



129,000 Pound Evaluation of US-30 M.P. 330.82 to M.P. 333.447 (Case #201613US30)

Executive Summary

Pacific Recycling submitted a request for 129,000 pound trucking approval on U.S. 30 between mile post (M.P.) 330.82 and M.P. 333.447 for transportation of scrap iron. The request projects up to 1,200 trips annually, which is a 15-25% reduction from current operations. The Idaho Transportation Department's District 5, Department of Motor Vehicles and Bridge Asset Management all recommend proceeding with the request.

This section of U.S. 30 is relatively flat with minimal curvature and is coded a "Red Route," where vehicles with 115-foot overall length and 6.5-foot off-track are authorized. The Idaho Transportation Department Bridge Section confirms the two bridges on the route will safely support 129,000-pound vehicles. The requested roadway pavement condition is in "fair" to "good" condition, and is not deficient in cracking, roughness, or ruts. The Commercial Average Annual Daily Traffic (CAADT) constitutes approximately 18% of the Average Annual Daily Traffic (AADT). This segment has one Non-Interstate High Accident Location at the intersection with Philbin Road. This intersection ranks 6th in District 5 and 94th in Idaho in crash rates, with the majority of the accidents appearing to be angle-turning crashes. Of the 23 crashes in this segment from 2012-2014, only one involved a tractor-trailer combination. Due to the flat nature of the section of roadway, there are no runaway truck ramps.

There are no local roads requests required with this application.

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 U.S. 30 is designated 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 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 two bridges pertaining to this request and 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 5 Evaluation

This segment has been evaluated and the District recommends proceeding.

District Five has evaluated the roadway characteristics, pavement condition, traffic volumes, and crash data on U.S. 30 between milepost 330.82 and 333.447 in response to the request to make this segment a 129,000-pound trucking route to service Pacific Recycling. 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 undivided urban principle arterial and is generally flat. The roadway geometry is outlined in the table below.

Table 1. US-30 Roadway Geometry

| | THROUGH LANES | TWO-WAY LEFT TURN LANE (TWLTL) | SHOULDER | PARKING LANE |
|---------------------------------|----------------------|-----------------------------------|----------|-----------------|
| MP 330.820 – 332.313 | 4 – 2 each direction | Yes | Yes | No |
| | 12' | 14' | 8' | - |
| MP 332.313 – 333.447 | 2 – 1 each direction | Yes | Yes | No |
| | 12' | 14' | 5' | - |

Pavement Condition

The road is asphalt pavement and is in good to fair condition and is not deficient in cracking, roughness, nor ruts. Milepost 330.82 to 332.3 had a mill and inlay and seal coat in 2011. Another mill and inlay is scheduled for 2021 for the remaining mileposts. Spring breakup limits do not pertain to this section at this time.

Table 2. 2014 TAMS Visual Survey Data

| | PAVEMENT TYPE | DEFICIENT (YES/NO) | CONDITION STATE | CRACKING INDEX | ROUGHNESS INDEX | RUT AVERAGE (IN) |
|---------------------------------|------------------|-----------------------|--------------------|-------------------|--------------------|------------------------|
| MP 330.820 – 332.313 | Flexible | No | Good | 4.9 | 3.05 | - |
| MP 332.313 – 333.444 | Flexible | No | Fair | 4.7 | 2.98 | - |

Traffic Volumes

This road is classified as an Urban Principal Arterial and has a speed limit of 55 mph. There are no stop signs or stop lights on the mainline of this segment. The traffic volumes are provided below.

Table 3. 2014 Traffic Volumes

| | AADT | CAADT | % TRUCKS |
|-----------------------------|------|-------|----------|
| MP 330.820 – 332.313 | 4671 | 820 | 18 |
| MP 332.313 – 333.444 | 7194 | 1193 | 17 |

Crash Data

This segment has one Non-Interstate High Accident Location as indicated by the ITD WebCars application – the Intersection of Philbin Road and U.S. 30. This intersection ranks 6th in District 5 and 94th in the State of Idaho in regards to crash rates. The majority of the crashes appear to be angle-turning crashes. Of the 23 crashes in this segment from 2012-2014, only one involved a tractor-trailer combination.

The applicant is suggesting a 15-25% reduction in truck trips from their facility as a result of applying the 129k load limit. As a result of this reduction of truck trips on this segment, no significant impact on safety is anticipated.

Truck Ramps

Due to the flat nature of this segment, no runaway truck ramps exist.

Port of Entry (POE)

The POE maintains a rover site on this section of highway and conducts regular checks of westbound traffic. They are currently evaluating options for establishing a site for eastbound traffic evaluation, but have historically had low traffic volumes. In addition, there is monitoring at the Inkom POE site for vehicles using Interstate 15 toward Utah.

Additional Data:

Bridge Data:

Route Number: US-30
Department: Bridge Asset Management
Date: 2/22/2016
Route Milepost: 330.82
Milepost: 333.447

| Highway Number | Milepost Marker | Bridge Key | 121 Rating^a (lbs) |
|-----------------------|------------------------|-------------------|---|
| 30 | 330.85 | 13690 | 186,000 |
| 30 | 331.85 | 13696 | 246,000 |

a: 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).