



129,000 Pound Evaluation of US-30 MP 333.0 to MP 335.77 (Case #201706US30)

Executive Summary

Great Western Malting submitted a request for 129,000 pound trucking approval on US-30 between their facility on US-30 at milepost (MP) 333.0 and Yellowstone Avenue in Pocatello at MP 335.77. The requested route will connect with a previously approved section of US-30 which extends west to I-86. The requestor will transport malting barley to a malting facility with approximately 2,800 trips annually as Great Western Malting completes expansion, increasing production from 193 million pounds to 358 million pounds of malting grade barley. This section of US-30 is coded a “Red Route” where vehicles with 115-foot overall length and 6.5-foot off-track are authorized. ITD Bridge Section evaluation shows there are no bridges on this section of highway. The Office of Highway Safety analysis shows this US-30 segment has seven Non-Interstate High Accident Intersection Locations (HALs) and has one HAL Cluster. District 5 evaluation describes the route as asphalt pavement in good to poor condition and rated deficient in cracking, roughness, or ruts in a one half mile section of the eastbound lane. A seal coat for the entire section of requested highway is planned for 2020. Division of Motor Vehicles, Materials Section, District 5, Highway Safety and Bridge Asset Management all 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. The 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-30 from MP 333.0 to 335.77 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 Section 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 this request and has determined there are no bridges within the request limits on US-30 between MP 333.0 and MP 335.77.

Materials Section

The Idaho Transportation Department’s 129,000 pound pilot project report to the Idaho State Legislature in 2013 states, “For pavements, axle weight is a more significant determinant of pavement damage than gross vehicle weight. Truck weight limits that allow a higher GVW distributed over more axles do not necessarily lead to higher pavement costs and can even produce savings.” Based on the increased number of axles required for 129,000 pound vehicles to maintain legal axle weights, the equivalent single axle loads (ESAL) for 129,000 pound vehicles are lower than for 80,000 pound and 105,500 pound vehicles. For this section of roadway, our assessment is the increased vehicle weight with a corresponding increased number of axles will reduce loads per axle compared to 80,000 or 105,500 pound vehicles and thereby produce lower loads on the road surface and subsurface resulting in equal or lesser damage.

District 5 Evaluation

This segment has been evaluated and the District recommends proceeding.

General: District Five has evaluated the roadway characteristics, pavement condition, and traffic volumes on US-30 between MP 333.00 – MP 335.77 in response to the request to make this segment a 129,000-pound trucking route to service Great Western Malting. The District has found no concerns with this action and recommends proceeding. Details of the evaluation are provided below.

Roadway Characteristics

This section of road is an urban principal arterial from MP 333.00 – MP 335.77. The roadway geometry is outlined in the table below. There is one low clearance structure at MP 333.15 (approximately 14 feet).

Table 1. US-30 Roadway Geometry

MILEPOSTS	THROUGH LANES	TWO-WAY LEFT TURN LANE (TWLTL)	SHOULDER	PARKING LANE
333.000 – 333.665	2 – 1 each direction	Yes	Yes	No
	12'	14'	5'	-
333.665 – 334.006	4 – 2 each direction	No	Yes	No
	12'	Hard Island with turn bays at	5'	-



		intersections		
334.006 – 335.391	6 – 3 each direction	No	No *	No *
	12'	Hard Island with turn bays at intersections	-	-
335.391 – 335.778	6 – 3 each direction	No	No *	No *
	12'	Hard Island with turn bays at intersections	-	-

* Frontage road, with multiple access points, available for emergency stopping and parking.

Pavement Condition

The road is asphalt pavement and is in good to poor condition; one section is considered deficient in cracking, rutting, or ride. The entire section received a mill, inlay, and seal coat in 2011. MP 333.000 – 334.006 is schedule for another mill and inlay in 2019. A seal coat for the entire section is planned for 2020. Spring breakup limits do not pertain to this section at this time.

Table 2. 2016 TAMS Visual Survey Data

MILEPOSTS	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE	CRACKING INDEX	ROUGHNESS INDEX	RUT AVERAGE (IN)
333.00 – 333.665	Flexible	No	Fair	3.5	2.80	0.22
333.665 334.006	Flexible	No	Good	4.7	3.16	0.11
334.006 – 335.391	Flexible	No/No	Good/Good	4.9/4.5	3.85/3.89	0.06/0.08
335.391 – 335.778	Flexible	No/Yes	Fair/Poor	4.7/4.9	2.59/2.53	0.11/0.11

(Descending direction / Ascending Direction)

Traffic Volumes

The speed limit of the highway varies between 45 and 55 mph. There are four (4) stop lights in this segment. The traffic volumes are provided below.

Table 3. 2016 Traffic Volumes

MILEPOSTS	AADT	CAADT	% TRUCKS
333.00 – 333.665	8042	1193	15
333.665 334.006	10000	1400	14
334.006 – 335.391	9636	782	8
335.391 – 335.778	15868	548	3

Truck Ramps

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

Port of Entry (POE)

The POE does maintain one rover sites on this section of highway at Milepost 333.7.



Highway Safety Evaluation

This US-30 segment has seven Non-Interstate High Accident Intersection Locations (HALs) and has one HAL Cluster. The locations are shown in the table below with their statewide ranking.

Analyses of the 5-year accident data (2011-2015) shows there were a total of 98 crashes involving 185 units (3 fatalities and 58 Injuries) on US 30 between MP 333.0 and MP 335.778 of which nine crashes involved tractor-trailer combinations. Of the crashes involving tractor trailers, the most prevalent contributing circumstances were improper turn and inattention. No injuries and no fatalities resulted from the crashes with tractor trailers.

Table 4. HAL Segments US 30

Route	Statewide Rank	Milepost	Length (miles)	County
US 30	28	332.822	Intersection	Bannock
US 30	93	335.391	Intersection	Bannock
US 30	124	334.007	Intersection	Bannock
US 30	283	335.486	Intersection	Bannock
US 30	463	333.447	Intersection	Bannock
US 30	714	334.767	Intersection	Bannock
US 30	736	335.542	Intersection	Bannock
US 30	440.5	333.322-334.007	0.685	Bannock

