Traffic Study

BEAGLIN PARK DRIVE TRAFFIC STUDY

Wicomico County, Maryland

November 8, 2010

Prepared for:

Salisbury – Wicomico Metropolitan Planning Organization

Merging Innovation and Excellence®

Prepared in cooperation with the United States Department of Transportation, Federal Highway Administration and Federal Transit Administration.

The Traffic Group

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INTRODUCTION AND SUMMARY OF FINDINGS

Traffic Study

BEAGLIN PARK DRIVE TRAFFIC STUDY
Wicomico County, Maryland

Prepared for
Salisbury-Wicomico Department of Planning and Zoning

STUDY PURPOSE

The Traffic Group, Inc. has conducted a planning study to assist the Salisbury-Wicomico Metropolitan Planning Organization (S/W MPO) Council and its Staff in evaluating vehicular safety along a segment of Beaglin Park Drive in Salisbury, Maryland. The findings and recommendations resulting from this study will assist in the planning for future roadway improvements for enhancing vehicular safety.

BACKGROUND

The S/W MPO was officially established in the fall of 2003, with its primary mission to perform transportation planning and to coordinate those efforts within the region. Member jurisdictions include the City of Salisbury, the City of Fruitland, the Town of Delmar (DE & MD) and Wicomico County and Sussex County (DE). Only a portion of the unincorporated areas of Wicomico and Sussex Counties surrounding the municipalities are included in the MPO Planning Area.

Beaglin Park Drive serves as north/south Urban Minor Arterial on the east side of the City of Salisbury, Maryland. A portion of Beaglin Park Drive is in Wicomico County, Maryland. In 2009, the Average Annual Daily Traffic Volume for this roadway was estimated to be 15,660. A segment of Beaglin Park Drive, from Hannibal Street to North Park Drive, approximately one-half mile in length, has experienced a significant number of vehicular collisions in recent years. A detailed investigation into the cause of these collisions will provide vital information in planning future roadway improvements for enhancing vehicular safety along this corridor.

SCOPE OF SERVICES

The principal scope of services undertaken as part of this study was as follows.

1. *CONDUCT A FIELD INSPECTION TO COLLECT PHYSICAL INFORMATION CONCERNING THE ROADWAY SEGMENT TO INCLUDE THE FOLLOWING:*

    - *ROADWAY AND LANE WIDTHS, INCLUDING BIKE LANES, IF ANY*

- *Roadway surface treatment and condition*
- *Pavement markings, including reflectivity and condition*
- *Vertical grades and horizontal curvatures*
- *Roadway lighting and other above ground utilities*
- *Curbing and driveways*
- *Sight restrictions*
- *Corporate boundaries*
- *Intersection locations*
- *Roadway signs, including the reflectivity, size and condition*
- *Posted speed limits*

2. *Prepare a base plan for the roadway segment and condition diagrams for each intersection along the roadway segment, depicting the data collected in Task 1.*

3. *Collect collision data from the City of Salisbury, Wicomico County, and the Maryland State Highway Administration for the study roadway segment for the most recent years available.*

4. *Compile the collision data and identify, by severity and type, on the base plan and intersection condition diagrams.*

5. *Analyze the collision data and identify any trends among the dependent and independent variables and probable contributing factors leading to collisions.*

6. *Develop a list of potential countermeasures which are projected to have the greatest success in addressing the contributing factors identified in Task 5.*

7. *Evaluate the safety effectiveness and costs of the potential countermeasures and develop a recommended list of countermeasures based on the most cost effective treatments to reduce the number of vehicular collision along the study roadway segment.*

8. *Prepare Draft Report for your review.*

9. *Prepare a Final Report incorporating any comments from your review.*

10. *Present findings and recommendations to the Technical Advisory Committee and the S/W MPO Council.*

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The Traffic Group, Inc. has conducted a planning study to assist the Salisbury-Wicomico Metropolitan Planning Organization (S/W MPO) Council and its Staff in evaluating vehicular safety along a segment of Beaglin Park Drive in Salisbury, Maryland. Beaglin Park Drive serves as north/south Urban Minor Arterial on the east side of the City of Salisbury, Maryland. A portion of Beaglin Park Drive is in Wicomico County, Maryland. In 2009, the Average Annual Daily Traffic Volume for this roadway was estimated to be 15,660. A segment of Beaglin Park Drive, from Hannibal Street to North Park Drive, approximately one-half mile in length, has experienced a significant number of vehicular collisions in recent years. A detailed investigation into the cause of these collisions will provide vital information in planning future roadway improvements for enhancing vehicular safety along this corridor.

The collision analysis revealed that the probable contributing factors to the non-intersection related collisions are:

1. Horizontal curvature of the roadway segment
2. Cross slope and lack of superelevation of the roadway segment
3. Pavement condition
4. Weather conditions
5. Excessive speed for road and weather conditions

Several strategies were identified which are designed to address the probable contributing factors on the non-intersection related collisions. The most effective strategy would be to redesign the roadway to provide the proper cross slope and superelevation, given the existing horizontal and vertical curves. However, this strategy would be costly and would also take a considerable amount of time to implement. Therefore, other strategies have been identified which can be quickly implemented at reasonable costs.

Our strategies for addressing these probable contributing factors are:

1. Provide advance warning of the changes in horizontal alignment through the installation of Horizontal Alignment Curve Warning Signs.
2. Reduce the travel speed through the use of Advisory Speed Plagues or reduction in the posted speed limit.
3. Enhance the delineation of the lanes by installing high quality pavement markings with raised pavement markers.
4. Provide vertical delineation of the curve through the installation of roadside delineators around the northern horizontal curve.

5. Provide wider lanes around the northern horizontal curve by eliminating the northbound left turn into and out of Hannibal Street.

6. Install centerline rumble strips.

7. Provide skid-resistant pavement surfaces by applying slurry seal throughout the roadway segment.

8. If the countermeasures above do not reduce the number of single vehicle collisions with a fixed object, install a guardrail along the northern horizontal curve.

9. Improve superelevation and cross slope through road reconstruction.

We recommend the following roadway improvements based on noted deficiencies, not on crash analyses.

1. Install Traffic Signal Advance Warning Sign on northbound Beaglin Park Drive in advance of Glen Avenue.

2. Intersection Warning Sign on northbound Beaglin Park Drive in advance of Camelia Road.

3. Install luminaries on existing utility poles on the east side of Beaglin Park Drive in the county limits.

4. Replace the following signs which are in poor condition:

   Cross Road Warning Sign (W2-1) southbound
   Signal Ahead Warning Sign (W3-3) southbound

5. Trim vegetation in northeast quadrant of the intersection of Beaglin Park Drive and Camelia Road.

6. Remove the crosswalks across the south and east legs of the intersection of Beaglin Park Drive and Glen Avenue as there are not sidewalks in the southeast quadrant of the intersection.

The data and methodology used to undertake this study is detailed in the sections that follow.

EXISTING CONDITIONS

The purpose of this study is to evaluate vehicular safety along a segment of Beaglin Park Drive in Salisbury, Maryland. Beaglin Park Drive serves as north/south Urban Minor Arterial on the east side of the City of Salisbury, Maryland. A portion of Beaglin Park Drive is in Wicomico County, Maryland. In 2009, the Average Annual Daily Traffic Volume for this roadway was estimated to be 15,660.

The roadway segment from Glen Avenue to North Park Drive consists of four travel lanes, 2 lanes in each direction with curbing throughout. The roadway width is consistently 50 feet. Left turn lanes are provided at the four intersections along this roadway segment: Glen Avenue, Camelia Road, Hannibal Street, and North Park/North Schumaker Drive. At these intersections, lane widths narrow to 10 foot to provide for a left turn lane along with four through lanes.

The intersections of Beaglin Park Drive with Camelia Road and Hannibal Street are STOP controlled. The intersections of Beaglin Park Drive with Glen Avenue and North Park/North Schumacker Drive are signalized. Due to pedestrian activity at the intersection with North Park/Schumaker Drive, pedestrian signals, along with crosswalks and curb ramps, are provided here. Crosswalks and curb ramps are provided at the intersection of Beaglin Park Drive and Glen Avenue, but there are no pedestrian signals. No pedestrians were observed at this intersection and therefore it is not apparent that they are warranted at this time. Sidewalks are present on three of the four quadrants of this intersection, but not on the southeast quadrant.

The horizontal alignment consists of a horizontal reverse curve. The radius for the northern curve, just south of Hannibal Street is 973 feet +/-, and the radius for the southern curve is 1500 feet +/-. The cross section of the roadway varies from a standard crown of 3% near Glen Avenue and North Park Drive. The crown of the roadway near Hannibal Street and a short distance southward is excessive, with measurements of 5% or more. No superelevation is provided along the curves.

The vertical alignment of this roadway segment consists of a sag vertical curve which descends at a slope of approximately 2% +/- to a low point just south of Hannibal Street in the vicinity of the city/county jurisdictional line.

A dip in the road exists on the east leg of the intersection of Beaglin Park Drive and North Schumaker Drive where North Schumaker Drive meets the edge of pavement of Beaglin Park Drive. Vehicles were observed travelling slowly through this area to avoid scraping the bottom of their vehicle.

The pavement markings on the roadway have been applied appropriately; however they are worn with little to no reflectivity. The surface of the roadway is fair with patches throughout.

Advance warning signs should be provided in accordance with the Manual on Uniform Traffic Control Devices. Deficiencies are noted in the Recommendations. The regulatory signs governing traffic control at the intersections and the regulatory speed have been applied appropriately.

The posted speed limit for this segment of Beaglin Park Drive is 40 mph. A speed study conducted by Wicomico County Department of Public Works for a one-week period in the spring of 2010 revealed that the 85th percentile speed is 47 mph.

Right turns on red are appropriately banned for the westbound approach of Glen Avenue to Beaglin Park Drive because of vegetation which restricts sight distance in the southeast quadrant of the intersection.

Sight distances throughout the roadway segment and at the intersections are, for the most part, acceptable, with the following exceptions.

The sight distance for a vehicle stopped on Camelia Road is less than desired. The sight distance to the north is obscured by vegetation. Trimming of this vegetation should provide acceptable sight distance to the north. Sight distance to the south is limited by the horizontal curve. A design speed of 50 mph (10 mph more than the posted speed) requires an intersection sight distance of 588 feet. The stopping sight distance required for drivers northbound on Beaglin Park Drive is, for a design speed of 50 mph, 425 feet.

Street lighting is provided on the east side of the roadway throughout the city portion of the roadway segment.

A base plan depicting the geometrics and other physical characteristics of the study area is provided in Exhibit 1. Condition diagrams for the three intersections are provided in the Appendix.

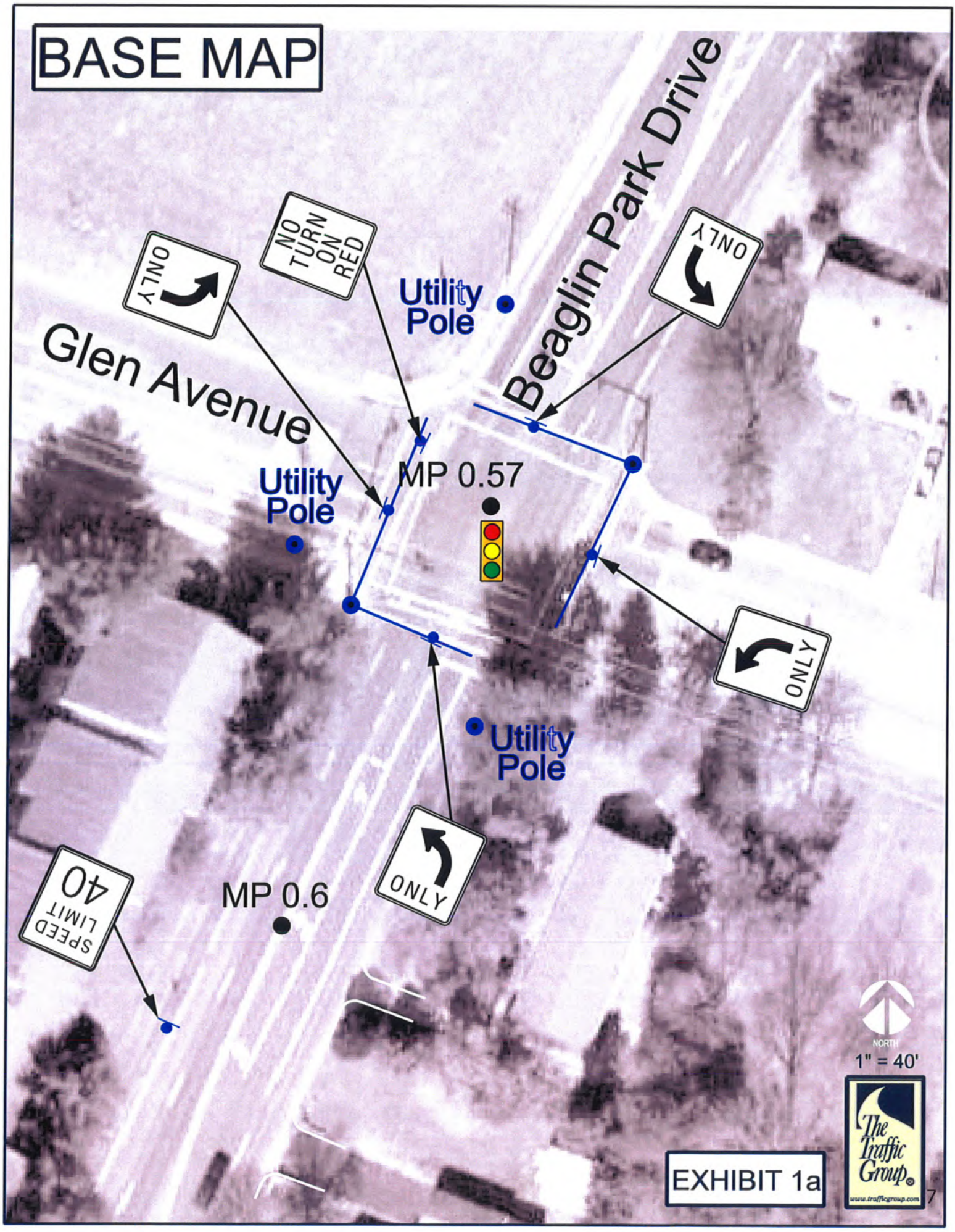
BASE MAP
Beaglin Park Drive
Glen Avenue
NO TURN ON RED
ONLY
ONLY
ONLY
ONLY
SPEED LIMIT 40
Utility Pole
Utility Pole
Utility Pole
MP 0.57
MP 0.6
NORTH
1" = 40'
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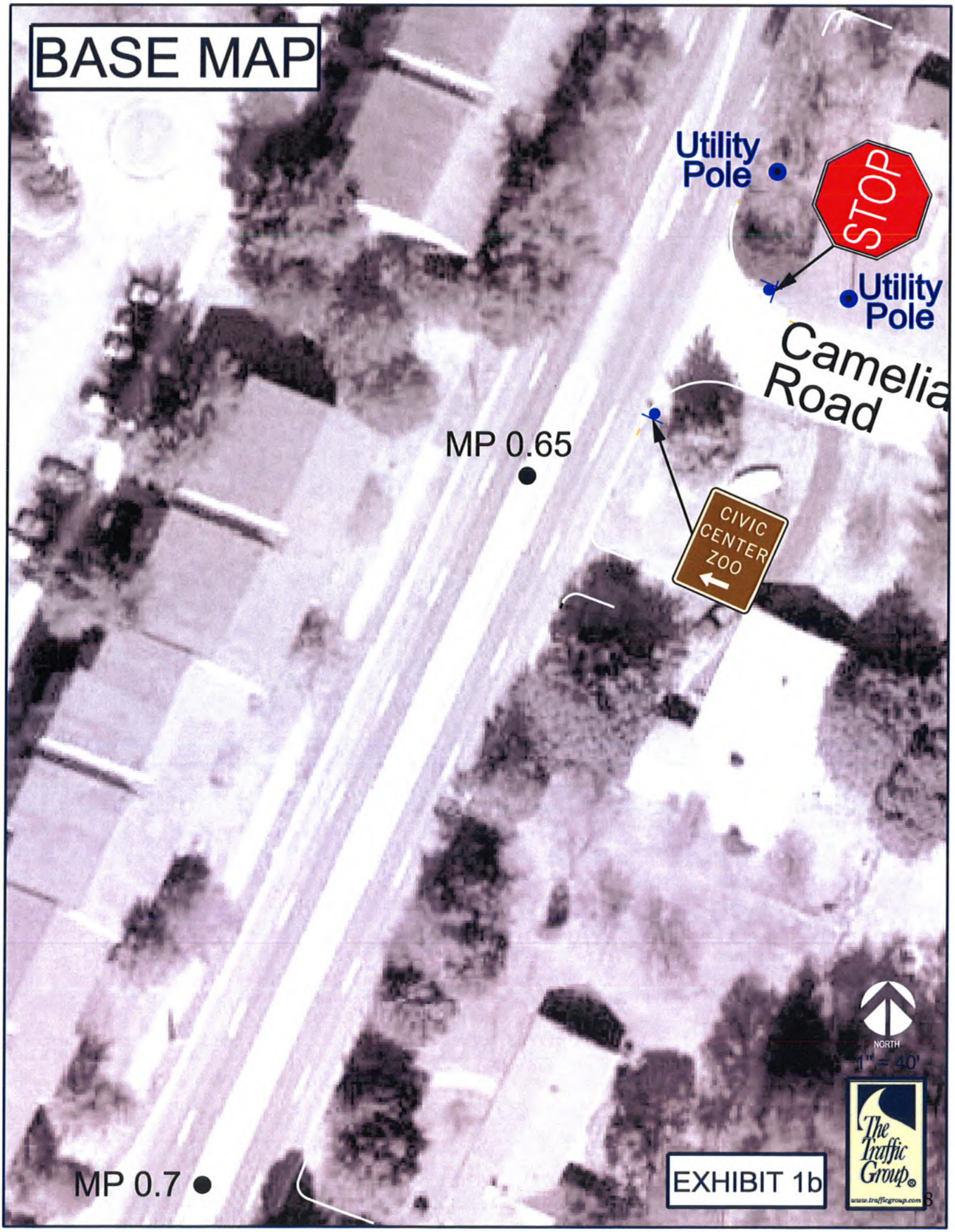
EXHIBIT 1a


