

129,000 Pound Evaluation of Case # 202102US93 United States Highway 93 (US-93): MP 82.600 to 160.382

Executive Summary

Amalgamated Sugar Company is requesting this segment of US-93 be designated as a 129,000 Pound Route for the transportation of lime rock from Darlington, ID to Amalgamated Sugar plants in Twin Falls, ID and Paul, ID. Amalgamated Sugar is projecting up to 4,700 annual trips weighing up to 129,000 pounds.

This segment of US-93 is a two lane rural principal arterial route with a mix of flat and rolling agricultural and high desert lands passing through the communities of Arco, Moore, Darlington, and Mackay. The route is currently coded as a "Red Route" and as such all trucks must adhere to the permitted 6.50-foot off-track, 115 foot overall vehicle length criteria and not to exceed 105,500 pounds. The application is requesting a reclassification of this route from "Red" to "Purple" and as such all trucks must adhere to the permitted 6.50-feet off track, 115 foot overall vehicle length criteria and not to exceed to 129,000 pounds.

ITD Bridge Asset Management has reviewed the seventeen (17) bridges pertaining to this request and has determined they will safely support CMVs weighing up to 129,000 pounds. Pavement conditions range from fair to good. The Commercial Average Annual Daily Traffic (CAADT) constitutes up to 21% of overall traffic volume. Between 2016 and 2020, there were seven (7) accidents involving tractor-trailer combination, resulting in 1 fatality and no injuries. This route passes by one (1) church and no other social facilities. There are no signalized intersections on this route. This route traverses a significant mountain pass – Willow Creek Summit is 7161 feet which poses no significant operatonal or safety concern.

Department of Motor Vehicles, Highway Safety, Bridge Asset Management and District 6 recommend proceeding with this request.

Detailed Analysis

Department of Motor Vehicles (DMV) Review

All Idaho Transportation Department routes are currently categorized by their ability to handle various extra-length vehicle combinations and their off-tracking allowances. The categories used when considering allowing vehicle combinations to carry increased axle weights above 105,500 pounds and up to 129,000 pounds are:

- Blue routes at 95 foot overall vehicle length and a 5.50-foot off-track
- Red routes at 115 foot overall vehicle length and a 6.50-foot off-track.

Off-tracking is the turning radius of the vehicle combination, which assists in keeping them safely in their lane of travel. Off-tracking occurs because the rear wheels of trailer trucks do not pivot, and therefore will not follow the same path as the front wheels. The greater the distance between the front wheels and the rear wheels of the vehicle, the greater the amount of off-track. DMV confirms that the requested route falls under one of the above categories and meets all length and off-tracking requirements for that route. More specifically, the requested section of US-93 from MP 82.600 to MP 160.382 is designated as a red route and as such all trucks must adhere to the 6.5-foot off-track and 115 foot overall vehicle length criteria.

Bridge Review

Bridges on all publicly owned routes in Idaho, with the exception of those meeting specific criteria, are inspected every two years at a minimum to ensure they can safely accommodate vehicles. A variety of inspections may be performed including routine inspections, in-depth inspections, underwater inspections, and complex bridge inspections. All are done to track the current condition of a bridge and make repairs if needed.

When determining the truck-carrying capacity of a bridge, consideration is given to the types of vehicles that routinely use the bridge and the condition of the bridge. Load limits may be placed on a bridge if, through engineering analysis, it is determined the bridge cannot carry legal truck loads.

ITD Bridge Asset Management has reviewed the seventeen (17) bridges pertaining to this request and has determined they will safely support CMVs weighing up to 129,000 pounds, provided the truck's axle configuration conforms to legal requirements. To review load rating data for each of the bridges, see the Bridge Data chart below.

ROUTE	FROM:	US-93/US-20 JCT
	MILE POST:	82.600
	TO:	US-93/SH-75 JCT
	MILE POST:	160.900

Table 1	1. (US-93,	Bridge	Data
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HIGHWAY NUMBER	MILE POST	BRRIDE KEY	RATING (lbs)
US-93	83.95	17950	186,000
US-93	85.43	17955	314,000
US-93	87.58	17960	238,000
US-93	89.11	17965	312,000
US-93	90.04	17970	264,000
US-93	90.11	17975	250,000
US-93	91.48	17980	378,000
US-93	95.18	17985	292,000
US-93	96.33	17990	226,000
US-93	98.71	17995	284,000
US-93	107.29	18000	372,000
US-93	113.13	18005	OK EJ
US-93	156.56	18011	756,000
US-93	157.93	18015	296,000
US-93	159.16	18020	226,000
US-93	159.92	18026	819,800
US-93	160.03	18031	246,000

Table 2. US-93, Bridge Data

ITD District 6 Evaluation

This segment has been evaluated and the District recommends proceeding.

District 6 has evaluated the roadway characteristics, pavement condition, and traffic volume on US-93 from MP 82.6 to MP 160.382 in response to the request to make this segment a 129,000 Pound Route. The District has found no concerns with this action and recommends proceeding. Details of the evaluation are provided below.

Roadway Characteristics

This Roadway is a major rural principal arterial collector with the roadway geometry outlined below. MP 108.8 to MP 109.24 has a bike path between lane of travel and parking.

