



Montana Department of Transportation

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Helena, MT 59620-1001

Memorandum

To: Bob Vosen, P.E. – Missoula District Administrator

From: Stan Brelin II, P.E. – Traffic Operations Engineer *SB*

Date: March 1, 2024

Subject: Speed Limit Recommendation
US 93 (N-5) - Lakeside

Please present the following report to Flathead County for review and comment. Inform them that we would prefer to receive all comments in writing within the next 60 days. Comments not received within 120 days will be regarded as concurrence with the findings of this report. Their comments along with the Department's final recommendation will be presented to the Montana Transportation Commission for action.

Introduction

In September of 2022, Flathead County requested a speed study be performed on US 93 from the Flathead County line to the intersection with Highway 82. After reviewing the study area and receiving another request on US 93 in the Rollins area both studies were extended to meet at milepost 93. The Rollins speed study was completed in 2022. This study beginning at milepost 93 and continuing to the intersection with Montana 82 was requested to be performed during the summer of 2023. Flathead County has received “citizen inquiries on the speeds and concerns about pedestrians crossing in the community of Lakeside.” A focus on the “downtown Lakeside area” was requested by Flathead County. On top of this speed study, there are ongoing and completed pedestrian studies to look at addressing the crossings through the community of Lakeside.

Site Characteristics

The beginning of this segment of US 93 was constructed by MDT in 1964 and the rest was constructed prior to 1924. In 1924 this segment of US 93 was considered an improved roadway and listed as the Auto Trail Great White Way. Most recently the study area from milepost 93 to milepost 102 was improved with a microsurfacing project, NH 5-3(151)93, in 2022. The rest of the study area was improved in 2018 through HSIP-G 5-3(134)103 with a crosswalk upgrade and NH 5-3(65)103 F in 2000 which resurfaced the roadway. Within this speed study, US 93 is part of the non-interstate national highway system (N-5) and classified as a principal arterial.

Typical sections are primarily comprised of two 12-foot travel lanes (one in each direction) with 2-foot shoulders. The shoulders do vary a bit between 2-foot and 8+-feet depending on if there is a pull-off or general fluctuations in the shoulder widths. Through the community of Lakeside shoulder widths fluctuate between 4-feet and 18-feet depending on the location to accommodate pedestrian traffic or on-street parking at times. Large sections of Lakeside do not have curb and gutter, making the shoulder and off-street parking for businesses blur together. There is also a 13-foot center two-way-left-turn lane through the community of Lakeside between Blacktail Road and Bierney Creek Road. A 12-foot center two-way-left-turn lane exists from Old Highway 93 to the Somers Fishing Access north of Lakeside in the region of Somers. Additional left-turn lanes exist for the intersections with Lutheran Camp Road, Political Hill Road, Caroline Point Road, Ridgewood Drive, Somers Road, and Forest Hill Road. There are right-turn lanes at the following intersections: Blacktail Road and a Historic Pull-off. North of the Somers Fishing access the shoulder widths increase to 8-foot. The typical section changes to four 12-foot travel lanes (two in each direction) near milepost 104 and continues to the end of the study. Southbound traffic has two 12-foot travel lanes from about a half mile north of milepost 103 to the intersection with Montana 82. There is for the most part adequate sight distance both on and along the roadway. Areas do exist where rock cuts and vegetation may obscure visibility, primarily in the curves. Furthermore, some of the approaches do not meet current design standards and may make entering US 93 difficult because of the intersection skew and slope. Centerline and shoulder rumble strips are present within the study area. The centerline rumble strips cover about 79-percent in three separate segments: milepost 93 to Stoner Loop, Walker Lane to just north of Quarry Drive, and Seven Row to Montana 82. Shoulder rumble strips only cover about 24-percent of the study area in two segments from Deep Bay Drive to about a half mile north of milepost 95 and from Happy Hollow to Montana 82. There are about 2-miles of passing zones for southbound traffic and 1.4-miles for northbound traffic accounting for 15-percent of the study segment.

There are broken segments of pedestrian facilities throughout the study area. In the Lakeside region a painted shoulder separates pedestrian traffic from motor vehicles from Stoner Creek Road to Larchwood Lane where there are no pedestrian facilities on the west side of the road. On the east side of US 93 there are pedestrian facilities that begin at the intersection with Adams Street and continue to just south of Docs Road or the Short Branch Bar. A total of two marked pedestrian crossings exists in Lakeside for the intersections of Adams Street where there is an RRFB and Bierney Creek Road. Pedestrian facilities around Somers exist on the east side of the roadway in the form of the Great Northern Historical trail from Old Highway 93 to Somers Road and then at the intersection with Montana 82. There are marked pedestrian crossings at the intersection with Montana 82, at the Somers Fishing Access, and just south of the fishing access. The two crossings near the fishing access have RRFBs installed and the one at the Montana 82 intersection is signalized.

Average annual daily traffic (AADT) volume from 2022 ranges from almost 12,500 vehicles near Somers and the intersection with Montana 82 to about 6,100 vehicles south of Lakeside. Peak AADT from the past 5 years was primarily observed in 2021, except near Somers where the peak occurred in 2019. On average the whole study area has seen a 4-percent increase in traffic volumes, however the volume patterns for south of Lakeside, Lakeside to Somers and Somers to Montana 82 follow different patterns over the past 5 years. During the COVID-19

pandemic south of Lakeside saw about a 3-percent increase, Somers to Montana 82 saw a 22-percent increase, and Lakeside to Somers saw a 2-percent decrease in traffic volumes. All three segments saw about a 15.6 percent increase in traffic volumes from 2020 to 2021. South of Lakeside to Somers saw an 11.5-percent decrease on average in traffic from 2021 to 2022. It should be noted that traffic volumes on average were 44-percent higher during the summer months throughout the study area but could be as much as 53-percent higher some in areas.

The roadside environment starts out as rural and then transitions rapidly to the more urban environment of Lakeside. After the main portion of Lakeside, the roadside environment can be described as rural suburban until entering the region of Somers which resembles a rural town. The study then ends in the rural environment outside the suburban area of the City of Kalispell. Land development in the rural area south of Lakeside has sporadic residential development but primarily consists of recreational development. The main portion of Lakeside from Stoner Loop to Bierney Creek Road is a mix of commercial with some institutional and recreational land use. Between Lakeside and Somers, the rural suburban type environment primarily consists of residential homes of varying density with some commercial, recreational, and industrial development at times such as the alpine coaster, some stores and hotels, and storage units. Near Somers and through the Somers area, the land use is a mix of residential and recreational development with some commercial. There are hotels, boat docks and launches, and personal residences. At the end of the study there is agricultural land use with a mix of industrial and commercial in the form of a hotel and gas station. Development continues in Flathead County, and it is anticipated that the Lakeside and Somers regions will continue to see growth. During the summer the population substantially increases because of the recreational opportunities on Flathead Lake. Although not as much of a draw during the winter Blacktail Mountain Ski Area and Flathead Lake also cause an influx of recreationalists.

Speed Zone History

The majority of the study area was last reviewed in 2007 with the 55-mph and 45-mph speed zones south of Lakeside, the 35-mph speed zone through Lakeside, the 45-mph and 55-mph speed zones north of Lakeside, 45-mph speed zone through Somers, and previously posted statutory 65-mph speed zones. MDT recommended and the Transportation Commission approved the following speed limit changes:

A 55-mph speed limit beginning at the existing approved in 2000 45/55-mph transition north of Lakeside and extending north approximately 3.37-miles.

A 55-mph speed limit beginning approximately 525-feet north of Seven Row Road and continuing north to the intersection with MT-82, an approximate distance of 1.08-miles.

No other changes were recommended or approved. Below is the existing posted speed limit configuration:

A 70-mph speed limit beginning at milepost 93 and continuing north to a point approximately 790-feet north of milepost 97, an approximate distance of 4.15-miles.

A 55-mph speed limit beginning approximately 790-feet north of milepost 97 and continuing north to a point approximately 690-feet south of Blacktail Road, an approximate distance of 2645-feet.

A 45-mph speed limit beginning approximately 690-feet south of Blacktail Road and continuing to a point approximately 80-feet north of Blacktail Road, an approximate distance of 765-feet.

A 35-mph speed limit beginning approximately 80-feet north of Blacktail Road and continuing north to a point approximately 210-feet south of Old Orchard Road, an approximate distance of 2535-feet.

A 45-mph speed limit beginning approximately 210-feet south of Old Orchard Road and continuing north to a point approximately 200-feet north of Larchwood Road, an approximate distance of 1295-feet.

A 55-mph speed limit beginning approximately 200-feet north of Larchwood Road and continuing to a point approximately 320-feet north of Quarry Road, an approximate distance of 3.38-miles.

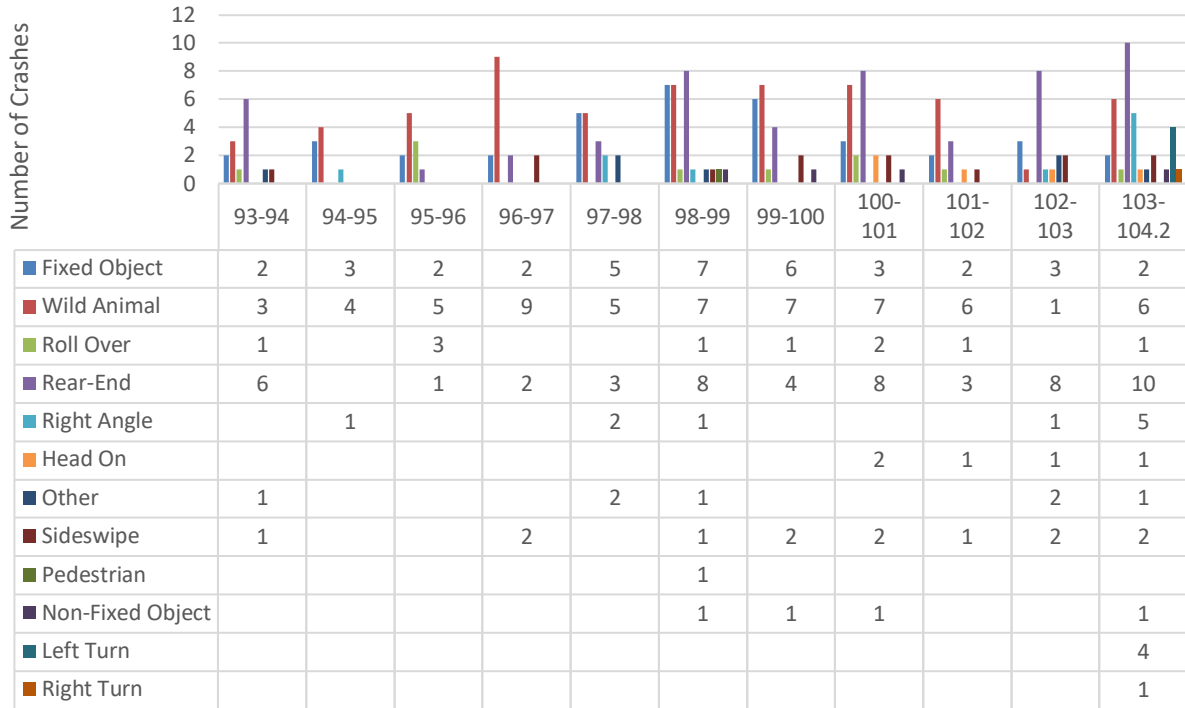
A 45-mph speed limit beginning approximately 320-feet north of Quarry Road and continuing north to a point approximately 600-feet north of Seven Row Road, an approximate distance of 1.55-miles.

