

Spot Safety Project Evaluation

Project Information

Order ID: 41000030334

Project ID: 01-07-201

Location: Site-A: NC-11 at SR 1212 (Short Cut Rd) / SR 1213 (Old NC-11);
Site-B: US-13 at SR 1130 (Modlin Hatchery Road)

County: Hertford

City: Near Ahoskie

Division: 1

Signal ID: Site-A Flasher 01-0308 / Site-B New Signal 01-0211

Countermeasure: Remove the SR 1213 approach from Site-A and install a traffic signal at Site-B

Project Completion: September 2, 2010

Project Cost: \$250,000

Map and Aerial (from Google Maps) – Site-A: 36.329889,-76.991848 / Site-B: 36.317301,-76.986936



Naive Before and After Analysis

- Before Period: December 1, 2006 through July 31, 2010 (3 years, 8 months)
- Const. Period: August 1, 2010 through September 30, 2010
- After Period: October 1, 2010 through May 31, 2014 (3 years, 8 months)
- Analysis Criteria: Treatment data consisted of all crashes within 150 feet of both subject intersections.
- Target Crashes: Site-A: Frontal Impact (Angle) crashes involving SR 1213 vehicles;
Site-B: Intersection Frontal Impact crashes – Angle, Left Turn

<u>Site-A: NC-11 at SR 1212/1213</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	25	5	- 80.0 %
Total Severity Index	18.16	3.96	- 78.2 %
Target Crashes – SR 1213 Frontal	23	0	- 100.0 %
Target Crash Severity Index	19.33	0.00	- 100.0 %
Volume (2008, 2012)	8,200	5,600	- 31.7 %
Fatal injury Crashes	2	0	- 100.0 %
Class A injury Crashes	2	0	- 100.0%
Class B injury Crashes	10	0	- 100.0 %
Class C Injury Crashes	7	2	- 71.4 %
Property Damage Only	4	3	- 25.0 %

<u>Site-B: US-13 at SR 1130</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	5	1	- 80.0 %
Total Severity Index	6.92	1.00	- 85.5 %
Target Crashes – Frontal Impact	1	0	- 100.0 %
Target Crash Severity Index	8.40	0.00	- 100.0 %
Volume (2008, 2012)	10,600	8,700	- 17.9 %
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	0	0	N/A
Class B injury Crashes	0	0	N/A
Class C Injury Crashes	4	0	- 100.0 %
Property Damage Only	1	1	0.0 %

Overall Summary Results

Site-A Total Crashes:	- 80 %	(reduction)
Site-A Total Crash Severity:	- 78 %	(reduction)
Site-A Target Crashes:	- 100 %	(reduction)
Site-A Target Crash Severity:	- 100 %	(reduction)
Site-A Volume:	- 32 %	(reduction)

Additional Summary Results

Site-B Total Crashes:	- 80 %	(reduction)
Site-B Total Crash Severity:	- 86 %	(reduction)
Site-B Target Crashes:	- 100 %	(reduction)
Site-B Target Crash Severity:	- 100 %	(reduction)
Site-B Volume:	- 18 %	(reduction)

Items for Discussion/Concerns

None – The countermeasures were effective at eliminating Before Period crash patterns.

Data Prepared For

The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Jason B. Schronce, EI
Work Group/Consultant: NCDOT - Safety Evaluation Group
Date: September 5, 2014

LEGEND

	MOVING VEHICLE		ANGLE		9 MPH OR LESS		PEDESTRIAN
	PARKED VEHICLE		TURNING		10 MPH TO 19		TRAIN
	PARKING VEHICLE		BACKING		20 MPH TO 29		DRIVER AT FAULT
	FIXED OBJECT		SIDESWIPE		30 MPH TO 39		DRY
	HEAD ON		INJURY		40 MPH TO 49		WET
	REAR END		FATALITY		50 MPH TO 59		ICY OR SNOWY
	RAN OFF ROAD		SPEED UNKNOWN		60 MPH TO 69		OTHER

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 Hertford County
 Site-A
 NC-II @ SR 1212/1213

