ORDINANCE NO. 2012-3

ROAD SPEED LIMITS

AN ORDINANCE TO ESTABLISH A SPEED LIMIT ON HIGHWAY 282, LEWIS AND CLARK COUNTY, MONTANA, AND TO PROVIDE PENALTIES FOR A VIOLATION THEREOF

WHEREAS, the Lewis and Clark County Commission requested a review of the speed limit along Highway 282, south of the City of East Helena, Lewis and Clark County; and

WHEREAS, the Lewis and Clark County Public Works Department requested that Abelin Traffic Services of Helena, Montana, perform a speed study on this road and determine if the posted speed limit is appropriate for the existing road conditions and travel patterns; and

WHEREAS, Section 61-8-310, MCA allows the Lewis and Clark County Commission to establish speed limits on any public highways as defined in 60-1-103, MCA; and

WHEREAS, Highway 282, in Lewis and Clark County, Montana, is a public road as defined in Section 60-1-103, MCA; and

NOW, THEREFORE, BE IT ORDAINED BY THE COUNTY COMMISSION OF LEWIS AND CLARK COUNTY, STATE OF MONTANA:

SECTION 1. SPEED LIMIT ESTABLISHED

See attached "Exhibit A - Abelin Speed Study."

SECTION 2. SPEED LIMIT SIGNS

Upon receiving notice of the regulatory speed limit established by this Ordinance, and after the passage of at least thirty days from the date this Ordinance is adopted, the Public Works Department shall erect the appropriate signs giving drivers notice of the regulatory speed limit established by this Ordinance.

SECTION 3. PENALTY

Section 1 – Highway 282, ASARCO south of U.S. Highway 12 to Smelter Road. A vehicle traveling more than $\underline{45}$ mph on this section of Road is in violation of the law, and the driver is subject to penalties.

Section 2 — Highway 282, ASARCO to City of Helena. A vehicle traveling more than <u>60</u> mph on this section of Road is in violation of the law, and the driver is subject to penalties.

Section 3 – Highway 282, City of Helena. A vehicle traveling more than <u>60</u> mph on this section of Road is in violation of the law, and the driver is subject to penalties

Section 4 – Highway 282, L&C County. A vehicle traveling more than <u>60</u> mph on this section of Road is in violation of the law, and the driver is subject to penalties.

Penalty for violation of this Ordinance or any provision thereof shall be enforced according to Title 61, Chapter 8, MCA, or any other applicable state or local law.

SECTION 4. SEVERABILITY

Should any court declare any part of this ordinance unconstitutional or invalid, the ordinance as a whole, or any part thereof, other than the part so declared to be unconstitutional or invalid, shall remain in effect.

SECTION 5. EFFECTIVE DATE

This Ordinance shall take effect thirty days after the date of Second Reading and approval of this Ordinance by the County Commission.

SECTION 6. MODIFICATION

This Ordinance may be modified by formal action by the Board of County Commissioners in the same manner as required in the adoption of the Ordinance.

SECTION 7. DURATION

This Ordinance shall remain in effect until repealed or suspended by other legislative or judicial action

action.	
READ and adopted at first reading this d Lewis and Clark County Commission, State of Montan	
ATTEST:	Andy Hunthausen, Chairman
Paulette DeHart, Clerk of the Board	
READ and adopted at second and final reading this	day of, 2012
ATTEST:	Andy Hunthausen, Chairman
Paulette DeHart, Clerk of the Board	



April 25, 2012

services

Eric Griffin Lewis & Clark County 3402 Cooney Drive Helena, MT59601

RE: Highway 282 Speed Study

Dear Eric,

Per your request Abelin Traffic Services (ATS) has reviewed the existing vehicle speeds along Highway 282 south of the City of East Helena. Highway 282 is currently maintained by four different agencies, the City of East Helena (4,562 LF.), the City of Helena (2,242 LF.), Lewis & Clark County (1,967 L.F.) and Jefferson County (4,392 LF.). The only posted speed limits on this road are in the newly reconstructed City of Helena section which has a posted speed limit of 45 MPH. ATS analyzed the speed information on Highway 282 to determine appropriate speed limits for this road based on existing road conditions and travel characteristics.

Existing Conditions

The study roadway begin at an intersection with U.S. Highway 12 in East Helena near the ASARCO smelter. Highway 282 extends south past the smelter facilities, crosses a spur of the Montana Rail Link railroad tracks , then curves to the west. This portion of the road is under the jurisdiction of the City of East Helena. The Highway then curves to the south again and enters a newly reconstructed portion of the roadway which is maintained by the City of Helena and was improved to modern standards as part of the Mountain View Meadows development project. This section is approximately one-half mile in length and has a posted 45 MPH speed limit. Past the City of Helena section, the road then curves back to the west and continues through a Lewis & Clark County maintained section and then into a Jefferson County maintained section. The road then crosses over I-15 and connects with Colonial Drive. See Figure 1 for a map of the study area.

For the purposes of this study ATS broke the road into four different sections. These sections include the portion of road south of Highway 12 to Smelter Road (City of East Helena), the portion from Smelter Road to the City of Helena boundary (City of East Helena), the newly reconstructed City of Helena portion, and the Lewis & Clark County /Jefferson County section. The Lewis & Clark County and Jefferson County section s have similar characteristics and were analyzed as one segment.