BASE MAP
Utility Pole
STOP
Utility Pole
Camelia Road
MP 0.65
CIVIC CENTER ZOO
MP 0.7
NORTH
1" = 40'
EXHIBIT 1b
The Traffic Group
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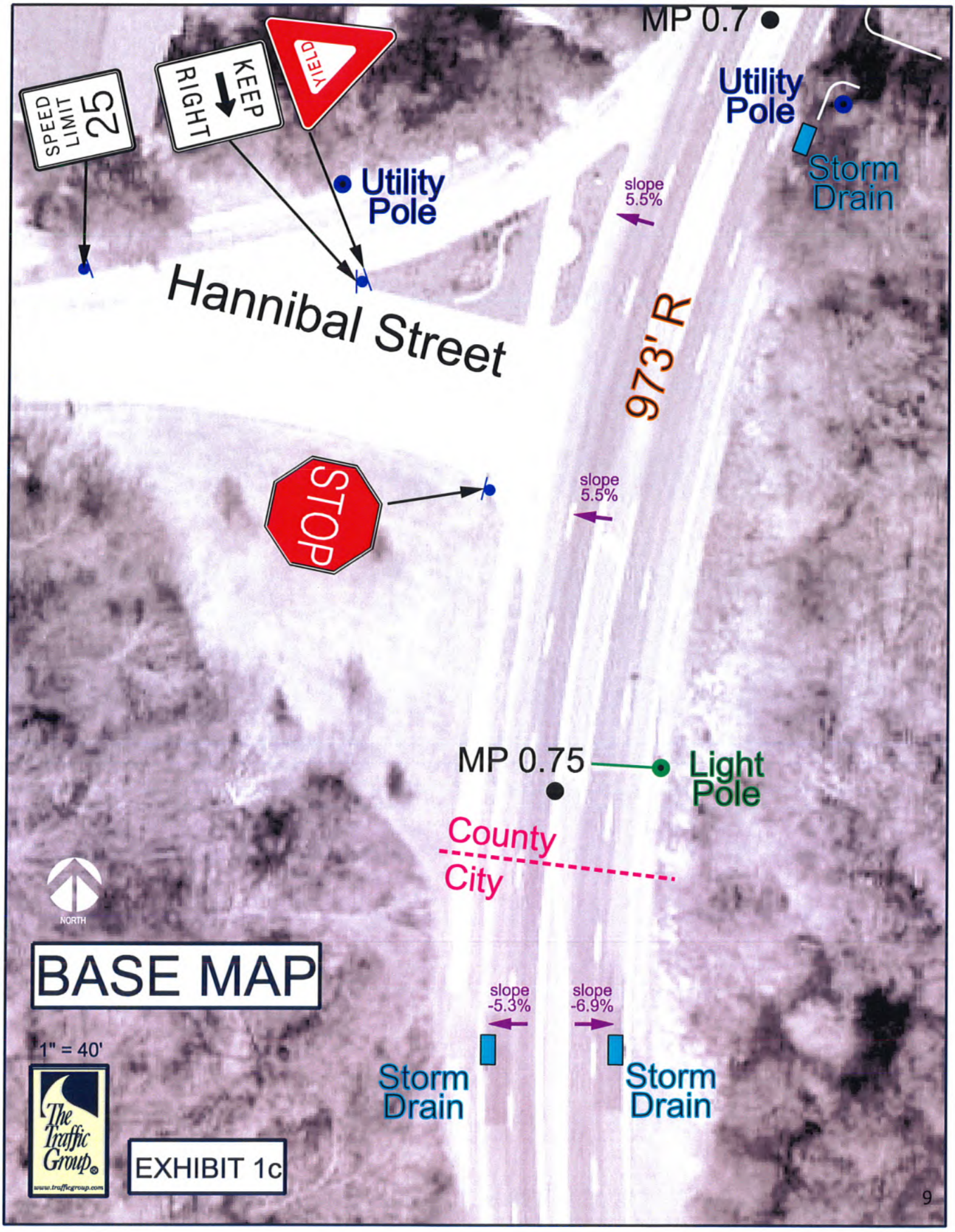
MP 0.7
Utility Pole
Storm Drain
SPEED LIMIT 25
KEEP RIGHT
YIELD
Utility Pole
slope 5.5%
Hannibal Street
973' R
STOP
slope 5.5%
MP 0.75
Light Pole
County
City
NORTH
BASE MAP
1" = 40'
slope -5.3%
slope -6.9%
Storm Drain
Storm Drain
The Traffic Group
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EXHIBIT 1c

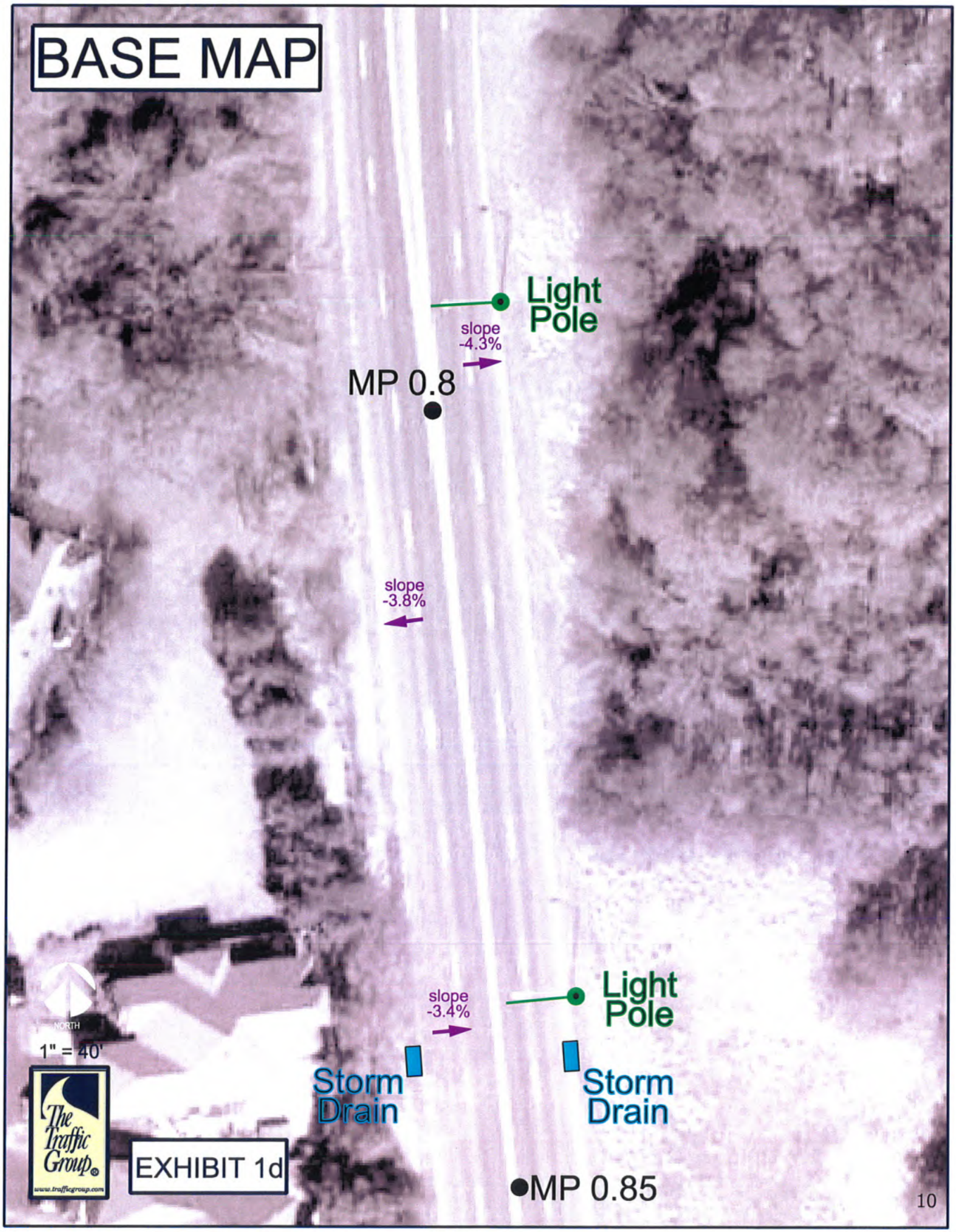
BASE MAP
Light Pole
slope -4.3%
MP 0.8
slope -3.8%
slope -3.4%
Light Pole
NORTH
1" = 40'
Storm Drain
Storm Drain
MP 0.85
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EXHIBIT 1d


BASE MAP
MP 0.85
slope
-2.3%
Eaglin Park Dr
Light
Pole
1500' R
MP 0.9
NORTH
1" = 40'
Fire
Hydrant
Light
Pole
EXHIBIT 1e
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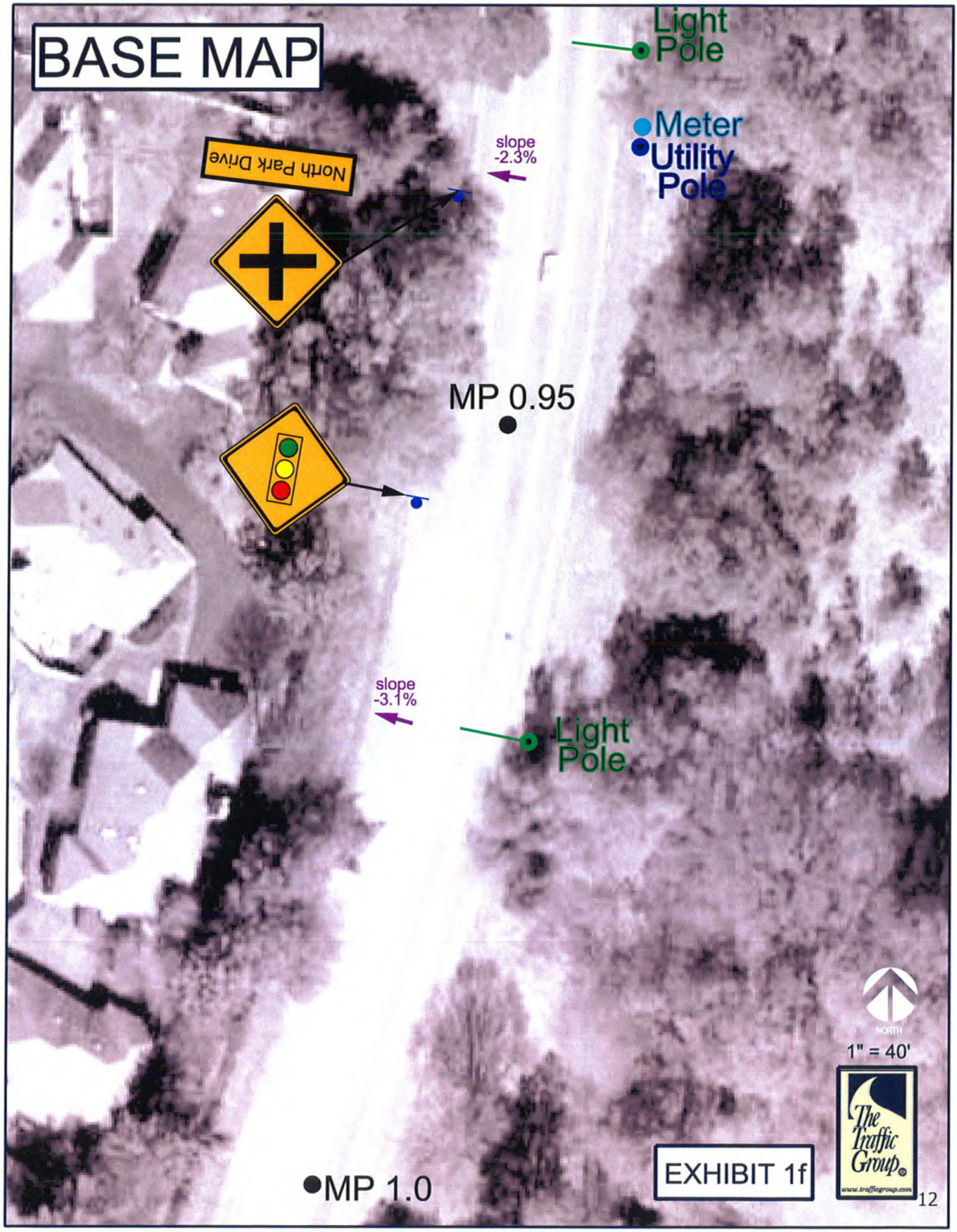
BASE MAP
Light Pole
Meter
Utility Pole
North Park Drive
slope -2.3%
MP 0.95
slope -3.1%
Light Pole
MP 1.0
NORTH
1" = 40'
The Traffic Group
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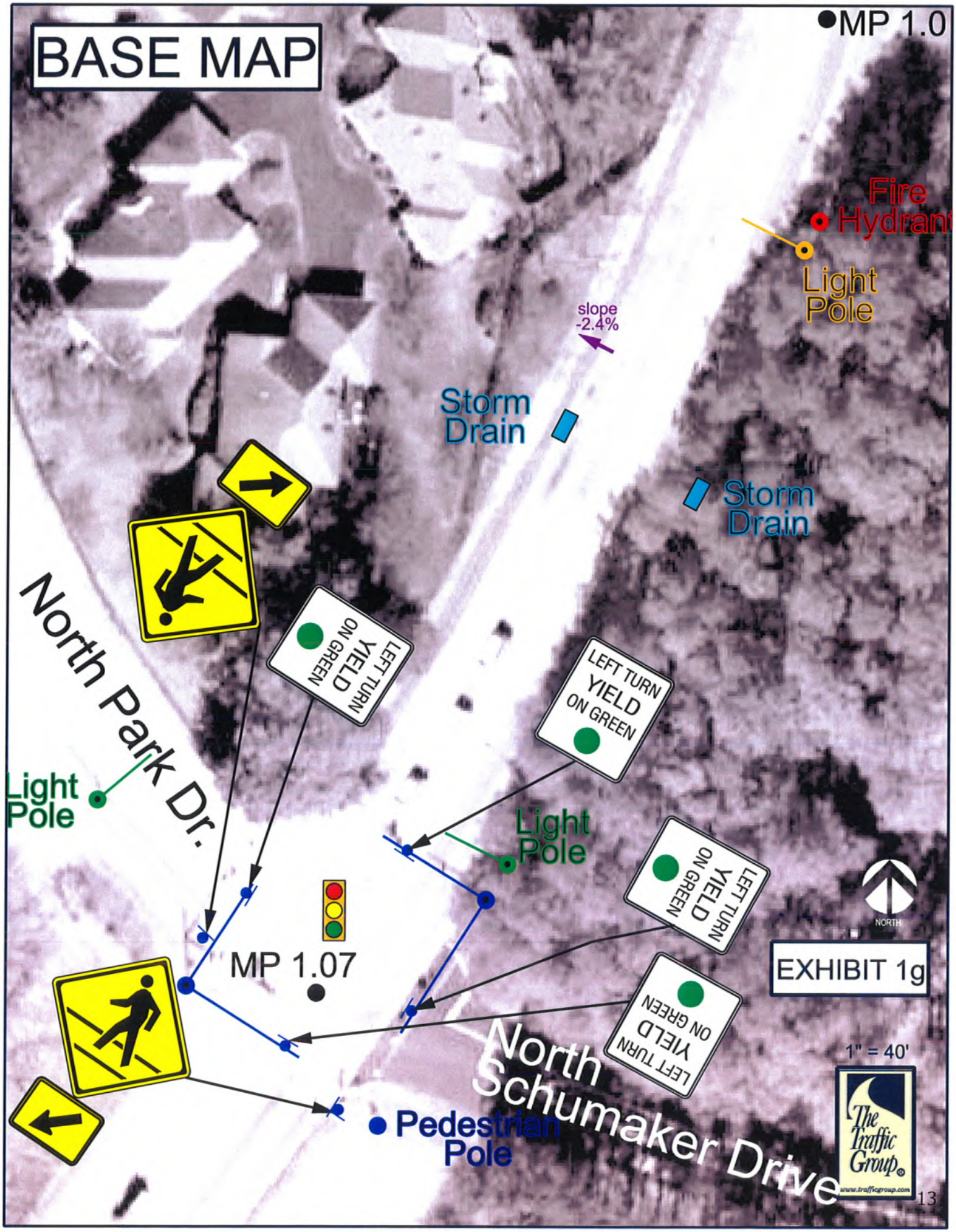
EXHIBIT 1f