A 55-mph speed limit beginning approximately 600-feet north of Seven Row Road and continuing north to the intersection with Montana 82, an approximate distance of 4235-feet.

Crash and Citation History

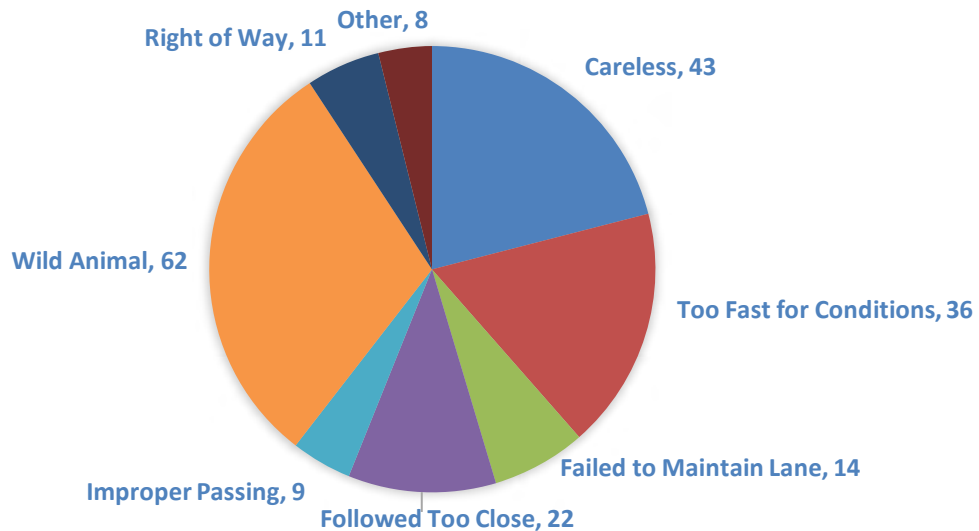
Crash history was reviewed for a three-year period from January 1, 2019 to December 31, 2021. A total of 205 crashes were reported along the 11-mile study segment – 13 suspected serious injury, 33 suspected minor injury, 12 possible injury, 144 no apparent injury, and 3 unknown injury crashes. A majority of the crashes were recorded from milepost 98 to milepost 99 (28 crashes) which includes some of Lakeside, milepost 100 to milepost 101 (25 crashes) between Lakeside and Somers, and in the last mile of the study (34 crashes) which includes the intersection with Montana 82. Wild animal crashes were the most common (60) followed by rear-ended crashes (53) and fixed-object crashes (37). There were also greater than 10 crashes considered roll-over, right-angle, and sideswipe. Of these 205 crashes, about a third occurred under adverse road conditions (ice/frost, snow, slush, wet). There were 55 crashes related to intersections or driveways. Based on officer narratives, the intersections with the highest number of recorded crashes were Montana 82 (11), Marco Bay (3), and Deer Creek (2). A total of 14 crashes throughout the study involved pedestrians.

Crashes 2019-2021

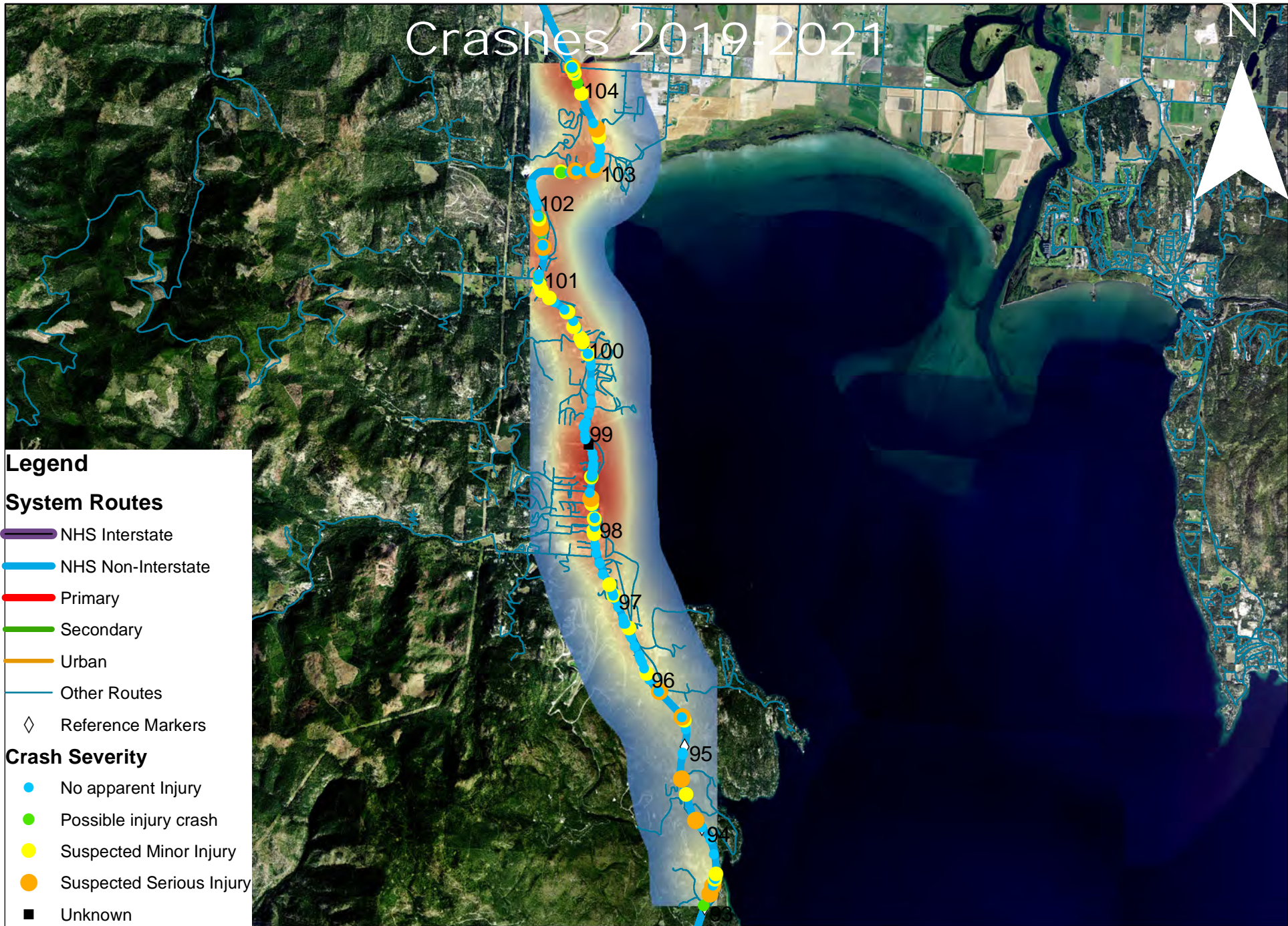


Speed played a role in at least 36 of the recorded crashes. The primary contributing circumstance was wild animals in the roadway (62) followed by careless driving (43). Of the 36 crashes where the contributing circumstance was driving too fast for conditions all but three occurred under adverse road conditions (ice/frost, snow, slush, wet). Other contributing circumstances of note include following too close (22), right-of way violations (11), and improper passing (9).