Visibility on the road is very good and much of the road (70%) has no passing restrictions. The clear zones have few obstructions. In general the road structure is in good shape and the ride character is reasonably smooth, however the road surface is in poor condition with considerable cracking in the asphalt surface in all but the City of Helena section. All of the sections of road have an Average Daily Traffic volume of 1,400 VPD.

Section 3

Section 4

From The Bud

From The

Figure 1 - Vicinity Map

Road Sections

Section 1 - Highway 282, ASARCO

Section 1 includes the portion of Highway 282 south of U.S. Highway 12 to Smelter Road. The intersection of Highway 282 and U.S. Highway 12 is currently controlled by a traffic signal. This section of road passes next to the ASARCO Smelter facility. The roadside environment in this section is industrial in nature and there are several driveway approaches. The road has a paved width of 25 feet on 80 feet of right-of-way. There is no posted speed limit along this section.

Section 2 - Highway 282, ASARCO to City of Helena

Just south of ASARCO near Smelter Road, the Highway curves to the west. The road side environment in this section is composed of open fields. The Highway has the same or ssection and design with 26 feet of pavement on 80 feet of ROW. Section 2 ends where the road curves to the south at the City of Helena City Limits. There is no posted speed limit along this section.

Section 3-Highway 282, City of Helena

Section 3 begins at the City of Helena City limits where the road has been fully reconstructed as part of the Mountain View Meadows project. This section of road has a paved width of 35 feet on 100 feet of ROW. Near the north end of the section Highway 282 intersects Runkle Parkway. This inters ection has a sep arated left -turn deceleration lane. The Highway then crosses a large gully with steep slopes which are protected by guard rails. This section of road has a posted speed limit of 45 MPH

Section 4 - Highway 282, L&C County & Jefferson County

South of the City of Helena section, Highway 282 curves back to the west and crosses into Lewis & Clark County. From here the road cross-section reverts back to the 25 foot paved service on 100 feet of ROW as seen in Section 2 and the roadside environment is clear. The road then passes into Jefferson County with the same road design and surface condition. The road crosses I-15 and intersect s Colonia Drive at a four-way STOP controlled intersection. There is no speed limit on Section 4. It should be noted that the L&C County/Jefferson County line is marked with roadside signs 100 yards west of Dahl Drive. However, a review of the County Boundaries indicates that the L&C Co/Jefferson County line is east of Dahl Drive. The County boundary signs may not be on the actual county line.

Crash Data

Abelin Traffic Services obtained crash data for the study roadways from the Montana DOT. This data indicate d that six vehicle crashes have occurred along this roadway in the past five years. These six crashes were spread out over the length of the roadway with no obvious crash concentrations. Three of the crashes were collisions with wild animals. One multi-vehicle rear-end collision occurred and one alcoholrelated crash resulted in a fatality. The crash rate for Highway 282 is approximately 1.1 crashes per million vehicle miles traveled, which is slightly below the state average for secondary highways.

Speed Data

Vehicle speed data was collected on the four sections of roadway April 3-5 2012. The weather condition during the traffic study was warm and mostly sunny and the roads had very good driving conditions throughout the data collection period. The data was collected continuously using Diamond Unicorn Limited traffic counters to record the individual speed data from every vehicle using the road. The results of the data collection are shown in **Table 1**.

TABLE 1 - Vehicle Speed Data

	Section 1	Section 2	Section 3	Section 4
Average Speed (MPH)	39.3	47.2	51.9	55.2
85% Percentile Speed (MPH)	45.0	53.6	58.8	62.4
10 MPH Pace Speeds	35-45 MPH	40-50 MPH	45-55 MPH	50-60 MPH
Percent in Pace	64.7%	58.1%	57.3%	57.8%
Average Daily Traffic Volume	1,451	1,377	1,414	1,406

The data indicates that vehicle speeds along Highway 282 are reasonably uniform. Although there is no posted speed limit on most of these sections of road, most vehicles (around 60%) are driving within the pace (the 10 MPH range in which the most road users are driving). In general it is desirable to have the majority of traffic on a roadway traveling within or around the 10 MPH pace, this decreases the variability in vehicle speeds and decreases vehicle conflicts. The average speed and 85th percentile speed (the speed at which 85% of road uses are driving at or below) slowly increases from section 1 through section 4. Vehicles drive more slowly near the ASARCO smelter in Section 1 (45 MPH), and fastest in the L&C County and Jefferson County section (62 MPH).

Based on the speed information, it may be most appropriate to set two different speed limits on Highway 282. In section 1 where speeds are lower near the ASARCO smelter, a 45 MPH speed limit would be appropriate. In the other three sections, a posted speed limit of 60 MPH would be appropriate. It should be noted that if this road is ever reconstructed or resurfaced, an improved road surface may increase vehicle speeds and the posted speed limit may need to be re-evaluated.

Recommendati ons

It is recommended that the posted speed limit on Highway 282 from U.S. Highway 12 to Smelter Road be posted at 45 MPH. The speed limit for the rest of Highway 282 should be posted at 60 MPH. If yo u have any questions about these results please feel free to call me at 406-459-1443

Sincerely,

Bob Abelin, P.E.

Abelin Traffic Services, Inc.

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