BASE MAP
MP 1.0
Fire Hydrant
Light Pole
slope -2.4%
Storm Drain
Storm Drain
North Park Dr.
LEFT TURN YIELD ON GREEN
LEFT TURN YIELD ON GREEN
Light Pole
Light Pole
LEFT TURN YIELD ON GREEN
LEFT TURN YIELD ON GREEN
NORTH
MP 1.07
EXHIBIT 1g
1" = 40'
North Schumaker Drive
Pedestrian Pole
The Traffic Group
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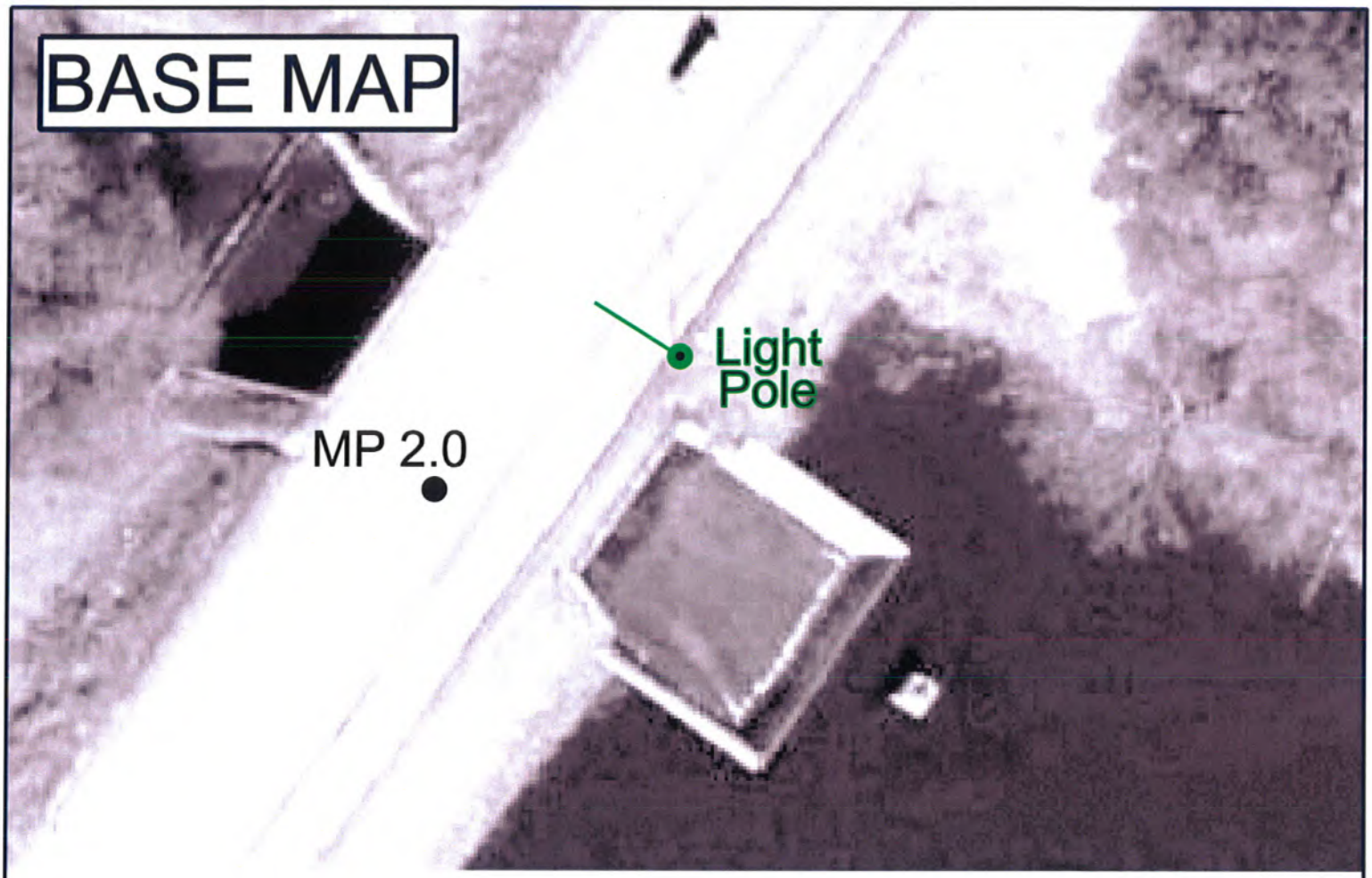
13

BASE MAP



1" = 40'

EXHIBIT 1h

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ANALYSIS OF COLLISIONS

Collision data was provided by the S/W MPO and the Maryland State Highway Administration (SHA) for the years from 2002 through September of 2009. The data for the year 2009 has not yet been verified. Detailed collision data is contained in Appendix A.

Ninety-three collisions were reported during the study time period from 2002 through September 2009.[1] It should be noted that not all collisions are reported to the Maryland State Police Records (MSP) Division in Baltimore. SHA obtains collision data from the MSP. Typically, a report is written under the following circumstances.

- ALL fatalities
- Personal Injury accidents
- Moderate to substantial property damage, or when a vehicle is towed from the scene
- If the parties involved request the officer to write an accident report

Sixty-four of these collisions were reported as non-intersection related. A summary of these collisions is provided in Table 1. Exhibit 2 depicts the location of these collisions on the base plan.

Several trends among the non-intersection related collisions should be noted (see Table 1A).

- 67.2% occurred along an 850 foot +/- segment beginning just north of Hannibal southward
- 84.4% occurred when the roadway surface was wet or covered with snow
- 71.9% were single vehicle collisions with a fixed object
  - 82.6% of the single vehicle collisions with a fixed object struck the curb
  - 73.9% of the single vehicle collisions with a fixed object were travelling south
- 59.4% occurred with one or both vehicles travelling south
- 23.4% occurred with one or both vehicles travelling north

[1] The data for 2009 was provided by SHA but has not yet been verified.

- 71.9% involved no injuries

The number of non-intersection collisions has been steadily increasing since 2002. However, traffic volumes have most likely have increased since Beaglin Park Drive was extended to Zion Road in November 2008.

The analysis of the collisions revealed several probable contributing factors. As noted above, 67.2% of the non-intersection collisions occurred between log mile 0.70 and 0.86[2], which occurs on a horizontal and vertical curve. The radius for this curve, just south of Hannibal Street is 973 feet +/-. The roadway descends in a vertical curve just south of Hannibal Street at a slope of approximately 2.0 % +/-. The cross section of the roadway near Hannibal Street and a short distance southward has cross slopes (particularly on the outside of the horizontal curve) that are excessive, with measurements of 5% or more. No superelevation is provided along the curve. Also, the lane widths narrow just north of Hannibal Street to provide a northbound left turn lane into Hannibal Street.

A high percentage of the collisions occurred when the roadway surface was wet or snow covered. This indicates that the skid resistance of the pavement is poor, drivers are moving at excessive speeds, there is poor delineation of lane lines, and there is inadequate advance warning of roadway conditions.

Eight collisions were reported as "opposite direction" which includes head-on collisions. All eight of these collisions were between the log miles of 0.72 and 0.82, where the majority of collisions throughout the roadway segment have occurred. Seven of these collisions occurred on wet pavement, and in five, injuries or possible injuries were reported.

Twenty-nine of the collisions for the study period between 2002 and September 2009 were reported as intersection related. A summary of these collisions is provided in Table 2. SHA provided collision diagrams for those occurring between 2006 and 2009 and these are contained in the Appendix.

Of the 26 intersection related collisions, 10 occurred during the year 2005. However, the numbers have been declining since then. There is no significant pattern among the type of collisions occurring at these intersections.

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[2] The log mile on the collision reports is an approximate location as determined by the reporting officer.

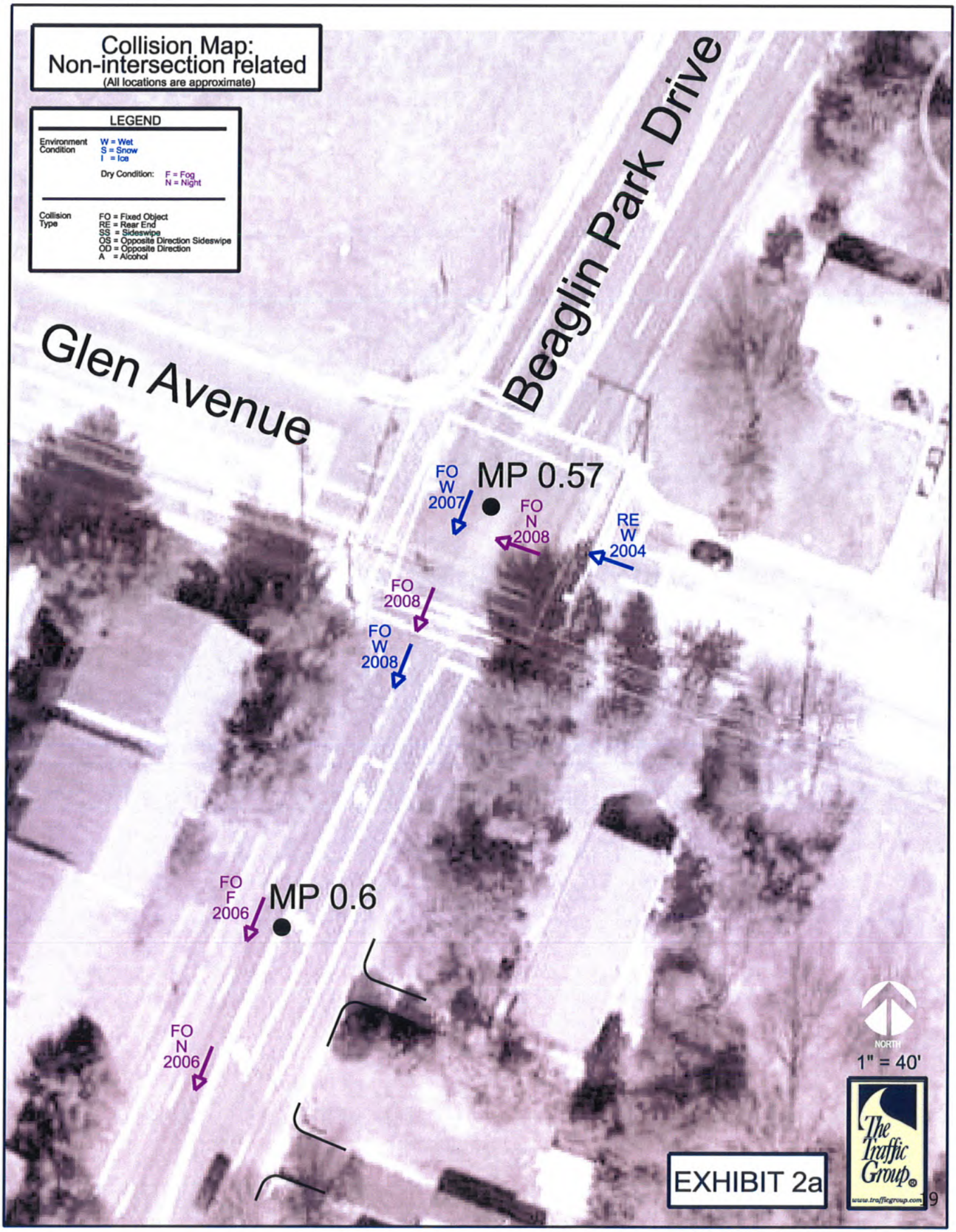
Table 1: Non-Intersection Related Collisions by Log Mile (2002 through Sept. 2009)

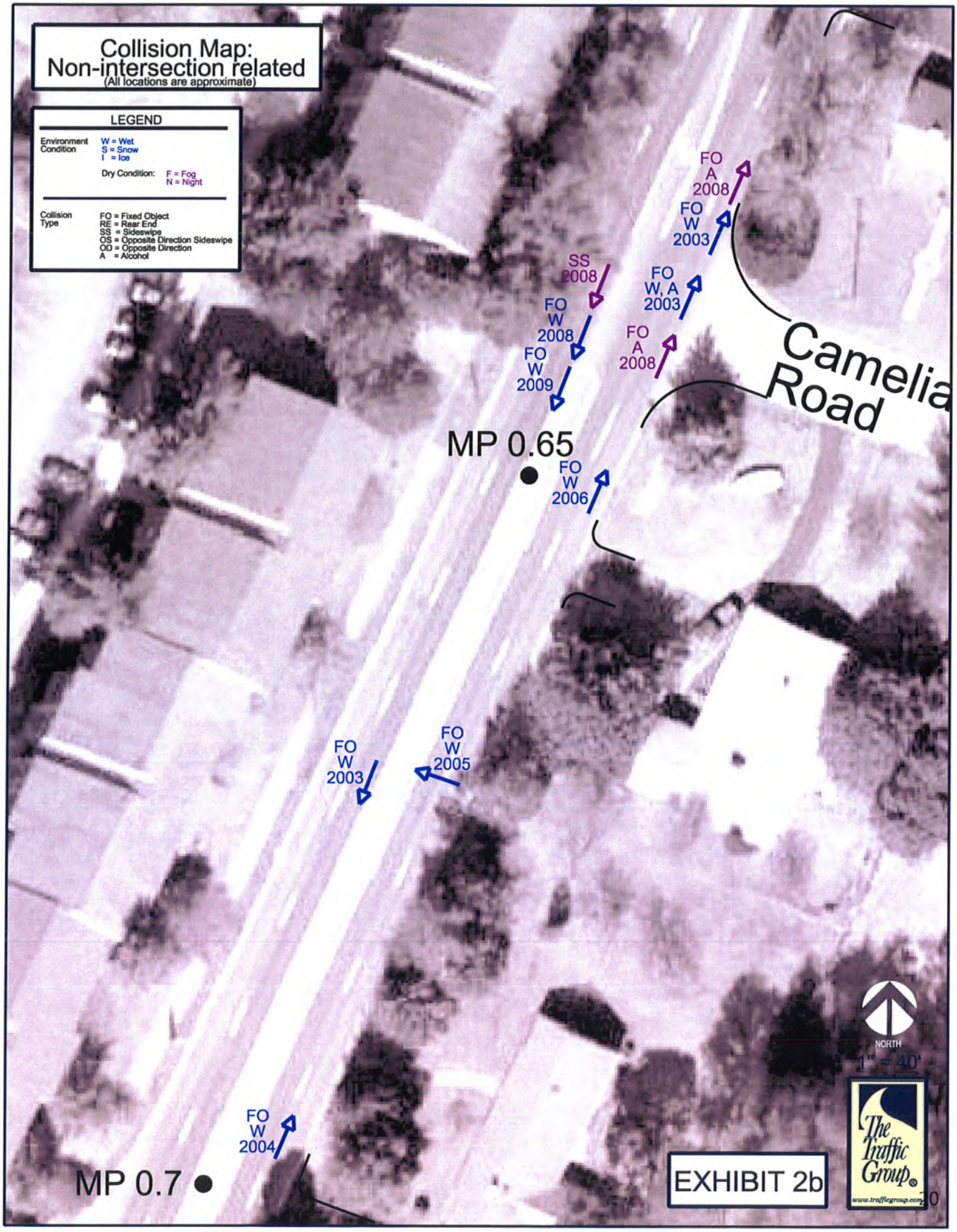
Cross Street	Log mile	Date	Time	Accident Severity (AS)	Surface Condition (S)	Collision Type (CT) First Event (E1)	Fixed Object (FO)	Vehicle Direction (DIR V1 - V2)	Contributing Circumstance (PCSC)
Glen Ave.	0.57	12/7/04	12:00 PM	Not injured	Wet	Rear End	Not Applicable	West - West	Following too closely
	0.57	5/2/07	5:00 PM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.57	6/6/08	2:00 AM	Not injured	Dry	Fixed Object	Not Applicable	West	Failed to give full time and attention
	0.58	6/5/08	12:00 PM	Not injured	Dry	Fixed Object	Curb	South	Failure to drive in a single lane
	0.58	9/5/08	9:00 PM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.60	1/31/06	7:00 PM	Not injured	Dry	Fixed Object	Curb	South	Not Applicable
	0.61	4/18/06	2:00 AM	Not injured	Dry	Fixed Object	Curb	South	Failure to drive in a single lane
Camelia	0.63	10/26/03	7:00 PM	Not injured	Wet	Fixed Object	Curb	North	Under influence of alcohol
	0.63	9/13/08	10:00 AM	Not injured	Dry	Sideswipe	Not Applicable	South - South	Improper lane change
	0.63	12/23/08	9:00 PM	Not injured	Dry	Fixed Object	Curb	North	Under influence of alcohol
	0.64	6/24/08	1:00 AM	Not injured	Wet	Fixed Object	Curb	South	Failed to give full time and attention
	0.64	9/8/09	6:00 AM	Injury	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.65	11/24/06	2:00 PM	Not injured	Wet	Fixed Object	Curb	North	Wheels
	0.67	8/7/03	3:00 PM	Possible Injury	Wet	Fixed Object	Curb	South	Rain, snow
	0.67	3/25/05	4:00 PM	Not injured	Wet	Fixed Object	Curb	West	Failed to give full time and attention
	0.70	11/4/04	4:00 PM	Pos. Injury	Wet	Fixed Object	Curb	North	Failed to give full time and attention
	0.71	5/12/08	1:00 PM	Injury	Wet	Fixed Object	Tree/Shrbbery	North	Failed to give full time and attention
	0.71	9/8/09	4:00 PM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.72	12/9/04	4:00 PM	Not injured	Wet	Opposite Direction	Not Applicable	North - South	Failed to give full time and attention
	0.72	12/22/04	10:00 PM	Possible Injury	Wet	Opposite Direction	Not Applicable	South - North	Failed to give full time and attention
Hannibal	0.73	2/13/07	5:00 PM	Not injured	Wet	Rear End	Not Applicable	North - North	Improper Turn
	0.73	2/5/08	9:00 AM	Not injured	Wet	Fixed Object	Curb	North	Wet
	0.73	3/7/08	3:00 PM	Possible Injury	Wet	Sideswipe	Not Applicable	North - North	Too fast for conditions
	0.74	8/18/04	11:00 PM	Not injured	Dry	Fixed Object	Curb	South	Fell asleep, fainted, etc.
	0.74	12/6/05	9:00 AM	Not injured	Snow	Fixed Object	Curb	South	Too fast for conditions
	0.74	5/10/08	9:00 AM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.75	4/14/04	4:00 PM	Not injured	Wet	Unknown	Not Applicable	North	Failure to drive in a single lane
	0.75	8/20/07	11:00 PM	Not injured	Wet	Fixed Object	Curb	South	Failure to drive in a single lane
	0.75	10/26/07	2:00 PM	Pos. Injury	Wet	Fixed Object	Curb	North	Failed to keep right of center
	0.75	9/6/08	4:00 PM	Not injured	Wet	Opposite Direction	Not Applicable	South - North	Too fast for conditions
	0.75	10/28/08	8:00 AM	Injury	Wet	Opp. Dir Sideswipe	Not Applicable	South - North	Wet
	0.75	6/5/09	12:00 AM	Not injured	Dry	Fixed Object	Curb	South	Under influence of alcohol
	0.75	6/9/09	10:00 PM	Not injured	Wet	Fixed Object	Tree/Shrbbery	South	Too fast for conditions
	0.75	7/23/09	1:00 PM	Not injured	Wet	Rear End	Not Applicable	South - South	Under influence of drugs
	0.76	2/26/03	8:00 AM	Disabled	Snow	Sideswipe	Not Applicable	South - South	Snow
	0.77	5/16/03	2:00 PM	Not injured	Dry	Opposite Direction	Not Applicable	South - North	Failure to drive in a single lane
	0.77	6/19/05	2:00 PM	Disabled	Wet	Fixed Object	Curb	South	Failure to drive in a single lane
	0.77	4/22/06	2:00 PM	Not injured	Wet	Fixed Object	Tree/Shrbbery	South	Rain, snow
	0.77	11/8/06	9:00 AM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.77	3/7/07	11:00 AM	Not injured	Snow	Fixed Object	Curb	North	Rain, snow
	0.78	5/16/05	7:00 AM	Disabled	Wet	Fixed Object	Curb	South	Exceeded the speed limit
	0.78	1/7/09	8:00 AM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.79	5/16/03	10:00 PM	Not injured	Wet	Fixed Object	Curb	South	Tires
	0.79	1/11/08	6:00 AM	Possible Injury	Wet	Opposite Direction	Not Applicable	South - North	Failure to drive in a single lane
	0.79	6/11/08	1:00 AM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.79	2/22/09	4:00 PM	Injury	Wet	Fixed Object	Sign Support	South	Too fast for conditions
	0.81	8/7/03	2:00 PM	Possible Injury	Wet	Opposite Direction	Not Applicable	South - North	Failed to give full time and attention
	0.82	10/10/02	6:00 PM	Disabled	Wet	Opposite Direction	Not Applicable	South - North	Not Applicable
	0.82	1/17/03	2:00 PM	Not injured	Dry	Rear End	Not Applicable	North - North	Failed to give full time and attention
	0.82	12/14/03	3:00 AM	Not injured	Wet	Fixed Object	Light Support Pole	South	Under influence of alcohol
	0.82	4/15/07	11:00 AM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.82	4/12/08	3:00 PM	Not injured	Wet	Fixed Object	Curb	South	Failure to drive in a single lane
	0.82	7/31/08	2:00 AM	Injury	Wet	Fixed Object	Fence	South	Wet
	0.82	5/5/09	11:00 PM	Not injured	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.83	9/2/03	10:00 PM	Not injured	Wet	Fixed Object	Curb	North	Failed to give full time and attention
	0.83	1/6/09	4:00 PM	Not injured	Wet	Fixed Object	Curb	South	Wet
	0.84	4/14/07	10:00 PM	Pos. Injury	Wet	Fixed Object	Curb	South	Too fast for conditions
	0.86	11/27/07	7:00 AM	Not injured	Wet	Fixed Object	Fence	South	Failed to give full time and attention
	0.93	8/28/02	3:00 PM	Not injured	Wet	Fixed Object	Curb	South	Failed to give full time and attention
	0.99	3/2/07	2:00 AM	Fatal	Wet	Fixed Object	Curb	North	Too fast for conditions
N. Park	1.05	4/17/06	8:00 AM	Not injured	Wet	Rear End	Not Applicable	South - South	Failed to give full time and attention
	1.05	9/1/06	8:00 PM	Not injured	Wet	Fixed Object	Curb	South	Exceeded the speed limit
	1.05	4/4/07	1:00 PM	Not injured	Wet	Fixed Object	Curb	South	Exceeded the speed limit
	1.07	4/18/06	6:00 PM	Not injured	Wet	Rear End	Not Applicable	North - North	Too fast for conditions

