# 129,000 Pound Evaluation of Case \# 202102US93 <br> 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.

Table 1. US-93, Bridge Data

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

Table 2. US-93, Bridge Data

| HIGHWAY <br> NUMBER | MILE <br> POST | BRRIDE KEY | RATING (Ibs) |
| :---: | :---: | :---: | :---: |
| 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 |

## 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.

Table 7. US-93 Roadway Geometry

| MILEPOSTS | THROUGH LANES | TURN LANES | SHOULDER | PARKING LANE |
| :---: | :---: | :---: | :---: | :---: |
| 82.6000-82.870 | 5-2 Each Direction | Center | Yes | No |
|  | 12' |  | 7 |  |
| 82.871-90.030 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 4' - 5' |  |
| 90.031-90.400 | 2-1 Each Direction | Center | Yes | No |
|  | 12' |  | 1 ' |  |
| 90.401-99.260 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 3'-4' |  |
| 99.261-108.800 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 2'-3' |  |
| 108.801-109.240 | 2-1 Each Direction | Center | Yes | Yes |
|  | 12' |  | 12' |  |
| 109.241-113.480 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 3'-4' |  |
| 113.481-131.190 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 5'-6' |  |
| 131.191-141.450 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 1'-2' |  |
| 141.451-159.150 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 1'-2' |  |
| 159.151-160.010 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 2'-3' |  |
| 160.011-160.240 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 5 ' |  |
| 160.240-160.382 | 2-1 Each Direction | Yes | Yes | No |
|  | 12' |  | 4 |  |

## 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.

Table 8. US-93 TAMS Visual Survey Data

| MILEPOST | PAVEMENT TYPE | $\begin{aligned} & \text { DEFICIENT } \\ & \text { (YES/NO) } \end{aligned}$ | 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 |

## Traffic Volumes

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

Table 9. US-93 Traffic Volumes

| MILEPOSTS | TDT | AADT | CAADT | \% CMV |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{8 2 . 0 0 0} \mathbf{- 9 0 . 5 0 7}$ | 2,000 | 1,690 | 310 | $16 \%$ |
| $\mathbf{9 0 . 5 0 8 - 1 0 8 . 5 1 1}$ | 1,200 | 950 | 250 | $21 \%$ |
| $\mathbf{1 0 8 . 5 1 2 - \mathbf { 1 1 2 . 7 0 3 }}$ | 1,000 | 980 | 110 | $11 \%$ |
| $\mathbf{1 1 2 . 7 0 4 - \mathbf { 1 1 8 . 4 0 4 }}$ | 900 | 770 | 130 | $14 \%$ |
| $\mathbf{1 1 8 . 4 0 5 - 1 3 1 . 1 0 6}$ | 580 | 460 | 120 | $21 \%$ |
| $\mathbf{1 3 1 . 1 0 7 - 1 5 8 . 9 1 1}$ | 700 | 590 | 110 | $16 \%$ |
| $\mathbf{1 5 8 . 9 1 2 - 1 6 0 . 3 8 2}$ | 1,000 | 800 | 200 | $\mathbf{2 \%}$ |

## 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 <br> AVERAGE |
| :---: | :---: |
| Average Annual <br> Precipitation | $9.44^{\prime \prime}$ |
| Snowfall | $30.5^{\prime \prime}$ |
| Annual August <br> High Temp | 86.4 F |
| Average December <br> Low Tem | 32.0 F |

## End Evaluation

