TEO Signal Committee Meeting Minutes
Meeting Date: 10/2/2018
Water's Edge Conference Rm 176
Meeting Time: 9:00am – 12:00am

Meeting Attendees:

Jerry Kotzenmacher	Sue Zarling	Kile Holm	Kevin Chan
Linda Heath	Mike Posch	Greg Wagner	Robin Delage
Mike Fairbanks	Derek Lehrke	Tod Becker	Paul Reichstadt
Clint McCullough	Brian Vitek	Bob Emineth	
Alex Govrik	Curt Krohn	Chris Bosack	
By phone:			
Ron Eberle			
Mark Korwin-Kuczynski	Les Bjerketvedt	Nick Ollrich	
Cindy Dittberner	Paul Ackerley		

Old Business-

Controller and Remote Communications – Metro received $200,000 from the CAV-X Office for controller replacements across the state. DTE's have been given the opportunity to provide a list of what signals they would like the controller replaced, an Ethernet over cell connection installed, and be connected to Maxview. D6 is currently the only district Metro has worked with for replacements. With connected vehicles there may be a need over time to place ATC controllers across the State and connect to Maxview. All notes that Metro sends out to the districts on this subject should also be sent to OTE and ESS.

Encryption – To make updates on the new controllers via USB BitLocker must be removed from your laptop. A request must be made to MnIT to remove this. Derek L. has a note from MNIT (see attached). Cell modem plans cost around $35 to $40 per intersection per month. Curt and Derek can help set up these systems in Maxview.

No splice in T-base – There continues to be moisture problems with the Duetch connector. It was suggested by ESS to no longer have any splice from the cabinet to the field components, but rather do a straight pull through the base. A meeting with OTE and ESS will be set up to discuss the issues and determine what should be done in the future.

RICWS – The signs are reported to have a 75% fail rate. They are even failing on replacements returned from warranty by the manufacturer... OTE is looking into a pedestal design to replace

the signing posts that had originally been chosen by the design build project. This information will be sent out as soon as possible. It was also suggested to talk to Metro Transit regarding the blank out signs that they have used. Another suggest was to explore the life cycle cost of the RICWS systems. The cost of the systems is $115,000 - $120,000. Safety funds are being provided to install systems. OTE will set up a meeting with the Safety Section to discuss concerns.

Pedestrian Changes – the State Non-Motorized Transportation Advisory Committee (SNTC) sent a letter to the commissioner early this year regarding pedestrian safety at traffic signals. Pedestrian safety has become a higher priority for MnDOT. A committee was formed and discussed items we could change for pedestrian safety. Leading Pedestrian intervals, no flashing yellow arrow during a ped call, slower walking speeds were some of the items discussed. A response letter for the commissioner to send has been drafted by the committee along with a more in depth report on each topic... Look for changes coming this winter.

Ped stations getting knocked down – There are cases where a particular ped stations continue to get knocked down. For these stations, moving them to the PA pole or out of the way for traffic may be the best option. ESS should work with each districts and inform them if they decide to move a station. If a station is moved, it should be documented on why. Sue will work with Todd G. from the ADA office regarding discussions with districts on original placement of the stations.

Pole and Mast Arm Delay – The delays are up to 26 weeks. OTE met with Millerburnd Mfg to discuss these delays. The delays are caused by a multiple of things. A steel company closed and hiring problems were mentioned. Millerburnd suggested that they give MnDOT dedicated time each month. They also requested a list of signals to be built over the next year. This may help but is unknown at this time. The manufacture also suggested that we remove the head mounting points on the mast arm. This would then require us to use a different type of mounting bracket.

OTE will also be setting up a meeting with Valmont, the other pole and mast arm manufacture to get and provide the same information.

Camera Detection – Metro has been installing more cameras for traffic detection. Maintenance is concerned that this will increase their costs. There are also questions on the design, what type a cable should be used for what system? An open approach on the layout was suggested, meaning no detection areas should be placed on the layout. Detection areas could be placed on the layout by operations after the signals construction has been completed. What are the future costs? OTE has set up a meeting that will include those that want to attend. Send Jerry a request if you want to be included on this meeting.

Other districts have also installed cameras and have commented on some issues with vibration from wind. It was suggested the issues are because the cameras are an old version and newer cameras do not have that problem. There was also concern from some that the life of the

cameras is such that they will need to be replaced during the life of the signal and they will have changed during that period.