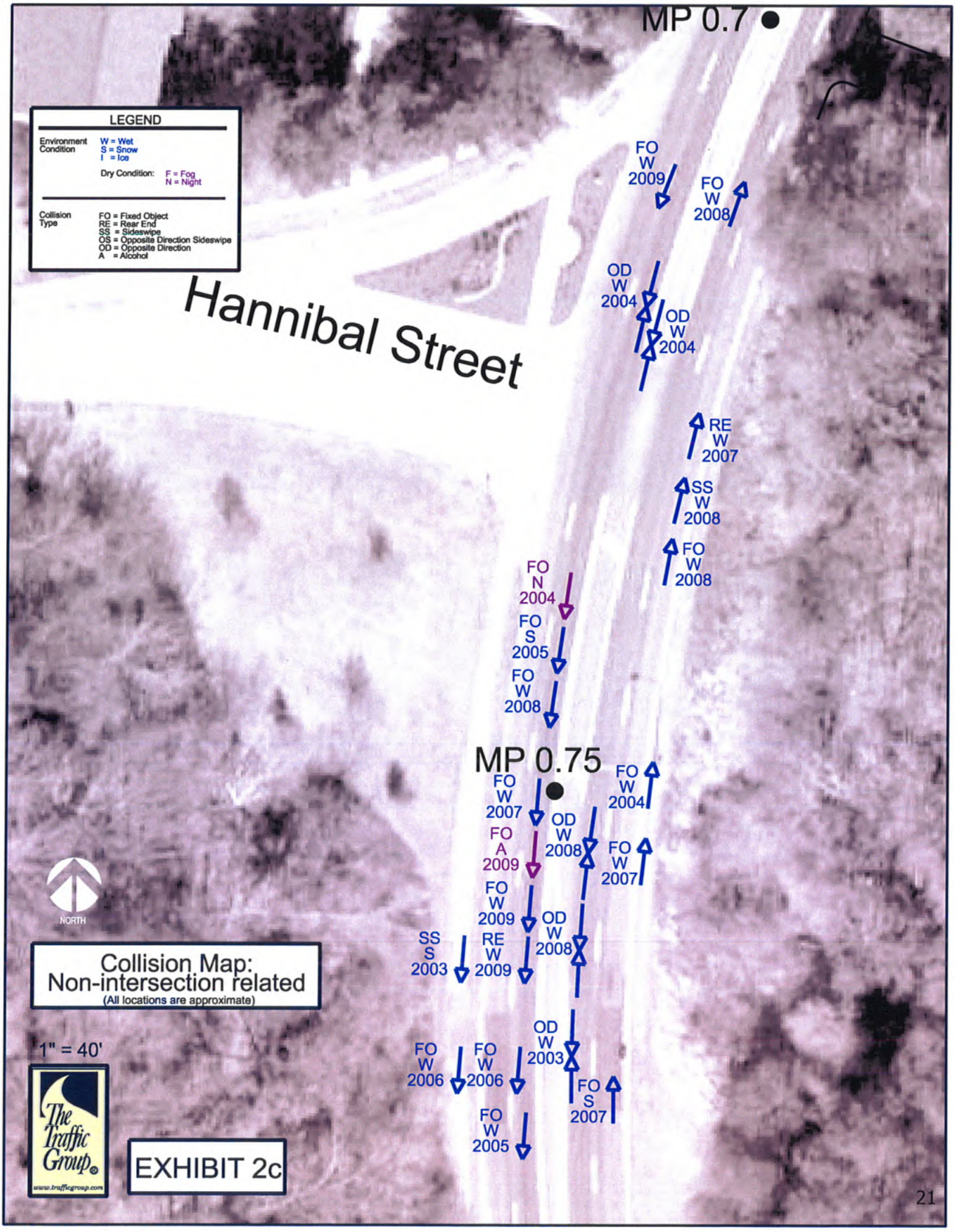
Table 1A: Summary of Non-Intersection Related Collisions

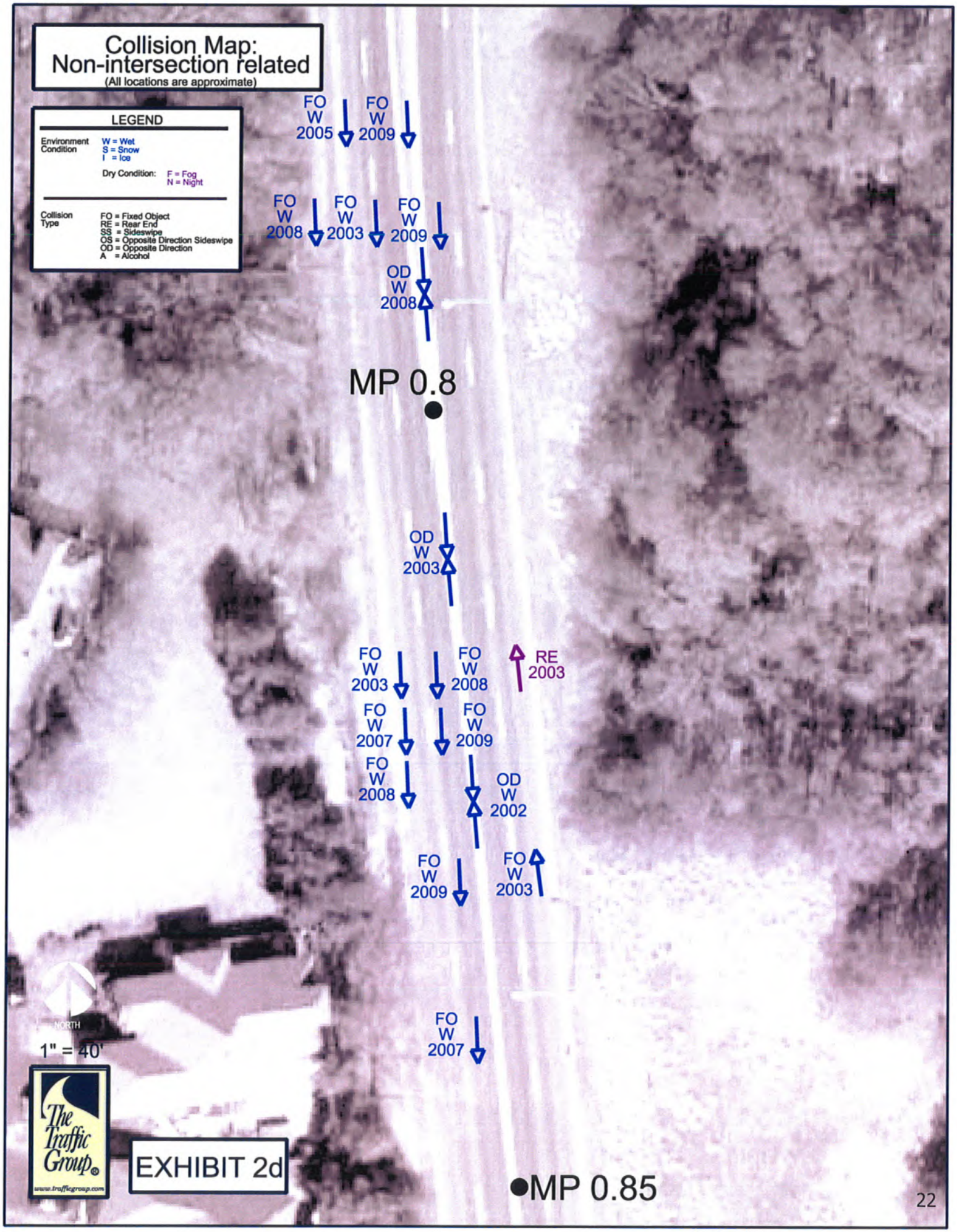
(2002 through Sept. 2009)

		Number	Percentage
By Year	2002	2	3.1%
	2003	9	14.1%
	2004	6	9.4%
	2005	4	6.3%
	2006	8	12.5%
	2007	10	15.6%
	2008	16	25.0%
	2009, partial	9	14.1%
By Severity	Non-Injury	46	71.9%
	Pos-Injury	8	12.5%
	Injury	5	7.8%
	Disabled	4	6.3%
	Fatal	1	1.6%
By Surface Condition	Dry	10	15.6%
	Snow	3	4.7%
	Wet	51	79.7%
By Collision Type	Fixed Object	46	71.9%
	Opp Direction	8	12.5%
	Rear End	6	9.4%
	Sideswipe	3	4.7%
	Unknown	1	1.6%
By Direction	North	15	23.4%
	South	38	59.4%
	South/North	8	12.5%
	West	3	4.7%


Collision Map:
Non-intersection related
(All locations are approximate)
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
Glen Avenue
Beaglin Park Drive
MP 0.57
FO W 2007
FO N 2008
RE W 2004
FO 2008
FO W 2008
MP 0.6
FO F 2006
FO N 2006
NORTH
1" = 40'
EXHIBIT 2a
The Traffic Group
www.trafficgroup.com

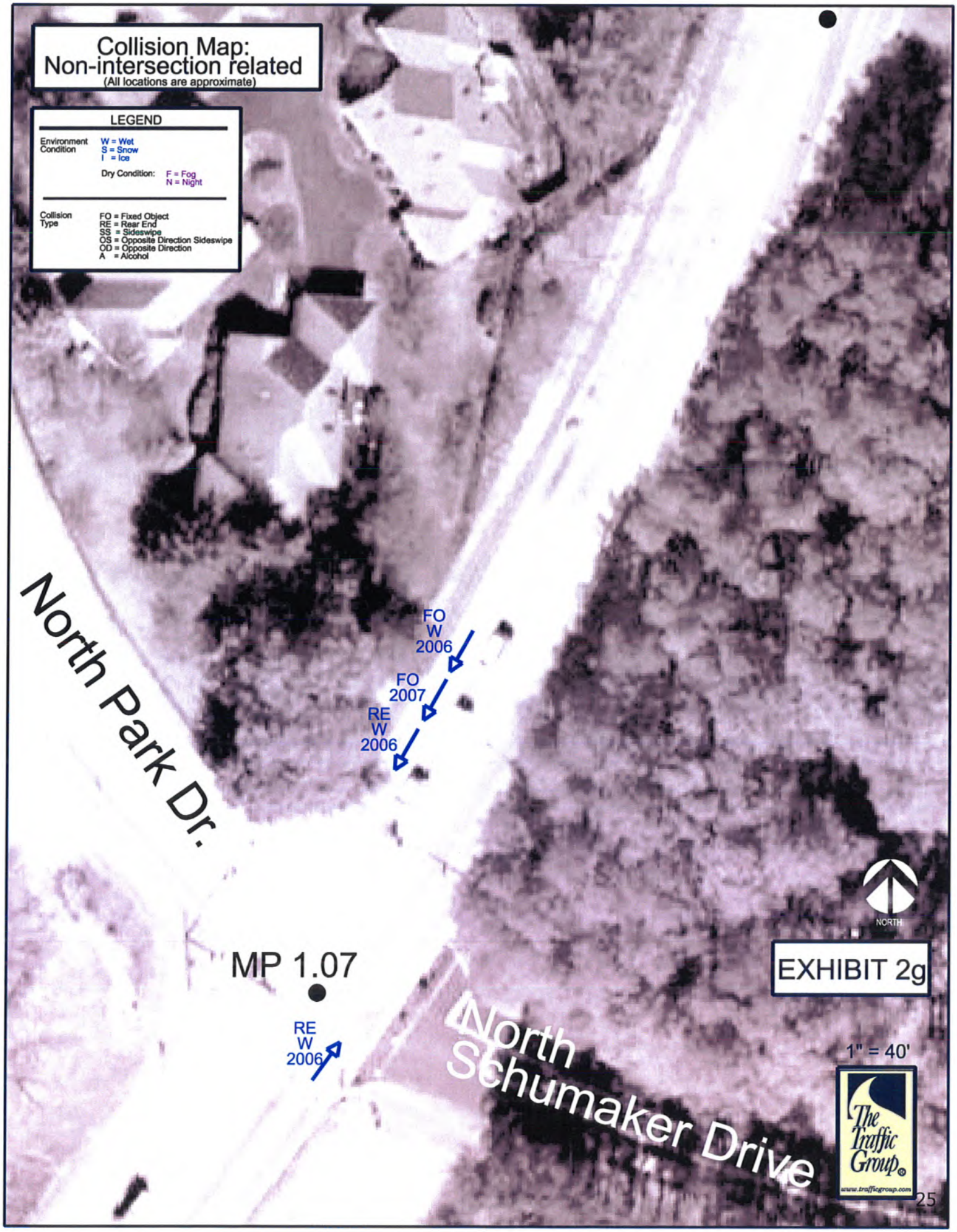

Collision Map:
Non-intersection related
(All locations are approximate)
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
FO A 2008
FO W 2003
SS 2008
FO W, A 2003
FO W 2008
FO A 2008
FO W 2009
Camelia Road
MP 0.65
FO W 2006
FO W 2003
FO W 2005
FO W 2004
MP 0.7
NORTH
1" = 40'
EXHIBIT 2b
The Traffic Group
www.trafficgroup.com


