



***Federal Railroad Administration
Office of Safety
Headquarters Assigned
Accident Investigation Report
HQ-2005-32***

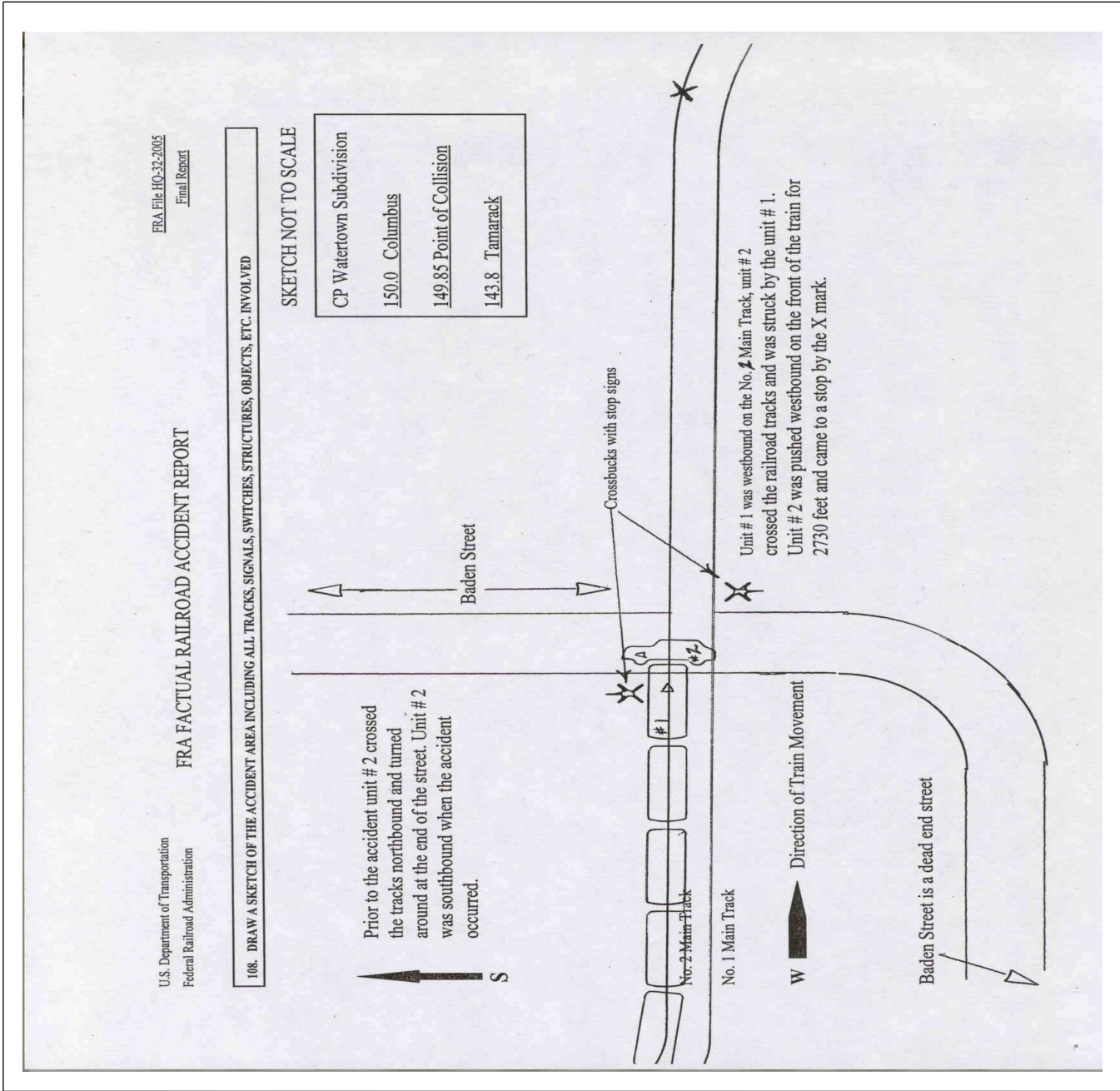
***Canadian Pacific (CP)
Columbus, Wisconsin
April 10, 2005***

Note that 49 U.S.C. §20903 provides that no part of an accident or incident report made by the Secretary of Transportation/Federal Railroad Administration under 49 U.S.C. §20902 may be used in a civil action for damages resulting from a matter mentioned in the report.