CONTRIBUTING CIRCUMSTANCES

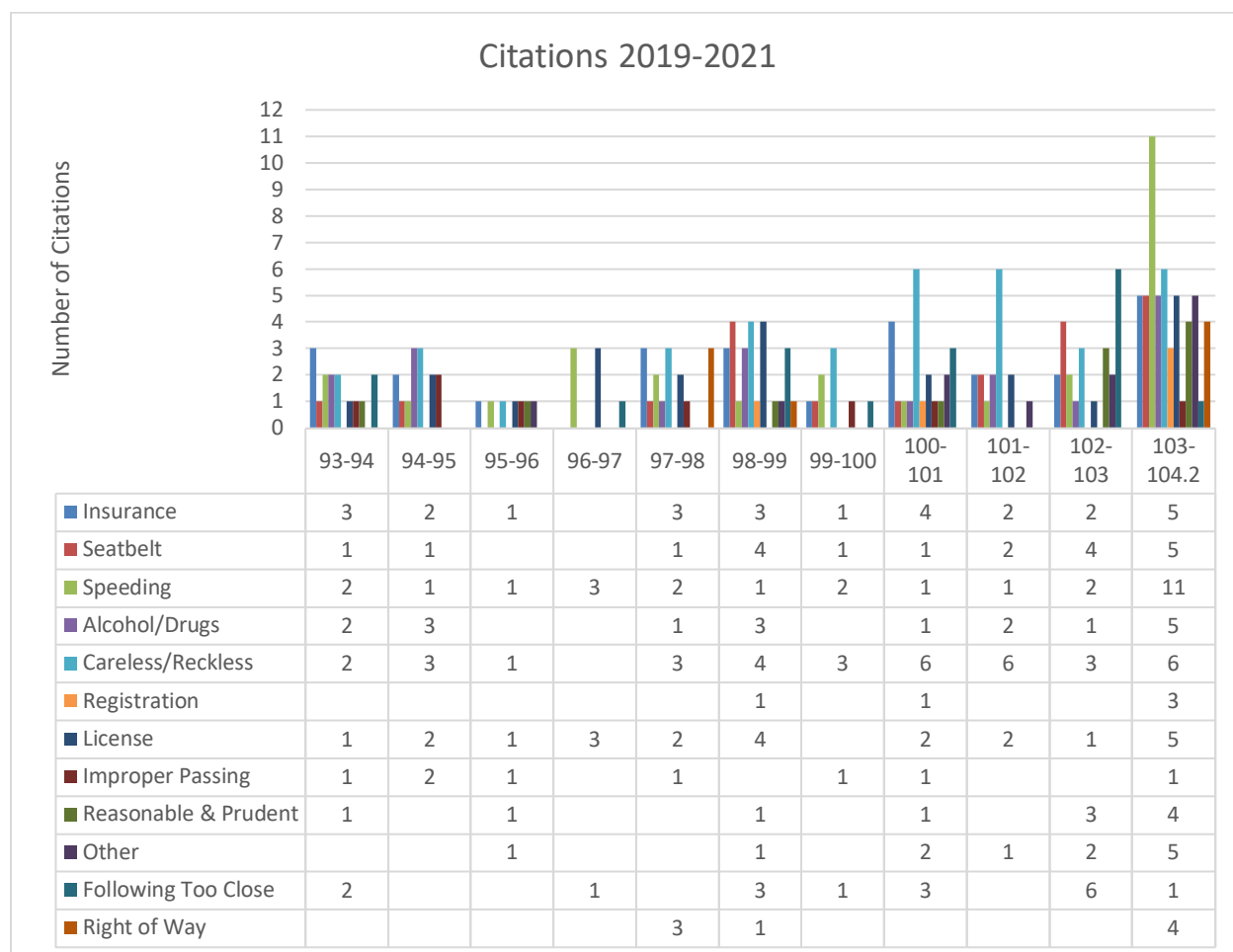


Crashes 2019-2021



0 0.75 1.5 3 4.5 6 Miles

During the same period, the Montana Highway Patrol made 153 traffic stops and issued 212 citations. Thirteen percent (27 of 212) of the citations involved speeding throughout the study segment. Speeding citations were relatively evenly distributed throughout the study with about two occurring per mile except in approximately the last mile of the study where there were 11 speeding citations. On average speeding citations were written for about 13-mph above the posted speed limit. Speeding citations were about 1-mph to 2-mph higher on average in the 55-mph and 45-mph speed zones. Secondary offences make up about 35-percent of the citations. Excluding speeding citations and secondary offences the peak number of citations occurred in the last mile of the study (26) with elevated citations from milepost 98 to milepost 99 (13), milepost 100 to milepost 101 (14), and milepost 102 to milepost 103 (15).



Citations 2019-2021



Legend

- Citations

System Routes

- NHS Interstate
- NHS Non-Interstate
- Primary
- Secondary
- Urban
- Other Routes
- ◇ Reference Markers

0 0.75 1.5 3 4.5 6 Miles

Speeding Citations, 2019-2021



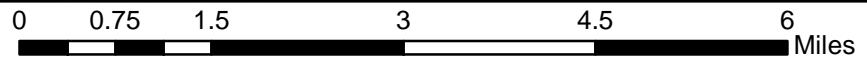
Legend

Citations

- Careless
- Following Too Close
- Improper Passing
- Reasonable & Prudent
- Reckless
- Speeding

System Routes

- NHS Interstate
- NHS Non-Interstate
- Primary
- Secondary
- Urban
- Other Routes
- Reference Markers



Travel Speed Characteristics

Vehicular travel speeds were sampled directionally at 24 locations to develop a speed profile of the 85th percentile speeds and the pace of the traffic stream from which to evaluate the speed limit configuration of US 93. The following spot speed sample statistics begin approximately 500-feet north of the Flathead/Lake County line with a 70-mph speed limit and continues north just past the 55/45-mph speed limit transition just before the intersection of US 93 and MT 82. Data was collected in August.

Location	50th Percentile Speed	85th Percentile Speed	Pace of Traffic Stream
470-ft North of Flathead/Lake County Line (RP 0+0.089) 70-mph Speed Zone	64-mph NB 64-mph SB	70-mph NB 70-mph SB	(59-mph – 69-mph) 53% (61-mph – 71-mph) 51%
1,150-ft North of Milepost 94 (RP 0+0.687) 70-mph Speed Zone	62-mph NB 67-mph SB	69-mph NB 73-mph SB	(57-mph – 67-mph) 59% (62-mph – 72-mph) 63%
On Milepost 95 (RP 1+0.468) 70-mph Speed Zone	60-mph NB 63-mph SB	67-mph NB 70-mph SB	(55-mph – 65-mph) 49% (58-mph – 68-mph) 54%
2,400-ft North of Milepost 95 (RP 1+0.927) 70-mph Speed Zone	63-mph NB 61-mph SB	70-mph NB 68-mph SB	(57-mph – 67-mph) 55% (56-mph – 66-mph) 54%
On Milepost 96 (RP 2+0.491) 70-mph Speed Zone	65-mph NB 63-mph SB	71-mph NB 68-mph SB	(60-mph – 70-mph) 59% (57-mph – 67-mph) 62%
2,400-ft South of Milepost 97 (RP 3+0.021) 70-mph Speed Zone	66-mph NB 66-mph SB	72-mph NB 73-mph SB	(61-mph – 71-mph) 62% (62-mph – 72-mph) 58%
770-ft North of Milepost 97 (RP 3+0.617) 70/55-mph Speed Zone	56-mph NB 59-mph SB	63-mph NB 65-mph SB	(52-mph – 62-mph) 53% (53-mph – 63-mph) 60%
570-ft South of Blacktail Rd (RP 4+0.138) 55/45-mph Speed Zone	46-mph NB 48-mph SB	52-mph NB 54-mph SB	(41-mph – 51-mph) 64% (42-mph – 52-mph) 59%
560-ft North of Adams St (RP 4+0.517) 35-mph Speed Zone	31-mph NB 29-mph SB	36-mph NB 34-mph SB	(25-mph – 35-mph) 66% (25-mph – 35-mph) 61%
140-ft South of Lakeside Blvd (RP 4+0.754) 45/35-mph Speed Zone	37-mph NB 33-mph SB	42-mph NB 37-mph SB	(32-mph – 42-mph) 67% (27-mph – 37-mph) 73%
180-ft North of Larchwood Ln (RP 5+0.005) 55/45-mph Speed Zone	45-mph NB 46-mph SB	51-mph NB 52-mph SB	(40-mph – 50-mph) 61% (41-mph – 51-mph) 64%

600-ft North of Larchwood Ln (RP 5+0.246) 55-mph Speed Zone	51-mph NB 53-mph SB	56-mph NB 58-mph SB	(46-mph – 56-mph) 65% (49-mph – 59-mph) 65%
400-ft North of Caroline Point Rd (RP 5+0.833) 55-mph Speed Zone	54-mph NB 54-mph SB	59-mph NB 59-mph SB	(48-mph – 58-mph) 69% (49-mph – 59-mph) 72%
On Milepost 100 (RP 6+0.498) 55-mph Speed Zone	56-mph NB 55-mph SB	61-mph NB 60-mph SB	(51-mph – 61-mph) 72% (50-mph – 60-mph) 71%
120-ft South of Marco Bay Rd (RP 6+0.970) 55-mph Speed Zone	55-mph NB 56-mph SB	60-mph NB 60-mph SB	(49-mph – 59-mph) 74% (51-mph – 61-mph) 73%
80-ft North of Milepost 101 (RP 7+0.512) 55-mph Speed Zone	54-mph NB 54-mph SB	58-mph NB 59-mph SB	(49-mph – 59-mph) 71% (50-mph – 60-mph) 67%
140-ft South of Whitey-Lamb Rd (RP 7+0.941) 55-mph Speed Zone	55-mph NB 56-mph SB	60-mph NB 60-mph SB	(50-mph – 60-mph) 70% (51-mph – 61-mph) 70%
500-ft North of Quarry Dr (RP 8+0.360) 55/45-mph Speed Zone	51-mph NB 49-mph SB	58-mph NB 54-mph SB	(45-mph – 55-mph) 63% (43-mph – 53-mph) 70%
480-ft South of Landing Trail (RP 8+0.674) 45-mph Speed Zone	46-mph NB 48-mph SB	50-mph NB 51-mph SB	(40-mph – 50-mph) 80% (42-mph – 52-mph) 84%
650-ft North of Landing Trail (RP 8+0.886) 45-mph Speed Zone	47-mph NB 44-mph SB	51-mph NB 48-mph SB	(41-mph – 51-mph) 80% (38-mph – 48-mph) 78%
750-ft South of Milepost 103 (RP 9+0.271) 45-mph Speed Zone	43-mph NB 43-mph SB	47-mph NB 48-mph SB	(38-mph – 48-mph) 77% (38-mph – 48-mph) 68%
330-ft South of Somers Rd (RP 9+0.489) 45-mph Speed Zone	47-mph NB 48-mph SB	52-mph NB 53-mph SB	(42-mph – 52-mph) 74% (43-mph – 53-mph) 73%
440-ft North of Seven Row Rd (RP 9+0.792) 55/45-mph Speed Zone	50-mph NB 51-mph SB	54-mph NB 58-mph SB	(44-mph – 54-mph) 75% (45-mph – 55-mph) 58%
120-ft South of Marco Bay Rd (RP 10+0.140) 55-mph Speed Zone	53-mph NB 57-mph SB	57-mph NB 63-mph SB	(47-mph – 57-mph) 70% (52-mph – 62-mph) 64%

Contextual Characteristics

Recently, the National Cooperative Highway Research Program (NCHRP) completed new research for setting appropriate speed limits on rural and urban streets. *NCHRP report 17-76: Development of a Posted Speed Limit Setting Procedure and Tool* considers contextual aspects of the roadway environment and how it influences operating speed and safety (crashes). The procedure of the tool uses fact-based decision rules that consider both driver speed choice and general safety associated with the roadway. This means the roadway classification, speed, AADT, and other contextual aspects are accounted for when determining an appropriate speed limit.

Four segments were created for analysis: South of Lakeside, Lakeside, Between Lakeside and Somers and Somers. The entire study area is rural except for sections inside Lakeside and Somers and have appropriate typical section for most of the study area.

South of Lakeside, approximately 4.5 miles, the roadway is primarily two lanes, 2-foot shoulders and a slightly elevated crash rate between milepost 93 and 97. Considering that the 2-foot shoulder does not meet current design standards and an elevated crash rate, the closest 50th percentile should be used when determining an appropriate speed limit.

Within the area of Lakeside, approximately 0.6 miles, there is a slightly elevated injury crash rate at 44% higher than the Highway Safety Information System (HSIS) database average. Pedestrians were observed near the roadway and there are currently two pedestrian crossings with RRFB's in Lakeside. There are large sections without adequate pedestrian facilities along this portion of US 93. There is also an elevated number of approaches through this section of Lakeside. Based on these facts a speed limit based on the 50th percentile would be recommended.

Between Lakeside and Somers, an approximate distance of 3.8 miles, there are primarily two-lanes and 2-foot shoulders. There is an elevated crash rate along this section. Based on the shoulder width of 2-feet and an elevated crash rate, it is recommended that the speed limit be set to reflect the 50th percentile speeds.

Within the area of Somers, approximately 1.0 mile, there are primarily 2-lanes with a center two-way left-turn lane and 2-8-foot shoulder widths. There are no sidewalks present along this section, however there is the Great Northern Historical pedestrian trail located on the south side of the roadway which is separated and has a buffer from the roadway. The northern section of this roadway has no sidewalks or pedestrian facilities. There are two marked pedestrian crossings with RRFB's in the area of Somers. Based on the lack of pedestrian facilities along the northern sections of the roadway and observed pedestrians in the area, it is recommended that the speed limit be set to reflect the 50th percentile speeds.

