

भारत सरकार  
सड़क परिवहन एवं राजमार्ग मंत्रालय

सं. 30 आर डब्ल्यू/एनएच-12014/1096/2016/एचआर/एनएच-1

सेवा में,

सचिव,  
हरियाणा सरकार,  
लोक निर्माण विभाग, चंडीगढ़।

परिवहन मंत्र, संसद मार्ग,  
नई दिल्ली 110001  
दिनांक 26.9.2016

विषय:- 4-laning from km. 3.335 to 3.657 and km. 4.575 to 6.875 in Bhiwani District on Bhiwani-Mundal-Jind-Karnal road new NH-709A in the State of Haryana.

संदर्भ:- Engineer-in-Chief, Haryana, PWD (B&R) Branch, Chandigarh vide letter no. 89-NH-2016/1832 dated 20.07.2016 & 89-NH-2016/71112 dated 17.08.2016.

महोदय,

(Job No. NH-709A-HR-2016-17-393)

मुझे तकनीकी नोट में दी गई शर्तों के अधारीन, निम्न व्यारे के अनुसार विषय शीर्षक में उल्लिखित करने का निर्देश हुआ है:-

1. राज्य द्वारा भेजे गए उक्त कार्य के लिए प्राक्कलन में उल्लिखित राशि	(रुपये लाखों में)
2. तकनीकी अनुगोदन की राशि (9% की दर से एजेंसी प्रभार सहित )	Rs. 1180.98
3. वित्तीय एवं प्रशासनिक रक्तीकृति की राशि	Rs. 1097.35

(Rupees Ten Crore Ninety Seven Lakh and Thirty Five Thousand only)

2. यह संस्कीकृत निम्नलिखित शर्तों पर आधारित है:-

- यह कार्य तकनीकी नोट में दिए गए लक्ष्य व उल्लेख के अनुसार पूरा किया जाना चाहिए।
- 9 गार्व, 2000 के पत्र सं. 30 आर डब्ल्यू/एनएच-11029/3/99-यू एस डी । के तहत जारी "निविदा आमंत्रण" संबंधी दिशा निर्देशों का पालन किया जाएगा।
- पूर्व परिपत्र दिनांक 13.1.2000 सं.आरडब्ल्यू/एनएच-11026/2/99-यूइस (डी-1) का अधिकमण करते हुए मंत्रालय के परिपत्र दिनांक 29.10.2001 संख्या आरडब्ल्यू/एनएच-11026/2/99-यूएस (डी-1) में निर्दित आदेशों के अनुसार, यदि निविदा की लागत स्वीकृत अनुमानित लागत से 5% अधिक है, तब संशोधित प्राक्कलन पर मंत्रालय से स्वीकृति लेनी होगी। इसके अतिरिक्त यह भी सुनिश्चित किया जाए कि राष्ट्रीय राजमार्गों पर निर्माण के निष्पादन हेतु आमंत्रित की गई निविदा तथा विज्ञापन से संबंधित अन्य केन्द्रीकृत वित्तीय योजनाओं की आवश्यकताओं को देखते हुए इन्हे मंत्रालय के दिनांक 9.3.2000 के परिपत्र संख्या आरडब्ल्यू/एनएच-11024/3/99-यूएस (डी) द्वारा जारी दिशा-निर्देशों के अनुरूप पालन किया जाए।
- 50% कार्य होने पर यदि परियोजना का जायजा लेने से यह पता लगता है कि परियोजना के भौतिक रूप से होने की तुलना में वित्तीय व्यय के आधार पर प्राक्कलन संशोधन आवश्यक होगा तो संशोधित प्राक्कलन प्रस्तुत करने के लिए तत्काल कार्यवाही की जानी चाहिए ताकि यह सुनिश्चित किया जा सके कि अनुमानित सीमा से अधिक व्यय करने की आवश्यकता अत्पन्न होने से पहले स्वीकृत संशोधित प्राक्कलन उपलब्ध है।
- इस कार्य पर तथा संस्कीकृत कार्यों पर व्यय चालू वित्त वर्ष के दौरान राज्य सरकार के लिए किए गए आवंटन से अधिक नहीं होना चाहिए और यह भी सुनिश्चित किया जाए कि राज्य सरकार को जारी की जाने वाली राशि कार्य की प्रगति और पहले जारी की गई राशि की उपयोगिता के आधार पर उचित है।
- मंत्रालय के दिनांक 5/10.7/2001 के परिपत्र सं. ए-10एच-15015/29/2001-पी० एल० के अनुसार यदि स्वीकृति की तारीख से 6 माह के अंदर कार्य नहीं सौंपा जाता है तो कार्य अस्वीकृत हो जाएगा।

(vii) मंत्रालय के ज्ञापन सं0 आर डब्ल्यू/एनएच 33044/10/202 एस एण्ड आर (आर) दिनांक 26 मई 2003 एवं 31 दिसम्बर, 2003 द्वारा प्रदर्शन पट प्रदर्शित करने के संबंध में जो अनुदेश जारी किए गए हैं उनका सख्ती से अनुपालन किया जाए ।

3 यह व्यय मुख्यशीर्ष 5054-सड़कों और पुलों संबंध में पूँजीगत परिव्यय; 01-राष्ट्रीय राजमार्ग; 01.337--सड़क कार्य; 03 राष्ट्रीय राजमार्ग मूल कार्य; 03.01 केन्द्रीय सड़क निधि से वित्त पोषित कार्य; 03.01.53 मुख्य कार्य के नामे डाला जाएगा जिसके लिए चालू वित्त वर्ष 2016-2017 के लिए संगत मांग सं0 74-सड़क परिवहन और राजमार्ग मंत्रालय है ।

4. अनुमोदित प्राक्कलन की एक प्रति अलग से मुख्य अभियन्ता (रा० रा०) को भेजी जा रही है ।

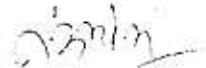
5. सभी स्वीकृति कार्यों की तरह विहित प्रपत्र में 5 करोड़ से ज्यादा के कार्यों के लिए गासिक प्रगति रिपोर्ट इस मंत्रालय तथा उसे सेविय अधिकारी, चंडीगढ़ को भेजी जाए ।

6. निम्नलिखित वस्तुगत और वित्तीय लक्ष्य निधियों की उपलब्धता के आधार पर किया जाए ।

वर्ष वस्तुगत(संचयी) वित्तीय(संचयी लाखों में)

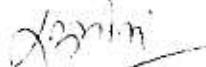
2016-2017	30%	Rs. 329.00
2017-2018	100%	Rs. 1097.35

7. यह संस्वीकृति वित्त प्रभाग की सहमति से उनके यू ओ सं0 2132/TF-II/2016 dated 01.09.2016 के द्वारा जारी की जाती है ।

  
(सुशील कुमार जीवा)  
अवर सचिव भारत सरकार

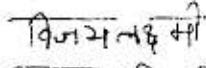
प्रतिलिपि प्रेषितः-

- महालेखाकार, हरियाणा सरकार, चंडीगढ़ ।
- वेतन एवं लेखा अधिकारी, सड़क परिवहन एवं राष्ट्रीय राजमार्ग, आई डी ए बिल्डिंग, जाम नगर हाउस, नई दिल्ली ।
- वेतन एवं लेखा अधिकारी, सड़क परिवहन एवं राष्ट्रीय राजमार्ग, छठामाला, केन्द्रीय सदन, सैकटर 9ए, चंडीगढ़ ।
- लेखा प्रमुख निदेशक, आर्थिक एवं लेखा मंत्रालय, महालेखाकार, केन्द्रीय राजस्व भवन, इन्द्रप्रस्थ इस्टेट, एन.एच.डी.पी-4-ए, अनुभाग ।

  
(सुशील कुमार जीवा)  
अवर सचिव भारत सरकार

तकनीकी नोट की एक प्रति के साथ प्रति प्रेषितः-

- मंत्री जी के निजी सचिव ।
- अध्यक्ष, भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, भाट न0. 5-6, सैकटर-10, द्वारका, नई दिल्ली ।
- संयुक्त सचिव, (राष्ट्रीय राजमार्ग) ।
- मुख्य अभियन्ता (एन.एच.डी.पी-4) ।
- मुख्य अभियन्ता, राष्ट्रीय राजमार्ग, हरियाणा सरकार, लोक निर्माण विभाग, चंडीगढ़-संशोधित प्राक्कलन की एक प्रति सलग्न है ।
- अधीक्षण अभियन्ता, सड़क परिवहन एवं राष्ट्रीय राजमार्ग, छठा माला, केन्द्रीय सदन, सैकटर 9ए, चंडीगढ़ ।
- मुख्य अभियन्ता पी-1/अधीक्षण अभियन्ता पी-1/कार्यकारी अभियन्ता पी-1/ कार्य एवं लेखा अनुभाग/ गार्ड फाईल ।

  
विजय भट्ट  
अनुभाग अधिकारी

GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS

No. RW/NH/12014/1096/2016/HR/NH-1

Dated: 26<sup>th</sup> September, 2016

TECHNICAL NOTE

(Job No. NH-709A-HR-2016-17-393)

1. Name of work	4-lanning in km. 3.335 to 3.657 and km. 4.575 to 6.875 Bhiwani District on Bhiwani-Mundal-Jind-Karnal road new NH-709A in the State of Haryana	
2. NH No.	709A	
3. Length in Km.	2.44 km	
4. State	Haryana	
5. Estimated Cost (Rs. in lakh)	As proposed by the State PWD (i/c agency charges @ 9%) Rs. 1180.98 lakh	As modified in the Ministry (i/c agency charges @ 9%) Rs. 1097.35 lakh
6. Rate per Km.	Rs. 484.01 lakh	Rs. 449.73 lakh
7. Reference	Engineer-in-Chief, Haryana, PWD (B&R) Branch, Chandigarh vide letter no. 89-NH-2016/1832 dated 20.07.2016 & 89-NH-2016/71112 dated 17.08.2016	

1. **Scope of Work** **COMMENTS**  
The scope of work envisages for 4-lanning in km. 3.335 to 3.657 and km. 4.575 to 6.875 Bhiwani District on Bhiwani-Mundal-Jind-Karnal road new NH-709A in the State of Haryana.

2. **Provisions**  
2.1 In view of the facts stated by PWD the following provisions have been allowed:  
(a) Earth work on berms & side slopes;  
(b) 260 mm thick GSB in widening portion;  
(c) 250 mm thick WMM in widening portion;  
(iv) P/L Primer coat & tack coat;  
(d) 90 mm thick DBM on widening as well as on exiting carriageway;  
(e) 40 mm thick BC on entire carriageway;

2.2 **Minor bridges/culverts:** Re-construction of minor bridge at RD 3.334 & 3.350 as proposed by the State PWD. And culverts at RD 5.100, 5.500 & 6.400 as proposed by State PWD.

2.3 **Miscellaneous:**  
(i) Construction of chamber for utility as proposed by State PWD.  
(ii) Road markings with thermoplastic paint for centre line, edge line and Zebra crossings etc. as proposed by the State PWD.  
(iii) Construction of 1.5 m wide central verge as proposed by the State PWD.  
(iv) Painting two coats with synthetic enamel paint as proposed by State PWD.  
State PWD has made provision of utilities shifting on lumpsum basis i.e. i.e. forest clearance is Rs. 1,50,00,000/-, shifting of electrical lines is Rs. 50,00,000/- and shifting of Sewer/water supply line is Rs. 30,00,000/- as proposed by State PWD. The utilities shifting actual estimate from concern authority may be obtained before award of work.

2.4 **Modifications:** The provision of street lighting may be deleted from the estimate..

3. **Comments and Modifications made in the estimate**

3.1 The provisions for granular layers (sub base and base layer) proposed by the State PWD based on IRC-37:2012 in the widening portion has been allowed as proposed. The provision of strengthening as proposed by the State PWD has been allowed.

3.2 The proposal of State PWD for construction of 2 nos minor bridges & 3 nos. of culverts has been allowed for estimate purposes only. However, the design and drawing of the culverts and side drain shall be approved by CE (NH), Haryana PWD before award of the work.

3.5 The State PWD has intimated that there is requirement of shifting of utilities and forest clearance in order to carry out the work of widening in the instant stretch. The provisions for utilities shifting on lumpsum basis i.e. i.e. forest clearance is Rs. 1,50,00,000/-, shifting of electrical lines is Rs. 50,00,000/- and shifting of Sewer/water supply line is Rs. 30,00,000/- as proposed by State PWD. The State PWD shall ensure that the estimates of utilities shifting would be collected from concern authority before award of work.

3.6 The State PWD shall ensure that the work of utility shifting & tree cutting would be done before calling the tender for the work.

4. **Breakup of the Cost:** The estimate has been checked in view of above comments for Rs. 1097.35 lakh including all centages and forest clearance Rs. 150.00 lakh, shifting of electric poles line Rs. 50.00 lakh & shifting of Sewer/water supply lines Rs. 30.00 lakh also included in the estimated cost). The brief break up of the cost is given below:

Estimated cost of Civil work	=Rs.	756.71 lakh
Cent ages (2.8% contingency, 1.5% WC, 1% QC & 9% Agency)	=Rs.	110.64 lakh
Forest clearance	=Rs.	150.00 lakh
Shifting of electrical lines	=Rs.	50.00 lakh
Shifting of Sewer/water supply lines	=Rs.	30.00 lakh
<b>Total</b>	=Rs.	<b>1097.35 lakh</b>

5. **Rates and leads**

5.1 The estimate has been prepared based on the analysis of rates as per the Ministry's latest Standard Data Book. The rates of materials and conveyance have been adopted as per the latest Schedule of Rates for material applicable for the State of Haryana. It is presumed that State Chief Engineer has satisfied himself about the adequacy of rates and lead adopted in the estimate.

5.2 The leads for the collection of various materials as adopted in the estimate have been allowed for estimate purpose only. However, while calling tender, the source may not be indicated. The contractor shall be responsible to procure the material conforming to the specifications of the work. No provision of extra lead during execution of the work shall be allowed.

6 **Specifications and Quality control:**

6.1 All the items of the work included in the scope of the work will be executed strictly as per Ministry's specification for Road and Bridge works (5<sup>th</sup> Revision- 2013) and other circulars/ guidelines issued by the Ministry from time to time. The deviation in specification/scope of work, if any, must be reported to the Ministry and approval sought before commencement of the work.

6.2 Adequate tests shall be done by State PWD as per Ministry's specification and the quality of work done in the past as well as in present/ future may be ensured by State PWD. If there are instances of premature failures, necessary action should be taken by State PWD for identifying the reasons for these failures and may fix the responsibilities for such lapses.

6.3 The CE (NH), Haryana PWD shall get the independent quality control tests of adequate items from any of the NABL accredited laboratories as per IRC:SP:94-2011 done from the quality Control provisions in the estimate and ensure the quality of work.

6.4 Provisions for quality control @ 1% have been allowed. The work is to be carried out in accordance with the "Hand Book of Quality Control for construction of Roads and Runways (Second Revision)-IRC: SP: 11-1988", observing strict quality control instructions contained in Ministry's letter No. NH-III/P/I/83 dated 19.04.84 and permanent records maintained thereof.

6.5 Stipulations made in the Manual for Construction and Supervision of Bituminous works shall be strictly followed during the execution of work.

6.6 Batch type Hot Mix plant shall be used for the work as per Ministry's guidelines. The plant must be located at such a location that farthest point of the reach will be within 25 km from the HMP.

6.7 The existing surface shall be prepared to the required profile in accordance with Clause 501.8 and 902.3 of Ministry's Specifications. Extra provision required for patching potholes and sealing cracks for preparing the existing surface before laying bituminous layers shall be got executed as per Ministry's specification.

6.8 **Three stage videography (before, during and after complication of work) shall be done and CD may be furnished to Regional Officer, MORT&H Chandigarh before final payment is released. In this regard Ministry's circular No. NH-22023/16/2005-P&M dated 18.05.2005 may kindly be referred.**

6.9 The work of road items should not continue over the bridges, if any. The longitudinal profile of the immediate approaches should be suitably adjusted to merge with the road level of the bridge as per the guidelines circulated vide Ministry's letter no. RW/NH-33044/10/2000-S&R dated 1<sup>st</sup> June, 2000.

6.10 The work of road marking with stipulated paint (thermoplastic) shall be done as per Clause 803 of Ministry's Specification and IRC: 35-1997.

7 **Splitting of work:**  
No splitting of work shall be allowed.

8 **Invitation of Tenders:**

8.1 E-procurement must be adhered to while inviting the tender. Guidelines circulated by Ministry vide letter no. RW/NH-24035/4/2008-P&M/PIC/EAP dated 31.03.2016 may be adopted for invitation of tender and qualification of contractors.

8.2 The Bill of quantities (BOQ) for the tender purpose may be modified in compliance of this technical note and observations given below. However, it shall be ensured that all items of work including the items against L.S. provisions are included in the Bill of quantities (BOQ) to be issued with the tender documents.

8.3 The advertisement for invitation of tenders shall be done as per modified guidelines circulated to State PWDs in the Ministry's No. RW/NH-11024/3/99-US (D.I) dated 09.03.2000 and the cost incurred under contingencies with the approval of Ministry's R.O. as per para 1.1 of Ministry's circular No. RW/G-20011/8/98-WA dated 16.08.2002.

8.4 In accordance with the order contained in Ministry's circular No. RW/NH-11026/2/99-US(P) dated 13.01.2000, if the cost of tender exceeds 5% of the sanctioned amount, the work shall be got de-sanctioned and fresh estimate be got sanctioned from the Ministry.

8.5 It needs to be clearly mentioned in the NIT that the rates are inclusive of cost of traffic management during construction. Contractor shall provide road signage, ballads, boards, gunny bags, sheets etc. for safety of traffic during construction period, which will be incidental to work.

8.6 Ministry's Standard Document must be followed for works contract costing more than Rs. 5.00 crore as per of Ministry's circular No. RW/NH-24020/2/99-PIC dated 21.12.2000.

8.7 **Defect liability period is three year as per Ministry's circular No. RW/NH-11065/4/2012-P&M (Pt-II) dated 12.04.2012.**

8.8 Ministry's circular No. RW/NH-24035/4/2008-P&M/PIC-EAP dated 13.11.2014 must be followed for guidelines and procedure to be adopted for invitation of tenders and qualification of contractor for execution of Road & Bridge works on National Highway and Centrally Finance schemes.

8.9 All the relevant Circulars and amendments regarding tender procedures issued from time to time by Ministry shall be followed. While finalizing the tender Central Vigilance Commission (CVC) guidelines circulated vide Circular No. 4/3/07 dated 03.03.2007 should be strictly followed.

8.10 The time limit for awarding of this work should be strictly followed as per the instruction communicated to all State PWDs vide this Ministry's letter No. RW/NH-15015/29/2001-PL dated 5<sup>th</sup> July, 2001 and compliance reported to the Ministry. If the work is not awarded within the stipulated time, it may lead to de-sanction of the work unless Ministry's prior approval to extension of time limit is obtained.

8.11 The work shall be entrusted to contractors having adequate experience in similar type of works and having adequate machineries and financial resources to execute the work using HMP and sensor paver finisher of adequate capacity and specifications to the entire satisfaction of the engineer.

8.12 State PWD will intimate this Ministry and the R.O. Chandigarh about award of contract / commencement of work immediately as per instructions contained in the Ministry's letter No. RW/NH-11028/1/93-(DO-I) dated 01.12.1993.

**9 General Observations:**

9.1 Collection of material on the road side should be so planned that it should commensurate with the physical progress of work and the collected material should not cause any hindrance to the traffic. It must be ensured that the contractor arranges for separate land for storage of road construction material and machinery and these shall not be allowed to be stacked on roadside.

9.2 Bitumen used for work shall be heated in boilers only and not in drums on open fire. Spraying of bitumen wherever necessary should be done only with the mechanical sprayers and premixing of bitumen and stone aggregates should be done only in the proper mechanical mixer / Hot Mix plant.

9.3 The provisions made in the estimate are accepted for estimate purpose only. Any savings (in the provisions in the estimate) during execution of the work shall be credited to the estimate.

9.4 The work should be carried out as per Ministry's specifications for Road and bridge works (5<sup>th</sup> Revision) 2013 and guidelines issued by the ministry from time to time. Deviations in specifications for any work should be got approved from the Ministry before adopting the same.

9.5 No work beyond the scope of the sanctioned estimate leading to increase in the scope of work or change in specifications should be undertaken without obtaining prior written approval of the ministry. In this connection this Ministry's letter No. RW/NH III/Coord/32/84 dated 19.05.84 and NH-11026/2/99-US (D-I) dated 29.10.2001 may be referred.

9.6 Provision for quality control @ 1% has been allowed. The work is to be carried out in accordance with the "Hand book of Quality control for construction of Roads and Runways (second Revision)- IRC SP: 11-1988", observing strict quality control instructions contained in Ministry's letter No. NH III/P/I/83 dated 19.04.84 and permanent records maintained thereof. CE (NH) shall ensure strict quality control during actual execution of work and shall ensure that suitable instructions are issued to all Field officers in this regard.

9.7 In order to ensure that there is no slippage in achieving the targets, the progress may be closely monitored by CE (NH) and quarterly status report furnished to the Ministry and R.O. Chandigarh in the prescribed proforma.

9.8 The tack coat shall be provided with bitumen emulsion as per latest specifications of the Ministry.

9.9 Camber or cross fall of 2% for CC surface, 2.5% for bituminous surface and 3.5% for earth work may be provided as per Clause 8.2 of IRC: 52-1981 considering the high rainfall in the area.

9.10 The selection of grade of bitumen to be used for the work shall be as per guidelines issued vide Ministry's Circular No. RW/NH-33044/3/98-(S&R) dated 04.11.99.

9.11 During the course of execution, the traffic may be regulated in accordance with guidelines laid down vide Ministry's letter No. NH III-33 (126)/72 dated 20.03.1973, Letter No. RW/NH-11060/1/1998-D.O.1 dated 07.10.1987. Smooth flow of traffic may be ensured by providing adequate traffic control devices in accordance with stipulation of IRC: SP: 55: 200 "Guidelines on Safety in construction Zone."

9.12 The display boards on development activities of the work shall be made as per guidelines issued vide Ministry's letter No. RW/NH-33044/10/2002-S&R (R) dated 26-5-2003. The cost of the same will be met out of the provision of contingencies allowed in the estimate.

**10 Targets:**

Following physical and financial targets may be achieved subject to the availability of funds:

Year	Physical Progress cumulative (%)	Financial Progress cumulative (Rs. in lakh)
2016-17	30	329.00
2017-18	100	1097.35

(Pramod Kumar)  
Assistant Engineer (P-1)  
for DG (Road Development) & Special Secretary