
ROUTE SURVEY REPORT WITH PHOTO ALBUM

BHEL

Our Ref. No. – 99/100/12106

JHANSI, UTTARAPRADEH – BHEL, BAIJNATH (HIMACHAL PRADESH)

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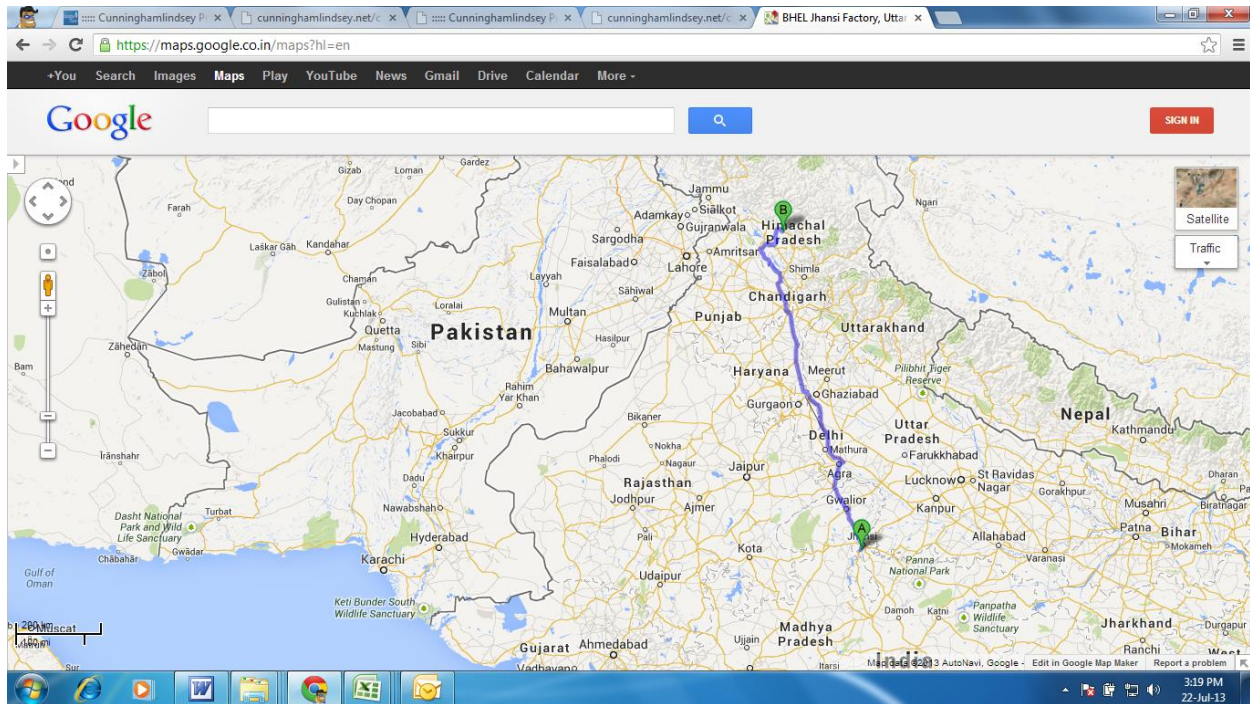


ROUTE MAP

BHEL, Jhansi (UTTAR PRADESH) –BHEL, BAIJNATH (HIMACHAL PRADESH)

From: Jhansi, Uttar Pradesh – Shivpuri (M.P) – Dholpur (RJ) - Agra (U.P) – Palwal (HR) – Pathankot (PB) – Paror (HP) – Baijnath (H.P).

Total Distance: - 1338 Kms



BRIEF SYNOPSIS OF ROUTE SURVEY FROM JHANSI (UTTAR PRADESH) TO BAIJNATH, HIMACHAL PRADESH

01. **Details of Route:**

BHEL Jhansi – Shivpuri – Moorena – Dholpur – Mania – Agra – Mathura – Palwal – Sohna – Pataudi – Jhajjar – Rohtak – Panipat – Karnal - Ambala – Rajpura – Sirhind – Khanna – Ludhiana – Jalandhar- Pathankot – Palampur – Baijnath – Pandol – BHEL Site

02. **Total Distance:** 1338 KMS

03. **States to be Passed:**

Uttar Pradesh, Madhya Pradesh, Rajasthan, Haryana, Punjab, Himachal Pradesh.