Conclusions and Recommendations

A review of the spot speed samples shows that the prevailing speeds along US 93 match with the set speed limits. The 85th percentile speeds and upper limits of the pace are for the most part within ± 3 -mph of the 70-mph and 35-mph speed limits. The 85th percentile speeds and upper limits of the pace are for the most part within ± 6 -mph of the 55-mph and 45-mph speed limits. In total, 80-percent of the stations showed speeds with ± 5 -mph of the speed limit. Furthermore, approximately 64-percent of drivers were on average observed traveling within 10-mph of each other.

Although prevailing speeds indicate appropriately set speed limits, roadway context indicates these speeds are slightly elevated above what should be reasonable and prudent. Based on lack of pedestrian facilities, observed pedestrians and higher than average crash rates for Lakeside, it would be advisable to use the closest 50th percentile for these two communities. For Lakeside this would result in a 5-mph speed limit reduction to 30-mph. Within the area of Somers this would result in a no-change to the existing speed limit.

There is an elevated crash rate south of Lakeside, and in conjunction with inadequate shoulder width, the closest 50th percentile should be used to determine an appropriate speed limit. This would result in a 5-mph speed limit reduction from the statutory 70-mph to 65-mph. This would create a consistent speed limit with the 65-mph speed limit that ends at milepost 93. Additionally, a 70-mph speed zone based on NCHRP guidance should be at a minimum 6.2-miles in length which this segment length of 4.15-miles does not currently meet.

There is an elevated crash rate in the section between Lakeside and Somers, and in conjunction with inadequate shoulder width, the closest 50th percentile should be used. This would result in a no-change to the 55-mph speed limit for this section.

Currently the transitions to the north and south of Lakeside are not to current MDT guidance. The 45-mph transition to the south of Lakeside is currently 765-feet and we recommend a length of 1,600-feet. The 45-mph transition to the north of Lakeside is 1,295-feet, and we recommend a length of 1,600-feet.

Based upon these observations and *NCHRP report 17-76: Development of a Posted Speed Limit Setting Procedure and Tool* MDT recommends lowering the existing speed limit in the Lakeside area and to the south of Lakeside. MDT recommends a 5-mph speed reduction to the statutory 35-mph speed limit to 30-mph with no change in length from the original 35-mph speed zone. MDT recommends extending both 45-mph transitional zones on either side of Lakeside to meet current MDT best practices and shifting the 55-mph transitional zone on the southside of Lakeside to accommodate the proposed 45-mph transitional zone being lengthened. MDT also recommends a 5-mph speed reduction to the statutory 70-mph speed limit to 65-mph. Citation data indicated law enforcement is present and targeting those motorists traveling outside the norm.

We recommend the following speed limits:

A 65-mph speed limit beginning at milepost 93 (straight-line station 000+00) and continuing north for an approximate distance of 4.00-miles, approximately on milepost 97 (straight-line station 183+50)

A 55-mph speed limit beginning at milepost 97 (straight-line station 183+50) and continuing north for an approximate distance of 2,550-feet, approximately 350-feet north of the intersection of Political Hill Road (straight-line station 209+00)

A 45-mph speed limit beginning approximately 350-feet north of the intersection with Political Hill Road (straight-line station 209+00) and continuing north for an approximate distance of 1,600-feet, approximately 80 feet north of the intersection with Blacktail Road (straight-line station 225+00)

A 30-mph speed limit beginning approximately 80-feet north of the intersection with Blacktail Road (straight-line station 225+00) and continuing north for an approximate distance of 2,535-feet, approximately 210 feet south of the intersection with Old Orchard Road (straight-line station 251+50)

A 45-mph speed limit beginning approximately 210-feet south of the intersection with Old Orchard Road (straight-line station 251+50) and continuing north for an approximate distance of 1,600-feet, approximately 150-feet north of the intersection with Walker Lane (straight-line station 264+25)

A 55-mph speed limit beginning approximately 150-feet north of the intersection with Walker Lane (straight-line station 264+25) and continuing north for an approximate distance of 3.35-miles, approximately 320-feet north of Quarry Road (straight-line station 441+50)

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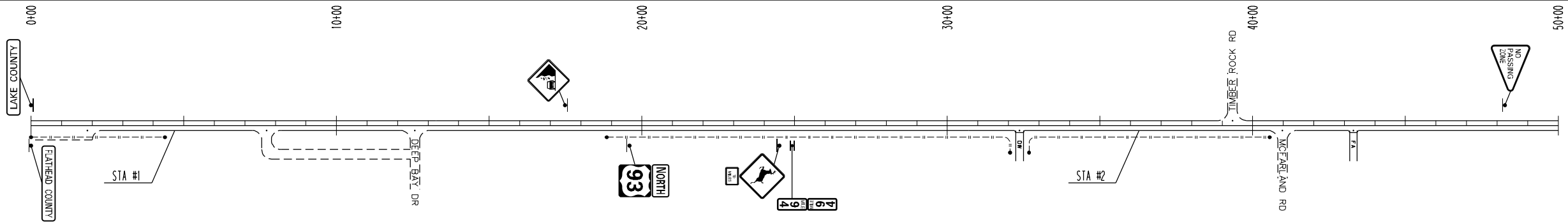
Gabe B. Priebe, P.E. – Traffic & Safety Engineer
Rebecca Franke, P.E. – Missoula District Traffic Engineer
Brenden Borges, P.E. – Investigations Lead Worker

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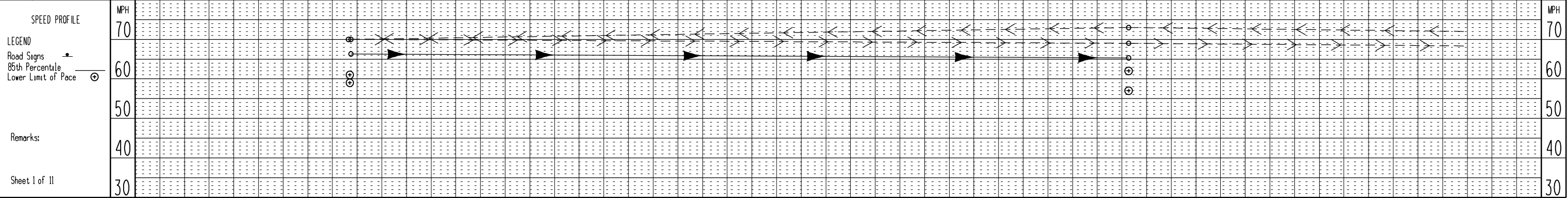
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 0+00 to 50+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



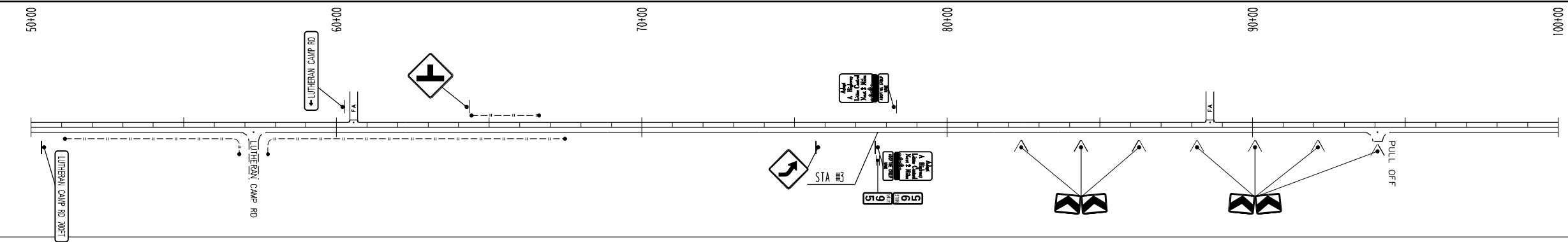
Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	SB 4370 VEH NB 4121 VEH
Observed Speed - Pace	61-71 (51%) 59-69 (53%)
85th Percentile	70 MPH 70 MPH
50th Percentile	64 MPH 64 MPH
Existing Speed Zone	

SB	NB
4282 VEH	4058 VEH
62-72 (63%)	57-67 (59%)
73 MPH	69 MPH
67 MPH	62 MPH



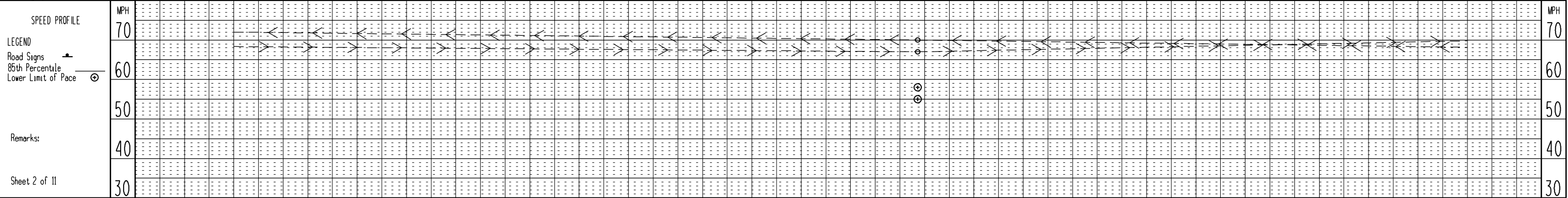
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 50+00 to 100+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



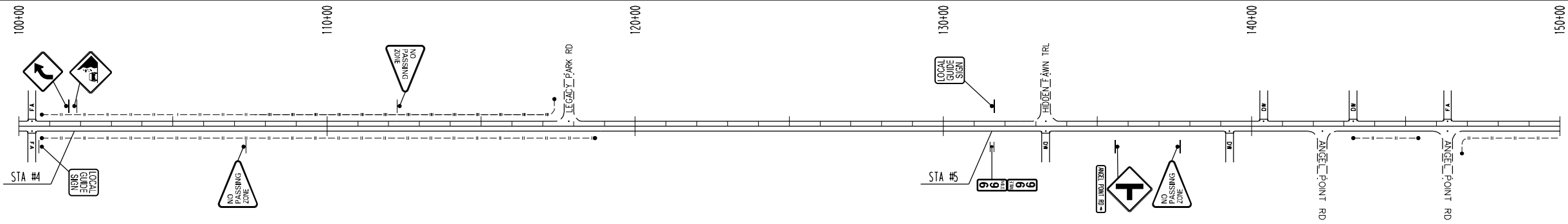
Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	SB 3895 VEH NB 3853 VEH
Observed Speed - Pace	58-68 (54%) 55-65 (49%)
85th Percentile	70 MPH 67 MPH
50th Percentile	63 MPH 60 MPH
Existing Speed Zone	

