



# 129,000 Pound Evaluation of US-93 M.P. 48.26 to M.P 58.8 (Case #201803US93)

## Executive Summary

Glanbia Nutritionals submitted a request for 129,000 pound trucking approval on US-93 between mile post (MP) 48.26 (Washington Street in Twin Falls) and MP 58.8 (intersection with SH-25) for transportation of liquid whey product from their Twin Falls plant to their Richfield plant. The request projects up to 4,015 trips annually which is reduction of approximately 1,100 loads annually from current operations. This section of US-93 is coded a "Red Route," where vehicles with 115-foot overall length and 6.5-foot off-track are authorized. ITD Bridge Section confirms the three bridges on the route will safely support 129,000 pound vehicles. District 4 evaluation shows the road condition to be rated "Good" to "Poor" with the "Poor" section (MP 49.45 to MP 50.14) rated as deficient. The deficient section of highway is programmed for a restoration project in FY 2021. The Office of Highway Safety analysis shows this section of US-93 has six Non-Interstate High Accident Intersection Locations (HAL) and has four HAL Clusters with details provided below. There is a single local road, Washington Street, under request with the City of Twin Falls. The Division of Motor Vehicles, the Office of Highway Safety, Bridge Asset Management and District 4 all recommend proceeding with this request.

## Detailed Analysis

### **Division 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. The DMV confirms that the requested routes 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 48.26 to 58.8 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 **three bridges** pertaining to this request and has determined they will safely support the 129,000-pound truck load, 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.

## ITD District 4 Evaluation

This segment has been evaluated and the District recommends proceeding.

District 4 has evaluated the roadway characteristics, pavement condition, and traffic volumes on US-93 between MP 48.26 – MP 58.8 in response to the request to make this segment a 129,000-pound trucking route. The District found no concerns with this action and recommends proceeding. Details of the evaluation are provided below.

## Roadway Characteristics

This section of road is a Principal Arterial in urban sections of northern Twin Falls and within the Twin Falls City limits from MP 48.26 to MP 50.2 and the rural sections through central Jerome County from MP 50.2 to MP 58.8. It intersects with US-93B at MP 49.45, I-84 at MP 53.1 and SH-25 at MP 58.7.

There are no dedicated passing or climbing lanes. The roadway geometry is outlined in the table below.

*Table 1. US-93 Roadway Geometry*

MILEPOSTS	THROUGH LANES	TWO-WAY LEFT TURN LANE (TWLTL)	SHOULDER	PARKING LANE
48.26 – 49.24	6 – 3 each direction divided	No*	Yes	No
	12'	-	8'	
49.45 – 49.89	5 – 2 NBL, 3 SBL	Yes	Yes	No
	12'	-	8'	
49.89 – 50.14	4 – 2 each direction	No*	Yes	No
	12'	-	8'	-
50.14 – 50.74	4 – 2 each direction bridge	No	No	No
	12'	Barrier Median		-
50.74 – 52.71	4 – 2 each direction divided	No*	Yes	No
	12'	-	8'	-
52.71 – 53.15	4 – 2 each direction	No*	Yes	No
	12'	-	8'	-
53.15 – 55.20	4 – 2 each direction divided	No*	Yes	No
	12'	-	8'	-
55.20 – 58.80	2 – 1 each direction	No	Yes	<b>No</b>
	12'		4' - 5'	

\* Center left turn bays located at local road intersections - 14' wide.

Note: A gap in mileposts exists between MP 49.24 and MP 49.45 due to the intersection of Pole Line Road and Blue Lakes Boulevard.

### Pavement Condition

The road is concrete pavement from MP 48.26 to MP 49.24 and MP 52.71 to MP 53.15. Concrete pavement is in “Fair” condition and is not deficient in cracking, rutting, or ride. The road is asphalt from and MP 49.45 to MP 50.14 and is in “Poor” condition with a restoration project programed for FY 2021. The asphalt pavement from MP 50.74 to 58.80, the asphalt pavement from MP 49.24 to 52.71 and the asphalt pavement from MP 53.15 to 58.80 are in “Good” condition and are not considered deficient in cracking, rutting or ride.