BEFORE Period
 12/1/06 - 7/31/10
 3.67 Years

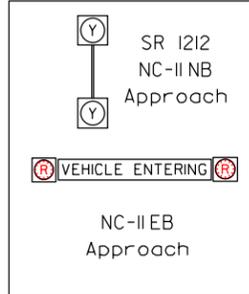
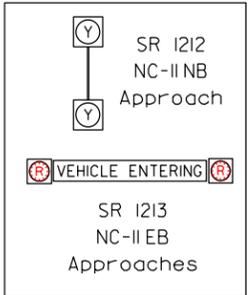
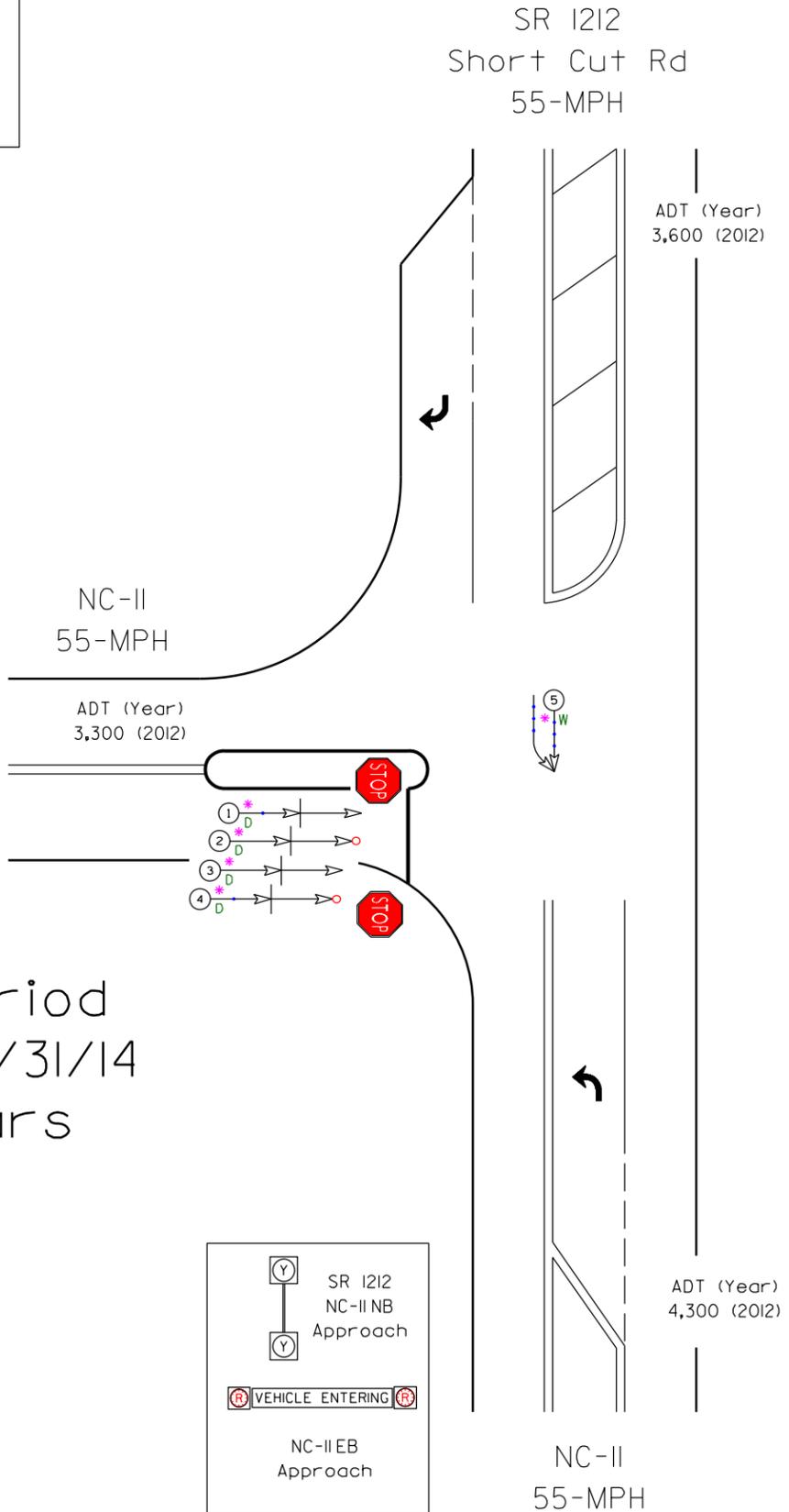
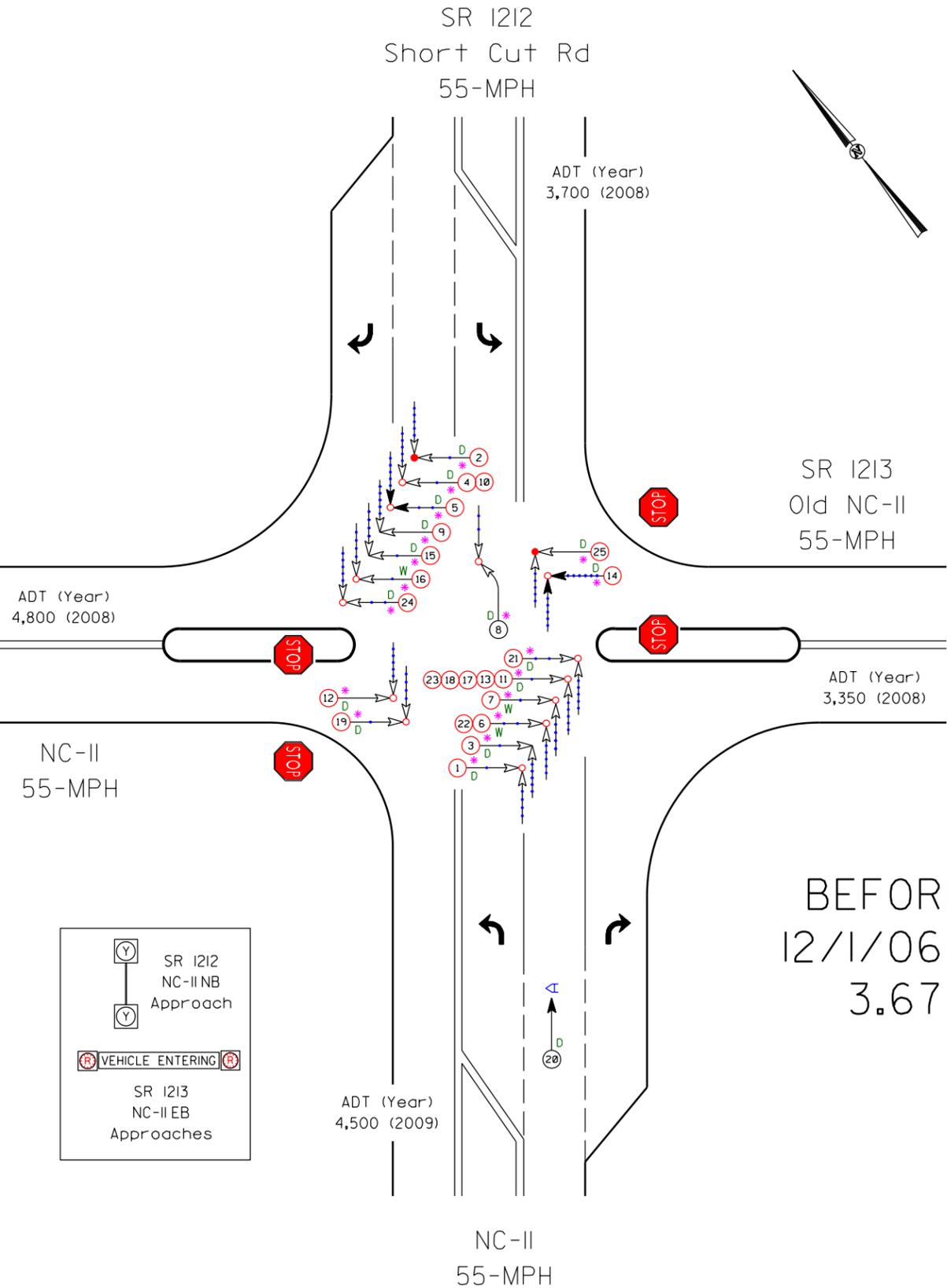
AFTER Period
 10/1/10 - 5/31/14
 3.67 Years