SB	NB
3895 VEH	3853 VEH
58-68 (54%)	55-65 (49%)
70 MPH	67 MPH
63 MPH	60 MPH

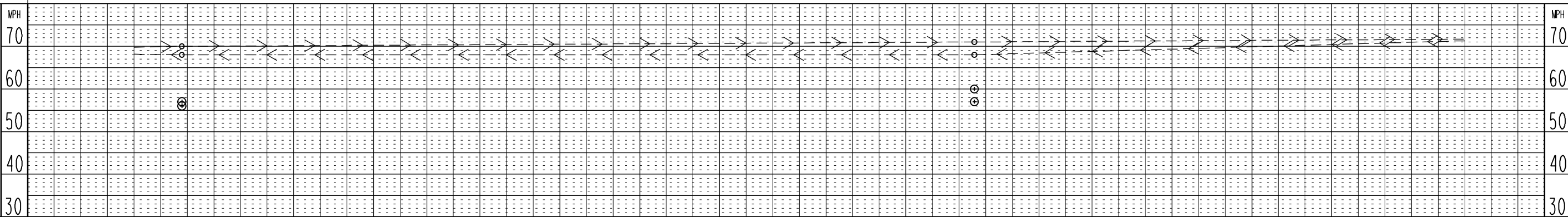


STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 100+00 to 150+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



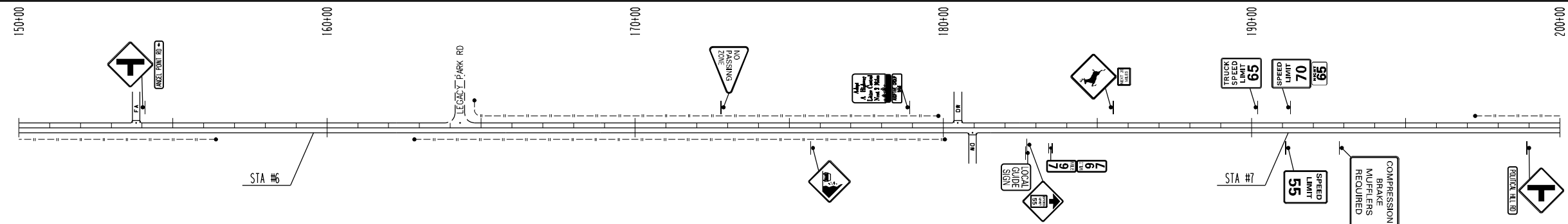
Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	SB: 3883 VEH, NB: 3979 VEH
Observed Speed - Pace	SB: 56-66 (54%), NB: 57-67 (55%)
85th Percentile	SB: 68 MPH, NB: 70 MPH
50th Percentile	SB: 61 MPH, NB: 63 MPH
Existing Speed Zone	



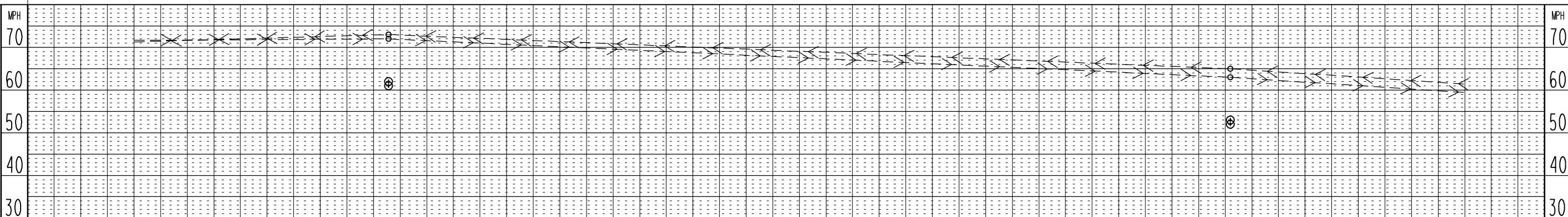
Sheet 3 of 11

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 150+00 to 200+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



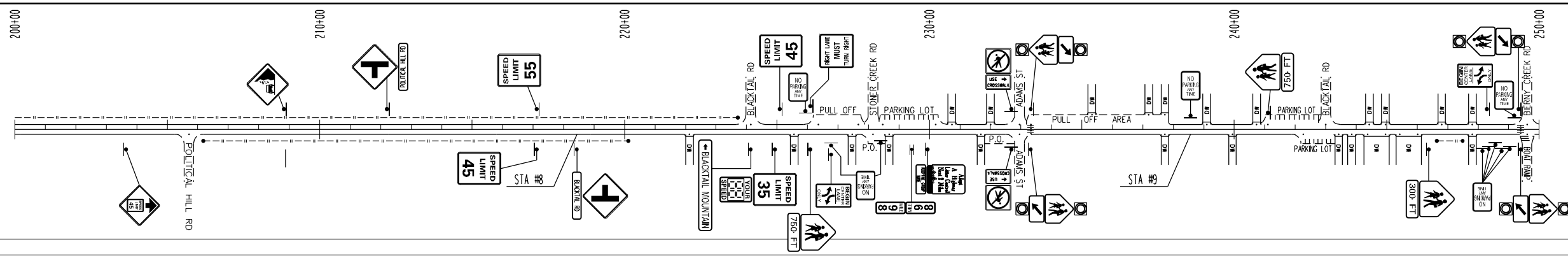
Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	SB: 4568 VEH, NB: 4335 VEH
Observed Speed - Pace	SB: 62-72 (58%), NB: 61-71 (62%)
85th Percentile	SB: 73 MPH, NB: 72 MPH
50th Percentile	SB: 66 MPH, NB: 66 MPH
Existing Speed Zone	



Sheet 4 of 11

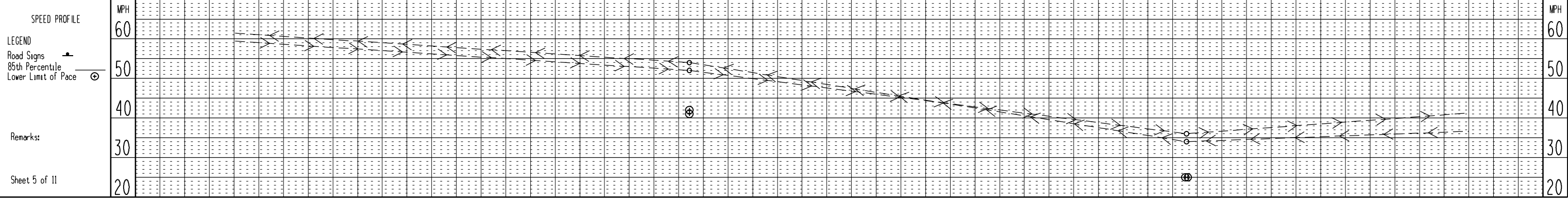
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 200+00 to 250+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	
Observed Speed - Pace	
85th Percentile	
50th Percentile	
Existing Speed Zone	

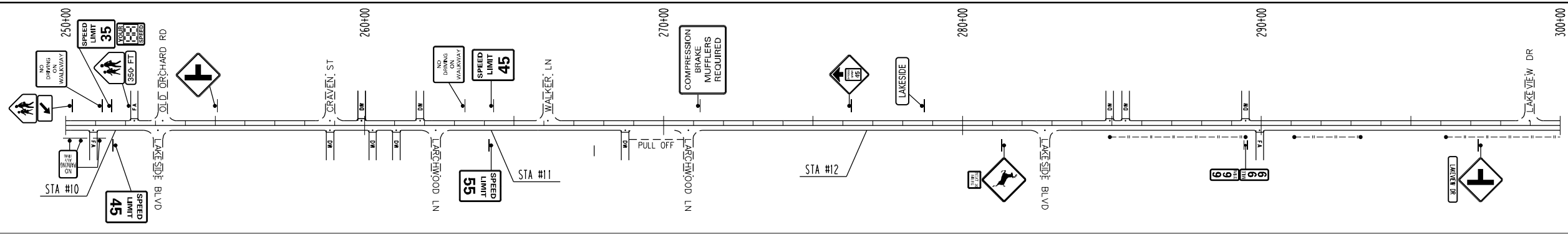
	SB	NB	SB	NB
Number of Vehicles Observed	4479 VEH	4872 VEH	5476 VEH	5103 VEH
Observed Speed - Pace	42-52 (59%)	41-51 (64%)	25-35 (61%)	25-35 (66%)
85th Percentile	54 MPH	52 MPH	34 MPH	36 MPH
50th Percentile	48 MPH	46 MPH	29 MPH	31 MPH



Remarks:
Sheet 5 of 11

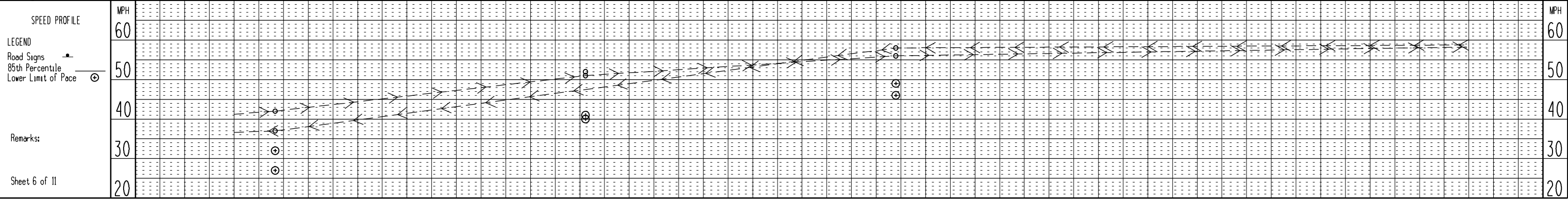
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 250+00 to 300+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	
Observed Speed - Pace	
85th Percentile	
50th Percentile	
Existing Speed Zone	

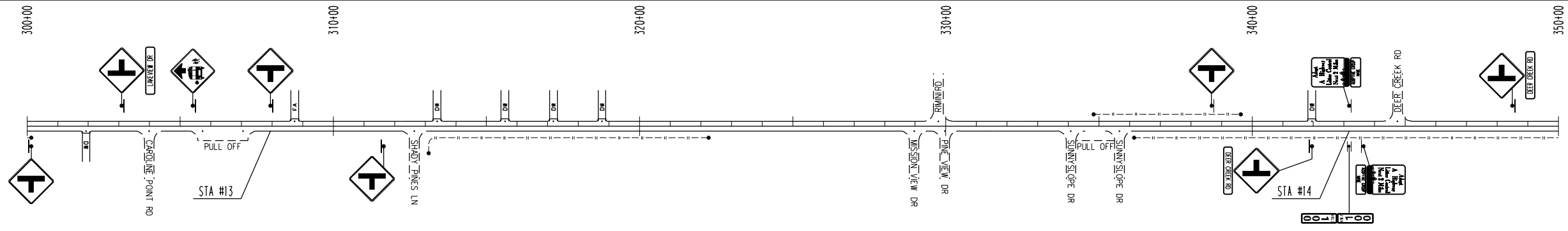
	SB	NB	SB	NB	SB	NB
Number of Vehicles Observed	6395 VEH	7374 VEH	7016 VEH	6674 VEH	5674 VEH	5579 VEH
Observed Speed - Pace	27-37 (73%)	32-42 (67%)	41-51 (64%)	40-50 (61%)	49-59 (65%)	46-56 (65%)
85th Percentile	37 MPH	42 MPH	52 MPH	51 MPH	58 MPH	56 MPH
50th Percentile	33 MPH	37 MPH	46 MPH	45 MPH	53 MPH	51 MPH



