the Line 1 platforms needs to be restricted.
- i.No access up the stairs
- ii. No access up the elevators
 - b. On Sunday May 3rd access will be needed to the lower platform to install fencing for the commencement of stage 2 on line 2

- 4. Blair Station As our bus service is still operational, our customers still require access to get from the south bus platform up to the overpass to cross to the mall or north platform.
- a. Access to the elevators 1 and 2 is required but travel should be from the lower concourse to the upper concourse (no stopping at the platform)
- b. Access up/down the stairs from the lower concourse to the upper concourse will be required.

i. Need a solution to prevent people from going elsewhere on the platform or trying to board a train

These are just the issues we identified there may be more.

For those stations that are not completely shut down it would be easier to include maps of areas cordoned off, as descriptions are not often fulsome when looking at these situations.

Thank you

Duane D. Duquette

Director, Rail Operations
Director, Opérations ferroviaires
Transit Operations | Opérations du transport en commun
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Web: www.octranspo.com

From: Morgan, Michael (Transit) [mailto:michaelj.morgan@ottawa.ca]

Sent: Friday, April 24, 2020 9:17 AM

To: Steven Nadon <<u>Steven.Nadon@ottawa-lrt.ca</u>>; Tom Pate <<u>tom.pate@rtmgp.ca</u>>

Cc: Peter Lauch <peter.lauch@rideautransitgroup.ca>; James Messel <james.messel@rtmgp.ca>; Charter, Troy

<Troy.Charter@ottawa.ca>; Pieters, Matt <Matt.Pieters@ottawa.ca>

Subject: RE: Proposed additional works

Is this something different than what we do at night? How much fencing is required to close off stations? I just want to understand what you are thinking here...

The benefit of a 5 day shutdown does allow for us to secure the system one time with fencing to ensure passengers using the bus system cannot access the Confederation Line 1 System. This will require fencing installation and reconfiguration of elevator to ensure elevators do not allow train platform access.

Separately, do you have details / material analysis reports on the following? We understood there was pitting due to winter salting / pre-wetting used on highways. Is there an electrical flashover occurring on these units? In talking with other agencies, buildup of materials on the OCS has resulted in flashover / short circuiting through the elements that are supposed to act as insulators.

- Replace all Parafil and Termination Bodies that show excessive electrical tracking damage

Do you have availability of the replacement parafils that are sleeved? I assume you were still sleeving these units – perhaps that detail is in your rectification plan...

Michael

From: Steven Nadon < Steven.Nadon@ottawa-lrt.ca>

Sent: April 23, 2020 6:12 PM

To: Morgan, Michael (Transit) <michaelj.morgan@ottawa.ca>

Cc: Tom Pate <tom.pate@rtmgp.ca>; James Messel <james.messel@rtmgp.ca>; Charter, Troy

<Troy.Charter@ottawa.ca>; Manconi, John <<u>John.Manconi@ottawa.ca</u>>; Begin, Jocelyne <<u>Jocelyne.Begin@ottawa.ca</u>>;

Matthew Slade < Matthew. Slade@ottawa-Irt.ca>

Subject: FW: Proposed additional works

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Michael,

Please see my comments to your questions below in RED. Please do not hesitate if you require additional details.

Regards,

Steven Nadon

Project Manager, RTG

(Remedial Plan PM)

Cell: 613-296-3874

Email: steven.nadon@ottawa-lrt.ca

From: Peter Lauch [mailto:peter.lauch@rideautransitgroup.ca]

Sent: Thursday, April 23, 2020 2:37 PM

To: Morgan, Michael (Transit) <michaeli.morgan@ottawa.ca>

Cc: Steven Nadon <Steven.Nadon@ottawa-Irt.ca>; Tom Pate <tom.pate@rtmgp.ca>; James Messel

<james.messel@rtmgp.ca>; Charter, Troy <Troy.Charter@ottawa.ca>; Manconi, John <John.Manconi@ottawa.ca>;

Begin, Jocelyne < <u>Jocelyne.Begin@ottawa.ca</u>>; Matthew Slade < <u>Matthew.Slade@ottawa-irt.ca</u>>

Subject: RE: Proposed additional works

Michael,

Thanks for your note.

I'll let the team provide the details, some of which will also be included in the response to your Rectification Notice letters we will issue tomorrow.

Regards,

Peter

From: Morgan, Michael (Transit) <michaelj.morgan@ottawa.ca>

Sent: April 23, 2020 1:19 PM

To: Peter Lauch <peter.lauch@rideautransitgroup.ca>

Cc: Steven Nadon <Steven.Nadon@ottawa-Irt.ca>; Tom Pate <tom.pate@rtmgp.ca>; James Messel

< iames.messel@rtmgp.ca>; Charter, Troy < Troy.Charter@ottawa.ca>; Manconi, John < John.Manconi@ottawa.ca>;

Begin, Jocelyne < Jocelyne. Begin@ottawa.ca>

Subject: RE: Proposed additional works

Importance: High

The level of detail on the scope, resourcing, and planning for the May 9 – 13 shutdown is insufficient.