1. Name of Railroad Operating Train #1 SOO LINE RAILROAD COMPANY			1a. Alphabetic Code SOO			1b. Railroad Accident/Incident No. 190793			
2. Name of Railroad Operating Train #2 N/A			2a. Alphabetic Code N/A			2b. Railroad Accident/Incident N/A			
3. Name of Railroad Responsible for Track Maintenance: SOO Line RR Co. [SOO]			3a. Alphabetic Code SOO			3b. Railroad Accident/Incident No. 190793			
4. U.S. DOT_AAR Grade Crossing Identification Number 390642M			5. Date of Accident/Incident Month Day Year 04 10 2005			6. Time of Accident/Incident 10:05:00 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM			
7. Type of Accident/Incident (single entry in code box)			1. Derailment			4. Side collision			
			2. Head on collision			5. Raking collision			
			3. Rear end collision			6. Broken Train collision			
			7. Hwy-rail crossing			10. Explosion-detonation			
			8. RR grade crossing			11. Fire/violent rupture			
			9. Obstruction			12. Other impacts			
						13. Other (describe in narrative) 07			
8. Cars Carrying HAZMAT 14		9. HAZMAT Cars Damaged/Derailed 0		10. Cars Releasing HAZMAT 0		11. People Evacuated 0		12. Division CHICAGO	
13. Nearest City/Town COLUMBUS			14. Milepost (to nearest tenth) 149.85		15. State Abbr Code N/A WI		16. County DODGE		
17. Temperature (F) (specify if minus) 65 F		18. Visibility (single entry) Code 1. Dawn 3. Dusk 2. Day 4. Dark 2		19. Weather (single entry) Code 1. Clear 3. Rain 5. Sleet 2. Cloudy 4. Fog 6. Snow 1		20. Type of Track Code 1. Main 3. Siding 2. Yard 4. Industry 1			
21. Track Name/Number MAIN TRACK NO. 2			22. FRA Track Code Class (1-9, X) 4		23. Annual Track Density (gross tons in millions) 23.6		24. Time Table Direction Code 1. North 3. East 4		
OPERATING TRAIN #1									
25. Type of Equipment Consist (single entry)		1. Freight train		4. Work train		7. Yard/switching		A. Spec. MoW Equip. Code	
		2. Passenger train		5. Single car		8. Light loco(s).		26. Was Equipment Attended? Code 1. Yes 2. No 1	
		3. Commuter train		6. Cut of cars		9. Maint./inspect.car		27. Train Number/Symbol 199-10	
28. Speed (recorded speed, if available) Code R - Recorded E - Estimated 59 MPH R		30. Method(s) of Operation (enter code(s) that apply) a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track c. Auto train stop i. Time table/train orders o. Positive train control d. Cab j. Track warrant control p. Other (Specify in narrative) Code(s) e. Traffic k. Direct traffic control f. Interlocking l. Yard limits e N/A N/A N/A N/A							
29. Trailing Tons (gross tonnage, excluding power units) 2440		30a. Remotely Controlled Locomotive? 0 = Not a remotely controlled 1 = Remote control portable 2 = Remote control tower 3 = Remote control transmitter - more than one remote control transmitter 0							
31. Principal Car/Unit		a. Initial and Number		b. Position in Train		c. Loaded (yes/no)		32. If railroad employee(s) tested for drug/alcohol use, enter the number that were positive in the appropriate box.	
(1) First involved (derailed, struck, etc)		N/A		1		N/A		Alcohol Drugs 0 0	
(2) Causing (if mechanical cause reported)		SOO 6033		2		N/A		33. Was this consist transporting passengers? (Y/N) N	
34. Locomotive Units		a. Head End		Mid Train		Rear End		35. Cars	
		b. Manual		c. Remote		d. Manual		a. Freight	
						c. Remote		b. Pass.	
(1) Total in Train		2		0		0		c. Freight	
(2) Total Derailed		0		0		0		d. Pass.	
								e. Caboose	
36. Equipment Damage This Consist		0		37. Track, Signal, Way, & Structure Damage		0		38. Primary Cause Code M302	
								39. Contributing Cause Code N/A	
Number of Crew Members					Length of Time on Duty				
40. Engineer/Operators N/A		41. Firemen 0		42. Conductors 1		43. Brakemen 0		44. Engineer/Operator Hrs 6 Mi 5	
								45. Conductor Hrs 6 Mi 5	
Casualties to:		46. Railroad Employees		47. Train Passengers		48. Other		49. EOT Device? 1. Yes 2. No 1	
Fatal		0		0		4		50. Was EOT Device Properly Armed? 1. Yes 2. No 1	
Nonfatal		N/A		0		0		51. Caboose Occupied by Crew? 1. Yes 2. No 2	
OPERATING TRAIN #2									
52. Type of Equipment Consist (single entry)		1. Freight train		4. Work train		7. Yard/switching		A. Spec. MoW Equip. Code	
		2. Passenger train		5. Single car		8. Light loco(s).		53. Was Equipment Attended? Code 1. Yes 2. No N/A	
		3. Commuter train		6. Cut of cars		9. Maint./inspect.car		54. Train Number/Symbol N/A	
55. Speed (recorded speed, if available) Code R - Recorded E - Estimated 0 MPH N/A		57. Method(s) of Operation (enter code(s) that apply) a. ATCS g. Automatic block m. Special instructions b. Auto train control h. Current of traffic n. Other than main track 0 = Not a remotely controlled 1 = Remote control portable							

108. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED.

39-2005
Accident
Sketch.jpg



109. SYNOPSIS OF THE ACCIDENT

A westbound Soo Line Railroad (SOO)¹ freight train (SOO 199-10) collided with a motor vehicle at a highway-rail grade crossing on April 10, 2005, at 10:05 a.m. CST. The accident occurred at Baden Street, near Columbus, Wisconsin (WI), at Milepost 149.85, on Soo's Watertown Subdivision.

The motor vehicle driver and all three passengers were killed. There were no injuries to the train crew. There was no derailment and Canadian Pacific Railway (CP) did not report any damage to the train.

At the time of the accident, it was daylight, clear and the temperature was 65° F.

The accident was caused by failure of the motor vehicle driver to yield to the train. According to the Dodge County Sheriff's Department, the driver failed to yield the right of way and disregarded a traffic control sign by not stopping for a posted stop sign.

¹ The Soo Line Railroad Company (SOO) was acquired by the Canadian Pacific Railway (CP) and are one railroad. However, the railroad has been segregated by the former railroad company for record keeping.

110. NARRATIVE

The following information was obtained from an investigation that was conducted by the Federal Railroad Administration.

Circumstances Prior to the Accident

The crew of SOO 199-10 included a locomotive engineer and a conductor. They reported for duty at 4 a.m. CST, April 10, 2005, at Bensenville Yard in Bensenville, Illinois. The crew members received more than their statutory off duty period, prior to reporting for duty.

Their assigned freight train consisted of two locomotives, 21 loaded and 18 empty cars of several varieties. It was 3,128 feet long and weighed 2,440 tons. The train was scheduled to travel to Minneapolis, Minnesota (MN). The train received an initial terminal train air brake test and departed Bensenville Yard at 6:35 a.m.

As the westbound train approached the accident area, the locomotive engineer was seated at the controls on the north side of the lead locomotive and the conductor was seated on the south side of the lead locomotive.

In this area of the railroad there are, in succession, a 1 degree curve to the left of about 1,200 feet, followed by a tangent of 900 feet to the point of the accident and 2730 feet beyond. There is a 0.5 percent descending grade approaching the accident site, followed by a 0.45 ascending grade beyond.

The railroad timetable direction of the train was west, the geographic direction was northwest. Timetable directions are used throughout this report.

The Accident

The train was being operated on No. 2 Main Track at 60 miles per hour approaching the accident area. The engineer said he became aware of the impending collision about 200 feet in advance, at which time he initiated an emergency train air brake application. The train had slowed to 59 miles per hour when the collision occurred. The speed was recorded by the event recorder of the controlling locomotive. The maximum authorized speed for this train was 60 MPH, as designated in the current CP Timetable No. 5. The accident occurred at 10:05 a.m.

The motor vehicle was traveling south on Baden Street in Dodge County. According to the locomotive engineer, the driver failed to stop for the stop sign and never looked in the trains direction after the motor vehicle entered the crossing. A report, filed by the Dodge County Sheriff's Department, estimated the driver was operating the vehicle at approximately 10 MPH when the collision occurred.

