



129,000 Pound Evaluation of Case # 202101SH162

SH-13: MP 24.400 to 26.390
US-12: MP 74.480 to 66.220
SH-162: MP 23.065 to 8.000
SH-162: MP 38.819 to 31.077

Executive Summary

KBC Transport LLC., is requesting sections of State Highways 13 (SH-13), United States Highway (US-12) and State Highway 162 (SH-162) be designated as 129,000 Pound route(s) (Attached Map) for the transportation of lumber and wood chips from mills in Kookia, ID to Tamarack, ID and Boise, ID. KBC Transport is projecting up to 250 trips annually.

These highways are predominantly two lane rural arterial routes with a mix of flat rolling agricultural and U.S. Forest Service lands passing through the communities of Kookia and Kamiah. The routes are currently coded as “Blue” and as such all trucks must adhere to the permitted 5.50-foot off-track and 95 foot overall vehicle length criteria and not to exceed 105,500 lbs. The recommendation is to reclassify these routes to “Orange” and as such all trucks must adhere to the permitted 5.50-foot off track and 95 foot overall vehicle length criteria not to exceed to 129,000 lbs.

ITD Bridge Asset Management has reviewed the nine (9) bridges pertaining to this request and has determined they will safely support the 129,000-pound truck load. Pavement conditions on these highways range from good to poor. The highways Commercial Average Annual Daily Traffic (CAADT) constitutes 6% to 16% of the Average Annual Daily Traffic (AADT). Between 2016 and 2020, there were a total of 103 accidents on these highway of which one (1) involved tractor-trailers. There were a total of 44 injuries and two (2) fatality associated with these accidents. The two (2) fatality did not involve a tractor-trailer.

Department of Motor Vehicles, Highway Safety, Bridge Asset Management and District 2 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 and Orange routes at 95 foot overall vehicle length and a 5.50-foot off-track
- Purple routes at 95 foot overall vehicle length and a 5.50-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 fall under one of the above categories and meet all length and off-tracking requirements for that route. More specifically, the requested section of SH-162, SH13 and US12 are designated blue routes and as such all trucks must adhere to the 5.50-foot off-track and 95-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 nine (9) 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.

Table 1. SH-13, Bridge Data

ROUTE	FROM:	SH-13
	MILE POST:	24.400
	TO:	SH-13/US-12 JCT
	MILE POST:	26.390

HIGHWAY NUMBER	MILE POST	BRIDGE KEY	RATING (lbs)
SH-13	26.17	10556	304,000

Table 2. US-12, Bridge Data

ROUTE	FROM:	US-12/SH-13 Jct
	MILE POST:	74.480
	TO:	US-12/SH162 Jct
	MILE POST:	66.220

HIGHWAY NUMBER	MILE POST	BRIDGE KEY	RATING (lbs)
SH-12	70.48	10435	338,000
SH-12	68.77	10430	284,000
SH-12	66.75	10426	298,000

Table 3. SH-162, Bridge Data

ROUTE	FROM:	SH-162/US-12 Jct
	MILE POST:	38.819
	TO:	SH-162
	MILE POST:	8.00

HIGHWAY NUMBER	MILE POST	BRRIDE KEY	RATING (lbs)
162	20.56	14931	298,000
162	19.30	14925	308,000
162	17.85	14924	796,000
162	17.61	14923	198,000
162	17.04	14922	198,000

*The bridge(s) is/are adequate if it has a rating value greater than 129,000 pounds or is designated as "OK EJ" (okay by engineering judgment).

ITD District 2 Evaluation

This evaluation is in response to the application from KBC Transport LLC, case number 202101SH162, requesting that portions of SH-13, US-12 and SH-162 be designated as a 129,000 pound route. District 2 has evaluated the roadway characteristics, pavement condition, and traffic volumes in response to the request.

It is District 2's recommendation that the following road sections be reclassified from a "Blue" to a "Orange" route that is legal for a single trailer not exceeding 48 feet and a doubles configuration not exceeding 61 feet and 75 feet overall (doubles configurations can exceed one or the other and still be legal). A Permit would be required if exceeding these dimensions and must not exceed 5.50 feet of off-track and 95' overall length including load overhang. Total gross weight not to exceed 129,000 lbs.

