FINAL REPORT OF INVESTIGATION A&I E16203 July 18, 2016 Collision

Adopted by the Metrorail Safety Commission at its meeting on April 8, 2019.

Washington Metrorail Safety Commission 777 North Capitol Street, NE, Suite 402 Washington, DC 20002



Department of Safety & Environmental Management

FINAL REPORT OF INVESTIGATION A&I E16203

SMS 20160829

Date of Event:	7/18/2016
Type of Event:	Collision
Incident Time:	02:44 hrs.
Location:	K2 320+00, Between Ballston and East Falls
	Church, Track 2
Time and How received by SAFE:	N/A
Safety Officer Response:	None
Time of Safety Officer Arrival:	N/A
Time of Safety Officer Departure:	N/A
Rail Vehicle:	N/A
Injuries:	None
Damage:	Intrusion Detection Warning System (IDW)
	Box and associated wiring
Emergency Responders:	TRST

Executive Summary

On Monday July 18, 2016, at 05:15 hrs., SAFE was notified by the Maintenance Operations Center (MOC) that at 02:44 hrs. on 7/18/16 there was a report of a tripped Intrusion Detection Warning (IDW) alarm between Ballston and East Falls Church Station (Orange Line), Track 2 at Chain Marker (CM) K2-320+00. After further investigation, Track and Structures (TRST) personnel revealed that an IDW was damaged and required replacement. There were no reported injuries or further damage to any other components related to this event.

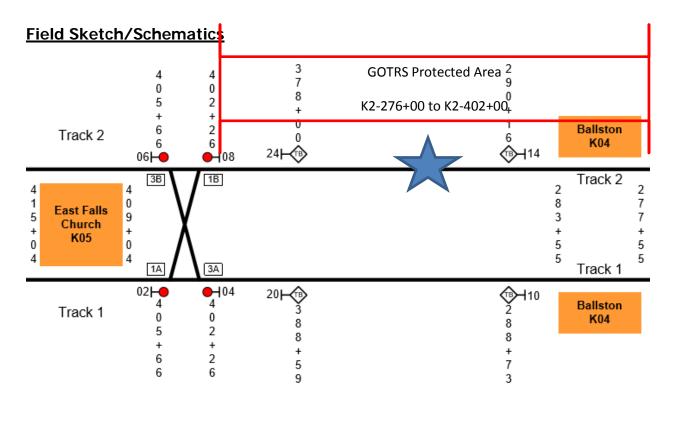
Notification

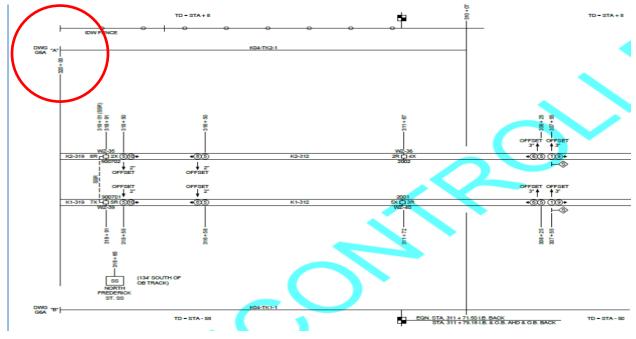
Title	Time	Comment:
FTA	05:53 hrs.	
ТОС	05:53 hrs.	

Incident Site

Between Ballston and East Falls Church, K2 320+00

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IDW location

Date: 7/18/2016 Time: 02:44 hrs. Final Report - Collision E16203

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Rev.2 Drafted By: S		uge 1
Rev.2 Reviewed By: SA	AFE 701 – 03/03/2019	
Rev.2 Approved By: SA	AFE 70 – 03/04/2019	
Rev.3 Approved By: SA	AFE 70 – 03/25/2019	

Investigation

The General Orders Track Rights System (GOTRS) request number 201616701400 was assigned for this nature of work. The work was being performed by the TRST Productions department. The nature of the work included railroad tie prep work that involved staging ties and materials along the right of way for future track improvement work. Hand tools were used, and the work equipment scheduled for use was a Prime Mover, Flat Car and Tie Crane. The work crew has been prepping the area since 7/10/2016, besides no reports were made prior that there was any damage to the IDW. There was no indication that a post inspection was performed after the task since the IDW alarmed at 05:15 hours. There were no Maximo records showing the IDW was disabled prior to the work assignment.