MILEPOSTS	THROUGH LANES	TURN LANES	SHOULDER	PARKING LANE
82.6000-82.870	5 – 2 Each Direction	Center	Yes	No
02.0000-02.070	12'		7'	
82.871 – 90.030	2 – 1 Each Direction	Yes	Yes	No
02.071 - 90.030	12'		4' – 5'	
90.031 - 90.400	2 – 1 Each Direction	Center	Yes	No
90.031 - 90.400	12'		1'	
90.401 - 99.260	2 – 1 Each Direction	Yes	Yes	No
90.401 - 99.200	12'		3'-4'	
99.261 – 108.800	2 – 1 Each Direction	Yes	Yes	No
99.201 - 100.000	12'		2' – 3'	
108.801 - 109.240	2 – 1 Each Direction	Center	Yes	Yes
100.001 - 109.240	12'		12'	
109.241 – 113.480	2 – 1 Each Direction	Yes	Yes	No
105.241 - 115.400	12'		3'-4'	
113.481 – 131.190	2 – 1 Each Direction	Yes	Yes	No
115.401 - 151.190	12'		5' – 6'	
131.191 – 141.450	2 – 1 Each Direction	Yes	Yes	No
131.191 - 141.430	12'		1' – 2'	
141.451 - 159.150	2 – 1 Each Direction	Yes	Yes	No
141.401 - 100.100	12'		1' – 2'	
159.151 – 160.010	2 – 1 Each Direction	Yes	Yes	No
159.151 - 160.010	12'		2' – 3'	
160.011 – 160.240	2 – 1 Each Direction	Yes	Yes	No
100.011 - 100.240	12'		5'	
160.240 - 160.382	2 – 1 Each Direction	Yes	Yes	No
100.240 - 100.302	12'		4'	

Table 7. US-93 Roadway Geometry

Pavement Condition

The requested section of highway is asphalt and is in generally good condition and is not considered deficient. Spring breakup limits do not pertain to this section at this time.

MILEPOST	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE
83.000 - 88.000	Flexible	No	Fair
88.000 - 90.580	Flexible	No	Good
90.581 - 93.500	Flexible	No	Good
93.501 - 96.500	Flexible	No	Good
96.501 - 99.500	Flexible	No	Good
99.501 - 102.500	Flexible	No	Good
102.501 - 105.000	Flexible	No	Good
105.501 - 108.470	Flexible	No	Good
108.471 - 111.000	Flexible	No	Good
111.001 – 112.900	Flexible	No	Good
112.901 - 115.540	Flexible	No	Good
115.541 – 118.000	Flexible	No	Fair
118.001 – 120.000	Flexible	No	Good
120.001 - 121.950	Flexible	No	Good
121.951 - 125.000	Flexible	No	Fair
125.001 – 127.000	Flexible	No	Good
127.001 – 129.000	Flexible	No	Good
129.001 – 131.000	Flexible	No	Good
131.001 – 134.000	Flexible	No	Good
134.001 – 137.000	Flexible	No	Good
137.001 – 140.000	Flexible	No	Fair
140.001 – 142.000	Flexible	No	Good
142.001 - 144.500	Flexible	No	Fair
144.501 – 147.000	Flexible	No	Fair
147.001 – 150.000	Flexible	No	Fair
150.001 – 152.000	Flexible	No	Good
152.004 - 155.000	Flexible	No	Good
155.001 – 157.160	Flexible	No	Fair
157.161 – 160.000	Flexible	No	Good

Table 8. US-93 TAMS Visual Survey Data

Traffic Volumes

The speed limit of this section of highway varies between 25 and 65 mph. The traffic volumes are provided below.

MILEPOSTS	TDT	AADT	CAADT	% CMV
82.000 - 90.507	2,000	1,690	310	16%
90.508 - 108.511	1,200	950	250	21%
108.512 – 112.703	1,000	980	110	11%
112.704 – 118.404	900	770	130	14%
118.405 – 131.106	580	460	120	21%
131.107 – 158.911	700	590	110	16%
158.912 - 160.382	1,000	800	200	2%

Table 9. US-93 Traffic Volumes

Truck Ramps

No runaway truck ramps exist along these routes.

Port of Entry (POE)

There are no P.O.E. or rover site on US-93.

Safety Review

Accident Data

Analyses of the 5-year accident data (2016-2020) on the nearly 78 mile segment of US-93 shows there were a total of 146 accidents involving 173 units (5 fatalities and 50 Injuries). There were seven (7) accidents which involved a tractor-trailer combination, resulting in one (1) fatality and no injuries. Contributing circumstances were improper turning, animals, speed and inattention. This route passes by one (1) church and no other social facilities. There are no signalized intersections on this route. This route traverses a significant mountain pass – Willow Creek Summit is 7161 feet which poses no significant operatonal or safety concern.

Climate Data

PRECIPITATION	ANNUAL AVERAGE	
Average Annual	9.44"	
Precipitation		
Snowfall	30.5"	
Annual August	86.4F	
High Temp		
Average December	32.0F	
Low Tem	32.0F	

End Evaluation