Remarks:
Sheet 6 of 11

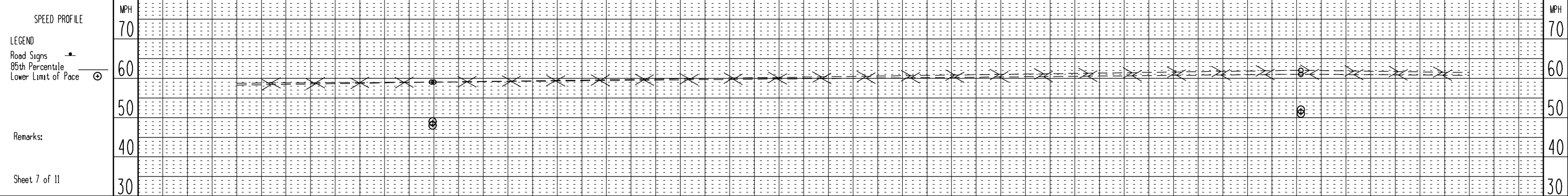
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 300+00 to 350+00
Scale 1" = 100 FEET
Date AUGUST 2023



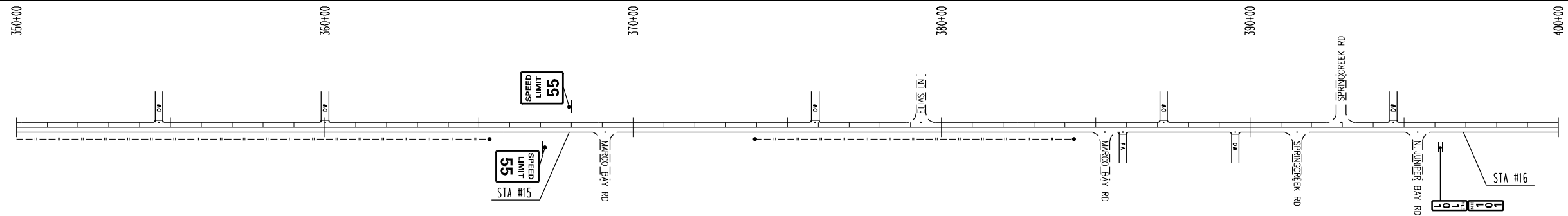
Roadway Width
Number of Striped Lanes
Type of Divider
Average Daily Traffic
Direction of Traffic
Number of Vehicles Observed
Observed Speed - Pace
85th Percentile
50th Percentile
Existing Speed Zone

	SB	NB	SB	NB
Number of Vehicles Observed	7610 VEH	7354 VEH	8076 VEH	8401 VEH
Observed Speed - Pace	49-59 (72%)	48-58 (69%)	50-60 (71%)	51-61 (72%)
85th Percentile	59 MPH	59 MPH	60 MPH	61 MPH
50th Percentile	54 MPH	54 MPH	55 MPH	56 MPH



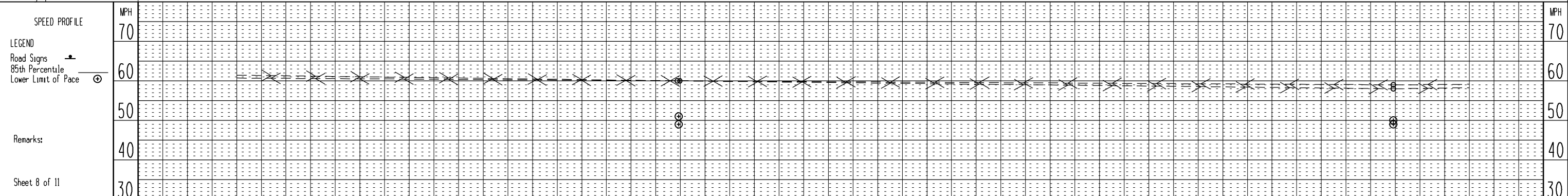
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 350+00 to 400+00
Scale 1" = 100 FEET
Date AUGUST 2023



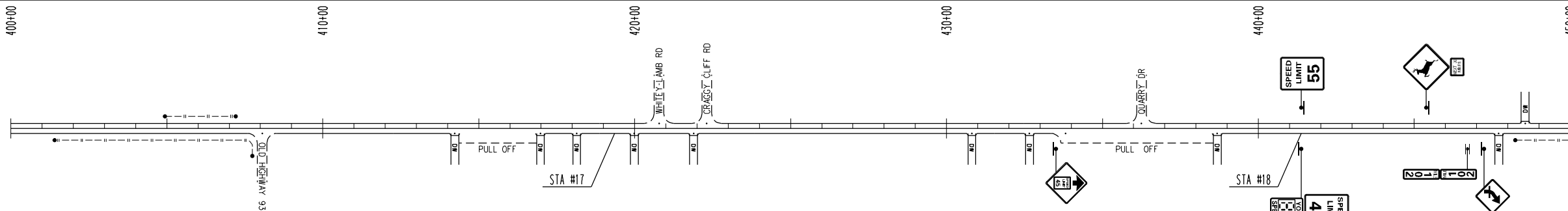
Roadway Width
Number of Striped Lanes
Type of Divider
Average Daily Traffic
Direction of Traffic
Number of Vehicles Observed
Observed Speed - Pace
85th Percentile
50th Percentile
Existing Speed Zone

	SB	NB	SB	NB
Number of Vehicles Observed	7707 VEH	7127 VEH	7467 VEH	6961 VEH
Observed Speed - Pace	51-61 (73%)	49-59 (74%)	50-60 (67%)	49-59 (71%)
85th Percentile	60 MPH	60 MPH	59 MPH	58 MPH
50th Percentile	56 MPH	55 MPH	54 MPH	54 MPH



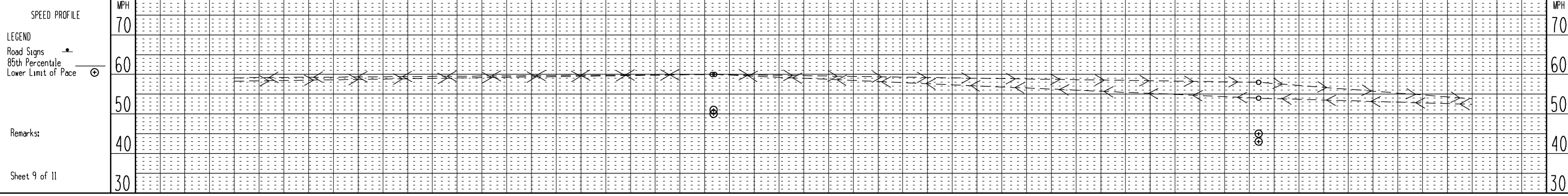
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 400+00 to 450+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



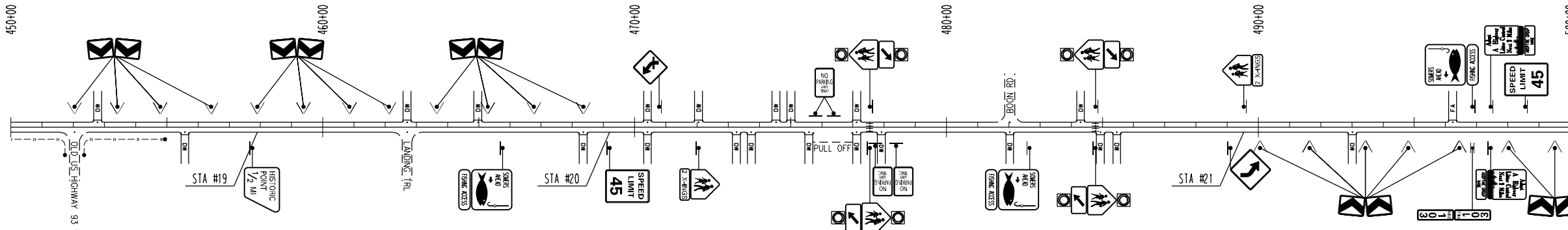
Roadway Width
Number of Striped Lanes
Type of Divider
Average Daily Traffic
Direction of Traffic
Number of Vehicles Observed
Observed Speed - Pace
85th Percentile
50th Percentile
Existing Speed Zone

	SB	NB	SB	NB
Number of Vehicles Observed	7309 VEH	6847 VEH	8600 VEH	8206 VEH
Observed Speed - Pace	51-61 (70%)	50-60 (70%)	43-53 (70%)	45-55 (63%)
85th Percentile	60 MPH	60 MPH	54 MPH	58 MPH
50th Percentile	56 MPH	55 MPH	49 MPH	51 MPH



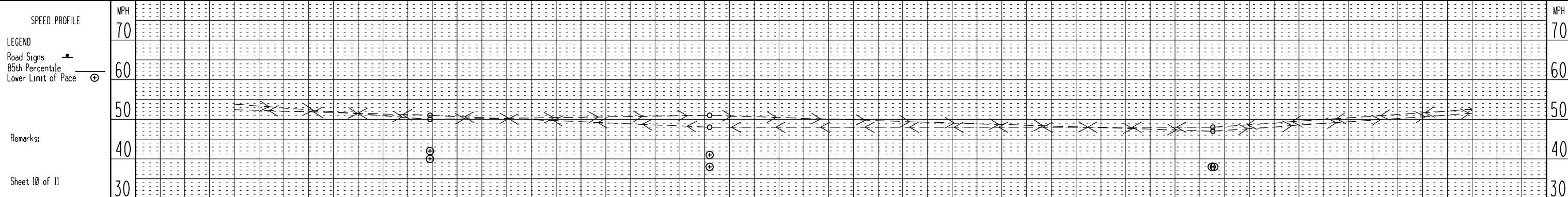
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 450+00 to 500+00
Scale 1 UNIT = 100 FEET
Date AUGUST 2023