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and
SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 9-4-2014

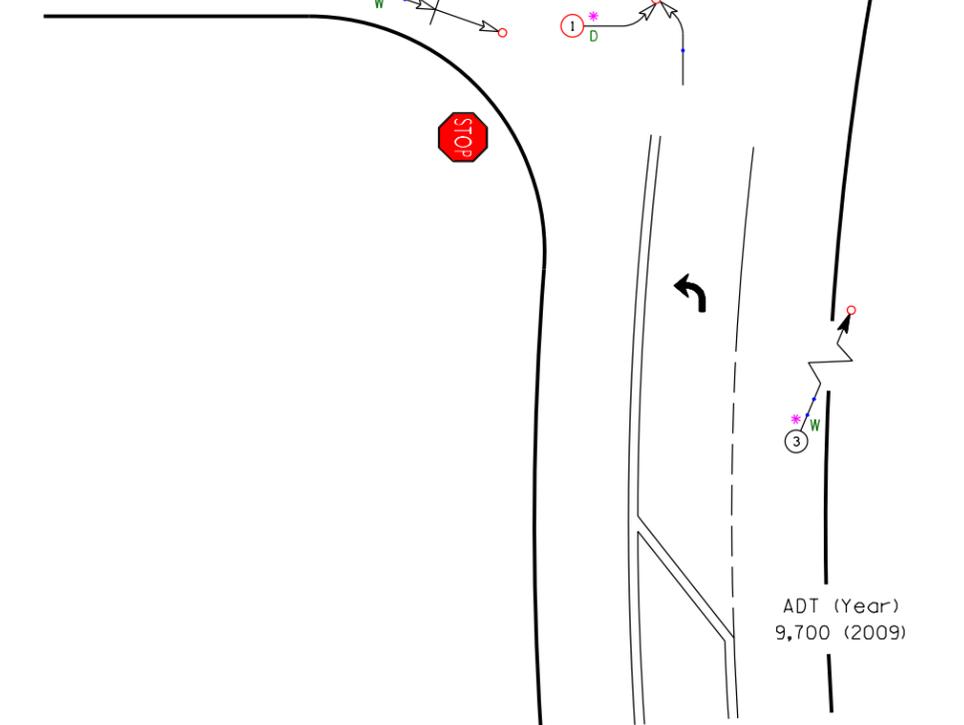
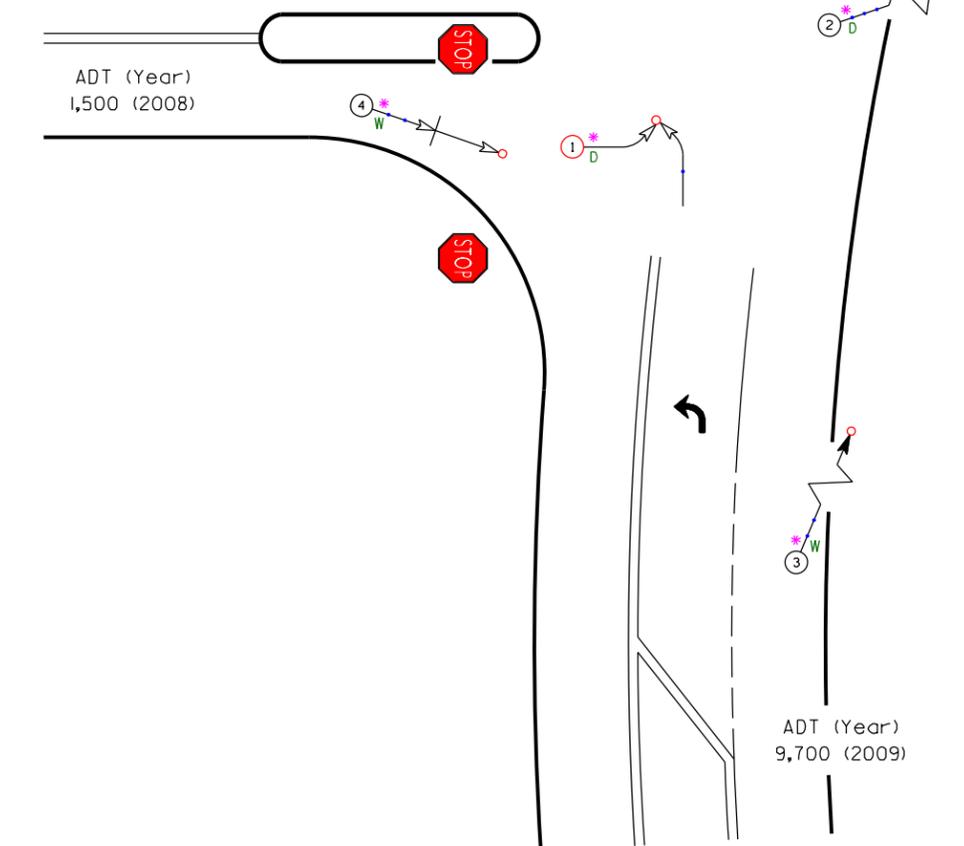
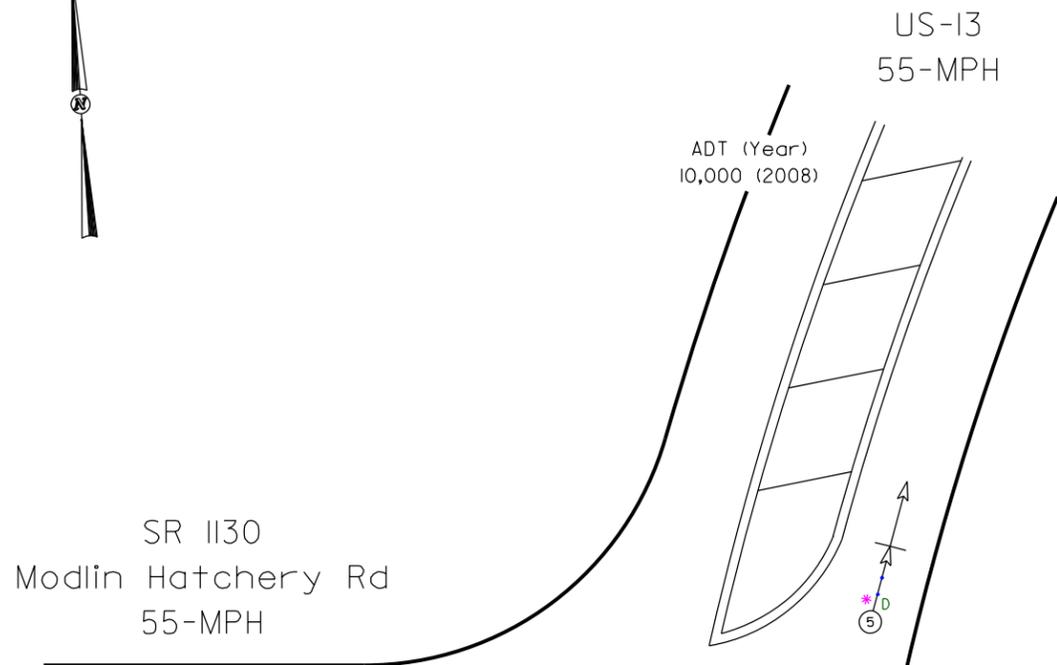
Prepared By: J. Schronce