MP 0.7
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
Hannibal Street
FO W 2009
FO W 2008
OD W 2004
OD W 2004
RE W 2007
SS W 2008
FO W 2008
FO N 2004
FO S 2005
FO W 2008
MP 0.75
FO W 2007
FO W 2004
OD W 2008
FO A 2009
FO W 2007
FO W 2009
OD W 2008
SS S 2003
RE W 2009
OD W 2003
FO W 2006
FO W 2006
FO S 2007
FO W 2005
NORTH
Collision Map:
Non-intersection related
(All locations are approximate)
1" = 40'
The Traffic Group
www.trafficgroup.com
EXHIBIT 2c


Collision Map:
Non-intersection related
(All locations are approximate)
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
FO W 2005
FO W 2009
FO W 2008
FO W 2003
FO W 2009
OD W 2008
MP 0.8
OD W 2003
FO W 2003
FO W 2008
RE 2003
FO W 2007
FO W 2009
FO W 2008
OD W 2002
FO W 2009
FO W 2003
FO W 2007
NORTH
1" = 40'
The Traffic Group
www.trafficgroup.com
EXHIBIT 2d
MP 0.85

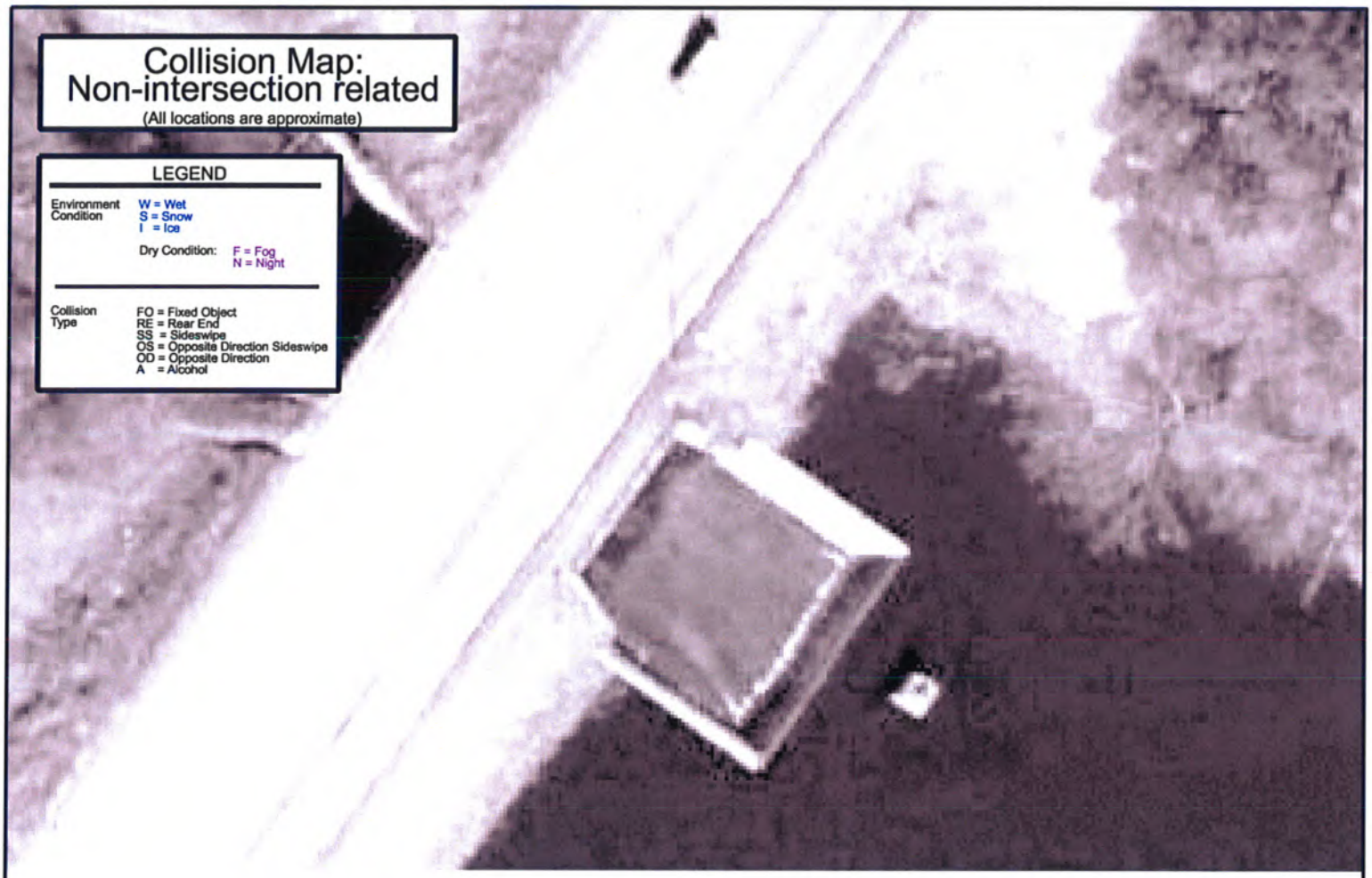

Collision Map:
Non-intersection related
(All locations are approximate)
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
MP 0.85
FO
W
2007
Eaglin Park Dr
NORTH
1" = 40'
The Traffic Group
www.trafficgroup.com
EXHIBIT 2e


Collision Map:
Non-intersection related
(All locations are approximate)
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
FO
W
2002
MP 0.95
FO
W
2007
fatality
MP 1.0
NORTH
1" = 40'
The Traffic Group
www.trafficgroup.com
EXHIBIT 2f


Collision Map:
Non-intersection related
(All locations are approximate)
LEGEND
Environment Condition
W = Wet
S = Snow
I = Ice
Dry Condition:
F = Fog
N = Night
Collision Type
FO = Fixed Object
RE = Rear End
SS = Sideswipe
OS = Opposite Direction Sideswipe
OD = Opposite Direction
A = Alcohol
North Park Dr.
FO
W
2006
FO
2007
RE
W
2006
MP 1.07
RE
W
2006
North Schumaker Drive
NORTH
EXHIBIT 2g
1" = 40'
The Traffic Group
www.trafficgroup.com

Collision Map: Non-intersection related

(All locations are approximate)



LEGEND

Environment Condition	W = Wet S = Snow I = Ice
Dry Condition:	F = Fog N = Night
Collision Type	FO = Fixed Object RE = Rear End SS = Sideswipe OS = Opposite Direction Sideswipe OD = Opposite Direction A = Alcohol

NORTH

1" = 40'

The Traffic Group®
www.trafficgroup.com

EXHIBIT 2h

Table 2. Intersection Related Collisions (2002 through September 2009)

Cross Street	Date	Time	Surface Condition (S)	Collision Type (CT)	Vehicle Direction (DIR V1)	Vehicle Direction (DIR V2)	Contributing Circumstance (PCSC)
Glen Ave.	6/6/02	2:00 PM	Dry	Angle Meets Head On	South	East	Failed to give full time and attention
Glen Ave.	5/7/03	4:00 PM	Dry	Sideswipe	North	North	Failed to give full time and attention
Glen Ave.	9/1/03	2:00 PM	Dry	Angle	East	South	Failed to give full time and attention
Glen Ave.	12/18/03	6:00 PM	Dry	Left Turn	North	South	Failed to yield right of way
Glen Ave.	1/23/04	11:00 PM	Dry	Left Turn	South	North	Failed to give full time and attention
Glen Ave.	10/19/04	7:00 AM	Wet	Angle	North	West	Failed to give full time and attention
Glen Ave.	12/14/04	10:00 PM	Dry	Single Vehicle	North	N/A	Failed to give full time and attention
Glen Ave.	1/5/05	7:00 AM	Wet	Angle Meets Right Turn	East	South	Improper right turn on red
Glen Ave.	5/6/05	8:00 AM	Wet	Rear End	North	North	Too fast for conditions
Glen Ave.	6/11/05	11:00 AM	Dry	angle	West	North	Failed to obey traffic signal
Glen Ave.	10/20/05	9:00 PM	Dry	Left Turn	North	South	Failed to yield right of way
Glen Ave.	11/30/05	5:00 PM	Dry	Left Turn	North	South	Failed to yield right of way
Glen Ave.	4/21/06	4:00 PM	Wet	Single Vehicle	North	N/A	Too fast for conditions
Glen Ave.	10/11/06	1:00 PM	Wet	Angle	North	East	Too fast for conditions
Glen Ave.	1/5/07	2:00 PM	Wet	Angle Meets Head On	East	North	Failure to drive within a single lane
Glen Ave.	4/18/07	8:00 AM	Dry	Left Turn	North	South	Failed to yield right of way
Glen Ave.	6/26/07	12:00 PM	Dry	Angle Meets Right Turn	East	South	Failed to yield right of way
Glen Ave.	10/24/07	2:00 PM	Wet	Angle Meets Head On	North	East	Failure to obey traffic control
Glen Ave.	5/12/08	4:00 PM	Wet	Left Turn	East	West	Failed to yield right of way
Camelia	2/18/07	2:00 PM	Dry	Rear End/Left Turn	NA	South/South	Following too closely
Hannibal St.	1/24/08	4:00 PM	Ice	Rear end	NA	South/South	Too fast for conditions
Hannibal St.	1/22/05	2:00 PM	Snow	Opposite Direction	North	South	Too fast for conditions
N.Park Drive	2/22/05	4:00 PM	Wet	Angle	East	South	Failed to obey traffic signal
N.Park Drive	5/5/05	11:00 AM	Dry	Angle Meets Head On	North	West	Failed to give full time and attention
N.Park Drive	6/26/05	4:00 PM	Dry	Angle	North	West	Failed to yield right of way
N.Park Drive	10/17/05	2:00 PM	Dry	Left Turn	North	South	Failure to drive within a single lane
N.Park Drive	9/15/07	10:00 AM	Wet	Angle Meets Head On	North	West	Failed to obey traffic signal
N.Park Drive	11/20/07	11:00 AM	Dry	Angle Meets Head On	North	West	Failed to obey traffic signal
N.Park Drive	2/1/08	6:00 PM	Wet	Fixed Object	Curb	West	Not Applicable

RECOMMENDATIONS

The Traffic Group, Inc. has conducted a planning study to assist the Salisbury-Wicomico Metropolitan Planning Organization (S/W MPO) Council and its Staff in evaluating vehicular safety along a segment of Beaglin Park Drive in Salisbury, Maryland. This segment of Beaglin Park Drive, from Hannibal Street to North Park Drive, approximately one-half mile in length, has experienced a significant number of vehicular collisions in recent years.

We have conducted a thorough investigation of the physical characteristics of this roadway segment and collisions which have occurred since 2002 for the purpose of identifying probable cause of the collisions and other safety deficiencies which will provide vital information in planning future roadway improvements for enhancing vehicular safety along this corridor.

Roadway signs and pavement markings were evaluated in terms of their proper placement and condition. The MUTCD specifies that Signal Ahead Warning Signs "shall be installed on an approach to a primary traffic control device that is not visible for a sufficient distance to permit the road user to respond to the device."[3] Traffic Signal Advance Warning Signs are presently installed on the southbound approach to Glen Avenue, on the southbound approach to North Park Drive, the eastbound approach on Hannibal Street, and the eastbound approach on North Park Drive. The Traffic Signal Advance Warning Sign on the southbound approach to North Park Drive is obscured by vegetation.

We recommend an additional Traffic Signal Advance Warning Sign be posted on the northbound approach of Beaglin Park Drive to Glen Avenue. Based on the reported 85th percentile speed of 47 mph, this sign should be placed 250 feet in advance of the intersection. [4]

The condition of the roadway signs varies throughout the roadway segment. Those signs which should be considered for replacement or modification are listed below.

> Cross Road Warning Sign (W2-1) southbound - replace (also obstructed by tree)
> Signal Ahead Warning Sign (W3-3) southbound - replace (also obstructed by tree)

Sight distances along the roadway segment and at the intersections were evaluated. The sight distance for a vehicle stopped on Camelia Road is less than desired. The sight distance to the north is obscured by vegetation. Trimming of this vegetation should provide acceptable sight distance to the north. Sight distance to the south,

[3] Manual on Uniform Traffic Control Devices, Section 2C.36, December 2009, page 123.
[4] Manual on Uniform Traffic Control Devices, Table 2C-4, December 2009, page 108.

is limited by the horizontal curve. We recommend that an Intersection Warning Sign (W2-1) be installed on northbound Beaglin Park Drive in advance of Camelia Road. Based on the reported 85th percentile speed of 47 mph, this sign should be placed on northbound Beaglin Park Drive 250 feet in advance of the intersection.[5]

Street lighting is provided on the east side of the roadway throughout the city portion of the roadway segment. Less than 40 percent of the collisions within the city limits occurred during darkness. However, 50 percent of the collisions within the county limits occurred during darkness. It is not likely that the lack of street lighting contributed to these collisions; however, given the presence of utility poles with the county limits, it would seem prudent to have luminaries installed.

Crosswalks are provided on all four-legs of the intersection of Beaglin Park Drive and Glen Avenue. However, there are no sidewalks in the southeast quadrant of this intersection. Therefore, to discourage pedestrian crossing to this area, it is recommended that no crosswalks be provided on the south and east legs of the intersection. Due to the lack of significant pedestrian activity at this intersection, pedestrian signals do not appear to be warranted at this time. However, if pedestrian activity increases, the need for pedestrian signals should be re-evaluated.

Of all of the collisions reported for the study period between 2002 and September 2009, 29 were reported as intersection related. Of these, 10 occurred during the year 2005. However, the numbers have been declining since then. There is no significant pattern among the type of collisions occurring at these intersections and, other than the general recommendations mentioned above, no safety improvements are recommended at the intersections.

The analysis of all of the collisions during the study period revealed that 67.2% of the non-intersection collisions occurred between log mile 0.70 and 0.86[6], which occurs on a horizontal and vertical curve. The radius for this curve is 973 feet +/-. The cross slope along this roadway segment is excessive, with a slope on the southbound lane of 5% or more. No superelevation is provided along this curve. The majority of the collisions along this segment were single vehicle collisions with a fixed object, in most cases the fixed object being the curb. It is unknown whether or not the vehicles upon hitting the curb, "jumped" it and left the roadway. All eight of the "opposite direction" type of collisions occurred along this roadway segment.

Throughout the study area, 83.6% of the collisions occurred during inclement weather, when the roadway surface was wet, or snow covered.

The collision analysis revealed that the probable contributing factors to the non-intersection related collisions are:

1. Horizontal curvature of the roadway segment

[5] Ibid
[6] The log mile on the collision reports is an approximate location as determined by the reporting officer.

2. Cross slope and lack of superelevation of the roadway segment

3. Pavement condition

4. Weather conditions

5. Excessive speed for road and weather conditions

We have identified several strategies which are designed to address the probable contributing factors on the non-intersection related collisions. The most effective strategy would be to redesign the roadway to provide the proper cross slope and superelevation, given the existing horizontal and vertical curves. However, this strategy would be costly and would also take a considerable amount of time to implement. Therefore, other strategies have been identified which can be quickly implemented at reasonable costs.

Our strategies for addressing these probable contributing factors are designed to:

1. Provide advance warning of the changes in horizontal alignment

2. Reduce the travel speed

3. Enhance the delineation of the lanes

4. Provide vertical delineation of the curve

5. Provide wider lanes around the curve

6. Provide skid-resistant pavement surfaces

7. Improve superelevation and cross slope

These are discussed below.

Provide advance warning of the changes in horizontal alignment: Horizontal alignment CURVE (W1-2) warning signs should be posted in advance of the northern curve in both directions. The location of these signs is based on the desired reduction in speed on the curve. To determine an advisory speed for navigating the northern horizontal curve, tests were conducted using a ball-bank indicator. The generally accepted criteria for setting advisory speeds are ball bank readings of 16 degrees for speeds below 20 mph, 14 degrees for speeds between 20 and 30 mph, and 12 degrees for speeds 35 mph or higher.[7] The field tests resulted in a ball bank reading of 9 degrees for a speed of 20 mph, 10 to 12 degrees for a speed of 30 mph, and 12 to 14 degrees for a speed of 40 mph. Based on these field tests, an advisory speed of 35 mph would be recommended. However, the field tests were conducted under dry conditions. Given that the majority of the collisions occurred under wet roadway surface conditions, it is

[7] Manual on Uniform Traffic Control Devices, Section 2C.08, December 2009, page 112.

recommended that the advisory speed be 30 mph. Based on the reported 85th percentile speed of 47 mph, it is recommended that the CURVE (W1-2) sign be located 125 feet from the point of curvature.

Reduce the travel speed: Advisory speed plaques may be added to these CURVE warning signs and given that the reported 85th percentile speed is 47 mph, an advisory speed plague is recommended.

Consideration should be given, however, to lowering the regulatory speed limit to 35 mph. The posted speed limit on Beaglin Park Drive just south of North Park Drive is presently 35 mph. However, we believe that increased enforcement of the speed is necessary to reduce the 85th percentile speed. Speed radar signs could also be used occasionally to give motorists information about their travel speed.

Enhance the delineation of the lanes: Given that a high majority of the collisions occurred when the road surface was wet, we recommend that the pavement markings be of the highest reflective quality. Also, we recommend raised pavement markers, or snow plowable lane delineators, be incorporated into the lane lines and the double yellow centerlines. Eight of the non-intersection related collisions involved vehicles moving in opposite directions and may have involved crossing the double yellow center line. Therefore, consideration should be given to installing centerline rumble strips.