State Highway 13

Roadway Characteristics

The portion of SH-13 requested to be reviewed starts MP 24.400 and ends at the intersection with US-12 at MP 26.390. This section of road is a rural arterial passing through agricultural lands and the rural community of Kooskia. Our review will start at MP 24.429 (the entrance to the KBC office and lumber mill yard) and will conclude at the intersection of US-12 at MP 26.390. This section is in Idaho County. There are no pull off opportunities until in the community.

This section of roadway is predominantly flat with no dedicated passing or climbing lanes. The speed limit at the start of the review on SH-13 is posted at 55 MPH. The speed limit drops to 35 MPH at MP 25.083. The areas with curb, gutter and sidewalk begins at approximately MP 26.363. The speed limit further reduces to 25 MP at approximately MP 25.398 in the community of Kooskia.

At approximately MP 24.488, the highway widens to have a center turn lane along with the through lanes and curb side parking. This widen section continues to approximately MP 25.832 where the center turn lane ends and the road narrows to one lane in each direction with widened shoulders. The speed limit increases to 35 MPH at approximately MP 35.882.

Beginning at approximately MP 26.002, the highway widens for a north bound (NB) through lane, a NB right turn bay, a south bound (SB) through lane and a SB left turn bay at the Broadway Ave (SH-13 Business Loop) intersection at MP 26.082. This widening ends at the start of the bridge at MP 26.152. The bridge ends at MP 26.256.

From the bridge to the intersection with US-12 at MP 26.390, the highway has widened shoulders. This intersection does not have turn bays on SH-13, but has a right turn bay from east bound US-12 onto SH-13. The SH-13, Howard Creek to Kooskia City Limits (MP 18.680 to MP 25.378) paving project was completed in 2010 and this section was later seal coated in 2013.

Roadway Geometry

Table 4. SH-13 Roadway Geometry

MILEPOSTS	THROUGH LANES	TURN LANES	SHOULDER	PARKING LANE
24.426 TO 26.363	1 – 1 each direction	No	No	No
	11'			
26.363 TO 25.488	1 – 1 each direction	No	Paved	Yes
	12'			Both Sides
25.488 TO 25.832	1 – 1 each direction	Center	Paved	Yes
	12'			Both Sides
25.832 TO 26.002	1 – 1 each direction	No	Paved	Yes
	12'			Both Sides
26.002 TO 26.152	1 – 1 each direction	Yes	Paved	No
	12'	Left and Right		
26.152 TO 26.256 KOOSKIA BRIDGE	1 – 1 each direction	No	Concrete	No
	12'			
26.256 TO 26.390	1 – 1 each direction	Yes	Paved	No
	12'	Right turn from US-12		

Pavement Condition

These sections are asphalt pavement. SH-13 is rated as good or fair outside of the community of Kooskia. In Kooskia, it is rated as fair or poor.

Table 5. SH-13 TAMS Visual Survey Data

MILEPOST	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE
24.390 – 24.490	Flexible	No	Good
24.490 – 24.590	Flexible	No	Fair
24.590 – 24.690	Flexible	No	Good
24.690 – 24.790	Flexible	No	Fair
24.790 – 24.890	Flexible	No	Good
24.890 – 24.990	Flexible	No	Fair
24.990 – 25.090	Flexible	No	Good
25.090 – 25.190	Flexible	No	Fair
25.190 – 25.290	Flexible	No	Good
25.290 – 25.390	Flexible	Yes	Poor
25.390 – 25.490	Flexible	No	Fair
25.490 – 25.590	Flexible	Yes	Poor

25.590 – 25.690	Flexible	Yes	Poor
25.690 – 25.790	Flexible	No	Fair
25.790 – 25.890	Flexible	Yes	Poor
25.890 – 25.990	Flexible	Yes	Poor
25.990 – 26.090	Flexible	Yes	Poor
26.090 – 26.190	Flexible	Yes	Poor
26.190 – 26.290	Flexible	Yes	Poor
26.290 – 26.390	Flexible	No	Fair

Traffic Volumes

The speed limit of these highway sections vary between 25 and 55 mph.

Table 6. SH-13 Traffic Volumes

MILEPOSTS	AADT	CAADT	% TRUCKS
24.43 – 25.44	2,400	300	11%
25.44 – 26.02	3,100	400	11%
26.02 – 26.33	2,890	310	10%

United States Highway 12

Roadway Characteristics

For this request, our review will start at the “T” intersection of SH-13 (MP 26.390) and US-12 (MP 73.850). On US-12 for east bound (EB) traffic, there is a right-turn only lane and one through lane. For west bound traffic, there is one left-turn only lane and one through lane. There is a pullout/POE at the junction of US12 and SH13.