04. **Highways**

The consignments will travel on both National & State Highways. The Details of which are as given below:

State	Highway description	Distance KMS
Uttar Pradesh to Madhya Pradesh	NH 25 & NH 76	113
Madhya Pradesh to Rajasthan	NH 3	210
Rajasthan to Uttar Pradesh	NH – 3 & also some portion of SH 43	40
Uttar Pradesh to Haryana	NH – 2 & also some portion of SH 1	130
Haryana to Punjab	NH – 1 & also some portion of SH 16	340
Punjab to Himachal Pradesh	NH 2	365
Himachal Pradesh to Bhel Site	NH – 20 & also some portion of SH 17	140
TOTAL		1338

05. Highlights of Route

National Highways (NH) & State Highways (SH)

<u>From</u>	<u>To</u>	<u>Highway</u>	<u>Distance in kms</u>	<u>Road Type</u>
BHEL, Jhansi, Uttar Pradesh	Shivpuri, Madhya Pradesh	NH 25 & NH 76	113	Two by Two Lane One side road width varies from 7 to 8 mtr.
Shivpuri, Madhya Pradesh	Morena, Madhya Pradesh	NH 25 & NH 76	176	Two by Two Lane One side road width varies from 7 to 8 mtr.
Morena, Madhya Pradesh	Dholpur, Rajasthan	NH 3	28.700	Two by Two Lane One side road width varies from 7 to 8mtr.
Dholpur, Rajasthan	Agra, U.P	NH 3	67.300	Two by Two Lane One side road width varies from 7 to 8 m.
Agra, U.P	Mathura, U.P	NH 3	59	There is ROB (Rail over bridge) above railway line near Mathura. It is a single lane flyover. The carrying capacity of this bridge is maximum 150 MT. From Pataudi, Haryana to Jhajjar, Haryana is a Single lane highway One by one lane.
Mathura, U.P	Kosi Kalan, U.P	NH 3	47.900	
Kosi Kalan, U.P	Palwal, Haryana	NH 3	42.900	
Palwal, Haryana	Sohna, Haryana	NH 71	30.200	
Sohna, Haryana	Gurgaon, Haryana	SH 28	23	
Gurgaon, Haryana	Pataudi, Haryana	NH 8	35.300	
Pataudi, Haryana	Jhajjar, Haryana	NH 71	37.700	
Jhajjar, Haryana	Rohtak, Haryana	NH 71	34.600	
Rohtak, Haryana	Panipat, Haryana	SH 16	72.500	

Panipat, Haryana	Karnal, Haryana	NH 1	30.200	
Karnal, Haryana	Ambala, Haryana	NH 1	82.200	
Ambala, Haryana	Rajpura, Punjab	NH 1	25.600	
Rajpura, Punjab	Sirhind, Punjab	NH 1	28.600	Two by Two Lane One side road width varies from 7 to 8 m.
Sirhind, Punjab	Ludhiana, Punjab	NH 1	68.600	Two by Two Lane One side road width varies from 7 to 8 m.
Ludhiana, Punjab	Pathankot, Punjab	NH 1A	184.500	Two by Two Lane One side road width varies from 7 to 8 m.
Pathankot, Punjab	Palampur, Himachal	NH 20	113	One by One Lane One side road width varies from 6 to 7 m.
Palampur, Himachal	Bajnath, Himachal	NH 20	17.200	One by One Lane One side road width varies from 6 to 7 m.
Bajnath, Himachal	BHEL Site, Himachal	Neri – Bajnath Road	35.300	One by One Lane One side road width varies from 3 to 3.5 m. (See note in annexure- 1)

06. Brief Description on routes

<u>Sr. No.</u>	<u>Contents</u>	<u>Description</u>	<u>Remarks</u>
01	Route	Jhansi (12km) – Shivpuri (98.4km) – Morena (176km) – Dholpur (28.7km) – Agra (67.3km) – Mathura (59km) – Kosi Kalan (47.9km) – Palwal	Total distance- 1323 Km. States Involved- Uttar Pradesh Madhya Pradesh Rajasthan