Provide vertical delineation of the curve: Given that the majority of collisions occurring at the northern horizontal curve were single vehicle collisions involving a fixed object during adverse weather conditions, vertical delineation of the curve is recommended. Since they will be located along the edge of the road, the delineators should be white and mounted on 4-foot flexible posts. For a horizontal curve radius of 973 feet, the delineators should be spaced 90 feet apart.[8]

Provide wider lanes around the curve: A northbound left turn lane is provided at Hannibal Street. This results in 10 foot lanes at this location and throughout a portion of the area around the curve where a significant number of collisions have occurred. Given the existing cross slope and lack of superelevation, a wider lane width is desirable around the curve. Therefore, it is recommended that Hannibal Street be converted to right-in, right-out access. There is convenient access to Hannibal Street from North Park Drive, a signalized intersection, to the south. Access to the apartments between Glen Avenue and Hannibal Street can easily be accessed from Glen Avenue, a signalized intersection. The 50 foot roadway could then be striped with 2-12 foot lanes northbound, and a 12 foot and 14 foot lane southbound. The 14 foot

[8] Manual on Uniform Traffic Control Devices, Table 3F-1, December 2009, page 427

outside lane southbound would provide additional pavement for those traveling on the non-superelevated curve. An island or delineators should be installed on Hannibal in such a way that northbound left turns **cannot** be made.

Provide skid resistant pavement surface: Because of the existing horizontal curvature, the excessive cross slope in the southbound direction, and the high number of collisions when the pavement is wet, we recommend that when this roadway is resurfaced, a high level of skid resistance be provided. While it is desirable that the roadway be reconstructed to improve the superelevation and cross slope, an interim measure would be to install slurry seal throughout the roadway segment.

Additional Considerations: The majority of single vehicle collisions with a fixed object involved a curb in the vicinity of the northern horizontal curb. It is not known how many of these collisions involved a vehicle "jumping the curb". However, evidence in the field indicates that this is occurring to some degree. The majority of these collisions have been property damage only, with no injuries. The countermeasures previously identified should, when implemented, reduce the number of single vehicle collisions with a fixed object. However, if these types of collisions continue, consideration should be given to installing a guardrail just behind the curb. Delineators could be installed on the guardrail giving further delineation of the location of the roadway, especially when the road surface is wet. There are two or more driveway cuts along the southbound travel lanes which do not provide access to any property. Therefore, consideration should be given to curbing these driveway cuts.

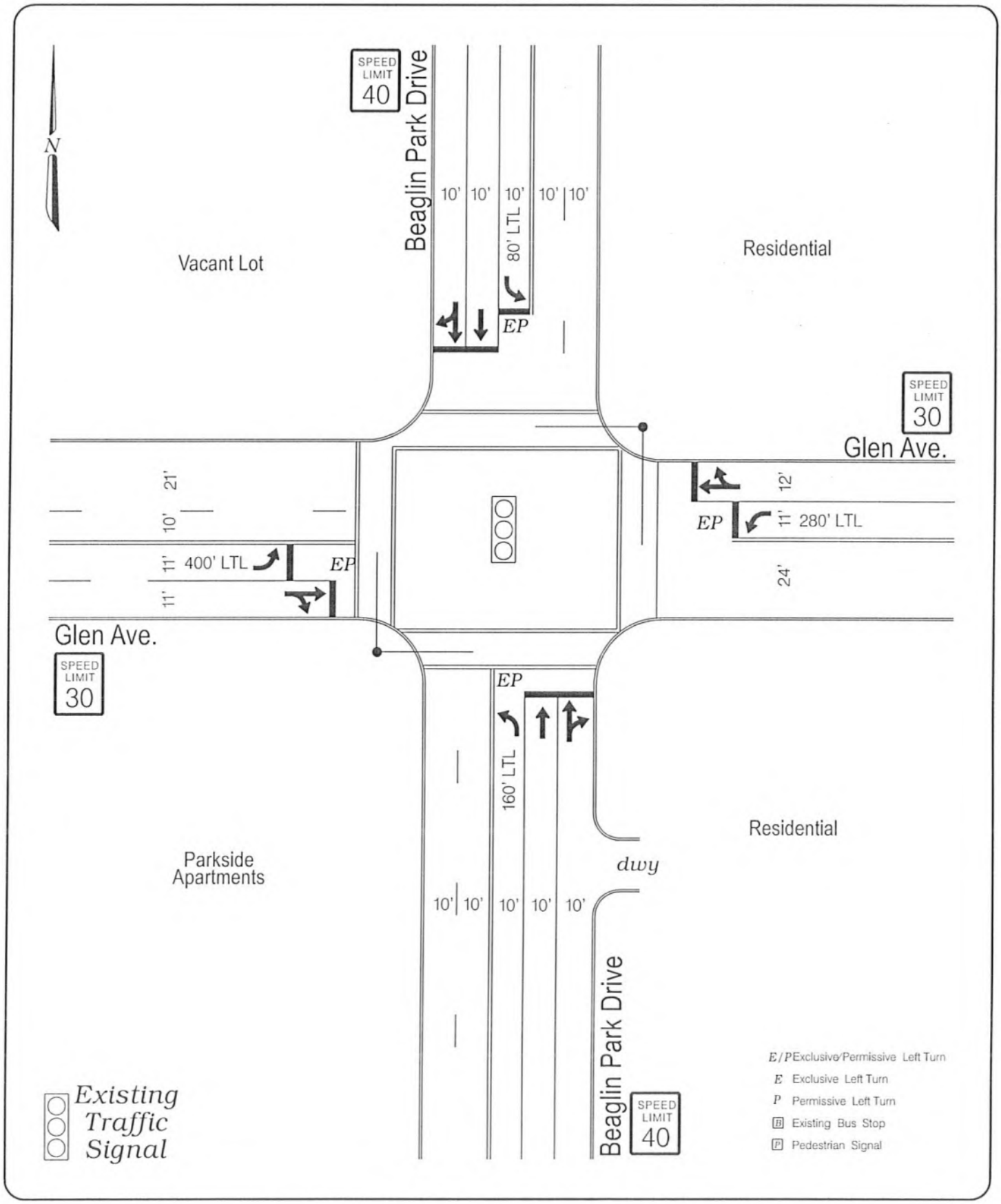
Improve cross slope and superelevation: A Policy on Geometric Design of Highways and Streets recommends that the cross slope for urban streets on tangents be no more than 3 percent. For urban streets with horizontal curves, superelevation may also be needed. The cross slope on the outside lane exceeds 5 percent in the segment where the majority of the collisions have occurred. Therefore, it is recommended that this roadway segment be reconstructed to provide the proper cross slope and superelevation.

Please be aware the road improvements that are detailed above have not been designed. Our recommendation for these road improvements are conceptual in nature and are based upon the mathematical computations/capacity analyses that are provided in this report. It is unlikely, at this point in the process, that The Traffic Group, Inc. has undertaken sufficient field work/design to determine the impact of the recommended road improvements on either above ground or below ground utilities, drainage conditions, or right-of-way conditions that would impact the feasibility or cost of making the improvements that we have recommended. The feasibility and cost of making these improvements will be undertaken in the next phase of our studies.

APPENDIX A

Collision Data and

Condition Diagrams

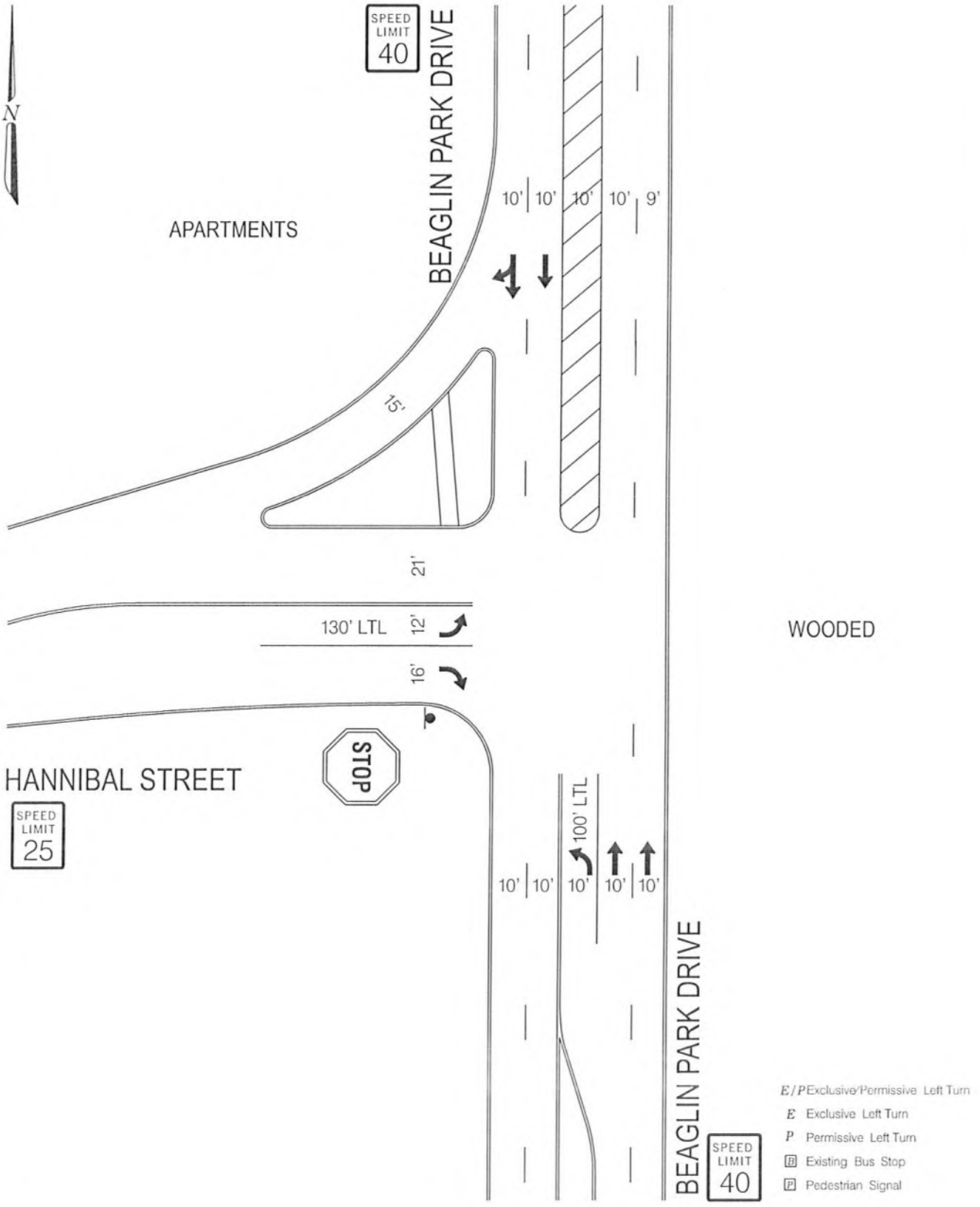


The Traffic Group

Beaglin Park Drive at Glen Ave.

FIELD WORK BY: *B. Tustin*
DRAWN BY: *M. Vailati*
DATE: *August 2010*
SCALE: *N/A*

JOB NO.: *2010-0615*
DWG NAME: *BeaglinParkDr@GlenAve.DGN*
LOCATION: *Wicomico Co., MD*
SHEET NO.: *1* OF *3*

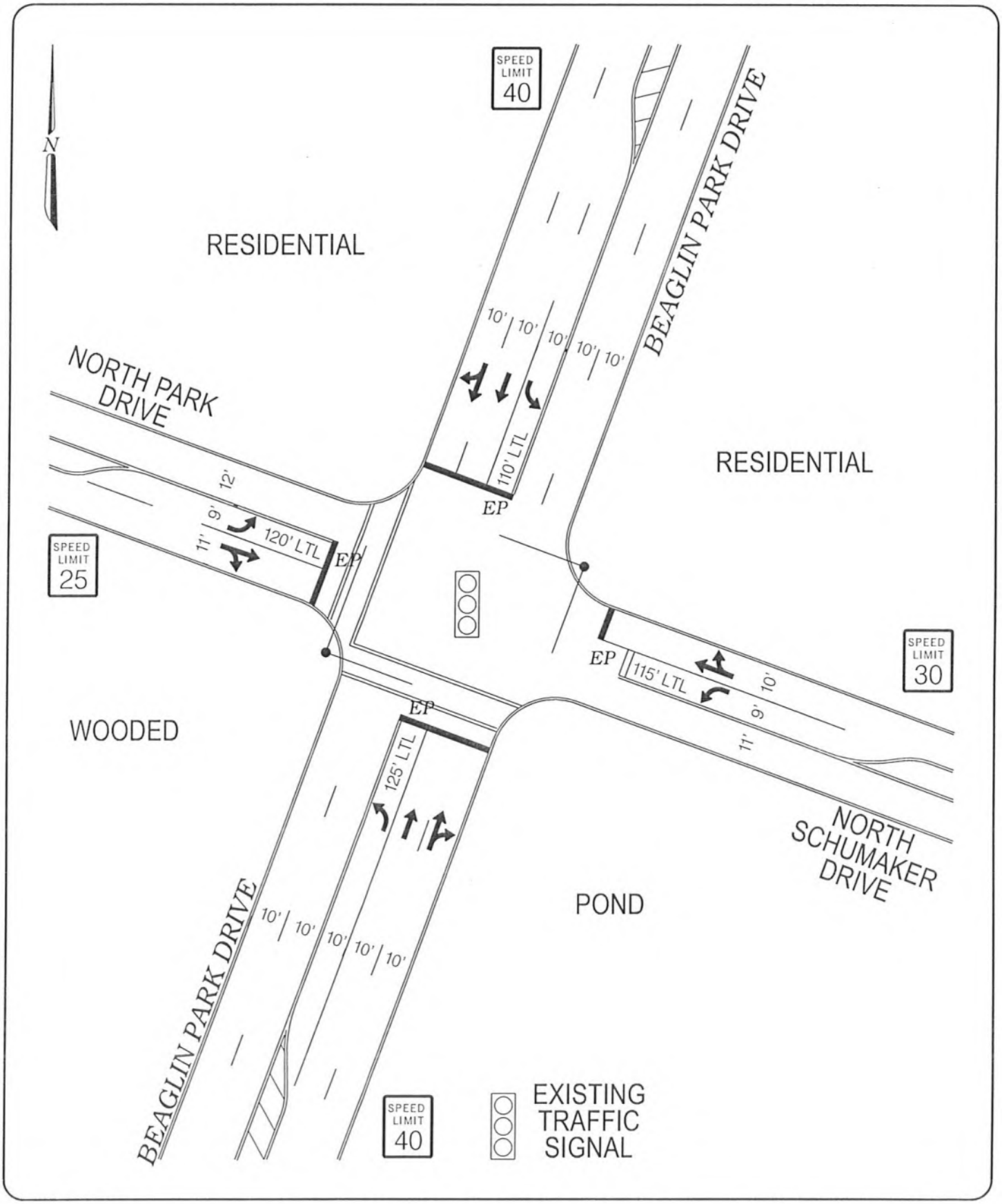


The Traffic Group

BEAGLIN PARK DRIVE AT HANNIBAL STREET

FIELD WORK BY: *B. Tustin*
DRAWN BY: *M. Vailati*
DATE: *August 2010*
SCALE: *N/A*

JOB NO.: *2010-0615*
DWG NAME: *BeaglinParkDr@HannibalSt.DGN*
LOCATION: *Wicomico Co., MD*
SHEET NO.: *2* OF *3*



The Traffic Group

BEAGLIN PARK DRIVE AT NORTH PARK DRIVE/ NORTH SCHUMAKER DRIVE

FIELD WORK BY: *B. Tustin*
DRAWN BY: *M. Vailati*
DATE: *August 2010*
SCALE: *N/A*

JOB NO.: *2010-0615*
DWG NAME: *BeaglinParkDr@NorthParkDr-SouthSchumakerDr.DGN*
LOCATION: *Wicomico Co., MD*
SHEET NO.: *3* OF *3*

MARYLAND STATE HIGHWAY ADMINISTRATION

18897

Office of Traffic and Safety – Traffic Development & Support Division

SHA 52.1 - 1.1 (Rev. 6/22/09)

Date : 07/22/2010

To : Ms. Betty Tustin

Department : The Traffic Group

Subject : Accident Data / Analysis

Location (s) :

County : Wicomico Town / Place :

Route : Beaglin Park Dr Log Mile (s) : 0.57 - 1.07

[x] at Glen Ave & North Park Dr.

[x] from Glen Ave to N. Park Dr

Attached is the accident data/analysis you requested in your letter of 07/14/2010 .
Specifically, we are providing the following data for the subject location.

[x]	Accident Summary	[x]	Accident History	[ ]	Accident Rates
[x]	Study Worksheet	[x]	Collision/Line Diagram	[ ]	Other

[ ]	One Year	[ ]	Two Years	[ ]	Three Years
[ ]	No reported Accidents	[x]	2006 - May 2009	[ ]	Combined

Comments: Please note there were no "intersection related" accidents for the intersections of Camelia Dr or Hannibal Dr.
Also note, 2009 data is thru approx May and is unedited.

Should you have any questions, kindly contact me at (410) 787 - 5849.

Sincerely ,

Alexander D. Lewis
Crash Analysis Safety Team
Traffic Development & Support Division

✓ #18897

Robert Cunningham

From: Robin Ayele [rayele@wicomicocounty.org]
Sent: Wednesday, July 14, 2010 10:40 AM
To: Robert Cunningham
Cc: Keith Hall
Subject: Re: Request for Beaglin Park Drive data-Wicomico County

Dear Mr. Cunningham,

I am a Planner for Wicomico County who is overseeing a Traffic Study for Beaglin Park Drive in Wicomico County.

I would like to request any accident data that you or your agency may have for the following roadway segments and intersections to help us complete this study. Our consultant preparing the study is The Traffic Group, Inc., and if possible, data that you have can be sent directly to Betty Tustin at The Traffic Group. This request is not being made as the result of any civil litigation but is purely for planning purposes.