1. How many OCS crews are you going to have working on the system to correct the stagger, cross overs, level the section insulators, adjust the stagger of the rigid rail, clean the existing parafil units...? What are the extents of the OCS you are going to fix? I received the detailed proposal from our contractor earlier this morning. They are providing me with 10 men with 4 high-rail bucket trucks to accomplish the work listed below. The goal will be to perform all of this work in the area from Blair to Cyrville on the May 2nd and 3rd shutdown and then establish a plan for the remainder of the alignment. The May 2nd and 3rd shutdown will give us better visibility into how long each of the steps will take and a plan for further shutdowns could then be presented. Scope of work is:

- Perform a complete inspection of the entire OCS
- Clean all components
- Torque all hardware
- Adjust all Balance Weight Assemblies
- Adjust height and Stagger to as designed specifications
- Adjust catenary in crossovers
- Adjust Rigid Rail to maximize stagger
- Replace all Parafil and Termination Bodies that show excessive electrical tracking damage
- Retrofit all Parafil Termination bodies with a proper boot and silicone as per KLK assembly instruction
- 2. How many different crews are going to be working? How much time does each of the tasks take? See the answer from above, I believe it has all of the detail you were looking for. It is hard to estimate how much time each task will take because work will be performed in parallel. I did not request a proposal per task, it was all encompassing.
- 3. An additional date "down the road" for parafil is not acceptable. We need dates and timelines for all of the work. Again, see the details in your question #1. We will be looking at building a detailed schedule after the May 2nd and 3rd work is performed. We will have a better understanding of level of effort to accomplish all tasks we requested from our contractor and his team.
- 4. Are there no planned repairs to the intermittent platform heaters? Where is the plan to improve the switch heaters you had discussions with Council about adding stock rail heaters? What of other solutions to improve the performance of the switch heaters? There is no planned work for the platform heaters as these can be addressed during regular engineering hours. There will be detailed plans for the switch heater modifications shown in Peter's response to your Rectification Notice Letter. Peter is delivering this response to you tomorrow.
- 5. The list of work for the May 9-13 seems like a laundry list of routine maintenance items. Did you really need 5 days for rail welding and how/when was this work planned for prior to the City's offer of a shutdown? I apologies for the lack of detail in the email response. The bullet form response was our team identifying items we would work on without giving details. I hope this list below gives you better clarity of what we are proposing to action.
- The benefit of a 5 day shutdown does allow for us to secure the system one time with fencing to ensure passengers using the bus system cannot access the Confederation Line 1 System. This will require fencing installation and reconfiguration of elevator to ensure elevators do not allow train platform access. With the OCS works the same principle would apply to providing Level C isolation for the OCS.

- It is true that the list does appear to show maintenance items, however, should we have the 5 day shut down time we would take advantage of maintenance items that would normally take longer and be spread out over time and in essence Blitz the system. It was these tasks that were focused on.
- The distressing of rail would take 3-4 weekends during engineering hours to complete and we would likely have requested single tracking in the area 90 minutes prior to end of service so as to position equipment. Should we have a 5 day shutdown we would be able to complete in a shorter time block and take advantage of daylight which is preferred for this type of work.
- With the de-wirement at St. Laurent station in January the repair involved 4 splice joints. While this is a suitable repair it was always intended to replace the catenary wire in the rigid rail through the station and eliminate the splice joints. This repair could not be completed in engineering hours and would be now be done as part of this shutdown.
- The proposed timing of the shutdown will line up nicely with the spring thaw having been completed. We could go end to end for track checks and adjust where necessary through the shutdown.
- Although the tunnel leak east of Rideau will be worked on during the May 2-3 shutdown, it is possible further injections will be needed. Should this occur we could take advantage of this period
- Some glass at Stations is positioned above the OCS. While the majority of glass cleaning will be completed prior to this shutdown, we would complete any outstanding glass, notably over the OCS during this shutdown period. Glass cleaning will be done in a progressive manner moving forward after this initial period.
- Alstom is working on a vehicle works plan for the 5 day shutdown period. This has yet to be submitted. However, a 5 day shutdown provides a greater opportunity for vehicle works
- We will have our contractor continue the OCS work listed in the "scope of Work" identified above at item #1. Every opportunity where there is a 5 hour track access window will be used to progress the OCS work along the full alignment (12.5km, two tracks and all of the cross-overs).
- OLRT will also look at performing the last two SCADA releases during that 5 day period. There is a SCADA Server 3 integration and a Virtual IP SCADA Update. Both of these are tracking to install on separate weekends (during the long engineering windows), but we would include them in this 5 day shutdown.

When do you think you will be in a position to provided a detailed plan for the May 9 – 13 work? When will you be able to confirm the timing for any subsequent works?