With the exception of the community of Kamiah, this section of road is a two (2) lane, rural arterial bordered by the Clearwater River on one side and agricultural and wooded properties on the other. It is predominantly rolling terrain with no dedicated passing or climbing lanes. A majority of this section is in Idaho County, but is in Lewis County on the west side of the river.

Upon leaving the intersection, this area reduces to one (1) lane in each direction. The road surface is asphalt concrete pavement. The speed limit in this section is 55 MPH.

At the intersection of US-12 and Valley View Drive at MP 69.644, there are opposing left turn lanes and a west bound right turn lane. At the intersection of US-12 and Trenary Drive at MP 68.457, there is a west bound right turn lane. At the intersection of US-12 and Woodland Road, at MP 66.916, there is an east bound left turn lanes.

The speed limit reduces to 35 MPH at the beginning of the bridge at MP 66.857. This structure ends at MP 66.736. A railroad crossing is located MP 66.659. This crossing is no longer used as the a RR bridge located to the south of the crossing was severely damaged several years ago during heavy spring runoffs.

At the west end of the bridge, the roadway becomes an urban section with concrete curb on either side of the highway. These curbs end at approximately MP 66.595 and the shoulders are paved. In addition, a continuous center left turn bay begins.

There is a west bound right turn bay at the west entrance to Harvest Food Grocery Store at MP 66.275. This review ends at the US-12 / SH-162 intersection at US-12 MP 66.220.

The US-12, Valley View Drive Turnbay project (MP 69.33 to 69.64) was completed in 2018. This project widened along both sides of US-12 to construct opposing left turn lane and a west bound right turn lane at Valley View Drive.

The Trenary Drive turn bay project (MP 68.457) was completed in 2009. This project constructed a west bound right turn lane.

The US-12, Woodland Road to MP 70 project (MP 66.835 to MP 70.000) was completed in 2008. This project placed a HMA overlay and upgraded guardrail.

This section from MP 66.874 to MP 73.85 received a sealcoat in 2011 (see FY12 D2 Districtwide Sealcoats, Key 12012).

Table 7. US-12 Roadway Geometry

MILEPOSTS	THROUGH LANES	TURN LANES	SHOULDER	PARKING LANE
73.966 TO 73.716	1 each direction	2	Paved	No
	11'	EB Right / WB Left		
73.716 TO 66.857	1 each direction	See below	Paved	No
	11'			
VALLEY VIEW DR. MP 68.644	1 each direction	Yes	Paved	No
	11'	Opposing Lefts/WB Right		No
TRENARY DRIVE MP 69.457	1 each direction	Yes	Paved	No
	11'	WB Right Turn		
WOODLAND RD MP 66.916	1 each direction	Yes	Paved	No
	11'	EB Left Turn		
66.857 TO 66.736 KAMIAH BRIDGE	1 each direction	No	Concrete	No
	12'			
66.659 RR CROSSING	1 each direction	No	Concrete Panels	No
	12'			
66.736 TO 66.605	1 each direction	No	Paved	No
	12'			
66.605 TO 66.595	1 each direction	No	Paved	No
	12'			
66.595 TO 66.220	3 – 1 each direction	Yes	Paved	No
		Center Left Turn Lane		
66.220 US-12/SH- 162 INTERSECTION	3 – 1 each direction	Yes	Paved	No
	12'	Left Turnbay to SH-162		

Pavement Condition

US-12 is generally rated as fair condition with some smaller sections noted as poor.

Table 8. US-12 TAMS Visual Survey Data

MILEPOST	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE
66.220 – 66.720	Flexible	Yes	Poor
66.720 – 66.820	Flexible	No	Fair
66.820 – 66.920	Flexible	Yes	Poor
66.920 – 69.475	Flexible	No	Fair
69.475 – 69.575	Flexible	Yes	Poor
69.575 – 69.975	Flexible	No	Fair
69.975 – 70.075	Flexible	Yes	Poor
70.075 – 70.275	Flexible	No	Fair
70.275 – 70.375	Flexible	Yes	Poor
70.375 – 70.975	Flexible	No	Fair
70.975 – 71.075	Flexible	Yes	Poor
71.075 – 71.975	Flexible	No	Fair
71.975 – 72.075	Flexible	Yes	Poor
72.075 – 72.575	Flexible	No	Fair
72.575 – 72.875	Flexible	Yes	Poor
72.875 – 72.975	Flexible	No	Fair
72.975 – 73.075	Flexible	Yes	Poor
73.075 – 73.175	Flexible	No	Fair
73.175 – 73.675	Flexible	Yes	Poor
73.675 – 73.950	Flexible	No	Fair
73.950 – 74.050	Flexible	Yes	Poor