*Table 2. Pavement Condition*

MILEPOSTS	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE	CRACKING	ROUGHNESS	RUTING
<b>48.26 – 49.24</b>	Rigid	No	Fair	Good	Fair	Good
<b>49.45 – 49.89</b>	Flexible	Yes	Poor	Good	Very Poor	Fair
<b>49.89 – 50.14</b>	Flexible	Yes	Poor	Good	Very Poor	Fair
<b>50.74 – 52.71</b>	Flexible	No	Good	Good	Good	Good
<b>52.71 – 53.15</b>	Rigid	No	Fair	Good	Fair	Good
<b>53.15 – 55.20</b>	Flexible	No	Good	Good	Good	Good
<b>55.20 – 58.80</b>	Flexible	No	Good	Good	Good	Good

### Traffic Volumes

The speed limit of the highway varies between 35 and 60 mph. Seven stop lights are in this segment, four located within the City of Twin Falls, two at the I-84 Interchange and one 500 South MP 53.68.

*Table 3. 2016 Traffic Volumes*

MILEPOSTS	AADT	CAADT	% TRUCKS
<b>48.26-49.24</b>	13,000	400	3
<b>49.45-49.89</b>	31,000	2,400	8
<b>49.89-50.14</b>	31,000	2,400	8
<b>50.74-52.71</b>	27,500	2,800	10
<b>52.71-53.15</b>	18,500	2,300	12
<b>53.15-55.20</b>	14,000	2,000	14
<b>55.20-58.80</b>	8,500	900	11

### Truck Ramps

No runaway truck ramps exist due to the flat nature of the highway.

### Port of Entry (POE)

No POEs are located on this section of highway.

### Highway Safety Evaluation

This US-93 segment has six Non-Interstate High Accident Intersection Locations (HALs) in the top 200 statewide rankings and has four HAL Clusters in the top 200. These locations are shown in Table 4 with their statewide ranking.

Analyses of the 5-year accident data (2012-2016) shows there were a total of 334 crashes involving 712 units (1 fatality and 282 injuries) on US-93 between MP 48.258 and MP 58.8 of which, 20 crashes involved tractor-trailer combinations. Of the crashes involving tractor trailers, the most prevalent contributing circumstances were failure to yield and following too close. Eight injuries and no fatalities resulted from the crashes with tractor trailers. Implementation of 129,000 pound trucking is projected to reduce truck traffic on this route.

**Table 4. HAL Segments – US-93**

<b>Route</b>	<b>Statewide Rank</b>	<b>Milepost Range</b>	<b>Length (miles)</b>	<b>County</b>
<b>US 93</b>	52	54.716	Intersection	Jerome
<b>US 93</b>	93	57.727	Intersection	Jerome
<b>US 93</b>	109	48.998	Intersection	Twin Falls
<b>US 93</b>	131	50.742	Intersection	Jerome
<b>US 93</b>	139	56.727	Intersection	Jerome
<b>US 93</b>	160	48.258	Intersection	Twin Falls
<b>US 93</b>	71	48.838-48.930	0.092	Twin Falls
<b>US 93</b>	79.5	47.961-48.461	0.5	Twin Falls
<b>US 93</b>	127	48.469-48.670	0.201	Twin Falls
<b>US 93</b>	194.5	48.258-49.252	0.994	Twin Falls

**Additional Data:*****Bridge Data:***

**Route Number:** US 93  
**Department:** Bridge Asset Management  
**Date:** 10/3/2018

<b>Route</b>	<b>From:</b>	Intersection with Washington Street
	<b>Milepost:</b>	48.26
	<b>To:</b>	SH-25
	<b>Milepost:</b>	58.80

<b>Highway Number</b>	<b>Milepost Marker</b>	<b>Bridge Key</b>	<b>Rating<sup>a</sup> (lbs)</b>
93	48.66	19393	364,000
93	50.04	17580	200,000
93	56.51	17595	160,000

<sup>a</sup>: The bridge is adequate if it has a rating value greater than 121,000 pounds or is designated as "OK EJ" (okay by engineering judgment).