Michael

From: Peter Lauch peter.lauch@rideautransitgroup.ca>

Sent: April 23, 2020 12:08 PM

To: Morgan, Michael (Transit) <michaelj.morgan@ottawa.ca>

Cc: Steven Nadon <Steven.Nadon@ottawa-lrt.ca>; Tom Pate <tom.pate@rtmgp.ca>; James Messel

<<u>iames.messel@rtmgp.ca</u>>; Charter, Troy <<u>Troy.Charter@ottawa.ca</u>>

Subject: Proposed additional works

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Hello Michael,

I've not been responding quick enough to your "shut down" proposals. As such, I've asked Steve Nadon and Tom Pate to liaise with you on this, as I am going to them for guidance each time anyway. By the way, Steve is now seconded to RTG and is gradually divesting himself of his OLRTC duties, works out of the MSF and will be managing the execution of the Remedial Plan. I would appreciate if you (or your designate) communicate shutdown related issues to Steve and Tom (who are working closely together on this), and cc James and me.

There has been good debate internally as to the optimum shutdown dates and durations.

If we do the 4 weekends in May then we will have to consider planned maintenance being worked into the planning as well. Five days in a row may be easier to secure the resources and equipment, and avoid repeated mobilization and demobilization. The five days gives us more options to take on with vehicles as well.

Ideally, we have two different shutdown periods, with an additional period down the road for works primarily on the OCS (mostly parafil). However, not to say that other works would not be scheduled. While the below is all rather high level, it should get discussions going:

In brief:

May 2—3 would be for the Thales Build and test of version 6.1 accompanied by some additional works listed below

May 4-8 - Resume Revenue Service

May 9-13 – Proposed 5 day shut down with additional works listed below

May 2-3

Thales Version 6.1 Build and Test

Infrastructure

- May 02- Weld @105-600
- May 03- weld @105+800
- OLRT request for OCS works. Required Level 'C' isolation from MODS-119 and MODS-120 to end of tracks at Blair. This would be required during the full duration of the shutdown (May 2nd at 1am to May 4th at 4am). May need to amend this to engineering hours if Thales cannot accommodate request.
- SW330, SW329, SW328 and SW327, testing switch heater controls. This will be done during the shutdown hours. We will use work zones for protection if Thales is running. If Thales is not using in the area, we will work under the OCS permit as secondary. No power isolation required for this work.
- GIDS updates and testing. We will be updating the GIDS firmware, confirming the scanner power cable is operating, adjust the scan rated and perform validation test. All GIDS will be in bypassed for the duration of the outage so we do not EB a test train that Thales is using. We will work with rail control for IGAs to test functionality while Thales is testing.
- We will be requesting IGAs to access rooms beyond the end gates in the underground stations. These requests will be made through rail control.
- Guideway clean up May 2-3rd
- Tunney's Drainage Repair May 2-3rd
- Glass replacement Lees & Pimisi May 2-3rd High Humidity may cancel this operation
- Twin Box Culvert (Material on Order/waiting Engineers review) Tentative May 2-3
- Tunnel injection Tentative May 2-3rd
- Annual Switch Motor Maintenance including levelling if required

Vehicles

Spline Shaft Greasing on bogie retrofit trains

- 09, 17, 22, 27, 31
- LMB3 will have two 100K trains
 - 01, 27
- One full LMB will remain free for defects that may arise/defect clearance/warranty
- One full LMB will be set aside for fleet checks
- Bogie retrofit will continue as planned
- 02
- Seasonal vehicle inspections

Stations

- Exterior Interior Glass Cleaning
- High Pressure washing of stations
- Platform Crack repair work

May 9-13

Infrastructure

- May 09- Destress Hurdman to SW 314, weld.
- May 10- Destress Hurdman to SW 313, weld.
- May 11- Destress SW 314 to SW316, weld.
- May 12- Destress SW 313 to SW315, weld.
- May 13- Destress Hurdman to Rideau Exp joints, East and West bound., weld.
- OCS Clean Insulators, Finish inspection from area not covered on May 2-3, Adjustment of tension, height and stagger, Work on parafils (silicone boot connections). Identify future works to be performed.
- Re-wire St.Laurent to eliminate temporary splice connections
- SCADA Server 3 and VIP upgrades and tests
- Tunnel injection if not completed May 2-3
- Trackwork gauge checks, adjustment Blair to Tunneys
- Post Winter Switch Heater checks

Vehicles

Plan being worked on

Stations

- Complete Exterior Interior Glass Cleaning
- Complete High Pressure washing of stations
- Complete Platform Crack repair work
- Damage Repairs to panels, etc
- Cleaning of station lights where required

Other

- ETEL3 Cable replacement/repair at Hurdman
- ITEL1 at Tunney's
- Annual Signalling Inspection : Preventive maintenance
- Check all transponder tags/signaling lights/WRU
- Switch Machine Leveling/Wielding deficiencies
- 6M TVS Inspection of the jet fans at East/West Portal and St Laurent: Preventive Maintenance
- Troubleshooting of RIEF-3 and SLEF-1 faults

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Peter Lauch

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