Roadway segment: Beaglin Park Drive (County road number 277) from Glen Avenue to North Park Drive. 0.57 - 1.07

Intersections:
CO 277
Beaglin Park Drive and Glen Avenue 0.57 @ CO 272 - 1.02 / mu 1080 1.02
Beaglin Park Drive and Camelia 0.63 @ CO 283 - 0.00 none ~~Reported~~ Related
Beaglin Park Drive and Hannibal 0.73 @ mu 123 - 0.00 - None Related To Ifor
Beaglin Park Drive and North Park Drive 1.07 mu 2050 @ 0.71

Betty's address is:

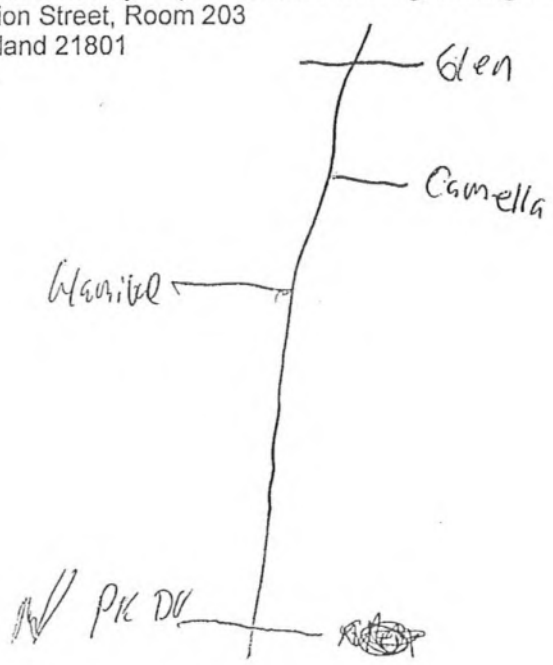
Betty Tustin, btustin@trafficgroup.com

Thanks in advance for any assistance you can provide. If you need to reach me by phone, my number is 410. 548. 4860.

Robin Ayele

Robin M. Ayele
Long Range Planner
Salisbury/Wicomico County Department of Planning, Zoning and Community Development
125 North Division Street, Room 203
Salisbury, Maryland 21801
410. 548. 4860

(1)



Beagle Pk Dr

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

SHA 52.1 ADC Study Worksheet Output rev. 03/2010-1

Name: Alex Lewis

Date: 07/22/2010

Location: Beaglin Park Dr from Glen Av to North Park Dr

Logmiles: From 000.57 To 001.07 Length: 0.50

County: Wicomico, D1

Period: January 01, 2006 To May 31, 2009

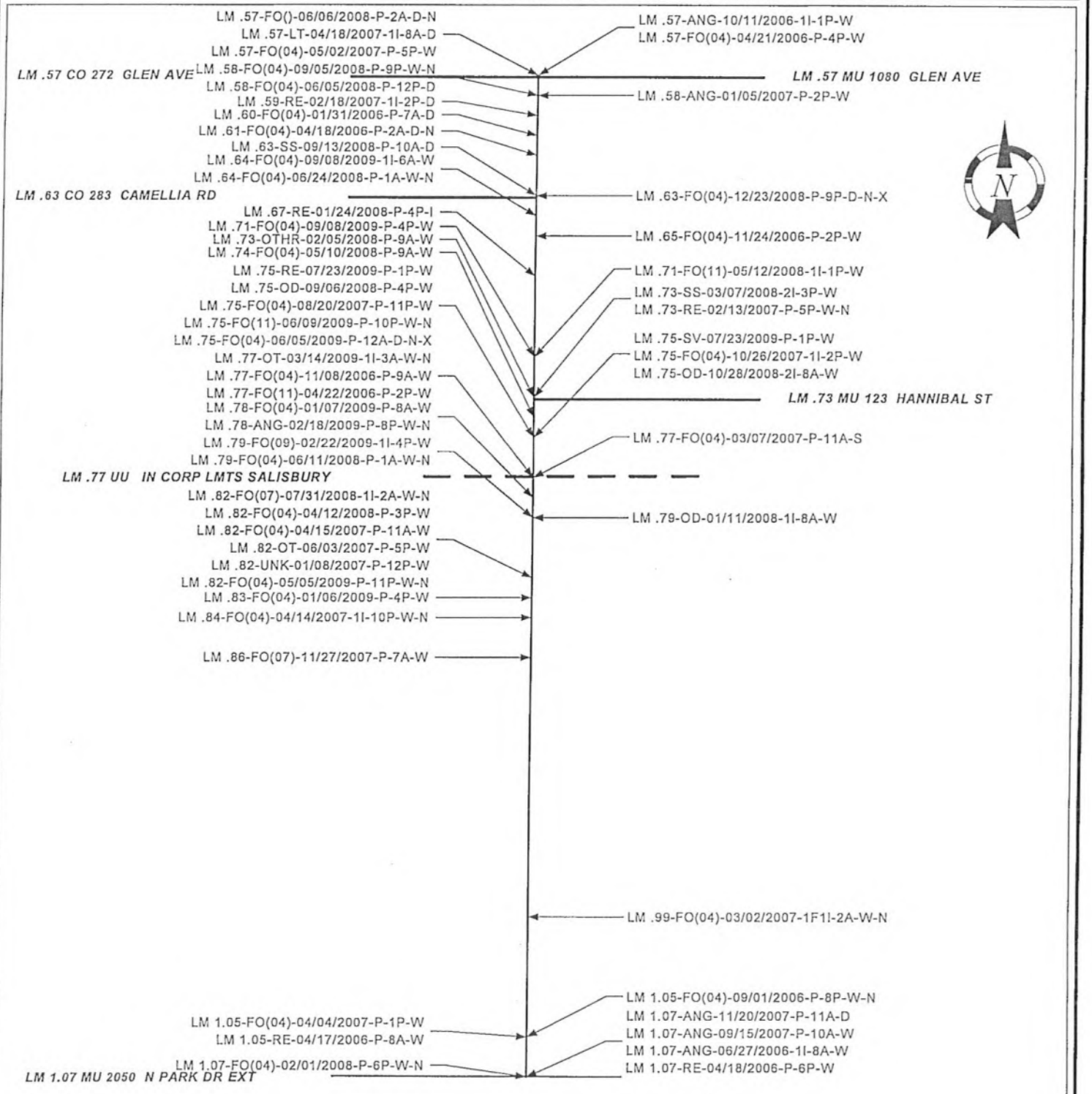
Note: 2009 data is thru approx May and is unedited

YEAR >>	2006	2007	2008	2009	Total
Fatal	0	1	0	0	1
No. Killed	0	1	0	0	1
Injury	2	4	5	3	14
No. Injured	2	5	7	3	17
Prop. Damage	9	12	13	9	43
Total Crashes	11	17	18	12	58
Severity Index	13	37	29	24	Avg 26
Opposite Dir.	0	0	3	0	3
Rear End	2	2	1	1	6
Sideswipe	0	0	2	0	2
Left Turn	0	1	0	0	1
Angle	2	3	0	1	6
Pedestrian	0	0	0	0	0
Parked Veh.	0	0	0	0	0
Fixed Object	7	9	11	8	35
Other	0	2	1	2	5
U-Turn	0	0	0	0	0
Backing	0	0	0	0	0
Animal	0	0	0	0	0
Railroad	0	0	0	0	0
Fire / Expl.	0	0	0	0	0
Overturn	0	1	0	1	2
Other/Unk	0	1	1	1	3
Truck Related	0	1	0	0	1
Night Time	2	3	7	5	17
Wet Surface	9	13	13	11	46
Alcohol	0	0	1	1	2
Intersection	3	3	2	0	8
Total Vehicles	16	24	24	14	78
Total Trucks	0	1	0	0	1
Truck %	0.0	4.2	0.0	0.0	1.3

Comments:

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Beaglin Pk Dr from Glen Av to N. Park Dr
County: WICOMICO
Study Period: 01/01/2006 to 05/31/2009
Analyst: ALEWIS Date: 07/22/2010



KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 06-27-06

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night	
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol	
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface	
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface	
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface	
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuater	S - Snowy Surface	
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other		
				07 - Fence	99 - Unknown		

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

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Name: Alex Lewis

Date: 07/22/2010

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Logmiles: From 000.57 To 001.07 Length: 0.50

County: Wicomico, D1

Period: January 1, 2006 To May 31, 2009

Note: 2009 data is thru approx May and is unedited

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents	1	14	43	58
Veh Occ	1	17		
Pedestrian				

AVG Severity Index: 26

DAY OF THE WEEK	SUN	MON	TUE	WED	THU	FRI	SAT	UNK
	4	4	16	9	5	12	8	

MONTH OF THE YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
	7	6	4	10	4	8	3	1	7	3	4	1	

CONDITION	DRIVER	PED
Normal:	70	
Alcohol:	2	
Other:	6	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:	1	2	4	1			1	2	6	3	2	3	
PM:	2	5	5	2	6	3	2		2	2	2	2	

VEHICLES INVOLVED PER ACCIDENT	1	2	3	4	5	6+	UNK	TOTAL
	39	18	1					78

VEHICLE TYPE			
	Motorcycle/Moped		Tractor Trailer
44	Passenger Vehicle	1	Passenger Bus
9	Sport Utility Veh		School Bus
8	Pick-Up Truck	4	Emergency Veh
1	Trucks (2+3 axles)	11	Other Types

SURFACE	
46	Wet
10	Dry
2	Sno/Ice
	Mud
	Other

MOVEMENTS	NORTH			SOUTH			EAST			WEST		
	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
		24		2	32			1	1	3	3	

OTHER MOVEMENTS 12

PROBABLE CAUSES

1	Influence of Drugs	1	Improper Lane Change
2	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
7	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
6	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
1	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign	2	Rain, Snow
2	Fail to Obey Traffic Signal		Animal
1	Fail to Obey Other Control		Vision Obstruction
1	Fail to Keep Right of Center	1	Vehicle Defect
	Fail to Stop for School Bus	4	Wet
	Wrong Way on One Way		Icy or Snow Covered
1	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
23	Too Fast for Conditions		Traffic Control Device Inop.
1	Followed too Closely		Shoulders Low, Soft or High
1	Improper Turn	3	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:		2	1	3
Rear End	Related:			1	1
	UnRelated:		1	4	5
Sideswipe	Related:				
	UnRelated:		1	1	2
Left Turn	Related:		1		1
	UnRelated:				
Angle	Related:		2	2	4
	UnRelated:			2	2
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:		1	4	5

F	Bridge	01				
I	Building	02				
X	Culvert/Ditch	03				
E	Curb	04	1	3	24	28
D	Guardrail/Barrier	05				
	Embankment	06				
O	Fence	07		1	1	2
B	Light Pole	08				
J	Sign Pole	09		1		1
E	Other Pole	10				
C	Tree/Shrubbery	11		1	2	3
T	Contr. Barrier	12				
S	Crash Attenuator	13				
	Other Fixed Object				1	1

WEATHER		ILLUMINATION		TOTALS	
17	Clear / Cloudy	38	Day	06-09	58
1	Foggy	2	Dawn/Dusk		
38	Raining	14	Dark - Lights On		
2	Snow / Sleet	3	Dark - No Lights		
	Other	1	Other		

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

SHA 52.1 ADC History Output rev. 03/2010-2 - Combined Year Listing

Name: Alex Lewis

Date: 07/22/2010

Location: Beaglin Park Dr from Glen Av to North Park Dr

Logmiles: From 000.57 To 001.07 Length: 0.50

County: Wicomico, D1

Period: January 01, 2006 To May 31, 2009

Note: 2009 data is thru approx May and is unedited

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO0277												
0.57	✓	04212006	Property	04P	Day	Wet		04	FXOBJ	NS		Too fast for conditions
0.57	✓	10112006	1 Injured	01P	Day	Wet			ANGLE	NS	ES	Too fast for conditions
0.57	✓	04182007	1 Injured	08A	Day	Dry			LFTRN	NS	SL	Fail to yield right-of-way
0.57		05022007	Property	05P	Day	Wet		04	FXOBJ	SS	SS	Too fast for conditions
0.57		06062008	Property	02A	Night	Dry			FXOBJ	Wu		Fail to give full attention
0.58		01052007	Property	02P	Day	Wet			ANGLE	ER	NS	Fail to drive in single lane
0.58		06052008	Property	12P	Day	Dry		04	FXOBJ	SS		Fail to drive in single lane
0.58		09052008	Property	09P	Night	Wet		04	FXOBJ	SS		Too fast for conditions
0.59		02182007	1 Injured	02P	Day	Dry			RREND	SS	SL	Followed too closely
0.61		04182006	Property	02A	Night	Dry		04	FXOBJ	SS		Fail to drive in single lane
0.60		01312006	Property	07A	Day	Dry		04	FXOBJ	SS		
0.63		09132008	Property	10A	Day	Dry			SDSWP	SS	SS	Improper lane change
0.63		12232008	Property	09P	Night	Dry	✓	04	FXOBJ	Nu		Under influence of alcohol
0.64		06242008	Property	01A	Night	Wet		04	FXOBJ	SS		Fail to give full attention
0.64		09082009	1 Injured	06A	Day	Wet		04	FXOBJ	SS		Too fast for conditions
0.65		11242006	Property	02P	Day	Wet		04	FXOBJ	NS		Vehicle defect
0.67	✓	01242008	Property	04P	Day	Ice			RREND	SS	SS	Too fast for conditions
0.71		05122008	1 Injured	01P	Day	Wet		11	FXOBJ	NS		Fail to give full attention
0.71		09082009	Property	04P	Day	Wet		04	FXOBJ	SS		Too fast for conditions
0.73		02132007	Property	05P	Night	Wet			RREND	NS	NS	Improper turn
0.73		02052008	Property	09A	Day	Wet			OTHER	NS	uu	Wet
0.73		03072008	2 Injured	03P	Day	Wet			SDSWP	NS	NS	Too fast for conditions
0.74		05102008	Property	09A	Day	Wet		04	FXOBJ	SS		Too fast for conditions
0.75		08202007	Property	11P		Wet		04	FXOBJ	SS		Fail to drive in single lane
0.75		10262007	1 Injured	02P	Day	Wet		04	FXOBJ	NS		Fail to keep right of center
0.75		09062008	Property	04P	Day	Wet			OPDIR	SS	NS	Too fast for conditions
0.75		10282008	2 Injured	08A	Day	Wet			OPDIR	SS	NS	Wet
0.75		06052009	Property	12A	Night	Dry	✓	04	FXOBJ	SS		Under influence of alcohol
0.75		06092009	Property	10P	Night	Wet		11	FXOBJ	SS		Too fast for conditions
0.75		07232009	Property	01P	Day	Wet			RREND	SS	SS	Under influence of drugs
0.75		07232009	Property	01P	Day	Wet			OTHER	NS		Too fast for conditions
0.77		04222006	Property	02P	Day	Wet		11	FXOBJ	SS		Rain, snow
0.77		11082006	Property	09A	Day	Wet		04	FXOBJ	SS		Too fast for conditions
0.77		03072007	Property	11A	Day	Snow		04	FXOBJ	NS		Rain, snow
0.77		03142009	1 Injured	03A	Night	Wet			OTHER	SS		Too fast for conditions
0.78		01072009	Property	08A	Day	Wet		04	FXOBJ	SS		Too fast for conditions

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

9

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
0.78		02182009	Property	08P	Night	Wet			ANGLE	NS	SS	
0.79		01112008	1 Injured	08A	Day	Wet			OPDIR	SS	NS	Fail to drive in single lane
0.79		06112008	Property	01A	Night	Wet		04	FXOBJ	SS		Too fast for conditions
0.79		02222009	1 Injured	04P	Day	Wet		09	FXOBJ	SS		Too fast for conditions
0.82		01082007	Property	12P	Day	Wet			OTHER	SS	uu	Fail to give full attention
0.82		04152007	Property	11A	Day	Wet		04	FXOBJ	SS		Too fast for conditions
0.82		06032007	Property	05P	Day	Wet			OTHER	WS		Fail to give full attention
0.82		04122008	Property	03P	Day	Wet		04	FXOBJ	SS		Fail to drive in single lane
0.82		07312008	1 Injured	02A	Night	Wet		07	FXOBJ	WS		Wet
0.82		05052009	Property	11P	Night	Wet		04	FXOBJ	WS		Too fast for conditions
0.83		01062009	Property	04P	Day	Wet		04	FXOBJ	SS		Wet
0.84		04142007	1 Injured	10P	Night	Wet		04	FXOBJ	SS		Too fast for conditions
0.86		11272007	Property	07A	Day	Wet		07	FXOBJ	SS		Fail to give full attention
0.99		03022007	1 K, 1 I	02A	Night	Wet		04	FXOBJ	NS		Too fast for conditions
1.05		04172006	Property	08A	Day	Wet			RREND	SS	SS	Fail to give full attention
1.05		09012006	Property	08P	Night	Wet		04	FXOBJ	NS		Too fast for conditions
1.05		04042007	Property	01P	Day	Wet		04	FXOBJ	SS		Exceeded speed limit
1.07		04182006	Property	06P	Day	Wet			RREND	NS	NS	Too fast for conditions
1.07	✓	06272006	1 Injured	08A	Day	Wet			ANGLE	NS	WL	Fail to obey other control
1.07	✓	09152007	Property	10A	Day	Wet			ANGLE	NS	WL	Fail to obey traffic signal
1.07	✓	11202007	Property	11A	Day	Dry			ANGLE	NS	WL	Fail to obey traffic signal
1.07	✓	02012008	Property	06P	Night	Wet		04	FXOBJ	WS		

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

SHA 52.1 ADC Study Worksheet Output rev. 03/2010-1

Name: Alex Lewis

Date: 07/21/2010

Location: Beaglin Park Dr @ Glen Ave

Logmiles: 000.57 At 001.02 Radius: 200 ft.