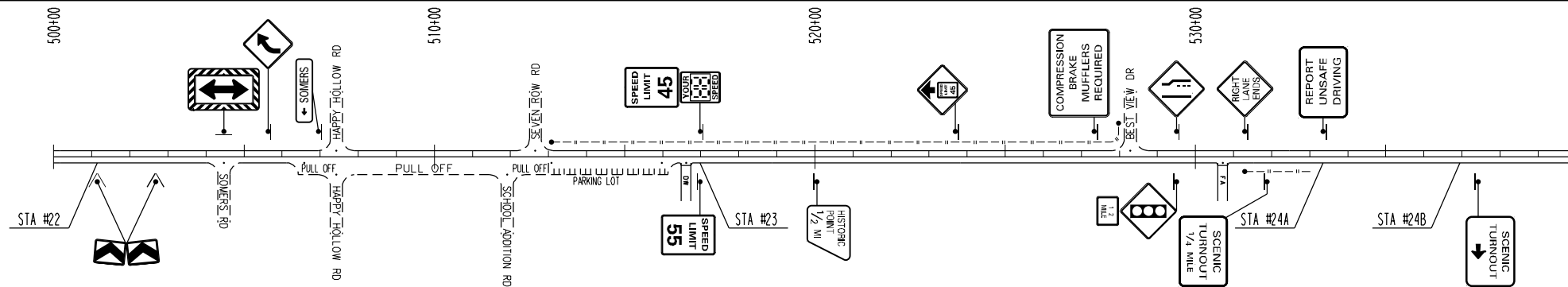
Roadway Width
Number of Striped Lanes
Type of Divider
Average Daily Traffic
Direction of Traffic
Number of Vehicles Observed
Observed Speed - Pace
85th Percentile
50th Percentile
Existing Speed Zone

	SB	NB	SB	NB	SB	NB
Number of Vehicles Observed	8730 VEH	7662 VEH	8324 VEH	8293 VEH	9260 VEH	7827 VEH
Observed Speed - Pace	42-52 (84%)	40-50 (80%)	38-48 (78%)	41-51 (80%)	38-48 (68%)	38-48 (77%)
85th Percentile	51 MPH	50 MPH	48 MPH	51 MPH	48 MPH	47 MPH
50th Percentile	48 MPH	46 MPH	44 MPH	47 MPH	43 MPH	43 MPH



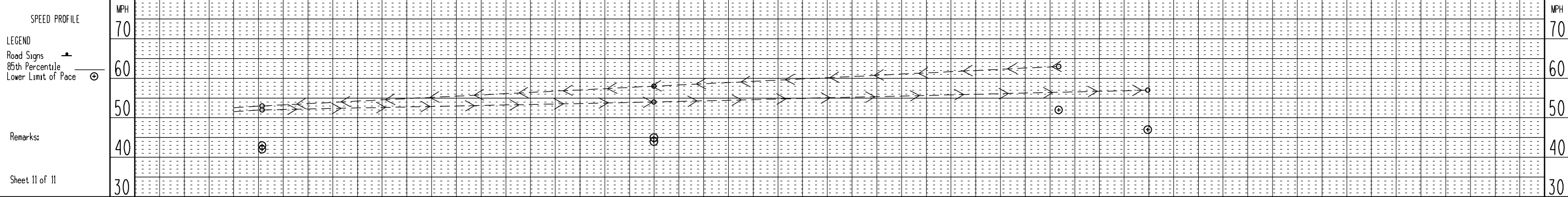
STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location LAKESIDE
County FLATHEAD COUNTY
Roadway US 93 (N-5)
Sta from 500+00 to 540+00
Scale UNIT = 100 FEET
Date AUGUST 2023



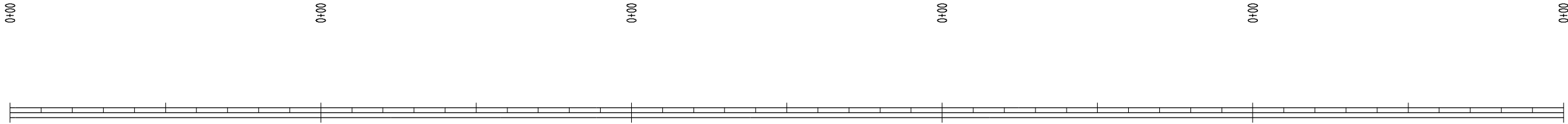
Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	
Observed Speed - Pace	
85th Percentile	
50th Percentile	
Existing Speed Zone	

	SB	NB	SB	NB	SB	NB
Number of Vehicles Observed	7263 VEH	6820 VEH	8628 VEH	8128 VEH	9052 VEH	8614 VEH
Observed Speed - Pace	43-53 (72%)	42-52 (75%)	45-55 (58%)	44-54 (75%)	52-62 (64%)	47-57 (70%)
85th Percentile	53 MPH	52 MPH	58 MPH	54 MPH	63 MPH	57 MPH
50th Percentile	48 MPH	47 MPH	51 MPH	50 MPH	57 MPH	53 MPH

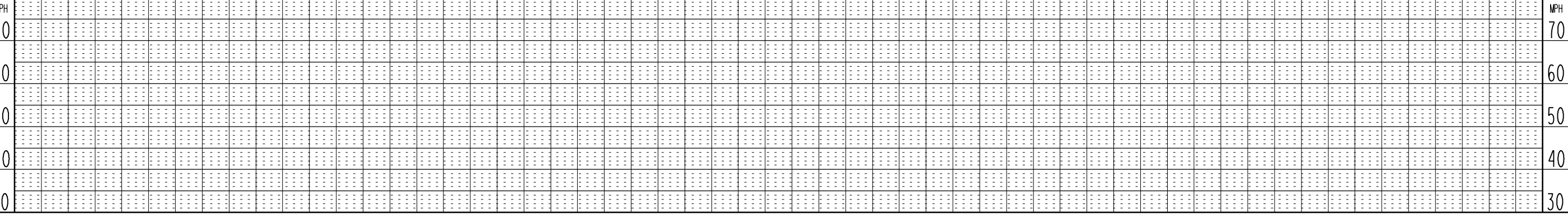


STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
TRAFFIC UNIT
SPEED ZONE SURVEY

Location _____
County _____
Roadway _____
Sta from 0+00 to 0+00
Scale _____
Date _____



Roadway Width	
Number of Striped Lanes	
Type of Divider	
Average Daily Traffic	
Direction of Traffic	
Number of Vehicles Observed	
Observed Speed - Pace	
85th Percentile	
50th Percentile	
Existing Speed Zone	



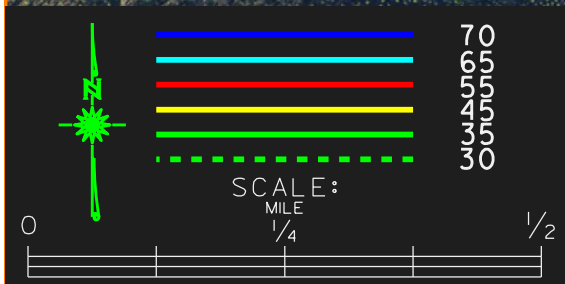
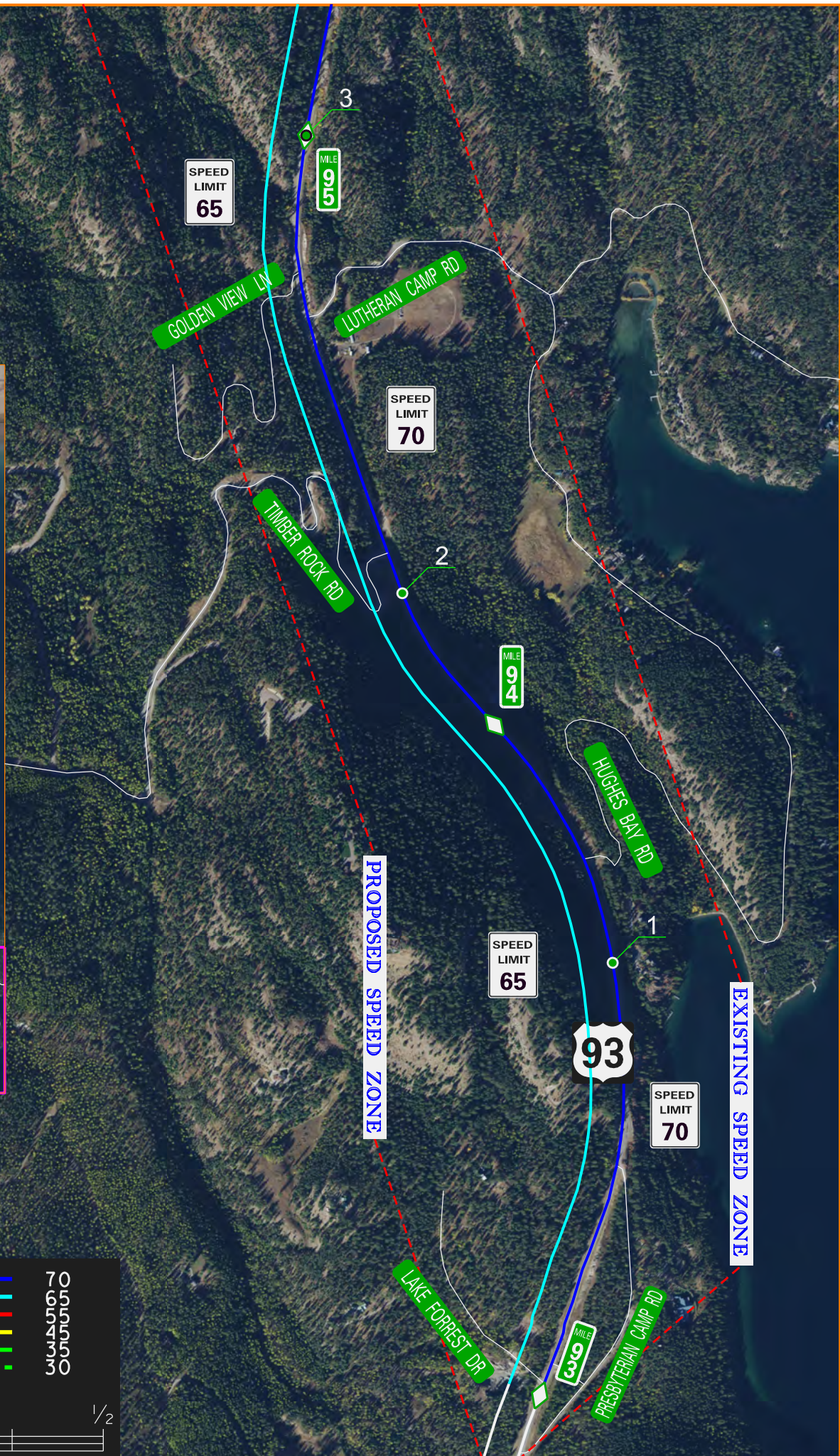
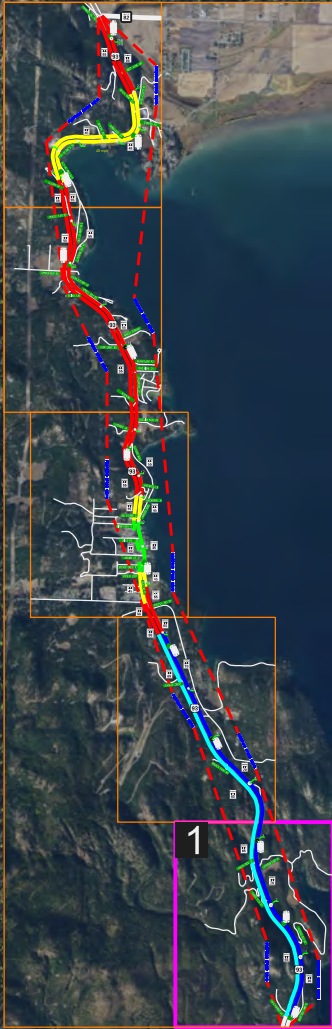
**PROPOSED SPEED ZONE
US HWY 93 (N-5)**