Traffic Volumes

The speed limit of these highway sections vary between 25mph and 55mph.

Table 9. US-12 Traffic Volumes

MILEPOSTS	AADT	CAADT	% TRUCKS
66.22 – 66.29	4,600	310	6%
66.29 – 66.95	5,800	430	7%
66.95 – 73.86	4,100	600	13%

State Highway 162

Roadway Characteristics

The review section of SH-162 starts at the intersection of SH-162 and US-12 (MP 66.220) and ends at Four Corners (MP 8.00) where it intersections with Old SH-7 and SH-162 turns to the north. This section of road, with the exception of the portion in the community of Kamiah, is a two lane, rural arterial passing through agricultural and wooded properties and is predominantly rolling terrain with no dedicated passing or climbing lanes. This section is in Lewis County until crossing the Lawyers Creek Bridge at MP 20.577 at which point it becomes Idaho County.

Starting at the intersection US-12 (MP 66.220) and SH-162 (MP 31.077), this portion runs south and west through the community of Kamiah. This area has one lane in each direction. The road surface is asphalt concrete pavement with wide shoulder to allow parking. This in-town section which

include the Hill and 5th Streets has a speed limit in this section is 25 MPH. This road intersects with SH-64 at MP 30.819 and continues south from there.

At MP 23.065, SH-162 this section runs through a residential area and past the Kamiah School. The speed limit is 25 MPH up to MP 22.590 where it increases to 40 MPH. The speed limit then increases to 55 MPH at MP 22.300.

The section from Kamiah to MP 14 is locally referred to as the 7 Mile due to the long grade in this section. Once on top, the grade is more gradual and the road continues to wind through an agricultural area.

Other than the P.O.E rover site MP 19, there are very limited pull off opportunities along this section.

In 2012, between MP 8.000 to MP 13,047, a shoulder notch widening, retaining walls, a Full Depth Reclamation and an HMA overlay project was completed.

The SH-162, Red Rock Road to Kamiah project (MP 14.853 to MP 23.065) was completed in 2012. This project included a cold-in-place recycle, soft spot repairs, shoulder enhancements, guardrail upgrades and a HMA overlay.

The SH-162, MP 13 to Red Rock Road project (MP 13.047 to MP 14.853) was completed in 2013. This project included shoulder notch widening, Cement Recycled Asphalt Base Recycle, retaining walls and a HMA overlay.

The section from MP 8.00 to MP 23.065 received a sealcoat in 2016.

Table 10. SH-162 Roadway Geometry

MILEPOSTS	THROUGH LANES	TURN LANES	SHOULDER	PARKING LANE
30.819 TO 31.077	1 each direction	No	Paved and Gravel	Yes
	12'		3'	
23.065 TO 20.577	1 each direction	No	Paved	No
	11'			
20.577 TO 20.562 LAWYER CR BR	1 each direction	No	Concrete	No
	11'			
20.562 TO 8.00	1 each direction	No	Paved	No
	11'			

Pavement Condition

In the community of Kamiah, SH-162 is rated as poor and fair on Hill and 5th Streets. Outside of the community, it is mostly good and fair with some smaller poor areas.