The train struck the left side of the motor vehicle about midpoint of the left front door. The vehicle was pushed west on the front of the lead locomotive until the train came to a stop about 2,730 feet west of the collision.

After the train stopped, the locomotive engineer stayed on the locomotive to establish radio communication with the train dispatcher. The conductor got off the unit and awaited emergency response personnel.

A Columbus, WI, police officer arrived at the scene at 10:07 a.m. and the Columbus Fire Department arrived at 10:10 a.m. A Columbia County Deputy Sheriff arrived on the scene at 10:10 a.m. and an ambulance arrived at 10:18 a.m. The Dodge County Deputy Sheriff arrived on the scene at 10:41 a.m. The Columbus Police Officer ascertained that the train crew members did not require any medical attention. The Dodge County Deputy Sheriff interviewed both train crew members. The accident occurred in Dodge County, however, the vehicle was pushed west on the railroad tracks into the City of Columbus in Columbia County. The Dodge County

Sheriff's Department is handling the accident investigation because the point of collision occurred in Dodge County. The driver and all three passengers of the vehicle were pronounced dead at 11:50 a.m. and the motor vehicle was transported to the Columbus city garage with the victims still inside because there was a large group of onlookers.

A SOO Manager of Field Operations (MFO) was dispatched to the scene from Milwaukee and arrived about 11:55 a.m. He ascertained the condition of the train, no hazardous materials involvement and no damage to the lead locomotive. The MFO discussed the situation with the deputy sheriff and both members of the train crew were given a critical stress incident debriefing. The train crew was transported by cab to Portage, WI, and went off duty. The train was re-crewed and departed the accident scene at 3:15 p.m.

Analysis and Conclusions

The driver was a 60 year old male. The other three passengers of the motor vehicle were adults between the ages of 56 and 59.

The highway-rail grade crossing was equipped with crossbucks and stop signs. There are no advanced warning signs on Baden Street. When traveling northbound, prior to crossing the railroad tracks, the road is marked with a dead end sign. Baden Street, north of the railroad tracks, is the only access for five residences. The approaches to the highway-rail grade crossing are maintained by Dodge County.

The railroad had a whistle post in place approximately 1320 feet east of the crossing. Both train crew members said the locomotive engineer began sounding the whistle when the train neared the whistle post. This was later validated by analysis of the event recorder data.

The lead locomotive was equipped with a headlight, auxiliary lights and an audible warning device required by Federal regulations. The locomotive engineer tested these devices at the accident site in the presence of the deputy sheriff and MFO. All the devices functioned as intended, with one exception, both auxiliary ditch lights were inoperative after the accident. The lights were replaced prior to departing the accident site. The devices were retested in St. Paul, MN, on April 12, 2005, in the presence of a Federal Railroad Administration (FRA) motive power and equipment inspector. The inspection noted one auxiliary ditch light was burned out and the right front handrail was bent. These were the only exceptions noted and all other devices were in compliance with Federal requirements. FRA F6180.96 mechanical inspection report RAL No. 34 is attached.

The locomotive was also equipped with a speed indicator and an event recorder as required. The relevant event recorder data was downloaded and analyzed by the MFO at the accident site. This analysis disclosed that the locomotive engineer was in compliance with all applicable railroad operating and train handling requirements. FRA reviewed the results of this analysis and concurred with the conclusions. FRA F6180.96 event recorder data inspection report PDG No. 57 is attached.

The train crew and a woman who lived in the house on the northeast corner of Baden Street were the only witnesses to the accident and they had no information that could be used to determine why the motor vehicle failed to stop at the crossing.

Probable Cause and Contributing Factors

The motor vehicle apparently had traveled westbound on portions of Highway 16/60 that were closed for road construction. The driver passed two "road closed to local traffic" and "bridge out" signs prior to arriving at the accident site.

The driver of the motor vehicle was apparently attempting to locate a route into Columbus. The bridge over the Crawfish River just west of Baden Street on Highway 16/60 was closed for construction. The driver turned onto a dead end street, driving over the rail crossing once and then trying to go back across the tracks when the accident occurred.

The accident occurred because the driver of the motor vehicle failed to stop at a posted stop sign at the highway-rail grade crossing. The FRA concurs with these findings.

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