Microwave and sonic detection for temporary signals is no longer being used. Districts are now using video detection for their temporary signals. The temporary signal plan should be updated to show video detection rather than sonic/microwave. Eliminate language on sonic/microwave form the special provisions.

MASH Base - The Frey APS base has been tested according to Manual Assessment of Safety Hardware (MASH), the new federal requirement for breakaway testing and it passed. They also tested and had the base approved for use with vehicle indications. MnDOT will continue to use the base only for push button stations. With the existing foundation it cannot be used as a pedestal base.

7 amp fuse – This is the issue with changing out the ¾ amp fuse when they blow. When installing a cabinet at an intersection that still has incandescent lamps needs to change to a larger fuse. In some cases the fuses are blowing when LED indications are installed. It is not a wide spread problem, but has been a nuisance thing. The¾ amp is needed to meet the intent of the class 3 power limited circuit. This item will be sent to the electrical distribution committee for their review.

Conflict monitor not recognizing dual indication – problem exist when a loose neutral causes dual indication. Power to the LED indications is too low. A firmware update may be need in the MMU. This has been an intermittent issue. OTE will work with Tod, Bob, and Mike P and talk to the MMU manufacture to see what can be done.

Signal Details to Standard Plans – There has been concern by some engineers regarding signatures on standard signal details (also an issue with other areas standard details). Project engineers are reluctant to sign a detail that was not designed under their direction. Making the details standard plan sheets will eliminate this signature problem. OTE will work on this change. The details will be much harder to change once they are standard plan sheets and there was some discussion about the need to be able to make changes to details based on the intersection. The standard plan sheets will be routed for comments before going through the process of becoming plan sheets and then will be routed again through that process for comments. This change will happen over the next year.

Cabinet Antennas – Cell modems and ped push buttons have added a need for antenna placements on the cabinet. There are maintenance concerns with mounting the antenna on the top of the cabinet. There was no area on the cabinet that everyone agreed was best. Kevin is working with Mike P, ESS, and Metro district to what the best option is for a standard antennae placement.

Round Robin –

Alex – Anchor rod tightening. New specifications. See attachment

Mark - Rail Road preemption. No place to terminate the pedestrian circuit. Work with OTE and ESS.

Sue – Cabinet art. MnDOT has gotten some requests and it appears the desired option to begin with is a wrap. Details on installation requirements are still being worked out with the Public Art Committee based on TEO recommendations and research on others currently doing this. Final requirements will be placed in the TEM with reference to the TEM from the Art Policy. For legal reasons requests to place cabinet art need to go through the art policy process

Next meeting: Friday, March 22nd, 2019

Waters Edge **Conference Room 176**

9:00am – 12:00 noon

Skype available

Send agenda items to Jerry K

Attachments:

All

Given that the Cobalt (and other ATC controllers) will be doing their firmware updates mostly via USB the windows BitLocker Utility that is on our MnDOT laptops can cause issues. If you are going to be updating software via USB you can request that BitLocker be removed (if it is enabled already) from your laptop in a similar fashion to my request outlined below on the IT service desk page.

This link will bring you directly to the exception request form (note it will only work when connected to the MnDOT network)

Bitlocker To-Go USB ITERA Exception Request

What would you like to do . * :	Other Policy Exception Request
Computer Name (if applicable):	T79CLW161TRA024
Computer serial number :	9JCYNN2
Policy Exception * :	BitLocker-To-Go (USB)
What website are you trying to reach, please copy in the address (URL) here:	
Additional Information :	Use this option to request BitLocker exception to USB and other removable devices where encryption prevents proper function of the device. This request will route approvals and management of the change to the device.
Steps to reduce risk * :	Drives would not contain public data and would only be used to move/retrieve files from traffic signal controllers
Timeframe * :	Indefinitely
Employees affected * :	ESS signal Maintenance staff, Signal operations staff
Business Reason * :	Newer traffic signal controllers often require us to locally connect to the device with a USB device to upload new firmware and to download/upload controller databases and logs. These controllers do not support bitlocker which prevents us from doing our normal daily tasks since we cannot upload new firmware to the USB devices from a MnDOT computer.
Date Needed * :	6/7/2018

Derek Lehrke