LEGEND

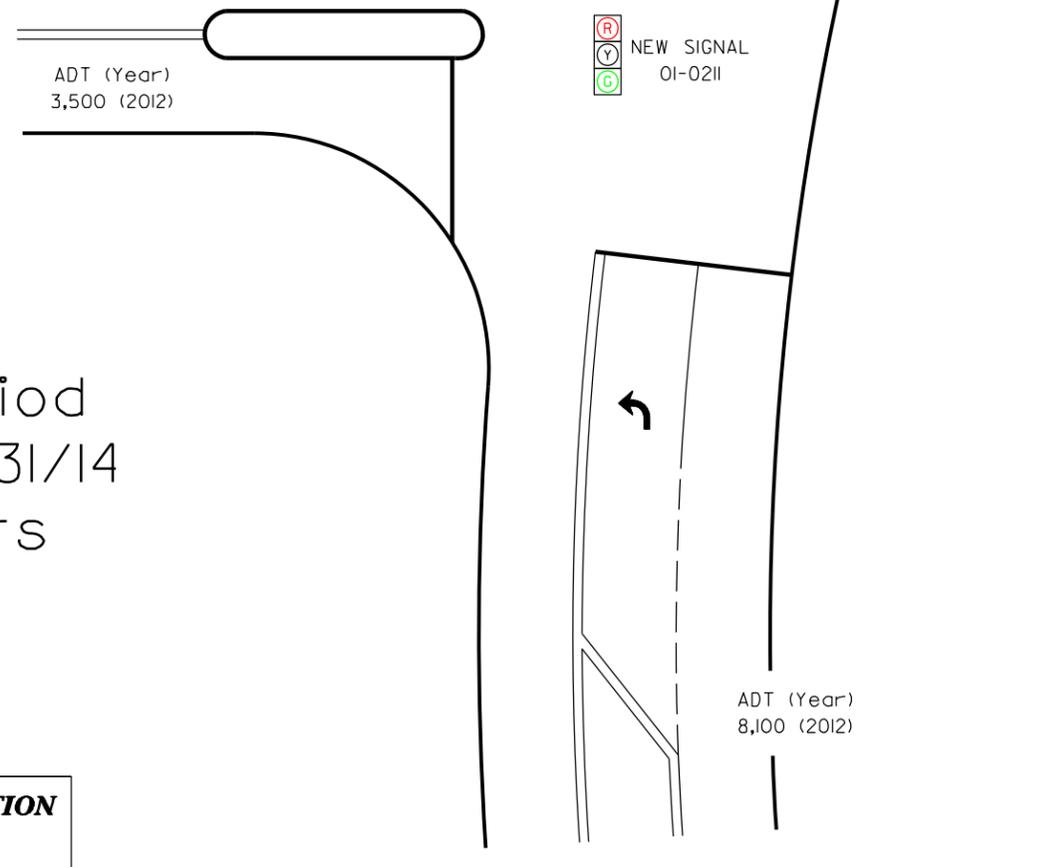
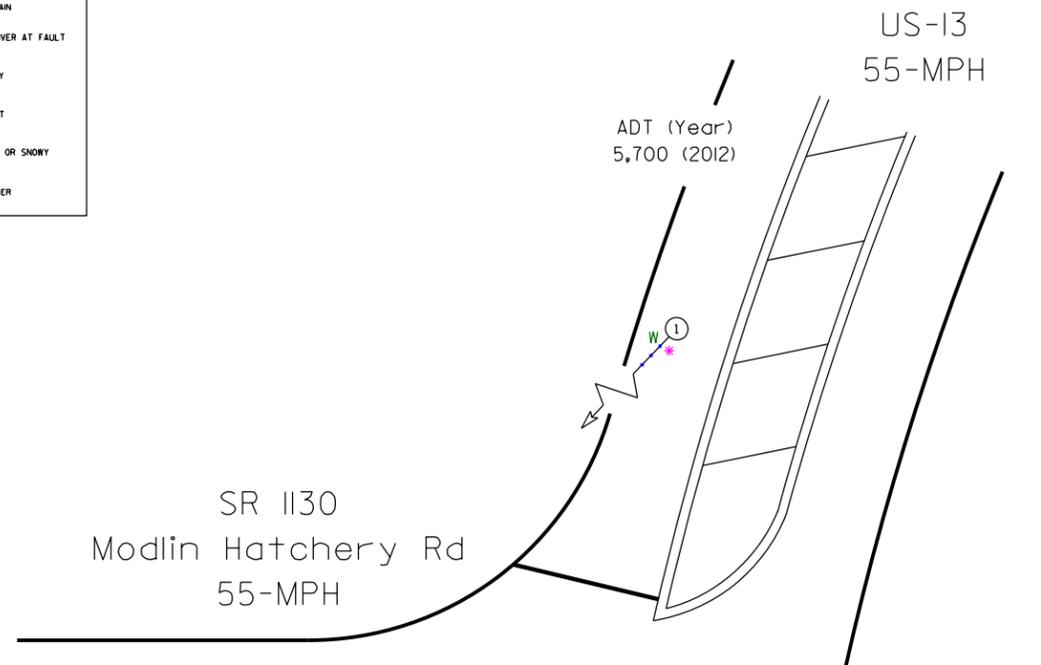
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 Frontal Impact
Target Crashes