MP 93 to MT HWY 82

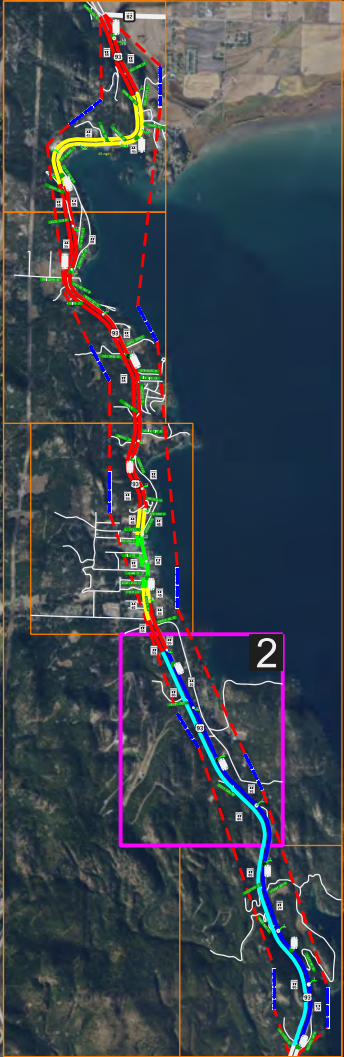
LAKESIDE

FLATHEAD COUNTY

Page 1



PROPOSED SPEED ZONE
US HWY 93 (N-5)
 MP 93 to MT HWY 82
LAKESIDE
 FLATHEAD COUNTY
 Page 2



SPEED LIMIT
55

SPEED LIMIT
55

SPEED LIMIT
65

SPEED LIMIT
70

SPEED LIMIT
70

SPEED LIMIT
65

93

EAGLES CREST

LEGACY PARK RD

MILE
937

MILE
936

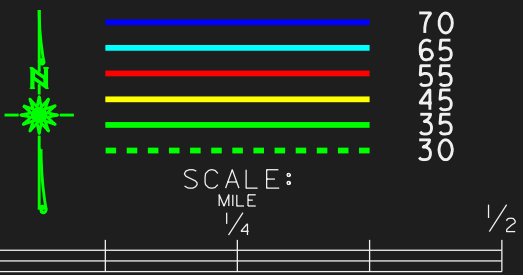
2

7

6

5

4



PROPOSED SPEED ZONE

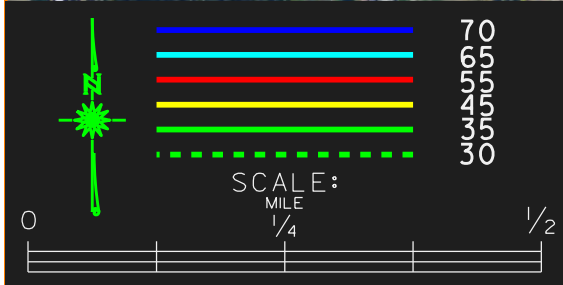
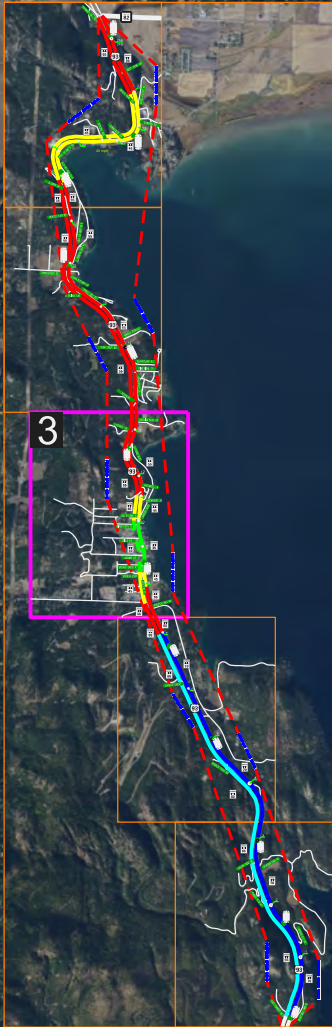
US HWY 93 (N-5)

MP 93 to MT HWY 82

LAKESIDE

FLATHEAD COUNTY

Page 3



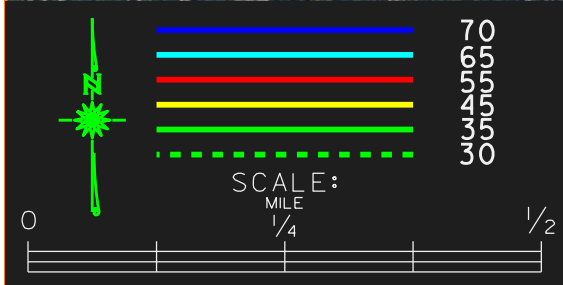
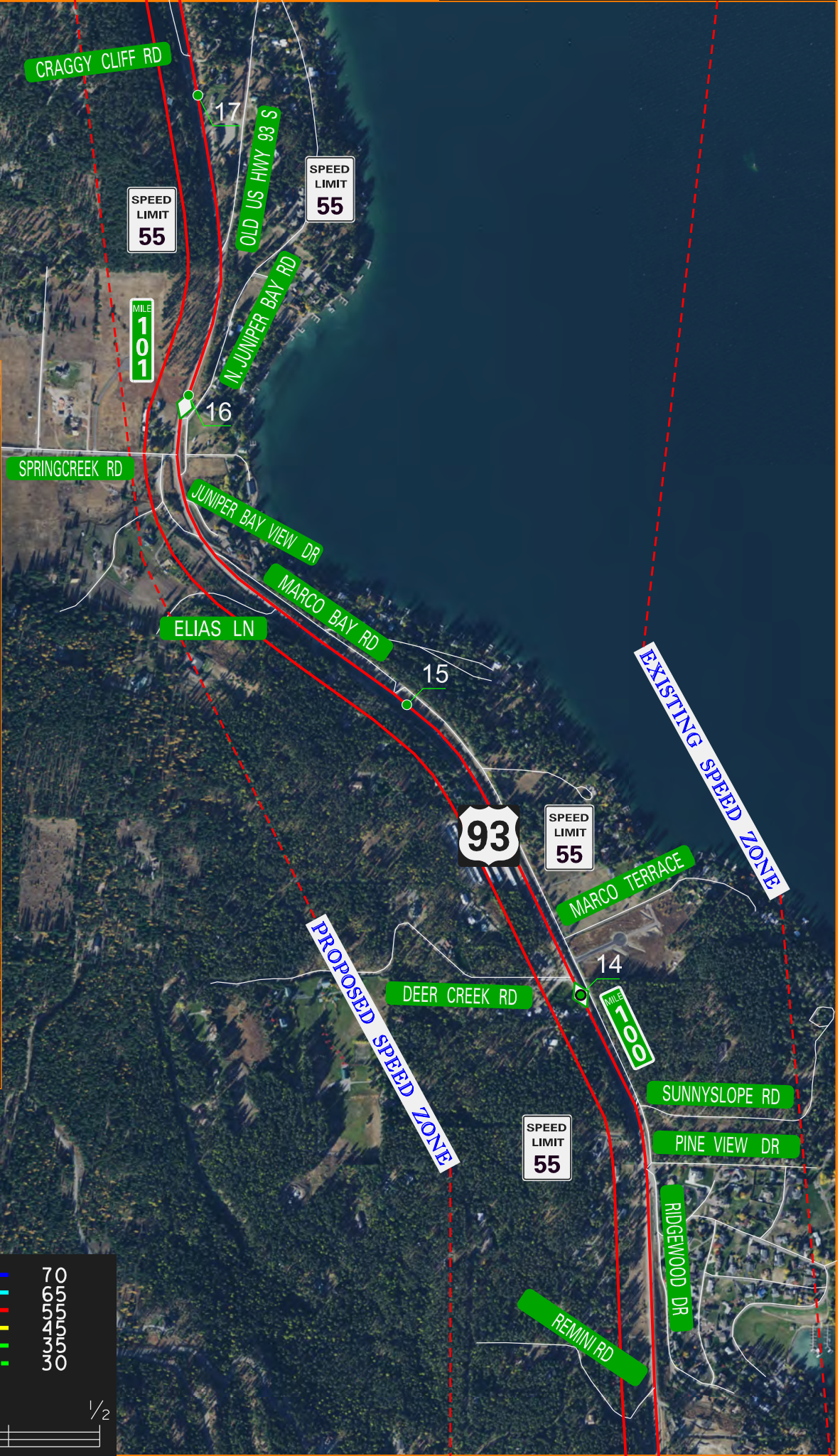
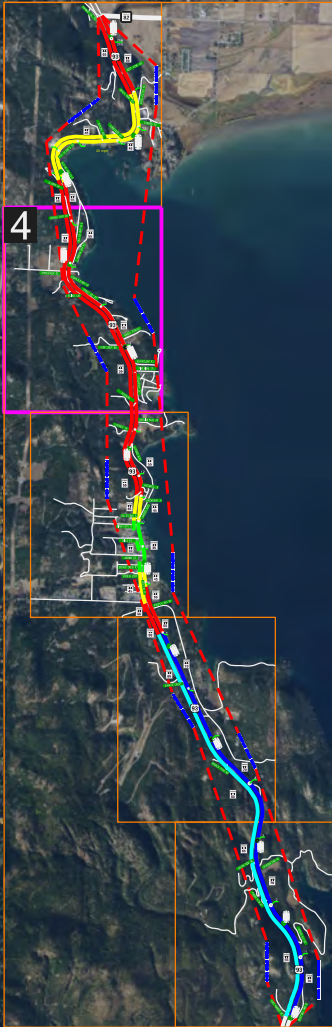
**PROPOSED SPEED ZONE
US HWY 93 (N-5)**

MP 93 to MT HWY 82

LAKESIDE

FLATHEAD COUNTY

Page 4



**PROPOSED SPEED ZONE
US HWY 93 (N-5)**

MP 93 to MT HWY 82

LAKESIDE

FLATHEAD COUNTY

Page 5