Table 11. SH-162 TAMS Visual Survey Data

MILEPOSTS	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE
8.000 – 8.100	Flexible	Yes	Poor
8.100 – 8.800	Flexible	No	Good
8.800 – 9.200	Flexible	No	Fair
9.200 – 9.300	Flexible	No	Good
9.300 – 10.300	Flexible	No	Fair
10.300 – 10.400	Flexible	No	Good
10.400 – 10.600	Flexible	No	Fair
10.600 – 10.800	Flexible	No	Good
10.800 – 10.900	Flexible	No	Fair
10.900 – 11.300	Flexible	Yes	Poor
11.300 – 11.400	Flexible	No	Fair
11.400 – 11.700	Flexible	No	Good
11.700 – 12.500	Flexible	No	Fair
12.500 – 12.700	Flexible	No	Good
12.700 – 12.800	Flexible	Yes	Poor
12.800 – 13.000	Flexible	No	Good
13.00 – 13.100	Flexible	Yes	Poor
13.100 – 13.200	Flexible	No	Good
13.200 – 13.500	Flexible	Yes	Poor
13.500 – 13.600	Flexible	No	Fair
13.600 – 13.800	Flexible	Yes	Poor
13.800 – 14.300	Flexible	No	Good
14.300 – 14.400	Flexible	No	Fair
14.400 – 14.800	Flexible	No	Good
14.800 – 15.100	Flexible	Yes	Poor
15.100 – 15.200	Flexible	No	Good
15.200 – 15.600	Flexible	Yes	Poor
15.600 – 15.800	Flexible	No	Good
15.800 – 15.900	Flexible	Yes	Poor
15.900 – 16.000	Flexible	No	Good
16.000 – 16.100	Flexible	Yes	Poor
16.100 – 16.200	Flexible	No	Good
16.200 – 16.400	Flexible	No	Fair
16.400 – 16.600	Flexible	No	Good
16.600 – 16.700	Flexible	Yes	Poor
16.700 – 17.000	Flexible	No	Good
17.000 – 17.200	Flexible	No	Fair
17.200 – 17.600	Flexible	No	Good
17.600 – 17.700	Flexible	Yes	Poor
17.700 – 17.800	Flexible	No	Fair
17.800 – 18.000	Flexible	No	Good
18.000 – 18.100	Flexible	No	Fair
18.100 – 20.000	Flexible	No	Good
20.000 – 20.100	Flexible	Yes	Poor
20.100 – 20.500	Flexible	No	Good
20.500 – 20.800	Flexible	Yes	Poor

MILEPOSTS	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE
20.800 – 22.100	Flexible	No	Good
22.100 – 23.000	Flexible	No	Fair
23.000 – 23.065	Flexible	Yes	Poor
30.819 – 31.019	Flexible	Yes	Poor

Traffic Volumes

The speed limit of these highway sections vary between 25mph and 55mph.

Table 12. SH-162 Traffic Volumes

MILEPOSTS	AADT	CAADT	% TRUCKS
8.00 – 20.56	1,120	80	7%
20.56 – 21.85	1,110	90	8%
21.85 – 23.03/30.819	1,670	330	16%

Truck Ramps

No runaway truck ramps exist along these routes.

Port of Entry (POE)

There is a P.O.E. rover site at the intersection of SH-13 and US-12.
There is a P.O.E rover site on SH-162 at MP 19.

Safety Review

Accident Data

State Highway 13

Analyses of the 5-year accident data (2016-2020) on this section of SH-13 shows there were a total of 20 accidents involving 36 units and 33 people (0 fatalities and 5 Injuries), none of which involved a tractor-trailer combination. Accidents on this section primarily involved parked cars getting struck or were intersection related. Contributing circumstances were improper turning, animals, speed and inattention. This route pass by two (2) churches and no other social facilities. There are no signalized intersection on this route.

United States Highway 12

Analyses of the 5-year accident data (2016-2020) on this section of US-12 shows there were a total of 50 accidents involving 68 units and 73 people (2 fatalities and 22 Injuries), none of which involved a tractor-trailer combination. The accidents on this section primarily involved wild animals, rear-end accidents, and vehicles leaving the roadway. Contributing circumstances were animals, inattention and failure to maintain lane. This route pass by four (4) churches and no other social facilities. There are no signalized intersection on this route.

State Highway 162

Analyses of the 5-year accident data (2016-2020) on this section of SH-162 shows there were a total of 33 accidents involving 37 units and 48 people (0 fatalities and 17 Injuries). One accident involved a tractor-trailer combination (no injuries or fatalities). The accidents on this section primarily involved accidents with vehicles leaving the roadway. This route pass by Kamiah Elementary/High School and no social facilities. There are no signalized intersection on this route.

Climate Data

PRECIPITATION	ANNUAL AVERAGE
Rainfall	30.6"
Snowfall	26.4"
Days w/ Precipitation	110
Annual August High Temp	90.0F
Average December Low Tem	25.6F

END EVALUATION