		(42.9km) – Sohna (30km) – Gurgaon (23.2km) – Pataudi (35.3km) – Jhajjar (37.7km) – Rohtak (34.6km) – Panipat (72.5km) – Karnal (30.2km) – Ambala (82.2km) – Rajpura (25.6km) – Sirhind (28.6km) – Ludhiana (68.6km) – Pathankot (184.5km) – Palampur (113km) – Baijnath (17.2km) – BHEL Site (35.3km)	Haryana Punjab Himachal Pradesh
02	Highway	NH25, NH76, NH2, NH1, NH20 & SH 16	Single Lane, Double Lane.
03	Railway crossing	Electrified 04 Numbers. Manual 09 Numbers.	Railway level crossing with Height barricades having clearances varying from 4.5 to 5.5 m. at certain locations. There may be necessity to remove these height barricades for passing of the consignment and then re-fitment. Receiver's may obtain permission from the Railway Superintendent's regional offices for this.
04	Ghat Section	01 Numbers.	Local gradients angle wise ranging from 10 to 35 degree. Turning radius ranging from 2 to 3 m. One way road width in Ghat Section is 4 to 5 m. Ghat section parameters mentioned above are normal

			and no abnormality like sharp turn / sharp gradient observed. However, being “Ghat Section”, require more precautions than Straight Highway Surface.
05	Major Bridges	Road Bridges 16 Number River Bridges 07 Number	Slow pass needed while passing those bridges.
06	Minor Bridges	Road Bridges 15 Number River Bridges 08 Number	Slow pass needed while passing those bridges.

Our location wise chain-age detailed route survey findings are incorporated in ANNEXURE- “A” appended to this survey report.

07. Major Structures En-route:

Based on our past experience and considering the present conditions of the major road & river bridges and minor structures by and large of 15 to 20 years old, these are safe to carry load of consignments weight upto 150 Tones.

08. Gradients En-route:

Depending on the size of the consignments and subsequent length of the trailer, such gradients if found beyond the range of the Hydraulic adjustments should be corrected by suitable civil work.

09. Local RTO restrictions:

Reportedly local RTO have restriction to transport of such ODC cargo through abovementioned cities. Time permitted to transport such ODC cargo is 2000 hrs PM TO 06:00 hrs through the cities. Need to be kept in mind while passing the cargo through the cities.

10. District collectors order:

As per our understanding there exist an order of collector for carrying local beyond 20T. For the purpose of load carried beyond it, permission of collector is required.

Conclusion:

It is feasible to transport consignments having overall height up-to 3.6 Mtrs including trailer height of 1.10 Mtrs and cargo weight up-to 42 Tons to 60 Tons from Jhansi to Paprola, Baijnath.

Further beyond Paprola, Baijnath to BHEL site, a distance of about 35 Kms, the road condition is adverse. It is informed to us that two trailers have toppled in this stretch earlier. The road is narrow and potholed with minimal turning spaces and even stones protruding at the turning and sharp climbs. It is recommended that extensive repair of the road is undertaken and road widened wherever necessary for the trailers to pass.

A dry run of the empty trailer should be taken by the driver to understand road contour and elevation before actually moving the consignment.

Extreme precaution is necessary in their stretch in view of road condition and past event.

General Remarks

In our opinion transporting agency need to check the subject route condition before commencement of actual transport.

Based on our past experience we advise the best route which mostly covering National Highway and suitable to transport package of 60 Tons from Jhansi to Baijnath.

BHEL Jhansi – Shivpuri – Moorena – Dholpur – Mania – Agra – Mathura – Palwal – Sohna – Pataudi – Jhajjar – Rohtak – Panipat – Karnal - Ambala – Rajpura – Sihind – Khanna – Pathankot – Palampur – Baijnath – Pandol – BHEL Site

Issued without Prejudice

For Cunningham Lindsey International Pvt. Ltd.,

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Managing Director