The protected area for this work zone was CM K2-276+00 to K2-402+00, Track 2. The reported incident occurred 1000 feet south of the Ballston Portal and

Based on the MOC summary report for July 18, 2018, a Track Supervisor responding to the work zone reported finding a damaged cable associated with the IDW on Track 2, CM K2-320+00. Track Supervisor reported track vehicle #802, a tie crane, while working in the area more than likely, damaged the IDW cable located on the fence line separating the WMATA right of way from I-66 roadway. MOC notified Automatic Train Control (ATC) personnel and dispatched the group to repair the damaged cable. Upon ATC arrival an assessment was performed of the damaged equipment. The entire IDW Box required replacement. The IDW cable was reinstalled to the box, the alarm was reset and the IDW system for this area was placed back in service. SAFE was informed of the damage to the cable/fence and Work order #12860253 was generated. (See attachment 1).

There were no injuries reported as a result of this incident and no further damage was reported.

<u>Weather</u>

At the time of the incident, the temperature was 79°F, and SAFE has concluded that weather was not a contributing factor in this incident (Weather source: National Oceanic Atmospheric Administration (NOAA) – Location: Falls Church, VA)

<u>Findings</u>

- MOC received a report of a tripped IDW alarm
- Investigation revealed that the IDW box and cable was damaged
- •
- ATC repaired the damaged cable

Immediate Mitigation

Date: 7/18/2016 Time: 02:44 hrs. Final Report - Collision E16203

 Rev.2 Drafted By:
 SAFE 702 - 02/21/2019

 Rev.2 Reviewed By:
 SAFE 701 - 03/03/2019

 Rev.2 Approved By:
 SAFE 70 - 03/04/2019

 Rev.3 Approved By:
 SAFE 70 - 03/25/2019

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- An investigation was performed by ATC personnel who responded to the reported damage identified by Track Supervisor
- The IDW cable was repaired by ATC personnel.

Conclusion

Based on the salient facts, it is most probable that the tie crane made contact with the IDW box while positioning the ties along the fence line. SAFE has no further actions on this matter and recommends E16203 for closure.

Attachment

etro			Wor	k Order Det	ails						
rk Order #: 12860253 pe: CM					Status: CLOSE 07/21/2016 08:45						
	Work Description	: K04 -2-1 IDW ALARM									
Job	Plan Description	:									
				Work Informat	on						
	Asset: 444588	ATCS, INTRUSION DETECTION WAR (IDW) SYSTEM,					Par	ent:			
Asset Tag:				Maintenance Offic	e: ATCS-TSSM-KF	RFO		Create Date: 07/18/2016 02:55			
Asset S/N:			Labor Grou	p: ATCSD2K99			Actual S	tart: 07/18/201	6 04:42		
Location: 7438 K04, BALLSTON MU, STATION, PLATFORM 1, ROOM 115, TRAIN CONTROL ROOM (K04 IB FT)			Crew:				Actual Comp: 07/21/2016 08:45				
Wor	k Location:			Lea	d:			I	em: ATCSV99	92	
Fa	ilure Class: ATCS005	IDW		GL Accou	t: WMATA-02-335	30-50499270-04	2- *****	-OPR**			
Pro	blem Code: 4450	ZONE TROUBLE LED LIT		Supervise	r:			Target S	tart:		
Rec	uested By:			Requestor Phone:					Target Comp:		
Chain Mark Start: Chain Mark			Chain Mark En	d:			Scheduled S	tart:			
Crea	ite-Mileage: 0.0			Complete-Mileag	e: 0.0						
tual Labor											
Task ID	Labor		Start Date	End Date	Start Time	End Time	Approved?	Regular Hours	Premium Hours	Line	
			07/18/2016	07/18/2016	02:45	04:30	Y				
			07/18/2016	07/18/2016	02:45	04:30	Y				
						Tota	Actual Hour/Labor				
ilure Repo	rting										
Cause		Remed	у			Supervisor			Rema	ark Date	
4476	RESPECTIVE ZONE I	IS SHORTED 3135	SUPPORT	REQUESTED					07/18	/2016	
Remarks	See long MIDs 7/18/16 @0300 found tipover box Tipover Box located at CM	damaged by track work crew, reinstalled wirin	g however box is (damaged beyond repair.							

Attachment 1 – Work Order for repair made on IDW