County: Wicomico, D1

Period: January 01, 2006 To May 31, 2009

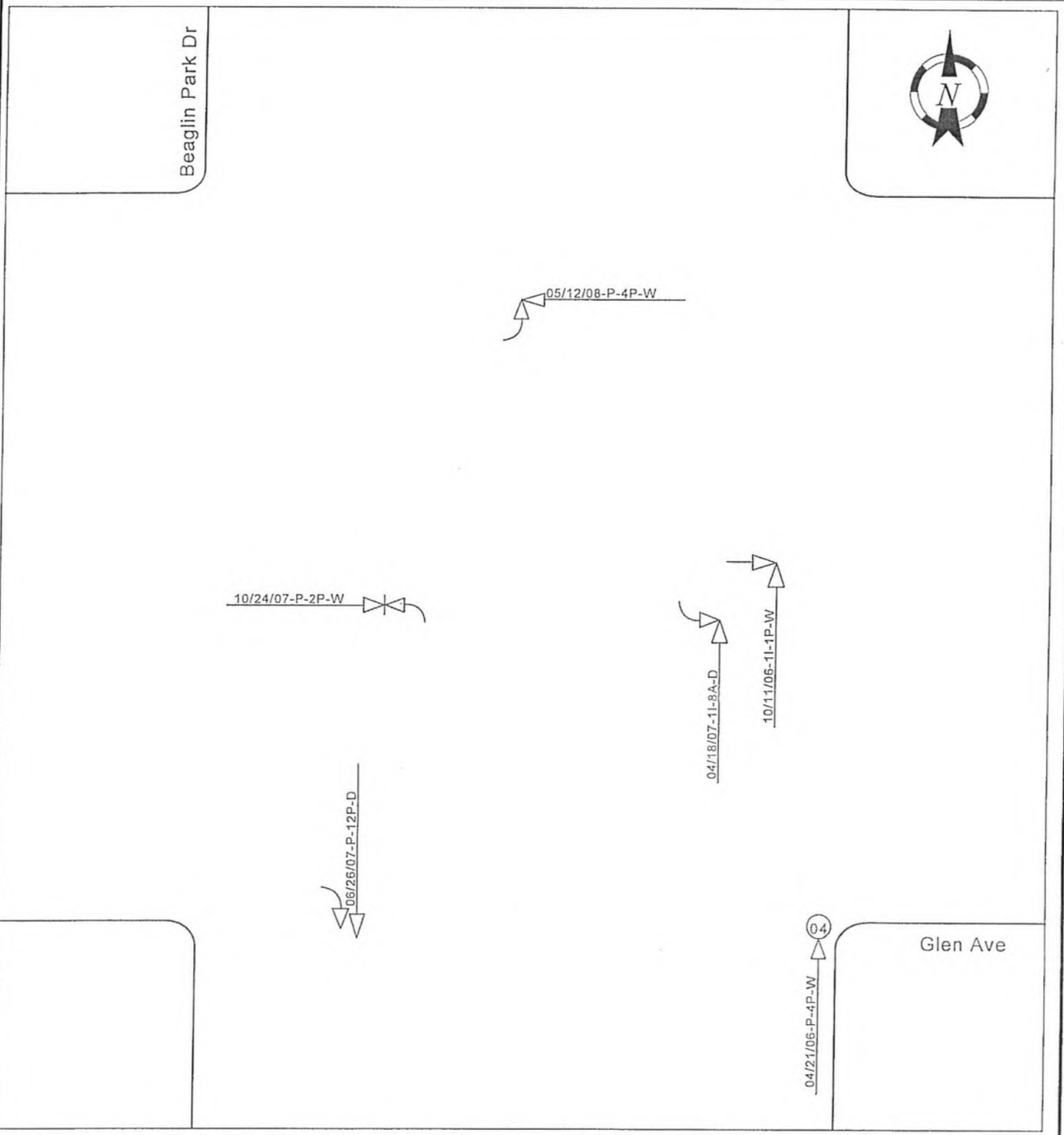
Note: 2009 data is thru approx May and is unedited

YEAR >>	2006	2007	2008	2009	Total
Fatal	0	0	0	0	0
No. Killed	0	0	0	0	0
Injury	1	1	0	0	2
No. Injured	1	1	0	0	2
Prop. Damage	1	2	1	0	4
Total Crashes	2	3	1	0	6
Severity Index	3	6	1	0	Avg 3
Opposite Dir.	0	0	0	0	0
Rear End	0	0	0	0	0
Sideswipe	0	0	0	0	0
Left Turn	0	1	1	0	2
Angle	1	2	0	0	3
Pedestrian	0	0	0	0	0
Parked Veh.	0	0	0	0	0
Fixed Object	1	0	0	0	1
Other	0	0	0	0	0
U-Turn	0	0	0	0	0
Backing	0	0	0	0	0
Animal	0	0	0	0	0
Railroad	0	0	0	0	0
Fire / Expl.	0	0	0	0	0
Overturn	0	0	0	0	0
Other/Unk	0	0	0	0	0
Truck Related	0	1	0	0	1
Night Time	0	0	0	0	0
Wet Surface	2	1	1	0	4
Alcohol	0	0	0	0	0
Intersection	2	3	1	0	6
Total Vehicles	3	6	2	0	11
Total Trucks	0	1	0	0	1
Truck %	0.0	16.7	0.0	0.0	9.1

Comments:

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Beaglin Pk Dr @ Glen Ave
County: WICOMICO
Study Period: 01/01/2006 to 05/31/2009
Analyst: ALEWIS Date: 07/21/2010



DATE-SEVERITY-TIME-SURFCE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only

SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 - Fence
08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Seperated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 06-27-06

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Development and Support Division
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County: Wicomico, D1
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SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		2	4	6
Veh Occ		2		
Pedestrian				

AVG Severity Index: 3

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
	1	1	3		1		

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
			2	1	1				2			

CONDITION	DRIVER	PED
Normal:	11	
Alcohol:		
Other:		

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:									1				
PM:	1	1	1		2								

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
1	5						11

VEHICLE TYPE

Motorcycle/Moped	Tractor Trailer
5 Passenger Vehicle	1 Passenger Bus
Sport Utility Veh	School Bus
1 Pick-Up Truck	Emergency Veh
1 Trucks (2+3 axles)	3 Other Types

SURFACE

4	Wet
2	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
1	3		1	1		1	2	1		1	

OTHER MOVEMENTS

PROBABLE CAUSES

Influence of Drugs	Improper Lane Change
Influence of Alcohol	Improper Backing
Influence of Medication	Improper Passing
Influence of Combined Subst.	Improper Signal
Physical/Mental Difficulty	Improper Parking
Fell Asleep/Fainted, etc.	Passenger Interfere/Obstruct.
Fail to give full Attention	Illegally in Roadway
Lic. Restr. Non-compliance	Bicycle Violation
Fail to Drive in Single Lane	Clothing Not Visible
Improper Right Turn on Red	Sleet, Hail, Freezing Rain
3 Fail to Yield Right-of-way	Severe Crosswinds
Fail to Obey Stop Sign	Rain, Snow
Fail to Obey Traffic Signal	Animal
1 Fail to Obey Other Control	Vision Obstruction
Fail to Keep Right of Center	Vehicle Defect
Fail to Stop for School Bus	Wet
Wrong Way on One Way	Icy or Snow Covered
Exceeded Speed Limit	Debris or Obstruction
Operator Using Cell Phone	Ruts, Holes or Bumps
Stopping in Lane Roadway	Road Under Construction
2 Too Fast for Conditions	Traffic Control Device Inop.
Followed too Closely	Shoulders Low, Soft or High
Improper Turn	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:		1	1	2
	UnRelated:				
Angle	Related:		1	2	3
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01		
I	Building	02		
X	Culvert/Ditch	03		
E	Curb	04	1	1
D	Guardrail/Barrier	05		
	Embankment	06		
O	Fence	07		
B	Light Pole	08		
J	Sign Pole	09		
E	Other Pole	10		
C	Tree/Shrubbery	11		
T	Contr. Barrier	12		
S	Crash Attenuator	13		
	Other Fixed Object			

WEATHER

2	Clear / Cloudy
	Foggy
4	Raining
	Snow / Sleet
	Other

ILLUMINATION

6	Day
	Dawn/Dusk
	Dark - Lights On
	Dark - No Lights
	Other

TOTALS

06-09	6

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

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Name: Alex Lewis

Date: 07/22/2010

Location: Beaglin Park Dr @ North Park Dr

Logmiles: 001.07 At 000.71 Radius: 200 ft.

County: Wicomico, D1

Period: January 01, 2006 To May 31, 2009

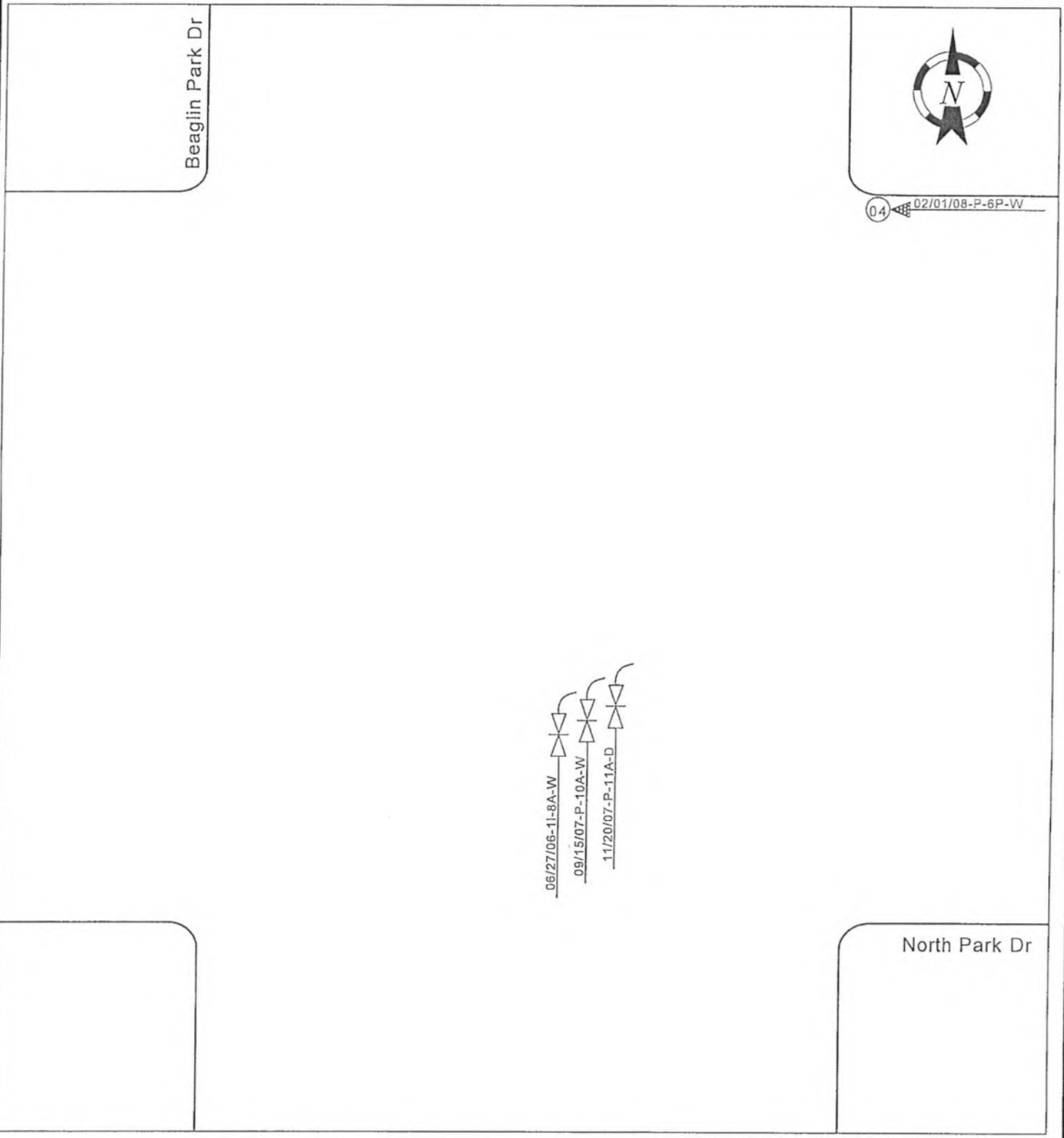
Note: 2009 data is thru approx May and is unedited

YEAR >>	2006	2007	2008	2009	Total
Fatal	0	0	0	0	0
No. Killed	0	0	0	0	0
Injury	1	0	0	0	1
No. Injured	1	0	0	0	1
Prop. Damage	0	2	1	0	3
Total Crashes	1	2	1	0	4
Severity Index	2	2	1	0	Avg 1
Opposite Dir.	0	0	0	0	0
Rear End	0	0	0	0	0
Sideswipe	0	0	0	0	0
Left Turn	0	0	0	0	0
Angle	1	2	0	0	3
Pedestrian	0	0	0	0	0
Parked Veh.	0	0	0	0	0
Fixed Object	0	0	1	0	1
Other	0	0	0	0	0
U-Turn	0	0	0	0	0
Backing	0	0	0	0	0
Animal	0	0	0	0	0
Railroad	0	0	0	0	0
Fire / Expl.	0	0	0	0	0
Overturn	0	0	0	0	0
Other/Unk	0	0	0	0	0
Truck Related	0	0	0	0	0
Night Time	0	0	1	0	1
Wet Surface	1	1	1	0	3
Alcohol	0	0	0	0	0
Intersection	1	2	1	0	4
Total Vehicles	2	4	1	0	7
Total Trucks	0	0	0	0	0
Truck %	0.0	0.0	0.0	0.0	0.0

Comments:

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

Location: Beaglin Park Dr @ North Park Dr
County: WICOMICO
Study Period: 01/01/2006 to 05/31/2009
Analyst: ALEWIS Date: 07/22/2010



DATE-SEVERITY-TIME-SURFCE
NIGHT
ALCOHOL
DRUGS

SEVERITY
F - Fatalities
I - Injured
P - Property Damage Only
SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 - Fence
08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

U - Units Seperated
N - Other Non collision
D - Off Road
R - Downhill Runaway
F - Explosion or Fire
? - Unknown

template 06-27-06

U - TURN
BACKING
OVERTURN
Parked Vehicle
P Pedestrian

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

SHA 52.1 ADC Summary Output rev. 03/2010-1

Name: Alex Lewis

Date: 07/22/2010

Location: Beaglin Park Dr @ North Park Dr

Logmiles: 001.07 At 000.71 Radius: 200 ft.

County: Wicomico, D1

Period: January 1, 2006 To May 31, 2009

Note: 2009 data is thru approx May and is unedited

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents		1	3	4
Veh Occ		1		
Pedestrian				

AVG Severity Index: 1

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
		2			1	1	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
	1				1			1		1		

CONDITION	DRIVER	PED
Normal:	7	
Alcohol:		
Other:		

TIME

	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:									1		1	1	
PM:							1						

VEHICLES INVOLVED PER ACCIDENT

	1	2	3	4	5	6+	UNK	TOTAL
	1	3						7

VEHICLE TYPE

	Motorcycle/Moped		Tractor Trailer
5	Passenger Vehicle		Passenger Bus
	Sport Utility Veh		School Bus
	Pick-Up Truck		Emergency Veh
	Trucks (2+3 axles)	2	Other Types

SURFACE

3	Wet
1	Dry
	Sno/Ice
	Mud
	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
	3								3	1	

OTHER MOVEMENTS

PROBABLE CAUSES

	Influence of Drugs		Improper Lane Change
	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty		Improper Parking
	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
2	Fail to Obey Traffic Signal		Animal
1	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	1	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:				
Sideswipe	Related:				
	UnRelated:				
Left Turn	Related:				
	UnRelated:				
Angle	Related:		1	2	3
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:				
Other Collision	Related:				
	UnRelated:				

F	Bridge	01		
I	Building	02		
X	Culvert/Ditch	03		
E	Curb	04	1	1
D	Guardrail/Barrier	05		
	Embankment	06		
O	Fence	07		
B	Light Pole	08		
J	Sign Pole	09		
E	Other Pole	10		
C	Tree/Shrubbery	11		
T	Contr. Barrier	12		
S	Crash Attenuator	13		
	Other Fixed Object			

WEATHER

2	Clear / Cloudy
	Foggy
2	Raining
	Snow / Sleet
	Other

ILLUMINATION

3	Day
	Dawn/Dusk
	Dark - Lights On
1	Dark - No Lights
	Other

TOTALS

06-09	4

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support Division

SHA 52.1 ADC History Output rev. 03/2010-2 - Combined Year Listing

Name: Alex Lewis

Date: 07/22/2010

Location: Beaglin Park Dr @ North Park Dr

Logmiles: 001.07 At 000.71 Radius: 200 ft.

County: Wicomico, D1

Period: January 01, 2006 To May 31, 2009

Note: 2009 data is thru approx May and is unedited

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
CO0277												
1.07	✓	06272006	1 Injured	08A	Day	Wet			ANGLE	NS	WL	Fail to obey other control
1.07	✓	09152007	Property	10A	Day	Wet			ANGLE	NS	WL	Fail to obey traffic signal
1.07	✓	11202007	Property	11A	Day	Dry			ANGLE	NS	WL	Fail to obey traffic signal
1.07	✓	02012008	Property	06P	Night	Wet		04	FXOBJ	WS		

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator