Government of Maharashtra
Public Works Department
Public Works Region, Aurangabad.
Public Works Circle, Osmanabad.

E-TENDER DOCUMENT

E-Tender Notice No. : ABJ-05/03-2015-16

-:- Name of Work -:-
Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15).

Estimated Cost :- Rs. 14,55,66,481.00
E.M.D. :- Rs. 14,56,000.00

Office of the,
Executive Engineer,
Public Works Division, Ambajogai.
# INDEX

**Name of Work:** Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed.

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<th>Page Nos.</th>
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</tbody>
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विषय : जाहिरात प्रसिद्धि वाक्य।
ई-निविदा सुचना क्र.: पीबीजे-५ सन् २०१५-२०१६।

या सोबतस्वी जाहिरात शासकीय घोषणानुसार लैणौत जाहिर ई-निविदा प्रसिद्ध करण्याकरिता आपणाकडे पाठवत आहे, तरी विषमाचे करण्याचे व्यवस्था करावी।

1. कार्यालयाचे नाव व दुरुस्ती क्रमांक: कार्यालयाची अभियंता,
   सर्वजनिक बांधकाम विभाग (२०४६) २४४६६०।
2. जाहिरातीकरण काम कोणत्या स्थानापासून याची संवेदनाची आहे: बीड सिला।
3. जाहिरात प्रसिद्ध किंवा अंतिम तारीख: लातकाकं।
4. जाहिरात किंवा वर्तमानपत्रानुसार प्रसिद्ध करण्याची आहे: एक मराठी/एक इंग्रजी।
5. जाहिरात साहित्यिक विभाग असाब्य असणा किंवा नाही: असाबे।
6. जाहिरात प्रतिवेदनीची भाषा: एक मराठी/एक, इंग्रजी।
7. वरील वेळपत्राचा जाहिरात किंवा वेळा प्रकाशित करण्याची आहे: एक वेळ।
8. कोणत्या अधिकारी-यांना जाहिरातीचे देखक पाठवावाचे आहे: कार्यालयाची अभियंता,
   सर्वजनिक बांधकाम विभाग, अंबाजोगाई।

सोबत: ई-निविदा सुचना प्रती

1) मराठी ५ प्रती
2) इंग्रजी ३ प्रती

प्रत: आ. मुख्य अभियंता सां. बं. प्राधिक क्षेत्र विभाग अंबाजोगाई यांना माहितीसऱ्या सविनय सावर।
सोबत: ई-निविदा सुचना प्रत।

प्रत: अधिकारी अभियंता सां. बं. मंडळ उपमानाचाय यांना ई-निविदा सुचना वेबसाइटवर प्रसिद्ध करण्यातील सावर।
सोबत: ई-निविदा सुचना प्रत।

प्रत: उप विभागीय अभियंता सां. बं. उपविभाग, अंबाजोगाई/परखऱ्या/केजऱ्या/माजलगाव यांना माहितीसाठी देऊन सुचवून करण्यात येते की, जाहिरातीकरण ई-निविदाचे बेलेपत्रकारण तपास करण्याची कार्याची साधने कायमसाठी सांगून प्रसिद्ध करण्याचे याचावत।

प्रत: विद्युत शाखा यांना देऊन सुचवून करण्यात येते की, सदर कामशाळी लागणारे वाक्य सारे ईमानादी तयार करून प्रसिद्ध करण्याचे याचावत।

प्रत: ताजिन माहिती ई-मार्गस्थळ-५/ रस्ते-२ सां. बं. विभाग, अंबाजोगाई यांना माहितीसाठी नोटिस बोर्डवर डिक्स्पोनसाठी।
GOVERNMENT OF MAHARASHTRA
PUBLIC WORKS DIVISION, AMBAJOGAI
E-TENDER NOTICE NO.: ABJ-05 OF 2015-2016

Online tenders for following works are invited by Executive Engineer, Public Works Division, Ambajogai Dist. Beed (Phone No. 02446-247760) from the contractor registered with Government of Maharashtra in appropriated class. The Blank Tender forms download w.e.f. 27/07/2015 to 20/08/2015 on the working days only. Download tenders will be Submitted online on or before 31/08/2015 upto 23.00 Hrs. Pre-bid Meeting will be held in the office of the Chief Engineer, Public Works Region, Aurangabad on 14/08/2015 upto 15.30 Hrs. for the following works.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Work</th>
<th>Estimate Cost</th>
<th>Earnest Money (Rs.)</th>
<th>Period of completion</th>
<th>Cost of E-Tender form (Rs.)</th>
<th>Class of Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Imp. to Ambajogai Mandwa Mandekhel Nathra Kaudgaon Sirsala Sonpeth Road SH-235 Km. 13/00 to 50/00 Tq. Parali Dist. Beed</td>
<td>Rs. 24,01,64,162/-</td>
<td>Rs. 24,01,700/-</td>
<td>18 Months</td>
<td>25,000/-</td>
<td>Class-1(B) &amp; above</td>
</tr>
<tr>
<td>2</td>
<td>Imp. to Manjarsumba-Kaji-Lokhandi Sawargaon-Ambajogai-Ahamadpur Road Sh-56 Km 128/00 to 158/00 Tq. Ambajogai Dist. Beed</td>
<td>Rs. 16,46,28,193/-</td>
<td>Rs. 16,46,300/-</td>
<td>18 Months</td>
<td>25,000/-</td>
<td>Class-1(B) &amp; above</td>
</tr>
<tr>
<td>3</td>
<td>Imp to Beed Parali Gangakhed Road MSH-16 Km. 408/00 to 441/00 Tq. Parali Dist. Beed</td>
<td>Rs. 14,55,66,481/-</td>
<td>Rs. 14,55,700/-</td>
<td>18 Months</td>
<td>25,000/-</td>
<td>Class-1(C) &amp; above</td>
</tr>
<tr>
<td>4</td>
<td>Imp. to Parali Dharmapuri Pangaon Road SH-233 Km. 0/00 to 22/500 Tq. Parali Dist. Beed</td>
<td>Rs. 14,91,09,501/-</td>
<td>Rs. 14,92,000/-</td>
<td>18 Months</td>
<td>5,000/-</td>
<td>Class-1(C) &amp; above</td>
</tr>
</tbody>
</table>

Note:
1) Contractors are mandated to get enrolled on e-Tendering portal http://maharashtra.etenders.in
2) For details Contractors be contact Help Desk Phone No. 020-25315555/25315556 Email ID: support.gom@nextenders.com
3) Right is reserved to reject any or all tenders without any reason thereof.
4) We are not responsible for any problem i.e. Internet Problem, Virus attack, Hardware and Software Problem or any Electrical Problem etc.
5) Above Tender Notice is also available on Web site of www.mahapwd.com

Executive Engineer,
Public Works Division, Ambajogai
# Tender Schedule

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>PWD Stage</th>
<th>Vendor Stage</th>
<th>Start Date</th>
<th>Start Time</th>
<th>Expiry Date</th>
<th>Expiry Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tender Release</td>
<td>-</td>
<td>24.07.2015</td>
<td>10:00</td>
<td>27.07.2015</td>
<td>19:30</td>
</tr>
<tr>
<td>2</td>
<td>-</td>
<td>Tender Download</td>
<td>27.07.2015</td>
<td>19:31</td>
<td>20.08.2015</td>
<td>23:00</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>Bid Preparation</td>
<td>27.07.2015</td>
<td>19:31</td>
<td>24.08.2015</td>
<td>23:00</td>
</tr>
<tr>
<td>4</td>
<td>Superhash &amp; Bid</td>
<td>-</td>
<td>24.08.2015</td>
<td>23:01</td>
<td>27.08.2015</td>
<td>23:00</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>Control Transfer of Bid</td>
<td>27.08.2015</td>
<td>23:01</td>
<td>31.08.2015</td>
<td>23:00</td>
</tr>
<tr>
<td>6</td>
<td>Technical Bid</td>
<td>-</td>
<td>01.09.2015</td>
<td>10:30</td>
<td>16.09.2015</td>
<td>19:30</td>
</tr>
<tr>
<td>7</td>
<td>Financial Bid</td>
<td>-</td>
<td>01.09.2015</td>
<td>10:30</td>
<td>16.09.2015</td>
<td>19:30</td>
</tr>
</tbody>
</table>

Executive Engineer,
Public Works Division, Ambajogai
Published on Jul 24 2015 5:55PM

GOVERNMENT OF MAHARASHTRA
PUBLIC WORKS DEPARTMENT
P.W. DIVISION, AMBAJOGAI
Tender Notice No B-1-5 for Year 2015-2016

Sealed tender for the following works are invited by the Executive Engineer Public Works Division, Ambajogai, PWD Premises, Ambajogai, Dist.Beed. Tel. No. 02446-247760 R.247780, 9228690510 from the Contractors registered with the Government of Maharashtra in appropriate class. The blank tender forms shall be issued by Executive Engineer Public Works Division, Ambajogai on e-tender procedure from 27/7/2015 to 20/8/2015 during office hours. Sealed tender forms will be received by the authority mentioned in the table below.

<table>
<thead>
<tr>
<th>Name of Work</th>
<th>Estimated cost Rs.</th>
<th>Current Money Rs.</th>
<th>Type &amp; Cost of Tender Form</th>
<th>Time limit for submission (pre-tender)</th>
<th>Class of Tender</th>
<th>Tender Receiving Authority</th>
<th>Pre Bid Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imp. to Ambajogai Mandelshet Nathra Kadugao Sirata Sonpeth Road SH-235 Kms. 1300 to 5000 Tq. Parali Dist. Beed</td>
<td>24,01,64,162</td>
<td>24,01,700</td>
<td>B-1</td>
<td>18</td>
<td>Class I-B &amp; Above</td>
<td>through e-tender procedure on or before 31/8/2015 up to 23.00 hours, online or Office of the Chief Engineer p.w.Regin Aurangabad dated 14/08/2015 up to 15.30 hrs.</td>
<td></td>
</tr>
<tr>
<td>No Attachments</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Imp. to Mangarumbo-Kanjumuk Sawargaon Ambajogai-Ahmadpur Road SH-56 Km 128/00 to 136/00 Tq. Ambajogai Dist. Beed</td>
<td>16,46,28,193</td>
<td>16,46,300</td>
<td>B-1</td>
<td>18</td>
<td>Class I-B &amp; Above</td>
<td>through e-tender procedure on or before 31/8/2015 up to 23.00 hours, online or Office of the Chief Engineer p.w.Regin Aurangabad dated 14/08/2015 up to 15.30 hrs.</td>
<td></td>
</tr>
<tr>
<td>No Attachments</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Imp. to Beed Parali Gangadhur Road MSH-16 Kms. 408/00 to 441/00 Tq. Parali Dist. Beed</td>
<td>14,55,69,481</td>
<td>14,55,700</td>
<td>B-1</td>
<td>18</td>
<td>Class I-C &amp; Above</td>
<td>through e-tender procedure on or before 31/8/2015 up to 23.00 hours, online or Office of the Chief Engineer p.w.Regin Aurangabad dated 14/08/2015 up to 15.30 hrs.</td>
<td></td>
</tr>
<tr>
<td>No Attachments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imp. to Parali Dhamiapur Pangeon Road SH-233 Kms. 2000 to 25000 Tq. Parali Dist. Beed</td>
<td>14,91,05,501</td>
<td>14,92,000</td>
<td>B-1</td>
<td>18</td>
<td>Class I-C &amp; Above</td>
<td>through e-tender procedure on or before 31/8/2015 up to 23.00 hours, online or Office of the Chief Engineer p.w.Regin Aurangabad dated 14/08/2015 up to 15.30 hrs.</td>
<td></td>
</tr>
<tr>
<td>No Attachments</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Detailed tender notice can be seen on the notice board in the office of the Executive Engineer, P.W. DIVISION, AMBAJOGAI. (copy can be obtained free of cost from the Executive Engineer’s office on request).

Executive Engineer
P.W. DIVISION, AMBAJOGAI

P.W. DIVISION, AMBAJOGAI

http://www.mahapwd.com/Nit/Tender.asp?nitno=37603

25/07/2015
E-Tender Notice No.B-1 - ABJ\05-03 For 2015-2016
Internal NIT No. __

PUBLIC WORKS DEPARTMENT

Online Tenders (E-Tender) in B-1 form for the following work are invited by the Executive Engineer, Public Works Division, Ambajogai. Phone No.02446-247760, E-mail : ambejogai.ee@mahapwd.com; on Government of Maharashtra Electronic Tender Management System http://maharashtra.etenders.in

Online bids are invited for the following work of items.

The details can be viewed and downloaded online directly from the Government of Maharashtra e-Tendering Portal http://maharashtra.etenders.in on Sub Portal of Public Works Department http://pwd.maharashtra.etenders.in

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Name of work</th>
<th>Estimated cost in (Rs.)</th>
<th>Time limit for completion (Months)</th>
<th>Earnest Money in (Rs.)</th>
<th>Cost of Blank tender form (Rs.)</th>
<th>Class of Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)</td>
<td>14,55,66,481/- (Eighteen Calendar Months including monsoon)</td>
<td>18</td>
<td>14,56,000/-</td>
<td>25,000/-</td>
<td>Class I C and above</td>
</tr>
</tbody>
</table>

For more details on the tender and bidding process you may please visit the above mentioned portal.

NOTE :-
1. All eligible/interested contractors are mandated to get enrolled on e-Tendering portal (http://maharashtra.etenders.in)
2. To process the tenders online, to encrypt their bid and to sign the bid hashes, bidders are required to obtain digital certificate. For details bidders be contact Help Desk.
3. Contractors can contact Help Desk for any clarification of their doubts regarding the process of Electronic Tendering System. Help Desk at through Email ID support.gom@nextenders.com or Phone No. 020-41466666.

Executive Engineer,
Public Works Division, Ambajogai

Contractor No. of Corrections Executive Engineer

- 1 -
DISCLAIMER

1. Detailed Time Table for the various activities to be performed in e-tendering process by the tenderer for quoting his offer is given in this Tender Document under “Tender Schedule”. Contractor should carefully note down the cut-off dates for carrying out each e-tendering process / activity.

2. Every effort is being made to keep the website upto date and running smoothly 24 X 7 by the Government and the Service Provider. However, Government takes no responsibility and will not be liable for the website being temporarily unavailable due to any technical issue at any point of time.

3. In that event, Public Works Department will not be liable or responsible for any damages or expenses arising from any difficulty, error, imperfection or inaccuracy with this website. It includes all associated services, or due to such unavailability of the website or any part thereof or any contents or any associated services.

4. Tenderers must follow the time table of e-tendering process and get their activities of e-tendering processes down well in advance so as to avoid any inconvenience due to unforeseen technical problem if any.

5. Public Works Department will not be responsible for any incomplete activity of e-tendering process of the tenderer due to technical error / failure of website and it cannot be challenged by way of appeal, arbitration and in the Court of Law. Contractors must get done all the e-tendering activities well in advance.
GOVERNMENT OF MAHARASHTRA
PUBLIC WORKS DEPARTMENT
ORIGINAL AGREEMENT No. B-1

Name of Work :- Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

1) Name of Contractor :- .......................................................
2) Date of Receipt of Tender :- .......................................................
3) No. & date of Work Order :- .......................................................
4) Amount put to Tender :- .......................................................
   Rs. 14,55,66,481.00
5) Percentage quoted :- .......................................................
6) Amount of Contract :- .......................................................
7) Date of commencement :- .......................................................
8) Time stipulated for completion of work :- 18 (Eighteen) Calendar Months including the monsoon period.
9) Date of Completion as per Agreement :- .......................................................
10) Actual Date of Completion :- .......................................................
11) Reference to Sanction of Extension of time.
   1) .......................................................
   2) .......................................................
   3) .......................................................

Contractor No. of Corrections Executive Engineer
- 3 -
DETAILS OF WORK

Name of Work :- Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

Estimated Cost of Work ::- Rs. 14,55,66,481.00
Earnest Money ::- Rs. 14,56,000.00 (Rupees in words :- Fourteen Lakh fifty six thousand Only.).

The Earnest Money Deposit applicable amount shall be paid via Online mode only. In case of Earnest Money Deposit Exemption, valid EMD exemption Certificate scanned from original copy shall be uploaded at the time of submission.

Total Security Deposit 4 % (Four percent)

i) Initial Security Deposit i.e. 2 % ::- Rs. 29,12,000.00
And

ii) Further Security Deposit to be deducted from bills i.e 2 % ::- Rs. 29,12,000.00

Total Security Deposit 4 % (Four percent) ::- Rs. 58,24,000.00

Class of Registered Contractor :- Class I C and above
Validity Period :- 120 days from the date of opening
Time limit for completion of work :- 18 (Eighteen) Calendar Months including monsoon.
Cost of Blank Tender Form ::- Rs. 25,000.00
## TENDER SCHEDULE

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td>Download period of online Tender</td>
<td>From Date 24.07.2015 at 10.00 a.m. To Date 27.07.2015 at 19.30 p.m.</td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>Last date and time for online raising of technical points for clarification (Pre-bid Meeting)</td>
<td>Can raise any Technical or other points through online query option on e-tendering portal or in the Pre-bid meeting to be held in office of the Chief Engineer, Public Works Region, Bandhkam Bhavan, Aurangabad – 431005, (Phone No.0240 - 2331815, 2331616) on Date 14.08.2015 at 15.30 Hrs. and same shall be replied.</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>Submit Hash to Create online Tender by Contractor (Technical and financial Bid Last date and time)</td>
<td>Date 24.08.2015 Upto 23.00 Hrs.</td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>Period of online super Hash Generation</td>
<td>Date 27.08.2015 Upto 23.00 Hrs.</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>Period of online Decryption and Re-encryption for tender details by Contractor.</td>
<td>Date 27.08.2015 at 23.01 Hrs. to Date 31.08.2015 at 23.00 PM.</td>
</tr>
<tr>
<td><strong>6.</strong></td>
<td>Receipt of online EMD / If EMD exempted then EMD exemption Certificate, stamp paper of Rs. 100/- bond Affidavit (Original) in prescribed format given in Annexure-I sworn before Executive Magistrate/ Notary and Tender Document fees, to be paid online only via Payment Gateway mode.</td>
<td>Document Tender Fee and EMD, Additional Performance Security (if required) to be paid via online mode only, If EMD exempted then EMD exemption Certificate shall be uploaded online.</td>
</tr>
<tr>
<td></td>
<td>Those Contactors who have submitted their bids online and are supposed to pay additional performance</td>
<td></td>
</tr>
</tbody>
</table>
security deposit should remit online in the account of Executive Engineer, Public Works Division, Ambajogai, ICICI Bank Account No.219205001124. However non submission of this additional performance security deposit shall be treated as non-responsive and Financial Bid shall not be opened.

**Note :-** In case the EMD exemption Certificate, additional performance security deposit submitted online does not match, during verification, as required above and bidder tries to mislead the department by submitting wrong information, legal action under IPC shall be initiated against the bidder.

7. Place, Date and timing of Opening of Technical and Financial Bid.

| Date 01.09.2015 at 10.30 Hours to 16.09.2015 at 19.30 Hrs. in the Office of the : Superintending Engineer, Public Works Circle, Osmanabad (if possible). |

**To be filled by the Contractor**

I/We have quoted My/Our offer in percentage rate in words as well as in figures at appropriate place while quoting rate through E-tendering. I/We further undertake to enter into Contract in regular 'B-1' Form in Public Works Department

Name & Signature of the Contractor/
Power of Attorney Holder with complete address
GOVERNMENT OF MAHARASHTRA
PUBLIC WORKS DEPARTMENT
INVITATION FOR TENDERS
DETAILED TENDER NOTICE

Name of Work :- Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

1. **Online** percentage rate tenders in ‘B-1’ Form are invited by the Executive Engineer, Public Works Division, Ambajogai for the following work from Contractors registered in appropriate class of Public Works Department in Maharashtra State. The Name of Work, Estimated Cost, Earnest money, Security deposit, time limit for completion etc. are as under:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Work</th>
<th>Estimated cost in Rupees</th>
<th>Earnest Money in Rupees</th>
<th>Security Deposit in Rupees</th>
<th>Class of Contractor</th>
<th>Time limit in months</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)</td>
<td>14,56,66,481/-</td>
<td>14,56,000/-</td>
<td>Initial Rs.29,12,000/- Through Bills Rs.29,12,000/-</td>
<td>Class IC and above</td>
<td>18 (Eighteen) Calendar Months including monsoon</td>
</tr>
</tbody>
</table>

1.1 Tender form, conditions of contract, specifications and contract drawings can be **downloaded** from the e-tendering portal of Public Works Department, Government of Maharashtra i.e. http://pwd.maharashtra.etenders.in after entering the details payment of **Rs.25,000/- (Rupees Twenty five thousand only)** should be paid online using payment gateway. The fees of tender document will be non refundable. Further information regarding the work can be obtained from the above office.
1.2 The Earnest Money Deposit applicable amount shall be paid via online using payment gateway mode only. The Earnest Money Deposit exemption certificate, Affidavit on Rs.100/- stamp paper in prescribed form given in Annexure-I, sworn before Executive Magistrate / Notary, Additional Performance Security Deposit (if required) should be submitted / remitted in the account of Executive Engineer, Public Works Division, Ambajogai, ICICI Bank Account No.219205001124 through online only and proof of remittance (copy of challan / remittance slip) should be submitted in Technical Bid. Bids will be opened as per the Tender Schedule, in the presence of such intending Tenderers or his/ their authorized representatives who may be present at that time. However non submission of Additional Performance Security Deposit (if required) via online shall disqualify opening of Technical Bid and Financial Bid shall not be opened.

1.3 The offer of the Contractor shall remain valid for acceptance for a minimum period of 120 days from the date fixed for opening of Envelope No.2 (Main Tender) and thereafter until it is withdrawn by the Contractor by notice in writing duly addressed to the authority opening the tender and sent by Registered Post Acknowledgement Due.

1.4 The tender notice shall form a part of the contract agreement.

1.5 The tenders are invited on the Departmental design only.

1.6 The tenderer if firm or company shall in their forwarding letter mention the names of all the partners of the firm or the company (as the case may be) and the name of the partner who holds the power attorney if any, authorising him to conduct transaction on behalf of the Firm or Company.

1.7 Right is reserved to revise or amend the contract documents fully or part thereof prior to the date notified for the receipt of tender. Such deviations/amendments if any, shall be communicated in the form of corrigendum or by a letter as may be considered suitable.

1.8 Right is reserved to reject any or all tenders without assigning any reason thereof.

1.9 Tenders which do not fulfill all or any conditions or are incomplete in any respect are liable to summary rejection.

1.10 The Tenderer may, in the forwarding letter, mention any points he may wish to make clear but right is reserved to reject the same of the whole of the tenders if the same become conditional tender thereby.

Contractor No. of Corrections Executive Engineer

- 8 -
1.11 All hot mix items under this contract shall be carried out only with hot mix plant (Batch type) minimum 80 (TPH) tonnes per hour capacity.

1.12 For WBM Grade-I/ Grade-II / Grade III / and BUSG work mechanical vibratory screening unit which is must / mandatory for screening of metal under required for WBM, Grade I / Grade II/ Grade III and BUSG work.

1.13 Compactions (Earthwork, GSB, WBM, BUSG, All BT works etc.) shall be done in combination with at least one intelligent compactor which shall have inbuilt compaction analyser as per IRC SP 97-2013 fitted with VSAT for delivering data and graphics on compactor terminal to PWD / Server / User Terminals.

1.14 Submission of monthly bill in Electronic form:-

1. As per Clause 10 of this B-1 contract, it is responsibility of the contractor to submit the bill monthly to the Engineer-In-charge.

2. To discharge this responsibility the contractor shall submit the bill in electronic form.

3. In doing so he shall use e-copy of Tender paper.

4. In support of the bills, required measurements, drawings, quality control reports (field lab and VQCC lab as per clause 24 of Additional General condition), site supervision data (SCADA) shall be submitted in electronic form, the data so submitted shall have a facility to Tightly integrate it with the contract conditions, provisions in the Maharashtra Public Works manual, Maharashtra Public Works Account Code (updated to date of submission of this tender) and current general engineering practices (issued though various Government Resolutions, Government circulars, Chief Engineer's Circulars etc. issued up to date of submission of this tender) followed in Public Works Department.

5. The submission of e-bill shall be in the web based format.

6. The offer of Contractor shall be inclusive of all, he shall not be paid separately, his offer shall be inclusive of all cost required for submitting bill in e-format mentioned in this para.

1.14 (a) Asphalt should be brought from only from Government Refinery and in the name of concerned contractor. Contractor should produce the Original Challan i.e. "Original for Buyer" or equivalent to site in charge.

(b) The contractor shall open Online Account with Government Refinery from where he procures as asphalt for this work.
(c) Documentary evidence (challan) that he has procured asphalt from Government Refinery shall be produced to the Engineer in charge or his representative as mentioned at (a) above.

(d) Contractor shall provide online facility to Engineer in charge or his representative for online Verification of the Documentary evidence (Challan) Submitted to him. Engineer in charge or his representative shall verify the transaction online and take print out of the online document.

(e) Attested copy of the print out of the online document shall be kept on record along with the Documentary evidence (challan).

1.15 Extraction Test of Bitumen Mix :-

The binder content of hot mix material shall be determined by ignition method only as specified in AASHTO T 308. The testing by ignition method shall be done in furnace which shall be equipped with internal balance. The furnace shall have Web based SCADA facility. The data so acquired shall be uploaded to PWD Website in real time with time lag not more than 30 Seconds.

**GENERAL**

a) **Time limit** :- The work is to be completed within time limit as specified in the Notice inviting tender which shall be reckoned from the date of written order of commencing the work and shall be inclusive of monsoon period.

b) **Tender Rate** :- No alteration in the form of tender and the schedule of tender and no additions in the scope or special stipulation will be permitted. Rates quoted for the tender shall be taken as applicable to all leads and lifts.

c) **Tender Units** :- The tenderers should particularly note the unit mentioned in the Schedule "B" on which the rates are based. No change in the units shall be allowed. In the case of difference between rates written in figures and words, the correct rate will be the one, which is lower of the two.

d) **Correction** :- No corrections shall be made in the tender documents. Any corrections that are to be made by crossing the incorrect portion and writing the correct portions above with the initials of the tenderer.
2. **EARNEST MONEY :-**

2.1 **Earnest Money** of minimum as stated in Notice Inviting Tender shall be paid Online using NEFT / RTGS or Payment gateway mode.

After tender opening, the E.M.D. of the unsuccessful bidder will be returned to account provided by the bidder during the bid preparation as given in challan under Beneficiary Account Number.

2.2 Scanned copy of Earnest Money exemption certificate will be accepted in lieu Earnest Money Deposit from the Registered Contractors of Maharashtra State only.

2.3 Earnest money in any other form or cash or cheque will not be accepted.

2.4 The amount will be refunded to the unsuccessful tenderers on deciding about the acceptance or otherwise of the tender. In case of successful tenderer, it will be refunded on his paying initial Security Deposit and completing the tender documents in Form B-1.

2.5 The amount of earnest money will be forfeited, in case a successful contractor does not pay the amount of initial security deposit within the time specified as stipulated by the Executive Engineer, and complete the contract documents. In all other cases, earnest money will be refundable.

3.0 **TENDERING PROCEDURE :-**

3.1 **Blank Tender Forms**

Tender Forms can be purchased from the e-Tendering Portal of Public Works Department, Government of Maharashtra i.e. https://pwd.maharashtra.etenders.in after paying Tender Fees via online mode as per the Tender Schedule.

Information regarding contract as well as blank tender forms can be downloaded from the e-tendering website upon providing the details of the payment of cost as detailed in the Notice Inviting Tender.

3.2 **PRE-TENDER CONFERENCE :-**

3.2.1 Pre Tender conference open to all prospective tenderers, who have purchased tender form before the date of Pre tender conference, will be held at **Aurangabad** on date **14.08.2015** at **15.30** hours in the office **Chief Engineer, Public Works Region, Bandhkam Bhavan**,
Aurangabad – 431005, (Phone No. 0240 - 2331815, 2331616, Fax No. 0240 - 2332068). Contractor may raise any points regarding the work Online, using post query option for the tender on e-tendering portal on or before as per E-Tender Time Schedule or in pre-bid meeting, reply to the same shall be uploaded on the e-tendering portal. Wherein prospective Tenderers will have an opportunity to obtain clarifications regarding the work and the Tender Conditions.

3.2.2 The prospective tenderers are free to ask for any additional information or clarification concerning the work, and the reply to the same shall be uploaded on the portal http://pwd.maharashtra.etenders.in and this clarification referred to as Common Set of Conditions/Deviations (C.S.D.), shall form part of tender documents and which will also be common and applicable to all tenderers. The point/points if any raised in writing and/or verbally/ online by the contractor in pretender conference and not finding place in C.S.D. issued after the pre-bid conference, is/are deemed rejected. In such case the provision in NIT shall prevail. No individual correspondence will be made thereafter with the contractor in this regard.

3.2.3 The tender submitted by the tenderer shall be based on the clarification, additional facility offered (if any) by the Department, and this tender shall be unconditional. Conditional tenders shall be summarily REJECTED.

3.2.4 All tenderers are cautioned that tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and conditional tenders will be treated as non responsive. The tenderer should clearly mention in forwarding letter that his offer (in Envelope No. 1 and 2) does not contain any conditions, deviations from terms and conditions stipulated in the tender.

3.2.5 Tenderers should have valid Class II / III Digital Signature Certificate (DSC) obtained from any Certifying Authorities. In case of requirement of DSC, interested Bidders should go to http://maharashtra.etenders.in/mah/DigitalCerti.asp and follow the procedure mentioned in the document ‘Procedure for application of Digital Certificate’.

3.2.6 The Tenderers have to make a payment of Rs.1,054/- (Rupees One thousand fifty four Only.) online as service charges for the use of Electronic Tendering during Online Bid Data Decryption and Re-encryption stage of the Tender.
3.2.7 For any assistance on the use of Electronic Tendering System, the Users may call the below numbers:

**Landline No.** - 020 - 30187500  
**Landline No.** - 022 - 2661 1117 (Ext 25 / 26)  
**Mobile No.** - 91679 69601 / 04 / 14

3.2.8 Tenderers should install the Mandatory Components available on the Home Page of [http://maharashtra.etenders.in](http://maharashtra.etenders.in) under the section ‘Mandatory Components’ and make the necessary Browser Settings provided under section ‘Internet Explorer Settings’.

3.3 Guidelines to Bidders on the operations of Electronic Tendering System of Public Works Department:

All the contractors registered in appropriate class and willing to participate in e-tendering process shall enroll their name/ Firm on the portal [http://maharashtra.etenders.in](http://maharashtra.etenders.in) for download of tender documents etc.

3.4 Pre-requisites to participate in the Tenders processed by PWD:

1. **Enrolment and Empanelment of Contractors on Electronic Tendering System:**

   The Contractors interested in participating in the Tenders of Public Works Department –processed using the Electronic Tendering System shall be required to enroll on the Electronic Tendering System to obtain User ID.

   After submission of application for enrolment on the System, the application information shall be verified by the Authorized Representative of the Service Provider. If the information is found to be complete, the enrolment submitted by the Vendor shall be approved.

   For participating in Limited and Restricted tenders the registered vendors have to apply for empanelment on the sub-portal of PWD in an appropriate class of registration. The empanelment will have to be approved by the respective officer from the PWD. Only empanelled vendors will be allowed to participate in such tenders.

   The Contractors may obtain the necessary information on the process of enrolment and empanelment either from Helpdesk Support Team or may visit the information published under the link Enroll under the section E-Tendering Toolkit for Bidders on the Home Page of the Electronic Tendering System.
2. **Obtaining a Digital Certificate:**

The Bid Data that is prepared online is required to be encrypted and the hash value of the Bid Data is required to be signed electronically using a Digital Certificate (Class – II or Class – III). This is required to maintain the security of the Bid Data and also to establish the identity of the Contractor transacting on the System.

The Digital Certificates are issued by an approved Certifying Authority authorized by the Controller of Certifying Authorities of Government of India through their Authorized Representatives upon receipt of documents required to obtain a Digital Certificate.

Bid data / information for a particular Tender may be submitted only using the Digital Certificate which is used to encrypt the data / information and sign the hash value during the Bid Preparation and Hash Submission stage. In case during the process of preparing and submitting a Bid for a particular Tender, the Contractor loses his/her Digital Signature Certificate (i.e. due to virus attack, hardware problem, operating system problem); he / she may not be able to submit the Bid online. Hence, the Users are advised to store his / her Digital Certificate securely and if possible, keep a backup at safe place under adequate security to be used in case of need.

In case of online tendering, if the Digital Certificate issued to an Authorised User of a Partnership Firm is used for signing and submitting a bid, it will be considered equivalent to a no objection certificate / power of attorney to that User to submit the bid on behalf of the Partnership Firm. The Partnership Firm has to authorize a specific individual via an authorization certificate signed by a partner of the firm (and in case the applicant is a partner, another partner in the same form is required to authorise) to use the digital certificate as per Indian Information Technology Act, 2000.

Unless the Digital Certificate is revoked, it will be assumed to represent adequate authority of the Authority User to bid on behalf of the Firm for the Tenders processed on the Electronic Tender Management System of Government of Maharashtra as per Indian Information Technology Act, 2000. The Digital Signature of this Authorized User will be binding on the Firm. It shall be the responsibility of Partners of the Firm to inform the Certifying Authority or Sub Certifying Authority, if the Authorized User changes, and apply for a fresh Digital Signature Certificate. The procedure for application of a
Digital Signature Certificate will remain the same for the new Authorised User.

The same procedure holds true for the Authorized Users in a Private / Public Limited Company. In this case, the Authorisation Certificate will have to be signed by the Director of the Company or the Reporting Authority of the Applicant.

For information on the process of application for obtaining Digital Certificate, the Contractors may visit the section Digital Certificate on the Home Page of the Electronic Tendering System.

3. **Recommended Hardware and Internet Connectivity:**

   To operate on the Electronic Tendering System, the Contractors are recommended to use Computer System with at least 1 GB of RAM and broadband connectivity with minimum 512 kbps bandwidth.

4. **Set up of Computer System for executing the operations on the Electronic Tendering System:**

   To operate on the Electronic Tendering System of Government of Maharashtra, the Computer System of the Contractors is required be set up. The Contractors are required to install Utilities available under the section Mandatory Installation Components on the Home Page of the System.

   The Utilities are available for download freely from the above mentioned section. The Contractors are requested to refer to the E-Tendering Toolkit for Bidders available online on the Home Page to understand the process of setting up the System, or alternatively, contact the Helpdesk Support Team on information / guidance on the process of setting up the System.

5. **Payment for Service Provider Fees:**

   In addition to the Tender Document Fees payable to Public Works Department, Government of Maharashtra, the Contractors will have to pay Service Providers Fees of **Rs.1,054/- (Rupees One thousand fifty four)** through online payments gateway service available on Electronic Tendering System. For the list of options for making online payments, the Contractors are advised to visit the link E-Payment Options under the section E-Tendering Toolkit for Bidders on the Home Page of the Electronic Tendering System.
3.5 **Steps to be followed by Contractors to participate in the e-Tenders processed by PWD.**

1. **Preparation of online Briefcase:**

   All Contractors enrolled on the Electronic Tendering System of Government of Maharashtra are provided with dedicated briefcase facility to store documents / files in digital format. The Contractors can use the **online briefcase** to store their scanned copies of frequently used documents / files to be submitted as a part of their bid response. The Contractors are advised to store the relevant documents in the briefcase before starting the Bid Preparation and Hash Submission stage.

   In case, the Contractors have multiple documents under the same type (e.g. multiple Work Completion Certificates) as mentioned above, the Contractors are advised to either create a single `.pdf` file of all the documents of same type or compress the documents in a single compressed file in `.zip` or `.rar` formats and upload the same.

   It is mandatory to upload the documents using the briefcase facility. Therefore, the Contractors are advised to keep the documents ready in the briefcase to ensure timely bid preparation.

   **Note:** Uploading of documents in the briefcase does not mean that the documents are available to PWD at the time of Tender Opening stage unless the documents are specifically attached to the bid during the online Bid Preparation and Hash Submission stage as well as during Decryption and Re-encryption stage.

2. **Online viewing of Detailed Notice Inviting Tenders:**

   The Contractors can view the Detailed Tender Notice along with the Time Schedule (Key Dates) for all the Live Tenders released by PWD on the home page of PWD e-Tendering Portal on [http://pwd.maharashtra.etenders.in](http://pwd.maharashtra.etenders.in) under the section Recent Online Tender.

3. **Download of Tender Documents:**

   The Pre-qualification / Main Bidding Documents are available for free downloading. However, to participate in the online tender, the bidder must purchase the bidding documents via online mode by filling the cost of Tender Form Fee.
4. Online Bid Preparation and Submission of Bid Hash (Seal) of Bids:

Bid preparation will start with the stage of EMD payment which bidder has to pay online using any one Online pay mode as RTGS, NEFT or payment Gateway. For EMD payment, if bidder uses NEFT or RTGS then system will generate a challan (in two copies) with unique challan number specific to the tender. Bidder will use this challan in his bank to make NEFT / RTGS payment via net banking facility provided by bidder’s bank. Bidder will have to validate the EMD payment as a last stage of bid preparation. If the payment is not realised with bank, in that case system will not be able to validate the payment and will not allow the bidder to complete his Bid Preparation stage resulting in non participation in the aforesaid eTender.

**Note :-**

* Realisation of NEFT / RTGS payment normally takes 2 to 24 hours, so it is advised to make sure that NEFT / RTGS payment activity should be completed well before time.

* NEFT / RTGS option will depend on the amount of EMD.

* Help file regarding use of e-Payment Gateway can be downloaded from e-Tendering Portal.

Submission of Bids will be preceded by online bid preparation and submission of the digitally signed Bid Hashes (Seals) within the Tender Time Schedule (Key Dates) published in the Detailed Notice Inviting Tender. The Bid Data is to be prepared in the templates provided by the Tendering Authority of PWD. The templates may be either form based, extensible tables and / or uploadable documents. In the form based type of templates and extensible table type of templates, the Contractors are required to enter the data and encrypt the data using the Digital Certificate.

In the uploadable document type of templates, the Contractors are required to select the relevant document / compressed file (containing multiple documents) already uploaded in the briefcase.

**Notes :-**

a. The Contractors upload a single document or a compressed file containing multiple documents against each unloadable option.

b. The Hashes are the thumbprint of electronic data and are based on one – way algorithm. The Hashes establish the unique identity of Bid Data.
c. The bid hash values are digitally signed using valid Class – II or Class – III Digital Certificate issued by any Certifying Authority. The Contractors are required to obtain Digital Certificate in advance.

d. After the hash value of bid data is generated, the Contractors cannot make any change / addition in its bid data. The bidder may modify bids before the deadline for Bid Preparation and Hash Submission as per Time Schedule mentioned in the Tender documents.

e. This stage will be applicable during both, Pre-bid / Pre-qualification and Financial Bidding Processes.

5. Close for Bidding (Generation of Super Hash Values):

After the expiry of the cut – off time of Bid Preparation and Hash Submission stage to be completed by the Contractors has lapsed, the Tender will be closed by the Tender Authority.

The Tender Authority from PWD shall generate and digitally sign the Super Hash values (Seals).

6. Decryption and Re-encryption of Bids (submitting the Bids online):

After the time for generation of Super Hash values by the Tender Authority from PWD has lapsed, the Contractors have to make the online payment of Rs. 1,054/- towards the fees of the Service Provider.

After making online payment towards Fees of Service Provider, the Contractors are required to decrypt their bid data using their Digital Certificate and immediately re-encrypt their bid data using the Public Key of the Tendering Authority. The Public Key of the Tendering Authority is attached to the Tender during the Close for Bidding stage.

Note: The details of the Processing Fees shall be verified and matched during the Technical Opening stage.

At this time, the Contractors are also required to upload the files for which they generated the Hash values during the Bid Preparation and Hash Submission stage.

The Bid Data and Documents of only those Contractors who have submitted their Bid Hashes (Seals) within the stipulated time (as per the Tender Time Schedule), will be available for decryption and re-encryption and to upload the relevant documents from Briefcase. A Contractor who has not submitted his Bid Preparation and Hash Submission stage within the stipulated time will not be allowed to decrypt / re-encrypt the
Bid data / submit documents during the stage of Decryption and Re-encryption of Bids (submitting the Bids online).

7. **Shortlisting of Contractors for Financial Bidding Process:**

The Tendering Authority will first open the Technical Bid documents of all Contractors and after scrutinizing these documents will shortlist the Contractors who are eligible for Financial Bidding Process. The shortlisted Contractors will be intimated by e-mail.

8. **Opening of the Financial Bids:**

The Contractors may remain present in the Office of the Tender Opening Authority at the time of opening of Financial Bids. However, the results of the Financial Bids of all Contractors shall be available on the P.W.D e-Tendering Portal immediately after the completion of opening process.

9. **Tender Schedule (Key Dates):**

The Contractors are strictly advised to follow the Dates and Times allocated to each stage under the column “Contractor Stage” as indicated in the Time Schedule in the Detailed Tender Notice for the Tender. All the online activities are time tracked and the Electronic Tendering System enforces time-locks that ensure that no activity or transaction can take place outside the Start and End Dates and Time of the stage as defined in the Tender Schedule.

At the sole discretion of the Tender Authority, the time schedule of the Tender stages may be extended.

C. **Terms and Conditions for Online Payments :-**

1. The Terms and Conditions contained herein shall apply to any person ("User") using the services of PWD Maharashtra, hereinafter referred to as "Merchant", for making Tender fee and Earnest Money Deposit (EMD) payments through an online Payment Gateway Service ("Service") offered by ICICI Bank Ltd. in association with E-Tendering Service provider and Payment Gateway Service provider through PWD Maharashtra website i.e. http://pwd.maharashtra.etenders.in. Each User is therefore deemed to have read and accepted these Terms and Conditions.

2. **Privacy Policy**

The Merchant respects and protects the privacy of the individuals that access the information and use the services provided through them.
Individually identifiable information about the User is not willfully
disclosed to any third party without first receiving the User's permission,
as covered in this Privacy Policy.

This Privacy Policy describes Merchant’s treatment of personally identifiable information that Merchant collects when the User is on the Merchant’s website. The Merchant does not collect any unique information about the User (such as User’s name, email address, age, gender etc.) except when you specifically and knowingly provide such information on the Website. Like any business interested in offering the highest quality of service to clients, Merchant may, from time to time, send email to the User and other communication to tell the User about the various services, features, functionality and content offered by Merchant’s website or seek voluntary information from the User.

Please be aware, however, that Merchant will release specific personal information about the User if required to do so in the following circumstances:

a) in order to comply with any valid legal process such as a search warrant, statute, or court order, or available at time of opening the tender
b) if any of User’s actions on our website violate the Terms of Service or any of our guidelines for specific services, or
c) to protect or defend Merchant’s legal rights or property, the Merchant’s ; site, or the Users of the site or;
d) to investigate, prevent, or take action regarding illegal activities, suspected fraud, situations involving potential threats to the security, integrity of Merchant’s website/offerings.

3. **General Terms and Conditions For E-Payment :-**

1. Once a User has accepted these Terms and Conditions, he/ she may register on Merchant’s website and avail the Services.

2. Merchant’s rights, obligations undertakings shall be subject to the laws in force in India, as well as any directives/ procedures of Government of India, and nothing contained in these Terms and Conditions shall be in derogation of Merchant’s right to comply with any law enforcement agencies request or requirements relating to any User's use of the website or information provided to or gathered by Merchant with respect to such use. Each User accepts and agrees that the provision of details of his/ her use of the Website to regulators or police or to any other third party in order to resolve disputes or complaints which relate to the
Website shall be at the absolute discretion of Merchant.

3. If any part of these Terms and Conditions are determined to be invalid or unenforceable pursuant to applicable law including, but not limited to, the warranty disclaimers and liability limitations set forth herein, then the invalid or unenforceable provision will be deemed superseded by a valid, enforceable provision that most closely matches the intent of the original provision and the remainder of these Terms and Conditions shall continue in effect.

4. These Terms and Conditions constitute the entire agreement between the User and Merchant. These Terms and Conditions supersede all prior or contemporaneous communications and proposals, whether electronic, oral, or written, between the User and Merchant. A printed version of these Terms and Conditions and of any notice given in electronic form shall be admissible in judicial or administrative proceedings based upon or relating to these Terms and Conditions to the same extent and subject to the same conditions as other business documents and records originally generated and maintained in printed form.

5. The entries in the books of Merchant and/or the Payment Gateway Service Providers kept in the ordinary course of business of Merchant and/or the Payment Gateway Service Providers with regard to transactions covered under these Terms and Conditions and matters therein appearing shall be binding on the User and shall be conclusive proof of the genuineness and accuracy of the transaction.

6. **Refund For Charge Back Transaction** :- In the event there is any claim for / of charge back by the User for any reason whatsoever, such User shall immediately approach Merchant with his/ her claim details and claim refund from Merchant alone. Such refund (if any) shall be effected only by Merchant via payment gateway or by means of a demand draft or such other means as Merchant deems appropriate. No claims for refund/ charge back shall be made by any User to the Payment Gateway Service Provider(s) and in the event such claim is made it shall not be entertained.

7. In these Terms and Conditions, the term "Charge Back" shall mean, approved and settled credit card or net banking purchase transaction(s) which are at any time refused, debited or charged back to merchant account (and shall also include similar debits to Payment Gateway Service Provider’s accounts, if any) by the acquiring bank or credit card company for any reason whatsoever, together with the bank fees, penalties and other charges incidental thereto.
8. **Refund for fraudulent / duplicate transaction(s) :** The User shall directly contact Merchant for any fraudulent transaction(s) on account of misuse of Card / Bank details by a fraudulent individual / party and such issues shall be suitably addressed by Merchant alone in line with their policies and rules.

9. **Server Slow Down / Session Timeout :** In case the Website or Payment Gateway Service Provider's webpage, that is linked to the Website, is experiencing any server related issues like 'slow down' or 'Failure' or 'session timeout', the User shall, before initiating the second payment, check whether his/her Bank Account has been debited or not and accordingly resort to one of the following options:—

   i. In case the Bank Account appears to be debited, ensure that he/she does not make the payment twice and immediately thereafter contact Merchant via e-mail or any other mode of contact as provided by Merchant to confirm payment.

   ii. In case the Bank Account is not debited, the User may initiate a fresh transaction to make payment.

   However, the User agrees that under no circumstances the Payment Gateway Service Provider shall be held responsible for such fraudulent / duplicate transactions and hence no claims should be raised to Payment Gateway Service Provider. No communication received by the Payment Gateway Service Provider(s) in this regard shall be entertained by the Payment Gateway Service Provider.

4. **Limitation of Liability**

1. Merchant has made this Service available to the User as a matter of convenience. Merchant expressly disclaims any claim or liability arising out of the provision of this Service. The User agrees and acknowledges that he/ she shall be solely responsible for his/ her conduct and that Merchant reserves the right to terminate the rights to use of the Service immediately without giving any prior notice thereof.

2. Merchant and/or the Payment Gateway Service Providers shall not be liable for any inaccuracy, error or delay in, or omission of (a) any data, information or message, or (b) the transmission or delivery of any such data, information or message; or (c) any loss or damage arising from or occasioned by any such inaccuracy, error, delay or omission, non-performance or interruption in any such data, information or message. Under no circumstances shall the Merchant and/or the Payment Gateway Service Providers, its employees, directors, and its third party agents involved in processing, delivering or managing the Services, be
liable for any direct, indirect, incidental, special or consequential damages, or any damages whatsoever, including punitive or exemplary arising out of or in any way connected with the provision of or any inadequacy or deficiency in the provision of the Services or resulting from unauthorized access or alteration of transmissions of data or arising from suspension or termination of the Services.

3. The Merchant and the Payment Gateway Service Provider(s) assume no liability whatsoever for any monetary or other damage suffered by the User on account of:
   
   (i) the delay, failure, interruption, or corruption of any data or other information transmitted in connection with use of the Payment Gateway or Services in connection thereto; and/or
   (ii) any interruption or errors in the operation of the Payment Gateway.

4. The User shall indemnify and hold harmless the Payment Gateway Service Provider(s) and Merchant and their respective officers, directors, agents, and employees, from any claim or demand, or actions arising out of or in connection with the utilization of the Services.

   The User agrees that Merchant or any of its employees will not be held liable by the User for any loss or damages arising from your use of, or reliance upon the information contained on the Website, or any failure to comply with these Terms and Conditions where such failure is due to circumstance beyond Merchant's reasonable control.

5. **Miscellaneous Conditions**:

   1. Any waiver of any rights available to Merchant under these Terms and Conditions shall not mean that those rights are automatically waived.

   2. The User agrees, understands and confirms that his/her personal data including without limitation details relating to debit card/credit card transmitted over the Internet may be susceptible to misuse, hacking, theft and/or fraud and that Merchant or the Payment Gateway Service Provider(s) have no control over such matters.

   3. Although all reasonable care has been taken towards guarding against unauthorized use of any information transmitted by the User, Merchant does not represent or guarantee that the use of the Services provided by/through it will not result in theft and/or unauthorized use of data over the Internet.
4. The Merchant, the Payment Gateway Service Provider(s) and its affiliates and associates shall not be liable, at any time, for any failure of performance, error, omission, interruption, deletion, defect, delay in operation or transmission, computer virus, communications line failure, theft or destruction or unauthorized access to, alteration of, or use of information contained on the Website.

5. The User may be required to create his/ her own User ID and Password in order to register and/ or use the Services provided by Merchant on the Website. By accepting these Terms and Conditions the User agrees that his/ her User ID and Password are very important pieces of information and it shall be the User’s own responsibility to keep them secure and confidential. In furtherance hereof, the User agrees to;

   i. Choose a new password, whenever required for security reasons,
   ii. Keep his/ her User ID & Password strictly confidential,
   iii. Be responsible for any transactions made by User under such User ID and Password.
   iv. The User is hereby informed that Merchant will never ask the User for the User's password in an unsolicited phone call or in an unsolicited email. The User is hereby required to sign out of his/ her Merchant account on the Website and close the web browser window when the transaction(s) have been completed. This is to ensure that others cannot access the User’s personal information and correspondence when the User happens to share a computer with someone else or is using a computer in a public place like a library or Internet cafe.

6. **Debit / Credit Card, Bank Account Details**

1. The User agrees that the debit/credit card details provided by him/ her for use of the aforesaid Service(s) must be correct and accurate and that the User shall not use a debit/ credit card, that is not lawfully owned by him/ her or the use of which is not authorized by the lawful owner thereof. The User further agrees and undertakes to provide correct and valid debit/credit card details.

2. The User may make his/ her payment (Tender Fee / Earnest Money deposit) to Merchant by using a debit/credit card or through online banking account. The User warrants, agrees and confirms that when he/she initiates a payment transaction and/or issues an online payment
instruction and provides his/ her card / bank details:

i. The User is fully and lawfully entitled to use such credit / debit card, bank account for such transactions;

ii. The User is responsible to ensure that the card/ bank account details provided by him/ her are accurate;

iii. The User is authorizing debit of the nominated card/ bank account for the payment of Tender Fee and Earnest Money Deposit

iv. The User is responsible to ensure sufficient credit is available on the nominated card/ bank account at the time of making the payment to permit the payment of the dues payable or the bill(s) selected by the User inclusive of the applicable Fee.

7. **Personal Information :-**

1. The User agrees that, to the extent required or permitted by law, Merchant and/ or the Payment Gateway Service Provider(s) may also collect, use and disclose personal information in connection with security related or law enforcement investigations or in the course of cooperating with authorities or complying with legal requirements.

2. The User agrees that any communication sent by the User vide e-mail, shall imply release of information therein/ therewith to Merchant. The User agrees to be contacted via e-mail on such mails initiated by him/ her.

3. In addition to the information already in the possession of Merchant and/ or the Payment Gateway Service Provider(s), Merchant may have collected similar information from the User in the past. By entering the Website the User consents to the terms of Merchant's information privacy policy and to our continued use of previously collected information. By submitting the User's personal information to us, the User will be treated as having given his/her permission for the processing of the User's personal data as set out herein.

4. The User acknowledges and agrees that his/ her information will be managed in accordance with the laws for the time in force.

8. **Payment Gateway Disclaimer :-**

The Service is provided in order to facilitate payment of Tender Fees / Earnest Money Deposit Online. The Merchant or the Payment Gateway Service Provider(s) do not make any representation of any kind, express or implied, as to the operation of the Payment Gateway other than what is specified in the
Website for this purpose. By accepting/agreeing to these Terms and Conditions, the User expressly agrees that his/her use of the aforesaid online payment service is entirely at own risk and responsibility of the User.

3.6.1 **ONLINE ENVELOPE No.1 :- (Documents)**

The first Online envelope “Envelope No.1” shall contain the following documents :-

I. **Scanned Copy** of Receipt of Online payment of Tender Fee.

II. **Scanned from original copy** Receipt of Online payment of Earnest Money Deposit or valid certificate of exemption from payment of Earnest Money, as per revised rules for registration of contractors vide Govt. resolution CAT-1096/CR/172/Bldg-2, dated 20/4/1998 if applicable.

III. **Scanned from original copy** valid original certificate as registered contractor with Public Works Department, Government of Maharashtra in appropriate class as per NIT.

IV. **Scanned copy** of details of other works tendered for and in hand with the value of work unfinished on the last date of submission of tender (In the proforma of **Statement No. I** on **Page No. 41**. The Statement from the Heads of the Offices under whom the works are in progress should be attached.)

V. **Scanned copy** of List of owned Machinery immediately available with the tenderer for use on this work and list of machinery proposed to be utilized on this work, but not immediately available and the manner in which it is proposed. (In the proforma of **Statement No. II & IIA** on **Page No. 42 & 43**).

VI. **Scanned copy** of details of one work of similar type and magnitude carried out by the contractor during last three years i.e. **2012-2013, 2013-2014, 2014-2015** (In the proforma of **Statement No. III, Page No. 47**)

VII. **Scanned copy** of details of Technical personnel on the rolls of the tenderers. (In the proforma of **Statement No. IV** on **Page No. 48**)

VIII. **Scanned copy** of original Registered Partnership Deed, Memorandum of Articles of Association, if the tenderer is a Partnership Firm, Joint Stock Company and Power of Attorney and Firm Registration Certificate if any.
IX. **Scanned from original copy** Valid Professional Tax Registration Certificate in the form of PTR and PTE under section (1) of section 5 of Maharashtra State Tax on Profession, Trade callings and Employment Act 1975, Rule 3 (2) for employees including technical personnel from the Professional Tax office of the concerned District of Maharashtra with its latest valid clearance certificate up to 31.03.2015. “No Dues Clearance Certificate” from competent authority should be submitted.

X. **Scanned from original copy** Valid registration certificate under Maharashtra Value Added Tax Act 2005 under Rule No. 8 & 9 / or TIN number issued by competent authority. This certificate should be valid on the date of tender opening.

XI. **Use of Specialised Machinery** :

For carrying out asphalting and cement concreting items of the work, use of specialised machinery as per latest MORT&H standard list of machineries shown in the format as given on Page No.43, it is necessary for the contractor to submit the abstract in Statement 2-A, in the given format of NIT. In case, during physical verification of the details supplied by the bidder if it is found that the machinery is not meeting with the requirement, his tender in Envelope No.2 will not be opened in any manner/ case.

With a view to ascertain, whether these machinery is in possession of the contractor and whether he can make available such machinery immediately for use on the work, The details of machinery as above, shall be verified by the department, if required, by physical verification of machinery owned by the contractor, by visiting sites. Contractor should produce sufficient documentary evidence regarding ownership machinery in support of having owned the obligatory machinery. The details of these specialized machinery required to be owned as per MORTH direction used on the work are given on Page No. 43 (Statement No. 2-A) of NIT. In case, during physical verification of the details supplied by the bidder if it is found that the machinery is not meeting with the requirement, his tender in Envelope No.2 will not be opened in any manner/ case. The proforma of the statement shall not be altered by contractor in any manner / case.

**Scanned from original copy** Valid inspection certificate issued by Assistant Chief Engineer (Mechanical) of any Public Works Region of Maharashtra before submission of the tender that, machinery is as per...
“MORT&H specification and Efficient–Working Condition” for following machinery :-

- Modern Hot Mix Plant (Batch Type) having minimum capacity of 80 TPH,
- Paver Finisher with Electronic Sensing Device With SCADA
- Intelligent Mechanical Bitumen Sprayer with SCADA
- Vibratory Roller with inbuilt compaction analyzer as per IRC SP-97:2013 amplitude and frequency of vibration desired for Bituminous works

The valid certificates to this effect shall be produced in Envelope No.1. In the absence of this certificate, the Envelope No.2 will not be considered for opening.

**Note :- Please see the General Conditions and Specification “Supervising Control And Data Acquisition for Bituminous Work” (SCADA)**

The contractor shall submit an affidavit in original (as per proforma given on Page No.52) to the tender accepting authority on the due date as per tender schedule regarding availability of owned machinery in Envelope No.1 duly Notarised. Affidavit not confirming to the content in the prescribed format, will not be accepted and Envelope No.2 will not be opened.

**XIII.** Scanned from original copy of sketch of plant location as mentioned on page No.44 with the certificate issued by the concerned Sub-Divisional Engineer, (P. W. Sub-Division, Parali (V.)) to the effect that the plant to site distance to maintain the temperature of the bituminous material will remain the same as per specification and does not exceed 60 Kilometers to the farthest point of the length of road under this contract.

**and / or**

Scanned from original copy challan / remittance slip for online payment of all Additional Performance Security deposit amount remitted in favour of Executive Engineer, Public Works Division, Ambajogai, in ICICI Bank Account No.219205001124.
XIV. QUALIFICATION CRITERIA :-

To qualify for award of the contract, each tenderer in his name should have :-

a) Achieved a minimum average financial turn over (in all classes of civil engineering construction works only) of Rs. 1,092.00 Lakhs at price level of 2015-2016 during last three years i.e. 2012-2013, 2013-2014, 2014-2015 (information to be given only in proforma of Statement No.V on page No. 49).

b) Satisfactorily completed as contractor of atleast one similar work (Road work of Government or Semi-Government bodies only) of value not less than Rs. 500.00 Lakhs at price level 2015-2016 during last three years. (It should have been commissioned and completed during last three years i.e. 2012-2013, 2013-2014, 2014-2015. (information to be given only in proforma III on page No.47).

c) Satisfactorily executed in any One Year of last three years i.e. 2012-2013, 2013-2014, 2014-2015 following minimum quantities of work. (information to be given only in proforma of statement No. VI on page No.50)

| i) Modified Penetration Macadam (MPM)/B.B.M. | 1,470.00 Square Metre |
| ii) Hot Mix Hot laid Bituminous Work like BM/ DBM, Bituminous concrete | 4,800.00 Cubic Metre |
| iii) B.C./S.D.B.C. | 1890.00 Square Metre |

Note :- Financial turnover and cost of completed works of previous year shall be given linear weightage of 10 % per year on rupee value to bring them at 2015-2016 price level.

d) Each contractor should further demonstrate availability of the following key and critical equipments at Sr. No. from (i) to (xviii) for this work and which should be owned by the contractor and same shall be actually in his possession at the time of submission of tender.

| (i) Modern Hot Mix Plant (Batch Type) having minimum capacity of 80 TPH. | One Number |
| (ii) Paver Finisher with Electronic Sensing Device with SCADA | One Number |

Contractor No. of Corrections Executive Engineer
- 29 -
(iii) Intelligent Mechanical Bitumen Sprayer with SCADA: One Number

(iv) Bouzer 10 MT capacity for conveyance of Asphalt with Vehicle Tracking System: Two Numbers

(v) Vibratory Roller with inbuilt compaction analyzer as per IRC SP-97:2013 with amplitude and frequency of vibration desired for Bituminous works: One Number

(vi) Static Roller 8 to 10 Tonne / Smooth wheeled Power Roller: One Number

(vii) Tippers / Truck with Vehicle Tracking System: Three Numbers

(viii) Hydraulic Broom: One Number

(ix) Water tanker (5000 Liters): One Number

(x) Excavator / JCB: One Number

(xi) Diesel Generator – 7.5 KVA: One Number

(xii) Mechanical screening unit: One Number

e) Availability for this work following key personnel on roll, when the work is in progress with adequate experience as required (information to be submitted in proforma IV on Page No.48)

<table>
<thead>
<tr>
<th>Contractor Technical Staff</th>
<th>Minimum Qualification required</th>
<th>Number of Technical Staff Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project in charge (Two Visits per Week)</td>
<td>BE / B.Tech Civil, Minimum 10 Year</td>
<td>1</td>
</tr>
</tbody>
</table>

**Full time Technical Staff on site required**

1. Resident Engineer | BE / B.Tech Civil, Minimum 5 Years | 1 |

2. Site Supervisor | Diploma Civil, Minimum 2 Years | 2 |

3. Plant / SCADA system supervisor | Diploma/ITI, Minimum 2 Years | 1 |
The contractor shall submit the list of technical personnel with their name and qualifications/experience after work order issued and before the starting of work. Once the list is approved by engineer in charge it should not be changed without his prior approval. The list so approved of the key personnel their required data shall be entered in the attendance machine prescribed below.

To ensure Attendance of above key personnel the contractor shall install face recognition based GPS AND SCADA ENABLED attendance machine on site and plant. The location of such machine shall be got approved from the engineer in charge. Key personnel shall register his attendance as many times as instructed by engineer in charge. The attendance so registered shall be uploaded to the PWD e-governance server/portal in real time. The analysis of attendance of these key personnel so registered shall be presented/mailed to engineer in charge and his representative in the format and frequency prescribed by engineer in charge. If after analysis of the attendance data if it is found that, the item of work is executed without attendance of the key personnel the work so executed shall be rejected.

**Note :-** The necessary certificates as mentioned for above qualification given in respective proforma supplied in NIT must be supported by certificates signed by the authority not below the rank of Executive Engineer, in the absence of these certificates, Envelope No.2 shall not be opened.

f) Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under.

\[
\text{Assessed available Bid capacity} = (A \times N \times 2) - B
\]

Where

- **A** = Maximum value of Civil Engineering Works executed in any one year during the last three years. (Updated to 2015 - 2016 Price level) taking this account the complete as well as works in progress.

- **N** = Number of years prescribed for completion of works for which tenders are invited.

- **B** = Value at 2015-2016 Price level of existing commitments and on going works to be completed during the next 18 Months (Period of completion of the works for which tenders are invited)
Note :- The Statement showing the value of existing commitments and on going works as well as the stipulated period of completion remaining for each of the work listed should be countersigned by the officer not below the rank of an Executive Engineer.

XV. Scanned from original copy Certificate of SCADA installed by Certified Agency on the behalf of tenderer.

XVI. Scanned from original copy affidavit in respect of genuiness of documents contained in the Envelope No.1 in the prescribed format given on Page No.52.

➤ All Scanned documents submitted in connection with the tender should be scanned from the Original copy only, documents scanned from Photostat or attested copy thereof will not be accepted or considered for further action and Envelope No. 2 will not be opened.

➤ Numbering should be done for all papers contained in Envelope No.1 and indexed.

Note :-

1. Even though the bidder meet the above requirement criteria, they are subject to be disqualified if they have made -

➤ misleading or false representation in the forms, statements and attachment submitted in proof of the qualification, requirement; and / or

➤ record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion litigation history or financial failure etc.

3.7 ENVELOPE No. 2 : TENDER :- (FINANCIAL BID)

Refer to Section Schedule of Online tendering Procedure at Sr. No.3.5 on Page No.15.

Contractor should not quote his offer any where directly or indirectly in Envelope No. 1. The contractor shall quote for the work as per details given in the main tender and also based on the detailed set of conditions issued / Additional stipulations made by the Department as informed to him via electronic media from Chief Engineer / Superintending Engineer after Pre-Tender Conference. His tender shall be unconditional.

3.8 SUBMISSION OF TENDER :-

Refer to Section ‘Guidelines to Bidders on the operations of Electronic Tendering System of Public Works Department’ for details.
3.9 OPENING OF TENDERS :-

On the date specified in the Tender Schedule, following procedure will be adopted for opening of the tender :-

3.9.1 ENVELOPE NO.1: (Technical Bid)

First of all Envelope No. 1 (Technical Bid) of the tender will be opened online to verify its contents as per requirements. If the various documents contained in this envelope do not meet the requirements of the Department, a note will be recorded accordingly by the tender opening authority and the said tenderer’s Envelope No.2 (Financial Bid) will not be considered for further action, but the same will be recorded. The decision of the Tender opening authority in this regard will be final and binding on the contractor.

3.9.2 ENVELOPE NO.2: (FINANCIAL BID)

This Envelope shall be open online immediately after opening of Envelope No.1 only if contents of Envelope No. 1 are found to be acceptable to the Department and / or fulfill the Qualifying Criteria. The tendered rates, Percentage above or below the estimated rates quoted shall be sealed and intimated to contractor through e-mail.

4. SECURITY DEPOSIT

4.1 The total Security Deposit to be paid shall be 4 % (Four percent) of amount put to tender.

The successful tenderer shall have to pay, half of the Security Deposit preferably in the form of National Saving Certificate or Term Deposit Receipt or in the form of Bank Guarantee (in the form as prescribed by Govt.) from any Scheduled Bank in favour of Executive Engineer, Public Works Division, Ambajogai within 10 days of acceptance of tender, and the balance security deposit will be recovered from running account bills at the percentage as shown in item (d) of the memorandum in printed B-1 form or as may be decided by the Executive Engineer during course of execution of the work looking to the position and circumstances that may prevail, whose orders will be final and binding on the contractor.

The Security deposit for the due performance of the contract shall be as detailed in the tender documents elsewhere. Fifty percent of the Security deposit will have to deposited within ten days of the acceptance of the tender and the remaining fifty percent will be recovered from the
running bills as the rate as specified in the tender form on the cost of work as per CSR prevailing at the time of acceptance of tender. Amount of total security deposit to be paid shall be 4 % (Four Percent) of the cost of work worked out as per D.S.R. 2014-2015 of respective District.

Initial Security Deposit may be in Bank Guarantee form in format on Page No. 53 to 54 of Tender document for full period of completion of work and it should be extendable upto expiry of valid extension if any, as directed by Engineer-in-charge.

4.2 All compensation or other sums payable by the Contractor under the terms of this contract or any other contract or on any account may be deducted from his Security Deposit or from any sums which may be due to him or may become due to him by Government on any account and in the event of the security being reduced by reason of any such above noted deductions, the Contractor shall within 10 days of receipt of notice of demand from the Engineer-in-charge make good the deficit.

4.3 There shall be no liability on the Department to pay any interest on the Security Deposited by or recovered from the Contractor.

4.4 The Security Deposit shall be refunded after completion of defect liability period prescribed for this contract in accordance with the provisions in Clause 1 and 20 of the contract.

5. **Condition for Payment of Additional security deposit if the offer is received lower than 15% below.**

In case the tenderer offers the rates lower than 15 % below the estimated cost put to tender, in that case, the tenderer will have to pay additional Security deposit along with the initial Security deposit, for performance of work. The amount of additional security deposit shall be amount exceeding 15 % below offer, in the form of demand draft or interest bearing securities pledged in favour of the Executive Engineer, Public Works Division, Ambajogai or in the form of Bank Guarantee for full period of completion of work and it should be extendable upto expiry of valid extension if any as directed by Engineer in charge, failing to which such tender will be considered as withdrawn and the earnest money shall be forfeited to Government. This additional Security deposit shall be refundable along-with the Final bill after satisfactorily completion of work.
The amount of security deposit shall be worked out as per following formula.

Additional Security Deposit

\[ = \text{Rs. (\% rate quoted by the contractor -15) X Cost put to tender} \]

\[ \frac{100}{100} \]

6. In the event of failure of the tenderer to pay cash security deposit within 10 days (unless extended in writing by the Executive Engineer,) from the date of receipt of notice (sent by Registered Post) of acceptance of his tender, the amount of earnest money shall be forfeited to Government and the acceptance of his tender, shall be considered withdrawn. Except that in the event of the notice of acceptance of the tender not being issued within 120 days of the date of opening of Envelope No.2 (Financial Bid). The tenderer shall have the option (to be intimated in writing in good time before the expiry of 120 days period) of withdrawing his tender, in which case the earnest money should be refunded in full. All the tenders shall remain open for acceptance for 120 days from the date fixed for opening of envelope No.2. (Financial Bid) and thereafter until it is withdrawn by the tenderer by notice in writing as per condition No.2 of the Memorandum on Page No. 65 to 67.

7. Earnest money of the unsuccessful Tenderers will be refunded on their application only after an intimation of rejection of their tender is sent to them or on the expiry of the validity period whichever is earlier.

8. The acceptance of the tender may be intimated to the contractor telegraphically or otherwise and either by the officer competent to accept the tender or any authority in the department including Government and such intimation shall be deemed to be an intimation of acceptance of the tender given by the authority competent to accept the tender.

9. In case there is difference between amount written in figures and words, the Lower offer will be taken as Final.

10. INCOME TAX :-

The Income Tax @ 2.00 % and surcharge thereon or at the rates amended from time to time or as intimated by the competent Income Tax authority shall be deducted from bill amount, whether measured bill, advance payment or secured advance.
11. VAT TAX :-

Value Added Tax @ 2.00 % of the contract amount will be recovered from the bill of the contractors who are registered under Maharashtra Value Added Tax Act 2005 and 5 % of the contract amount will be recovered from the contractors bill amount who are not registered under Maharashtra Value Added Tax Act 2005.

12. INSURANCE :-

As per the Govt. Resolution No. FD/Insurance-1098/Case No.28/98, dated 19-08-1998 and Director of Insurance Maharashtra, Mumbai letter dated 26-04-2005 Contractor has to submit Govt. Insurance policy before starting the work, failing which an amount equivalent to one percent (1%) of the tendered cost will be recovered from the First Running Account bill of this work.

13. ROYALTY CHARGES :

As per instructions issued vide P.W.D. Government of Maharashtra Resolution of Revenue and Forest Department No.Gaukhani-10/1009/CR-309/Kh(1) dated 11/2/2010 while framing the estimates, royalty charges for the items of supply of materials like rubble, metal, crushed metal, soft murum / hard murum, sand and soil shall be considered in the rate analysis of respective items @ 70.68 per Cubic Metre (Rs. 200.00 per brass) or actual and shall be recovered.

The contractor has to pay these charges directly to Revenue Department and original challans, permission documents shall be produced to concerned Executive Engineer, If contractor fails to produce these original documents the royalty charges shall be recovered from contractor's bill.

14. BUILDING & OTHER CONSTRUCTION WORKERS WELFARE CESS :

Building and other construction works on @ 1% or at the rate amended from time to time as intimated by the competent authority of building and other construction workers Welfare Dept. 1996 will be deducted from bill amount whether measured bill, advance payment or secured advance.

15. The tender shall be unconditional, conditional tender shall be summarily rejected.
16. EXAMINATION OF DRAWING AND SITE CONDITIONS:

The tenderers shall in his own interest carefully examine the drawings, conditions of contract and specifications etc. He shall also inspect the site and acquaint himself about the climate, physical and all weather conditions prevailing at site, the nature magnitude, special features, practicability of the works. All existing and required means of communications and access to site, availability of housing and other facilities, the availability of labour and materials, labour camp site, stores, godown etc. He shall obtain all necessary information as to the risk, contingencies and other circumstances which may affect and influence the tender. No claims on any of the above or any other factors will be entertained by the Government should there be any discrepancy or doubt or obscurity to be observed by him, he shall set forth in writing such discrepancies, doubts, obscurity and submit the same to the Executive Engineer, Public Works Division, Ambajogai for elucidation as soon as possible.

17. TIME LIMIT :-

The work is to be completed within time limit as specified in the N.I.T which shall be reckoned from the date of written order of commencing the work and shall be inclusive of monsoon period.

18. TENDER RATE :-

No alteration in the form of tender and the schedule of tender and no addition in the scope of special stipulation will be permitted. Rates quoted for the tender shall be taken as applicable to all leads and lifts.

19. TENDER UNITS :-

The tenderers should particularly note that the unit mentioned in the Schedule “B” on which the rates are based. NO change in the units shall be allowed. In the case of difference between the rates written in figures and in words the correct rate will be one, which is lower of the two.

20. TENDER ACCEPTANCE :

Acceptance of tender will rest with the Chief Engineer, Public Works Region, Aurangabad who reserve the right to reject any or all tenders without assigning any reasons therefore. The tenderer whose tender is accepted will have to enter into a regular B-1 agreement within
10 days of being notified to do so. In case failure on the part of Tenderer to sign the agreement within the stipulated time, the earnest money paid by him shall stand forfeited to the Government and the offer of the tenderer shall be considered as withdrawn by him.

21. **CONDITIONAL TENDER** :-

The tenders who do not fulfil the condition of the notification and the general rules and directions for the guidance of contractor in the agreement form or are incomplete in any respect are likely to be rejected without assigning any reason therefore.

The Tenderers shall be presumed to have carefully examined the drawings, conditions and specifications of the work and have fully acquainted themselves with all details of the site, the conditions of rock and its joints, pattern, river, weather characteristics, labour conditions and in general with all the necessary information and data pertaining to the work, prior to tendering for the work.

The data whatsoever supplied by the Department along with the tender documents are meant to serve only as guide for the tenderers while tendering and the Department accepts no responsibility whatsoever either for the accuracy of data or for their comprehensiveness.

The quarries for extraction of metal, murum etc. provided in the sanctioned estimate are as per survey conducted by the Department. The Contractor should however examine these quarries and see whether full quantity of materials required for execution of the work strictly as per specification are available in these source before quoting the rates. In case the materials are not available due to reasons whatsoever, the contractor will have to bring the materials from any other source with no extra cost to Government. The rates quoted, should therefore be for all leads and lifts from wherever the materials are brought at site of work and inclusive of royalty to be paid to the Revenue Department by the Contractor.

22. **POWER OF ATTORNEY** :

If the tenderers are a firm or company, they should in their forwarding letter mentioning the names of all the partners together with the name of person who holds the power of attorney authorising him to
conduct all transactions on behalf of the body, along with the tender and scanned copy in Envelope No.1.

23. The contractor or the firms tendering for the work shall inform the Department if they appoint their authorised Agent on the work.

24. No foreign exchange will be released by the Department for the purchase of plant and machinery for the work by the contractor.

25. Any dues arising out of contract will be recovered from the contractor as arrears of land revenue if not paid amicable, moreover, recovery of Government dues from the contractors will be effected from the payment due to the contractor from any other Government works under execution with them.

26. **VALIDITY PERIOD**:

   The offer shall remain open for acceptance for minimum period of 120 days from the date of opening of Envelope No.2 (Financial Bid) and thereafter until it is withdrawn by the contractor by notice in writing duly addressed to the authority. Opening the tender and sent by registered post acknowledge due. (refer to memorandum on Page No. 65 to 67 of B-1 form chapter).

27. The contractor will have to sign the hard copy of the tender papers and the drawings according to which the work is to be carried out. The contractor shall also have to give a declaration to the effect that, he has fully studied the plans, specifications, local conditions and availability of labour and materials and that he has quoted his rates with the consideration to all these factors.

28. After completion of the e-tendering process, the successful bidder will have to submit the hard copy of downloaded tender document and drawings duly signed on each page by the contractor or his authorised signatory. The tender should bear full signature of the tenderer or his authorised power of attorney holder in case of Firm.

29. The right is reserved to revise or amend the contract documents prior to the due notified for the receipt of tenders or extended date. Such deviations, amendments or extensions, if any, shall be communicated in the form of corrigendum by letter or / and by notice in News Papers as may be considered suitable.
30. The Tenderers, which do not fulfill all or any of the conditions or are incomplete in any respect are liable to summarily rejection.

31. Right to reject any or all tenders without assigning reason therefor is reserved. The acceptance of the tender lies with the Chief Engineer, Public Works Region, Aurangabad.

32. The E-Tender Notice shall form part of the tender agreement.

33. Instruction to Contractor:

32.1 In case the tenderer whose offer is found lowest is requested to negotiate and reduce the offer, if the contractor does not respond within a period of 10 days the tender accepting authority without issuing any reminder reserves the right to reject such tender.

32.2 In case the contractor who is informed of acceptance of his tender, does not remit the initial Security Deposit within a period of 10 days, the tender accepting authority reserves the right to forfeit the Earnest Money Deposit without issuing any reminder to take further action according to the tender provision.

32.3 As per Government instruction it is proposed to make payment of Contractors bills through ECS / NEFT System. For this purpose Contractor should open his Bank account in a bank having core banking facility only.
**STATEMENT - I**

**STATEMENT OF LIST OF WORKS IN HAND AND WORKS TENDERED FOR AS ON LAST DATE OF SUBMISSION OF THIS TENDER.**

Name of Contractor: __________________________________________________________

(i) **WORKS IN HAND**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of work</th>
<th>Agreement No.</th>
<th>Tendered Amount</th>
<th>Date of commencement</th>
<th>Stipulated date of completion</th>
<th>Value of work already done</th>
<th>Value of balance work to be executed in next 18 (Eighteen) months</th>
<th>Probable date of completion</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE FORM**

(ii) **WORKS TENDERED FOR**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of work</th>
<th>Name and Address of Client.</th>
<th>Tendered Amount</th>
<th>Time limit</th>
<th>Probable date when decision is expected</th>
<th>Other relevant details, if any.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE FORM**

**Note:**  
1) This is only a standard form. Details are to be furnished in this format in the form of type written statements which shall be Scanned and Enclosed in Envelope No.1 duly signed.

2) The documentary proof of work in hand, work tendered for should be submitted with this statement scanned from original copy.

3) The information submitted in above format is to be supported by certificates of Executive Engineer, without these certificates statement will be disqualified. All certificates of Executive Engineer are to be enclosed in Envelope No.1.

Signature of Contractor.

**Contractor**  
**No. of Corrections**  
**Executive Engineer**

- 41 -
# STATEMENT - II

STATEMENT SHOWING THE DETAILS OF OWNED/ HIRED MACHINERY IMMEDIATELY AVAILABLE WITH TENDERER FOR THIS WORK.

Name of Contractor : ____________________________________________________

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of equipment</th>
<th>No. of Units</th>
<th>Kind and make</th>
<th>Capacity</th>
<th>Age and condition</th>
<th>Present Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE FORM**

**Note :**

1) This is only a standard form. Details are to be furnished in this format in the form of type written statements which shall be Scanned and Enclosed in Envelope No.1 duly signed.

2) The contractor shall include ownership and other document of machinery’s with this statement scanned from original copy.

3) The information submitted in above format is to be supported by certificates of Executive Engineer, without these certificates statement will be disqualified. All certificates of Executive Engineer are to be enclosed in Envelope No.1.

Signature of Contractor

Contractor No. of Corrections Executive Engineer

- 42 -
**STATEMENT NO. 2 (A)**

**A) QUESTIONNAIRE ON MACHINERY :-**

Proforma for information regarding availability / procurement of machinery required for this work.

<table>
<thead>
<tr>
<th>Type of Machine</th>
<th>No. of Units</th>
<th>Name of Works on which deployed at present</th>
<th>Location</th>
<th>Output in tonnes of mix per day</th>
<th>Quantity in tonnes of hot mix balance for execution on works in hands</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Modern Hot Mix Plant (Batch Type) having minimum capacity of 80 TPH.</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Paver Finisher with Electronic Sensing Device with SCADA</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iii) Intelligent Mechanical Bitumen Sprayer with SCADA</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iv) Bouzer 10 MT capacity for conveyance of Asphalt with Vehicle Tracking System</td>
<td>Two Numbers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(v) Vibratory Roller with inbuilt compaction analyzer as per IRC SP-97:2013 with amplitude and frequency of vibration desired for Bituminous works.</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(vi) Static Roller 8 to 10 Tonne / Smooth wheeled Power Roller.</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(vii) Tippers / Truck with Vehicle Tracking System</td>
<td>Three Numbers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(viii) Hydraulic Broom</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ix) Water tanker (5000 Liters)</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(x) Excavator / JCB</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(xi) Diesel Generator – 7.5 KVA</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(xii) Mechanical screening unit</td>
<td>One Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The contractor must own aforesaid machinery and be actually in his possession at the time of submission of tender. And for ownership of above machinery contractor must enclose scanned copy Tax Invoice (invoice with TIN) and for bouzer's R.T.O.'s R. C. book showing bouzer’s registration and other details in Envelope No.1. The contractor shall include ownership document for all machinery’s.

Signature of the Bidder

The present location of SCADA embedded Modern Hot Mix Plant (Batch Type) having minimum capacity of 80 TPH shall be within a distance of 60 Kilometres from the farthest point of the length of road under this contract. The Contractor shall also submit a sketch showing existing location of plant in Envelope No.1, failing which the Envelope No.2 shall not be opened.

The certificate by the concerned Sub-Divisional Engineer, (P. W. Sub-Division, Parali (V.)) to the effect that the plant to site distance to maintain the temperature of the bituminous material will remain the same as per specification and does not exceed 60 Kilometers to the farthest point of the length of road under this contract. This scanned copy of this certificate has to be enclosed in the Envelope No.1, failing which it will be presumed that the bidder’s plant does not fulfill the criteria of Plant to Paver travel time being within distance of 60 Kilometers.

B) Conditions for Additional Performance security for Mobilization of Modern Hotmix Plant (Batch type) and Machinery :-

If the present location of SCADA embedded Modern Hot Mix Plant (Batch Type) having minimum capacity of 80 TPH plant which contractor intends to deploy for this work is presently located beyond 60 Kilometres from the work site or if the Plant (Batch Type) is not owned by contractor at the time of tendering then conditions for installing Hot Mix Plant with Electronic Control (minimum 80 tonnes per hours capacity Batch Mix Type) are as below :-

1. Contractor shall install Batch type Hot Mix Plant with Electronic Control of minimum 80 tonnes per hour capacity within 75 days from the date of issue of work order.

2. If the contractor wants to procure / purchase Hot Mix Plant with Electronic Control of minimum 80 tonnes per hour capacity Batch Mix Type as mentioned above, he should submit necessary Firm Purchase
Order placed on manufacturer of repute with minimum advance payment receipt of Rs.25.00 Lakhs in Envelope No.1.

3. If Contractor intend to purchase hot mix plant as in 2 above or shift already owned plant from existing location to the new location as required for this work, for that bidder shall submit additional security as specified in 4 below. He shall give trial run on or before 75 th day from the date of issue of work order.

4. In Envelope No.1 the bidder shall pay an Additional (performance) Security of Rs.10,00,000/- (Rupees Ten Lakh only.) in favour of Executive Engineer, Public Works Division, Ambajogai, in ICICI Bank Account No.219205001124 via online mode only. If Contractor fails to give trial run till 75th day of issue of said Work order, his above said Additional Performance Security shall be encashed without any notice to the contractor without considering any force major and shall be credited to Government revenue by the Engineer in charge immediately on 76 th day.

5. Encashment of Additional Performance Security deposit as mentioned above shall not absolved the Contractor from the responsibility of installing the Batch Mix Plant which is required for carrying out Hot Mix Work.

6. No extension of time limit shall be granted at any level for giving trial run after 76th day from the date of issue of work order.

7. If Contractor intends to purchase Compaction Analyzer after issue of Work Order then conditions shall be as below :-

7.1 Contractor shall procure Compaction Analyzer for Hot Mix B.T. Works within 75 days from the date of Work order

7.2 He shall give trial run of Compaction Analyzer for B.T. Work within 75 days from the date of work order.

7.3 In Envelope No.1, The bidder shall submit an Additional Performance Security deposit in favour of Executive Engineer, Public Works Division, Ambajogai, in ICICI Bank Account No.219205001124 via online mode only :-

(A) Rs. 2,00,000/- (Rupees Two Lakhs Only) for the Compaction Analyzer for Hot Mix B.T. Works.
7.4 If Contractor fails to give trial run of Compaction Analyzer (A) above before 75 th day, from the date of issue of work order, his above said Additional Performance Security of Rs.2,00,000/- (Rupees Two Lakh Only) shall by encashed without any notice to the contractor without considering any force major and shall be credited to Government revenue by the Engineer in charge immediately on 76 th day.

7.5 Encashment of Additional Security deposit as mentioned above shall not absolve the contractor from the responsibility of providing the compaction Analyzer which is required for BUSG and B.T. Work.

Signature of the Bidder
# STATEMENT - III


Name of Contractor : ____________________________________________________________

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of work</th>
<th>Name and address of the organization for whom the work was done</th>
<th>Place and country</th>
<th>Agreement No. and Date</th>
<th>Date of commencement</th>
<th>Tendered cost</th>
<th>Total Cost of work done</th>
<th>Actual date of completion</th>
<th>Remarks (Principal features in brief.)</th>
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<tbody>
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</table>

**SAMPLE FORM**

**Note :**
1) This is only a standard form; details are to be furnished in this format in the form of type written statements which shall be Scanned and Enclosed in Envelope No.1 duly signed. The documentary proof of similar type and magnitude should be submitted with statement.

2) The information submitted in above format is to be supported by certificates of Executive Engineer, without these certificates statement will be disqualified. All certificates of Executive Engineer are to be enclosed in Envelope No.1.
STATEMENT - IV

STATEMENT SHOWING THE DETAILS OF TECHNICAL PERSONNEL AVAILABLE WITH CONTRACTOR WHICH CAN BE SPARED EXCLUSIVELY FOR THIS WORK

Name of Contractor: ____________________________________________________________

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Person</th>
<th>Designation</th>
<th>Qualification</th>
<th>Whether working in field or in office.</th>
<th>Professional Experience of execution of similar works</th>
<th>Period for which the person is working with the tenderer.</th>
<th>Remarks</th>
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<tbody>
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</table>

SAMPLE FORM

Note :- 1) This is only a standard form. Details are to be furnished in this format in the form of type written statements, which shall be Scanned and Enclosed in Envelope No.1 duly signed. The documentary proof of his Technical persons should be submitted with this statement.

2) The information submitted in above format is to be supported by certificates of Executive Engineer, without these certificates statement will be disqualified. All certificates of Executive Engineer are to be enclosed in Envelope No.1.

Signature of Contractor

Contractor No. of Corrections Executive Engineer
- 48 -
STATEMENT No. V
STATEMENT SHOWING WORK DONE IN ALL CLASSES OF CIVIL ENGINEERING CONSTRUCTION WORKS DURING LAST THREE YEARS

Name of Contractor: ______________________________________________________

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of work</th>
<th>Amount put to tender/tendered cost</th>
<th>Agreement No.</th>
<th>Date of commencement</th>
<th>Amount of work done during each of last three years</th>
<th>Amount of work still remaining to be executed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

SAMPLE FORM

Outward No. and date of certificate issuing authority:

Note: 1) This is only a standard form. Details are to be furnished in this format in the form of type written statements, which shall be scanned and copy enclosed in envelope No.1 duly signed. The documentary proof of work done with whom contractor executed should be submitted with this statement.

2) The information submitted in above format is to be supported by certificates of Executive Engineer, without these certificates statement will be disqualified. All certificates of Executive Engineer are to be enclosed in Envelope No.1.
STATEMENT No. VI
STATEMENT SHOWING QUANTITIES OF
WORK EXECUTED IN ANY ONE YEAR
DURING LAST THREE YEARS

Name of the Contractor : ________________________________

<table>
<thead>
<tr>
<th>Name of work &amp; Agreement No.</th>
<th>Year</th>
<th>Quantity of work performed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Modified Penetration Macadam (MPM)/B.B.M. in $M^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hot Mix Hot laid Bituminous Work like BM/DBM, Bituminous Concrete in $M^3$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.C./S.D.B.C. in $M^2$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012-13</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2013-14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2014-15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Out ward No. and date of certificate issuing authority:

Note: 1) This is only a standard form. Details are to be furnished in this format in the form of type written statements, which shall be scanned and copy enclosed in envelope No.1 duly signed. The documentary proof of Quantity executed with whom work executed should be submitted with this statement.

2) The information submitted in above format is to be supported by certificates of Executive Engineer, without these certificates statement will be disqualified. All certificates of Executive Engineer are to be enclosed in Envelope No.1.
(To be included in Envelope No. 1)

Statement showing details of various plants and machinery required for this work

01. Details of Modern Hot Mix Plant (Batch Type) having minimum capacity of 80 TPH available with the tenderers for this work.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Name of Manufacture</td>
</tr>
<tr>
<td>b)</td>
<td>Date of Purchase</td>
</tr>
<tr>
<td>c)</td>
<td>Present Location</td>
</tr>
<tr>
<td>d)</td>
<td>Name of work on which deployed.</td>
</tr>
<tr>
<td>e)</td>
<td>Name and Address of Engineer in charge</td>
</tr>
<tr>
<td>f)</td>
<td>Anticipation of completion of work on which deployed.</td>
</tr>
</tbody>
</table>

02. Statement showing details of Paver Finisher with Electronic Sensing Device with SCADA required for this work

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Name of Manufacture</td>
</tr>
<tr>
<td>b)</td>
<td>Date of Purchase</td>
</tr>
<tr>
<td>c)</td>
<td>Present Location</td>
</tr>
<tr>
<td>d)</td>
<td>Name of work on which deployed.</td>
</tr>
<tr>
<td>e)</td>
<td>Name and Address of Engineer in charge</td>
</tr>
<tr>
<td>f)</td>
<td>Anticipation of completion of work on which deployed.</td>
</tr>
</tbody>
</table>

03. Statement showing details of Intelligent Mechanical Bitumen Sprayer with SCADA, Bouzer 10 MT capacity for conveyance of Asphalt with Vehicle Tracking System, Vibratory Roller with inbuilt compaction analyzer as per IRC SP-97:2013 with amplitude and frequency of vibration desired for Bituminous works, Vibratory Roller with inbuilt compaction analyzer for soil / GSB/ WBM works available with the tenderer required for this work (Use Separate statement for every machine/plant)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Name of Manufacture</td>
</tr>
<tr>
<td>b)</td>
<td>Date of Purchase</td>
</tr>
<tr>
<td>c)</td>
<td>Present Location</td>
</tr>
<tr>
<td>d)</td>
<td>Name of work on which deployed.</td>
</tr>
<tr>
<td>e)</td>
<td>Name and Address of Engineer in charge</td>
</tr>
<tr>
<td>f)</td>
<td>Anticipation of completion of work on which deployed.</td>
</tr>
</tbody>
</table>

Technical Details

01. Static Weight
(On Stamp Paper worth Rupees 100/-)

सत्यप्रतिज्ञा लेख (Affidavit)

मी ____________________________________________________________________

बय _______________ वर्ष

राहणार ____________________________________________________________________

या सत्यप्रतिज्ञा लेखावादूने तिहृत देतो की मी

____________________________________________________________________________

या कंपनीचा/फर्मचा प्रोप्रायटर / भागीदार असून

Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15) या कामासाठी निविदा सादर केली आहे. सदर निविदेकडी सदर काम करणेकरिता सर्व प्रकारची आवश्यक यंत्रसामग्री (Machinery) संबंधित कार्यकारी अभियंता व संबंधित उप अभियंता हे सूचना देतील त्यावेळी कामाचा ठिकाणी निविदा शर्तानुसार उपलब्ध करून देण्याचे मी प्रतिज्ञापत्राद्वारे शपथपूर्वक मान्य करीत आहे.

वर नमूद केल्याप्रमाणे वरील यंत्रसामग्री उपलब्ध करून देण्यात माझ्याकडून कसूर ज्ञात्यास संबंधित क्षेत्रीय अधिकारी (Engineer in charge) सदर कामाचा निविदेकावर जी कार्यवाही करतील ती मला मान्य असून, यावावर निविदेकडी अर्थी / शर्तानुसार मी कायदेशीर कार्यवाहीस पात्र आहे व राहील. तसेच ह्या निविद्या Envelope No.1 मध्ये जी कागदपत्रे सादर केली आहेत ती खरी, बरोबर व पूर्ण आहेत. ह्यामध्ये कोणत्याही चुकी, चुका नाहीत असे शपथपूर्वक मान्य करीत आहे. ह्या कागदपत्रांमध्ये काही चुकीची दिशाभूल करणारी, खोटी तसेच अपूर्ण माहिती आढळल्यास मी कायदेशीर कार्यवाहीस पात्र आहे व राहील.

कंट्रॉक्टरदाराची सही
GUARANTEE BOND FOR SECURITY DEPOSIT
( On Stamp Paper Worth Rupees 100/- )

In consideration of the Governor of Maharashtra (herein after referred to as "the Government") having agreed to exempt __________________________ (herein after referred to as "The Contractor") from depositing with the Government in cash the Sum of Rs._______________ (Rupees_____________________________ Only) being the amount of Security Deposit payable by the contractor to the Government under the terms and conditions of the "Agreement dated the ___________ day of ___________ and made between the Government of the one part and the contractor of the other part (hereinafter referred to as "the said Agreement") for ________________________ as security for the observance and performance by the contractor of the terms and conditions of the said Agreement, on the Contractor furnishing to the Government a Guarantee in the prescribed form of a Scheduled Bank in India being in fact these presents in the like Sum of Rs. _______________ (Rupees __________________________ Only) We ____________________________________ BANK/LIMITED registered in India under ___________________________ Act and having one of our Local Head Office at _________________________________ do hereby.

1) GUARANTEE TO THE GOVERNMENT :-

a) Due performance and observance by the contractor of the terms covenants and conditions on the part of the contractor contained in the said Agreement, and

b) Due and punctual payment by the Contractor to the Government of all sums of money, losses, damages, costs, charges, penalties and expenses payable to the Government by the contractor under or in respect of the said Agreement.

2) Undertake to pay to the Government on demand and without demur and notwithstanding any dispute raised by the Contractor(s) in any suit or proceeding filed in any Court or Tribunal relating thereto the said Sum of Rs._______________ (Rupees_____________________________ Only) or such less sum as may be demanded by the Government from us our liability herein under being absolute and unequivocal and agree that.

Contractor No. of Corrections Executive Engineer

- 53 -
3) a) The guarantee herein contained shall remain in full force and effect during the subsistence of the said agreement and that the same will continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been duly paid and its claims satisfied or discharged and till the Government certifies that the terms and conditions of the said Agreement have been fully properly carried out by the contractor.

b) We shall not be discharge or released from the liability under this Guarantee by reasons of

i) any change in the constitution of the Bank or the Contractor or

ii) any agreement entered into between the Government and the contractor with or without our consent:

iii) any forbearance or indulgence shown to the contractor.

iv) any variation in the terms convenants or conditions contained in the said Agreement:

v) Any time given to the contractor or

vi) any other conditions or circumstances under which in law, a surety would be discharged:

c) Our liability here under shall be joint and several with that of the contractor as if we were the Principal debtors in respect of the said Sum of Rs. _______________ (Rupees _______________ Only)

And

d) We shall not revoke this guarantee during its currency except with the previous consent in writing of the Government.

IN WITNESS WHEREOF the common Seal of _______________ _______________ day of _______________ 2015. The Common seal of _______________ was pursuant to the resolution of the Board of Directors of the Company dated the _______________ day of _______________ herein affixed in the presence of who, in token thereof, have hereto set their respective hand in the presence of

1) __________________________

2) __________________________
Name of Work    :-  Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

DECLARATION OF THE CONTRACTOR

I / We hereby declare that I / We have made myself / ourselves thoroughly conversant with the local conditions regarding all materials (such as stone, murum, and sand etc.) and labour of which I/We have based my / our rates for this work. The specifications, conditions and lead of materials to be used on this work have been carefully studied and understood by me / us before submitting this tender. I / We undertake to use only the best materials approved by the Executive Engineer, Public Works Division, Ambajogai in charge of the work or his duly authorized representative, before starting the work and to abide by his decision.

I hereby undertake to pay the labourers engaged on the work as per Minimum Wages, Act 1948 applicable to the zone concerned.

To be filled by the Contractor

I/We have quoted My/Our offer in percentage rate in words as well as in figures at appropriate place while quoting rate through E-tendering. I/We further undertake to enter into Contract in regular 'B-1' Form in Public Works Department

Name & Signature of the Contractor/
Power of Attorney Holder with complete address
GENERAL DESCRIPTION & SCOPE OF WORK

Name of Work :- Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

A. GENERAL DESCRIPTION & SCOPE OF WORK

Introduction :- As per 2001-2021 road development plan category of road Major State Highway and is classified as MSH-16. Working chainage of road start from Km.408/00 and ends at Km.441/00 in Tal.Parali (V.), District Beed.

Scope of work :-

01. Excavation for catch /road side water gutter / jungle gutter in all sorts of soils, soft murum, hard murum to the specified section.

02. Supplying, spreading and compacting hard murum for side shoulders.

03. Construction of 75 millimetre thick Modified Penetration Macadam over existing Black Top surface by providing and applying tack coat at specified rate of 3 Kilogram per 10 Square Metre as per MORTH Clause No.503

04. Providing and applying tack coat on Bitumen Emulsion (RS-1) existing black top surface.

05. Providing and Laying Dense Bituminous Macadam at the rate of 4.00 to 4.50 percent by weight of total mix and filler, Bituminous Concrete at the rate of 5.00 percent by weight of total mix and filler.

06. Providing road side furniture’s i.e. boundary stones, 200 meter stone, ordinary kilometer stones, 5th kilometer stones, informatory sign board, warning and caution sign boards, 10 centimetre and 15 centimetre as required width thermoplastic reflective paint, providing and fixing aluminium casted CAT EYE STUD.

07. Providing and erecting Double Pole Signage System.

Note  The material required for work is available in reasonable leads as water, required for this work is available within vicinity; However Contractor shall confirm these facts before quoting his offer.
The Method and Sequence of Execution

(GENERAL GUIDELINES)

1) On award of contract, the contractor shall take levels jointly with Engineer’s representative for existing cross sections and L sections of the road. The cross sections shall be taken at 10.00 m. interval and 5.00 m. interval on curves and in Ghat Section along the length of the road. Bench mark pillars shall be erected at 500 m. interval before starting leveling work and are kept intact till the defect liability period.

2) After taking line out, contractor must excavate the gutter as per section attached with the tender. Minimum longitudinal slope towards natural drain shall be 1:40.

3) The formation widening shall be executed simultaneously as per necessity.

4) After completion of gutter excavation, contractor shall take the work of C.D. Work in the excavation for head wall of C.D. work shall be completed after passing of foundation for head walls. Contractor shall construct concrete wall upto sill level of pipe and then pipe shall be laid in line and level and complete head wall construction along with catch pit.

5) Work of collection for W.B.M. shall be taken in hand only after completion of gutter and C.D. work with catch pit and completion of earth work.

6) W.B.M. and M.P.M. shall be completed with 3% camber and super elevation if required as per specification with schedule. B.M. shall be completed after M.P.M.

7) Open graded premix carpet with liquid seal coat, road side furniture shall be executed as per schedule.

8) The contractor will not be paid for W.B.M. gutter, C.D. works and B.T. Items if he has not excavated Gutters.

9) The work of filling watering and compacting side shoulder as specified with available murum shall be done simultaneously with laying of W.B.M., M.P.M. and carpet layers. The side shoulders shall be compacted with side slope of 5% from carriageway edge towards to the gutter.

10) Traffic plying at design speed should not feel bump or jerk on any stretches. Contractor shall plan for all such locations well before taking
up work in such stretches and difficulties in doing so, if any, be brought to the notice of the Engineer and only after his permission work proceed further.

11) If there is traffic plying on the existing road, the tenderer should get himself accustomed with the traffic conditions before quoting for the work. Once the work is started sufficient care shall be taken to see that obstruction / inconvenience to traffic is kept to the bearest minimum. Sufficient number of boards as required, approved by Executive Engineer in charge shall be provided by the Contractor at his own cost at such a location which give sufficient warning of work in progress, special care shall be taken by the contractor during night hours. The Contractor shall maintain the diversion properly at his own cost as directed by the Engineer in charge till the completion of the work.

12) Work of construction of road side furniture shall be completed before execution of premix carpet and seal coat.

13) Contractor shall erect scheme board within fifteen days from the date of work order.

14) Testing of material shall be as per frequency.
FORM – B-1

PERCENTAGE RATE TENDER AND CONTRACT FOR WORK

DEPARTMENT : Public Works Department
CIRCLE : Public Works Circle, Osmanabad
DIVISION : Public Works Division, Ambajogai.

Name of Work : Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS.

1. All works proposed to be executed by contract shall be notified in a form of invitation to tender Online e-Tendering System also pasted on a board hung up in the office of the Executive Engineer, and signed by the Executive Engineer, Public Works Division, Ambajogai. This form will state the work to be carried out as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills, It will also state whether a refund of a quarry fees, royalties, and ground rents will be granted. Copies of the specifications, designs and drawings estimated rates, scheduled rates and any other documents required in connection with the work shall be signed by the Executive Engineer for the purpose of identification and shall also be open for inspection by contractors at the office of the Executive Engineer, during office hours.

2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof, or in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so.
2. (i) The contractor shall pay along with the tender the sum of Rs.14,56,000.00 (Rupees Fourteen Lakh fifty six thousand only) as and by way of earnest money. Earnest Money shall be paid via Online using NEFT/RTGS or payment Gateway mode. The said amount of Earnest Money shall not carry any interest whatsoever.

(ii) In the event of his tender being accepted, subject to the provisions of sub-clause (iii) below, the said amount of earnest money shall be appropriated towards the amount of security deposit payable by him under conditions of General conditions of contract.

(iii) If, after submitting the tender, the contractor withdraws his offer, or modifies the same, or if after the acceptance of his tender the contractor fails or neglects to furnish the balance of security deposit without prejudice to any other rights and powers of the Government, hereunder, or in law, Government shall be entitled to forfeit the full amount of the earnest money deposited by him.

(iv) In the event of his tender not being accepted, the amount of earnest money deposited by the contractor, shall unless it is prior thereto forfeited under the provisions of sub-clause (iii) above, be refunded to him on his passing receipt therefore.

3. Receipts for payments made on account of any work, when executed by a firm, shall also be signed by all the partners except where the contractors are described in their tender as firm, in which case the receipts shall be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipts for the firm.

4. Any person who submits a tender shall fill up the usual printed form stating at what percentage above or below the rates specified in Schedule 'B' (Memorandum showing items of work to be carried out) or at appropriate place while quoting rate through E-tendering, he is
willing to undertake the work. Only one rate or such percentage on all the Estimated rates/Scheduled rates shall be named. Tenders which propose any alteration in the works specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions, will be liable to rejection. No printed forms of tender shall include a tender for more than one work, but if contractors wish to tender for two or more works, they shall submit a separate tender for each. Tenders shall have the name and number of the work to which they refer, written outside the envelope.

5. The **Superintending Engineer, Public Works Circle, Osmanabad** shall open tenders in the presence of contractors who have submitted tenders or their representatives who may be present at the time, and he will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, the contractor shall, for the purpose of identification, sign copies of the specifications and other documents mentioned in Rule 1. In the event of a tender being rejected, the Divisional Officer shall refund the amount of earnest money deposited by the contractor Online.

   In the event of tender being rejected, the **Executive Engineer** shall authorize the Treasury Officer / Bank concerned to refund the amount of the earnest money deposited, to the contractor making the tender, on his giving a receipt for the return of the money.

6. The competent office has the right of rejecting all or any of the tenders without assigning any reason.

7. No receipt for any payment alleged to have been made by a contractor in regard to any matter relating to this tender or the contract shall be valid and binding on Government unless it is signed by the Executive Engineer.

8. The memorandum of work to be tendered for and the schedule of materials to be supplied by the Public Works Department and their rates shall be filled in and completed by the office of the Executive Engineer, before the tender form is issued. If a form issued to an
intending tenderer has not been so filled in and completed he shall request the said office to have this done before he completes and delivers this tender.

9. All work shall be measured net by standard measure and according to the rules and customs adopted by the Public Works Department and without reference to any local custom.

10. Under no circumstances shall any contractor be entitled to claim enhanced rates for any items in this contract.

11. Every registered contractor should produce along with his tender certificate of Registration as approved contractor in the appropriate class and renewal of such registration with date of expiry. (Copies to be attested by a Gazetted Officer)

12. All corrections and additions or pasted slips should be initialed.

13. The measurements of work will be taken according to the usual methods in use in the Public Works Department and no proposals to adopt alternative methods will be accepted. The Executive Engineer’s decision as to what is “the usual method in use in the Public Works Department” will be final.

14. The tendering contractor shall furnish a declaration along with the tender showing all works for which he has already entered into contract and the value of the work that remains to be executed in each case on the date of submitting the tender. (with certificate from the head of the office concerned).

15. Every tenderer shall furnish along with the tender, information regarding the Income tax circle or ward of the district in which he is assessed to income tax the reference to the number of the assessment year.
16. No foreign exchange would be released by the Department for the purchase of plant and machinery required for the execution of the work contracted for.

17. The contractor will have to construct shed for storing controlled and valuable materials brought by him at work site at contractor’s cost. The material will be taken for use in the presence of the departmental person. No material will be allowed to be removed from the site of work.

18. The contractors shall also give a list of machinery in their possession and which they propose to use on the work in the form of Statement No. II and 2(A) on Page No.42 and 43.

19. Successful tenderer will have to produce to the satisfaction of the accepting authority a valid and current license issued in his favour under the provision of Contract Labour (Regulation and Abolition) Act 1970 before starting work, failing which acceptance of the tender will be liable for withdrawal and earnest money will be forfeited to Government.

20. The contractor shall comply with the provision of the Apprentices Act 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be breach of contract and the Superintending Engineer, may in his discretion cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the Act.
TENDER FOR WORKS

I/We hereby tender for the execution, for the Government of Maharashtra (herein before and hereinafter referred to as "Government") of the work specified in the under written memorandum within the time specified in such memorandum at *the rate quoted by me at specified place provided on-line in Envelope No.2 (E-2) Percent below /above the estimated rates entered in Schedule 'B' (Memorandum showing items of work to be carried out) and in accordance in all respects with the specifications, designs, drawings, and instructions in writing referred to in Rule - I hereof and in Clause 13 of the annexed conditions of contract and agree that when materials for the work are provided by the Government, such materials and the rates to be paid for them shall be as provided in Schedule 'A' hereto.
MEMORANDUM

1. General Description

Name of work :-

Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

(a) If several sub-works are included they should be detailed in a separate list.

(b) Estimated Cost

(b) Estimated Cost
(Civil Work)

Rs. 14,55,66,481.00

(c) The amount of earnest money to be deposited shall be in accordance with the provision of Para 206 & 207 of the M.P.W. manual

(c) Earnest Money

Rs. 14,56,000.00

(d) This deposit shall be in accordance with para 213 & 214 of M.P.W. Manual

(d) Security Deposit :-

i) Cash

Rs. 29,12,000.00

(not less than the amount of earnest money)

ii) To be deducted from current bills

Rs. 29,12,000.00

(e) This percentage where no security deposit is taken will vary from 5 % to 10 % according to the requirement of the case where Security Deposit is taken. See Note to Clause 1 of Conditions of the Contract.

(e) Percentage, if any to be deducted from bills so as to make up the total amount required as Security Deposit by the time, half the work, measured by the cost, is done :-

Four Percent

Contractor

No. of Corrections

Executive Engineer
(f) Give schedule where necessary showing dates by which the various items are to be completed.

(f) Time allowed for the work from the date of written order to commence.

18 (Eighteen) Calendar Months including Monsoon Season.

2. I / We agree that this offer shall remain open for acceptance for a minimum period of 120 days (One hundred twenty days) from the date fixed for opening the "same" means Envelope No 2 and thereafter until it is withdrawn by me/us by notice in writing duly addressed to the authority opening the tenders and sent by Registered Post A. D. or otherwise delivered at the office of such authority, Treasury Challan Number __________ and date __________ or term deposit receipt for a period of one year receipt No. __________ and date __________ in respect of sum of Rs. 14,56,000.00 (Rupees Fourteen Lakh fifty six thousands only.) representing the earnest money is herewith forwarded. The amount of earnest money shall not bear interest and shall be liable to be forfeited to the Government should I / We fail to:

(i) abide by the stipulation to keep the offer open for the period mentioned above or

(ii) sign and complete the contract documents as required by the Engineer and furnish the security deposit as specified in item (d) of the memorandum contained in paragraph (i) above within the time limit laid down in clause (1) of the annexed General Conditions of contract. The amount of earnest money may be adjusted towards the security deposit or refunded to me/us if so desired by me/us in writing, unless the same or any part thereof has been forfeited as aforesaid.

3. I / we have secured exemption from payment of earnest money after executing the necessary bond in favour of the Government a true copy of which is (exemption certificate with bond) enclosed herewith, should any occasion for forfeiture of earnest money for his work arise due to failure on my/our part to (i) abide by the stipulations to keep the offer open for the period mentioned above or (ii) sign and complete the contract documents and furnish the Security deposit as specified in item (d) of the Memorandum contained in paragraph (i) above within the time limit laid down in clause (1) of the annexed General Conditions of contract the amount payable by me/us may at the option of the Engineer, be recovered out of the amount deposited in lumpsum for securing exemption in so far as the same may extend in terms of the said bond and in the event of the deficiency out of any other moneys which are due or payable to me/us by the Government under any other contract or transaction of any nature whatsoever or otherwise.
4. Should this tender be accepted I/We hereby agree to abide by and fulfill all the terms and provisions of the conditions of contract annexed hereto so far as applicable and in default thereof to forfeit and pay to Government the sums of money mentioned in the said condition.

Receipt No. ________________ dated __________ from the Government Treasury or Sub Treasury at ________________ in respect of the sum of Rs.______________ ( Rupees in words __________________________ _______________________________________________ ) is herewith forwarded representing the earnest money (a) the full value of which is be absolutely forfeited to Government should, I / We not deposit the full amount of security deposit specified in the above memorandum, in accordance clause 1(A) of the said conditions, otherwise the said sum of Rs.______________ shall be refunded. (Strike out (a) if no cash security deposit is to be taken.)

Contractor ____________________________ (Signature of contractor) before submission of tender.

Address ____________________________________________

Date the ______ day of ______ 2015.

(Witness) ____________________________________________ (Signature of Witnessed) to contractor's signature.

Address ____________________________________________

(Occupation):- ____________________________________________

" The above tender is hereby accepted by me for and on behalf of the Governor of Maharashtra. "

__________________________________________________________

Signature of the Officer by whom accepted. 

Executive Engineer, 
Public Works Division, Ambajogai. 
Date : Day of ______ 2015.

Contractor No. of Corrections Executive Engineer
CONDITIONS OF CONTRACT

Clause 1 :-

The person/persons whose tender may be accepted (Hereinafter called the contractor, which expression shall unless excluded by or repugnant to the context. Include his, heirs, executors, administrators, and assigns) shall (A) within 10 days (which may be extended by the Executive Engineer/ Superintending Engineer or Chief Engineer concerned up to 30 days/ 60 days / 90 days if the Executive Engineer / Superintending Engineer/ Chief Engineer respectively. Thinks fit to do so the receipt by him of the notification of the acceptance of his tender deposit with the Executive Engineer in cash or Government securities endorsed to the Executive Engineer (if deposited for more than 12 months) of sum sufficient which will make up the full security deposit specified in the tender or (B) (permit Government at the time of making any payment to him for work done under the contract to deduct such as will amount to Four Percent of all moneys so payable such deductions to be held by Government by way of Security Deposit.) Provided always that in the event of the contractor depositing a lump sum by way of security deposit as contemplated at (A) above, then and in such case, if the sum so deposited shall not amount to Four Percent of the total estimated cost of the work, it shall be lawful for Government at the time of making any payment to the contractor for work done under the contract to make up the full amount of Four Percent by deducting a sufficient sum from every such payment as last aforesaid until the full amount of the security deposit is made up. All Compensation or other sums of money payable by the contractor to the Government under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising therefrom, or from any sums which may be due or may become due by Government to the contractor under any other contract or transaction of any nature on any
account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall, within ten days thereafter, make good in cash or Government securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to, when paid in cash may, at the cost of the depositor, be converted into the interest bearing securities provided that the depositor has expressly desired this in writing.

If the amount of the security to be paid in a lumpsum within the period specified at (A) above is not paid, the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for the recovery of the amounts. The amount of the security deposit lodged by a contractor shall be refunded alongwith the payment of the final bill, if the date upto which the contractor has agreed to maintain the work in good order is over. If such date is not over, only 50%, amount of security deposit shall be refunded alongwith the payment of the final bill. The amount of the security deposit retained by the Government shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete rectification work within the period upto which the contractor has agreed to maintain the work in good order, then, subject to provisions of clauses 17 and 20 hereof the amount of Security Deposit retained by Government shall be adjusted towards the excess cost incurred by the department on rectification work. The amount of Security deposit retained towards defect liability period in pursuant to Clause - 20 shall not be in the form of Bank Guarantee.

**Clause 2 :-**

**Compensation for delay**

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which
the order to commence work is given to the contractor. The work shall through out the stipulated period of the contract be proceeded with, with all due diligence and the contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Executive Engineer (whose decision in writing shall be final) may decide, of the amount of the estimated cost of the whole works shown by the tenderer for every day that the work remains uncommenced, or unfinished after the proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete.

The Contractor should complete the work as per phase period given below:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>1/4 of the time</td>
</tr>
<tr>
<td>40%</td>
<td>1/2 of the time</td>
</tr>
<tr>
<td>65%</td>
<td>3/4 of the time</td>
</tr>
</tbody>
</table>

Full work will be completed in **18 {Eighteen}** calendar months including Monsoon.

In the event of the contractor failing to comply with this conditions he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Superintending Engineer (Whose decision in writing shall be final) may decide of the said estimated cost of the whole work for every day that the due quantity of work remains incomplete provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10 percent of the estimated cost of the work as shown in the tender. The Superintending Engineer shall be final authority in this respect, irrespective of the fact that the tender is accepted by the Chief Engineer / Superintending Engineer.
Clause 3 :-

In any case in which under this clause or any clauses of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of his Security deposit whether paid in one sum or deducted by installment or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause the Executive Engineer, on behalf of the Government of Maharashtra, shall have power to adopt any of the following courses, as he may deem best suited to the interest of Government :

(a) To rescind the contract (for which rescission notice in writing to the contractor under the hand of Executive Engineer shall be conclusive evidence) and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of Government.

(b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.

(c) To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner.
and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors the amount of excess value shall be deducted from any money due to the contractor, by Government under the contract or otherwise howsoever or from his security deposit or the sale proceeds thereof provided, however that contractor shall have no claim against Government even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clause (a), (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advance on account of or with a view to the execution of the work or the performance of the contract.

**Clause 4 :-**

If the progress of any particular portion of the work is unsatisfactory the Executive Engineer shall notwithstanding that the general progress of the work is in accordance with the conditions mentioned in clause 2,
be entitled to take action under clause 3 (b) after giving the contractor 10 day’s notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Clause 5 :-

In any case in which any of the powers conferred upon the Executive Engineer by clause 3 and 4 hereof shall have become exercisable and the same shall not have been exercised the non-exercise thereof shall not constitute waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor for which under any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Executive Engineer taking action under sub-clause (a) or (c) of clause 3, he may, if he so desires, take possession of all any tools and plant, materials and stores in or upon the work of the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Executive Engineer whose certificate thereof shall be final. In the alternative the Executive Engineer may, after giving notice in writing to the contractor or his clerk of the work, foreman or other authorized agent require him to remove such tools and plant, materials, or stores from the premises within a time to be specified in such notice and in the event of the contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractor’s expense or sale them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the Executive Engineer as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.
Clause 6 :-

Extension of time

If the contractor shall desire an extension of the time for completion of Work on the ground of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the Executive Engineer before the expiration of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the Executive Engineer may with prior approval of the Authority competent to accept the Tender if in his opinion, there are reasonable grounds for grant an extension, grant such extension as he thinks necessary or proper. The decision of the Executive Engineer in this matter shall be final.

Clause 7 :-

Final Certificate

On the Completion of the work the contractor shall be furnished with a certificate by the executive Engineer (Hereinafter called the Engineer-In-Charge) of such completion; but no such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish and shall have cleaned off, the dirt from all wood work, doors, windows, wall, floor or other parts of any building in or upon which the work has been executed or of which he may have had possession for the purpose of executing the work, nor until the work shall have been measured by the Engineer-in-charge or where the measurement have been taken by his subordinates until they received approval of the Engineer-in-charge, the said measurements being binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to the removal of scaffolding surplus materials and rubbish and cleaning of dirt on or before the date fixed for the completion of the work the Engineer-in-charge may at the expense of the contractor, remove such scaffolding, surplus materials and rubbish, and dispose off the same as he thinks fit and clean off.
such dirt as aforesaid and the contractor shall forthwith pay the amount of all expenses so incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

**Clause 8 :-**

No payment shall be made for any work estimated to cost less than rupees one thousand till after the whole of the work shall have been completed and a certificate of completion given. But in the case of works estimated to cost more than rupees one thousand the contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the work than approved and passed by the Engineer-In-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for works actually done and completed and shall not preclude the Engineer-in-charge from requiring any bad, unsound imperfect or unskillful work to be removed or taken away and reconstruction or re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the occurring of any claim nor shall if conclude, determine or affect in any other way the powers of the Engineer-in-charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for the completion of the work, otherwise the Engineer-in-charge certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.

**Clause 9 :-**

The rates for several items of work estimated to cost more than Rs. 1000/- agreed to within, shall be valid only when the item concerned is accepted as having been
completed fully in accordance with the sanctioned specifications. In cases where the items of work are not accepted as so completed the Engineer-in-charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on account bills.

**Clause 10 :-**

A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-charge for all work executed in the previous month, and the Engineer-in-charge shall take or cause to be taken the requisite measurement for the purpose of having the same verified and claim, so far as it is admissible, shall be adjusted, if possible, within ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose counter signature to the measurement list shall be sufficient warrant and Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

**Clause 11 :-**

The contractor shall submit all bills on the printed forms to be had on application at the office of the Engineer-in-charge. The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at the rates hereinafter provided for such work.

**Clause 12 :-**

If the specification or estimate of the work provides for the use of any special description of material to be supplied from the store of the Public Works Department store or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge. (such material and stores and the prices to be charged...
therefor as hereinafter mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meaning or effect of this contract specified in the schedule or memorandum hereto annexed) the contractor shall be supplied with such materials and stores as may be required from time to time to be used by him for the purpose of the contract only, and value of the full quantity of the materials and stores so supplied shall be set off or deducted from any sums then due, or thereafter to become due to the contractor under the contract, or otherwise, or from the security deposit or the proceeds of sale thereof if the security deposit is held in Government Securities the same or a sufficient portion thereof shall in that case be sold for all purpose. All materials supplied to the contractor shall remain the absolute property of Government and shall on no account be removed from the site of the work, and shall at all times be open for inspection by the Engineer-in-charge. Any such materials unused and in perfectly good condition at the time of completion or determination of the contract shall be returned to the Public Works Department store if the Engineer-in-charge so requires by a notice in writing given under his hand but the contractor shall not be entitled to return any such materials except with consent of the Engineer-in-charge and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for any wastage in or damage to any such materials.

**Clause 13 :-**

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specification. The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of the work during office hours. the contractor will be entitled to receive three sets of contract drawings and working
drawings as well as one certified copy of the accepted tender along with the work order free of cost. Further copies of the contract drawings and working drawings if required by him, shall be supplied at the rate of Rs.300=00 per set of Contract Drawings and Rs.150=00 per working drawings except where otherwise specified.

**Clause 14 :-**

The Engineer-in-charge shall have power to make any alteration in or additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by the Engineer-in-charge and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates entered in the Schedule of Rates of the Division or at the rates mutually agreed upon between the Engineer-in-charge and the contractor whichever are lower.

If the additional or altered work for which no rate is entered in the schedule of Rates of Division is ordered to be carried out before the rates are agreed upon them. The contractor shall within seven days of the date of receipt by him of the order to carry out the work, inform the Engineer-in-charge of the rate which it is his intention to charge for such class of work. And if the Engineer-in-charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order carry out such class of work and arrange to carry it out in such manner as he may consider advisable provided always that if the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have
been determined as lastly hereinbefore mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rates as shall be fixed by the Engineer-in-charge. In the event of a dispute the decision of superintending Engineer of the Circle will be final.

Where however, the work is to be executed according to the designs, drawings and specifications recommended by the contractor and accepted by the competent authority the alterations above referred to shall be within the scope of such designs, drawings, and specifications appended to the tender.

The time limit for the completion of the work shall be extended in the proportion that increase in its cost occasioned by alterations or additions bears to the cost of the original contract work, and the certificate of the Engineer-in-charge as to such proportion shall be conclusive.

Clause 15 :-

(1) If at any time after the execution of the contract documents the Engineer shall for any reason whatsoever (other than default on the part of the contractor for which the government is entitled to rescind the contract) desires that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out, at all he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any danger or injure to the work already done or endanger the safety thereof provided that the decision of the Engineer as to the stage at which the work or any part of it could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim to any payment or compensation whatsoever by
reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

(2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 days, prior notice in writing to the Engineer, within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineer to record the final measurement of the work already done and to pay final bill. Upon giving such notice the contractor shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under his contract on receipt of such notice the Engineer shall proceed to complete the measurements and make such payments as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the contractor such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.

(3) Where the Engineer requires the contractor to suspended the work for a period in excess of 30 days at any time or 60 days in the aggregate, the contractor shall be entitled to apply to the Engineer within 30 days of the resumption of work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery rendered idle on the site or on the account of his having, had to pay the salary or wages of labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the 30 days whether consecutive or in the aggregate of such suspension or in respect of any suspension whatsoever occasioned by unsatisfactory work or any other default on his part. The Decision of the Engineer in this regard shall be final and conclusive against the contractor.
In the event of -

(i) Any total stoppage of work on notice from Engineer under Sub clause (1) in that behalf.

(ii) Withdrawal by the contractor from the contractual obligations to complete the remaining unexecuted work under sub-clause (2) on account of continued suspension of work for a period exceeding 90 days.

or

(iii) Curtailment in the quantity of item or items originally tendered on account of any, alteration, omission or substitution in the specifications, drawings, designs or instructions under clause 14(1) where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25 percent at the rates for the item specified in the tender is more than Rs.5000/-. It shall be open to the contractor within 90 days from the service of (i) the notice of stoppage of work or (ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of work or (iii) notice under clause 14 (1) resulting in such curtailment to produce to the Engineer satisfactory documentary evidence that he had purchased or agreed to purchase material for use in the contracted work, before receipt by him of the notice of stoppage, suspension or curtailment and require the Government to take over on payment such material at the rates determined by the Engineer, provided, however, such rates shall in no case exceed the rates at which the same were acquired by the contractor. The Government shall thereafter take over the material so offered, provided the quantities offered, are not in excess of the requirements of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the Engineer.

No claim to compensation on account of loss due to delay in supply of materials by Government...

Clause 15 (A) :-

The contractor shall not be entitled to claim any compensation from Government for the loss suffered by him on account of delay by Government in the supply of materials entered in Schedule A where such delay is caused by -
(i) Difficulties relating to the supply of railway wagons.

(ii) Force majeure.

(iii) Act of God.

(iv) Act of enemies of the state or any other reasonable cause beyond the control of Government.

In the case of such delay in the supply of materials, Government shall grant such extension of time for the Completion of the work as shall appear to the Executive Engineer to be reasonable in accordance with the circumstances of the case. The decision of the Executive Engineer as to the extension of time shall be accepted as final by the contractor.

**Clause 16 :-**

Under no circumstances whatsoever shall the contractor be entitled to any compensation from Government on any account unless the contractor shall have submitted a claim in writing to the Engineer-in-charge within one month of the cause of such claim occurring.

**Clause 17 :-**

If any time before the security deposit or any part thereof is refunded to the contractor it shall appear to the Engineer-in-charge or his subordinate in charge of the work that any work has been executed with unsound, imperfect or unskilful workmanship or with materials of inferior quality, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for, or are otherwise not in accordance with contract, it shall be lawful for the Engineer - in - charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained of may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or if so required, shall remove the materials or articles so specified and provide other
proper and suitable materials or articles at his own charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-charge and cost, and in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of 1% on the amount of the estimate for every day not exceeding 10 days during which the failure so continues and in the case of any such failure the Engineer-in-charge may rectify or remove, and re-execute the work or remove and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the contract. Should the Engineer-in-charge consider that any such inferior work or materials as described above may be accepted or made use of it shall be within his description to accept the same at such reduced rates as he may fix therefor.

**Works to be open to inspections**

**Clause 18 :-**

All works under in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions or have responsible agent duly authorized in writing present for that purpose. Orders given to the Contractor’s duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

**Clause 19 :-**

The contractor shall give not less than five days, notice in writing to the Engineer-in-charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is so covered up or place beyond the reach of measurements.

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**Contractor**

**No. of Corrections**

**Executive Engineer**
and shall not cover up or place beyond the reach of measurements any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained the same shall be uncovered at the contractor’s expense and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed.

Clause 20 :-

If during the period of 36 months (Thirty six months) from the date of completion as certified by the Engineer in charge pursuant to clause 7 of the contract or (54) Fifty four month after commissioning the work, whichever is earlier in the opinion of the Executive Engineer, the said work is defective in any manner whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Executive Engineer, duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the Executive Engineer. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefor in the said notice and/or to complete the same as aforesaid as required by the said notice, the Executive Engineer get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of the contractor.

The contractor shall forthwith on demand pay to the Government the amount of such costs, charges and expenses sustained or incurred by the Government of which the certificate of the Executive Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and on the event of the contractor failing or
neglecting to pay the same in demand as aforesaid without prejudice to any other rights and remedies of the Government, the same may be recovered from the contractor as arrears of land revenue. The Government shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the Government to the contractor either in respect of the said work or any other work whatsoever or from the amount of the Security Deposit retained by Government.

**Clause 21 :-**

The contractor shall supply at his own cost all material (except such special materials if any as may in accordance with contract, be supplied from the Public Works Department stores) plants, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works which may required for the proper execution of the work, whether, in the original, altered or substituted form, and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with the carriage therefor to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the materials, failing which the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceed of sale thereof or of a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defence of every suit, action or other legal proceeding, that may be
brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with consent of the contractor be paid for compromising any claim by any such person.

Clause 21 A :-

The contractor shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connections therewith :-

(a) Suitable scaffolds be provided for workmen for all works that cannot be safely done from a ladder or by other means.

(b) A scaffold shall not be constructed, taken down or substantially altered except :-
   i) Under the Supervision of a competent and responsible person; and
   ii) As far as possible by competent workers possessing adequate experience in this kind of work.

(c) All scaffolds and appliances connected therewith and all ladders shall :-
   i) be of sound material.
   ii) be of adequate strength having regard to the loads and strains to which they will be subjected, and
   iii) be maintained in proper condition.

(d) Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.

(e) Scaffolds shall not be over-loaded and so far as practicable the load shall be evenly distributed.

(f) Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffold.

(g) Scaffold shall be periodically inspected by a competent person.

(h) Before allowing a scaffold to be used by his workmen the contractor shall, whether the
scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations herein specified.

(i) Working platform, gangways stairways shall :-
   i) be so constructed that no part thereof can sag unduly or unequally.
   ii) be so constructed and maintained having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping, and
   iii) be kept free from any unnecessary obstruction.

(j) In the case of working platform, gangways, working places and stairways at height exceeding 3 metres (to be specified)
   i) every working platform and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety.
   ii) every working platform and gangway shall have adequate width and
   iii) every working platform, gangway, working place and stairway shall be suitably fenced.

(k) Every opening in the floor of a building or in a working platform shall except for the time and to the extent required to allow the excess of persons or the transport or shifting of materials be provided with suitable means to prevent the fall of persons or materials.

(l) When persons are employed on roof where there is a danger of falling from a height exceeding 3 meters suitable precautions shall be taken to prevent the fall of persons or materials.

(m) Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffold or other working place.

(n) Safe means of access shall be provided to all working platform and other working places.

(o) The contractor(s) will have to make payments to Labourares as per Minimum Wages Act.
Clause 21 B :-

The contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him :-

(a) Hoisting machine and tackle, including their attachments, anchorages and support shall :-

i) be of good mechanical construction, sound material & adequate strength & free from patent defect

and

ii) be kept in good repair and in good working order.

(b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.

(c) Hoisting machine and tackle shall be examined and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the Government.

(d) Every chain, ring, hook, shackle swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.

(e) Every crane driver or hoisting appliance operator shall be properly qualified.

(f) No person who is below the age of 21 years shall be in control of any hoisting machine, including any scaffold which, or give signals to the operator.

(g) In the case of every hoisting machine and of every chain, ring, hook, shackle, swivel pulley block used in hoisting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means.

(h) Every Hoisting machine and all gear referred to in the proceeding regulation shall be plainly marked with the safe working load.
(i) In the case of hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated.

(j) No part of any hoisting machine or of any gear referred to in regulation (h) above shall be loaded beyond the safe working load except for the purpose of testing.

(k) Motors, gearing transmissions, electric wiring and other dangerous part or hoisting appliances shall be provided with efficient safeguards.

(l) Hoisting appliances shall be provided with such means as will reduce to minimum and the risk of the accidental descent of the load.

(m) Adequate precautions shall be taken to reduce to a minimum the risk of any part of a suspended load becoming accidentally displaced.

Clause 22 :-

The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the Executive Engineer. When such permit is given, and also in all cases when destroying cut or dug up trees brushwood, grass etc. by fire; the contractor shall take the necessary measure to prevent such fire spreading to or otherwise damaging surrounding property.

The contractor shall make his own arrangements for drinking water for the labour employed by him.

Clause 23 :-

Compensation for all damages done, intentionally or unintentionally by contractor’s labour whether in or beyond the limits of Government property including any damage caused by the spreading of fire mentioned in Clause 22 shall be estimated by the Engineer-in-charge or such other officer as he may appoint and the estimate of the Engineer-in-charge subject to the decision of the Superintending Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the
assessed compensation on demand, failing which, the same will be recovered from the contractor as damages in the manner prescribed in Clause 1 or deducted by the Engineer-in-charge from any sums that may be due or become due from Government to contractor under this contract or otherwise. The contractor shall bear the expenses of defending any action or other legal proceeding that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence.

Clause 24 :-

The employment of female labourers on works in the neighbourhood of soldier’s barracks should be avoided as far as possible. The contractor shall employ the labourers from nearest employment exchange.

Clause 25 :-

No work shall be done on a Sunday without the sanction in writing of the Engineer-in-charge.

Clause 26 :-

The contract shall not be assigned or sublet without the written approval of the Engineer-in-charge. And if the contractor shall assign or sublet his contract, or attempt so to do, to become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any compensation with his creditors, or attempt so to do or if bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the contractor or any of his servants or agents to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-charge may thereupon by notice in writing rescind the contract, and the security deposit of the contractor shall thereupon
stand forfeited and be absolutely at the disposal of Government and the same consequences shall ensure as if the contract had been rescinded under Clause 3 hereof and in addition the contractor shall not be entitled to recover or be paid for any work therefor actually performed under the contract.

Clause 27 :-

All sums payable by a contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

Clause 28 :-

In the case of tender by partners, any change in the constitution of a firm shall be forthwith notified by the contractor to the Engineer-in-charge for his information.

Clause 29 :-

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Superintending Engineer, of the Circle for the time being, who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

Clause 30 (1) :-

Except where otherwise specified in the contract and subject to the powers delegated to him by Government under the Code, rules then in force, the decision of the Superintending Engineer of the Circle for the time being shall be final, conclusive, and binding on all parties to the contract upon all questions relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work, or as to
any other question, claim, right matter, or thing whatsoever, if any way arising out of, or relating to the contracts, designs, drawings, specifications, estimates, instructions, orders, or other conditions, or otherwise concerning the works, or the execution, or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof.

Clause 30 (2) :- The contractor may within thirty days of receipt by him of any order passed by the Superintending Engineer of the Circle as aforesaid appeal against it to the Chief Engineer concerned with the contract, Work or Project provided that :-

(a) The accepted Value of the Contract exceeds Rs.10.00 Lakhs (Rupees Ten Lakhs).

(b) Amount of claim is not less than Rs. 1.00 Lakh (Rupees One Lakh).

Clause 30 (3) :- If the contractor is not satisfied with the order passed by the Chief Engineer as aforesaid, the contractor may, within thirty days of receipt by him of any such order, appeal against it to the concerned Secretary, Public Works Department, who if convenience that prima facie the contractor's claim rejected by Superintending Engineer / Chief Engineer is not frivolous and that there is some substance in the claim of the contractor as would merit a detailed examination and decision by the Standing Committee, shall put up to the Standing Committee at Government level for suitable decisions.

Clause 31 :-

The contractor shall obtain from the Public Works Department Stores, all stores and articles of European or American manufacture which may be required for the work, or any part thereof or in making up any articles required therefor or in connection therewith unless he has obtained permission in writing from the Engineer-in-charge to obtain such stores and articles elsewhere. The
value of such stores and articles as may be supplied to
the contractor by the Engineer-in-charge will be debited
to the contractor in his account at the rates shown in the
schedule, in Form A attached to the contract and if they
are not entered in the said schedule, they shall be
debited to him at cost price which for the purpose of this
contract shall include the cost of carriage and all other
expenses whatsoever which shall have been incurred in
obtaining delivery of the same at the stores aforesaid.

**Clause 32 :-**

When the estimate on which a tender is made
includes lumpsum in respect of parts of the work the
contractor shall be entitled to payment in respect of the
items of work involved or the part of the work in question
at the same rates as are payable under this contract for
each item, or if the part of work in question is not in the
opinion of the Engineer-in-Charge capable of
measurement, the Engineer-in-Charge may at his
discretion pay the lumpsum amount entered in the
estimate and the certificate in writing of the Engineer- in-
charge shall be final and conclusive against the
contractor with regard to any sum or sums payable to
him under the provision of this clause.

**Clause 33 :-**

In the case of any class of work for which there is
no such specifications as is mentioned in rule 1 such
work shall be carried out in accordance with the
Divisional specifications, and in the event of there being
no Divisional specifications, then in such case the work
shall be carried out in all respects in accordance with the
instructions and requirements of the Engineer-in-charge.

**Clause 34 :-**

The expression " works ", or " work " where used in
these conditions shall unless there be something in the
subject or context repugnant to such construction, be
construed to mean the work or works contracted to be
executed under or in virtue of the contract, whether
temporary or permanent and whether original, altered,
substituted or additional.
Clause 35 :-

The percentage referred to in the tender shall be deducted from/added to the gross amount of the bill before deducting the value of any stock issued.

Clause 36 :-

All quarry fees, royalties, octroi dues and ground rent for stacking materials, if any, should be paid by the contractor, directly to revenue department failing of which the amount of royalty charges shall be deducted through bills and no claims shall be entertained on this ground.

Clause 37 :-

The contractor shall be responsible for and shall pay compensation to his workmen payable under the Workmen’s Compensation Act 1923 (VIII of 1923) (hereinafter called the said Act) for injuries caused to the workmen. If such compensation is payable/paid by Government as principle under Sub-section (1) of section 12 of the said Act on behalf of the contractor, it shall be recoverable by Government from the contractor under sub-section (2) of the said section. Such compensation shall be recovered in the manner laid down in Clause 1 above.

Clause 37 A :-

The contractor shall be responsible for and shall pay the expenses of providing medical aid to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by Government the same shall be recoverable from the contractor forthwith and be deducted without prejudice to any other remedy of Government from any amount due or that may become due to the contractor.

Clause 37 B :-

The contractor shall provide all necessary personnel safety equipment and first aid apparatus available for the use of the persons employed on the site,
and shall maintain the same condition suitable for immediate use at any time and shall comply with the following regulations in connection therewith.

(a) The workers shall be required to use the equipment so provided by the contractor and the contractor shall take adequate steps to ensure use of the equipment by those concerned.

(b) When work is carried on in proximity to any place where there is risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.

(c) Adequate provision shall be made for prompt first-aid treatment of all injuries likely to be sustained during the course of the work.

Clause 37 C :-

The contractor shall duly comply with the provisions of "The Apprentices Act, 1961 (III of 1961) the rules made thereunder and the orders that may be issued from time to time under the said Act and the said rules and on his failure or neglect to do so, he shall be subject to all the liabilities and penalties provided by the said Act and said Rules."

Clause 38 - (1) :-

Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long as, subject to any special provision contained in the specification prescribing a different percentage of permissible variation, the quantity of the item does not exceed the tender quantity by more than 25% and so long as the value of the excess quantity beyond this limit, at the rate of the item specified in the tender, is not more than Rs. 5000/-. 

(2) The contractor shall if ordered in writing by the Engineer, so to do also carry out any quantities in excess of the limit mentioned in sub clause (1) hereof on the same conditions as and in accordance with
specifications in the tender and at the rates (i) derived from the rates entered in the Current Schedule of Rates and in the absence of such rates, (ii) at the rate prevailing in the market, the said rates being increased or decreased as the case may be, by the percentage which the total tendered amount bears to the estimated cost of the work as put to tender, based upon the schedule of rates applicable to the year in which the tenders were invited. (For the purpose of operation of this clause, this cost shall be taken as Rs.14,55,66,481.00)

(3) Claim arising out of reduction in the tendered quantity of any item beyond 25 % will be governed by the provision of clause 15 only when the amount of such reduction beyond 25 percent at the rate of the item specified in the tender is more than Rs. 5000/-

Clause 39 :-

The contractor shall employ any famine, convict or other labour of a particular kind or class if ordered in writing to do so by the Engineer-in-charge.

Clause 40 :-

No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance of works on account of any delay in according sanction to estimates.

Clause 41 :-

No compensation shall be allowed for any delay in the execution of the work on account of water, standing in borrow pits or compartments. The rates are inclusive for hard or cracked soil, excavation in mud, subsoil, water standing in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.

Clause 42 :-

The Contractor shall not enter upon or commence any portion of work except with the written authority and
instructions of the Engineer-in-charge or of his subordinate in charge of the work. Failing such authority the contractor shall have no claim to ask for measurements or payment of work.

**Clause 43 :-**

(i) No contractor shall employ any person who is under the age of 18 years.

(ii) No contractor shall employ donkeys or other animals with breaching of string or thin rope. The breaching must be at least three inches wide and should be of tape (Newar)

(iii) No animal suffering from sores; lameness or emaciation or which is immature shall be employed on the work.

(iv) The Engineer-in-charge or his Agent is authorized to remove from the work any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by Government for any delay caused in the completion of the work by such removal.

(v) The contractor shall pay fair and reasonable wages to the workmen employed by him, in the contract undertaken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable the dispute shall be referred without delay to the Executive Engineer who shall decide the same. The decision of the Executive Engineer shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by Government at the sanctioned tender rates.

(vi) Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban areas.

(vii) Contractor to take precaution against accidents which takes place on account of labour using loose garments while working near machinery.
Clause 44 :-

Payment to contractor shall be made by Cheque drawn on any treasury within the division convenient to them, provided the amount exceeds Rs.10/-.. Amounts not exceeding Rs. 10/- will be paid in cash.

Clause 45 :-

Any contractor who does not accept these conditions shall not be allowed to tender for works.

Clause 46 :-

If Government declares state of scarcity or famine to exist in any village situated within 16 kms. of the work, the contractor shall employ upon such parts of the work, as are suitable for unskilled labour, any person certified to him by the Executive Engineer, or by any person to whom the Executive Engineer may have delegated this duty in writing to be in need of relief and shall be bound to pay to such person wages not below the minimum which Government may have fixed in this behalf. Any disputes which may arise in connection with the implementation of this clause shall be decided by the Executive Engineer whose decision shall be final and binding on the contractor.

Clause 47 :-

The price quoted by the contractors shall not in any case exceed the control price, if any, fixed by Government or reasonable price which it is permissible for him to charge a private purchaser for the same class and description, the controlled price or price permissible under Hoarding and Profiteering Ordinance, 1943 as amended from time to time, if the price quoted exceeds the controlled price or the price permissible under Hoarding and Profiteering Prevention Ordinance, the contractor will specifically mention this fact in his tender along with the reasons for quoting such higher prices. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to conform to the controlled price on the permissible under
the Hoarding and Profiteering Preservation Ordinance. This discretion will be exercised without prejudice to any other action that may be taken against the contractor.

**Clause 47 (A)**

"The tender rates are inclusive of all taxes, rates and cesses and are also inclusive of the taxes leviable in respect of works sale by transfer of property in goods involved in the execution of a work contract under the provision of rule 58 of Maharashtra Value Added Tax Act, 2005 for the purpose of levy of tax.

**Clause 48 :-**

The rates to be quoted by the contractor must be inclusive of all taxes. No extra payment on this account will be made to the contractor.

**Clause 49 :-**

In case of materials that remain surplus with the contractor from those issued for the work contracted for, the date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of VAT tax and the VAT tax will be recovered on such sale.

**Clause 49 (A) -**

Contractor should note that the recovery at panel rate twice the issue rates will be effected, if the contractor does not return surplus material. VAT tax and General tax will be recovered from them.

**Clause 50 : -**

The contractor shall employ the unskilled labour to be employed by him on the said work only from locally available labour and shall give preference to those persons followed under Maharashtra Government Employment and self-employment Department Scheme. Provided, however, that if the required unskilled labours from that district are not available locally the contractor shall in the first instance employ such number of

<table>
<thead>
<tr>
<th>Contractor</th>
<th>No. of Corrections</th>
<th>Executive Engineer</th>
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<tbody>
<tr>
<td></td>
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<td>- 99 -</td>
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</table>
persons as is available and thereafter may with previous permission in writing of the Executive Engineer-in-charge of the said work, obtain the rest of the requirement of unskilled labour from outside the above scheme.

**Clause 51 :-**

(1) The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the contractor is located. The contractor shall comply with the provisions of the apprentices Act –1961 and the rules and orders issued from time to time if he fails to do so his failures will a breach of the contract and the Superintending Engineer, may in his discretion cancel the contract. The contract shall also be liable or any pecuniary liability arising on account of any violation by him of the provision of act. The contractor shall pay the labourers skilled and unskilled according to wages prescribed by Minimum Wages Act applicable to the area in which the lies.

**Clause 52 :-**

All amounts whatsoever which the contractor is liable to pay to the Government in connection with the execution of the work including the amount payable in respect of :

(i) Materials and or stores supplied/issued hereunder by the Government given to the contractor

(ii) Hire charges in respect of heavy plant, machinery and equipment given on hire by the Government to the contractor for execution by him of the work and/or on which advances have been given by the Government to the contractor shall be deemed to be arrears of the Land Revenue and the Government may without prejudice to any other rights and remedies of the Government recovery the same from the contractor as arrears of land revenue.
Clause 53 :-

The Contractor shall duly comply with all the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra Contract Labour (Regulation and Abolition) Rules, 1971 as amended from time to time and all other relevant status and statutory provisions concerning payment of wages particularly to workmen employed by the contractor and working on the site of the work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the rates prescribed under the Maharashtra Contract Labour (Regulation and Abolition) Rules 1971. If the contractor fails or neglects to pay wages at the said rates or makes short payment and the Government makes such payment of wages in full or part thereof less paid by the contractor, as the case may be, the amount so paid by the Government to such workers shall be deemed to be an arrears of Land Revenue and The Government shall be entitled to recover the same as such from the contractor or deduct same from the amount payable by the Government to the contractor hereunder or from any other amount/s payable to him by the Government.

Clause 54 :-

The contractor shall engage apprentices such as bricklayers, carpenters, wiremen, plumber as well as blacksmith as recommended by the State Apprentice-ship Advisor, Director of Technical Education, Dhobi Talao, Mumbai-1 on the construction work.

Clause 55 :-

A) The anti-malaria and other health measures shall be as directed by the Joint Director (Malaria and Filaria) of Health Services, Pune.

B) Contractor shall see that mosquitogenic conditions are not created so as to keep vector populations to the minimum level.

C) Contractor shall carry out anti-malaria measures
Relation With Public Authorities

in the area as per guidelines prescribed under National Malaria Eradication Programme and as directed by the Joint Director (M. and F.) of Health Services, Pune.

D) In case of default in carrying out prescribed anti malaria measures resulting in increasing in malaria incidence, contractor shall be liable to pay to Government the amount spent by Government on anti malaria measures to control the situation in addition to fine.

E) The contractor shall make sufficient arrangement for draining away the sewage water as well as water coming from the bathing and washing places and shall dispose off this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient of number of sweepers.

The contractor shall comply with all rules, regulations, by laws and directions given from time to time by any local or public authority in connection with this work and shall pay fees or charges, which are leviable on him without any extra cost to Government.
SCHEDULE ' A '  

**Name of Work :-** Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

Schedule showing (Approximately) the materials to be supplied from the Public Works Department stores for work contracted to be executed and preliminary and ancillary works and the rates at which they are to be charged for :-

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Quantity</th>
<th>Rate in figure</th>
<th>Rate in words</th>
<th>Unit</th>
<th>Place of delivery</th>
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**Note :-**

1. *All materials such as VG-30 Grade Bulk Asphalt, Cement, Steel etcetera shall be procured by contractor at his own cost.*

2. *R.C.C. pipes required on work shall be procured from M.S.S.I.D.C. only.*
**Additional Conditions Of Materials**  
*(Cement, M. S. Bars, H.Y.S.D. Bars, T.M.T. Bars, Bulk Asphalt Etc.)*  
*Brought By Contractor.*

1. All the materials such as Asphalt, Cement, steel etc. shall be procured by the Contractor from approved Government Institutions or as directed by Engineer-in-charge only. The material shall be brought at the site of work well in advance by the Contractor. The gate pass of the Asphalt, Invoice of Cement, steel etc. shall be examined by the authorised representative of the Engineer-in-charge.

2. The Contractor shall submit periodically as well as on the completion of work, an account of all materials used by him on the work. In addition, a separate register shall be maintained on site for recording daily itemwise Asphalt, Cement, steel consumption and also itemwise consumption of other materials. This shall be signed daily by Contractor or his representative and authorised representative of the Engineer-in-charge.

3. The materials from any other source in lieu of the approved Institutions shall be allowed except under written permission from the Executive Engineer. In such case, Certificate for its quality shall be produced by the Contractor and samples of materials shall be tested from any Government Laboratory by the Contractor at his cost and the test results be supplied to the Department. The materials not conforming to the required standard shall be removed at once from the site of work by the Contractor as his own cost. All the materials such as Asphalt, Cement etc. required for use in the work shall be confirming to the concerned I.S. / M.O.R.T.& H. specifications. The Contractor shall get necessary tests carried out to the frequency specified for each material in the specification and submit the test results to the Engineer-in-charge or his authorised representative. These materials shall be used on work by the Contractor, only if the test thereof are found satisfactory to the results Engineer-in-charge or his authorised representative. For the purpose of daily testing of material, such metal, sand, rubble, etc., the Contractor shall make his own arrangements to install a well equipped Laboratory at the site of work at his own cost. The Contractor shall employ qualified personnel at the site of work at his own cost. The responsibility of carrying out tests to the frequency specified for each material shall rest with the Contractor. The extract of register shall be submitted to the Executive Engineer with each bill. Copy of register for the entire period shall be submitted along with the final bill.

4. The Contractor shall construct at his own cost shed/sheds as per direction of the Engineer-in-charge of the work for storing the materials and provide double locking arrangements. The Store shed such constructed shall be removed on completion of work. The Contractor shall take all necessary steps to guard the materials brought by him.

Contractor  
No. of Corrections  
Executive Engineer  

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5. The Contractor shall make his own arrangement for the safe custody of the materials brought by him on site of work.

6. The charges for conveying of materials from the place of purchase by the Contractor to the site of work and the actual spot on work site shall be entirely borne by the Contractor. No claims on this account shall be entertained.

7. Separate registers shall be maintained by the Contractor on the site for recording detailed itemwise Asphalt, Cement and Steel consumption on the work. These registers shall be signed by Contractor or his authorised representative and got signed from the representative Engineer-in-charge.

8. The material required only for this work shall be kept in the godown at site. No material shall be shifted outside of the godown except for the work for which this arrangement is entered, without prior approval of the Engineer-in-charge.

9. The Contractor shall produce sufficient documentary evidence i.e. bill for the purchase, octroi receipts etc. for the purchase of material brought on the work site at once if so requested by the Department.

10. All these material i.e. cement, steel etc. shall be protected from any damages, rains etc. by the contractor at his own cost.

11. The Contractor will have to erect temporary shed of approved specifications storing of above materials at work site at contractors cost having double lock arrangements (By Double lock - it is meant that godown shall always be locked by two locks, one lock being owned & operated by Contractor & other by Engineer-in-charge of his authorised representative & the door shall be openable only after both locks are opened.)

12. If required, the wieghment of cement bags/ steel/ bulk asphalt bouzers etc. brought by the Contractor shall be carried out by the contractor at his own cost.

13. The contractor shall not use cement and other material for the item to be executed outside the scope of his contract except for such ancillary small item as are connected and absolutely necessary for execution of this work as may be decided by the Engineer-in-charge.

14. The Government shall not be responsible for the loss in cement, steel, bulk asphalt etc. during transit to work site. The cement brought by the contractor at the work site store shall mean 50 Kg. equivalent to 0.0347 Cubic Meter per bag by weight. The rate quoted should correspond to this method of reckoning. In case of ordinary/controlled concrete, if cement is found short, the shortage/shortages will be made good by the contractor at his cost.
15. **ANNEXURE FOR R.C.C. PIPE PROCUREMENT**: The R.C.C. pipes required for the work shall be procured from the MISSIDC only. The payment towards providing and fixing NP2 / NP3 / NP4 pipes will be released only after the contractor submits the bill of MISSIDC to authenticate that the pipes have been purchased from the MISSIDC. No payment towards the item of providing and laying of the pipe will be released in absence of the submission of the requisite document.

After completion of these items in the particular kilometer the withheld payment will be finally released.

16. **INDEMNITY**: The condition regarding indemnity as defined on Page No.116 at Sr.No.2 will apply mutatis mutandis in case of material brought by contractor at the site for the execution of the work being executed under this contract.

17. In case the material brought by the Contractor become surplus owing to the change in the design of the work, the material should be taken back by the Contractor at his own cost after prior permission of Engineer-in-charge.

18. Empty asphalt drums shall be the property of the Contractor and the same shall be removed immediately after completion of work.

19. All empty cement bags shall be returned by Contractor to Department and the Executive Engineer shall preserve them for one year as token of proof of use of cement in proper proportion in work.

**Arrangement of Materials**

1. The Contractor shall make his own arrangement for supply of materials including bitumen 60/70 grade, and 30/40 grade, cement, steel and RCC pipes / Collars. The Contractor shall be responsible for all transportation and storage of the materials at the site and shall bear all the related costs. The Engineer shall be entitled at any time, to inspect or examine all such materials. The Contractor shall provide reasonable assistance for such inspection or examination as may be required.

2. The Contractor shall keep as accurate record of use of materials like bitumen, cement and steel used in the works in a manner prescribed by the Engineer.

3. After receiving the bitumen, the authorised challan / gate pass should be obtained from the refinery mentioned in the quality of bitumen, grade of bitumen, date, time of delivery etc. and it should be handed over to department for each consignment.

4. While transportation of bouzer a through transport pass should be obtained from the Corporation/ Municipality through which the bouzer is passed and same should be handed over the authorised person of the Department.
5. If there is any doubt regarding the material received, the same should be get tested from the Government laboratory at the cost of the Contractor, and if the results are substandard, the material or the work executed with such material will be rejected.

6. The day to day record of the receipt /utility/ balance of material should be kept by the Contractor at plant site / site of work / store and same will be checked by the Engineer-in-charge or authorised Engineer at any time.

7. The procurement of cement/ steel etc. should be from the authorised manufacturing company and the vouchers regarding purchase thereof shall be submitted to Engineer-in-charge.

8. The testing charges shall be entirely borne by the Contractor.

**SPECIAL ATTENTION OF CONTRACTOR FOR EXECUTION**

**Procurement of Material :**

Department will not supply any material for execution of work such as Cement, Tor Steel, Asphalt etc. The contractor has to arrange the same from his own source. The quality of the material brought to the site by the contractor should be verified through the various tests provided as per relevant Indian Standards at the cost of the contractor.

The adjustment for variation in cost prices of Mild steel and Tor steel bars, structural steel, cement ( all tested quality) shall be separately made corresponding to the difference in the cost as per the basic price mentioned hereafter as per Price Variation Clause.

The contractor shall construct shed/sheds at his own cost and as per direction of Engineer-in-charge for storing the materials brought by him and provide double locking arrangements, one lock shall be in the charge of departmental person and the material shall be taken for use in presence of the departmental person only.

**ENSURING GRADE OF ASPHALT BROUGHT ON SITE BY THE CONTRACTOR**

It shall be mandatory on the part of the contractor to procure the asphalt from Government owned Refinery only. The contractor shall communicate the schedule of arrival of bouzer of asphalt to the Engineer-in-charge in advance. Apparatus and equipment for testing grade of asphalt shall be made available by the contractor at site. If the grade of asphalt is found as per specification written permission will be given for unloading the bouzer by the Engineer-in-charge, otherwise written instructions will be given for not using the same on site. ( Please refer Government Circular ( Marathi) No. Misc 2005/CR-187/ N.H.2, dated 8/10/2007.)
PRICE VARIATION CLAUSE

I) If during the operative period of the contract as defined in condition (i) of Para II below, there shall be any variation in the Consumer Price Index (New Series) for Industrial workers for Nanded Center as per the Labour Gazette published by the Commissioner of Labour, Government of Maharashtra and/or in the wholesale Price Index for all commodities prepared by the office of Economic Adviser, Ministry of Industry, Government of India, or in the price of petrol/oil and lubricant and major construction materials line bitumen, cement, steel various types of metal pipes etc. then subject to the other conditions mentions below, price adjustment on account of:

(1) Labour component
(2) Material Component
(3) Petrol / Oil and Lubricants component
(4) Bitumen Component
(5) HYSD and mild steel component
(6) Cement component
(7) CI & DI pipes component

Calculated as per the formula hereinafter appearing, shall be made apart from these, no other adjustment shall be made to the contract price for any reasons whatsoever. Component percentage as given below are as of the total cost of the work put to tender. Total of Labour, Material and POL components shall be hundred and other component shall be as per actual.

<table>
<thead>
<tr>
<th>No.</th>
<th>Component Description</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>01</td>
<td>Labour component</td>
<td>$K_1$ 16%</td>
</tr>
<tr>
<td>02</td>
<td>Material Component</td>
<td>$K_2$ 74%</td>
</tr>
<tr>
<td>03</td>
<td>Petrol / Oil and Lubricants component</td>
<td>$K_3$ 10%</td>
</tr>
<tr>
<td>04</td>
<td>Bitumen Component (VG-30)</td>
<td>Actual</td>
</tr>
<tr>
<td>05</td>
<td>HYSD and mild steel Component</td>
<td>Actual</td>
</tr>
<tr>
<td>06</td>
<td>Cement Component</td>
<td>Actual</td>
</tr>
<tr>
<td>07</td>
<td>CI &amp; DI pipes component</td>
<td>Actual</td>
</tr>
</tbody>
</table>

**Note :-** If cement, steel, bitumen, CI & DI pipes are supplied on Scheduled “A” then respective components shall not be considered. Also if particular component is not relevant same shall be deleted.
(1) **Formula for Labour component**

\[
V_1 = 0.85 \left( \frac{P}{100} \times \frac{K_1}{L_0} \right)
\]

Where:

- \( V_1 \) = Amount of price variation in rupees to be allowed for labour component
- \( P \) = Cost of work done during the quarter under consideration minus the cost of cement, HYSD and Mild steel, T.M.T., Bitumen and CI & DI pipes calculated as the Basic star rates as applicable for the tender consumed during the quarter under consideration.
- \( K_1 \) = Percentage of labour component as indicated above.
- \( L_0 \) = Basic consumer price index for Nanded centre shall be average consumed price index for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- \( L_1 \) = Average consumer price index for Nanded centre for the quarter under consideration.

(2) **Formula for Material component**

\[
V_2 = 0.85 \left( \frac{P}{100} \times \frac{K_2}{M_0} \right)
\]

Where:

- \( V_2 \) = Amount of price variation in rupees to be allowed for Material component
- \( P \) = Same as worked out for Labour component.
- \( K_2 \) = Percentage of Material component as indicated above.
- \( M_0 \) = Basic wholesale price index shall be average wholesale price index for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- \( M_1 \) = Average Wholesale price index during the quarter under consideration.
(3) **Formula for Petrol, Oil & Lubricant component**

\[ V_3 = 0.85 \left( K_3 \frac{K_3}{100} \times \frac{P_1 - P_0}{P_0} \right) \]

Where :

- \( V_3 \) = Amount of price variation in rupees to be allowed for POL component
- \( P \) = Same as worked out for Labour component.
- \( K_3 \) = Percentage of Petrol, Oil & Lubricant component.
- \( P_0 \) = Average price of HSD at Mumbai during the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- \( P_1 \) = Average price of HSD at Mumbai during the quarter under consideration.

(4) **Formula for Bitumen component**

\[ V_4 = QB (B_1 - B_0) \]

Where :

- \( V_4 \) = Amount of price variation in rupees to be allowed for Bitumen component
- \( QB \) = Quantity of bitumen (Grade VG-30) in metric tonne used in the permanent works and approved enabling works during the quarter under consideration.
- \( B_1 \) = Current, ex-refinery price per metric tonne of Bitumen (Grade VG-30) under consideration including taxes (octroi, excise, VAT tax) during the quarter under consideration.
- \( B_0 \) = Basic rate of Bitumen in rupees per metric tonne as considered for working out for value of \( P \) or average ex-refinery price in rupees per metric tonne including taxes (octroi, excise, VAT tax) of bitumen for the grade of bitumen under consideration prevailing quarter preceding the month in which the last date prescribed for receipt of tender, falls, whichever is higher.
(5) Formula for HYSD and mild steel / T.M.T. component

\[ V_5 = \left( \frac{S_0 (S_{I1}-S_{I0})}{S_{I0}} \right) \times T \]

Where :

- \( V_5 \): Amount of price variation in rupees to be allowed for HYSD and Mild steel component
- \( S_0 \): Basic rate of HYSD / Mild steel / T.M.T., in rupees per metric tonne as considered for working out the value of P.
- \( S_{I1} \): Average steel Index as per RBI bulletin during the quarter under consideration.
- \( S_{I0} \): Average steel Index as per RBI bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- \( T \): Tonnage of steel used in the permanent works for the quarter under consideration.

(6) Formula for cement component

\[ V_6 = \left( \frac{C_0 (C_{I1}-C_{I0})}{C_{I0}} \right) \times T \]

Where :

- \( V_6 \): Amount of price escalation in rupees to be allowed for cement component
- \( C_0 \): Basic rate of cement in rupees per metric tonne as considered for working out the value of P.
- \( C_{I1} \): Average cement Index published in per RBI bulletin for the quarter under consideration.
- \( C_{I0} \): Average cement Index published in the RBI bulletin for the quarter preceding the month in which the last date prescribed for receipt of tender, falls.
- \( T \): Tonnage of Cement used in the permanent works for the quarter under consideration.
(7) **Formula for CI / DI pipe component :-**

\[ V_7 = Q_d (D_1 - D_0) \]

**Where :**

- \( V_7 \): Amount of price escalation in rupees to be allowed for CI & DI Pipe component
- \( D_1 \): Pig iron basic price in rupees per tonne considered for working out value of \( P \).
- \( D_0 \): Average Pig iron price in rupees per tonne during the quarter under consideration (Published by IISCO).
- \( Q_d \): Tonnage of CI & DI Pipes used in the works during the quarter under consideration.

**The following conditions shall prevail :-**

**i)** The operative period of the contract shall mean the period commencing from the date of the work order issued to the contractor and ending on the date when the time allowed for the work specified in the Contract for the work expires, taking into consideration the extension of time, if any, for completion of the work granted by Engineer under the relevant clause of the conditions of contract in cases other than those where such extension is necessitated on account of default of the contractor. The decision of the Engineer-in-charge as regards the operative period of the contract shall be final and binding on the contractor. Where any compensation for liquidated damages is levied on the contractor on account of delay in completion or inadequate progress under the relevant contract provisions, the price adjustment amount for the balance of work from the date of levy of such compensation shall be worked out by pegging the indices, \( L_1 \), \( M_1 \), \( C_1 \), \( P_1 \), \( B_1 \), \( SL_1 \) and \( CI_1 \) levels corresponding to the date from which such compensation is levied.

**ii)** The price variation clause shall be applicable to all contracts in B1/B2 and C form but shall not apply for piece works. The price variation shall be determined during each quarter as per formula given above in this clause.

**iii)** The price variation under clause shall not be payable for the extra items required to be executed during the completion of the work and also on the excess quantities of items payable under the provisions of
Clause 38 / 37 of the contract form B-1 / B-2 respectively, since the rates payable for the extra items or the extra quantities under clause 38 / 37 are to be fixed as per the current DSR or as mutually agreed, to yearly revision till completion of such work. In other words, when the completion/ execution of extra items as well as extra quantities under clause 38 / 37 of the contract form B-1 / B-2 extends beyond the operative date of the DSR, then rates payable for the same beyond that date shall be revised with reference to the current DSR prevalent at the time on year to year basis or revised in accordance with mutual agreement thereon, as provided for in the contract, whichever is less.

iv) This clause is operative both ways, i.e., if the price variation as calculated above in on the plus side, payment on account of the price variation shall be allowed to the contractor and if it is on the negative side the Government shall be entitled to recover the same from the contractor and the amount shall be deductible from any amounts due and payable under the contract.

v) To the extent that full compensation for any rise or fall in costs to the contractor is not entirely covered by the provision of this or other clauses in the contract, the unit rate and prices included in the contract shall be deemed to include the amounts to cover the contingency of such other actual rise or fall in costs.

vi) **Star Rates / Basic Rate :-**

The star rates / Basic rate for cement and TMT steel shall be as under (with all taxes including VAT etcetera) :-

a. **Bulk asphalt (VG-30 grade) Rs.42,563.61 per Metric Tonne**

(Rupees Forty two thousand five hundred sixty three and Paise Sixty one only.) at Ex-Refinery, Mumbai
## ADDITIONAL GENERAL CONDITIONS AND SPECIFICATIONS

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1. ADDITIONAL GENERAL CONDITIONS AND SPECIFICATIONS

Note:- These are to apply as additional specifications and conditions unless already provided for contradictorily elsewhere in this contract.

MORTH Specification for Road and Bridges Work latest edition with all amendments):

MORTH Specification for Road and Bridge Work 5th Revision (2013) shall form part of the contract documents and the contractors shall be legally bound to the various provisions made therein unless and otherwise specifically relaxed or waived wholly or partly by any special clauses in the contract documents.

1.0 CONTRACTOR TO INFORM HIMSELF FULLY:

The contractor shall be deemed to have carefully examined the work and site conditions including labour, the general and the special conditions, specifications, schedules and drawings and shall be deemed to have visited the site of the work and to have fully informed himself regarding the local conditions and carried out his own investigation to arrive at rates quoted in the tender. In this regard, he will be given necessary information to the best of knowledge of Department but without any guarantee about it. If he shall have any doubt as to the meaning of any portions of these general conditions or the special conditions, or the scope of work or the specifications and drawings or any other matter concerning the contract, he shall in good time, before submitting his tender, set forth the particulars thereof and submit them to the Executive Engineer, Public Works Division, Ambajogai in writing in order that such doubts may be clarified authoritatively before tendering. Once a tender is submitted, the matter will be decided according to tender conditions in the absence of such authentic pre-clarification.

2. INDEMNITY:

The contractor shall indemnify the Government against all actions, suits, claims and demands brought or made against him in respect of anything done or committed to be done by the contractor in execution of or in connection with the work of this contract and against any loss or damage to the Government in consequence of any action or suit being brought against the Contractor for anything done or committed to be done in the execution of the works of this contract.
3. **DEFINITIONS:**

Unless excluded by or repugnant to the context,

(a) The expression "Government" as used in the tender papers shall mean the Public Works Department of the Government of Maharashtra.

(b) The expression "Chief Engineer" as used anywhere in the tender papers shall mean Chief Engineer or the Government of Maharashtra who is designated as such.

(c) The expression "Superintending Engineer" as used in the tender papers shall mean an officer of Superintending Engineer's rank (by whatever designation he may be known) under whose control the work lies for the time being,

(d) The expression "Engineer" or "Engineer-in-charge" as used in the tender papers shall mean the Executive Engineer in charge of the work for the time being.

(e) The expression "Contractor" used in the tender papers shall mean the successful tenderer whose tender has been accepted, and who has been authorized to proceed with the work. The contractor shall / may be the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representatives of such an individual or person comprising such firm or company as the case may be and permitted assigns of such individual or firm or company.

(f) The expression "Contract" as used in tender papers shall mean the deed of contract together with its original accompaniment and those later incorporated in it by mutual consent. The contract shall mean the notice offender the sealed quotation and the tender documents including the tender and acceptance thereof together with the documents referred to therein and the accepted conditions, specifications, designs, drawings, priced schedule / bill of quantities and schedule of rates. All these documents taken together shall be deemed to form one contract and shall be complementary to one other.

(g) The expression "Plant" as used in the tender papers shall mean every machinery, necessary or considered necessary by the Engineer to execute, construct, complete and maintain the works and used in altered, modified, substituted and additional work ordered in the time
and the manner herein provided and all temporary materials and special and other articles of appliances of every sort, kind and description whatsoever intended or used thereof.

(h) "Drawing" shall mean the drawings referred to in the specifications and any modifications of such drawings approved in writing by Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.

(i) "Engineer's representative" shall mean an assistant of the Engineer notified in writing to the contractor by the Engineer.

(j) "Provision sum" or "Provisional lump-sum" shall mean a lump sum included by Government in tender documents and shall represent the estimated value of work for which details are not available at the time of issue of tender.

(k) "Provisional items" shall mean items for which approximate quantities have been included in the tender documents.

(l) The "Site" shall mean the Sands and / or other places, on, under, in or through which the work is to be executed under the contract including any other lands or places which may be allotted by Government or used for the purpose of contract.

(m) The "Work" shall mean the works to be executed in accordance with the Contract or part (s) thereof as the case may be and shall include all extra, additional, altered or substituted works as required for performance of the Contract.

(n) The "Contract Sum" shall mean the sum for which the tender is accepted.

(o) The "Accepting authority" shall mean the officer competent to accept the tender. The "Accepting Authority" shall mean the Chief Engineer, Public Works Region, Aurangabad.

(p) The "Day" shall means a day of 24 hours from midnight to midnight irrespective of the number of hours worked in any day in that week. (q) "Temporary Works" shall means all temporary works of every kind required in or about the execution completion or maintenance of the work.

(r) "Urgent Works" shall means any measure which in the opinion of the
Engineer-in-Charge become necessary during the progress of the works to obviate any risk or accident or failure or which become necessary for security of the work or the persons working thereon.

(s) A "Week" shall means seven consecutive days without regards to the number of hours worked on any day in that week.

(t) "Excepted Risks" are risks to riots (other wise than among contractors employees) and civil commotions (in so far as both these are uninsurable) war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, lightening and unprecedented floods over which the contractor has no control and accepted as such by the accepting authority. Where the context so requires, words importing the singular number only also include the plural number and vice-versa.

(u) The expression "Latest Valid Certificate" as used in the tender papers shall mean certificate valid as on 31st March 2015 or issued after 31st March 2015.

Heading and Marginal notes if any to the general condition shall not be deemed to form par thereof or be taken into consideration in the interpretation or construction thereof the contract.

Wherever, there is mention of "Schedule of Rates" of the division or simply D.S.R. of schedule rates in this tender, it will be taken to mean as "The schedule of rate of the Division in whose jurisdiction the work lies"

4. ERRORS, OMISSION AND DISCREPANCIES:

In case of errors, omissions and / or disagreement between written and scaled dimensions on the drawing or between drawings and specifications etc. The following order of preference shall apply.

i) Between actual scaled and written dimensions or descriptions on a drawing the latter shall be adopted.

ii) Between the written or shown description of dimensions in the drawing and corresponding one in the specifications, the latter shall apply.

iii) Between the quantities shown in schedule of quantities and those arrived at from the drawings, the latter shall be preferred.

iv) Between the written description of the item in the schedule of quantities and the detailed description in the specifications of the same items, the latter shall be adopted. In case of difference between
the rates written in figures and words, the rate adopted by the contractor for working out the total amount of the item will be taken as correct. In other cases correct rate would be that, which is lower.

In all cases of omissions and / or doubts or discrepancies in the dimensions or description of any item or specification, reference shall be made to the Executive Engineer, Public Works Division, Ambajogai whose elucidation, elaboration or decision shall be considered as authentic. The contractor shall be held responsible for any errors that may occur in the work through lack of such reference and precaution.

The special provisions in detailed specifications and wording of any item shall gain precedence over corresponding contractor provisions (if any) in the standard specifications of public works department Hand Book where reference to such specifications is given without reproducing the details of contract.

5. METHODOLOGY OF CONSTRUCTION AND CONSTRUCTION EQUIPMENTS :-

5.1 Construction Machinery / Equipments:

5.1.1 The methodology and equipments to be used on the project shall be furnished by the Contractor to the Engineer-In-Charge well in advance of commencement of work and approval of the Engineer-In-Charge obtained prior to its adoption and use.

5.1.2 The Contractor shall give, a trial run of the equipment for establishing its capability to achieve the laid down specifications and tolerance to the satisfaction of the Engineer-in-Charge before commencement of work, if so desired by the Engineer-In-Charge.

5.1.3 All equipments provided shall be of proven efficiency and shall be operated and maintained at all times in the manner acceptable to the Engineer-In-Charge.

5.1.4 No equipment or personnel shall be removed from the site without permission of the Engineer-In-Charge.

5.2 Contractor shall furnish at least 15 days in advance his programme of commencement of item of work, the details of actual methods that would be adopted by the contractor for the execution of various items of work such as well sinking, cast-in-situ, superstructure for bridge work items etc. for bridge works supported by necessary detailed
drawings and sketches including those of the plant and machinery that would be used, their locations, arrangements for conveying and handling materials etc. and obtain prior approval of the Engineer-In-Charge well in advance of starting of such item of work. The Engineer-In-Charge reserves the right to suggest modifications or make complete changes in the method proposed by the contractor, whether accepted previously or not at any stage of the work, to obtain desired accuracy quality and progress of the work which shall be binding on the contractor, and no claim on account of such change in method of execution will be entertained by Government so long as specifications of the item remain unaltered. The sole responsibility for the safety and adequacy of the methods adopted by the contractors, will however, rest on the contractor, irrespective of any approval given by the Engineer.

6. WORKING METHODS:

Contractor shall submit, within times stipulated time by the Engineer, in writing the details of actual methods that would be adopted by the contractor for the execution of any item as required by Engineer, at each of the locations, supported by necessary detailed drawings and sketches including those of the Plant and Machinery that would be used, their locations, arrangement for conveying and handling materials etc. And obtain prior approval of the Engineer-in-charge well in advance of starting of such item of work The Engineer-in-charge reserves the right to suggest modifications or make complete changes in the method proposed by the contractor, whether accepted previously or not, at any stage of the work, to obtain the desired accuracy, quantity and progress of the work which shall be binding on the contractor, and no claim on account of such change in method of execution will be entertained by Government so long as specifications of the item remain unaltered.

7. PROGRESS SCHEDULE:

7.1 The contractor shall furnish within the period stipulated in writing by the Engineer-in-charge, of the order to start the work, the programme of work in CPM/PERT charts in quadruplicate indicating the date of actual start, the monthly progress expected to be achieved and the anticipated completion date of each major item of work to be done by him, also indicating dates of procurement and setting up of materials, plant and machinery. The schedule is to be such as is practicable of achievement towards the completion of the whole work in the time limit, the particular items, if any, on the due dates specified in the contract and shall have the approval of the Engineer-in-charge. No
revised schedule shall be operative without such acceptance in writing. The Engineer is further empowered to ask for more detailed schedule or schedules say week by week for any item, in case of urgency of work as will be directed by him and the contractor shall supply the same as and when asked for.

7.2 The Contractor shall furnish sufficient plant, equipment and labour as may be necessary to maintain the progress of schedule. The working and shift hour’s restricted to one shift a day for operations to be done under the Government supervision shall be such as may be approved by the Engineer-in-charge. They shall not be varied without the prior approval of the Engineer. Night work which requires supervision shall not be permitted except when specifically allowed by Engineer each time, if requested by the Contractor. The Contractor shall provide necessary lighting arrangements etc. For night work as directed by Engineers without extra cost.

7.3 Further, the contractor shall submit the progress report of work in prescribed forms and charts etc. At periodical intervals, as may be specified by the Engineer-in-charge. Schedule shall be in form of progress charts, forms, progress statement and/or reports as may be approved by the Engineer.

7.4 The contractor shall maintain proforma, charts, details regarding machinery, equipment, labour, materials, personnel etc. As may be specified by the Engineer and submit periodical returns thereof as may be specified by the Engineer-in-charge.

7.5 PRIORITIES OF WORKS TO BE EXECUTED :-

Priorities for items to be executed shall be determined periodically keeping in view of the final time limit allowed for the work and all the time schedule fixed for intermediate stages of work.

7.6 REVISED PROGRAMME OF WORK IN CASE OF SLIPPAGE :-

In case of slippage from the approved work programme at any stage, the contractor shall furnish revised programme to make up slippage within the stipulated time schedule and obtain the approval of the Engineer-in-charge to the revised programme.

7.7 ACTION IN CASE DISPROPORTIONATE PROGRESS :-

In case of extremely poor progress of the work or any item at any stages of work which in the opinion of the Engineer-In-Charge
cannot be made good by the Contractor considering his available resources, the Engineer-In-Charge will get it accelerated to make up the lost time through any other agency, and recover the additional cost incurred, if any, in getting the work done from the Contractor after informing him about the action envisaged by him.

8. **TREASURE-TROVE :-**

In the event of discovery by the contractor or his employees, during the progress of the work of any treasure, fossils, minerals or any other articles of value or interest, the contractor shall give immediate intimation thereof to the Engineer and forthwith hand over to the Engineer such treasure or things which shall be the property of Government.

9. **AGENT AND WORK-ORDER BOOK :-**

The contractor shall himself manage the work or engage an authorized all-time agent on the work capable of managing and guiding the work and understanding the specifications and contract condition. A qualified and experience, Engineer shall be provided by the Contractor as his agent for technical matters in case the Engineer-in-charge considers this as essential for the work and so directs contractors. He will take orders as will be given by the Executive Engineer or his representative and shall be responsible for carrying them out. This agent shall not be changed without prior intimation to the Executive Engineer and his representative on the work site. The contractor shall supply to the Engineer the details of all supervisory and other staff employed by the Contractor and notify changes when made, and satisfy the unquestionable right to ask for change in the quality and numbers of contractor’s supervisory staff and to order removal from work of any of such staff. The contractor shall comply with such orders and effect replacements to the satisfaction of the Engineer.

A work-order book shall be maintained on site and it shall be the property of Government and the Contractor shall promptly sign orders given therein by Executive Engineer or his representative and his superior officers, and comply with them. The compliance shall be reported by the contractor to the Engineer in good time so that it can be checked. The blank work order book with machine numbered pages will be provided by the Department free of charge for this purpose. The contractor will be allowed to copy out instructions therein from time to time.
10. SETTING OUT FOR ROAD / BRIDGE :-

10.1 SETTING OUT FOR ROAD WORK :-

Setting out the works as spelt out in clause 109 of Ministry’s specifications for Road and Bridge works (2nd Revision) will be carried out by the Contractor.

Immediately on receipt of the work order, the contractor shall at his own expenses clean the site and take up a provisional and final setting out and lining out of the work under the supervision of his responsible representative and shall provide necessary material, labour, tools, instruments etc. required for the same.

One tentative abutment location will be indicated by Engineer-in-charge and the center line of the bridge shall be defined by him. The contractor will then have to fix up the location of the other abutment. The abutment location will then be verified by the department and shall be adjusted if necessary. Once the final location of abutments is so finalized, it will be the contractor’s responsibility to line out and locate the remaining foundation of piers.

The contractor shall be responsible for true and proper setting out of the work and for the correctness of the positions, level dimensions and arrangements of all parts of works and for providing all necessary instruments, appliances and labours in connection therewith at his own cost. Officers may assist the contractor in proper setting out. Government instruments may be allowed to be used for setting out of work for which no cost shall be recovered from the contractor. If at any time during the progress of work, any errors arise in regard to levels of dimensions or alignment of any part of the work, rectification thereof, on being required to do so, will be carried out by the contractor at his own cost, unless such errors are based on incorrect data, supplied in writing by the Engineer or his authorized representative in which case the expenses of the rectification shall be refunded by Government.

The contractor shall provide free of charge all labour and materials required for lining out, surveying, inspection decided by the Engineer as considered necessary for the proper and systematic execution of the work. Likewise only one bench mark with definite value of R.L. will be shown to contractor who shall have to provide for network of temporary benchmark’s all along the bridge as required for executive the work. The contractor shall be responsible for the provision, accuracy and maintenance of such temporary bench mark.
He shall be responsible for the correctness of the position, levels, dimensions and alignments of all parts of the works and provisions of necessary instruments and labour in connection with it. The contractor shall provide scientific instruments and labour in connection with it. The contractor shall provide like theodolite and leveling instruments and steel tapes for lining out the bridge suitable masonry pedestals or wooden stacks firmly fixed shall be provided by the contractor for marking the Center lines of the structures.

The checking or inspection of any setting out of any line or level or word by Engineer or his representative shall not any way leave the contractor of his responsibility for correctness thereof. The contractor shall carefully protect and preserve bench mark pedestals and stone etc. used in setting of the works.

WATER :- If the potable water is not available in the river bed the contractor has to make his own arrangements for potable water required for concrete mixing, its curing and other parts of the construction for which no extra claim will be paid by the department.

10.2 RESPONSIBILITIES FOR LEVEL AND ALIGNMENT :-

The Contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify effectively any errors or imperfections therein, such rectifications shall be carried out by the Contractor, at its own cost, when instructions are issued to that effect by the Engineer-in-charge.

10.3 LEVELLING INSTRUMENTS :-

If measurements of items of the work are based on volumetric measurements calculated from levels taken before and after construction of the item, a large number of leveling staffs, tapes etc. will have to be kept available by the Contractor at the site of work for this purpose. Lack of such leveling staffs, tapes etc. in required numbers may cause delay in measurements and the work. The Contractor will have therefore to keep sufficient number of these readily available at site and in good working condition.

10.4 TO CARRY OUT ACTIVITIES MENTIONED ABOVE 10.1, 10.2 and 10.3.

Contractor shall make all necessary arrangements to carry out all necessary detail surveys required as per the Specifications / Tender
Conditions, during currency of work / project, and deliver desired outputs in printed / soft as instructed by engineer in charge at different stages of works as instructed by the engineer in-charge during the currency of the project, that is from start to finish of the work/project. To carry out such surveys and deliver desired outputs in printed form / soft copy as instructed by engineer in charge as mentioned above.

The Contractor shall appoint a survey agency with the approval of the engineer in charge, for that, Contractor shall submit list of three survey agencies to engineer in charge, along with the payment of his security deposit (as required under the clause one of the B-1 contract). The engineer in charge on receipt of such list will select one survey agency out of three and communicate it, along with the work order to contractor. Contractor should appoint survey agency as selected by the engineer in charge. The survey agency shall not be changed without permission of the engineer in charge. The survey agency and / or contractor shall have

1) Latest survey instruments and/or equipments viz. total station, auto levels, plotter etc.

2) Auto CAD, non-auto CAD base software to deliver desired outputs based on survey carried out using (1) above, in printed / soft copy as instructed by engineer in charge.

3) Necessary trained manpower to work on and deliver as (1) and (2) above.

For appointing survey agency, to carry out such surveys and deliver desired outputs in printed/soft as instructed by engineer in charge as mentioned above the Contractor shall not be paid separately. His offer shall be inclusive of all.

11. AUTHORITIES OF THE ENGINEER-IN-CHARGE REPRESENTATIVE

The duties of the representative of the Engineer-in-charge are to watch and supervise the work and to test and examine any material to be used or workmanship employed in connection with the works.

The Engineer-in-charge may from time to time, in writing delegate to his representative any powers and authorities vested in the Engineer-in-charge and shall furnish to the Contractor a copy of all such delegations of powers and authorities. Any written instructions of Approval given by the representative of the Engineer-in-charge to the Contractor within the terms of such" delegations (but not otherwise) shall bind the Contractor and the
department as through it had been given by the Engineer-in-charge, provided always as follows. Failure of the representative of the Engineer-in-charge to disapprove any work or materials shall not prejudice the power of the Engineer-in-charge thereafter to disapprove such work or materials and so order the putting down, removal or breaking up thereof.

12. INITIAL MEASUREMENTS FOR RECORD :-

Where for proper measurement of the work, it is necessary to have an initial set of levels or other measurements taken, the same as recorded in the authorized field book or measurement book of Government by the Engineer or his authorized representative will be signed by the contractor who will be entitled to have a true copy of the same made at his cost. Any failure on the part of the contractor to get such levels etc. Recorded before starting the work, will render him liable to accept the decision of the Engineer as to the basis of taking measurements.

Like-wise the contractor will not cover any work which will render its subsequent measurements difficult or impossible without first getting the same jointly measured by himself; and the authorized representative of the Executive Engineer. The record of such measurements on the Government side will be signed by the Contractor and he will be entitled to have a true copy of the same made at his cost.

13. HANDING OVER OF WORK :-

All the work and materials before finally taken over by Government will be the entire liability of the Contractor for guarding, maintaining and making good any damages of any magnitude interim payments made for such work will not alter this position. The handing over by the Contractor and taking over by the Executive Engineer or his authorized representative will be always in writing, copies of which will go to the Executive Engineer or his authorized representative and the contractor. It is, however understood that before taking over such work, Government will not put it into regular use as distance from casual or incidental one, except as specially mentioned elsewhere in this contract, or as mutually agreed to.

14. ASSISTANCE IN PROCURING PRIORITIES, PERMITS ETC. :-

The Engineer, on a written request by the contractor, will if in his opinion, the request is reasonable and in the interest of work and its progress, assist the contractor in Securing, the priorities for deliveries, transport permits for controlled materials etc., where such are needed. The Government, will not, however be responsible for the non-availability of such
facilities or delay in this behalf and no claims on account of such failures or delays shall be allowed by the Government. The Contractor shall have to make his own arrangement for machinery required for the work. Such machinery conveniently available with the Department may be spared as the rules in force on recovery of necessary Security Deposit and rent with Agreement in the prescribed Signature of Contractor form. Such an Agreement shall be independent of this contract and the supply of machinery shall not form a ground for any claim or extension of time limit for this work.

15. A) The Contractor shall set up and get it checked and certified by the Executive Engineer, a field laboratory with necessary equipments for testing of all materials, finished products used in the construction as per requirements of relevant specifications. The testing of all materials shall be carried out by the Engineer, or his representative for which the contractor shall make all the necessary arrangements and bear the entire cost.

B) At least 30% of the tests of those required as per frequency chart given in Clause 15.1 shall be carried out in Government Laboratories of Vigilance & Quality Control Circle. All the tests which cannot be carried out in field laboratory shall be carried out 100% at the contractor's cost in Vigilance & Quality Control laboratory.

C) The tests which cannot be carried out both in field laboratory and Vigilance & Quality Control Circle's laboratories shall be carried out 100% in the laboratories of Government Engineering College / Government Polytechnic at the entire cost of Contractor.

15.1 Frequency Chart for Testing of Materials :-

ANNEXURE- 'A'

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Material</th>
<th>Test</th>
<th>Frequency of testing</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Sand</td>
<td>1. Fineness Modules</td>
<td>At the beginning and if there is change in source</td>
<td>Every batch of Sand</td>
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<td></td>
<td></td>
<td>2. Silt Contents</td>
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<tr>
<td>02</td>
<td>Metal</td>
<td>1. Crushing value</td>
<td>One test per 200 Cubic Metre or part thereof</td>
<td>PWD Hand Book IS 2386 Part – II</td>
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<td></td>
<td></td>
<td>2. Impact Value</td>
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<td>3. Abrasion Value</td>
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<td>4. Water Absorption</td>
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<td>5. Flakiness Index</td>
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<td>6. Sulipping Value</td>
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<td>7. Gradation</td>
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<td>Sr.</td>
<td>Material</td>
<td>Test</td>
<td>Frequency of testing</td>
<td>Remarks</td>
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<td>03</td>
<td>Cement concrete</td>
<td>1. Compressive Strength</td>
<td>Upto 5 Cum – 1 Set 6 – 15 Cum - 2 Sets 16 – 30 Cum - 3 Sets 31 - 50 Cum - 4 Sets 51 and above – 4 Sets + 1 additional set for each additional 50 cum. or part thereof</td>
<td>MOST Specification 1716</td>
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<td></td>
<td></td>
<td>2. Initial Setting time</td>
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<td>3. Final Setting time</td>
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<td>4. Specific gravity</td>
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<td>5. Soundness</td>
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<td>6. Fineness</td>
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<tr>
<td>04</td>
<td>Cement</td>
<td>1. Compressive Strength</td>
<td>One test for each consignment of 50 M.T. (1000 bags) or part thereof</td>
<td>I.S. -269 12269</td>
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<td></td>
<td></td>
<td>2. Initial Setting time</td>
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<td>3. Final Setting time</td>
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<td>4. Specific gravity</td>
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<td>6. Fineness</td>
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<tr>
<td>05</td>
<td>Steel</td>
<td>1. Weight per metre</td>
<td>One test for every 5.0 Metric Tonne or part thereof for each diameter</td>
<td>I.S. – 432</td>
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<td>2. Ultimate Tensile stress</td>
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<td>3. Yield stress</td>
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<td>4. Elongation</td>
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<td>06</td>
<td>Water Bound Macadam</td>
<td>1. Aggregate impact Value</td>
<td>One test per 200 Cum.</td>
<td>MORTH Specification Table 900-3</td>
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<tr>
<td></td>
<td></td>
<td>2. Gradation</td>
<td>One test per 100 Cum.</td>
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<td>3. Flakiness index</td>
<td>One test per 200 Cum.</td>
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<td>4. Elongation index</td>
<td>One test per 200 Cum for binding material</td>
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<td>5. Attenberg limits of</td>
<td>One test per 100 Cum.</td>
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<td>portion of aggregates</td>
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<td>passing 425 Micron</td>
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<tr>
<td>07</td>
<td>Prime coat / tack coat / Fog spray</td>
<td>1. Quality of Binder</td>
<td>No. of samples per lot and test as per IS-73, IS-217, IS – 8887 as applicable</td>
<td>MORTH Specification Table 900-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Binder Temperature</td>
<td>At regular close intervals</td>
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<td></td>
<td></td>
<td>3. Rate of spread of binder</td>
<td>1 test per 500 Sqm. and not less than 2 test per day.</td>
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</tr>
<tr>
<td>08</td>
<td>Seal Coat / Surface Dressing</td>
<td>1. Quality of Binder</td>
<td>Same as mentioned under Sr. No.7</td>
<td>MORTH Specification Table 900-4</td>
</tr>
<tr>
<td>Sr.</td>
<td>Material</td>
<td>Test</td>
<td>Frequency of testing</td>
<td>Remarks</td>
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<tr>
<td>09</td>
<td>Open graded premix of surfacing / Close graded premix surfacing</td>
<td>1. Quality of Binder</td>
<td>Same as mentioned under Sr.No.7</td>
<td>MORTH Specification Table 900-4</td>
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<tr>
<td></td>
<td></td>
<td>2. Impact value /Abrasion value</td>
<td>One test per 50 Cum.</td>
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<td>3. Flakiness and Elongation Index</td>
<td>One test per 50 Cum.</td>
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<td>4. Stripping value of aggregate (immersion tray)</td>
<td>One test per 50 Cum.</td>
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<td>5. Water absorption, Water sensitivity of Mix</td>
<td>Initially 1 set of 3 representative samples for each source of supply. Subsequently by change in the quality of aggregates.</td>
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<td></td>
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<td>6. Gradation</td>
<td>1 Test per 25 Cubic Metre</td>
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<td>8. Soundness</td>
<td>Initially one determination by each method for each source of supply, then as warranted by change in the quality of aggregate.</td>
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<td>9. Temperature of Binder</td>
<td>At regular close intervals</td>
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<td>10 Binder Content</td>
<td>1 test per 500 Cum. and not less than 2 test per day.</td>
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<td>11 Rate of spread of materials</td>
<td>Regular Control through checks of layer thickness.</td>
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<td></td>
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<td>12 Percentage of fractured faces</td>
<td>When gravel is used one test per 50 Cum.</td>
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<tr>
<td>10</td>
<td>Thermoplastic paint</td>
<td>1. Glass bead contents and grading analysis</td>
<td>One test for 3 Km. work</td>
<td>MORTH Specification Table 900-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Reflectance and Yellowness index</td>
<td>One test for 3 Km. work</td>
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<td>3. Flow-ability</td>
<td>One test for 3 Km. work</td>
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<td>4. Softening Point</td>
<td>One test for 3 Km. work</td>
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<td>5. Drying Time</td>
<td>One test for 3 Km. work</td>
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<tr>
<td>11</td>
<td>Granular Materials</td>
<td>1. Gradation</td>
<td>One test per 200 Cum.</td>
<td>MORTH Specification Table 900-3</td>
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<tr>
<td></td>
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<td>2. Aterberg limits</td>
<td>One test per 200 Cum.</td>
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<td>3. Moisture content prior to compaction</td>
<td>One test per 250 Cum.</td>
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<td>4. Density of compacted layer</td>
<td>As required</td>
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<td>5. C.B.R.</td>
<td>As required</td>
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<tr>
<td>Sr.</td>
<td>Material</td>
<td>Test</td>
<td>Frequency of testing</td>
<td>Remarks</td>
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<tr>
<td>12</td>
<td>Dense Bituminous Macadam</td>
<td>1. Quality of Binder</td>
<td>Same as per Sr.No.9</td>
<td>MORTH Specification Table 900-4</td>
</tr>
<tr>
<td></td>
<td>Semidense Bituminous Concrete</td>
<td>2. Impact value /Abrasion value</td>
<td>Same as per Sr.No.9</td>
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<td>Bituminous Concrete</td>
<td>3. Flakiness and</td>
<td>Same as per Sr.No.9</td>
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<td>Elongation Index</td>
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<td>4. Stripping value</td>
<td>Same as per Sr.No.9</td>
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<td>5. Water sensitivity of mix</td>
<td>Same as per Sr.No.9</td>
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<td>6. Water absorption</td>
<td>Same as per Sr.No.9</td>
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<td>7. Percentage of</td>
<td>Same as per Sr.No.9</td>
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<td>fractured faces</td>
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<td>8. Sand Equivalent test</td>
<td>As required</td>
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<td>9. Plasticity Index</td>
<td>As required</td>
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<td>10 Mix Grading</td>
<td>One set of tests on</td>
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<td>individual</td>
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<td>constituents and</td>
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<td>mixed aggregate</td>
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<td>from dryer mix</td>
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<td>subject to a minimum</td>
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<td>of two tests per</td>
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<td>plant per day.</td>
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<td>11 Binder content</td>
<td>As above</td>
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<td>12 Stability of Mix</td>
<td>For each 400 Tonnes</td>
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<td>of mix products.</td>
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<td>13 Water Sensitivity of mix</td>
<td>Same as per Sr. No.9</td>
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<td>14 Swell test of mix</td>
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<td>Bituminous concrete</td>
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<td>15 Control of temperature</td>
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<td>of Binder in boiler,</td>
<td>intervals</td>
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<td>aggregates in dryer</td>
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<td>17 Rate of spread of mixed</td>
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15.1.2 It is mandatory on the part of Contractor to carry out all the required tests of various construction materials as mentioned in Schedule-’B’ of the Tender.

If the contractor fails to submit required Test Results of the various construction materials as mentioned in the items of Schedule- ‘B’, he will be liable to deposit the amount at penal rate of five times of the amount of particular test which he has not carried out. Contractor will be informed by the Engineer-in-charge by letter. On receipt of letter, contractor will have to either deposit the said amount or to carry out the required test within 10 days. If he again failed to carry out the required tests in stipulated time limit, the said tests will be carried out by the department and total expenditure incurred on the testing charges plus five times amount of testing charges will be recovered from the Contractor’s bill.

As this recovery is only due to the negligence on the part of contractor to carry out work as per Tender Conditions and Executive Engineer’s decision will be final and binding on the Contractor and it cannot be challenged by the Contractor by way of Appeal, Arbitration or in the Court of Law.

15.2 SAMPLING OF MATERIALS

Samples provided to the Engineer or his representative for their retention is to be in the labeled boxes suitable for storage. Materials or workmanship not corresponding in character and quality with approved samples will be rejected by the Engineer or his representative and shall be removed from the site as directed by the Engineer at the Contractor’s cost. Samples required for approval and testing must be supplied well in advance by at least 48 hours to allow for testing and approval. Delay to work arising from the late submission of sample will not be acceptable as a reason for delay in the completion of work. For all materials brought from outside, the cost of sampling, testing whether in India or outside shall be borne by the contractor.

All materials to be used on work shall be got approved in advance from the Engineer in-charge and shall pass the test and or analysis required by him. which will be as follows :-
a) As specified by the Indian Road Congress Standard Specification.

b) Code of Practice for Road and Bridges.

c) B.I.S. specification (whichever and wherever applicable)

d) Such recognised specifications accepted to Engineer-in-charge or equivalent hereto or in absence of such recognised specifications.

e) i) The Contractor shall set up Field Laboratory with necessary equipment for testing of all materials / finished products, and get it checked and certified from the Executive Engineer.

ii) Such requirement test and or analysis as may be specified by the Engineer-in-charge in order of precedence given above.

iii) The contractor shall at his risk and cost make all arrangement and/or shall provide for all such facilities as the Engineer-in-charge may require for collecting preparing required number of samples for tests or for analysis at such time and to such places may be directed by the Engineer and bear all charges and cost of testing. Such samples shall also be deposited with the Engineer-in-charge.

iv) The contractor shall if and when required submit at his cost the samples of materials to be tested or analysis and if, so directed shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and the materials, finally accepted by the Engineer- in-charge. Samples provided to the Engineer in charge for retention purpose are to be in labeled boxes suitable for storage.

v) The contractor shall not be eligible for any claim or compensation at either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of the materials.

vi) The contractor or his authorized representative will be allowed to remain present in the department laboratory while testing samples furnish by him. However the results of all the tests carried out in the department laboratory in the presence or absence of the contractor or his authorized representative will be binding on the contractor.

vii) Cost of routine day-to-day quality control testing charges for tests required as per specifications will be borne by the contractor by
sending the same to the concerned Government laboratories.

viii) Test shall be carried out at approved Government Laboratories or Government institutions as directed by Engineer-in-charge and all testing charges shall be borne by the Contractor.

ix) 15% of the rate shall be withheld and shall be released only after the receipt of the satisfactory test result wherever specified. Routine test shall mean testing of aggregate for gradation, flakiness index and binder content. All other tests shall be carried out by the contractor at his own cost. However the cost of testing of material as directed by Engineer-in-charge for approving a particular material as laid down in para 15.2. (i) to (viii) will have to be borne by the contractor.

x) The contractor shall at his own cost arrange to carry out the routine tests of materials which are to be used on the work. The tests will have to be carried out either in the field laboratory or in an approved laboratory.

xi) Testing of the material used for this work should be carried out as per the provisions made in Government Circular No. Miscellaneous /2004/PC-1 08/NH-2, dated 22/3/2005. Testing of material should be carried out as per frequency stipulated by the Vigilance & Quality Control Circle. The contractor should carry out 25% testing of material out of the total material required as per the frequency from the Departmental Laboratory of Public Works Department. The payment for testing of material from the Departmental Laboratory should be borne by the Contractor.

xii) In case of materials procured by the contractor/testing as required by the codes and specifications, the same shall be arranged by him at his own cost. Testing shall be done in the presence of an authorized representative of the Engineer-in-charge at the nearest laboratory. If additional testing other than as required by specification is ordered the testing charges shall be borne by the department if the test results are satisfactory and by the contractor if the same are not satisfactory.

xiii) In case of materials supplied by the Government, if the contractor demands certain testing, the charges thereof shall be paid by the contractor if the test results are satisfactory and by the department if the same are not satisfactory.
15.3 The responsibility of assuring the quality of work shall be on the contractor who shall take actions as stipulated in standard specification as per “Schedule C”

15.4 It shall be responsibility of the contractor to achieve quality of work as stipulated in section 900 of MORTH Specification for Road and Bridge Work (2013)

16. **CO-ORDINATION :-**

When several agencies for different sub-work of the project are to work simultaneously for the timely completion of the whole project smoothly, the scheduled dates for completion specified in each contract shall therefore be strictly adhered to. Each contractor may make his independent arrangement for water, power, housing etc. If they so desire. On the other hand the contractors are at liberty to mutual agreement in this behalf and make joint arrangements with the approval of the Engineer. No single contractor shall take or cause to be taken any steps or action that may cause disruption, discontent, or disturbance of the work labour or arrangement etc. of other contractor in the Project localities. Any action by any contractor which the Engineer in his unquestioned discretion may consider as infringement of the above code, would be considered as a breach of the contract conditions and shall be dealt with as such. In case of any dispute, disagreement between the contractors, the Engineer’s decision regarding the co-ordination, co-operation and facilities to be provided by any of the contractors shall be final and binding on the contractors concerned and such a decision or decisions shall not violate any contract nor absolve the contractor’s of his/their obligations under the contract nor consider for the grant for any claim or compensation.

17. **PATENTED DEVICE**

Whenever the contractor desires to use any designed devices, materials or process covered by the letter of patent or copyright, the right for such use shall be secured by suitable legal arrangement and agreement with patent owner and the copy of their agreement shall be filed with the Engineer-in-charge if so desired by the letter.

18. **PAYMENT**

The contractor must understand clearly that the rates quoted are for completed work and include all cost due to labour, scaffolding, plant, machinery, supervision, power, royalties, taxes etc. and should also include
all expenses to cover the cost of height work as and when required and no claim for additional payment beyond the prices or rates quoted will be entertained. The mode of measurement has been indicated in the specifications. If there is any ambiguity or doubt in this respect, the decision of Superintending Engineer will be final.

19. SUPERVISION AND INSPECTION OF WORKS AND QUALITY CONTROL:-

19.1 SUPERVISION :-

The Contractor shall either himself supervise the execution of the works or shall appoint the competent agent approved by the Engineer-in-charge, to act on his behalf. If in the opinion of the Engineer-in-charge, the Contractor has himself no sufficient knowledge and experience of receiving instructions or cannot give his full attention to the works, the Contractor shall at his own expenses employ as his accredited agent & qualified Engineer approved by the Engineer-in-charge. Orders given to the Contractor’s agent shall be considered to have the force as if these had been given to the Contractor himself. If the Contractor fails to appoint a suitable agent as directed by the Engineer-in-charge, the Engineer-in-charge shall have full power to suspend the execution of the work until such date a suitable agent is appointed and the Contractor shall be responsible for the delay so caused to the works and the Contractor shall not be entitled for any compensation on this behalf.

19.2 INSPECTION:-

The Contractor shall inform the Engineer-in-charge in writing -when any portion of the work is ready for inspection giving him sufficient notice to enable him to inspect the same without affecting the further progress of the work. The work shall not be considered to have been completed in accordance with the terms of the contract until the Engineer-in-charge shall have certified in writing to that effect. Approval of materials or workmanship or approval of part of the work during the progress of execution shall not bind the Engineer-in-charge or in any way affect him even to reject the work which is alleged to be completed and to suspend the issue of his certificate of completion until such alteration and modifications or reconstruction have been effected at the cost of the Contractor as shall enable him to certify that the work has been completed to his satisfaction.

The Contractor shall provide at his cost necessary ladders and such arrangements as to provide necessary facilities and assistance for proper inspection of all parts of the work at his own cost.
19.3 TEMPORARY QUARTERS:

i) The contractor shall at his own expense maintain sufficient experienced supervisory staff etc. Required for the work and shall make his own arrangement, provide housing for them with all necessary arrangements, including fire preventive measures etc. as directed by the Engineer-in-charge.

ii) The contractor shall provide, furnish, maintain and remove on completion of the work, a suitable office on the work-site for the use of Executive Engineer’s representative. The covered area for office exclusive of varandha should not be less than 24 Square Metre and height 3.0 meter it have Brick masonry walls and asbestos or corrugated iron roof, paved floor should be 18" above ground level. He should provide a basket type latrine, urinals and keep them clean, daily. The contractor shall have provide Laboratory (with ref. books & I.S. codes) at site of size 6.0 metre X 6.0 metre minimum and height 3.0 meter at work site. The office and Laboratory structures shall be semi-permanent type. This will be supposed to be included in his rates.

19.4 SAFETY MEASURES AND AMENITIES:

While executing the work, necessary precautions regarding safety of labour, supervisory staff, public and traffic users shall be taken by the agency according to rules and regulations specified by the Government of India / Government of Maharashtra.

1) The contractor shall take all necessary precautions for the safety of the workers and preserving their health while working in such job as require special protection and precautions. The following are some of the requirements listed, though no exhaustive. The contractor shall also comply with the directions issued by the Engineer in this behalf from time to time and at all times.

2) **Labour Licence** :- It shall be obligatory on the part of the contractor to obtained the necessary labour Licence from the labour Department within fortnight of issue of work order.

3) Providing protective foot-wear to workers, in situations like mixing and placing of mortar of concrete in quarries and places where the work is done under too much of wet condition as also for movements over surfaces infected with Dyster growth etc.

4) Providing protective head wear to workers, working in quarries etc. to protect them against accidental fall of materials from above.
5) Taking such normal precautions like providing hand rails at the edges of the floating platform or barges, not allowing nails or metal parts or useless timber to spread around etc.

6) Supporting workmen with proper belts, ropes etc. when working on any masters, cranes grabs, hoist, dredgers etc.

7) Taking necessary steps towards training the workers concerned in the use of machinery before, they are allowed to handle it independently and taking all necessary precautions in and around the areas where machines, hoists and similar units are working.

8) Providing adequate number of boats (of at all required for playing water) to prevent overload and over-crowding.

9) Providing life belts to all men working in such situation from where they may accidentally fall into the water, equipping the boats with adequate number of life belts etc.

10) Avoiding bare live wires etc. as would electrocute workers.

11) Making all platforms, staging and temporary structures sufficiently strong so as not to cause inconvenience and risk to the workmen and supervisory staff.

12) Providing sufficient first aid trained staff an equipment to be available quickly at the work site to render immediate first aid treatment in case of accidents due to suffocations, dropping and other injuries.

13) Take all necessary precautions with regard to use of divers.

14) Providing full length gum boots, leather hand gloves with fire proof apron to cover the chest and back reaching upto knees and protective goggles for the eyes to the labourers working with hot asphalt handling vibrator in cement concrete and also where use of any or all these items is beneficial in the interest of health and well being of the labours in the opinion of the Engineer.

20. **EXPLOSIVES** :-

The Contractor shall at his own expense construct and maintain proper magazines, if such required for the storage of explosives for use in connection with the works, and such magazine, being situated constructed and maintained in accordance with the Government Rules applicable in that behalf. The contractor shall at his own expenses obtain such Licenses as may be necessary for storage of explosives are approved by the Engineer, the Government shall not be incurring any responsibility whatever in connection with storage and use of explosives on the size or any accident or occurrence
whatsoever in connection therewith, all operations in or for which explosives are employed being at the risk of the contractor and upon his sole responsibility and the contractor here by gives to Government an absolute indemnity in respect thereof.

21. DAMAGE BY FLOODS OR ACCIDENTS :-

The contractor shall take all precautions against damage by floods or like or from accident etc. No compensation will be allowed to the Contractor on this account or for correcting and repairing any such damage to the work during construction. The contractor shall be liable to make good at his cost any plant or materials belonging to the Government, lost or damaged by floods or from any other cause which is in his charge.

22. RELATION WITH PUBLIC AUTHORITIES :-

The contractor shall comply with all rules, regulation, bye-laws and direction given from time also by any local public authority in connection with this work and shall himself pay fees or charges which are leviable on him without any extra to the Department.

23. POLICE PROTECTION :-

For the Special Protection of camp and the contractor's works, the department will help the contractor as far as possible to arrange for such protection with the concerned authorities if so required by the Contractor in writing. The full cost of such protection shall be borne by the contractor.

24. MEDICAL AND SANITARY ARRANGEMENTS TO BE PROVIDED FOR LABOUR EMPLOYED ON THE CONSTRUCTION BY THE CONTRACTOR

a) The contractor shall provide an adequate supply of potable water for use of labourers on work and in Camps.

b) The contractor shall construct trench or semi permanent latrines for the use of the Labourers. Separate latrines shall be provided for men and women.

c) The contractor shall build sufficient number of huts on a suitable plot of land for use of the Labourers according to the following specifications:-

Contractor No. of Corrections Executive Engineer
1. Huts of Bamboos and Grass may be constructed.

   A good site not liable to submergence shall be selected on high ground remote from jungle but well provided with trees, shall be chosen where it is available. The neighborhood of tank, jungle, grass or woods should be particularly avoided. Camps should not be established close to large cuttings of earth work. The lines of huts shall have open spaces of at least ten meters between rows. When a good natural site cannot be procured, particular attention should be given to the drainage. There should be no overcrowding. Floor space at the rate of 30 Sq.ft. Per head shall be provided. Care should be taken to see that the huts are kept clean and in good order.

   The Contractor must find his own land and if he wants Government land, he should apply for it and pay assessment for it, if made available by Government.

   The contractor shall construct a sufficient number of bathing places. Washing places should also be provided for the purpose of washing clothes. The Contractor shall make sufficient arrangements for draining away the surface and sullage water as well as water from the bathing and washing places and shall dispose off this waste water in such way as not to cause any nuisance.

   The contractor shall engage a Medical officer with a traveling dispensary for a Camp containing- 500 or more persons if there is no Government or other private dispensary situated within 8 kilometers from the Camp. In case of emergency the contractor shall arrange at his cost for transport for quick medical help to his sick worker.

   The Contractor shall provide the necessary staff for effecting a satisfactory drainage system and cleanliness of the camp to the satisfaction of the Engineer. At least one sweeper per 200 persons should be engaged.

   The Assistant Director of Public Health shall be consulted before opening a labour camp and his instruction on matters such as water supply sanitary conveniences, the camp site accommodation and food supply shall be followed by the Contractor.

2. The contractor shall make arrangement for all anti-malaria measures to be provided for the labour employed on the work. The anti-malaria measure shall be provided as directed by the Assistant Director of Public Health.
25. **QUARRIES :-**

25.1 The quarrying operations shall be carried out by the Contractor with proper equipment such as compressors, Jack-hammers, drill bits, explosives etc. and sufficient number of workmen shall be employed so as to get the required out turn.

25.2 The Contractor shall carry out the works in the quarries in conformity with all the rules and regulations already laid down or may be laid down from time to time by Government. Any cost incurred by Government due to non-compliance of any rules or regulations or due to damages by the contractor shall be the responsibility of the Contractor. The Engineer-in-charge or his representative shall be given full facilities by the Contractor for inspection at all times of the working of the quarry, records maintained, the stocks of the explosives and detonators etc. so as to enable him to check that the working records and storage are all in accordance with the relevant rule. The Engineer-in-charge or his representative shall at any time be allowed to inspect the works, buildings, and equipment at the quarters.

25.3 The Contractor shall maintain at its own cost, the book registers etc. required to be maintained under the relevant rules and regulations and as directed by the Engineer-in-charge. These books shall be open for inspection at all times by the Engineer-in-charge or his representative and the Contractor shall furnish the copies or extracts of books or register as and when required.

25.4 All quarrying operations shall be carried out by the Contractor in organized and expeditious manner systematically and with proper planning. The Contractor shall engage licensed blaster and adopt electric blasting and/or any other approved method which would ensure complete safety to all the men engaged in the quarry and its surroundings. The Contractor shall himself provide suitable magazines and arrange to pre and store explosive etc. as required under the rules at his own cost. The designs and the location of the magazine shall be got approved in advance from the Chief Inspector of Explosives and the rules and regulations in this connection as laid down by the Chief Inspector of Explosives from time to time shall be strictly adhered to by the Contractor. It is generally experienced that it takes time to obtain the necessary license for blasting & license for storage of material from the concerned authorities. The contractor must therefore take timely advance action for procuring all such licenses so that the work progress may not be hampered.
25.5 The approaches to the quarrying place from the existing public roads shall have to be arranged by the Contractor at his own cost, and the approach shall be maintained by the contractor at his own cost till the work is over.

25.6 The quarrying operations shall be carried out by the Contractor to the entire satisfaction of the Engineer-in-charge and the development of the quarry shall be made efficiently so as to avoid wastage of stones. Only such stones as are of the required quality shall be used on the work. Any stone such is in the opinion of the Engineer-in-charge, not in accordance with the specifications or of required quality will be rejected at any time, at the quarry or at the site of work. The rejected stones shall not be used on the work and such rejected materials shall be removed to the place shown at the Contractor’s cost.

25.7 Since all stones quarried from Government quarry (if made available) by the contractor including the excavated over burden are the property of the Govt. no stones or earth shall be supplied by the Contractor to any other agencies or works are allowed to be taken away for any other works.

All such surplus quarried materials not required for work under this contract shall be the property of the Government and shall be handed over by the Contractor to Government free of cost at quarry site duly heaped at the spots indicated by the Engineer-in-charge. The contractor will be entitled to the refund of royalty if any, paid by him for such quantity handed over to Govt. for which necessary certificate will be issued by Executive Engineer as per usual procedure, if however, the Government does not required such surplus material the contractor may be allowed to dispose off or such surplus material else where with prior written permission of Engineer-in-charge. Leaving off a quarry face or opening of a new quarry face shall be done only on the approval of the Engineer-in-charge.

25.8 Quarrying permission will have to be directly obtained by the Contractor, from the Collector of the District concerned for which purpose the department will render necessary assistance. All quarry fees, royalty charges, octroi duties, ground rent for staking material etc. and charges shall be paid directly to Revenue Department by the contractor as per rules in force. If it is not paid by contractor the same will be recovered from his bills.

25.9 The contractor will be permitted to erect at his own risk and cost at the quarry site if suitable vacant space of Government area is available for the purpose, his own structures for stores, offices etc. At
places approved by the Engineer-in-charge. On completion of the work the contractor shall remove all the structures erected by him and restore the site to its original condition.

25.10 The Contractor shall not use any Sand in the quarry either for cultivation or for any other purpose except that required for breaking or stacking or transporting stones.

26. TRAFFIC REGULATION / ARRANGEMENT FOR TRAFFIC DURING CONSTRUCTION :-

Action for arrangement for traffic during construction will be taken by the Contractor as envisaged in the contract documents and spelt out in clause 112 of MORTH Specification for Road and Bridge Work (2013)

26.1 Unless separately provided for in the contract, the Contractor shall have to make all necessary arrangements for regulating traffic, day and night during the period of construction to the entire satisfaction of the Engineer. This includes the construction and maintenance of diversions if necessary. The contractor shall have to provide necessary caution board, barricades, flags, light and watchmen etc. So as to comply with the latest Motor Vehicles rules and Regulation and for Traffic Safety and he shall be responsible for all claims from accidents which may arise due to his negligence whether in regulating the traffic or in stacking material on the roads, or due to any other reasons.

26.2 It is to be clearly understood that whatever work carried out by the Contractor for construction of diversion road including earthwork, W.B.M. bituminous surface dressing. R.C.C pipe drains etc. Will be paid for only once. If due to flow of traffic, due to floods or due to any other cause, this diversion road and/or the R.C.C drain gets damaged it shall be repaired and maintained by the Contractor in good condition till completion of the whole work at his own expenses.

Traffic safety and control shall be as per Clause No. 112.4 of M.O.S.T. Specifications for Roads and Bridges (5th Revision, 2013 Edition).

27. PROCUREMENT OF MATERIALS:-

27.1 Where suitable and approved P.W. Department’s quarries exist, the Contractor or piece worker will be allowed if otherwise there is no objection to obtain the materials to the extent required for the work
from the quarry. He will be however, liable to pay compensation. If any
damage is caused to the quarry either deliberately or through
negligence or for wastage of materials by himself or his staff or labour.

27.2 Where no suitable Government quarries exist or when the quantity of
the material required cannot be obtained from a P.W. Department
quarry the Contractor or pieceworker shall make his own
arrangements to obtain the material from existing or a new quarry in
Government waste land, private land or land belonging to other States
or Talukas, etc.

After opening the quarry but before starting collection the
quarry shall be got approved by the Engineer-in-charge or his
representatives. The Contractor or piece worker shall pay all royalty
charges compensation etc. No claims or responsibility on account of
any of obstructions caused to execution of the work by difficulties
arising out of private owners of land will be entertained.

27.3 The rates in the tender include all incidental charges such as opening
of a new quarry, opening out a new portion in an existing quarry,
removing top soil and the unsuitable material, dewatering a quarry,
cost of blasting powder and fuse, lift, lead, repairs to existing cart
tracks, making new cart tracks, control charges, Central/State
Government or Municipal taxes, Local Boards, Cess, etc.

27.4 The rates in the tender are for the delivery of the approved material on
road side properly stacked at the places specified by the Engineer-in-
charge and are inclusive of conveyance charges in respect of the leads
and lifts. No claims on account of changes in lead will be entertained.

27.5 No material shall be removed from the land within the road boundary
or from the land touching it without the written permission of the
Engineer- in-charge of his authorised agent. If any materials is un-
authorised obtained from such places the Contractor or piece worker
shall have to make good the damages and pay such compensation, in
addition as may be decided by the Executive Engineer and will have to
stop further collection.

27.6 Any material that falls on any P.W.D. Road from the cart etc. during
conveyance shall be immediately picked up and removed by the
Contractor or piece worker, failing which it will be got removed
Departmentally at his cost. No heap shall be left prior to checking
even temporarily on the road surface or in any way so as to cause any
obstruction or danger to the traffic. The Contractor or the piece
worker shall be liable to pay for any claims of compensation etc. arising out of any accident, etc.

Any such materials causing obstruction or danger etc. will be got removed Departmentally at his cost and no claims for any loss or damage to the material, thus removed, will be entertained. The Contractor shall also be responsible for the damage or accident etc. arising out of any material that falls on the road or track, not in charge of the Department and shall attend to any complaint which may be received otherwise authorised by Engineer in writing. Collection and spreading shall not be carried out at the same time in one and the same mile or in to adjoin in Km. except with the return permission of the Executive Engineer.

27.7 Unless otherwise directed, the materials shall be collected in the following orders availability of space :-

1) Rubble (if included in tender)
2) Metal
3) Soft murum
4) Hard murum

shall be stacked on the side opposite for petty repairs and shall be stacked on the side opposite to metal for new layer. Where metal for two layers has to be stacked as in the case of new roads, the metal for each layer shall be stacked on the opposite sides of the road.

27.8 All road material shall be examined and measured before it is spread. The labour for measurements (and check measurements where ever carried out) shall be supplied by the contractor or place worker. Immediately after the measurements are recorded the stacks shall be marked by the contractor or piece worker by who wash or otherwise as may be directed by the Executive Engineer to prevent from any authorised tampering with the stacks. If the contractor or piece worker fails to attend the measurements after receiving the notice from Sub-divisional officer or his subordinate stating date and time of the intention to measure work, shall be measured never-the-less and no complaint in this respect will be entertained later on. If the contractor or piece worker fails to supply sufficient labour for the materials required at the time of measurements or check measurements, after due notice has been given to him, the expenses incurred on account of employing department labour or material etc. shall be charged against his account.
27.9 No deduction will be made for voids.

27.10 The materials shall not be stacked in place where it is liable to be damaged or lost due to traffic passing over it, to be washed away by rain or floods, to be buried under the landslides etc. or slip down an embankment or hillside etc. No claims for any loss due to these and similar causes will be entertained.

27.11 Before stacking, the materials shall be free from all earth, rubbish vegetable matter and other extraneous substance and in the case of metal, screened to gauge, if so directed when ready. It shall be stacked entirely clear of the road way, on ground which has been cleaned of vegetation and leveled. On high banks, ghat roads etc. where it may not be practicable to stack it entirely clear of the roadway it may be stacked with the permission of the Engineer-in-charge on terms in such a way as to cause minimum danger and obstruction to the traffic or as may be directed by him.

27.12 The size of the stacks for materials other than rubble shall be 3.00 Metre X 1.50 Metre x 0.80 Metre or such other size as may be directed by the Engineer-in-charge and all but one stack in 200 Meter shall be of the same uniform size and shall be uniformly distributed over whole lengths. One stack (at the end) in each 200 Metre may be of length different from the rest in order to adjust total quantity to be required but its width and height will be the same as those of the rest.

27.13 The Sub Divisional Officer shall supply the Contractor with statement showing furlong wise quantities that will be required and the order in which the collection is to be done. No materials in excess of requirements in that furlong shall be stacked. Any excess quantity shall be removed at the expenses of the Contractor or piece worker to where it is required before the material in that furlong is finally measured.

27.14 In slacking materials the deposition shall commence at the end of the KM fastest from the quarry and be carried continuously to the other end (unless otherwise directed by the Executive Engineer). Stacking in one 200 M shall be completed before it is started in another, unless directed otherwise, in writing by the Executive Engineer. Measurements of the materials stacked in a furlong will not be recorded until the full quantity required has been stacked.
27.15 All the materials such as asphalt, cement, steel etc. shall be procured by the contractor from approved Government Institutions or as directed by Engineer-in-charge only. The materials shall be brought at the site of work well in advance by the contractor. The contractor shall be responsible for all transportation and storage of the materials at the site and shall bear all the related costs. The Engineer shall be entitled at any time to inspect or reasonable assistance. (or such inspection as may be required)

27.16 After receiving bitumen, the authorized challan / gate pass should be obtained from the refinery mentioning the quantity of bitumen, rate of bitumen, date of delivery etc. And it should be handed over to the department for each consignment. Similarly the invoice of cement etc. shall be given to the authorised representative of the Engineer in charge immediately on procurement of the materials.

27.17 The day to day record of the receipt / utility balance of material should be kept by the contractor in the form of register for each material like asphalt, cement, steel at plant site / site of work / store and the same will be checked by the Engineer-in-charge or authorised Engineer at anytime. This register shall be signed daily by the contractor or his representative and representative of Engineer-in-charge. The contractor shall submit periodically as well as on completion of work an account of all materials used by him on the work to the Engineer-in-charge.

27.18 While transportation of bouzer, transport pass should be obtained from those corporation / municipality through whose limits the bouzer is passed and should be handed over to the authorised representative of the department.

27.19 The procurement of cement / steel etc. should be from authorised manufacturing company / institutions and vouchers regarding purchase thereof shall be submitted to the Engineer-in-charge. The material from any other source other than the approved institutions shall not be allowed unless written permission from the Executive Engineer is taken. In such cases certificate for test, quality shall be produced by the contractor and samples of materials shall be tested from any Government laboratory by the contractor at his cost and the test results be supplied to the department. The materials not conforming to the required standard shall be removed at once from the Site of work by the contractor at his own cost. All the materials
such as asphalt, cement etc. required for use In the work shall be confirmed from the concerned 1000 of M.O.R.T.H. specifications. These materials shall be used on work by the contractor only after the tests thereof are found satisfactory. The responsibility of carrying out tests to the frequencies specified for each material shall rest with the Contractor.

The R.C.C. pipes required for the work shall be procured from the Maharashtra Small Scale Industrial Development Corporation only. The payment towards the item of providing and fixing NP2 / NP3 / NP4 Pipes will be released only after the contractor submits the bills of MSSIDC to authenticate that the pipes have been purchased from the MSSIDC. No payment toward the item of providing and laying of pipe will be released in absence of the submission of requisite documents.

27.20 Any consignment or part of consignment of cement which is dilapidated in any way shall not be used In the works and shall be removed from the site by the contractor without charge to the employer.

27.21 Cement shall be transported and handed and stored on the site such a manner as to avoid deterioration, contamination. Each consignment shall be stored separately so that it may be readily identified and inspected. Cement shall be used in the sequence in which it's delivered at site.

27.22 The contractor shall prepare and maintain proper records on the site in respect of deliver, handling, storage and use of cement and these records shall be made available for inspection by the Engineer at all times.

27.23 The contractor shall construct at his own cost shed / sheds as per directions of the Engineer-in-charge for storing the material and providing double locking arrangements. (one lock of department and other of the Contractor) Materials shall be taken out from stores only in presence of authorised representative of the Engineer-in-charge. The store shed constructed on site shall be removed on completion of work. The contractor shall take all necessary steps to guard the materials brought by him.

27.24 Cement to be used in the works shall be any of the following types with the prior approval of the Engineer. Ordinary Portland cement conforming to IS 8 112 (latest edition) Ordinary / Portland
cement conforming to IS 12269 (latest edition)

27.25 TMT FE-500 grade conforming to I.S. 1786 shall be used for reinforcement.

27.26 Bulk bitumen of IS grade VG-30 grade shall be used and also for Tack coat

27.27 The contractor shall make his own arrangement for the self custody of the materials brought by him on the site of work.

27.28 The charges for conveying of the material from the place of the purchase by the contractor to the site of work and the actual spot of work shall be entirely borne by the contractor, No claim on this account shall be entertained.

27.29 Register showing dispatch of bituminous load from the plant, vehicle No., time of dispatch, temperature at the time of dispatch etc. shall be kept in prescribed form at hot mix plant site. Similarly register showing the time, temperature of the mix at the site shall be kept the authorised representative of the contractor shall fill both these registers. These shall be signed by the Contractor everyday in token of acceptance. The maintenance of these registers does not absolve the contractor of his contractual obligation towards quality of the work.

27.30 The contractor should ensure that all safety precautions are observed by the labours while handling the materials and precautions. For their labour at the cost of the contractor and the contractor will bear all the expenses compensation etc. If any incident occur to the labour etc. no claim in this regard what-so-ever shall be entertained and the decision of the Department will be final and conclusive.

27.31 In case the materials become surplus owing to the change in the design of the work after the materials are brought by the contractor, no claim in this regard will be entertained and the contractor will be required to take away such materials from the site.

27.32 The contractor should arrange for weighment of the bouzer if desired by the Engineer in charge. The weighment shall be done in the presence of representative of the department at the cost of the contractor.

27.33 The weight of the steel bars used on the work will be calculated
on the basis of standard weight per unit length vide IS. 1732. No wastage of steel will be considered at all. Cut pieces of the steel irrespective of the length will be the property of the contractor and no claim whatsoever in this regard shall be entertained. The consignment of the steel brought by the contractor having weight less than the standard weight per unit length of the bar as mentioned above will not be accepted. For this purpose random sample will be tested by the Executive Engineer and the decision of the Executive Engineer shall be binding on the contractor, if the steel received is over weight (more than standard weight per running meter length) no extra payment will be made and no claim in this regard whatsoever shall be entertained.

27.34 No claims on account of cement or steel rods used for ancillary works on Site of work shall be entertained.

27.35 All the materials to be brought on site shall be brought only on working days and in presence of an authorized representative of the Engineer-in-charge.

27.36 All the materials such as cement, mild steel, H.Y.S.D. Bars, TMT Bars etc. required for execution of work shall be brought by the contractor at his own cost.

27.37 The contractor shall maintain the record of these materials (cement, steel etc.) in the prescribed proforma and registers as directed by Engineer-in-charge. The sample of prescribed proforma is attached at the end. These registers shall be signed by both the contractors and representative of the Engineer-in-charge. These registers shall be made available for inspection, verification for the Department as and when required. These registers shall be in the custody of Department and shall be maintained by the Department.

27.38 The material required only for this work shall be kept in the go-down at site. No material shall be shifted outside of the go-down site except for the work for which this agreement is entered without prior approval of the Engineer-in-charge.

27.39 The materials i.e. cement, steel etc. brought on the work site shall be accompanied with necessary company/manufacturing firm’s test certificates. In addition these materials shall be tested as per frequency prescribed by the Department and the cost of such testing shall be borne by the contractor. If the test results are satisfactory, then and then only the material shall be allowed to be used on the
work. If the test results are not as per standards prescribed, these materials shall be immediately removed from the work site at the contractor's cost. In case of cement, if so requested by the contractor in writing, material shall be allowed to be used before receipt, of test results but this will be entirely at the risk and cost of the contractor.

27.40 The contractor shall produce sufficient documentary evidence i.e. bill for the purchase of materials brought on the work site at once if so required by the department.

27.41 All these materials i.e. cement, steel etc. shall be protected from any damages rains etc. by the contractors at his own cost.

27.42 The contractor will have to erect temporary shed of approved specifications for storing of above materials at work site at contractor's cost having double locking arrangements (By double lock it/s meant that godown shall always be locked by two locks, one lock being owned and operated by contractor and other by Engineer-in-charge or his authorised representative) and the door shall be openable only after both locks are opened.

27.43 If required, the weighment of cement bags / steel etc. brought by the contractor shall be carried out at his own cost.

27.44 The contractor shall not use cement and other material for the item to be executed outside the scope of this contract except for such ancillary small items as are connected and absolutely necessary for this work as may be decided by the Engineer-in-charge.

27.45 The Government shall not be responsible for the loss in cement and steel during transit to work site. The cement brought by the contractor at the work site store shall mean 50 Kilogram equivalent to 0.0347 cubic meter per bag by weight. The rate quoted should correspond to this method of reckoning. In case of ordinary / Controlled concrete, if cements found short, the shortage / shortages will be made good by the contractor at his cost.

28. MISCELLANEOUS :-

28.1 Rate shall be inclusive of Sales Tax, General Tax and other taxes etc.

28.2 For providing electric wiring or water lines etc. recesses shall be provided if necessary, through walls, slabs, beams etc. and later on
refilled up with bricks or stone chipping, cement mortar without any extra cost.

28.3 In case it becomes necessary for the due fulfillment of contract for the Contractor to occupy land outside the Dept. Limits, the Contractor will have to make his own arrangements with the land owners and to pay such rents if any are payable as mutually agreed between them.

The Department will afford the Contractor all the reasonable assistance to enable him to obtain Government Land for such purpose on usual terms and conditions as per rules of Government.

28.4 The special provision in detailed specifications or wording of any item shall gain precedence over corresponding contradictory provision (if any) in the standard specifications or P.W.D. Hand book where reference to such specifications is given without reproducing the details in contract.

28.5 Suitable separating Barricades and enclosures shall be provided to separate material brought by contractor and material issued by Government to contractor under Schedule "A" Same applies for the material obtained from different sources of supply.

28.6 It is presumed that the Contractor has gone carefully through the Standard Specifications of P.W.D. Hand Books, specification of Road and Bridges of MORT&H latest edition 2013 and the Schedule of Rate of the Division and studied the site condition before arriving at rates quoted by him. Decision of the Engineer-in-charge shall be final as regards interpretation of specifications.

28.7 The stocking a storage of construction material at site shall be in such a manner as to prevent deterioration or intrusion of foreign matter and to ensure the preservation of their quality, properties and fitness of the work. Suitable precautions shall be taken by the Contractor to protect, the material against atmospheric actions, fire and other hazards. The materials likely to be carried away by wind shall be stored in suitable stores or with suitable barricades and where there is likely hood of subsidence of soil, such heavy materials shall be stored on approved platform.

28.8 For Road and Bridge works, the contractor shall in addition to the specifications cited here, comply with requirements of relevant I.R.C. Code of Practice and MORT&H.
28.9 The Contractor shall be responsible for making good the damages done to the existing property during construction by his men.

28.10 If it is found necessary from safety point of view to test any part of the structure, the test shall be carried out by the Contractor with the help of the Department at his own cost.

28.11 The contractor shall provide, maintain, furnish and remove on completion, temporary shed for office on work site for the use of Executive Engineer's representative.

28.12 Defective work is liable to be rejected at any stage. The contractor, on no account can refuse to rectify the defects merely on reasons that further work has been carried out No extra payment shall be made for rectification.

28.13 General directions or detailed description of work, materials and items coverage of rates given in the specification are not necessarily repeated in the Bill of Quantities. Reference is however, drawn to the appropriate section clause(s) of the General Specifications in accordance with which the work is to be carried out.

28.14 In the absence of specific directions to the contractor, the rates and prices inserted in the items are to be considered as the full inclusive rates and prices for the finished work described there under and are to cover all labour materials, wastage, temporary work, plant, overhead charges and profits, as well as the general liabilities, obligations and risks arising out of the General conditions of contract.

28.15 All measurements will made in accordance with the methods indicated in the specification, and specification read in conjunction with the General Conditions of Contract.

28.16 The details shown on drawings and all other information pertaining to the work shall be treated and provisional only and are liable to variation as found necessary while preparing working drawing which will be supplied by the Government during execution. The contractor shall not, on account of such variation be entitled to any increase over the ones quoted in the tender which are on quantity basis.

28.17 The recoveries if any from contractor will be effected as arrears of land revenue through the Collector of the District.

28.18 Protection of underground telephone cable and aerial telephone wires and poles, transmission towers, electrical cables, and water supplying lines. It will therefore be the responsibility of the contractor
to protect then carefully all such cases should be brought to the notice of the Engineer-in-charge by the contractor and also the concerned department, any damage what so ever done to these cables and pipe lines by the contractor shall be made good by him at his cost.

28.19 Public Utilities:

Action in respect of public utilities will be taken by the Contractor as envisaged in Clause 110 of Ministry's Specifications for Road and Bridge work (5th Revision).

29. PAYMENTS AND MEASUREMENTS :-

29.1 PAYMENT :-

The contractor must understand clearly that the rates quoted are for completed work and include all costs due to labour, scaffolding, plant, machinery, supervision, power, royalties, octroi, taxes etc. And should also include all expenses to cover the cost of night work if and when required and no claim for additional payment beyond the prices or rates quoted will be entertained.

The mode of measurements has been indicated in the specification and in the schedule of payments, if there is any ambiguity or doubt in this respect the decision of Superintending Engineer will be final.

29.2 Two payments in a month will be granted by the Engineer-in-charge for construction of Bridge, if the progress is satisfactory, and shall be made as per, accepted payment schedule.

29.3 In respect of Black Top Work, 15% (Fifteen Percent) payment of Black Top in a particular Km. shall be retained till completion of side berms / C.D. Works, 5th Km. stone, Km. stone, 200 meter stone etc. in that km. After completion of other items satisfactorily, the withheld payment will be released finally.

29.4 Contractor can have copies of the measurements and of the bills paid to him at his own cost and his own responsibility.

29.5 Additional Condition about availability of Funds :-

The budget provision for this work is less at present. The payment of bills will be made as per the availability of funds. No claims will be entertained for delayed payments.

If situation arises, the work will be stopped at safe stage and
will be withdrawn under clause 15 for which no compensation will be allowed.

30. MAINTENANCE: (ROADS)

30 (i) The Contractor shall maintain the finished surface of the road for a period mentioned in Clause No. 20 after the completion of work without any extra cost to Government irrespective of the designs, standards and specifications and the actual traffic etc. The Contractor shall get the pot holes filled up with asphalt mix materials and keep the road surface in good condition through out the year. 5% amount of the total work done shall be recovered from running account bills and shall be withheld for period mentioned in Clause No. 20 from the date of actual completion of work as maintenance charges of maintaining and keeping the road in good condition. This 5% amount withheld towards maintenance charges shall be allowed to be replaced with bank guarantee or other recognised forms at intermediate stage, if so desired in writing. This maintenance charges shall be in addition to security deposit.

30 (ii) On completion of the work in all respects, necessary certificate will be issued by the concerned Executive Engineer and the defects liability period will be counted from the date of issue of such certificates.

30 (iii) It will be responsibility of the contracting Agency to maintain total road length under work portion of this contract Agreement in good condition from the date of issue of work orders, till completion of defect liability period as per Clause 20 and this shall be treated as part of total scope of this contract Agreement. In case the contractor fails to maintain road length properly including rectification of the defects pointed out by the department within a period of 7 days from the date of written notice by the Engineer-in-charge rectification / repairs to such defects will be carried out by the department at contractor’s risk and cost. The expenditure incurred on such rectification work shall be recovered from the amount withheld as per Clause 30 (i) / 30 (ii) for Building / Roads respectively.

30 (iv) All damages during execution shall be made good by the Contractor at his cost. He will be responsible for any damages to the road surface including B.T. surface in rainy seasons and during construction and guaranteed maintenance period and no separate
payment will be made for restoring such damages.

"Any defects noticed in finished black topped surface such as pot holes, damages etc. within a period mentioned in Clause 20, after completion of work (including Monsoon) will have to be repaired by the Contractor at his own cost."

30 (v) Defective work is liable to be rejected at any stage. The Contractor on no account can refuse to rectify the defects merely on reasons that further work has been carried out. No extra payment shall be made for such rectification.

31. FINAL BILL:
31.1 The contractor should submit final bill within one month after completion of the work and the same will be paid within 5 months if it is in order. Disputed items and claims, if any shall be excluded from the bill and settled separately later on.

31.2 Bills for extra work or for any claim shall be paid separately apart from the interim bills for the main work. The payment of bills for the main work shall not be withheld for want of decision on the extras or claims not covered in the stipulations of the contact.

31.3 Claims for extra work shall be registered within 30 days of occurrence of the event. However, bills for these claims including supporting data and details may be submitted subsequently at his own cost.

32. PRELIMINARY ARRANGEMENTS :-
32.1 The Contractor if necessary construct temporary roads and maintain these in proper condition till the completion of the work at his own cost. If necessary, he shall also, at his own expenses make necessary arrangements for acquisition of land required by him in connection with the execution of the work.

32.2 The contractor shall have to makes at his own cost all preliminary arrangements for labour, water electricity and materials etc. immediately after getting the work order. No claim for any extra payment or application for extension of time on the grounds of difficulty in connection with the above matter, will be entertained,
32.3 The contractor shall at his own expenses, engage watchmen for guarding the materials and plant and machinery and the work during-day and night against any pilferage of damages and also for prohibiting trespassers or damage to them.

32.4 The contractor shall have to make his own arrangement for water required for any purpose on the work.

33. INSPECTION :-

33.1 The contractor shall inform the Engineer-in-charge in writing when any portion of the work is ready for inspection giving him sufficient notice to enable him to inspection to inspect the same without affecting the further progress of the work. The work shall not be considered to have been completed in accordance with the terms of the contract until the Engineer-in-charge shall have certified in writing to that effect. No approval of materials or workmanship or approval of part of the work during the progress of execution shall bind the Engineer-in-charge or in any way affect him even to reject the work which is alleged to be completed and to suspend the issue of his certificate of completion until such alterations and modifications or reconstruction have been effected at the cost of the contractor as shall enable him to certify that the work has been completed to his satisfaction.

33.2 The contractor shall provide at his cost necessary ladders and such arrangements as to provide necessary facilities and assistance for proper inspection of all parts of the work at his own cost.

33.3 The contractor after completion of work shall have to clean the site, of all debris and remove all unused materials other than those supplied by the Department and all plant and machinery, equipment, tools etc. belonging to him within one month from the date of completion of the work, or otherwise the same shall be removed by the Department at his cost and the contractor shall not be entitled for payment of any compensation for the same.

34. ACCIDENT :-

In the event of an accident involving serious injuries or damages to human life or death of any of his employees and or labourers or tress passers, the same will be reported within 24 hours of the occurrence to the Executive Engineer and the Commissioner of workmen’s compensation.
35. **PLANT:-**

All constructional plant, provided by the contractor shall when brought on to the site be deemed to be exclusively intended for the construction of this work and the contractor shall not remove the same or any part thereof (Say for the purpose of moving it from one part of the site to another or the repairs etc.) without the consent in writing of the Engineer-in-charge which shall not be unreasonably withheld. The concreting shall be done by the ready mix batch type concrete mixer diesel or electrically operated with a minimum size of 200 litres with automatic water measuring system and integral weigher (Hydraulic or pneumatic type one). This RMC Plant may be of portable type.

For Grade –I / Grade-II / Grade –III / WBM and for BUSG work metal shall be supplied at site only after screening it on “screening unit”. The special “mechanical vibratory screening unit” arrangement shall consist of main input hopper to receive raw metal, conveyor belt to transport it to the “mechanical vibratory screening unit”. The “mechanical vibratory screening unit” shall have required number of trays, sieves / decks as directed by the Engineering in charge. The output of “mechanical vibratory screening unit” shall be conveyed to “storage Unit” where metal of different sizes, shall be stored separately. Metal so supplied shall undergo all the tests as per the specifications. As a input to the main input hopper, contractor may use hand broken metal or output of primary crusher / cone crusher of size or equivalent to not less than 24” x 18”. The metal so supplied from the “mechanical Vibratory screening unit” at site shall not exempt the contractor from carrying out tests as specified in the specifications.

36. **EXCEPTED RISKS :**

36.1 The contractor shall be under no liability whatsoever by way indemnity or otherwise for or in respect of destruction of or damage to the works (save work condemned under the provisions of specifications and conditions of this tender prior to the occurrence of any excepted risk hereinafter mentioned) or temporary works or to property whether of the Department or third parties or for or in respect of injury or loss of life which is the consequence whatever direct or indirect, were hostilities (whether were to declared or not) invasion, act of foreign enemies, rebellion, revolution, insurrection or military of usurped power. Civil war or riot, commotion or disorder otherwise than among the contractor’s own employees or his piece worker and sub-agencies (hereinafter comprehensively referred to as

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"The said excepted risks") and the department shall indemnify and save harmless the contractor against and' from the same and against and from all claims, demands proceedings, damages, costs charges and expenses, whatsoever arising there out or in connection therewith and shall compensate the contractor for any loss of or damage to property of the contractor used for intended to be used / or the purpose of the works and laying at site of work and occasioned either directly or indirectly by the said excepted risks.

36.2 If the works or temporary works or any materials (whether for the former or the later brought to site shall sustain destruction or damages by reasons of any of the said excepted risks, the contractor shall be entitled payment for any permanent works and for any materials so destroyed or damaged and shall be paid by the department the cost of making good any such destruction or damages whatever to the works or temporary works and for replacing or making good such materials so far as may be necessary for the completion of the works on a prime costs basis as the Engineer-in-Charge may certify to be reasonable. The contractor shall lodge his claim, in writing, supported by Engineer-in-charge immediately, but not later than 30 days of such occurrence of damage to works by excepted risk.

36.3 Destruction, damage injury or loss caused by the explosion or impact whenever and wherever occurring of any mine bomb, shell, grenade or other projectile missile or ammunition or explosive or war resulting from action described in above shall be deemed to be a consequence of the said excepted Risk.

37. ADDITIONAL WORKS SPECIFICATIONS :-

37.1 The whole work shall be carried out strictly in accordance with the approved detailed drawing (unless otherwise directed) description of the items, detailed specification of the MORT&H for Bridge and Road Works 5th revision 2013, standard Specification book IIth edition (with Indian Standard specification indicated therein) of P.W. Department, Government of Maharashtra subject to the additional specification given for the relevant items and in the best workmen like manner.

37.2 While adopting the relevant number and pages for different items of the M.O.S.T. Specifications for Bridges and Road Works. IIIrd revision 1995 Standard Specification Book, due care has been taken to indicate correct number and page for the various items. However if for
some reasons or other it is noticed that the specification numbers and pages quoted are not pertinent, the contractor is bound to carry out the work in accordance with the correct relevant specifications for the item or items from the standard specification Book. After taking into account the description of the items, scope and spirit of the work.

**37.3** It is to be definitely and clearly understood that the specifications stipulated shall be rigidly enforced and no relaxations shall be allowed. Extra charges or claims in respect of extra works shall not be entertained unless they are clearly outside the scope of the item and its specifications to which they relate or unless such works are ordered in writing by the Executive Engineer and claimed for in specified manner before the same is taken in hand.

**38. QUALITY ASSURANCE AND MAINTENANCE:**

**38.1.** The contractor to ensure the specified quality of work which will also include necessary surveys, temporary works etc. The contractor shall prepare a quality assurance plan and get the same approved form the Engineer-in-charge within one month from the date of work order. The contractor shall submit an organization chart of his technical personnel to be deployed on the work along with their qualification, job descriptions defining the functions of reporting, supervising inspecting and approving. The contractor shall also submit a list of tools, equipment and the machinery and instruments which he proposes to use for the construction and for testing in the field and or in the laboratory and monitoring. The contractor shall modify/supplement the organisation chart and the list of machinery, equipment etc. as per the directions by the Superintending Engineer Engineer-In-Charge and shall deploy the personnel and equipment on the field as per the approved chart and list respectively. The contractor shall submit written method statements detailing his exact proposals of execution of the work in accordance with the specification. He will have to get those approved from the Engineer-in-charge. The quality of the work shall be properly documented through certificate, records, check-lists and logbooks of results etc. Such records shall be complied from the beginning of the work and be continuously update and supplemented and this will be the responsibility of the contractor. The forms should be got approved form the Executive Engineer-in-charge.
38.2 Where the work is to be done on lump sum basis on contractor’s design the contractor shall also prepare and submit a maintenance manual giving procedure for maintenance, with the periodicity of maintenance works including inspections, tools and equipment to be used, means of accessibility for all parts of the structure. The maintenance manual shall be approved by the Engineer-In-Charge. He shall also include the manual the specifications for maintenance work that would be appropriate. For his design and technique of construction. This manual shall be submitted within the contract period.

39. TECHNICAL COMPLETION REPORT

The contractor shall submit Technical Completion Report along with his final bill, which shall include:

1. Detailed measurements
2. Working drawing
3. Details of material brought on site and consumed in the work, which shall also indicate standard consumption and deviation if any, with reasons.
4. Test Results of all materials used in the work with an abstract of total tests carried out and required as per frequency of tests as laid down in the relevant M.O.R.T.& H. Specifications.

40. ADDITIONAL SPECIAL CONDITIONS

1. Details of works carried out by the contractor of similar type and magnitude, similar work environment which may be of Government/Semi-Government but must be in India. The contractor shall be aware of the Bye-laws of Building Permission & shall follow it scrupulously.

2. Shuttering requirement.

Contractor must have shuttering and formwork of Marine Ply / Steel plates, Acrospan, Aluminium Formwork, The Maximum eight repetition will be allowed for all types of wooden shuttering material.
Contractor shall use adjustable metal props for supporting all R.C.C. elements. The form work design shall be approved by the Engineer in Charge before erection.

3. The contractor shall setup a material testing Laboratory at site with all necessary equipment.

4. For all concrete works will be carried out using Concrete Mixer Weight batch type of appropriate capacity of any standard company with diesel or electric operated. The Engineer may at his discretion, allow in writing hand mixing of concrete for minor items where small quantities are involved but in that case the Contractor shall increase the cement content of the mixture by 10% without any extra cost.

5. The cement to be used in the various Items must be of O.P.C. grade and for the concrete work Fly Ash can be used at maximum 17% of total cementious content.

6. The natural sand to be used in various items shall be as per IS 383-1970.

7. All the cementitious work should be properly cured as per the requirement of the item.

8. The placement of the concrete and the shuttering shall be as per relevant I.S Codes.

9. The contractor should submit the system of quality control at the AAC Block / Fly ash Brick manufacturing unit.

10. The planning Engineer at site must be well acquainted with MS Project software.

11. All the required equipment / connectivity / software / hardware should be supplied by the Contractor to his personnel at site. The system of software should be compatible with the, then PWD Software and interface. Contractor shall construct the Site office for the Government / PMC Staff having minimum area of 200.00 Square Metre. without claiming for any extra cost. The Office should be equipped with latest communication systems like video conferencing etc.

12. **Staff safety.**

   While executing the work, necessary precautions regarding safety of labour, supervisory staff, public and traffic users shall be taken by the agency according to rules and regulations specified by
the Government of India / Government of Maharashtra and as directed by District Court.

Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period works as can be done safely from ladders. When ladder is used an extra mazdoor shall be engaged to hold the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 to 4 (1 horizontal and 4 vertical).

Scaffolding or staging more than 3.25 metre above the ground or floors, swing or suspended from an overhead support or erected with stationary support, shall have a guard rail properly attached, bolted, braced and otherwise assured atleast 1 metre high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

Working platform, gangways and stairways shall be so constructed that they do not sag unduly or is more than 3.25 meter above ground level or floor level, it shall be closely boarded, have adequate width and be suitably fenced as described in 2 above.

Every opening in floor of the building or in a working platform shall be provide with suitable protection to prevent fall of persons or materials by providing suitable fencing or railing with minimum height of 1 metre.

Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 metre in length, width between side rails in a rung ladder shall in no case be less than 30 centimetre for ladders upto and including 3 metre in length. For longer ladders with width shall be increased atleast 6 millimetre for each additional 30 centimetre of length. Uniform step spacing shall not exceed 30 cm.

Adequate precautions shall be taken to prevent danger from electrical equipments. No materials on any of the site shall be stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect public from accidents and shall be bound to bear expenses
of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precaution and to pay any damages and costs which may be awarded in any such suit, action or proceeding to any such person or which may with the consent of the Contractor, to be paid to compromise any claim by any such person.

For the construction work of upper floors safety nets should be provided on the floor beneath it.

All the Staff, labour at site should be protected with the appropriate safety measures.

13. Contractor should use new centering material for all the concreting work with the maximum repetition shall not exceed 8 Numbers. At the same time the Centering material shall be got approved from the Engineer -In-Charge advance.

14. Steel to be used shall be invariably from the **integrated plant steel** more specifically TATA, SAIL, JINDAL etc. and the cement to be used shall be of ISI mark and of major plant only with reputed name. Any imported material regarding steel, cement will not be allowed.

15. For steel cutting, bending, shuttering and allied works specific location shall be earmarked at site. All the transportation vehicle shall be equipped with vehicle tracker. Proper care to be taken to avoid the corrosion of the steel at store/yard by applying cement slurry without claiming for any extra cost.

16. Contractor shall provide a mock up room at site.

17. While excavation care should be taken by the contractor regarding noise level at night. No excavation activity shall extend beyond 10 PM at night. Contractor should follow the traffic rules regarding the conveyance of material at night.

18. It is on the part of contractor to take necessary permission from the concerned Traffic Police regarding the conveyance of material.

19. While conveyance of the material contractor shall observe that there should not be any inconvenience to the traffic and no material should drop on road.

20. Contractor shall provide web based integrated project management software’s like Think Project /Prologue or similar Systems for complete monitoring of the project.
21. **Provide minimum level of sanitation / safety facilities for construction workers:**

   The contractor shall strictly follow the provisions contained in Clause-18 & its sub-clause; Clause-19 & its sub-clauses of GCC-2010 for providing basic amenities to the workers. The contractor shall ensure cleanliness of workplace with regard to the disposal of waste and efficient provide clean drinking water and latrines and urinals as per applicable standard. The contractor shall strictly follow the “CPWD SAFETY CODE” of GCC-2010.

   The contractor shall comply with the National Building Code 2005 norms on construction safety for ensuring safety during construction. The National Building Code 2005 have provisions for clean and hygienic accommodation, toilet facilities, purified drinking water, general store, a subsidized canteen, medical facilities, day care centre and onsite safety equipments, etc.

   The contractor shall adopt additional best practices and prescribed norms as in NBC 2005.

   The contractor shall submit sufficient documentary & photographic evidences in compliance to above three paras.

22. **Reduce air pollution during construction:**

   The contractor shall ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility and water spraying facility to reduce air pollution during construction. The site roads should be regularly sprayed with water and wheels of all vehicles should be washed to prevent air pollution. The contractor shall transfer, handle / store dry loose materials such as bulk cement and dry pulverized fly ash inside a totally enclosed system.

   The contractor shall install dust screen (at least 3 M high) around the disturbed area to prevent air pollution and spillage to undisturbed site area.

   The contractor shall undertake the responsibility to prevent air pollution (dust & smoke), ensure availability of adequate water supply for dust suppression, devise methodology to minimize impact of dust on the surrounding environment and ensure that these methods are implemented. The contractor shall provide documentary evidence regarding the method of working, plant equipment and air-pollution-control system being adopted on the site.
The contractor shall efficiently use the natural resources (water, energy and materials) and takes measures to conserve the natural resources.

23. **Efficient water use during construction**:

The contractor shall prevent wastage of water during curing. The contractor shall also make efforts to minimize use of potable water during construction by proper & efficient construction water management on site.

The contractor shall construct Sedimentation tank for collecting excess curing water.

24. **Reduction in waste during construction, Efficient waste segregation, Storage and disposal of wastes & Resource recovery from waste**:

The contractor shall ensure maximum resource recovery and safe disposal of wastes generated during construction and reduce the burden on landfill. The contractor shall segregate inert, chemical and hazardous wastes separately. The contractor shall make all efforts to recycle/safe disposal of segregated wastes (oil, paint, batteries & asbestos). The contractor shall dispose-off the inert waste at landfill sites duly approved by local body/Engineer-in-charge.

The contractor shall keep record of all waste generated during construction activity and storage facility for segregated inert and hazardous waste before recycling and disposal.

The contractor shall use multi-colored bins for waste segregation at source at his own cost.

The contractor shall (in consultation with Engineer-in-charge) allocate separate space for the collected waste before transferring to the recycling/disposal stations.

The contractor shall make arrangements for recycling of waste through local (Junk) dealers. The contractor shall also keep record of such transactions and provide the same to the department as and when required.

The contractor shall make all efforts for achieving zero waste generation by adopting appropriate resource recovery measures.
25. **Minimize ozone depleting substances:**

The contractor shall employ 100% zero ODP (ozone depletion potential), HCFC (hydrochloro-fluorocarbon) free and CFC (chloro-fluorocarbon) free insulation such as HCFC free rigid form insulation, mineral fibre cellulose insulation, glass fibre, wood fibre board, cork wool, expanded (bead) polystyrene, recycled newspaper and jute & cotton duly approved by Engineer-in-charge. The contractor shall not use materials which are not inherently zero-ODP such as polyurethane foams and polyisocyanurates. The contractor shall also submit certificates & vouchers from suppliers/manufacturers that the insulation used are ODP/CFC/HCFC free.

26. **Ensure water quality:**

The contractor shall ensure that water used in construction meets the water quality norms as prescribed in the Indian Standards for various applications. The contractor shall get the water tested with regard to its suitability of use in the works and get written approval from the Engineer-in-charge before he proceeds with the use of same of execution of works. If the water is not suitable, the contractor shall arrange Municipal water or from any other sources at his own cost and nothing extra shall be paid to the contractor on this account. The water shall be got tested at frequency specified in latest CPWD specifications/BIS code.

27. **Preservation of Existing Trees.**

It is obligatory on the part of Contractor to take utmost care to preserve the existing trees as it is and in no case contractor shall be allowed to cut the existing trees or the branches there of, without written permission of the Engineer-in-Charge and the competent authority. The Existing trees shall be protected by erecting 1.2 m high temporary half brick partition wall in the form of tree guard, at no extra cost.

28. **Entry and exit of the construction vehicle shall be properly maintain by merging in and diverging out so as to avoid the accidents .**

29. **The contractor shall display the board at site showing the name of work, Project cost, Project duration, Name of contractor.** etc. as directed by Engineer-In -Charge.

30. **Contractor shall be fully responsible for any mishaps / accidents during construction at the time of construction.** He should make all
necessary safety arrangements to ensure safety of existing building users. He should get necessary insurance cover. Offer of contractor shall be inclusive of all costs for making such insurance cover and safety arrangements. He shall not be paid separately for making such necessary arrangements.

31. Any damages to the existing structure shall be made good by the contractor at his cost, as per the instructions of engineer in charge. He shall not be paid separately for making such necessary repairs to damages. Offer of contractor shall be inclusive of all costs for making such necessary repairs.

32. The contractor should make adequate provision and make preventive arrangement to avoid dust and noise pollution in the premises at his own cost.

41. ADDITIONAL SPECIAL CONDITIONS FOR HOTMIX ASPHALTIC WORKS:

1. Clause No.106 of Ministry’s Specifications (5th Revision, 2013)
   This clause stipulates certain conditions relation to choice and use of equipment which have relevance to production of quality work. These are :-
   a) The Contractor shall be required to give a trial run of the equipment for establishing capability to achieve the laid down specifications and tolerances to the satisfaction of the Engineer before commencement of work.
   b) All equipment provided should be proven efficiently and shall be operated and maintained at all times in a manner acceptable to the Engineer.
   c) No equipment and personnel will be removed from the site without the permission of the Engineer.

2. The contractor has to ensure that the temperature of hot mix material and its ingredients is within the specified range as per MOST specification at the time of before mixing, during mixing and laying.

3. Clause No. 901 of Ministry's Specifications (5th Revision, 2013)
   a) The responsibility for the quality of the entire construction work is on the Contractor. For this purpose he is required to have his own independent and adequate setup.
b) The Engineer for satisfying himself about the quality of the material and work will also have tests conducted by quality control units or by any other agency, generally to the frequency set out in the specifications. For test to be done by the Engineer, the Contractor is to render all necessary co-operation and assistance including the provision of labour assistance in packing and dispatching samples etc.

c) For the work of embankment, sub-grade and pavement, construction of subsequent layer of the same or other material over the finished layer shall be done only after obtaining approval from the Engineer.

d) The Contractor shall be responsible for rectifying / replacing any work falling short of quality requirements as directed by the Engineer.

4. **CLAUSES IN THE CONDITION OF CONTRACT**

a) All materials and workmanship shall be of the respective type described in the contract and in accordance with the Engineer’s instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the site. All samples shall be supplied by the Contractor.

b) No work is to be covered up or put out of view without the approval of the Engineer for his examination and measurements.

c) During the progress of the works, the engineer shall have the power to order the removal from the site of any unsuitable material, substitution or proper suitable material and the removal and proper re-erection notwithstanding any previous test or interim payment therefore, and of any work which is in respect of materials or workmanship is not, in the opinion of the Engineer in accordance with the contract.

42. **GUIDELINES ON QUALITY CONTROL OPERATIONS:**

The onus of achieving quality of work will be on the Contractor who will take actions as stipulated in Section 900 of Ministry’s Specifications for Road and Bridge Works, 5th Revision, April, 2013 edition.

43. **SUPERVISING CONTROL AND DATA ACQUISITION (SCADA) :-**

Engineer in charge shall allocate unique identification number to the work of this contract for all bituminous items under this contract, the contractor shall provide web based Supervisory Control and Data Acquisition (SCADA) arrangements for the following :-

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<tr>
<th>Contractor</th>
<th>No. of Corrections</th>
<th>Executive Engineer</th>
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43.1 **(A) Bituminous Batch Mix Plant :-**

Engineer in charge shall allocate unique identification number to the work of this contract. For all Bituminous items under this contract, the contractor shall provide web-based Supervisory Control and Data Acquisition (SCADA) arrangements for the following :-

(i) Temperature and Weight of metal in all Hot bins before mixing, in every batch.

(ii) Temperature and Weight of Bitumen and Filler before mixing, in every batch.

(iii) Temperature and weight of mix material of every batch.

At Batch mix plant, temperatures should be sent directly to SCADA device (SCADA Box). No PC or software program should be connected with SCADA device to receive the temperature and send to PWD server. No data should be sent through PC or any program/software installed in it.

The data should directly be sent from SCADA box through GPRS connection / Ethernet connectivity, to be provided by the contractor. The SCADA box should have facility to write WORK ID, Type of Material, Truck Number which will be sent by SCADA device directly to PWD server.

To enter the Truck number, RFID device should be used comprising of RFID tag and RFID reader. The tag will contain Truck Number which will be swiped on the RFID reader connected to the SCADA device, which will send the RFID tag number to be associated with the Truck Number on which material is being carried out on the site. The RFID system should have of the following specifications

**Introduction :-** RFID (radio frequency identification) systems shall use data strings stored inside RFID tags or transponders) to uniquely identify people or objects when they are scanned by an RFID reader. These types of systems are found in many applications such as passport protection, animal identification, inventory control systems, and secure access control systems, robotics, navigation, inventory tracking, payment systems, and car immobilization. Because passive tags require a strong RF field to operate, their effective range is limited to an area in close proximity to the RFID reader. Each transponder tag contains a unique identifier (one of 1,099,511,627,776, possible combinations) that is read by the RFID Reader Module and transmitted to the host via a simple serial interface.

**Product Features :-**

Low-cost method for reading passive RFID EM4100 family transponder tags Reading Distance 10-15CM of the reader (Depend card shape)
125kHz read frequency
9600 baud rate
Enable input allows module to be enabled/disabled externally
Small Size
Built in Antenna
Status LED for card detection
On-Board Power LED

**Asphalt Batch Mix Plant Minimum 80 TPH shall have minimum following FEATURES (Technical Specification)**

- Fully computerized air conditioned control cabin, with on-board electrical power control console, distribution switch board, fully automatic process, interlocks and sequence controls. User friendly software on computer with a parallel PLC man machine interface.
- Fail Proof interlocks and auto process controls.
- Online fault detection with remote connectivity and solution.
- Docket printing and inventory management.
- Provisions to print & store production details, mix proportions etc.
- Automatic cold aggregate feeder controls linked with mix design and hot bin levels.
- Automatic free fall compensation.
- PLC Diagnostics system allows for quick trouble location and trouble shooting in the plant.
- SCADA Controls an extension to PLC allow for access & changing system calibration from remote locations as well as production data storage for future references.
- Automatic Maximum Temperature Controller for Aggregate and Bitumen.
- Mix Temperature Automatic Controls.

**B) MIX TRANSPORTATION**

(i) Vehicle tracking system (VTS) for all vehicles transporting bituminous mix.
C) ROLLERS / COMPACTORS :-

i) Intelligent Compactors

The data of All parameters as per IRC SP 97 - 2013 in the computer on the intelligent compactor, including graphic displays shall be replicated on the PWD user Terminal on real time basis (time lag not more than 15 seconds).

Roller / Compactors shall be intelligent. The intelligent compaction system shall have compaction analyzer. The compaction analyzer system shall be inbuilt and provided by the original manufacturer at the time of first sale of the compactor. In no case retro-fitted system shall be accepted. The compactor shall be fitted with VSAT (Very Small Aperture Terminal).

ii) Vibratory / Static Rollers

(i) Temperature of mix during compaction.

(ii) Vehicle tracking to monitor movement of Roller / Compactor and so as to give approximate number of passes, speed and direction (Forward / backward movement) of Roller / Compactor.

a) Intelligent Compacting System -

The contractor shall also provide intelligent compacting system on the compactor used for compaction work of PWD. The intelligent compacting system shall have GPS, temperature sensors and screen fitted on the compactor. This system shall be IP-65 compliant. This compaction system shall also record the number of passes made by the compactor. The system shall have the monitor that shall show that compaction in graphical form to the operator on the compactor. The contractor shall provide real time data transfer to the web application to monitor the compaction remotely. The Contractor shall provide the web application in such a manner that it also updates the compaction data in real time on PWD's works management e-governance application dashboard. The intelligent compacting system shall be connected with dashboard system. The contractor shall provide software facility for PWD officials to update QAP (Quality Assurance Plan) related data for compaction through its web application that will get transferred to the intelligent compacting system to bench mark the acceptance norms for colour coding, no of passes and acceptable temperature and density levels. The contractor shall provide compaction register that shall contain information related to the compaction for further analysis. The compaction register shall maintain following record RUN ID, DATE and TIME of compaction, latitude, longitude, location, temperatures (in case of asphalt),
density (for soil it can be derived as a compaction measurement value). no of passes, colour for temperature, colour for number of passes. The contractor shall provide web application to replicate the actual view as shown on the monitor of the compactor through live streaming of the compaction operations. The system shall be inbuilt provided by the original manufacturer of compactor. In no case the retrofitted system shall be accepted.

**Web Connectivity**

The contractor shall provide web connectivity through satellite communication supporting mobile devices to the above monitoring system (mobile VSAT). The web connectivity shall have minimum two MBPS internet speed and 99% availability. Software should be intelligent; in case of connectivity failure it should maintain the pending files and send them as soon as it is connected. The contractor shall make sure that the entire software and hardware solution is virus free.

The offer of contractor shall be inclusive of all. He shall not be paid separately.

**43.5 THE OFFER OF THE CONTRACTOR SHALL INCLUDE :**

1. The cost of procuring, establishing, running operating and maintaining SCADA including all Censors, Vehicle Tracking System (VTS) and any other instrumentation, automation required to acquire the desired data, mentioned at 43.1 to 43.4 above.

2. Web connectivity to all locations where data is being acquired, transmitted processed, stored and retrieved with minimum speed of 1 MBPS and 100% availability. The contractor shall provide the web application in such a manner that it shall first update the above data in real time of PWD’s works monitoring e-governance web application automatically.

3. Web based application including Computer Software, Hardware etc. to transmit, process, store and retrieve the data in the forms and formats as prescribed by the Engineer in charge.

4. Arrangement for security of data, Disaster recovery arrangements shall be as per I.T. Industry practice, during the construction period and upto defect liability period (DLP) Handing over the data on the Web Server after defect liability period in Electronic form as instructed by Engineer in charge.
(5) Calibration of all SCADA related attachments / accessories as per the specification – Web based application to monitor the schedule of Calibration of all SCADA related attachment / accessories. The invalidity of calibration shall lead to non acceptance of work or measurement and the Contractor shall not be paid for such non accepted work or measurements.

(6) Submission of printed and authenticated reports to the Engineer in charge as and when required.

(7) Point (1) to (6) above shall be arranged and maintained during contract period and defect liability period.

(8) Cost includes rectification, fine tuning, corrections, additions and alterations to the system to the satisfaction of Engineer in charge.

(9) All data generated as per this special condition of contract shall be the property of PWD.

43.6 The contractor shall make all necessary arrangement required under clause 43.1, 43.2 above (Supervising control and data acquisition for bituminous items, concrete works) well in advance before starting of the related items of works. All necessary arrangements so made shall be offered for inspection to Engineer in charge one month prior to the start of the related items of work changes if any, after his inspection suggested by the Engineer in charge shall be carried out at no extra cost and within the period of three days. A fresh request for inspection of Engineer in charge after such rectifications shall be requested by the Contractor and final approval to the SCADA arrangements as specified in clause 41.1 shall be obtained.

44.1 Machinery and Testing Equipments :-

a) Extraction Test of Bitumen Mix.

The binder content of hot mix material shall be determined by ignition method only as specified in AASHTO T308. The testing by ignition method shall be done in furnace which shall be equipped with internal balance. The furnace shall have Web based SCADA facility. The data so acquired shall be uploaded to PWD Website in real time with time lag not more than 30 Seconds.

44.2 GIS MAP :-

Displaying locations of Hot mix Plants, Tippers used for hot mix material transportation, Roller/ compactor and Sprayer, Concrete Batch Mix Plant, Transit Mixers, concrete pumps on GIS map.
Communicate the Data which is beyond the set parameters by SMS and e-mail to the representative of Engineer In charge for all 43.1 to 43.5 above

44.3 The Contractor shall make all necessary arrangement required under Clause 41.1 to 41.4 above (Supervising control and data acquisition for Bituminous / WBM /Earthway concrete works / all cement works / masonry / plaster / Testing Equipments items) well in advance before starting of the related items of work. All necessary arrangements so made shall be offered for inspection to Engineer In charge one month prior to the start of the related items of work. Changes if any, after his inspection suggested by the Engineer In charge shall be carried out at no extra cost and within the period of Three days. A fresh request for inspection, of Engineer In charge after such rectifications shall be requested by the Contractor and final approval to the SCADA arrangements as specified in Clause-19 shall be obtained.

45. CONTRACTOR'S FACILITIES

According to the contract, the Contractor is responsible for the quality of the entire construction work, and for this purpose he is required to have his own independent and adequate set up. To meet this requirement :-

a) The Contractor shall set up his own laboratory at locations(s) approved by the Engineer. The laboratory shall be equipped with modern and efficient equipment with sufficient standbys suitable to carry out the tests prescribed for different materials and work according to the specifications. The list of equipments to be procured and the facilities to be provided shall be got approved by the Engineer. The equipment shall be maintained in a workable condition to the satisfaction of the Engineer.

b) Sampling and testing procedures shall be in accordance with relevant standards of BIS (previously called ISI) or IRC. Frequency of testing shall be as laid down in the Ministry's Specifications for Road and Bridge Work, 5th Revision, 2013. In the absence of relevant Indian Standards, sampling and testing procedures shall be as approved by the Engineer.

c) The laboratory should be manned by a qualified Materials Engineer assisted by Materials Inspector / Technicians, and the set up should be got approved by the Engineer.

d) The Contractor should prepare printed proforma for according readings and results of each type of test, after getting the formats of the

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performance approved from the Engineer. He should keep a daily record of all the tests conducted by him. Two copies of the test results should be submitted to the Engineer for his examination and approval, of which one copy will be returned to the Contractor for being kept at site of work.

e) The Material Engineer of the Contractor should keep close liaison with the Quality Control Unit of the Engineer and keep the later informed of the sampling and testing programme so that the Engineer's representative could be present during this activity, if considered necessary.

46. **DAY-TO-DAY QUALITY CONTROL OPERATIONS:**

The day-to-day controls to be exercised by the Contractor and the Engineer are enumerated in the below paragraphs :

47. **BITUMINOUS CONSTRUCTION - GENERAL:**

a) Manufacturer's test certificate for quality of bitumen will be acceptable to the Engineer. However, where the quality is in doubt, the Engineer may call for tests to be conducted by the Contractor for verification.

b) The base on which bituminous courses are to be laid must be dry and free of dust and other delirious matters.

c) Mineral aggregates to be used should be checked for their specifications, requirements and got approved by the Engineer.

48. **BITUMINOUS SPRayed WORK:**

a) Temperature of binder in the boiler and rate of spray at site shall be checked. Spraying shall be uniform and shall be carried out with the help of the either self propelled or towed bitumen pressure sprayer with self-heating arrangements and spraying nozzles arrangements.

b) Rate and uniformity of spread of chippings should be checked and controlled.

c) Adequate embedment of the chippings by rolling shall be ensured.

49. **HOT MIXED AND HOT LAID BITUMINOUS CONSTRUCTIONS:**

a) Job mix formula (JMF) satisfying specification requirements should be worked out based on laboratory tests and got approved by the Engineer. The Engineer will have independent tests made before approving the JMF.

b) The plant should be checked for capability to produce mix conforming
to the JMF If necessary, trial stretches should be laid and checked approximately.

c) Control should be exercised on temperature of binder in the boiler, aggregate in the dryer and mix at the time of laying and rolling.

d) Tests for stability flow, unit weight, etc. of mix collected from the discharge point of the plant, extraction test for binder content and aggregate gradation should be performed to check on the quality of mix discharged from the plant.

e) Thickness and density of compacted mix should be checked by taking core samples.

50. **ACCEPTANCE CRITERIA:**

In addition to the stipulation in the specification of relevant items, the finished surface shall be checked with Rougho-Meter for roughness values. The finished surface shall have a roughness value of not more than 2000 mm/Km. for bituminous concrete surface and 2500 mm/Km. for bituminous premix carpet surface, when measured in accordance with **M.O.S.T. Circular No. RW/NH-III/P/10/84**, dated 19/5/1984. Subsequent readings should be taken within 4-6 months after opening of the road to traffic or the defects liability period which is earlier. The roughness value during the second measurements should be judged against the following standards

1) **Bituminous concrete 2500 mm/Km.**
2) **Premix carpet 2500 mm /Km.**

It shall be the responsibility of the contractor to make all the required arrangements and get this survey done in the presence of and under the guidance of the Engineer-in-charge. The Survey data shall be submitted to the Engineer-in-charge for his perusal who shall decide further action to be taken depending on survey results.

51. **IN CASE OF CEMENT CONCRETE WORKS**

i) Besides manufacturer’s test certificate for quality of cement, at least one set of physical and chemical tests should be conducted for each source of supply of verification. Where the quality is in doubt, or where the cement had been stored for long period or in improper condition, the Engineer shall call for testing the cement at more frequent intervals.

ii) Job mix formula worked out based on trials carried out in the Contractor’s laboratory should be got approved by the Engineer.
iii) The mineral aggregates should be tested for their properties. Water to be used for mixing should be tested for chemical impurities.

iv) Checking for stability and sturdiness of formwork.

v) Ensuring that the crucial equipment like mixers and vibrators are in working order before start of work.

vi) Control on water cement ratio.

vii) Control on workability and time elapsed between mixing and placing of concrete.

viii) Control on compaction and finishing.

ix) Tests on cube samples at 7 to 28 days.

x) Check on provisions for adequate curing.

xi) In case of masonry work, control should be exercised on the quality of the material (e.g. stone, brick, sand, cement, etc.) as also on mortar proportions.

xii) For RCC work, quality of steel in each batch may be approved on the basis of test certificate. The reinforcement layout should be checked for conformity with approved drawings and bar bending schedules. All laps should be checked for conformity with the specification. The reinforcement should be free of oil and loose rust scale and should be properly tied with binding wire. The size and spacing of the bars as also the cover should be checked for correctness.

52. PAVEMENT COURSES - GENERAL CONTROLS:

a) The base on which the pavement layer is to be placed should be checked for levels and regularity, and should be in a condition to receive the pavement layer.

b) Each layer should be checked for thickness, levels, cross fall (camber), regularity and strength before next layer is permitted to be laid.

53. SUBMISSION OF MONTHLY BILL IN ELECTRONIC FORM :-

1. As per Clause 10 of this B1 contract, it is responsibility of the contractor to submit the bill monthly to the Engineer-In-Charge.

2. To discharge this responsibility the contractor shall submit the bill in electronic form.

3. In doing so he shall use e-copy of Tender paper.

4. In support of the bills, required measurements, drawings, quality control reports (field lab and VQCC lab as per clause 24 of Additional General Condition), site supervision data (SCADA) shall be submitted.
in electronic form, the data so submitted shall have a facility to tightly integrate it with the contract conditions, provisions in the Maharashtra Public Works manual, Maharashtra Public Works Account Code (updated to date of submission of this tender) and current general engineering practices (issued through various govt. resolutions, govt. circulars, Chief Engineer’s Circulars etc. issued up to date of submission of this tender.) followed in Public Works Department.

5. The submission of e-bill shall be in the web based format.

6. The offer of Contractor shall be inclusive of all. He shall not be paid separately, his offer shall be inclusive of all cost required for submitting bill in e-format mentioned in this para and also........

   a) The cost of procuring, establishing, running, operating & maintaining web based system for submission and approval of bill, with all instrumentation / automation / services required to submit / approve / store in PWD data base.

   b) Web connectivity to all locations where bill and its relevant documents required for the bill are being acquired / prepared, transmitted, processed, stored and retrieved with minimum speed of 2 MPBS and 100% availability (including SCADA). The contractor shall provide the web application in such a manner that it shall first update the above data in real time on PWD’s works monitoring e-governance web application automatically. The contractor shall put his request to Engineer in charge to get access to the PWD e-governance web application.

   c) Web-based application including Computer Software, Hardware etc. to transmit, process, store and retrieve the data in the forms and formats as prescribed by the Engineer in charge.

   d) Arrangement for security of bill and its relevant documents, Disaster recovery arrangements shall be as per prevailing I.T. industry practice, during the construction period and up to defect liability period. (DLP). Handing over the data on the Web Server after DLP in Electronic form as instructed by Engineer In charge.

   e) Calibration of all accessories/attachment related to bill shall be as per the specification.

   f) Web based application to monitor the schedule of Calibration of all related attachment/accessories related to bill and its relevant
documents. The invalidity of calibration shall lead to non-acceptance of work or measurement and the Contractor shall not be paid for such non-accepted work or measurements.

g) Submission of printed and authenticated reports to the Engineer In-charge as and when required.

h) Point (a) to (g) above shall be arranged and maintained during contract period and defect liability period.

i) Cost includes rectification, fine tuning, corrections, additions & alterations to the system to the satisfaction of Engineer In-charge.

j) All data generated as per this special condition of contract shall be the property of PWD.

53.1 The Contractor shall make all necessary arrangement required under Clause 43.1 to 43.5 above (Supervising control and data acquisition for bituminous work / Testing Equipments items, submission and approval of bill/s well in advance before starting of the related items of works and activities. All necessary arrangements so made shall be offered for inspection to Engineer in charge/PMC/Officer appointed by the engineer in charge on month prior to the start of the related items of work. Changes if any after his inspection suggested by the Engineer in charge/PMC/Officer appointed by the engineer in charge shall be carried out at no extra cost and within the period of Three days. A fresh request for inspection, of Engineer in charge / PMC / Officer appointed by the engineer in charge after such rectifications shall be requested by the Contractor and final approval to the arrangements of SCADA and submission and approval of bill/s shall be obtained.

54. ADDITIONAL GENERAL CONDITION ABOUT INSURANCE :-

Contractor shall take out necessary insurance Policy / Policies (viz. Contractors All Risks Insurance Policy, Erection All Risks insurance policy etc. as decided by the Director of Insurance ) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period compulsorily from the "Directorate of Insurance, Maharashtra State, Mumbai " only. Its postal address for correspondence is " 264, MHADA, First Floor, Opp. Kalanagar, Bandra (E) Mumbai-400 051“ (Telephone Nos. 26590403 / 26590690 and Fax Nos. 26592461 / 26590403) similarly all workmen’s appointed to complete the
contract work are required to insure under workmen’s compensation Insurance Policy, Insurance Policy / Policies taken out from any other company will not be accepted. If any contractor has effected insurance with any Insurance Company, the same will not be accepted and the amount of premium calculated by the Government Insurance Fund will be recovered directly from the amount payable to the contractor, for the executed contract work and paid to the Directorate of Insurance Fund, Maharashtra State. The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.

**Proforma**

**Mix Transportation Details**

Name of Work :- ______________________________________________
Name of Division :- ______________________________________________
Name of Sub-Division :- ______________________________________________
Name of Contractor :- ______________________________________________
Name of Engineer-in-charge :- ________________________________________

<table>
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<tr>
<th>Sr. No.</th>
<th>Date</th>
<th>Registered No. of Tipper</th>
<th>Weight of Mix</th>
<th>Time to leave the plant</th>
<th>Time to reach the Paver</th>
<th>Time taken in minutes</th>
<th>Temperature Mix at Plant</th>
<th>Mix at Paver</th>
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</tbody>
</table>

*Signature of Engineer in charge*  
*Contractor*

**Note :-** This information is to be kept upto date as per Additional General Conditions and Specifications No.27.29
रस्त्यांच्या डांबरोकरणाच्या कामात रिफायनरीलौन प्राप्त होणा-या डांबराची प्रत कामाच्या वापरणाच्या पूर्ती पुनर्च तपासून खातररें म्हणून करणे अत्यावश्यक आहे. यावरीती कार्यकाळात निशिचत करण्याच्या बाव शासनकाच्या विचारात्मक होती. या परिपत्रकर्त्यांना शासन असे निर्देश देत आहे की, डांबरोकरणाच्या कामाच्या वापरणाच्या वेगा-या डांबराची प्रत (Grade) तपासण्यासाठी खालीलप्रमाणे कार्यकाळात अवलंबित विवाद यावी.

अ) ज्या कामाच्या डेकेडार (Contractor) डांबर रिफायनरीलौन प्राप्त करणार आहे अशा डांबर प्राप्तीचे वेढाप्रक्र (Schedule of arriva of bouzers) क्षेत्रात अधिकांबायांना देणे डेकेडारास अवलंबित राहिल. डांबराचे प्रयाण (Procurement) सरकारी ते कंपन्यांच्या रिफायनरी मधुनून बाबत करणार यावे. तसे प्लन्टवर प्राप्त झालेल्या डांबराची प्रत (Grade) तपासण्यासाठी आवश्यक उपकरणे, साहित्य इत्यादी युक्त प्रयोगशास्त्र उपलब्ध करून देणे डेकेडारास अवलंबित राहिल.

ब) वरील ‘अ’ प्रमाणे सूचनांचा अंतर्भाव निरोज प्रमाण प्रस्ताव करणार यावे. रिफायनरीमधून डांबराचा बाउँडर डेकेडाराच्या प्लन्टवर पोहोचून नीती अथवा अंतर्भाव अधिकांबारी रिफायनरीलौन प्राप्त चेतन व इंटरक्रॉप्लिस्ट मेमोरी मूल्य प्रतीक्षित डांबराची प्रत लेखी रस्त्यावर (मोजमाळ पुनर्लागण) नोंदवणे आवश्यक आहे. तसे प्लांट अधिकांबारी प्लांटवर आलेल्या डांबराच्या बाउँडरमध्ये डांबराचे चाचणी नमुना गोळ्या करून डांबराची प्रत तपासून ती लेखी रस्त्यावर नोंदवणी.
क) रिफायनरीमधुन निर्मित ज्यालेल्या बांधकामशील डंबराची प्रत वरीलप्रमाणे चाचणी अहवालनुसार नुस्तत असत्याची खासी ज्याल्यावर संबंधीत ठेकेदार अथवा त्याचा अधिकृत प्रतिनिधी यांचे उपर्युक्तलिन्ये डंबराचा बांधकर प्लांटवर रिकामा करणारी लेखी प्रवासी क्षेत्रीय अधिकारी देलील, त्यानंतर बांधकर रिकामा करावा अन्यथा हे डंबर कामासाठी न वापरण्यात येईल कंपनीस्तरात लेखी निर्देश देतील।

ढ) प्रयोक्त कामानीय व्यापार एक नोंदवलेली ठेवतील. त्यामध्ये बांधकर क्रमांक, चलन क्रमांक, डिलीवरी मेमो क्रमांक, डंबराचे वजन, ग्रेड तपासणी व चाचणी अधिका-यांचे नाव इत्यादी तपशिल ठेवता.

इ) वरीलप्रमाणे क्षेत्रीय अधिका-यांकडून बांधकरमधील डंबराची प्रतीत (Grade of Bitumen) प्रत्यक्ष तपासणीसाठी खालीलप्रमाणे मानकानुसार कार्यवाही करणारी जबाबदारी क्षेत्रीय अधिका-यांसाठी राहील.

<table>
<thead>
<tr>
<th>अ.क्र.</th>
<th>अधिकारी</th>
<th>चाचणीचे प्रमाणण (एकूण परिमाणाचा)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>कॉनिस्ट्र अभियंता / शाहा अभियंता / सहा. अभियंता (श्रेणी-२)</td>
<td>१०० टक्के</td>
</tr>
<tr>
<td>2)</td>
<td>सहा. कार्यकारी अभियंता /सहा. अभियंता (श्रेणी-२)/ उपविभागीय अभियंता / उपविभागीय अधिकारी</td>
<td>२५ टक्के</td>
</tr>
<tr>
<td>3)</td>
<td>कार्यकारी अभियंता</td>
<td>५ टक्के</td>
</tr>
</tbody>
</table>

) कार्यकारी अभियंता यांनी डंबराकरणाच्या कामाचे तपासणी दी-यात प्लांट साइटवरून डंबराच्या ग्रेडची तपासणी करत त्याची नोंद नोंदवलेली करावी.

क्षेत्रीय अधिका-यांनी वरीलप्रमाणे कार्यवर्तीतील अंमलबाबुणी करावी.

2. सदर शासन परिषद महाराष्ट्र शासनाच्या www.maharashtra.gov.in यावेळ्यासारखा प्रसिद्ध करणारे आला असून त्याचा संगणक संकेत दाखल २००७२००१६४०५००२ असा आहे.

(एस. एस. जोशी)
उप सचिव (र.म.), महाराष्ट्र शासन
Extract from specifications for Road and Bridge works by M.O.S.T.

902  Control of alignment, level and surface regularity.

902.1  General

All works performed shall conform to the lines, grades, cross section and dimensions shown on the drawings or as directed by the Engineer, subject, to the permitted tolerances described hereinafter.

902.2  Horizontal alignment

Horizontal alignments shall be reckoned with respect to the center line of the carriageway as shown on the drawings. The edges of the carriageway as constructed shall be correct within a tolerance of ± 10 millimetre therefrom. The corresponding tolerance for edges of the roadway and lower layers of pavements shall be 3.25 mm.

902.3  Sub-grade Levels

The levels of the Sub-grade and different pavement courses as constructed, shall not vary from those calculated with reference to the longitudinal and cross profile of the road shown on the drawings or as directed by the engineer beyond the tolerance + 6 mm or 0.6 mm. providing . However, that the negative tolerance for wearing course, if the thickness of the former is thereby reduces by more than 6 mm. for fixable pavements and 5 mm. for concrete pavements.

For checking compliance with the above requirement for sub-grade, sub-base and base course, measurements of the surface levels shall be taken on a grid of points places at 6.25 metre longitudinally and 3.5 metre transversely. For any 10 consecutive measurements taken longitudinally or transversely, not more than one measurement shall be permitted to exceed the tolerance as above, this one measurement being not in excess of 5 mm. above the permitted tolerance.

For checking compliance with the above requirement for bituminous wearing course and concrete pavements, measurements of the surface level shall be taken on a grid of points spaced at 6.25 m. along the length and at 0.5 m. from the edges and at the center of the pavement. In any length of pavement, compliance shall be deemed to be met for final road surface only if the tolerance given above is satisfied for any point on the surface.

902.4  Surface Regularity of pavement courses

The Longitudinal profile shall be checked within a 3 meter long straight edge /moving straight edge as desired by the Engineer at the middle of each traffic lane a line parallel to the center line of the road. The
maximum permitted number of surface irregularities shall be as per Table 900-2.

**Table 900-2 Maximum permitted number of surface irregularities**

<table>
<thead>
<tr>
<th>Irregularity</th>
<th>Surface of carriageway and paved shoulders</th>
<th>Surface of Lay bays, services Areas and all bituminous base Course.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 mm.</td>
<td>7mm.</td>
</tr>
<tr>
<td>Length (m.)</td>
<td>300</td>
<td>75</td>
</tr>
<tr>
<td>National Highway Expressways</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Roads of Lower Category</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>27</td>
</tr>
</tbody>
</table>

Category of each section road as described in the contract.

The maximum allowable difference between the road surface and underside of a 3 metre straight edge when placed parallel with, or at right angles to the center line of the road at points decided by the Engineer shall be.

For Pavement surface (Bituminous and cement concrete) 3 millimetre

For Bituminous base courses 6 millimetre

For Granular Sub-base courses 8 millimetre

For Sub-base under concrete Pavements 10 millimetre

For Sub-grade 15 millimetre

**902.5 Rectification**

Where the surface regularity of sub-grade and the various pavement courses fall outside the specified tolerances, the contractor shall be liable to rectify these in the manner described below and to the satisfaction of the Engineer.

**Granular Sub-base:** Where the surface is high, it shall be trimmed and suitably compacted. Where the same is low, the deficiency shall be corrected by scratchyng the lower layer and adding fresh material and recompacting to the required density. The degree of compaction and the type of material to be used shall conform to the requirements of Clause 401.
**Water Bound Macadam / Wet Mix Macadam Sub-base / Base:** Where the surface is high or low, the top 75 mm shall be scarified, reshaped with added material as necessary and re-compacted to Clause 404. This shall also apply to wet mix macadam to Clause 406.

**Bituminous Constructions:** For bituminous construction other than wearing course, where the surface is low, the deficiency shall be corrected by adding fresh material over a suitable tack coat if needed and re-compacting to specifications. Where the surface is high, the full depth of the layer shall be removed and replaced with fresh material and compacted to specifications.

For wearing course, where the surface is high or low, the full depth of the layer shall be removed and replaced with fresh material and compacted to specifications. In all cases where the removal and replacement of a bituminous layer is involved, the area treated shall not be less than 5 m in length and not less than 3.5 m in width.
**ROUGHNESS INDEX**

The Contractor shall be responsible to measure the roughness of road surface for which he may use the Roughness Index Testing Machine at his own cost. Use of “Towed Fifth Bump Integrator” shall be made to measure the roughness of the road surface. The calibration of the machine shall be done from time to time as and when warranted from reputed Institutions like C.R.R.I., New Delhi and their Certificate shall be produced to that effect. The values of roughness so measured shall not exceed the values given below for various types of road surfaces under standard conditions of carrying out the test and as specified below:

1) S.D.B.C. : 2200 mm./Km.
2) Premix Carpet : 2500 mm./Km.
3) B.M. : 2500 mm./Km.

The Roughness Index test shall be carried out before start of the work and after completion of Surface Course as directed by Engineer-in-charge for the work of strengthening and as directed.

The results of Roughness Index test shall be made available to the Engineer-in-charge within 5 days from the test so taken.

As an outcome of roughness test, where the surface irregularity of wearing surfaces falls outside the tolerances mentioned above, the Contractor shall be liable to rectify the deficiencies in a manner as directed and to the satisfaction of the Engineer-in-charge.

If the contractor fails to carry out roughness index test, the same will be done departmentally and double the cost so incurred will be recovered from him.
Name of work :- Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

**SCHEDULE "B"**

Memorandum showing the items of work to be carried out by the contractor

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item of work</th>
<th>Rate</th>
<th>Unit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>12000.00 Cubic Metre</td>
<td>ITEM No. 1 :- Excavation for catch /road side water gutter / jungle gutter in all sorts of soils, soft murum strata to the specified section including stacking the excavated stuff in a regular bund and disposing off unsuitable or excess stuff beyond 50 metres from the place of excavation as directed by Engineer in charge.</td>
<td>50.00</td>
<td>Rupees Fifty and Paise Nil Only.</td>
<td>6,00,000.00</td>
</tr>
<tr>
<td>1470.00 Cubic Metre</td>
<td>ITEM No. 2 :- Excavation for catch /road side water gutter / jungle gutter in hard murum strata to the specified section including stacking the excavated stuff in a regular bund and disposing off unsuitable or excess stuff beyond 50 metres from the place of excavation as directed by Engineer in charge.</td>
<td>63.00</td>
<td>Rupees Sixty three and Paise Nil Only.</td>
<td>92,610.00</td>
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<tr>
<td>Quantity</td>
<td>Item of work</td>
<td>Rate</td>
<td>Unit</td>
<td>Amount</td>
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<tr>
<td>1915.00</td>
<td><strong>ITEM No. 3 :</strong> Supplying hard murum / kankar at the road side, including conveying with all lifts and leads and stacking etcetera complete as directed by Engineer in charge.</td>
<td>336.23</td>
<td>One Cubic Metre</td>
<td>6,43,880.00</td>
</tr>
<tr>
<td>1915.00</td>
<td><strong>ITEM No. 4 :</strong> Spreading gravel / sand / soft murum/ hard murum etcetera complete as directed by Engineer in charge.</td>
<td>25.00</td>
<td>One Cubic Metre</td>
<td>47,875.00</td>
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<tr>
<td>26500.00</td>
<td><strong>ITEM No. 5 :</strong> Compacting the hard murum / kankar in layers of thickness upto 20 centimetre with power roller including necessary labour, materials, artificial watering etcetera complete as directed by Engineer in charge.</td>
<td>4.25</td>
<td>One Square Metre</td>
<td>1,12,625.00</td>
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<tr>
<td>Quantity</td>
<td>Item of work</td>
<td>Rate</td>
<td>Unit</td>
<td>Amount</td>
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<tr>
<td>4900.00 Square Metre</td>
<td><strong>ITEM No. 6 :-</strong> Construction of 75 millimetre thick Modified Penetration Macadam over existing Black Top surface by providing and applying tack coat at specified rate of 3 Kilogram per 10 Square Metre as per MORTH Clause No.503, and providing a layer of compacted crushed coarse aggregate using chips spreader with alternate applications of bituminous binder and key aggregate and rolling with a three wheel 80-100 kN static roller to achieve the desired degree of compaction. (By using Bitumen of VG – 30)</td>
<td>220.56</td>
<td>Rupees Two hundred twenty and Paise Fifty six Only.</td>
<td>10,80,744.00</td>
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<td>401800.00 Square Metre</td>
<td><strong>ITEM No. 7 :-</strong> Providing and applying tack coat on existing black top surface by intelligent mechanical bitumen sprayer with SCADA for uniform spraying at specified temperature at specified rate of 3 Kilogram / 10 Square Metre etcetera complete as directed by Engineer in charge. (Using Bulk Asphalt VG-30 grade.)</td>
<td>16.22</td>
<td>Rupees Sixteen and Paise Twenty two Only.</td>
<td>65,17,196.00</td>
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<td>Quantity</td>
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<td>Rate</td>
<td>Unit</td>
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<tr>
<td>9625.00 Cubic Metre</td>
<td><strong>ITEM No. 8 :-</strong> Providing and laying Dense Bituminous Macadam using crushed aggregates of specified grading premixed with bitumen binder VG-30 Bitumen at the rate of 4.00 to 4.50 percent by weight of total mix and filler, transported to site with Vehicle Tracking System (VTS), laid over a previously prepared surface, finished to the required grade, level, alignment and rolling to achieve the desired compaction to achieve required density - using 80 TPH Batch Mix type hot mix plant with Supervisory Control and Data Acquisition (SCADA), Sensor Paver, Intelligent Compactor with compaction analyser and V-SAT attachment with Stone Dust Filler.</td>
<td>7990.96</td>
<td>Rupees Seven thousand nine hundred ninety and Paise Ninety six Only.</td>
<td>7,69,12,990.00</td>
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Contractor  No. of Corrections  Executive Engineer

- 191 -
<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item of work</th>
<th>Rate</th>
<th>Unit</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>01</td>
<td>02 In Figures</td>
<td>03 In Words</td>
<td>05</td>
<td>06</td>
</tr>
<tr>
<td>6279.00 Cubic Metre</td>
<td><strong>ITEM No. 9 :-</strong> Providing and laying Bituminous Concrete using crushed aggregates of specified grading premixed with bitumen binder VG-30 Bitumen at the rate of 5.00 percent by weight of total mix and filler, transported to site with Vehicle Tracking System (VTS), laid over a previously prepared surface, finished to the required grade, level, alignment and rolling to achieve the desired compaction to achieve required density - using 80 TPH Batch Mix type hot mix plant with Supervisory Control and Data Acquisition (SCADA), Sensor Paver, Intelligent Compactor with compaction analyser and V-SAT attachment with Stone Dust Filler.</td>
<td>8998.98</td>
<td>Rupees Eight thousand nine hundred ninety eight and Paise Ninety eight Only.</td>
<td>One Cubic Metre</td>
</tr>
<tr>
<td>330 Numbers</td>
<td><strong>ITEM No. 10 :-</strong> Providing and fixing Reinforced Cement Concrete 1:2:4 boundary stones as per IRC design including painting, numbering, fixing in 150 millimetre X 150 millimetre X 900 millimetre standard size cement concrete 1:4:8 block etcetera complete as directed by Engineer in charge.</td>
<td>600.00</td>
<td>Rupees Six hundred and Paise Nil Only.</td>
<td>One Number</td>
</tr>
<tr>
<td>Quantity</td>
<td>Item of work</td>
<td>Rate</td>
<td>In Words</td>
<td>Unit</td>
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<tr>
<td>132 Numbers</td>
<td><strong>ITEM No. 11 :-</strong> Providing and fixing 200 metre stone as per IRC design including painting, numbering, fixing in 150 millimetre X 150 millimetre X 900 millimetre standard size cement concrete 1:4:8 block etcetera complete as directed by Engineer in charge.</td>
<td>600.00</td>
<td>Rupees Six hundred and Paise Nil Only.</td>
<td>One Number</td>
</tr>
<tr>
<td>7 Numbers</td>
<td><strong>ITEM No. 12 :-</strong> Providing Reinforced Cement Concrete 5th Kilometre stones including painting, numbering, etcetera complete for National Highway and State Highway and Major District Road as per IRC design for Highway 5th Kilometre stones and fixing in standard size Cement Concrete 1:4:8 block etcetera complete.</td>
<td>2400.00</td>
<td>Rupees Two thousand four hundred and Paise Nil Only.</td>
<td>One Number</td>
</tr>
<tr>
<td>27 Numbers</td>
<td><strong>ITEM No. 13 :-</strong> Providing Reinforced Cement Concrete 1:2:4 ordinary Kilometre stones including painting, numbering, etcetera complete for National Highway and State Highway and Major District Road as per IRC design for Highway Kilometre stones and fixing in standard size Cement Concrete 1:4:8 block etcetera complete.</td>
<td>2200.00</td>
<td>Rupees Two thousand two hundred and Paise Nil Only.</td>
<td>One Number</td>
</tr>
<tr>
<td>Quantity</td>
<td>Item of work</td>
<td>Rate</td>
<td>Unit</td>
<td>Amount</td>
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<tr>
<td>3.60</td>
<td><strong>ITEM No. 14</strong>: Providing and fixing Informatory sign boards in square or rectangular shape of any size made out of 16 gauge (1.6 millimetre) thick Galvanised iron steel sheet painted with one coat of Zinc chromate stoving primer and two coats of green stove enamel paint on front side and grey stove enamel on back side and border /messages / symbols etcetera with cut out of retroreflective sheeting of engineering grade, including mild steel angle frame of 35 millimetre x 35 millimetre x 3 millimetre and two Mild Steel angle iron post of size 60 millimetre x 65 millimetre X 6 millimetre, 3.65 metre long properly cross braced with mild steel angle of size 50 millimetre x 50 millimetre x 5 millimetre duly painted with one coat of epoxy primer and two coats of epoxy finish paint, having alternate black and white bands of 25 centimetre width including galvanised iron fixtures etcetera and fixing the boards in 1:4:8 concrete block of size 60 centimetre x 60 centimetre x 75 centimetre including transportation etcetera complete as directed by Engineer in charge.</td>
<td>7000.00</td>
<td>Rupees Seven thousand and Paise Nil Only.</td>
<td>One Square Metre</td>
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<tr>
<td>Quantity</td>
<td>Item of work</td>
<td>Rate</td>
<td>Unit</td>
<td>Amount</td>
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<tr>
<td>11000.00</td>
<td><strong>ITEM No. 15 :-</strong> Providing and applying 10 centimetre width thermoplastic reflective paint of approved colour or compound for traffic lane strips of 3 millimetre thick of pigments 10%, on clean, dry and good road surface with 30 to 40 percent glass beads, 20 percent binder and 40 percent of filler material etcetera complete. <em>Note rate is for actual painted length.</em></td>
<td>58.00</td>
<td>One Running Metre</td>
<td>6,38,000.00</td>
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<tr>
<td>6000.00</td>
<td><strong>ITEM No. 16 :-</strong> Providing and applying 15 centimetre width thermoplastic reflective paint of approved colour or compound for traffic lane strips of 3 millimetre thick of pigments 10%, on clean, dry and good road surface with 30 to 40 percent glass beads, 20 percent binder and 40 percent of filler material etcetera complete. <em>Note rate is for actual painted length.</em></td>
<td>85.00</td>
<td>One Running Metre</td>
<td>5,10,000.00</td>
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<td>Quantity</td>
<td>Item of work</td>
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<td>12 Numbers</td>
<td><strong>ITEM No. 17 :</strong> Providing and fixing Cautionary / Warning sing board having shape of an equilateral triangle of 90 centimetres sides made out of 14 gauge (2 millimetre) thick aluminium sheet bonded with white retro reflective sheeting of engineering grade having pressure sensitive/heat activated adhesive retroreflective or screen printed transparent red coloured border, black coloured cutout symbols of non reflective sheeting having pressure sensitive adhesive or screen printed symbols in black opaque colour including one Mild Steel angle iron post of size 65 millimetre X 65 millimetre X 6 millimetre, 3.65 metre, long painted with one coat of epoxy primer and two coats of epoxy finish paint, having black and white bands of 25 centimetre width including galvanised iron fixtures etcetera and fixing the board in 1:4:8 concrete block of size 60 centimetre X 60 centimetre X 75 centimetre including transportation etcetera complete.</td>
<td>4400.00</td>
<td>Rupees Four thousand four hundred and Paise Nil Only.</td>
<td>One Number</td>
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<td>Quantity</td>
<td>Item of work</td>
<td>Rate</td>
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<td><strong>ITEM No. 18 :-</strong> Providing and fixing aluminium casted CAT EYE STUD of size 10 centimetre X 10 centimetre at base with mild steel zinc coated mails of size 12 millimetre diameter of 12 centimetre long having both sides (Dual direction) high impact ABC 3 numbers of eyes of 16 millimetre diameter on both sides containing 7 beads each i.e. 42 beads in retro-reflective etcetera complete.</td>
<td>385.00</td>
<td>One Number</td>
<td>3,85,000.00</td>
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<td>1000 Numbers</td>
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<td><strong>ITEM No. 19 :-</strong> Providing structural steel work in roller section, fixed with connecting plates or angle cleats etcetera as in main and cross beams, hip and jack rafters, purlins connecting to truss members and the like as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted / welded connections and three coats of oil painting complete.</td>
<td>66000.00</td>
<td>One Metric Tonne</td>
<td>10,56,000.00</td>
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<td>16.00 Metric Tonne</td>
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<td>Item of work</td>
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<td>149.18</td>
<td><strong>ITEM No. 20</strong> :- Providing and fixing Aluminium sheet of 24 British Wire</td>
<td>225.00</td>
<td>One Kilogram</td>
<td>33,566.00</td>
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<td>Gauge painted with one coat of zinc chromate stoving primer and two coats of</td>
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<td>white stove enamel paint and red border on front side and grey stove enamel</td>
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<td>on back side, symbols with cutout of red retro-reflective sheeting of</td>
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<td>engineering grade, including transportation etcetera complete as directed by</td>
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<td></td>
<td>Engineer in charge.</td>
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| TOTAL    |                                                                               |       |              | 14,55,66,481.00 |

(Rupees Fourteen Crore fifty five Lakhs sixty six thousand four hundred eighty one Only.)
Name of work: Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq. Parali (V.), District Beed. (CRF 2014-15)

**SCHEDULE "C"**

Memorandum showing the Specifications for the items of work to be carried out by the contractor

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item of work</th>
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<tbody>
<tr>
<td>01</td>
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<td>02</td>
<td>03</td>
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<tr>
<td>1.</td>
<td><strong>ITEM No. 1 :-</strong> Excavation for catch/road side water gutter / jungle gutter in all sorts of soils, soft murum strata to the specified section including stacking the excavated stuff in a regular bund and disposing off unsuitable or excess stuff beyond 50 metres from the place of excavation as directed by Engineer in charge.</td>
<td>RD – 9 Page No.187</td>
<td>The useful excavated material shall be utilised as directed by the Engineer in charge. The contract rate shall be for One Cubic Meter.</td>
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*Contractor*  
*No. of Corrections*  
*Executive Engineer*  

- 199 -
<table>
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<tr>
<td>2.</td>
<td><strong>ITEM No. 2:</strong> Excavation for catch/road side water gutter/jungle gutter in hard murum strata to the specified section including stacking the excavated stuff in a regular bund and disposing off unsuitable or excess stuff beyond 50 metres from the place of excavation as directed by Engineer in charge.</td>
<td>RD – 9 Page No. 187</td>
<td>The useful excavated material shall be utilised as directed by the Engineer in charge. The contract rate shall be for One Cubic Meter.</td>
</tr>
<tr>
<td>3.</td>
<td><strong>ITEM No. 3:</strong> Supplying hard murum/kankar at the road side, including conveying with all lifts and leads and stacking etcetera complete as directed by Engineer in charge.</td>
<td>RD – 23 Page No. 202</td>
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<td>4.</td>
<td><strong>ITEM No. 4:</strong> Spreading gravel/sand/soft murum/hard murum etcetera complete as directed by Engineer in charge.</td>
<td>RD – 28, 30,31 Page No. 205.</td>
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<td>Item No.</td>
<td>Item of work</td>
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<td>05</td>
<td><strong>ITEM No. 5 :-</strong> Compacting the hard murum / kankar in layers of thickness upto 20 centimetre with power roller including necessary labour, materials, artificial watering etcetera complete as directed by Engineer in charge.</td>
<td>RD – 38 Page No. 211</td>
<td></td>
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</tbody>
</table>
| 06      | **ITEM No. 6 :-** Construction of 75 millimetre thick Modified Penetration Macadam over existing Black Top surface by providing and applying tack coat at specified rate of 3 Kilogram per 10 Square Metre as per MORTH Clause No.503, and providing a layer of compacted crushed coarse aggregate using chips spreader with alternate applications of bituminous binder and key aggregate and rolling with a three wheel 80-100 kN static roller to achieve the desired degree of compaction. (By using Bitumen of VG – 30) | As per Technical Specification Clause 506, as per IRC SP-20 2002, Appendix 8.4, | A) Metal shall be supplied at site only after screening it on Mechanical Vibratory Screening Unit as detailed in Additional General Conditions and Specification.  
B) Work shall be carried out in days Time and in dry climate and should be closed before 6.00 P.M.  
C) The representative of Contractor shall maintain a register giving details of Challan of bitumen received and should get it signed from the representative in charge of department in token of its acceptance.  
D) For controlling traffic during construction and maintain diversion no extra payment shall be made. |
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<tr>
<th>Item No.</th>
<th>Item of work</th>
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| 7.      | **ITEM No. 7 :-** Providing and applying tack coat on existing black top surface by intelligent mechanical bitumen sprayer with SCADA for uniform spraying at specified temperature at specified rate of 3 Kilogram / 10 Square Metre etcetera complete as directed by Engineer in charge. (Using Bulk Asphalt VG-30 grade.) | MORTH 2013 Clause No.503 (Fifth Revision). | A) Work shall be carried out in days Time and in dry climate and should be closed before 6.00 P.M.  
B) The representative of Contractor shall maintain a register giving details of Challan of Bulk Asphalt VG-30 grade received and should get it signed from the representative in charge of department in token of its acceptance.  
C) For controlling traffic during construction and maintain diversion no extra payment shall be made. |
<table>
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<tr>
<th>Item No.</th>
<th>Item of work</th>
<th>Reference to standard specification (Pink Book) &amp; MORTH Specification No./Page No.</th>
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<td>8.</td>
<td><strong>ITEM No. 8 :-</strong> Providing and laying Dense Bituminous Macadam using crushed aggregates of specified grading premixed with bitumen binder VG-30 Bitumen at the rate of 4.00 to 4.50 percent by weight of total mix and filler, transported to site with Vehicle Tracking System (VTS), laid over a previously prepared surface, finished to the required grade, level, alignment and rolling to achieve the desired compaction to achieve required density - using 80 TPH Batch Mix type hot mix plant with Supervisory Control and Data Acquisition (SCADA), Sensor Paver, Intelligent Compactor with compaction analyser and V-SAT attachment with Stone Dust Filler.</td>
<td><strong>A)</strong> Work shall be carried out in days time and in dry climate and should be closed before 6.00 p.m.  &lt;br&gt; <strong>B)</strong> The representative of the contractor shall maintain a register giving details of challan of bitumen received and shall get it signed from the representative incharge of department in token of it's acceptance.  &lt;br&gt; <strong>C)</strong> For controlling traffic during construction and maintain diversion, no extra payment shall be made.  &lt;br&gt; <strong>D)</strong> The binder content of hot mix material shall be determined by ignition method only as specified in AASHTO T308. The testing by ignition method shall be done in furnace which shall be equipped with internal balance. The furnace shall have Web based S.C.A.D.A. facility. The data so acquired shall be uploaded to P.W.D. Website in real time with time lag not more than 30 Seconds.  &lt;br&gt; <strong>E)</strong> The contractor shall provide webbased SCADA facility as detailed in Sr No. 43 of Additional General Conditions and Specifications.</td>
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<td>Item No.</td>
<td>Item of work</td>
<td>Reference to standard specification (Pink Book) &amp; MORTH Specification No./Page No.</td>
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</table>
| 9.     | **ITEM No. 9 :-** Providing and laying Bituminous Concrete using crushed aggregates of specified grading premixed with bitumen binder VG-30 Bitumen at the rate of 5.00 percent by weight of total mix and filler, transported to site with Vehicle Tracking System (VTS), laid over a previously prepared surface, finished to the required grade, level, alignment and rolling to achieve the desired compaction to achieve required density - using 80 TPH Batch Mix type hot mix plant with Supervisory Control and Data Acquisition (SCADA), Sensor Paver, Intelligent Compactor with compaction analyser and V-SAT attachment with Stone Dust Filler. | As per MORTH specification Fifth Edition 2013 Clause No.507 and IRC-SP-97-2013. | A) Work shall be carried out in days time and in dry climate and should be closed before 6.00 p.m.  

B) The representative of the contractor shall maintain a register giving details of challan of bitumen received and shall get it signed from the representative incharge of department in token of it's acceptance.  

C) For controlling traffic during construction and maintain diversion, no extra payment shall be made.  

D) The binder content of hot mix material shall be determined by ignition method only as specified in AASHTO T308. The testing by ignition method shall be done in furnace which shall be equipped with internal balance. The furnace shall have Web based S.C.A.D.A. facility. The data so acquired shall be uploaded to P.W.D. Website in real time with time lag not more than 30 Seconds.  

E) The contractor shall provide webbased SCADA facility as detailed in Sr No. 43 of Additional General Conditions and Specifications. |
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<tr>
<td>10.</td>
<td><strong>ITEM No. 10</strong> :- Providing and fixing Reinforced Cement Concrete 1:2:4 boundary stones as per IRC design including painting, numbering, fixing in 150 millimetre X 150 millimetre X 900 millimetre standard size cement concrete 1:4:8 block etcetera complete as directed by Engineer in charge.</td>
<td>RD – 69 Page No.243</td>
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</tr>
<tr>
<td>11.</td>
<td><strong>ITEM No. 11</strong> :- Providing and fixing 200 metre stone as per IRC design including painting, numbering, fixing in 150 millimetre X 150 millimetre X 900 millimetre standard size cement concrete 1:4:8 block etcetera complete as directed by Engineer in charge.</td>
<td>RD – 69 Page No.243</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td><strong>ITEM No. 12</strong> :- Providing Reinforced Cement Concrete 5th Kilometre stones including painting, numbering, etcetera complete for National Highway and State Highway and Major District Road as per IRC design for Highway 5th Kilometre stones and fixing in standard size Cement Concrete 1:4:8 block etcetera complete.</td>
<td>RD – 69 Page No.243</td>
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<tr>
<td>Item No.</td>
<td>Item of work</td>
<td>Reference to standard specification (Pink Book) &amp; MORTH Specification No./Page No.</td>
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<td>13.</td>
<td><strong>ITEM No. 13:</strong> Providing Reinforced Cement Concrete 1:2:4 ordinary Kilometre stones including painting, numbering, etcetera complete for National Highway and State Highway and Major District Road as per IRC design for Highway Kilometre stones and fixing in standard size Cement Concrete 1:4:8 block etcetera complete.</td>
<td>RD – 69 Page No.243</td>
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</tr>
<tr>
<td>14.</td>
<td><strong>ITEM No. 14:</strong> Providing and fixing Informatory sign boards in square or rectangular shape of any size made out of 16 gauge (1.6 millimetre) thick Galvanised iron steel sheet painted with one coat of Zinc chromate stoving primer and two coats of green stove enamel paint on front side and grey stove enamel on back side and border /messages / symbols etcetera with cut out of retroreflective sheeting of engineering grade, including mild steel angle frame of 35 millimetre x 35 millimetre x 3 millimetre and two Mild Steel angle iron post of size 60 millimetre x 65 millimetre x 6 millimetre, 3.65 metre long properly cross braced</td>
<td>As per IRC-67 1977 &amp; MOST circular No.RW/NH-33023/31/88 DO-III dated 2/11.5.94</td>
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<td>Item No.</td>
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<td>with mild steel angle of size 50 millimetre x 50 millimetre x 5 millimetre duly painted with one coat of epoxy primer and two coats of epoxy finish paint, having alternate black and white bands of 25 centimetre width including galvanised iron fixtures etcetera and fixing the boards in 1:4:8 concrete block of size 60 centimetre x 60 centimetre x 75 centimetre including transportation etcetera complete as directed by Engineer in charge.</td>
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<tr>
<td>15.</td>
<td><strong>ITEM No. 15 :</strong> Providing and applying 10 centimetre width thermoplastic reflective paint of approved colour or compound for traffic lane strips of 3 millimetre thick of pigments 10%, on clean, dry and good road surface with 30 to 40 percent glass beads, 20 percent binder and 40 percent of filler material etcetera complete. <em>(Note rate is for actual painted length.)</em></td>
<td>MORTH 2001 Clause No.803.4, Page 321.</td>
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<tr>
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<td>16.</td>
<td><strong>ITEM NO. 16 :-</strong> Providing and applying 15 centimetre width thermoplastic reflective paint of approved colour or compound for traffic lane strips of 3 millimetre thick of pigments 10%, on clean, dry and good road surface with 30 to 40 percent glass beads, 20 percent binder and 40 percent of filler material etcetera complete. <em>(Note rate is for actual painted length.)</em></td>
<td>MORTH 2001 Clause No.803.4, Page 321.</td>
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**ITEM No. 17 :-** Providing and fixing Cautionary / Warning sing board having shape of an equilateral triangle of 90 centimetres sides made out of 14 gauge (2 millimetre) thick aluminium sheet bonded with white retro reflective sheeting of engineering grade having pressure sensitive/ heat activated adhesive retroreflective or screen printed transparent red coloured border, black coloured cutout symbols of non reflective sheeting having pressure sensitive adhesive or screen printed symbols in black opaque colour including one Mild Steel angle iron post of size 65 millimetre X 65 millimetre X 6 millimetre, 3.65 metre, long painted with one coat of epoxy primer and two coats of epoxy finish paint, having black and white bands of 25 centimetre width including galvanised iron fixtures etcetera and fixing the board in 1:4:8 concrete block of size 60 centimetre X 60 centimetre X 75 centimetre including transportation etcetera complete.

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<td>18</td>
<td><strong>ITEM No. 18</strong>: Providing and fixing aluminium casted CAT EYE STUD of size 10 centimetre X 10 centimetre at base with mild steel zinc coated mails of size 12 millimetre diametre of 12 centimetre long having both sides (Dual direction) high impact ABC 3 numbers of eyes of 16 millimetre diametre on both sides containing 7 beads each i.e. 42 beads in retro-reflective etcetera complete.</td>
<td>As directed by Engineer in charge.</td>
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<td>19</td>
<td><strong>ITEM No. 19</strong>: Providing structural steel work in roller section, fixed with connecting plates or angle cleats etcetera as in main and cross beams, hip and jack rafters, purlins connecting to truss members and the like as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted / welded connections and three coats of oil painting complete.</td>
<td>Bd.C-3 Page No.275</td>
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</table>

Contractor

No. of Corrections

- 210 -

Executive Engineer
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item of work</th>
<th>Reference to standard specification (Pink Book) &amp; MORTH Specification No./Page No.</th>
<th>Additional Specifications (If any)</th>
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<tbody>
<tr>
<td>01</td>
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<td>20.</td>
<td><strong>ITEM No. 20 :-</strong> Providing and fixing Aluminium sheet of 24 British Wire Gauge painted with one coat of zinc chromate stoving primer and two coats of white stove enamel paint and red border on front side and grey stove enamel on back side, symbols with cutout of red retro-reflective sheeting of engineering grade, including transportation etcetera complete as directed by Engineer in charge.</td>
<td>As directed by Engineer in charge.</td>
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</tbody>
</table>
पुंजीत डांबराची आवक आणि खप यांचा हिशोब दाखविणारी नॉंदव्हाही क्रमांक १
कामाचे नांव :-

मागील सप्ताहापासून कामाच्या ठिकाणी असलेली शिल्लक,
आवक आणि खप यांचा हिशोब

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<th>दिनांक</th>
<th>कॉर्नर नंबर</th>
<th>रिफायनरीचे नाव</th>
<th>गेट पास क्रमांक</th>
<th>प्राप्त डांबरचे निव्वड वजन</th>
<th>वापरलेल्या डांबरचे निव्वड वजन</th>
<th>दिवसाच्या आक्षेपासून शिल्लक डांबरचे वजन</th>
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कंट्रांटच्या सही
आभियंत्याची सही

नॉंदव्हाही क्रमांक - २
निर्णित घटक बारीवर आठवड्यामध्ये उपयोगात आणणे आवश्यक असलेले परिमाण यांचे तुलना दाखवणारे कोटक.

<p>| १) सरफेस ड्रेसिंग | ६) ऑस्ट्रोलीक वॉन्कैट ६.२५ टक्के |
| २) बी.बी.एम. | ७) एस.बी.बी.जी. ५.२५ टक्के |
| ३) टेंक कोट | ८) ऑपेन ग्रेडेड कारपेट |
| ४) बी.एम. | ९) लिक्वीड सिलिकोट |
| ५) डी.बी.एम. ४.५ टक्के | |</p>
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<tr>
<th>अ. क्र.</th>
<th>कामाचे नाव</th>
<th>केलेल्या कामाचे अंदाजे परिमाण</th>
<th>वापरणे आवश्यक असलेल्या डाऊंकदायचे परिमाण म्है. टन</th>
<th>वापरवावळास हवेच असलेले डाऊंकदाय एकूण परिमाण म्है. टन</th>
<th>प्रवक्षण वापरलेले डाऊंकदायचे एकूण परिमाण म्है. टन</th>
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</tbody>
</table>
Name of Work :- Improvements to Beed Parali Gangakhed road, MSH-16, Km.408/00 to 441/00, Tq.Parali (V.), District Beed. (CRF 2014-15)

DRAWINGS

CONTRACT DRAWINGS :

The Contract drawings provided for tendering purpose with the tender documents shall be used as a reference only. Contractor should visualize the nature or type of work contemplated and to ensure that the rates and prices quoted by him in the bill of quantities take due considerations of the complexities of work involved during actual execution / consideration as experienced in the field.

The tendered rates/prices for the work shall be deemed to include the cost of preparation, supply and delivery of all necessary drawings, contractor is required to provide in accordance with the contract.

DOCUMENTATION :

If so ordered by the Engineer-in charge, the contractor will prepared drawings of the work at constructed and will supply original and three copies to the Engineer who will verify and certify these drawings.

Final and constructed drawings shall then be prepared by the contractor and applied in triplicate along with a micro-film of the same to the Engineer for record and reference purpose at the contractors cost.
Name of Work: Improvement to Beed-Paralli-Gangakhed road Km 408/0 to 441/00 of MSH-16 in Parli Tq. District Beed.

TYPICAL CROSS SECTION OF 7.00 M. WIDE C.W.

Sub-Divisional Engineer,
P.W. Sub Division, Parli-(V.)

Executive Engineer,
P.W. Division, Ambajogai.